

SmartLINK Gateway

**Ei1000G**

Installation Manual

Read and retain carefully for as long as the product is being used. It contains vital information on the operation and installation. The manual should be regarded as part of the product.





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## 1. Introduction

An exciting innovation in home life safety, the SmartLINK Gateway will connect to compatible alarms and HomeLINK Environmental Sensors to push data to the HomeLINK Dashboard and App for Residents.

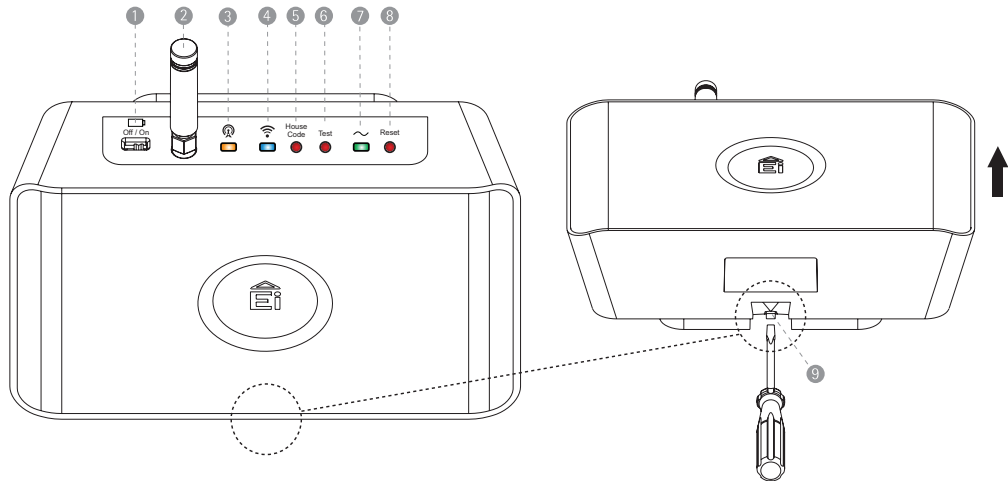
The data from connected devices allows clients to view and manage their installed alarms and sensors and provides information on Fire and CO activations along with actionable insights into environmental risks including Damp and Mould, Indoor Air Quality, Excess Cold and Heat and Heat Loss.

Features include:

- Alarm status
- Fault status
- Detailed property and portfolio views, designed for multiple user roles
- Actionable insights segmented by high, medium and low risk
- Dedicated HomeLINK App for Residents available
- Text alert and e-mail notification capability
- Multiple data integration options including API, MQTT and HTTPS Webhooks
- Property, Insight, Alert and Device reports

A Gateway is necessary in the system to push events from the Alarms to the HomeLINK Portal as they happen. The Gateway is a roaming 2G GSM-based device that ensures the maximum connectivity possible without the need for local broadband or Wi-Fi services.

## 2. Product Overview



1	On / Off battery switch	2	Antenna
3	GSM LED	4	RF LED
5	House Code button	6	Test button
7	Power LED	8	Reset button
9	Removal slot		

To unclip the Gateway from the mounting plate, insert a screw driver in to the slot shown above and push the Gateway upwards

### 3. Technical Specifications

<b>Supply Voltage:</b>	230V AC, 50Hz
<b>Battery back-up:</b>	Rechargeable battery
<b>Power consumption:</b>	40mA
<b>RF frequency:</b>	868MHz band (1% duty cycle)
<b>RF Range:</b>	>100 Metres in free air <sup>1</sup>
<b>RF Protocol type:</b>	Mesh architecture
<b>RF Protocol:</b>	SmartLINK, HomeLINK and RadioLINK+
<b>RF System size:</b>	Up to 12 RF devices <sup>2</sup>
<b>Receiver category:</b>	2
<b>RF power:</b>	5.3dBm (radiated)
<b>Data upload:</b>	via 2G GSM network (Roaming SIM card supplied)
<b>Modem:</b>	Quad-Band GPRS modem
<b>Data storage:</b>	Cloud based
<b>Indicators:</b>	<b>Green LED</b> - Power <b>Blue LED</b> - RF communication <b>Yellow LED</b> - GSM communication
<b>Normal Operating and Storage Temperature Range:</b>	-10° to 40°C <sup>3</sup>
<b>Normal Operating and Storage Humidity Range:</b>	15% to 95% Relative Humidity <sup>3</sup> (non-condensing)
<b>Approvals:</b>	Compliant with Radio Equipment Directive 2014/53/EU KM 735628, Internet of Things (IoT)

1. Obstructions of any sort will result in a reduction in range from the free space specification. The range may vary depending on installation.
2. Please contact us for further advice if additional RF devices are required.
3. Temperature and Humidity conditions are for normal operation and storage. Units will function outside these ranges as required by the specific product Standards. Extended exposure to conditions outside these ranges can reduce product life. For advice on prolonged operation outside these ranges consult the manufacturer.

## 4. Important Safety Instructions

**WARNING:** Mains operated devices should be installed by a qualified electrician in accordance with the local appropriate Regulations for Electrical Installations. Failure to install the Gateway correctly may expose the user to shock or fire hazards and damage the device.

**ATTENTION:** The device must be continuously powered 24 hours a day so it is important that it is not on a circuit that can be turned off by a switch.

**WARNING:** This device should only be installed in a location where an all-pole mains switch in accordance with Annex L of EN62368-1 is incorporated in the electrical installation of the building. As the device is permanently connected to mains supply, the appropriate disconnect device shall be provided as part of the building installation.

**ATTENTION:** The device must not be connected when the house wiring insulation is being checked with high voltages. i.e. Do not use a high voltage insulation tester on the device.

**ATTENTION:** Light Dimmer Circuits - the Gateway must not be powered from a light dimmer circuit.

## 5. Locating Your Gateway

To identify a suitable location for the installation of your Gateway, we recommend you first perform a short GSM survey as follows:

1) Move the Battery Switch (see figure 1) to the "On" position. (DO NOT CONNECT TO THE MAINS SUPPLY at this stage) .

**ATTENTION:** Do not leave your Gateway on battery power only for longer than 72 hours.

2) Screw the Antenna (located in the bag supplied) on, by rotating the gold nut clockwise and ensuring it is tightened fully in place by hand. Ensure while performing the survey that you hold the Gateway with the Antenna in the vertical orientation.

3) Using a small screwdriver or pen, press the Test button.

4) Count the yellow flashes.

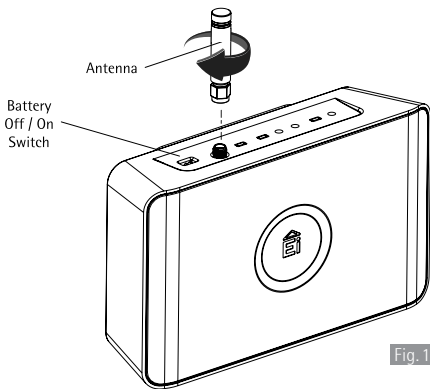


Fig.1

Number of Flashes	Signal Strength
4	Excellent
3	Good
2	Average
1	Poor

If your Gateway is indicating a poor signal strength, we recommend you move to a location that provides you with the best signal strength.



It is also equally important that the Gateway communicates with the RF devices installed in the dwelling. The number of walls, ceilings and metal objects in the signal path will reduce the strength of the RF signals.

Do not mount your Gateway in a steel box or close to large metal objects such as boilers, as this will reduce your GSM signal strength and will affect RF communication.

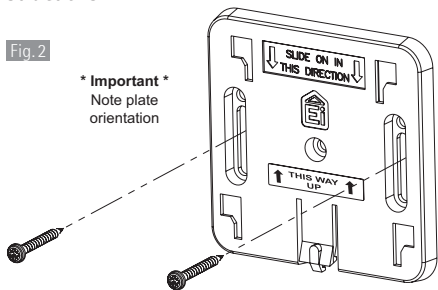
The Gateway is not waterproof and must not be exposed to dripping or splashing. Do not locate the Gateway in a wet room, bathroom, shower room, etc...

## 6. Installation

**WARNING:** To prevent injury, this device must be securely attached to the wall in accordance with the installation instructions.

Fig.2

\* Important \*  
Note plate  
orientation



Please ensure your Gateway is mounted with the Antenna in the vertical orientation. It is recommended that the Gateway is mounted at least 2m from floor level.

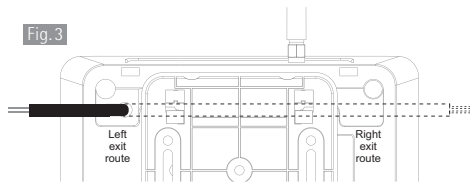
1. Fix the mounting bracket to the wall with the screws provided (see figure 2).

**IMPORTANT** - Make sure the mounting plate is positioned on the wall in the correct orientation before fixing (see figure 2).

2. Disconnect the AC mains supply from the circuit that is going to be used.

3. Wire the Gateway 2 core cable into an un-switched spur. There is a cable channel in the rear of the Gateway that can be used to run the power cable left or right of the Gateway (see figure 3). Do not coil excess cable around the Gateway and keep the cabling away from the antenna.

Fig.3



L : Live - Brown and N : Neutral - Blue

**WARNING:** *Wiring must be installed in compliance with local regulations.*

4. Slide the Gateway onto the mounting plate.

5. Connect the mains power to the circuit used.

6. Check that the green power LED on the Gateway is on.

On power up, the blue LED and Yellow LED will also flash for a short period (<1 min). On stand by, only the green LED is on.

**Gateway LED Indicator Table**

Mode	Action	Green LED	Blue LED	Yellow LED
GSM survey	Press Test button	-	ON	Flashing
Power up		ON	Rapid Flashing	3 slow Flashes
Standby		ON	-	-
RF communication		ON	Flashes	-
GSM communication		ON	-	ON
Battery OFF with Mains supply ON*		ON	ON	ON

**\*ATTENTION:** *Please ensure that the battery switch is on the "ON" position. Failure to carry out this step will result in no battery backup capability if power is lost to the Gateway.*

## 7. Gateway System Set Up

Do not start the system set up until the Gateway is in Standby mode.

To set up a Gateway system, simply follow the steps in the SmartLINK® App available to download from the Google Play or iTunes app store.



If you do not have log-in details for the SmartLINK App and you will be managing the system, including paying subscription costs, you will need to complete the registration form available on the following link <https://www.aico.co.uk/gateway-subscription/> or by scanning the QR code on the left.

If you are installing the system and someone else will be managing it, including paying subscription costs, **they will need to complete the registration form and then create an Installer Account for you.**

If you have a log-in but the client you are installing for is not listed in the SmartLINK App, please contact the client directly to request they create an Installer Account for you.

For any queries please contact the Aico Technical team: [technical@aico.co.uk](mailto:technical@aico.co.uk) or 01691 66410.

## 8. Testing

Once the system has been installed and set up, a test should be performed to validate it is functioning correctly as follows:

- 1) Press and hold the test button on an alarm or temporarily remove an Environmental Sensor from its base if no alarms are present. This will generate an event.
- 2) Check that the yellow LED on the Gateway lights up, indicating the event information has been sent to the Cloud server.
- 3) On your phone SmartLINK® App, select "View Installations".
- 4) Select the system you are testing.
- 5) Select the unit you have tested.

- 6) Under the Events tab, "Button Test" or "Head Removed" will be listed with the corresponding date and time; confirming that the event information is stored on the Cloud server.
- 7) If an Environmental Sensor was removed to generate the event, refit the Environmental Sensor and ensure that a 'Power Up' event is seen under the Events tab for the unit.

## 9. Troubleshooting

Incorrect number of blue flashes on the Gateway during the House Coding process	If you are unable to house code some devices to the Gateway, you may need to move the Gateway or position another Alarm to act as a "repeater" between the device(s) which is (are) not communicating with the Gateway to shorten the path and/or by-pass an obstacle which is blocking the RF signal.
Factory Reset	Sometimes in order to resolve an RF communication issue it may be necessary to reset (factory reset) and House Code all the RF devices again. To reset the Gateway, press and hold the House Code button until the blue LED starts to flash. Release immediately.
House Code error message on SmartLINK® App when uploading	Press "Retry" to upload again.
Check internet connection message on SmartLINK® App	This means that your phone has no mobile service. Move to an area where your mobile service is restored.

## 10. Guarantee

If, within the guarantee period, your Gateway fails to work after you have carefully read and followed all the instructions and installed the Gateway accordingly, then contact us using the details below:

### **Aico Technical (UK customers):**

Tel: 01691 664100

e-mail: [technical@aico.co.uk](mailto:technical@aico.co.uk)

If you are advised to return your Gateway, please ensure that the device is placed in a padded box, with the proof of purchase and a note stating the nature of the fault.

Ei Electronics guarantees this Gateway for five years from the date of purchase against any defects that are due to faulty materials or workmanship. If this device should become defective within the guarantee period, we shall at our discretion repair or replace the faulty unit.

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.

This guarantee does not apply to any product that has been modified in any way by a third party or has been fitted with a third party element.

Do not interfere with the gateway 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.



Hereby, Ei Electronics declares that this Ei1000G Gateway is in compliance with the essential requirements and other relevant provisions of Directive 2014/53/EU. The Declaration of Conformity may be consulted at [www.eielectronics.com/compliance](http://www.eielectronics.com/compliance)

The crossed out wheellie 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.



Hereby, Ei Electronics declares that this Ei1000G Gateway is in compliance with the essential requirements of the Radio Equipment Regulations 2017. The Declaration of Conformity may be consulted at [www.eielectronics.com/compliance](http://www.eielectronics.com/compliance)



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