

User and Fitting Instructions

WARNING! Electricity can kill - do not install the unit if you are not competent to do so.

Warranty conditions.

When the installation is completed by and or signed off by a qualified Electrician and the warranty return card is received by us by email or by post, within 28 days of the installation, the unit qualifies for the 10 year return-to-base warranty. Do not customise the unit in any way during installation as that invalidates the warranty.

About the SOLiC Wireless.

The SOLiC Wireless is designed to work seamlessly with your solar photovoltaic or other micro generation system, utilising the excess power that would have been exported to the grid, to operate your immersion element or similar heating element.

The free power diverted by the SOLiC into a typical domestic hot water tank with a 4kW solar PV system, is around 2000kWh a year giving an estimated cost saving of £150 a year, by providing free hot water.

Once installed the SOLiC Wireless operates automatically sensing the exported power and signalling the main unit 5 times each second to control the power output level.

The SOLiC Wireless sensor detects when power is being fed back into the grid, then varies the power offered to the immersion element, until the exported power is reduced to as close to zero as possible.

For example, if the house is using 500W and the solar inverter is producing 900W, the SOLiC will sense that 400W are being exported and will signal the main unit to increase the power available for the immersion element until the sensor detects no power being exported.

The SOLiC will divert excess power in this manner to the immersion heater until the water is hot. The temperature of the water is set by the immersion heater thermostat. Once the water is hot the immersion heater thermostat will click off. Power will continue to be available to the immersion heater, so long as exported power is still detected.

A boost button is provided to switch the immersion heater on manually for 60 mins on the main unit. When pressed once the SOLiC Wireless will provide full mains power to the immersion heater replicating the function of the immersion switch. After 60 minutes has elapsed, or if the boost button is pressed a second time automatic operation will resume.

Fitting Instructions

Note the SOLiC Wireless unit is shipped pre paired for easy installation.

Mains Unit

- Install the mains unit on the fused spur by the immersion tank, as per the wiring diagram inside the unit and using the fitting kit as supplied.
- Position the mains unit with a 5cm space around it to allow good air circulation and maximise heat dissipation.
- Gently push the green button stem onto the right hand button mount on the mains circuit board.
- Ensure the circuit board is on the mounting lugs within the enclosure.
- Screw one of the two supplied aerials on the mains unit Ariel socket.
- Ensure the green button is lined up with the case hole while replacing the lid on the main unit.

Sensor Unit

- Mount the sensor unit on two screws near the mains tails of the building, typically on the main consumer board.
- Plug in and clamp the sensor clamp on one of the mains tails, ensuring it is grid side of both house loads and the micro generation system.
- Mount the Ariel on the sensor aerial socket.
- Plug in the sensor power supply.

Switching on / Resetting.

- Ensure the main unit is powered up.
- Ensure the heating element is demanding power.
- Turn on the sensor unit, after a short time you will see the LED lights operating normally per the light table.
- To reset the SOLiC wireless just power down and restart the sensor unit when the load is asking for power.

Please note the Sensor unit automatically sets the direction of the clamp on start up.

LEDs	Meaning
Sensor unit - Flashing Red/Green irregularly	The power output of the building is measured at approximately 0W.
Sensor unit - Flashing Red/Green rapidly	The Sensor unit does not have RF connection with the Main unit.
Sensor unit - Green	The house is exporting so the sensor unit is asking the Main unit to increase the power output.
Sensor unit - Red	The house is importing so the sensor unit is asking the Main unit to reduce the power output.
Main - Power LED - Red	The Main unit does not have RF contact with the sensor unit and is powered up.
Main - Power LED - Green	The Main unit has RF contact with the sensor unit and it is powered up.
Main - Immersion LED - Off	The Main unit is not offering power to the load.
Main - Immersion LED - Green	The Main unit is offering power to the load.
Main - Immersion LED - Flashing Red	The Main unit is offering full mains power to the load.
Main - Both LEDs - Red	The Main unit is in standby (no power being offered, no RF signal).

