PT3002 Flow Sensor Transmitter

Installation and Programming Instructions

Instrucciones de instalación y programación

ENG

ENG

Contents

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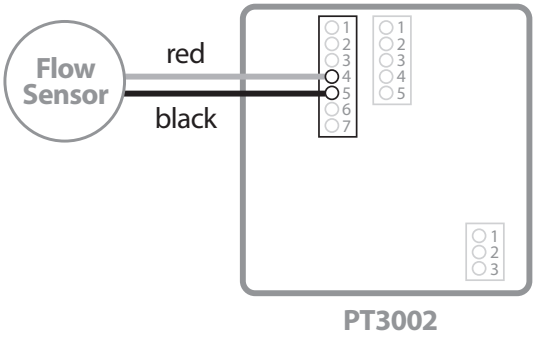
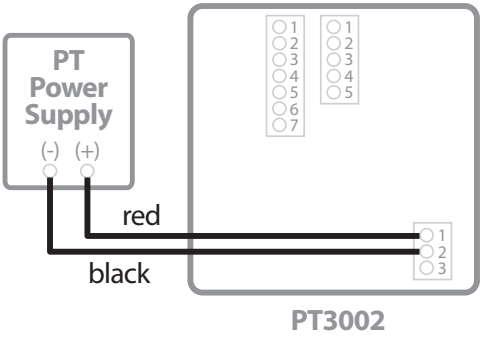
Wiring Instructions

NOTE: Refer to the PT3002 Flow Monitor and NEMACAB Installation sheet for more detailed instructions.



Wire red wire from flow sensor to terminal four on terminal block with seven terminals. Wire black wire from flow sensor to terminal five on terminal block with seven terminals. See wiring diagram label on side of PT3002.

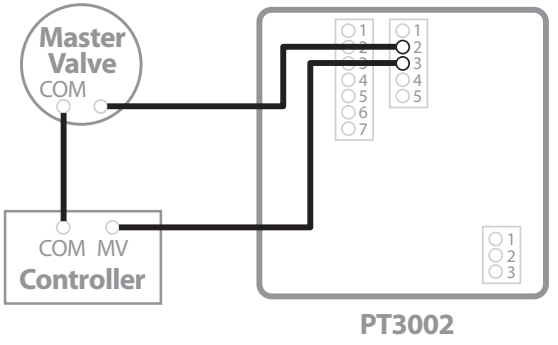


Wire the red lead (+) from the PT Power Supply to the terrminal one on the three port terminal block. Wire the black / white (-) wire to terminal two of the three port terminal block.

Wiring Instructions (cont.)

For Use As A High Flow Shut Off Device With A Stand Alone Controller

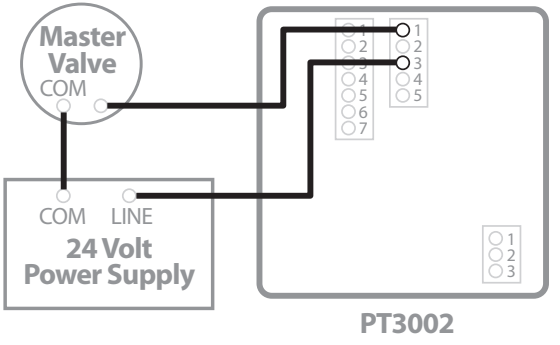
Using a Normally Closed Master Valve



Wire one leg of the master valve solenoid wire to the Relay 1 NC 2 terminal. Wire the Relay 1 COM 3 terminal to the master valve terminal in the controller.

Note: Wire master valve common to controller common as in any normal installation.

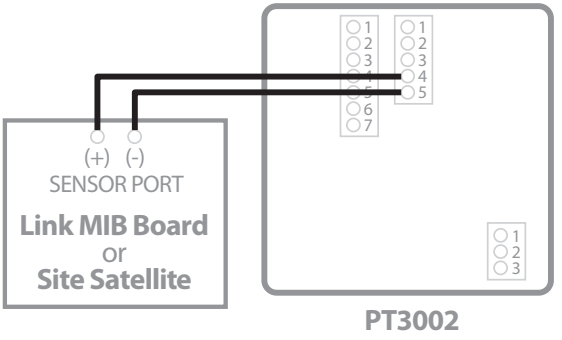
Using a Normally Open Master Valve



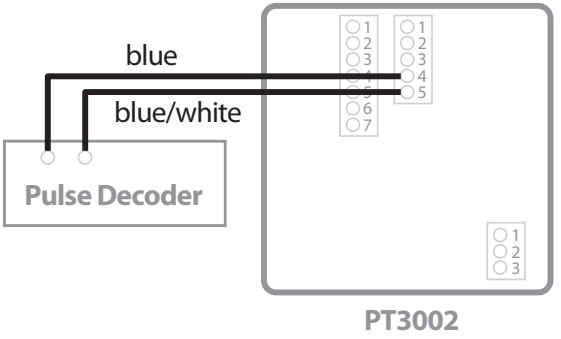
Wire one leg of the master valve solenoid wire to the Relay 1 NO 1 terminal. Wire the second leg of the solenoid to an auxiliary 24 volt power supply. Wire the Relay 1 COM 3 to the other leg of the auxiliary power supply. When a high flow condition occurs the internal relay closes, powering the normally open master valve and closing it.

For Output to Maxicom® or Site Control

(complete step 1 on pages 6 to 8 and step 2b on pages 11 to 12)



Wire the Pulse 1 Out terminal four to the positive (+) terminal of the sensor port on a link MIB board or Site Satellite. Wire Pulse 2 Out terminal five to the negative (–) terminal of the sensor port on a link MIB board or Site Satellite.



Wire the Pulse 1 Out terminal four to the blue wire of a pulse decoder if using two wire communications between CCU and satellite Controller. Wire Pulse 2 Out terminal five to the blue / white wire of a pulse decoder.

Initial Powerup

Plug the PT3002 Flow Monitor power supply into a 120 VAC electrical outlet.

When the PT3002 is first powered up, it runs through internal self checks, while displaying "PT3002 DIC Initializing." At the end of this cycle its normal display will appear.

Display and Key Pad

Menu 1-Switch to main menu
2-Backward/Previous menu

Enter 1-Save value
2-Forward/Next menu

▲ 1-Select Menu option
2-Increase numerical value

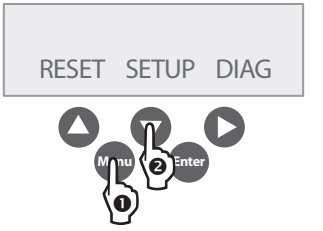
▼ 1-Select Menu option
2-Decrease numerical value

▶ 1-Select Menu option
2-Move cursor to the right

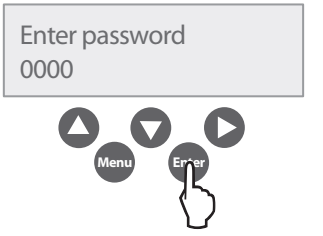
General Programming

Step 1

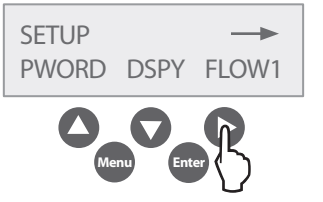
1. Press MENU to enter Programming Mode. Press ▼ to go to the Password Screen.



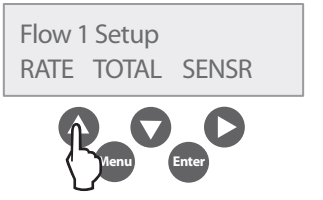
2. Use the arrow keys to enter a 4 digit password then press ENTER OR press ENTER to bypass using a password.



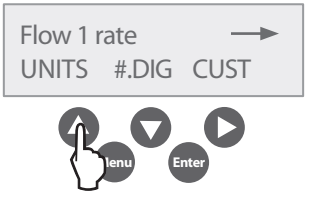
3. At the Setup menu, press ▶ to go to the Flow 1 Setup Screen.



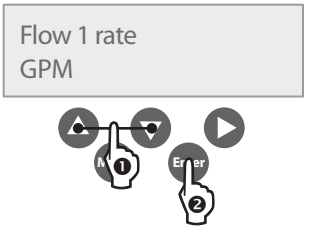
4. Press ▲ to go to the Flow 1 Rate Screen.



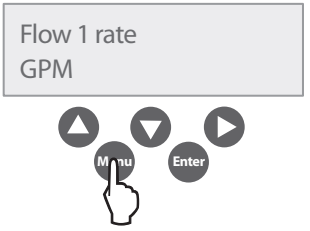
5. Press ▲ to Set Units.



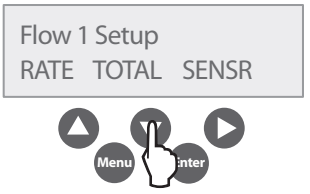
6. Set UNITS for GPM* by using ▲ or ▼ then press ENTER (the PT3002 saves the setting). (**Note:** GPM used as an example throughout this manual.)



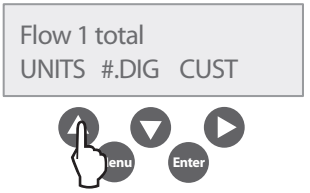
7. Press MENU once to go to the Flow 1 Setup Screen.



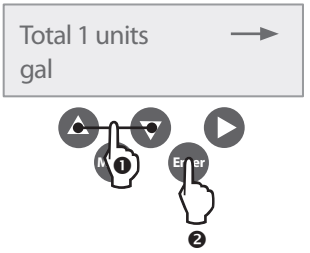
8. Press ▼ to Set TOTAL.



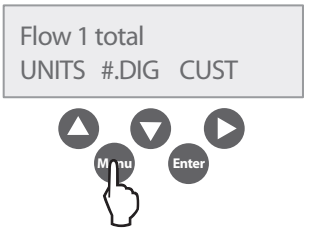
9. Press ▲ to Set UNITS.



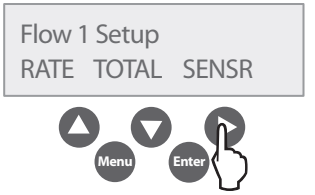
10. Set UNITS for gal by using ▲ or ▼ then press ENTER (the PT3002 saves the setting)



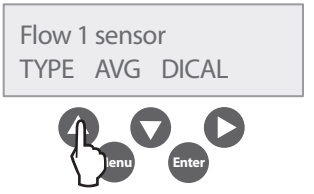
11. Press MENU twice to go to the Flow 1 Setup Screen.



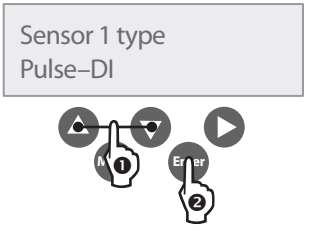
12. Press ▶ to Set SENSOR.



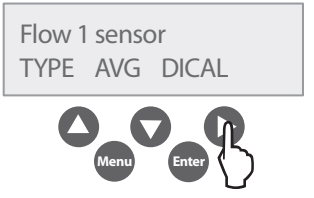
13. Press ▲ to Set TYPE.



14. Press ▲ or ▼ until "Pulse –DI" appears, then press ENTER. The PT3002 saves the setting and brings you back to the screen below

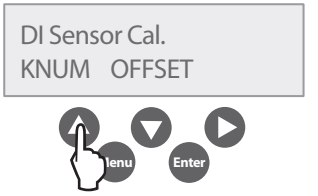


15. Press ▶ to Set DICAL.

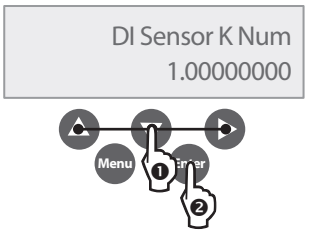


Step 1 cont.

16. Press ▲ to Set SENSOR K FACTOR.

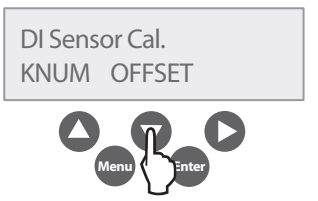


17. Use the ▲ ▼ ▶ keys to enter the K FACTOR then press ENTER (the PT3002 saves the setting and returns to the Sensor Calibration Screen)

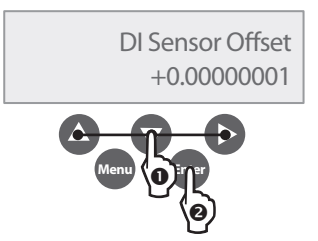


Note: *See instructions pages 26 - 29 for Rain Bird Flow Sensor K & Offset information or instruction sheet included with Rain Bird Flow Sensors.*

18. Press ▼ to Set SENSOR OFFSET.

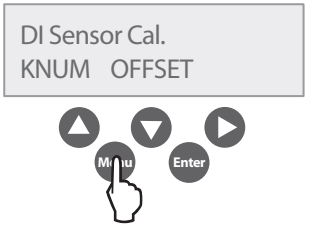


19. Use the ▲ ▼ ▶ keys to enter the OFFSET then press ENTER (the PT3002 saves the setting and returns to the Sensor Calibration Screen)

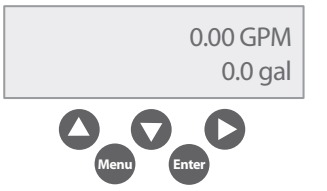


Note: *See instructions pages 26 - 29 for Rain Bird Flow Sensor K & Offset information or instruction sheet included with Rain Bird Flow Sensors.*

20. Press MENU until you arrive at the GPM / Total Screen.



21. The screen will look as to the right.



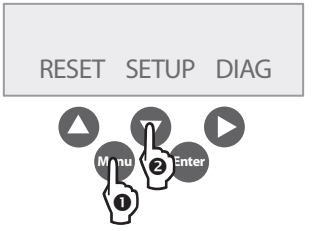
Follow Step 2a or Step 2b to complete setup.

Step 2a

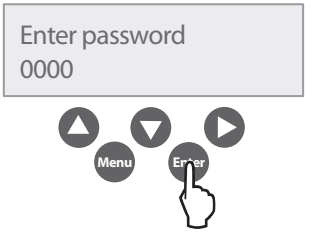
Set Up as a High Flow Shut Off Device With a Stand Alone Controller

Be Sure Unit is Set Up Through Step 1 Above Before Continuing

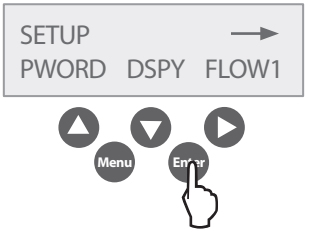
1. Press MENU to enter Programming Mode. Press ▼ to go to the Password Screen.



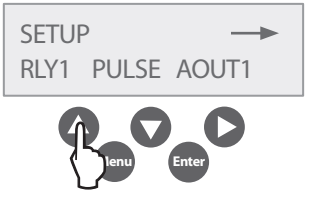
2. Use the arrow keys to enter a 4 digit password then press ENTER OR press ENTER to bypass using a password.



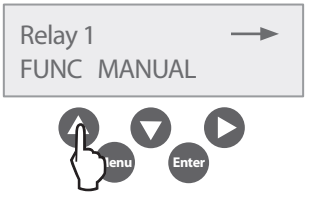
3. At the Setup screen, press ENTER.



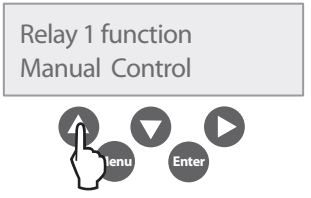
4. Press ▲ for RLY1.



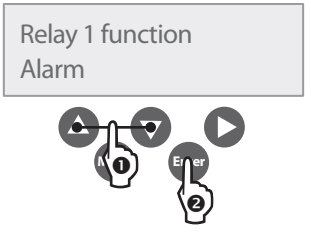
5. Press ▲ for FUNC.



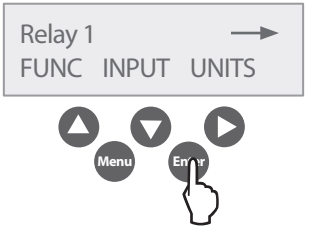
6. Press ▲ for MANUAL.



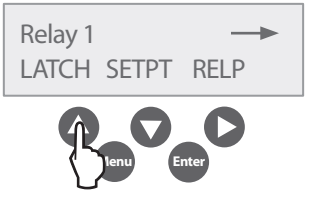
7. Press ▲ or ▼ until ALARM appears. Press ENTER to SAVE.



8. Press ENTER.

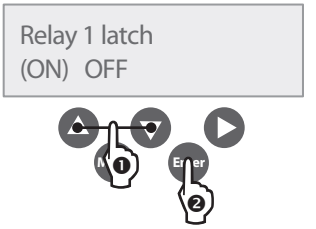


9. Press ▲.



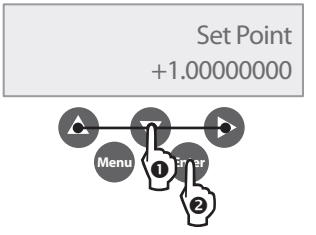
Step 2a cont.

10. Press ▲ or ▼ until brackets are around "ON" then press ENTER.

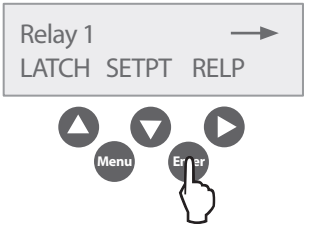


11. Press ▼ for SET POINT.

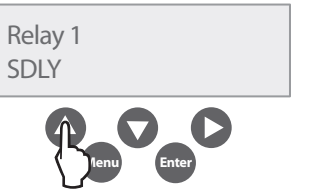
12. Use the ▲ ▼ ▶ keys to set the Flow Threshold Amount. (This amount, once exceeded, will cause the PT3002 to break the common and close the master valve, stopping flow.) Press ENTER when done.



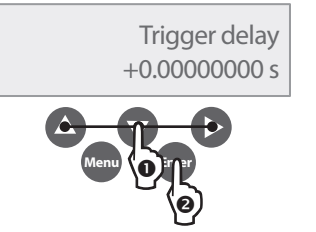
13. Press ENTER.



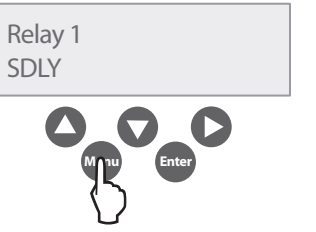
14. Press ▲.



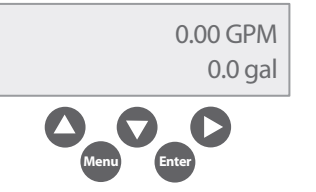
15. Use the ▲ ▼ ▶ keys to set the number of desired seconds for the PT3002 to wait before breaking the valve common and closing the Master Valve once a High Flow occurs. Press ENTER to SAVE.



16. Press MENU until you arrive at the GPM / Total Screen.



17. The screen will look as to the right.

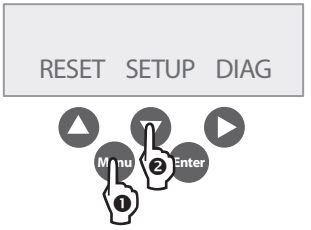


Step 2b

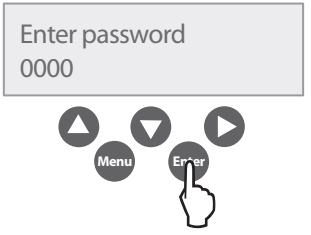
Set Up For Use With Central Control

Be Sure Unit is Set Up Through Step 1 Above Before Continuing

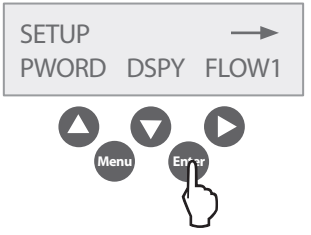
1. Press MENU to enter Programming Mode. Press ▼ to go to the Password Screen.



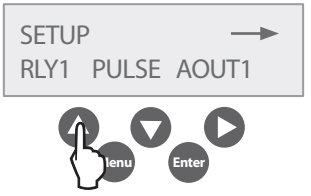
2. Use the arrow keys to enter a 4 digit password then press ENTER OR press ENTER to bypass using a password.



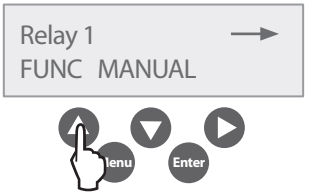
3. At the Setup screen, press ENTER.



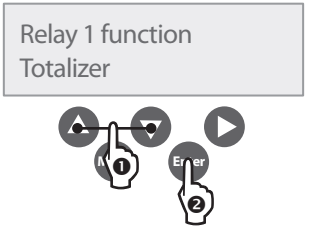
4. Press ▲ for RLY1.



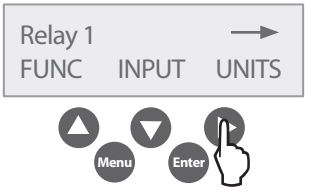
5. Press ▲ for FUNC.



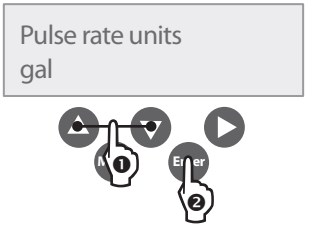
6. Press ▲ or ▼ until "TOTALIZER" is displayed and then press ENTER.



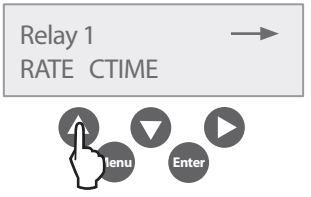
7. Press ▶ to set PULSE RATE UNITS.



8. Press ▲ or ▼ until "gal" is displayed. Press ENTER to SAVE, then press ENTER again.

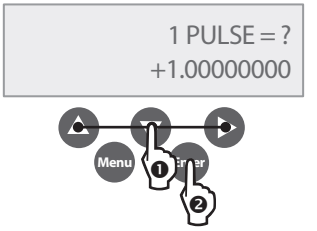


9. Press ▲ to SET RATE.

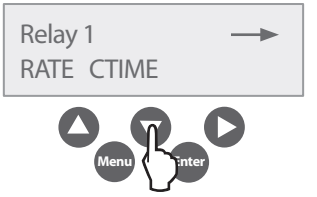


Step 2b cont.

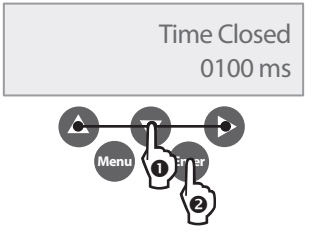
10. Use the ▲ ▼ ▶ keys to SET PULSE. (**Note:** this will normally be set to +1.00000000). Press ENTER to SAVE.



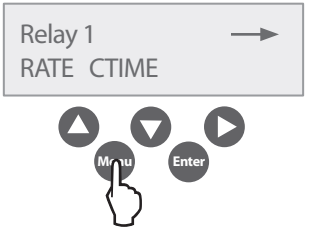
11. Press ▼ to SET CLOSETIME.



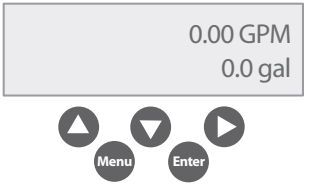
12. Use the ▲ ▼ ▶ keys to SET CLOSETIME. (**Note:** this will normally be set 100 ms). Press ENTER to SAVE.



13. Press MENU three (3) times to return to Flow Total Screen.

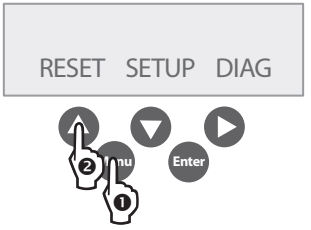


14. The screen will look as to the right.

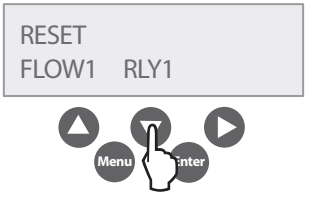


Resetting the 3002 After a High Flow Occurrence

1. Press MENU to enter Programming Mode. Press ▲ to go to the Reset Screen.

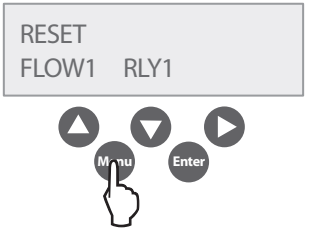


2. Press ▼ to Reset Relay.



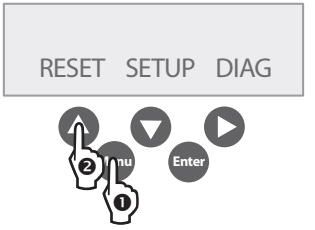
3. Press ▲ (OK) to Reset.

4. Press MENU twice to return to the GPM / Total Screen.

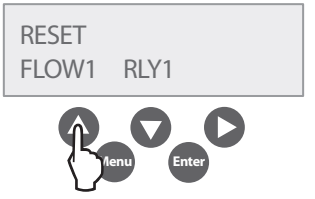


Resetting the 3002 To Zero Total Flow Readings

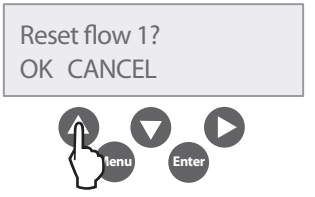
1. Press MENU to enter Programming Mode. Press ▲ to go to the Reset Screen.



2. Press ▲ to Reset Flow.



3. Press ▲ (OK) to Reset.



4. Press MENU twice to return to the GPM / Total Screen.