



Thank you for choosing the GEO Calcium Reactor. This latest model reflects many changes made over the years to provide a better product. Heavy duty cast construction and quality fittings used throughout ensure years of trouble free service.

## Setting up and Installing Your New GEO Kalkwasser Reactor

There are many ways to operate the kalkwasser reactor. The three I list, are what I feel are the safest way to use the unit. All three ways are used in conjunction with your fresh water top off system. This would include the fresh water reservoir and a perstalic dosing pump, except for the gravity fed version. I do NOT recommend using a powerhead to feed the reactor or connecting the reactor directly to an RO unit. Use of the dosing pump or gravity fed method will insure only preset small amounts of kalkwasser will be added to your system at any given time.

### **Things you will need to install your reactor to top off evaporated water with kalkwasser:**

- Float switch
- Appliance timer
- Dosing pump
- Fresh water reservoir
- Aquarium grade kalkwasser

With this installation, all evaporated water would be replaced with kalkwasser. (See Diagram A) The float switch is placed in your sump to activate the dosing pump as water evaporates from your system. When the dosing pump is turned on, it feeds RO water into the bottom of the kalk reactor pushing fresh kalkwasser out of the unit and into your sump. The timer is used to turn on the Maxi-Jet mixing pump stirring the solution in the reactor as needed. Stir frequency is determined by the amount of water being fed through the reactor.

### **Things you will need to install your reactor to dose kalkwasser at timed intervals:**

- Fresh water topoff reservoir
- Dosing pump
- Two appliance timers
- Aquarium grade kalkwasser

With this installation, kalkwasser is dosed into the aquarium at preset times. (See Diagram B) There are two timers used in this set up. One timer will activate the dosing pump feeding RO water into the bottom of the reactor, pushing fresh kalkwasser into the sump. The second timer is used to turn on the Maxi-Jet mixing pump stirring the solution in the reactor as needed. Stir frequency is determined by the amount of water being fed through the reactor. This setup is most recommended and would be used to dose your aquarium at night. When using this setup, it is important to dose the kalkwasser in small intervals.



## Setting up and Installing Your New GEO Kalkwasser Reactor Continued

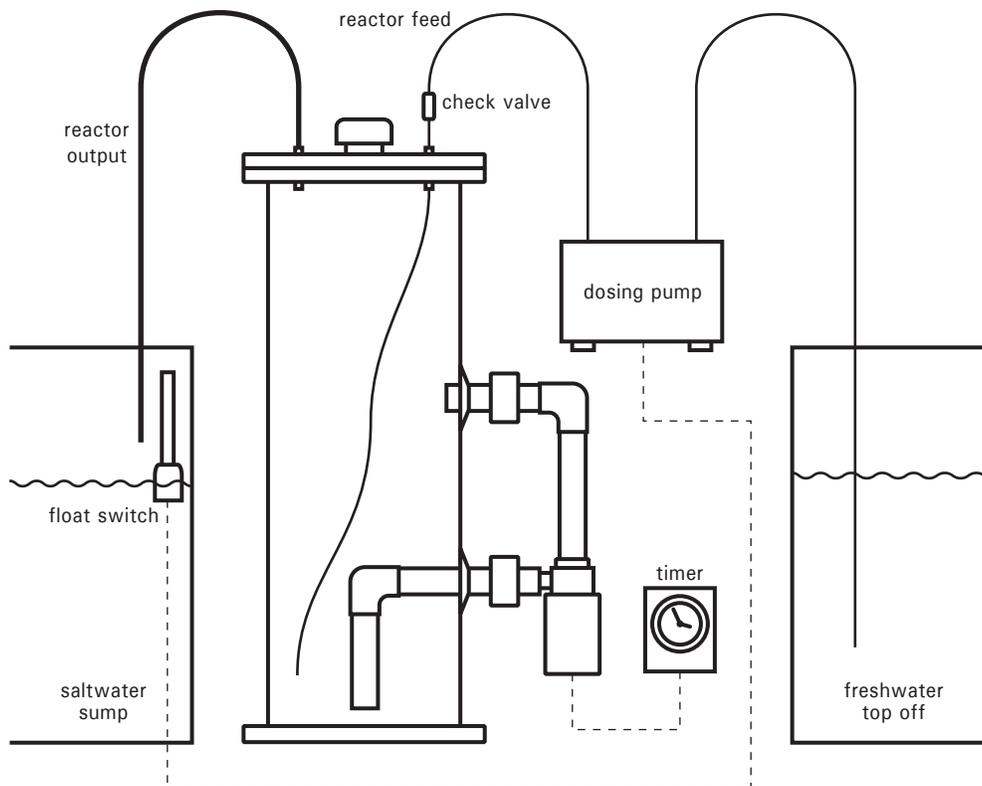
After you choose which installation you are going to use and have your reactor in place, allow the unit to fill with RO water about 3/4 full. Mix about half a cup of aquarium grade kalkwasser with a small amount of RO water to create a slurry. Remove the quick fill cap located at the top of the reactor to add the kalkwasser slurry. Close the cap and turn on the Maxi-Jet pump to mix the solution. Allow the unit to continue filling with RO water until full. The blue handled valve located in front of the reactor can be used to drain water out of the unit when adding fresh kalkwasser or to remove water for pH testing. I recommend setting the timer used with the Maxi-Jet to stir the unit four times a day in 1 minute intervals. You can test pH of the kalkwasser after dosing to determine if more frequent interval stirs are needed.

Feel free to email George at [sales@geosreef.com](mailto:sales@geosreef.com) with any questions concerning the set up or maintenance of your new kalkwasser reactor. I hope this unit brings you many years of service.

Enjoy!

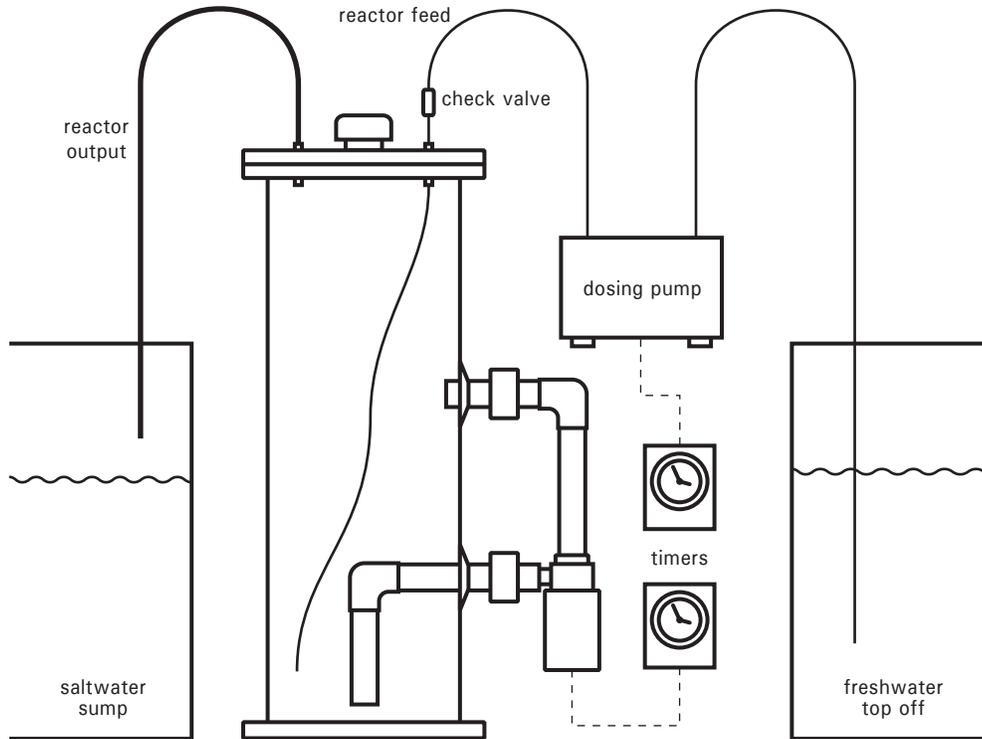
George Weber

## Kalkwasser Top Off Diagram A



# Kalkwasser Timed Dosing

# Diagram B



# Kalkwasser Gravity Fed Dosing

# Diagram C

