REEF GLASS

Congratulations on your purchase of the Reef Glass Nano Skimmer. We know you will be pleased with the results.

Register your product at
http://reefglass.com/registration.html

Parts Included:

1. **Glass Skimmer Body**: Made with high quality Pyrex glass. It has a simple and practical straight shape so you can remove the air stone from the top without unmounting the skimmer.
2. **Plastic Mount**: Versatile mount allows you to install the skimmer on most rimless and rimmed tanks.
3. **Mount Screw**
4. **Rubber Stopper**: Has an air inlet hole and a waste drain hole. The air valve must be placed into the air inlet hole and the elbow connector must be inserted into the waste drain hole.
5. **Limewood Airstone**: Made of high quality limewood, produces microbubbles that trap the waste that is subsequently drained to a waste container of your choice. Limewood airstones expand slightly after getting wet. Our airstones are designed considering that expansion. Other limewood airstones may get stuck and damage the skimmer.
6. **Rigid Acrylic Tube**: One end must be inserted into the air inlet hole on the bottom of the rubber stopper. The other end has a flexible connector for connecting the limewood airstone.
7. **O-Ring**: Holds the glass skimmer on the plastic mount and can be adjusted to change the height of the skimmer.
8. **Air Valve**: Must be inserted into the air inlet hole on the top of the rubber stopper. Use it to adjust air flow to the limewood airstone.
9. **Drain Elbow connector**: One end must be inserted into the waste drain hole on the rubber stopper. Connect a length of flexible tubing to the other end of the elbow of sufficient length to reach the waste container.
10. **Flexible tubing**: 4' of flexible tubing is included.
11. **Straight tubing connector**: Can be optionally inserted into a hole on the cap of your waste container or to connect airline tubing directly to the air inlet if you prefer to use your own in-line air valve.

Parts Needed:

- **Air Pump**: We recommend AP-3 Danner, Tetra Whisper 10/20, Marina 200 or similar pump. Note that limewood airstones require more pressure than regular airstones.
- **Waste Container**: Can be as simple as a used water bottle. Air must be able to exit the container at all times for proper operation. We recommend that you leave the waste container uncapped. If you decide to place a cap, then you must drill 2 holes on the cap, one for inserting the included straight tubing connector and another one to permit the free flow of air. The hole for the connector is approximately 5/32" (drill bit size).

Instructions

1) Plastic Mount Installation

The Reef Glass skimmer mount was designed to fit most rimless and rimmed tanks (or sumps). Insert the plastic screw in the hole that is located on the back of the mount, from the back of the tank (Figure 1). Do not overbend the mount or overtight the screw.

Figure 1 - Mount with screw

2) Assembling the Rubber Stopper

The rubber stopper has two holes: an air inlet and a drain. The rubber stopper comes pre-assembled out-of-the-box for your convenience, with the exception of the air valve, which must be inserted in the air inlet hole on the top of the rubber stopper. It should look as shown in Figure 2.

Figure 2 – Rubber Stopper with air valve and drain elbow

3) Glass Skimmer Body Installation

Slide the skimmer body through the O-ring and into the mount from the top. The O-ring holds the skimmer body in place, allowing you to adjust its height. We recommend that you begin placing the skimmer approximately 3.5” from the water line to the top of the glass, as shown in Figure 3.

Insert the rubber stopper through the top of the skimmer body, making sure that there is a tight seal.

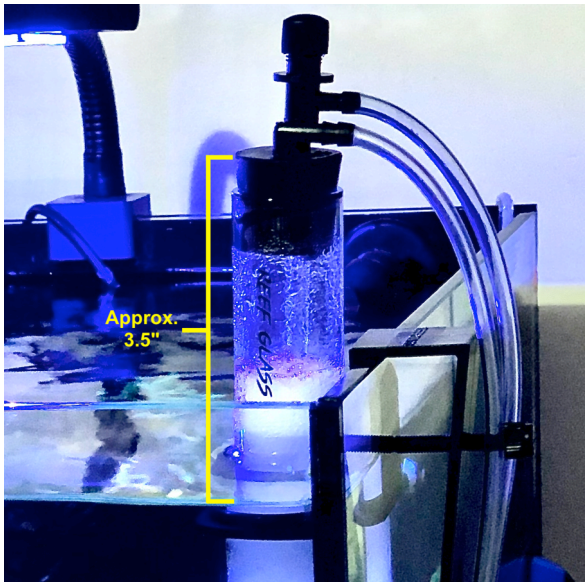

Figure 3 – Skimmer body height

4) Drain Hose Installation

The Reef Glass skimmer comes with 4’ of flexible tubing, which can be used as a drain hose to transport the skimmate to your waste container. Connect one end of the tubing to the drain elbow connector as shown in Figure 4. The other end goes into your waste container. Cut the length of the tubing so that it comfortably reaches the waste container without loops or bends. Air must be able to flow at all times though the drain hose. If your waste container will remain uncapped, it is recommended that the drain hose hangs high on the waste container, leaving enough room for skimmate to accumulate without submerging the end of the tubing, as show in Figure 5.

Figure 4 - Drain flexible tubing

Figure 5 - Uncapped container

Alternatively, you can also drill two holes on the waste container cap, and use the included straight tubing connector to connect the drain flexible tubing to the waste container as shown in Figure 6. The second hole is necessary in order to allow air to exit the container. The holes can be drilled using a 5/32” drill bit.

Figure 6 - Waste container cap with holes

5) Air Pump Installation

We suggest AP-3 Danner, Tetra Whisper 10/20, Marina 200 or a similar pump. Note that limewood airstones require more pressure than regular airstones. Connect the airline coming from the air pump to the air valve located on the top of the rubber stopper.

We recommend that you initially close the valve and then tune the skimmer following the instructions below.

6) Tuning Your Skimmer

It will take some trial and error to get your skimmer producing skimmate the way you like it. Please be patient. After you get it right, your skimmer should operate with a high level of consistency, requiring little to no adjustment other than periodic maintenance.

The skimmer is tuned by adjusting its height (using the O-ring) and air volume (using the air valve).

Skimmer Height: We recommend that you begin by positioning the top of skimmer 3-4" from the water level as in Figure 3.

Air Volume: Close the air valve until you get almost no bubbles. Then start to open the air valve slowly until you get a large amount of very fine bubbles, but careful not to overflow through the drain, as shown in Figure 7.

In most cases, you should wait up to a couple of days for the skimmer to "break in" and start collecting skimmate. After that, you can start tweaking the skimmer body height and air volume in order to achieve the desired results.

If the skimmate is too light, raise the skimmer body by lowering the O-ring. If the skimmer is not producing enough skimmate, lower the skimmer body by raising the O-ring.

Raising the skimmer will result in less but thicker/darker skimmate. We recommend lighter skimmate because it is less prone to clogging the drain.

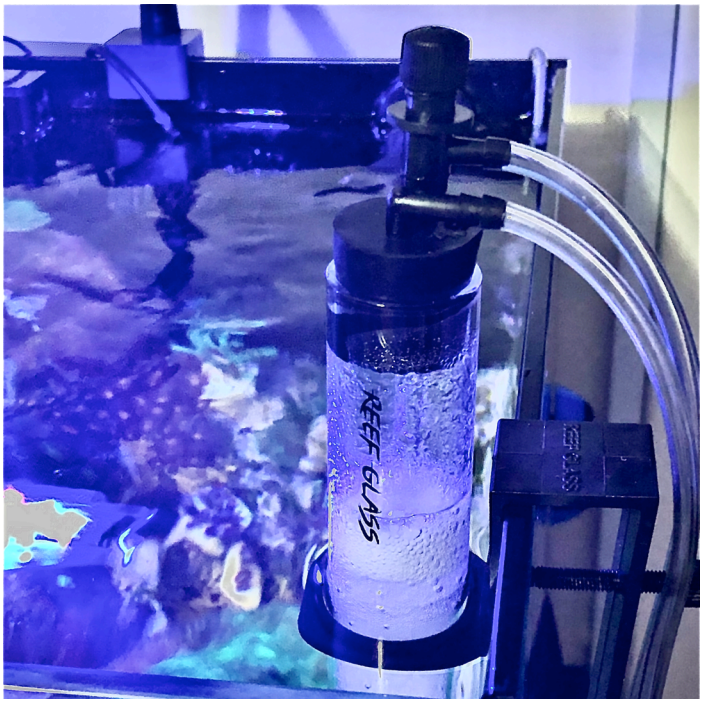

Figure 7 - Skimmer with abundant micro-bubbles

Skimmer Maintenance

1. In most cases, the skimmer should be cleaned every 2–4 weeks. Use a soft toothbrush to clean the glass skimmer body, rubber stopper and limewood airstone.
2. Use a toothpick or similar object to clean any accumulated gunk that may be clogging the drain elbow.
3. If cleaning the limewood airstone with the toothbrush does not bring it back to its normal performance, you may use a razor blade to remove a thin layer of dirt and wood. Eventually, the limewood airstone should be replaced with a new one. The airstone should last 2-4 months, depending on your specific conditions.
4. If your skimmer suddenly stops generating bubbles, foam does not raise as usual or starts generating blurping sounds, make sure that the drain elbow is not clogged, inspect the drain flexible tubing for any obstructions and make sure it is not submerged in skimmate. Make sure that air can exit the drain tubing freely.
5. The limewood airstone will expand slightly after getting wet. The Reef Glass limewood airstones are designed considering that expansion. Other limewood airstones that are not designed specifically for the Reef Glass Nano Skimmer may get stuck and damage the skimmer.

Thank you very much for your purchase. We hope you enjoy your Reef Glass skimmer!

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