INSTALLATION AND OPERATION INSTRUCTIONS FOR

UVR Series Residential & Light Commercial Ultraviolet Systems

Left to right: UVR20000, UVR10000, UVR06000

UVR03000

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A. General Information

UVR Series Residential/Light Commercial Ultraviolet Systems are designed to destroy micro-organisms in the water supply. The units include a 304 stainless steel housing, a special UV transmitting quartz sleeve, a UV glow plug, and an ultraviolet lamp that destroys or inactivates the DNA of micro-organisms to deem them harmless.

B. Specifications

Property	Maximum	Minimum
Water Pressure	125 psi (8.5 bar)	25 psi (1.7 bar)
Water Temperature	100°F (38°C)	35°F (1.7°C)
pH	10	5.0
Turbidity	10 NTU	0 NTU
Lamp Life	9,000 hours	N/A
Ultraviolet Dosage	N/A	30,000 μw sec/cm² (12 months)
Flow Rate (UVR03000)	3 gpm	N/A
Flow Rate (UVR06000)	6 gpm	N/A
Flow Rate (UVR10000)	10 gpm	N/A
Flow Rate (UVR20000/1)	20 gpm	N/A

WARNING: This filter must be protected from freezing. Failure to do so may result in cracking of the filter and water leakage.

Make certain that the installation complies with all state and local laws and regulations.

C. Components Description

Description	Part No.	Qty.
For UVR03000 (3 gpm)		
Ultraviolet Lamp	DI-LMP42002	1
O-ring for Quartz Sleeve	UL-213E	1
Quartz Sleeve	DI-QTZD004	1
Ballast	SWT10018EF	1
For UVR06000 (6 gpm)		
Ultraviolet Lamp	DI-LMP41004	1
O-ring for Quartz Sleeve	UL-213E	1
Quartz Sleeve	DI-QTZD005	1
Ballast	SWT10018EF	1
For UVR10000 (10 gpm)		
Ultraviolet Lamp	DI-LMP41007	1
O-ring for Quartz Sleeve	UL-213E	1
Quartz Sleeve	DI-QTZD007	1
Ballast	SWT10019	1
For UVR20000/1 (20 gpm)		
Ultraviolet Lamp	IL10001	1
O-ring for Quartz Sleeve	UL-213E	1
Quartz Sleeve	DI-QTZD009	1
Ballast	SWT10020	1

D. Installation Instructions

D.1 Installation

1.1 Securely anchor the system to the installation site. The system can be installed vertically or horizontally, but manufacturer recommends vertical installation for larger units (UVR10000, UVR20000).

1.2 Attach the inlet water supply to the top NPT nipple on the side of the stainless steel ultraviolet chamber.

1.3 Attach the outlet water connection to the bottom NPT nipple on the side of the stainless steel ultraviolet chamber.

Note: It is suggested that a 3-valve service bypass loop be installed around the system for ease of servicing the unit at a future date, or in case the unit needs to be bypassed for any reason.

D.2 Install the ultraviolet lamp and quartz sleeve

2.1 Carefully slide the quartz sleeve into the end nipple on the ultraviolet chamber until the quartz sleeve "bottoms out" securely in the indent centered at the bottom of the chamber (leaving less than 1 inch of the quartz sleeve protruding).

2.2 Lubricate the o-ring then slide the lubricated o-ring onto the quartz sleeve until it rests on the top edge of the end nipple on the ultraviolet chamber.

2.3 Screw the gland nut onto the nipple.

NOTE: *Hand tighten only! Over-tightening can break the quartz sleeve.*

2.4 Carefully slide the lamp completely into the quartz sleeve.

2.5 Connect the lamp power cord to the ultraviolet lamp and make sure that the rubber boot is fully extended around the lamp and not folded under.

2.6 Plug the cord from the ballast into a surge protected power supply.

E. Servicing and Maintenance

IMPORTANT: Before servicing the system, be sure to shut off the water to the system and relieve the pressure. Also, be sure to unplug the unit from the wall.

WARNING: Never look directly at ultraviolet light. It can cause severe eye damage. Always wear ultraviolet blocking eye protection. Prolonged exposure due to direct ultraviolet light may cause skin cancer.

E.1 When to change the ultraviolet lamp

The ultraviolet lamp should be replaced every 12 months.

E.2 How to change the ultraviolet lamp

To replace the ultraviolet lamp, unplug the lamp and slide the lamp out of the quartz sleeve.

E.3 Cleaning the quartz sleeve

Inspect the quartz sleeve regularly to determine if it needs cleaning (a dirty quartz sleeve will directly diminish the effectiveness of the ultraviolet treatment). Should the quartz sleeve require cleaning, removal is accomplished by reversing the installation procedure. Clean the quartz sleeve with clean water and a soft cloth only. This cleaning should be done on a scheduled basis, as determined by the frequency of deposits (e.g. iron, calcium) appearing on the wetted parts.