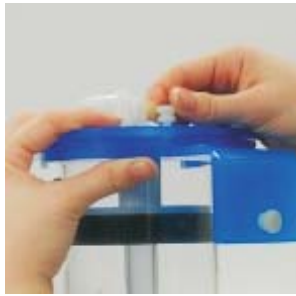


Hang On Adapter:

To install the optional Hang-On Adapter, simply loosen 4 of the screws that secure the lid until they are flush with the bottom of the flange. Place the HOA under the flange, align the screw holes and tighten. **You do not need to remove the Hang-On Adapter to change the media or remove the lid.** You may notice a small gap between the reactor and the flange at some of the screws - this is normal.



Other Notes:

The MR1 should provide years of trouble-free service if properly cared for. Here are a few hints to help:

Your reactor may be installed anywhere, as long as the surface is flat and the reactor is upright. Your reactor can be installed in-ump, and is also ozone safe.

When changing the media, please keep in mind that some water may leak out of the reactor when you remove the lid. Open the reactor over a bowl, bucket, or over your sump. New media may cloud the water in the reactor (and your tank), you may want to let the cloudy water run off into a container to be discarded.

Rinse the reactor when changing media, including the sponges.

Replacement sponges and o-ring gaskets are available from NextReef.

Please contact NextReef or your dealer with any installation questions.

We want you to be completely satisfied with your purchase!

Problem? Question? Give us a call first – we'll be happy to help.

Email: sales@NextReef.com Phone: 941-704-5391 (M-F 9am – 5pm EST)

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LIMITED WARRANTY

NextReef makes no claim to the suitability of this product for any specific use. The end user is solely responsible for determining fitness for a particular use, and for installation. This product is sold as a component of a custom aquarium installation.

Your product is warranted to be free of defects for a period of 90 days from purchase. We will, at our discretion, repair or replace your product at no charge during this period. Return shipping is the responsibility of the purchaser. This warranty does not cover accidental damage, misuse, improper care or alteration, or acts of God, such as floods and earthquakes. Coverage terminates if the original purchaser sells or otherwise transfers the product. This warranty excludes claims for incidental or consequential damages, loss of revenue or profits, loss of business, or other financial loss in connection with the warranty problem. Some jurisdictions do not allow the exclusion or limitation of incidental or consequential damages so the above limitation or exclusion may not apply to you. This warranty gives you specific legal rights, and you may also have other rights, which vary from state to state or country to country.



Thank you for choosing NextReef! Our products are hand-built in the USA, and are designed to provide the highest level of performance for your aquatic systems.



Instructions – MR1 and MR1 Shorty Media / Substrate Reactor

Wash everything. While we take great care to keep any contaminants away from our products during assembly, please take a moment to clean the reactor and plumbing before attaching to your tank. Only clean your reactor with warm water and a single drop of plain dish soap (avoid dish soaps with moisturizers, etc.). Use caution when handling as acrylic scratches easily. Never clean Acrylic with alcohol based products.

Plumb the MR1. There are multiple ways to plumb in your media reactor, depending on your tank configuration and design – 4 are listed on the following page.

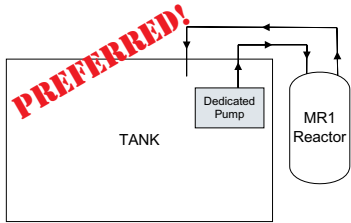
Please keep in mind that a media reactor is intended to be a bypass filter, and is not designed to handle the complete flow and pressure requirements of a large aquarium system. In some installations you may want to install a ball valve before the reactor – never use one to restrict the flow out of the reactor, as this can over pressurize it. **The fitting in the center of the lid is the water inlet; the fitting offset to one side is the outlet.** Fittings should be wrapped with Teflon pipe tape. Do not over-tighten when installing – should one not seal correctly, re-wrap with Teflon plumbing tape and reinstall.

The MR1 is designed to accommodate flow rates up to 160gph, and we recommend you choose a quality pump such as the EcoPlus 132 or the Mini-Jet 606. These pumps feature adjustable flow rates, perfect for fine tuning your reactor's performance.

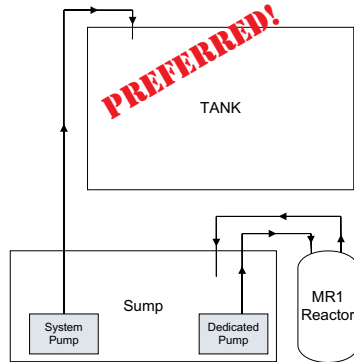
Your reactor is set up to use ½ inch (inner diameter) tubing. ½ inch ID tubing will also fit snugly around the output from an EcoPlus or Mini-Jet pump. Three plastic hose clamps are included - the third can be used to secure tubing to the pump if you choose this installation.

If you plumb the return from your reactor into the main tank, place the return line above the water level to avoid siphoning in the event of a power loss. **Always test for siphoning when making any change to your aquarium configuration!**

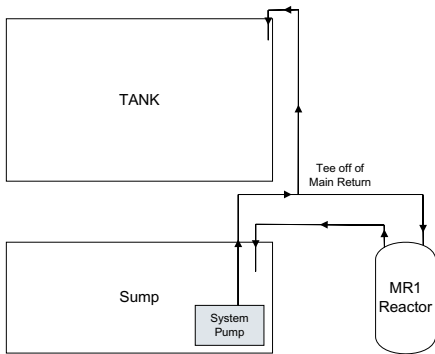
Examples of MR1 Suggested Installations:



A simple installation where the MR1 is plumbed directly into the main tank.

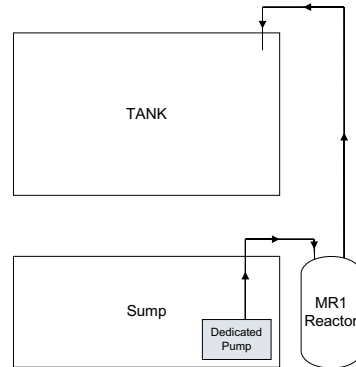


MR1 Reactor installed with a dedicated pump, returning water into the sump. This is the preferred installation for systems with a sump – the reactor faces the lowest head pressure, and cannot siphon from the main tank.



MR1 Reactor installed on the main system pump, returning water into the sump.

The MR1 is not designed to handle the flow from large pumps – tee off of the main return line and use a ball valve to control the flow.



MR1 Reactor installed with a dedicated pump, returning water into the main tank. This adds head pressure to the dedicated pump, and may reduce flow through the reactor. Do not submerge the return to prevent siphoning in the event of a power loss



Insert the clear tube with the attached lower plenum and a filter sponge into the MR1 canister.

Make sure the sponge is all the way at the bottom of the canister, flush against the plenum – otherwise the media may leak past it when filling.

We suggest using a length of pipe or tubing to push the sponge in with. *(Please do not get your hand stuck in the MR1, it's far harder to cut off than a Pringles can...)*



Holding your thumb over the tube, pour your media into the MR1. Be sure to keep the tube centered as you fill the reactor.

Some media (such as phosphate control products) is not designed to be aggressively fluidized in a reactor – please read the instructions on your media carefully. You may fill the reactor as far as you wish with these products.



For media designed to be fully fluidized, the reactor should be filled no more than two-thirds full to allow the media room to move around. With heavy or fine media, you may need to add less.

Slide the second sponge and the upper plenum onto the tube. The plenum may fit snugly, please use caution when sliding it on.

Wipe any debris or leftover media off of the lid and top of the reactor.



Press down firmly onto the center of the reactor, seating the tubing into the fitting on the underside of the lid.

Twist the reactor lid clockwise and gently tighten the thumb screws.