



# Midipond UV pond filter system

## 20000/28000

[www.blagdonwatergardening.co.uk](http://www.blagdonwatergardening.co.uk)

[www.interpetcentral.com](http://www.interpetcentral.com)

[www.pondaquariumproblemsolver.co.uk/blagdon](http://www.pondaquariumproblemsolver.co.uk/blagdon)



# Midipond UV pond filter system

## 20000/28000

Congratulations on buying a Blagdon Midipond Water Garden Filtration System. Manufactured with advanced technology to create a clean and healthy pond for your fish.

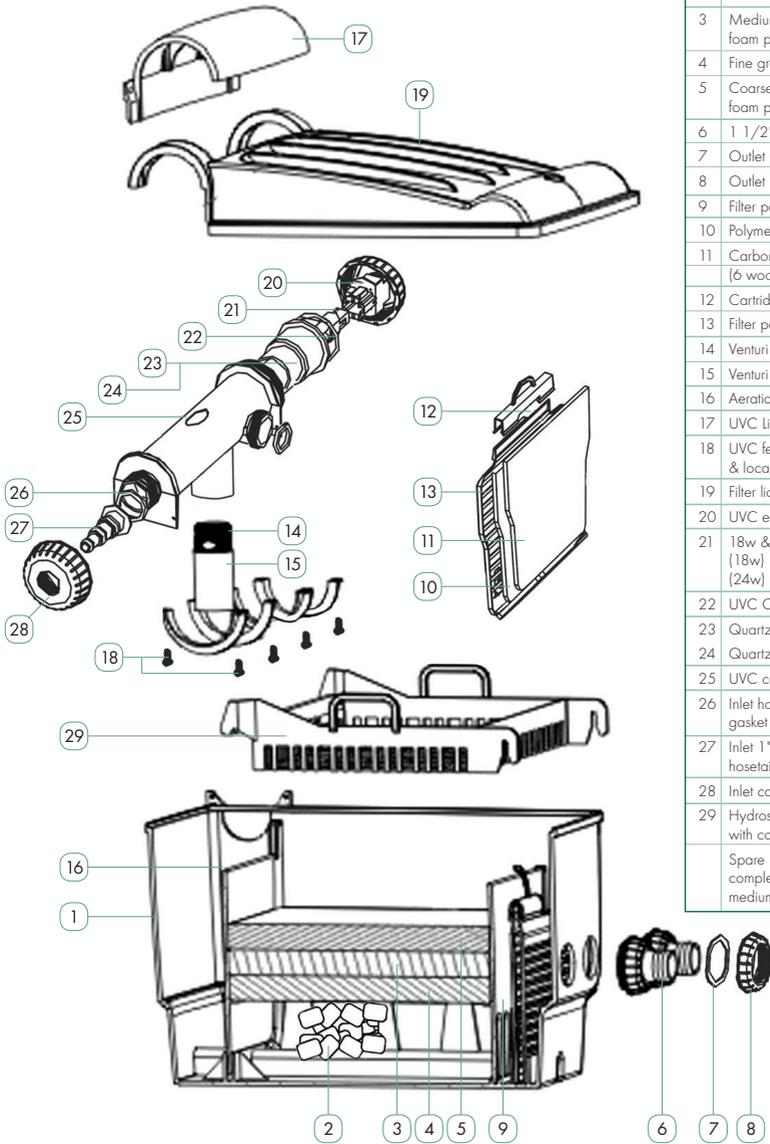
### IMPORTANT

Please attach proof of purchase to this manual and file in a safe place.

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# GETTING TO KNOW YOUR MIDIPOND FILTER



Part Description	Spare Code
1 Filter body	N/A
2 Ceramic biomedica	1012430
3 Medium grade foam pad	1060004
4 Fine grade foam pad	
5 Coarse grade foam pad	
6 1 1/2" outlet hose tail	1040600
7 Outlet O ring gasket	
8 Outlet nut	
9 Filter partition divider	N/A
10 Polymer wool pad	1060011
11 Carbon foam pad (6 wool & 6 carbon)	
12 Cartridge clip	
13 Filter pad cartridge	1060028
14 Venturi adjuster	N/A
15 Venturi outlet	N/A
16 Aeration Partition	N/A
17 UVC lid	N/A
18 UVC feet/hinge & locating screws x8	N/A
19 Filter lid	N/A
20 UVC electronics & cap	N/A
21 18w & 24w UVC lamp (18w) (24w)	1050128 1050111
22 UVC O ring gasket	N/A
23 Quartz sleeve 18w	1060035
24 Quartz sleeve 24w	1060042
25 UVC contact chamber	N/A
26 Inlet hose tail O ring gasket	N/A
27 Inlet 1", 1 1/4", 1 1/2" hose tail	N/A
28 Inlet cap	N/A
29 Hydroscreen complete with coarse sieve	1060059
Spare Hydroscreen complete with fine, medium & coarse sieve	

## GETTING TO KNOW YOUR MIDIPOND FILTER

### Midipond Flexible Outlet Options:

Two, three or four outlet options. Two outlet plugs are provided.



**Maximum flow from 2 outlets:**  
MPF20,000: 4,000 ltr /880 gal  
MPF28,000: 4,000 ltr /880 gal



**Maximum flow from 3 outlets:**  
MPF20,000: 5,000 ltr /1,100 gal  
MPF28,000: 6,000 ltr /1,320 gal



**Maximum flow from 4 outlets:**  
MPF20,000: 5,000 ltr /1,100 gal  
MPF28,000: 7,000 ltr /1,546 gal

## TECHNICAL SPECIFICATION CHART

Model	 Over 75cm deep without fish in shade	 Over 75cm deep with fish in shade	 Under 75cm deep with fish in shade	 Over 75cm deep with fish in full sun	 Under 75cm deep with fish in full sun	 Under 75cm deep with Koi in full sun
MIDIPOND 20,000	20,000 ltrs 4,399 gals	10,000 ltrs 2,200 gals	7,500 ltrs 1,650 gals	7,500 ltrs 1,650 gals	5,625 ltrs 1,237 gals	2,810 ltrs 618 gals
MIDIPOND 28,000	28,000 ltrs 6,159 gals	14,000 ltrs 3,080 gals	10,500 ltrs 2,310 gals	10,500 ltrs 2,310 gals	7,875 ltrs 1,732 gals	3,935 ltrs 870 gals

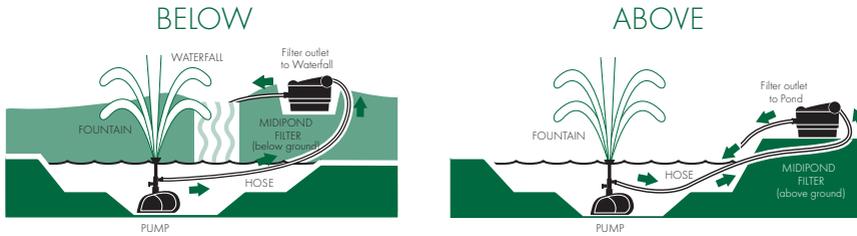
Model	<b>W</b> Green water clarifier lamp wattage	 Max flow rate through UVC from pump	 Recommended hose size	Filter inlet hose from pump	Filter outlet hose to pump
MIDIPOND 20,000	18 watts	5,000 ltrs 1,100 gals	32mm 1 1/4"	3 x 40mm 1 1/2"	
MIDIPOND 28,000	24 watts	7,000 ltrs 1,540 gals	40mm 1 1/2"	3 x 40mm 1 1/2"	

MIDIPOND FILTER	20,000	28,000
Watts	18W	24W
Voltage	230V	230V
Hertz	50Hz	50Hz
Safety rating	IP56 <b>CE</b>	IP56 <b>CE</b>
Cable	5 metres	5 metres

# INSTALLATION

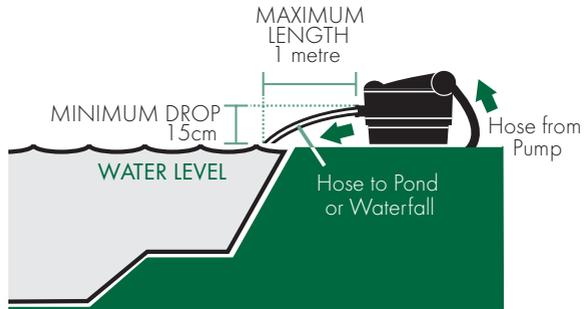
## Convenient Installation

Can be installed below or above ground with water returned direct to the pond or via a waterfall. e.g:

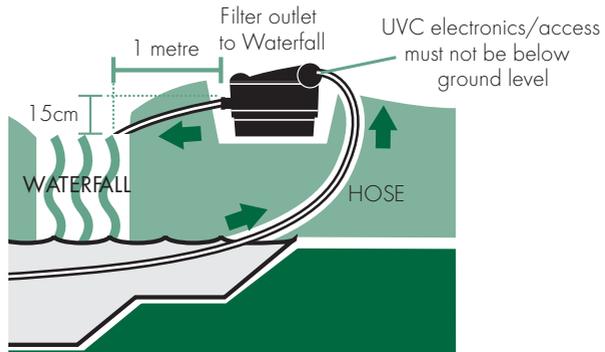


## Filter Outlet Hose Installation

ABOVE  
GROUND



BELOW  
GROUND



# INSTALLATION

## Important

The outlet hoses should be smooth bore pipe installed over as short a distance as possible with no kinks or bends.

The water level in the filter outlet chamber after the carbon wool cartridge should not be higher than the outlet fittings when in use.

See Flow detail diagram maximum outlet chamber level. (page 9)

**WARNING:** If there is insufficient drop in height from the outlet pipes or excessive bends or kinks this will cause the filter to drain poorly allowing the outlet chamber to fill above the maximum recommended level. This will increase filter maintenance and may cause the filter to overflow.

## Connecting Inlet Hoses

The recommended hose size for your Midipond filter is stated in the filter performance and specification chart.

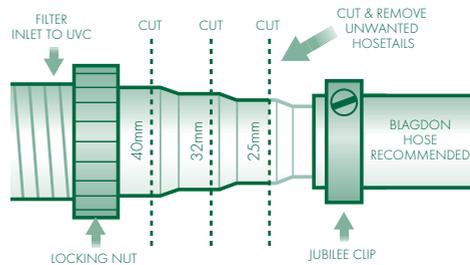
Always secure hose with a jubilee clip.

Warming the hose in a bucket of boiling water can aid fitting.

Always ensure that the smaller diameter hosetail is cut off and removed to prevent reduced filter performance.

Use the shortest possible hose lengths to minimise flow restrictions.

Avoid folds and kinks in the hose, which will reduce flow and filter performance.



# INSTALLATION

## Connecting To Your Pump

The pump supplying the Midipond filter must not have a pumping head exceeding 6m - 0.6 Bar.

The maximum flow rate recommended is stated in the filter performance and specification chart. This flow should not be exceeded.

The ideal flow rate for your pond is to pump the volume of the pond water through the filter every 2-4 hours. To calculate your pond volume: average length (m) x average width (m) x average depth (m) x 1000 = Litres Pond Volume.

To calculate your pump's flow rate, fill a container from the outlet hose of the filter at the pond side.

Time how long this takes in seconds e.g. a 10 ltr bucket takes 12 seconds to fill. Divide 3600 (the number of seconds in an hour) by the time it takes to fill the bucket e.g. 12 seconds. Then multiply by the volume of the container. e.g. 10 ltr. Therefore -  $3600 \div 12 = 300$  seconds  $300 \times 10 \text{ ltr} = 3000$  ltrs per hour flow rate.

To increase flow you may need to get a larger pump. If flow is too high use an inline valve to reduce it.

The purpose of the pump is to transfer dirty water from the pond to the Midipond filter.

Placing the pump at the opposite end of the pond to the filter will give the best results.

Foam-free pump designs will give optimum Midipond filtration.

## UVC Bulbs & Quartz Sleeve Maintenance

The UVC lamp must be replaced yearly. It is recommended that the lamp is replaced and reconnected in the spring.

The Quartz sleeve can become coated in lime scale build up in hard water areas. This should be carefully removed from the quartz sleeve with a soft cloth.

Blagdon Pond Pump Cleaner should be used in stubborn cases.

Remove the quartz sleeve from the unit and soak for 3 hours in Pump Cleaner, ensuring that all O-rings are checked and replaced, if necessary.

A wet test must be carried out after maintenance to ensure there are no leaks before the UVC is reconnected.

## Wet Testing The Filter

**IMPORTANT:** A wet test of the filter under operating conditions must be carried out before the UVC or electrical supply is installed. Connect the filter to the pump following all installation instructions. After running for 24 hours check for leaks.

# INSTALLATION

## Testing/installing the UVC lamp

**IMPORTANT:** Ensure that the mains supply is switched off and the power isolated before removing the UVC cover.

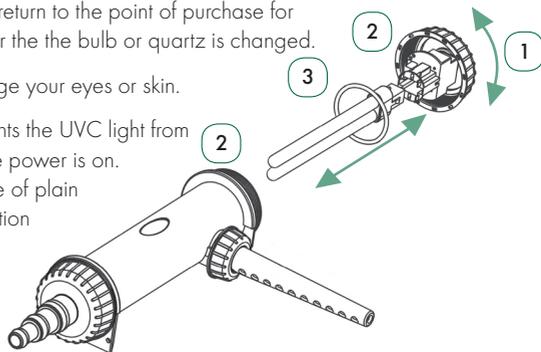
1. Unscrew the UVC electronics cover cap.
2. Inspect the UVC cap and Quartz sleeve for water leaks.
3. If there are no signs of leakage reverse the procedure ensuring that the Cover o ring is in place.

If there has been any damage to the unit please return to the point of purchase for inspection. This test should be repeated whenever the the bulb or quartz is changed.

Warning direct exposure to UVC light can damage your eyes or skin.

This unit is protected by a micro switch that prevents the UVC light from illuminating when the cover is removed even if the power is on.

In order to check that the UVC lamp hold a piece of plain paper up to the the UVC outlet a faint blue reflection should be seen. This operation may be needed to be carried out at dusk as UVC lamps emit a dim blue light under normal operation.



## ELECTRICAL INSTALLATION

### Electrical installation - UVC



The power supply must meet the specifications on the product.

The UVC is intended to be used with either a weatherproof cable connector or permanently connected to the fixed wiring in the main system by means of a plug and socket.

The cores in the supply cable are coloured in accordance with the following code:

**Brown = Live, Blue = Neutral.**

Do not use the supply cable to lift the UVC as this may cause damage.



#### Electrical/Safety

**UVC Warning:** Caution: Dangerous Ultra Violet Radiation. The rays from the UVC lamp are harmful to eyes and skin. Always turn off UVC electrical supply before any maintenance. To protect unit from flooding, leave a minimum 5cm showing above ground level to protect UVC electrics. Never immerse unit in water. Locate unit 1m minimum from pond edge to ensure the filter cannot fall in.

## ELECTRICAL INSTALLATION

**IMPORTANT:** Please note all electrical work on garden lighting and power installations must comply with part P of the building regulations. Failure to comply is a criminal offense. If the installation of this product is not carried out by a competent electrician who is registered under the Part P self-certification scheme then you must notify the local building control department before work begins. For further information and guidance on this matter and other electrical installations in your home that might be covered by the relevant legislation, contact your local authorities building control department.

For permanent installations to the mains supply, it is necessary to conform to the regulations of the local electricity authority and this would include the use of a metal or plastic conduit to protect the cable.

Attention has been drawn to the fact that special rules may exist concerning the installation of your pond UVC (i.e. local building regulations).

This UVC must not be used in swimming pools, or areas where people are in contact with the water.

Always disconnect the mains electricity supply whilst the equipment is being installed, repaired, maintained or handled. Consult a qualified electrician if in any doubt about wiring this product to the mains supply.



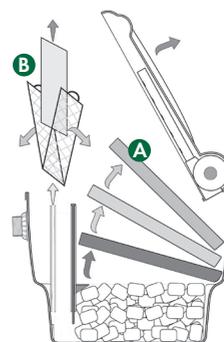
**WARNING:** A Residual Current Device (RCD), also known as the Residual Current Circuit Breaker (RCCB), with a tripping current not exceeding 30mA must be installed in the supply circuit. A means of disconnection from the supply having a contact separation of at least 3mm in all poles must be incorporated in the fixed wiring.

## MAINTENANCE & CLEANING

Your Midipond filter has been designed to need a minimum of maintenance.

When the filter system is first installed filter cleaning may be increased for a period until the back log of accumulated pond waste is removed.

### FILTER CLEANING



# MAINTENANCE & CLEANING

## Routine Maintenance

### Hydroscreen chamber

When the hydroscreen chamber fills with water and overflows into the foam chamber, remove and wash out under a tap. It is not necessary to remove the metal screen from its carrier for routine cleaning.

### Graded foams

The filter foams only need cleaning when the foam chamber is full with water and the water layer above the foams starts to significantly overflow the partition into the cartridge chamber.

25% of the pumps input may be allowed to overflow the partition into the cartridge chamber, prior to cleaning.

Cleaning the foams before the foam chamber overflows will result in decreased filter efficiency as the foams work most effectively when partially blocked.

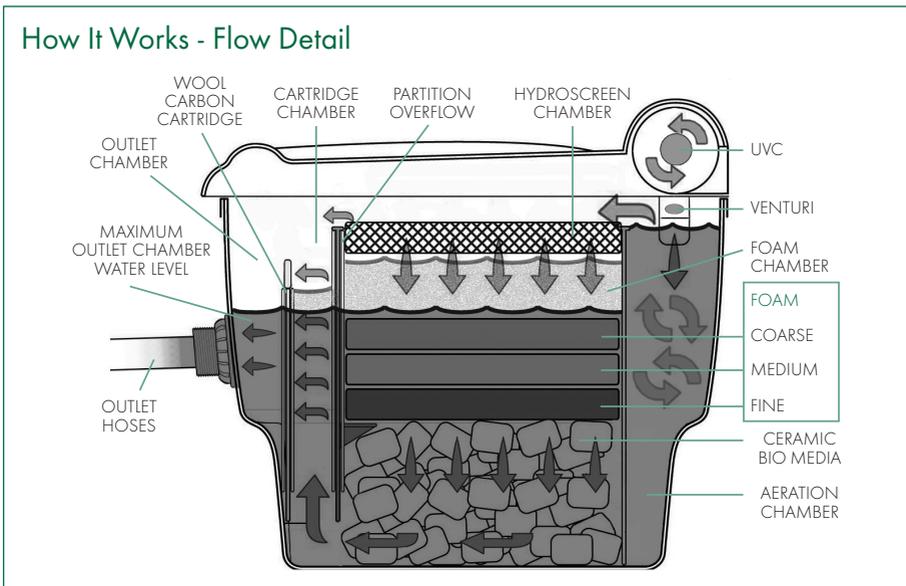
Foams may be cleaned vigorously under a running tap or hose.

Adding Blagdon Bio Start after filter maintenance will help replenish these beneficial bacterial populations, and is highly recommended during the first two months of operation when the filter is slowly being colonised.

### Professional ceramic bio media

These will only need very occasional cleaning (once per year), but must be rinsed in pond water to prevent damaging the beneficial bacteria which help maintain a healthy pond.

## How It Works - Flow Detail



## MAINTENANCE & CLEANING

### Polymer wool and carbon cartridge

When the cartridge chamber fills with water and starts to overflow into the outlet chamber the cartridge should be cleaned or replaced.

The Polymer wool pad may be washed a limited number of times before it starts to lose efficiency and blocks rapidly.

The Carbon Foam pad contains activated carbon particles that remove colorants and chemical pollutants from your pond water. After six weeks the activated carbon pad must be replaced as the carbon becomes full with pollutants and will be unable to absorb more from the pond water.

Replacement packs of polymer wool and carbon foam pads will be available from your retailer and are quick and easy to replace. (see diagram on page 8 and codes/descriptions on page 2)

## Annual Maintenance

### Check for wear

Once a year you should dismantle your Midipond filter. Dismantle the filter examining all the parts for wear or damage, replacing any parts show obvious signs of wear or damage. (see getting to know your Midipond filter for replacement codes and parts descriptions on page 2).

### Replacing foams

After prolonged use and cleaning the filter foams will become damaged. This can be identified by their inability to return quickly into shape after cleaning.

Replacement of the foams is recommended.

## Winter Storage

The filter can be run year round if the pump flow is maintained, this is the best option. Alternatively in winter the filter may be switched off. Follow annual maintenance procedure and store frost-free in the house or garage until spring.

# TROUBLESHOOTING

In order to correctly identify if you have green water or cloudy/brown water, a settlement test should be carried out.

Take a glass of pond water and allow to settle for a few hours. When the glass is stirred a small layer of settled waste can be seen at the base of the glass. This indicates that you have brown or cloudy water and that if you have a UVC model it is working correctly. If there is no settlement it indicates that you have green water and the UVC is not working correctly.

## Filter Leaks

- Check that the filter outlet nut and O ring have been correctly assembled and that they are hand tight.
- Check the hosedtail connector O ring seal is fitted and aligned correctly on the end of the hosedtail fitting and that the inlet cover is hand tight.
- PTFE tape may be needed to give a water tight seal and should be applied to the inlet or outlet hosedtails.
- Always secure the filter inlet hose and outlet hose with a jubilee clip.
- Insure that the filter is installed on a flat and level base.

## Cloudy/Brown Water

- The flow rate / pond turnover is too high or too low. Check that you have correctly calculated the pond volume and that pump flow rate is within limits. (see connecting your pump page 6)
- The filter is not being supplied with water 24 hours a day. Do not turn off your pump or UVC. Continuous running is needed to maintain a clean and healthy pond.
- The filter foam pads are insufficiently blocked to trap the fine waste. Treat with Interpet Clear Pond treatment.
- Do not clean the foams until the filter foam chamber starts to overflow into the carbon wool chamber.
- The water is extremely dirty, remove pond waste and leaves - carry out a partial water change.
- Filter is incorrectly sized - refer to filter performance and specification chart. Calculate the pond volume - see connecting to your pump page 6.
- The filter foams have not been positioned or replaced correctly, ensure that the foams fit tightly within the filter chamber.

# TROUBLESHOOTING

## Green Water

- Settlement test the water to ensure that there is no sediment suspended in the water. If there is follow the brown cloudy water trouble shooting guide.
- At dusk check that the UVC light is illuminated by holding a piece of paper up to the UVC outlet and looking for the reflected pale blue UVC light. Turning the lamp on and off may aid visual identification. (Ensure the UVC lamp is not more than 6 months old).
- The UVC may be working effectively but the foams are too clean and are unable to remove the fine coagulated waste. Treat the pond with Interpet Clear Pond and do not clean the foams until the foam chamber starts to overflow into the carbon wool chamber.
- The flow rate of the pump exceeds the maximum flow rate that the UVC is able to handle. Check the filter specification chart and reduce the pump flow rate if needed. It is possible to purchase an optional flow control valve that may be fitted inline between the pump and the filter to control the flow rate.
- The filter is too small for the pond, check the filter selection chart.
- The UVC quartz sleeve is dirty or coated in lime scale. Gently remove the quartz sleeve and clean in Blagdon pond pump cleaner.
- Follow all cloudy water trouble shooting points.

## UVC Light Not Illuminated

- Check all fuses / RCD and electrical connections follow electrical installation (pages 7-8)..

## Poor flow into the filter or out of the filter

- Inspect and clean your pond pump, check that it is in good working order.
- Check foams and filter pads ,clean as per routine maintenance if blocked.
- Always use the minimum length of inlet or outlet hose needed as this will reduce back pressure due to friction.
- Ensure that the inlet hose connector has been cut correctly to size, if not this will restrict the flow from the pump into the filter see diagram page 5.
- Ensure that the correct number of outlets are being used (see page 3).
- Ensure that the inlet hose is not kinked or crushed.
- Ensure that the outlet hoses are under 1m in length and that there is a drop of 15cm over this distance, ensure that they are not kinked crushed or have a sharp bend as this will stop the filter draining correctly.

## IMPORTANT

### FAULTS - PROBLEMS PROCEDURE

Before returning your Midipond Filter to your dealer or contacting our Consumer Advice Department, please carry out the following steps. This will solve most problems quickly and easily.

1. Ensure electrical procedures have been followed fully. Check fuses and any cable connectors/switch boxes.
2. (a) Follow routine maintenance procedure fully. (b) Check location and connecting your pump details including flow rates. (c) Ensure that your pond volume and pump flow rate meet the maximum pond size recommended for the filter model on the filter performance and specification chart. (d) Follow troubleshooting guide.
3. If there is a mechanical breakdown of the filter or UVC, return to the point of purchase for inspection and advice (You will need proof of purchase).

### CLEARWATER GUARANTEE

The Clearwater guarantee will be honoured for 1 year after proof of purchase. Clearwater is guaranteed to a depth of 1m, so that fish are clearly visible.

Clearwater is guaranteed provided:

- You follow all instructions as above.
- Your filter is within the performance guidelines stated.
- You consult the Consumer Advice Line and follow any advice to correct the situation. See details below.

Refunds can only be authorised by Interpet Blagdon.

### CONSUMER ADVICE CONTACT DETAILS

**Interpet (Blagdon) Consumer Advice Department** Vincent Lane, Dorking, Surrey RH4 3YX  
**Fax:** 01306 876712 **E-mail:** [customercare@interpet.co.uk](mailto:customercare@interpet.co.uk)

[www.pondaquariumproblemsolver.co.uk/blagdon](http://www.pondaquariumproblemsolver.co.uk/blagdon)

## GUARANTEE

This product is guaranteed against defects in material and workmanship for 3 years from the date of purchase, under normal usage. The guarantee DOES NOT APPLY in case of improper use, negligence, lack of maintenance or accidental damage to either the filter or UVC. If the filter or UVC fails due to a manufacturing fault within this period it will be either repaired or replaced free of charge. Liability is limited to replacement of the faulty product only; no other costs will be reimbursed.

This guarantee is not transferable and does not affect your statutory rights. This guarantee does not confer any rights other than those expressly set out above. This guarantee does not cover the filter foams, screen, or UVC bulb, which will need replacing when worn or every 6 months. If any parts are needed, spares are available from your retailer.



Established over 50 years ago, Blagdon are committed to producing a comprehensive range of high quality and easy to use water gardening equipment. We have an on-going programme of research and development that ensures excellent product performance and value for money for our customers. Our products are brought together with half a century of expertise and knowledge so you can be assured of a successful and creative water garden.

**INNOVATIVE**



**DESIGN**

Interpet, Vincent Lane,  
Dorking, Surrey, RH4 3YX

[www.blagdonwatergardening.co.uk](http://www.blagdonwatergardening.co.uk)  
[www.interpetcentral.com](http://www.interpetcentral.com)  
[www.pondaquariumproblemsolver.co.uk/blagdon](http://www.pondaquariumproblemsolver.co.uk/blagdon)

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