

# **Owner's Manual and Installation Guide**

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## **STOP - WARNING!**

UltraHome systems *must* be installed and maintained by a licensed, bonded contractor. Installation and maintenance must comply with all applicable ordinances and plumbing codes. AlkaViva is not liable for issues as a result of improper installation.

What's included?	
Blue Filtration Tank (Premium) Black Salt-Free Softening Tank  Configuration may vary depending on your order.	
Premium Tank Box(es) Include:	
1 x Clack Bypass with Red Levers	
1 x Clack Shark Bite Adapters	
1 x 10" x 54" tank with Clack head pre-installed	
Salt-Free Tank Box(es) Include:	
1 x Clack Bypass with Red Levers	
1 x Clack Sharkbite Adapters	
1 x 10" x 54" tank with Clack head (upflow stickers pre-installed)	
Sediment Filters & Housing Box(es) Include:  1 x Clear Sediment Filter Housing w/ Filter & Nipples Pre-Installed	
2 x Sediment Replacement Filters	
1 x Roll of Thread Tape	
1 x Pre-Filter Wrench	
1 x Mounting Screws for the Housing	
1 x Main Tank Installation Instructions	

Ensure you have all parts listed above prior to installation!

These instructions are meant to serve as a guide to basic installation. Individual installation needs, including placement, local building codes, adapters, and materials may vary and will need to be determined by a licensed, bonded contractor.

#### **Notice to Professional Installer!**

#### **Prior to installation:**

- Read these instructions carefully in their entirety. AlkaViva is not liable for issues as a result of improper installation.
- Determine the location of all system components. UltraHome systems must be installed on a level surface and the tank(s) level so they are standing upright.
- Check all applicable plumbing and building codes for installation compliance.
- Ensure the UltraHome system will be installed on the main water supply. Before installation, the main water supply should be turned off.
- Use only Teflon tape when connecting to any of the ports on the UltraHome filter components.
- Ensure the source water intended for use with the UltraHome system is potable, or safe for drinking.
- Note that additional fittings may / will be needed to adapt to the plumbing. All tanks and sediment pre-filters come with standard sized fittings. All tanks are equipped with 1" Shark Bit connections.
   Pre-Filter is equipped with 1" MNPT connections. Do not overtighten fitting, as this may cause leakage and broken fittings.
- Note that the head(s) may come loose in transit. Check by hand-tightening clockwise, no more than 1/4 turn. The head may not move at all, or less than 1/4 turn.
- UltraHome Systems have different start-up and flushing instructions. The Premium Filtration Systems require pre-conditioning flushing of the media tanks, while the Salt-Free System only requires the post-installation flushing.

## Warning:

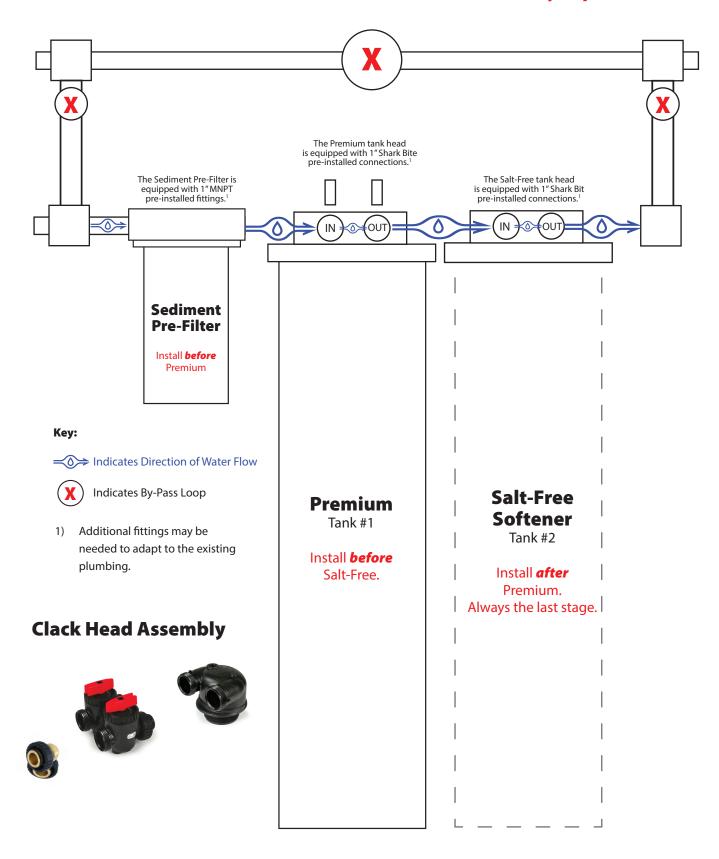
- Many metal (conductive) plumbing systems, e.g. copper or galvanized, are used as electrical grounding in homes. A whole home system installed on a metal plumbing system will interrupt the electrical contibuity of the plumbing system. Install a 'jumper wire' consisting of the same material as the existing plumbing, to re-establish conductivity.
- If you have a well water system, the system should be installed after the pressure tank. If using a booster pump, this system should be installed after the booster pump. DO NOT USE this system for pneumatic or hydro-pneumatic applications.

#### **Notice to Homeowner!**

- It is important to request that your professional installer teach you how to use your shut-off valves properly. This is necessary to change the Sediment Pre-Filter, any time that service is required, and in the event of an emergency.

## **UltraHome Diagram**

## The order in which the main tanks are installed is very important!



## **Installation Instructions** (*Professional Installer Recommended*)

**Step One: Flush the Tanks.** Prior to connecting the outlet(s) of the tank(s), flush the water filter tank(s) into a 5-gallon bucket until the water runs clear (about 5-10 minutes). Flushing the Salt-Free tank is not required, but can be flushed inline if needed.

**If flushing the tanks prior to installation is not possible:** Once the system has been installed, brought to standing pressure and checked for leaks locate the nearest faucet in the home. Remove the aerator and turn on the cold-water line until the water runs clear (the Clack Valve is equipped with an air pressure relase valve (Vent Tap) to easily purge the tanks of excess air).

**Step Two:** Ensure a level surface. The tank(s) should be installed on a level surface and upright. You may level the tanks by lifting the tank straight up 6-inches and tap it on the ground until the tank stands vertical. The bottom of the tank is round and the boot allows the tank to stand upright.

**Step Three:** Turn off the main source water supply line.

**Step Four:** Plumb in a By-Pass Loop **(x)** with shut off valves so that the filtration system can be taken offline for maintenance or servicing without shutting off the water supply to the whole home (See "UltraHome Diagram"). Use only Teflon tape when connecting to any of the ports on the UltraHome filter components.

**Step Five:** Use Unions, Flexible Stainless-Steel Hose or Quick Connect / Push Fittings when connecting all parts of the filtration system to the water line.

**Step Six:** When putting the system into service for the first time, turn on the main valve, slowly filling the tank(s) with water and bring them to a standing pressure as slowly as possible. Check the system for leaks and inform the homeowner on how to operate the by-pass loop valves and how to change the Sediment Pre-Filter.

The UltraHome System is ready to use!

## **Owner's Manual**

Your new UltraHome system is as easy to use as running on your faucet, shower, or tap! There's just a few things you need to know:

First thing you should know: Replace your Sediment Pre-Filter annually or as needed.

It is recommended that the Sediment Pre-Filter be replaced every 6-12 months, depending on the amount of sediment present in your source water. If the system has been working properly and the pressure is slowing, it may be time to change the Sediment Pre-Filter.

## **To Change the Sediment Pre-Filter:**

- 1. Turn off the main water supply to the Sediment Pre-Filter using the shut-off valves and by-pass all tanks
- 2. Run a faucet (cold water) inside the house to relieve the pressure leave faucet open.
- 3. Unscrew the Sediment Pre-Filter Housing clockwise using the supplied Filter Wrench.
- 4. Remove the existing Sediment Filter and discard.
- 5. Remove the O-Ring and wipe the groove clean. Lubricate a new O-Ring with a coating of clean silicone grease.
- 6. Replace the O-Ring and press down into the groove with two fingers. This step is important to ensure a proper filter seal. Make sure the O-Ring is seated level in the groove. If it appears damaged, stretched, or crimped it should be replaced.

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#### **Change the Sediment Pre-Filter (cont'd):**

- 7. Place a new Sediment Pre-Filter into the Stand Pipe located in the bottom of the Pre-Filter Housing.
- 8. Screw the Pre-Filter Housing onto the Filter Cover and hand tighten. Lightly secure the housing with the supplied Filter Wrench, being careful not to overtighten.
- 9. Turn on the main water supply slowly to allow the Sediment Pre-Filter to fill with water and expel air from lines. Put the tanks back in service, out of by-pass.
- 10. Check for leaks.

## In Case You Need to Shut Off Water to the System:

A By-Pass Loop is designed to allow water to be turned on and off independently between the water main and the filtration system. It does this using a series of shut off valves. A properly installed By-Pass or Service Loop will allow you to maintain your UltraHome System and make maintenance easy to do.

Note: The Clack heads have a built-in by-pass. The Sediment Pre-Filter still requires a bypass loop for filter

**Note:** It's important to have your professional installer teach you how to use shut off valves properly. They will need to be used to change the Sediment Pre-Filters, any time that service is required, and in the event of accidental damages. You will need to understand the sequences to operate them effectively.

## Low Pressure or Slow Flow? Replacing Your Sediment Filter Didn't Fix it?

The Premium and Combo Systems do NOT require back flushing. However, if you experience a drop in water pressure and changing the sediment filter hasn't helped, they can be manually back flushed. This involves rerouting of the water supply. We recommend this step to be conducted by a licensed professional. If you would like instructions, please contact AlkaViva.

#### Salt-Free Softener: What to expect.

Benefits you'll see and feel.

Once you start using the UltraHome Salt-Free Water Softener, you should begin to notice differences:

- You'll have softer, smoother hair and skin.
- Soap and detergents will work differently (better) and you'll use less too!
- Your clothes will feel softer without hard minerals trapped in the fabric. Fabrics last longer and whites stay whiter without the dingy gray caused by hard water.
- All your hot water appliances will operate more efficiently and be less susceptible to damage.
- You will be cleaning your plumbing system as old scale gets washed away.

## The "de-scaling" effect.

**Showers and aerators.** If you live in a hard water area, likely, you have existing mineral deposits and scale on the inside of your pipes and fixtures. Over the first few weeks, this scale will begin dissolve, detach, and come out of your faucets. This de-scaling process is temporary and perfectly normal and will steadily diminish depending how hard your water is and how much build up you have.

As descaling starts to occur in the first few weeks, you'll notice reduced softness - especially when using hot water. As mineral scale loosens and flushes out of your system, you may start to see mineral silt in the water. It will range in size from very fine silt, to pieces as large as a grain of sand. The largest pieces will build up in the aerator screens of your fixture or in your shower head. Clean aerators and shower heads weekly for as long as you notice the buildup.

**The bathtub.** The temporary silt may be more obvious in bathtubs where the water may take on a slightly milky tinge. At the extreme, it may contain sand-like grit. This is also temporary, and perfectly normal. If you had a traditional salt-based water softener, your bath water likely felt slick or even slimy. The water from your UltraHome system won't have that feel because we don't add bicarbonate. If you miss that, simply add a few tablespoons of baking soda to get the same effect.

**Spotting.** Depending on your water, you may see some water spots. With your UltraHome system you'll have reduced spotting compared to untreated water. Unlike the spots that are produced by traditional salt-based softening, your spots are not chemical in nature and are much easier to clean than spots from untreated water. The best of both worlds!

**Soaps and Detergents.** Oil-based soaps like Ivory react with calcium minerals and create a sticky film. Detergent-based cleaners like shampoos, shower gels, dish soaps, and laundry detergents will react very slightly or not at all. Detergents will work better with treated water. You may not notice improvement when using regular bar soap or oil-based products since the minerals ar largely still able to react with the fats in the soap.

**Your dishwasher.** As the UltraHome system removes scale over the first few weeks, hardness inside the dishwasher may temporarily increase. Harsh chemicals, low pH detergents or rinse agents, can re-dissolve these crystals, reducing the desired effect. You may want to adjust the combination and amounts of detergents and rinse agents. Gel packs are a great alternative. They are formulated to contain just the right amounts of detergents and rinse agent. Lemi-Shine Rinse Agent is an excellent choice and is available online or in stores.

**Glass shower doors.** Scale can etch the surface of your glass. Etching allows soap scum and minerals to stick easily. We recommend cleaning the glass surface thoroughly with a de-scaling cleaner then apply a few coats of Rain-X. This will seal the pores in the glass and causes the water to bead and run off easily.

**HOT TIP!** Optional hot water sediment filter. Installing a hot water sediment filter after your hot water tank will help mitigate the above issues – especially the ones related to silt or sediment. These are available online at alkaviva.com or through your Dealer.

## **Water Conditions for Operation of Salt-Free Softening System**

Water quality can affect the performance of a Salt-Free Water Softening System. The catalytic surfaces of the medias used in a Salt-Free Water Softening System can be coated by certain contaminants and interfere with the process. Water should be free of, or lower than the maximum contaminant levels listed below. If found, they can be removed or reduced by adequate pre-treatment. Contact AlkaViva Technical Services with any concerns or for pre-treatment solutions at techsupport@alkaviva.com, or 775-324-2400.

Hydrogen Sulfide (Rotten Egg Smell): 0 mg/L

- Hydrocarbons, oils, & lubricants: 0 mg/L

Phosphates 1.0 mg/LCopper: 1.3 mg/L

- Iron: 0.3 mg/L

Chlorine: 2.0 mg/LManganese: 0.05 mg/L