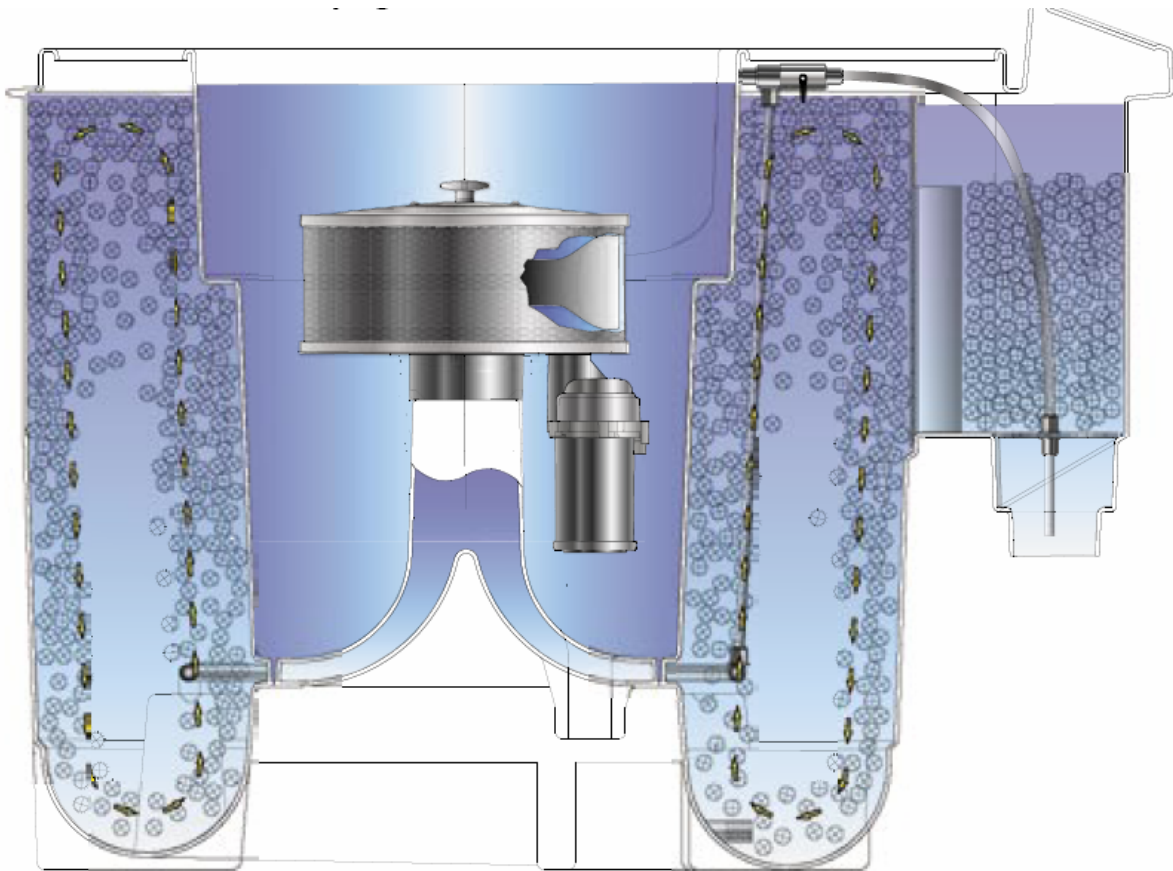


# nexus

FILTRATION system

## Fine Particle Filter with Air Backwash Module 2000 / 3000





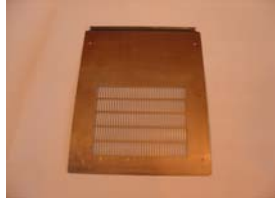



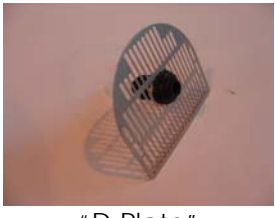



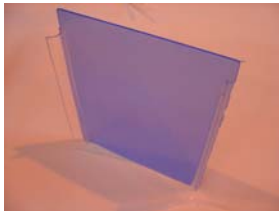

## Installation & Operating Instructions

**Note: Do not attempt to install this Module  
without first reading this manual thoroughly**

**Manufactured by** Evolution Aqua Ltd.  
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Thank you for purchasing your Fine Particle Filter with Air Backwash Module. We are sure you will be delighted with its performance.

Your new Module comprises of the following components:

3000 Module		2000 Module	
 <p>Stainless steel exit plate (including 2 sets of additional fixings that may be required)</p>	 <p>Air-valve with "T" connector</p>	 <p>Stainless steel exit plate (including 2 sets of additional fixings that may be required)</p>	 <p>Air-valve with "T" connector</p>
 <p>"D-Plate"</p>	 <p>Pipe clips &amp; fixings</p>	 <p>"D-Plate"</p>	 <p>Pipe clips &amp; fixings</p>
 <p>Plastic weir-plate (remove protective blue film before fitting)</p>	 <p>Backwash Air-tube</p>	 <p>Plastic weir-plate (remove protective blue film before fitting)</p>	 <p>Backwash Air-tube</p>

## 3000 Installation

1) Remove the existing stainless steel exit plate by unscrewing the four or six "Nyloc" nuts holding the exit plate in position. Withdraw the four or six retaining screws. Ensure that the sealing washer on each screw is not lost as these will be required to ensure a leak proof installation. Set aside all fixings as these will be required later.



2) Remove the existing exit "D-Plate" by carefully inserting a small screwdriver through the slots in the plate and gently ease the plate upwards and out.



3) Insert the new "D-Plate".



4) Push the supplied air tube fully into the connector.



- 5) Replace the four or six screws removed in stage 1. The top two screws are require to be fitted with a "Nyloc" nut to act as a spacer for the new weir plate.



- 6) Fit the new weir plate over the two lower sets of screws.



- 7) Fit the new supplied full length exit plate.



- 8) Refit and tighten the "Nyloc" nuts. (Ensure that the sealing washers are fitted on the outside of the tank, under the heads of all screws).



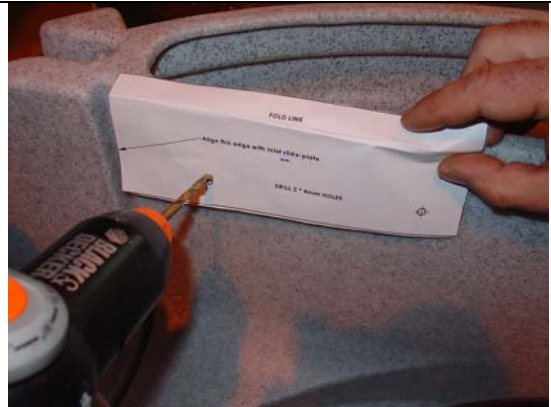
9) If your Nexus had the earlier four hole exit plate fitted, you will be required to carefully drill two additional 5mm holes for the two lower fixings.



10) Fit and tighten the two lower fixings using the screws, washers and nuts supplied. (Ensure that the sealing washers are fitted on the outside of the tank under the heads of all screws).



11) Using the template supplied drill two 4mm holes in the side of the inner drum.



12) Fit the two air-pipe clips using the M4 screws and "Nyloc" nuts supplied.



13) Remove the current 90° air-pipe elbow by pushing in the collar and pulling pipe out. Connect the incoming air tube directly to the new "T" connector.



14) Connect the existing air-ring air tube to the lower connection on the "T" connector.



15) Connect the new back wash air tube to the other side of the air valve.



16) Fill the outlet chamber with 10 litres of Kaldnes. It is recommended that this be taken from the biological stage of your Nexus. Kaldnes is made from a hydroscopic polymer and absorbs water thereby making it critically buoyant and this critical buoyancy is required for optimum performance. If you wish to use virgin Kaldnes in the outlet chamber then this should first be soaked for 72 hours prior to use.



17) To enable cleaning of the Kaldnes in the outlet chamber, a "T" connector is required to be fitted in the pipe line between the Nexus and the circulating pump. This "T" off line to waste should be  $\frac{3}{4}$ " or similar, as this gives a slower waste purge, promoting aggressive Kaldnes agitation and improved cleaning. Fit a valve into this  $\frac{3}{4}$ " pipe and plumb to waste.



## 2000 Installation

- 1) Remove the existing stainless steel exit plate by unscrewing the four or six "Nyloc" nuts holding the exit plate in position. Withdraw the four or six retaining screws. Ensure that the sealing washer on each screw is not lost as these will be required to ensure a leak proof installation. Set aside all fixings as these will be required later.



- 2) Remove the existing exit "D-Plate" by unscrewing and withdrawing the two retaining screws. Ensure that the sealing washer on each screw is not lost as these will be required to ensure a leak proof installation. Set aside all fixings as these will be required later.



- 3) Insert the new "D-Plate" by re-fitting and tighten the two fixings screws (Ensure that the sealing washers are fitted on the outside of the tank under the heads of all screws).



- 4) Push the supplied air tube fully into the connector.



- 5) Replace the four or six screws removed in stage 1. (Ensure that the sealing washers are fitted on the outside of the tank under the heads of all screws).



- 6) Fit the new weir plate by sliding into position as shown. (Note weir plate orientation. Plate overhang to be at lower edge).



- 7) Fit the new supplied full length exit plate.



- 8) Refit and tighten the "Nyloc" nuts. (Ensure that the sealing washers are fitted on the outside of the tank under the heads of all screws).



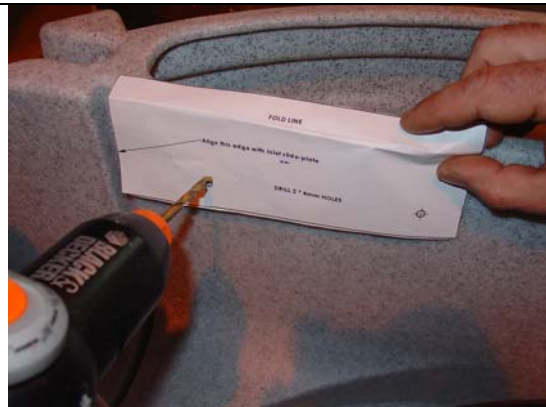
9) If your Nexus had the earlier four hole exit plate fitted you will be required to carefully drill two additional 5mm holes for the two lower fixings.



10) Fit and tighten the two lower fixings using the screws, washers and nuts supplied. (Ensure that the sealing washers are fitted on the outside of the tank under the heads of all screws).



11) Using the template supplied drill two 4mm holes in the side of the inner drum.



12) Fit the two air-pipe clips using the M4 screws and "Nyloc" nuts supplied.



13) Remove the current 90° air-pipe elbow by pushing-in the collar and pulling pipe out. Connect the incoming air tube directly to the new "T" connector.



14) Connect the existing air-ring air tube to the lower connection on the "T" connector.



15) Connect the new back wash air tube to the other side of the air valve.



16) Fill the outlet chamber with 10 litres of Kaldnes. It is recommended that this be taken from the biological stage of your Nexus. Kaldnes is made from a hydroscopic polymer and absorbs water thereby making it critically buoyant and this critical buoyancy is required for optimum performance. If you wish to use virgin Kaldnes in the outlet chamber then this should first be soaked for 72 hours prior to use.



17) To enable cleaning of the Kaldnes in the outlet chamber, a "T" connector is required to be fitted in the pipe line between the Nexus and the circulating pump. This "T" off line to waste should be  $\frac{3}{4}$ " or similar, as this gives a slower waste purge, promoting aggressive Kaldnes agitation and improved cleaning. Fit a valve into this  $\frac{3}{4}$ " pipe and plumb to waste.





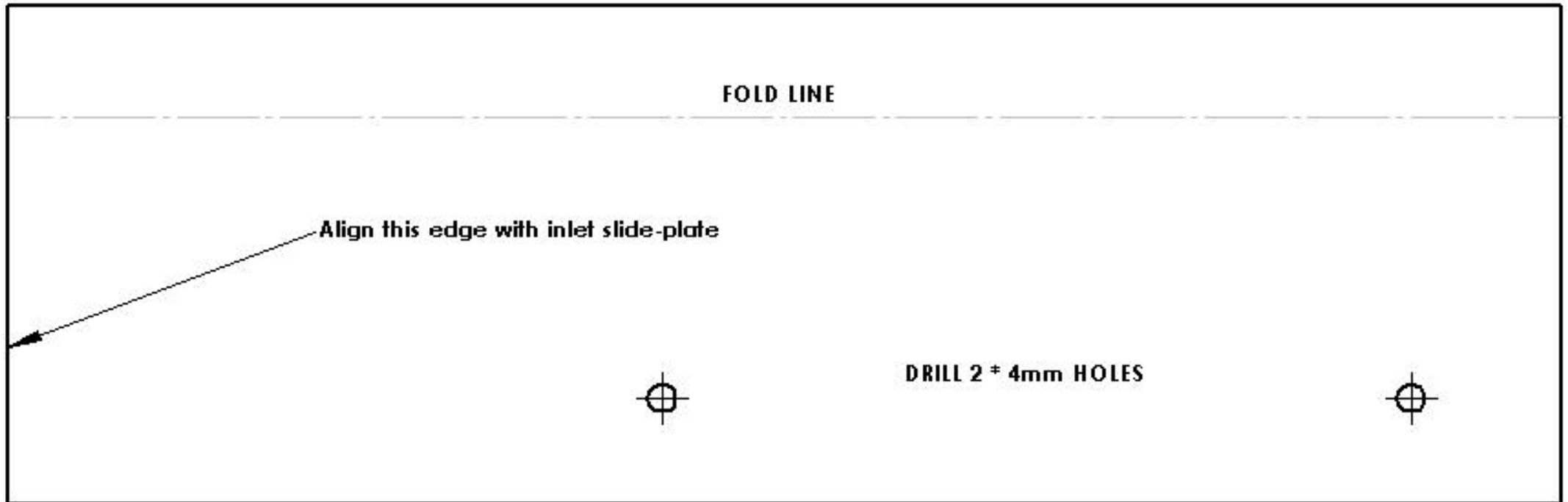
## Cleaning

To achieve optimum water clarity we recommend that the outlet chamber be air backwashed and purged on a regular basis. The frequency of cleaning will depend on the loading of the pond, the longer the filter is left undisturbed the finer the filtration will become. However the filter **must** be purged regularly to avoid circulation pump starvation.

### **Procedure**

- 1) Stop the circulation pump
- 2) Close the valve between the Nexus and circulation pump
- 3) Close the valve between the ponds bottom drain and the Nexus. If you do not have this valve fitted in your system then close the inlet to the Nexus by using the inlet slide-plate supplied with your Nexus. You should now have isolated your Nexus from the System
- 4) Slowly open the air valve until the Kaldnes in the outlet chamber is seen to be moving freely. The Kaldnes will be seen to expand into the open area between the exit grill and the weir plate; this is normal and all part of the cleaning process. On re-starting the system, all this Kaldnes will again repack neatly into the exit chamber
- 5) Having run the air backwash for one minute open the  $\frac{3}{4}$ " waste valve and purge the water in the exit chamber to waste. Leave the waste valve open for a minimum of two minutes or until the chamber is clean, at which point close the  $\frac{3}{4}$ " waste valve.
- 6) Close the air valve.
- 7) Open the inlet valve or remove the Nexus inlet slide-plate
- 8) Open the outlet valve and restart the circulation pump
- 9) The Kaldnes in the exit chamber will now repack.

# 2000 Template



# 3000 Template

