# DM-Series Field Calibration Guide

There are 3 keys, M, S, and Z.

- Key M is to save data and settings.
- Key S for data setting and numerical increment.
- Key Z for digit shifting and option.

**Setting data using M, S, and Z keys**:

The following is a step by step walkthrough on navigating the DM-Series using the 3 programming keys. Please note: Some calibrations require programming not available through basic button functions. For calibrations that require programming please contact Eagle Eye Power Solutions at our toll-free line: 1-877-805-3377 or email us at info@eepowersolutions.com

Interface 1 – Code input screen

Press Z for up to 3 seconds and you enter into data setting interface code 1. Press Z key to shift the flash digit to the last space.

Press S key to change the digit to 2, then press Z key. There is one flash arrow on the lower left, press the S key. Turn to the unit setting interface of operation code 2.

Interface 2 – Setting units

The current unit is now shown, press S key and the unit option begins flashing, press S key again and the unit changes. Continuing to press S key subsequent times will cycle through available units. Choose the unit you would like to use then press M key to save.

Interface 3 – Setting lower limit range

After you save the measuring unit you will enter into the interface operation code 3. If you do not need to set the lower limit press M key to save the setting.

Interface 4 – Setting upper limit range

After you save you will then enter into interface operation code 4. The current upper limit range should be either 1, 2, or 3. Press the S key to set the upper range. Once complete press M key to save.

<u>Interface 5 – Setting Damping</u>

You will now enter into interface operation code 5. The damping setting is the unit's response time. The damping is typically set to 0 seconds, however it can be adjusted to a max of 32 seconds. Press S key to set damping then M key to save.

<u>Interface 6 – Setting zero trim</u>

You will now enter interface operation code 6 – zero trim of main variables.  Press S key to choose either YES or NO, then use M key to save. NOTE: If the value is 0.0000 then you will not need to trim (NO) – if there is any value besides 0.0000 please zero (YES).

<u>Interface 8 – Setting outputting characteristic</u>

You will now enter interface operation code 8 for setting linear output or square root output. Press S key to choose either LIN or SQRT. Press M key to save.

<u>Interface 0 – Operating screen</u>

You will now arrive to operation code 0. The DM-Series will return to the operating screen within 5 seconds.

**<u>Additional Notes</u>**:

There is range migration that may occur after installation therefore interface code 6 – Setting zero trim of main variables should be checked after initial DM-Series installation.

Press Z key for 3 seconds, now push Z key again to shift the flashing digit to the last space. Press S key to change the last digit to 6. Press Z and you will enter into code 6 menu. Pressing Z key will bring up a flashing arrow on the lower left.  Press S key to choose YES or NO. Choose Yes to Zero the unit. Press M key to save. You should now return to the operating screen.

<u>Setting lower/Upper limit range</u>
- Low limit must be under empty situation without liquid touching the diaphragm.
- Upper limit must be set under which both diaphragms are fully covered by the liquid.

From the main operating screen press and hold Z key for up to 3 seconds. Once you enter interface 1 press Z and the digit begins flashing. Press Z key again and shift to the last digit. Press S key to change last digit to 9. Press Z and there a flashing arrow on the lower left will appear. Press S key to enter into the interface of LOW limit range calibration. If the current data is 0.0000 G/CM3 (or whichever measuring unit you have chosen) then the unit is accurate and no changes need to be made. If the setting does need changed press S to adjust numerical value, Z to adjust digit position.

Once lower range is set, press Z key to enter into the Upper limit range code 10. To set press S key to adjust numerical value and Z key to change digit position.  Press M key to save after setting.

Code 11 will not need setting press M to save settings.

## Restoring Factory Settings

Press and hold Z key for up to 3 seconds. Once you inter code 1 interface press Z key to shift the flashing digit to the last space. Press S key to adjust numerical value to 5.  You will enter into the damping interface.

You will input code: "05678" to restore all factory settings.

Press S key when upper arrow begins flashing. Press S key again to shift the flash point to the first digit. Press Z to shift and input 6, repeat for 7 and 8 until screen shows "05678".  Press S key again and all decimals will start flashing. Pressing S key again will move the decimal point past the 8. Once you have done this press M key to complete the factory reset.