

Aqua Solar Control Operation Manual

The Aqua Solar is a fully automatic solar heating control which requires minimal set up or adjustment under normal operating conditions. Typically the following is required:

1. Set the main switch to AUTO
2. Set the "Desired Temperature" knob to the desired temperature for the pool

The "Heating" LED will show when the pool is being solar heated.

Controls and Displays

MAIN SWITCH

ON: The Aqua Solar directs water through the solar collectors regardless of desired temperature setting. Both the "Heating" and "Cooling" LED's will be on.

AUTO: For normal operation. In this position, the Aqua Solar will operate automatically based on the solar and pool temperatures.

OFF: The Aqua Solar ceases solar heating or cooling (if enabled). Recirculate freeze protection (if enabled) will still operate normally. This switch does NOT remove power from the unit--to service the equipment, disconnect power at the main circuit breaker.

DESIRED TEMPERATURE

Set the desired pool temperature. The digital display will show the exact temperature while rotating the Desired Temperature knob. The display reverts back to the default pool temperature display a few seconds later.

TEMPERATURE DISPLAY

The temperature display normally displays the pool temperature. Push the small button next to the display to cycle through the various displays. If a temperature sensor is not wired to the Aqua Solar, or the sensor is not functioning properly, the error message "Err" will be displayed for that sensor. If the button is not pushed for 30 seconds, the display will automatically revert back to pool temperature. The example below shows a typical display:

- Normal, default display indicates **P**ool temperature:
- 1st button push will show **S**olar Collector temperature:
- 2nd button push will show **A**ux temperature (if used):
- 3rd button push will show "Desired Temperature":
- 4th button push will show software **r**evision number:
- 5th button push will loop back to show **P**ool temperature.

LED INDICATORS

Power: Input power is applied to the Aqua Solar.

Heating: Solar heating is active. If both Heating and Cooling are on, the switch is in the ON position.

Cooling: Nocturnal Cooling is active. If both Heating and Cooling are on, the switch is in the ON position.

Sweep Interlock: Not used.

Pool Sensor: A problem is detected with the pool sensor (open or short circuit).

Solar Sensor: A problem is detected with solar sensor (open or short circuit).

Aux Sensor: A problem is detected with the AUX sensor (short circuit, only when used for recirculation freeze protection). Not used.