

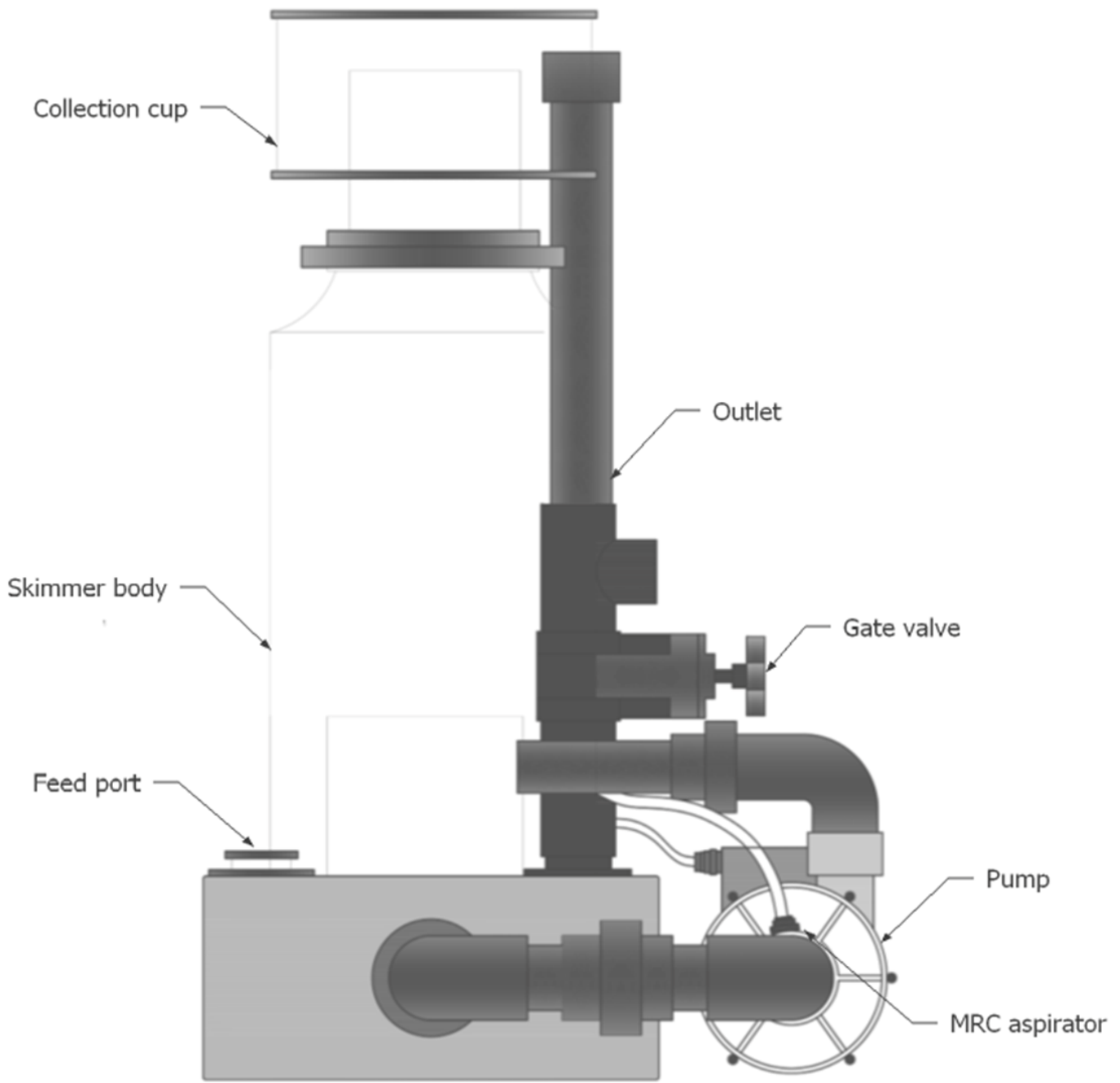


MRC

Building Success

## MRC PRO series

### Operating Instructions



# IMPORTANT SAFETY PRECUATIONS

To guard against injury and electric shock, basic safety precautions should be observed.

1. READ AND FOLLOW ALL SAFETY INSTRUCTIONS.
2. DANGER – To avoid possible electric shock, special care should be taken.
  - a. DO NOT attempt to repair the unit yourself; return the unit to an authorized dealer.
  - b. Never service the pump while in operation. Unplug the pump before touching the pump.
  - c. If the pump shows any signs of damage, immediately unplug it from the power source.
  - d. Never run the pump dry; you may damage the pump voiding any warranty.
  - e. DO NOT operate the unit if it has a damaged cord or plug or if it has been damaged in any manner.
  - f. To avoid the possibility of the power outlet or plug getting wet, employ a drip-loop.
  - g. If the plug or outlet gets wet, DO NOT unplug the cord. Disconnect the circuit breaker that supplies power to the outlet, then unplug the unit and examine for presence of water and let dry. Consult a licensed electrician before use.
3. Close adult supervision is required when used by or near children.
4. Always unplug the unit when not in use or when cleaning. Never pull on the cord to unplug the unit from the outlet. Grasp the plug and gently pull to disconnect.
5. Do not use the unit for any use other than the intended use. The use of attachments or parts not recommended or sold by MRC may cause an unsafe condition and voids any and all warranties.
6. Verify the unit is installed in a secure manner before operating it.
7. If an extension cord is employed, use a cord with the proper amperage rating. Using an inappropriate cord may cause the unit or cord to overheat and may cause a fire. Care should be taken to secure the cord so that it will not be tripped over or accidentally unplugged. Employ a drip-loop. Never use with an extension cord unless the plug can be fully inserted.
8. The pump has a polarized plug. As a safety feature, this plug will fit in a polarized outlet in one way only. If the plug does not fit, consult a licensed electrician. Do not attempt to overcome this safety feature.

# MRC Pro Series

Congratulations on your purchase of the MRC Pro Series skimmer. The Pro Series protein skimmer is a recirculating skimmer. A feed pump is required for operation. It is best suited outside of a sump for highly efficient skimming. DO NOT submerge pump as it is an EXTERNAL pump.







## Assembly

The skimmer has been packaged in a partially disassembled state to prevent damage during transit. Each unit is water tested at the factory; condensation or moisture may be present. The Gate valve and output pipe assembly easily disassembles; be sure to position the output tee and gate valve to the appropriate positions before gluing in place. You will need additional plumbing for the return/drain. Remove all tape and wrapping and inspect for damage and packaging materials. Install the pump using the supplied plumbing; be sure to use Teflon tape around the threaded fittings. Ensure the o-rings are securely in place and free from debris before tightening. Do not turn on the pump unless it is supplied with water.

Before installing the skimmer, fill the unit with fresh water and water-test to ensure that there has not been any damage during transit and the pump is functional.

## Installation

Position the skimmer so that it is above your sump; this will allow the return to easily drain into the sump, reducing back pressure.

-  Attach blue air line to the aspirator on the front of the pump.
-  Apply lubrication to the o-ring on the twist-lock flange of the collection cup. Carefully install the collection cup and twist until securely seated onto the skimmer body.
-  Install the outlet pipe and gate valve on the back left/right. Open the gate valve completely.
-  Plumb the feed pump to the inlet on the back left/right of the skimmer base.
-  Turn on the feed pump and ensure the skimmer is draining properly.
-  Plug in the skimmer pump, turning on the skimmer.

## Operation and Tuning

Once you have turned on the pump, the skimmer body should begin filling with tank water and air bubbles. Once filled, the chamber should look milky white (due to the air/water mixture). The fine air bubbles should build a dense foam which will be pushed up and into the collection cup. Allow the skimmer to settle for 3-4 days before adjusting. It is common for a skimmer to go through a “break-in” phase as it builds a slime coat to increase efficiency.

- 🌀 You want the foam head to break over into the collection cup. You may need to raise the water level to achieve optimal results.
- 🌀 To raise the water level, close the gate valve. To lower the water level, open the gate valve.
- 🌀 If your collection cup is filling with a clear liquid, your water level is too high; lower the level slightly until you are collecting a darker liquid skimmate. You can do this by opening the gate valve or slowing the feed rate.
- 🌀 The collection cup should be emptied every 3-4 days or as required. It is common for the cup to fill more frequently during inception and taper off with prolonged use (your water is getting cleaner). You can also utilize a waste collector and use the barb fitting to continuously drain the collection cup.
- 🌀 Wait 24 hours after making an adjustment before making another adjustment.
- 🌀 All MRC skimmers are ozone safe. Use precaution when using ozone; please refer to the ozone unit's manufacturer for proper dosage and use. Excessive ozone can be dangerous.

## Maintenance

The Pro Series is a low maintenance skimmer line. Once set up correctly, you will need very little, if any, adjustment and only minor cleaning. To ensure worry free performance, follow the proceeding maintenance schedule:

- 🌀 Empty and clean collection cup every 3-4 days or as required.
- 🌀 Every 12 months or when required, remove the pump from the skimmer body and clean.
- 🌀 Inspect and clean the air line. Take a Q-tip and insert into the tip of the airline, removing any salt or dust that may have built up (the pump will suck dust from the air). RO water may be used to clean the airline.
- 🌀 Check and replace the floss in the outlet pipe (top). This can be completely removed if the sound level is acceptable.

## Troubleshooting

There are no or very few bubble/insufficient air

- 🌀 The airline or aspirator is blocked. Make sure the line is not kinked and is free of debris. Blow into the line to remove any further blockages.

There is no water filling the reaction chamber or the pump is noisy

- 🌀 Check your feed pump. Ensure that the pump is unobstructed and the feed line is not kinked.

Skimmer is overflowing

- 🌀 Water level is too high. Open the gate valve or reduce the feed rate to lower the water level.
- 🌀 Additives have been added to the tank. The efficiency of the skimmer will skim out many additives added to the aquarium. It is best to turn off the skimmer for 24 hours during dosing of these additives.

For further information about this or any other MRC product, please contact us at [www.mrcamerica.com](http://www.mrcamerica.com)

For any Pro I or Pro II pump related questions or issue, please contact: Reeflo Pumps at [sales@reeflopumps.com](mailto:sales@reeflopumps.com)

For any Pro III or IV pump related questions or issue, please contact: MRC at [support@mrcamerica.com](mailto:support@mrcamerica.com)