Clean Water Made Easy

WonderLight UV Sterilizer Installation Guide

Thank you for purchasing a Clean Water System! With proper installation and a little routine maintenance your UV sterilizer will last for many years.

Questions?

Call us toll-free: 1-888-600-5426 or 1-831-462-8500

Email us: support@cleanwaterstore.com

See more information on our website: www.cleanwaterstore.com/resources

Pre-Installation

1. Note that for UV to be effective the water should be low:
    a. Less than 7 grains per gallon of hardness, or less than 120 PPM)
    b. Free of color and crystal clear.
    c. Iron should be less than 0.3 mg/L.
    d. Manganese should be less than 0.05 mg/L
    e. pH range should be 6.5 to 9.5

2. If you are going to be turning off the water to the house and you have an electric water heater, shut off the power to the water heater before beginning installation in case water heater is accidentally drained.

3. Pick a suitable location for your UV Sterilizer. It is best to mount on a wall, where you can be sure to remove one end of the UV with enough space to completely remove and install the UV lamp (bulb). Choose a location where it won't be exposed to freezing temperatures. A minimum of 10 PSI is required. Maximum pressure is 100 PSI.

4. Get all of your plumbing parts together before beginning installation. Installation typically takes 1 to 4 hours. Review your packing list and make sure you have received all the parts before beginning installation.

Best Practices for Piping & Drain Installation

1. See typical installation on page 2, Figure 1

2. Install UV with stainless steel flexible lines, or use a pipe union so UV can be easily removed later if needed.

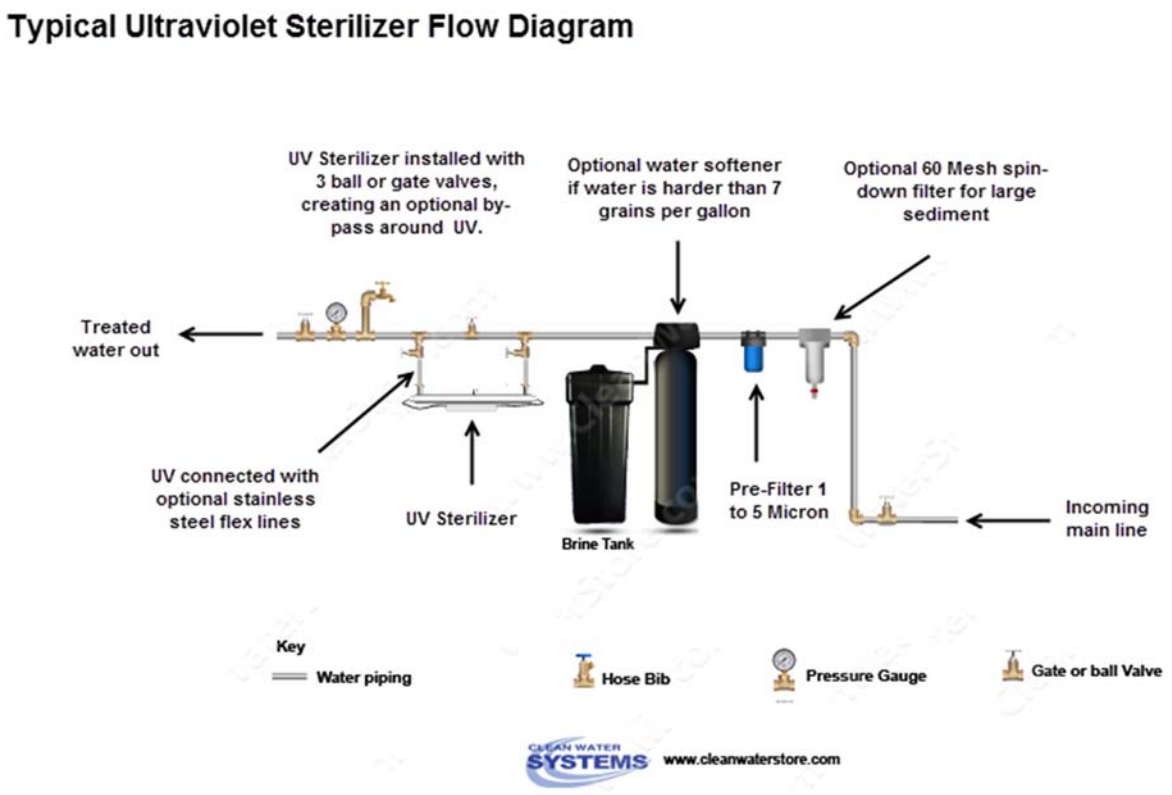
3. If you will be using copper piping, do not sweat the copper pipe directly on the UV.

4. If you are going to be using PVC pipe, do not connect PVC fittings direct to UV sterilizer, as the UV rays can degrade the PVC pipe. Use a stainless steel line to isolate the PVC from the UV sterilizer is the best practice.

5. Install a series of 3 ball valves to create a by-pass around the UV as shown in Figure 1 if desired.

6. Install a 5 micron pre-filter prior to UV sterilizer (optional) to remove very fine particles that might block the transmission of UV rays into the water.

Fig 1



Installation:

1. Install UV sterilizer in piping.
2. Add ½ to 1 cup of bleach to pre-filter to UV, or shock well or add directly to piping if possible.
3. Flush piping in home after UV with chlorinated water to sanitize pipes in the home.
4. For badly contaminated piping or piping with sediment or scale, this procedure may need to be repeated to kill all bacteria after UV upon start-up.
5. Turn on UV lamp and note GREEN light on ballast. This means the UV lamp ('lamp' is what the UV light bulb is often referred to) is operating normal, and water flowing through UV is sterilized.

6. If ballast RED light is lit, this means the lamp is not operating.
7. NOTE: IF LAMP IS BURNED OUT, ALARM WILL SOUND AND RED LIGHT WILL BE LIT ON THE BALLAST.

Maintenance:

Change UV lamp and clean quartz sleeve with a damp cloth once every 12 months.

When changing UV lamp, we recommend the household piping is sanitized with chlorine or hydrogen peroxide.

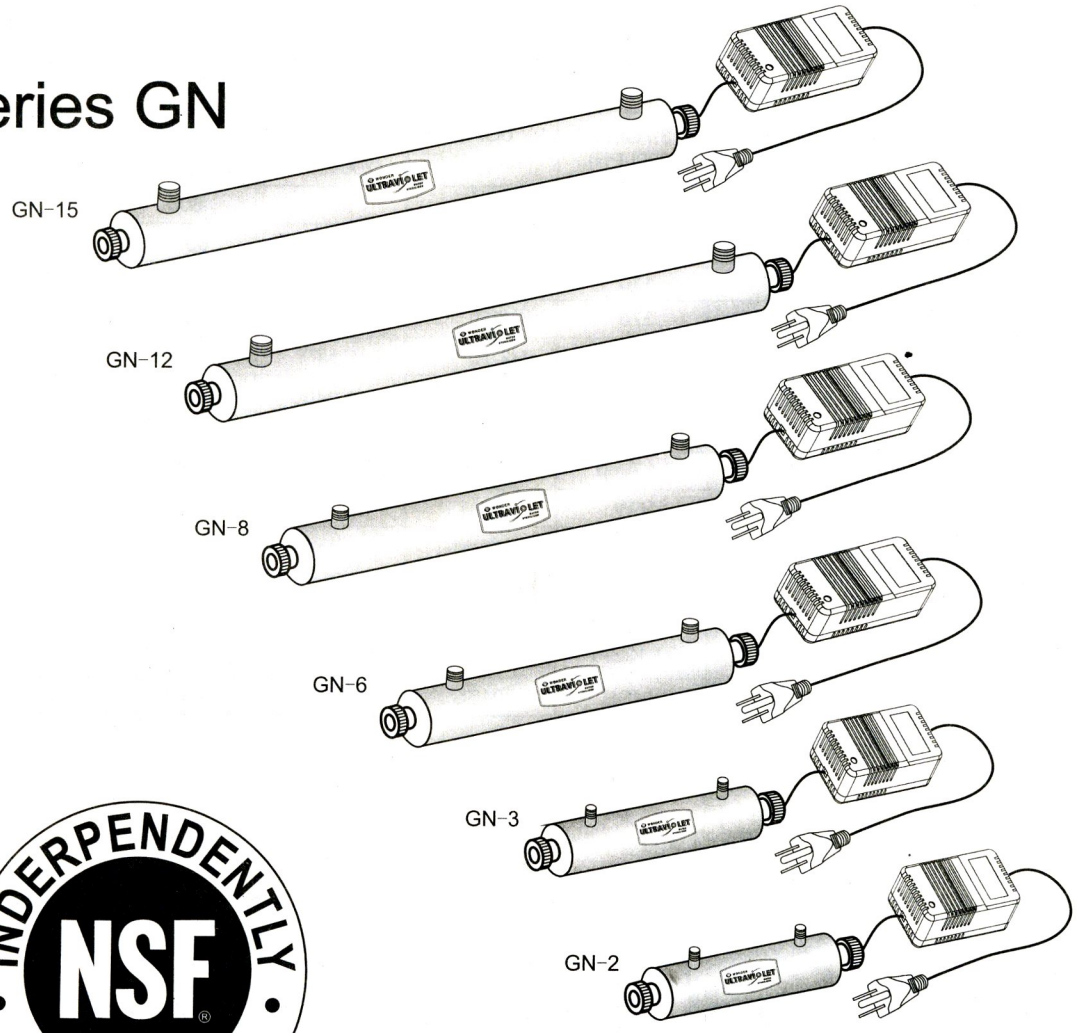
WONDER®

ULTRAVIOLET

WATER STERILIZER

OPERATING INSTRUCTIONS

Series GN

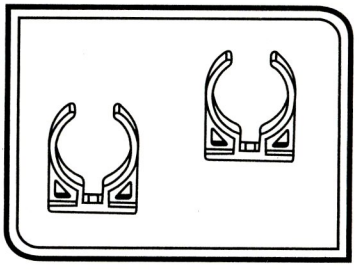


INDERPENDENTLY NSF® CERTIFIED®

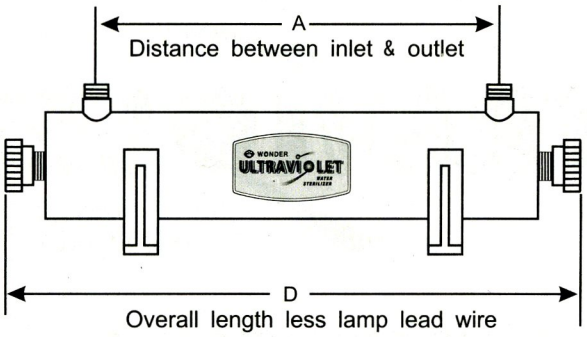
System tested and Certified by NSF International against NSF/ANSI Standard 55 for the reduction of class B

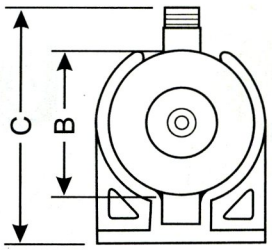
c UL® US

Option : clips



Please read these instructions completely before operating this unit and retain it for future reference.

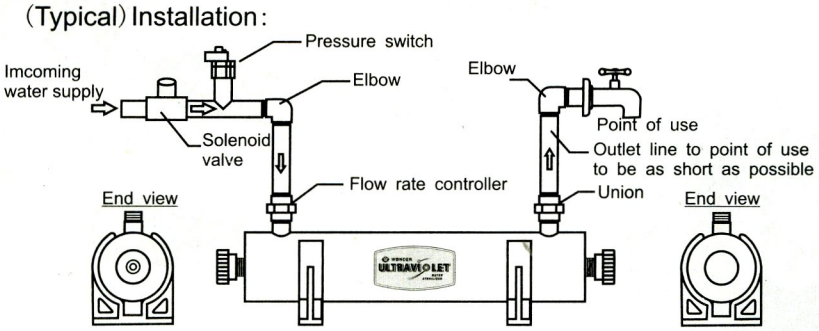




Note: Line cord and lamp lead wire omitted for clarity.

Model	GN-2	GN-3	GN-6	GN-8	GN-12	GN-15
NSF Suggested Flow Rate	2.5GPM (567LPH)	3.5GPM (794LPH)	5.5GPM (1247LPH)	7.8GPM (1769LPH)	12GPM (2722LPH)	12GPM (2722LPH)
Maximum Flow Rate	3GPM (680LPH)	3.7GPM (839LPH)	6GPM (1361LPH)	9.1GPM (2064LPH)	12.9GPM (2926LPH)	13GPM (2948LPH)
A	235	260	440	585	800	800
B	63. 5	63. 5	63. 5	63. 5	63. 5	63. 5
C	110	110	110	110	113	113
D	350	370	550	700	930	930
Inlet & outlet size	1/2" NPT	1/2" NPT	1/2" NPT	3/4" NPT	1" NPT	1" NPT
Volts	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	0.4 Amp	0.4 Amp	0.4 Amp	0.4 Amp	0.5 Amp	0.9 Amp
Lamp Power	14W	15W	21W	29W	40W	65W
Operating pressure	10-100Psi (69-689Kpa)	10-100Psi (69-689Kpa)	10-100Psi (69-689Kpa)	10-100Psi (69-689Kpa)	10-100Psi (69-689Kpa)	10-100Psi (69-689Kpa)
Ambient Temperature	2℃-40℃ (32-122)°F	2℃-40℃ (32-122)°F	2℃-40℃ (32-122)°F	2℃-40℃ (32-122)°F	2℃-40℃ (32-122)°F	2℃-40℃ (32-122)°F
Chamber Material	304SS	304SS	304SS	304SS	304SS	304SS

(Typical) Installation:



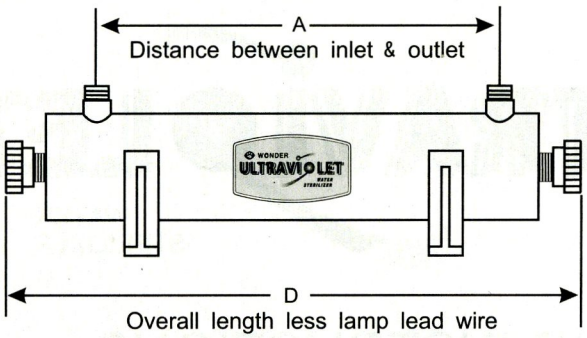
NOTES:

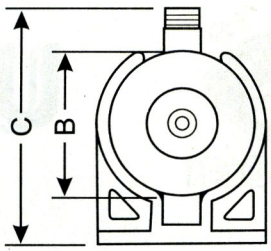
1.Do not allow water sterilizer equipment to freeze.

2. The system and installation shall comply with applicable state and local regulations.

3. This Class B system or component conforms to NSF/ANSI 55 for the supplemental bactericidal treatment disinfected public drinking water or other drinking water that has been tested and deemed acceptable for human consumption by the state or local health agency having jurisdiction. The system is only designed to reduce normally occurring non–pathogenic nuisance microorganisms.Class B systems are not intended for treatment of contaminated water.

4. While testing was performed under standard laboratory conditions, actual performance may vary.





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Ambient Temperature	2°C-40°C (32-122)°F	2°C-40°C (32-122)°F	2°C-40°C (32-122)°F	2°C-40°C (32-122)°F	2°C-40°C (32-122)°F	2°C-40°C (32-122)°F
Chamber Material	304SS	304SS	304SS	304SS	304SS	304SS

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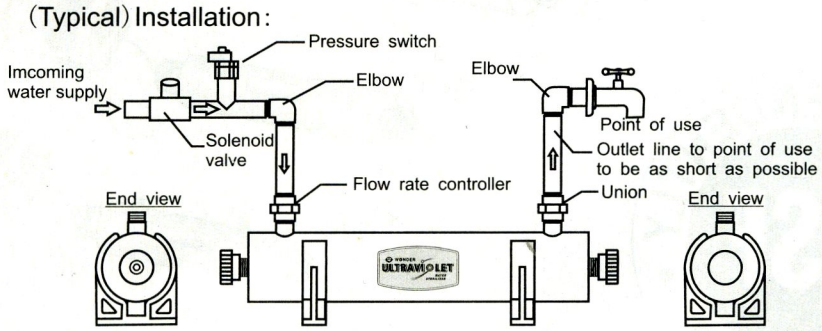

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Replacing UV lamp and servicing UV system:

Note: Avoid touching the sides of the quartz sleeve and lamp, handle by the ends only.

1. Disconnect power.
2. Turn water off and open down stream of system to relieve pressure.
3. Remove dust cap(1) and unscrew the aluminum nuts(2).
4. Carefully withdraw lamp(4)approximately 2 inches from chamber(7).
5. While holding lamp end carefully remove lamp socket(3)on end now exposed.
6. Carefully withdraw lamp from chamber.
7. Carefully remove O-rings(5)from the ends of the quartz sleeve(6).
8. Carefully remove the quartz sleeve.
9. To reinstall follow step 8 through 1 in reverse.

Maintenance suggestion:

To operate the sterilizer properly and attain its maximum efficiency that the users need to do some maintenance job as below.

1. Quartz sleeve cleaning or replacement:
   a) Quartz sleeve is to be cleaned every 6-12 months with glass cleaner.
   b) Quartz sleeve is to be replaced every 24 months.
2. UV lamp replacement is recommended every 8000-9000 hours of operation(approx.12 months of continuous service).
3. For purchasing replaceable components,please contact our local agents or our head office.

Performance date sheet:

1. Model number and flow rate: GN-2(2.5 GPM); GN-3(3.5 GPM); GN-6(5.5 GPM);GN-8(7.8 GPM); GN-12(12 GPM);GN-15(12GPM)
2. Lamp life:8000-9000 hours of operation approximate 12 months of continuous service
3. Maximum working pressure:100 PSI
4. Maximum operating temperature in degrees C(Degrees F):40°C(104°F)
5. General installation conditions and needs:Avoid touching the sides of the quartz sleeve and lamp,handle by the ends only.Ultraviolet lamp and quartz sleeve are easily damaged.
6. General operation and maintenance:Quartz sleeve is to be cleaned every 6-12 months and to be replaced every 24 months.UV lamp is to be replaced every year.

2 YEARS OF GUARANTEE

We guarantee that this equipment will be free from defects in material and workmanship for a period of two years from the date of shipment. Within the guarantee period we shall repair or replace such products which are returned to us and which are determined by us to be defective. This guarantee will not apply to any product which has been misused negligencely, or destructured accidently, or modified, and repaired by unauthorized persons.

Buyer shall examine the product promptly after receipt and shall notify us at our agent in writing of claims, such as claims of breach of warranty within one week after the buyer discovers. Any submission of written notice of a claim behond one week will be treated as a waiver of the claim.

One year guarantee for UV lamp , one year guarantee only for its efficient radiation dosage of UV lamp.

Please type or print in ink

(1) Customer: _____
Address: _____
Country: _____
Post code: _____
Tel: _____
(2) Procurement from: _____
Country: _____
Tel: _____

Date of purchase: _____
Contact person: _____
Serial No. : _____
Model: _____
Fax: _____
Address: _____
Post code: _____
Fax: _____

IMPORTANT: Please fill out and return this from in order to activate guarantee within two weeks after receipt of the goods.

WONDER LIGHT INDUSTRY MACHINERY ELECTRONIC PRODUCTS (ZHONGSHAN) CO., LTD
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