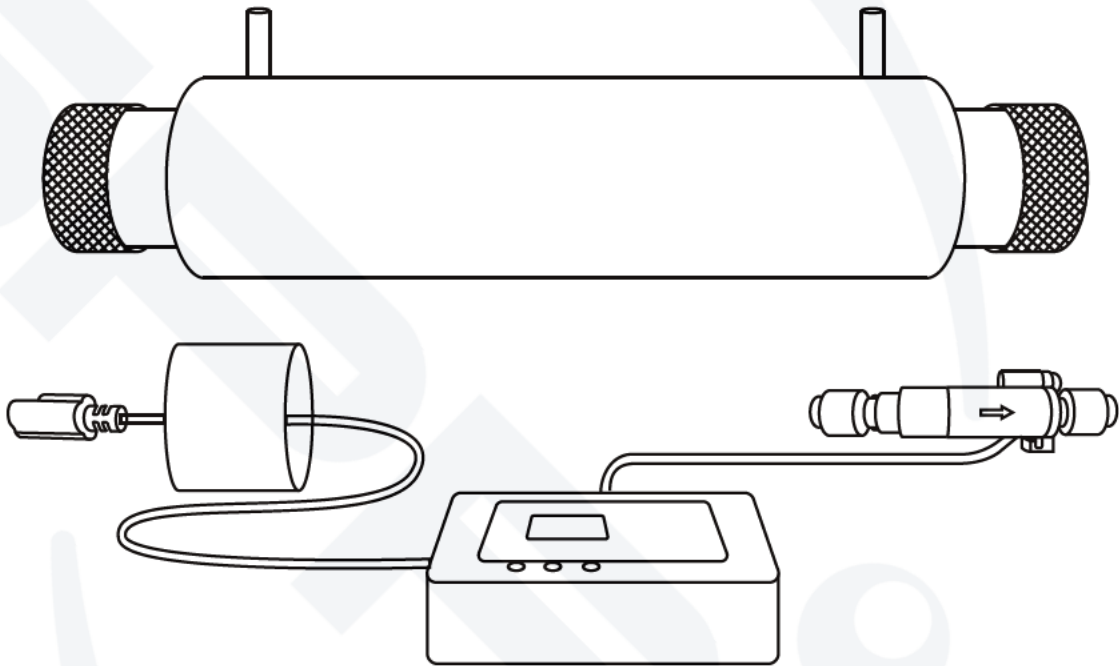


iSpring Ultraviolet Water Filter



Model: UVF11A / UVF11B / UVF11B-A / UVF11B-E

Installation Instructions & User Manual

Ver. 04/2022



iSpring Water
Systems



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We stand behind our products

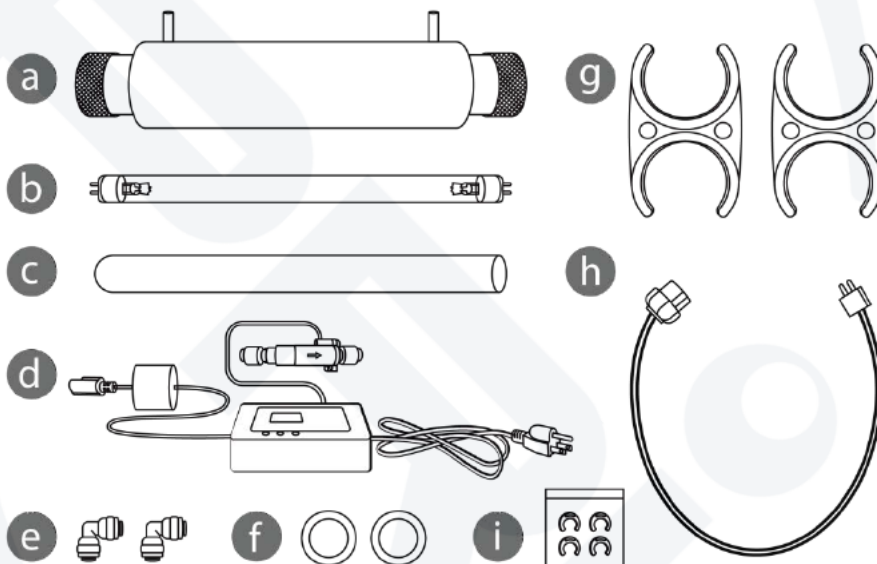
Since 2005, iSpring has been dedicated to providing high-quality drinking water to families across the United States. We provide various residential faucets and water filtration systems that purify your water in everyday life and deliver pure, healthy, and tasty water to you and your family.

At iSpring, we strive to develop products to the highest standards and 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.

Read this instruction manual carefully prior to installation.
Keep this manual readily available for future reference.

Packing List

No.	Part	Quantity
a	Stainless Steel Reactor Chamber	1
b	UV Lamp	1
c	Quartz Tube	1
d	Electronic Ballast with Flow Sensor	1
e	1/4" Elbow Fittings (with clips installed)	2
f	O-rings	2
g	Clamp Clips	2
h	Cable (blue)	1
i	Spare Clips	4



* Different models come with different type of chargers. This graph is only shown as an example.

Product Overview

The iSpring Ultraviolet Water Filter (Model: UVF11A/UVF11B/UVF11B-A/UVF11B-E) is an innovative way to purify water and is suitable for residential use.

The UVF11 series are designed for easy installation. It is also designed to operate with a minimal amount of maintenance. It allows for quick and easy lamp change requiring no tools. The dual-chamber heads of the UVF11 series are removable and may be rotated independently, which aids in the installation, maintenance, or retrofitting of an existing system.

The UVF11 series come with a flow sensor that turns the UV on and off automatically with water flow. It automatically turns off when the flow sensor detects there is no water flowing through the unit. This special design reduces energy consumption and prolongs the life span of the UV lamp.

The UVF11 series are capable of self-cleaning. Suppose the unit has been idled for 24 hours but still has power on. In that case, it will start the self-cleaning process by turning itself on for 300 seconds to ensure that water in the reactor chamber will not deteriorate.

The UVF11 series work as follows:

- a. Water enters the UVF11 series and flows into the annular space between the quartz tube and the inner wall of the stainless steel reactor chamber.
- b. The UV lamp emits UV rays to start the purification process. The green LED indicator on the electronic ballast will immediately light up, indicating that the UV lamp is in operation and working properly. There is no dead corner in the chamber for water without being purified.
- c. Water that leaves the UVF11 series is ready for use; no further contact time is required.
- d. When the UVF11 series are not functioning properly, the red LED indicator starts flashing, and the alarm sounds off.
- e. When there is no water flowing through the UVF11 series, the unit will be in standby mode, and all the indicator lights will be off.

Product Features

Item	Specification
Lamp Power	11w
Rated Voltage	220V or 110V depends on model
Operating Pressure	5 - 115 psi
Minimum UVT	70%
Installation Position	Vertical or Horizontal
Rated Flow	1 GPM
Rated Service life of the lamp	1 Year
Flow Sensor Model	FS-7
Ballast Model	UVT11
Quartz Tube Model	UVQ11
Quartz Tube Dimension	23mm x 245mm
Incoming Water Requirements	
Temperature	36 - 104 °F (2 - 40 °C)
TDS	< 10 ppm
Hardness	< 120 ppm
Iron	< 0.3 ppm
Manganese	< 0.05 ppm
Turbidity	< 1 NTU
pH	6.5 - 9.5

Note: Water quality plays a major role in the UV light performance. The incoming water should not exceed the requirements as shown in the table above.

The UVF11 series are NOT intended to treat water with obvious contamination or intentional source, such as raw sewage; nor is the unit intended to convert wastewater to safe drinking water.

Precautions

Warning:

- Changes or modifications made to this system without the manufacturer's consent could render the system unsafe for operation and may void the manufacturer's warranty.
- Do not operate the UV Lamp when removed from the reactor chamber, as this may cause exposure to dangerous UV radiation.

- To avoid possible electric shock, special care should be taken since water is near the electrical equipment.
- Do not operate the unit if it has a damaged cord or plug, malfunctioning, or has been dropped or damaged in any manner.
- This unit is only designed for potable water applications. Using attachments not recommended or sold by the manufacturer may cause unsafe conditions.
- Please do not install this product outside or at a place where it is exposed to direct sunlight or freezing temperature.
- Please install this product at a place where it is easy to access and maintain.
- The UV lamp contains mercury. If the lamp breaks, avoid inhalation or ingestion the debris and avoid exposure to eyes and skin. Never use a vacuum cleaner to clean up a broken lamp, which may scatter the spilled mercury. Follow local regulations and guidelines for the removal and disposal of mercury waste.

Installation

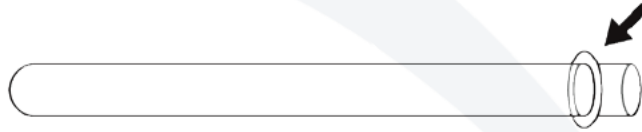
Note:

- Make sure the quartz tube and UV Lamp are clean before installation. Use alcohol or mild detergent to clean if necessary.
- The UVF11 series are designed for continuous operation. Frequent switching will reduce the UV radiation and service life.
- Always turn the main power off before any actions on the UV system.
- The UV system should be installed after the filters as the last stage.
- Keep the UV system away from children to avoid potential injury.

Step 1. Remove both the open end nut and closed-end nut from the reactor chamber.



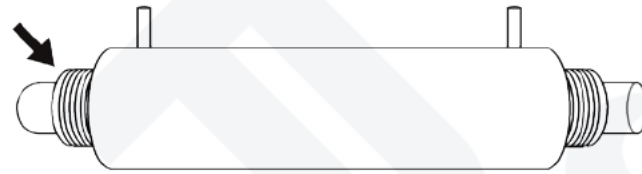
Step 2. Install one of the O-rings onto the open end of the quartz tube (about 5 mm from the opening).



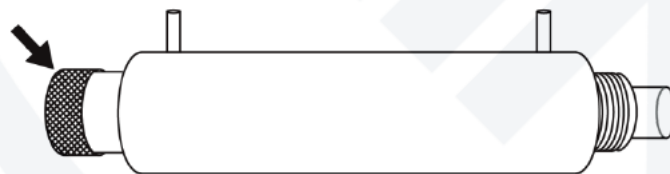
Step 3. Insert the quartz tube into the reactor chamber.



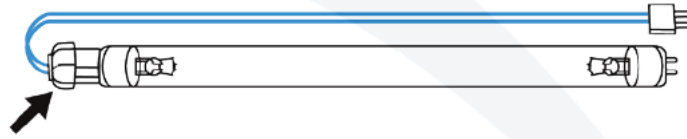
Step 4. Install the other O-ring onto the closed end of the quartz tube.



Step 5. Hand-tighten the closed-end nut onto the reactor chamber (where the closed end of the quartz tube is). Do not over tighten.



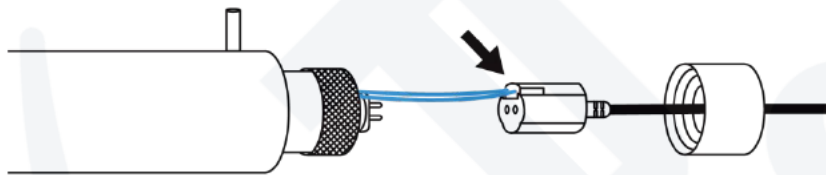
Step 6. Insert the two pins of one end of the UV lamp into the female end of the blue cable.



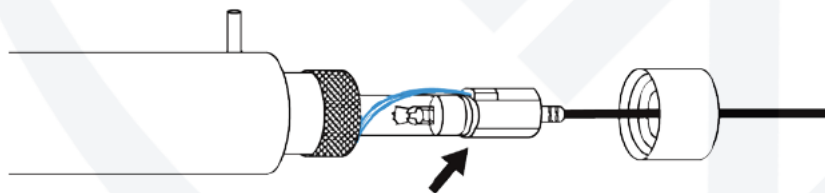
Step 7. Carefully insert the UV lamp and the blue cable into the quartz tube. Hand-tighten the open end nut onto the reactor chamber.



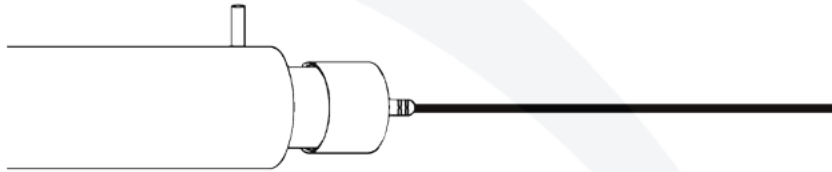
Step 8. Insert the male end of the blue cable into the indented female end of the lamp socket of the ballast.



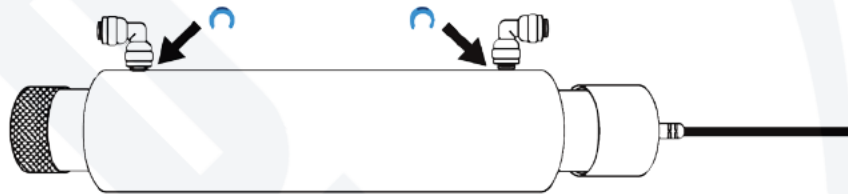
Step 9. Insert the two pins of the other end of the UV lamp into the protruding female end lamp socket of the ballast.



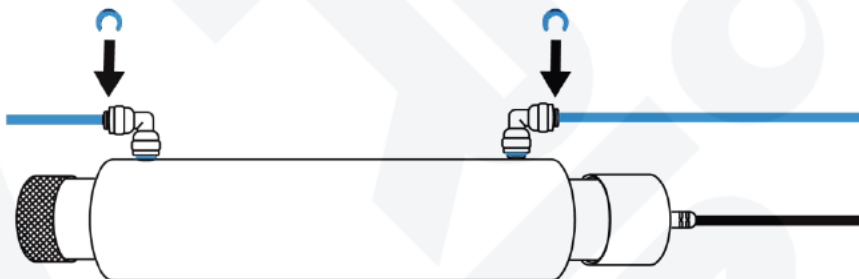
Step 10. Carefully insert the UV lamp and the blue cable all the way down into the reactor chamber. Install the black cover cap attached to the ballast onto the open end nut.



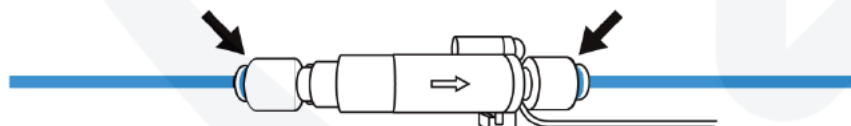
Step 11. Install the elbow fittings onto the water inlet and outlet of the reactor chamber: 1) remove one clip from each of the fittings; 2) push the end of the fitting all the way down into the reactor chamber; and 3) re-install the blue clips onto the fittings to secure the connections. Be sure to push the clips all the way down.



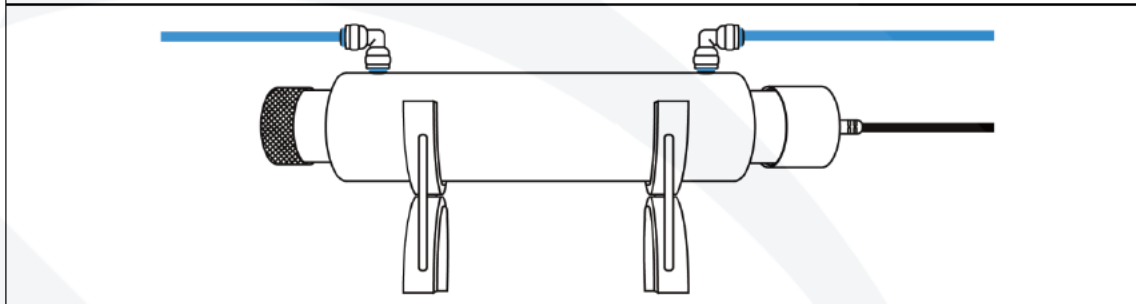
Step 12. Install 1/4" tubings (not included) onto both elbow fittings: 1) remove clips from the fittings; 2) push tubing all the way (about half an inch) into the fittings; 3) re-install the clips onto the fittings to secure the connections by pushing them all the way down.



Step 13. Install the flow sensor onto the inlet tubing of the unit. Follow the flow direction on the flow sensor. Be sure to install the blue clips to secure the connection.



Step 14. Install the two supporting pieces when needed. Place the UVF11 unit in a proper location.

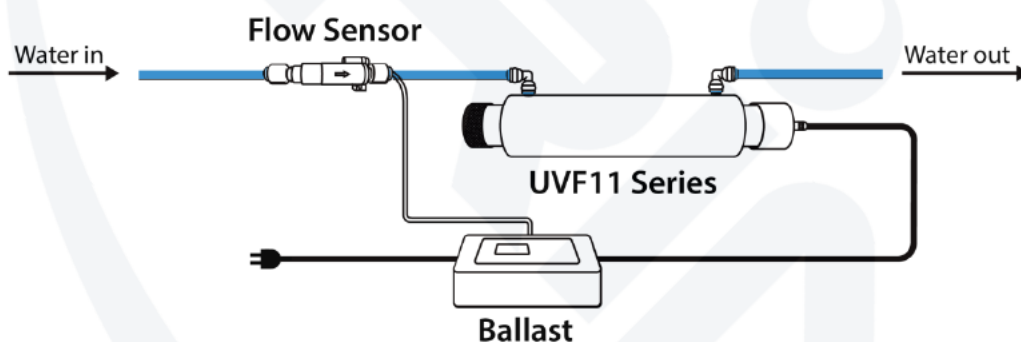


Note: Cut the 1/4" tubing (not included) using a sharp blade to an appropriate length to avoid kinking. Ensure the tubing is fully inserted into the quick-fitting connection about half an inch deep and secure the connection with the supplied blue clips.

Perform the following steps to complete the installation process:

- a. After completing all plumbing connections, slowly turn on the water supply and check for leaks. Also, check to see if water flow activates the UV light.
- b. Allow the water to run for a few minutes to clear any air or dust potentially in the reactor chamber.
- c. Plug in the power for starting up.
- d. The system is now ready to use.

The completed system connection should be as shown below.



Maintenance and Inspection

For your safety, always wear eyewear and turn the power off before servicing the unit. Servicing the unit with the power on will also cause damage to the ballast.

A. Clean the UV Lamp and the Quartz Tube

Clean the UV lamp and quartz tube at least three times a year if the unit can be dismantled easily. Otherwise, please replace the lamp and quartz tube every 1-2 years.

Follow the steps below to clean the lamp and the quartz tube. Use great care when handling the quartz tube as it is very fragile; avoid bumping or jarring it.

- a. Wear appropriate gloves to avoid contaminating the lamp.
- b. Unplug the power, shut off both inlet and outlet valves, and remove the entire unit from the waterline.
- c. Drain the water, remove the black rubber cap with the attached power cord, and remove the lamp from the quartz tube.
- d. Wipe the lamp with a piece of lint-free cloth moistened with white vinegar.
- e. Pour vinegar into the water inlet and soak the quartz tube until it is clear. Rinse thoroughly.

B. Maintain the UV Lamp

- Regularly inspect the UVF11 unit to ensure that the UV lamp is still in operation. An LED indicator light, located on the ballast, visually indicates UV lamp operation. This indicates lamp operation and does not indicate the level of UV intensity or transmission through the water. Ballasts have a built-in audio alarm which will indicate lamp failure.
- To ensure the proper operation of the UVF11 unit, regular biological testing of your water (e.g., quarterly) by an accredited agency is highly recommended. Additional testing may be performed whenever modifications, change, or additions are made to the plumbing system, pumps, well source water, etc., to ensure adequate purification under new conditions.
- Other maintenance measures may include ensuring that grounding wires are secure, replacing any damaged or broken components.

Troubleshooting

Problem	Solution
After turning on the water supply, the ballast does not turn on automatically.	<ol style="list-style-type: none"> 1. Ensure that the water flow switch is correctly connected. Verify that the direction of the water flow on the water flow switch is correct. 2. Verify that the unit has been correctly connected to the power supply. 3. Verify that the power supply voltage is within the rated voltage range. 4. Verify that the water flow rate ≥ 0.08 GPM.
The ballast alarms, the lamp does not light up.	<ol style="list-style-type: none"> 1. Verify that the lamp tube is firmly connected. 2. Check whether the lamp tube has the end of its life. If yes, replace it with a new UV lamp. 3. If 1 and 2 do not work out, the ballast is likely damaged. Replace it with a new ballast.
The ballast alarms, the lamp lights up.	The ballast alarm system is damaged, replace the ballast.
The timer number does not change.	Please reset the timing mode. If there is a decimal point behind, it means the timing is in minutes, and it will count one after one minute.
Leaking from the reactor chamber.	The O-ring inside the quartz tube might be damaged. Replace it with a new one.
Leaking from the quartz tube.	Replace the quartz tube.
Leaking at the water inlet/outlet of the reactor chamber.	Wrap plumber's tape on the threads and reconnect the tubing.
Lamp does not turn on after replacing.	Check the lamp connection.
Lamp turns on, but indicator lights and alarm are abnormal.	Indicator lights are broken. Replace the ballast.

For any questions or concerns, please contact us at support@123filter.com or visit our help page at 123filter.com/support

Warranty Registration

To register your product for the warranty, visit our website at 123filter.com and go to the "Warranty" tab.

We provide a 30-day money-back guarantee, a 1-year manufacturer warranty, and lifetime tech support for all of our products. However, we do not have the order information from websites other than 123Filter.com (Amazon, Home Depot, etc.), so please fill in that information upon registration of your system. If you have any questions or concerns about your product, please call or email us or put it in the notes/comments upon your warranty registration. Your satisfaction is our business!

If you are happy with our products and service, please show your support by writing a product review on Amazon, even just a single line. It takes you just a minute but means a lot to us. Thank you!



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support@123Filter.com

(678) 261-7611

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