DM-P Use & Care Manual

1. SELECTING THE UNIT OF MEASURE (UOM)

Before using the meter you should select the desired UOM. To do so, follow these instructions:

Note: Changing the UOM resets the batch AND total.

1. Press and hold both the CAL and RESET buttons, until the UOM indicator blinks (approx. 3 seconds.) Once this happens, release both buttons. The UOM will continue to blink, indicating that you are in UOM selection mode.

2. Press the RESET button to cycle through the different units available:**Gal** = US gallons**Qts** = quarts (1/4 gallon)**Pts** = pints (1/8 gallon)**L** = liters

3. Once the desired UOM indicator is blinking, press and hold the CAL button to exit the UOM selection mode.

2. CALIBRATION

Before using the meter for critical applications, it should be calibrated to ensure accuracy for that particular application.

Calculate the proper correction factor by following these steps:

1. Record the current correction factor by pressing and holding the CAL button, then pressing the RESET button. The large digits are the correction factor. **Note:** If you press RESET momentarily, the correction factor will only display until RESET is released. If you hold RESET for more than 3 seconds, you will enter UOM selection mode, and will need to exit by pressing and holding CAL. Entering UOM selection mode will also reset the totalizer... even if you do not change the UOM! All units ship with the correction factor set to 1.000, but meters that have been calibrated previously may have a diffferent value. ALWAYS CHECK THIS VALUE WHEN CALIBRATING.

2. Reset the batch total by pressing the RESET button momentarily. Then measure a known amount of the fluid to be metered by filling a vessel of an actual known volume. The larger the volume, the more accurate your correction factor will be. A minimum volume of 50 gallons is recommended.

3. Record the metered value from the batch volume register. The large digits are the batch volume.

4. Calculate the new correction factor using this equation:

current correction factor x (actual known value / metered value)

Example:

- The current correction factor is **0.998**.

- You fill a **200** gallon tank with the same liquid that is to be metered.

- The meter displays the total of **190.5** gallons.

new correction factor = **0.998 x (200 / 190.5) = 1.048**

Set the meter's new correction factor by following these steps:

1. To enter calibration mode, press and hold the CAL button until the display reads **Cal USEr** across the bottom. The large digits will display the current correction factor.

2. Once in calibration mode, the first digit will begin to blink. You must now enter the new correction factor that was calculated during the tests you just ran.

CAL - pressing the CAL button will cycle you through each digit, then loop back to the first digit over and over until calibration mode is exited.

RESET - pressing the RESET button will increase the blinking digit by 1 then loop back to 0 over and over until calibration mode is exited.

3. Once the proper correction factor has been entered, you must exit calibration mode by pressing and holding the CAL button.

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3. OPERATION

Once installed, the operation of the meter is quite simple.

Batch Total: The meter will measure and display the batch volume with the large digit register on top. The units of measure are displayed to the right as Qts, Pts, L, or Gal.

To reset the batch total simply press the RESET button momentarily.

Flow Rate and Totalizer Volume: The small digit register across the bottom of the display shows either the total volume (totalizer) or the current flow rate. This is indicated by the words “FLOW RATE” above the small digits, or “RESET TOTAL” to the right of them.

To toggle back and forth between the 2, simply press the CAL button momentarily.

To reset the totalizer, press and hold the RESET button until all 0’s show (approx. 3 seconds.) The totalizer will be reset regardless of whether the meter is displaying the totalizer or flow rate.

4. MAINTENANCE

Aside from replacing the batteries, the meter should operate maintenance free for its entire lifetime.

Replacing the Batteries: The meter is powered by 1.5v alkaline batteries (AAA X2). The expected lifetime is 2 years, however, it is recommended that they be replaced every year. As the batteries run low, you will notice the display will fade, or go completely blank. If this happens, and/or on the regularly scheduled changeout time, follow these steps to replace the batteries.

1. Remove the screws in each of the 4 corners on the front of the digital display with a phillips head screwdriver.

2. Separate the display face and rubber shroud from the plastic housing, being careful not to break the battery wire or harm any of the electronics on the backside of the display.

3. Remove the old batteries, and check the terminals on the battery housing for corrosion and debris. Clean if necessary.

4. Insert the new batteries making sure that the polarity is correct. Then check the display to confirm that power has been restored.

5. Reassemble the housing, shroud, and display with attention to the following: - The rotation of the display is in the desired orientation - Keep the battery wires clear from any pinch point - The rubber shroud is properly seated in between the housing and display - Do not over tighten the screws or strip the heads