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Please register your product online at our website:  
[www.stigroupinc.com/registration](http://www.stigroupinc.com/registration)

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**STI Group Inc. Locations:**

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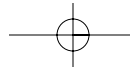


## Solar Oxygenator

### Solar Powered Air Pump

Operates During Daytime





**Solar Oxygenator** Instruction Manual

ENGLISH

**Spare parts**

- |                           |           |
|---------------------------|-----------|
| 1. Solar panel            | 21820AS01 |
| 2. Panel mounting kit     | MTGKIT    |
| 3. Pump motor             | 21820P01  |
| 4. Air stone with 2m tube | 2182STONE |

**Full 2 year warranty**

If within 24 months from the date of purchase this product fails due to a defect in material or workmanship, STI Group, Inc. 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.



STI Group, Inc. reserve the right to modify any product to enhance its' performance and design.

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2. Before you start
3. Overview
4. Components
5. Assembling and using your product
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8. Spare parts
9. Full 2 year warranty

**Introduction**

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

**Before you start**

The air pump can be used to oxygenate any pond or water reservoir provided the solar panel receives direct sunlight. 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 oxygenator has been designed for outdoor use. The pump drives air through the two tubes and the air stones.



Solar panel & Stand Kit



Fixing The Panel Holder



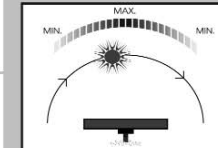
Wall Mounted Solar Panel



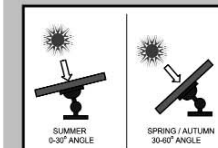
Stand Mounted Solar Panel



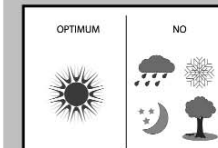
Standing Solar Panel



PANEL PERFORMANCE



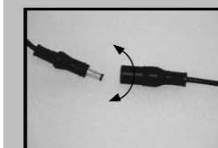
PANEL ADJUSTMENT



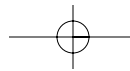
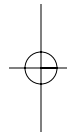
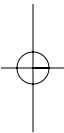
CONDITION FUNCTIONALITY

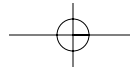


SEASONAL FUNCTIONALITY

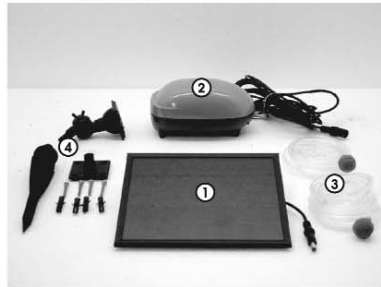


Solar Pump Connector





### Components



- 1 Solar panel 3 2 x tube 2 m. with air stone
- 2 Air pump 4 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.

**Please note:**  
The air pump draws air in through small holes on the bottom of the pump body. The air pump should therefore not be located where water can get in through the holes.

Attach the two air stones to the two tubes. Attach the tubes to the air pump. Unroll the pump cable.

Select a suitable location for you solar panel and fix the mounting as shown. Connect the solar panel and the air 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 Oxygenator is now ready to use.

### 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 at the air stones.

**Please note :**  
The motor which drives the air pump will stop working over the time (three or four years) and must be replaced.

Unscrew the 4 cross head screws on the bottom of the air pump body.  
Take off the top of the air pump body.  
Unscrew the 2 cross head screws and take out the motor.  
A new motor is fitted in reverse order.  
Remove any dirt or scale which has built up and close the case back up.

**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 STI Group, Inc. before returning to the place of purchase. For immediate answers visit our website [www.stigroupinc.com](http://www.stigroupinc.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) Pump motor is defect. Contact STI Group, Inc. Service to get a spare part.

#### **Pump does operate but there is no air coming through the air stone**

- 1) Check for the build up of sediment, scale or dirt on the air stones. Clean the air stones.
- 2) Check the position of the magnet wheel inside the air pump. Open the body as described above. Adjust the position of the magnet wheel by moving the motor back.



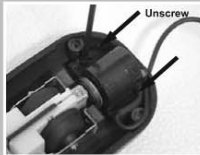
Attach air stones



Attach tubes to air pump



Unscrew on the bottom



Unscrew to remove or adjust the motor



Remove the motor

