



SETTING UP THE SYSTEM

1. Attach the filter to the bucket

- A. Insert the threaded male adapter through the hole on the side of the bucket so the threads are protruding outside the bucket.



- B. Place the gray rubber o-ring on the male threads that are protruding through the hole.



- C. Screw the hose and female adapter onto the male threads.
D. Slide the filter hanger (black plastic circle with a hook on it) around the filter and add the cap to the nozzle end.



- E. Attach the filter to the hose by pushing the quick disconnects together and turning until the ribs align.



2. Attach the sticker

- Place the Water of Life sticker on the bucket. Make sure that the sticker is centered over the hose. A second sticker may also be affixed to the back of the bucket.



3. Create some dirty water to filter

Note: The color of the water is not a reliable indicator of whether the water is safe to drink. Dirty water makes for a nice demonstration, but it's the things you cannot see that can be harmful. If the water has a tint to it after it has been filtered, that doesn't mean it is unsafe. (There may be tannic acids in the water that are not harmful, but they can "stain" the water or discolor it, like putting a tea bag in a cup of water.) Rest assured that all of the pathogens have been removed.

We have found that potting soil works best for discoloring the water for demonstrations. Stir a cup or two of soil into the water. The big particulates will sink to the bottom while the dirt will create a muddy-brown tint. **We recommend letting the big chunks settle on the bottom of the bucket before you filter the water.** This will keep the filter flowing faster and you won't have to backwash as frequently.

4. Using the filter

Add water to the bucket and lower the filter head below the bottom of the bucket to start the flow. The greater the distance between the filter and the top of the water line, the faster the water will flow. **Always filter water into a clean receptacle.**

This is a gravity-operated system. To turn the filter on, simply lower it below the water level. To stop the water flow, raise the filter above the pail. When not in use, place the filter into the filter hanger and hang it on the side of bucket.

If you do not plan to demonstrate the system for several days after running muddy water through it, backwash at the end of the demonstration even if the filter doesn't appear to have slowed down. This will prevent mud from building up in the filter.



CLEANING THE SYSTEM

Backwashing the filter

When muddy water is placed in the bucket, the filter will eventually slow down or stop flowing altogether. This means it is getting clogged and it needs to be backwashed.

- Reserve some filtered water to use for backwashing, and fill the syringe with this filtered water.
- Empty the bucket so there is no water in it.
- Remove the filter from the tube at the disconnect.



- Take the syringe that you've filled with filtered water and forcefully push the water through the end of the filter from which the safe water was flowing. (You will be pushing water backwards through the filter and against the usual direction of flow.)



Caution: Do not backwash filter with contaminated water. If you must backwash with dirty water, run at least one liter (one quart) of water through the filtration system before drinking. Do not drink the first liter.

- Repeat this process until the water coming out of the other end of the filter is clear.
- Reattach the filter to the hose by pushing the quick disconnects together and turning until the ribs align.

