

## User Manual for the easichange Replacement Series:

Ei141EK - Ionisation    Ei144EK - Heat    Ei146EK - Optical  
 Ei161EK - Ionisation    Ei164EK - Heat    Ei166EK - Optical

**Congratulations!** You have purchased a genuine Ei Electronics replacement smoke/heat alarm kit.

This replacement kit contains everything you need to easily, quickly and safely replace your mains powered, Ei Electronics smoke or heat alarm.

### 1. Removing the Existing Alarm

#### 1 Disconnect the mains power

**Warning!** Before the existing alarm is removed the mains power must be disconnected.

Look on your mains distribution board for a switch marked "Smoke Alarms" or similar and switch this off. If there isn't a switch marked with a recognisable label, switch the mains power off.

**Note:** This will cut power to everything in the house including the lights.

#### 2 Locate the removal Slot



Locate the directional arrow on the front face of the alarm, the removal slot is located directly above the arrow.

#### 3 Inserting the removal tool



Insert the supplied removal tool approx. 1cm into the alarms removal slot and lever it down gently.

#### 4 Slide the alarm off the mounting plate



With the removal tool still inserted, slide the lower half of the alarm away from the removal tool in the direction of the arrow on the cover.

#### 5 Remove the alarm



Remove the alarm from the base by moving it vertically towards the floor.

### 2. Connecting the New Alarm

#### 1 Attach the alarm



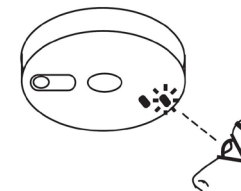
Place the alarm on the base, slightly offset from the centre and slide in the opposite direction to the arrow on the cover until it "clicks" into place.

#### 2 Reconnect the mains power

After the new alarm has been attached to the base plate, reconnect the mains power supply.

### 3. Checking the new Alarm

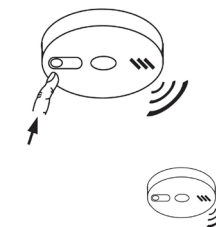
#### 1 Checking the indicating lights



Once the new alarm has been connected and the mains power has been restored it is important to check the indicating lights.

If the alarm is working correctly the **GREEN LIGHT** should be on constantly and the **RED LIGHT** should flash once every 40 sec.

#### 2 Testing the alarms



Press and hold the test button for 10 seconds, the alarm should sound loudly.

If there are other alarms in the house these should also sound within 10 seconds of the test button being pressed.

Any problems?

If you have any problems fitting your new alarm please give us a call on: 0800 612 4837 or email [support@easichange.co.uk](mailto:support@easichange.co.uk)

### 4. Keeping a Record

Now that you have installed and tested your new alarm, it is essential to keep a record of the date when it was fitted. We have included a handy replacement record sticker in this pack.

Fill in the date and stick it near your distribution board for future reference.

## 5. Important Information

**✗** Do not paint your alarm. Do not allow paint, water or dust to contaminate your alarm.

**✗** Your alarm is a mains 230V AC electrical appliance. Do not open or insert anything into the alarm.

**✓** Regularly check that the green mains indicator light on the cover is lit.

**✓** Test weekly - press and hold the test button on the alarm for 10 seconds. The alarm will sound loudly and the red light should flash rapidly. All other interconnected alarms should sound.

**✓** If alarm beeps once every 40 seconds for over 20 minutes, the battery is probably depleted (models Ei141EH/144EH/146EH only) and must be replaced. (See "Changing the Battery" section on page 5)

**✓** If a nuisance alarm occurs, press the test/hush button. This will silence the alarm for 10 minutes.

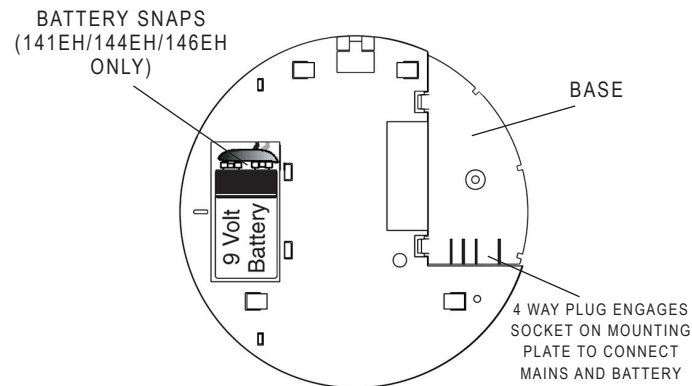
**✓** Clean your alarm regularly. This will reduce the risk of false alarms.

**✓** Remove or completely cover your alarm when decorating to prevent dust and contamination damaging the unit.

**?** If your alarm sounds for no reason and will not reset, it can be removed by releasing the clip on the base. (See "Removing the Existing Alarm" section on page 1)

## 6. Changing the Battery (141EH / 144EH / 146EH only)

1. Switch off mains power to alarm (the green light on the cover should go out).
2. Remove unit as shown in "Removing the Existing Alarm" section on page 1.
3. Locate the battery slot in the alarm as shown below.
4. Unclip battery from battery snap connectors.
5. Connect new battery by clipping back on to battery snap connectors. Use only 9V Alkaline batteries Duracell MN1604, Energizer 522. Other batteries can cause problems. We recommend that the "use by date" on the battery should still have at least 2 years to go. Older batteries will give beeps prematurely.
6. Slide unit back on to the base. A click should be heard as the alarm engages. (The unit cannot be replaced on the base unless a battery is installed).
7. Press and hold the test button the horn should sound loudly.
8. Reinststate mains power to alarm (green light on cover should come on).



We recommend that the battery is replaced at least every three years for optimum performance.

## 7. Testing & Maintaining Your Alarm

### Checking your Alarms

Check all your alarms weekly, especially after the initial installation or after reoccupation i.e. after a holiday.

1. Check that the green mains indicator light is on. (If it is off check circuit breakers, fuses etc.) Check the red light on the cover flashes every 40 seconds.
2. Press the test button for up to 10 seconds to ensure the sensor chamber, electronics and sounder are working. A red light on the cover will flash while the alarm is sounding. The alarm will stop when the button is released. Pressing the test button simulates the effect of smoke or heat during a real fire and is the best way to ensure the alarm is operating correctly.

**WARNING: DO NOT TEST WITH FLAME**

The can damage the alarm and can be a fire risk

We do not recommend testing the alarms with smoke or heat as the results can be misleading unless special apparatus is used.

3. Check for any sign of contamination such as cobwebs or dust and clean the alarm as described in the "Cleaning your Alarm" section on page 8 if necessary.
4. **Interconnected Alarms only** - Test the first alarm by pressing the button for 10 seconds. All the alarms should sound within 10 seconds of the first alarm sounding. The red light on the first alarm only will flash about once a second. Repeat this test on all the other alarms.
5. Check the functioning of the battery back-up directly after installation and then at least yearly as follows:
  - Turn off the mains power at the distribution board and check that the green indicator light is off.
  - Press the test button for 10 seconds and ensure the horn sounds loudly.

Reinststate the mains supply at the distribution board.

Note: If the mains is disconnected and the battery is almost depleted the alarm will beep every 40 seconds for at least 30 days.

6. Monitor the alarm over a short period of time for any beeps.

## 8. Low Battery Warning

The alarm automatically monitors the battery every 40 seconds to ensure that it is satisfactory. If it is depleted it will give a short beep every 40 seconds.

### Ei141EH, Ei144EH & Ei146EH Models

Before replacing the battery, check that the beeps are not due to one of the following:

1. Battery snaps not connected properly.
2. On the optical smoke alarm only (Ei146) if the unit beeps and the red light does not flash at the same time it indicates a problem with the smoke chamber (see "Cleaning your Alarm" section on page 8)
3. If the beeps have continued for over 20 minutes (and the other causes of beeps have been ruled out (see "Troubleshooting" section on page 10) the battery must be replaced. (See "Changing the Battery" section on page 5)

### Ei161EH, Ei164EH & Ei166EH Models

1. Check that the green mains power indicator light is on. If it is off the alarm is not receiving mains power and is being powered from its internal back-up cells, the beeps indicate that they are depleted. Reconnect the mains, check the fuse/circuit breakers and wiring. If in doubt contact a qualified electrician. The beeps should cease within 2 hours as the cells charge up. Fully charged, the cells will provide up to 6 months back-up without mains power.
2. On the optical smoke alarm only (Ei166EH) if the unit beeps and the red light does not flash at the same time it indicates a problem with the smoke chamber (see "Cleaning you Alarm" section on page 8.)

If all of the above possible causes of beeps have been ruled out, but the beeping has still persisted for over 2 hours with the green light on, the rechargeable cells may be defective. The smoke/heat alarm must be returned for repair or replacement. (See "5 Year Guarantee" section on page 12)

Please note: The ionisation and heat alarms (Ei141EH/Ei144EH/Ei161EH/Ei164EH) give two short beeps about a second apart at the end of the hush period (i.e. about 10 minutes after test/hush button has been pressed). These two beeps should not be confused with low battery beeps.

An alarm will operate from the mains alone, even with a fully depleted or a defective battery, and give beeps every minute, though it may not give sufficient warning of fire if the mains supply is disconnected for any reason.

If there are any problems get a qualified electrician to inspect the house wiring and connections to the alarms.

If there are still problems the unit must be returned to us at one of the addresses on the back page for examination and analysis.

## 9. Cleaning Your Alarm

**WARNING:** Electrical shock hazard. Disconnect the mains power at the fuse box or circuit breaker powering the alarm before following the cleaning instructions.

Clean your alarm regularly, particularly in dusty areas. Use the narrow nozzle attachment of your vacuum cleaner to remove dust, insects and cobwebs from the sides and cover slots where the smoke/heat enters. To clean the cover, wipe with a damp cloth. Dry cover thoroughly with a lint free cloth.

**WARNING: Do not paint your Alarm.**

Other than the cleaning described above, no other customer servicing of this product is required. Repairs, when needed, must be performed by the manufacturer.

All alarms are prone to dust and insect ingress which can cause false alarms or failure to alarm.

The latest design, materials and manufacturing techniques have been used in the construction of the alarm to minimise the effects of contamination. However it is impossible to completely eliminate the effect of dust and insect contamination, and therefore, to prolong the life of the alarm you must ensure that it is kept clean so that excess dust does not build up. Any insects or cobwebs in the vicinity of the alarm should be promptly removed.

In certain circumstances even with regular cleaning, contamination can build up in the smoke sensing chamber causing the alarm to sound or fail. If this happens the alarm must be returned to us for servicing or replacement. Contamination is beyond our control, it is totally unpredictable and is considered normal wear and tear. For this reason contamination is not covered by the guarantee and a charge is made for servicing such alarms.

## 10. Nuisance Alarms

If absolutely sure that the alarm is just a nuisance alarm, simply press the test/hush button briefly on the alarm with the rapidly flashing red light to silence the alarm for 10 minutes.

If, when the alarm goes off, there is no sign of smoke, heat or noise to indicate that there is a fire, you should get your family into a safe place before you start investigating.

1. Check the house carefully in case there is a small fire smouldering somewhere.
2. Check whether there is some source of smoke or fumes, for example cooking fumes being drawn past the alarm by an extractor.

If there are frequent nuisance/false alarms it may be necessary to relocate the device away from the source of the contamination or replace it with a more appropriate type of alarm.

If cleaning the alarm does not correct the problem it can be returned to us at one of the addresses on the back page for repair or replacement.

### Hush Feature

The alarm has a combined Test/Hush button to help you control nuisance false alarms.

1. To cancel a false alarm, press the Test/Hush Button located on the cover. The alarm will automatically switch to a reduced sensitivity condition (very large levels of smoke from a nearby fire will override the Hush feature on smoke alarms). This condition allows unwanted alarms to be silenced for a period of approximately 10 minutes.

The red light will flash every 10 seconds to indicate the sensitivity is reduced. At the end of the hush period the Ionisation smoke alarms (Ei141EH/161EH) and the heat alarms (Ei144EH/164EH) will give two short beeps.

On interconnected alarms, pressing the Test/Hush button on the alarm with the rapidly flashing red light will silence all alarms. Pressing the hush button on any of the other units will not silence the alarm.

- The unit will reset to normal sensitivity at the end of the silenced period. If additional silenced time is required, simply push the Test/Hush button again.

## 11. Troubleshooting

### Frequent Nuisance Alarms Occur:

- Close kitchen / bathroom door when in use.
- Ensure that the alarm is sited at least 6m away from sources of fumes.
- Contamination from insects, paint or paint fumes may have occurred. Clean the alarm (see "Cleaning your Alarm" section on page 8.) If the problem persists, resiting of the alarm should be considered.

### Alarm Sounds for no Apparent Reason:

- Identify the alarm source. On interconnected alarms, the red light on the cover will flash rapidly only on the alarm which is the source of the detection. If an optional Ei1529RC Control Switch is installed, press locate when all alarms are sounding to identify source of alarm.
- Check for fumes, steam etc. from the kitchen or bathroom. Paint and other fumes can cause nuisance alarms.
- Press the test/hush button to silence the alarm for 10 minutes.
- If alarm does not stop, switch off the mains and remove unit - see "REMOVING THE EXISTING ALARM" section on page 1. (Only remove the alarm with rapidly flashing red light).

### Low Battery & Other Beeps: (Ei141EH/144EH/146EH only)

If the battery is correctly connected and the alarm has been beeping for over 20 minutes the battery may be depleted (See "Changing the Battery" section on page 5)

### Low Battery & Other Beeps: (Ei161EH/164EH/166EH only)

Check the green mains power light is on. If not, check the fuse/circuit breakers. If the green light is off, the Lithium cells will deplete after some months without mains and will need to be recharged. If turning on the mains fails to stop the beeps after 2 hours, a fault may exist. Switch off mains and remove the alarm (see "Removing the Existing Alarm" section on page 1)

### Low Battery & Other Beeps: (All Alarms)

- If the green mains light is on and replacing the battery, recharging the Lithium cells or cleaning alarm has not stopped the beeps, a fault may exist. Disconnect the mains first and replace the unit (see "Removing the Existing Alarm" section on page 1)
- Ionisation smoke alarms (Ei141EH/161EH) and heat alarms (Ei144EH/164EH) give two beeps 10 minutes after the test/hush button is pressed.
- If an Optical unit (Ei146EH/166EH) beeps without the red light flashing at the same time, the chamber is defective. Clean the chamber.

### Interconnected Alarms do not all Sound

- Hold test button for 10 seconds after first alarm has sounded to ensure the signal is transmitted to all of the alarms.
- One or more of the connections may not be correctly connected, we recommend you consult a qualified electrician.

Construction Product Type: Smoke Alarm Devices  
European Standard: EN14604:2005  
Certificate of Conformity: 0086-CPD-537430

Model	Type
Ei141	Ionisation 230V Smoke Alarm
Ei146	Optical 230V Smoke Alarm
Ei161	Ionisation 230V Smoke Alarm
Ei166	Optical 230V Smoke Alarm



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## 12. Five Year Guarantee

Ei Electronics guarantees this alarm (excluding battery in the Ei141EH/144EH/146EH models) for five years from date of purchase against any defects that are due to faulty materials or workmanship. This guarantee only applies to normal conditions of use and service, and does not include damage resulting from accident, neglect, misuse, unauthorised dismantling, or contamination howsoever caused. This guarantee excludes incidental and consequential damage. If this alarm should become defective within the guarantee period, it must be returned, with proof of purchase, carefully packaged, with the problem clearly stated. We shall at our discretion repair or replace the faulty unit.

Do not interfere with the alarm or tamper with it. This will invalidate the guarantee, but more importantly may expose the user to shock or fire hazards.

This guarantee is in addition to your statutory rights as a consumer.

Distributed By:

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**Aico Ltd.** Mile End Business Park, Maesbury Rd, Oswestry, Shropshire, SY10 8NN, U.K.

Tel: 0870 758 4000

[www.aico.co.uk](http://www.aico.co.uk)

The crossed out wheelee bin symbol that is on your product indicates that this product should not be disposed of via the normal household waste stream. Proper disposal will prevent possible harm to the environment or to human health. When disposing of this product please separate it from other waste streams to ensure that it can be recycled in an environmentally sound manner. For more details on collection and proper disposal, please contact your local government office or the retailer where you purchased this product.

