



UV Disinfection System

Manual

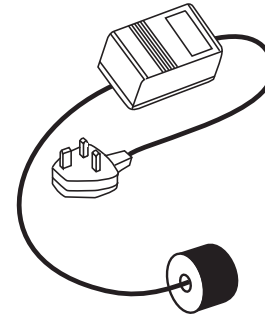
# What's Included



Your Sabre UV system will come as standard with the following components:



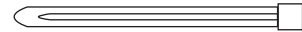
**1 x Stainless steel reactor chamber**



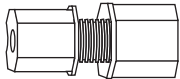
**1 x Ballast with UK mains plug**



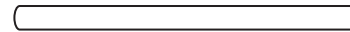
**2 x O-ring seals**



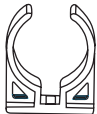
**1 x UV lamp**



**2 x 1/4" Fitting (for SUV-S-4-1/4 Only)**



**1 x Quartz sleeve**



**2 x Mounting clips**

Or



**2 x Mounting Brackets with bolts (for SUV-S-57-1 Only)**

## Standard Range Specifications

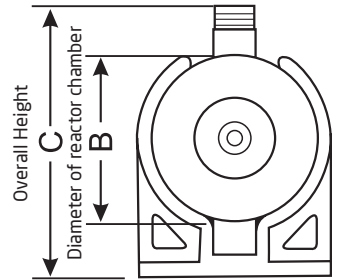
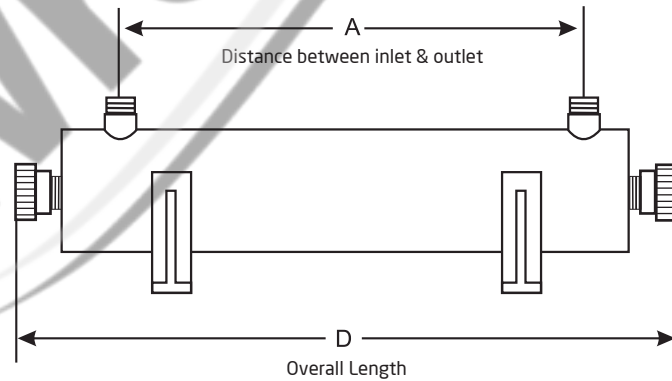
Ordering Code	SUV-S-4-1/4	SUV-S-8-1/2	SUV-S-30-3/4	SUV-S-57-1	SUV-S-132-2	SUV-S-250-2
Flow rate/lpm (m <sup>3</sup> /hr)	4 (0.24)	8 (0.48)	30 (1.8)	57 (3.4)	132 (8)	250 (15)
Voltage V/Hz	100-240/50-60	100-240/50-60	100-240/50-60	100-240/50-60	100-240/50-60	100-240/50-60
Lamp Power/W	10	14	29	65	2 x 65	3 x 85
Port size/BSP M (")	¼	½	¾	1	2	2

## Parts List

System	SUV-S-4-1/4	SUV-S-8-1/2	SUV-S-30-3/4	SUV-S-57-1	SUV-S-132-2	SUV-S-250-2
Lamp	SUV-S-4LAMP	SUV-S-8LAMP	SUV-S-30LAMP	SUV-S-57LAMP	SUV-S-57LAMP	SUV-S-250LAMP
Quartz Sleeve	SUV-S-4SLEEVE	SUV-S-8SLEEVE	SUV-S-30SLEEVE	SUV-S-57SLEEVE	SUV-S-57SLEEVE	SUV-S-57SLEEVE
O-ring	SUV-ORING-SILICONE	SUV-ORING-SILICONE	SUV-ORING-SILICONE	SUV-ORING-VITON	SUV-ORING-VITON	SUV-ORING-VITON
Ballast	SUV-S-4BALLAST	SUV-S-4BALLAST	SUV-S-30BALLAST	SUV-S-57BALLAST	SUV-S-132BALLAST	SUV-S-132BALLAST

SABRE UV disinfection ranges for specialised applications and higher flows are available on request.

# System Dimensions



System	A (mm)	B (mm)	C (mm)	D (mm)	Connections ("BSP M)
<b>SUV-S-4-1-1/4</b>	168	51	83	264	1/4
<b>SUV-S-8-1/2</b>	238	64	112	350	1/2
<b>SUV-S-30-3/4</b>	588	64	112	704	3/4
<b>SUV-S-57-1</b>	800	88	170	962	1
<b>SUV-S-132-2</b>	762	90	174	962	2
<b>SUV-S-250-2</b>	750	158	244	970	2

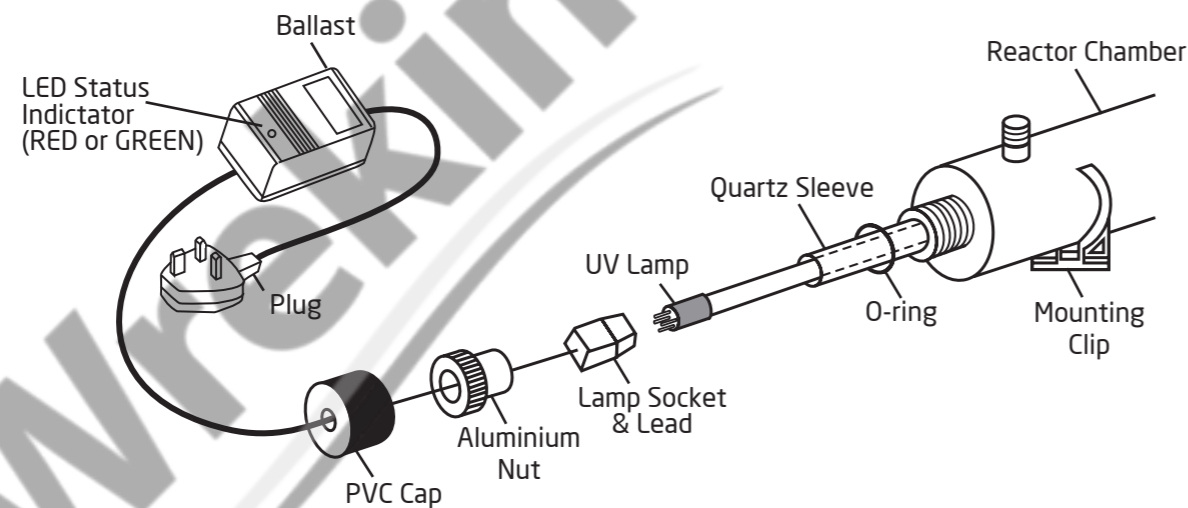
## SUV-S Range User Guide

For systems: - SUV-S-4-1/4  
 - SUV-S-8-1/2  
 - SUV-S-30-3/4  
 - SUV-S-57-1



**WARNING** - Please read before installation. Retain these instructions for future reference. Install by a qualified person and in accordance with applicable local laws and plumbing codes of practise.

- Avoid direct exposure to germicidal ultraviolet rays as they are harmful to the eyes and skin.
- Lamps lose dosage levels after 1 year of continuous service. It is unsafe practise to use lamps beyond the stated lifetime.
- Unplug the equipment before any servicing of the assembly.
- To be effective, the UV units require the water to be clear, use pre-filtration.
- Ultraviolet lamp and quartz sleeve are easily damaged. Hold lamp by ends only. For safety, wear protective gloves when handling quartz sleeves.
- Maximum pressure 100 psi or 6.9 Bar, the use of a pressure regulator is sometimes advisable to avoid pressure surges.
- Temperature range 2°C - 40°C. The system must be protected from freezing and is for use with cold water systems.



### Installation

1. Ensure the location is well lit, accessible, close to where the water enters the property and adequate space is left for replacement of lamps and sleeves.
2. Attach mounting clips to the wall.
3. Attach stainless steel reactor chamber to mounting clips.
4. Connect plumbing to inlet and outlet ports (for SUV-S-4-1/4 use 1/4" fittings provided, for use with 1/4" flexible tube).
5. Install quartz sleeve and lamp, as follows;
  - a) Remove aluminium nut.
  - b) Slide the quartz sleeve through the reactor chamber.
  - c) Roll the O-rings on to the ends of the quartz sleeve.
  - d) Slide the lamp into the quartz sleeve. **CAUTION:** Do not touch the lamp glass as any fingerprints or dirt will reduce the efficiency of the lamp and may cause it to fail.
  - e) Connect the lamp to the lamp socket.
  - f) Screw the nut on to the reactor chamber hand tight and place the PVC cap on the nut.
6. Turn on the water and inspect for leaks.
7. Plug the ballast into the electrical socket. Protection by a Ground Fault Interrupt (GFI) circuit is recommended.
8. Run water through the unit for 5-10 minutes before first use.

**Maintenance** - To ensure the system remains effective, routine maintenance must be performed. Frequency of maintenance will depend on source water quality and system usage.

- Clean quartz sleeves with an alcohol wipe or similar every 3-6 months.
- It is recommended that UV lamps are replaced within 9000 hours or 12 months (365 days x 24 hours = 8760 hours) of use to ensure the system continues to operate as intended.
- After 24 months, quartz sleeves should be inspected for scratches or reduced visibility, replace if necessary.



Clean quartz sleeve



Replace UV lamp



Replace quartz sleeve if damaged



### 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 the downstream of the system to relieve pressure.
3. Remove the PVC cap and aluminium nuts.
4. Carefully withdraw lamp approximately 5 cm from the reactor chamber.
5. While holding lamp end, carefully remove lamp socket from the exposed end.
6. Carefully withdraw the lamp fully from the reactor chamber.
7. Carefully remove O-rings from the ends of the quartz sleeve.
8. Carefully remove the quartz sleeve.
9. To reinstall follow instructions 8 through to 1 in reverse.

### Operation

- UV disinfection systems are designed for continuous use. There is a single LED light on the ballast to show the status of the unit, when lit this is either RED or GREEN.
- When a GREEN light is showing the unit is operational, although this does not indicate lamp life, annual lamp change required.
- If a RED light is shown and the alarm sounds the lamp or lamp socket needs attention or replacing. In the event of power loss to the unit the RED light will show and the alarm will sound briefly, then no light will show.