

How to Wire and Program a Flow Rate Sensor on a **Prominent 5 Series** Controller

Materials Needed:

- One Flow Rate Sensor
- Wiring Tools (Wire strippers, screwdrivers)
- Electrical Wire
- Safety Equipment (Gloves, safety goggles)

Safety Precautions:

- **Power Shutdown:** Ensure all power to the pool chemical controller is turned off.
- **Wear Safety Gear:** Use Gloves and Safety Goggles to prevent injuries.

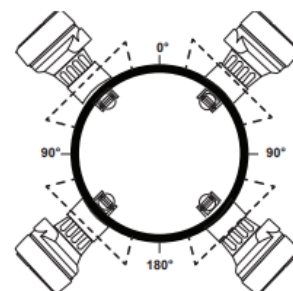
Step 1: Prior to Installation

Ensure the controller is un-plugged from the electrical outlet, and is completely powered down.

1. Inspect flow rate sensor for any damage.

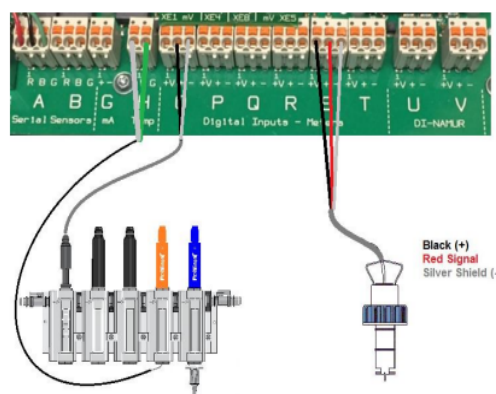
Step 2: Choose the Correct Mounting Orientation

1. Horizontal Pipe Runs:
 - a. Mount the sensor at a 45° angle from vertical on the side of the pipe to maintain consistent, reliable flow detection.
2. Vertical Pipe Runs:
 - a. Mount in any orientation, but ensure water is flowing upward for full pipe and steady flow.
3. Follow Straight-Run Requirements:
 - a. 10x pipe diameter of straight pipe upstream and 5x pipe diameter downstream.
 - b. Avoid elbows, tees, or valves directly near the sensor.



Step 3: Wire the Sensor to the Controller

1. Ensure Wires inside of Flow Rate Sensor are secure.
2. Strip ends of the sensor wire.
3. Secure wires in any Digital Input O-T
 - a. Black - 1
 - b. Red - 2
 - c. Silver - 3
4. Place cover on controller and power on.



Step 4: Set Up the Flow Total Contact

1. Open the controller on Vivopoint, and click the gear Icon at the top left, and scroll down to "Enable IO".
2. Drop down and Select what contact (P-V) you landed the sensor on and click Submit.
3. Exit the menu, and click on the contact you enabled on the far right under "Contacts".
4. Go to "Setup" in the Contact menu options, Rename Sensor to Flow Total and select "Turbine Meter".
 - a. Make sure Decimals are set to "0"
 - b. Keep G as Unit of measurement
5. Calculate the K Factor using Pipe Size, Type, and Fitting type with the K Factor Calculator below and enter it under "K Factor":
 - a. <https://www.gfpstools.com/k-factor-tool/index.html>
 - b. Leave Compensation as None

Step 5: Set up the Flow Rate Contact

1. From the Enable IO page from before, Enable "M" and hit Submit.
2. Click on the contact "M".
3. Go to "Configure" in the menu options, and select source as your Flow Total.
4. Go to "Setup" in the menu options.
 - a. Set Display Units as "GPM".
 - b. Set Decimal Digits to "0".
5. Adjust Alarms to match your normal flow rates (Every body of water is different).

Step 6: Contact Support to get Flow Rate Set-Up on Vivopoint

1. Call Support at 888-702-8486
 - a. If any further assistance/troubleshooting is needed, feel free to contact Support as well.