

## inpond 5 in 1

Instant solution for a clear and beautiful pond

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## inpond 2000

Congratulations on buying an inpond 5 in 1

Manufactured with advanced technology to create a clean and healthy pond for your fish.

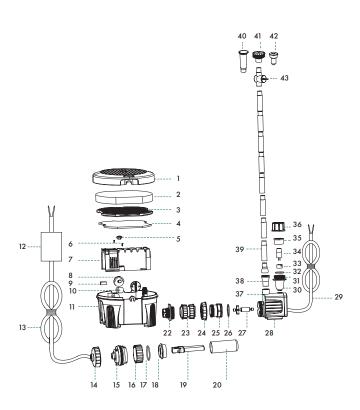
#### **IMPORTANT**

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

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#### GETTING TO KNOW YOUR INPOND 2000



#### GETTING TO KNOW YOUR INPOND 2000

No.	Part Description	Spare Code			
1.	Filter Lid	N/A			
2.	Green Foam	1054690			
3.	Polymer Wool Cartridge	N/A			
4.	Polymer Wool Pad	1054690			
5.	UVC Viewing Window	N/A			
6.	UVC Contact Chamber Screws	N/A			
7.	UVC Contact Chamber	N/A			
8.	Lid Locks	N/A			
9.	UVC Magnet	N/A			
10.	Ceramic Media	1051187			
11.	Filter body	N/A			
12.	IP68 Starter UVC	N/A			
13.	UVC Mains Cable	N/A			
14.	UVC Electronics & Cap	N/A			
15.	UVC Body	N/A			
16.	UVC Quartz Sleeve Yellow Lock Cap	N/A			
17.	UVC O ring	N/A			
18.	UVC Quartz Sleeve Holder	N/A			
19.	PI 5W UVC Lamp	1041041			
20.	5W Quartz Sleeve	N/A			
21.	Outlet Locking Nut	N/A			
22.	Double Threaded Attachment	N/A			
23.	Connecting Pipe	N/A			
24.	Pump Locking Nut	N/A			
25.	Impellor Cover	N/A			
26.	Impellor cover O ring	N/A			
27.	Impellor Complete	1040556			
28.	Pump Motor unit	N/A			
29.	Pump Cable	N/A			
30.	LED Spot Light Body	N/A			
31.	Thread	N/A			
32.	LED Spot Light O Ring	1055840			
33.	LED Body	N/A			
34.	LED Lamp 1w	1055840			
35.	LED Lamp Cover Clear	N/A			
36.	LED Lamp Screw Cap	N/A			
37.	Pump Outlet	N/A			
38.	Ball Joint Socket	1017763			
39.	Black Extension pipe	1017763			
40.	Water Bell Large	1017763			
41.	Super Daisy	1017763			
42.	Daisy	1017763			
43.	Flow control valve	1017763			

#### **GETTING TO KNOW YOUR INPOND**

#### Pump performance / flow chart

1.5m		79 ltr/hr	200 ltr/hr	835 ltr/hr	
1.0m	185 ltr/hr	300 ltr/hr	870 ltr/hr	1626 ltr/hr	
0.5m	300 ltr/hr	520 ltr/hr	1250 ltr/hr	2371 ltr/hr	
0m	650 ltr/hr	700 ltr/hr	1500 ltr/hr	3000 ltr/hr	
MODEL	2000	3000	6000	9000	
	THIS MODEL				

#### TECHNICAL DATA - PUMP

- 230 Volt 50 Hz 10 Watts
- 650 ltrlhr (143 gallhr) max flow
- Max pumping height: 1.25m (4'1")
- 10 metre cable
- IP68 Approved

#### **TECHNICAL DATA - UVC**

- 230 Volt 50 Hz
- 5 Watt UVC lamp
- 10 metre cable
- IP68 Approved

#### **TECHNICAL DATA - LED**

1 Watt

#### **FEATURES**

- Everything needed for a clear and healthy pond, combined efficient pump and filtration package
- Low voltage pump/filter includes:
  - 3 attractive fountain features
  - mechanical & biological filter
  - polymer wool cartridge
  - UV clarifier
- · Includes automatic night time LED spot light with pivoting feature

#### THIS 5 IN 1 WILL MAINTAIN THE FOLLOWING POND SIZES:

Model & Pond Size Category	Deep without fish	Deep with fish	Shallow with fish	Deep with fish in full sun	Shallow with fish in full sun	Shallow with Koi in full sun	Filter & Waterfall	Fountain, Filter & Waterfall
2000 SMALL POND	<b>2000 ltrs</b> 440 gals	<b>1334 ltrs</b> 293 gals	1000 ltrs 220 gals	<b>1000 ltrs</b> 220 gals	<b>750 ltrs</b> 165 gals	<b>375 ltrs</b> 82 gals	N/A	N/A

"The power supply must meet the specification of the product.

#### Inpond Pump

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

Brown = Live, Blue = Neutral.

The electric cable is permanently connected and sealed in the motor body. If the supply cable is damaged the pump must not be used.

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



#### WARNING - All Inpond models must be used with an RCD

A Residual Current Device (RCD), also know as the Residual Current Circuit Breaker (RCCB), with a tripping current not exceeding 30mA must be nstalled 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.

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 pump (i.e. local building regulations).

These pumps 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 main supply.



Warning - The Inpond pump is provided with a thermal cut out that temporarily switches off the pump in case of overheating and the pump may automatically restart.

#### **UVC INSTALLATION**



Warning - 1) Always turn off the power before any maintenance to the UVC section 2) Always view the UVC lamp through the viewing window on the UVC Chamber 3) Direct exposure to UVC light can damage your eyes and skin.



Caution - Inpond UVC has been fitted with a magnetic safety switch. 1) Do not remove unit with power turned on 2) Do not place near strong magnetic fields.

#### UVC Lamps & quartz sleeve maintenance

The UVC lamp must be replaced every six months / once a season. It is recommended that the lamp is replaced 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 and cleaned with a soft cloth.

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

#### Wet testing the UVC

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

#### Testing/replacing the UVC lamp

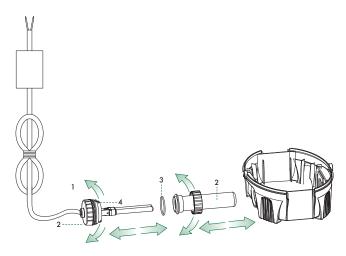
IMPORTANT - Ensure that the mains supply is switched off and the power is isolated before removing the UVC cover.

#### See Page 7 for illustration

- 1. Unlock the green UVC electronics cap.
- 2. Inspect the UVC cap and Quartz sleeve for water leaks.
- Then unlock the yellow quartz sleeve end cap and unplug the lamp to replace if desired

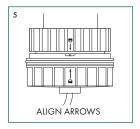
#### **UVC INSTALLATION**

- If there are no signs of leakage reverse the procedure ensuring that the quartz sleeve O-ring is in place. See alignment diagram.
- Ensure the yellow quartz sleeve cap and the green UVC electronics cap are firmly ser cured by making sure the two looked positions are in direct line of each other. See diagram on page 8, section 5.
- 6. The unit is protected by a magnetic safety 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 is operating see page 6 on how to view your UVC lamp.



If there has been any damage to the unit please return to the point of purchase for inspection.

#### **UVC ELECTRICAL INSTALLATION**





Warning - Direct exposure to UVC light can damage your eyes and skin.

#### Flectrical installation - UVC

#### Inpond UVC



The cores in the supply cable are coloured in accordance with the following code: Brown = Live, Blue = Neutral. Green / Yellow = Earth In accordance with FN60335-2-109:2010



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 wiring

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 offence. 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.

#### **UVC ELECTRICAL INSTALLATION**

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: Electrical Safety

UVC warning: Dangerous Ultra Violet Radiation. The rays from the UVC lamp are harmful to eves and skin.

Always turn off UVC electrical supply before any maintenance.

To protect the UVC starter; never immerse in water. Locate the UVC starter (Inpond 2000 part 12 ) 1 metre minimum from pond edge.

#### Locating your Inpond 5 in 1

The Inpond pump and filter should be located on a firm and level base in the pond/water feature in a depth of at least 10cm, but no more than 150cm for the 2000 model.

#### Fountain

Make sure there is ample cable. Place product in desired location.

Using the pipe adjust so the fountain head is above the surface of the pond.

Fountain height can now be adjusted, see 'Adjusting flow control' diagram below. See "Getting to know your Inpond" for parts and descriptions.

#### Inpond 2000



The flow control valve is fitted with a diverter to ensure there is always pond circulation.



#### Bell Fountain

Adjust bell by moving head higher for small bell and lower for a wider bell shape.



Select your preferred fountain -jet form three options supplied. Fountain height can be adjusted with flow control valve.

Push fit together the required number of fountain extension pipes.

The fountain jet should just break \_\_\_ the surface of the water when the inpond is at the bottom of the pond.

The fountain jet can be adjusted to a vertical position when the inpond is in location using the ball joint provided.



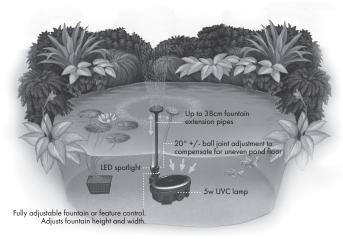
Tip: Ensure that any fountain or feature fitted does not empty water out of pond/water feature.

#### Convenient Installation

# FOUNTAIN OPTION OR WATER FEATURE FOUNTAIN HOSE INPOND

#### Inpond 2000

INPOND 5 IN 1 RUNS A FOUNTAIN OR FEATURE AND LED SPOTLIGHT



#### Waterfall Installation

#### **Important**

The outlet hose should be smooth bore (not corrugated) pipe installed over as short a distance as possible with no kinks or bends.

### Connecting a feature hose

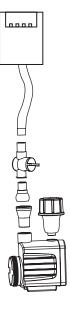


The recommended hose size is 1/2'' for your Inpond. It is not essential but if the fit is not tight a 1/2'' jubilee clip can be used to secure the hose. Warming the hose in a bucket of boiling water can aid fitting.

Use the shortest possible hose lengths to minimise flow restrictions.

Avoid folds and kinks in the hose, as this will restrict the pipe, reducing pump flow and filter performance.

## Water feature hose 1/2" connection





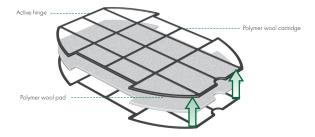
IMPORTANT - Failure to carry out routine maintenance leaving the pump under reduced or no flow conditions for long periods will result in a shorter pump life and will invalidate the guarantee.

#### Routine Maintenance

Reduced fountain or feature flow indicates that the filter is blocked and needs cleaning. The filter foam may be cleaned vigorously in a bucket of water as required. The polymer wool pad should be replaced if blocked.

#### Polymer wool cartridge

Replacement packs of polymer wool are available from your retailer and are quick and easy to replace.



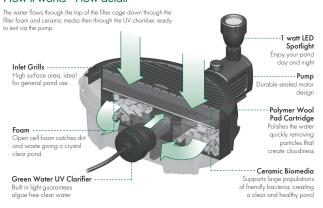
The ceramic bio media only needs occasional rinsing in a bucket of pond water.

Note: Using pond water protects the beneficial bacteria within the filter from chemicals in tap water. Friendly bacteria within the filter are essential to create and maintain a healthy pond.

#### Routine Maintenance

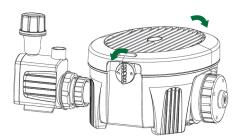
- 1. Switch off electricity
- 2. Remove Inpond from pond (do not use the cables to lift the Inpond)

#### How it works - Flow detail

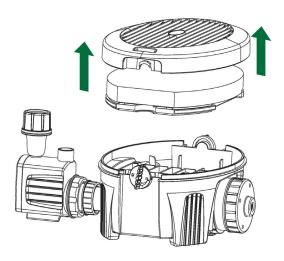


3. Remove the filter lid

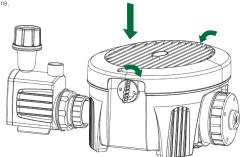
Rotate the two lid locks 180 degrees anti-clockwise



Lift the lid from the main filter body



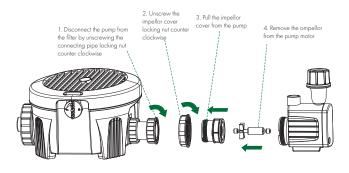
After cleaning the filter media  $\,$  replace the filter lid  $\,$  rotating the lid locks in a clockwise direction to secure.



#### Cleaning the impellor

The Pennington Inpond 5 in 1 is centrifugal with a magnetic impellor movement driven by a watertight synchronous motor. They require minimum cleaning, only periodic cleaning of the impellor is necessary.

Remove the impellor cover and impellor and wash both parts thoroughly.



## Removing led Lamp Replacing or removing the lamp

Replacing or removing the lamp can be easily done by unscrewing the lamp screw cap, then the clear cover can come apart. Allowing the LED lamp to be disconnected. See getting to know your Inpond for part descriptions.



IMPORTANT - Ensure that the mains supply is switched off and the power isolated before removing the lamp cover.

#### Annual maintenance of the filter

Check for wear. Once a year you should dismantle your Inpond. Dismantle the filter examining all the parts for wear or damage, replacing any parts showing obvious signs of wear and/or damage (see getting to know your filter for replacement codes and parts descriptions on pages 3 and 4)

#### Annual maintenance of the pump

Check for wear. Once a year you should service your pump. Dismantle pump and examine all parts for wear or damage, replacing any parts that show obvious wear and/or damage (see getting to know your Inpond for parts/description and replacement codes). Particular care should be taken to examine the cable entry points.

#### Annual maintenance of the UVC

Check for wear. Once a year you should dismantle your Inpond UVC - see page 8. Ensure you have disconnected the mains supply before carrying out any maintenance or cleaning. Dismantle the UVC examine all the parts for wear and damage, replacing any parts that show obvious signs of wear and damage (see getting to know your Inpond for parts/description and replacement codes). The UVC lamps require replacing annually, ideally in the spring.

#### Winter Storage

The Inpond can be run in the pond during the winter but care should be taken to ensure that it is fully immersed and cannot freeze solid. If the Inpond is not used during the winter follow the annual maintenance procedure and store frost-free in the house or garage until spring.

#### **TROUBLESHOOTING**

#### Inpond Filter

#### Cloudy/brown water

- Check that you have correctly calculated the pond volume, pond depth and if the ponds level of direct sunlight. See page 4 for inpond sizing table. You may require a larger inpond model in the range. Adding shade to the pond by introducing lilies and floating plants to the water surface will reduce pond sludge. Planting the pond with marginal plants will also help create a balance. New ponds may require some time to establish and create a healthy balance.
- The filter is not being supplied with water 24 hours a day. Do not turn off your Inpond.
   Continuous running is needed to maintain a clean and healthy pond.
- The filter foam pads are insufficiently blocked to trap the fine waste. Do not clean the foams or replace the polymer wool pad until they partially block.
- 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 see page 4.
- The filter foams have not been positioned or replaced correctly, ensure that the foams fit tightly within the filter chamber.

#### **UVC** leaks

- · Check that the UVC O-ring has been correctly assembled.
- Check that the UVC cap is correctly locked with the yellow quartz sleeve section.
   Arrows on both caps should be correctly aligned when fitted. See page 8 on how to correctly install and remove UVC section.

#### Inpond Pump

#### Problem

#### Low flow from pump

- 1. Follow routine cleaning procedure if no improvement.
- 2. Follow monthly cleaning procedure.
- 3. Ensure pipe work is not blocked, leaking or is laid so that it gets crushed or kinked.
- Keep the height that water is to be pumped from the water surface (called Head) to a minimum. The higher the head the lower the flow rate and the more wear on the pump.

#### TROUBLESHOOTING

 Use the largest diameter, smoothest bore pond hose over the shortest distance and keep hose fittings to a minimum. This removes frictional loss of flow and so increases pump flow rates.

#### Poor Fountain performance

- Reduced height.
- Jets blocked.
   Clean flow adjusters and fountain head. Wash under a tap or hose.
   Lime scale remover should be used to remove lime scale build-up/waste (see diagram) for improved results.

#### DAISY

To clean, remove head and rinse. Or in hard water areas, use lime scale remover.



#### No flow from pump

- 1. Check power supply is on.
- 2. Check fuse and wiring (SEE ELECTRICAL INSTALLATION).
- 3. Follow low flow procedure as above.

If none of the above works contact Consumer Advice Department (See Faults problem procedure Page 20).

#### 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 troubleshooting guide.
- In order to check that the UVC lamp is operating: Open the filter unit (see page 14/15) remove the filter foams and cartridge. Positioned on top of the yellow UVC contact chamber will be a round viewing window where you should see a faint blue light. This operation may need to be carried out at dusk as UVC lamps emit a dim blue light under normal operation. 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 filter foam/media is too clean and is unable to remove the fine coagulated waste.
- · The filter is too small for the pond, check your filter selection chart see page 4.
- The UVC quartz sleeve is dirty or coated in lime scale. Gently remove the quartz sleeve and clean
- · Follow all cloudy water trouble shooting points.

#### TROUBLESHOOTING & IMPORTANT

#### UVC light not illuminated

· Check all fuses / RCD and electrical connections follow electrical installation

#### Faults - Problem Procedure

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

- Ensure electrical procedures have been followed fully. Check fuses and any cable connectors/switch boxes.
- (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.
- 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).

#### Guarantee

#### **UV & FILTER**

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. The 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 or UVC bulb, which will need replacing when worn or every  $\delta$  months. If any parts are needed, spares are available from your retailer.

#### **IMPORTANT**

#### PUMP & LIGHT

This product is guaranteed against defects in material and workmanship for 3 years from date of purchase, under normal usage. This guarantee DOES NOT APPLY in case of improper us, negligence, lack of maintenance or accidental damage either to the pump or the impeller shaft. If the pump 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. The 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. Excludes the pump impellor & LED lamp which may require replacing annually. If any parts need replacing, sparses are available from your retailer.

#### 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 Email 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 Interpet, Vincent Lane, Dorking, Surrey RH4 3YX England

Telephone: 0845 226 7437

(Monday to Friday 10am to 4pm except Bank Holidays - Time may vary)

Fax: 01306 876712 E-mail: customercare@interpet.co.uk

www.blagdonwatergardening.co.uk

www.interpet.co.uk



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.



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

Interpet.co.uk Blagdonwatergardening.co.uk

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