



INSTALLATION GUIDELINES

SOLAR POOL PUMP

***** THIS PUMP DOES NOT HEAT WATER *****

FOR MODELS ENDING: 370 / 500 / 900 / 1200

INCLUDED IN THIS BOX	
QTY	DESCRIPTION
1	SOLAR POOL PUMP
1	SOLAR POOL PUMP CONTROLLER
2	SCREW ON PVC 50mm CONNECTORS
2	O-RINGS FOR 50mm PVC CONNECTORS
1	6M, 4mm 2 CORE CABLE (FOR SOLAR PANEL CONNECTION)
1	CLEAR LID AND SCREW ON HOLDER FOR LEAF TRAP
1	LEAF TRAP OPENER HANDLE
1	LEAF TRAP BASKET (WHITE)

CONNECTING THE PUMP, CONTROLLER AND SOLAR PANELS

1. Open the controller box by undoing the 4 screws.
2. Mount the controller box in the appropriate position. Close enough to the pump and solar panels. The box is IP65 rated when closed correctly. You can place in another box if ventilated.
3. Insert the cable from the pump through the cable gland at the bottom of the controller and connect the labelled wires to their corresponding letters in the controller. U, V and W respectively. *** If you have extended the cable be sure to mark the extended cables accordingly. Only extend with appropriate cable.
4. Insert the 6m cable supplied for the solar panels through the other cable gland. If you need to extend the solar panel 2-core cable supplied, you can do so up to 16m with a 4mm cable. If you extend beyond this you need to replace the complete cable with 6mm cable up to 60m.
5. Connect P+ and P-: The Blue wire to P- (negative) and the brown/red wire to P+ (positive)
6. Ensure the variable speed is set appropriately (normally maximum)
7. Ensure the battery / Solar switch in the top right corner is set to solar (if no batteries connected).
8. Once the solar panel cable is long enough, crimp 2.5mm MC4 connectors (NOT INCLUDED) onto the respective cables. Positive + (brown/red) and Negative - (blue) Ensure that the controller switch at the bottom is in the off position.

SOLAR PANEL CONFIGURATION (DIAGRAMS ON LAST PAGE)

1. Ensure the input voltage from the solar panels is within the operating range of the controller. The voltage of the controller is marked on the front of the controller.
 - a. 24V Controller = 24V - 63V (VoC)
 - b. 48V Controller = 48V - 100V (VoC)
 - c. 72V Controller = 48V - 150V (VoC)
2. The wattage of the solar panels should be the pump wattage plus 30% to 60%.

PUMP	CONTRL.	PANELS	CONNECTIONS	OUTPUT TO CONTRL.
370w	48v	2 x 250w, 36v	2 panels connected in series	500w @ 72v
500w	48v	4 x 165w, 36v	2 panels in series, 2 sets in parallel	660w @ 72v
900w	72v	6 x 200w, 36v	3 panels in series, 2 sets in parallel	1200w @ 108v
1200w	72v	6 x 300w, 36v	3 panels in series, 2 sets in parallel	1800w @ 108v

SOLAR PANEL MOUNTING

Solar panel mountings are not included in this kit as roofs and installations vary.

1. Solar Panels must face NORTH
2. They should be at a pitch of between 26° - 36° degrees for optimal operation.

PUMP CONNECTIONS (PLUMBING)

This pumps is connected in the same way as a standard pool pump using 50mm PVC connections.

OPERATION

1. When the pump is running optimally the SYS and PUMP light will remain ON. The MPPT light will flash intermittently.
2. When the TANK_F light is on (RED) this indicates the switch on the controller is in the ON position. To turn the pump on turn this switch to the OFF position.



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SOLAR POOL PUMP

FREQUENTLY ASKED QUESTIONS

- 1. How do I backwash the pool?**
 - a. Ideally for maximum efficiency you should backwash the pool between 11am and 2pm on a clear sunny day. You can backwash the pool earlier and later, but you will not have the same flow of water which will make the process longer.
- 2. The pump is making a high pitched noise.**
 - a. This is normal when the pump is running at lower power. You will generally hear this noise in the morning and afternoon, or a cloudy day.
- 3. Will my pool cleaner work / my pool cleaner is not working.**
 - a. This pump is a variable speed solar pump. When the sun comes up in the morning it will start working, but at a slow pace. The solar pump will only get up to maximum capacity later in the day at which point it should drive your pool cleaner. The pumps have been tested with many different pool cleaners to great effect.
- 4. Will this pump heat my water?**
 - a. No this pump circulates your water like a standard pool pump. It does not heat water at all.

CONTROLLER LIGHTS

LED	DESCRIPTION
SYS	Indicates that the controller is getting power and that the board has switched on.
PUMP	Indicates that the motor has started turning. The motor will take a few seconds to get up to full speed which will be regulated according to the power from the solar panels.
MPPT	This light, when flashing, indicates that the controller is busy tracking the maximum power point and this also means that the motor will be running at its optimum performance.
ERR	Possible over current alarm which can be caused by incorrect cable size
LOW_P	This light indicates under voltage which can be caused by insufficient power from the solar panels, incorrect cable size, incorrect angle, weather conditions, dirt on the panels, etc. Common to see in the early morning / evening.
WELL_L	Not used on this product.
TANK_F	This light is also triggered by the on/off switch at the bottom of the controller.

SUPPORT

Telephonic and email support is available from Bundu Power during office hours. You can contact us and find additional support information online.

Telephone: 087 700 0198
Email: solarsupport@bundupower.com
Website: www.BunduPower.co.za

INSTALLERS

It is always recommended that you use a qualified installer for this product. Should you require details of an installer in your area please contact us.

WARRANTY & SPARES

Spare parts are available from Bundu Power directly. The warranty on the pump and controller is 12 months subject to assessment of product.

