

Quick Calibration Instructions

For the 450 and 460 Indicators

Calibration Mode

There are 6 different methods in which to calibrate. The methods described below assume that the necessary parameters (full-scale value or graduation size, for example) are selected before the actual calibration is performed.

Quick Calibration

Enter the Quick Cal mode from either the Weigh or Counting modes using the following keypad instructions. Entering Quick cal mode.

1. Press **[ZERO]** + **[SELECT]** simultaneously.
2. Press **[ZERO]** **[PRINT]** **[UNITS]** **[ENTER]**.

“New Zero?” Calibration

Used for a new calibration (establishing the first/new calibration).

1. Please remove any extraneous load.
2. Press **[SELECT]** key until “New Zero” is displayed.
3. Press **[ENTER]** to select “New Zero”.

Note: the display should now read Keyin CalWt.

4. Place the calibration weight on the platform.
5. Key in the calibration weight value.
6. Press **[ENTER]**

Note: the display should now read “CAL OK?”. If “RECAL REQ” is displayed, repeat steps 1-6.

7. Press **[ENTER]** to accept calibration.
8. Press **[ENTER]** to save modifications.
9. Press **[ENTER]** to exit calibration.

"Last Zero?" Calibration

Allows span re-calibration without removing the applied test weight. The last zero established by pressing **[ZERO]** from the weigh mode will be used as the zero reference.

1. Press **[SELECT]** key until “Last Zero?” is displayed.
2. Press **[ENTER]** to select “Last Zero?”.

Note: Indicator briefly displays the units for keying in the calibration weights

3. Key in the applied weight.
4. Press **[ENTER]**.

Note: the display should now read “CAL OK?”. If “RECAL REQ” is displayed, repeat steps 1-4.

5. Press **[ENTER]** to accept calibration.
6. Press **[ENTER]** to save modifications.
7. Press **[ENTER]** to exit calibration.

"Temp Zero?" Calibration

To Re-Cal (without establishing a new zero) used to perform a calibration without removing the currently applied load.

1. Press **[SELECT]** key until "Temp Zero?" is displayed
1. Press **[ENTER]** to select "Temp Zero?".

Note: Indicator briefly displays the units for keying in the calibration weights

2. Add the calibration weight.
3. Key in the applied weight.
4. Press **[ENTER]**

Note: the display should now read "CAL OK?". If "RECAL REQ" is displayed, repeat steps 1-4.

5. Press **[ENTER]** to accept calibration.
6. Press **[ENTER]** to save modifications.
7. Press **[ENTER]** to exit calibration.

"Only Zero?" Calibration

To re-establish the indicator's calibration zero without affecting the established gain. Used in weighing applications where the re-zero parameter (P118) is set very low in order to prevent inadvertent re-zeroing.

1. Press **[SELECT]** key until "Only Zero?" is displayed.
2. Press **[ENTER]** to select "Only Zero?".

Note: the display should now read "CAL OK?". If "RECAL REQ" is displayed, repeat steps 1 and 2.

3. Press **[ENTER]** to accept calibration.
4. Press **[ENTER]** to save modifications.
5. Press **[ENTER]** to exit calibration.

"Cal Reset"

The Cal Reset adjusts the zero and gain factors of the amplifier on the A/D.

1. Press **[SELECT]** key until "Cal Reset" is displayed.
2. Press **[ENTER]** to select "Cal Reset".
3. Perform a "New Zero?" calibration.

Note: After performing a Cal Reset, a re-calibration must be performed before exiting the calibration or setup modes. The reset will not be saved unless a re-calibration is performed and changes are saved.

"Known LCOut"

Known Load Cell is used to calibrate without test weights. This selection will only be available on the Model 460. The exact full-scale mV/V rating must be known for each load cell. All load cells must be of the same full-scale capacity.

1. Press **[SELECT]** until "Known LCOut" is displayed.
2. Press **[ENTER]** to select "Known LCOut".

Note: The number of load cells specified during the last calibration will also be displayed. A value of zero (0) indicates that this calibration method has not yet been performed.

3. Enter the number of load cells (8 maximum).

Key in the number of loads cell then press **[ENTER]**

- or -

Press **[ENTER]** to accept the displayed value.

4. Enter in the load cell's mV/V value

Key in the load cells mV/V and then press **[ENTER]**

- or -

Press **[ENTER]** to accept displayed value.

5. The indicator will now automatically repeat steps 3 and 4 for each load cell.
6. Enter the load cell full scale "LC FS"

Key in the load cells full scale and then press **[ENTER]**

- or -

Press **[ENTER]** to accept displayed value.

7. Establish the current input signal as the zero reference.

- 1) Press **[ENTER]** to accept displayed value

- or -

- 2) Press **[SELECT]** to display Zero=0mVv?

- 3) Press **[ENTER]** to use a 0mV/V output as the zero reference.

- or -

- 4) Press **[SELECT]** to display Keyin CurWt.

- 5) Enter the known gross weight already applied to the scale

- 6) Press **[ENTER]**.

- or -

- 7) Press **[CLR]** to bypass the zeroing option.

8. Press **[ENTER]** to accept "CAL OK".
9. Press **[ENTER]** to save modifications.
10. Press **[ENTER]** to exit calibration.

NOTE: If the calibration weight is less than 5% of capacity or if there is a large change in the calibration, the indicator will prompt, ReCal Req'd. Press **[ENTER]** and you will be returned to the beginning of the calibration selections, or press **[CLR]** to obtain the "CAL OK?" Prompt as described above and override the re-calibration requirement. GSE recommends that you perform a re-calibration in order to avoid any serious inaccuracy.