

Item No. BUB-080 Version 101.2



Use with Hall Effect Water Meters

Manufactured by:

R.E Prescott Co., Inc.

10 Railroad Avenue • Exeter, New Hampshire • 03833 Phone: (603) 772-4321 • Fax: (603) 772-1089

Table of Contents

Description	3
Application	3
	•
Installation	3
Instructions	3
Programming	4
Flow Meter Control Board	5
Meter Selection & Pulse Setting	5
Pressure Drop Graph	6
· · · · · · · · · · · · · · · · · · ·	

Description

Meter Control Unit

- Displayed real time flow rate, GPM
- Total accumulated flow, Gallons
- Records peak flow, GPM Peak
- Power On Green Light
- Adjustable threshold gallons prompt
- 80% Threshold Flashing Amber Light
- 90% Threshold Flashing Red Light
- 100% Threshold Audible alarm
- 100% Threshold 12 V AC Output

1" Flow Meter

- Set Volume/Set Time 12 V AC Output
- Flow Switch 12 V AC Output
- 4-20 mA Proportional Flow Rate Output
- 80 Pulses per Gallon
- 1-40 GPM +/- 5%
- Multiple Quick Connect fittings
- 1" High Flow Turbine Meter
- Glass Reinforced Polymer Housing

Application

The meter control unit reads a standard Hall Effect water meter output to display flow.

Installation

- Connect standard 1" MNPT fitting kit (Item V3007-04) to water line.
 - Other fitting kits are available for copper, shark bite pex and PVC.

Instructions

The display on the meter control unit displays the following information by pressing the corresponding buttons. These are (working from left to right across the display):

- Flow: Displays CURRENT flow rate, gal/min.
- Total Flow: Displays TOTAL gallons treated since last meter reset, gal.
- Peak Flow: Displays PEAK flow rate since last meter reset, gal/min.

Lights:

- Green Power Light: System is plugged in and fully functioning.
- Yellow Warning Light: Blinks when system is at 80% of threshold gallons.
- Red Expired Light: Blinks when system is at 90% of threshold gallons.

Alarm Beep:

- 3 Beeps every 15 seconds at 100% threshold gallons.
- Push any button to silence beep for two days.
- See **CLEAR MEMORY** section below to stop beep.
- Opt2 connection is powered with 12 V AC at 100% threshold gallons.

Clear Memory:

Clear Memory will stop the 100% Threshold Beep and zero out the Total Flow and Peak Flow values. Be sure to write these values down and the date for future reference.

- Press all 3 buttons simultaneously and screen displays CLR MEMORY NO.
- Press Total Flow or Peak Flow button and screen displays CLR MEMORY YES.
- Press Flow button.
- Memory is cleared.

Programming

Press all three buttons of the display simultaneously for 3 seconds.

- Flow Button: Toggles to next screen, also acts as the <u>Enter</u> Button.
- Total Flow Button: Toggles the values <u>up</u>.
- Peak Flow Button: Toggles the values **down**.

Screen One: CLR MEMORY YES / NO

- YES to clear memory of Total Flow and Peak Flow.
- NO to continue on with programming.

Screen Two: SET PULSES (factory set at 80 for 1" Flow Meter)

• Set pulses per gallon (PPG) for Hall Effect meter model.

Screen Three: SET THRESHOLD TOTAL 2 YES or NO

- YES to use threshold function.
- NO to turn off threshold function, skips screen four.

Screen Four: SET THRESHOLD TOTAL 2 (factory set at 80)

- Set threshold gallons.
- Yellow light blinks at 80% threshold.
- Red light blinks at 90% threshold.
- Alarm beeps at 100% threshold.
- Opt2 connection is powered with 12 VAC at 100% threshold. (30 milliamps max.)

Screen Five: **SET GAL/MIN** (no factory setting)

- 4-20 mA proportional flow rate output
- Set GPM for the 20 milliamp output flow rate.
- Zero flow is a fixed 4 milliamp output.
- Verify polarity. 4-20mA output at J2 connection.

Screen Six: SET GAL 1

- Set the gallon batch to energize Opt1 connection.
- Set between 1 and 990 gallons. Feed Pump setting is 1 gal for _____
- 10 gpm peak flow, 2 gal. for 20 gpm peak flow, 3 gal. for 30 gpm peak flow, and 4 gal. for 40 gpm peak flow
- A setting of zero energizes Opt1 like a flow switch, sensitive at .5 GPM.

Screen Seven: SET MIN 1

- Set the minute batch for Opt1 connection:
- Set between 0.1 and 90 minutes. Feed Pump setting is 0.10 min.
- Opt1 is 12 VAC (30 milliamps max.)

END OF PROGRAMMING

Factory Settings:

CLR MEMORY

no

SET PULSES

80

SET THRESHOLD
TOTAL YES

SET THRESHOLD

TOTAL 80 GAL
2 X1000

SET

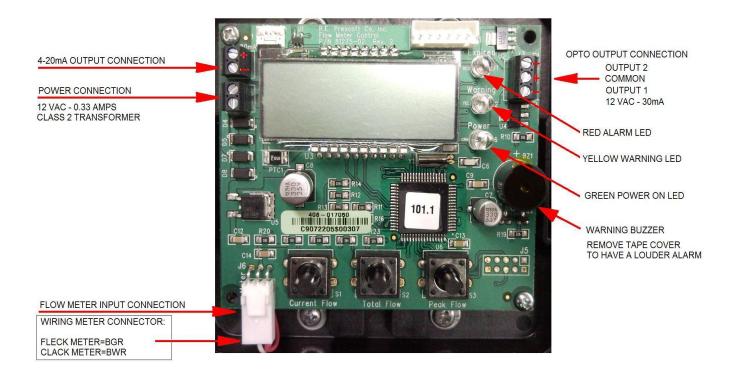
5 GAL

MIN

SET 20 gal

SET 0.33 min 1

Flow Meter Control Board



^{*}For Fleck Meters, change meter wires from Black-Red-Green to Black-Green-Red (BRG to BGR)

Meter Selection and Pulse Setting

					Meter Wire
<u>N</u>	Model	Size	4-20mA range	PPG	Color Code
a	. Bubble Up Meter	1" Male IPS Connections	0.5-25 GPM Max	83 PPG	BWR
b	. Iron Gate Meter	1" Male IPS Connections	0.5-25 GPM Max	80 PPG	BWR
С	. Monitor Meter	1" Male IPS Connections	0.5-25 GPM Max	80 PPG	BWR
d	I. BUB080-A In-Line Meter*	1" Male IPS #V3039	0.5-50 GPM Max	66 PPG	BWR
е	BUB080-B In-Line Meter	1.5" Female IPS #3040-15	0.5-60 GPM Max	37 PPG	BWR
f.	. BUB080-C In-Line Meter	2" F X M IPS #V3050	1.5-150 GPM Max	20 PPG	BWR
g	BUB080-D In-Line Meter	3" Female IPS #V3075	3.5-350 GPM Max	8 PPG	BWR
h	. Fleck Meters - requires cl	nanging meter wires from BRG	to BGR		BGR

B = Black Wire

W = White Wire

R = Red Wire

G = Green Wire

^{*} See pressure drop graph on next page

Pressure Drop Graph

BUB080-A 1" Flow Meter

