

Autumn Solar

POOL & SPA HEATING

Installation and Operation of Digital Solar Heating Controller

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Installation Instructions

Control Box

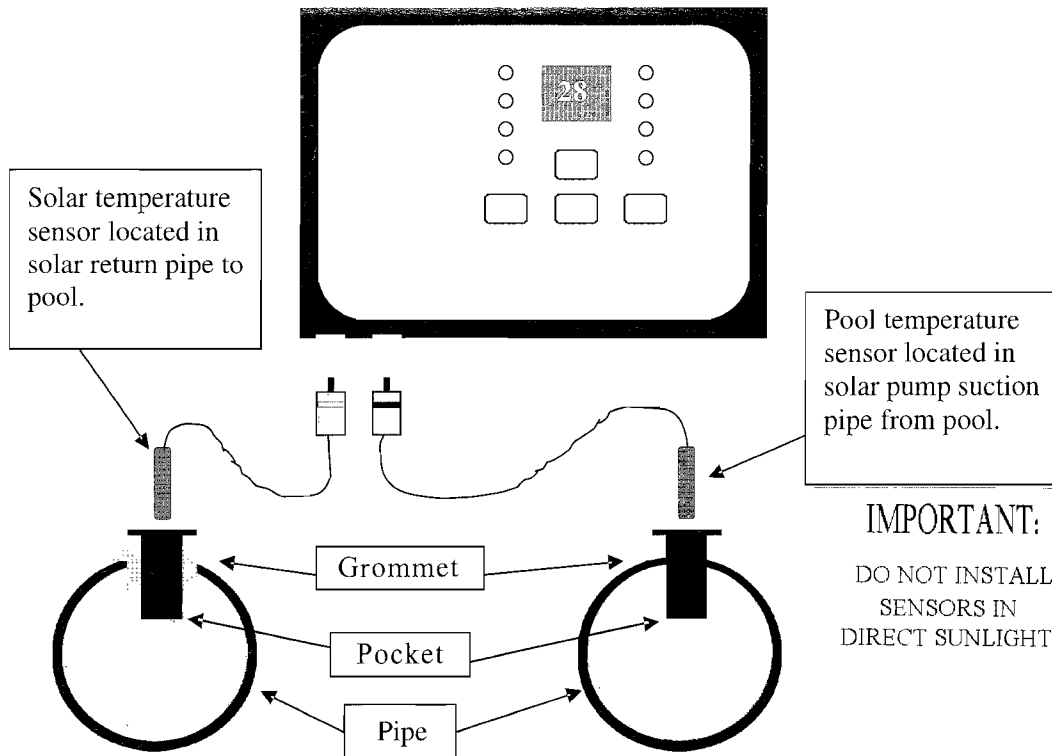
1) Your Digital Pool Solar Heating controller comes complete with, screws, and wall plugs enabling the unit to be mounted to several types of surfaces. Before mounting the controller choose a dry location approximately 1.5 metres above ground level and adjacent to the solar pump.

a) If the supply cord is damaged, it must be replaced by the manufacturer, it's service agent, or a similarly qualified person in order to avoid a hazard.

b) A means of disconnection, having a contact separation of 3mm in all poles must be incorporated into any fixed wiring.

Temperature Sensors

Use a 16mm drill to make one hole in the solar pump suction pipe, and another in the solar return to pool pipe. Insert the grommets provided into each of these holes and then install the black plastic sensor pockets into the grommets. Fit the Sensor with the RED striped plug into the pipe returning water from the solar collector, and the sensor with the BLACK striped plug into the solar pump suction pipe. Connect the RED & BLACK stripped sensor plugs into the control box as per the diagram below.



How Does the Controller Operate?

Displaying the Pool Temperature; When the ***Pool Temp.*** light is illuminated the two digit display will show the measured pool temperature.

Pool Temperature Setting; Press the SELECT button until the ***Set Temp.*** light is illuminated. The display will show the current set temperature. Use the UP / DOWN arrows to alter the set temperature to the desired temperature that you wish to heat the pool to.

Setting the Clock; Your solar controller has an inbuilt clock with battery backup so as the controller retains settings during a mains power failure. To change the clock time press the SELECT button until the **hours** light is illuminated. The two digit display will show the current hour of day (in 24 hour format). To change the hours use the UP/ DOWN arrows. To change the minutes press the SELECT button until the **minutes** light is illuminated. Again use UP/ DOWN arrows to set the minutes.

Auto Mode; When in Auto mode the unit will turn the solar pump ON and test the water temperatures for a 3 minute period each hour, between 8:00am and 6:00pm daily. If the controller determines that the temperature of the water returning from the solar collector is hotter than the pool water temperature then the unit will continue to keep the pump running to heat the pool until the desired pool water temperature is reached.

~~Alternatively if the temperature of the water returning from the solar collector is less than~~ the pool water temperature then the controller will turn the pump OFF. The controller will then again switch the pump back ON for a 3 minute test at the beginning of the next hour. Auto mode will only ever turn the solar pump on between the hours of 8:00am and 6:00pm, unless the controllers Clock has been incorrectly set.

Manual Mode; Manual will turn the solar pump ON permanently, regardless of the time of day.

Standby Mode; Standby mode turns the solar pump OFF.

Winter Mode; It is important to flush your solar system periodically with fresh pool water during the winter months when it is too cold to solar heat the pool. This assists in keeping the solar pump bearings from seizing, and water stagnating in the solar collector tubes. For this reason your solar controller is equipped with a winter mode which switches the solar pump ON each day at midday for 20 minutes.

E2 and E4 messages; Should the display periodically flash **E2** this indicates that the pool temperature probe is not connected, or faulty.

Should the display periodically flash **E4** this indicates that the solar hot water temperature probe is not connected, or faulty

WARRANTY

Claims under this warranty must give evidence of date of purchase, model and serial number of the equipment. Also the claimant's name, address and telephone number.

1. Your pool solar heating controller, when used for its designed purpose, correctly housed and vented against weather, vermin, dirt etc should render trouble free service. You should carefully read the instructions supplied, and your unit should be installed and operated in accordance with these, otherwise this warranty will not apply. The warranty does not cover damage, malfunction or failure resulting from, use on incorrect voltages, alteration, accident, misuse, neglect, abuse, faulty or improper installation, mis-adjustment, mains supply problems, thunderstorms, lightning, infestation by insects or vermin, tampering by unauthorised persons, failure due to non company supplied components or products being substituted as part of the system, or exposure to abnormal corrosive conditions.
2. Autumn Solar Installations Pty Ltd (the Company) hereby warrants in accordance with and subject to the provisions herein contained your pool solar heating controller against defects in material and workmanship under normal use and service and when properly installed and connected for a period of 12 months. This warranty is limited in time to a maximum period of two years from date of manufacture. Freight charges both ways and risk of loss or damage will be the owners responsibility. If new or replacement parts are supplied for in field replacement work, any labour or travelling charges will be at the owners expense. Spare parts are normally stocked for a period of 5 years & generally stocked for the life of the unit.
3. This warranty does not extend to component parts of Units not manufactured by the company but where permissible and possible the Company will make available to you the benefit of any warranty of that manufacturer thereof.
4. The Company will not be liable for the costs involved with the taking out and re-installing of equipment that has failed under the warranty period. This includes electrician's time and with wiring costs, and plumber's time and materials.
5. This warranty does not extend to or cover your Unit or any part of it which in the reasonable opinion of the Company has worn by fair wear and tear, abraded or corroded by fluid pumped, operated at high temperatures or outside the technical specifications of the equipment, or has been damaged or rendered defective by accident, wilful act, negligence (other than that of the Company) misuse, alteration, or repair carried out by other than the Company (or by permission with its dealers), usage of other than the company's parts, operation on voltages or frequencies other than indicated on the rating plate, incorrectly set voltage regulator, electrical fusion, lightning, or by force majeure. This warranty is an exclusive warranty and is in lieu of all other warranties and conditions, expressed or implied, whether statutory or otherwise. Swimming pools or spa equipment will not be warranted where the Langelier saturation index "pH" range is outside 7.2 to 7.6 and they have not been regularly treated with Chlorine or Bromine based sanitising system. Use of any other chemical treating system voids warranty.
6. Save as foresaid the Company shall not be liable for any loss or damage of any kind whatsoever (including injury or death to persons or animals or loss or damage to property) whether suffered or incurred by you or by some third party where such loss or damage arises in relation to or as a result of the Unit or any part thereof and whether arising wholly or partly as a result of negligence of the Company, its servants or agents or otherwise. Without limitation upon the provisions of the foregoing provisions of this clause the Company shall not be liable for any consequential loss damage (including financial loss or damage) and in no event and in no circumstances shall the liability of the Company to you or any third party exceed the total purchase price of the Unit or parts thereof in question.
7. Nothing in this warranty, limits or restricts, or is intended to derogate from, any right or remedy which the purchaser or ultimate user of the Unit may have pursuant to Australian State and/or Australian Federal Consumer Protection Legislation and where necessary shall be so read and construed.