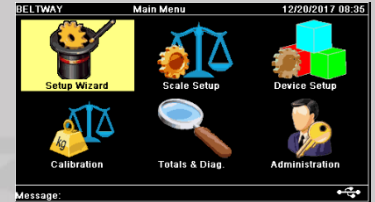


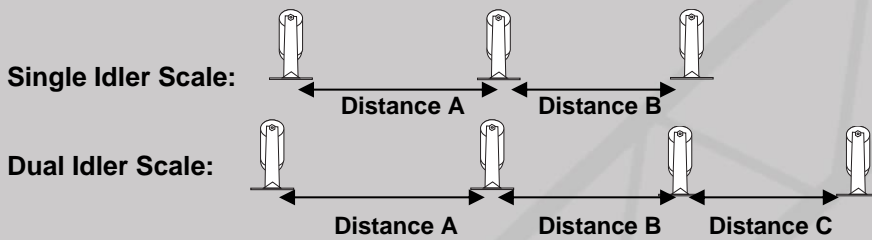
Setup Wizard

Several measurements are required to complete the wizard.
Record the following values before starting the wizard.

1. Number of weigh idlers (1 for single idler scale, 2 for dual idler scale, etc)
2. Load cell capacity found on Load cell assembly label (45 kg, 100 kg, 200kg, etc)



3. Idler spacing distance (Measure as shown below):



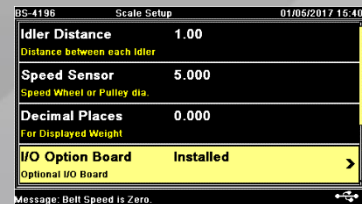
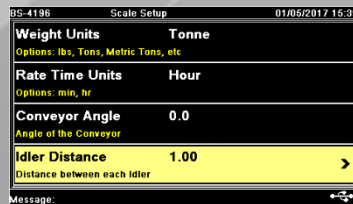
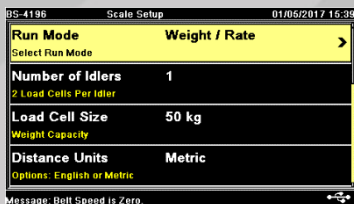
4. Conveyor Angle (if an automatic angle sensor is not used)
Note: If the conveyor angle is not known, leave the angle at the default of 12 degrees.
5. Head or Tail pulley diameter if shaft mount speed sensor is used instead of the wheel speed sensor.

The Setup Wizard proceeds through the following parameters:

- | | |
|----------------------------------|--|
| 1) Select Run Mode | 9) Enter Angle |
| 2) Select Number of Weigh Idlers | 10) Enter Idler Spacing |
| 3) Select Load Cell Size | 11) Speed Wheel Diameter |
| 4) Select Distance Units | 12) Select IO Installed YES / NO |
| 5) Select Weight Units | 13) Belt Length Entry or Calibration |
| 6) Select Decimal Places | 14) Zero Calibration Static or Dynamic |
| 7) Select Rate Time Units | 15) Calibration - Test Weight or Material Test |
| 8) Select Angle Sensor ON / OFF | |

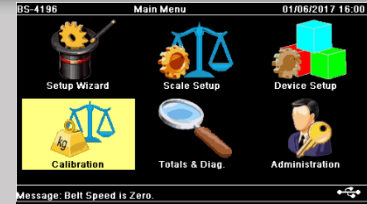
Scale Setup

Scale parameters can be viewed and edited under the Scale Setup menu.

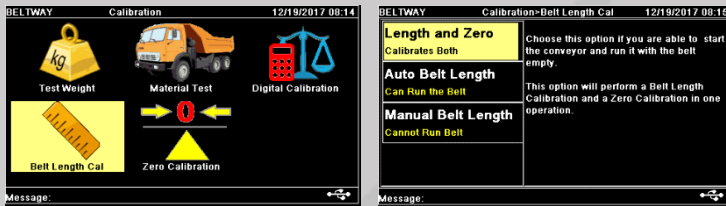



Scale Calibration

All Calibration options are available under the calibration menu icon.



- 1. Perform Length and Zero (if not completed during the setup wizard)**
 The Length and Zero establishes the belt length and initial zero weight of the belt. It must be run once at startup and whenever the belt length changes significantly. Navigate to **Calibration > Belt Length Cal > Length and Zero** and follow instructions.

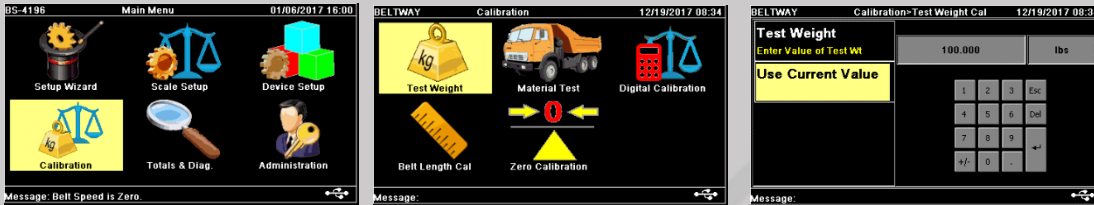


- 2. Perform Zero Calibration**
 The Zero calibration weighs at least one revolution the empty belt and calculates a new zero weight. **The Zero Calibration should be performed at least once per day!**
 Start the belt running empty and press the Zero Calibration button on the keypad. 
 Follow the instructions on the screen. Repeat as needed until the accumulated weight hovers up and down slightly with the belt running empty.
- 3. Perform Test Weight Calibration**
 The **Test Weight Calibration** changes the **Trim Number** properly calibrate the scale. The calibration should be performed at startup and several times per year on a stationary conveyor. A portable conveyor should be calibrated each time it is moved.

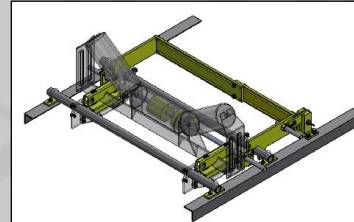
Suggested test weight amounts by scale model:					
Model 45 or Model 50	Model 100 or Model 150	Model 200	Model 350	Model 500	Model 1000
25-50 lbs.	50-100 lbs.	75-100 lbs.	100-200 lbs.	200+ lbs.	200+ lbs.

The test weight amount must include the bar or other hardware used to hang the weights on the load cells. If the bar weight is unknown, install the bar on the scale and perform the zero calibration. Then use the exact test weight value.

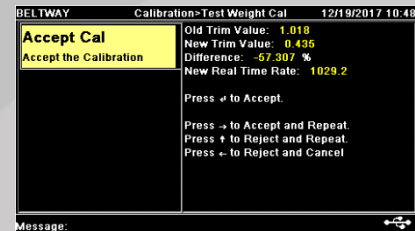
Navigate to **Calibration > Test Weight**. Enter the test weight amount.



Hang the weights on the load cells or drop the weights if using the Belt-Way test weight system. **Make sure the weights hang freely from the load cell assemblies!**



Start the belt running empty and follow the instructions. Pay close attention to the **Accept Cal** screen. The **New Trim Value** will typically be between **.90 and 1.10**. If it is not in that range check all setup parameters including model number, idler distance, speed sensor, angle and test weight amount.



Navigate to **Totals & Diagnostics > Live Weight**



If the **Live Weight** is close to the test weight value, then repeat the calibration. If the trim is still out of range then refer to the troubleshooting section and contact Belt-Way tech support for further assistance.

Calibration Verification:

If the Trim number is close to 1.000, use the following formula to verify the calibration.

$$\left(\frac{\text{Test Weight Amount}}{\text{Idler Distance}} \right) * \text{Belt Speed} * 60 / 2000 = \text{Tons Per Hour}$$

Example: $\left(\frac{100 \text{ lbs.}}{4 \text{ ft.}} \right) * 400 \text{ feet per minute} * 60 / 2000 = 300 \text{ Tons Per Hour}$

4. Perform Material Test Calibration

The **Material Test Calibration** adjusts the Trim Number to make the belt scale match another scale. The calibration is typically performed with a certified truck scale or rail scale.

Run the belt empty and perform a Zero Calibration prior to each material test load!

Weigh the truck **EMPTY** to get an accurate tare weight.

Clear the weight on the belt scale or record the starting weight.

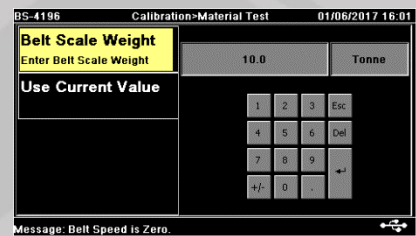
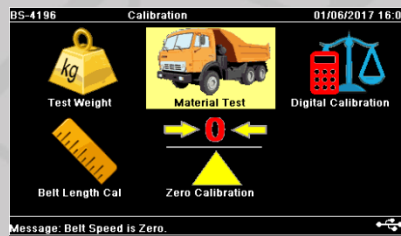
Run the material to start test. Make sure all material is caught in the truck.

Larger tests are better. A minimum of 15 tons per test is recommended.

Complete 2-3 tests in a row without changing anything on the scale.

Compare the results to prove the scale is repeatable before continuing the calibration.

Navigate to **Calibration > Material Test**



Proceed by entering the belt scale weight.

If the tests are reasonably close, use the sum of all the tests.

Choose the correct certified scale units then enter the certified weight.

Follow the instructions and press **Enter** several times until you reach the Accept Cal screen.

Pay close attention to the **Accept Cal** screen.

The **New Trim Value** will typically be **.90 to 1.10**. If the trim is out of range make sure the correct weights and units were used.

Reject and Repeat the calibration if incorrect values were entered.

If multiple material loads vary greatly stop and review troubleshooting procedures or contact tech support.

5. Digital Calibration

The digital calibration resets the **Trim Factor** to the default of 1.000.

Navigate to **Calibration > Digital Calibration** and follow the instructions .