Operation Manual



Calcireactor CR IIO Calcireactor CR 200







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Calcireactor CR 110 and CR200



Thank you very much for purchasing a Blau Aquaristic calcium reactor.

Before installation and use of this calcium reactor it is recommended that you read and understand these instructions.

Operating principle of calcium reactors:

The theoretical basis of calcium reactors is the dissolution of calcium carbonate (or similar compounds) in acid media, decomposing into calcium ions and carbonates. To avoid altering the pH of the aquarium, this reaction is done in an independent chamber with a small flow of water and with the injection of CO2 to lower the pH of the water inside.

Set composition:

- Main body of the reactor.
- Cover with water outlet, purge and probe inlet.
- Internal recirculation pump with controller and transformer.
- PVC tube with accessories that connects the upper part of the reactor with the pump.
- CO2 and water supply tubes. With non-return valve and tap.
- Rubber gaskets.
- Silicone gasket for the lid
- Plug for the input of the pH probe (in case of not using it).
- Reaction material is not included.

Assembly:

- Mount the recirculation pump at the base of the reactor body.
- Place the tubes that connect the pump with the body of the reactor. Make sure the corresponding O-rings are
 on.
- Open the lid of the reactor by unscrewing and place the reaction medium between the two sponges.
- It is recommended to use a reaction medium with a large grain, about 3 cm and that does not give off dust that could damage the pump.
- Close the lid of the reactor and place the flexible blue tubes according to the graph

Calcium Reactor Water Feed:

To feed the calcium reactor with aquarium water, several systems can be followed:

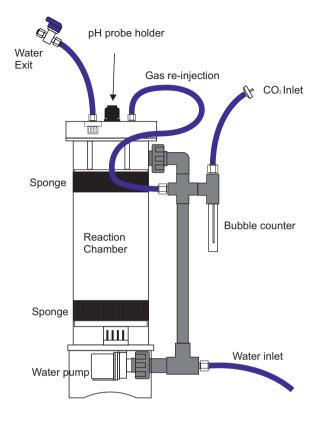
- This reactor is designed to directly take water from the sump, but depending on the position of the reactor or the water level in the sump, the water flow may not be sufficient.
- Making a small bypass in the tube of the return water circuit from the sump to the aquarium.
- With a dosing pump.
- By gravity from the main tank (take the water from just a few centimeters below the water level of the aquarium, to prevent it from emptying if the recirculation pump stops).

Reaction Media.

The base of the medium that will be used to react with CO2 and obtain calcium and carbonates can be different and thus obtain different results:

- Coral sand: fragments of coral and shells. It can have different granulometry. Normally it will provide all the components found in the skeletons and shells, so in addition to calcium carbonate it dissolves other important components for the growth of corals such as strontium, magnesium, etc. But it will also dissolve phosphates depending on the characteristics of the material. Due to the fact that it is not pure calcium carbonate, the proportion of calcium with respect to that of the entire material is lower, so we will obtain less dissolved calcium.
- Pure calcium carbonate: it has the advantage of providing more calcium for the same amount of material compared to coral sand; phosphate is not dissolved if the medium is of quality. The disadvantage is that we do not add other important components in the formation of the coral skeleton.

IT IS IMPORTANT THAT THE REACTION MEDIUM IS COMPOSED OF LARGE AND DUST-FREE PIECES TO AVOID CLOGGING THE PUMP.



Maintenance:

- Frequently clean the pump to remove any possible grit or calcium carbonate build-up.
- For safety, disconnect the pump from the electrical network before any maintenance action.

WARNING

- 1- Do not run the pump dry.
- 2- Place the controller and power supply sheltered from splashes.

WARRANTY

This product has a 2-year warranty against any manufacturing defect.

The guarantee does not cover:

- Damage caused by incorrect installation.
- Damage caused by improper use.
- Damage caused by wear due to operation.
- Transportation costs to the repair center.
- Damage to the pump due to the use of incorrect material or due to wear

To be entitled to the guarantee, the purchase receipt must be attached to the product.

