## ClearTec UV-C



Models: 5W / 9W / 11W / 18W / 36W



### **Important Safeguards**

WARNING: The Ultraviolet globe used in this unit produces harmful ultraviolet radiation. So caution needs to be taken as follows. Never look directly at the lamp, as damage to your eyes will occur. Always disconnect the power supply before opening the unit for service. Failure to do so will expose the user to harmful UV light.

A quick glance to ensure it is working is harmless.

# WARNING: To guard against injury, basic safety precautions should be observed, including the following:

This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge unless they are supervised adequately by a responsible person to ensure that they can use the appliance safely. Children should be supervised to ensure that they do not play with the appliance.

Read and follow all safety instructions before using this appliance. There maybe additional electrical safety instructions relevant to your country on page 4.

**Warning:** To avoid possible electric shocks, special care should be taken where water and electricity are combined, for each of the following situations do not attempt repairs yourself. Return the appliance to an authorised dealer for servicing.

If you have any doubts about the electrical installation you should consult a qualified electrician.

Please observe local laws and regulations regarding the installation of ponds and pond equipment. Always abide by these regulations. If in any doubt please consult your local government planning department or authority.

This appliances is intended for outdoor garden pond use only, don't use the appliances for any other purpose. The appliances must be installed with a residual earth leakage circuit breaker (RCCB OR RCCD of 30mA in the supply line to the appliance.

If the appliance shows any sign of abnormal water leakage or malfunction, immediately disconnect it from the power source. Do not attempt repairs yourself.

Carefully examine the appliance after installation. It should not be plugged in or connected to the mains power supply when there is water present on parts which are not supposed to be wet.

Do not operate the appliance if it has a damaged power supply cord or plug, or it is malfunctioning, or has been dropped or damaged in any manner. If the plug or socket does get wet, do not unplug or disconnect the appliance from the socket. Disconnect the fuse or circuit breaker that supplies the power to the appliance, then unplug and examine for presence of water in the socket.

To avoid the possibility of the appliance plug or mains connection socket getting wet, position the switch box or outdoor weather proof socket at least 2 metres from the pond side. It should also be raised above possible flooding zones.

Always disconnect the appliance from the electrical outlet when not in use, before putting on or taking off parts, before any type of maintenance or cleaning. Never yank or use the power cord to pull it from the outlet or from the pond. Only carry by the main appliance body.

# NEVER CARRY THE FILTER BY THE ELECTRIC SUPPLY CABLE THIS WILL DAMAGE THE UV-C AND MAKE IT UNSAFE.

Do not use the appliance for reasons other than the intended use. The use of attachments that are not sold or recommended by the appliance manufacturer may cause the product to be unsafe. We strongly recommend against it.

Do not install or store the appliance where it will be exposed to weather or temperatures below freezing.

Read and observe all the important notices on the appliance type plate.

#### Maximum main power supply 10 meters.

The appliance comes with 10 meters of mains power cable. It should not be extended.

The external flexible cable or cord of this UV-C cannot be replaced. If the cord is damaged the UV-C should be scrapped.

Appliance shall only be used with rated voltage and frequency. 220 - 240V~50HZ

For Guarantee Conditions, please refer to the Guarantee form on page 10 of this instruction manual.



Warning:

This appliance must not be disposed of together with domestic waste. It must be disposed of at an authorised centre set up for the recycling of electrical and

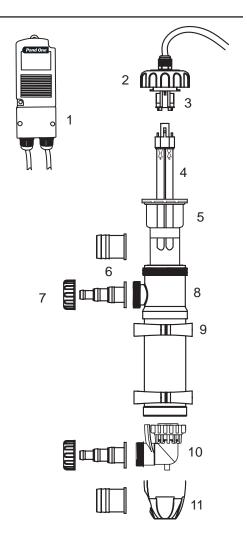
electronic appliances. By collecting and recycling waste, you help save our natural resources. Please Make sure this product is disposed of in an environmental friendly and safe way.

## **Before First Use / Preparation**

Read and follow all the instructions, even if you feel you are familiar with the product. Find a place to keep the instructions handy for future reference. Your attention is drawn particularly to the sections concerning "IMPORTANT SAFEGUARDS" and "POND ONE GUARANTEE". Please ensure you retain your original purchase receipt in the event that guarantee service is required.

Carefully unpack the UV-C making sure you keep all the packing material until all the parts of the product have been found and the product has been assembled.

### **Know Your UV-C**



Carefully unpack the UV-C making sure you keep all the packing material until all the parts of the product have been found and the product has been assembled

This product is shipped to you in a factory sealed carton. Should the product malfunction in any way or if the unit is damaged and requires replacement, contact the retailer where the product was purchased for inspection.

The plug supplied with this product is a sealed plug and we do not recommend removing or changing it.

The external flexible cable or cord of this UV-C cannot be replaced. If the cord is damaged the UV-C should be scrapped.

Pond One ClearTec UV-C units ensure a clear and healthy pond for your fish.

Water is pumped through the UV-C device where it is exposed to UV rays at a specific wave length. The wave length of the UV globe targets algae and bacteria thereby limiting their growth. In turn this provides a clear and healthy pond.

- 1. Ballast
- 2.Lid
- 3. Tombstone
- 4. Ultraviolet Globe
- 5. Quartz Sleeve
- 6. Hosetails
- 7. Hosetail Screw lock
- 8. Body
- 9. Mounting Bracket
- 10. Directional Outlet
- 11. End Cap

# Connecting your appliance to the mains electricity supply - Country specific instructions

Always check local government regulations prior to installing your Pond One product

#### **United Kingdom**

According to government guidelines pond equipment intended for permanent installation outside must be supplied without a fitted plug.

These appliances are intended for connection to or hard wiring to the mains supply by means other than a conventional plug and socket.

This means either a suitable specialist weather proof outdoor socket or a hard wired socket indoors must be used. All cables from the appliance to the socket should be led through a suitable approved conduit and buried in the ground or raised above the ground For ease of visibility, thus avoiding accidental damage from actions like digging of the ground or mowing of grass.

An approved earth leakage circuit breaker (RCCB) or otherwise known as an Residual Circuit Current Device (RCCD) must be fitted in the electricity supply line.

The appliance should be connected to the mains supply using the following colour coding. Refer to Diagram 1

Red or brown wire - to the live connection 'L'

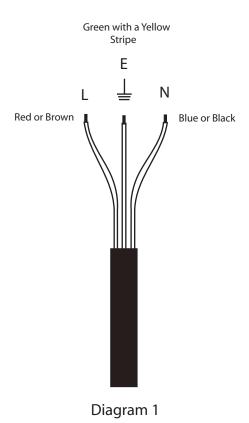
Blue or black wire - to the Neutral connection 'N'

Green with Yellow stripe wire - to the Earth connection 'E'

IF YOU ARE IN ANY DOUBT ABOUT INSTALLING YOUR APPLIANCE YOU SHOULD CONSULT A QUALIFIED ELECTRICIAN.

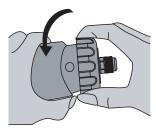
#### Australia, New Zealand and Hong Kong

In Australia, New Zealand and Hong Kong all products are supplied with fitted plugs. This plug should **NOT** be tampered with in any way or removed. Removal or tampering with the plug invalidates our guarantee offered with this product.

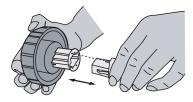


## **Setting Up Your UV-C**

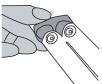
- 1. The UV globe and the hosetails needs be installed prior to setting up the unit.
- Hold the lid of the UV-C body where the power cord is. Turn the UV-C body anti-clock wise to remove it.



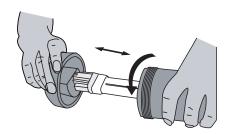
- 3. Remove the UV globe from its packet. **DO NOT** touch the globe. Use a soft tissue or cloth to hold the globe.
- 4. Insert the globe into the tombstone in the lid. It does not matter which way it is inserted.



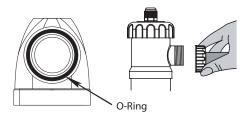
5. ClearTec 18W and 36W units are supplied with a rubber globe support; this prevents the globe moving once it is inserted in to the quarts sleeve. Place the globe support on the end of the globe.



- 6. You will notice an O-ring at the top of the UV-C body. Prior to reinstalling the lid use a fish safe lubricant to lube this O-ring. This will provide a water tight seal for the UV globe and make removing the lid easier when maintenance or globe replacement is required.
- 7. Replace the lid with the UV globe inserted. Be careful when inserting the globe into the quartz sleeve as they are both very delicate.



- 8. Tighten the lid hand tight. No tools are required.
- 9. Decide on which outlet/inlet size to use. 5 & 9 Watt units have a choice of 1/2" (13mm) 3/4" (19mm) 1" (25mm) or 1 1/4" (32mm). Larger units 11, 18 & 36 Watt have 1" (25mm) 1 1/4" (32mm) 1.5" (37mm.) Ensure you remove the smaller size fittings off your stepped hose tail if they are not being used. (A hack saw is recommended for this) Failure to do so will result in significant water flow loss.
- 10. On the body of the UV-C, where the inlet and outlet attach, there is an O-ring. It is very important this O-ring is in position and lubricated before the hose tails are fitted.



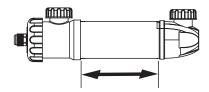
11. If required, you can now rotate one of the outlets to suit your installation. Simply hold the body of the UV-C unit with one hand and rotate the base (the opposite end of where the power cord exits) of the unit to suit your desired angle with the other. This is easier if the hosetails are attached. Ensure they are attached firmly before using them as leverage.



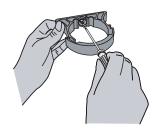


## **Setting Up Your UV-C**

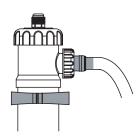
12. Measure the distance illustrated below.



13. Your UV-C is supplied with 2 mounting brackets. Using the measurement obtained in the previous step, screw the mounting brackets into the desired location at the appropriate distance apart; keep in mind the unit is going to have water passing through it at a rapid rate. This is also going to add weight to the unit so ensure it is mounted to something solid.



- 14. Insert the UV-C unit. Ensure the brackets "click" together.
- 15. Cut your hoses and attach them to the UV-C inlet and outlet. Use metal hose clamps to secure the hose. Be careful not to over tighten the clamps as you may crack the hosetails.



16. To achieve the best results, the water should pass through the UV-C before it enters your filter. The UV-C should be mounted on the inlet side of your filter.

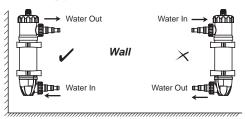
- 17. Turn the pump or filter on, allow the unit to fill with water and check for leaks around the inlet, outlet and the lid.
- 18. Position the ballast. It is a water proof unit; however do not expose it to weather. If it is going to be placed outside ensure it is covered. If it is being placed inside an aquarium cabinet do not put things on top of it as it does get hot.
- 19. Turn the UV-C on at the main power supply and ensure it is working.

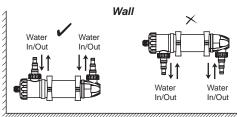
**CAUTION:** Ultraviolet light can harm your eyes. Do not look at the clear hosetails for extended periods of time.

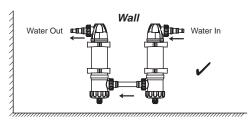
**NEVER** operate the unit when it does not have water passing through it.

Small rocks may damage the unit. Therefor ensure the area where your pump sits is free from all small solid objects and does not draw them into the unit.

#### **Mounting your UV-C**





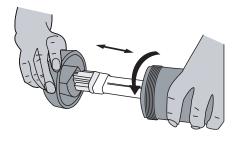


## Cleaning Your UV-C / Replacing the UV Globe

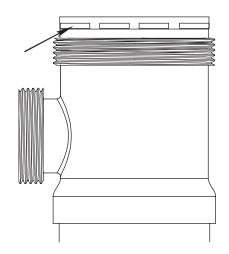
The UV-C unit does not require a great deal of continual maintenance. The most important thing is to ensure the UV globe is operating. The quartz sleeve will require cleaning occasionally and the UV globe will need to be replaced every 12 months or at the beginning of every summer season.

To clean the quartz sleeve or replace the UV globe refer to the following instructions.

- 1. Turn the main power supply off to both the UV-C and the pump/filter In that order. **DO NOT** allow the UV-C unit to operate without water running through it.
- 2. Remove the hose clamps (if used) and detach the hoses from both the inlet and the outlet.
- 3. Remove the unit from its mounting brackets. (If applicable)
- 4. Take the unit to the sink or a clean area free of soaps and detergents.
- 5. Open the unit by holding the lid and turning the body. This will prevent the power cord getting tangled.



- 6. Carefully remove the body and place the lid with the globe attached somewhere safe.
- 7. To remove the quartz sleeve you will require a flat head screwdriver.
- 8. You will notice several rectangle gaps between the clear plastic top of the quartz sleeve and the black plastic body as indicated by the arrow in the following diagram.



- 9. Inset the head of the screwdriver into one of the gaps and gently pry the sleeve from the plastic body. You may need to gently pry more than one gap in order to remove the sleeve.
- 10. Remove the sleeve and clean it gently with a soft cloth. Do not use abrasives and avoid using hot water.

#### DO NOT GET WATER INSIDE THE SLEEVE.

- 11. Do the same for the UV-C body.
- 12. When reassembling the unit ensure a fish safe lubricant is used to lube both O-rings. There is one at the top of the quartz sleeve and another at the top inside the body.
- 13. Reassemble the unit in reverse order.
- 14. Turn the pump/filter on and check the unit for leaks before restoring power to the UV-C.

#### **CAUTION:**

**NEVER** run the UV-C without water passing through the unit.

## **Troubleshooting**

#### MY UV-C IS LEAKING.

- 1. Check that the hosetail locks are firmly closed.
- 2. Check the O-ring between the hosetail and the body as it may have split or it may require lubrication. Use a fish safe lubricant.
- 3. Check the O-ring between the lid and the body as it may have split or it may require lubrication. Use a fish safe lubricant.
- 4. Check the body at the seams.
- Check the quartz sleeve. The plastic part of the sleeve may have become brittle with age and developed hair line cracks or the glass may have cracked.

#### MY UV-C IS NOT WORKING.

- 1. Ensure the UV-C is switched on at the main power supply.
- 2. Replace UV globe.
- 3. If the unit still does not work, the ballast may be malfunctioning. Take the unit to your supplying retailer for inspection.

## MY UV-C GLOBE IS WORKING HOWEVER THE WATER HAS GONE GREEN.

- Disassemble the UV-C and clean the quartz sleeve. Refer to section "Cleaning Your UV-C" on page 7 of this instruction booklet.
- 2. Replace UV globe. All UV globes should be replaced after 12 months. Refer to section "Cleaning Your UV-C" on page 7 of this instruction booklet.

# SINCE FIRST INSTALLING MY UV-C I HAVE NOT BEEN ABLE TO ACHIEVE CLEAR WATER OR GOOD WATER QUALITY.

It could be the UV-C is too small for the biological loading being put upon it. This can be because the pond is too large, too many fish or more often the case over feeding of the fish which leads to a lot of uneaten food sinking to the bottom of the pond and decaying. Decaying food and leaves etc, causes the filter to work much harder. If the UV-C is only just big enough for your pond size this can mean that it can't cope.

Recommended action: Clean pond and feed only what the fish consume in a few minutes, thus reducing the biological load on the UV-C and improving the all round health of the pond. In essence a UV-C will help maintain a clear healthy pond, it can not turn an extremely dirty soiled pond in to a pristine one without a lot of help from the pond owner.

Other things which need to be taken into consideration include things like: the environment in which the pond is situated! Is it close to a high traffic or dusty area? Is the pond situated in an area which receives a lot of sun light throughout the day? These factors and others can also prevent the UV-C from working to its full potential.

If the above actions do not solve the problems you are experiencing please consult your supplying retailer.

#### **CAUTION:**

- a. **NEVER** run the UV-C without water passing through the unit.
- b. Small rocks may damage the unit. Therefore ensure the area where your pump sits is free from all small solid objects and it does not draw them into the unit.
- c. **NEVER** look at the ultraviolet light for long periods of time, as it may damage your sight. A quick glance to ensure it is operating is harmless.

Precision Manufactured in the P.R.C. Designed in Australia by Aqua One Distributed in Australia by: Kong's (Aust.) Pty. Limited 48 Williamson Rd. Ingleburn 2565 NSW Australia

Distributed in New Zealand by: Kong's (NZ) Limited 52 Glenlyon Avenue. Greerton Tauranga New Zealand

Distributed in Hong Kong by: **Kong's Aquarium Supplies Co., Ltd** No 31, 3/F Thriving Industrial Centre 26-38 Sha Tsui Road, Tsuen Wan Hong Kong

Distributed in the UK by: Kong's (UK) Limited, C/O Aqua Pacific UK Ltd. PO Box 268 Romsey Hampshire SO51 0WW United Kingdom



220 - 240V ~ 50HZ

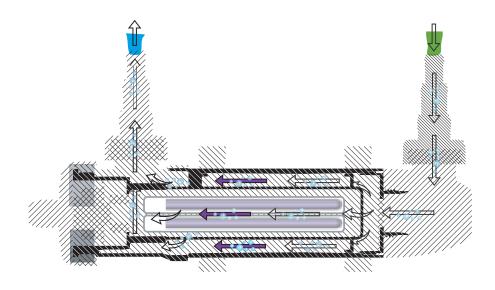




### **VOLTAGE: 220 - 240V~50HZ**

ClearTec UV-C	Dimensions		Maximu **	m Pond Sizes in litres	Suggested	Installation Information				
Model	Length cm	Dia cm	V	* *	* * * V•V•V•	Wattage	Fittings in and out	Cable Length	Max Flow Litres / hour	
5W	35.5	8.1	2000	1500	1000	5 watt	1/2" - 1.1/4"	10m	1000 L/hr	
9W	35.5	8.1	6000	4500	3000	9 watt	(13 - 32mm)	10m	3000 L/hr	
11W	44	8.5	8000	6000	4000	11 watt	1" - 1.5"	10m	4000 L/hr	
18W	44	8.5	15000	12000	7500	18 watt	1" - 1.5"	10m	6000 L/hr	
36W	62.5	8.5	30000	22500	15000	36 watt	(25 - 37mm)	10m	15000 L/hr	

Key	
*	Ornamental pond with plants and few fish and less than average exposure to sun - no more than 6 hours a day full sunlight exposure
* *	Typical pond with plants and average fish contents and average sun exposure
* * *	Heavily stocked pond with plants and larger fish or greater than average sun exposure



## Pond One - Guarantee 2 + 1 Year

The additional 1 Year Extended Guarantee applies when you REGISTER with Pond One. See enclosed for details.

### ATTENTION! PLEASE RETAIN YOUR PROOF OF PURCHASE AND GUARANTEE

Congratulations on your purchase of a quality Pond One product. This product will last you many years under normal usage.

#### About this Guarantee

The Manufacturer or Distributor, of Pond One goods, is collectively known herein as "Pond One". Please refer to contact details for Pond One below or on the applicable Pond One website. Any product that is covered by its own Guarantee (as enclosed with the product) is subject to the conditions of that Guarantee.

The benefits given to the purchaser, under Guarantee, are in addition to all other statutory rights and remedies which the purchaser has in respect of goods under legislation in the applicable country of purchase. This Guarantee shall not affect any such rights and should be read subject to such legislation.

#### 1.0. Terms and Conditions of Guarantee.

- 1.1. Pond One warrants to the purchaser, for 2 Years from date of original purchase, to repair or replace goods where fault is found due to defective materials or faulty workmanship and where goods do not operate in accordance with the instructions.
- 1.2. All claims for repair or replacement must be made at place of purchase.
- 1.3. The original and dated Proof of Purchase (receipt) must be supplied with all goods claims. Please also provide this Guarantee where possible.
- 1.4. All goods subject to claim under Guarantee should be prepared for transportation in the original packaging or other comparable packaging which offers the same degree of protection.
- 1.5. Where goods are repaired or replaced under Guarantee, these goods are Guaranteed for the remainder of either the original Guarantee or Extended Guarantee period.
- 1.6. Where claims on inspection reveal goods are in normal working order, Pond One will request reimbursement of all reasonable costs incurred.

#### 2.0. Other Terms and Conditions - Extended Guarantee

- 2.1. The Extended Guarantee period is for an additional 1 Year and commences on expiration of the standard guarantee period.
- 2.2. Application for Extended Guarantee is FREE of any registration cost to the purchaser on completion of the Extended Guarantee questionnaire which may be found with the Pond One goods purchased or on the applicable Pond One website. (See below)
- 2.3. Upon receipt and acceptance of the questionnaire, Pond One will forward a Certificate of Extended Guarantee to the purchaser.
- 2.4. For more information on how we collect, hold, use and disclose personal information provided to us, please refer to our Privacy Statement on the Pond One websites or write to our Privacy Officer, in your country of purchase.
- 2.5. Where Pond One determines goods are being used in a manner contrary to the instructions, specifications or this Guarantee. Pond One reserves the right to terminate Extended Guarantee for such goods and will provide written notice to the purchaser.

#### 3.0. Exclusions and Limitations

Where permitted by local law, the following exclusions and limitations apply in regard to the Guarantee:

- 3.1. Goods claims where fault is due to, but not limited by a) misuse b) neglect c) abuse d) fire or flood e) normal wear and tear f) accidental breakage g) Acts of God h) mains voltage fluctuation or supply problems i) connection to any voltage other than what is stated on the rating plate j) modification or tampering to electrical cord or plug, k)vermin, insects or foreign object I) liquid spillage or submersion of goods where goods are not designed to sustain such use or duress.
- 3.2. Where inspections reveal goods are in normal working order including where noise or vibration is consistent with normal goods operation.
- 3.3. Attempted repairs or modifications by unauthorised persons, including but not limited to modifications to the electrical lead or plug.
- 3.4. Where the goods factory rating plate has been removed, altered, damaged or is rendered illegible.
- 3.5. Where goods are not installed, operated or maintained in accordance with Pond One's goods instructions, specifications or this Guarantee.
- 3.6. Replacement or repair of worn consumables or replacement of lost goods, parts or components.
- 3.7. Costs associated with goods transportation, removal, installation, postage or cost of insurance.
- 3.8. Any damage incurred whilst installing, transporting or moving the goods.
- 3.9. Subject to certain local statutory rights and obligations to the contrary, and this guarantee shall not affect those rights or obligations, where, to the full extent permitted by law:
- 1. all express and implied warranties and conditions under statute or general law, are expressly excluded and Pond One, where permitted, will limit liability as follows and at Pond One's option to: in regard to goods either a) the replacement of goods or supply of equivalent goods b) the repair of goods or the cost of replacing the goods or of acquiring equivalent goods OR in regard to services either c) the re-supply of services d) the cost to re-supply services.
- 2. Pond One will not be liable for any loss or damage, including consequential loss or damage either directly or indirectly, or for any incidental expenses, of any kind, and in any way whatsoever.
- (1) Consumables include items such as quartz sleeves, globes, O-rings, hosetails and other plastic fittings.

#### Pond One may be contacted in: Australia Kong's (Aust.) Pty. Limited PO Box 863, Ingleburn 1890 NSW Australia www.pondone.com.au

## **Pond Log**

Fish Informat	ion	
Type of Fish	Size	Date Added
!		· · · · · · · · · · · · · · · · · · ·
		! !
		! !
		! !
 		! L
		! L
		! L
		: 
<u> </u>		
Food	Frequency	Amount
<u></u>		
		! !
		; ; ;
1	; ; ;	! ! !
	Fish Informat Type of Fish  Food	Fish Information Type of Fish Size  Food Frequency

## **Pond Log**

Test Date	°С	рН	Ammonia	Nitrite	Nitrate	Carbonate Hardness	Other	Other	Other	Other