

SR2 WITH RIO 600RV

As the marine aquarium industry expands, so does the need by many aquarists for a simple yet efficient protein skimmer to add to their sump or wet/dry filter. The SR2 Venturi driven protein skimmer is designed for those who have limited sump space or don't want to hassle with messy hoses. It comes complete with its own RVT Rejuvenation powerhead and Bio-Bale $^{\text{TM}}$ filter media and can be used on a new system, or to replace or supplement an existing system.

To place your SR2 into operation:

- 1. Open the packaging carefully and inspect the unit for damaged or missing parts. You should have:
 - (1) SR2 body with Bio-BaleTM filter media
 - (1) RVT Rejuvenation powerhead
 - (1) Collection cup assembly with lid and "O" ring
 - (1) Inlet assembly

If any items are damaged or missing, please contact your dealer immediately.

- 2. Attach the powerhead to the inlet as shown in the diagram. The airline can be inserted in the black clip located at the top of the unit. The end of the air line must be kept out of the water at all times during operation.
- 3. Place the "O" ring around the collection cup and insert the collection cup assembly into the skimmer chamber.
- 4. Stand the whole unit in the sump portion of your system. The SR2 requires at least a space measuring 6 ½" x 6 ½" in its normal configuration. Fill the body with water until it is no longer buoyant. Make sure that the outlet from the SR2 is as far away from the return pump as possible to reduce the chance of bubbles entering the tank. A sponge placed below the outlet can also reduce the amount of turbulence that can cause bubbles to enter the tank.
- 5. Plug in the RVT powerhead and allow the SR2 to run for a couple of minutes. The optimum sump water level in relation to the SR2 body is just below the inlet where it enters the body. Since many sumps and wet/dry filters have different water levels, the water can be as high as the outlet of the skimmer or as low as 1/2 inch above the powerhead. It may be necessary to add or remove water in the sump.
- 6. The quality of foam in the collection cup can be adjusted by sliding the "O" ring up or down. If the foam is too wet, raise the collection cup by sliding the "O" ring down until the desired foam quality is achieved. If the foam is too dry or no waste is collecting in the collection cup, lower the cup by sliding the "O" ring up. The recommended level for the collection cup is where the base of the collection cup assembly, which is actually an inverted funnel, is about 1/8" below the water line in the skimmer chamber.
- 7. The Bio-Bale[™] filter media in the outlet chamber works as a biological filter and also helps to eliminate any fine bubbles that would otherwise enter the sump. It should be removed and cleaned by swishing it in salt water every two to three months, or as needed. This will reduce the amount of loose detritus and algae on the Bio-Bale[™].

Your SR2 is now operational

Trouble Shooting

Problem:	Cause and Solution:
Small air bubbles returning to the tank	The surface tension of the water has been increased by the addition of additives, medications, or conditioners. Disable the protein skimmer by submerging the airline into the water (remove muffler first) or shutting off the air valve for 24 hours. Many products contain chemicals which will still be present in the aquarium after 24 hours. Running the protein skimmer as well as the use of activated carbon will help to remove compounds which may be affecting surface tension.
	The salinity is too high. Lower the salinity to 1.023.
	The aquarium has just been cleaned or water has been changed. Synthetic salt mixes often contain conditioners which increase the surface tension of the water. Bubbles should disappear within 24 hours.
	The gray elbows or air lines are clogged with detritus or salt creep. This will increase the water flow rate and possibly sweep the bubbles from the skimmer chamber back into the tank before they can dissipate. The elbows and airlines should be cleaned every two weeks.
Bubbles escaping from the powerhead into the sump.	The rejuvenation plate is not properly seated or is missing the small "O" ring that fits around the plate. Remove the plate and make sure no detritus or calcium buildup is preventing the plate from seating properly and that the "O" ring is intact. Be sure not to break or bend the two clips which hold the plate in place.
No waste collecting in collection cup.	The powerhead and its air lines or elbows may be dirty. Clean the whole unit every two weeks for optimal performance.
	The collection cup is not low enough. See instructions for the correct height of the collection cup.
	The biological load may not be sufficient to generate waste. On a new tank or a tank with supplemental filtration it may take over a week to generate waste foam.
	Skimmer chamber is not filled with micro bubbles. Slowly close the air line valve until the chamber is filled with bubbles.
The Rio 600 is producing little or no bubbles.	An airline, grey elbow, muffler may be blocked. Detritus, calcium and salt will build up in these parts over time. Clean these parts every two to three weeks with warm tap water.
	The powerhead may need to be cleaned. If the powerhead becomes clogged with organic material the flow rate and the air intake rates will reduce. Follow the instructions included with your SR2 to clean your powerhead. Powerheads should be replaced every twelve to eighteen months.
Tank has high ammonia or nitrite readings.	Your tank may not have completed the nitrogen cycle. This process can take up to 8 weeks in fish-only systems.
	The Bio Bale may need to be cleaned. Remove the Bio Bale and lightly swish it around in a bucket of salt water to remove excess detritus and algae. If you find that it is necessary to clean the Bio-Bale more than once every couple of months, you may be over feeding your tank. Please consult your local fish store about the proper feeding of your tank.

Before calling CPR's Technical Support, please take some time to look over this troubleshooting guide. Most of the problems associated with the performance of the SR2 are due to improper maintenance of the Rio 600 powerhead. Cleaning the powerhead at least once a month will ensure optimal performance of the SR2.

Removal and Cleaning of Your Powerhead

- 1) Slide the powerhead from the SR2 inlet.
- 2) Remove the powerhead cover by inserting a flat-head screwdriver at slot (C) and gently prying.
- 3) Remove the round plate (B) by lining up the flat portion to the locking guide.
- 4) Wash all parts under running tap water. Never use detergent on parts that will come into contact with aquarium water. Make sure both air lines and elbows (A) are clear of any foreign matter.
- 5) Reassemble the powerhead and connect it to the inlet of the SR2.

MUFFLER

The SR2 works better without the muffler (E). If the noise level is acceptable without the muffler, remove it. To clean the muffler, soak it in warm water and allow it to dry completely. It can also be replaced with a coarse airstone, which allows more air in than the standard muffler and has quieter operation.



