

# Amphibious® IQ

2250-4500 3000-6000 4500-9000 6000-12000

www.blagdonwatergardening.co.uk www.interpetcentral.com www.pondaquariumproblemsolver.co.uk/blagdon



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Congratulations on buying a Blagdon Amphibious IQ pump.

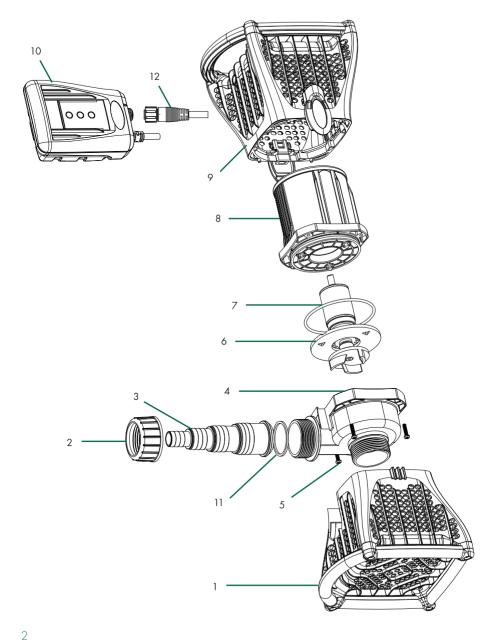
These pumps have been manufactured using the highest quality materials to deliver a durable, powerful, energy-saving, controllable pond pump. The range of fittings and advanced functions included with your pump have been researched and designed to provide outstanding water garden performance.

Please take time to carefully read this instruction booklet, so that you may gain an understanding of how to use your pump to its maximum potential, granting you the greatest benefit.

# **IMPORTANT**

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

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Part Number	Part Description	Spare Code	
1	Cage - front section	N/A	
2	Hose tail lock nut	N/A	
3	Stepped hose tail	N/A	
4	Impeller cover	N/A	
5	Impeller cover bolts	N/A	
6	Impeller	2250-4500: 1111041 3000-6000: 1111058 4500-9000: 1011297 6000-12000: 1111065	
7	Impeller cover O-ring	N/A	
8	Pump motor	N/A	
9	Cage - rear section (including clasp)	N/A	
10	Pump controller	2250-4500: 1111072 3000-6000: 1111089 4500-9000: 1111096 6000-12000: 1111102	
11	Hose tail O-ring	N/A	
12	Pump-controller connector	N/A	

Note: N/A = Not available for separate purchase

Sold Separately	Spare Code
Amphibious IQ external running kit (Includes: extra hose tail, O-ring & lock nut, foot plate, rubber feet, pre-filter cage and screws & wall plugs)	1111119

# Technical Specification

MODEL	2250-4500	3000-6000	4500-9000	6000-12000
Maximum flow at Om head (L/H)	4900	5900	8700	11200
Minimum power consumption (watts)	15	17	30	40
Maximum power consumption (watts)	25	35	60	85
Max head (on maximum power)	3m (9′10″)	4.2m (13'9")	4.5m (14'9")	5m (16'4")
Power input	230v/50Hz	230v/50Hz	230v/50Hz	230v/50Hz
Pump cable length	8.5m	8.5m	8.5m	8.5m
Controller cable length	1.5m	1.5m	1.5m	1.5m
Pump safety rating	IPX8	IPX8	IPX8	IPX8
Controller safety rating	IP56	IP56	IP56	IP56

#### Electrical installation

The power supply must meet the specifications on the product.

The pump and controller are designed to be used with either a weather-proof cable connector or connected to the mains 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, Green/Yellow = Earth

The electrical cable is permanently connected and sealed inside the motor body and controller.

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

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.

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



Warning - The controller must be affixed vertically to a secure surface, 30cm minimum above the ground. Install in a well ventilated area. Do not restrict ventilation to the heat sink. IP56 weatherproof enclosure, do not submerge. Caution hot surface, turn off power and allow to cool before removal.

Important: This appliance can be used by children aged 8 and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning the use of the appliance in a safe way and understand the hazards involved. Children shall not play with the appliance. Cleaning and user maintenance shall not be made by children without supervision.



Image 1 - External in-line installation

prevents the pump from clogging.

- Scrolling text displays energy usage, current pump status and any actions required.
- Built in 'Run Dry' and 'Motor Protection' system.

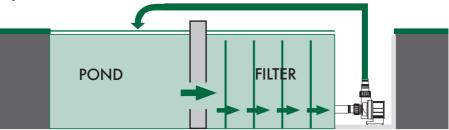
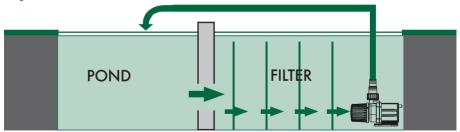


Image 2 - External resevoir installation

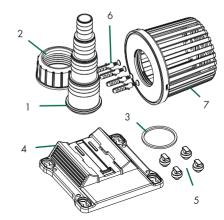


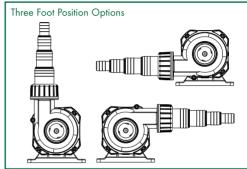
### External Running Kit

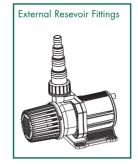
Part Number	Part Description
1	Stepped hose tail
2	Hose tail lock nut
3	Hose tail O-ring
4	Foot plate
5	Rubber feet
6	Screws & wall plugs
7	Pre-filter cage

To fully release the pump from the cage to enable you to use the pump in an external setting, it is necessary to unscrew the handle section on the rear section of the cage (part 9). When used with the External Running Kit, the pump can be located on the foot plate in one of three directions.

Included in the kit are:
Pre-filter cage for use in reservoir (image on page 6).
Hose tail for external in-line use (image on page 6).









IMPORTANT: Ensure the O-rings are in place on the hose tails before turning on.

Tip: if the pump is installed in-line it would be suggested to install an inline tap/valve on both the inlet to and the outlet from the pump. These can then be shut off during maintenance, preventing the water from the pond and filter draining out when the pump is removed for maintenance.

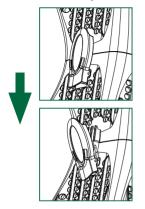
**Blagdon Amphibious IQ pumps** are centrifugal pumps with a magnetic impeller movement driven by a watertight digitally controlled motor. They only require periodic cleaning of the pre-filter cage, impeller and impeller chamber.



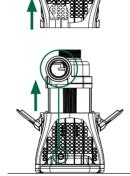
Warning - ensure the pump is turned off at the mains power supply before any maintenance is undertaken

## Opening the cage/impeller maintenance

#### To remove the cage:



To access the impeller:



Insert tool, e.g. a flat bladed screwdriver, and lever the clasp to release. Once open, lift the front section of the cage away from the pump. From here, the motor can be slid out from the rear section of the cage.

When putting the pump back together, the motor will only fit in one direction, this can be checked by lining up the outlet nozzle and the cable exit on the rear cage section (ringed in the diagram to the left)



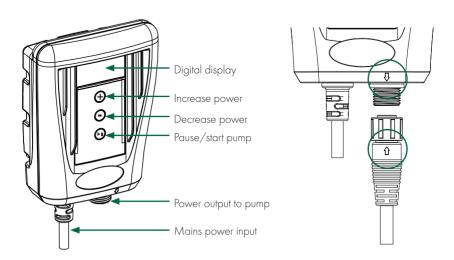
With the cage open, unscrew the four bolts (ringed on the left diagram), and remove the impeller cover. With the cover removed, locate the small open area ringed in the right hand diagram, insert a wide flathead screw driver and gently prise the impeller up until it is loose. Once it is loose remove by hand.

Wash the cage, impeller and impeller chamber with plenty of fresh water and reassemble.

# Winter Storage:

These pumps can be run in the pond during the winter, but care should be taken to ensure they are fully immersed and cannot freeze solid. If the pump is not used during the winter, remove from the pond and allow it to drain, then store in a frost free location (shed or garage) until the spring.

**Blagdon Amphibious IQ pumps** come with a controller which adjusts the output of the pump by means of digitally controlling the amount of power supplied to it. This means that rather than applying the back pressure caused by an inline tap or valve, you can turn the pump output up or down to suit your needs, by simply pressing a button.



# Connecting the pump/controller:

When installing the pump and controller, ensure the arrow on the controller aligns with the arrow on the pump cable. Incorrect installation is protected against with the design of the connection.



Warning - incorrect connection of the pump cable to the controller will cause irreversible damage, and void your guarantee

#### Soft Start feature:

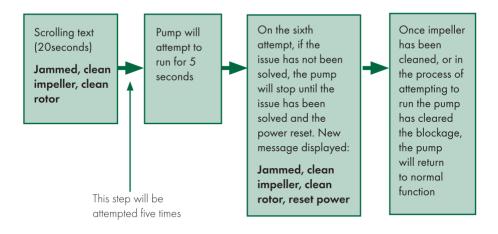
On initial start up the controller will gradually increase the power supplied to the pump to its pre-set power position, in turn gradually increasing the flow rate. This reduces pump wear, and reduces stress on pipework and filters fitted to the system, decreasing the risk of leaks or damage.

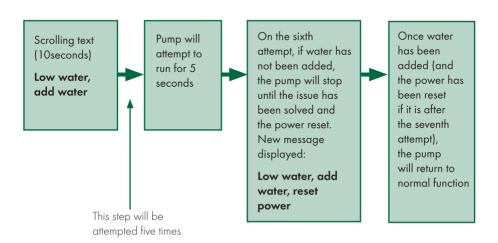
Under normal running conditions the display on the controller will show you the current power consumption of the pump. This can be altered through use of the increase/decrease power buttons.

However there are pre-set programs on the controller designed to increase the levels of protection for the pump, preventing overheating and damage to the impeller. These functions are identified by the scrolling text displayed on the controller.

Message displayed on digital display	Issue	Action required	Reset power
Jammed, Clean Impeller, Clean Rotor.	An object has caused an obstruction of the impeller – stopping it from being able to spin.	Turn off the pump at the socket, open the cage, clean the impeller and impeller chamber – ensur- ing to remove any obstructions	If the pump has remained blocked for a period of time the display will read: jammed clean pump clean rotor reset power. After cleaning turn the power off at the mains supply for a minimum of 5 seconds to enable the pump to run again
Low Water, Add Water	The water level in the pond has dropped.	Add dechlorinated water to raise the water level back to original depth.	If the pump has been without water for a period of time, the display will read: low water add water reset power. After adding water, or solving any leaking issues, turn the pump off at the mains power supply for a minimum of 5 seconds to enable the pump to run again.
Check pump cable and connector	Either: -The plug from the pump to the controller has not been connected correctlyOr, there may be damage to the pump cable.	- Ensure the plug is fully inserted into the socket on the controller: - Check cable for any damage, if damage is found, cease using the pump.	After ensuring the connector is correctly inserted, turn the power off at the mains supply for a minimum of 5 seconds to enable the pump to run again.

#### **Function flow charts:**





**IMPORTANT:** when the power is being reset, turn the pump off at the mains power supply for a minimum of 5 seconds - this will allow the components of the controller to fully reset.

#### Problem

#### Low flow from pump

- 1. Clean the pump cage and impeller.
- 2. Ensure pipework is not blocked.
- 3. Ensure the pump power is set to the correct desired level.
- 4. Reset power to pump.

#### No flow from pump

- 1. Check the plug from the pump is connected correctly to the controller.
- 2. Check power supply is on.
- 3. Check fuse and wiring (see electrical installation)
- 4. Follow Low flow procedure above.

#### Controller stuck on warning message

If the controller is stuck on low water or jammed message, after the problem has been rectified, reset the power to the controller. If this has no affect, contact Interpet (Blagdon) Consumer Advice Department.

#### Maximising performance

- 1. Keep the height to which the water is being pumped (head) to a minimum. The higher the head height the lower the flow rate.
- 2. 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.

#### **IMPORTANT**

#### FAULTS - PROBLEMS PROCEDURE

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

- Ensure electrical procedure has been followed fully. Check fuses and any cable connectors or switchboxes.
- 2. Follow the maintenance steps from page 8, follow the troubleshooting options from page 12
- 3. Return pump to point of purchase for inspection and advice (proof of purchase may be required)

#### CONSUMER ADVICE CONTACT DETAILS

Interpet (Blagdon) Consumer Advice Department Vincent Lane, Dorking, Surrey RH4 3YX

E-mail: customercare@interpet.co.uk

### **GUARANTEE**

This product is guaranteed against defects in materials 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 either to the pump, controller, or impeller.

If the pump or controller fail 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. Excludes the impeller, which may become worn over time. If any parts need replacing, spares are available from your local retailer.

# ENVIRONMENT FRIENDLY DISPOSAL



You can help to protect the environment, please remember to respect local regulations: hand in non-working electrical equipment to an appropriate waste disposal centre.



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

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