AVADY PRIM EVOL PH

AVADY PRIM EVOL pH Regulator User Manual

Model: PRIM EVOL PH

1. Introduction

This manual provides essential instructions for the installation, operation, and maintenance of your AVADY PRIM EVOL pH Regulator. Please read this manual thoroughly before using the device to ensure safe and efficient operation. This regulator is designed for automatic pH management in swimming pools and spas, ensuring optimal water quality.

2. Product Overview

The AVADY PRIM EVOL pH Regulator is an advanced system for maintaining the ideal pH balance in your pool or spa water. It is specifically designed to measure and dose pH- (acid) to lower the pH level. Key features include:

- Automatic pH regulation for basins up to 50 m^3.
- High-contrast digital LED display for clear pH value indication.
- Compact measurement and dosing unit.
- Adjustable pH set point range: 7.0 to 7.6.
- Pre-set pH value: 7.4.
- Proportional acid dosing on demand.
- Safety dosage lock: Dosing stops if pH is too high or too low (below 5 or above 9).
- Silent operation due to tube rotation mechanism.



Figure 1: AVADY PRIM EVOL pH Regulator. This image displays the AVADY PRIM EVOL pH Regulator. The device features a dark grey casing with a blue control panel at the top. The control panel includes a digital LED display showing '7.5 pH-', indicating the current pH level and the type of regulation (pH- for acid dosing). To the left of the display are two orange circular buttons, one labeled 'SET' and another with a power icon. To the right, there's a triangular 'CAL' button and the AVADY logo. Below the control panel, a transparent cover reveals the peristaltic pump mechanism with a white rotor and two beige tubes, responsible for dosing the pH- corrective solution. Two black connectors are visible at the bottom of the unit for tubing.

3. Setup

Proper installation is crucial for the accurate and safe operation of your pH regulator. Follow these steps for setup:

1. **Mounting the Unit:** Select a suitable location near your pool or spa's filtration system, ensuring it is protected from direct sunlight and extreme weather. Mount the regulator securely to a vertical surface using appropriate fasteners.
2. **Probe Installation:** Install the pH probe into the water circulation system, typically in a bypass line or directly into the pipework after the filter and heater. Ensure the probe is always submerged in water and positioned to receive a representative sample of the pool water.
3. **Dosing Tube Connection:** Connect the dosing tube from the regulator's peristaltic pump to the injection point in your pool's return line. Ensure the injection point is downstream from the probe and any other chemical injection points.
4. **Suction Tube Connection:** Place the suction tube from the regulator into the container of pH- corrective solution (acid). Ensure the tube reaches the bottom of the container to allow for complete dosing.
5. **Power Connection:** Connect the regulator to a suitable power supply, ensuring it is a grounded outlet and protected by a Residual Current Device (RCD) for safety.
6. **Initial Calibration:** Before first use, calibrate the pH probe according to the manufacturer's instructions, typically using buffer solutions of known pH values (e.g., pH 7.0 and pH 4.0). Refer to the 'CAL' button on the control panel for calibration mode.

4. Operating Instructions

Once the AVADY PRIM EVOL pH Regulator is set up, follow these steps for daily operation:

1. **Power On:** Press the power button (labeled with a power icon) to turn on the device. The digital LED display will illuminate, showing the current pH value of your pool or spa water.
2. **Set Desired pH Level:** The regulator comes pre-set to pH 7.4. To adjust this, press the 'SET' button. Use the up/down arrows (if available, or repeated presses of SET/CAL in some models) to navigate and select your desired pH set point within the range of 7.0 to 7.6. Press 'SET' again to confirm.
3. **Automatic Regulation:** The regulator will continuously monitor the pH level. If the measured pH deviates from your set point, the peristaltic pump will automatically dose the pH- corrective solution into the water until the desired pH is achieved. The display will show the current pH during this process.
4. **Monitoring:** Regularly check the digital display to ensure the pH level is stable and within the desired range. Also, periodically check the level of your pH- corrective solution and refill as necessary.
5. **Safety Stop:** The system is designed to stop dosing if the pH level falls below 5 or rises above 9, preventing over-dosing and potential damage to the pool or spa.

5. Maintenance

Regular maintenance ensures the longevity and accuracy of your AVADY PRIM EVOL pH Regulator:

- **pH Probe Cleaning:** Clean the pH probe regularly (e.g., monthly or as needed) to remove any deposits or buildup that can affect its accuracy. Use a soft brush and a mild cleaning solution specifically designed for pH probes. Rinse thoroughly with distilled water.
- **pH Probe Calibration:** Re-calibrate the pH probe periodically (e.g., every 3-6 months or if readings appear inaccurate) using fresh buffer solutions. Follow the calibration procedure outlined in the 'Setup' section.
- **Dosing Tube Inspection:** Inspect the dosing and suction tubes for any signs of wear, cracks, or blockages. Replace them if necessary to prevent leaks or dosing issues.
- **Peristaltic Pump Tube Replacement:** The peristaltic pump tube (sleeve) is a wear-and-tear part and should be replaced annually or as recommended by AVADY, depending on usage. Refer to the manufacturer's guidelines for replacement procedures.
- **Chemical Solution Check:** Ensure the pH- corrective solution container is adequately filled. Do not allow the pump to run dry for extended periods.

6. Troubleshooting

If you encounter issues with your pH regulator, refer to the following troubleshooting guide:

- **Problem: pH reading is inaccurate or fluctuating.**
  Solution: Clean the pH probe. Re-calibrate the pH probe using fresh buffer solutions. Check for air bubbles around the probe. Ensure the probe is fully submerged.
- **Problem: Regulator is not dosing pH- solution.**
  Solution: Check if the pH level is already at or below the set point. Verify that the pH is not below 5 or above 9 (safety stop activated). Ensure the pH- solution container is not empty. Check for blockages in the dosing or suction tubes. Inspect the peristaltic pump tube for wear or damage. Ensure the power supply is connected.
- **Problem: pH level is not changing after dosing.**
  Solution: Confirm the pH- solution is not expired or diluted. Check the flow rate of the pump; it might be too low. Ensure proper water circulation in the pool/spa. Verify the pH probe is clean and calibrated.
- **Problem: Display is blank.**

Solution: Check the power connection and ensure the device is switched on. Verify the power outlet is functional.

7. Specifications

Feature	Detail
Brand	AVADY
Model	PRIM EVOL PH
Product Type	Pool/Spa Water Treatment (pH Regulator)
Suitable for Basin Volume	Up to 50 m^3
Measurement Type	pH- (Acid)
Display	High-contrast Digital LED
Adjustable pH Set Point Range	7.0 to 7.6
Pre-set pH Value	7.4
Dosage Stop Limits	pH < 5 or pH > 9
Manufacturer	AVADY
ASIN	B01N4Q53RU

8. Warranty and Support

Specific warranty details and direct support contact information are not provided within this manual. For warranty claims, technical support, or spare parts, please refer to the documentation included with your product packaging or visit the official AVADY website. Keep your proof of purchase for warranty purposes.