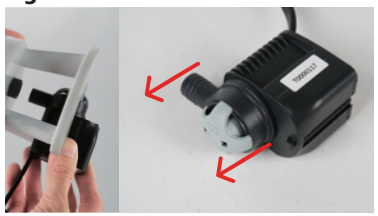
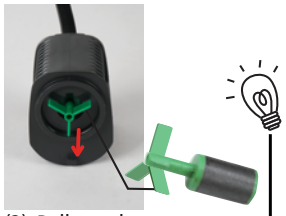
▶ Maintenance

Regular maintenance of the pump will ensure long life and maximum performance: recommended every 3 months. You can disassemble the pump to clean by following steps:

Sigma-1



(1) Pull out the pump from the bottom. Separate the cover from the pump.



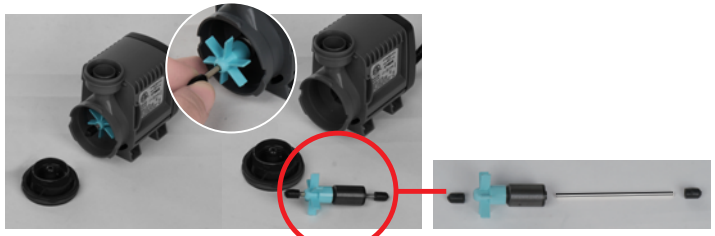
(2) Pull out the rotor.

How to remove the limescale?

NO OTHER CHEMICALS, soak in a mixture of 1 part water and 1 part vinegar (citrin acid also available) for at least 24 hours. Once you finish, please rinse with warm water.

Sigma-2

(1) Press the PULL TO OPEN on both side of the pump and pull out the cover. Take off the inside cover.



(2) Pull out the inside parts (Make sure to put back in position)

The rotor could be disassembled.

▶ WARRANTY

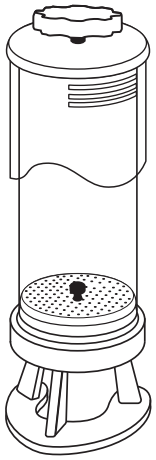
JNS warrants all JNS products to be free from manufacturing defects for one year from the original purchase date when purchased through an authorized JNS retailer. This warranty does not cover any damages caused by misuse, neglect, alterations, or improper handling / transport / maintenance / installation. Physical damages are not covered by the warranty. JNS does not cover personal injury, personal loss, or other damages associated with the use of our products. In order to request warranty service, please email us at info@jnsaquaria.com. A purchase receipt is required for any warranty service. Products requiring warranty service must be returned to JNS. You are responsible for the cost of shipping a warranty claim to JNS and any damages that may occur during transit. Once a returned product has been inspected, it will be repaired or exchanged at our discretion and returned to you. International and/or expedited shipping are not covered under your JNS warranty.

Media Reactor
Sigma-1 / Sigma-2

jns aquaria
www.jnsaquaria.com
info@jnsaquaria.com

▶ Before installation and operation

Please open the package carefully and check if there's any damaged or lost parts.



Parts included:

1. Main media reactor body with Lid and base bracket
2. Filter sponge *2
3. Sicce Syncra pump *1
3. Sucker *3

2

3

4

▶ Recommendations

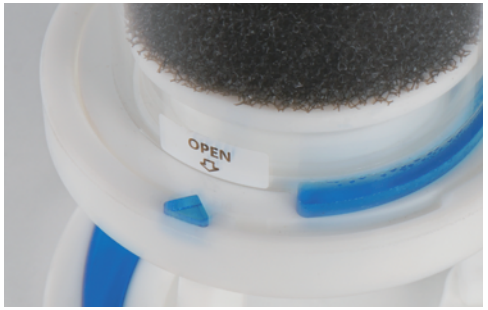
1. While we take great care to keep any contaminants away from our products during assembly, please take a moment to clean with warm water ONLY. Never clean Acrylic with alcohol-based products. Use caution when handling acrylic scratches easily.
2. The reactor should be cleaned out every time that the media is replaced ensuring that there is no media below the bottom plate.
3. Regular maintenance of the pump will ensure a long life and maximum performance.

▶ Select a suitable place to set your Sigma Media Reactor

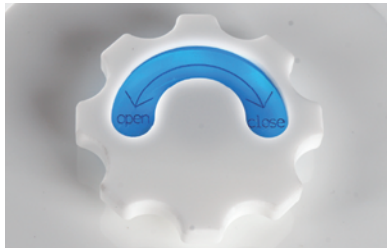
1. Verify now that your sump has adequate space for the media reactor. Be sure that the media reactor can sit flat and that it is not touching the sides of the sump, any baffles or any plumbing. This will ensure the quietest performance from your media reactor.
2. The pump must be completely submerged underwater when in use.

▶ Assembly

1. To separate the body chamber and the base bracket, hold the body chamber and base bracket carefully and turn counterclockwise until the OPEN is beyond the blue triangle.

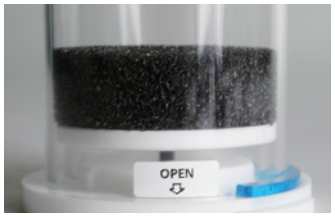


2. To open the lid, loosen the thumb screws. Turn the lid counterclockwise to release.



3. **(Biopellets do not require the two black sponges, this step could be skipped)**

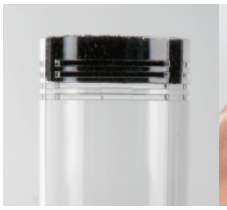
   Put the filter sponge into the body chamber, make sure the sponge is in the bottom of the reactor, and attached completely to the bottom plate, or the media may leak past it when filling.



4. Pour your media into the body chamber. 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. Please check with manufacturer's instruction for proper amount of media needed for your specific set up.

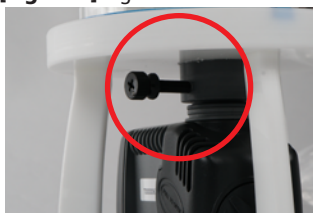
   Sigma-1 –500 ml Maximum Volume Capacity
   Sigma-2 –1000 ml Maximum Volume Capacity

5. Insert the upper filter sponge and place the lid. Follow the direction to tighten. Do not over-tighten.

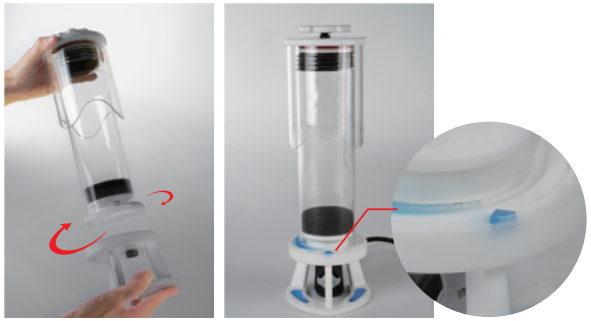


6. Install the suckers into the base.

7. Connect the water outlet of the pump to the base bracket.
   [Sigma-1] **[Sigma-2]** Tighten the screw.



8. Install the body chamber onto the base.



▶ To Start

1. Plug in the pump.

2. Different media needs the different flow rate. Please adjust your flow rate by turning the body chamber.

3. Some filter media should be held in suspense at all times, but 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. If the filter media collects at the top sponge, the flow rate is too high. If you cannot detect any motion in the filter media, the flow rate is too low.