



liberty<sup>®</sup> Solar

# pond or feature pump & LED light

500



Solar Recharged



Lithium Battery Powered

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



BlagdonWaterGardening



liberty<sup>®</sup> Solar

# pond or feature pump & LED light

500

Congratulations on buying a Liberty Pond or Feature Pump & LED set. This product has been designed to enhance your garden with the sight and sound of moving water.

**IMPORTANT** Please attach proof of purchase to this manual and file in a safe place. Retain your proof of purchase for any consumables purchased for this product.

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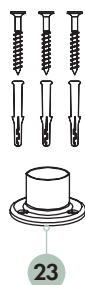
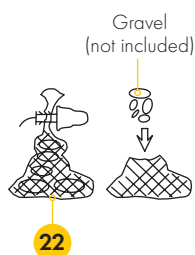
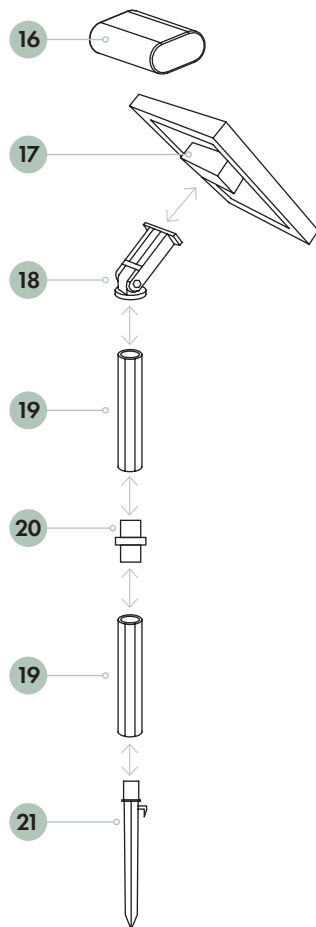
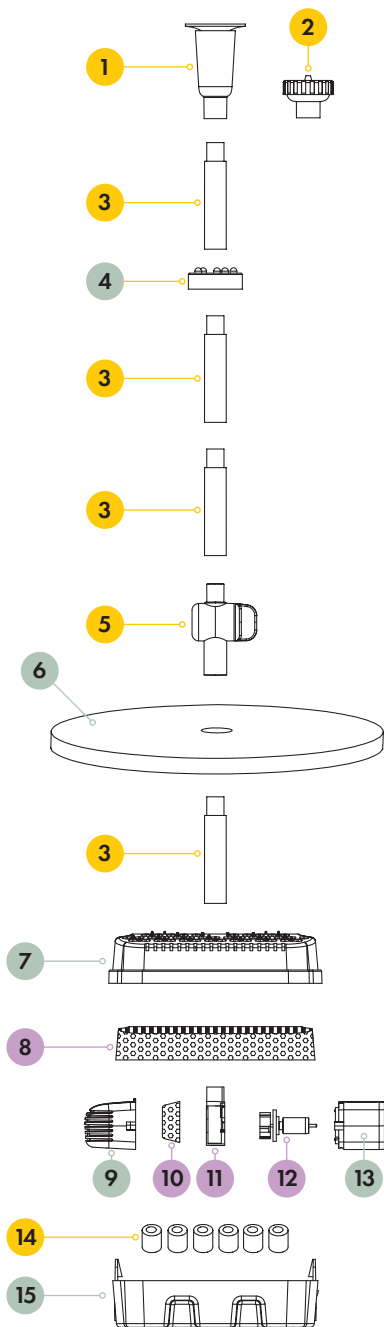
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# GETTING TO KNOW YOUR LIBERTY PUMP



# GETTING TO KNOW YOUR LIBERTY PUMP

1	Bell Jet	9016
2	Daisy Jet	9016
3	Fountain Extension Pipes (x6)	9016
4	LED Light	
5	Flow Control Valve	9016
6	Pump Float	
7	Pre-filter Cage Top	
8	Cage Pre-filter Foam	9017
9	Pump Cage	
10	Pump Pre-filter Foam	9017
11	Impeller Cover	9017
12	Impeller	9017
13	Motor	
14	Bio-media	
15	Pre-filter Cage Base	
16	Solar Panel Battery Only	
17	Solar Panel	
18	Solar Panel Bracket	
19	Solar Panel Posts (x2)	
20	Solar Panel Post Connector	
21	Solar Panel Ground Spike	
22	Pond Anchor (Gravel not included)	9016
23	Wall Bracket and Fittings	

## TECHNICAL DATA

### PUMP

- IPX8 • 5M cable
- DC low voltage 2.4 Watts
- 482 ltr/hr (106 gal/hr) max flow
- 1.7m (5'7") max pumping height

### LIGHT

- IPX8 • 5M cable
- 0.15 Watts LED

### BATTERY & SOLAR PANEL

- IP44
- Max 5 hour Li-ion battery backup
- Li-ion 7.4V /2900mAh
- 10 Watts Solar Panel

1 5  
2 22  
3

### Fountain Fittings Spares Kit

Code: 9016

Contains: Bell Jet, Daisy Jet, 6x fountain extensions, flow control valve and pond anchor (Gravel not included).

8 11  
10 12

### Annual Maintenance Kit

Code: 9017

Contains: 6x Cage pre-filter foam, 6x pump pre-filter foam, impeller cover and impeller.

## Sold Separately

### Indoor Mains Power Extension & Charger

(1.5m + 5m Extension)

Code: 1055901



### Mains Power Extension Only

(5m Extension)

Code: 1052702



### 5m LED & Pump Extension Cables

(Extension from solar panel to led and pump)

Code: 1057615



## IMPORTANT: SOLAR PANEL POSITION/DIRECTION

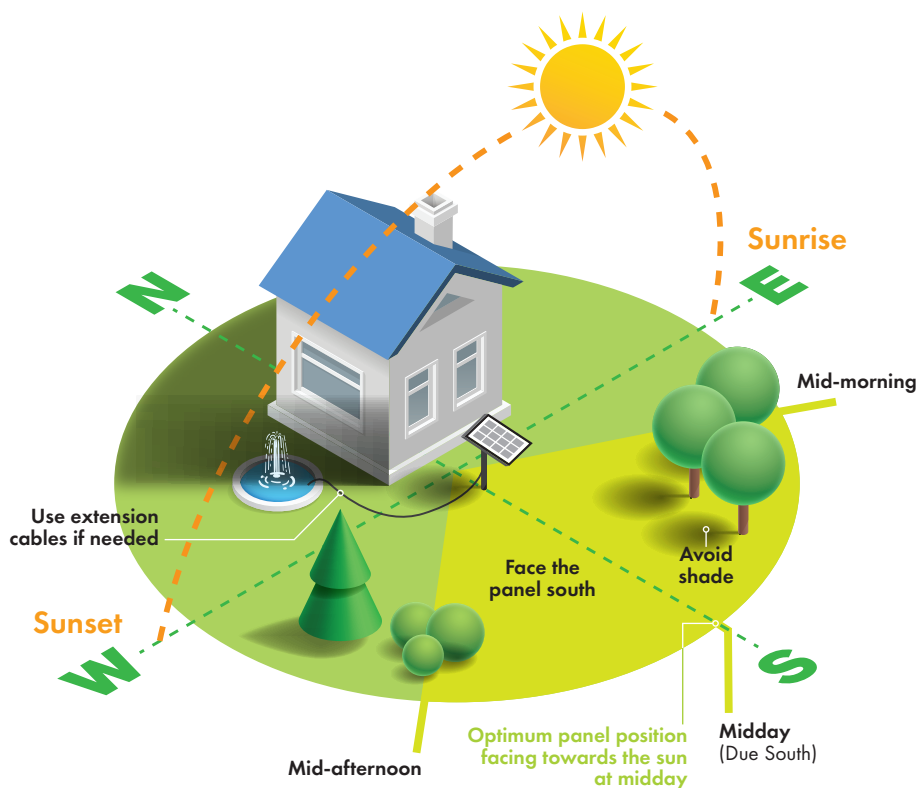
**Face the panel south:** Position the solar panel to face due south to maximise exposure to the midday sun.

**Avoid shade:** Move the panel along an east-west axis to prevent shading from trees or buildings.

**Elevate if needed:** To avoid obstruction from low shrubs or plants, mount the panel on a wall or fence.

**Consider sunlight timing:** The panel generates the most power between mid-morning and mid-afternoon. If shading is unavoidable, choose a placement that minimises shade during these peak hours.

**Use extension cables if needed:** 5-metre pump and light extension cables are available to help position the panel for the best sunlight exposure.



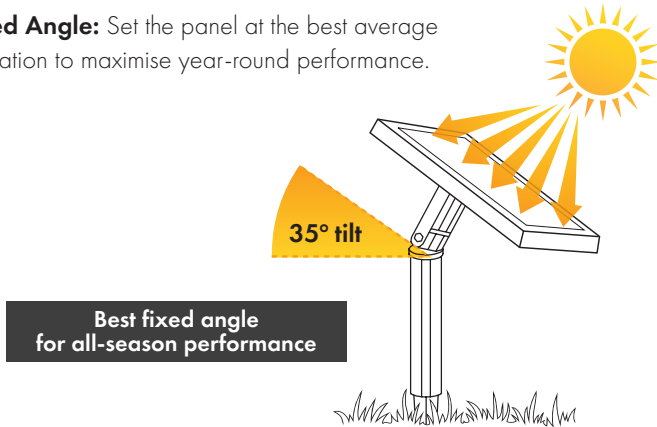


# IMPORTANT: SOLAR PANEL ANGLE

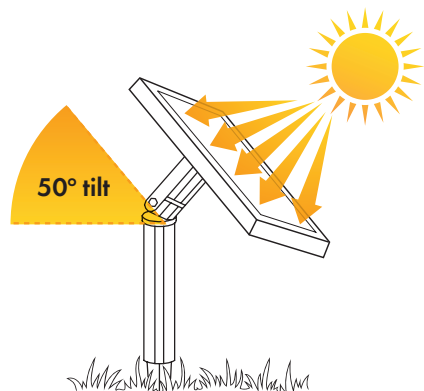
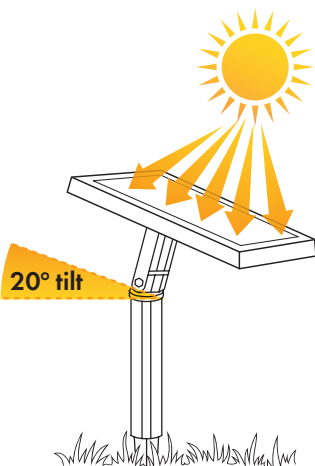
## Setting the optimal tilt angle for your solar panel

The sun's angle changes throughout the year, affecting solar panel efficiency. You can either:

- 1. Use a Fixed Angle:** Set the panel at the best average tilt for your location to maximise year-round performance.



- 2. Adjust Seasonally:** Tilt the panel steeper in winter and flatter in summer to capture more sunlight and improve efficiency.

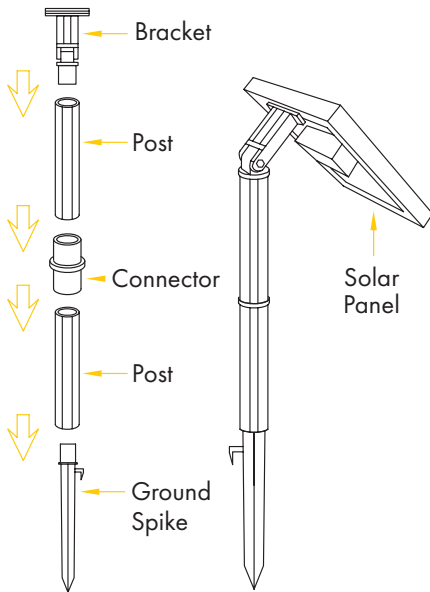


# STEP BY STEP GUIDE

## 1. Solar panel installation.

### Ground mounted:

1. Insert the ground spike vertically into the chosen location.  
**Note:** For soft ground, secure it with post cement.
2. Insert the panel post into the ground spike.
3. Attach the panel post connector.
4. Insert the final panel post.
5. Connect the adjustable bracket to the post.
6. Slot the solar panel frame into the adjustable bracket, allowing it to hang securely.

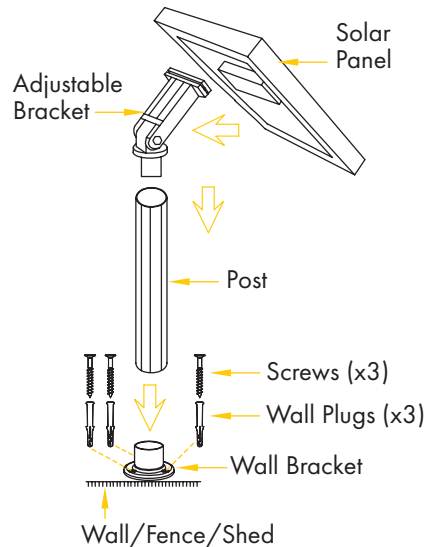


### Wall or fence mounted:

The solar panel can be mounted on top of a wall/fence or shed. It can also be mounted horizontally on a wall or fence; however, when mounted horizontally, the panel's angle cannot be adjusted to face south/midday for optimal performance.

#### To install:

1. Use the provided wall plugs (for walls only) and screws to secure the bracket in place.
2. Attach one section of the panel post to the bracket.
3. Connect the other end of the panel post to the adjustable bracket.
4. Slot the solar panel frame into the adjustable bracket, allowing it to hang securely.



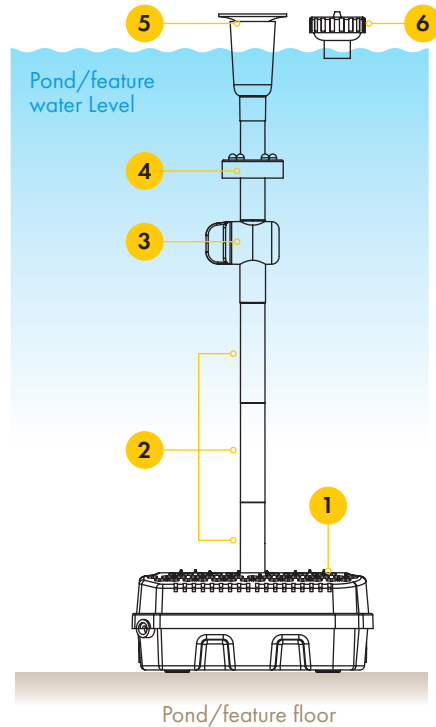


## STEP BY STEP GUIDE

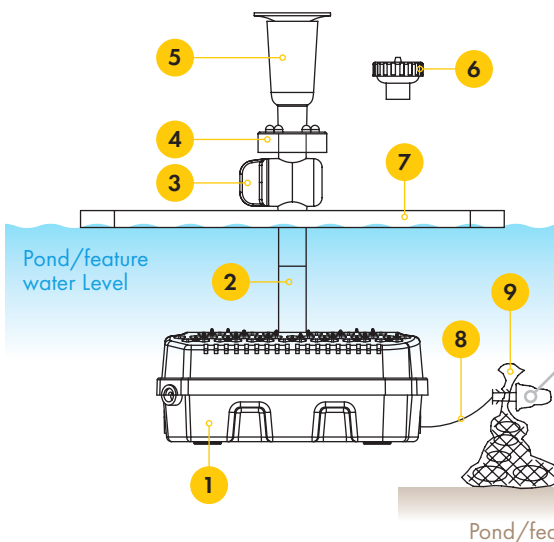
### 2. Pump assembly.

### Sitting on pond or feature floor

1. Pre-filter assembly
2. Fountain Extensions (x6)
3. Flow Control Valve
4. LED Light
5. Bell Jet
6. Daisy Jet
7. Pond Fountain Float
8. String
9. Pond Float Anchor



### Floating in pond or feature



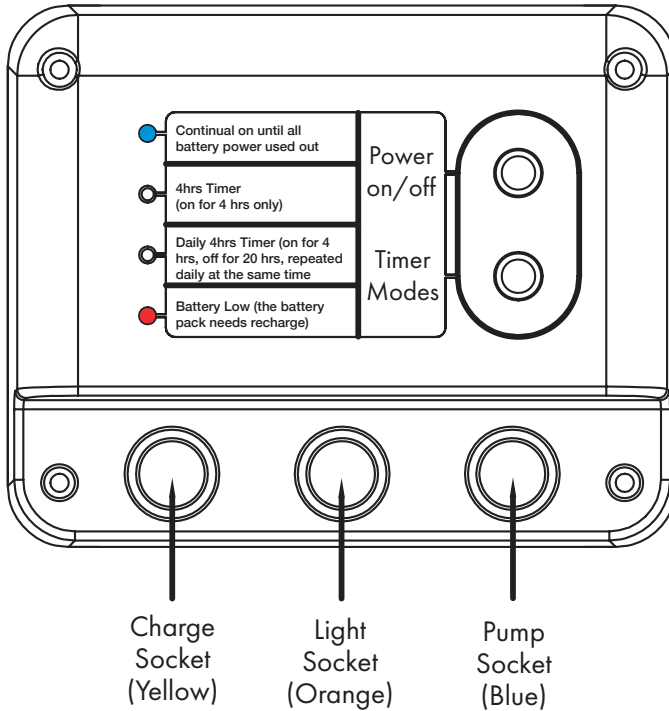
#### Securing the Floating Location

1. Fill the mesh bag with pebbles or stones (not supplied).
2. Tie the anchor to the pre-filter clip.
3. Adjust the string length to match the pond depth.

Pond/feature floor

## STEP BY STEP GUIDE

### 3. Connection to the solar panel.



- Connect the pump plug to the blue socket.
- Connect the LED plug to the orange socket.
- The yellow socket should remain unused.

#### Important:

Keep the Charge Socket cap (yellow cap) closed on the socket if not used, this will prevent water ingress into the control panel.

# OPERATION

The Blagdon Liberty Pond Pump is designed for maximum performance during the summer months, however it will perform all year round depending on the strength of the sunlight received by and on the orientation (see solar panel installation section) of the solar panel.

Note: The LED light has been designed to work at night, being operated by a light sensor on the solar panel.

The Blagdon Liberty Pond Pump has 3 operating modes, as indicated by the label on the reverse of the solar panel:

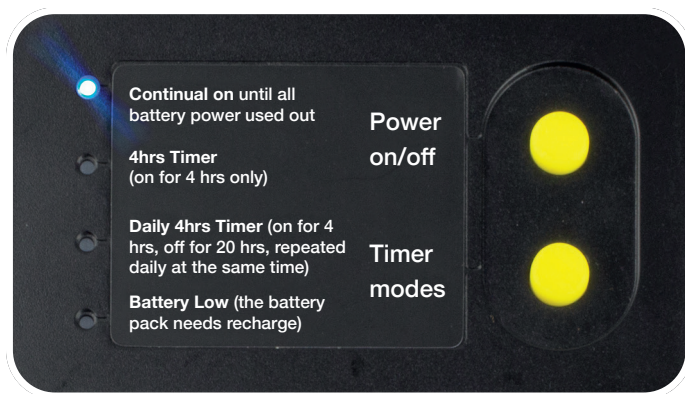
**Continual on:** activated by pressing the "Power on/off" button, in this mode the pump will run continuously until the battery has used its available charge. It will then restart by itself once the solar panel has recharged the battery to a sufficient level.

**4hrs Timer:** activated by pressing the "Timer modes" button once, in this mode the pump will run for a pre-set 4 hours and will then stop – it will not restart automatically, requiring you to press a button to choose a mode.

**Daily 4hrs Timer:** activated by pressing the "Timer modes" button twice (or once if the pump is currently running on the pre-set 4hrs timer above), in this mode the pump will run for a pre-set period of 4 hours, at the end of the 4 hours period it will enter a 20 hour stand-by mode. This function allows the pump to activate daily at the same time everyday. If you wish to change the time from which the pump activates, simply turn it on using the "Timer modes" button at your new chosen time.

Note: the indicator light next to "Daily 4hrs Timer" on the solar panel will blink slowly during the day whilst the pump is in stand-by mode, to save power it will stop blinking during the night, you can check the status of the pump in this period by pressing either of the buttons on the solar panel – the indicator light will be activated for a while, before turning off again.

Below the mode indicator LEDs, there is also a red "**Battery Low**" indicator LED, this will blink when the battery is nearing the end of it's available charge, indicating the pump will turn off shortly. The indicator will turn off once the solar panel has recharged the battery to a sufficient level.



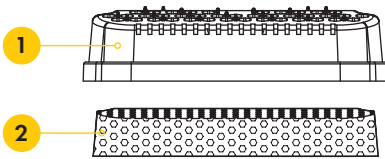
## PERFORMANCE & MAINTENANCE



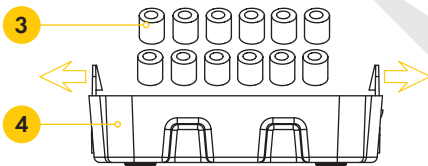
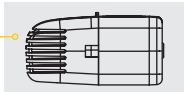
### IMPORTANT MAINTENANCE

When flow is visibly reduced, clean the pre-filter and pump. Remove all parts and wash in a bucket of clean pond water.

#### Pre-filter System

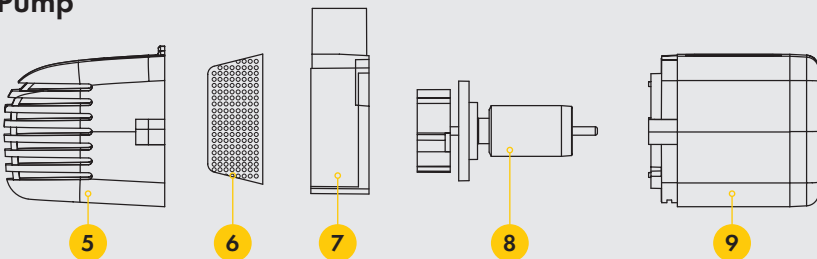


**Pump**  
(see below)



1. Pre-filter cage top
2. Pre-filter foam
3. Bio-media
4. Pre-filter cage base
5. Pump cage
6. Pre-filter foam
7. Impeller cover
8. Impeller
9. Motor

#### Pump



#### Important:

The frequency of cleaning the pre-filter foam may vary between users – those operating the pump in ponds with large quantities of floating debris may need to clean the foam on a more regular basis.

**Note:** Pond debris collects on the pond floor. Therefore using the pump and pre-filter floating on the surface can reduce maintenance.

# MAINTENANCE

## Maintenance:

The Blagdon Liberty pond pump has been designed to be simple and easy to maintain, we would recommend some basic maintenance is performed on the pump on a monthly basis:

- Unclip the front case, remove the pre-filter foam and clean in freshwater.
- Remove the impeller cover, lift out the impeller, clean the impeller and impeller chamber with freshwater.
- Reassemble.

## Battery replacement:

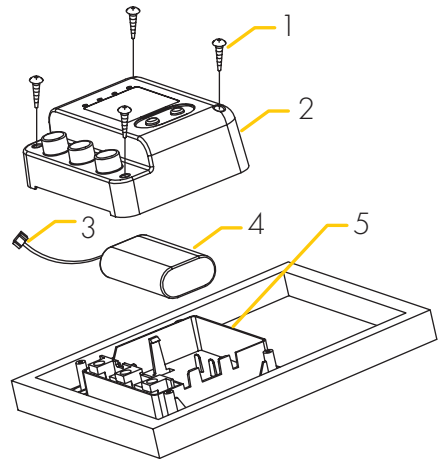
The Blagdon Liberty pond pump has been designed to run for many years if correctly maintained. The Li-ion battery pack in the solar panel however, in common with all rechargeable batteries, has a limited life span. As such it may require replacing after a period of 18-24 months.

1. Remove the 4 screws (part 1 on the diagram to the right) from the control panel cover (part 2), and lift the cover away from the solar panel.
2. Disconnect the battery pack connector (part 3) from the control panel (part 5) and remove the battery pack (part 4).
3. Repeat steps 1 and 2 in the reverse order to reassemble.

### Tools needed:

Small headed Philips screwdriver

Dispose of the old battery pack according to your local regulations.



### **Important:**

Only the correct, official Blagdon Liberty battery pack should be used for replacement, as alternatives may be incompatible, they may damage the system or create an electrical hazard – this will void the guarantee.

Do not place the removed battery in or near fire, or in direct sunlight. Heating the battery can damage the safety circuitry, which can cause additional heating, rupture or ignition of the battery.

# LITHIUM ION BATTERY SAFETY

1. Lithium-Ion cells and batteries may get hot, explode or ignite and cause serious injury if exposed to abuse conditions. Be sure to follow the safety warnings listed below:
  - Do not place the battery in a fire or heat the battery.
  - Do not install the battery backwards so the polarity is reversed.
  - Do not connect the positive terminal and the negative terminal or the battery to each other with any metal object (such as wire).
  - Do not carry or store the battery together with necklaces, hairpins or other metal objects.
  - Do not pierce the battery with nails, strike the battery with a hammer, step on the battery or otherwise subject the battery to strong impacts or shocks.
  - Do not solder directly onto the battery.
  - Do not expose the battery to water or salt water, or allow the battery to get wet.
2. Do not disassemble or modify the battery. The battery contains safety and protection devices, which, if damaged, may cause the battery to generate heat, explode or ignite.
3. Do not place the battery in or near fire, on stoves or other high temperature locations. Do not place the battery in direct sunlight or use or store the battery inside cars in hot weather. Doing so may cause the battery to generate heat, explode or ignite. Using the battery in this manner may also result in loss of performance and shortened battery life span.
4. If the device is to be used by small children, the caregiver should explain the contents of this document to the children and provide adequate supervision to ensure the device is being used appropriately.
5. When the battery is worn out, insulate the terminals with adhesive tape or similar materials before disposal.
6. Immediately discontinue use of the battery if, while using, charging or storing the battery, the battery emits an unusual smell, feels hot, changes colour or shape, or appears abnormal in any other way.
7. Do not place the battery in microwave ovens, high-pressure containers or on induction cookware. In the event the battery leaks and the fluid gets into ones eyes, DO NOT rub the eye. Rinse well with water and seek medical attention immediately. If left untreated, the battery fluid could cause damage to the eye.

## Battery warning:

Be sure to follow the warnings listed below while charging the battery. Failure to do so may cause the battery to become hot, explode or ignite and cause serious injury.

- When charging the battery, ONLY use the provided solar panel, or the Blagdon Liberty charger (sold separately).
- Do not attach the battery, if removed, to any other power supply.  
The temperature range within which the battery can be charged is 0° to 45°. Charging the battery at temperatures outside of this range may cause severe damage to the battery or reduce the battery life span.

## Battery discharging:

Do not discharge the battery using any device except for the specified device. When the battery is used in devices other than the specified device, it may damage the battery or reduce its life expectancy. If the device causes an abnormal current to flow, it may cause the battery to become hot, explode or ignite and cause serious injury.

The temperature range within which the battery can be discharge is 0° to 60°. Use of the battery outside of this range may damage the performance of the battery or reduce the life span of the battery.

## TROUBLESHOOTING

- Ensure the plugs for the LED and Pump are fully pushed into the sockets on the solar panel.
- Check the location of the solar panel – ensure it is not being shaded by buildings, shrubs or trees and is pointed at the midday sun position (12 o'clock). See diagrams on pages 5 and 6.
- Check if the "Battery Low" LED is blinking. If it is, the battery power is low. Switch off the pump and leave the solar panel charging in strong, direct sunlight for at least 6 hours.
- Check the water level – make sure the pump is fully submerged in water.
- Check any hoses and pipes connected to the pump for kinks and blockages.
- Check that the impeller is not blocked by debris, and make sure the pre-filter foam is clean.
- Check that the pump is not "air locked", turn the pump off, wait for the air to clear, then turn the pump on.

### Winter Protection:

The Lithium-ion battery works at optimum performance between 0° and 45°. The efficiency of the battery will be significantly reduced below 0°. During winter months we would recommend that the pump and solar panel should be stored dry in a frost-free location, such as a shed or garage.



## IMPORTANT INFORMATION

### Consumer advice contact details

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

**E-mail:** [customercare@interpet.co.uk](mailto:customercare@interpet.co.uk)

## GUARANTEE

The 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, and lack of maintenance or accidental damage to either the pump, impeller, impeller shaft or filter foams.

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.

This guarantee is not transferable and does not affect your statutory rights. This guarantee does not confer any rights other than those expressly set above. Excludes the impeller, pre-filter foams and battery pack, which may require replacing annually. If an parts are need replacing, spares are available from your retailer.



### Environment Friendly Disposal

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



### Battery Information and Disposal:

- Do not dispose of batteries in fire.
- For best results, do not mix old and new batteries; do not mix alkaline, standard (carbon-zinc) or rechargeable (nickel-cadmium) batteries.
- Install only new batteries of the same type in your product.
- Failure to insert batteries in the correct polarity, as indicated in the battery compartment, may shorten the life of the batteries, or cause the batteries to leak.
- Batteries should be recycled or disposed of as per your local guidelines.

**Booklet product code:** 19/02/25 EC

**Interpet Ltd.** Interpet House, Vincent Lane, Dorking, Surrey RH4 3YX, England

**Interpet Europe Ltd.** 22 Northumberland Road, Ballsbridge, Dublin 4, Ireland D04 ED73

**Email:** [customercare@interpet.co.uk](mailto:customercare@interpet.co.uk) [www.blagdonwatergardening.co.uk](http://www.blagdonwatergardening.co.uk)

 **BlagdonWaterGardening**



Liberty Solar Pumps have been designed by Blagdon, a leading British water gardening company. Over half a century in fish keeping and water gardening are brought together in this product, so you can be assured of a successful, creative water feature.