

User Manual

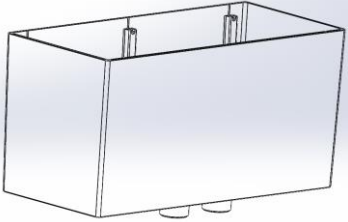
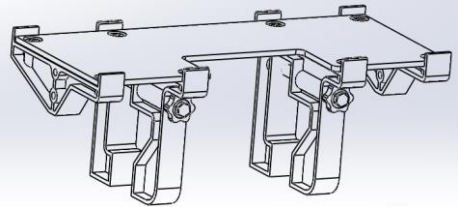
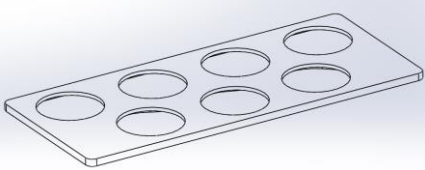



Aquatic Circle


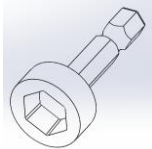

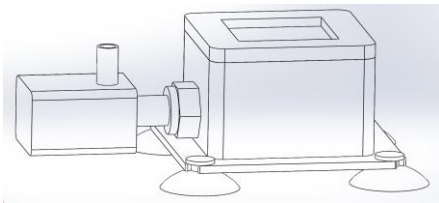
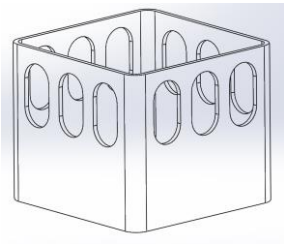
Aquaponics Filtration System

for Fish tanks

Model AC.5.30.01

What is included:

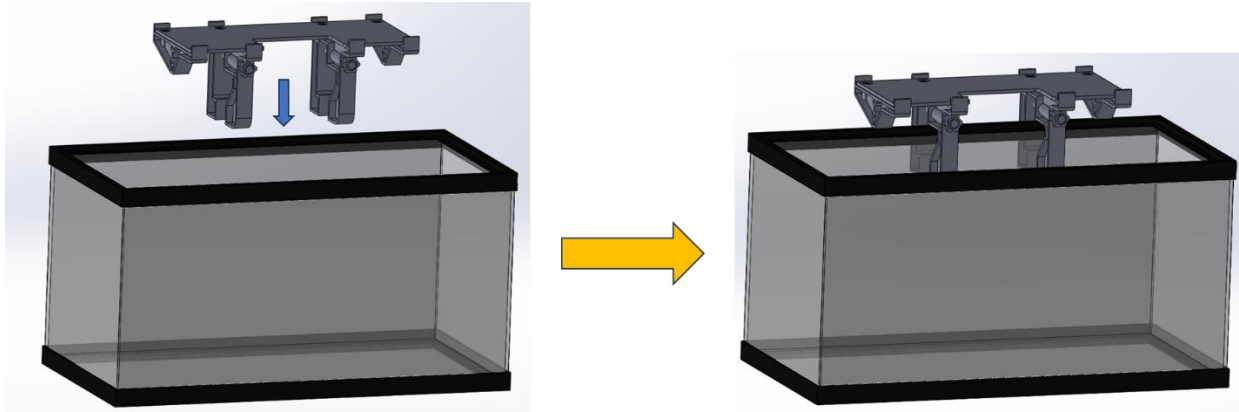
<p>Aquaponics planting tank</p> <p>1X</p>	 A 3D wireframe illustration of a rectangular aquaponics planting tank. It has a flat top surface and four vertical side walls. Two vertical posts are visible on the top surface, likely for supporting a lid or fixture shelf.
<p>Aquaponics fixture shelf</p> <p>1X</p>	 A 3D wireframe illustration of a rectangular aquaponics fixture shelf. It features a flat top surface with several raised edges and two central vertical supports that hold up the top surface, creating a gap for net pots.
<p>Planting tank lid – Net pot holder</p> <p>1X</p>	 A 3D wireframe illustration of a rectangular planting tank lid. It has a flat top surface with seven circular holes arranged in two rows: three in the front row and four in the back row. The holes are designed to hold net pots.
<p>Water inlet</p> <p>1X</p>	 A 3D wireframe illustration of a water inlet fitting. It consists of a cylindrical top cap with a textured surface, a central vertical post, and a wider base for mounting.
<p>Waterfall outlet</p> <p>1X</p>	 A 3D wireframe illustration of a waterfall outlet fitting. It features a cylindrical top cap with a textured surface, a central vertical post, and a wide, flat base that allows water to spill over the edge, creating a waterfall effect.
<p>Net pots</p> <p>7X</p>	 A 3D wireframe illustration of a net pot. It is a cylindrical container with a mesh or screen body, designed to hold a plant's root system in a nutrient solution.

<p>Expanded clay pebble bag</p> <p>1X</p>	
<p>10mm hex-socket</p> <p>1X</p>	
<p>PE Tubing (2' length)</p> <p>1X</p>	
<p>Bio-filter pump base</p> <p>1X</p>	
<p>Removable Mechanical pre-filter</p> <p>2X</p>	

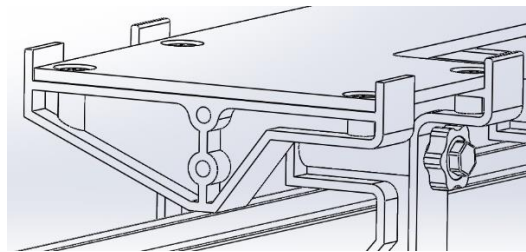
Installation

Note: The aquaponics filtration system could be installed with or without water pre-filled in the tank.

Step 1: Installation of Aquaponics Fixture Shelf



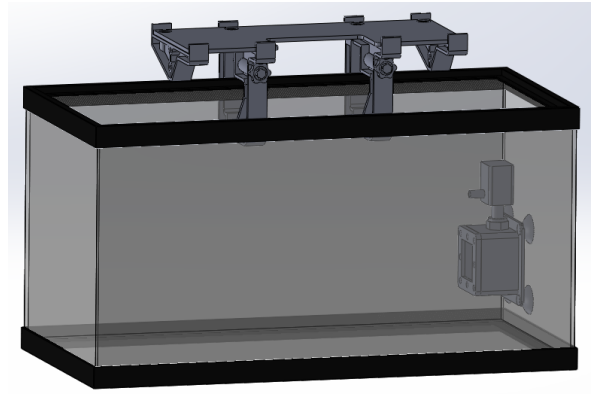
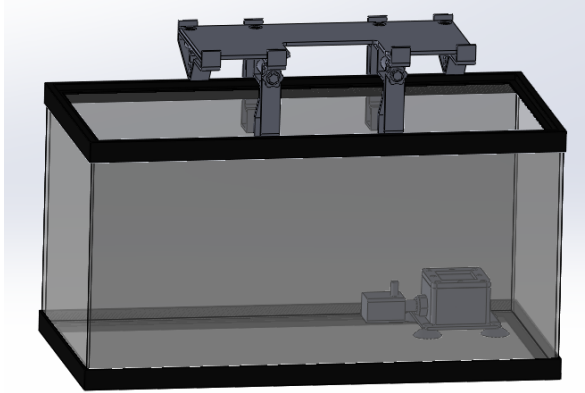
1. Make sure that the gap on the clamps is wide enough to slide through the frame plastic frame of the fish tank. The gap can be adjusted using the screw knob
2. This model is optimized for a standard 10-gallon aquarium. The clamps will fit through the filter slot on the lid of the tank. In order to use the stock lid of the tank, place the lid on the tank, adjust the position of shelf to center to the filter slot of the lid. Tighten the clamps by turning the screw knob. For larger tank (30" or 36" width), installation of 2 systems side by side is recommended
3. Please ensure that the bottom of the clamps is positioned on the top edge of fish tank frame as shown in the picture below:



4. Using the provided hex socket in combination with a low torque impact driver or electric drill to turn the knob (loosening or tightening) is recommended

Warning: Do not over tighten the clamps

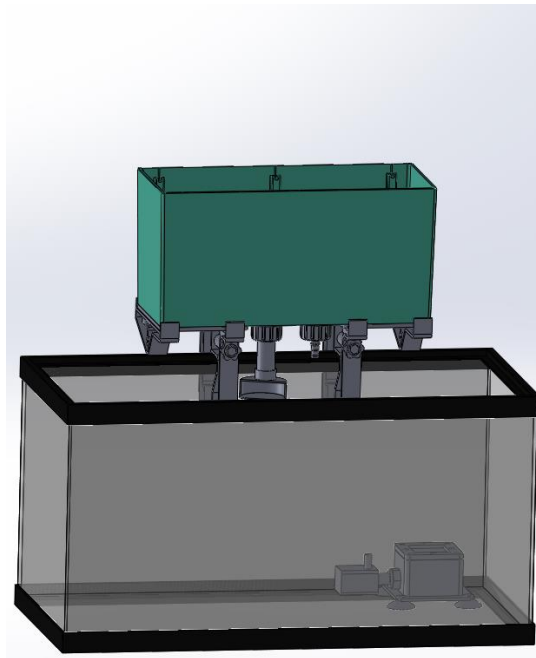
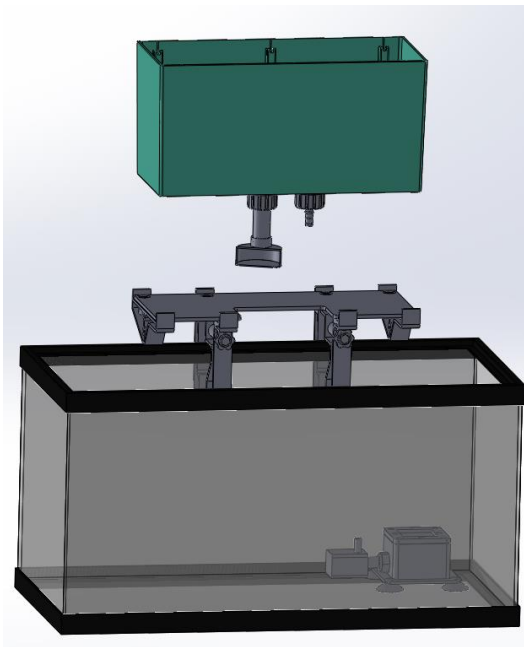
Step 2: Positioning of in-tank filter



1. Use the suction-cups to hold the filter base at the desired place in the tank.
2. The filter base can be installed either on the bottom or the side wall of the tank as shown in pictures

Warning: The whole in-tank filter will need to be submerged in water when running

Step 3: Installation of Aquaponics planting tank



1. Placing aquaponics planting tank on top of the shelf, make sure that the inlet and outlet are in the slot of the shelf
2. Please note that the inlet and outlet sides are interchangeable

Step 4: Connect the PE tubing from water outlet of the Aquaponics tank to the water pump.
Trim the PE Tubing's length if needed.

Step 5: Place one removable mechanical filter on top of the bio-filter base. The magnetic connection will automatically align the mechanical filter to the base. In this filter module, the finer sponge goes to the bottom and the more coarse sponge is placed on top.

Step 6: Please ensure that the pump and bio-filter base is fully submerged before turning on filter pump and circulating the water.

Step 7: Close the aquaponics planting tank using the provided net pot holder lid

Step 8: Starting planting with cuttings (see “recommended plants” section)

1. Place one or two plant cuttings in each net pot
2. Fill net pots with provided expanded clay pebbles to hold plant cuttings in place
3. Place each net pot in a slot on the aquaponics planting tank

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.