

### 1. Installation and Operation Precautions

- The sterilizer can be installed either horizontally (let-water-in end up) or vertically (plastic covers up, let-water-in end at the bottom).
  - It must be connected at the end of a water filter or reverse osmosis system, so that the treated water flows through the UV sterilizer before reaching the tap.
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### 2. Assembling the Quartz Sleeve

#### For DUV-10W to UV-12W:

1. Install the moisture O-ring about 1–1.5 cm from the open end of the quartz sleeve.
2. Insert the quartz sleeve into the casing.
3. Install the screw cap.

#### For UV-16W to UV-220W:

1. Insert the quartz sleeve into the casing.
  2. Install the O-ring about 1–1.5 cm from the open end.
  3. Install the screw cap.
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### 3. Installing the UV Lamp

1. Connect the lamp pins to the ballast connector.
2. Insert the lamp into the stainless steel casing.
3. Place the rubber bushing outside the screw cap.
4. Ensure the lamp lights up when switched on.
5. If the lamp moves, secure the rubber bush with string.

**⚠ Note:** Avoid touching the quartz glass with fingers, as any residue can reduce effectiveness.

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### 4. Safety Precautions

1. Do not look directly at the UV lamp – it may cause eye injury.
2. If the unit is not enclosed, disconnect it from the power supply.

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## 5. UV Lamp Lifetime

- The UV lamp should be replaced after approximately 8000 hours of use (typically once per year).
- Continuous operation is preferred; frequent on/off cycles reduce lifespan.

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## 6. Special Water Conditions (for correct installation):

- Hydrogen:  $\leq 0.3$  ppm
- Total Iron Sulphide:  $\leq 0.05$  ppm
- Suspended Solids:  $\leq 10$  ppm
- Manganese:  $\leq 0.05$  ppm
- Hardness:  $\leq 7$  gpg

If hardness exceeds 7 gpg, use a water softener.

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## 7. Cleaning the Quartz Sleeve

1. Turn off all water sources.
2. Remove the screw cap (for UV-110W to UV-220W open the drain valve).
3. Carefully remove the O-ring. Replace annually.
4. Clean the quartz sleeve with vinegar using a soft cloth.
5. Reinstall the sleeve so it protrudes equally on both sides.
6. Moisten the O-ring, reinstall the aluminum cap, and tighten by hand.
7. Check all connections and reopen the water source to inspect for leaks.
8. Reinstall the UV lamp and rubber bushing.
9. Power on and check that the lamp is glowing steadily.

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## 8. Operation and Maintenance Tips

- Always turn off power before assembling/disassembling the unit.
- Check regularly if the lamp is working. If not, the ballast will emit a warning sound.
- Replace the lamp every year for effective sterilization.

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## 9. Technical Specifications

| Model   | Power  | Casing    | Flow Rate          |
|---------|--------|-----------|--------------------|
| UV-10W  | 10W x1 | 304#/316# | 0.11 T/H (0.5 GPM) |
| UV-12W  | 12W x1 | 304#/316# | 0.26 T/H (1.5 GPM) |
| UV-16W  | 16W x1 | 304#/316# | 0.5 T/H (2 GPM)    |
| UV-20W  | 20W x1 | 304#/316# | 1.5 T/H (6 GPM)    |
| UV-30W  | 30W x1 | 304#/316# | 1.9 T/H (8 GPM)    |
| UV-40W  | 40W x1 | 304#/316# | 2.85 T/H (12 GPM)  |
| UV-110W | 55W x2 | 304#/316# | 5.4 T/H (24 GPM)   |
| UV-165W | 55W x3 | 304#/316# | 8.5 T/H (36 GPM)   |
| UV-220W | 55W x4 | 304#/316# | 10 T/H (48 GPM)    |

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## 10. Factory Quality Guarantee

- 1-year warranty from the date of purchase.
- Manufacturer is not responsible for indirect damage.
- Repairs are at customer's expense unless under warranty.