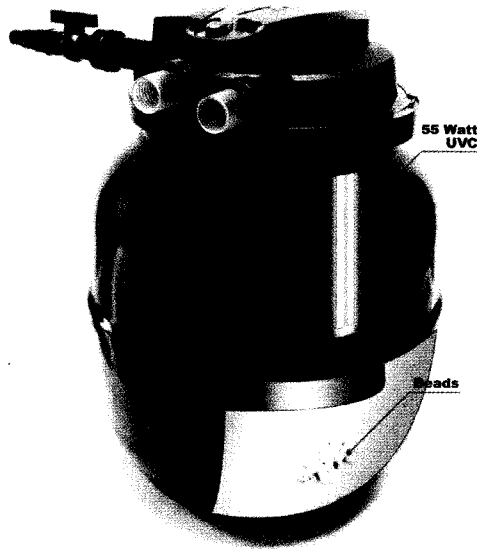


pondXpert
SpinClean Auto 50 PRO



CE

UV Biological Pond Filter

Model	UV Lamp Power	Dimensions Diar x height	Inlet /Outlet Size	Max Pond Vol. (Ltrs)	Recomended Flow Rate
PXSCA50000	55w	60 X 82 cm	32/38/50mm	50000 (25000 koi)	16,000 LPH

rated voltage of 220-240V, 50Hz

Introduction

Congratulations on the purchase of your pondXpert filter. Once your filter is connected you can look forward to many years of healthy pond water.

Your filter is pump fed so must be connected to a suitable pond pump in order to work correctly. Ideally a solids-handling pump will be used as this will push dirty waste and debris into the filter. PondXpert filters are carefully inspected and tested to ensure both safety and operating performance. However, failure to follow the instructions and warnings in the manual may result in product damage and/or serious injury. Be sure to read and save this manual for future reference.

General safety Instructions

Read and observe all of the instructions before installing, connecting and operating. Make sure the filter is securely and correctly installed before switching on.

Always disconnect the UV when not in use and when carrying out maintenance. Always disconnect all equipment in the pond before starting to handle, maintain, repair or install any pond equipment.

The 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 have been given supervision or instruction concerning use of the appliance by a person responsible for their safety.

Children should be supervised to ensure that they do not play with the appliance.

For safety reasons, servicing or repair of this item should only be carried out by PondXpert. Never hang or carry the pump by the power cord.

Do not operate the pump with a damaged cord or plug. The supply cord of the appliance cannot be replaced.

If the electrical cord is damaged the product should be scrapped.

Safety and Electrical Connections

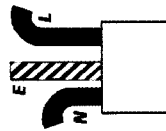
This unit is designed for outdoor use only. It is weatherproof and should be situated safely pondside. The filter should be sited where it cannot fall into the water or become waterlogged.

NO PART OF THIS UNIT SHOULD EVER BE SUBMERGED IN WATER.

Direct exposure to UVC light can damage the eyes and skin. NEVER look directly at the UV when switched on. The translucent inlet will illuminate showing that the UV is working. Always disconnect all equipment in the pond before starting to handle, maintain, repair or install any pond equipment.

The ultra violet clarifier housed within the filter is electrically operated so great care must be taken during installation and operation. The following electrical and safety guidelines must be carefully followed.

Each filter is supplied with a length of 3 core electrical cable which is permanently connected to the ultra violet clarifier unit housed inside the filter.



The wires in the mains electrical lead are coloured in accordance with the following code:
 BLUE – Neutral (marked with an “N” in most terminal connections)
 BROWN – LIVE (marked with an “L” in most terminal connections)
 GREEN/YELLOW – EARTH (marked “E” or ⊕ in most terminal connections)

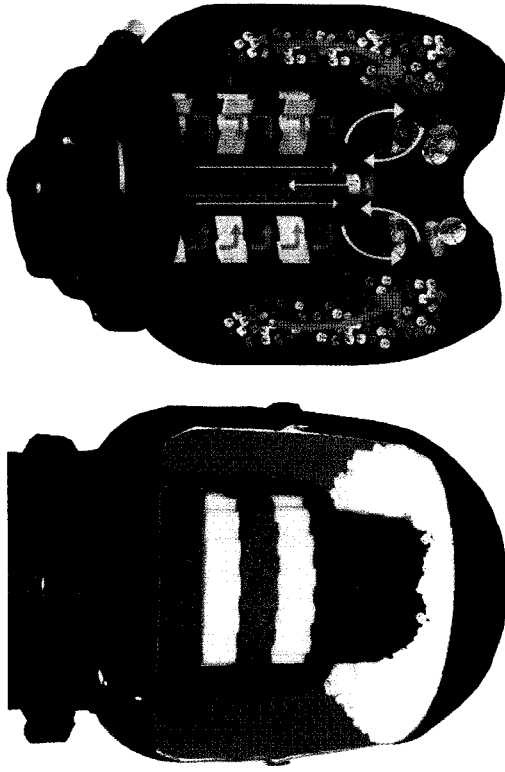
1st January 2005 revised Building Regulations for England and Wales
 Installing this product in the garden is classified as ‘notifiable’. The Regulations now require you to tell your local authority building control department that you intend to install this product before installation. Your local authority will let you know how you can get your installation approved

The termination to the mains supply should be permanent, inside a dry weatherproof enclosure, through a double pole switched fused spur with a minimum contact gap of 3mm – (disconnected) to BS 3676 – and fitted with a 3 or 5 amp fuse.

Exposed cable runs should be sensibly positioned, and protected if necessary by armoured conduit. A 10mA or 30mA Residual Current Circuit Breaker (RCD) MUST be fitted to the mains supply.

Permanent installations to the mains supply (hard wiring) must comply with the regulations of the local electricity authority which may stipulate the use of metal or plastic conduit to protect the cable. If in any doubt about wiring to the mains supply contact a qualified electrician or your local electricity authority. The supply cable cannot be replaced. If the cable is damaged, the unit must be discarded.

Insides of filter and how it works



Solid particles from dirty water attach to foams. Water flow then forces biomedica to tumble around the extensive outer skin area. This tumbling action encourages healthy new bacteria to grow. UVC zaps single-cell algae to combat green water.

Core ‘Dirt Catcher’ Chamber

Effective mechanical filtration via 7 layers of filter foam: 4 x fine (yellow) 3 x coarse (blue).

One Touch AUTO Clean System

While pump is running simply twist blue cleaning dial to ‘clean’ setting. Motorised cleaning arm agitates foam surfaces dislodging dirt particles. Dirty water runs off to drain via dedicated waste outlet.

Biological Cleaning and ‘Moving Bed’ Feature

Two cartridges of 45mm diameter Biosphere Biomedica begin biological breakdown process.

Hand crafted extra large

fibreglass chamber (volume 170 Ltrs) containing X1 biomedica acts as a ‘floating bed’

encouraging healthy bacterial growth.

35 Ltrs of X1 media included.

Max recommended chamber capacity of X1 Biomedica is 60 Ltrs.

Directions for use

Installation

Once installed and connected to a suitable pump the pond water will flow through the filter. As this is a 'Pressure Filter' the filter is sealed shut meaning the filtered water leaves the filter still under pressure. This means that you have maximum opportunity in positioning your filter as it can be buried up to its hinged lid and below the water exit point.

PondXpert filters are pump-fed, external filters with an integral UVC unit. Your filter is supplied with a black hose-tail. This should be screwed into the threaded filter inlet. Pond hose size 32-50mm (1 1/4" to 2") can be attached to the inlet hose-tail. Your pump and filter outlet should be positioned at opposite ends of the pond to promote maximum circulation.

Cut the inlet hose to the size appropriate to the size of hose you are using. Then connect the hose from your pump to this inlet hose-tail and secure with hose clips. The translucent hose-tail should be connected to the filter outlet as described above.

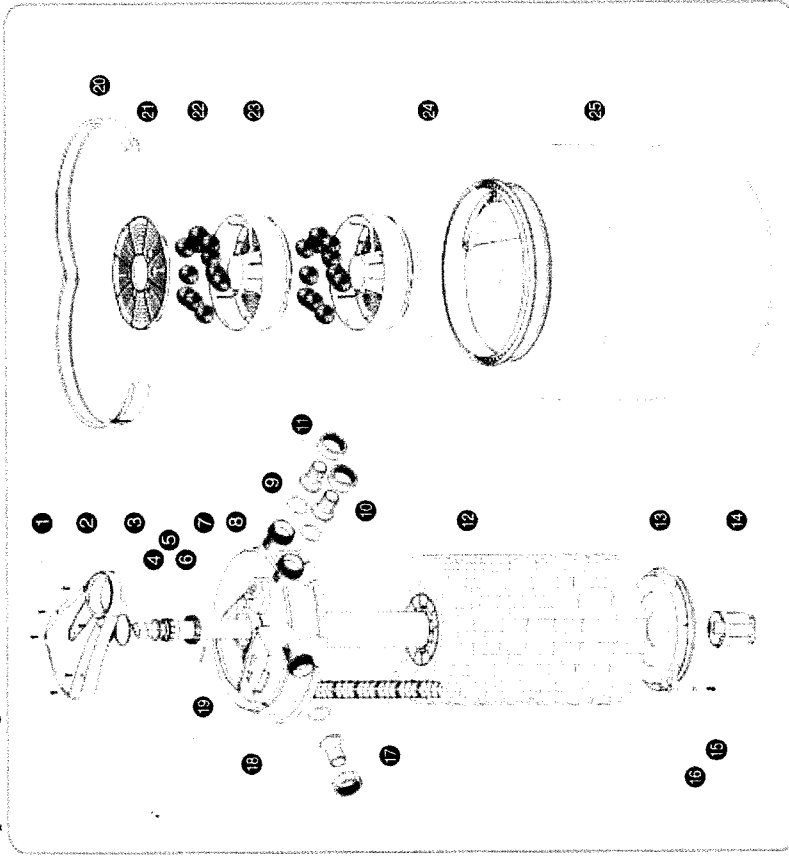
Maturation of the Filter

Your filter comes complete with mechanical and biological filter. The filter foam acts as a mechanical barrier to pick up solids whilst the bio-ball media housed at the bottom of the unit helps to develop 'friendly' bacteria. These friendly nitrifying bacteria help to convert harmful fish waste and other organic waste (ie, ammonia, nitrite) into harmless nitrate. This 'biological maturation' process usually takes 6-8 weeks. It is recommended that you do not switch on your UVC during this period.

Maintenance

As the filter does its job the foam filters will block up reducing water flow. If the pond is very dirty then the foams may need cleaning every couple of days or so at first.

Exploded Diagram



1	HEAD SCREWS	10	HOSETAILS	19	RUBBER SEAL
2	UV HEAD	11	OUTLET NUT	20	HEAD CLASP
3	COVER O-RING	12	SPONGES	21	FILTER BASKET COVER
4	UV LAMP	13	FILTER PLATE	22	BIO BALLS
5	UV O-RING	14	PLATE HOLDER	23	FILTER BASKET
6	UV QUARTZ	15	PLATE SCREW	24	MAIN HEAD O-RING
7	UV QUARTZ NUT	16	ROD WASHER	25	FILTER BODY
8	FILTER LID	17	CLEANING MECHANISM		
9	HOSETAIL O-RING	18	CLEANING MOTOR		

“Full Clean” / Switch Off & Strip Down Cleaning Procedure:

The filter requires minimum maintenance. If your pond is very dirty, initially you may need to clean the filter every couple of days. When the filtering process kicks in your water will become clearer and there will be less debris to remove. The red domed indicator turns completely red when pressure builds inside the filter suggesting that cleaning is necessary.

Switch off any electrical connected to the pond (including the filter itself).

Access to the filter can be gained simply by unlocking the securing clamping bracket around the rim (fig1). You can then simply lift the lid.

Remove the foam filters out of the unit (fig 2) by unscrewing the Plate Holder (14) giving access to the individual foams. Carefully wash away any solids using a bucket of POND WATER (3). Whilst open take the opportunity to ensure everything inside is clean such as the large ‘O’ ring (4). Once clean replace the foams back in position (5)

The bacterial chamber at the bottom of the unit should not be cleaned unless they are highly contaminated and should only be cleaned with pond water to preserve the microorganisms that keep your filter biologically active.

“Quick Clean” AUTO Feature

Your filter has an integrated motorised cleaning feature. Periodic cleaning of the filter sponges can be achieved by a simple 45 degree twist of the blue flow control valve. No need to switch your pump off, simply turn to ‘clean’ position and the water direction is reversed with dirty backflushed water directed out of your filter’s waste outlet. Watch as the dirty water exits and once water runs clear simply switch back to the ‘pond’ position.

Note: Whilst this operation occurs the UV indicator turns from blue to red. After a period of two minutes a siren sounds to warn you that the pump has been running to waste for a significant period. Please be careful as if left unattended there is a risk that your pond could be emptied if the water flow is not redirected back to your pond.

Typically a 30-60 second period is enough for to achieve a quick clean.

Note that this process will reduce your pond water levels. This is not an issue as pond water should be topped up regularly anyway to optimise the health of your water.

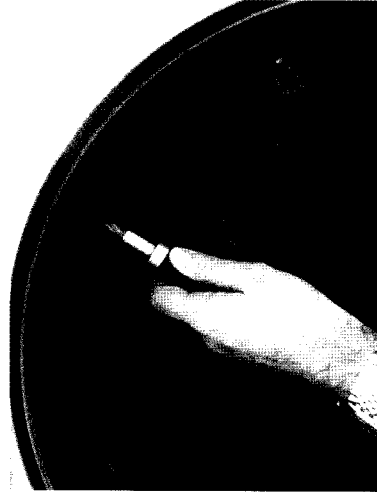
Access Floating Bio-Media Bed

Remove Lid & Foams

The actual media is hidden inside the ‘second skin’ of the filter. To gain access you first need to lid the lid off the filter (this will remove the UV, cleaning motor and filter sponges). You should be now able to see the bio-media at the base of the unit.

Remove Inner ‘Dirt Catcher’ Chamber

There is one ‘holding screw’ that needs to be loosened (not removed) by a few turns of the screw head.



There is an inlet plate that is secured in position – this should be carefully removed. Note: this reveals a large hole in the side of the Dirt Catcher Chamber through which additional X1 media can be added if required.

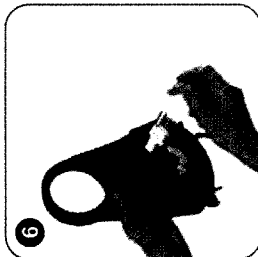
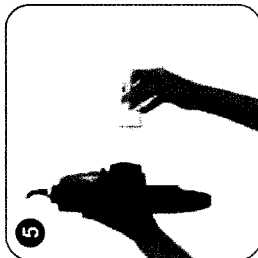
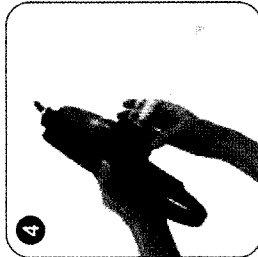
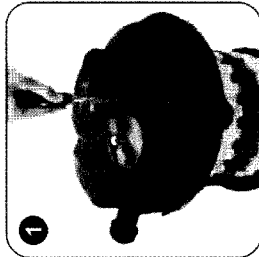


Once the first screw has been loosened, and the next two screws removed along with the filter inlet grid the inner chamber can be rotated by a few degrees then lifted out to reveal the large outer chamber.

Changing the UV Bulb and checking on the UV Quartz

Your filter ships with a 55 watt UVC bulb in position. These bulbs degrade over time (though they still illuminate) and a new bulb should be installed every 9-12 months.

The glass surrounding your UV bulb is called the 'Quartz Sleeve' - this allows the UV rays to affect the algae inside the water but prevents the water gaining access to the UV electric. Over time this quartz sleeve can become cloudy - often due to calcium deposits in hard water areas. If cloudy this will negatively affect the performance of the UV. The quartz sleeve can be replaced or a new spare part purchased.



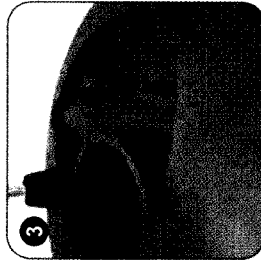
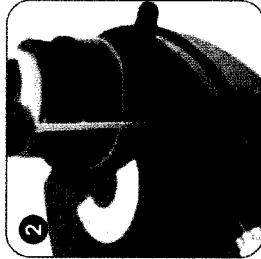
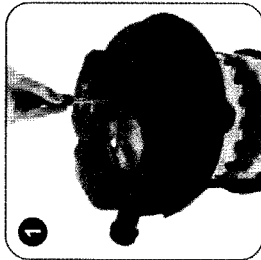
- 1) Unscrew the four screws from the lid of the unit.
- 2) Remove the UV head from the filter lid.
- 3) Gently clean the quartz sleeve with a damp cloth.
- 4) To replace the UV bulb, remove the fixing nut on the quartz sleeve.
- 5) Remove the quartz sleeve and check for any cracks.
- 6) Remove the old bulb and install the new one.
- 7) Reassemble

Troubleshooting -UV Indicator not illuminating

Ensure power is off - UVC is dangerous and can blind. Never look into UVC light.

1) Unscrew the UV head cover and pull the UV head cover clear from the main body 2) Insert a screw driver into the hole on the base of the UV head cover and gently press down until you hear a short click.

3) If the UV is operational, check that there is no damage to the safety button insert on the top of the filter lid. When in operation, this part is inserted into the UV head to press down on the unit safety button, providing power to the UV.



Removing the filter

If your filter is ever taken away from the pond (ie-winter storage) then all of the filter media (foams and biomedia) must be thoroughly cleaned before restarting. Your filter will then need to undergo the 'maturation' procedure phase as described above.

Note: Take care to ensure rubber O ring is correctly positioned between lid/unit after opening. Failure to do so will lead to leaks (a smear of Vaseline around this ring may help keep the seal watertight).

Filtration Spares and consumables

The filter is supplied with everything you need to get started (including filter media, UV bulb and quartz tube for the UV). Over time these parts may need replacing and can be purchased from your retailer.

Periods of operation

Maintain filtration 24 hrs a day through the fish feeding season (typically early March-October when the water temperature is above 10 degrees C), but preferably all year round. In the winter operating the pump and filter will maintain a background level of friendly bacteria in the filter and help prevent the pond icing up in all but the severest weather conditions.

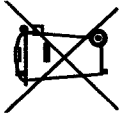
The UV bulb should be changed at the beginning of every new season. The lamp may look like it is working but the levels of effective UV radiation decrease over time.

Limited Warranty

This product is guaranteed for a period of 36 months from the date of purchase for material or manufacturing defects. The guarantee covers the substitution of defective parts. However, the guarantee is considered null and void in the case of improper use, improper handling or negligence on the part of the buyer. The UV bulb, quartz sleeve and foams are not guaranteed. If your pondXpert filter fails please take it back to the retail outlet from where it was purchased. You will be required to provide your receipt/proof of purchase. This does not affect your statutory rights.

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Your appliance contains valuable materials which can be recovered or recycled. Leave it at a local civic waste collection point.