

SUNLOVER HEATING

WARRANTY – SLH3

This product is covered by a limited 2 year warranty against component failure or faulty workmanship from the date of installation. Temperature sensors are covered by a limited 12 month warranty.

A faulty unit should be returned in the first instance to the dealer from which the unit was purchased.

Damage to the unit due to misuse, power surges, lightning strikes or installation that is not in accordance with the manufacturer's instruction may void the warranty.

Warranty does not cover travel costs to or from installation site. Unit must be returned to manufacturer for repairs.

If the power cord is damaged, do not use the controller; return the unit to the supplier for repair.

Customer Record. (To be retained by the customer);

Dealer/Installer Name _____

Serial Number _____

Date Installed _____

For service assistance phone SUNLOVER HEATING

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SLH3 INSTRUCTIONS

DESCRIPTION:

The SLH3 is a pump controller that controls the water flow through heat pumps or gas heaters when the water temperature is below the desired temperature limit (and is within the required run time). A pump sampling period setting allows the pump to stop for this time period once the desired temperature limit is achieved, after the elapsed time the pump will then automatically run for 3 minutes to obtain an accurate temperature, should heating be required then the pump will continue to run, if no heating is required the pump will stop and the last accurate temperature will be displayed until the next sample period.

CONTROLLER INSTALATION

Find a suitable location to mount the control box. The controller should be installed out of direct weather and no closer than 3 meters from the waters edge. Lift up the two mounting tabs and use two appropriate screws to mount the control box to the wall, keeping in mind that the power cable is 1.8m long and should be plugged directly into a general power outlet, not into an extension lead.

The circulating pump plugs into the 240Vac socket marked as PUMP.

The pool sensor must be fitted into the suction line of the pump, as close to the pool as practical, preferably in a position out of direct sunlight. It is recommended that a 14.5mm hole be drilled in the PVC pipe, this can be carried out using a Dontek PD01 grinding drill or a small pilot hole can be drilled and a 14.0mm drill-bit used spinning in a counter clockwise direction to minimize the chance of shattering pipe. Insert the grommet into the pipe and gently push in the black sensor barb. The green sensor plug is to be fitted to the plug socket marked POOL.

DO NOT cable-tie or tape sensor wires to mains power, in some cases there is some benefit to cable tie 100mm of wire from the sensor to the pipe and insulate this section (some ambient differences can travel up the copper wire and affect the sensor reading).

Select the "Settings Menu" as described below and set the clock and the required run hours then select exit to save the changes, the controller will then start automatic heating mode.

SETTINGS MENU

To select the SETTINGS MENU push the ENTER button and the following will be displayed;

1)CLOCK

Press the UP or DOWN buttons to scroll to the option you wish to change. Press the ENTER button to select the sub-menu of the currently displayed menu item.

Available Settings Menu items are shown below:

- 1)CLOCK
- 2)RUNHRS
- 3)MODE
- 4)EXIT

The settable items in the sub-menus will be flashing, to change these values use the UP or DOWN button to adjust the value, if the value is correct press ENTER to move to the next value, once all setting have been set you will return to the settings menu, press the UP or DOWN button to scroll to EXIT and press ENTER to save your adjustments.

1)CLOCK

Set the time of day in 24 hour format, note there is an AM/PM indication to avoid incorrect settings. Seconds are automatically set to zero.

2)RUNHRS

You will be prompted to set the start & end time; the pump will only be allowed to run between these hours.

Set the start time (S1 hh:mm) and end time (E1 hh:mm) in half hour steps (30 mins)

Once the start and end time are set you are prompted to set temperature limit sample time (S xx MIN), this stops the pump for the selected time period once the temperature limit has been achieved, for smaller bodies of water running a higher temperature limit (i.e. spa) the sample time should be set shorter than larger bodies of water that run lower temperature limits (i.e. pool). If the pump runs for 3 minutes and stops frequently, then increase the sample time as the body of water is not losing much heat.

If the temperature sensor is placed directly in the water (i.e. in a continuous filtration pipe) then a sample time of 0 minutes can be selected, the pump will then turn on as soon as the temperature sensor drops 0.5°C below the desired temperature limit or will turn the pump off if the temperature is 0.5°C above the desired temperature limit.

NOTE: if a 24 hour continuous run time is required then set the start time and end time to the same value. (E.g. S1 12:00, E1 12:00)

3)MODE

Two options are available, heating and away.

Heating mode performs heating during the runtime.

Away mode does not perform heating but a three minute maintenance flush occurs every day at noon (12:00).

4)EXIT

When this menu is selected push ENTER to save ALL settings, the unit will then return to automatic operation.

Note: If any of the menu items are left unattended for 3-4 mins the menu will time-out and automatically save all settings and return to automatic operation.

TEMPERATURE LIMIT

To change the pool or spa temperature limit simply press the UP button to increase and the DOWN button will decrease.

NOTES:

1. If a sensor fault is detected the controller will display POOL O/C for an open circuit fault (open circuit fault, disconnected sensor or broken cable) or POOL S/C (short circuit fault or reversed polarity sensor)
2. Should power be interrupted for any reason, the controller will resume normal operation when power is restored, all information will have been kept.
3. Temperature sensor used with this unit is digital and is accurate to 0.5°Celsius, no calibration is required.
4. The sensor cable with the thin trace is the positive and is usually fitted to the right hand side of the green plug (as viewed from the screw side), incorrect polarity will be displayed as a short circuit.
5. If the controller has stopped pumping and is displaying a higher temperature than expected it may be caused by a pump which is failing to prime, check the pump and if necessary prime the pump as per the pump manufacturers' instructions then reset the controller by turning it off/on.
6. Maximum rated output load for the 240V sockets is 10 Amps 2400 Watt.

Return to supplier for repair.