

Reef Octopus REGAL-200INT

Reef Octopus Regal Internal Protein Skimmer REGAL-200INT User Manual

Model: REGAL-200INT

INTRODUCTION

The Reef Octopus Regal-INT series protein skimmer is designed for in-sump operation, offering efficient organic waste removal for marine aquariums. This manual provides comprehensive instructions for the assembly, operation, maintenance, and troubleshooting of your Regal-200INT protein skimmer to ensure optimal performance and longevity.

The Regal-200INT features a high-quality cast acrylic body, a precision control valve, and a hybrid conical body for stable and concentrated foam production. It is powered by the controllable VarioS skimmer pump, which includes a pinwheel impeller, a detachable controller, and a ceramic shaft for durability. The VarioS pump offers variable speed flow technology, enhancing performance, energy efficiency, and operational safety.

PRODUCT FEATURES

- Exceptional in-sump performance for effective waste removal.
- Custom VarioS DC pump specifically designed for protein skimmers.
- Adjustable speed DC pump for energy efficiency and quiet operation.
- Integrated float switch for monitoring water levels and preventing overflow.
- Premium handcrafted solid cast acrylic construction ensures durability.
- Hybrid cone body design for enhanced foam separation and collection.
- Large collection cup with a convenient waste drain for easy disposal.
- High air intake volume for robust skimming action.
- Designed for simple and straightforward maintenance.

SAFETY INFORMATION

Please read all safety instructions carefully before operating the protein skimmer. Failure to follow these instructions may result in injury or damage to the product or aquarium.

- Always disconnect power to the skimmer and all other aquarium equipment before performing any maintenance or handling.
- Ensure the skimmer is placed on a stable, level surface within your sump.
- Do not operate the skimmer if any part is damaged or if the power cord is frayed.
- Keep all electrical connections dry and away from water. Use a drip loop for all power cords.

- This product is designed for indoor use in a marine aquarium environment only.
- Do not allow children to operate or play with the skimmer.

PACKAGE CONTENTS

Verify that all components are present and undamaged upon opening the package:

- Regal-200INT Skimmer Body (including base, reaction chamber, and neck)
- Collection Cup with Lid and Waste Drain
- VarioS Skimmer Pump
- VarioS Controller
- Precision Control Gate Valve
- Float Switch Monitor
- Silencer
- Venturi (for air intake)
- Necessary O-rings and connecting hardware

SETUP AND ASSEMBLY

Follow these steps to assemble and set up your Reef Octopus Regal-200INT protein skimmer.

1. Component Identification

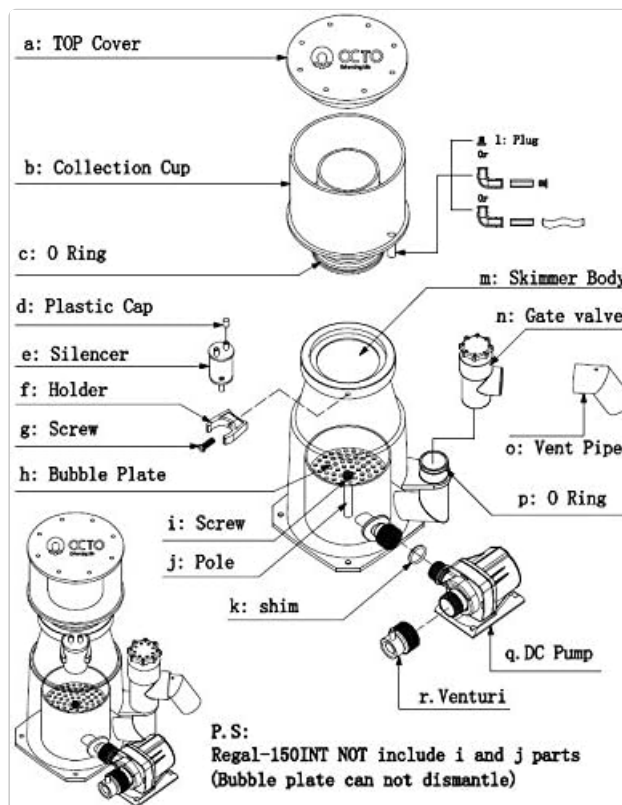


Figure 1: Exploded diagram showing all parts of the Reef Octopus Regal protein skimmer, including the top cover, collection cup, O-rings, plastic cap, silencer, holder, screw, bubble plate, pole, shim, skimmer body, gate valve, vent pipe, O-ring, DC pump, and Venturi. This diagram aids in identifying each component for assembly.

1. **Unpack and Inspect:** Carefully remove all components from the packaging. Inspect for any signs of damage. Refer to Figure 1 for component identification.
2. **Assemble Skimmer Body:** Connect the main skimmer body sections if they are not pre-assembled. Ensure all O-rings are properly seated to prevent leaks.

3. **Install DC Pump:** Attach the VarioS DC pump to the skimmer body's intake port. Ensure the Venturi is securely connected to the pump's air intake.
4. **Attach Gate Valve:** Secure the precision control gate valve to the skimmer's water outlet. This valve will be used to adjust the skimmer's water level.
5. **Install Silencer:** Connect the silencer to the air intake line of the Venturi to reduce operational noise.
6. **Place Collection Cup:** Seat the collection cup firmly onto the skimmer neck. Ensure the O-ring on the collection cup is clean and properly seated for a tight seal.
7. **Connect Float Switch:** If included, install the float switch into the designated port on the collection cup or skimmer body. Connect its cable to the VarioS controller.

2. Placement in Sump



Figure 2: Fully assembled Reef Octopus Regal-200INT Protein Skimmer, ready for placement in a sump. This image shows the overall compact design and the red accents of the skimmer.

The Regal-200INT is an in-sump skimmer and requires a stable water level for optimal performance. Place the skimmer in a dedicated skimmer chamber within your aquarium sump. The ideal water depth for this model is typically between 7 to 9 inches (18-23 cm). Refer to the specifications section for precise recommended water depth.

3. Electrical Connections



Figure 3: The VarioS Controller, a key component for adjusting the skimmer pump's speed and accessing feed modes. It features buttons for speed adjustment, feed mode activation, and power.

1. **Connect Pump to Controller:** Plug the VarioS DC pump cable securely into the "PUMP" port on the VarioS Controller (Figure 3).
2. **Connect Power Adapter:** Plug the power adapter into the "POWER" port on the VarioS Controller.
3. **Connect Float Switch (Optional):** If using the float switch, plug its connector into the designated port on the controller.
4. **Power On:** Once all connections are secure and the skimmer is properly placed in the sump, plug the power adapter into a GFCI-protected electrical outlet.

OPERATING INSTRUCTIONS

The VarioS controller provides precise control over your skimmer's performance.

1. Initial Start-up and Break-in

Upon initial start-up, the skimmer will require a break-in period, typically 1-2 weeks. During this time, the skimmer may produce inconsistent foam or no foam at all. This is normal as manufacturing residues dissipate and the skimmer surfaces become conditioned by the aquarium water. Adjust the gate valve to allow water to fill the skimmer body and set the VarioS pump to a medium speed setting (e.g., level 3).

2. Adjusting Skimmer Performance (VarioS Controller)

The VarioS controller (Figure 3) allows you to fine-tune the skimmer's operation:

- **Speed Settings:** Use the '+' and '-' buttons to adjust the pump speed. There are five preset speed settings (ECO, NORMAL, MAX, and two intermediate levels). Higher speeds generally produce more aggressive skimming. Start with a medium setting (e.g., level 3) and adjust as needed.
- **Feed Mode:** Press the 'FS' button once for a 15-minute feed mode, or press and hold for a 60-minute feed mode. This temporarily shuts off the skimmer to prevent it from pulling out beneficial additives or food. The skimmer will automatically resume operation after the set time.

- **PS ON/OFF:** This button controls the float switch function. When 'PS' is illuminated, the float switch is active and will shut off the skimmer if the collection cup overflows or water level drops too low.
- **Power Button:** Press the power button to turn the skimmer pump on or off.

3. Adjusting Water Level (Gate Valve)

The gate valve on the skimmer's outlet controls the internal water level. Adjust this valve to achieve the desired foam consistency:

- **Wet Skimate:** If you desire a lighter, more watery skimate, open the gate valve slightly to lower the internal water level. The foam head will be lower in the neck.
- **Dry Skimate:** For a darker, thicker skimate, close the gate valve slightly to raise the internal water level. The foam head will rise higher into the collection cup neck.

Aim for the foam head to break just below the collection cup's neck for a balanced skimate. Adjustments should be made gradually, allowing 30-60 minutes for the skimmer to react to changes.

MAINTENANCE

Regular maintenance is crucial for the long-term performance and efficiency of your protein skimmer.

1. Collection Cup Cleaning



Figure 4: Top view of the Reef Octopus Regal protein skimmer, highlighting the removable collection cup and the float switch mechanism. Regular cleaning of this cup is essential for skimmer efficiency.

- **Daily/Bi-daily:** Empty the collection cup as needed, depending on the amount of skimate produced.
- **Weekly:** Remove the collection cup (Figure 4) and thoroughly rinse it with warm water to remove any accumulated organic film. Use a brush if necessary. This prevents buildup that can impede foam production.

2. Skimmer Body and Neck Cleaning

- **Monthly/Bi-monthly:** Disconnect power to the skimmer. Remove the skimmer from the sump. Disassemble the collection cup and the skimmer neck. Clean the inside of the skimmer neck and reaction chamber with a soft brush to remove any algae or organic buildup. This ensures proper foam rise.

3. Pump and Impeller Cleaning

- **Quarterly:** Disconnect power and remove the pump from the skimmer body. Disassemble the pump volute and remove the pinwheel impeller. Clean the impeller, impeller shaft, and pump housing thoroughly. Use a small brush or pipe cleaner to clear any debris from the Venturi and air intake line. Reassemble carefully, ensuring all O-rings are properly seated.

Note: For stubborn calcium or organic deposits, a diluted vinegar or citric acid solution can be used for soaking components, followed by thorough rinsing with fresh water.

TROUBLESHOOTING

This section addresses common issues you might encounter with your protein skimmer.

Problem	Possible Cause	Solution
No Foam Production / Poor Skimming	New skimmer (break-in period) Low water level in sump Air intake blocked Pump/impeller dirty or clogged Recent water change or dosing Oily residue on skimmer neck	Allow 1-2 weeks for break-in. Adjust sump water level to recommended depth. Check silencer and Venturi for blockages; clean if necessary. Clean pump and impeller (see Maintenance). Wait 24-48 hours after water changes/dosing. Clean skimmer neck and collection cup.
Skimmer Overflowing	Water level in sump too high Gate valve closed too much Sudden change in water chemistry (e.g., dosing) Air intake partially blocked	Lower sump water level. Open gate valve slightly to lower internal water level. Reduce pump speed via VarioS controller. Wait for water chemistry to stabilize. Check and clear air intake.
Excessive Noise	Air intake silencer clogged or missing Pump impeller damaged or dirty Vibrations from pump	Clean or replace silencer. Clean pump and impeller; inspect for damage. Ensure pump is seated correctly; use rubber feet if available.

If the problem persists after attempting these solutions, please contact customer support.

SPECIFICATIONS

Model	REGAL-200INT
Dimensions (L x W x H)	22 x 20 x 13 inches
Item Weight	18.06 pounds
Material	Acrylic
Pump Type	VarioS DC Skimmer Pump (Controllable)
Recommended Sump Water Depth	7 - 9 inches (approx. 18-23 cm)

Included Components	VarioS skimmer pump, precision control gate valve, float switch monitor, collection cup with waste drainage, VarioS controller
Style	Submersible (In-Sump)

WARRANTY AND SUPPORT

Warranty Information

The Reef Octopus Regal-200INT protein skimmer comes with a **2-year warranty** specifically covering the pump motor. This warranty covers defects in materials and workmanship under normal use. Please retain your proof of purchase for warranty claims. *Note:* The warranty typically does not cover damage resulting from misuse, neglect, unauthorized modification, or improper installation. Consumable parts like O-rings or impellers are generally not covered under the motor warranty.

Customer Support




For technical assistance, troubleshooting beyond this manual, or warranty inquiries, please contact Reef Octopus customer support. You can typically find contact information on the manufacturer's official website or through your authorized dealer. When contacting support, please have the following information ready:

- Product Model: REGAL-200INT
- Date of Purchase
- Description of the issue



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Related Documents - REGAL-200INT

	<p>Reef Octopus Regal-S Protein Skimmer Instruction Manual</p> <p>Instruction manual for Reef Octopus Regal-S series protein skimmers (150-S, 200-S, 250-S, 300-S), detailing maintenance, safety, assembly, and product specifications for optimal aquarium use.</p>
	<p>Reef Octopus eSsence 130 Protein Skimmer Instruction Manual</p> <p>Detailed instruction manual for the Reef Octopus eSsence 130 protein skimmer, covering features, specifications, assembly, maintenance, and safety tips for aquarium enthusiasts.</p>
	<p>Reef Octopus BH-50INT Nano Protein Skimmer - Installation and Overview</p> <p>Comprehensive guide to the Reef Octopus BH-50INT Nano protein skimmer, detailing its features, installation steps, safety precautions, and warranty information for aquarium hobbyists.</p>

