Rayne Water Conditioning

www.RayneofSanDiego.com

Rayne of San Diego
FREQUENTLY ASKED QUESTIONS

Click on the link below to go to that section:

LINX Drinking Water System - FAQs

1. **What is LINX Technology?**
   The word "LINX" stands for "eLectrically regenerated Ion EXchange." It represents the first new technology in the POU water treatment industry since residential RO was introduced in the early 1970s. The patented process employs the basics of ion exchange technology but uses electricity for regeneration rather than salt or other chemicals. **LINX Technology** removes a wide range of contaminants including 90-95% or more of the Total Dissolved Solids (TDS) such as metals, nitrate & nitrite and others

   LINX Systems are the first "SMART" water system that takes into account the quality of your feedwater and then lets you decide how you want your drinking water to taste using the Dial-A-Taste® control feature.

2. **How does a LINX System work?**
   Water passes through special LINX cells (also called cartridges) made from ion exchange resin. An electrical charge attracts the impurities in the water and it attaches them to the cells leaving you with great tasting drinking water. Periodically the cells need to be regenerated. During regeneration the electrical charge to the cells is reversed - releasing the absorbed contaminants. The cells are flushed with water and the accumulated TDS goes safely down the drain leaving the system ready to produce high quality drinking water.

3. **What is the Dial-A-Taste Control feature and how does it work?**
   LINX Systems have 5 separate settings that allow you to dial the taste of your water. First when the technician installs the unit he will set the system to "High" or "Low"

based upon the quality of the feedwater. While public water supplies are carefully monitored and tested, not all water delivered to the tap is the same quality. This first setting takes into account these water quality differences and adjusts to provide the level of treatment needed.

The second setting is the Dial-A-Taste control on the front of the unit. This dial allows you to select any one of 5 settings to get the water flavor you want. All other drinking water systems only allow one setting and one water quality.

If you like spring water flavor set the dial all the way to the left. If you like purified water flavor, set the dial all the way to the right. If you like drinking water flavor, set the dial on one of the middle settings. These settings effectively control the level of mineral content – or taste – of your water.

4. **How does LINX Systems use less water than RO?**
   The LINX system only regenerates after the system produces the preset quantity of water – 3 gallons on the low TDS setting and 1.5 gallons on the high TDS setting. During regeneration LINX systems use 1 gallon of water regardless of the setting.

   Typical residential RO systems can use 10 gallons or more of tap water to produce 1 gallon of drinking water. In fact, one study by Ted Kuepper at the US Navy's Port Hueneme water research center in California found that typical residential ROs use up to 27 gallons to make 1 gallon.

5. **What are the filtering components of a LINX system?**
   The LINX system includes 4 cartridge filters:
   a. A "pre-filter" to remove any suspended solids in the feed water
   b. 2 LINX TDS reduction cartridges
   c. A carbon "post-filter" to polish the water prior to drinking

6. **How often do the filters need to b e changed?**
   It depends on the quality of your feed water and the volume of water used – but an estimate is after approximately 1,300 gallons of water have been consumed. But don't worry - this is a smart system that will notify you by a series of blinking lights that it's time to call for system maintenance.

7. **How much water can be drawn at one time?**
   1.5 to 3 gallons are available from the LINX system depending on how soon the system is scheduled to regenerate, plus what is available in the storage tank. The 2.2 gallon tank actually holds about 1.5 gallons of water while the 3.2 gallon tank holds about 2.5 gallons.

   During the regeneration process, which takes 32 minutes, the only water available is what is in the storage tank.

8. **How much electricity does the LINX system use?**
   Less than one cent per gallon of drinking water produced or less than $5 per year on average.

9. **Can the system be hooked up to an icemaker and will the ice be crystal clear?**
   In most cases the system can be hooked up to an icemaker. Crystal clear ice is a function of the ice maker, in concert with good water. Residential icemakers freeze the ice from the outside in and sometimes air gets caught in the cube and thus the ice is not perfectly clear. Commercial icemakers freeze ice from the inside out which pushes the air out, which produces clearer ice cubes.

10. **What else do I need to know?**
    The regeneration process uses water to rinse the TDS off the LINX cartridges and down the drain. You might hear a flushing sound when the system goes into regeneration, as the system creates a "burst" of water to flush the TDS. When you hear the burst of water, you know our are saving about 10 times the water you would have used with reverse osmosis. Most bottled waters are produced using the same reverse osmosis process and consequently uses more water than LINX to make the finished product.

11. **What do the lights mean?**
    This is a table that shows the meaning of the lights.

NORMAL CODES:	Light A (Blue)	Light B (Red)	Light C (Blue)	Light D (Red)
Delivering Water	Blinking	Off	Blinking	Off
Cell 1 Regenerating	Off	Blinking	Off	Off
Cell 2 Regenerating	Off	Off	Off	Blinking
Unit Startup (85 min); or last 2 min of regeneration	All 4 lights blink in sequence (left-to-right-to-left)			
PROBLEM CODES:				
Service LINX Carbon and Sediment filters soon	Off	Solid	Off	Off
Service LINX TDS Cartridges soon	Off	Off	Solid	Off
Blue Lid Covers Ajar (Can be re-set by customer)	Off	Blinking	Blinking	Blinking
ERROR CODES:				
Source water flow sensor malfunction	Blinking	Blinking	Off	Off
Service water flow sensor malfunction	Off	Off	Blinking	Blinking
Drain valve plug, or leak to drain detected	Blinking	Blinking	Blinking	Blinking

BACK TO TOP

Portable Exchange Soft Water Tanks - FAQs

Should I soften both hot and cold water, or just my hot water? Most consumers choose to soften their hot and cold water to gain the full benefits of their softening system. Some plumbing layouts dictate that only hot water can be treated. In other cases, the benefits to hot water softening coupled with the cost being somewhat less is preferred.

Benefits- Hot water only softening: Prevents sediment build-up in hot water heater that costs money in heating energy. Automatic dishwashers use just hot water, so your dishwasher will reap the full benefits of reduced scaling and spotting, as well as soap savings that are available with softened water. Dishes, glasses and silverware see a dramatic decrease in water spots as well.

Added benefits for Hot and Cold softening: The full benefits of reduced scaling and spotting, as well as soap savings as described above are delivered throughout the home. Since you bathe in hot water combined with cold, softened water for your entire home reduces the amount of soaps, shampoos and conditioners needed, usually by 50-75%. The added benefits in laundering, bathing, and cleaning are substantial.

Why does soft water feel "slippery"? Water hardness and the resultant un-dissolved soap cause a sticky feeling on your hair and skin. This can cause a dry, irritated feeling. With soft water, your soap dissolves properly so there is no sticky residue. What you thought was "squeaky clean" is actually un-dissolved yucky soap scum on your skin! When the hardness and un-dissolved soap is absent, and the natural feel of clean skin and hair is present.

What is in the tank? The material inside the softener tanks is Ion Exchange Resin, which has the appearance of translucent amber colored plastic beads. In bulk, it appears much like plastic sand.

How does it work? As the hard water passes through the tank, the resin collects the hardness (mostly calcium and magnesium) and releases sodium ions in exchange. There is a trace of sodium in the softened water.

Is there salt in soft water? No. Common salt (Sodium Chloride) is used to regenerate the resin when it is exhausted. After the resin is regenerated, all of the salt is removed from the resin. Only a trace of sodium charge remains to attract hardness for the next service cycle.

How much sodium is in soft water? Very little. A glass of softened water has only about 1/3 the amount of sodium that is in a glass of milk.

Does a water softener exchange tank reduce flow? Yes. Depending on your water main size and water pressure, a water softener typically reduces the flow around 10-15%.

In cases where a larger water main is treated, double tank systems may be needed to prevent greater flow loss.

Why do I get a "Low Pressure" tank sometimes? The sand-like material inside the tank can plug the outlet screens. A tank replacement is required. The tank can be put on bypass to restore pressure until a new tank is delivered.

Can I water my plants with soft water? The nature of removed hardness and a slight bit of added sodium in soft water do not create a problem in most cases. These elements are present in soil. If you were to water sensitive indoor plants for long enough, the balance of elements would change. Outdoor plants are much less of a concern. Natural rain washes the root base of build-ups.

Why does my tank "run out" before delivery? The regeneration of the tanks is done in batch form to maintain the consistency of the tanks. Human error can still occur, and our service department will be happy to deliver a new tank upon request. If "running out" occurs frequently, we can deliver more frequently, but first take a look at where the water may be going. Here are some tips:

*High flow shower heads and long showers are the biggest water users.

*Hand washing dishes can use a tremendous amount of water. Automatic dishwashers use very little water.

*Toilets can quietly waste water. Check the flapper and float valves for any leakage.

*Don't let water run needlessly while shaving, brushing teeth, etc.

*Is someone using an outside faucet that is on the soft line?

* Have company? More people using the water can cause you to run out.

Why is the water cloudy or discolored after delivery? There is a small amount of air in the pipes after a tank delivery. This will clear up quickly, but it will make the water look cloudy, and can also disturb sediments and scaling in the plumbing system. We can install a faucet at the tank for the delivery person to run after the delivery to minimize this problem, or you can just run some water from your bathtub and the problem should clear up quickly.

BACK TO TOP

Automatic Water Softeners - FAQs

How does the system work? Automatic water softeners work by removing the hardness from your water by a process called ion exchange. It will exchange ions of sodium for ions of hardness. These hardness ions are mostly calcium and magnesium, and are flushed down the drain each time the softener regenerates.

Salt, which is either sodium chloride or potassium chloride, is placed in the salt storage tank (or brine tank). This salt dissolves into the 12 +/- inches of water that is in the bottom of the salt storage tank, and then is used to regenerate the ion exchange resin inside the softener tank. (The ion exchange resin looks like amber colored plastic sand.) During a regeneration cycle, the system runs this salt water through the resin in the tank, and then rinses all of this salt out with fresh water. A great deal of the sodium ions are instilled onto the ion exchange resin, and the old hardness ions are flushed down the drain.

When hard water flows through the softener tank, hardness ions stick to the resin, in exchange for the sodium ions. This does add a trace of sodium to the softened water, but softened water still has only one third the amount of sodium that is in a glass of milk.

Why does my system regenerate at a certain time? Most systems are controlled by a meter, which improves efficiency by regenerating the system only when needed. Non-metered systems are controlled by a pre-set schedule, and do not self-adjust to water usage fluctuations. In either case, the factory set regeneration times are usually 2 AM, when less water is being used. When regeneration times seem unusual, start by checking the system's current time setting.

Why is there water / sediment in the salt tank? These systems need around 12 inches of water in the salt tank when idle. This dissolves the salt and is used in the next regeneration cycle. The impurities in the salt can build up in the tank. This is cleared in the final backwash of the tank regeneration, and does not migrate to the soft water produced by the system.

When should I add salt? It is important that you remember to add salt to your brine tank as you cannot get soft water if the salt tank is empty. How often you need to add salt depends upon the level of hardness of your water and how much water your home uses. If you look in the brine tank and you see the water at the bottom, it is most definitely necessary to add salt. You should keep the salt tank at least ¼ filled at all times.

BACK TO TOP

Reverse Osmosis Drinking Water - FAQs

How does a Reverse Osmosis work? The system is made of a minimum of 3 separate filter processes, with the main filter being a very fine membrane, which allows only water molecules to pass through. Pollutant molecules are much larger, and are rinsed to the drain so they do not build up in the filter itself. (You may hear water going to drain during this cycle.)

This process produces water very slowly. All standard Reverse Osmosis units use reservoir tank systems. Pure water is produced at a slow rate, usually between 8 to 35 gallons over a 24 hour period. The reservoir holds about 2 to 3 gallons. If this runs out, it will take some time to refill.

Does Reverse Osmosis waste water? The system uses water to build up pressure, force water thru the very fine membranes, and rinse the impurities to drain. Older, inefficient systems can waste a lot of water. We supply newer, state of the art systems that minimize this water use, and our automatic shut-off valve shuts the system off when the tank is filled. If you are interested in conserving water, please review our FAQ page on the LINX Drinking Water System.

How long does my filter last? Due to the rinsing design of Reverse Osmosis, the filters typically last 2 to 5 years. We recommend that they are tested at the 2 year interval or sooner if the taste of the water is in question. Consumers who have our drinking water service are sent a reminder in the mail at a 2 year interval from the last filter change.

How do I get my water tested? Testing Reverse Osmosis purity levels is done with a TDS (Total Dissolved Solids) meter. You can purchase a meter, or call our office to have us send a sample bottle package to you to test your water purity, or schedule a visit to have the water tested by our service department.

Why are Reverse Osmosis systems so expensive? We have found that the higher quality systems more than pay for themselves when compared to the “off the shelf” units at the local discount stores. We frequently get calls for us to come fix these cheaper systems, which sometimes fail right out of the box. Our systems are built to last and are backed by an industry leading warranty and installed and serviced only by Rayne professionals.

BACK TO TOP