

Pro Clear
Advantage



TMC

Instructions for Installation and Use

This Pro Clear Advantage unit is supplied with two universal hosedails for connecting the clarifier to your water supply, two blanking caps for blocking the unused inlet/outlet, two brackets for mounting the unit and electrical connections which are similar to those found in a domestic plug. Installation is explained below, but please read the following safety information first.

Important Safety Information - Please Read Carefully

- Never look directly at an illuminated UV lamp.
- Do not run this unit dry. Do not cover this unit.
- Always isolate the unit from mains electricity and turn off the water supply before carrying out any maintenance.
- Always disconnect all pond appliances from the mains supply before putting your hands into the water.
- Use in the area of the garden pond only if the installation complies with the relevant wiring regulations.
- Power must be supplied through a Residual Current Device (RCD) with a rated residual operating current not exceeding 30mA.
- This unit must be earthed. Never use a fuse larger than 3 amps.
- Rating: 220-240V, 50Hz. UV30, 35-43 watt. UV55, 50-62 watt. Class 1. IP44.
- The unit must not be submerged in water.
- If the quartz sleeve is cracked, replace it immediately.
- The unit must be either fully frost protected or taken inside during the winter months.
- Young children should always be supervised near water.



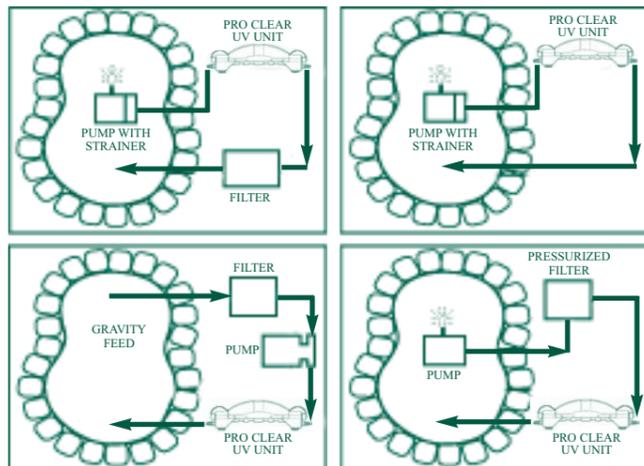
Product Information

- This unit is manufactured and conforms to BS EN 60335-1 and BS EN 60335-2-55.
- This unit conforms to the low voltage directive (safety) CEE 73 23.
- This unit conforms to the EMC directive CEE 89 336.
- This unit is CE approved.

POSITIONING THE PRO CLEAR ADVANTAGE UNIT

Pro Clear Advantage units are weatherproof but not waterproof. The unit can be positioned either on its base on a flat surface, or attached horizontally to a vertical surface using the brackets provided. It must not be submerged in water or placed in a position where water may collect around the unit.

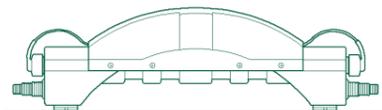
If installing the unit prior to or without a filter, it is important that a pre-filter is used on the water pump to prevent excess solids from being pumped into the unit. The unit may be connected to the water supply using one of the options below:



MOUNTING ON A HORIZONTAL SURFACE

Caution: To prevent this unit falling into water, do not install it above or alongside your pond. Do not make the electrical connection to your unit until it has been plumbed in and fixed securely.

If the unit is to be mounted on a flat surface the supplied blanking caps should be screwed into the two lower inlets/outlets as shown in the diagram on the next page.



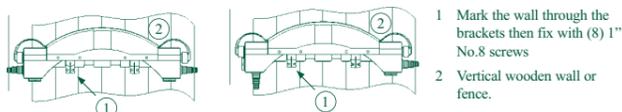
The two universal hosetails should then be screwed into the other inlet/outlet at either end of the unit. Hosetails should be tightened using hand pressure only. The blanking caps should be inserted and also only tightened by hand. Ensure that the "O" rings are in position before assembling. Do not use jointing compound or PTFE tape. Please note that there is no correct flow direction through the unit. Either end of the unit may be used as the inlet or outlet. However, the flow must be from one end of the unit to the other to ensure correct operation.

To prevent the unit inadvertently being dropped into the pond, we strongly recommend that it is securely positioned at least 2 metres from the edge of the pond. Any flexible cabling used between the unit and the permanent wiring should also be kept to a minimum length. We recommend a maximum length of 1.5 metres.

MOUNTING ON A VERTICAL WALL

Caution: To prevent this unit falling into water, do not install it above or alongside your pond.

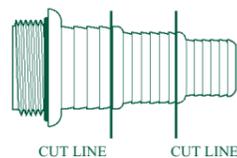
The unit may be mounted horizontally onto a vertical wall using the mounting brackets included (see diagram below). The 8 screws provided are suitable for fixing the brackets to a wooden surface. You should ensure that the unit is the correct way round with the wall spacers positioned at the back of the unit so that the unit sits securely. The water connections may be made in either of the inlets/outlets on the bottom of the unit, the ends of the unit, or a combination of both (see diagram below). Please note that there is no correct flow direction through the unit. Either end of the unit may be used as the inlet or outlet. However, the flow must be from one end of the unit to the other to ensure correct operation and the two blanking caps should be fitted to the inlet and outlet not being used. Hosetails should be tightened using hand pressure only. The blanking caps should be inserted and also only tightened by hand. Ensure that the "O" rings are in position before assembling. Do not use jointing compound or PTFE tape.



CONNECTION TO THE WATER SUPPLY

Connection with flexible hose

The Pro Clear Advantage unit is supplied with two universal hosetails to take 1", 1 1/4", and 1 1/2" diameter flexible hose. If you are using one of the two larger sizes, the smaller sections of the hosetails must be cut off to ensure sufficient water flow and prevent possible damage to the pump. We recommend that you use the largest diameter hose available. The hosetails should be trimmed away from the unit as shown in the diagram below. Using a hacksaw, carefully cut off the excess hosetail, ensuring that the sections are cut off at the second ridge and that the cut follows the line of the ridge.



Once the hosetails have been trimmed, attach them to the unit as described above. Secure the hosepipe to the hosetail with a stainless steel hose clip. The hosetails supplied are made from a translucent material which will glow when the unit is operating correctly.

Connection using rigid pipe

The unit may also be rigid plumbed by the use of an adaptor (not supplied). The inlets and outlets of the unit are 1 1/2" BSP thread and an adaptor or union (1 1/2" male thread to female plain) to suit your pipework should be obtained from your nearest supplier of plumbing fittings.



FLOW RATES

Both of our Pro Clear Advantage units have a maximum flow rate as listed below. Please note that for optimum performance we recommend that you pass the entire volume of your pond through the UV unit approximately once every two hours. Please also note that we recommend a minimum flow rate equivalent to passing the entire pond volume through the unit once every three hours.

Unit	Maximum Flow Rate
Pro Clear Advantage UV30	3,000 Imp. gallons/13,500 litres per hour.
Pro Clear Advantage UV55	4,000 Imp. gallons/18,000 litres per hour.

SYSTEM PRESSURE

The unit has been designed for use with all types of domestic garden pump (working pressure not to exceed 0.7 bar). Advice should be sought from your dealer if the unit is to be subjected to abnormal conditions.

CONNECTION TO THE ELECTRICITY SUPPLY

If in doubt consult a qualified electrician.

Caution: Use in the area of the garden pond only if the installation complies with the relevant wiring regulations. Please consult a qualified electrician.

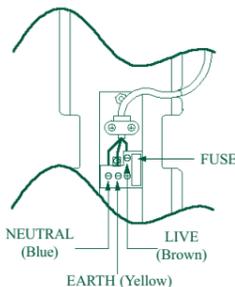
Caution: Always disconnect all pond appliances from the mains supply before putting your hands into the water.

Caution: Power must be supplied through a Residual Current Device (RCD) with a rated residual operating current not exceeding 30mA.

All electrical installations and wiring must be adequately protected to prevent any damage.

Mains electrical cable is not supplied with the unit. This unit must be connected to permanent wiring. A switch with 3mm contact separation must be provided in the fixed wiring to provide disconnection from the electricity supply.

Remove the lid by unscrewing the four screws on either side of the Pro Clear Advantage unit. Feed one end of the cable through the cable clamp and connect to the junction block as shown above. Before replacing the cover, feed the cable out of the unit via the cable channel in the main body. Replace the lid and fasten the screws.



INTERNAL FUSE REPLACEMENT

Always isolate the unit from the mains supply before undertaking any maintenance. All units use a 3 amp fuse. Never use a larger rated fuse.

ROUTINE MAINTENANCE

The UV lamp inside the Pro Clear Advantage unit has a usable life of approximately 7000 hours. As green water is only usually a problem during spring and summer, the lamp only needs to be replaced once a year in the spring (see below).

As already mentioned it is essential that the unit is protected from frost during the winter months, or disconnected from water and electricity supplies and stored indoors. During the spring and summer season, the quartz sleeve, which separates the UV lamp from the water passing through the unit, will need to be cleaned two or three times (see below). This is essential, as dirt building up on the quartz sleeve will inhibit the penetration of the ultraviolet light into the water and affect the efficient working of the unit.

IMPORTANT

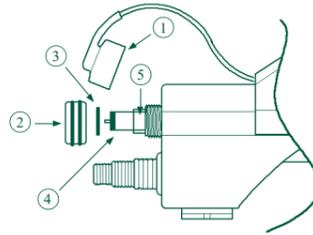
The black plastic body and any hoesetails supplied with this unit are manufactured from polymers that have been specifically stabilised, to protect them from the effects of UVC light wavelength emitted from the lamp. Despite this UV protection the plastic body and hoesetails will be eroded by the UVC and the water flow. As a matter of course they should be inspected whenever a lamp change is carried out, to ensure that they are not showing excessive wear and tear. Low cost replacements are available from your local aquatic supplier.

LAMP REPLACEMENT AND QUARTZ CLEANING

Always isolate the unit from the electricity and water supplies before carrying out any maintenance on the unit.

Peel back the rubber end caps from either end of the unit and carefully pull off the white plastic electrical end caps. Carefully slide the lamp out of the unit. Next, unscrew the two compression fittings located at either end of the main body (see diagram) and slide off the two "O" rings from either end of the quartz sleeve. Carefully slide out the quartz sleeve. Clean the sleeve and polish with a soft cloth or paper towel. If you live in a hard water area there may be some limescale on the quartz sleeve; this can be easily removed by soaking the sleeve in a proprietary plastic kettle descaling solution. Failure to remove the limescale will limit the effectiveness of the UV lamp.

- 1 Rubber end cap covering white electrical end cap.
- 2 Compression fitting.
- 3 'O' ring.
- 4 UV lamp.
- 5 Quartz sleeve.



ASSEMBLY PROCESS

Slide the quartz sleeve into the unit. Ensure that you locate the two "O" rings carefully on the ends of the quartz sleeve. Failure to do so will result in leaks when the water is turned on. If you are carrying out the annual lamp change, use new "O" rings. Firmly hand tighten the compression fittings. Replace the lamp or fit a new one. Relocate the white electrical end caps onto the pins of the lamp and slide the rubber endcaps over the compression fittings. Reconnect and turn on the water supply, carefully checking for any leaks before switching on the electricity supply.

TROUBLE SHOOTING

Some Common Questions:

How can I tell if the unit is working?

The translucent hosetails will glow when the unit is operating correctly. In strong sunlight this may not be apparent, but at night and at low light levels the glow is easily detectable.

How long after I install the unit will my pond become clear?

There are many factors which control this, including the levels of nutrients available to the algae, the water temperature and the level of sunlight. Assuming that the correct size unit has been properly installed most ponds should clear within 3-14 days. However, please allow a full six week period for the unit to take effect.

The lamp is not working. Even at night the hosetails are not glowing. What is wrong?

First check the power supply and the fuse. Check that the white electrical end caps are correctly located on the lamp pins. If it still doesn't work, remove the lamp (as detailed on the previous page). Check that the lamp and the quartz sleeve are not broken. Remember to switch off the electricity and water supplies before carrying out any maintenance on the unit.

The unit worked well when I first installed it but recently my pond has gradually gone green again - what is wrong?

This usually indicates that the quartz sleeve has become dirty and requires cleaning (read maintenance instructions). Also make sure you have the right model for your pond size by checking the table on the front inside cover of this leaflet.

Does a Pro Clear Advantage unit put anything into the water, and will it harm anything living in the pond like frogs, newts, plants or fish?

Ultraviolet lamps leave no residues, and only affect the water pumped through the unit. Unlike many chemical treatments, your Pro Clear Advantage unit will not harm the plants and animals living in the water.

How long can I leave the unit running?

Pro Clear Advantage units should be run 24 hours a day, every day, from mid March to early October, depending on the weather conditions. If the unit is frost protected it may be left running throughout the winter. Otherwise, the unit should be removed, drained and stored safely for the winter.

Can I use my Pro Clear Advantage unit if I am using any treatments for my fish?

From our own experience of using a wide range of treatments and medications, we have found no harmful effect from running Pro Clear Advantage units at the same time as treating a pond, although some medications may be broken down a little quicker than normal. Always check the manufacturer's instructions before using any water treatment.

Can I bury the unit underground?

Do not bury the unit. It could become waterlogged at a later date, which would be dangerous.

General Note: Large fish such as Koi can cause murky water by stirring up the bottom of the pond. This murky water should not be confused with suspended algae.

GUARANTEE

PLEASE NOTE that the 12 month guarantee cover for the unit does not include serviceable parts, ie. lamp and the quartz sleeve.

GARANTIE

VEUILLEZ NOTER que la Garantie de 12 mois de l'unité ne couvre pas les pièces remplaçables, c'est-à-dire la lampe et le manchon en quartz.

GARANTIE

ES IST ZU BEACHTEN, daß sich die 12-Monats-Garantie für das Gerät nicht auf die wartbaren Teile, wie die Lampe und die Quarzhülse, erstreckt.

GARANTIE

N.B.: In de garantie van 12 maanden voor het apparaat zijn niet opgenomen de onderdelen die onderhouden kunnen worden, zoals de lamp en de kwartsmof.

GARANZIA

NOTARE che la garanzia di 12 mesi per l'apparecchiatura non comprende i componenti soggetti a normale usura, quali la lampara e il manicotto di quarzo.

GARANTÍA

Recuerde por favor que la garantía de 12 meses de la unidad no incluye piezas que entran en el servicio rutinario de mantenimiento, por ej. lámpara y mango de cuarzo.



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Open between

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