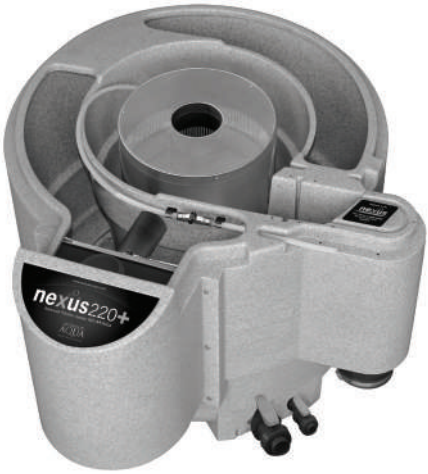
NEX22080724MAN

UK
English

EVOLUTION AQUA
INNOVATION IN WATER

nexus 220+

INSTALLATION AND INSTRUCTION MANUAL





IMPORTANT PLEASE READ:

Your Nexus 220+ MUST be installed on a solid, level base, a minimum of 1.2 metres x 1 metre. Failure to do this will cause irreparable damage to the filter and will therefore invalidate your warranty.

Your Nexus 220+ is supplied ready for pump fed installation. You MUST remove the outlet stand pipe if setting up on gravity fed installations and make other adjustments. Carefully read installation instructions.

Evolution Aqua Ltd. - Evolution House - Kellet Close - Wigan - Lancashire - United Kingdom - WN5 0LP
www.evolutionaqua.com

INTRODUCING THE NEXUS 220+

Building on the tried and tested technology that has been ever present in their world renowned Nexus filtration systems, the team at Evolution Aqua have gone even further to enhance their number one Nexus+ Koi pond filter.

Nexus320+ and Nexus220+ filters now come with a new filter media called K+Media in the moving bed outer chamber for vastly improved biological filtration. The new Nexus+ filters are also supplied “auto ready”, with factory fitted fixings already in place, making it even easier to upgrade to the Nexus Automatic System.

Please read this instruction manual carefully from start to finish before attempting to install your new Nexus 220+.

CONTENTS

Nexus 220+ parts list	PAGE 3
Specifications	PAGE 4
Air pump recommendation	PAGE 4
Flow rates	PAGE 4
Nexus 220+ dimensions	PAGE 5
How the Nexus 220+ works	PAGE 6
How are you going to configure the Nexus 220+?	PAGE 8
Pump Fed installation and operating instructions	PAGE 9
Gravity Fed installation and operating instructions	PAGE 16
How to get the best from your Nexus filter	PAGE 26
Warranty	PAGE 27
Spare parts list	PAGE 29
Troubleshooting	PAGE 30



WARNING: The stainless steel eazy has very sharp edges, take care when handling

NEXUS 220+ PARTS LIST

Your Nexus 220+ comes complete with the following items:



1) Inlet Slide Plate



2) Hosetail Inlet Assembly Pump-Fed Set-Up
(Parts supplied loose in a separate kit bag ready to be glued using solvent weld adhesive)



3) Overflow / By-Pass Collar
(Pre-installed)



4) Eazy Mechanical Filter
K1Micro is supplied in place in the Eazy section of your Nexus 220+.

WARNING: THE STAINLESS STEEL EAZY HAS VERY SHARP EDGES, TAKE CARE WHEN HANDLING



5) 1 x 50 litre bag of K+Media
To be placed in the outer chamber of the Nexus 220+.



6) Nexus Cleaning Instructions:

- Red coloured instructions for cleaning Gravity Fed installations.
- Blue coloured instructions for cleaning Pump Fed installations.



7) Cleaning Pipe
Used during cleaning procedure

NEXUS 220+ SPECIFICATIONS

Maximum Flow Rate	**10,000 litres/hr** 2,200 UK gallons/hr 2,640 US gallons/hr
Maximum Pond Size	**18,000 litres** 4,000 UK gallons 4,800 US gallons
Amount of K+Media supplied	**50 litres** in outer chamber **(Biological)**
Amount of K1 Micro supplied	**18 litres** in Eazy **(Mechanical)**
Recommended Air Pump	**Air Pump 75** or above *(See Air Pump recommendation)*
Total volume of water in filter	**510 litres** / 112 UK gallons / 135 US gallons
Volume of water in outer chamber	**405 litres** / 89 UK gallons / 107 US gallons
Volume of water in inner chamber	**105 litres** / 23 UK gallons / 28 US gallons

You can increase the biological capacity of your Nexus 220+ by adding up to **100 litres** of additional K+Media into the outer chamber. You will however need to ensure that you have the correct size of air pump to enable the K+Media to move sufficiently (see below for recommended size of air pump).

AIR PUMP RECOMMENDATION

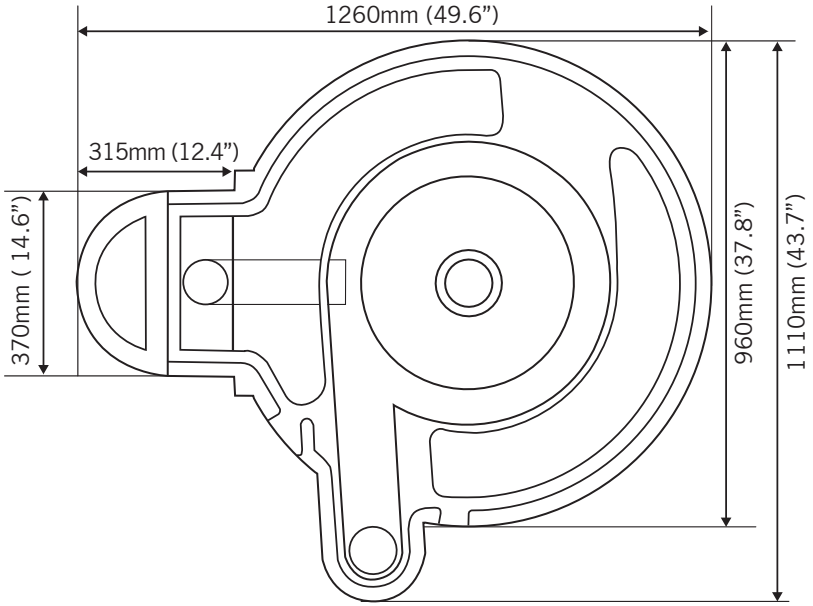
The following Evolution Aqua air pumps are recommended for use with the Nexus 220+. Our recommendations are based on the amount of K+Media that is in the outer chamber.

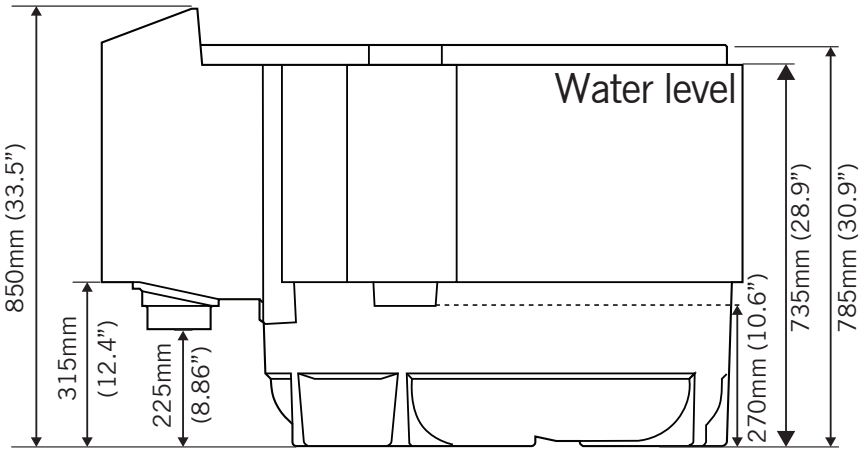
Total amount of K+Media in the outer chamber	Recommended Evolution Aqua Air Pump
50 Litres (as supplied) - 75 Litres	Air Pump 75
75 - 100 Litres	Air Pump 95
100 - 150 Litres	Air Pump 130

FLOW RATES

One of the factors that can have a significant influence on the general parameters of our ponds is turn over rate. This is the time that it takes for the total volume of the pond to pass through the filter system once. We recommend that for ideal performance a turn over rate of every 2 to 3 hours is found to be best.

NEXUS 220+ DIMENSIONS





HOW THE NEXUS 220+ WORKS

The Nexus filter is simple yet innovative. Water enters the Nexus via the inlet into the inner chamber which works as a basic vortex allowing larger solids to settle out. The water then passes through the Eazy where the finer particles are removed at the mechanical stage of filtration. From the Eazy the water passes into the outer chamber where the biological stage of filtration takes place using the K+Media Moving Bed.

The water then passes through the grill into the Exit Chamber, where it is returned to the pond through the outlet. The Eazy is cleaned by diverting the air from the Outer Chamber to the Eazy using the air valves. Waste is then discharged through the larger waste ball valve.

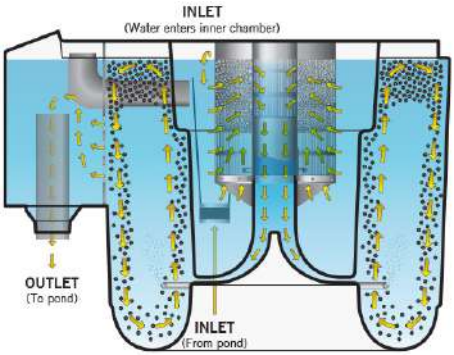


Figure 1.



Figure 2.

HOW THE NEXUS 220+ WORKS

The Eazy (Mechanical Filtration)

The Eazy is a stainless steel vessel containing a set volume of static K1 Micro Media (18 litres for Nexus 220+) which is located within the inner chamber of the Nexus. After water enters the Nexus it rotates around the Eazy in the inner chamber with a downward motion allowing the larger solids to settle to the bottom of the chamber before passing through the slots of the Eazy into the static K1 Micro. The water flows from all angles through the K1 Micro where improved mechanical filtration and settlement takes place and fine particles are caught within the K1 Micro. The water then flows through the slots in the centre column and into the outer chamber.

The Eazy has been designed so that it can be easily lifted out of the Nexus should it be needed.

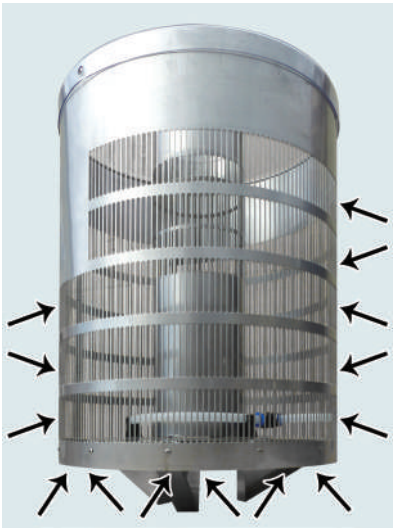


Figure 3. Illustration shows improved water flow through the Eazy.

Outer Chamber (Biological Filtration)

The outer chamber of the Nexus contains the moving bed of K+Media. This is where the final stage of biological treatment occurs. Biological breakdown occurs through different strains of bacteria living on the protected surface area on each piece of the K+Media. These bacteria convert Ammonia and Nitrite into harmless Nitrate. The amount of Ammonia and Nitrite produced in the pond is dependant on feed rates and the type of food used. For higher feed rates additional K+Media should be added into the outer chamber.

In optimum conditions 250g per day of average protein content food will be broken down by 50 litres of K+Media. To ensure excellent biological filtration of a Nexus maintain a pond pH of 7 or higher. Bacteria conversion rates are reduced in cooler temperatures.

WARNING: The stainless steel eazy has very sharp edges, take care when handling

HOW ARE YOU GOING TO CONFIGURE THE NEXUS 220+?

PUMP FED

By this we mean that if your pump is going to be used to supply the water to the filter, and the filtered water then returns back into your pond via gravity, i.e. down a waterfall, or through a large diameter pipe, this is referred to as **PUMP FED** (i.e. the water is fed to the filter using a pump). **Refer to page 9.**

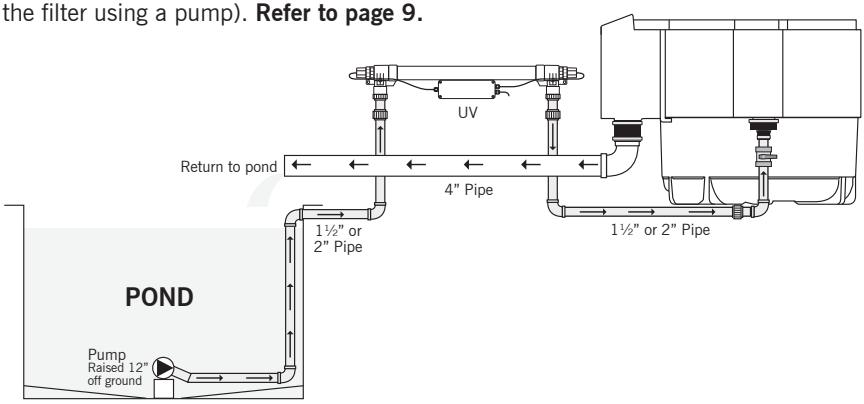


Figure 4.

GRAVITY FED

By this we mean that your pump is going to be used to return the filtered water to the pond and therefore your filter will be supplied by gravity via a larger diameter pipe. In this situation the water level in the filter will be at the same level as the pond. **Refer to page 16.**

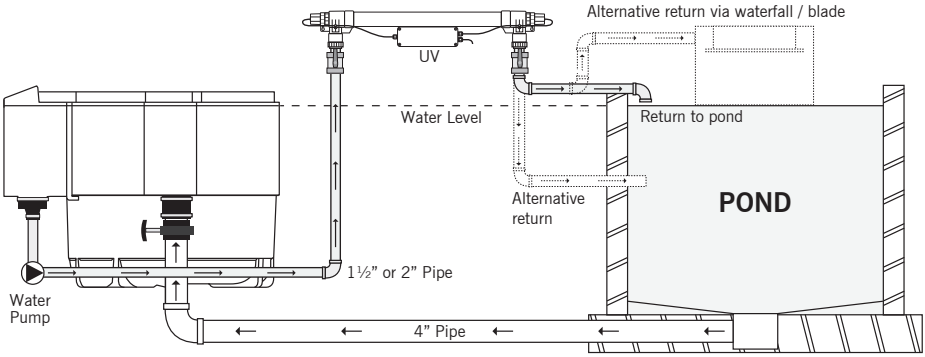


Figure 5.

ENSURE THAT ONCE YOU HAVE ESTABLISHED WHICH SET-UP YOU WANT TO USE, REFER ONLY TO THE CORRECT SECTION IN THIS MANUAL.

nexus220+

PUMP FED INSTALLATION INSTRUCTIONS



TO INSTALL THE NEXUS 220+ ON A PUMP FED SET-UP PLEASE FOLLOW THE INSTRUCTIONS ON PAGES 10 TO 15.

IMPORTANT NOTE: It is not sufficient to support the Nexus using just blocks underneath the feet, as this will lead to damage to the Nexus. **Incorrect installation will render the warranty invalid.**

IMPORTANT PREPARATION

A **solid** and **level base** is required. It should be a **minimum of 1.2m (3.9 feet) x 1.0m (3.27 feet)**, to allow easy access to valves and for maintenance purposes. The Nexus filter needs to be well supported, this is to prevent distortion and damage when it is full of water. The best option for this is a **level, 100mm (3.9") thick, concrete plinth**, although decking or paving slabs would be sufficient as long as the Nexus sits level and is not allowed to deform under the weight of the water.

Before installation check that all the jubilee clips on the 3 x EazyConnectors are tight to prevent leaks. These EazyConnectors can be found on the inlet, outlet and underneath the centre chamber (this should be accessed before installation by lifting the Nexus 220+).

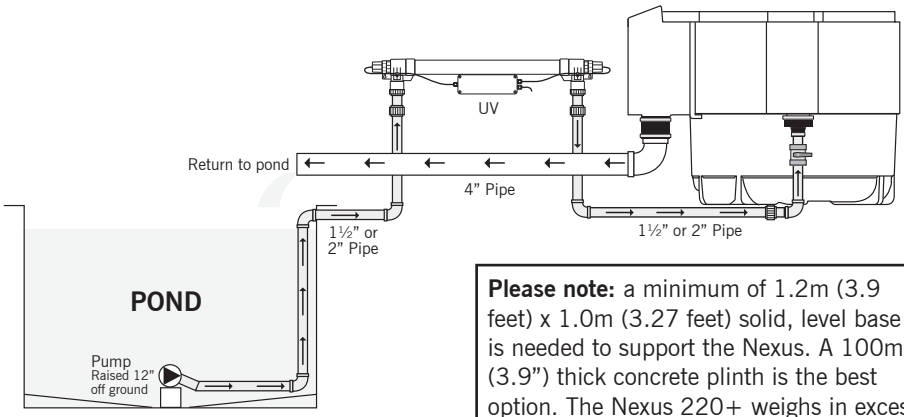


Figure 6.

Please note: a minimum of 1.2m (3.9 feet) x 1.0m (3.27 feet) solid, level base is needed to support the Nexus. A 100mm (3.9") thick concrete plinth is the best option. The Nexus 220+ weighs in excess of 510kg (1124lbs) when operating and full of water. An unlevel base will cause irreparable damage to the unit.

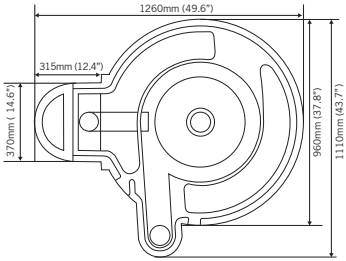


Figure 6.1.

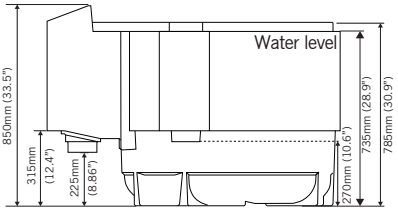


Figure 6.2.

INSTALLATION EQUIPMENT REQUIRED

1. **Pond Pump**, with an actual flow rate that delivers to the filter a maximum of 10,000 litres / hour (2,640 US Gallons/hour) or the entire volume of water in the pond, every 2 to 3 hours, whichever is the greater.
2. **Air Pump**. See Air Pump Recommendation on page 3.
3. A valve should be fitted before the Nexus so that the unit can be cleaned as per the cleaning instructions on page 14.
4. It is highly recommended that a suitably sized UV unit is installed with the Nexus for removal of single cell algae. UV systems are always installed after the pump. Evolution Aqua recommend an **evoUV**.

NEXUS 220+ PUMP FED INSTALLATION

Your Nexus 220+ has been supplied to you ready for you to set up for Pump fed operation.

Pump Fed Installation Steps:

1. Glue the components together to make the Hosetail Assembly (Figure 7.1). We recommend using solvent weld adhesive (not supplied).
2. Attach the Hosetail Assembly (Figure 7.1) to the EazyConnector on the Nexus Inlet (A).
3. Connect the hose / pipework from your pump to the hosetail (G), cutting down the hose tail to fit the correct hose, we recommend using 1½" hose.
4. Connect your 4" return pipework to the EazyConnector on the Exit (B).
5. Pour the 50L K+Media bag into the outer chamber (C) of the Nexus.
6. Connect your air pump to the Nexus air inlet (E).
7. Connect the waste valves (F) to your waste outlet as described on the next page.

For the first few days to one week of operation, both the K+Media and K1 Micro will tend to float. This is perfectly normal and will operate normally as it begins to mature.

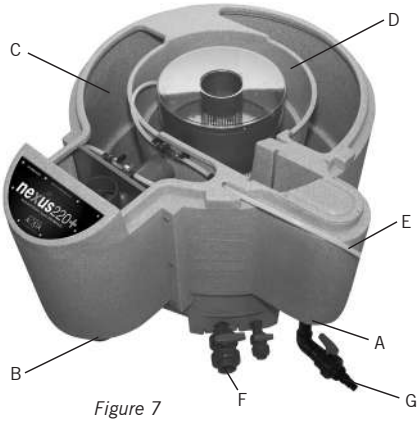


Figure 7

IMPORTANT: You must assemble and use solvent weld adhesive to glue the components together as shown below to create the Hosetail Assembly.



Figure 7.1. Hosetail assembly

WASTE PIPE CONNECTION

The waste valves are where the waste from your Nexus is discharged when cleaning and prior to draining. The 1½" valve is for the Inner Chamber and is used for when cleaning the Eazy, while the ¾" valve is for draining the outer chamber (only when and if required).

Both of these valves can be connected using a waste pipe kit (optional extra) as shown in Figure 8.1 - 8.3 or can just be discharged individually. If the Nexus is located below your drain height the waste can be either discharged into a sump where a submersible pump can be used to pump the waste away or an in-line pump can be connected to the waste line where it can pump directly to waste.

Once your Nexus is installed and plumbed in as described, you are ready to fill the Nexus and begin treating your pond water.



Figure 8.1. Installed



Figure 8.2. Exit to left



Figure 8.3. Exit to right

NEXUS AUTOMATIC UPGRADE KITS - NOW AVAILABLE

Your Nexus is supplied with pre-drilled fittings making it even easier to install the Nexus Automatic Kit.

The Auto Kit upgrade enables you to benefit from a **fully automated** cleaning cycle on your multi award winning Nexus filtration systems. Physically turning ball valves and manually switching pumps on and off will now be a thing of the past thanks to the Nexus Automatic System. All of the key processes that form the cleaning cycle are now controlled automatically with this **easy to install** kit.

Speak to your Evolution Aqua stockist or visit **www.evolutionaqua.com** for more details.

NEXUS FILTERS NOW WITH PRE-DRILLED FITTINGS FOR AUTO KIT UPGRADES







OPERATING YOUR NEXUS 220+ PUMP FED

Once your Nexus is installed and plumbed in as instructed, you are ready to fill the Nexus and begin filtering your pond water.

To fill your Nexus first you need to open the inlet valve. With a pump fed unit you then need to switch on your pump.

Once the Nexus is full, you will notice that both the K+Media in the outer chamber and the K1 Micro in the Eazy will float on the surface of the water. In a pond containing fish, the media will absorb pond water and become semi-buoyant within a week.
This is perfectly normal.

Now your Nexus is full it is time to turn on your air pump to circulate the media making sure the air valve to the outer chamber is open and the valve to the Eazy is closed.



Figure 9.1. Normal operation

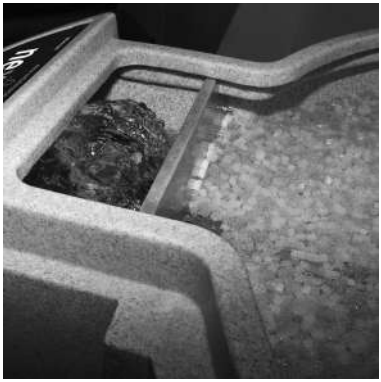


Figure 9.2. Needs cleaning

CLEANING YOUR NEXUS 220+ PUMP FED

The central Eazy section of the Nexus will collect all the debris and suspended solids that come into the filter. In time you will find out how often you need to clean this, and probably get into a routine to keep the filter working at its optimum. Each pond is different, and the regularity of cleaning is affected by stocking levels and feeding rates along with other factors such as algae in the pond.

WHEN TO CLEAN?

We recommend cleaning the Eazy every 1 to 2 weeks. If however during this time water is flowing out of the overflow as shown in Figure 9.2 then the Eazy is blocked and requires cleaning.

Normally we would not recommend leaving the filter uncleaned more than 3 weeks. The filter can be left longer if absolutely necessary but this would not be best practice.

CLEANING YOUR NEXUS 220+ ON A PUMP FED INSTALLATION

For cleaning instructions, refer to the blue cleaning guide supplied with your Nexus or follow the instructions below:

1. **Insert** cleaning pipe into the centre of the Eazy. Water level in the filter will start to rise.
2. Once the water level to a level just below the overflow, **close** the inlet valve.
3. **Switch** water pump **off**.
4. **Insert** inlet slide plate.
5. **Open** air valve to the **inner chamber**.
6. **Close** the air valve to the **outer chamber**.
7. Allow the K1 Micro in the Eazy to **agitate** for **5 minutes**.
8. **Open** the larger waste valve and wait for the **inner chamber** to empty.
9. At this stage you may want to **hose down** any debris from underneath the Eazy.
10. **Close** the waste valve.
11. **Open** the air valve to the **outer chamber**.
12. **Close** the air valve to the **inner chamber**.
13. **Open** Nexus inlet valve.
14. **Remove** inlet slide plate and then **switch** pump **on**.

Steps 2 to 14 should be repeated until the Eazy is clean. It is likely that you will need to do this 2 to 3 times depending on your pond.

15. When water level rises to the same level as the **outer chamber** **remove** the cleaning pipe.

FURTHER MAINTENANCE

From time to time, you may find that the level of water in the inner chamber overflows and the normal cleaning procedure does not prevent this happening. At this point it may be necessary to carry out a **Back Flush** of your Nexus. This is a simple operation which can be done during your normal cleaning procedure.

To perform a **Back Flush**:

- Pause the cleaning procedure at step 9. Double check that air valve to the outer chamber is closed. The inner chamber and Eazy will be empty of water.
- Pull out the cleaning pipe and stand back. Water will purge back from the outer chamber up through the centre pipe clearing any blockage in the transfer points. When the water has stopped running backwards through the centre column, install cleaning pipe back into the centre. After this continue the cleaning procedure from step 9.
- Back flushing can be done with the Eazy installed or removed. (A greater purge can be achieved with the Eazy removed. See below for removing the Eazy.)

REMOVING THE EAZY

WARNING: The stainless steel eazy has very sharp edges, take care when handling

Periodically you may want to remove the Eazy in order to clean the air bar (recommended every 6 - 12 months).

The Eazy has been designed so that it can be easily lifted out of the Nexus. To do this:

- Empty the inner chamber of water as you would during a cleaning procedure.
- Turn off the air pump.
- Disconnect the airline from the airline valve to the inner chamber by pulling back the blue collar on the valve and gently removing the airline.
- Lift out the Eazy, taking note of its original position.

When you replace the Eazy it is essential that it is installed in the correct position for optimum performance. To do this check that the seam on the Eazy aligns with the centre of the overflow, see Figure 10. To do this:

- Install the Eazy back in the centre chamber (check seam is aligned with overflow pipe)
- Reconnect the airline to the inlet airline valve (push-fit)
- Turn the air pump back on.
- You can then fill the inner chamber with water as you would when completing the cleaning procedure.

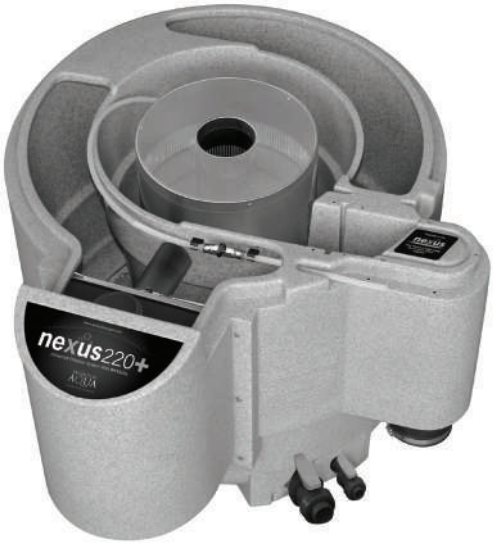


Figure 10. Align the Eazy seam to the centre of the overflow pipe.

nexus220+

GRAVITY FED INSTALLATION INSTRUCTIONS

The Nexus 220+ is supplied configured for a Pump Fed installation. Components will need to be removed before a gravity fed installation can be carried out. See pages 17 to 25.



IMPORTANT NOTE: It is not sufficient to support the Nexus using just blocks underneath the feet, as this will lead to damage to the Nexus. **Incorrect installation will render the warranty invalid.**

NEXUS 220+ GRAVITY FED INSTALLATION

A **solid** and **level** base is required. It should be a **minimum of 1.2m (3.9 feet) x 1.0m (3.27 feet)**, to allow easy access to valves and for maintenance purposes. The Nexus filter needs to be well supported, this is to prevent distortion when it is full of water. The best option for this is a **level, 100mm (3.9") thick, concrete plinth**, although decking or paving slabs would be sufficient as long as the Nexus sits level and is not allowed to deform under the weight of the water.

A gravity fed system is where the water level in the Nexus is at the same height as the water level in the pond, therefore it is critical that the Nexus is installed so that the lip at the top of the Nexus should be level with the proposed finished surface water level of the pond. The plinth for your Nexus, should be 735mm (28.9") below where you want the finished pond water surface to be. Please see diagram below.

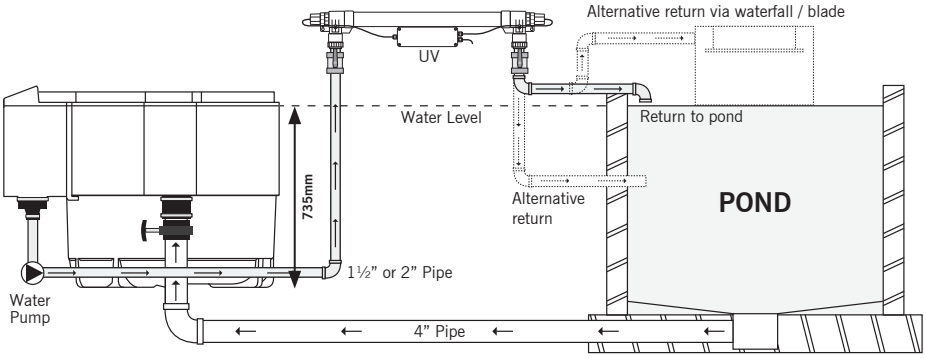


Figure 11.

Please note: a minimum of 1.2m (3.9 feet) x 1.0m (3.27 feet) solid, level base is needed to support the Nexus. A 100mm (3.9") thick concrete plinth is the best option. The Nexus 220+ weighs in excess of 510kg (1124lbs) when operating and full of water. An unlevel base will cause irreparable damage to the unit.

NEXUS 220+ GRAVITY FED INSTALLATION

The water on a Gravity fed system should be fed from an appropriately placed bottom drain through at least a 4 inch (110mm) pipe with as short a length and fewer bends as possible (For optimum flow swept bends should be used). At the end of the bottom drain line before entering the Nexus, a valve is required so that the line can be shut and the Nexus isolated.

For long bottom drain pipe runs, it is recommended that a 'T' purge valve line is installed to remove solids that may settle in the bottom drain line. This should discharge straight to waste (if possible) or into a suitably sized sump.

It is very important that when laying the bottom drain line that there is no section where the pipework rises then falls as airlocks can form in this area which will block flow. Figure 12 below describes what should and shouldn't be done.

Pipework should be level until reaching the filterhouse where it should ideally go through a swept bend 90 into the Nexus inlet.

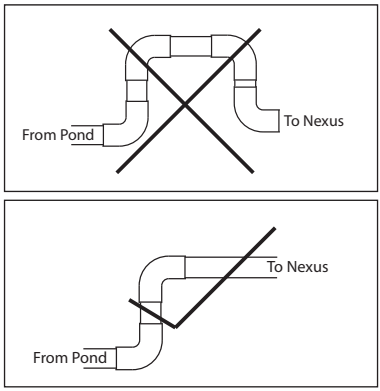


Figure 12.

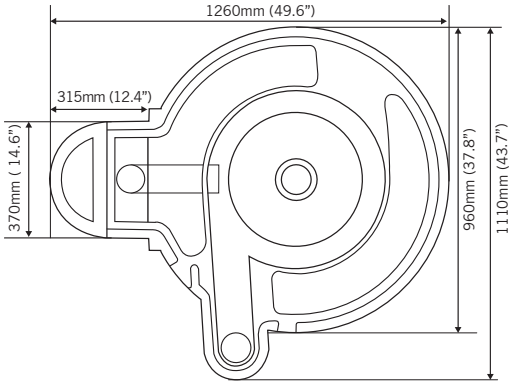


Figure 12.1.

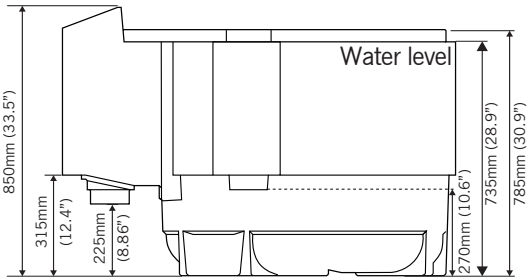


Figure 12.2.

IMPORTANT - You **MUST** remove the stand pipe from the outlet when setting up the filter for gravity fed installations. Follow these instructions shown below.

CONFIGURE YOUR NEXUS 220+ FOR GRAVITY FED INSTALLATION

Your Nexus 220+ comes with a stand pipe in the outlet. This is for use in **PUMP FED SET-UPS ONLY**. Please remove the standpipe from the Nexus outlet by undoing the jubilee clips (Figure 13.1) and removing the 4"- 4" EazyConnector (Figure 13.2), remove the 3 retaining screws (Figure 13.3) and slide out the 4" PVC pipe (Figure 13.4).



Figure 13.1



Figure 13.2

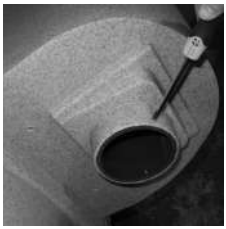


Figure 13.3



Figure 13.4



Figure 13.5



Figure 13.6



Figure 13.7



Figure 13.8

1. Remove the 4"- 1½" EazyConnector from Nexus inlet (A) (Figure 13.5).
2. On the Nexus Outlet (B) (Figure 13.6) attach the 4"- 1½" EazyConnector (Figure 13.7).
3. Attach the 4"- 4" EazyConnector to the Nexus Inlet (A) (Figure 13.8).
4. Ensure the EazyConnector underneath the Nexus is also tight at this time.

INSTALLING YOUR NEXUS

1. Connect the pipework from your pond to the EazyConnector on the Nexus Inlet (A).
2. Connect your water pump to the 4”- 1½” EazyConnector (B) on the outlet using suitable pipe work. A valve should be positioned between the pump and the Nexus, to isolate the Nexus during cleaning.
3. Pour the 50L K+Media bag into the outside chamber (C) of the Nexus (Figure 14).
4. Connect your air pump to the Nexus air inlet (E).
5. Connect your water pump outlet to the remainder of your pipework including a UV.
6. Connect the waste valves (F) to your waste outlet.

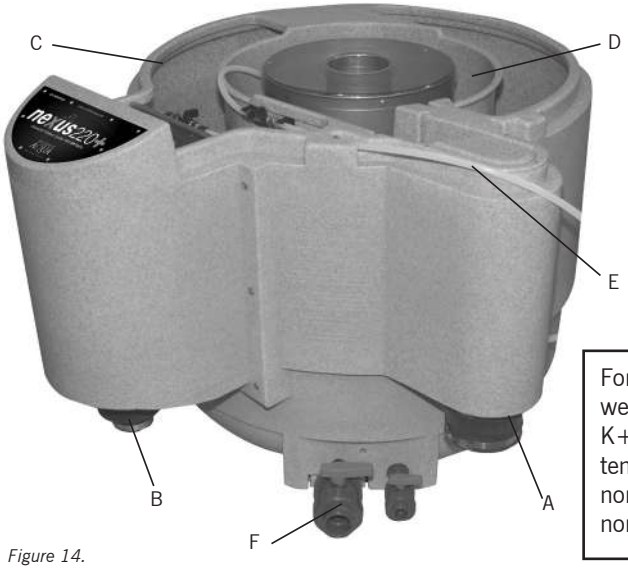


Figure 14.

For the first few days to one week of operation, both the K+Media and K1 Micro will tend to float. This is perfectly normal and will operate normally as it begins to mature.

WASTE PIPE CONNECTION

The waste valves are where the waste from your Nexus is discharged when cleaning and prior to draining. The 1½" valve is for the Inner Chamber (D) and is used for when cleaning the Eazy, while the ¾" valve is for draining the outer chamber (C) (only when and if required).

Both of these valves can be connected using a waste pipe kit (optional extra) as shown in Figure 15.1 to 15.3 or can just be discharged individually. If the Nexus is located below your drain height the waste can be either discharged into a sump where a submersible pump can be used to pump the waste away or an in-line pump can be connected to the waste line where it can pump directly to waste.

Once your Nexus is installed and plumbed in as described, you are ready to fill the Nexus and begin treating your pond water.



Figure 15.1. Installed



Figure 15.2. Exit to right



Figure 15.3. Exit to left

NEXUS AUTOMATIC UPGRADE KITS - NOW AVAILABLE

Your Nexus is supplied with pre-drilled fittings making it even easier to install the Nexus Automatic Kit.

The Auto Kit upgrade enables you to benefit from a **fully automated** cleaning cycle on your multi award winning Nexus filtration systems. Physically turning ball valves and manually switching pumps on and off will now be a thing of the past thanks to the Nexus Automatic System. All of the key processes that form the cleaning cycle are now controlled automatically with this **easy to install** kit.

Speak to your Evolution Aqua stockist or visit **www.evolutionaqua.com** for more details.

NEXUS FILTERS NOW WITH PRE-DRILLED FITTINGS FOR AUTO KIT UPGRADES







OPERATING YOUR NEXUS 220+ GRAVITY FED

Once your Nexus is installed and plumbed in as instructed, you are ready to fill the Nexus and begin filtering your pond water. To fill your Nexus first you need to open all the valves before and after the Nexus. The system should be filled until the water levels are equal.

Once the Nexus is full, you will notice that both the K+Media in the outer chamber and the K1 Micro in the Eazy will float on the surface of the water. In a pond containing fish, the media will absorb pond water and become semi-buoyant within a week.
This is perfectly normal.

Now your Nexus is full it is time to turn on your air pump to circulate the media making sure the air valve to the outer chamber is open and the air valve to the Eazy is closed.

CLEANING YOUR NEXUS 220+ GRAVITY FED

The central Eazy section of the Nexus will collect all the debris and suspended solids that come into the filter. In time you will find out how often you need to clean this, and probably get into a routine to keep the filter working at its optimum. Each pond is different, and the regularity of cleaning is affected by stocking levels and feeding rates along with other factors such as algae in the pond.

WHEN TO CLEAN?

You may also notice that the water level in the outer chamber – the Biological stage – lowers as water is prevented from getting through the Eazy as quickly as it is being pumped back into the pond. When this water level falls beneath the level of the bypass pipe, this is the indication that you should clean the Eazy. We recommend cleaning the Eazy every 1 to 2 weeks.

Normally we would not recommend leaving the filter uncleaned more than 3 weeks. The filter can be left longer if absolutely necessary but this would not be best practice.

CLEANING PROCEDURE

For cleaning instructions, refer to the red cleaning guide supplied with your Nexus or follow the instructions below:

1. **Switch** the circulation pump **off**. Wait for 1 minute.
2. **Insert** the inlet slide plate.
3. **Insert** the cleaning pipe into the centre of the Eazy.
4. **Open** air valve to the **inner chamber**.
5. **Close** the air valve to the **outer chamber**.
6. Allow the K1 Micro in the Eazy to **agitate** for **5 minutes**.
7. **Open** the larger waste valve and wait for the **inner chamber** to empty.
8. At this stage you may want to **hose down** any debris from underneath the Eazy.
9. **Close** the waste valve.
10. **Open** the air valve to the **outer chamber**.
11. **Close** the air valve to the **inner chamber**.
12. **Remove** the inlet slide plate and wait until the **inner chamber** has filled with water.
13. Once **inner chamber** has filled, **remove** the cleaning pipe.

Steps 2 to 13 should be repeated until the Eazy is clean. It is likely that you will need to do this 2 to 3 times depending on your pond.

14. **Switch** the circulation pump **on**.

FURTHER MAINTENANCE

From time to time, you may find that the level of water in the outer chamber runs lower than normal and the normal cleaning procedure does not rectify this. At this point it may be necessary to carry out a **Back Flush** of your Nexus. This is a simple operation which can be done during your normal cleaning procedure.

To perform a **Back Flush**:

- Pause the cleaning procedure at step 8. Double check that air valve to the outer chamber is closed. The inner chamber and Eazy will be empty of water.
- Pull out the cleaning pipe and stand back. Water will purge back from the outer chamber up through the centre pipe clearing any blockage in the transfer points. When the water has stopped running backwards through the centre column, install cleaning pipe back into the centre. After this continue the cleaning procedure from step 8.
- Back flushing can be done with the Eazy installed or removed. (A greater purge can be achieved with the Eazy removed. See below for removing the Eazy.)

REMOVING THE EAZY

WARNING: The stainless steel eazy has very sharp edges, take care when handling

Periodically you may want to remove the Eazy in order to clean the air bar (recommended every 6 - 12 months).

The Eazy has been designed so that it can be easily lifted out of the Nexus. To do this:

- Empty the inner chamber of water as you would during a cleaning procedure.
- Turn off the air pump.
- Disconnect the airline from the airline valve to the inner chamber by pulling back the blue collar on the valve and gently removing the airline.
- Lift out the Eazy, taking note of its original position.

When you replace the Eazy it is essential that it is installed in the correct position for optimum performance. To do this check that the seam on the Eazy aligns with the centre of the overflow, see Figure 16. To do this:

- Install the Eazy back in the centre chamber (check seam is aligned with overflow pipe)
- Reconnect the airline to the inlet airline valve (push-fit)
- Turn the air pump back on.
- You can then fill the inner chamber with water as you would when completing the cleaning procedure.

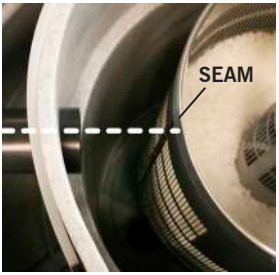


Figure 16. Align the Eazy seam to the centre of the overflow pipe.

LONGER PERIOD OF TIME BETWEEN CLEANING

Regular cleaning of the Eazy is essential to maintain your pond at its best. Build up of detritus in any pond filter can harbour pathogens, and other pollutants which may harm your fish.

At times, you may want to leave your filter for longer than you would normally want between cleaning, perhaps if you go on holiday. In these instances, your Nexus 220+ incorporates a manual by-pass, which will prevent the biological stage from emptying, and therefore potentially starving your pump of water, should your Eazy become full of debris. The filter by-pass should be turned 90 degrees, as per Figures 17.1 to 17.3, when you need to leave your filter for longer periods of time such as holidays etc. This will allow the water to bypass the Eazy should it become blocked. On return from your holidays - turn the bypass back to 12 o'clock, see Figure 17.1. Normally we would not recommend leaving the filter uncleaned more than 2 - 3 weeks. The filter can be left longer if absolutely necessary but this would not be best practice.



Figure 17.1 - Normal operation



Figure 17.2 - Move 90º to by-pass

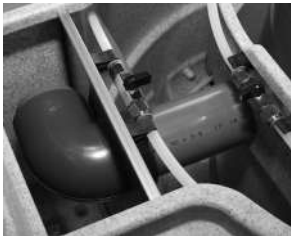


Figure 17.3 - By-pass in operation

HOW TO GET THE BEST FROM YOUR NEXUS FILTER

Using conventional methods, maturing a biological filter can take some time. To speed up this process we recommend using the award winning **PURE**POND and **PURE**PONDBOMB which massively accelerates this process.

PUREPOND

With over 8 billion bacteria per litre of Pure Pond Balls, your pond will shine, especially if you add them monthly into the K+Media Moving bed. The Pure Pond balls are made from a biodegradable polymer, and crammed full of bacteria that are slowly released when they are needed most. When you introduce the Pure Pond balls into the biological chamber of your Nexus, they become one with the moving bed, agitating alongside the K+Media, just waiting to smooth out the peaks and troughs of the Ammonia / Nitrite cycle.

Top tips for optimum biological performance:

- Maintain a pond pH of 7 or higher.
- Maintain a pond Nitrate reading of 50mg/l or less.
- Always dechlorinate your mains water. Use an Evolution Aqua Dechlorinator for removal of harmful chlorine when topping up with mains water.
- For best results for the prevention of green water use an evoUV pond clarifier.
- Add **PURE**POND to the moving bed (outer biological chamber) in the Nexus.
- Feed your fish Evolution Aqua's own food range which has been designed to create less fish waste.

NEXUS AUTOMATIC UPGRADE KITS - NOW AVAILABLE

Nexus owners can now benefit from a **fully automated** cleaning cycle on their multi award winning Nexus filtration systems. Physically turning ball valves and manually switching pumps on and off will now be a thing of the past thanks to the Nexus Automatic System. All of the key processes that form the cleaning cycle are now controlled automatically with this **easy to install** kit. Speak to your Evolution Aqua stockist to order your upgrade kits now.

GRAVITY FED 220 KIT - EA Code: NEXUSAUTO220G
PUMP FED 220 KIT - EA Code: NEXUSAUTO320P

WARRANTY

A copy of the warranty information is available on our website should you remove the warranty form on the following page.

WARRANTY CARD

EVOLUTION AQUA
INNOVATION IN WATER

nexus+

WARRANTY CARD

WARRANTY PROVISIONS

1. Your Nexus Filter is covered by your warranty for 1 year from the date of purchase (2 years if the warranty card is correctly completed and returned) provided that:

   a. It is installed, operated and regularly maintained in accordance with the instruction manual.

   b. Any warranty repairs to the Nexus must be undertaken by Evolution Aqua Ltd or its authorised representatives.

2. Though the warranty period may not have expired, payment for repairs must be made in the following cases:

   a. When the fault is due to misuse or unauthorised repairs have been attempted.

   b. When the fault is due to cold weather, fire, natural disaster, act of God etc.

   c. If the warranty has been lost, incorrectly completed or details fraudulently changed.

Evolution Aqua Ltd. accepts no responsibility or liability for any consequential loss caused by or arising from the use of any Evolution Aqua products. Therefore, any dispute arising from the provisions of the warranty will be dealt with under the laws of England and Wales subject to the exclusive jurisdiction of the English Courts.

**ACTIVATE YOUR 1 YEAR EXTRA FREE WARRANTY COVER,
COMPLETE THE FORM & POST IT TODAY,
OR GO TO www.evolutionaqua.com
AND COMPLETE ONLINE.**

NEXUS WARRANTIES - EVOLUTION AQUA - KELLET CLOSE - WIGAN - LANCASHIRE - WN5 0LP - TEL: 01942 216554

WARRANTY CARD

Or register online at www.evolutionaqua.com

EVOLUTION AQUA
INNOVATION IN WATER

Your Name:

Customer Address:

Postcode:

Country:

Tel:

Mobile:

Email

Purchased From:

Address:

Postcode:

Country:

Tel:

Web:

Date of Purchase: / /

Model:

Serial Number:

I have read and accept the terms and conditions listed in the warranty card, and understand the obligations of the Customer under this warranty.

Signature: Date: / /

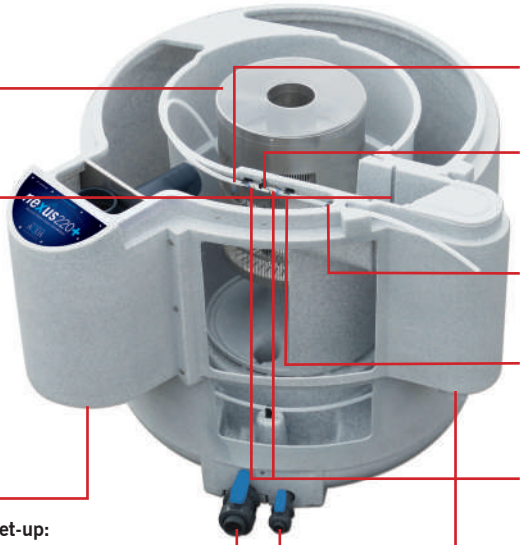
EMAIL NEWSLETTER

If you want to receive marketing information, please sign up to receive our newsletter online at our website.

NEXUS WARRANTIES - EVOLUTION AQUA - KELLET CLOSE - WIGAN - LANCASHIRE - WN5 0LP - TEL: 01942 216554

NEXUS+ SPARE PARTS LIST

There are a number of spare parts for the Nexus 220+ that are readily available from Evolution Aqua dealers. See diagram below for relevant spare parts and product codes:



Eazy lid
EA Product Code:
EAZYLID

Inlet Slide Plate
EA Product Code:
INLETSLIDE-PLATE220



12mm air line / hose
EA Product Code:
1000-135

Air valve
EA Product Code:
1000-085

12mm t-piece
EA Product Code:
1000-030

12mm airline clips
EA Product Code:
K81-10-05

Air valve stud connectors
(2 per valve)
EA Product Code:
1000-080

OUTLET



Pump Fed Set-up:
Nexus Outlet EazyConnector
EA Product Code: ***NPC125***



Gravity Fed Set-up:
Nexus Outlet EazyConnector
EA Product Code: ***DACE122-48***

INLET



Pump Fed Set-up:
Nexus Inlet EazyConnector
EA Product Code:
DACE122-48



Gravity Fed Set-up:
Nexus Inlet EazyConnector
EA Product Code:
NPC125

Waste valve
(1½" Double Union)
EA Product Code:
K25-50-50

Outer chamber maintenance valve
(¾" Double Union)
EA Product Code:
K25-50-25

ADDITIONAL ITEMS:



Nexus Cleaning Pipe
(Eazy Isolation Pipe 90mm)
EA Product Code:
5000-329



K+Media
(50 Litre)
EA Product Code:
KPLUSMEDIA50L

TROUBLESHOOTING

K1 Micro is floating but K+Media is not, why is this?

The K+Media in normal conditions becomes semi-buoyant within 48 hours. However, the K1 Micro (only in the Eazy) takes longer to absorb water. This can take up to one week.

The K1 Micro in the Eazy doesn't move well during the cleaning cycle.

The reasons for this could be one of the following:

- The air pump is not powerful enough (see Air Pump Recommendation on page 4)
- There isn't enough water in the Nexus – check that you used the cleaning pipe to maintain the level on a pump fed system.
- Check all air fittings and air line for leaks and blockages.
- Please ensure that there is no more than 18 litres of K1 Micro in the Eazy. If the media is not moving well enough you can take a few small handfuls out if needed.

I have an Ammonia and / or Nitrite reading.

A typical filter can take approximately 8 weeks to mature. During this time Ammonia and Nitrite levels will rise and fall. This process can be accelerated by using **PURE**POND.
If you still experience Ammonia and Nitrite readings after this period of time, check the following:

- Nexus is adequately sized for the pond.
- Check flow rate is correct - ensure the pond water is being turned over through the Nexus every 2 to 3 hours without exceeding the maximum flow of the unit.
- Check chlorine levels of tap water and pond water - ensure a dechlorinator is used on mains water top ups.
- Ensure pond water pH is above 7. If it is above pH 7 keep it as stable as possible.
- Check feeding and stocking rates of pond.

I have an issue with green water.

Please ensure that an appropriately sized evoUV is installed on your system.

I have excessive blanket weed growing in my pond and filter maintenance is slightly higher than normal.

Use a full course of Stop Blanketweed treatment to eliminate the weed and fine algae particles. Normal filter maintenance will be resumed.

TROUBLESHOOTING

My pond has been running for longer than 2 months and my water is cloudy.

- It is important that the Eazy is flushed a minimum of 2 times during cleaning. This ensures that all the debris collected is flushed out to waste. If the unit is only cleaned once some debris can be returned to the pond, clouding the water. Flush the unit 2 to 3 times as per the cleaning instructions and water clarity should be restored within 3 to 7 days.
- Check your pond food is of a good quality and it is not discolouring your water. If it is please use Evolution Aqua's range of pond food.
- Check that the evoUV is working and the bulb has not exceeded its 9000 hours lifespan. It is recommended to change a UV-C bulb at the start of each pond season.
- Check that you turned your circulating pump off and that you have used the cleaning pipe, so that the dirt in the K1 Micro hasn't returned to the pond.
- Check that you have the correct amount of K1 Micro in the Eazy.

Evolution Aqua are the award winning pond filtration manufacturer who put innovation, research and development at the top of their agenda. With a proven track record for delivering the latest technology to the aquatics and fish farming markets - we are the first choice for everyone from the general hobbyist to the serious fishkeeper. Find out more about the Nexus and all of our other innovative products at **www.evolutionaqua.com**. The difference is clear.

EVOLUTION AQUA

INNOVATION IN WATER

Evolution Aqua Ltd
Evolution House
Kellet Close
Wigan
Lancashire
United Kingdom
WN5 0LP

t: +44 (0) 1942 216554
f: +44 (0) 1942 418489
w: www.evolutionaqua.com