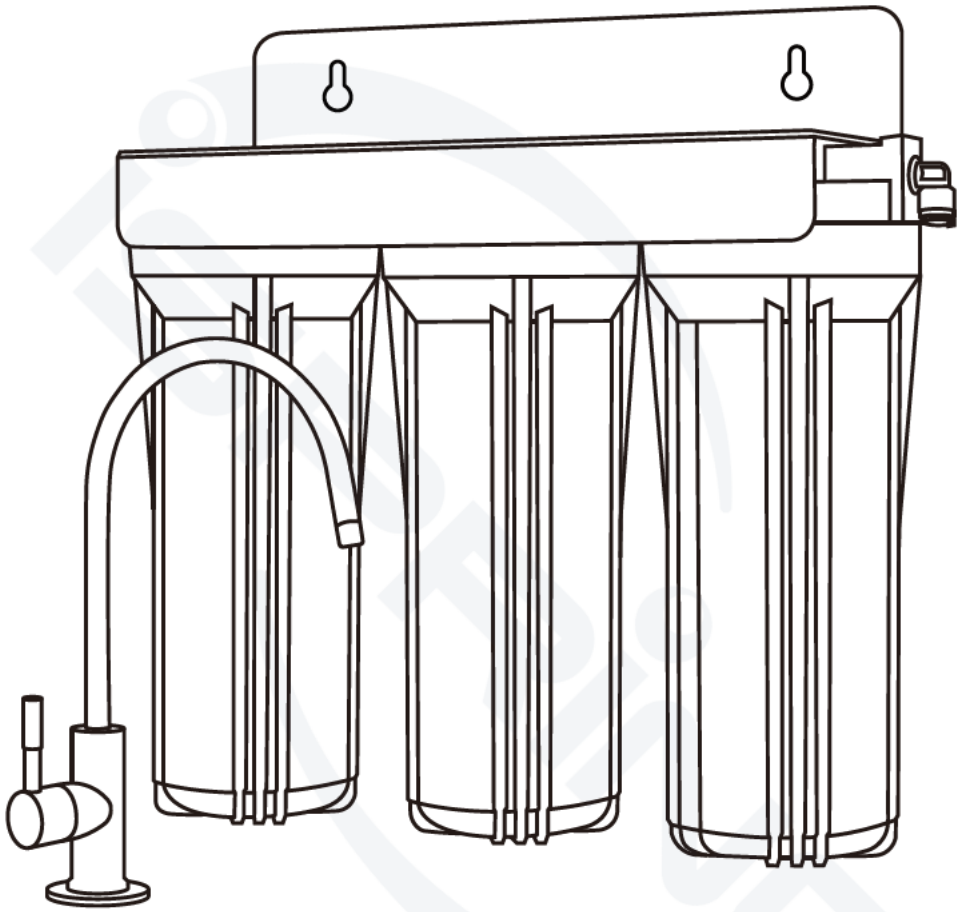
UNDER SINK

iSpring US31 Series 3-Stage Under Sink Tankless Water Filtration System



Model: US31 / US31-NC / US31-PB / US31-BV / US31-PF

Installation Instructions & User Manual

Ver. 06/2024

iSpring Water Systems

Any questions?
Scan the QR code
for support.

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We stand behind our products

Since 2005, iSpring has been dedicated to providing high-quality drinking water to families across the United States. We provide various residential faucets and water filtration systems that purify your water in everyday life and deliver pure, healthy, and tasty water to you and your family.

At iSpring, we strive to develop products to the highest of standards and aim to make excellent drinking water accessible for all households. With affordable pricing, reliable quality, prompt delivery, and top-notch customer service, we hope to assist in bringing you great water for years to come.

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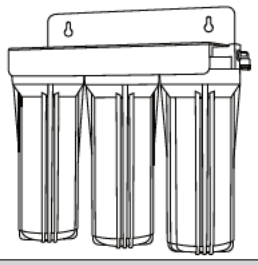
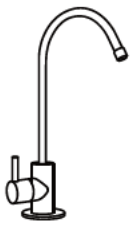
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User Information

The user must adhere to the installation specifications described in this Product Installation and Operation Manual (hereinafter referred to as the "instruction manual"). iSpring is not responsible for damage, loss, or injury resulting from neglect, improper maintenance, or unauthorized modification of products.

- This product is designed for residential use only. Contact iSpring customer service to inquire about usage in non-residential settings.
- The operating temperature range is 40°F - 100°F (4 - 37 °C). This water filtration system is NOT designed for HOT water. If the water temperature or ambient temperature falls below 40°F, immediately shut off the inline water supply and drain the remaining water from the system.
- Use only authorized iSpring parts and filters. Using unauthorized or aftermarket components will void the product warranty.
- It is recommended that users check external fittings and connections regularly to ensure all components are secure and operating properly.
- Unauthorized modification and disassembly are strictly prohibited and will void the warranty.
- This system is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities or lack of experience and knowledge unless they have been given supervision or instruction concerning the use of the appliance by a person responsible for their safety. Children should be supervised to ensure that they do not play with the appliance.

Packing List

		
Housing and Bracket Assembly	3 Cartridges	Faucet w/ Installation Kit
		
Feed Water Adapter (Model: AFW43)	Tubing	Faucet Bracket
		
Plumber's Tape	Fittings	Wrench

Product Features

Parameter	Specification
Minimum Inlet Water Pressure	30 psi
Maximum Inlet Water Pressure	70 psi
Incoming Water Temperature	40 - 100 °F

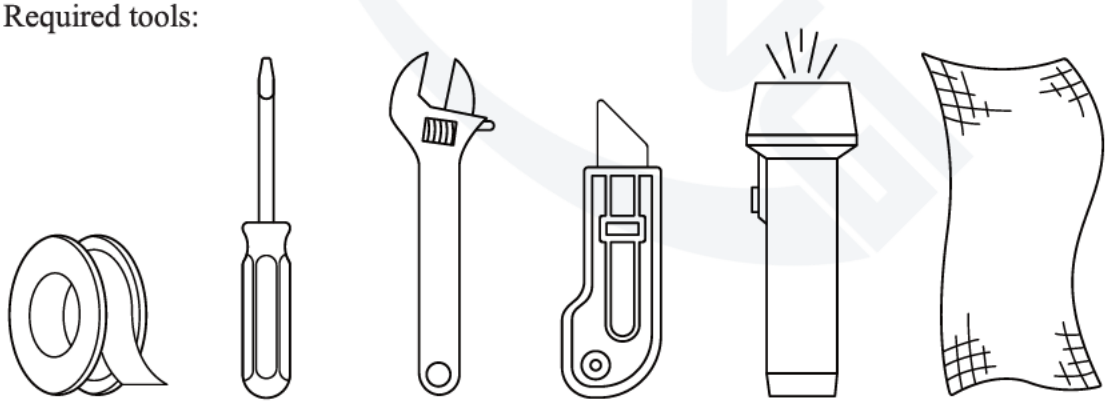
- Maximum water pressure: 70 psi, or a pressure regulator (Model: APR70) is required for high inlet water pressure.
- Minimum water pressure: 30 psi, or a booster pump is needed.
- Do not use this system with microbiologically unsafe water or which has been potentially inadequately disinfected.
- This system is designed to be used on a cold supply only and kept away from freezing environments.
- The installation must comply with applicable local plumbing codes and/or regulations.
- Choking hazard. Small parts are included in the package. Please keep the package out of the reach of small children at ALL times.
- This purification system DOES NOT reduce TDS concentration.

If you have any questions or concerns during the installation, please contact us at **support@ispringfilter.com** or visit our help page at **ispringfilter.com/support**

Prior to Installation

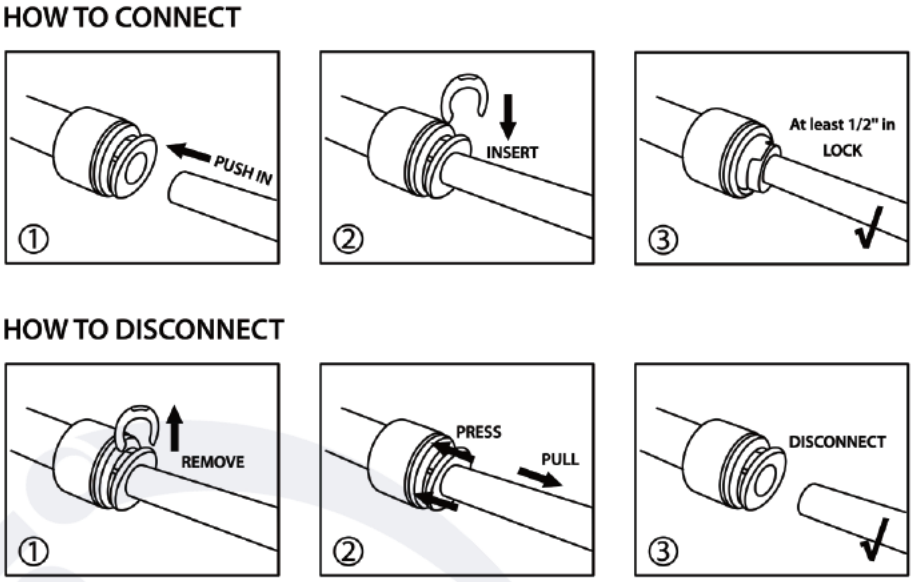
Before you start the installation

- It is highly recommended that you watch the video **"How to Install iSpring US31 Under Sink Water Filtration System | Step by Step Easy DIY"** on **YouTube.**
- Choose a suitable location for the system. Again, it must be placed on a flat surface and make sure this system is to be installed on INDOOR cold water supply ONLY.
- Check the packing list to confirm all accessories are included in the package. Contact iSpring customer service if any components are missing.
- Required tools:



- Optional tools:
  - Variable speed drill with two bits: 1/4" (for drilling a hole on PVC drain pipe), 1/2" hollow diamond (for drilling a hole on the countertop for drinking faucet)
  - 5/8", 9/16" open-end wrench, or adjustable wrench, pliers

- Quick connect instruction



It is highly recommended that you watch the video **"How to Connect and Disconnect Quick Connect Fittings | DIY Installation"** on **YouTube.**

Cut the tubing end squarely using utility knife or scissors. Insert the tubing into the quick connect fitting for at least 1/2". You will need to wiggle the tube and apply additional pressure to create a seal.

Installation

Step1. Install Feed Water Adapter (AFW43)

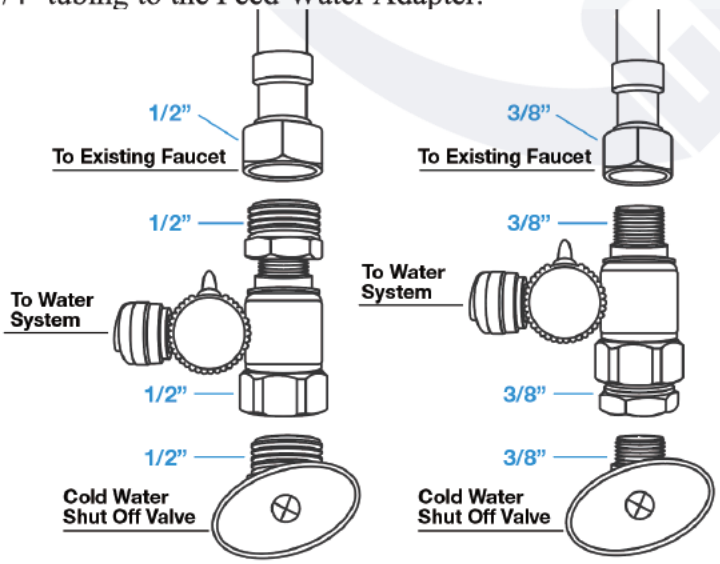
It is highly recommended that you watch the video **"How to Install a Feed Water Adapter for Reverse Osmosis (RO) and Other Applications | iSpring AFW43"** on **YouTube.**

A. Turn off the Cold Water Supply Valve (CWSV) under the sink and open the kitchen faucet to release pressure. Prepare a towel or bucket to catch any water drips. Disconnect the kitchen faucet connector pipe from the CWSV.

B. Install the Feed Water Adapter onto the CWSV and tighten it using a wrench or pliers. Make sure the O-ring is seated inside the adaptor.

C. Re-install the kitchen faucet connector pipe onto the male end of the Feed Water Adapter. Turn the handle of the Feed Water Adapter to the perpendicular OFF position. Turn on the CWSV slowly, and ensure you are getting a proper seal.

D. Connect the 1/4" tubing to the Feed Water Adapter.



The included bushing can be threaded on either side of the Feed Water Adapter to fit the configuration of both 3/8" COMP and 1/2" NPT.

Step 2. Install Drinking Water Faucet

A. Drill a hole to install the faucet

a. If your kitchen sink does not have an existing 1/2" faucet hole, drill a hole under the guidance of ***How to drill a Hole on Sink or Countertop***. Wipe clean and dry the area.
b. Slip the front plate on the faucet stem, followed by the front washer. Insert the faucet stem into the hole on the countertop. Under the sink, slip on the back washer, and tighten the nut with the lock washer wing nut.
c. Slide the quick fitting up to the push-in adapter on the base so that it seats securely into the faucet stem, then lock it in place by sliding the blue clip under the collet of the quick fitting.
d. Insert the tubing about 1/2" into the push-in fitting, and again, secure it with the clip.

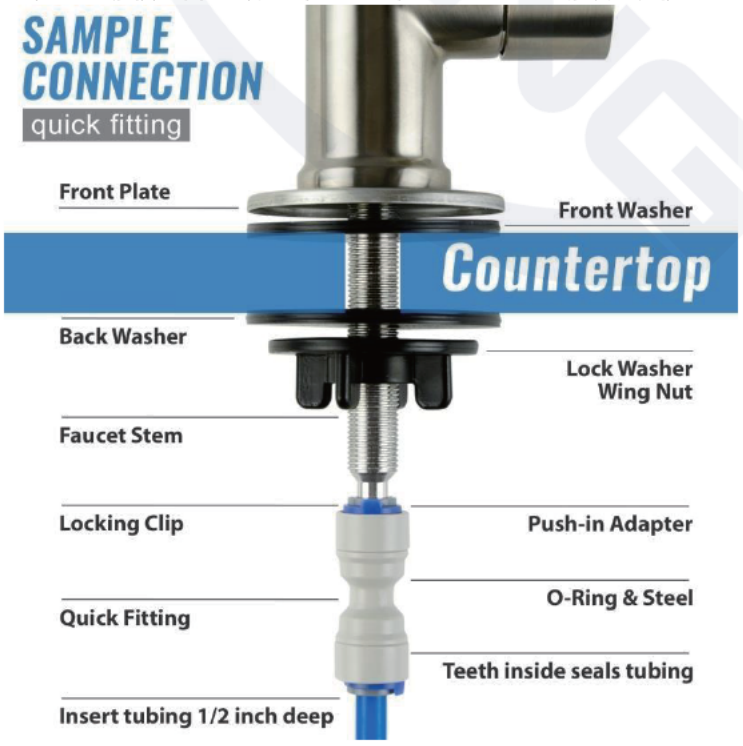
See the figure below.

B. Install a faucet bracket (included) instead of drilling a hole (Optional)

a. Mount the bracket to the sidewall of the cabinet.
b. Insert the faucet stem into the hole on the bracket. Slip on the back rubber washer.
c. Tighten the nut with the plastic wing.
d. Insert the tubing about 1/2" into the push-in fitting and secure it with the clip.

How to Drill a Hole in Sink or Counter-top

1. It is highly recommended that you watch the YouTube video "**How to Drill Faucet Holes**".
2. Choose a 1/2" Diamond Core Bit for granite and a titanium drill bit for steel. Do NOT use a hammer drill on natural stone, glass, and ceramic.
3. An indent should be made with a punch on steel before drilling to help guide the bit.
4. Use caution when drilling on a Porcelain sink, as it could be easily chipped - set drill speed on slow. Press the bit downward firmly until it breaks through the slippery surface.
5. Use a coolant to disperse heat. Choose water for granite and oil for steel. Use the Water Suction Cup to hold coolant inside and prevent the drill bit from slipping.
6. Hold the drill firmly and vertically at the slowest speed to prevent the drill bit from slipping on the counter.
7. Once you break through the smooth surface, swirl the drill a little to evenly apply pressure in a circle. Be patient and deliberate. It can take 20 - 40 minutes to drill through 1".



Step 3: Install the Filters: Stage 1, 2, and 3

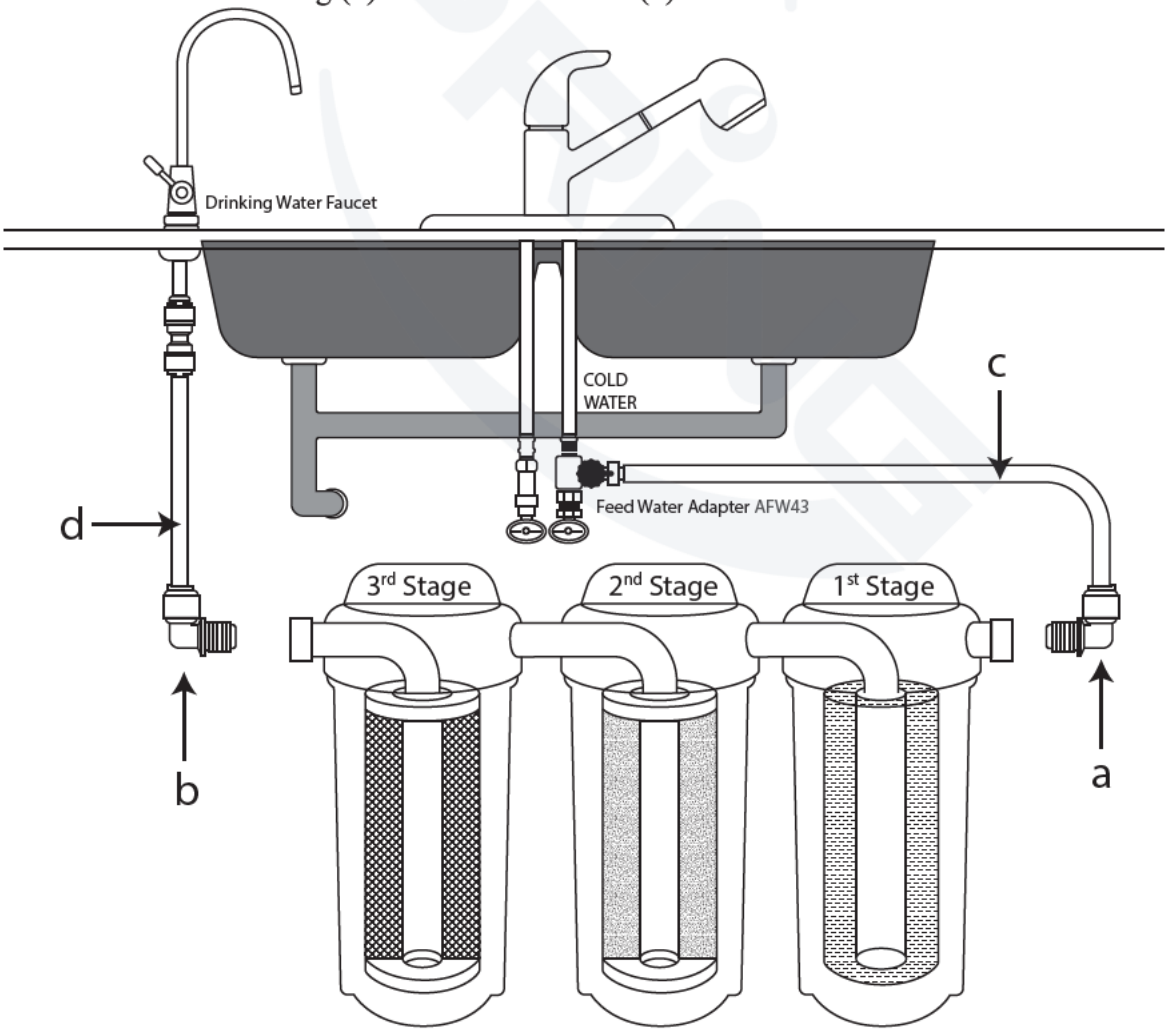


A. Make sure that the O-ring is seated inside the groove at the top of the filter housing. Food-grade silicone jelly may help the O-ring stay in place and seal better.
B. Filter cartridges are preserved in shrink wrap. Note the direction sign on the sticker before removing the wrap.
C. When placing the filter cartridge into its housing, make sure it is centered, and the knob is protruding from the bottom of the housing fits in the central hole of the filter.
D. Screw the housing, with filters attached, onto the housing caps (caps are pre-assembled on the machine head). The cap also has a center knob that should be inserted into the center hole of the filter cartridge. Twist the housing on in a counter-clockwise direction by hand, and then use a housing wrench to tighten it up for about 1/4 - 1/2 turn. **Do not overtighten. This can cause leaks and make it difficult to unscrew the housing when replacing filters.**

Note: the second stage GAC filter is the only filter that must go in a certain direction. Carefully follow the instruction on the GAC filter for reference.

Step 4. Tubing Connection

A. Install the fittings (a & b) onto the inlet and outlet of the system. Wrap the male end of the fittings with 4-5 wraps of plumber's tape to ensure a proper seal, and then screw them into each side of the system. Do not over-tighten.
B. Insert the supply tubing (c) onto the inlet side (a).
C. Insert the faucet tubing (d) onto the outlet side (b).



Step 5. System Start-up

A. Make sure no tubing are kinked. Place a towel under the system to catch any possible water leaks.
B. Open the drinking water faucet. Slowly turn on the Feed Water Adapter (AFW43) and check for leaks. **The top 3 causes of leaks are 1) The tubing is not fully inserted into the quick-connect fitting. 2) The O-ring is not in the correct place or is kinked. 3) The Housing/Cap is not tightened properly or is misaligned with the threads.**
C. Rinse the system for at least 5 minutes. It is normal to see residual carbon and fine air bubbles in the water when flushing the system for the first time.
D. Check for leaks daily for the first two weeks after installation to ensure the system is functioning properly.

Congratulations, you have successfully installed your iSpring US31 Under Sink Water Filtration System!

Troubleshooting Guide

A. Zero output water from drinking water faucet

a) Water supply is closed. Open the water supply to the system.
b) Incorrect installation. Verify all tubing connections.
c) A tubing is crimped, blocking the water flow. Check all tubings and uncrimp any crimped tubings.

B. Low water flow (trickle) at drinking water faucet

a) One or some of the filters are clogged and need replacement.
b) Water supply is not fully opened. Open the water supply to the system.

C. Cloudy water after installation

a) In the weeks after installing the system or changing the filters, you will see many tiny air bubbles in the treated water. This can cause the water to appear "cloudy." The bubbles will disappear as the system clears itself of trapped air and are harmless for the time being.

D. Water from the system tastes the same as tap water

a) Incorrect installation. Verify all connections on the system.
b) One or some of the filters has reached its lifespan and need replacement..

E. Leaking from where the tubings are inserted into the fittings

a) The tubing is not pushed in past the O-ring inside the fitting, therefore not creating a seal. Make sure the tubing is pushed in a full 1/2" into the fitting. It will take some extra pressure, but you will feel the tube go entirely into the fitting when it does so.
b) The O-ring on the fitting is not creating a seal. Unscrew the elbow fitting, and replace it with a new one. Make sure to wrap the new fitting thread 4-5 times with plumber's tape before screwing it in.

Maintenance

All iSpring Water Filter Systems are designed with ease of use and low maintenance in mind. If the filter cartridges are changed on schedule as suggested, the system will work properly for years to come. See the chart below for the filter pack model numbers for your system. The filter packs can be found on ispringfilter.com, Amazon, or HomeDepot.com.

Model Number	Filter Set Model	Filter Order
US31	**F3**	FP15 → FG15 → FC15
US31-NC	**F3NC**	FP15 → FC15-NC → FC15
US31-PB	**F3PB**	FP15 → FC15 → FC15-PB
US31-BV	**F3BV**	FP15 → FC15 → FC15-BV
US31-PF	**F3PF**	FP15 → FC15 → FC15-PF



Sediment	GAC	CTO
#FP15	*#FG15*	*#FC15 / #FC15-NC / #FC15-PB / #FC15-BV / #FC15-PF*
Up to 6 months	Up to 12 months	Up to 12 months

* Please note: The general filter cartridge replacement schedule is for reference only.
Not all filters included in the same filter pack. Carefully choose the filter pack that suits your system.
Filter replacement schedule may vary depending on the quality of your source water.

When to change the filter?

The filters are highly suggested to be replaced when they reached their recommended replacement cycle. However, the actual lifespan of filters may vary depending on the source water quality and daily usage. If you notice a great decrease in the tap water flow, or detect a unpleasant smell, taste, and odor, it would be a good time to get your filters changed.

How to change the filters?

A. Turn off the inlet cold water valve and open the drinking faucets to release pressure.
B. With a towel or bucket underneath, twist the filter cartridge wrench clockwise to remove.
C. Install the new filter and twist the cartridge back on.
D. Check the tubing connection. Open the inlet cold water valve and rinse the system for at least 5 minutes.

O-rings: Replace every 3 years or sooner if leak happens at O-rings.

What should I do with the system when going out of town?

When you are leaving for an extended time, you will want to shut off the water supply to the system and empty the system. To do this, close the knob on the feed water adapter, and open the faucet until it stops running. This will signify that the system is empty of water. The filters should be replaced if the system is not used for over a week as they will be sitting in stagnant water.

Optional Add-on

Ice Maker Connection Kit (Model# ICEK)

The iSpring ICEK can be purchased separately to feed water to your refrigerator for crystal clear ice cubes and great tasting water. It can be easily installed to connect the US31 system to the ice maker or water dispenser of your fridge.

Tubing (Model# T14B or T14W)

1/4" food-grade tubing in a 50' roll, which is good to use for tubing replacement and extension as needed.

Top Mount Faucet Installation Kit (Model# AIG1)

A US patent tool-free product for countertop drinking water faucet installation. It works great for countertops with 1" - 1 ½" (D) holes and also fits standard 7/16" drinking faucet stem.It is highly recommended that you watch the video **"How to install a drinking water faucet WITHOUT reaching under sink | iSpring AIG1 Installation Kit"** on **YouTube.**

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+1 (678) 261-7611

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