Trouble Shooting: SunSwitch Controller

- **Controller is on, but pump is not & solar conditions are good**
  - Check solar pump is plugged into the base of the controller & check controller is not in ESM
  - Set controller to Manual & verify that the pump runs
  - Test pump by plugging into a different power point & turn on. If it doesn’t turn on then the pump is the problem
  - Check computer output by plugging in a power tool or small appliance into the bottom of the controller to see if it runs

- **ER message in display (SunSwitch)**
  - Check wire connections to controller
  - ER flashing = Faulty Roof Sensor
  - ER not flashing = Faulty Cold Sensor
  - Check for breaks in wires and/or damage to the sensor ends
  - Repair or replace sensor wire & sensor
  - If ER still displayed, call Sunbather Head Office with a description of the fault

- **Controller not turning on – no power**
  - Plug controller into a different power point and test. If no response please call Sunbather Head Office

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**Contact Sunbather – service@sunbather.com.au**

Refer to our website for additional SunSwitch information

**www.sunbather.com.au**

**Other Tips:**

- If you have an ER message displayed on an SCM model controller, (blue box with diving girl), the ER message will not be flashing, but the LED light next to the button ‘Roof Temp, Set Temp, Pool Temp’ will be red or green. Red = Roof/Hot Sensor fault. Green = Pool/Cold Sensor fault. Please call Sunbather Head Office for repair information.
- For SCM controller with a serial number prior to 411583 (found on the back or base), brass ended 2kΩ sensors are required – plastic ended 47kΩ sensors are not compatible.
- For SCM Controllers with a serial number 411583 and onwards, use plastic ended sensors (47kΩ) which are interchangeable with SunSwitch sensors.
- SunSwitch version 6 (serial numbers 1500 – 4999).
- SunSwitch version 8 (serial numbers 5000 – 7499).
  1. Flashing dot in LED display means the controller is awaiting user instruction, eg. Set temperature. Pulsating circle means the controller is in Auto.
  2. Energy Saving Mode (ESM) has a 2.5 hour lock-out period after the set temperature has been reached. A non-flashing dot in the display indicates that the unit is in ESM.

**ESM last 2.5 hours. At the end of this period the unit will run a 5 minute test before resuming normal operation.**
### Trouble Shooting: Leaks

<table>
<thead>
<tr>
<th>Leaking from main solar strips</th>
<th>Leaking from manifold connections</th>
<th>Leaking from Vacuum Break Valve</th>
<th>Leaking from pipe work</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water is spraying into the air or running down roof</td>
<td>Degrading rubber &amp; grommet connections may be the cause</td>
<td>Dripping or pouring water from over flow hose or leaking from threaded connection to pipe work</td>
<td>Glue any fittings you may have forgotten to glue or not glued enough</td>
</tr>
<tr>
<td>Use repair kit to fix leaks</td>
<td>If a Sunbather system, fix with insert &amp; header plug in tool</td>
<td>Check for debris under valve seat. The valve may be unscrewed and cleaned out.</td>
<td>If pipe is cracked, replace the leaking section</td>
</tr>
</tbody>
</table>

**Contact Sunbather – service@sunbather.com.au**

### Trouble Shooting: Solar Pipe Work

| Air bubbles continually returning to pool | Pipes vibrating & causing noise |
|------------------------------------------|---------------------------------
| Bubbles may take up to 10 minutes to clear when starting up for the first time | Check that air is not being sucked in vacuum break valve |
| Check for holes or a crack in the suction line | Check that solar pump is not partially blocked or drawing air |
| Check that the pump lid & barrel union connections are sealed | If a simultaneous system, check the filter pump is not sucking air or partially blocked. If yes, notify owner. |
|                                      | If pumps & filters are OK, adjust opti valve until bubbles cease. DO NOT close by more than 2/3 |
|                                      | Larger pump maybe required |

**Contact Sunbather – service@sunbather.com.au**
Trouble Shooting

**Trouble Shooting: Pressure Gauge**

- **Pressure Gauge is in the red area**
  - Ensure all valves are open and in the flow & return pipe work. This includes flip hose valves which should NEVER be fully closed. This creates back pressure if closed.
  - Remove any eyeballs in the pool return outlets. These are the returns in the actual pool.
  - Install opti valve on the discharge side of the solar booster pump. Slowly restrict the valve until the pressure drops into the green.
  - Solar pump may be too powerful & need to be down-sized.

- **No pressure reading can be seen on the gauge**
  - If no air bubbles are returning to the pool and all appears reasonable, then no pressure reading is OK.

**Contact Sunbather – service@sunbather.com.au**

**Trouble Shooting: Solar Pump**

- **Solar pump not operating**
  - Check that any opti valves are not closed
  - Try pump in another power outlet that you know works.

- **Pump motor is running, but no water circulating**
  - Check solar computer for correct settings and/or faults
  - Visually inspect pump for blockages

- **Pump will not prime**
  - Check lid seal is airtight
  - Fill pump filter pot with water, reseal, and try to run pump again. Priming may take 5 Min
  - Check the impellor to see if it is clogged or broken shaft. Only dismantle a pump if you are competent.

- **Pump makes loud whining or grating noise**
  - Stones may have jammed impellor. Open casing and check. Only do so if you are competent.
  - Possible bearing, impellor, or seal failure.

- **Solar pump may be too powerful & need to be down-sized**

**Contact Sunbather – service@sunbather.com.au**

“A Collection of Great Ideas”
Solar FAQ's

Ideal Roof Type: All except slate
Ideal Orientation: North, North-West & West
Ideal Roof Angle: Any walkable roof
Ideal Exposure: In sun for at least 2/3 of the day
Ideal Height: Up to 4 storeys
Ideal Direction: Running horizontally across roof. May be ran vertically on tile roofs
Ideal Fixation: Glued to roof surface with a high grade silicone
Ideal Size: 100% of pool surface area
Ideal Maintenance: Annual inspection by qualified Sunbather Technician
Weight On Roof: 4kg per m² (When full of water)

Troubleshooting FAQ's

Pool is not heating to required temperature
- Is there enough collector?
- Is the controller set correctly?
- Is it a brand new system? It takes around 4–5 days of good sun to heat
- Is it an old system that has previously worked well? Check for blockages in pipe work
- If it is leading into Autumn, the sun isn’t as high in the sky or as hot

Refer to pages 26–28 or our website for more troubleshooting & detailed SunSwitch information or contact your nearest Sunbather office.

Required Components of a Sunbather Solar System

The above picture is of an ideal Sunbather Solar System & a list of its components.
All these items and more can be found on pages 7–11 of this price list.

“A Collection of Great Ideas”