

# **User Manual**

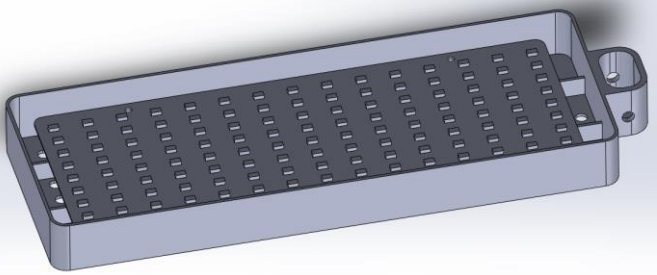
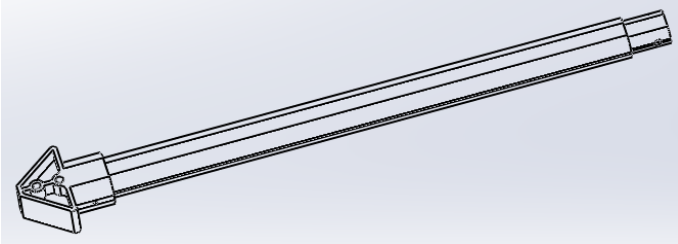
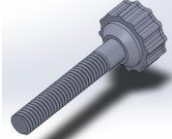
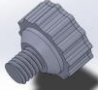
**Aquatic Circle**

## **LED grow light module for**

for Aquaponics Filtration system AC.5.30.01

Model AC.L.5.30.01

What is included:

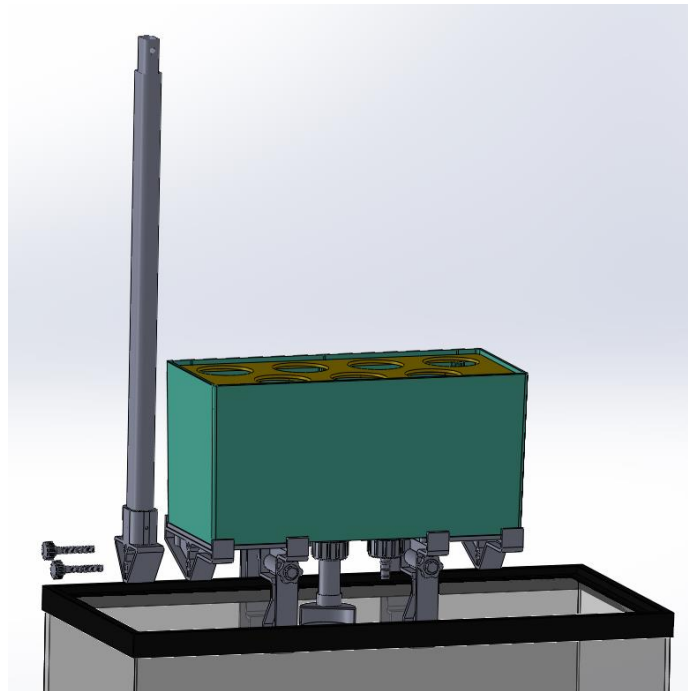
<p>LED grow light</p> <p><b>1X</b></p>	 A rectangular, dark-colored LED grow light fixture with a grid of small light-emitting diodes on its top surface. It has a mounting bracket on the right side.
<p>Extendable pole</p> <p><b>1X</b></p>	 A long, thin, cylindrical metal pole with a mounting bracket at one end and a threaded section at the other.
<p>35mm M6 bolt</p> <p><b>2X</b></p>	 A long, threaded metal bolt with a hexagonal head.
<p>6mm M6 bolt</p> <p><b>2X</b></p>	 A short, threaded metal bolt with a hexagonal head.

## Installation

### Note:

- LED grow light module is recommended when the fish tank is placed far away from natural source of light (indoor, far away from windows)
- Only install this module on an Aquaponics Filtration system of model AC.5.30.01. The aquaponics filtration system must be already installed on the fish tank, with water filled in the planting tank recommended.
- The order of step 1 and 2 can be reversed
- The LED grow light module can be installed on either side of the aquaponics planting tank fixture shelf

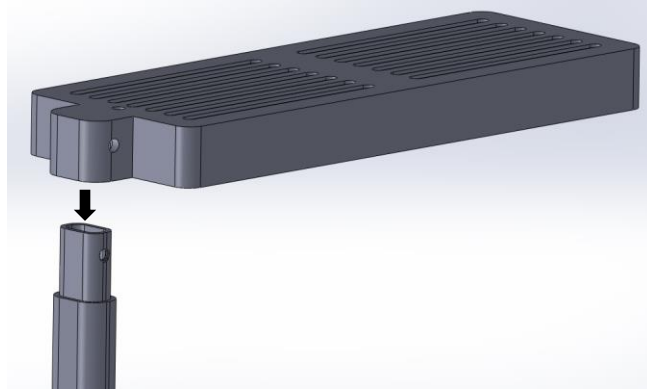
### Step 1: Installation of extendable pole on the fixture shelf



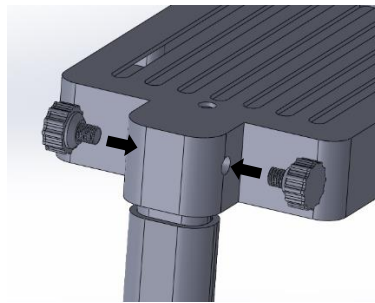
1. Choose either side of the fixture self to install the extendable light pole
2. Align the holes on the base of the pole and the side of the fixture shelf
3. Fix the light pole to the fixture shelf using the 2 provided 35mm M6 bolts

## Step 2: Installation of the LED grow light assembly

1. Insert the slot on the LED grow light on to the top of the light pole



2. Tighten the 6mm M6 bolts on each side of the light



## Step 3: Adjust the height of the light accordingly to the growth of plants

Recommendation: Use smart plug to control and program light schedule

### **Filter cleaning:**

- When the water flow is noticeably slow at the outlet of the tank, it's time for swapping the removable mechanical pre-filter unit with the stand by one.
- Rinse the sponges with water until clean.

### **Water quality monitoring:**

- Water testing is recommended periodically to ensure the waste levels are low and the chemical content is balanced

### **Recommendations:**

- Fish stocking: do not over stock more than recommended number for each type fish per volume of water. Low fish stocking will allow time for the plants to absorb Nitrogen waste in water. Water change can be avoided completely if the ratio of fish/plant is low.
- **For the plant to grow healthily, dosing of micro-nutrients and trace elements is needed. We recommend to dose SeaChem Flourish or other equivalent fertilizer (doesn't not contain Nitrogen or Phosphate) following the recommended dose (usually 1ml per 10 gallons of water once or twice per week).**
- Buffering water hardness is recommended (crushed coral, crushed oyster shell, baking soda, etc.)

### **Recommended plants:** (not limited to this list, feel free to explore more options)

- House plants: Pothos, Arrowhead plants, Colocasia, etc.
- Veggies: Lettuce, Arugula, watercress, etc.
- Herbs: basil, mint
- Flower: Impatiens, Water Iris, etc.
- Fruit: Strawberry, chili pepper, etc.