



Energy for life

## SOLAR ENERGY KIT

Model No.: EC4

### GENERAL SAFETY

Please read this manual carefully before using you Energy Centre

Save this manual. This manual contains instructions for maintaining your system.

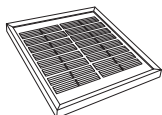
Follow the installation instructions carefully.

### ENERGY CENTRE CONTENTS

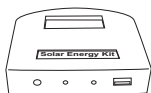
Your system should include all the following components. If there is anything missing, please contact the distributor you purchased the product from.



**Bulb**  
LED bulb x 2



**Solar Panel**  
PV Solar Panel



**Energy Centre**  
Controller



**Cables**  
Cables



**Manual**  
Manual

### HOW THE ENERGY CENTRE WORKS

The solar panel absorbs sunlight and turns it into electricity.

The battery in the Energy Centre stores the energy for later use.

The controller in the Energy Centre protects against;

- Over-charge
- Over discharging
- Short circuit and overload

The Energy Centre contains a built-in, state of the art Lithium-Ion battery which is rechargeable and can be replaced if necessary.

### INSTALLATION – SOLAR PANEL

Place the Solar Panel in a position directly facing the sun where it can receive the strongest possible sunlight.

The Panel should be installed in a well-ventilated location – good ventilation will help to generate more energy and extend the life of the product.

The solar panel performs best when set up at 90° to the direct sunlight.

The solar panel is water resistant but not waterproof. Do not submerge in water or expose the panel to a continual flow of water.

### INSTALLATION - ENERGY CENTRE CONTROLLER

Place the Energy Centre Controller on a stable flat surface in area that is safe from the unit being knocked or caused to fall.

The controller should be placed in a dry, shady place free from moisture.

Keep well away from fire or any corrosives.

If you prefer the unit can be mounted on an indoor wall.

### INSTALLATION – ELECTRICAL CONNECTIONS

Connect the light bulb to the cable by carefully inserting the connector into the top of the bulb and then tightening the screw connector. Repeat this for the second bulb

Connect the cable of the first LED bulb to the socket marked with a picture of a light bulb.

Connect the cable of the second LED bulb to the remaining socket marked with a picture of a light bulb.

Connect the cable from the solar panel to the socket marked with a picture of the sun.

### USING YOUR ENERGY CENTRE

Turn on the switch at the front of the controller.

The red LED will come on to indicate that your system is charging.

When the charging indicator light turns to green the system is fully charged and ready to use.

To use the LED Bulbs make sure that the on/off switch on the cable is switched to the on position.

The LED bulbs are water resistant and can be used outside but do not submerge them in water or expose them to a continual flow of water.

To charge your mobile phone, connect the original USB charging cable of your phone to the charging port marked with a picture of a mobile phone.

### RECOMMENDATION

Please charge the Energy Centre for a full day before first use.

## RECHARGING YOUR ENERGY CENTRE

The green LED indicator which is located on the top right of control box indicates the state of system.

When the battery is discharged the LED will turn off, and the controller will shut down all output.

Then please connect the control box to the solar module for charging allowing 8 hours in good sunlight for a full charge.

## MAINTENANCE

Non-use - turn off the main switch during long-term storage. To make sure that the battery remains in good condition the Energy Centre should be charged at least once a month.

**Solar Module** - clean the glass surface of the module as necessary. Use water and a cloth- a mild detergent can be used.

**Protect the cables** from stress by placing them where they will not be trodden on.

**If the controller is to be used outside**, please place the unit in a protective housing keeping it free from dust and water.

The Energy Centre is a maintenance free design and there are no user serviceable parts. If you have any problems please follow the steps in this manual or contact the distributor you purchased the kit from.

## SPECIFICATION

Solar panel Power, Size & Cable	4W/11V, 22.5*19.5cm; 5 Metres
Internal Battery Type	LITHIUM
Battery voltage & Capacity	7.4V/2200MAh
Output 1- Waterproof LED Light Voltage & Current	6V 240MA
Output 2 - Phone Charger Voltage & Current	5V 500MA
Waterproof LED light with 5 metre cable	1W
Battery Charging Time (standard: AM 1.5, 1000W/M <sup>2</sup> , 25°C)	8 hrs
Light Time (2pcs 1W LED lamps)	8hrs
Lifespan	
Solar module	No less than 15 Years
LED Light	50,000 hours
Battery	More than 500 cycles