



PENTEK

Pentair Water

UV Inline Water Module Instruction Manual

Models UV-4, UV-6 and UV-8

Specifications

Temperature Range:	40–100°F (4.4–37.8°C)
Pressure Range:	20–125 psi (1.4–8.62 bar)
Flow Rate	
UV-4	0.5 gpm (1.9 Lpm)
UV-6	1.0 gpm (3.8 Lpm)
UV-8	2.0 gpm (7.6 Lpm)
Capacity:	
UV-4	9–12 months
UV-6	9–12 months
UV-8	9–12 months
Dimensions:	
UV-4	2" x 10" (51 mm x 254 mm)
UV-6	2" x 13" (51 mm x 256 mm)
UV-8	2.5" x 14" (63.5 mm x 356 mm)

Precautions

⚠ WARNING: Do not use with water that is microbiologically unsafe or of unknown quality without adequate disinfection before or after the system.

⚠ WARNING: Dry hands before handling electrical parts.

⚠ WARNING: Do not use extension cords.

⚠ WARNING: Locate cord where it cannot be unplugged or cause bodily harm.

CAUTION: Make sure power source matches the rating on the transformer (120 V AC, 60 Hz).

CAUTION: Module must be protected against freezing, which can cause cracking of the module and water leakage.

CAUTION: Install this cartridge on cold water lines only. Do not use on water lines exceeding 100° F (37.2° C). Minimum water pressure of 20 psi (1.4 bar). Do not exceed maximum water pressure of 125 psi (8.62 bar).

NOTE: Substances reduced are not necessarily in your water. Module must be maintained according to manufacturer's instructions, including replacement of module cartridges.

NOTE: Keep this unit clean with soap and water. Do not use spray cleaners or insecticides near the unit.

NOTE: Do not install module close to a heat source.

NOTE: Comply with applicable state and local laws and regulations.

Features

PENTEK's patented disposable UV modules destroy bacteria, viruses and many other microorganisms by interfering with their molecular structure. The DNA and RNA in the organisms' reproductive cycle are damaged and the cells are rendered sterile.

- **UV BALLAST:** The UV Series modules utilize a custom designed ballast to properly regulate the voltage required to power the ultraviolet lamps. (120V AC, 60 Hz)
- **Ballast comes standard with North American outlet pin configuration.**
- **UV LIGHT:** The contact disinfectant property of UV light energy is measured in milli-Joule per square centimeter (mJ/cm²) or micro Watt-second per square centimeter (µW-sec/cm²).
- **UV Series systems produce 32,000 to 35,000 µW-sec/cm² (32–35 mJ/cm²)**
- **Built-in flow restrictor**

Tested at Truesdail Laboratories, a California certified independent testing laboratory, according to standards set by the U.S. Department of Health for ultraviolet sterilization and NSF Standard 55.

Installation Recommendations

1. Install in a convenient location within 5 feet of a 120V AC, 60 Hz electrical outlet.
2. Inline modules are most effective when water flows down through the module. Install with the inlet port at the top and the outlet port at the bottom. Flow arrow is visible on module label.
3. UV module life depends upon the water volume used and the substances present in the water source. Manufacturer recommends changing the module every 9 to 12 months.

Installation Instructions

1. Turn the water off.
2. Disconnect the existing module or cut the cold water tubing where the module will be installed.
NOTE: Cut the tubing square and cleanly. Tubing that is not cut square may leak. Remove all score marks and burrs from the tubing. Use a tube insert with soft, thin-walled plastic tubing. Install only on a cold water line.
3. Verify water flow matches the direction of the arrow on the module.
4. Connect the inlet lines. See Figure 1 below.
5. Connect the outlet water line to the appliance inlet.
6. Carefully turn on the water and check for leaks.
7. Plug wire lead from module into wire lead on transformer
8. Plug transformer into electrical outlet
Note: A soft blue glow will eliminate from the inlet end showing that the module is working.
9. Recheck for leaks at intervals for several hours following installation.

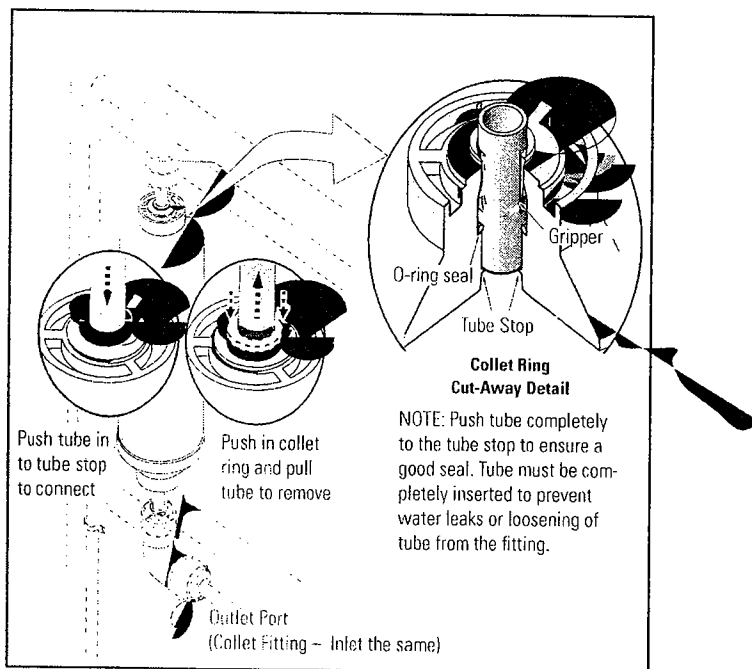


Figure 1 Collet Style Fittings:

- A. Insert tube into assembly completely to the tube stop.
- B. Pull back on tubing to assure collet grips tubing in place.
- C. To remove - turn off water, push tube in, hold the collet ring down and remove tube.

Organisms Destroyed by Ultraviolet Light

Bacteria	Germicide Level ($\mu\text{W-sec/cm}^2$)
<i>Bacillus subtilis</i> (vegetative)	11,000
<i>Clostridium tetani</i>	22,000
<i>Corynebacterium diphtheriae</i>	6,500
<i>Escherichia coli</i>	7,000
<i>Legionella bozemanii</i>	3,500
<i>Legionella dumoffii</i>	5,500
<i>Legionella gormanii</i>	4,900
<i>Legionella micdadei</i>	3,100
<i>Legionella longbeachae</i>	2,900
<i>Legionella pneumophila</i>	3,800
<i>Leptospira interrogans</i> (Infectious Jaundice)	6,000
<i>Mycobacterium tuberculosis</i>	10,000
<i>Neisseria catarrhalis</i>	8,500
<i>Proteus vulgaris</i>	6,600
<i>Pseudomonas aeruginosa</i> (laboratory strain)	3,900
<i>Pseudomonas aeruginosa</i> (environmental strain)	10,500
<i>Rhodospirillum rubrum</i>	6,200
<i>Salmonella enteritidis</i>	7,600
<i>Salmonella paratyphi</i> (Enteric Fever)	6,100
<i>Salmonella typhimurium</i>	15,200
<i>Salmonella typhosa</i> (Typhoid Fever)	6,000
<i>Sarcina lutea</i>	26,400
<i>Serratia marcescens</i>	6,200
<i>Shigella dysenteriae</i> (Dysentery)	4,200
<i>Shigella flexneri</i> (Dysentery)	3,400
<i>Shigella sonnei</i>	7,000
<i>Staphylococcus epidermidis</i>	5,800
<i>Staphylococcus aureus</i>	7,000
<i>Streptococcus faecalis</i>	10,000
<i>Streptococcus hemolyticus</i>	5,500
<i>Streptococcus lactis</i>	8,800
<i>Viridans streptococci</i>	3,800
<i>Vibrio cholerae</i>	6,500

Algae	Germicide Level ($\mu\text{W-sec/cm}^2$)
<i>Chlorella vulgaris</i> (algae)	22,000

Viruses	Germicide Level ($\mu\text{W-sec/cm}^2$)
MS-2	50,000
Hepatitis virus	8,000
Influenza virus	6,600
Poliovirus (Poliomyelitis)	26,000
Rotavirus	24,000

Yeast	Germicide Level ($\mu\text{W-sec/cm}^2$)
Baxter's yeast	8,800
Brewer's yeast	6,600
Common yeast cake	13,200
<i>Saccharomyces var. ellipsoideus</i>	13,200
<i>Saccharomyces sp.</i>	17,600

Note: Indicated capacities are based upon sound laboratory and field data we believe to be reliable and are offered in good faith. Your results may vary and should be verified by actual subject tests. The manufacturer assumes no liability for misuse of this product or equipment used with it.
1,000 $\mu\text{W-sec/cm}^2$ = 1 mJ/cm²

PENTEK FILTRATION LIMITED WARRANTY

Ultraviolet Water Module

PENTEK Filtration/Pentair Fil

workmanship one (1) year

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Pentair Filtration Inc., (8) problems and/or damage resulting in whole or in part from alteration, modification, repair or attempted alteration, modification or repair by any party other than Pentair Filtration Inc., (9) noncompliance with applicable codes/ordinances.

If a defect in workmanship and/or materp

replace the defective product or part (Pentair Filtration, Inc. may consider, in good faith, the customer's preference).

All claimed defective product

product or part (3) returned to Pentair Filtration, Inc. prior to the expiration of the warranty date, at the customer's expense, shipment pre-paid, (4) be accompanied by a letter detailing the Model Number, Serial Number (if any), and a brief description of the problem.

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Pentair Filtration, Inc. maximum liability under any provision of this Limited Warranty shall be limited to the amount actually paid for the Ultraviolet Water Module.

NOTE: Because some states do

THIS WARRANTY GRANTS SPECIFIC LEGAL RIGHTS, AND OTHER RIGHTS MAY APPLY. SUCH RIGHTS VARY FROM STATE TO STATE.



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