TROUBLESHOOTING.

Manual Button does not work:

For the Manual switch to work there must be at least one successful temperature transmission from the roof module after the unit is plugged in and switched on. Transmissions require strong sunlight.

"00" in the display - no signal is being received.

There may be insufficient Sun. Or the distance between the transmitter and SunSwitch may be too great [if so, then the transmitter must be moved closer.]

The 6-digit numbers don't match.

The two units may be mismatched or SunSwitch might be receiving signal from another SunSwitch transmitter close by. Ring 1800 BATHER for a solution to this issue.

"01" is an internal fail-safe procedure.

If SunSwitch does not receive any transmissions for a set period of time it will institute a count down from its current temperature down to "01" and switch the pump off.

Other Odd Numbers in the Screen:

If the roof transmitter has not sent a successful signal, the receiver will continue to recall the last piece of information recorded on start-up or resetting. Be patient, as most odd numbers are temporary and will right themselves within 24 hours. If not, contact Sunbather service for assistance.

SERVICE FUNCTIONS:

Start-up Diagnostic: All lights, displays and non-volatile memory are checked on start-up. "EE" will flash in the display if a fault is found.

Pool Sensor Fault Diagnosis: "Er" display indicates a faulty pool sensor. Cold sensor is non-polar 4.7K Ohm at 25° C thermistor with these temp/resistance ohm readings: 10° C - 9535, 20° C - 5902, 30° C - 3770, 40° C - 2480.

Electrical Specifications: △T on 6°C. △T off at 2°C. Max relay overload 230V-10A

Readout Calibration: To fine tune the temperature readings hold TEMP SET button down for 10 seconds until the display flashes. Pressing the up or down arrow buttons will change the units base settings one degree each press. While in standby, the display reads the last recorded temperature.

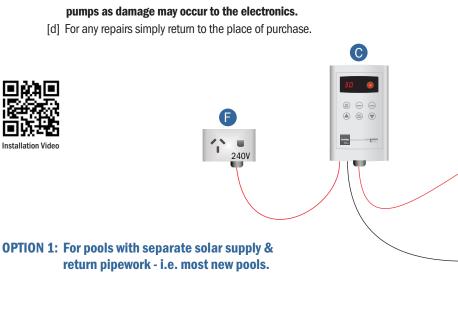
Service Lock-Out Mode: Hold AUTO & MAN buttons down for 10 seconds (LO appears in display). Controller will remain in Lock-Out for 2 hours before reverting to normal automatic operation.

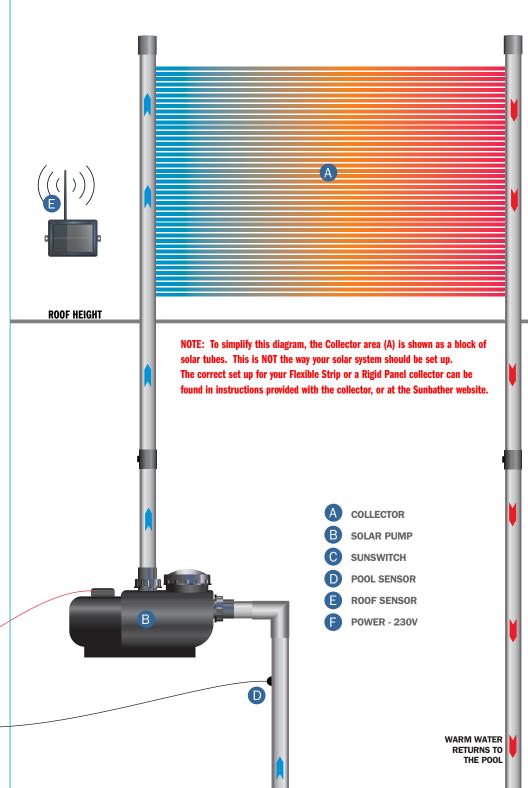


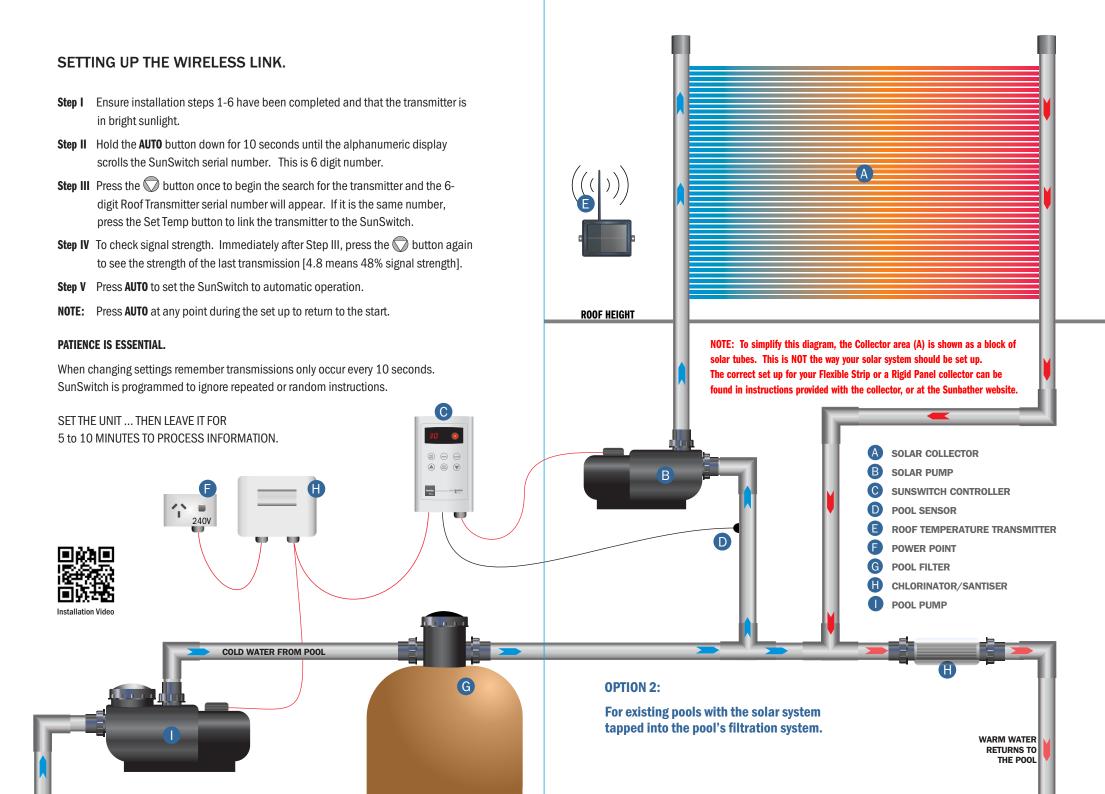
Sunbather Pty Ltd 2174 Frankston-Flinders Road PO Box 107 Hastings Victoria Australia 3915

SUNSWITCH INSTALLATION INSTRUCTIONS.

- The Roof Temperature Transmitter runs on the power of the Sun, it doesn't have a battery. It is recommended that you place it in the Sun for 15 minutes before installation, if you intend on installing it and turning it on straight away.
- Fix wall mounting bracket on a vertical wall **protected from direct rain and sun**. Step 2
- Locate Roof Temperature Transmitter adjacent to the solar collector. It must Step 3 receive similar sun to the solar collector but not be in contact with it. Effective transmission range is up to 150 metres depending on surrounding buildings. It is recommended that roof transmissions are confirmed before fixing the transmitter permanently in place - just in case it needs to be moved for best transmission.
- A Pool 'Cold' Sensor 'barb and grommet' is provided. Drill a 13mm hole and install it into a section of pipework prior to the solar pump, i.e. on the intake side of the pump. Insert the 1.8m Pool Sensor cable into the well.
- Connect the Pool Sensor to the colour-matched connections on the controller. Step 5 Then slide unit into mounting bracket.
- Plug in solar circulation pump into the base of the controller and switch ON. Set Step 6 the Pool Temp to 30°C for the initial start up.
- [a] Joins in sensor cables must be soldered and waterproofed.
 - [b] Installation Option 2 requires the Sanitiser to be set for daylight hours.
 - [c] SunSwitches are NOT designed to switch DC motors or Multi-speed pumps as damage may occur to the electronics.







PRIMARY FUNCTIONS

To Switch ON:

Push the ON/OFF button once to switch the unit ON (pool temp reading will then display).

For Automatic Operation:

Press the AUTO button once for fully automatic operation (status light will then display).

In this mode the controller automatically switches the solar pump to heat the pool when weather conditions are favorable. The Status light pulses when the pump is on standby and remains on when the pump is running.

To Select the Desired Temperature:

Press the **SET TEMP** button down and scroll up or down with the arrow buttons until the desired pool temperature is displayed.

The display reverts back to reading the pool water temperature after 5 seconds.

The pool set temperature can be read anytime by pressing the SET TEMP button.

SECONDARY FUNCTIONS:

MANUAL:

Press **MAN** to run the solar pump (flashing status light indicates Manual mode). Unit will not run on Manual if no roof transmission has been received.

Press **AUTO** to exit Manual mode or wait 30 minutes for unit to revert back to Automatic. For continuous Manual operation, hold the **MAN** button down for 10 seconds. "CO" will appear in the display. Press **AUTO** to revert back to Automatic mode.

WINTER MODE:

Press **ON/OFF** for 10 seconds ("W" will appear in the display) and the solar pump will run for 10 minutes each day, from the time of setting. Press **ON/OFF** again to exit winter mode.

ROOF/POOL TEMPERATURE:

Press and hold the Up Arrow for 3 seconds to display the roof sensor temperature for 5 seconds. The display will show "00" if no roof temperature signal is received.

Press and hold the Down Arrow for 3 seconds to display the pool sensor temperature for 5 seconds.

ENERGY SAVING "ES" MODE:

When the Set Temperature has been reached, the letters "ES" and the pool temperature will alternate in the display.

This is not an error message - it indicates "Energy Saving Mode" has been achieved.

While in "ES" mode the pump will NOT run for 2.5 hours. After 2.5 hours the pump will run for 3 minutes to check the pool water temperature and then revert to normal operation.

If there is insufficient sun at the end of the 2.5 hour period for the transmitter to send a successful signal, "ES" will remain in the display until a successful signal has been received. This may not happen until the following day.

ALPHANUMERIC DISPLAY DIAGNOSTIC MESSAGES:



Energy Saving Mode.
Winter Mode.

Faulty Cold Sensor.

Software Fault.

Service lock-Out.

Continuous Operation.

Default Shut Down.





