



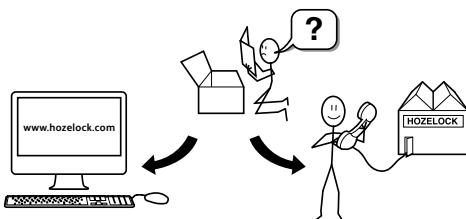
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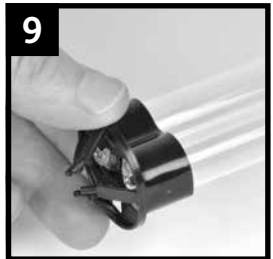
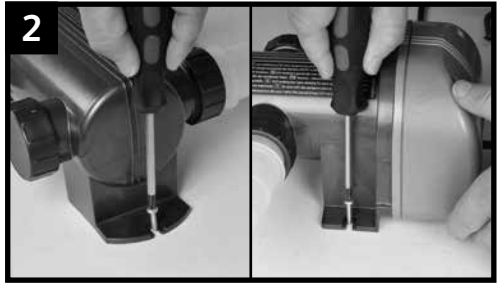
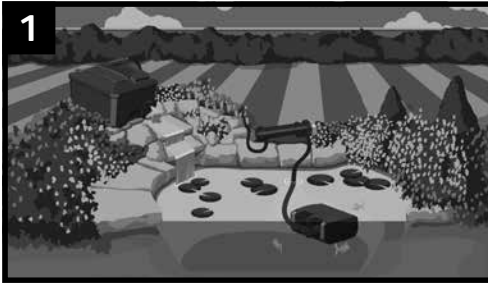
# VORTON 11/18/36/55



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## Installation & Operating Instructions



**READ INSTRUCTIONS CAREFULLY BEFORE ATTEMPTING INSTALLATION. KEEP THESE INSTRUCTIONS FOR FUTURE REFERENCE.**

This Vorton Ultra Violet Clarifier is electrically operated and designed to work with an existing pond filtration system. Typically this should consist of a mechanical and biological filter, filter pump and connecting hose. The unit is intended for household outdoor use.

### Attention: UV Caution

**⚠ WARNING: This appliance contains a UVC emitter. Unintended use of the appliance or damage to the housing may result in the escape of dangerous UVC radiation. UVC radiation may, even in little doses, cause harm to the eyes and skin.**

The Lamp is fitted with an interlock that will turn the lamp off in the event that the housing is inadvertently opened. When switched on, the lamp can be checked for operation by looking for a bluish glow from the translucent hosedetails. sight window. Do not run the Vorton UVC dry.

**⚠ WARNING: Do not operate the UVC emitter when it is removed from the appliance enclosure.**

### Important

This appliance must only be used by or under the supervision of a responsible adult who is capable of using the appliance in a safe way and who understands the hazards involved. Use and store this appliance out of reach of children and persons with reduced physical, sensory, or mental capabilities.

### Warning: Safety & Electrical Connections

**⚠ WARNING: ALWAYS UNPLUG OR DISCONNECT ALL APPLIANCES IN THE POND FROM THE ELECTRICITY SUPPLY BEFORE PUTTING YOUR HANDS IN THE WATER WHILST EQUIPMENT IS BEING INSTALLED, REPAIRED, MAINTAINED OR HANDLED.**

**⚠** The clear tube inside the unit is made from quartz glass and care should be taken during installation and maintenance. We recommend the use of eye protection and suitable gloves.

**⚠** The Vorton UVC is weatherproof but not submersible. Position the unit horizontally near the pond but not where it can fall into the water or become waterlogged.

**⚠ Important:** This product is designed to be permanently wired to the mains supply. For connection to the mains supply use only 3-core cable (ref H05 RN-F). This has a minimum copper cross-section of 0.75mm<sup>2</sup> with Polychloroprene-Rubber insulation. The termination to the mains supply should be:

- Permanent.
- Inside a dry weatherproof enclosure.
- Through a double pole switched fused spur to BS 3676.
- Fitted with a 3 or 5 amp fuse.

**⚠** Exposed cable runs should be sensibly positioned and protected by armoured conduit, especially if there is a risk of contact with gardening equipment such as forks and lawnmowers, or children and domestic animals.

**⚠** A 30mA maximum Residual Current Device (RCD) MUST be fitted to the mains supply.

**⚠** Permanent installations to the mains supply (hard wiring), must conform to the National and Local wiring regulations. If in any doubt about wiring to the mains supply, consult a qualified electrician or local electricity authority.

**⚠** Protect from frost. In cold winter weather (when fish are inactive and algae growth ceases) the unit may be switched off. It should then be removed, drained of water

**⚠ Installing this product in the garden is classed as 'notifiable' in the Regulations for England and Wales. The Regulations require you to tell your local authority building control department that you intend to install this product before installation. Your local authority will let you know how you can get your installation approved.**

### General Guidance

**Performance** - We recommend that for maximum performance this product should be used with a Hozelock Cyprio filter pump and filter. The unit should be run 24 hours a day throughout the feeding season. Failure to do this may result in green water and will invalidate the Clearwater Guarantee.

**Flow Rate** - For best results the entire contents of the pond should pass through the Vorton UVC every 1½ - 2½ hours. We recommend that your pump is sized to supply the required flow rate against the full hydraulic head (the vertical distance between the pond water surface and filter inlet, plus an allowance of 0.6-0.9m, (2-3ft), for hose friction losses).

**Pressure Rating** - These Vorton UVC models have a maximum pressure rating of 0.7bar (or 7m, 0.07Mpa). The unit is therefore unsuitable for filtration systems that produce high levels of back pressure such as sand filters.

**Pond Treatments** - Some medications/ treatments can degrade very quickly by UVC radiation. Switch off the unit during disease treatment.

Extra care should be taken with any hose connections as leaks will result in loss of water from the pond.

**Spare Parts** - Use only genuine Hozelock Cyprio replacement parts.

### Installation

**⚠** The Hozelock Cyprio Vorton UVC can be added to most filter systems before or after filtration, the effect is the same. The water must be pumped through the unit - not gravity fed. A typical installation is shown in fig. 1.

**⚠** Location - the unit MUST be installed horizontally and on a solid surface. The lid of a filter may be suitable if sturdy enough.

**⚠** To mount the unit, using 3 suitable fixings, screw the base to the mounting surface. (See fig. 2).

⚠ Cut two universal hose tails (supplied) to suit the correct size of hose. Fit the hose tails to the inlet and outlet threaded connections using the seals and threaded nuts supplied (see fig. 3). There are 4 openings on the main body of the UVC and the hose connections can be made to either side of the UVC. The inlet should be connected at the electrical head end of the appliance and the outlet at the opposite end. It is important that the outlet is at the opposite end of the main body so that water is forced to flow the full length of the appliance. Push the inlet and outlet hose onto the hose tails and secure with a suitable hose clip. We recommend the use of Hozelock Cyprio Hose and Hose Clips (available separately). Avoid kinks and sharp bends. Keep hose lengths as short as possible to minimise losses in flow.

⚠ To fit the lamp refer to Section **Maintenance**.  
 ⚠ Warning. This appliance must be earthed, and it is essential that connections are made using the following code. The BROWN lead must be connected to the LIVE terminal marked 'L'. The BLUE lead must be connected to the NEUTRAL terminal marked N The GREEN/ YELLOW lead must be connected to the earth terminal marked  $\equiv$ .



⚠ Refer to Section, **Safety and Electrical Connections**, for termination to the mains supply. The supply cable of this Vorton UVC cannot be Replaced, if the cable is damaged the UVC should be scrapped. We recommend that the pump and UVC are connected to the same supply so that they can be switched off together.

⚠ Switch the pump and Vorton on and check for leaks. Check the lamp is operating by looking for a bluish glow from the sight window

## User Instructions

Coupled to a Hozelock Cyprio pond filter and filter pump, a Vorton UVC should produce clear water within two weeks. However, UV light can delay filter maturation. When installing a new biological filter, allow 6 - 8 weeks before switching on the UVC. Speed up maturation by adding a maturing agent such as Hozelock Cyprio filter start. During maturation your pond may go green, but should be clear within two weeks of switching on your Vorton UVC.

Ammonia and nitrite levels may initially rise due to decomposition of algae trapped in the filter. (Check these levels with Hozelock Cyprio test kits). Should this occur, stop feeding until ammonia and nitrite levels fall, whereafter feeding may be gradually increased to normal levels.

Run the filter and Vorton UVC 24 hours a day during the feeding season. Should you need to switch off the pump and filter, also switch off the Vorton UVC. Continued filtration in winter is recommended. UVC treatment in winter is optional, but if there is any risk of freezing, the unit should be switched off, drained and removed. This will prevent damage to the product.

## Maintenance

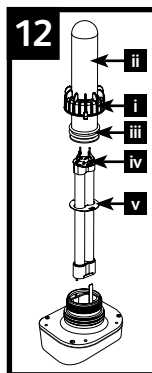
Always disconnect the electricity supply before starting to handle, maintain, repair or install any equipment in the pond. Read the relevant maintenance instructions before opening the appliance.

⚠ How well your Vorton UVC performs is related to the strength of the UV radiation produced. This will slowly decline from the day your lamp(s) are fitted. The UVC lamp has an effective life of 12 months. You need to change the lamp when there is a significant reduction in water clarity. Make sure this is due to an expired lamp and not a badly maintained filter or a dirty/limescaled quartz sleeve. Both can greatly reduce UV transmission into the water.

⚠ Change the lamp at the start of the new season. Even though the lamp still glows it may not be giving out any useful UV radiation.

⚠ **To fit a replacement lamp:**

Unscrew the four fixing screws securing the electrical head (See Fig. 4). The head should then pull gently away from the main body (See Fig. 5).



A flat head screwdriver can be inserted into the slots on either side of the electrical head in order to gently lever the electrical head away from the main body if necessary (See Fig.6). (Fig. 12) Unscrew the quartz tube locking collar (i). Gently hold the quartz tube (ii), lift up and remove together with its o-rings (iii) and locking collar.

Remove the old lamp by gently pulling it from its holder and remove the black protection cap from the end of the lamp (Fig. 12 (iv)) and remove the reflector plate (Fig. 12 (v)).

Dispose of the old lamp according to local regulations and fit the new lamp.

Refit the reflector plate and push the black cap on to the end of the lamp.

Slide the quartz tube down over the lamp. Ensure that the two o-rings at the base of the quartz tube are clean and free from debris.

Slide the locking collar down over the quartz tube and screw down. You should screw down until the stop of the locking collar hits the stop of the housing so that the collar cannot be screwed down any more.

Refit the electrical housing. The housing can only be fitted in one position so do not try to force it down. Once in position, replace the 5 screws. The screws must be fully screwed down to ensure that the interlock switch is activated.

⚠ Especially in hard water areas, the quartz tube may become covered in limescale, which will reduce efficiency. To gain access to the tube and lamp refer to section **Maintenance**. Clean the tube with a soft cloth and a gentle de-scaler, rinse in water before refitting. **DO NOT SUBMERSE THE UNIT IN WATER.**

⚠ Wash out the inside of the main body to remove dirt and debris.

⚠ Always check the system thoroughly for leaks when restarting.

## Winter Storage

When not in use, the unit should be removed, thoroughly washed, dried and stored in a dry frost protected area.

## Checklist

If your Vorton fails to produce clear water, please check the following table before contacting the Helpline.

CHECK	HOW
The UVC lamp is on and glowing	Make sure that the sight window is visible, so that you can see a bluish glow. This may be easier during late evening as it gets dark
The age of the lamp	Keep a record of the date the lamp was installed. We recommend a new lamp be fitted at the start of the new season
The Quartz Sleeve is clean	Refer to section <b>Maintenance</b>
That the pump is delivering sufficient flow of water	All the pond water should pass through the Vorton UVC once every 1 ½ - 2 ½ hours. i.e. a 10,000 ltr pond needs a flow rate of between 4000 and 6000 ltr/hr, while trying to achieve as near to the upper limit as possible
The pump is at the opposite end of the pond to the outlet of the filter	Inspection - This is to prevent short-circuiting of the filtration system, the same water being filtered over and over again, while other areas of the pond remain static and unfiltered

## Hozelock Cyprio 2 Year Guarantee

If this Vorton UVC (excluding Lamp) becomes unserviceable within 2 years of the date of purchase it will be repaired or replaced at our option free of charge, unless in our opinion it has been damaged. Liability is not accepted for damage due to accident, improper installation or use. Liability is limited to replacement of the faulty unit. This guarantee is not transferable. It does not affect your statutory rights. To obtain the benefits of this guarantee, firstly contact Hozelock Cyprio Consumer Services (0121 313 1122) who may request that the unit is sent along with proof of purchase directly to the address below.

## Contact

For product advice and spares please contact Hozelock Cyprio Consumer Services on 0121 313 1122 or visit [www.hozelock.com](http://www.hozelock.com)

	1559	1554	1557	1558
<b>Volts</b>	230v 50Hz			
<b>Power Consumption (w)</b>	11	18	36	55
<b>UV Size (w)</b>	11	18	36	55
<b>IP Rating</b>	IP67			
<b>Maximum Water Temperature</b>	35°C			
<b>Maximum Pond Size (LTR)</b>	8000	12000	24000	37000
<b>Recommended Flow (LPH)</b>	2000	3000	6000	9250

## Hozelock Cyprio Clearwater Guarantee

WE GUARANTEE YOU CLEAR WATER OR YOUR MONEY BACK for a Hozelock Cyprio Vorton UVC when used with a correctly sized Hozelock Cyprio filter. This guarantee runs for 12 months after purchase, provided that

- You have followed the installation and operating instructions.
- You are using equipment of the correct size, according to Hozelock Cyprio's sizing information.
- You consult our Helpline (0121 313 1122) early enough for any problems to be put right.
- The product has been returned undamaged.

A refund can only be authorised by Hozelock Cyprio and is made only at the place of purchase to the value of the purchase price of the UVC only. Please note that the Clearwater Guarantee does not cover loss of water clarity when blanketweed, as opposed to greenwater algae, is the cause.








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	<p> This marking indicates that this product should not be disposed with other household wastes throughout the EU. To prevent possible harm to the environment or human health from uncontrolled waste disposal, recycle it responsibly to promote the sustainable reuse of material resources. To return your used device, please use the return and collection systems or contact the retailer where the product was purchased. They can take this product for environmental safe recycling.</p>
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