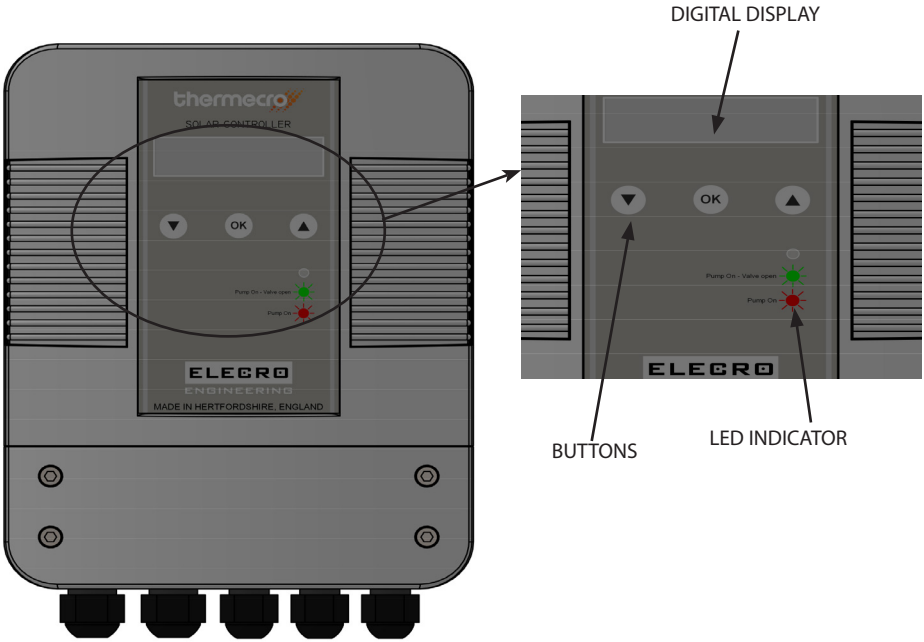
Thermecro Solar

Digital Controller

Installation & Operating Manual

ELECRO ENGINEERING

Overview



Language Setting

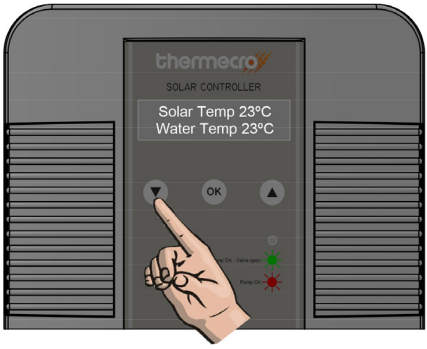
The factory default setting for the language is English.

To change to another language, press the ▲/▼ buttons until the desired language appears, press OK to select and save.

Set Up Modes

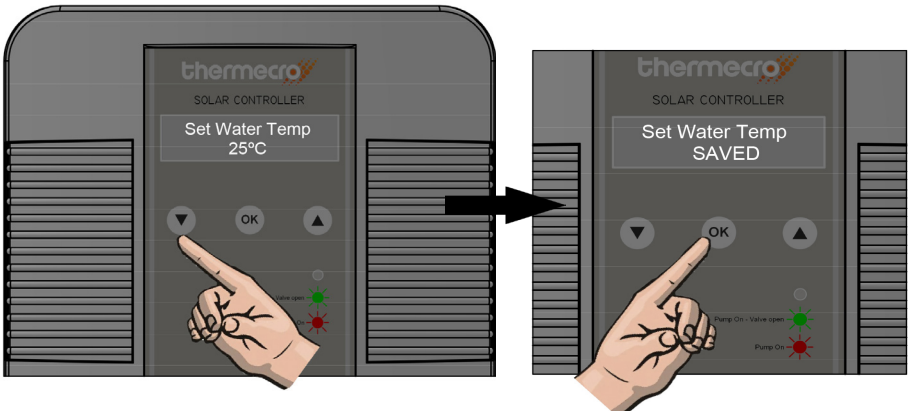
The Digital controller displays the solar water temperature and the pool water temperature. There are four modes for the set-up of your solar system i.e:

- SET WATER TEMPERATURE
- ON DIFFERENTIAL TEMPERATURE
- OFF DIFFERENTIAL TEMPERATURE
- FILL SYSTEM



To select a mode press the ▲ / ▼ buttons until the desired mode is displayed then press the OK button to select that mode.

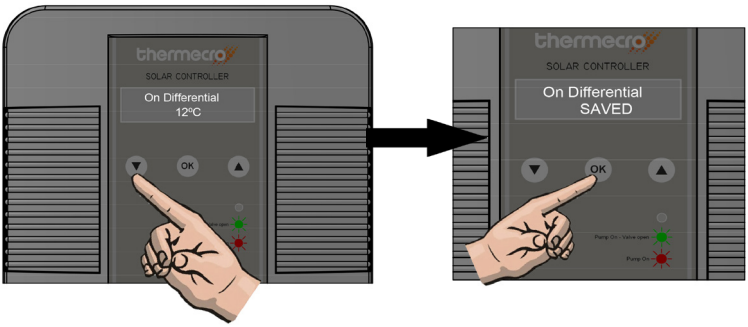
Set Water Temperature



Use the ▲ / ▼ buttons to select the desired swimming pool temperature. Then press OK to confirm and save.

NOTE - ***We suggest you set the required temperature on your traditional heater (electric, gas, heat pump) to 1°C or 2°C below the 'Set Water Temp' selected. This will ensure your system will operate as efficiently as possible.***

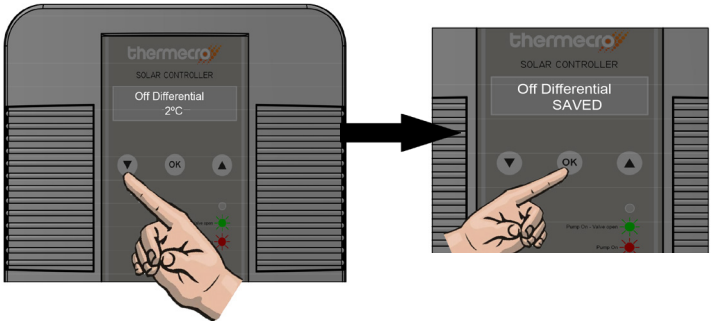
On Differential Temperature



This mode is user adjustable between 2°C and 60°C, the factory default is 10°C. 'On Differential' is the temperature difference between your Thermecro solar array and swimming pool water. When the 'On Differential' value is reached, the electronic stainless steel valve opens to allow the heated water back to your swimming pool. The 'On Differential' value can be changed to optimise the heating process according to the prevailing climatic and other influencing conditions, however, under most circumstances when 'On Differential' is set to a value between 10 - 12°C this will provide the best all round seasonal heating performance in most climates.

To set the 'On Differential Temperature' press the ▲ / ▼ buttons until this mode appears on the display and O.K. to select. Press the ▲ / ▼ buttons to set the required temperature and then press the O.K. button to save that value in the memory.

Off Differential Temperature



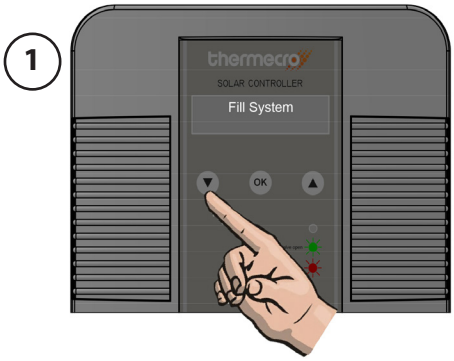
This mode is user adjustable between 1°C and 49°C the factory default is 2°C. 'Off Differential' is also the temperature difference between your Thermecro solar array and swimming pool water. When the 'Off Differential' value is reached, the electronic stainless steel valve closes, allowing the solar array to begin the heating process again.

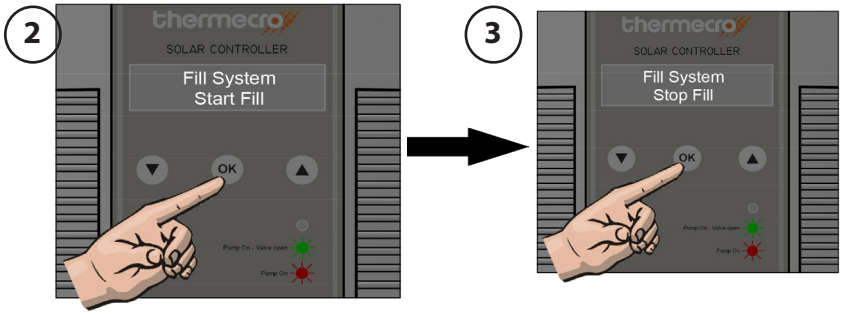
Fill System

Upon completion of the installation of the Thermecro solar array and pool interface valve, it is necessary to initially fill the array.

To fill the solar array press the ▲ / ▼ buttons until 'Fill System' mode appears on the display press O.K. this turns the filtration pump and the electronic valve 'On' (see diagram 1 and 2).

When the array is fully purged of air (i.e. no bubbles are being returned to the pool), press the O.K. button again to select 'Stop Fill' this switches the electronic valve and filtration pump off (see diagram 3).





Operation

The Thermecro digital controller is designed for use with the Themecro pool interface valve to facilitate the harvesting of heat from the solar array in the most efficient way possible.

The solar array water temperature and pool water temperature are measured continuously.

When the solar array temperature is greater than the 'set water temperature' + the 'on differential temperature' the controller will open the stainless steel valve to allow the heated water into the pool.

Example:
Set Water temperature = 28°C
On Differential = 10°C

The valve will be opened when 38°C is detected in the array.

The valve will remain open, delivering heated water to the pool until the 'Set Water Temperature' is achieved or the temperature within the solar array has fallen to the 'Off Differential' value

Example:
Set Water Temperature = 28°C
Off Differential = 2°C

The valve will close when 30^0C is detected in the array.

RoHS Compliance Statement

Elecro Engineering Limited certify that our Thermecro Solar Digital Controller complies in accordance with RoHS Directive 2011/65/EU on the restriction of hazardous substances.

Waste of Electrical / Electronic Equipment

This product complies with EU directive 2012/19/EU
Do Not dispose of this product as unsorted municipal waste.

This symbol on the product or on it's packaging indicates that this product should not be treated as household waste. Instead it should be handed over to the applicable collection point for the recycling of electrical and electronic equipment.

By ensuring this product is disposed of correctly you will help prevent potential negative consequences for the environment and human health, which could otherwise be caused by inappropriate waste handling of this product. The recycling of materials will help to conserve natural resources.

For more information please contact your local Civic office, your household waste disposal service or the retailer where you purchased the product.

Guarantee

Your digital controller is guaranteed for 3 years from the date of purchase against faulty workmanship and materials.

The manufacturer will replace or repair, at it's discretion, any faulty units or components returned to the company for inspection.

Proof of purchase may be required. The manufacturer will not be liable in cases of incorrect installation of the product, inappropriate use, or neglect.

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