

# INDUSTRIAL WATER EQUIPMENT

**Name:** Ultraviolet Water Purification System

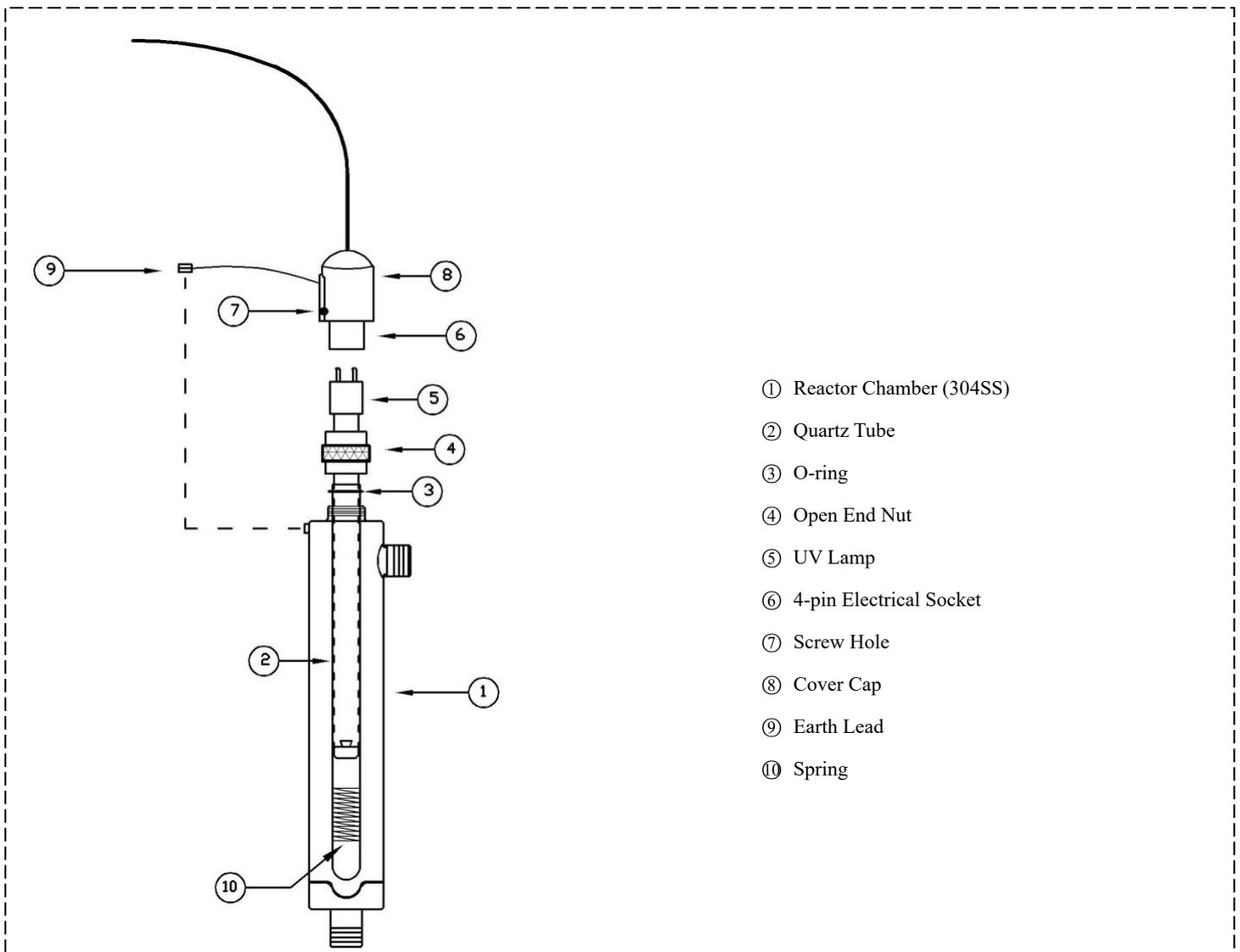
**Applications:** Drinking water, Rainwater from water tank, medical and industrial etc.

The SPS range is a combined filtration and UV water disinfection treatment system able to remove impurities and safeguard your tank water supplies against bacteria, viruses and pathogens. With 4 models in the range, the SPS-series provides safe, potable water for small, medium and large houses. It can also be used in any other water treatment application where the combination of pre-filtration and UV water disinfection is required.

Complete Water Treatment is achieved in 3 steps

1. Coarse Filtration – Removes impurities and sediment larger than 20 microns.
2. Fine Filtration – Removes impurities and sediment over 1 micron, removes parasitic cysts like Giardia and Cryptosporidium.
3. UV Disinfection – Inactivates pathogens, bacteria, and viruses.

**Input:** 110V to 220V 50/60Hz



## System Installation

**Step 1:** Open system box to make sure all components inside, installation parts list: SS reactor, UV lamp, Quartz sleeve, ballast controller, big blue filter housing, pressure gauge, O-ring & Washer.

**Step 2:** Open the black Knob on the side of the frame to open the box



**Step 3:** use screw to open the plastic cap



**Step 4:** remove the two nuts



**Step 5:** Remove the bottom nut



**Step 6:** Insert the Quartz Tube into the Reactor Chamber.



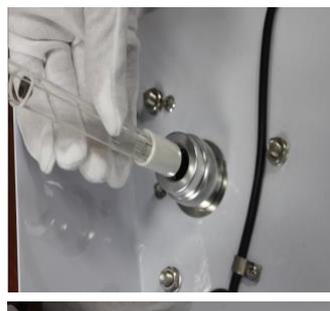
**Step 7:** Hand-screw End Nut on the Reactor Chamber.



**Step 8:** Screw the nuts tightly on the reactor chamber. Firm hand tightness is sufficient. Tools should not be used so as to avoid damaging the quartz sleeve

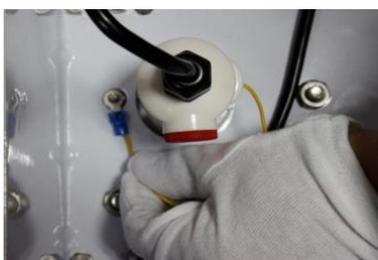


**Step 9:** Carefully insert the UV Lamp into the Quartz tube



**Step 10:** Install the cover cap and screw the setscrew tight on nut

**Step 10:** Install the earth wire



**Step 11:** use the plastic handle if you want to change the filter carbon.



**Step 12:** When all plumbing connections are made, slowly turn on the water supply (install a flow controller if there is a risk of high water flow rate)

**Step 13:** Allow the water to run a few minutes to clear any air or dust that may be in the reactor

**Step 14:** Connect the power for start up.

**Step 15:** Do not remove the uv lamp from the chamber when applying the electrical power

**Step 16:** UV systems are designed for continuous operation and frequent switching will reduce ultra-violet radiation and service life. Do not electrically cycle the uv unit more than 3 on/off cycles in a 24 hour period.

## System Operation

### a. Water Quality Guidelines

The Ultraviolet Disinfection System is intended for the use with visually clear water, not colored, cloudy or turbid.

- ◆ Ambient Water Temperature: 2-45°C
- ◆ Iron: <0.3ppm (0.3mg/l)
- ◆ Hardness: <7gpg (120mg/l)
- ◆ Turbidity: <1NTU
- ◆ Manganese: 0.05ppm (0.05mg/l)
- ◆ UV Transmittance: >75%

**b.** Recheck the installation before plug the sterilizer into power.

**c.** Do not proceed to install the equipment when UV Lamp or Sleeve Tube is broken, purchase a replacement and continue.

**d.** Ultraviolet Disinfection System is designed for continuous operation and frequent switching will reduce Ultraviolet radiation and service life.

**e.** If this unit falls into the water, turn main power off and then retrieve it. Do not attempt to use this sterilizer if it has been submerged.

**f.** Do not operate this unit if it has a damaged cord or plug, if it is malfunctioning or if it has been dropped or been damaged in any manner.

**g.** The UV system should be installed after the filter on the return line.

**h.** Always disconnect the water supply and completely drain the water purifier if it will be subjected to temperatures below freezing for extended periods of time.

## Important Safeguards



**b.** UV light is not visible to human eye, but harmful to eyes and skin. Never look directly at the light tube while device is in operation. Do not remove the UV Lamp from the Reactor Chamber when applying electrical power. Wear SAFETY GOGGLES if you need to look necessary.

**c.** Basic safety precautions should always be followed to reduce the risk of fire, electric shock. Make sure the leakage protection switch is installed before use.

**d.** Please do not touch the UV lamp directly in case of burning.

## System Maintenance

**a.** Testing monthly or before each use.

**b.** Lamp replacement is recommended every 9000 hours of operation. After 9000 hours, the lamp may still light, but the UV intensity has diminished.

**c.** Cleaning of the quartz sleeve once 3-6 months with alcohol or a mild detergent.

Note: To save the energy, turn off the power and water supply if you do not use the equipment for a long time.

**Warranty for uv chamber 2 years, uv lamp and quartz sleeve changer yearly**

