

# Assembly Guide

*Model SG-18*





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## Introduction

Solaris Systems Inc is a hydroponic systems company whose goal is to make it easy for anyone to grow lettuce, herbs and other small crops indoors. The combination of the Solaris Seed Starter with the Solaris Garden enables you to always have a new batch of seedlings ready when harvesting full plants.

If you want to have plants growing as soon as possible, then skip to the sections for setting up your Solaris Seed Starter and getting the seeds started. It takes 1-3 weeks for plants to be big enough to be transplanted to the Solaris Garden, so setting up the Solaris Garden can wait until after your initial planting is done.

## Models

The **SG-18** contains a single tray and light with space for 18 seedling sponges. Because of its shorter height, its top tier also has a flat surface with a railing that is perfect for a Solaris Seed Starter and other supplies.

The **SG-36** has a second tray and grow-light above the first tray, with space for 36 seedling sponges.

## Powering the Solaris Garden

Your system is wired such that it only requires one plug to a standard wall outlet. The Grow Lights are controlled by a timer, and the pump runs continuously, which is essential to keep your plants alive and healthy.

⚠ Do NOT use a power strip anywhere near the Solaris Garden. Power strips, with their open sockets, are an electrical hazard near a water source.

⚠ Electrical components are rated for indoor operation only.

## Video Guides

To view video guides of the following assembly steps, visit <https://solaris.garden/product-guides/>

## Contents of Shipping Box 1



## Contents of Shipping Box 2

 <p>Reservoir with Tubing x 1</p>	 <p>Pump with Tubing x 1</p>	 <p>Vertical Risers (Long) x 4</p>
 <p>Base Risers (B1) x 4</p>	 <p>Seed Packets x 4</p>	 <p>Seedling Sponges x 50</p>
 <p>pH Down (8 oz) x 1</p>	 <p>FloraMicro, FloraGrow, FloraBloom fertilizers x 1</p>	 <p>pH Test Kit x 1</p>



Tablespoon x 1



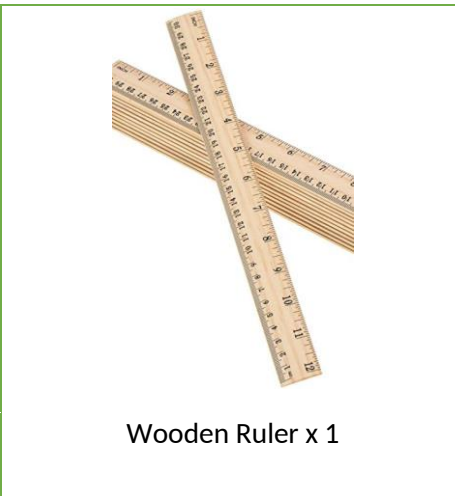
Electrical assembly with extension cord, Y-Cable, and Timer



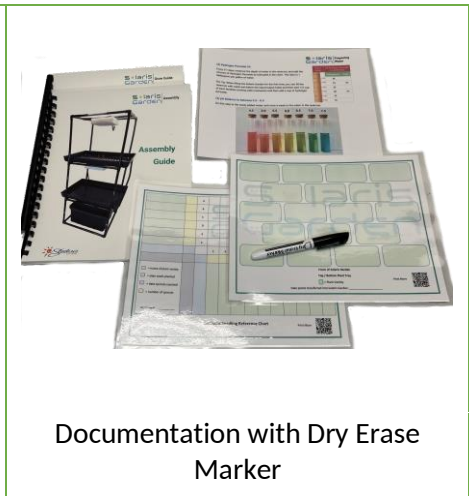
Plant Support x 1



Velcro Cable Ties x 2

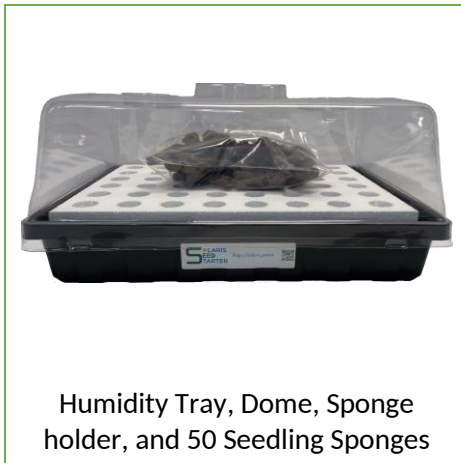


Wooden Ruler x 1



Documentation with Dry Erase Marker

**Also in Box 2 if the Solaris Seed Starter was purchased with the Solaris Garden**



Humidity Tray, Dome, Sponge holder, and 50 Seedling Sponges



Seedling Grow Lights x 1

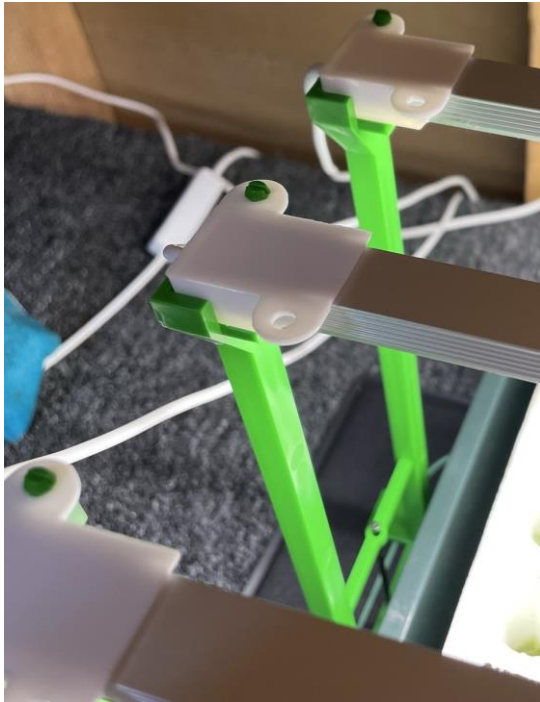


Seedling Light Legs with Bamboo Pick x 1

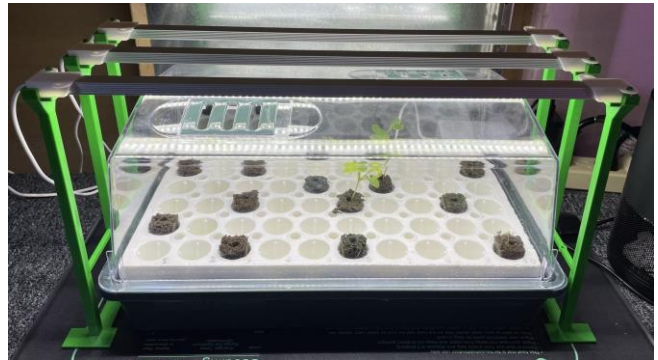
## Step-By-Step Assembly Instructions

### Seedling Grow Light Assembly

1. Place the lights on top of the legs and push the end of each light onto a peg. If necessary, use a rubber mallet to assist.



2. Once the lights are attached to the legs, place over the humidity dome with sponge holder.



## SG-18 Solaris Garden Assembly

Note: To push the tubing onto the connectors more easily, use a hairdryer or petroleum jelly.

1. Add the *Base Risers (B)* to the *Base*, and then put on the *Bottom Shelf*. For this and all subsequent steps: Hammer down all four corners with a rubber mallet if necessary to make everything level.



2. The reservoir hose and hose connector that receives water from the tray is installed backwards for shipping. Unscrew it, flip it around, and tighten the connector so that it faces outwards.



3. Put the *Reservoir and Pump* underneath the *Bottom Shelf*. Pull the pump's tubing through the reservoir's left grommet and connect it to the barbed connector on the right side of the tray. The larger tubing connects to the left side of the tray.

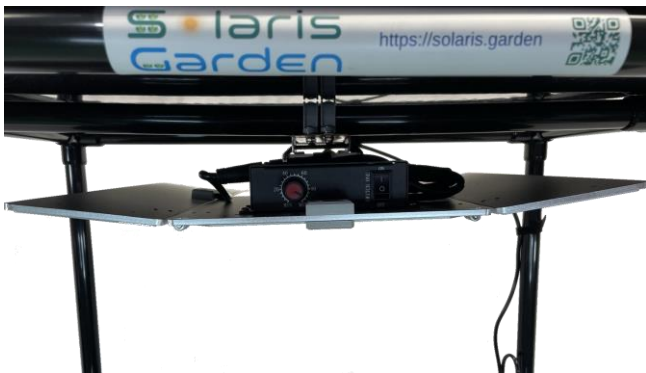


4. Put a *Vertical Riser* in each corner, and put the *Top Shelf with Surface* on that.





5. Slide the light's channels over the supporting plate on the underside of the *Top Shelf* so the cord faces the back. Remove the protective covering and open the light up.



6. Plug the light into the mechanical timer, and the extension cord into an outlet. Set the timer to the current time of day. Do not plug the pump into the Y-Cord until prepared water has been added to the reservoir.



## Powering the Lights

We recommend setting the light timer so the lights are on for 14 hours a day. Then enables a faster plant growth cycle.

It is important to know that all plants need dark hours for respiration. It is not useful to leave the LED lights on for more than 14 hours a day because the lack of dark time will slow the plants' growth.

Set the timer to your desired light cycle if it is different from the default settings. The mechanical timer comes preset to ON at 6 am and OFF at 8 pm, *but be sure to set the timer to the current time when you plug it in since the clock only runs when the timer has a power source*. The timer has no backup battery so it will need to be reset if you lose power or unplug it.

The LED lights should come on once everything is connected. If not, make sure their power switches are ON, and check to see if the timer is set for "on" at the time you are testing. Also check the plug connections to the LED lights to make sure they are firmly in the sockets.

Remember, the pump should **NOT** be attached to an on/off switch of any kind because the pump needs to operate continuously to keep the water from stagnating.

## Testing the Water Flow

Once you've added water to the reservoir (see the [Preparing the Water](#) chapter in the Grow Guide), plug in the pump to the open Y cable socket and watch to see that water is coming out of the tray's inlet. Once the tray is filled, it should drain into the reservoir at the same rate that it is being filled at to maintain an approximate water depth of 1-3/4".

## Drain Baffles

The tray's drain has a baffle connected to it. This helps prevent roots from growing into and clogging the drain. Some roots will still grow around them, so check and remove roots weekly from the drain tube.



## Warranty and Returns

Solaris Systems, Inc backs all Solaris Garden products with a one year parts warranty against manufacturing defects or failure, not due to misuse or error in operation. Should any part fail within one year of purchase because of a manufacturing defect or failure not due to misuse or error in operation, Solaris Systems will replace that part free of charge. Any modifications to the Solaris Garden or allowing water to fall below the top of the pump will void the warranty.

Solaris Systems, Inc offers a 14-day return policy on all Solaris Gardens. Returns must be initiated within 14 calendar days from the date the product was received. To be eligible for a return, your Solaris Garden must be unused and in the same condition that you received it. Your item must be in the original packaging. A receipt or proof of purchase is also required.

You will be responsible for paying shipping costs for returning your item. Shipping costs are non-refundable.

## Contact Us

If you have any questions about the assembly, or want to know the best way to grow your plants using the Solaris Garden, visit our website at <https://solaris.garden> for additional tips and tricks, or send an email to [info@solaris.garden](mailto:info@solaris.garden).

*If anything is missing from your shipment, contact us immediately and we will send the missing component.*

## Appendix

### About the submersible water pump

The EcoPlus Eco 264 Submersible Pump is a fixed flow rate, 290 gallon per hour multipurpose pump. EcoPlus pumps are for indoor or outdoor use and should never be let run dry.

### About the Solaris Garden Barrina grow lights

Low Energy Consumption Plant Grow Light - Consuming only 200W true output with 720LEDs! Including blue light 5000k, warm white light 3000k, red light 660nm and IR 730nm. In particular, the 660nm red and IR light are useful during bloom which will increase plant growth speed, make flowers bigger and more vivid. Barrina full spectrum LED grow light with 2.5 umol/J PPE, saves up to 50% energy than other SMD LEDs. Ideal for 3.5x3.5ft bloom stage, 4x4ft veg stage.

### Timer Manufacturer's Documentation

