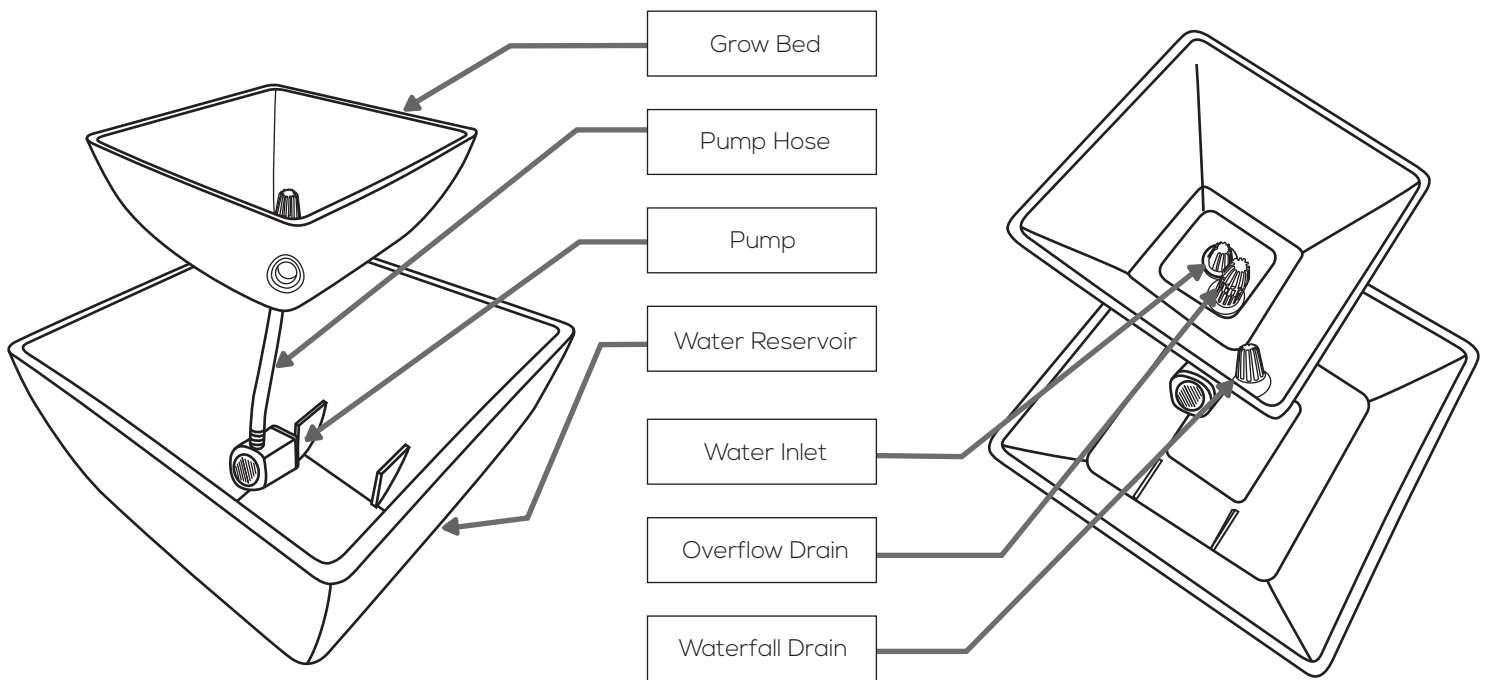


User Manual

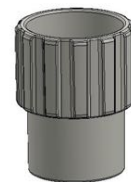




SETUP

Components

- 1 - Water Reservoir
- 1 - Grow Bed with rubber gaskets prefit into Overflow & Waterfall Drain
- 1 - Mounting Bracket
- 4 - Screws
- 1 - Water Pump with Hose Barb
- 1 - Pump Hose
- 1 - Water Inlet with Rubber Washers & Plastic Nut
- 4 - Drain Risers
- 3 - Drain Screens
- 1 - Bag of Clay Pebbles



Drain Riser



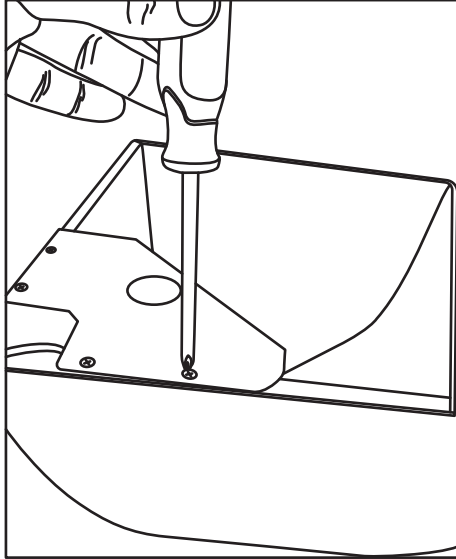
Water Inlet



Drain Screen

Assembly

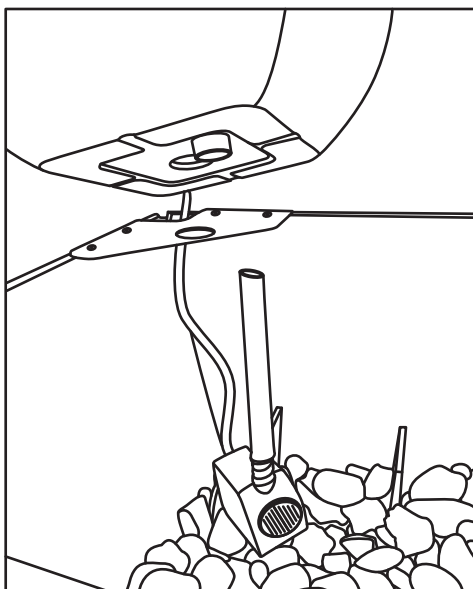
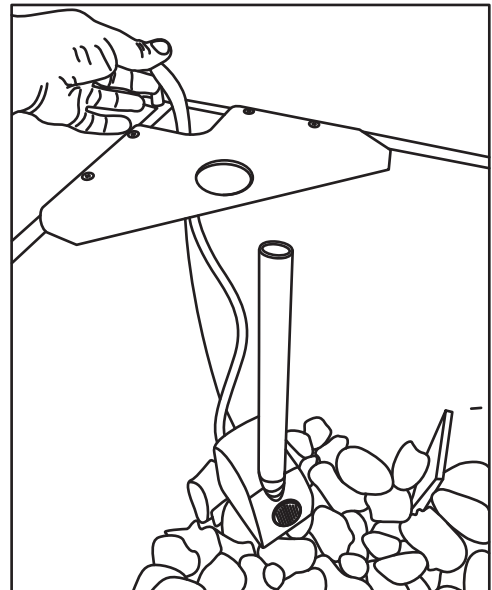
1. Place the Water Reservoir in its intended location and add substrate and decor items before you start assembly. The Fountain is not intended to be moved while assembled.



2. Place Mounting Bracket so the four holes on the edges align with the predrilled holes in the Water Reservoir rim. Attach Mounting Bracket to Water Reservoir with included mounting screws. Hand-tighten screws only until snug.

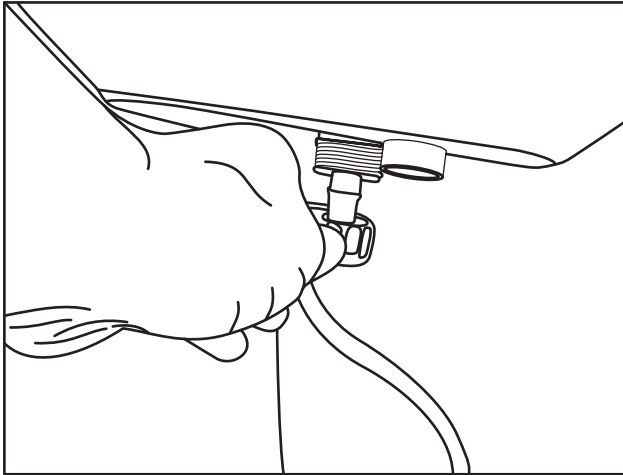
3. Place the Pump in the bottom of the Reservoir below the Mounting Bracket. Pull the Pump power cable plug up through the predrilled cable channel in the back corner of the Bracket.

Note: If you wish to add a tank heater, submersible lighting, or other powered accessories to the Reservoir, add them now and run the cables out alongside the Pump power cable.

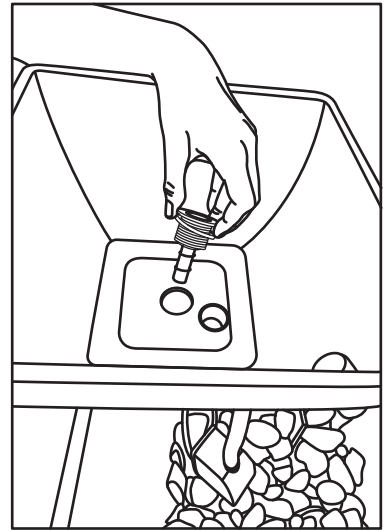
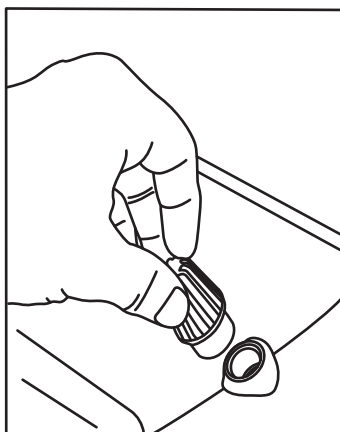
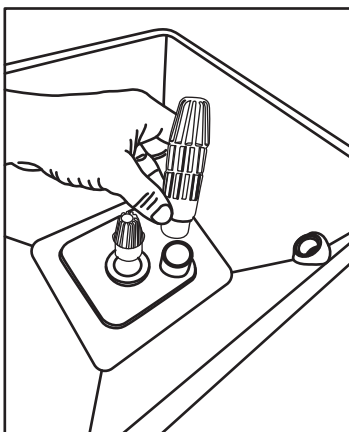


4. Place the Grow Bed on the Mounting Bracket with the Waterfall Drain facing the center of the Water Reservoir. Align the central hole in the Grow Bed with the matching hole in the Bracket.

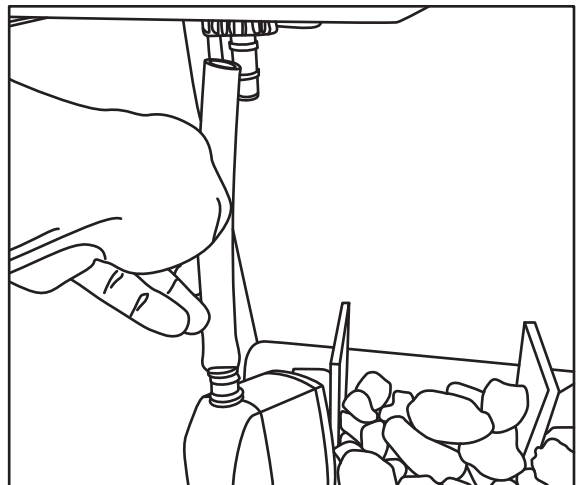
4. Remove the Plastic Nut from the Water Inlet; insert the Water Inlet with Rubber Washer into the central inlet hole in the Grow Bed from the top. Adjust positioning as necessary so Inlet sits flush against the bottom of the Grow Bed.



6. Connect the Pump to the Water Inlet with the Pump Hose. Insert the hose barb fitting of the Pump into one end of the Hose, and slide the other end of the Hose on to the Hose Barb of the Water Inlet.



5. Thread Plastic Nut from the Inlet up, flat side upward, and hand tighten until snug.



7. Add **three** Drain risers into the **Overflow Drain**, then add a Drain Screen to the **Water Inlet, Overflow Drain** and **Waterfall Drain** .

NOTE: Three Drain Risers is the standard configuration for the **Overflow Drain** in the Fountain Grow Bed. Using more or fewer Drain Risers will affect the maximum depth of water in the Grow Bed. By adjusting the Pump flow and number of Drain Risers in the Overflow, you can control the water height and waterfall flow rate in your Fountain.

OPERATION

Startup

Empty the clay pebbles from their bag into a bucket or basin, then rinse thoroughly to remove dust. Empty and repeat until the rinse water runs clear. Use dechlorinated water for final rinse. Once the pebbles are rinsed, fill the Grow Bed to your desired depth. The amount provided should be enough to fill the Grow Bed close to the top. Next, fill the Water Reservoir with **clean, dechlorinated water** to approximately ½" from the rim, then plug in the pump.

Planning on operating the Fountain as an aquaponic garden?

Start here. If you do not want fish and you are planning to use it as a water feature or water garden, or if you are interested in hydroponics, skip ahead to the next section!

TIP: Dechlorinating solutions for tap water are available at most pet stores . If your tap water is very hard or otherwise unsuitable, bottled spring water is a good alternative and usually does not require dechlorination. Do not use purified or distilled water!

Aquaponic Operation - Keeping fish in your Fountain?

Cycling - Preparing the Environment

Equipment setup is only the first step in establishing an aquaponic garden. Next, you will need to nurture the living components of the system as they grow. Your aquaponic fountain will need time to allow beneficial microbes to colonize its **biofilter**. For the first several weeks, any aquaponic garden will tend to be unstable and may need special care to protect the health of fish and plants.

Want to know more about the cycling process? For more information and detailed instructions check out our guide to cycling. If you have not kept an aquarium or aquaponic garden before, we recommend you check the guide before selecting fish and plants!

Planting - Ready to Grow?

You have several options for adding plants to your Fountain.

Sprouting: Some plants will germinate from seed in a soilless medium like the clay pebbles. Smaller seeds like parsley or basil can be started in plugs such as Aqua Grow Plugs.

Cuttings: Some plants can be introduced by sticking a cutting directly into the Grow Bed. Plants like basil and mint will propagate easily from cuttings. Some cuttings may need to root in a small container of water or be placed in a Grow Plug; treating with rooting compound will encourage faster growth.

Transplants: Seedlings or small plants can be transplanted into your garden. Gently wash all dirt off of the roots, then plant your transplant in the grow media so that the roots are deep enough to touch the water.

TIP: Inspect cuttings & transplants carefully to avoid introducing pests. It can be tough to treat plant pests in aquaponics once established, so keep them out!

Choosing Fish

Types: Most small freshwater aquarium fish will be happy in your system with the right care – these include common aquarium fish like platies and mollies, many varieties of tetras, small barbs such as cherry or checkerboard barbs, and more. You can also add small invertebrates like snails and shrimp! It is a good idea to choose hardy fish that can adapt to changing water conditions, and to consider your water source. If you're using dechlorinated tap water, choose fish that will thrive in the pH and hardness of your local water supply. If you are adjusting your water chemistry for better plant growth, choose fish that can tolerate the ideal soft, slightly acidic water conditions.

Check out the Fishkeeping section in our Support Center for more tips on getting started and common mistakes to watch out for, including fish species to avoid!

Number: Fish need adequate space. Choose fish with an adult size of two or three inches at most. A common guideline is "one inch of fish per gallon of aquarium" – that is, in an 8-gallon system like your Fountain, you can safely keep 3-5 typical small aquarium fish with adult sizes around 2 inches in length.

More fish means more waste; advanced users may stock up the tank more densely in a heavily planted, highly productive garden, but this requires more attention and more maintenance.

TIP: Provide your fish with an enriched environment. Add rocks or gravel, decorative aquarium plants, and decor items they can use to hide. Not only will this make your Fountain look better, it will make your fish more comfortable, and you will see them more often. Fish who have somewhere safe to retreat tend to actually spend more time out in the open!

Hydroponic Operation –

Want a decorative water garden or a simple hydro planter?

Water Feature

The Fountain can be just that – a Fountain. Fill with purified water, set the pump to constant minimum flow, and add decor.

You can also add ornamental houseplants to your Fountain with very little extra care. Robust plants like Golden Ivy or Dracaena will take readily to the Grow Bed. A small amount of slow-release fertilizer or liquid "plant food" will satisfy the needs of slow-growing indoor varieties. You may need to drain and replace the water in your Fountain occasionally, especially when using fertilizers, but water features otherwise require very little maintenance.

TIP: Some houseplants will thrive almost anywhere indoors, but many need more light. Check the sunlight requirements of the plants you want to grow and make sure they are suitable for the location of your Fountain.

Hydroponics

With the addition of nutrient solutions, your Fountain can be used to grow many hydroponic plants – even flowers, fruits, and vegetables! Hydroponics is a specialized field. It does not have to be hard, but it does take some planning and attention! Check out our knowledge base for more tips and links to resources where you can learn more about the exciting world of hydroponics, find supplies, and connect with other growers.

Outdoor Operation

Your Fountain can be placed indoors or out, but **please note the following important information** when setting up a Fountain outdoors.

- **Protect electrical connections from moisture.** Use only outdoor-rated, waterproof extensions and outlets. Use waterproof plug/junction boxes. Make sure any powered accessories are outdoor-rated.
- A small volume of water will change temperature along with ambient conditions, and may become too warm or too cold for the survival of your fish or plants. In particular, direct sunlight in a hot environment can cause the temperature of the water to rise dangerously. **Treat your Fountain like any other potted plant or animal enclosure and shade it, cover it, or bring it inside when necessary.**
- Even with appropriate care, temperature and water chemistry will vary much more outdoors than in an indoor aquarium. If you intend to keep fish in an outdoor Fountain, choose hardy varieties which can thrive in a variety of conditions. Many small tropical aquarium fish can only survive in a narrow range of warm water conditions.
- Cats, birds, and other animals may be attracted to your Fountain. Protect your fish by providing decor items they can use to hide.

Questions and troubleshooting

Q: How do I prevent discoloration from algae in my Fountain?

A: Wherever there's water, light, and nutrients, there's algae. To reduce algae growth in your reservoir, reduce the amount of direct light it receives! Aim your lights at the Grow Bed, position the Fountain so the reservoir is shaded, or add some floating decorations. Any algae that does appear can easily be wiped off with a sponge or clean cloth. Green water can be drained and replaced, but may recur as long as the reservoir continues to receive light. Algae can be a useful indicator, however; lots of algae growth can indicate that your system is holding a lot of extra nitrate, which can be unhealthy for your fish over time. A stable system will also be more resistant to algae growth; bigger, better-established plants will be better at taking up more nitrate, more quickly! You may also need to reduce the amount you're feeding your fish.

Q: Can the Fountain be used as a reciprocating or "ebb & flow" system?

A: Many aquaponic and hydroponic systems use a constant flow of water over plant roots to deliver nutrients. Some growers will opt instead for a reciprocating water flow (also known as "ebb & flow"), alternately flooding and draining the growing medium. Your Fountain can be configured as a reciprocating growing system with the addition of a simple plug timer to control the Pump. For more information on water flow styles and why you might choose one, check out our guide.

Q: Can I use fertilizer and fish?

A: **No.** Nitrogen-based fertilizers contain the same kinds of nitrogen compounds as fish waste, and they're just as toxic to your fish as waste buildup! The nitrifying bacteria in your biofilter will process ammonia from fertilizer, but adding so much of it at once is not safe for your system. You can add trace mineral supplements, as long as they are aquatic-safe and don't contain a significant amount of nitrogen. If you are not sure whether a supplement will be safe, get an expert opinion before testing!

Q: I have plant pests! How can I control them?

A: Pest problems can come from a variety of sources, but they are more prominent if you are growing outdoors. Pest control in aquaponics can be tricky, because solutions need to be aquatic-safe. Insecticidal soap or oil sprays are very useful against aphids, mites, and other common small pests, as long as you are careful not to get them in the water.

Q: Is it safe to eat what I grow?

A: Anything you add to your Fountain will ultimately end up in the plants you eat! We recommend using fish food that's intended for aquaculture or aquaponic use since pet store formulas may contain dyes or preservatives. Any fertilizer or hydroponic nutrient that's intended for gardening should be safe for gardening in your Fountain. You can add whatever you like to your Fountain, but if you plan to grow food, we suggest not putting anything into the water that you would not feel safe putting on your dinner plate!

Limitation of Liability

In no case shall **we**, our directors, officers, employees, affiliates, agents, contractors, interns, suppliers, service providers or licensors be liable for any injury, loss, claim, or any direct, indirect, incidental, punitive, special, or consequential damages of any kind, including, without limitation lost profits, lost revenue, lost savings, loss of data, replacement costs, or any similar damages, whether based in contract, tort (including negligence), strict liability or otherwise, arising from your use of any of the service or any products procured using the service, or for any other claim related in any way to your use of the service or any product, including, but not limited to, any errors or omissions in any content, or any loss or damage of any kind incurred as a result of the use of the service or any content (or product) posted, transmitted, or otherwise made available via the service, even if advised of their possibility. Because some states or jurisdictions do not allow the exclusion or the limitation of liability for consequential or incidental damages, in such states or jurisdictions, our liability shall be limited to the maximum extent permitted by law. You agree that your use of, or inability to use, the service is at your sole risk. The service and all products and services delivered to you through the service are (except as expressly stated by us) provided 'as is' and 'as available' for your use, without any representation, warranties or conditions of any kind, either express or implied, including all implied warranties or conditions of merchantability, merchantable quality, fitness for a particular purpose, durability, title, and non-infringement.

Warranty Registration

We warrant to the original retail purchaser that certain components will be free from defects in materials and workmanship for a period of one (1) year from the date of delivery following the original retail purchase. To read the complete warranty terms and conditions, and to **register** your product to put your warranty **in force** and to get the latest owner notices,



WARNING: CHOKING HAZARD

Small parts.
Not for children under 6 yrs.
Adult supervision required.



WARNING: ELECTRICAL SHOCK OR FIRE HAZARD

Risk of electric shock or fire.
Use a ground fault circuit interrupter (GFCI) outlet or surge protector.
Do not come in contact with electrical components when powered on.
Turn off power supplying this equipment before servicing.
Discard electrical components if/when they deteriorate.



WARNING: WATER DAMAGE RISK

Routinely ensure all drains and water pipes are clear from debris.
Never add water to the Fountain when pump is on.
Ensure equipment is in a safe, dry location on a strong, sturdy surface.
Never move equipment when assembled.
Never pick up equipment with wet hands.