

User's Manual

THE AQUAPONIC SOURCE, INC.

1860 LEFTHAND CIRCLE, SUITE E

LONGMONT, CO 80501

1-855-285-4252

customerservice@theaquaponicsource.com

Límíted Warranty

The Aquaponic Source warrants this product to be free from defects in material and workmanship for a period of one (1) year from the date of the original purchase, when utilized for normal household use, subject to the following conditions, exclusions and exceptions.

Should any defect covered by the terms of the limited warranty be discovered within one (1) year, *The Aquaponic Source* will repair or replace any defective part provided the unit is returned by the original purchaser, freight prepaid, to:

The Aquaponic Source 1860 Lefthand Cir, Suite E Longmont, CO 80501 USA

The liability of *The Aquaponic Source* under this warranty is limited solely to the cost of the replacement parts or the complete unit at our option. LABOR CHARGES ARE NOT INCLUDED.

This warranty does not cover normal wear of parts and does not apply to any unit that has been tampered with or used for commercial purposes. This warranty does not apply to any defect arising from misuse of the product, negligence, failure to follow *The Aquaponic Source's* instructions, use on current or voltage other than that stamped on the product, alteration or repair not authorized by *The Aquaponic Source*, or damage due to faulty packaging or mishandling in transit (by any common carrier). Repair or disassembly by anyone other than a "*The Aquaponic Source*" authorized service center will void the warranty.

This warranty is extended only to the original purchaser of the unit and excludes all other legal and/or conventional warranties. The responsibility of *The Aquaponic Source*, if any, is limited to the specific obligations expressly assumed by it under the terms of the limited warranty. In no event is *The Aquaponic Source* liable for incidental or consequential damages of any nature whatsoever. Some States/Provinces do not permit the exclusion or limitation of incidental or consequential damages, so the above may not apply to you.

This warranty gives you specific legal rights which vary from state to state or province to province.

If you have questions or concerns regarding your aquaponic system, please contact Customer Service. Please do not return any product without contacting *The Aquaponic Source* for return authorization. Unauthorized returns, as well as C.O.D. shipments, will be refused.

*Important: After receiving return authorization, carefully pack item to avoid damage in shipping. Be sure to include your name, complete address and phone number with note giving purchase information and what you believe is the problem with item. We recommend you insure the package (as damage in shipping is not covered by your warranty). Mark the outside of your package "ATTENTION CUSTOMER SERVICE".

We are constantly striving to improve our products; therefore the specifications contained herein are subject to change without notice.

NOTES		

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Troubleshooting

My grow bed is constantly flooding with water.

Check to make sure the media guard, bell and siphon do not have a piece of grow media lodged in them. Small fragments of grow media can become stuck in the siphon causing water to back up.

For the latest updates, please visit:

The Aquaponic Source.com/Aquaponicals

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Botanical Interests® Seeds

Untreated, non-GMO, USDA Certified Organic seeds with heirloom varieties and guaranteed germination rates

Seed Starting Supplies

A variety of seed starting media plugs to help your seeds and seedlings resist disease while maximizing nutrient uptake

Small Buffer Bag

A natural way to keep the pH levels in your water stable for happier, healthier fish and plants

D-Klor™ water dechlorinator

Recommended for dechlorinating any new water you add to your System

Zym-Bac™ beneficial live bacteria

Recommended to jump-start your System ecosystem after it has been emptied and stored for an extended period of time

Please visit The Aquaponic Source's online store at **TheAquaponicStore.com** for more information and to place an order.

To stay up-to-date on the latest in the world of Aquaponics, please bookmark and refer to the following sites:

Facebook: facebook.com/TheAquaponicSource

Blog: TheAquaponicSource.com/Blog

Community Site: AquaponicsCommunity.com

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Optimal Performance

Congratulations! You have finished setting up your new

Aquaponicals system. Your plants and fish are designed to work with one another in this tranquil ecosystem. Just remember to feed your fish, top off the water, and prune or harvest your plants as needed.

Recommended products to have on-hand include:

Tidy Tank™ sludge eradicator

Aids in breaking down organic debris and sludge to further improve water quality

Cleaning Pad for Acrylic

Handy for cleaning excess algae from the sides of your acrylic Fish Tank without scratching it

Home Grown Ponics™ Ornamental Fish Food

High-quality all-natural micro pellets suitable for a wide variety of ornamental fish that will not cloud the water

Grow Lighting

Supplemental CFL and LED grow lighting and timers will help your sun loving plants grow and thrive

Digital Submersible Thermometer

Perfect for keeping track of your water temperature

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Overview

Congratulations on your purchase of a new **Aquaponicals Tabletop Aquaponics System!** Your new ecosystem will provide fresh plants and lively fish to your home, classroom, or office. First, you will want to carefully read through this manual. Some assembly and setup is required, but we'll have you enjoying your new Aquaponicals aquaponics system in no time!

IMPORTANT

SAVE THESE INSTRUCTIONS

Read all Important Safety Instructions and Instructions for Use carefully. Remove and discard all packaging materials and keep them out of the reach of children and pets.

IMPORTANT SAFETY INSTRUCTIONS

Read all instructions before using this appliance.

When using an electrical appliance, basic safety precations should always be observed, including the following:



WARNING: To reduce the risk of fire, electrical shock, or injury:

- 1. Use indoors only.
- 2. Unplug all electrical cords before performing installation or maintenance.

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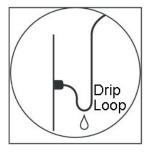


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- 3. Create a "drip loop" for each electrical cord. (See following section for details.)
- 4. Do not disassemble, modify or attempt to repair any part of the system. Contact *The Aquaponic Source* for examination or repair.
- 5. Read and follow all important notices in this guide.

DRIP LOOP

A "drip loop" simply allows an electrical cord to loop down and back up before the electrical outlet. This helps prevent water from trickling down the cord to the electrical outlet.



ADDITIONAL HELP

To stay up-to-date on the latest in the world of Aquaponics, please bookmark and refer to the following sites:

Facebook: facebook.com/TheAquaponicSource

Blog: The Aquaponic Source.com/Blog

Community Site: AquaponicsCommunity.com

For Customer Service, contact:

CustomerService@TheAquaponicSource.com (855) 285-4252 or (303) 720-6604

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level to rise and pour into the overflow pipe where you installed the Bobber. If you look carefully, you may be able to see the water trickling down the overflow pipe. The overflow pipe drains into the Base raising its water level, which in turn causes the Bobber to rise back to a safe level.

The amount of water you can add to the Grow Bed will of course depend on where the level of the water in the Grow Bed is in the fill cycle when you top it off.

Be careful not to top your system off with too much water as that could cause the Base to overflow (usually starting at the rear cutout where the electrical cord comes out). It's a good idea to protect the area and keep an eye on the Base for overflowing water anytime you add water to the system. Monitor the system until the overflow pipe has finished draining all of the overflow water into the Base.

If you would like further instruction on this topic, you may also view our helpful video, *Topping Off Your Aquaponicals System*, on our website at:

The Aquaponic Source.com/Aquaponicals

ALGAE CONTROL

In the event of algae buildup, **TheAquaponicStore.com** sells algae pads to aid in the removal of any excess algae. **IMPORTANT: Only use algae pads made for use with <u>acrylic</u> aquariums.**

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the Siphon inside the Bell. Do <u>not</u> move the Bell. You may be able to look inside the top of the clear Bell and see the siphon start to fire (drain water from your Grow Bed). Alternatively, you can look through the right side of the Fish Tank. (Refer to the following picture.) At the top of the Fish Tank, you should see the Siphon draining a thin column of water into it. If the Siphon has not fired, you may not have added quite enough water. Add a little more until it starts to fire.



Right-Side View

Once the Siphon fires, it will drain all of the water in the Grow Bed into the Fish Tank. This will cause the Fish Tank's water

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Getting Started

WHAT'S INCLUDED

Carefully lay out all of the parts and compare them against the picture on the following page before beginning assembly. If you think there are any missing parts please do not hesitate to contact us at **CustomerService@TheAquaponicSource.com**

REQUIRED SUPPLIES (NOT INCLUDED)

- fresh water
- freshwater aquarium fish
- fish food
- herbs, leafy greens, and/or houseplants

OPTIONAL SUPPLIES (NOT INCLUDED)

- aquarium gravel
- aquatic plant(s)
- fish net
- algae pad for <u>acrylic</u> aquariums

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Included Parts

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it on and off every day. (16 hours of light per day is a good starting point.) All of these accessories can be easily obtained from **TheAquaponicStore.com**

IMPORTANT: WATER LEVEL SAFETY ZONE

As mentioned earlier, the installed Bobber w/ Indicator will help you determine the current water level in the Base at any given moment. This is extremely important because if you allow the water level in the Base to drop below the water inlet of the Pump, the Pump could run dry and be permanently damaged. A pump damaged in this manner is not covered under its 1-year limited warranty, and a new one must be purchased.

When you installed the Bobber, you placed the O-ring 2" below the Bobber's red indicator tip. The distance between the red indicator tip of the Bobber and the O-ring is your Water Level Safety Zone. If you see the Bobber's red indicator tip reach the O-ring at any time, you know that the Base's water level is approaching the minimum safe water level before your Pump starts to run dry. You will need to top off the water in your system as described below.



Add dechlorinated (see previous Future Water Treatment section of this manual) fresh water that is the same temperature as the water in your Fish Tank. Add this water directly to your Grow Bed until its water level approaches the top of the Grow Media. What you are aiming for is to trigger



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START THE PUMP

Plug the Pump in. Water should begin to flow up the Fish Tank's water pipe and out the Water Spout into the Grow Bed. If you installed the Water Diffuser, temporarily remove it to check that the water is spraying from the Water Spout. If the water is not spraying, try the following:

- Unplug the Pump and plug it back in
- Double-check that the Gasket is in place
- Double-check that the Pump is still properly submerged in water with the yellow water flow dial facing the bottom of the Base

If you've checked all of the above and the Pump is running, try letting it run for 5 minutes. It may just need a few minutes to purge any trapped air.

OPTIONAL: ADD GROW LIGHTING

If your Aquaponicals location does not provide enough light, you can use artificial grow lights such as compact fluorescent (CFL) or LED bulbs. For maximum effectiveness, bulbs that use are specifically designed for use with plants. If you are using CFL bulbs, replace them after six months of use. Many of these bulbs will screw into standard desk or floor lamps. It is a good idea to place a timer on your lamp so you do not have to manually turn



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Build Your System

RINSE SYSTEM AND MEDIA

You may wish to rinse your Aquaponicals system before assembly. Use fresh water without soap or detergents.

The Grow Media that comes with your Aquaponicals system should be rinsed as well. The included Grow Media is expanded clay pebbles. Thoroughly rinsing the Grow Media will help remove any clay residue that can cloud your water and possibly clog your system.

PREPARE LOCATION

Select a level location to assemble your new system. You will want to assemble the system in the area you plan to place it. Make sure the location you choose is capable of supporting your system after it is filled, and has ample natural or artificial light for the plants you choose to grow.



Protect the area around your system in case any water splashes or spills.

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PREPARE PUMP

Your Pump comes with three adapters. You will use the smallest adapter as indicated by the circle below.



Adjust the water flow to its lowest setting by turning the yellow dial on the Pump all the way to the negative (-) side. The included high-quality pump is stronger than initially required by your Aquaponicals system. We opted to include such a strong pump because it will perform well for far longer with fewer cleanings than a pump with just adequate power. (Refer to the Pump's instruction manual for cleaning and other maintenance details.)

Your Pump includes a full 1-year limited warranty.

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ADD PLANTS

Your Aquaponicals system is able to support many common houseplants, leafy greens, and herbs. We recommend no more than 3-4 heavier feeding plants such as herbs, or 4-5 lighter feeding plants such as houseplants or leafy greens. Generally speaking, the more light a plant requires the more it feeds. In other words, a plant that requires full sun will be a heavy feeder, and a shade-loving plant will be a light feeder. Compact plants work best such as ones intended for containers that grow around 12" tall. Avoid plants such as rosemary that prefer a dry growing environment.



You can add seeds, seedlings, or plants to your grow bed. If you are starting from seed, be sure to place the seeds just deep enough into the grow media for them to receive some moisture. With seedlings and plants, you will want to bury them just deep enough for their roots to receive moisture. If transplanting plants from soil, rinse the soil away from the roots first.

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FILL GROW BED

Place the Small Buffer Bag so that it comes into contact with water anywhere in the Grow Bed or Fish Tank. The Buffer Bag is designed to help maintain a steady pH level in your water to keep your fish and plants happy. We recommend replacing the Buffer Bag every six months. Replacement Buffer Bags can be found at **TheAquaponicStore.com**

Fill the Grow Bed with the thoroughly rinsed Grow Media. Take care not to dislodge the Media Guard or spill Grow Media down the Feeding Tube. If Grow Media gets under the Media Guard and Bell, it could prevent the Siphon inside from functioning correctly.



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Securely attach one end of the Tubing to the smallest Pump adapter as shown.

Insert the adapter securely into the Pump's water outlet.



Use the suction cups to attach the Pump onto the rear side of the Base as shown in the following picture. The tubing will run along the very bottom of the Base, and the electrical cord will run up and out through the cutout in the rear.

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Be careful not to dislodge the Pump at any time. The Pump's water inlet is located at the very bottom of the Pump where the yellow water flow dial is located. Moving it could inadvertently cause the Pump to run dry.

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OPTIONAL: INSTALL WATER DIFFUSER

You may optionally slide the Water Diffuser onto the Water Spout in the middle rear of the Grow Bed. While not required, this diffuser will prevent plants in front of the water spout from receiving too much direct water. It has the added benefit of keeping the top surface of your Grow Media drier thus helping to prevent algae growth while your plants are young and small. Over time, you will find that the water pressure from the pump decreases so you may then opt to remove the diffuser.



Periodically remove the Water Diffuser to check that water is flowing to your Grow Bed properly. You will also want to do this anytime you have to reconnect the Pump for any reason.



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ATTACH GROW BED



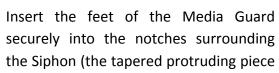
Poke the center out from one of the Gaskets, wet it, and insert it into the underside of the Grow Bed as indicated by the arrow in the diagram. This Gasket will form a seal between the Fish Tank's water pipe and the Grow

Bed. (The other Gasket is a spare. Keep it in case the first one is lost or damaged.)



Check that the Gasket is in place whenever you have to lift or reattach the Grow Bed for any reason. The water from the Base will not pump to the Grow Bed properly without it.

Place the Grow Bed on top of the Fish Tank. The Fish Tank's water pipe will fit into the circular notch where you installed the Gasket.





of plastic with a hole in the middle of it in the middle right side of the Grow Bed). Then, place the Bell all the way down into the Media Guard.

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FILL BASE

Fill the Base with fresh lukewarm water up to the "FILL TO HERE" line. Regular tap water works best. Avoid using distilled or reverse osmosis (RO) water.



Never allow the Base's water level to fall more than a couple of inches below the FILL TO HERE line. Running the pump dry can permanently damage it.

TREAT WATER

Included with your Aquaponicals Starter Kit are D-Klor™ water dechlorinator and Zym-Bac™ beneficial live bacteria. We will use each of these products to jump-start your new Aquaponicals ecosystem so it is ready for your fish and plants.



Shake the bottle of D-Klor™ then add 1 teaspoon of it to your water. You may store the rest as directed for future water additions.

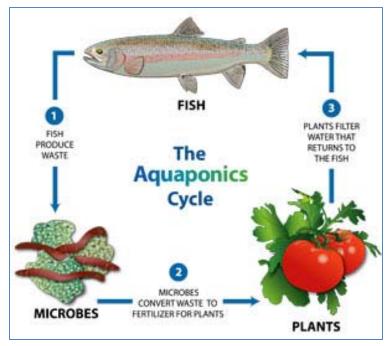
Shake the bottle of Zym-Bac[™] then add the entire contents to your water. This will help jump-start the growth of beneficial bacteria throughout your system. These bacteria (microbes) are essential for breaking down fish waste into nutrients for your plants.



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Aquaponicals Ecosystem

FUTURE WATER TREATMENT

Ideally, you will want to dechlorinate any water you add to the system. If you do not have any D-Klor™ handy, you may alternatively outgas/offgas the chlorine in your water by letting it sit in an open container for 1-2 days before adding it to your system. Glass or food-safe containers work best.

You do not need to add additional Zym-Bac[™] to your water unless you empty and store your system for an extended period of time.

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- 4. Treat the water in the Fish Tank with 1 teaspoon of D-Klor™ water dechlorinator just as you did with the water in the Base.
- 5. Let the fish and water sit for 10 minutes.
- 6. Add a small amount of Fish Tank water to the transport bag, and allow it to sit for 5 minutes. Take care not to allow the transport bag water to spill into your Fish Tank.
- 7. Repeat Step 6 another 1-3 times until the temperature of the water and the bag are approximately the same.
- 8. Use a fish net (or clean hands) to quickly but gently transfer your fish to the fish tank. Do NOT add the transport bag water to your fish tank.
- 9. Discard the transport bag and water.
- 10. Top the Fish Tank off with fresh lukewarm water until it is near, but <u>not</u> spilling over, the top of the overflow pipe (bottom of the Overflow Collar).

You may wish to cover the fish tank or keep the area dark for a few hours to better allow your fish time to adjust to their new environment. Do not leave your fish in their transport bag for more than ½ hour as there is no aeration in the transport bag, and your fish will eventually use up the oxygen in the bag's water. You Aquaponicals system aerates its water through the continual filling and draining of its Grow Bed when the pump is running.

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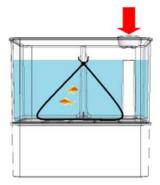
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Your hobby aquarium store or pet store will be able to recommend the best food and feeding schedule for your new aquatic companions. You can conveniently feed your fish through the Feeding Tube in the left side of the Grow Bed. Do not be surprised if your fish do not eat much right away. They may be stressed by their transportation and change in environment.



Fish do not like sudden or rapid changes in their environment. You will want to slowly acclimate your fish to any changes in temperature and water quality.

- 1. Place your fish into the Fish Tank while still in their transport bag.
- 2. Fit the Overflow Collar with the ridges facing down onto the top of the overflow pipe as indicated by the arrow below.



3. Fill the Fish Tank with fresh lukewarm water. Be careful not to fill your Fish Tank past the Overflow Collar or you could flood the already filled Base.

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ATTACH FISH TANK

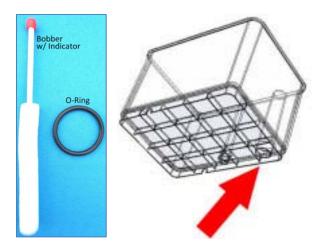
Insert the free end of the Tubing from the Pump into the underside of the Fish Tank's water pipe. The water pipe runs vertically through the rear center of the Fish Tank (indicated by the arrow below). Run the Tubing up the water pipe as far as it will go.



As you lower the Fish Tank onto the Base, you will also want to install the Bobber w/ Indicator.



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Place the Bobber w/ Indicator with the red indicator tip facing upwards into the overflow pipe. The overflow pipe runs vertically through the rear corner of the Fish Tank (indicated by the arrow in the preceding picture). After you lower the Fish Tank onto the Base, the Bobber should float on top of the water in the Base. This indicator will provide you with an easy way to judge the current water level in the Base at any given moment.

Slide the O-ring onto the top of the overflow pipe inside the Fish Tank. Keep sliding the O-ring down the overflow pipe until it is 2" below the red indicator tip. This is your **Water Level Safety Zone**, which we will go into more detail later.

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OPTIONAL: ADD AQUATIC ACCESSORIES

You may optionally add aquarium gravel, aquatic plants, and/or aquarium ornaments at this time. Your local or online hobby aquarium shop or pet store can recommend hardy aquatic plants that will do well in a 2-gallon freshwater aquarium with your lighting conditions. Aquatic plants can not only add aesthetic appeal to your aquarium, but it can also serve as an additional natural biofilter for your water.

ADD FISH

Recommended Fish

Your local hobby aquarium shop or pet store is a good resource for fish, fish food, and aquarium products and advice.

We recommend including 3-5 live-bearing fish up to 1" long (such as tetras). Additionally, we recommend a bottom feeder such as a pygmy corydora plus an algae eater. An algae eater could consist of 1 bristlenose or clown pleco, or 2-3 nerite snails. Avoid barbs, gobies, and other aggressive breeds.



Nerite Snail



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