



ReefTek Nielsen Reactor

Thank you for purchasing your Nielsen Reactor from us. Properly setup will provide with many years of trouble free operation.

Setting up

Unpack your reactor and verify that everything is in good shape. Inside the reactor chamber you will find the following:

1. Mixing pump motor and impeller
2. Fresh water supply tubing (green)
3. Fresh water down tube (light tan)

Some assembly is necessary to get the reactor ready:

1. Attach the mixing pump motor and impeller to the impeller housing attached to the base of the reactor. Align the tabs in the motor to the notch in the impeller housing and twist the motor to secure it to the impeller housing.
2. Screw the fresh water down tube to the valve threaded fitting (grey) in the reactor's lid. The lid comes installed upside down to protect the valve during shipping.

Locate a level surface where to place your reactor. Included are 10' of tubing (green) that you can use to set your reactor. If you need additional tubing, it should be ¼" OD polyethylene tubing; home improvement stores sell it.

On the reactor lid there are two Quick Connect fittings. The one with the valve (white) is the input and the one in the middle (tan) is the output. The valve will allow you to regulate how fast the limewater goes out of the reactor.

Warning: Do not obstruct the output of the reactor in any way, especially when connected to an RO unit. This will pressurize the reactor and may cause it to leak. Doing so will void the warranty.

Measure the distance from your fresh water output to the reactor and cut the green tubing to match. Do the same for the output of the reactor to your sump. Push the green tubing for both the input and the output of the reactor into the fittings as shown in the following picture:



Then pull to check it is secure:



To activate the mixing pump, you will also need a timer that will activate the mixing pump 3-4 times a day for 3-5 minutes. The home improvement stores sell an electronic timer that should work for this purpose. Or if you have an X-10 system you can use an appliance module to activate the mixing pump.

Filling up

You can add as many as 3 full cups of lime into the reactor. That should last for about 1-1.5 months depending on how much evaporation water you are replacing.

Make sure the o-ring is in place and seated in the groove. The o-ring groove should be free of debris to ensure a good seal. Tighten down the screws going around in a circle pattern. Usually hand tightening the thumbscrews is sufficient to seal the reactor. Turn on the fresh water supply and let the reactor fill up. Once the reactor is full, plug the mixing pump and let it work for a few minutes. Turn the mixing pump off and let the un-dissolved lime settle. The reactor is ready to dispense limewater to your aquarium.

Do not lift the reactor by the flange, once full with water it is very heavy. Instead position your hand below the reaction chamber under the base to fully support the unit.

Maintenance

You can determine when the limewater is losing its potency by measuring the PH of the reactor's output. Fully saturated limewater has a PH of 12 or more. Once the PH of the output starts to get below 11.5, it is time to add lime to the reactor. You can just add additional lime to the existing reactor limewater or empty the reactor to clean it. If you do empty the reactor, use this time to clean the mixing pump by gently twisting the pump motor which will expose the pump's impeller. Usually fresh water is all that is needed to clean the impeller and housing. If it has white deposits, you can use a diluted vinegar solution to clean the impeller.

You should also periodically inspect the output tubing end for lime deposits that will accumulate overtime. Clean it so that the tubing remains unblocked. Failure to follow this routine maintenance procedure will clog the output of the reactor and will build pressure inside it that might spring a leak.

If you have any problems with your reactor, don't hesitate to contact us via email at support@reeftek.com.

Limited 5 year Warranty

IMPORTANT WARRANTY NOTICE: Please read it carefully. YOUR RIGHTS AND REMEDIES PERTAINING TO THIS PURCHASE ARE LIMITED AS SET FORTH IN THE WARRANTY AND THIS CONTRACT.

GENERAL PROVISIONS – The warranties described below are provided by ReefTek to the original purchasers of new Nielsen Reactors from ReefTek or authorized ReefTek dealers. Under these warranties, ReefTek will repair or replace, at its option, any covered part which is found to be defective in material or workmanship during the applicable warranty term. Warranty service must be performed by ReefTek, which will use only new or remanufactured parts or components furnished by ReefTek. Warranty service will be performed without charge to the purchaser for parts or labor. The purchaser will be responsible, however, for any service call and/or transportation of product to and from ReefTek's place of business, all freight and insurance charges. All disputes as to this warranty shall be directed to ReefTek and ReefTek shall take such action as it deems appropriate in its sole discretion.

WHAT IS WARRANTED – All parts of any new ReefTek Nielsen Reactor, except for the mixing pump. This Nielsen Reactor unit is under warranty by ReefTek against defects in material or workmanship. If the Nielsen Reactor unit is found to be defective, the defective unit must be returned to ReefTek for repair or replacement, provided it has not been modified, damaged or misused.

WHAT IS NOT WARRANTED – ReefTek IS NOT RESPONSIBLE FOR THE FOLLOWING: (1) Used Products. (which include products not owned or possessed by their original purchaser) (2) Any product that has been altered or modified in ways not approved by ReefTek. (3) Depreciation or damage caused by normal wear, lack of reasonable and proper maintenance, and/or failure to follow the installation and service instructions. (4) The mixing pump. (5)

WARRANTY TERM – ReefTek warrants the Nielsen Reactor unit to be free from defects in materials and workmanship for as long as it is owned by the original purchaser, subject to the limitations set forth herein. ReefTek warrants the Nielsen Reactor unit for a period of five years from the date of original purchase.

THIS WARRANTY IS VOID if the Nielsen Reactor is used for other than it's intended purpose.

SECURING WARRANTY SERVICE – To secure warranty service, purchaser must (1) report the product defect to an ReefTek within the applicable warranty term, (2) present evidence of the warranty start date, (3) provide a copy of the original proof of purchase (original sales receipt and his/her name indicated as the original purchaser, thereon) at the time service is requested and (4) make the product available to ReefTek within a reasonable period of time.

NO IMPLIED WARRANTY OR OTHER REMEDY REEFTEK PRODUCTS – Where permitted by law, neither ReefTek or any company affiliated with it makes any warranties, representations, or promises, express or implied as to the quality or performance, or freedom from defect other than those set forth above, and NO IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS IS MADE. IN NO EVENT WILL REEFTEK OR ANY COMPANY AFFILIATED WITH REEFTEK BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES. THIS WARRANTY IS LIMITED TO REPLACEMENT OF THE NIELSEN REACTOR UNIT ONLY. WARRANTY DOES NOT COVER LOSS OF FISH AND/OR OTHER AQUATIC ORGANISMS, PERSONAL INJURY, PROPERTY LOSS, OR DAMAGE ARISING OUT OF USE OF THE UNIT. This warranty gives you specific legal rights, and you may have other rights which vary from state to state. The only remedies the purchaser has in connection with the breach of performance of any warranty on ReefTek products are those set forth above.

NO DEALER WARRANTY – THE SELLING DEALER MAKES NO WARRANTY OF ITS OWN AND THE DEALER HAS NO AUTHORITY TO MAKE ANY REPRESENTATION OR PROMISE ON BEHALF OF REEFTEK, OR TO MODIFY THE TERMS OR LIMITATIONS OF THIS WARRANTY IN ANY WAY.