

PondMAX

WATERGARDENING TO THE MAX

WATERFEATURE PUMP

INSTRUCTION MANUAL



AQUATEC
EQUIPMENT

HOTLINE 1300 AQUATEC

www.aquatecequipment.com

VERSION
JUNE 2016

MODEL
02PV030 - PV650
02PV050 - PV1200
02PV075 - PV1600
02PV077 - PV3000

WELCOME TO THE WORLD OF PONDMAX™.
 YOU MADE THE **RIGHT** CHOICE INVESTING IN THIS
QUALITY PRODUCT. THANK YOU AND **ENJOY.**

BEFORE USING THIS PRODUCT, PLEASE READ THESE INSTRUCTIONS CAREFULLY AND MAKE YOURSELF FULLY FAMILIAR WITH THE UNIT. PLEASE KEEP THESE INSTRUCTIONS IN A SAFE PLACE FOR FUTURE REFERENCE.

TECHNICAL SPECIFICATIONS

DESCRIPTION	PV650	PV1200	PV1600	PV3000
MAXIMUM WATER FLOW(L/H)	850	1300	1900	3000
MAXIMUM HEAD (m)	1.5	1.85	2.2	3
POWER CONSUMPTION* (W)	22	30	35	75
VOLTS (V)	240	240	240	240
IP RATING	IPX8	IPX8	IPX8	IPX8
FREQUENCY (Hz) AC	50	50	50	50
FRONT FILTER CAGE: FLOW ADJUSTER	Yes	Yes	Yes	Yes
INLET Ø BSP THREAD (inch)	N/A	1/2 (F)	1/2 (F)	1" (F)
OUTLET Ø BSP THREAD (Male/Female)	1/2 (F)	1/2 (F)	1/2 (F)	1/2 (F)
CABLE LENGTH (m)	10	10	10	10
RECOMMENDED TUBING SIZE (mm) ID	12mm	20mm	20mm	25mm
OPTIONAL FOUNTAIN KIT	#10 Jet Kit	#30 Jet kit	#30 Jet Kit	#30 Jet Kit

* SUBJECT TO VARIATION ACCORDING TO LOAD

DESIGN HIGHLIGHTS

The PondMax Waterfeature Pumps have been manufactured to provide you with the best quality pumps for your water feature. Visit our website to view our range of pond filtration, outdoor/underwater lighting, water treatments and general accessories.

- **Long life Impellor Design** – Ceramic shaft is wear resistant and self-lubricated by water
- **Marine Compatible*** see warranty disclaimer
– No exposed copper.
- **Tool-less Assembly** - Easy maintenance. No special tools required.
- **BSP Threaded inlet** – Easy to connect an optional block pre-filter sponge.
- **In-line use.**
- **Built-in Flow adjuster.**
- **10m outdoor cable.**

WATERFEATURE PUMPS

BENEFITS INCLUDE

- PondMax Waterfeature Pumps are suitable for use in many different applications including fountains, waterfeatures, aquarium applications and hydroponics. The pumps can be used in either submersible or in-line use applications.
 - Your pump has a single moving part (an impeller set) enabling easy cleaning and maintenance.
 - The motor is totally encapsulated in epoxy resin, ensuring safe operation under water.
 - The pump has a robust bearing and shaft design so no Oil/grease lubrication is required.
 - PondMax pumps, that have plastic impeller parts and ceramic shafts, can be used in Marine applications as there is no exposed copper.
- For Marine use, please see warranty disclaimer.
- PondMax waterfeature pumps are continuous rated therefore are designed to operate 24/7.
 - An optional fountain kit can be purchased and fitted to the models PV650 – PV3000 pumps. When using with a fountain kit, it is strongly recommended to purchase an optional block pre-filter sponge. This assists in straining the partials in the water, to assist the fountain nozzles becoming blocked up with debris. See your retailer for options.



IMPORTANT SAFEGUARDS

Please read the operating instructions and familiarise yourself with the equipment before placing it in service. Correct and safe use of the system requires strict compliance with the safety instructions. For safety reasons, persons less than 16 years of age or infirm persons that are not familiar with these instructions should not use this equipment.

- Any damage to the equipment or unmerited operation will bring dangers to the surrounding precincts. So if there is any damage of the equipment, it must not be used. The equipment should be placed out of reach of children.
- For your own safety, disconnect from the power supply before any maintenance of any equipment is attempted on the tank or water body. Always unplug the pump from the power supply when not in use. Never pull the cable to disconnect the plug from the power supply - Grasp the plug and pull to disconnect. If required, have a qualified electrician install a weatherproof power supply point near to the pond or water-feature (within the cable length of the appliance).
- Be sure the equipment is submerged completely in the water. The depth should not be greater than 2m.
- Do not operate the pump if the appliance or any components of the system, such as the power cable, have been damaged. Check appliance for defects regularly.
- Always use a properly grounded power supply that is connected to an RCD with a rated residual operating current not exceeding 30mA. As per AS/NZS 3350.2.41:1997
- To avoid an electric shock, do not attach the plug to the power supply socket with wet hands. The drip loop method should be used to prevent water from traveling down the cable and onto the plug or power supply. If the plug does get wet, do not unplug the cable. Disconnect the circuit breaker that supplies power to the power supply point. Then unplug and examine the plug and power supply point for presence of water. If the power point has become wet, you should consult an electrician before using the power point again.
- Do not install or store the appliance where it will be exposed to extreme hot or cold temperatures. Do not use in water above 35°C.
- Do not cut the cable as this will result in voiding your warranty.
- Care should be taken to arrange the power cable so that it cannot be accidentally tripped over or pulled.
- Do not attempt to repair the electrical appliance yourself. Return to an authorized service centre or place of purchase if a fault occurs, (regular maintenance is not considered repair and is required by user).

PRODUCT SPECIFIC SAFEGUARDS

- Do not operate the pump without water at any time, permanent damage may occur.
- Waterfeature pumps are a magnetically driven centrifugal pump. Be sure the equipment is submerged completely in the water. If used in line, the pump must have adequate flooded suction at all times, therefore they cannot suck from a water level that is below the inlet level.
- The pump is designed to be used in a garden waterfeature or aquarium environment. It is not to be used in any other manner or purpose.
- The pump should only be used in clean water only. Do not use the pump in, or with, any chemicals such as a solvent or gasoline.
- All PondMax Submersible pumps are cooled by water flowing through the inside of the motor body. If the pump flow becomes restricted it will overheat and could cause permanent damage. Large tubing size is strongly recommended to deliver adequate water flow to cool the pump. The pump needs to be cleaned regularly to prevent the pump becoming blocked, thus causing the pump to overheat and burn out. This is not a warrantable event. It is strongly recommended not to select a pump that is too small for the Job required. The flow rate through the pump needs to be enough so that a half of the rated max flow is kept running at all times.

INSTALLATION

For your convenience we have provided a built in flow control on the front of the front cage. This can be used to adjust the water flow if the flow is too fast for a particular installation. These are mainly used in clean water features with no debris.

- Some may choose to upgrade to a F3 or F11 Block sponge that has a large surface area, which is advisable to use in an outdoor pond environment.

WATERFEATURE PLUMBING GUIDE

If used to supply water to a waterfeature, cascade, waterfall, etc; where a pipe is needed to be used, use the hositails supplied in the package.

- For best results, use the bigger tubing size recommended in the table previously. Depending on the pump size, select the hose tail required for your tubing size and evaluate which hositail will be used. Using a smaller than recommended tubing size will create a unnecessary restriction in the plumbing system.
- Select the outlet hositail Adaptor and screw into the top of the pump.
- Now connect the tubing to the hositail. Remember to use Stainless Steel hose clamps to fasten the hose on to the hositail. This is to ensure that the pipe does not blow off at a later time or leak at this point in the plumbing system.
- When used in a waterfeature environment, position the pump as outlined below.
- Direct the hose to your desired location.

FOUNTAIN KIT SET UP GUIDE

- For Pumps, from 850L/hour to 6000L/hour, there are a number of optional fountain kits readily available. PondMAX has three readily available. For various suggestions of the correct model and fountain type selection see the specification table on page 2.
- For the purpose of these guidelines, a PondMAX #30 Jet kit has been selected. The installation principle will be similar for the other types.

WATERFEATURE PUMPS

Using the 1" to ½" threaded reducing nipple (1), attach onto the Male Threaded outlet of the pump. Now secure the Duel-Control-T-Piece (2) onto threaded reducing nipple. Now on the top of the Duel-Control-T-Piece (2), connect the Reducing Adaptor (4) on. Now extend riser to the desired height, then secure onto the top of the Reducing Adaptor with the threaded locking nut provided. Align riser vertically.

Select the desired nozzle, (7) (8) or (9), and screw into the Fountain Nozzle Threaded Mount. (6) Then attach the Mount to the riser.

Locate the stepped hose tail (5). Attach this to the side outlet of the Duel-Control-T-Piece to facilitate an optional accessory for example a filter or waterfall. Now, utilizing the Flow-Adjustment-Knob (3), on the T-Piece, you can vary the flow between the fountain head and the waterfall outlet. Close the second outlet of the T-Piece if this is not required. Now connect tubing to the side Hosetail if required. This T-piece is not suitable for dry mount applications.

Place the pump in desired location; ensure the pump is on a stable surface that is free of sludge, sand and other debris. Position the device in the pond horizontally, on a solid base, in such a way that it is fully covered with water and ensure that the pump is located, at a depth, in the water, which will not allow it to suck air from the surface. This is known as cavitation. Cavitation is a cause of premature impellor wear.

The fountain nozzle should now be protruding out of the water.

Push the plug into the power supply outlet and switch on. Use the power supply switch for turning the unit on and off.



CLEANING INSTRUCTIONS

Begin by ensuring that the mains power supply is disconnected before attempting any maintenance or adjustment of the unit or the water body. Remove the unit from the water. If your unit is connected to a sponge filter (optional), it will clog up over time. Please clean regularly (at least once a month) to ensure strong water flow. Failure to maintain the unit will result in a burnt out motor and other damage. This is not a warrantable event.

- All PondMAX Submersible pumps are water cooled, if pump becomes restricted, or blocked, it will overheat and could cause permanent damage. Regular inspections, cleaning and maintenance of impellor is necessary to ensure longer life.
- If using a fountain kit, take off the fountain set first by unscrewing it from the top of the pump. Examine the nozzles to ensure all ports are unblocked. Clean with a suitable brush if necessary.
- Maintain the filter sponge regularly according to how long it takes for the sponge to get clogged up. When the flow starts to be reduced, check and clean if necessary.
- To unclip the front filter cage from the front of the pump, push in the two tabs on either side of the filter cage and pull forward. See below for diagram. If available, take out the optional internal bio sponge (X) and clean. If using an optional pre-filter block sponge, slide the sponge off the threaded core and wash out. It is recommended that this is done in a bucket of pond water to ensure the good bacteria that are present in the sponge are not killed by the Chlorine in tap water. Check for wear and tear of the sponges. Replace if necessary.
- You can help boost the biological function of your filter sponge with a bacterial additive, available from your local stockiest.

IMPORTANT NOTES

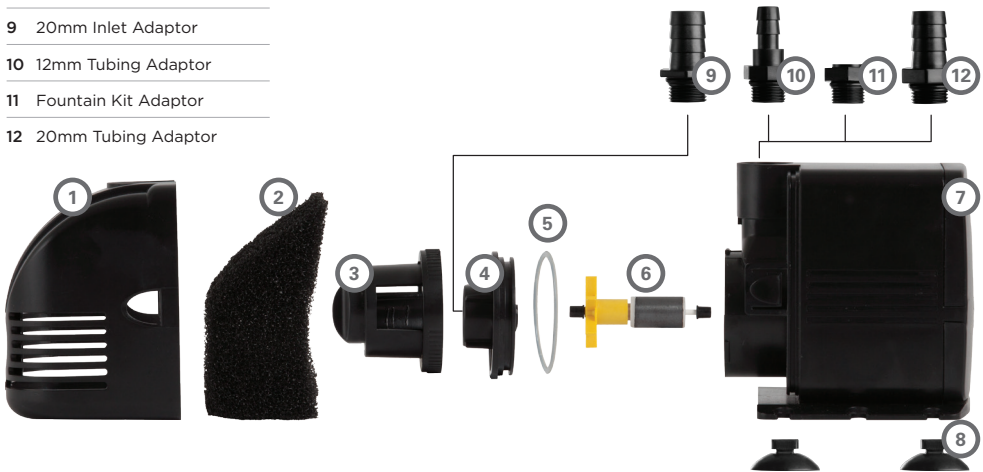
- It is important to ensure that this is carried out regularly as the cooling path inside the motor will become clogged. If the impellor assembly becomes worn or damaged it should be replaced (available from your dealer or special orders). Failure to do so may cause serious damage to pump motor. Inspect for signs for wear and tear. The impellor set is a wearing consumable part. Replace if necessary.
- Once the cleaning and inspection process is completed, reassemble in the reverse manner. Reinstall the shaft, and then carefully slide the impellor onto the shaft. The impellor will pull itself in by magnetic force, this

is normal. (Take care not to pinch your fingers). With the impellor in the correct position, carefully place the impellor cover back on, and then rotate clockwise to lock into position. Making sure the ceramic shaft is located properly in the impellor cover centre hole.

- On some models re-insert the internal sponge back into the filter cage and reattach to the pump. On other models re-attach the front filter screen.
- Re-attach tubing/fountain kit, submerge in water.

EXPLODED VIEW

- Front Cover
- Biosponge
- Flow Controller/Locking Ring
- Impellor Cover
- O Ring
- Impellor
- Motor Body
- Suction Cap Feet x4
- 20mm Inlet Adaptor
- 12mm Tubing Adaptor
- Fountain Kit Adaptor
- 20mm Tubing Adaptor



NOTE: Parts may differ slightly from shown



IMPORTANT

These accessories and attachments are recommended for use with your PondMAX product specified in this manual. The use of any other accessories or attachments might present a risk of injury to persons. Only use the accessory or attachment for its stated purpose.

WATERFEATURE PUMPS

SPARE PARTS

PART NO.	DESCRIPTION	PV650	PV1200	PV1600	PV3000
1	Sponge Filter Cage				
2	Internal Sponge Pre-Filter Insert (Optional)	12PV040	11AP534	12PV041	11AR720
3	Flow Adjuster Knob with Locking Nut	12PV052	12PV053	12PV054	12PV055
4	Threaded Impellor Cover	12PV046	12PV047	12PV048	12PV049
5	O Ring				
6	Impellor Assembly Including Ceramic Shaft And Rubber Grommets	12PV050	11A1246	12PV051	11AR961
7	Pump Motor Body				
8	Rubber Feet				
9	Threaded Hosetail For Inlet - 1/2" Bsp To 20mm Tube				
	Threaded Hosetail For Inlet - 1" Bsp To 25mm Tube				
10	Threaded Hosetail for Outlet - 1/2" BSP to 13mm Tube				
11	Fountain Kit Adaptor				
12	Threaded Hosetail for Outlet - 1/2" BSP to 20mm Tube				

TROUBLESHOOTING

Problem	Reason	Solution
WATER PUMP NOT WORKING	No Power	Check that the plug is connected and power point turned on.
	Sponges and filter media blocked with sludge.	Clean the sponges and filters.
	Impellor is blocked with sludge or lime scale build up.	Clean the Impellor as per the instructions.
	Running without sufficient water.	Submerge the equipment underwater then plug in. Refill if necessary.
	Blocked Impellor chamber or ceramic shaft is broken.	Clean the Impellor. Check for wear. Replace if necessary.
WATER PUMP IS NOISY	Blockage in pump.	Clear the blockage.
	Impellor & Shaft worn out.	Replace Impellor & Shaft.
	Impellor broken.	Replace Impellor.
	Water valve closed on the inlet or outlet.	Open the valve and allow.
	Unit inlet is blocked or the water pump outlet is blocked.	Clear all blockages.
	The height to which you are pumping is too high for the given model of pump.	Select a bigger model.

LIMITED WARRANTY 2+1 YEAR

- The additional 1 Year Extended Warranty applies when you REGISTER with Aquatec Equipment. See enclosed for details and please retain your proof of purchase and Warranty form.
- Warranty covers only appliance defects and faulty material and workmanship within a 2 year period.
- Faults arising due to accidents, misuse, not following manufacturer's guidelines/ instructions or power surges/spikes/brownouts will not be covered.
- The impellor set is a consumable item and is therefore not covered under warranty.
- Warranty will be void if any tampering removal of warranty labels or electrical circuitry is evident.
- Warranty will be void if the power cord is cut or damaged in any way.
- Warranty will be void if any visible signs of overheating are present.
- Loss of livestock, damage to property or personal injury caused by this product will not be covered.
- Warranty claims caused by installation faults will not be covered.
- It is the customer's responsibility to return the faulty appliance for any warranty claim, to Aquatec.
- For any warranty to be valid, an original proof of purchase must be provided.
- Our goods come with guarantees that cannot be excluded under the Australian Consumer Law. You are entitled to a replacement or refund for a major failure and for compensation for any other reasonably foreseeable loss or damage.

You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure.

- **A Warranty claim must be made within 2 years of the date of purchase.**
- **If used in Marine or Salt water, due to the harsh conditions, there is only 1 year warranty.**

EXTENDED WARRANTY

- The Extended Warranty period is for an additional 1 Year and commences on expiration of the standard Warranty period.
- Application for Extended Warranty is FREE of any registration cost to the purchaser on completion of the Extended Warranty questionnaire can be found in the box with the item purchased or online at aquatecequipment.com.
- Please keep a copy of the registration form in a safe place together with your proof of purchase (sales receipt). Both documents will be required for any claim under this extended warranty.
- Where Aquatec determines goods are being used in a manner contrary to the instructions, specifications or this Warranty, Aquatec reserves the right to terminate Extended Warranty for such goods and will provide written notice to the purchaser.

Please consult your retailer for quality original PondMAX replacement parts.

Visit www.aquatecequipment.com for your nearest stockists.

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