

# FISH MATE®

## 2000 P-UV / 3000 P-UV

### IMPORTANT SAFETY INSTRUCTIONS

**WARNING - To guard against injury or death, basic safety precautions should be observed, including the following**

### READ AND FOLLOW ALL SAFETY INSTRUCTIONS

- Register your purchase on-line at [www.pet-mate.com](http://www.pet-mate.com) (see guarantee).
- Closely supervise children when near to pond or pond equipment.
- Risk of electric shock. This filter is supplied with a grounding conductor and grounding type attachment plug. To reduce the risk of electric shock, be certain that it is connected only to a properly grounded, grounding-type receptacle.
- All electrical work must be carried out by a competent electrician.
- The filter MUST be wired into a ground fault circuit interrupter (G.C.F.I.) maximum 30mA and a 3 AMP (maximum) fuse. Ensure breaker is regularly tested in accordance with manufacturer's instructions.
- Ensure that the voltage on the rating label (O) see figure 1 conforms with your supply voltage.
- Unplug or switch off all appliances in the pond before carrying out maintenance.
- Connection to the power supply should be made through a suitable dry, weatherproofed 3 pin plug or double pole switched enclosure with minimum 1/8" (3mm) contact separation and a 3 AMP (maximum) fuse.
- It is essential that all connections are securely made using the following code:
 

Black	- Live
White	- Common
Green	- Ground
- Connect with 3 core cable suitable for outdoor use, (Standard PVC is not suitable for outdoor use) with a minimum of 0.001in<sup>2</sup> (0.75mm<sup>2</sup>) cores. All connectors and plugs must be an approved watertight design. Protect cable from physical damage.
- UV-lamps emit radiation that can be harmful to eyes and skin. When checking the UV-lamp you should never look directly at the light - always use the lamp indicator.
- Do not connect power to filter unless filter is fully assembled.
- Do not leave power connected unless water is running through filter.
- The filter is for outdoor ornamental pond use only. It must not be used for a swimming pool.
- Site filter well away from flammable items.
- Do not immerse filter. If the filter falls in the water DO NOT reach for it. Unplug it immediately and contact Pet Mate customer service.
- In freezing conditions disconnect power supply to filter and drain water from bucket (Z).
- Do not place objects directly on or in the filter.
- Never run the filter with damaged components or faulty electrical supply. Check plastic mouldings for damage and hairline cracks regularly.
- UV lamps and Quartz tubes are made from delicate glass and must always be handled with care.
- Check Quartz tube is not cracked before use, or if filter is dropped or exposed to freezing temperatures.
- Maintain filter annually with the appropriate FISH MATE parts (not included).

**SAVE THESE INSTRUCTIONS**

### IMPORTANT - READ BEFORE USE

#### 1. SETTING UP THE FILTER

##### A. Choose a suitable site for your new filter where:

- Power supply can be safely run to the filter and be protected with conduit against damage from garden equipment, children and animals.
- The filter must either be buried with clamp (T) at least 1" (25mm) above ground or placed above ground on a firm base (such as a paving slab). Ensure that the filter cannot fall into the pond.
- The area chosen is well away from flammable items.
- Water supply hose can be run from your water pump and back to the pond or to the waterfall.
- The water return is not feeding back close to the pump inlet.
- If the filter overflows or leaks, ensure the water will not cause electrical or other dangers.
- Sludge hose (when attached) can reach a drainage area (preferably lower than the filter to get best filter cleaning).

##### B. Assemble filter

- Open clamp (T) and remove lid (R) by carefully lifting vertically.
- Remove bio tray (L) with lid (V).
- Pull off bio tray lid (V). Fill tray with SUPRA+ supplied and refit lid (V).
- Remove UV-tube (U) by turning anti-clockwise 1/8 of a turn and pulling. Confirm Quartz tube (S) is not cracked. Refit UV-tube (U) so that the arrows align (see fig. 3).
- Make sure foam support (Y) is in place with legs pointing downwards and fit bottom foam(s) (M) ensuring foam is in the centre of the filter. Fit top foam (X) and bio tray (L) (see fig. 1), ensuring piston (W) is not rucked.
- Refit main lid (R) ensuring that main O-ring (N) is correctly fitted before fitting clamp (T).

##### C. Plumb in to the filter

- The flow through the filter should be approximately 50% of your pond volume every hour. e.g. For a 1000 gallon (5000 litre) pond, you will need a flow of around 500 GPH (2500 L/h). (You will normally lose at least 40% of the manufacturer's claimed flow due to pipe losses etc.)

Model	Maximum Flow	Max Head Pump
2000	1300 GPH (5000 LPH)	26ft (8m)
3000	2000 GPH (7500 LPH)	26ft (8m)

*Note: If the filter is run outside of the recommended flow rate, the clear water guarantee is invalid and POWERCLENZ may not clean as effectively as it should.*

- Choose suitable hoses and fix with hose clips. The water inlet and outlet adapters (G & H) will accept 3/4" (19mm), 1" (25mm) and 1 1/4" (32mm) hoses. To ensure efficient flow, saw off water inlet and outlet adapters (G & H) along appropriate line (see fig. 2). Fit using nuts (I). *Note: Smaller hose sizes will generate greater flow losses.*
- The water return should be as far away from the pump inlet as possible to help water flow in the pond.

##### D. Connecting Electrical Power

**WARNING: Read the safety instructions before carrying out any electrical work.**

- An R.C.D./G.F.I. (30mA maximum) must be fitted in the power supply to the filter.

With the filter assembled, connect power and by looking at lamp indicator (A) confirm lamp is working. (*Note: only a small amount of safe light is emitted from the indicator so you may have to cup your hands over the indicator*). Never look at the lamp (E) directly as it produces UV-C light which may be harmful to the eyes and skin.

#### 2. OPERATION

The filter is now ready to run.

Set the dial (F) to position 'RUN' and switch on pump and run filter for 10 minutes to ensure that there are no leaks. If all is OK, finally turn on power supply to filter.

The water should start to clear in 2 to 3 weeks, but full clarification may take 1 to 2 months. If the pond water is very green, a partial water change should be made before starting the filter.

The filter should be run 24 hours per day through the year except when there is a risk of the water freezing. If there is a risk of freezing, drain the filter and move the filter indoors.

#### 3. MAINTENANCE

##### A. Weekly Maintenance

The filter should ideally be cleaned once a week. In cooler weather the filter will not need cleaning so often.

The waste coming out of the sludge hose is suitable as a fertiliser for most established plants. The waste is rich in nutrients and excessive use could be harmful to delicate plants.

*Note: POWERCLENZ is designed only to remove the excess waste in the filter and leave behind a useful amount of biologically active deposit. Also, a foam cleaned by POWERCLENZ will collect pond waste more effectively than a hand-cleaned foam.*

- Remove sludge blocking cap (J) and fit sludge adapter (K) with approx. 3' (1m) of 3/4" (19mm) or 1" (25mm) hose with nut. Saw off adapter (K) along line if using 1" (25mm) hose. Do not over-tighten nut.
- Place end of the sludge pipe as low as possible to aid cleaning cycle.
- Turn dial (F) to 'CLEAN' for 30-60 seconds. You may see flow decrease when the foam is fully depressed indicating that the cleaning cycle can be ended. No further cleaning occurs after the foam is fully depressed so the filter should not be left in this position. We recommend you repeat the cleaning cycle after first turning the dial (F) to 'RUN' for a further 20 seconds.

- Remove sludge adapter (K) and refit sludge blocking cap (J).

*Note: After the POWERCLENZ 'CLEAN' some dirty water may come out of the outlet hose. If this is a problem, turn the dial (F) to the intermediate position 'A' and this dirty water will be discharged through the sludge pipe.*

##### B. Mid Season Maintenance

During the height of summer the filter may need to be cleaned more thoroughly to keep it in top performance.

- Disconnect power to all appliances in the pond including the pump and filter.
- Open clamp (T) and remove lid (R).
- Remove bio tray (L) and rinse in pond water (never in tap water).
- Remove foams (X & M) and clean in pond water (never in tap water). Do not over-clean as this will reduce efficiency.
- Remove foam support (Y) and if there is a lot of sludge in the bottom of the bucket (Z), remove it.
- Refit foam support (Y) with legs pointing downwards, bottom foam (M), top foam (X) and bio tray (L) ensuring that foams are in the centre of the filter.
- Remove UV-tube (U) by turning anti-clockwise 1/8 of a turn and pulling.
- The Quartz tube (S) can be carefully cleaned with an aquarium-cleaning pad.
- Confirm UV-tube (U) is clean and refit by turning clockwise 1/8 of a turn. The two pointers should line up when fitted (see fig. 3).
- Refit main lid (R) ensuring that main O-ring (N) is correctly fitted before fitting clamp (T).
- Connect power to pump and then filter. Check for leaks.

##### C. Annual Maintenance

In addition to the Mid Season Maintenance (3.B.) we recommend:

##### UV-Lamp Replacement

The UV output of the lamp (E) reduces over time and after 12 months running should be replaced. Note that the UV-lamp (E) will carry on giving off violet light well after the UV light that kills the algae has stopped. We recommend that the lamp is replaced at the start of the summer so that it is at its most efficient when the need is greatest.

**Only use FISH MATE replacement lamps which have been developed for maximum UV-C output and long life.**

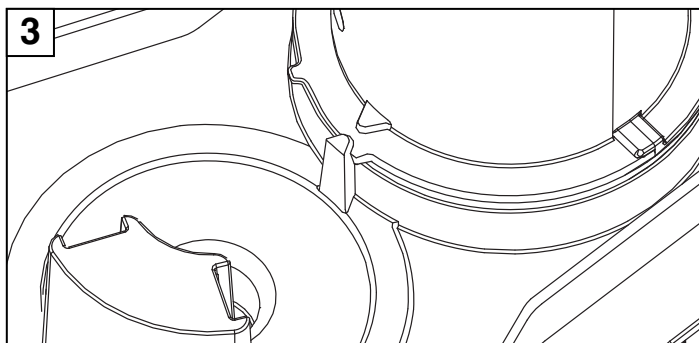
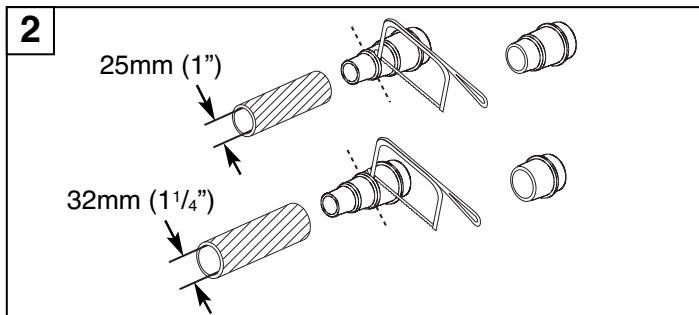
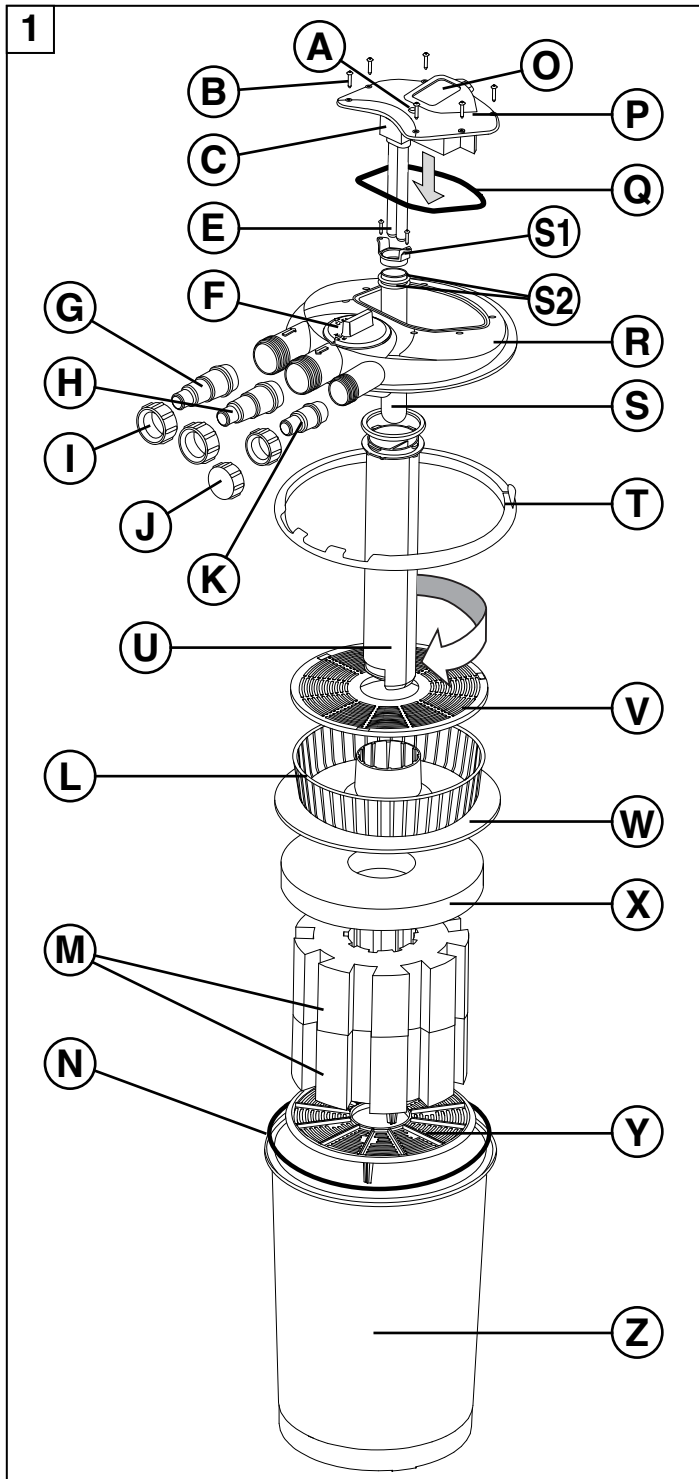
- Disconnect power to all appliances in the pond including the pump and filter.
- Remove electrical lid (P) by removing 6 screws (B).
- Remove UV-lamp (E) by pulling UV-lamp (E) away from the lamp holder (C) (see fig. 1). Never twist or pull in any direction other than that shown by the arrow in fig. 1.



[www.pet-mate.com](http://www.pet-mate.com)



(936) 760 4333



- iv) Confirm that your new Fish Mate UV-lamp (E) wattage is correct by checking that the wattage on the UV-lamp (E) is the same as the old part.
- v) Fit lamp by pushing new UV-lamp (E) into lamp holder (C) (see fig. 1).
- vi) Refit electrical lid (P) ensuring that a new electrical seal (Q) is in place. Fit 6 screws (B).
- vii) Connect power to pump and then filter. Check for leaks.
- viii) Look at lamp indicator (A) to confirm UV-lamp is working.

#### Filter Foam, Piston, Seal and SUPRA+ Replacements

The performance of the foams (X & M), piston (W), and seals (Q, S2 & N) will deteriorate over time and so should be inspected and if necessary replaced annually. All items subject to deterioration are available as spare parts. The performance of the SUPRA+ will slowly deteriorate over time and we recommend that 50% should be replaced with new FISH MATE SUPRA+ every year.

#### 4. TROUBLE SHOOTING

##### A. Water doesn't clear

- ▼ The water should start to clear in 2 to 3 weeks, but full clarification may take 1 to 2 months. If the pond water is very green a partial water change should be made before starting the filter. Thereafter the filter will keep the water clear.
- ▼ If the UV-lamp (E) is over 12 months old replace with new FISH MATE UV-lamp.
- ▼ Confirm UV-lamp is working by looking at the lamp indicator (A). *Note: Only a small amount of safe light will be coming through the indicator so you may have to cup your hands over the indicator. Never look at the lamp (E) directly as it produces UV-C light which may be harmful to the eyes and skin.*
- ▼ Confirm that you have selected the correct size filter for your pond (see carton).
- ▼ Confirm that flow rate through the filter is correct (see section 1.C.)
- ▼ Confirm that the filter outlet is not near the pump inlet in the pond.
- ▼ Confirm that the filter is being run 24 hours a day through the year except when there is a risk of the water freezing.
- ▼ Confirm Quartz tube (S) is not dirty. Clean carefully if necessary.
- ▼ Do not feed your fish more food than they can consume in 2-3 minutes. We recommend the use of our FISH MATE automatic fish feeders - specially designed for slow, safe feeding of fish.
- ▼ Do not use a lawn or pond plant fertiliser.

##### B. Blanket Weed

- ▼ This filter will not eliminate blanket weed.
- ▼ Increased use of plants in the pond may be beneficial.
- ▼ Do not use lawn or pond plant fertiliser.

##### C. The flow coming out of the filter is less than expected

- ▼ The flow from the pump will inevitably be reduced on passing through the filter.
- ▼ Increase the hose diameter.
- ▼ Reduce the height of the outlet hose.
- ▼ Confirm you have cut off the hose adapter to suit (see fig. 2).
- ▼ Fit a bigger pump.

##### D. The flow coming out of the filter has reduced over time

- ▼ The flow will naturally reduce as the filter gets dirty.
- ▼ Complete a **POWERCLENZ** cleaning cycle.
- ▼ If **POWERCLENZ** cleaning is insufficient, perform the Mid Season Maintenance (3.B.).
- ▼ If problem persists, confirm that there is nothing blocking the hoses, adapters, filter and pump.

##### E. The filter is still dirty after a **POWERCLENZ** cleaning cycle

- ▼ **POWERCLENZ** is designed only to remove the excess waste in the filter and leave behind a useful amount of biologically active deposit. This will ensure that the filter runs at maximum performance.
- ▼ Confirm you are providing the recommended minimum flow rate for your filter.
- ▼ You can confirm the foam is being compressed by putting the filter into a **POWERCLENZ** cleaning cycle and after 45 seconds turning the pump off. If the filter is then opened, you should find the bio tray (L) near the bottom of the bucket.
- ▼ Decreasing the height and length of the sludge pipe will increase cleaning compression. Increasing the hose diameter and cutting off the hose adapter to suit will also improve performance.

##### F. Little or no dirt is coming out of the sludge pipe

- ▼ As the filter is only designed to remove excess dirt from the foams, dirt will not be visible from the sludge pipe until the filter is fully dirty.

##### G. **POWERCLENZ** dial (F) is stiff or will not rotate

- ▼ Do not force.
- ▼ Remove main lid (R), disassemble and clean dial assembly (F) (consult website/helpline for details).

NOTE HERE DATE FOR NEXT ANNUAL SERVICE



Pet Mate Ltd. guarantees your product for a period of 3 years from the date of purchase, subject to the registration of your purchase details on our website [www.pet-mate.com](http://www.pet-mate.com) within 14 days of purchase. (If you do not have access to a computer, please send details of your purchase with copy of receipt along with your name and address.) In the event of a fault developing contact Pet Mate customer services for a returns authorisation number. The guarantee is limited to any defect arising due to faulty materials or manufacture. Any defective item will be repaired or replaced free of charge at the manufacturer's discretion, provided that the defect has not been caused by neglect, misuse or normal wear and tear. The guarantee excludes claims arising from frost, accidental damage or loss of fish. Your statutory rights are not affected.