saltwater conversion

1 Year Warranty

What is covered
This warranty covers any defects in materials or workmanship with the product, with the exceptions stated below.

How long coverage lasts
This warranty runs for 12 months. The warranty starts from date of shipping.

What is not covered
This warranty does not cover associated damage to the aquarium, any equipment or its inhabitants, or damage to property. As with all aquarium products, the risk of leaking or overflowing is very real. This product should only be used in a location where, if in the event of leaking or flooding, appropriate drainage and waterproof surfaces exist to mitigate all potential damage. Appropriate care should be taken to ensure that, in the event of an overflow, there is no risk of electrical equipment contacting the water.

Warranty shipping
The customer shall be responsible for shipping costs associated with returning this product to Saltwater Conversion for warranty should it be required.

What Saltwater Conversion will do
In the event your product is faulty during the warranty period, please contact us and we will offer a replacement for the faulty item**.**

How to get Service
Contact Saltwater Conversion at info@saltwater-conversion.com A service representative will be in touch and let you know the necessary action to correct problems covered by this warranty.

How State Law applies
This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

IMPORTANT Disclaimer and Accepted Risks – Please read carefully
FLUVAL is a trademark registered by Rolf C. Hagen (USA) Corp. in Mansfield, MA, 02048, and is in no way associated with Saltwater Conversion.

As with all aquarium products, the risk of leaking or overflowing as a result of equipment failure is very real. This risk is increased further when using systems featuring a sump and return pump. This product should only be used in a location where, if in the event of leaking or flooding, appropriate drainage and waterproof surfaces exist to mitigate any potential damage – or in a situation where the customer understands and accepts the risk that folding may occur in the event of a fault. Appropriate care should be taken to ensure that, in the event of flooding, there is no risk of electrical equipment contacting the water.

The extent of the warranty provides for replacement of parts supplied by Saltwater Conversion only and assumes no liability for any and all associated damages including but not limited to damage to property, the tank, its inhabitants, lighting, water damage etc.

By using this product you accept the risks associated with it.

Otherwise please return the product for a full refund (excluding return shipping changes)

Thank you for your purchase of the Marine-Pac!

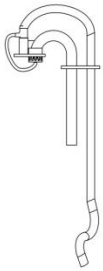
This product provides the base you need to turn your Fluval Edge™ into a stunning saltwater reef tank. The product has been designed to allow for the use of best-in-class hardware – such as the highly regarded Tunze 9002 skimmer and Aqua Illumination (AI) Nano LED Light – to allow you to convert the stunning Fluval Edge™ into a no-comprise reef tank. These instructions will help walk you through the steps required to set up your tank.

Congratulations on your new purchase and I hope you will gain many hours of enjoyment from your tank.

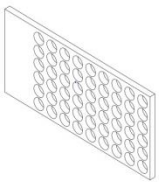
Contents of the Marine-Pac

1 x Perspex Sump with Lighting arm (pre drilled for AI Nano LED light)

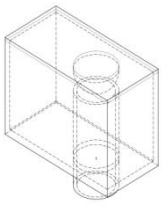
1 x Inlet/outlet plumbing custom made for the 46L Fluval Edge™ II.



3 x Grid plates (2 extra to allow for extra filter media options if no skimmer is used)



1x Skinny Cup (Required to fit Tunzie 9002 Protine Skimmer)



1 x Biological Filter matrix media (Not Shown)

1 x Instructions (Not Shown)

Selecting equipment

This guide will help you in choosing the equipment required to set up your new tank.

If you follow the recommended setup suggestions, a total of four additional parts are required to setup your new tank: the protein skimmer, heater, return water pump and light. These items are described in detail in the section below.

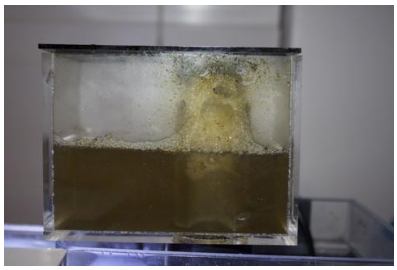
The first two items that should be purchased are the 46L / 12 gallon Fluval Edge™ II and the Marine-Pac itself. This allows you to build your tank up around these two core components and check that your chosen equipment fits together correctly. By shipping you only the essential parts, Marine-Pac users are provided with a greater choice as to which equipment they would like to use.

For help finding equipment for your tank and for a current list of recommended online suppliers for any of these products mentioned in this guide, please visit the FAQs at:

http://saltwater-conversion.com/pages/faq

1. Protein skimmer:

A protein skimmer is the core filtration component of most saltwater systems. Put in very simple terms, a protein skimmer works by creating a stream of foam from the water that removes waste into a collection cup. The waste (called skimate) is a foul yellow/black liquid containing dissolved organic waste that is normally emptied every few months.



Recommended skimmer: Tunze 9002

The German-made Tunze 9002 skimmer is highly regarded as one of the best small protein skimmers available on the market today. This skimmer is rated for tanks up to 200L / 50Us gallons. As a result it has a massive amount of headroom in the 46L / 12gallon Fluval Edge™ and succeeds in maintaining great water quality. This means less water changes and the high water quality required to grow advanced corals. The smaller skimmer collection cup required for the Tunze 9002 to fit is included with your marine-pac website.

2. Heater

A heater maintains the correct water temperature required by your reef. Any decent quality 50W heater will work. The heater used should be the fully submersible type. The heater is mounted with the larger temperature adjustment end pointed towards the bottom of the Marine-Pac. Depending on the heater

chosen, it may or may not be possible to use the included suction caps. I suggest you take the Marine-Pac with you to your local fish shop to check that heater you chose will fit.

If you chose to use a larger heater do not force it to fit into the Marine-Pac, instead install it into the main tank.

26 degrees Celsius or 79 degrees Fahrenheit is an optimal temperature and provides the largest margin of safety. Corals have been shown to thrive in water several degrees on either side of this temperature.

3. Light

The lighting makes up one of the most important aspects of your reef. Most of your reef's inhabitants depend on proper reef lighting for their nutritional and photosynthetic needs.

Recommended lighting: Aqua Illumination Nano LED

These lights are made in the USA and have a well-deserved reputation as one of the best nano light fittings on the market today. The Marine-Pac comes ready to mount this light with pre-drilled mounting holes and fan cut-out. Use a standard on/off timer or buy the Aqua Illumination controller for additional flexibility. The optional wireless adaptor for the controller does not fit in the limited space, use the included cable.

4. Return water pump

The return pump is responsible for creating the flow and water circulation in your tank. The Marine-Pac has been designed to work with any standard 500-600L/h water pump. Larger pumps up to 1000L/L can also be used but you will need to reduce the flow rate by using the flow control slider on the pump. Again I suggest bringing the Marine-Pac to your local fish shop to check that the pump you choose will fit properly.

Recommended pump: Eheim Compact 600

This makes a great option and is almost silent when running in the Marine-Pac.

Setting up your Marine-Pac

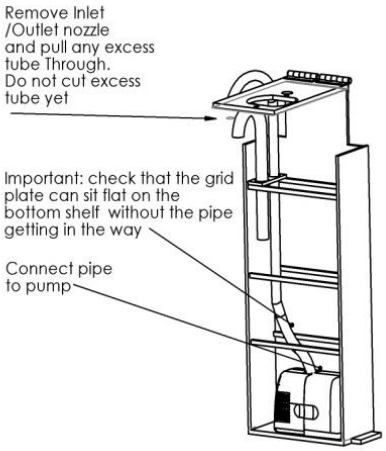
A setup video guide can be found on the Saltwater Conversion website. It is highly recommended you watch this in addition to these instructions.

Before you begin:

Pay particular attention in the diagrams to which side the pluming, pump and skimmer is installed in the Perspex sump. All photos and diagrams are shown with the lighting arm pointing towards the viewer

Step 1

Fit Pump



If the pump you have chosen is small it is recommended that you mount the pump horizontally on the right hand side of the Perspex sump. The Eheim compact 600 should be mounted this way for example

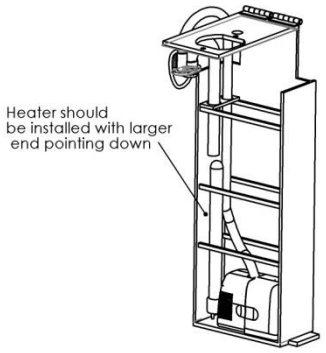
For Larger Pumps

If you have chosen a larger 1000l/h pump you will need to install it vertically on the left hand side of the sump and adjust the flow rate to about half (Ehime Compact 1000 shown in photos bellow) A larger pump such as this may limit the space available for a heater significantly.

Step 2

Optional Step- Some larger heaters require mounting inside the tank

Insert heater.

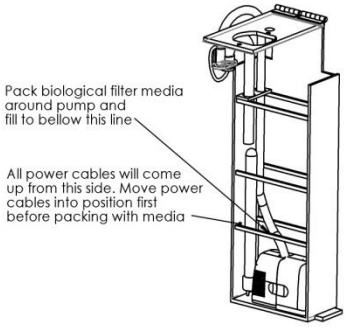


Depending on the heater you have chosen you may need to remove its suction caps to make it fit correctly.

Step 3

Optional Step- Some people may prefer to use this space for other types of filter media such as active carbon - or no media at all

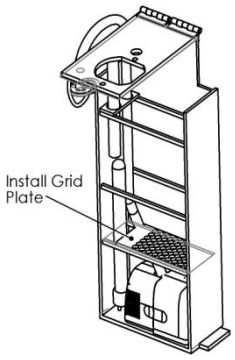
Fill sump with the included Biological Filter matrix media



Step 4

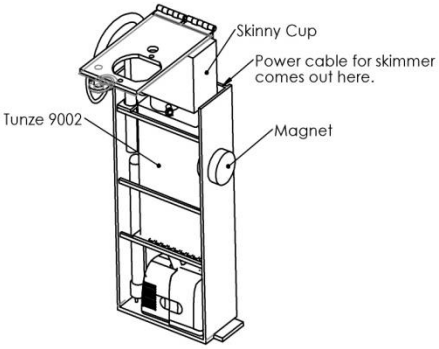
Optional Step – can be left out to help larger heaters fit correctly

Insert grid plate



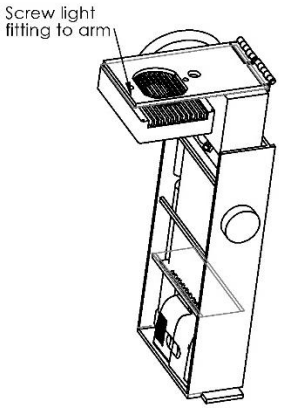
Step 5

Install skimmer and cup



Step 6

Install AI Nano LED on lighting arm



Use the plastic screws that are included with the AI Nano, you will need to cut them down to the correct length, side cutters of a knife will do the trick.

If you are using the optional AI lighting controller

It is highly recommended that you use the wireless adaptor option

Wired Mode

Use the shorter of the two cables included with the AI nano. Either stick down the controller using the included Velcro on top of the lighting arm

Or cut a small gap in the back of the hood to allow the cable out and attach the controller using the included velcro to the back column (this means less cable bulk under the hood of the tank)

Wireless Mode (recommended)

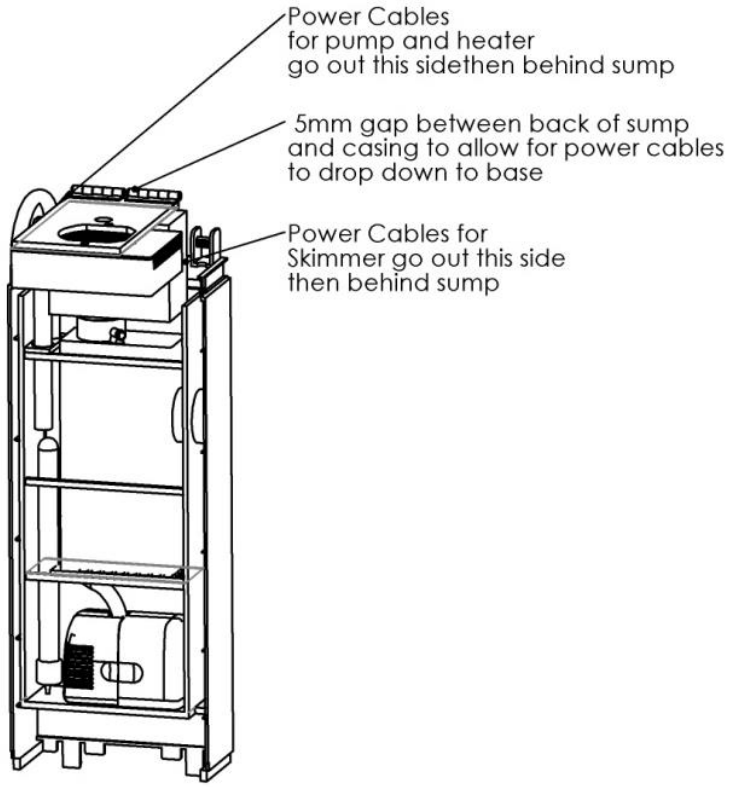
Install the wireless module as shown (photo with arm flipped back and LED's pointing up)

Step 7

To remove the original lighting arm, lift the arm up and remove the 4 recessed screws (2 each side) Once the screws have been removed pull the 2 halves of the arm apart and slip them off of the hinge. Remove the cable clamp holding down the lighting cable from the back column.

Step 8

Install Marine-Pac into the back column of the Fluval Edge™.

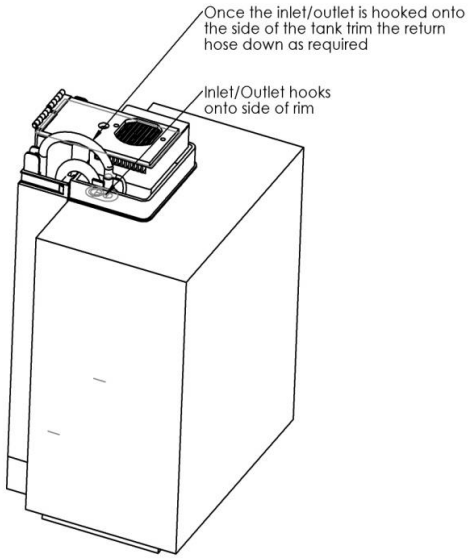


Remember to fit the power supply for the AI Nano LED Lights before closing the back column.

Step 9

Install back cover, base and tank.

Note: In some instances you may need to dip the end of the hose into a cup of boiling water to soften it before attaching it to the outlet.



At this stage you can trim down the excess silicon inlet hose so it fits neatly to the nozzle.

The cables come out the back of the tank as shown

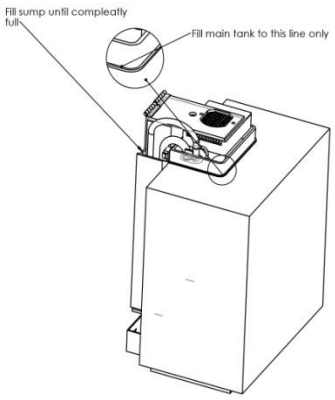
Important – Please read the guide on setting up water levels

Water levels

Very Important - Always lift up you lighting arm before starting or stopping pumps to avoid splashing your light fitting

The Marine-Pac has been designed to automatically start and recover from power outages without priming or manual intervention.

Remove the skimmer cup and fill the Marine-Pac with salt water until completely full . The main Fluval Edge™ tank should be filled to the edge on the bottom of the neck.



Next turn the power on and the pump and siphon will automatically start. A stream of bubbles will come out of the return pipe as air is removed from the system. These bubbles can be removed from the tank with a magnetic glass cleaner.

When your water levels need a top-up due to evaporation you will be able to notice this right away as the inlet will make a loud gurgling noise and a stream of bubbles will shoot out from the return pipe. The siphon will not break in this situation, but it is sensible to top up the water as soon as possible all the same.

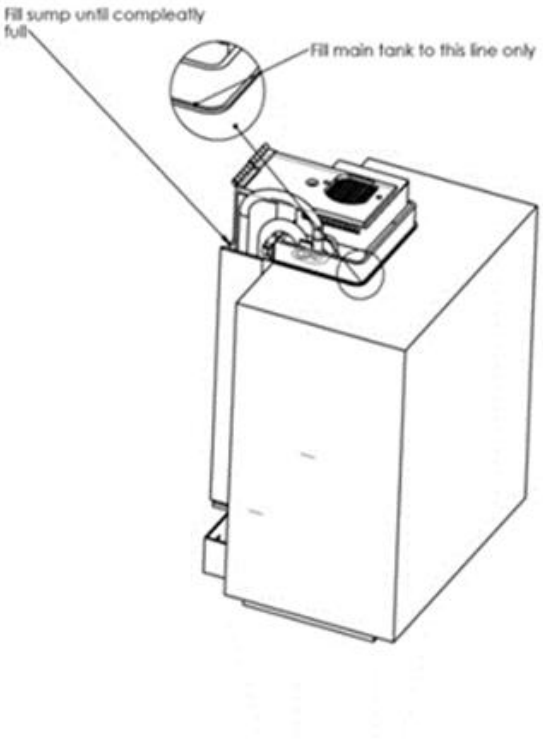
How to set your water levels

Follow these four steps to top up the water levels in the tank:

1. Turn the return pump off at the wall

2. Empty some water from the main tank so that the upper level sits at the top of the rim of the neck.

3. Fill the marine pack to the brim with water



4. Turn the pump back on.

If these instructions are not followed and the aquarium is overfilled – a small portion of water will overflow from the sump down the back column when the return pump is next turned off.

Water changes: Use the same process for water changes. Simply siphon out as much water as you need (typically 30%) from the main tank and replace with new water so that the upper level sits at the top of the rim of the neck

Maintenance

Top up water level once a week or as required. (See below.)

The intake grill and outlet nozzle assembly and siphon tubes should be cleaned every few months to prevent build-up that could lead to blockages. Additionally the skimmer and biological media should be removed every few months and cleaned. The matrix media should be rinsed in *saltwater only* to keep the beneficial bacteria alive. Always remove the AI nano from the light arm before carrying out any maintenance.

The small length of airline tube running from the inlet to the outlet is used to start the siphon automatically and should be changed every 6 months to prevent build up occurring in the tube. It may require a drop of super glue to seal properly.

Important notes

If the intake grill is completely blocked, the contents of the sump will overflow. That said, the intake grill is carefully designed with holes on all sides and placed in the tank in such a way that it is very difficult to block completely. In addition, its proximity to the return pipe jetting out water drives away most debris. Even so, it is probably a good idea all the same to avoid very large snails and anything else that may stand a shot at blocking the grill.

If the water level and evaporation was left uncorrected for a very long time it is possible that it could eventually drop below the siphon tube in the marine pack. While this event is very unlikely, if it did occur the remaining water in the Marine-Pac would be pumped back into the tank and overflow. The Marine-Pac starts jetting large amounts of bubbles and making a loud gurgling noise if the water level has dropped too low. Simply top up the water when you next get a chance to avoid any issues. It would take many weeks of gurgling and bubbles before any chance of overflow!

Troubleshooting tips

Mist of bubbles comes out of the return outlet

Possible solutions include:

- Most likely you skimmer has not broken in yet and is producing excessive micro bubbles, this should stop after 2 weeks once the skimmer has broken in properly.
- Check the airline tube is firmly seated on the side of the inlet nozzle. Sometimes it may be necessary to apply a drop of superglue if the hose has been changed or is not sealing correctly.
- Check that the matrix filter media is spread evenly around the pump. The media should be tightly packed with no air gaps.
- Check water level.
- Bubbles will take up to one day to work out of the system properly after the syphon is stoped. Use a magnetic cleaner to remove bubbles from the top glass surface. Brush the bubbles away from the intake to avoid recirculating them.
- Because of the enclosed top you can expect some bubbles to accumulate during normal operation.

Loud gurgling noise

Possible solutions include:

- Check water level.

No water coming from outlet

Possible solutions include:

- Check pump impeller for obstructions.

Syphon does not start automatically

Possible solutions include

- Check that water levels have been setup correctly as per this guide
- Clean inlet/outlet assembly

Fine tuning water levels

It is possible to adjust water levels in the display tank and Marine-Pac by adjusting the position of the return pump in the sump. ideally water levels should be about halfway up the neck of the tank.

If you find the water level in your main tank to be a bit low simply attach the return pump 3-5cm higher in the Marine-Pack and this will increase the water level in the main tank. You may need to trim the return hose down slightly .