# Please read the instruction carefully before using your RFI Micro pH Controller.

#### **Calibration Process**

Before you begin the calibration process, make sure that you have the pH calibration solutions, and some room temperature fresh water to rinse the pH probe between calibration solutions. You MUST have pH7 and pH4 calibration solutions.

- 1. Connect the pH probe to pH input terminal socket located at the back of the Micro pH controller.
- 2. Plug the power cord into the AC outlet.
- 3. Remove the plastic protecting cap from the pH probe if you are using this probe for the first time.
- 4. Rinse the tip of the probe with room temperature fresh water. Gently shake the probe to remove any clinging drops of water.
- Immerse the tip of the probe into the pH7 calibration solution. Wait a
  few seconds for the reading to stabilize. Simultaneously push the
  Prog/Enter and Cal pH7 buttons. The display will flash 3 times
  indicating that pH7 calibration is done.
- 6. Remove the probe from pH7 calibration solution and rinse the probe tip with fresh water. Gently shake the probe to remove clinging drops of water.
- 7. Immerse the tip of the probe into the pH4 calibration solution. Wait a few seconds for the reading to stabilize. Simultaneously push the <a href="Prog/Enter">Prog/Enter</a> and <a href="Slope pH4">Slope pH4</a> buttons. The display will flash 3 times indicating that pH4 calibration is done. Follow step 3 to 7 each time a new probe is used or when recalibration is needed.
- 8. Rinse the probe tip before return it to service in your system.



 $\Sigma$  Probe calibration should be checked once every 1 to 2 months.



Do NOT allow the tip of the probe to dry out.

Probe should be placed at least 6" apart.

#### Setup

The Micro pH Controller is capable of controlling pH within the range of 3.00 and 11.00. The Offset value is the delay in output action. The Offset value can be adjusted from 1 to 200 digits (The higher the number the less sensitive the controller gets). The Setpoint value is the point that you want the Micro pH Controller to take action when the pH reading goes above or below.

Example - Reef aquarium with calcium reactor setup. The pH reading of the aquarium is pH8.3. You want CO2 system to shut off when pH reading of the aquarium falls below 7.50.

- 1. Set the Setpoint value to 7.52
- 2. Set the Offset value to 0.02
- 3. Set the control output to Hi position

With the above setting, the Micro pH Controller will cut off power to the CO2 system (CO2 solenoid) when the pH reading falls below 7.50, and turn the CO2 system back on when the reading goes above 7.52.

### **Adjusting the Controller**

- Simultaneously press the Prog/Enter and Set buttons. The display will flash. Use the + or button to change the pH reading to your desired Setpoint.
- 2. Press the **Prog/Enter** button when done. The Micro pH Controller will beep once. This indicates that the setting has been saved.
- 3. Simultaneously press the **Prog/Enter** and **Offset** buttons. The display will flash. Use the + or button to change the Offset value. The lower the value the more sensitive the Micro pH controller will be.
- 4. Press the **Prog/Enter** button when done. The Micro pH Controller will beep once. This indicates that the setting has been saved.
- 5. Simultaneously press the **Prog/Enter** and **Hi/Low** buttons to select the Hi or Low position. See the examples for Hi and Low selections.

## **General Specification**

Power: 110V AC

Power Consumption: approximately 2 watts

Measurement: 0 to 14 pH Set Range: 3.0 to 11.0 pH Resolution: 0.01 pH Accuracy: 0.1%

Calibration: Automatic pH7 and pH4 Operating Humidity: Max 90%

## Warranty

One year warranty from the purchase date (excludes pH probe). pH probe has 90 day warranty. Please contact Reef Fanatic @ <a href="mailto:reef@reeffanatic.com">reef@reeffanatic.com</a> or your dealer for warranty.



http://www.reeffanatic.com