



solar cascade solar powered fountain

operates in direct sunlight



If you have any problems, please contact Smart Solar before returning to the place of purchase. For immediate answers visit our website www.smartsolar.com where you will find an extensive trouble shooting section with frequently asked questions and instant email enquiry forms.

usa

tel : +1 877 550 8840

email : ussupport@smartsolar.com

uk

tel : +44 (0) 8456 441 833

email : uksupport@smartsolar.com

germany

tel : +49 (0)151 12744268

email : servicede@smartsolar.com

smart solar ltd, gelderse weg 53, D-46399 Bocholt

europa

email : eusupport@smartsolar.com

australia

tel : +61 03 9512 0680

email : service@aspenwood.com.au

asia/ pan pacific

email : service@tgs.co.th

www.smartsolar.com



Contents

1. Introduction
2. Before you start
3. Overview
4. Components
5. Assembling and using your product
6. Cleaning and maintenance
7. Trouble Shooting
8. Spare parts
9. Full 2 year warranty

Introduction

Thank you for purchasing a solar cascade. These instructions contain important information for using this product. Please keep them in a safe place for future reference.

Before you start

Decide on an appropriate outdoor location for your water feature. Ideally this should be on a flat surface. A solar panel powers the pump by converting sunlight into electricity.

The solar panel will power the pump when exposed to direct sunlight. If the sun passes behind a cloud then the amount of electricity produced by the panel will decrease and the pump will stop working or slow down. As soon as the sun reappears from behind the cloud the amount of electricity will increase instantly and the pump will begin to work again.

The amount of electricity produced by the solar panel is proportional to the strength of sunlight received. For optimum performance we recommend that your solar panel should be exposed to as much direct sunlight as possible and away from shady areas e.g. under trees. The panel can also be angled towards the sun to maximise the amount of light received.

Overview

The solar cascade has been designed for outdoor use. The pump drives water to the topmost jug and then cascades down through the lower tiered bowls and finally pours into the main bowl. The water is constantly re-cycled.

Components



- | | |
|--|----------------------------|
| 1 Solar panel | 4 Small bowls |
| 2 Pump with plastic tube and plastic clips | 5 Main bowl |
| 3 Jug | 6 Solar panel mounting kit |

Assembling and Using Your Product

Unpack all components carefully. Please ensure that you check all parts have been removed from the packaging especially the solar panel, which is stored in the bottom of the box.

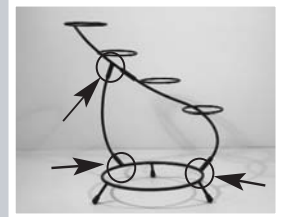
Decide on a suitable location, bearing in mind there will be some water splashes when the product is in use.

First assemble the metal stand. There are three connection points (see pictures). Insert the big bowl first (otherwise the stand will fall over). Next insert the three small bowls.

Take out the pump and unroll the hose and cable. Draw the hose through the top ring and insert the bung into the hole in the jug and place the jug on the top ring. Make sure that the hose pokes up inside the jug approximately 2.5 cm (1 inch).

Affix the hose to the metal frame using the clips provided and place the pump into the main bowl.

Fill the main bowl with water and align all the jugs and bowls.



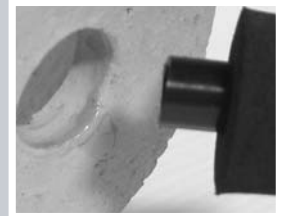
Stand connects at indicated points



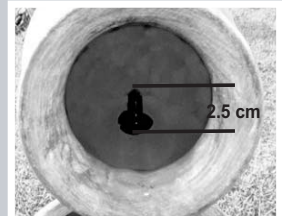
Insert the main bowl into stand



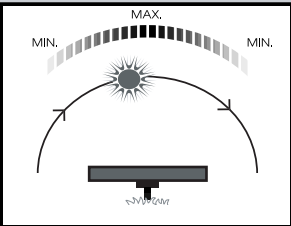
Attach hose where indicated



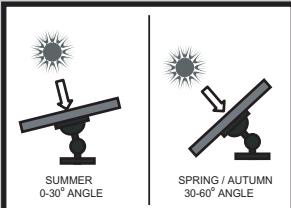
The hose and the rubber bung fits into the hole in the bottom of the jug.



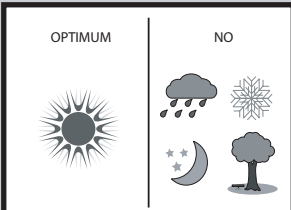
The hose pokes inside the jug approximately 2.5 cm



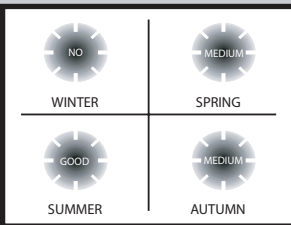
PANEL PERFORMANCE



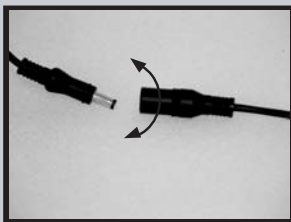
PANEL ADJUSTMENT



CONDITION FUNCTIONALITY



SEASONAL FUNCTIONALITY



Solar Pump Connector



Solar panel & Stand Kit



Fixing the Panel Holder



Wall Mounted Solar Panel



Stand Mounted Solar Panel



Standing Solar Panel

Please Note: We recommend you use distilled or rain water to prevent scale build up.

Select a suitable location for you solar panel and fix the mounting as shown. Connect the panel and pump together.

IMPORTANT

To ensure the seal remains water-tight twist the pump and panels connectors together rather than merely pressing them together.

The Solar Cascade is now ready to use.

Please note: On first use there maybe air in the pump. It can take up to 5 minutes until all the air is expelled and water begins to cascade from the top jug.

Cleaning and Maintenance

Pump: If, after a period of time, the pump starts to lose power or stops working check for the build up of sediment, scale or dirt in the filter and in the bottom of the pump housing. Remove the pump cover at its' base. Take out the impeller and remove any sediment, scale or dirt that has built up. Replace the impeller and replace the pump cover.

Solar panel: The panel should be cleaned periodically with a soft tissue and proprietary glass cleaning solution. Regular cleaning of the panel is advised to maintain optimum conversion of the sun's energy into direct current.

Trouble Shooting

If you have any problems please contact Smart Solar before returning to the place of purchase. For immediate answers visit our website www.smartsolar.com where you will find an extensive trouble shooting section with frequently asked questions and instant email enquiry forms.

Pump does not operate even though the solar panel is in full sunlight

- 1) Check the connection of the pump to the solar panel. If loose then re-connect, rotating the connectors until good contact is made. If any of the cabling is damaged then seek a replacement.
- 2) Check whether the impeller is blocked by removing the pump cover. If it is, then clean the pump as detailed above.

Pump does operate but there is no water running through the hose

- 1) Check for the build up of sediment, scale or dirt in the filter and in the bottom of the pump housing as detailed above.
- 2) Check whether the pump cover is attached properly. If the pump cover is not pushed down tightly, the pump will not push water through the hose.

Please note:

In winter the Solar Cascade must be stored in a dry and frost proof environment. Alternatively, an optional adapter can be purchased for occasional indoor use.

The pump must never be operated dry (out of water) as this will have a permanent adverse affect on the performance of the pump.

Spare parts

- | | |
|---------------------------------------|---|
| 1. Solar panel | 2050AS01 |
| 2. Panel mounting kit | MTGKIT |
| 3. Pump with hose | 20500P01 |
| 4. Pump impeller | IMPELLER |
| 5. Pump cover with filter | PCOVER |
| 6. 6 volt adapter for indoor use only | 6V-AC (please specify country)
please specify colour |
| 7. Jug | please specify colour |
| 8. Small bowl | please specify colour |
| 9. Main bowl | please specify colour |

Full 2 year warranty

If within 24 months from the date of purchase this product fails due to a defect in material or workmanship, Smart Solar will replace or repair free of charge. Please report immediately if there is any damage or missing pieces upon receipt of goods.

The warranty does not apply to:

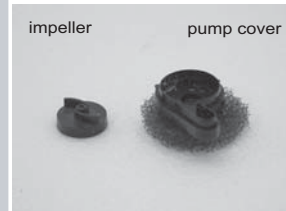
Damage caused by accidents, abuse, poor handling, frost or normal wear and tear. Products which have been subject to unauthorized repair or modification.

For further information please contact your nearest customer service centre detailed on the last page of this manual.

Waste electrical products should not be disposed of with household waste. Please recycle where facilities exist. Check with your local authority or retailer for recycling advice.



Smart Solar reserve the right to modify any product to enhance its' performance and design.



Remove pump cover



Take out impeller to clean