

AQUA-PRO AQUARIUMS

Installation Instructions

For the Aqua-Pro Reef aquarium range



D-D Aqua-Pro Reef Systemised Aquarium

Please read the following installation instructions carefully before starting to assemble and run your aquarium. If correctly installed, your new aquarium should give you years of pleasure in this fantastic and enthralling hobby.

STEP 1. POSITIONING THE AQUARIUM

Your Aqua-Pro Reef aquarium when filled will be very heavy!

You must establish a suitable position and ensure that the floor or cabinet which you are installing it on is suitable for the weight of the tank, water and substrates without deforming or collapsing. Specific Aqua-Pro cabinets are available and designed to support your aquarium properly. If you are uncertain that your floor will be strong enough, or requires support, please take professional advice.

If the aquarium is not being positioned on a specific Aqua-Pro cabinet care must be taken to ensure the surface is flat and level. Failure to do so may cause the aquarium to crack or the silicone joints to fail over time.

We recommend that any aquarium should be positioned out of direct sunlight and away from a static heat source, such as a radiator.

When positioning it is important to have enough people to safely move the aquarium. Jewellery that could potentially scratch the glass or cabinet finish should be removed prior to moving any aquarium or cabinet.

Approximate system weights

MODEL	EMPTY SYSTEM WEIGHT	WATER VOLUME	WATER WEIGHT	TOTAL WEIGHT	ADJUSTABLE FEET (METAL FRAME VERSION)	PEOPLE REQUIRED
600	100 Kg	223 L	229 Kg	329 Kg	n/a	2
900	134 Kg	267 L	274 Kg	408 Kg	n/a	2
1200	176 Kg	441 L	452 Kg	628 Kg	6	2-4
1500	244 Kg	536 L	549 Kg	793 Kg	6	4-6
1800	284 Kg	588 L	603 Kg	887 Kg	6	6

IMPORTANT: Aquarium care

The Aqua-Pro Reef aquarium cabinet is designed as a piece of furniture and is water resistant and not waterproof, requiring care and attention.

It is important that any water spillage or standing water is wiped up immediately to prevent damage to the board or edging which would not be covered under warranty.

Chemical products should not be used to clean the aquarium or cabinet as they may be toxic to aquatic life.

To avoid scratches when cleaning the glass do not use abrasive materials and take care when using bladed cleaners.

STEP 2 LEVELLING THE CABINET

To ensure long term stability of your aquarium once it is filled, it is of paramount importance that the cabinet and tank are correctly levelled. This ensures that there is no stress on the glass and that the doors will hang square.

Preparation

Ensure that the area where the tank is to be installed is clear so that you have plenty of space for access

Checking the aquarium on arrival

Transport damage – your aquarium will arrive fully protected and should be carefully unwrapped and checked for any damage. **You must check the aquarium and report any transport damage to your retailer within 12 hours of delivery.**

Ensure that there are no missing or damaged parts. Report any issues to your retailer within 24 hours and do not fill the aquarium.

Although the tanks are cleaned prior to packing we recommend using a soft sponge and clean water to wipe the inside of the sump and aquarium before setup to remove any residue dust or debris.

Contents

- Glass aquarium with pre-fitted base mat
- System cabinet
- Sump with pre-fitted base mat
- Weir comb
- Pipework set, containing;
 - Main overflow weir pipe with strainer
 - Emergency overflow weir pipe
 - Return pipe
 - Return nozzle outlet assembly
 - Overflow sump pipe with ball valve
 - Emergency overflow sump pipe
 - Return pipe hoesetail connection
 - Length of flexible hose

and adjustment. The cabinet should be initially levelled without the tank and sump installed and we recommend that you remove the quick release doors for better access by pressing the lever at the back of each hinge.

Cabinet Types

Two different cabinet versions are available for some sizes in the Aqua-Pro Aquarium range, wooden cabinets and metal framed cabinets.

Wooden Cabinet

The wooden cabinet should ideally be positioned on a level, flat floor. If the floor is not completely level or flat, then it will be necessary to use suitable shims to level the cabinet, (follow same process as for metal framed cabinet). This is important to avoid warping or movement over time and to ensure that the aquarium is fully supported.

Metal Framed Cabinet

The metal frame cabinet comes with 4-6 adjustable feet, depending on model.

Start by establishing if your floor is level by placing the cabinet roughly in position and using a spirit level on the top of the frame or top. A spirit level of at least 60-90cm in length will be required.

1. Level back to front.

- Cabinet leans backwards - extend all back feet, on larger models adjust middle foot first.
- Cabinet leans forwards - extend all front feet.

2. Level side to side.

- Cabinets with centre feet – if one end is higher than middle, raise both centre feet to match the highest point. Adjust all other corner feet down to firmly touch the floor.
- Cabinets without centre feet – extend feet at lowest end until level.

3. Final cabinet check, adjust if necessary.

- Re-check top of frame is level front to back and side to side, at multiple points.
- Re-check all feet are firmly on the floor.

Installing the tank and the sump

The sump comes fitted with protective mat. Do not remove this mat.

Install the sump with the skimmer chamber on the left as you look at the cabinet. Be careful not to catch the metal cabinet hinges with the glass sump when positioning. Push the sump to the back of the cabinet and centre it within the space left to right.

Place the aquarium carefully onto the top of the cabinet, ensuring that the protective base mat is sandwiched between cabinet top and tank base. The rear corners of the aquarium should line up with the rear corners of the cabinet. The front of the aquarium will protrude over the cabinet top but align with the cabinet perimeter when the doors are installed and closed.

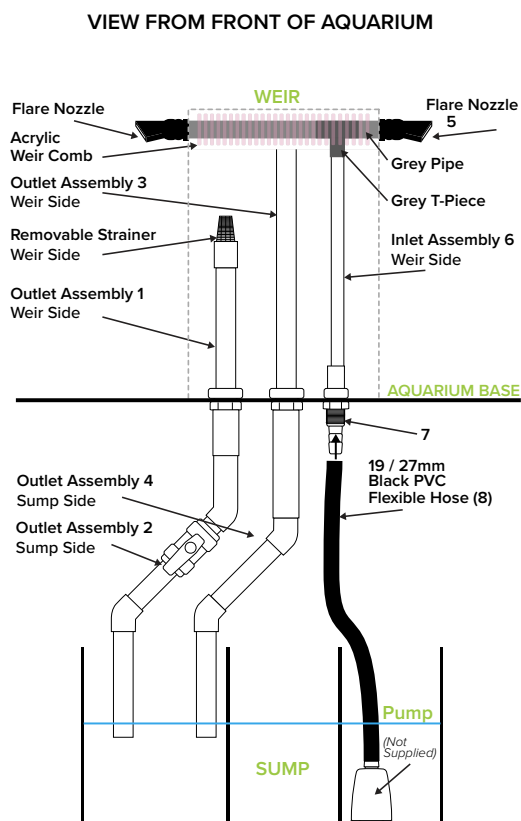
After installing the tank and sump, but before filling, check the level again by placing the spirit level along the top edges of the tank and make any fine adjustments. Leave the tank to settle for a couple of hours and then re-check and adjust if necessary.

STEP 3 INSTALLING THE PIPEWORK

The Aqua-Pro Reef aquarium pipework is designed to be easy to install using two people and without the need for aquarium silicone or tools. To allow easier access for installing the pipework into the weir it is best to lift off the

removable weir comb section and set aside in a safe place.

The three pipes can be installed in any order, but the following will allow for the easiest install.



Main overflow pipe

The weir side main overflow pipe is a 40mm diameter pipe with a large strainer fitted.

Remove the blue tape from the end and ensure that the rubber seal on the threaded section is in place. Insert the pipe down the weir so that the threaded end goes through the hole on the left as you look at the tank.

Next take the lower part of the main overflow pipe with the ball valve, remove the plastic wrapping from the end and ensure the rubber seal is in place. Offer up the threaded end of the pipe to the thread coming down through the weir whilst one person holds the lower section in place, so that the bottom open end of the pipe is sitting at the back of the left hand section of the sump, the other person should turn the upper section in the weir clockwise to screw the pipes together until they are hand tight.

Safety overflow pipe

The weir side safety overflow pipe is a straight 40mm diameter pipe.

Remove the blue tape from the end and ensure that the rubber seal on the threaded section is in place. Insert the pipe down the weir so that the threaded end goes through the hole in the middle. Next take the lower part of the safety overflow pipe, remove the plastic wrapping from the end and ensure the rubber seal is in place. Offer up the threaded end of the pipe to the thread coming down through the weir. Whilst one person holds the lower section in place, so that the bottom open end of the pipe is sitting at the back of the left hand section of the sump, the other person should turn the upper

section in the weir box clockwise to screw the pipes together until they are hand tight.

Return pipe

Take the long 25mm diameter pipe, remove the blue tape from the threaded end and ensure the rubber seal is in place.

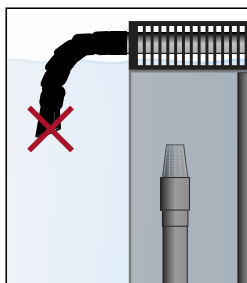
Insert the pipe down the weir so that the threaded end goes through the hole on the right side as you are looking at the tank.

Locate the small hosetail and push the section of flexible hose on as far as it will go, so it meets the collar at the end of the barb. Clip one of the provided nylon pipe clamps in place over the top to clamp into position.

Remove the protective film from the threaded end of the hosetail and check the rubber seal is in place. Next, one person offers up the threaded end of the hosetail assembly to the thread coming down through the tank whilst the other rotates the long return pipe in the weir clockwise to screw the components together until they are hand tight. The end of the flexible hose should be positioned in the return pump section of the sump ready for the pump.

Place the weir comb section back on top of the weir so that the slots are on the front and sides. Take the T section of the return pipe assembly and push into place on the return pipe in the weir. This should be positioned so that the open ends are facing to the sides and in line with the holes in the overflow comb. Finally push the flare nozzle assemblies through the holes in the sides of the weir comb and into the open ends of the return pipe. It is important that these are not glued as they will need to be removed for weir comb maintenance.

Please note when positioning the ends of the flare nozzles in the aquarium they must be kept near the surface. Failure to do so may cause water to be siphoned back into the sump and cause it to overflow in the event of a power outage.



Initial testing of the pipework

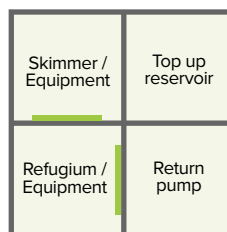
Before filling the aquarium, it is best to test that the pipework and tank connectors do not leak by first closing the ball valve on the main overflow pipe and then filling the overflow box only, rather than the main aquarium. Check underneath for any weeping and, if necessary, tighten up any loose connections. If there are no leaks, fully open the ball valve and continue with the aquarium set up. When opening the ball valve, some of the water used to test the pipe connections will flow into the sump.

Sump layout and setup

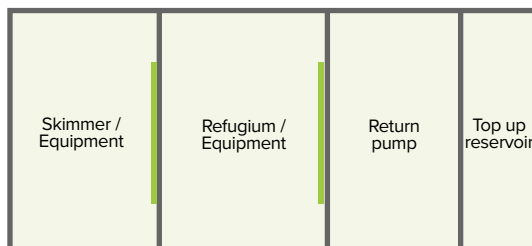
The glass sump is designed to be large enough to accommodate most types of equipment and various methodologies for running a reef aquarium.

Note: If installing an auto top-up unit, the float should be installed in the return pump section of the sump.

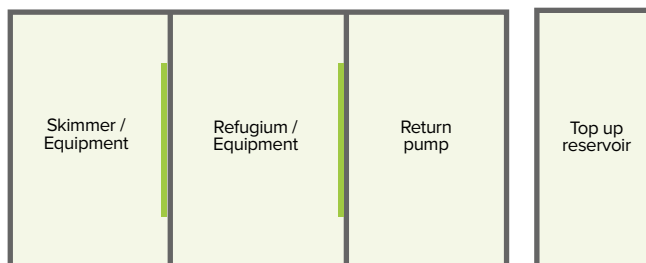
AQUA-PRO REEF 600 SUMP LAYOUT



AQUA-PRO REEF 900/1200/1500 SUMP LAYOUT



AQUA-PRO REEF 1800 SUMP LAYOUT



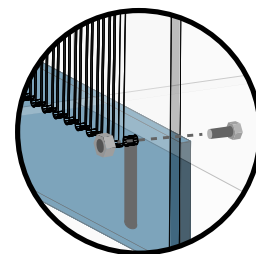
Fitting the adjustable baffles to the sump

The Aqua-Pro sump features two adjustable baffles, these allow for an adjustable water depth in the first two chambers. This can be used for various purposes, for example, setting the recommended running water depth of a piece of equipment or creating a deeper area for a refugium. If the baffles are set high then care must be taken that there is still enough space in the sump to handle drain down in the event of a power outage.

Using the four plastic screws and nuts provided simply fit each adjustable baffle into position. Thread the plastic screws through the open sections in the baffle plates and tighten the nut on the opposite side. The plates can be fitted to either side of the glass dividers.

To adjust or level the plates loosen the plastic screws slightly to allow the plate to move, reposition the plate, then retighten.

The plastic screws and nuts only need to be hand tight, do not use tools as this may cause them to become damaged.



Starting the aquarium and balancing the weir

When starting water circulation through the sump and aquarium for the first time, adjustments will need to be made to the ball valve on the main overflow pipe to ensure quiet running.

Once the return pump has been installed in the sump, fill the aquarium to the bottom of the weir comb and the sump to about $\frac{3}{4}$ full. Make sure that the ball valve on

the main overflow pipe is fully open, the handle should be in line with the direction of the pipe, and that the flare outlet nozzles just under the surface of the water and angled down slightly.

Turn on the return pump and water should start pumping up into the main aquarium from the sump. The water level in the aquarium will rise and start to flow into the weir box, this will then fill the weir to the level of the strainer on the main overflow pipe and then water will flow back into the first chamber of the sump. As this is happening the water level in the sump will decrease. If the return pump starts to draw in air add more water to the pump chamber, only add enough water to keep the pump suitably submerged, do not over fill.

At this stage, the aquarium will be running noisy, this is normal. Once water is circulating around the system and the water levels in the sump and main aquarium are stable you can fine tune the ball valve in the overflow pipework to achieve quiet running. If you have a flow controllable pump, set your pump to the desired power level before continuing.

Close the ball valve slowly in small increments until you start to see the water level inside the weir rise. Keep gradually closing the ball valve until the water reaches the top of the emergency overflow pipe and just starts overflowing into it. These adjustments can take some time to perform, it is sometimes best to make a minor adjustment and wait a few minutes before making the next. If water starts flowing down the emergency pipe too quickly then open the ball valve slightly to allow more water down the main overflow and reduce the water level in the weir. As the weir is filling, the sump water level will drop slightly, if needed add more water to suitably cover the pump.

Please be aware that it is common to get a small amount of noise from water running through the pipework when new. As the tank matures biofilms will form that will dampen some noise. It is also possible that minor adjustments will need to be made to the ball valve over the first few days to achieve quiet running as the tank settles.

Double check the pipework connections for any signs of drips or leaking once the tank is running.

When the ball valve has been set, we recommend that a power cut is simulated to check that the drain down will not be too much for the sump to handle. Simply unplug or turn off the return pump, the water level in the aquarium will then drop to the bottom of the overflow comb and the weir will drain level with the bottom of the main overflow strainer. The sump should fill to a high level during this but not overflow. Once this is done turn the return pump back on and allow the system to run. As the tank and weir refill the tank will run noisily, this will quieten as the weir refills.

If the water level in the sump is getting towards the point of overflowing and the main tank has not reached its drain down level, check that the two flare nozzle outlets are not submerged too far under water. If the sump continues to fill, remove some water from the system to avoid water flowing over the sump and on to the cabinet.

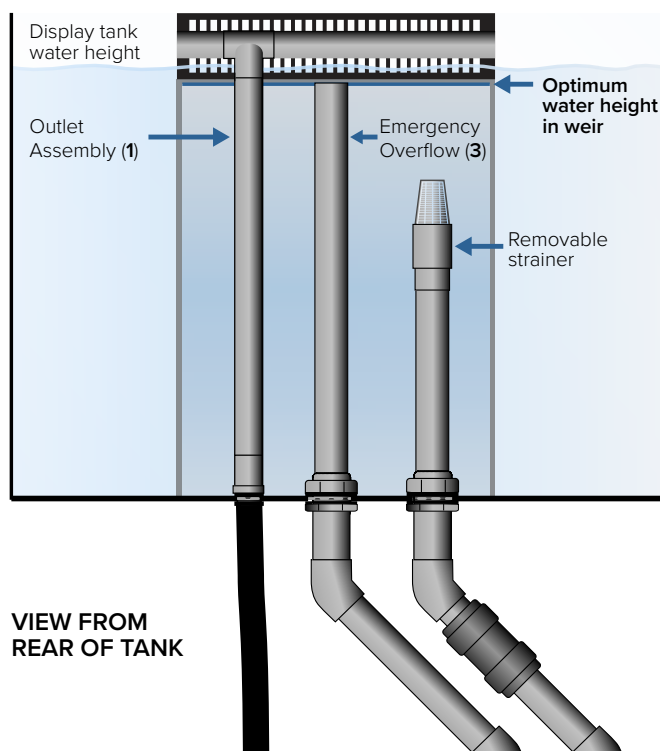
If you have had to remove water to prevent the sump overflowing you will need to lower the height of the second blue sump baffle or both baffles to reduce the amount of water in the system when running.

The easiest way to find out how far you need to reduce the height of these is to firstly, with the return pump still switched off, remove enough water from the sump so that the water level is at least 40mm down from the top edge. Turn the return pump back on and allow the main aquarium and weir to re-fill. It may take 10-15 minutes for the weir to fill to the level of the emergency overflow pipe, during this time the tank will run noisily.

Do not adjust the main overflow ball valve as any adjustments will have to be undone once the water rises. As the water level in the sump decreases slowly adjust the second baffle or both baffles downwards to keep the return pump submerged. Once the main aquarium and weir are back up to operating level and the return pump is suitably submerged, the baffles will be in the highest position, that they can be in for your aquarium to run safely without overflowing when the return pump switches off.

Please note that as you add equipment into the sump, the volume they take up can reduce the amount of drain down space in the sump, the blue baffles may need to be lowered further in some cases and some water removed from the system.

The weir overflow will work at its optimum performance when the water level is at the top during normal operation, with a slight trickle going down the 'Emergency Overflow (3)'. This is a better method than trying to perfectly adjust the valve to match the return pump flow.



Top up reservoir

All models of Aqua-Pro Reef aquariums come complete with a top up reservoir. The 600 / 900 / 1200 / 1500 models have this built into the main sump, the 1800 comes with a separate standalone reservoir that should be positioned to the right of the main sump. An auto top up unit will need to be purchased separately, such as the D-D H2Ocean Compact ATO.

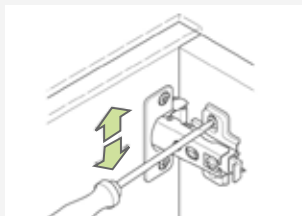
Adjusting the cabinet doors

The doors are pre-set in the factory before packing but the hinges may need to be adjusted slightly once the aquarium is in its final location. It is best to adjust the cabinet doors at the end of installation when the aquarium is full of water.

The soft-close hinges have three points of adjustment. If necessary, make adjustments until the door(s) are level,

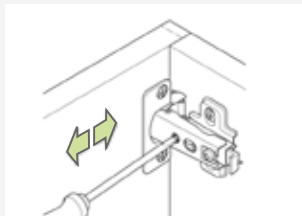
with an even gap, and close without any obstruction. The push-openers can also be adjusted by twisting them in or out, by hand.

The hinges can show signs of rust over time if splashed with saltwater or with high humidity. For extra protection silicone grease can be applied to their surface to provide a protective barrier. Rust on the surface of the hinge is not covered by warranty.



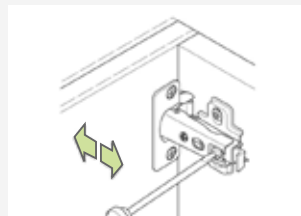
Height

The cabinet doors can be height adjusted marginally with the screws as shown. Loosen the screws on the top and bottom of both hinges and the door will drop down. Lift door into position and tighten screws.



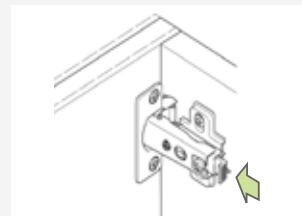
Left to right

Adjustment of the screw as shown will enable left and right alignment of the door. Adjustment of both hinges on the door this way can be used to square it up and will affect the gap between each door when closed.



Front to back

The door can be brought forward by loosening the screw as shown. Pull the door out or push it in then tighten screw to fix the position.



Quick release

The hinges have a quick release mechanism. Push the button at the back of the hinge to release the door, without having to undo the screws.

To compliment and benefit your new aquarium we recommend the following equipment and products...



RECOMMENDED EQUIPMENT	AQUA-PRO REEF 600	AQUA-PRO REEF 900	AQUA-PRO REEF 1200	AQUA-PRO REEF 1500	AQUA-PRO REEF 1800
Return Pump Volume	1500-2000 ltrs/hr	2000-3000 ltrs/hr	3000-4000 ltrs/hr	3000-4000 ltrs/hr	4000-5000 ltrs/hr
Protein Skimmer	Deltec 400	Deltec 400	Deltec 600	Deltec 1000	Deltec 1000
Chiller	DC300	DC300	DC750	DC750	DC750
LIGHTING OPTIONS					
Fish Only/Soft Corals/LPS	1 x Prime 16HD	2 x Prime 16HD	3 x Prime 16HD	3 x Prime 16HD	4 x Prime 16HD
Mixed Reef/LPS/SPS	1 x Hydra 32HD	2 x Hydra 32HD	2 x Hydra 32HD	3 x Hydra 32HD	3 x Hydra 32HD
Heavily Stocked SPS	1 x Hydra 64HD	2 x Hydra 32HD	2 x Hydra 64HD	3 x Hydra 64HD	4 x Hydra 32HD