
Home Owner User Guide Solar System

Installer: Please leave this with the system when commissioned.

There are many compelling reasons to use renewable and sustainable energy sources, they help us protect our environment by lowering the levels of carbon dioxide emissions in our atmosphere and reduce our reliance on fossil or other types of fuel.

Your solar heating installation contributes to the reduction of the carbon footprint of your home as well as bringing you financial savings by lessening fuel use and reducing boiler running time, this in turn will extend the boilers working life and help minimise on-going maintenance costs.

It is possible that the system could provide a saving of up to 70% in hot water heating, or around 30% of the total hot water and home heating costs per year.

To further reduce your impact on the environment please, whenever possible, assist in the reduction of the use of raw material sources by recycling all your household waste materials.

How Does My Solar System Work?

Your system harnesses the free renewable energy emitted by the sun which is then captured by the roof mounted solar collector(s) fitted on your home. The digital solar controller continually takes readings from sensors installed in the system and compares the temperature difference between the solar collector(s) and your hot water cylinder.

When a pre-set difference is reached it instructs the system to begin circulating the heated solar fluid from the collector(s) down through a coil in the bottom of the hot water cylinder. This heated solar fluid, which is safely contained in a sealed system, will in turn raise the temperature of the water in your hot water cylinder.

During the summer months it is estimated that the energy captured could provide up to 95% of your hot water needs and throughout the year an overall saving of 70% could be achieved.

Do I Need To Manually Operate My Solar System?

The short answer is **no**.

Your system will look after itself as the digital solar controller will keep a constant eye on it's operation.

Maximising Performance

For many households there is little hot water demand during the day so we would suggest heating your hot water in the late afternoon (once the solar system has had an opportunity to make its contribution) ready for the evenings use, and again briefly in the early morning to cope with the morning demand. In the main you should be aiming not to set the BOILER to heat hot water during the day when there is little demand and the opportunity arises to gather free solar energy.

The above advice should only be used as a guide because each individual household has different hot water demand times and volumes, the overall aim is to have the water in your hot water cylinder as cool as possible going into the day (after the morning hot water demands are finished) ready for the collection of the maximum quantity of solar energy.

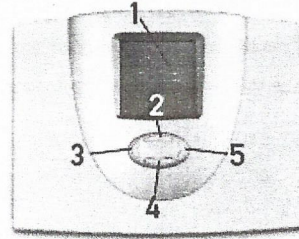
It may take some experimentation to achieve your most effective settings but remember it's worth it. Should there be times during this experimentation period when you find you have run out of hot water bear in mind that using your boiler timer boost facility will give hot water usually within 10-15 minutes.

Using the Digital Controller

Your solar controller has an integrated display screen that allows you to access information on the performance of your solar hot water heating system.

The display screen (1) will show you various readings that you can access, these readings scroll down through a rolling menu, indicated by an »Information« icon, by using button (4). Button (2) will scroll the menu up while buttons (3) and (5) can access other specialist settings within the controller.

- | | | |
|----|--|---------------------------------------|
| a) | Solar Collector 1 | Current Temperatur |
| b) | Solar Collector 1 | Minimum Temperatur since installation |
| c) | Solar Collector 1 | Maximum Temperatur since installation |
| d) | Solar Collector 2 | Current Temperatur |
| e) | Solar Collector 2 | Minimum Temperatur since installation |
| f) | Solar Collector 2 | Maximum Temperatur since installation |
| g) | Hot Water Cylinder | Current Temperatur |
| h) | Hot Water Cylinder | Minimum Temperatur since installation |
| i) | Hot Water Cylinder | Maximum Temperatur since installation |
| k) | Total number of hours the system has run | |



Readings for Collector 2 at d) e) f) will only be seen if your installation is an East/West system. This system type can be easily identified by the number of circulating pumps within the "Solar Pump Station" as two separate pumps will be fitted. A further way to identify this type of system is by looking at the Solar Collectors on your roof, if they are on opposite sides of a roof apex facing in different directions then your system is an East/West type.

10/11/09 6.30-11.00, 12-2, 4.00-11.00.

Unintentional Setting Changes

Should, in error, you enter any of the other specialist menu's and make an unintentional change then simply switch the power supply to the controller off, leave for 10 seconds and then switch it back on.

The controller will, not only default back to its previous settings, but will also remember the information it had previous recorded within it's memory.

Please Note:

The power to the solar system controller should be switched on at all times except for short periods when the system is being serviced by a specialist engineer. It is recommended that the solar system be serviced annually to ensure that peak performance is maintained.