Owner's Manual

UVMAX™

Pro Series (Pro10, Pro10S, Pro20, Pro20S, Pro30, Pro 30S, Pro50)
Plus Series (G Plus, H Plus, J Plus, K Plus)
Basic Series (G, H, J, K)

Ultraviolet Water Purification System

Congratulations. By purchasing this system, you have taken the first step in ensuring safe drinking water. Designed using the most advanced UV technology available today, your UV system is designed to provide you with years of trouble free operation with minimal maintenance required.

Date of installation: _ _ _ _ _ _ _ _ _ _ _ _

Installed by: _ _ _ _ _ _ _ _ _ _ _ _

Installer phone #: _ _ _ _ _ _ _ _ _ _ _ _

Serial #: _ _ _ _ _ _ _ _ _ _ _ _
(Found on label on side of Power Supply)

KEY INFORMATION YOU SHOULD KNOW:

- A minimum of one 5-micron (nominal) sediment filter must be installed upstream of (before) any UV system.
- This product is for **indoor use only**. Keep all components clean and dry.
- Clean the sleeve regularly for optimum performance.
- Ensure all performance related water quality parameters have been tested and are within specifications (page 8).

NSF C US

Pro10, Pro10S, Pro20, Pro20S, Pro30, Pro30S System Tested and Certified by NSF International against CSA B483.1 and NSF/ANSI 55 for Disinfection Performance, Class A

UVMAX™ Pro50 model is USEPA UVDGM 2006 validated.

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602936_RevP

Potential Hazard	Safety Measures
UV Exposure	Never illuminate UV Lamp outside of the UV Chamber. Never look directly at illuminated UV Lamp, even when using protective gear. Always use protective gear, including gloves and UV safety glasses. If accidental exposure occurs, immediately cool affected area and consult physician.
Electrical Shock	Disconnect power to system before performing any maintenance or repair. There may be more than one source of power.
Impalement	Never perform any physical inspection, repair or maintenance on UV Chamber unless UV chamber has been isolated and depressurized. Never service UV Lamps, Sleeves or associated hardware until depressurization of UV chamber has been confirmed.
Hot chamber	Allow UV Lamps, UV Chamber to cool for a minimum of 10 minutes before handling.
Cut or ingestion	Ensure the quartz sleeve or lamp is not broken, cracked or damaged in any way when handling equipment.
Scald from water	When there is no water flow, the water in the chamber will become hot. To prevent scalding, allow the system to cool before draining the system.
Fire	Do not store any combustible or flammable material close to the system.
Hg Exposure	The UV lamp contains mercury. If the lamp breaks, then avoid inhalation or ingestion of the debris and avoid exposure to eyes and skin. Never use a vacuum cleaner to clean up a broken lamp as this may scatter the spilled mercury. Obey local regulations and guidelines for the removal and disposal of mercury waste.
Water leak	Use proper plumbing materials to avoid potential material degradation from UV exposure.

SAFETY INSTRUCTIONS

GROUNDING

This product must be grounded. If it should malfunction or breakdown, grounding provides a path of least resistance for electric current to reduce the risk of electrical shock. This system is equipped with a cord having an equipment-grounding conductor and a grounding plug. The plug must be plugged into an appropriate outlet that is properly installed and grounded in accordance with all local codes and ordinances.

DANGER – Improper connection of the equipment-grounding conductor can result in a risk of electrocution. Check with a qualified electrician or service personnel if you are in doubt as to whether the outlet is properly grounded. Do not modify the plug provided with this system – if it will not fit the outlet, have a proper outlet installed by a qualified electrician. Do not use any type of adapter with this system.

GROUND FAULT CIRCUIT INTERRUPTER PROTECTION

To comply with the National Electrical Code (NFPA 70) and to provide additional protection from the risk of electric shock, this system should only be connected to a properly grounded, grounding-type power supply receptacle that is protected by a Ground Fault Circuit Interrupter (GFCI). Inspect operation of GFCI as per manufacturers suggested maintenance schedule.

EXTENSION CORDS

If an extension cord is necessary, use only 3-wire extension cords that have 3-prong grounding-type plugs and 3-pole cord connectors that accept the plug from this system. Use only extension cords that are intended for outdoor use. Use only extension cords having an electrical rating not less than the rating of the system. A cord rated for less amperes or watts than this system rating may overheat. Exercise caution when arranging the cord so that it will not be tripped over or pulled. Do not use damaged extension cords. Examine extension cord before using and replace if damaged. Do not abuse extension cord. Keep extension cord away from heat and sharp edges. Always disconnect the extension cord from the receptacle before disconnecting this system from the extension cord. Never yank cord to pull plug from outlet. Always grasp the plug and pull to disconnect.

WARNING – *Always shut-off water flow and release water pressure before servicing.*
To guard against injury, basic safety precautions should be observed, including the following:

1. READ AND FOLLOW ALL SAFETY INSTRUCTIONS.
2. DANGER – To avoid possible electric shock, special care should be taken since water is employed in the use of this system. Unless a situation is encountered that is explicitly addressed by the provided maintenance and troubleshooting sections, do not attempt repairs yourself; refer to an authorized service facility.
3. CAUTION - Do not operate with broken or faulty parts as this may result in exposure to ultraviolet radiation. Contact supplier for replacement parts.
4. Do not operate the system if it has a damaged cord or plug, or if it is malfunctioning or if it has been dropped or damaged in any manner.
5. Always unplug the system, release water pressure before servicing or cleaning. Never yank cord to remove from outlet; grasp the wall plug and pull to disconnect.
6. Do not use the system for other than intended use. The use of attachments not recommended or sold by the manufacturer may cause an unsafe condition.
7. To prevent risk of electrical shock, connect this system only to a properly grounded, grounding-type power supply receptacle that is protected by a Ground Fault Circuit Interrupter (GFCI). Inspect performance of GFCI as per manufacturer's suggested maintenance schedule. If an extension cord is used, ensure it is of a sufficient rating and accepts the plug from this system; never use an adapter.
8. Visually inspect this system prior to installation. If the quartz sleeve or lamp is broken, cracked or damaged in any way, do not use. Contact the supplier for replacement parts
9. Keep all connections dry and off the ground. Do not touch plug with wet hands.
10. The light emitted by the lamp will cause serious eye damage and burn unprotected skin. Do not plug system into an electrical outlet without first properly securing the lamp into the chamber. Unplug the system prior to removing the lamp from the chamber.
11. If the UV system malfunctions or fails, water must be boiled prior to consumption until the UV system is operational and the water lines have been shocked. System failure is indicated by the system's audible and visual alarms or the absence of any indicator light.
12. Intended for indoor use only. System must not be exposed to weather elements. In seasonal applications, chamber must be drained to prevent freezing.
13. Installation of this system must be in accordance with local plumbing and electrical codes as well as any and all applicable regulations and laws.
14. The UV system is not to be used or played with by children. Persons with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, are also not to handle the UV system unless they have been given supervision or instruction.
15. SAVE THESE INSTRUCTIONS.

WARNING – To prevent risk of electrical shock, connect this system only to a properly grounded, grounding-type power supply receptacle that is protected by a Ground Fault Circuit Interrupter. Pull plug before servicing or replacing lamp. Keep all connections dry and off the ground. Do not touch plug with wet hands.

WARNING – Do not look directly at UV lamp when it is operating. The light emitted by the lamp will cause serious eye damage and burn unprotected skin.

WARNING – Read manual before installing or servicing this system. Only authorized personnel possessing a strong understanding of this system should attempt to replace lamp or service this system.

WARNING – Always shut-off water flow and release water pressure before servicing.

NOTE – Maximum pressure rating is 100 PSI (6.89 bar)

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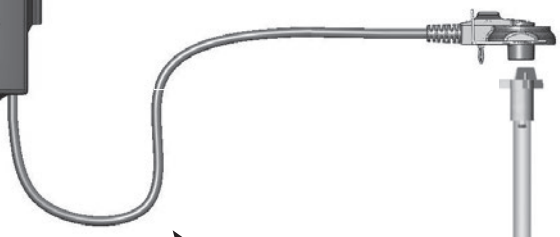
COMPONENTS

For replacement components please contact your installer or contact VIQUA directly for a referral: 1 800 265 7246 (North America), 519 763 1032, or info@viqua.com.

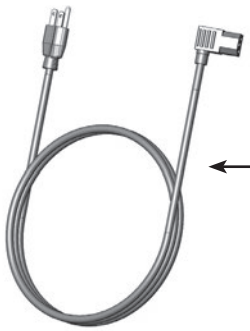
Power supply

Pro10/10S: Part #650709-003	G Plus: Part #650709-002	G: Part #650709-001
Pro20/20S: Part #650709-006	H Plus: Part #650709-005	H: Part #650709-004
Pro30/30S: Part #650709-009	J Plus: Part #650709-008	J: Part #650709-007
Pro50: Part #660020-R	K Plus: Part #660019-R	K: Part #660018-R

(power supply includes lamp cord)



Lamp cord
Part #650711-001



Power cord
110V Part #602636
220V Part #620637

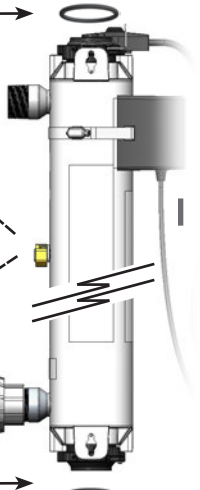
Lamp
Pro10/10S, G Plus, G: Part #602854
Pro20/20S, H Plus, H: Part #602855
Pro30/30S/50, J/K Plus, J/K:
Part #602856

Top bolt & wireform
Part #602916 & 602896

Sleeve
Pro10/10S, G Plus, G: Part #602974
Pro20/20S, H Plus, H: Part #602975
Pro30/30S/50, J/K Plus, J/K:
Part #602976

Accessory	Part Number
1" Solenoid Valve (option)	650627
2" Solenoid Valve (option)	410888-R
COMMcentre (option) Remote Controller	270270-R
COMMcentre with Dry Contact	270272-R

O-ring



CoolTouch™ fan
Part #650630

Chamber

Plug Kit
(Comes installed with Basic Series chamber)

Sensor
(Pro and Plus Series only)
Part #650580

Flow Meter
(Pro Series only)

Flow Meter Sensor

Pro 10	410982R-10
Pro 20	410982R-20
Pro 30	410982R-30

Sleeve removal tool
Part #602988
Note: keep this tool with system at all times.

O-ring

Bottom bolt (includes screw)
Part #603053

SPECIFICATIONS

General (All Models)

Operating Parameters	
Maximum operating pressure	100 PSI (689 kPa)
Minimum operating pressure	15 PSI (103 kPa)
Maximum ambient air temperature	104^0F (40^0C)
Minimum ambient air temperature	32^0F (0^0C)
Maximum humidity	100%
Maximum hardness	120 ppm (7 grains per gallon)
Maximum iron	0.3 ppm
Minimum UVT	75% *
Installation	Vertical ONLY
Other	
Chamber material	316L SST
Rated service life of lamp	up to 2 years

* Pro50 has a minimum UVT rating of 85%

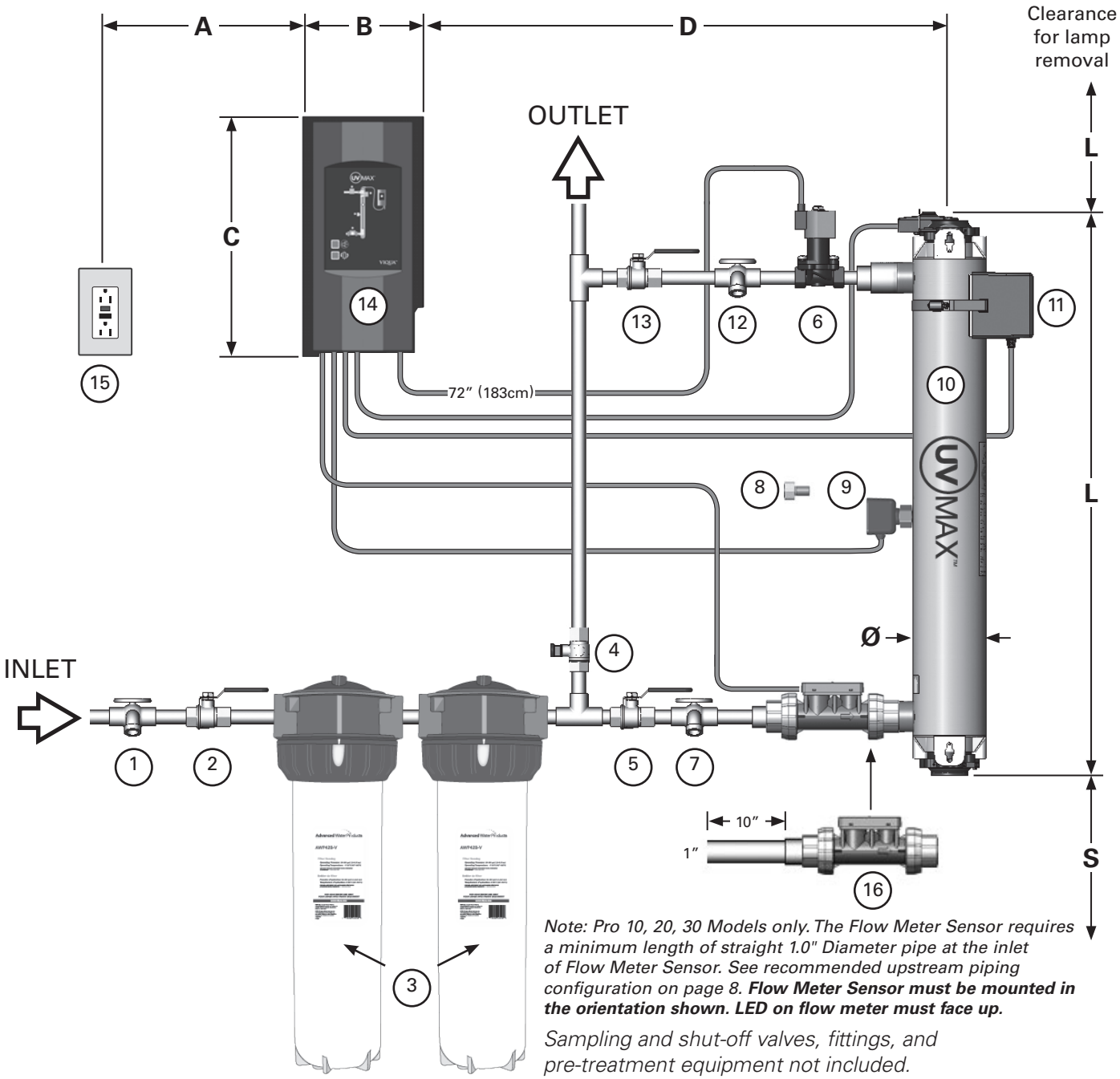
	Pro10/10S	Pro20/20S	Pro30/30S	Pro50*	G, G Plus*	H, H Plus*	J, J Plus*	K, K Plus**
Rated flow dose of 30 mJ/cm^2	--	--	--	--	up to 19 gpm (72 lpm)	20-39 gpm (76-148 lpm)	40-45 gpm (151-170 lpm)	80 gpm (303 lpm)
Rated flow dose of 40 mJ/cm^2	10 gpm (38 lpm)	20 gpm (76 lpm)	30 gpm (114 lpm)	50 gpm (189 lpm)	up to 15 gpm (57 lpm)	16-29 gpm (61-110 lpm)	30-44 gpm (114-167 lpm)	--
Electrical								
Voltage	100-240V 50-60Hz	100-240V 50-60Hz	100-240V 50-60Hz	100-240V 50-60Hz	100-240V 50-60Hz	100-240V 50-60Hz	100-240V 50-60Hz	100-240V 50-60Hz
Max. current	1.2 Amp	1.6 Amp	2.4 Amp	2.4 Amp	1.2 Amp	1.6 Amp	2.4 Amp	2.4 Amp
Max. power consumption	120 Watts	160 Watts	230 Watts	230 Watts	120 Watts	160 Watts	230 Watts	230 Watts
Lamp power consumption	100 Watts	140 Watts	200 Watts	200 Watts	100 Watts	140 Watts	200 Watts	200 Watts
Port Size								
Inlet and outlet	Combo 1 ¼" NPT, 1" FNPT	Combo 1 ¼" NPT, 1" FNPT	Combo 1 ¼" NPT, 1" FNPT	2" MNPT	Combo 1 ¼" NPT, 1" FNPT	Combo 1 ¼" NPT, 1" FNPT	Combo 1 ¼" NPT, 1" FNPT	2" MNPT

*Flow rates shown are at 85% UVT.
** Flow rates show are at 95% UVT.

SPECIFICATIONS

	Pro Series	Plus Series	Basic Series
Sensor	Yes	Yes	No
CoolTouch fan	Yes	Yes	Yes
Dynamic flow restrictor	Yes (not Pro50)	No	No
Communications ports (two, RJ45)	Yes	Yes	Yes
COMMcenter control package	Optional	No	No
Solenoid valve	Optional	Optional	Optional
Flow Meter Sensor (Pro10, 20, 30 Models only)	Yes	No	No
Controls			
Audible alarm mute button	Yes	Yes	Yes
New lamp button	Yes	Yes	Yes
Lamp age indicator	Yes	Yes	Yes
Lamp operation indicator	Yes	Yes	Yes
Power supply operation indicator	Yes	Yes	Yes
Solenoid operation indicator	Yes	Yes	Yes
Fan operation indicator	Yes	Yes	Yes
Sensor reading indicator	Yes	Yes	No
NSF/ANSI certification Pro10/10S, 20/20S, 30/30S Models only)	NSF Standard 55 Class A	No	No
USEPA UVDGM 2006 (Pro50 model only)	Yes	No	No
Other certifications	c UL us LISTED, CE	c UL us LISTED, CE	c UL us LISTED, CE

DIMENSIONS & LAYOUT



Note: Pro 10, 20, 30 Models only. The Flow Meter Sensor requires a minimum length of straight 1.0" Diameter pipe at the inlet of Flow Meter Sensor. See recommended upstream piping configuration on page 8. ***Flow Meter Sensor must be mounted in the orientation shown. LED on flow meter must face up.***

Sampling and shut-off valves, fittings, and pre-treatment equipment not included.

	L	S (min.)	Ø	A (max.)	B	C	D (max.)
Pro 10/10S, G Plus, G	21.4" (55cm)	12" (30cm)	4" (10cm)	72" (182cm)	6.5" (16.5cm)	13" (33cm)	48" (122cm)
Pro 20/20S, H Plus, H	31" (78cm)	12" (30cm)	4" (10cm)	72" (182cm)	6.5" (16.5cm)	13" (33cm)	48" (122cm)
Pro30/30S, J Plus, J	41" (103cm)	12" (30cm)	4" (10cm)	72" (182cm)	6.5" (16.5cm)	13" (33cm)	48" (122cm)
Pro50, K Plus, K	41" (103cm)	12" (30cm)	4" (10cm)	72" (182cm)	6.5" (16.5cm)	13" (33cm)	48" (122cm)

Note: ***Prefilter should be sized to accommodate the UV systems maximum flow rate.***

1. Sample valve: Allows for sampling of raw water.
2. Shut-off valve: Required to allow maintenance of pre-treatment equipment.
3. Pre-treatment: For the UV system to operate effectively, the water should meet certain water quality parameters, as outlined below. To meet these, pre-treatment of the water may be required. Pre-treatment equipment must be installed BEFORE the UV chamber. Pre-treatment systems can be comprised of one or more of the following elements: sediment filters; carbon filters; iron removal systems; water softeners; cyst reduction filters, etc.

Water Quality Requirements:

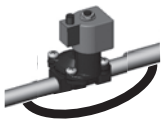
Iron:	< .3 PPM (.3 mg/L)
Hardness:	< 120 PPM (7 Grains Per Gallon)
% UVT:	> 75%
	> 85% (Pro 50)

NOTE: These are minimum requirements. For optimum results treat all to ND (non detectable) levels if possible.

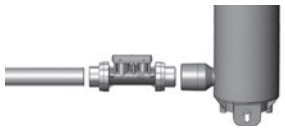
IMPORTANT: Minimum of one 5 micron (nominal) sediment filter must be installed before the UV system and after any water softening equipment.

4. Bypass shut-off valve: Bypass line and valve are optional. Intended to provide emergency water supply in the event that the UV system is unavailable.
5. Shut-off valve: Required to allow maintenance of UV system.
6. Solenoid valve: Optional piece of equipment supplied by VIQUA - a Trojan Technologies Company. Allows water supply to be shut-off when proper disinfection cannot be assured (1" & 2" SOLENOID available).

   Note: If the ground from your electrical panel is tied to your copper water lines, and you are using a Plastic Body solenoid valve, installation of an approved ground strap is required. This ground strap will maintain continuity between the lines that have been cut to install the solenoid. Check your local electrical code for the correct clamp and cable size.



7. Sample valve: Allows for sampling of water entering UV chamber; necessary in order to confirm water being treated is of adequate quality.
8. Plug kit: A stopper provided and installed on Basic models.
9. Sensor: Monitors UV output to ensure proper dose (UV exposure) is being provided.
10. UV chamber: Provides disinfection of the water. MUST BE INSTALLED VERTICALLY.
11. CoolTouch™ fan: Removes excess heat from water in chamber during periods without water flow.
12. Sample valve: Allows for sampling of water immediately following UV treatment; necessary in order to confirm proper operation of UV system.
13. Shut-off valve: Required to allow maintenance of UV system.
14. Power supply: Powers and controls the UV lamp and other devices. Provides human interface, displaying information and allowing control inputs (such as muting the audible alarm).
15. Power source: Provides power to the power supply. For safety reasons the outlet must be protected by a Ground Fault Circuit Interrupter (GFCI). NOTE: to protect the power supply, a UL1449 certified (or equivalent) transient voltage surge suppressor is required.
16. Flow Sensor: Monitors flow to provide real time dose (UV exposure) Flow Meter Sensor must be installed in this orientation with the LED facing up. (Pro10, Pro20, Pro30 only)



Recommended Minimum Straight Pipe Lengths for the Various piping configurations

Note: Flow Meter Sensor must be mounted in the following orientation with the LED facing up. Ensure all air is purged from the piping and Flow Meter Sensor. All straight length to the Flow Meter Sensor must be 1.00" in diameter

Straight Flange 10" straight pipe

Reducing Flange 15" straight pipe

2 x 90 degree Elbows 25" straight pipe

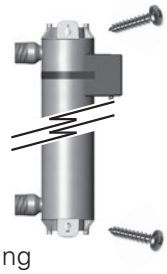
2 x 90 degree Elbows 3 dimensions 40" straight pipe

Pump 50" straight pipe

INSTALLING THE UV SYSTEM

1. Determine appropriate indoor location of the power supply and chamber, referring to Dimensions and Layout drawing. Power supply should be installed higher than chamber away from all water sources. Ensure adequate clearance above chamber to allow for removal of the lamp and sleeve.

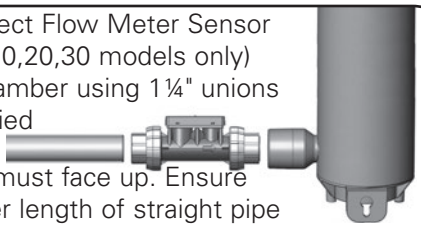
2. Attach chamber to wall VERTICALLY ONLY.



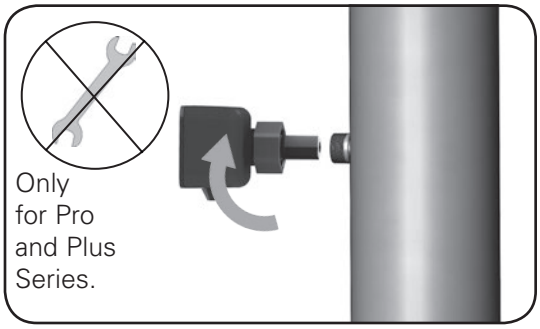
Install screws apart:
G, Pro10/10S: 18.5"
H, Pro20/20S: 27.5"
J, K, Pro30/30S/50: 37.5"

Make all necessary plumbing connections.

3. Connect Flow Meter Sensor (Pro 10,20,30 models only) to chamber using 1¼" unions supplied

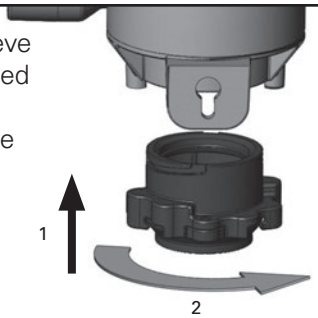


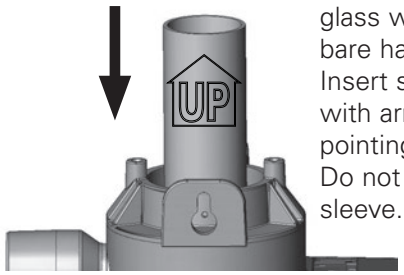
LED must face up. Ensure proper length of straight pipe 1.0" Diameter at inlet side of Flow Meter Sensor and use a 1¼" to 1" Reducing Coupler (not supplied)

4. 

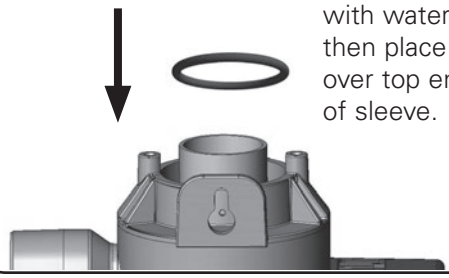
Only for Pro and Plus Series.

5. Ensure sleeve bolt is rotated full 1/4 turn until positive stop.



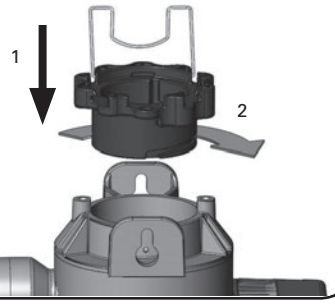
6. 

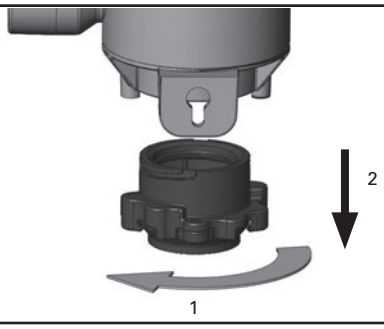
Do not touch glass with bare hands. Insert sleeve with arrow pointing up. Do not rotate sleeve.

7. 

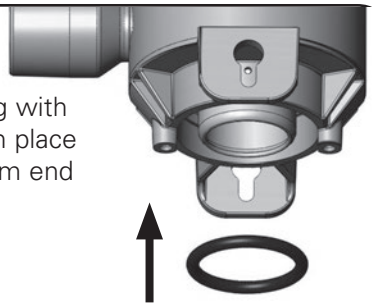
Wet O-ring with water then place over top end of sleeve.

8. Ensure sleeve bolt is rotated full 1/4 turn until positive stop.



9. 

10. Wet O-ring with water then place over bottom end of sleeve.



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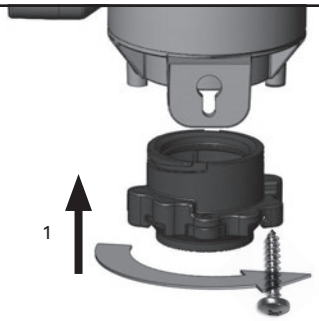

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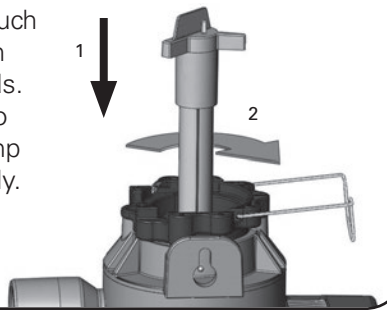
Do not touch glass with bare hands. Be sure to rotate lamp completely.



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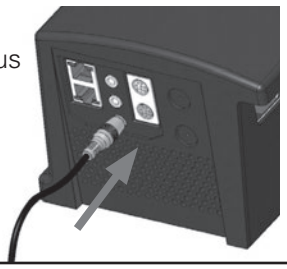
14

Plug UV sensor into blue jack.

(For Pro and Plus Series only).



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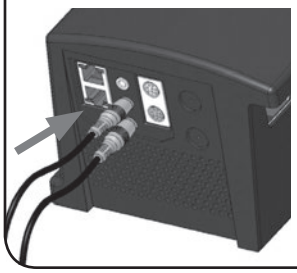

Plug Flow Meter Sensor into green jack

(for Pro Plus series only)

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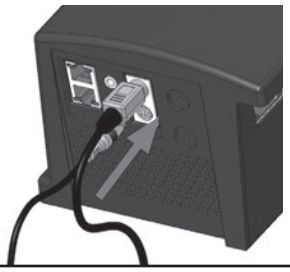
Plug CoolTouch fan into either receptacle.



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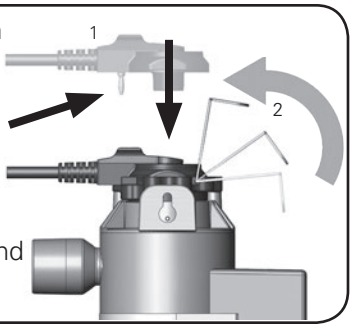
Lock wireform into position.

Note: Ensure lamp harness ground is inserted into chamber ground terminal



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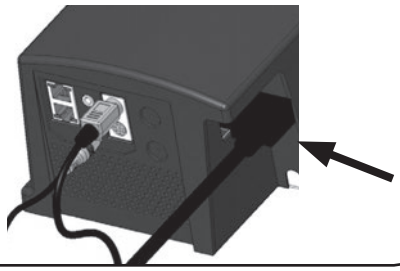
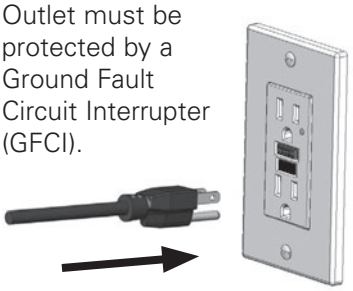


19

Outlet must be protected by a Ground Fault Circuit Interrupter (GFCI).



20

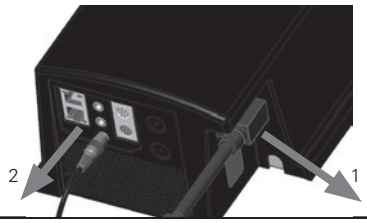
Let water flow to one faucet or other water outlet, then close the outlet and check for leaks.

Proceed to Disinfecting The Water Lines.

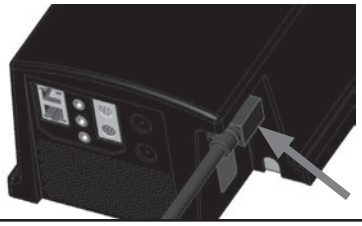
DISINFECTING THE WATER LINES

UV systems disinfect the water using ultraviolet light, treating the water as it passes through the system. When there is a risk that water downstream of the UV system has been contaminated it is critical that these water lines be chemically disinfected. Disinfection of the water lines is therefore required after initial system installation and following any period of time during which the system is inoperative, whether due to an alarm condition, a power failure, or for any other reason.

1. Unplug power supply and then unplug UV sensor from blue jack.



2. Make sure power supply is plugged in for entire disinfection process.



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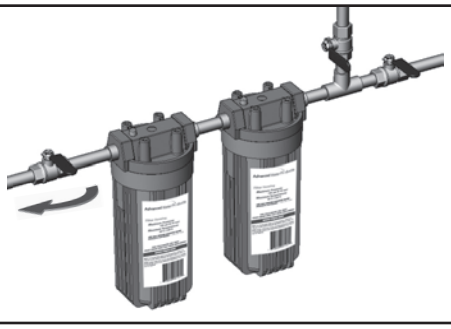

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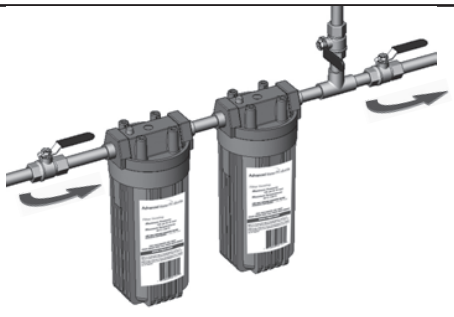
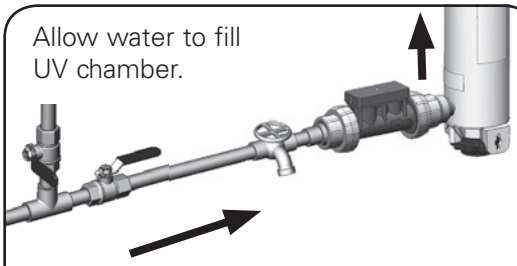


9

Allow water to fill UV chamber.



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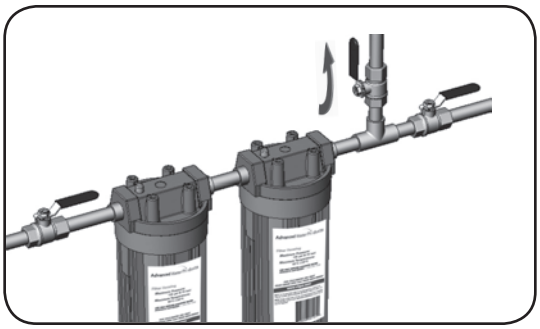
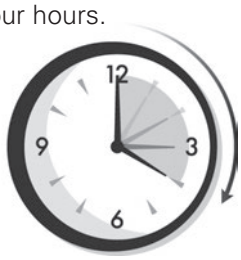


11

Go to a water outlet and allow the cold water to flow until you can smell bleach, then stop the flow. Allow hot water (if present) to flow until you can smell bleach, then stop the flow. Repeat procedure at all water outlets. Remember to include all faucets, washing machines, toilets, outside taps, and other water outlets. Note: You will likely run out of bleach; if you cannot smell bleach at a given outlet, turn off the main water supply, depressurize and add more bleach to the filter housing.

12

Let the bleach sit in the water lines for at least four hours.



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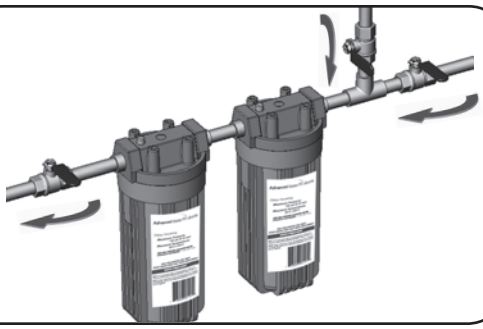

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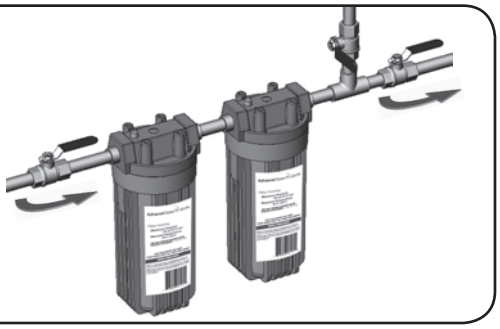
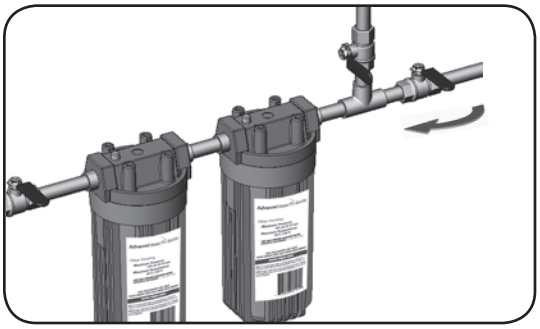


18

Flush all water outlets until bleach can no longer be smelled (at least 5 minutes).

19



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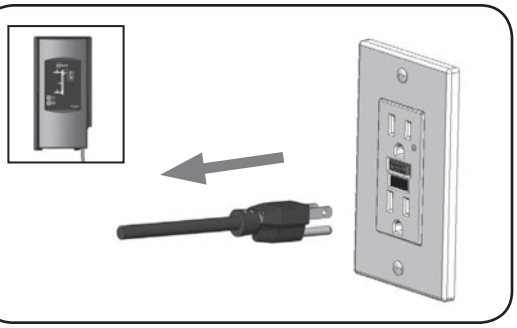
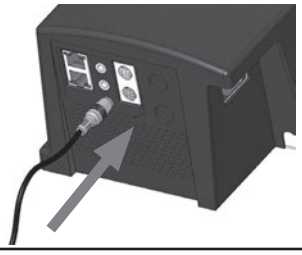


21

Plug UV sensor into blue jack.



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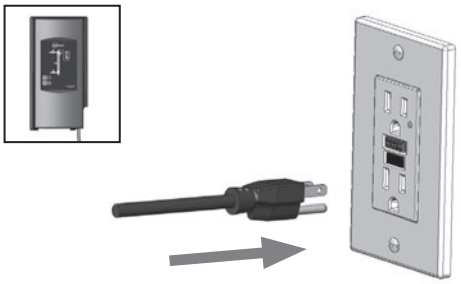

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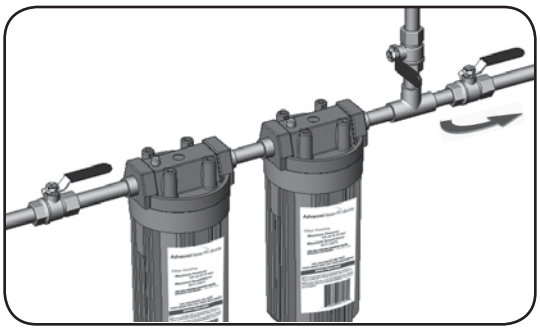


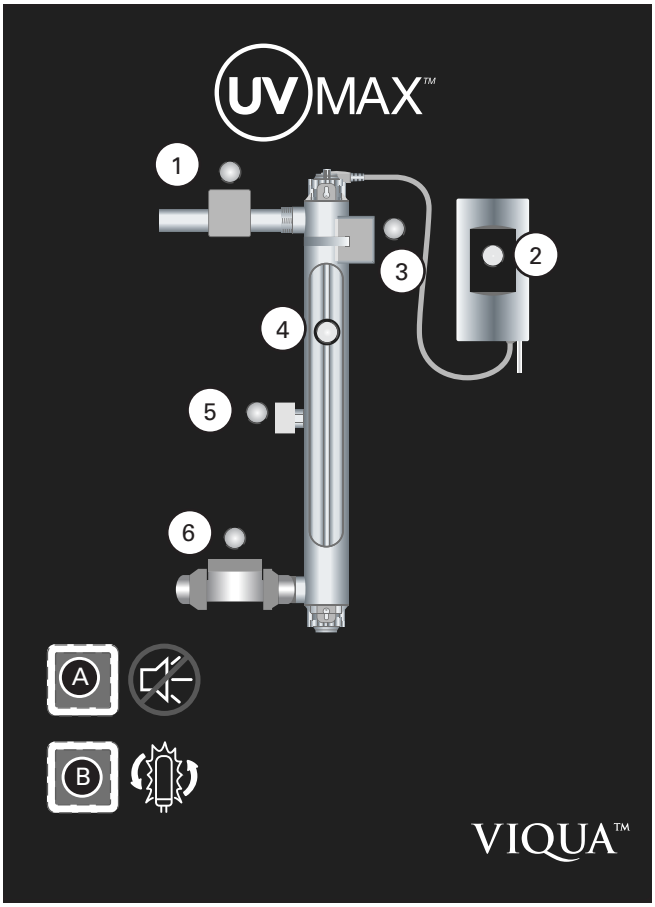
CONTROL PANEL

Buttons

	Button	Meaning
A	Mute	For low UV alarms press mute button to silence alarm. If low UV is detected consecutively 5 times alarm will be locked, press the mute button to unlock the alarm. For end of lamp life alarm press the mute button to silence audible alarm for 7 days; this may be repeated up to a max. of 4 times.
B	New Lamp	After installing a new lamp, press and hold this button until you hear a beep (about five seconds). This will reset the internal clock.

Indicator lights

Indicator lights only indicate a problem with the component when flashing red.



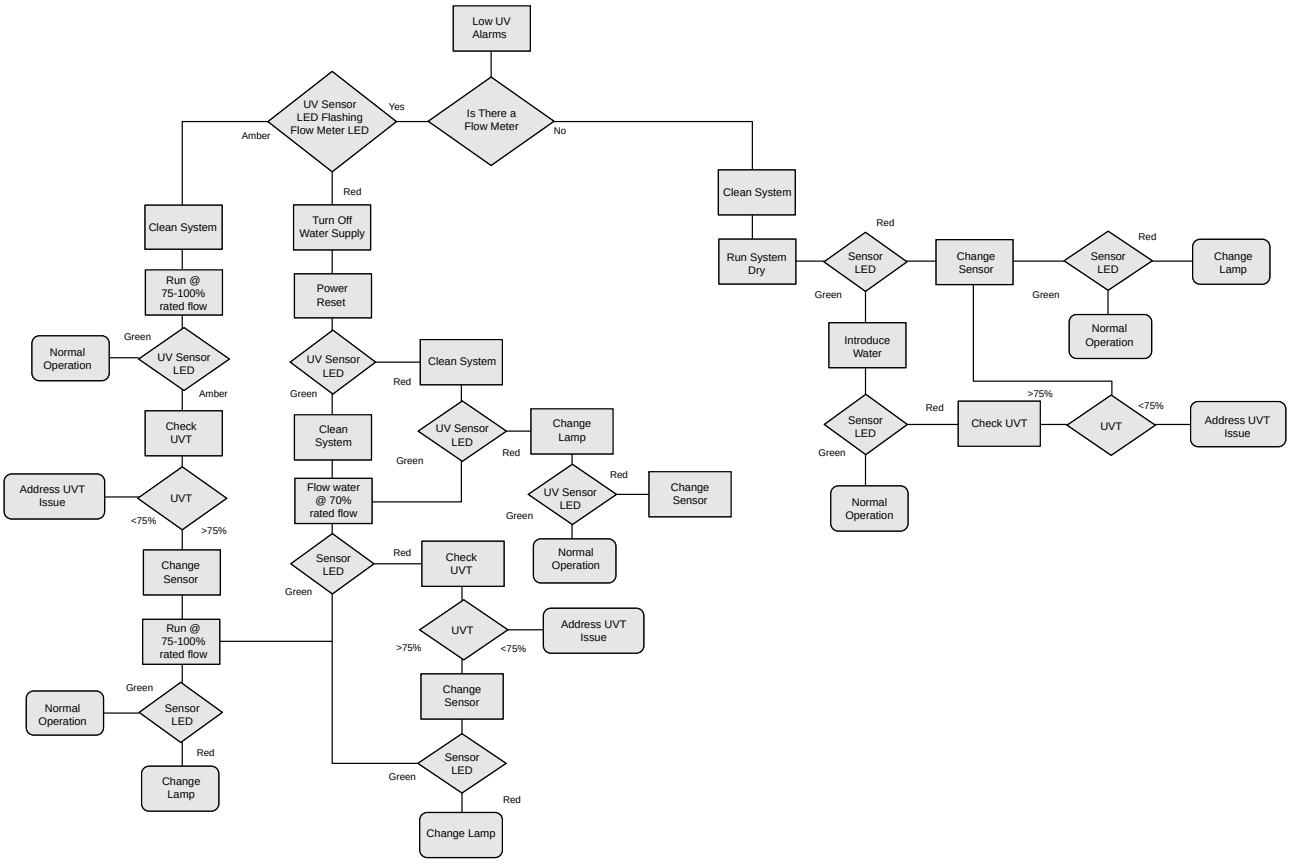
	Green	Yellow	Flashing Red	Solid Red
1	Solenoid valve open *(If equipped with solenoid)*	Not applicable	Solenoid valve disconnected; reconnect Solenoid coil damaged; replace coil *(not entire solenoid)*	Solenoid valve inactive (closed) due to failure of another component, in order to ensure safety of the water supply
2	Operating normally	Not applicable	Power supply failure; replace power supply	Power supply inactive due to lamp failure
3	Operating normally	Not applicable	Fan disconnected; reconnect Fan turning slower than required; unplug system, clean blades using a Q-tip Fan damaged; replace fan	Not applicable
4	Operating normally **NOTE:** During the lamp warm up, the indicator will flash	Warning; lamp will require replacement shortly	Lamp disconnected; unplug system, reconnect lamp and plug-in system again Lamp failure; replace lamp	Lamp inactive due to power supply failure
5	UV dose is adequate and sensor is operating normally *(Pro & Plus models only)*	UV dose is near the minimum required	Sensor disconnected; unplug system, reconnect sensor and plug-in system again Sensor failure UV dose is below minimum required, see Low UV Alarm section	Sensor inactive due to lamp or power supply failure
6	Flow Meter operating normally	High flow uv dose inadequate, reduce flow to achieve higher dose levels *(Pro10, Pro20, and Pro30 only)*	Flow meter sensor failure; service or replace sensor	Low flow uv dose inadequate, service required

TROUBLESHOOTING

The table below is a list of ***possible*** causes and solutions.

Symptom	Possible Cause	Possible Solution
No power	GFCI and/or breaker tripped	Reset GFCI and/or breaker
	Power supply fuse has blown	Replace power supply fuse - see Fuse Replacement section
	Transient voltage surge suppressor (TVSS) damaged	Replace TVSS
	Power supply damaged	Replace power supply and use a TVSS
GFCI or breaker repeatedly trips	Connection between lamp and lamp plug is wet	Clean and dry the lamp plug and lamp end, check unit for leaks or condensation
	Short-circuit in the electrical assembly	Replace power supply
Leak at inlet or outlet	Threaded pipe fittings are leaking	Clean threads, reseal with Teflon tape and retighten
Leak detected from area of chamber	Condensation of moist air on cold chamber (slow accumulation)	Control humidity or relocate unit
	O-ring damaged, deteriorated or incorrectly installed	Inspect and replace if deteriorated
	Sleeve bolt not tight enough	Ensure nut is turned completely (to stops)
Alarm	See Control Panel section	See Control Panel section
System is operating but water tests reveal bacterial contamination	Equipment downstream of UV system is acting as a breeding ground for pathogens	Ensure UV is the last piece of treatment equipment
	Pathogens are residing in the distribution lines post-UV	Ensure all distribution lines have been disinfected with chlorine - see Disinfecting the Water Lines section
	Recontamination from pipe dead-ends	Remove any pipe dead-ends and flush with chlorine - see Disinfecting the Water Lines section
Flow Meter Sensor red status LED	Detect Flow Sensor not detecting flow	Increase Flow rate through meter
	Flow Meter Sensor not functioning (Pro10, Pro20, and Pro30 only)	Flow Meter requires maintanence or replacement

LOW UV ALARMS (Pro & Plus Series Only)



1. In some cases, short-term flows of low ultraviolet transmittance (UVT) water can be created following and during the regeneration cycle of a water softener, resulting in a sensor alarm. Flushing the UV system alleviates this condition until the softener goes through another regeneration cycle. In the longer term, the softener's settings must be modified. To flush the UV system, unplug the sensor, then open a tap downstream and let water run for two (2) minutes. Disinfect the water lines following the procedures outlined under "Disinfecting The Water Lines" in the Installation section.
2. Refer to Sleeve Cleaning And Lamp Replacement section of the Owner's Manual.
3. Contact your water treatment dealer to inquire about testing the UVT of your water.

SLEEVE CLEANING & LAMP REPLACEMENT

Sleeve cleaning

Minerals in the water slowly form a coating on the sleeve. This coating must be removed because it reduces the amount of UV light reaching the water, thereby reducing disinfection performance. The need to clean the sleeve will be indicated by a low UV alarm (flashing red indicator light beside the sensor on control panel - see Control Panel section for details).

Note: Low UV alarms are for Pro & Plus Series only. If you own a Basic model, please clean the sleeve regularly (3-4 times per year, or more often depending on water quality).

When only cleaning is required, follow the instructions below and re-install the current lamp.

Lamp replacement

The amount of UV light created by the lamp decreases over time, requiring that the lamp be replaced. The system will automatically notify you when it is time to replace the lamp (the lamp should last up to 24 months). If the lamp requires replacement, follow the instructions below and in stall a new lamp.

NOTE: The UV system is designed to operate continuously and should not be shut off for short periods of time, such as over a period of less than three weeks.

Equipment required:

#2 Phillips screw driver

Clean cotton, latex or plastic gloves are preferred.

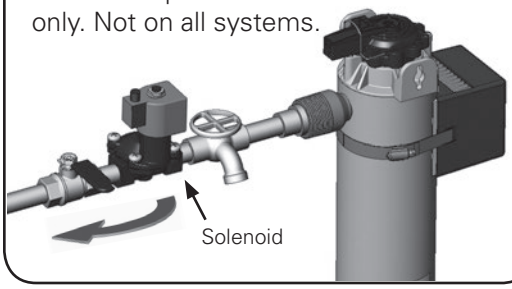
Scale remover such as vinegar or a citrus-based product.

Cloth must be soft, lint-free, and chemical-free. No clean-wipes.

Cotton swab.

1

Solenoid representative only. Not on all systems.



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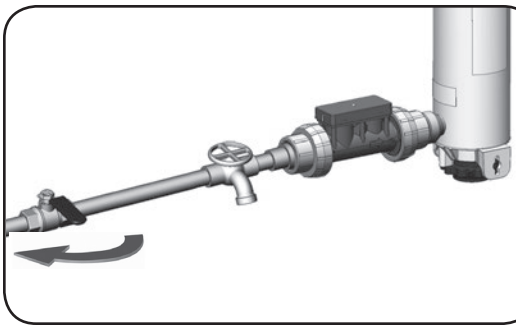

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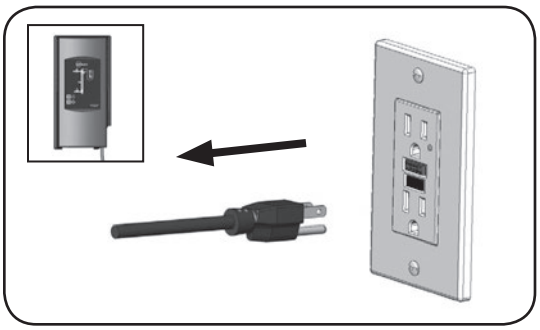
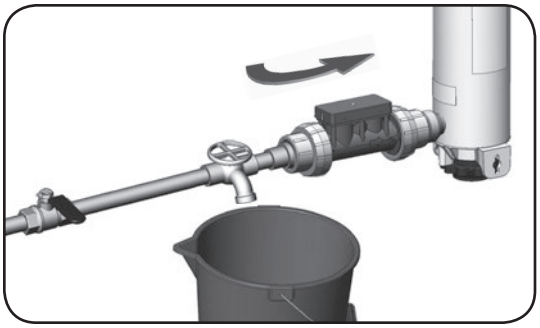


4

Let the system cool for 10 minutes.

5



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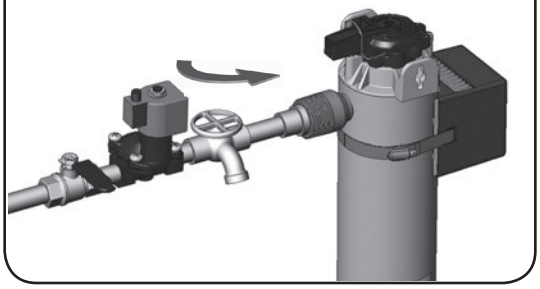
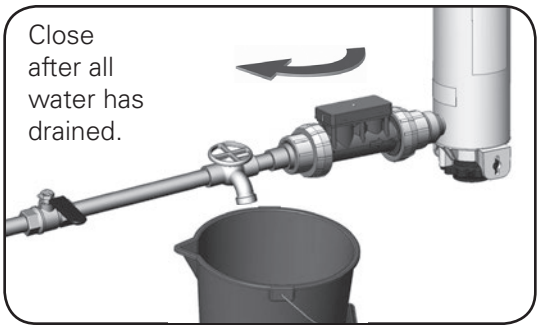


7

Close after all water has drained.



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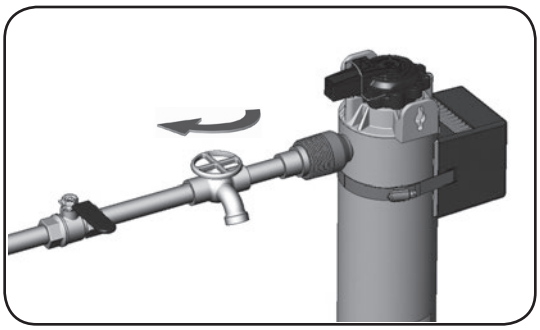
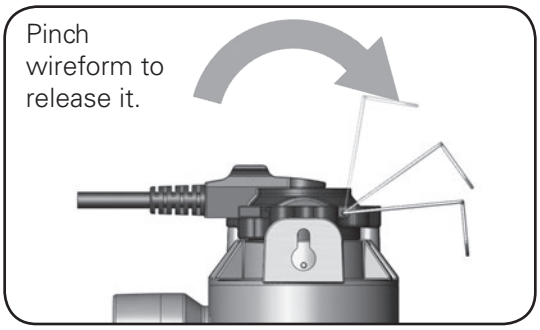


9

Pinch wireform to release it.



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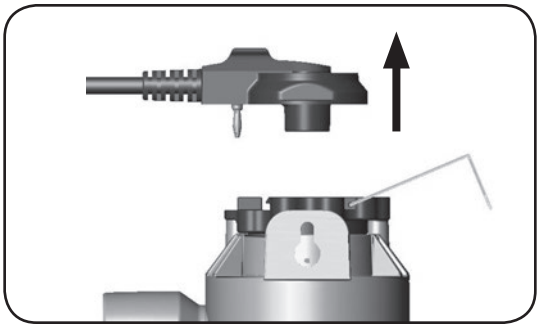

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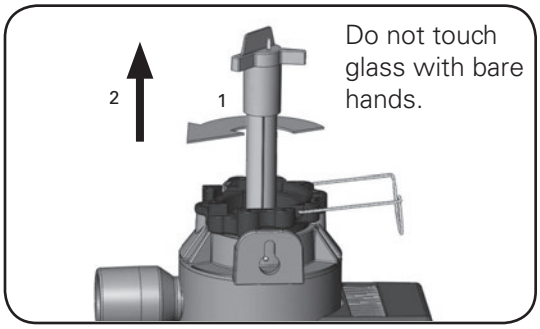
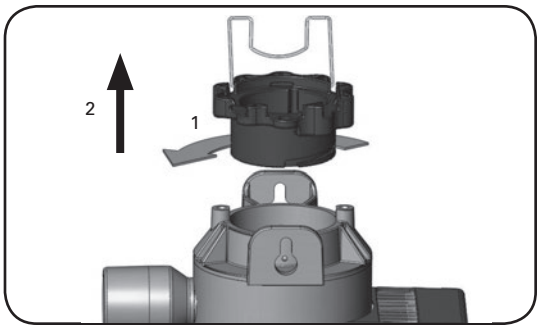


Do not touch glass with bare hands.

12



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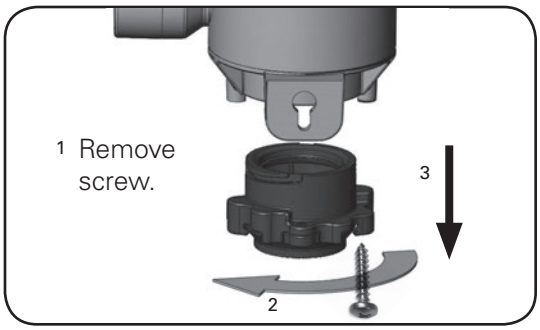

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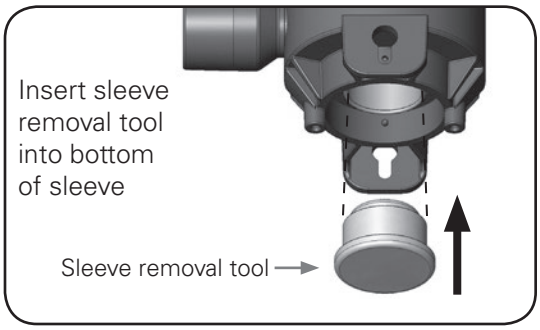

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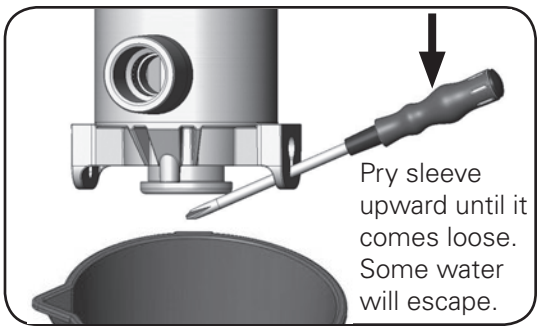
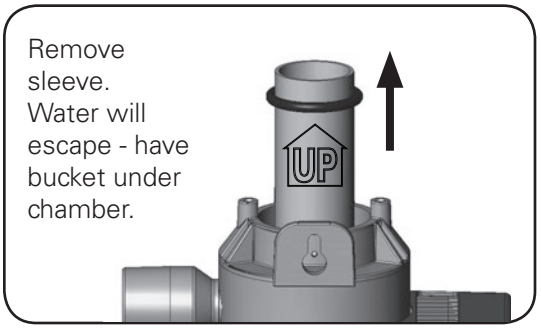


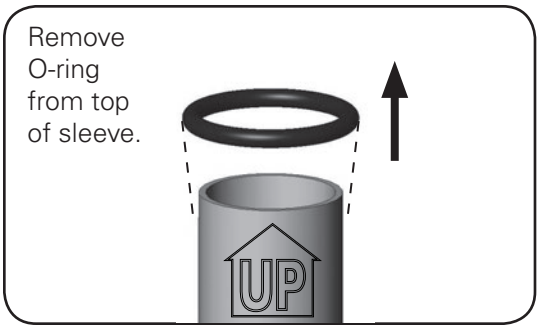
Pry sleeve upward until it comes loose. Some water will escape.

16



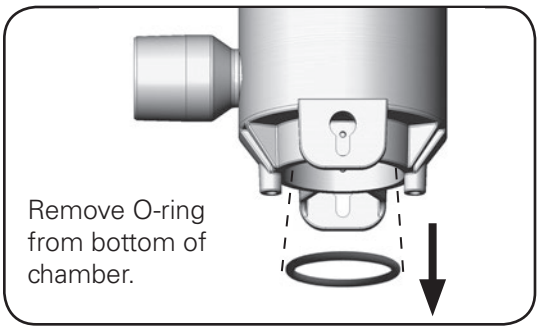
Remove sleeve. Water will escape - have bucket under chamber.

17



Remove O-ring from top of sleeve.

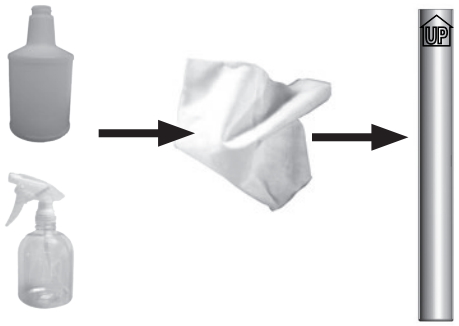
18



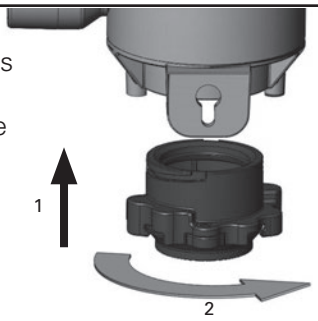
Remove O-ring from bottom of chamber.

19

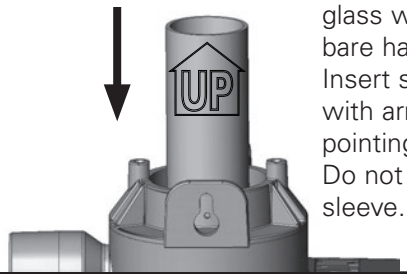
Ensure cloth used to clean the sleeve is soft, lint-free, and contains no chemicals (no clean-wipes). **Sleeve must be replaced if it cannot be completely cleaned or if it appears scratched or cracked.**



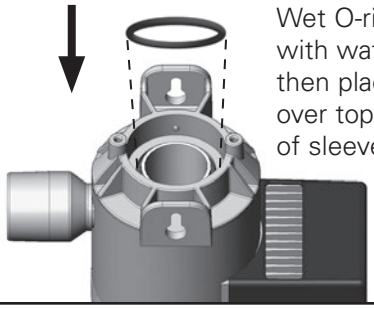
20 Ensure sleeve bolt is fully rotated until positive stop.



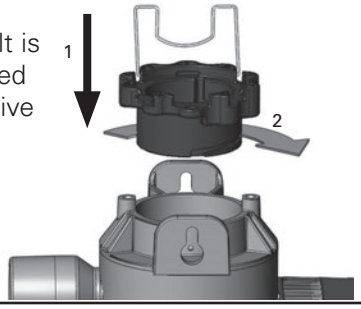
21 Do not touch glass with bare hands. Insert sleeve with arrow pointing up. Do not rotate sleeve.



22 Wet O-ring with water then place over top end of sleeve.



23 Ensure sleeve bolt is fully rotated until positive stop.



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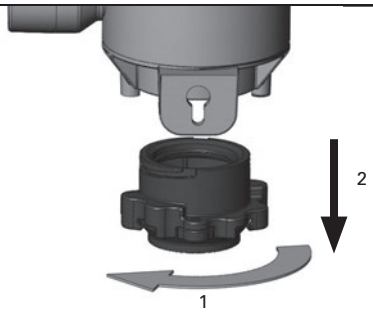
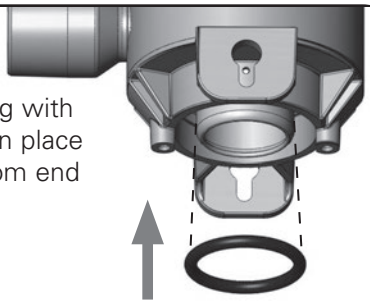
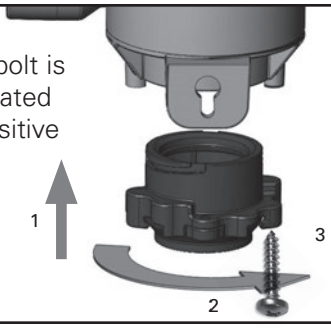


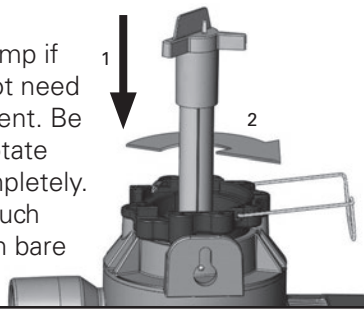
25 Wet O-ring with water then place over bottom end of sleeve.



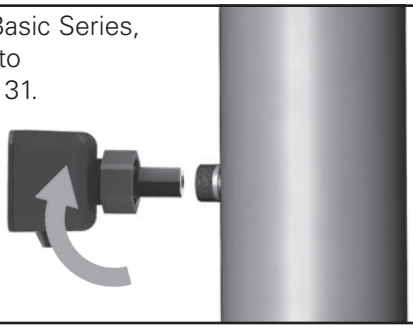
26 Ensure sleeve bolt is fully rotated until positive stop.



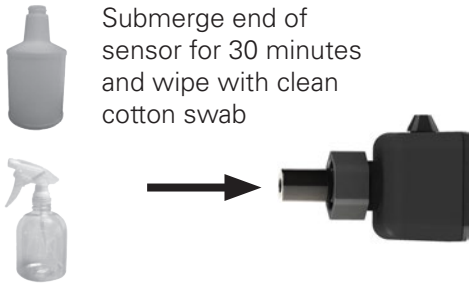
27 Re-install current lamp if it does not need replacement. Be sure to rotate lamp completely. Do not touch glass with bare hands.



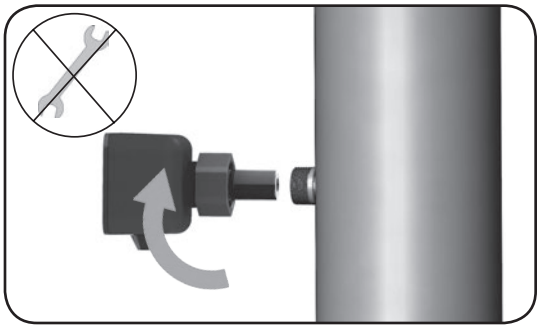
28 For Basic Series, skip to Step 31.



29 Submerge end of sensor for 30 minutes and wipe with clean cotton swab



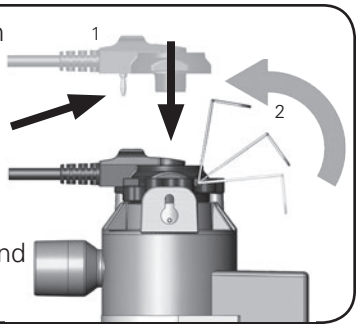
30



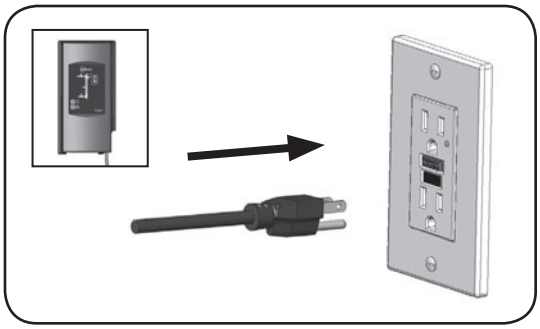
31

Lock wireform into position.

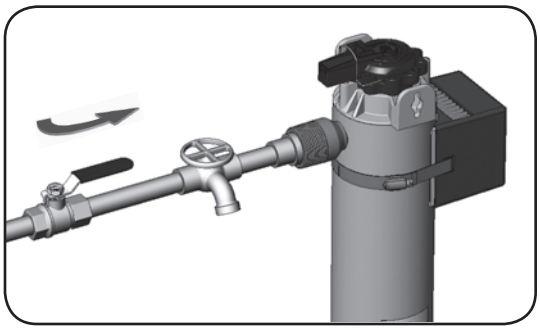
Note: Ensure lamp harness ground is inserted into chamber ground terminal



32

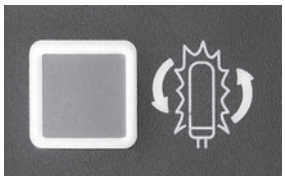


33



34

If lamp was replaced:
Press and hold "New Lamp" button for 5 seconds until you hear a "beep".

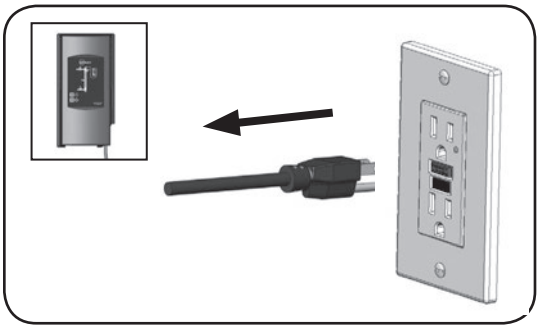


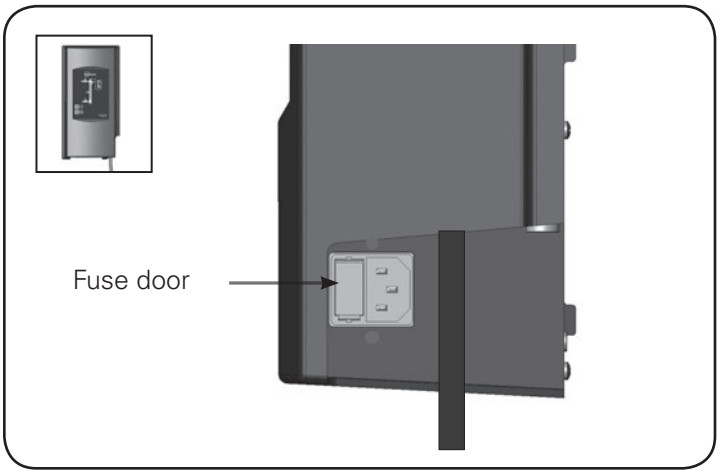
35

Disinfect the water lines. Refer to Disinfecting the Water Lines in Installation section.

FUSE REPLACEMENT

The system comes equipped with one functioning and one spare 250V 2.5A fuse. To access the fuses, first unplug system and disconnect the power cord from the power supply. Remove the fuse door by pushing in the tab on one side using a knife or other tool and gently prying outwards. Repeat on the other side.





Flow Meter Sensor Maintenance
Inspect Flow Meter Sensor periodically to ensure that there is no fouling and the paddle wheel spins freely with no resistance.

If Paddle wheel does not spin freely or is loose the sensor should be returned for service and calibration. It is recommended that the Flow Meter Sensor be returned for calibration every two years to ensure accurate system operation.

WARRANTY

Our Commitment

VIQUA is committed to ensuring your experience with our products and organization exceeds your expectations. We have manufactured your UV purification system to the highest quality standards and value you as our customer. Should you need any support, or have questions about your system, please contact our Technical Support team at 1.800.265.7246 or technicalsupport@viqua.com and we will be happy to assist you. We sincerely hope you enjoy the benefits of clean, safe drinking water after the installation of your UVMAX® purification system.

How to Make a Warranty Claim

NOTE: To maximise the disinfection performance and reliability of your UVMAX® product, the system must be properly sized, installed and maintained. Guidance on the necessary water quality parameters and maintenance requirements can be found in your Owner's Manual.

In the event that repair or replacement of parts covered by this warranty are required, the process will be handled by your dealer. If you are unsure whether an equipment problem or failure is covered by warranty, contact our Technical Support team at 1.800.265.7246 or e-mail technicalsupport@viqua.com . Our fully trained technicians will help you troubleshoot the problem and identify a solution. Please have available the model number (system type), the date of purchase, the name of the dealer from whom you purchased your UVMAX® product ("the source dealer"), as well as a description of the problem you are experiencing.

To establish proof of purchase when making a warranty claim, you will either need your original invoice, or have previously completed and returned your product registration card via mail or online.

Specific Warranty Coverage

Warranty coverage is specific to the following UVMAX® products: Pro10/10S, Pro20/20S, Pro30/30S, Pro50, models G, H, J, K, and G+, H+, J+ and K+. Warranty coverage is subject to the conditions and limitations outlined under the heading "General Conditions and Limitations" below.

Ten-Year Limited Warranty for UV Chamber

VIQUA warrants the UV chamber on the UVMAX® product to be free from defects in material and workmanship for a period of ten (10) years from the date of purchase. During this time, VIQUA will repair or replace, at its option, any defective UVMAX® UV chamber. Please return the defective part to your dealer who will process your claim.

Five-Year Limited Warranty for Electrical and Hardware Components

VIQUA warrants the electrical (power supply) and hardware components to be free from defects in material and workmanship for a period of five (5) years from the date of purchase. During this time, VIQUA will repair or replace, at its option, any defective parts covered by the warranty. Please return the defective part to your dealer who will process your claim.

One-Year Limited Warranty for Lamps, Sleeves and UV Sensors

VIQUA warrants lamps, sleeves and UV sensors to be free from defects in material and workmanship for a period of one (1) year from the date of purchase. During this time, VIQUA will repair or replace, at its option, any defective parts covered by the warranty. Your dealer will process your claim and advise whether the defective item needs to be returned for failure analysis.

IMPORTANT NOTE: Use only genuine UVMAX® replacement lamps and sleeves in your system. Failure to do so may seriously compromise disinfection performance and affect warranty coverage.

General Conditions and Limitations

None of the above warranties cover damage caused by improper use or maintenance, accidents, acts of God or minor scratches or imperfections that do not materially impair the operation of the product. The warranties do not cover products that are not installed as outlined in the applicable Owner's Manual.

Parts repaired or replaced under these warranties will be covered under warranty up to the end of the warranty period applicable to the original part.

The above warranties do not include the cost of shipping and handling of returned items.

The limited warranties described above are the only warranties applicable to the UVMAX® products listed in the "Specific Warranty Coverage" section. These limited warranties outline the exclusive remedy for all claims based on a failure of or defect in any of these products, whether the claim is based on contract, tort (including negligence), strict liability or otherwise. These warranties are in lieu of all other warranties whether written, oral, implied or statutory. Without limitation, no warranty of merchantability or of fitness for a particular purpose shall apply to any of these products.

VIQUA does not assume any liability for personal injury or property damage caused by the use or misuse of any of the above products. VIQUA shall not in any event be liable for special, incidental, indirect or consequential damages. VIQUA's liability shall, in all instances, be limited to repair or replacement of the defective product or part and this liability will terminate upon expiration of the applicable warranty period.

Pro10, Pro10S, Pro20, Pro20S, Pro30, Pro30S System Tested and Certified by NSF International against CSA B483.1 and NSF/ANSI 55 for Disinfection Performance, Class A

NSF information pertains to UVMAX™ Pro Series models – Pro10/10S, Pro20/20S, Pro30/30S.

This Class A system conforms to NSF Standard 55 for the disinfection of microbiologically contaminated water that meets all other public health standards. The system is not intended to convert wastewater or raw sewage to drinking water. The system is intended to be installed on visually clear water (not colored, cloudy, or turbid water). If this system is used for the treatment of surface waters a prefilter found to be in compliance for cyst reduction under NSF/ANSI Standard 53: Drinking Water Treatment Units - Health Effects shall be installed upstream of the system.

NSF Standard 55 defines waste water to include human and/or animal body waste, toilet paper, and any other material intended to be deposited in a receptacle designed to receive urine and/or feces (black waste); and other waste materials deposited in plumbing fixtures (gray waste).

UVMAX™ Pro50 model is USEPA UVDGM 2006 validated.

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RainHarvest Systems