



## 230V~ SMOKE & HEAT ALARMS RECHARGEABLE LITHIUM CELL BACKUP



### IONISATION

with Hush  
MODEL Ei151TL



### OPTICAL

with Hush  
MODEL Ei156TL



### HEAT

MODEL Ei154TL

If you are the installer see separate  
“Sitting & installation Instructions”

# USER INSTRUCTIONS

KEEP FOR REFERENCE

READ THIS FIRST  
IMPORTANT USER INFORMATION

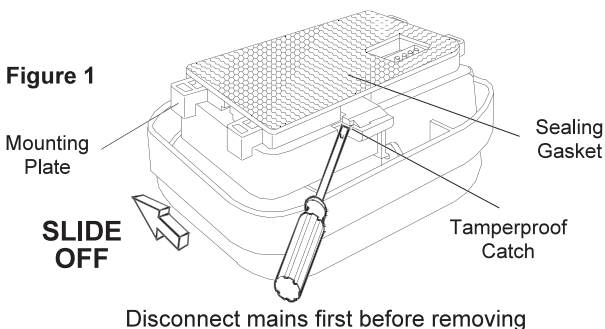
- REGULARLY CHECK THAT THE GREEN MAINS INDICATOR LIGHT IS ON.
- IF A NUISANCE ALARM OCCURS, FAN THE ALARM VIGOROUSLY WITH A NEWSPAPER TO HELP CLEAR THE SENSOR. (ON THE PFS-ITL PRESS THE HUSH BUTTON IN THE CORNER OF THE COVER).
- TEST WEEKLY - PRESS THE BUTTON FOR 10 SECONDS AND A RED LIGHT BEHIND THE BUTTON OR ON THE COVER SHOULD FLASH. INTERCONNECTED ALARMS WILL ALSO SOUND.
- CLEAN YOUR SMOKE ALARM REGULARLY. THIS WILL REDUCE THE RISK OF FALSE ALARMS.
- REMOVE OR COMPLETELY COVER YOUR SMOKE ALARM WHEN REDECORATING TO PREVENT DUST OR OTHER CONTAMINATION DAMAGING THE UNIT.

CONT.

## READ THIS FIRST

CONT.

- X** DO NOT ALLOW PAINT, WATER OR DUST TO CONTAMINATE YOUR ALARM.
- X** YOUR ALARM IS A MAINS 230V AC ELECTRICAL APPLIANCE. DO NOT REMOVE THE COVER OR INSERT ANYTHING INTO THE ALARM.
- X** DO NOT PAINT YOUR SMOKE ALARM - IT MAY ALARM OR CEASE TO OPERATE.
- ?** IF YOUR ALARM SOUNDS FOR NO REASON AND WILL NOT RESET, IT CAN BE REMOVED BY RELEASING THE CLIP ON THE BASE. SWITCH OFF MAINS FIRST. (SEE FIGURE 1, BELOW).
- ?** IF BEEPING OCCURS, CHECK THAT THE GREEN MAINS LIGHT IS ON. PRESS THE TEST BUTTON FOR 10 SECONDS.



- ?** THE RECHARGEABLE CELLS MAY REQUIRE A FEW DAYS TO CHARGE AFTER FIRST BEING CONNECTED TO THE MAINS. IT MAY GIVE A SHORT BEEP EVERY 40 SECONDS FOR UP TO 2 HOURS WHILE IT IS CHARGING.

## CHECKING & MAINTAINING YOUR ALARMS

### INSPECTION & TESTING PROCEDURE

After installation, then at least weekly, check all your Alarms. Also check after re-occupation following a holiday etc.

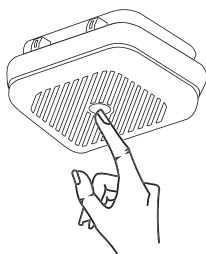
(i) Check that the green mains indicator light is on. (If it is off check circuit breakers, fuses and wiring etc.) Check the red light behind the button or on the cover flashes every 40 seconds.

(ii) Press the test button (see figure 2) for up to 10 seconds to ensure the sensor chamber, electronics and sounder are working. A red light behind the test button or on the cover, will flash while horn 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.**

This can set fire to the Alarm and damage the house.



**Figure 2**

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

Pressing and releasing the test/hush button on an optical alarm (Ei156TLH) puts it into hush mode. The smoke sensitivity is reduced and the red light flashes every 10 seconds (instead of every 40 seconds). The optical alarm automatically resets to normal sensitivity after 10 minutes (If an alarm is going to be checked with smoke in a suitable apparatus, the test/hush button must not be pressed beforehand as this makes the unit insensitive for 10 minutes).

(iii) Check for any sign of contamination such as cobwebs or dust and clean the alarm as described below if necessary.

### **Interconnected Alarms**

Test the first unit by pressing the button for 10 seconds. All the detectors should alarm within about 5 seconds of the first horn sounding and the red light on the first unit only will flash about once a second. Check all the other units similarly.

**(Note:** Ionisation and Heat Alarms signal to other interconnected alarms about 4 seconds after their own horn sounds. Optical alarms signal within about a second).

## **CHECKING RECHARGEABLE CELLS**

### **1. When the alarm is beeping**

The Alarm automatically monitors the cells every 40 seconds to ensure they are satisfactory. If a problem is identified it will give a short beep every 40 seconds. If the unit is giving beeps then check the following:

(i) Check that the green mains power light is on. If it is off the Alarm has been powered from the cells and the beeps indicate they are depleted. Re-connect the mains, check fuse, circuit breakers and wiring. If in doubt contact a qualified electrician. The beeps should cease within 2 hours as the cells charge up.

(ii) Check that the hush button has not been pressed inadvertently (Ei151TL only). This also causes beeps every

40 seconds for up to 15 minutes. Press the test button to cancel hush mode beeps.

(iii) The cells may be depleted. The beeps should cease within 2 hours as they charge up. Fully charged, the cells will provide up to 6 months back-up without mains power.

(iv) On the **Optical Smoke Alarms only** (Ei156TLH) 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 the Smoke Alarm.

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 are probably defective. The Smoke Alarm must be returned to the manufacturer for repair or replacement (see section Getting Your Alarm Serviced).

## **2. Manual Testing**

2. We recommend that the functioning of the rechargeable cells is checked periodically (at least yearly) as follows:

(i) Ensure that the alarm has been connected to the mains, green light on, for a least 2 days for the cells to charge.

(ii) Turn off the mains power at the distribution board and check that the green indicator light is extinguished. Do not remove the plug from the rear as this will disconnect the cells.

(iii) Press the test button and ensure the horn sounds loudly for 10 seconds.

(iv) Release the test button and watch it carefully for one minute:

- The red light behind the test button or on the cover will flash at least once.
- The unit must **not** give a beep which indicates the battery is low.

(v) Turn on the mains supply at the distribution board only if the unit passes all the above tests.

**Note:** If the mains is disconnected and the battery is almost depleted the unit will beep every 40 seconds for at least 72 hours. This is to remind you to re-connect the mains supply. The unit will operate from the mains alone, even with a fully depleted or a defective battery, 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 for examination (see section on Getting Your Alarm Serviced).

## CLEANING YOUR ALARM

**WARNING:** Electrical shock hazard. Disconnect the AC mains 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 or heat enters. To clean the cover, wipe with a damp cloth. Dry cover thoroughly with a lint free cloth. If the contamination around the outer case indicates that the area is particularly dirty, remove the Alarm from the ceiling (see figure 1). Check that the openings in the black smoke sensing chamber are not clogged by visually inspecting them through the large openings around the edges of the Smoke Alarms. If they are clogged - an extremely rare occurrence - the Smoke Alarm must be replaced.

**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 our Alarms to minimize 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 units.

If you experience persistent false alarms, in particular locations, due to contamination of the smoke chamber you could consider replacing Optical Smoke Alarms (Ei156TL) with Ionisation Smoke Alarms (Ei151TL). Ionisation type alarms are less susceptible to dust than Optical type alarms.

## NUISANCE ALARMS

Alarms caused by cooking fumes etc. can be readily silenced by fanning the unit with a newspaper or similar. On the Ei151TL simply press the hush button. On the Ei156TLH press the combined test/hush button.

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.

Check the house carefully in case there is a small fire smouldering somewhere.

Check whether there is some source of smoke or fumes, for example cooking fumes being drawn past the Smoke Alarm by an extractor.

If there are frequent nuisance/false alarms it may be necessary to re-locate the device away from the source of the fumes.

If for some reason the alarm continues to sound without smoke or heat being present (due to insect infestation or contamination build-up for example) switching off the mains power alone will not silence the alarm as it will still be powered by the cells. Switch off the mains, remove the plug from the rear to disconnect the cells (after removing the Alarm from the ceiling - see figure 1). If cleaning the Smoke Alarm does not correct the problem it can be returned to the manufacturer for repair or replacement. (see below).

## Hush Feature

The Ionisation Smoke Alarms (Ei151TL) has a separate Hush Button to help you control nuisance false alarms. The Optical Smoke Alarms (Ei156TLH) has a combined test/hush button.

1. To cancel a false alarm on an Ei151TL, press the Hush Button located on the lower right-hand corner. To cancel a false alarm on an Ei156TLH press the test/hush button. The Alarm will automatically switch to a reduced sensitivity condition (very large levels of smoke from a nearby fire will override the Hush). This condition allows unwanted alarms to be silenced for a period of approximately 10 minutes. **The Ei151TL will give a short beep every 40 seconds during this time to let you know the unit has been silenced.**

On the Ei156TLH alarm the red light will flash every 10 seconds (instead of every 40 seconds).

On interconnected Smoke Alarms, pressing the Hush Button on the one sensing smoke (i.e. the one with the red light flashing every second) will silence all alarms. Pressing the Hush Button on any other Smoke Alarm will **not** cancel the alarm.

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

3. To quickly return to normal non-silenced operation (on the Ei151TL only) simply push the Test Button; the alarm will sound briefly and return to its normal sensitivity alarm mode.

4. After installation, your Smoke Alarm (Ei151TL only) may beep approximately every 40 seconds for 15 minutes. This indicates it is in the Hush mode. To put it into normal operating mode, push and hold the Test Button until the alarm sounds.

## IMPORTANT SAFEGUARDS

When using household protective devices, basic safety precautions should always be followed, including those listed below:

- Please read all instructions.
- Rehearse emergency escape plans so everyone at home knows what to do in case the alarm sounds. Further information can be obtained from the Home Office Publication entitled "Smoke Detectors in the Home" (FB2) or from your local fire prevention officer.
- NOTE: Constant exposure to high or freezing temperatures or high humidity may reduce the life of the rechargeable cells.
- To maintain sensitivity to smoke, do not paint or cover smoke alarm in any manner; do not permit any accumulation of cobwebs, dust or grease.
- If unit has been damaged in any way or does not function properly, do not attempt a repair. Return Alarm (see - Getting your Alarm Serviced).
- This appliance is only intended for premises having a residential type environment.
- Smoke / Heat Alarms are not a substitute for insurance. The supplier or manufacturer is not your insurer.
- The chamber inside the Ionisation (Ei151TL) Smoke Alarm contains a small amount of radioactive material. Do not tamper with the chamber. You may safely install and clean the Smoke Alarm following this leaflet's instructions.
- Do not dispose of your Alarm in a fire.
- Ionisation Smoke Alarms can be disposed of in normal household rubbish, no more than one alarm per dustbin.

## PLANNING YOUR ESCAPE ROUTE FOR WHEN THE ALARM GOES OFF

Use the Smoke / Heat Alarm Test Buttons to familiarize your family with the Alarm sound and to practice fire drills regularly with all family members. Draw up a floor plan that will show each member at least 2 escape routes from each room in the house. Children tend to hide when they don't know what to do. Teach children how to escape, open windows, and use roll up fire ladders and stools without adult help. Make sure they know what to do if the alarm goes off - see below.

1. Check room doors for heat or smoke. Do not open a hot door. Use an alternate escape route. Close doors behind you as you leave.



2. If smoke is heavy, crawl out, staying close to floor. Take short breaths, if possible, through a wet cloth or hold your breath. More people die from smoke inhalation than from flames.



3. Get out as fast as you can. Do not stop for packing. Have a prearranged meeting place outside for all family members. Check everybody is there.



4. Call the Fire Brigade from a neighbour's house. Remember to give your name and address.



5. NEVER re-enter a burning house.



## Limitations of Smoke Alarms

Smoke Alarms have significantly helped to reduce the number of fire fatalities in countries where they are widely installed. However independent authorities have stated that they may be ineffective in some circumstances. There are a number of reasons for this:

- The Alarms will not work if the mains power is off and in the case of the Ei151TL, 154TL and 156TL if the cells are depleted.
- Smoke / Heat Alarms will not detect fire if sufficient smoke / heat does not reach the alarm. Smoke / heat may be prevented from reaching the Alarm if the fire is too far away, for example, if the fire is on another floor, behind a closed door, in a chimney, in a wall cavity, or if the prevailing air draughts carry the smoke away. Installing Smoke / Heat Alarms on both sides of closed doors and installing more than one Smoke / Heat Alarm as recommended in this leaflet very significantly improves the probability of early detection.
- Fit both Optical Smoke Alarms and Ionisation Smoke Alarms for the best response to all fires.
- The Alarm may not be heard.



- A Smoke / Heat Alarm may not wake a person who has taken drugs or alcohol.
- Smoke / Heat Alarms may not detect every type of fire to give sufficient early warning. They are particularly ineffective with: fires caused by smoking in bed, escaping gas, violent explosions. poor storage of flammable rags and/or liquids, (for example petrol, paint, spirits etc), overloaded electrical circuits, arson and children playing with matches.
- Smoke / Heat Alarms don't last indefinitely. For example if there is build up of contamination performance will be impaired, and in the case of the Ei151TL, 154TL or 156TL the rechargeable cells may eventually become too weak to function correctly in the event of a mains power failure.

The manufacturer recommends replacement of the Smoke / Heat Alarms after 10 years as a precaution.

## GETTING YOUR ALARM SERVICED

If your Smoke Alarm fails to work after you have carefully read all the instructions, checked the unit has been installed correctly, and is receiving AC power (green light on) contact Customer Assistance at the address given at the end of this leaflet. If it needs to be returned for repair or replacement put it in a padded box and send it to "Customer Assistance and Information" at the nearest address given on the Smoke Alarm or in this leaflet. State the nature of the fault, where the Smoke Alarm was purchased and the date of purchase.

## FIVE YEAR PRODUCT GUARANTEE

Ei Electronics guarantees this Smoke Alarm 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 to the Ei Electronics, with proof of purchase, carefully packaged, with the problem clearly stated. (see "Getting Your Alarm Serviced") We shall at our discretion repair or replace the faulty unit.

Do not interfere with the Smoke Alarm or attempt to 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.

## **TROUBLESHOOTING**

### **ALARM SOUNDS FOR NO APPARENT REASON:**

- (1) Identify the alarm source. On interconnected units the red light under the test button or on the cover will flash rapidly **only** on the unit which is the source of the alarm.
- (2) Check for fumes, steam etc. from the kitchen or bathroom. Paint and other fumes can cause nuisance alarms.
- (3) Press the hush button on the Ei151TL. On the Ei156TLH press the combined test/hush button.
- (4) If alarm does not stop, switch off mains and remove unit (see figure 1). (only remove alarm with red light flashing, the others are probably satisfactory)

### **ALARMS BEEPS CONTINUOUSLY:**

- (1) Alarms may be in 'hush mode'. Press the test button for 10 seconds to reset the unit (Ei151TL only).
- (2) Cells may be flat due to mains failure. Check the green mains light is on. If not, check fuse, circuit breakers and wiring connections.
- (3) If the above fails to turn on the green light, a fault may exist. Switch off mains and remove the unit (see figure 1). Or press the hush button on the Ei151TL or press the combined test/hush button on the Ei156TLH.
- (4) If the green mains light is on and the action in (1) above has not silenced the beeping, a fault may exist. Switch off mains and remove the unit (see figure 1).

### **INTERCONNECTED ALARMS DO NOT ALL SOUND:**

- (1) Hold test button for 10 seconds after first alarm has sounded to ensure signal is transmitted to all units.
- (2) Switch off mains and check that live, neutral and interconnect cables have been correctly connected and that the connections are tight.

### **IF FREQUENT NUISANCE ALARMS OCCUR:**

- (1) Close kitchen / bathroom door when in use.
- (2) Ensure that the alarm is sited at least 6m away from sources of fumes.
- (3) Contamination from insects, paint or paint fumes may have occurred. Clean the alarm.
- (4) If the problem persists, re-siting of the unit should be considered. Alternatively, replace the unit with an Optical unit, assuming that the problem is with an Ionisation type alarm.



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.



0086

Ei Electronics, Shannon, Co. Clare, Ireland

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DoP No.13-0001

EN14604:2005 + AC:2008

Smoke Alarm Devices:

Ei151TL, Ei151TLR, Ei156TLH, Ei156TLR

Fire Safety

Nominal activation conditions/ sensitivity, response delay (response time) and performance under fire condition	<b>Pass</b>
Operational reliability	<b>Pass</b>
Tolerance to voltage supply	<b>Pass</b>
Response delay and temperature resistance	<b>Pass</b>
Vibration resistance	<b>Pass</b>
Humidity resistance	<b>Pass</b>
Corrosion resistance	<b>Pass</b>
Electrical stability	<b>Pass</b>

The Declaration of Performance No. 13-0001 may be consulted at [www.eielectronics.com/compliance](http://www.eielectronics.com/compliance)

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