

# **Industrial Weighing Systems**

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# Industrial Weighing Sytems assumes no responsibility for the accuracy of the calibration instructions extracted from manufactureres documentation.

## Contact us for complete manuals we may have on file info@iwsystems.ca

# Industrial weighing systems provides repairs to all insturments and load cells. Calibration services available.

Should you require additional information please do not hesitate to contact IWSystems Check out our products at <u>www.iswystems.ca</u>



**Figure 6** Soft key flowchart for Configure menu



**Figure 8** Soft key flowchart for Calibration menu

Calibrate	Press the <b>SETUP</b> soft key to access the following soft key group:	
-SETUP	CAPAC	Press this key to enter the capacity of the scale and the division size.
	OPTION	Press this key to enable or disable multi-interval use.
	METHOD	Press this key to choose which calibration method to use, single or multipoint. <b>Multipoint is for analog scales only.</b>
	Following a	are detailed instructions for setting these parameters.
Calibrate —SETUP —CAPAC	If you press	s the <b>CAPAC</b> soft key, follow these instructions:
	1. The dis accept	splay shows the current value for the capacity. Press ENTER to this value or key in a new capacity and press ENTER
	7	The current division size is displayed.
	2. Press ENTER	ENTER to accept the division size or key in a new one and press R
	٦	The display returns to the SETUP display.
Calibrate —SETUP —OPTION	Press the <b>(</b> you enable <b>CAPAC</b> ap the scale fr	<b>OPTION</b> soft key to enable or disable the multi-interval option. If the multi-interval option, the division size you choose under oplies to weight on the scale from 0 to ½ capacity. For weight on from ½ capacity to full capacity the division size will double.
	When mult of zero, an is always c	i-interval is enabled, the division used to check for stability, center d AZT is always the smaller division size. Overload and underload alculated based on the upper division size.
	The display is in. The a and gross	ying and printing division size depends on which interval the scale ctive interval is chosen based on net when a tare weight is active, weight when a tare is not active.
	When gros size used o	s is displayed or printed (regardless of the tare value) the division depends on the interval used.
	After press multi-interv	ing <b>ENTER</b> to accept your choice of enabling or disabling the ral option, the display returns to the SETUP soft key choices.
Calibrate —SETUP —METHOD	Press the <b>I</b> choose <i>Sir</i> allow you to available u to 10 varyir	<b>METHOD</b> soft key to choose single or multipoint calibration. If you <i>ngle</i> , the choices available under the CAL softkey for calibration o do zero and span calibration. If you choose <i>Multi</i> , the choices nder the <b>CAL</b> softkey for calibration allow you to calibrate with up ng weights.

Calibrate —CAL (single)	Press the <b>CAL</b> soft key and you are presented with the soft key set for the type of calibration method chosen in SETUP, Single or Multi. If you have chosen Single, you will see the softkey set used to set zero and span, shown below:		
Calibrate	<ul> <li>ZERO Use this key to set the zero reference.</li> <li>SPAN Use this key to span the scale.</li> <li>SPEC Use this key to access another set of soft keys for specialized calibration.</li> <li>Following are detailed instructions for setting these parameters.</li> </ul>		
-CAL			
—ZERO	If you press the <b>ZERO</b> soft key, follow these instructions:		
	<ol> <li>The display asks you to remove all weight from the scale then press ENTER</li> </ol>		
Press <b>ESC</b> to abort.	After the indicator has calibrated the zero point, the display says <b>DONE</b> and asks you to press any key.		
	2 Above the text you will see the weight displayed. It should read zero in the increments you've chosen. If not you should perform this step again		
	The display returns to the CAL display.		
Calibrate			
CAL SPAN	If you press the <b>SPAN</b> soft key, follow these instructions:		
	<ol> <li>The current span calibration weight is displayed. Press ENTER to accept this weight or key in a new one and press ENTER</li> </ol>		
Press ESC to abort.	The display prompts you to apply the test weight load to the scale.		
	2. Apply the test weight load to the scale and press ENTER		
	The indicator determines the span and tells you when it is done. Above the text, the display should show you the correct test weight. If not perform the span again.		
	3. Press any key to return to the CAL display.		
Calibrate —CAL —SPEC	Use the <b>SPEC</b> soft key to access three new softkeys. These soft keys are listed below.		
	<b>TZERO</b> This stands for temporary zero. This calibration procedure is useful when a scale has weight on it that is impractical to remove, such as a hopper or bin which is partially full of material. This calibration allows you to establish a temporary zero, add weights to the scale and do a span without losing the zero reference point.		
	<b>KEY IN</b> This calibration procedure allows you to key in calibration data, mV/V or counts. This means calibration data can be transferred between different indicators if one fails and no new calibration procedure need be done.		
	<b>R-CAL</b> This stands for reverse calibration. Use this procedure when it is impractical to hang weights from a full or partially full hopper or bin. You can key in a span weight, unload that weight onto another scale, perform a zero calibration and your scale is calibrated.		

Following are detailed instructions for these soft keys.

#### Calibrate —CAL —SPEC —TZERO

If you press the **TZERO** soft key, you are shown two new soft keys, **TZERO** and **SPAN**.

To perform the temporary zero spanning procedure, press the **TZERO** soft key. The indicator performs a zero function, the display says **DONE** and asks you to press any key. Above the text you will see the weight displayed. It should read zero in the increments you've chosen. If not you should perform this step again. The display returns to the TZERO display.

Next, press the **SPAN** soft key.

1. The current span calibration weight is displayed. Press **ENTER** to accept this weight or key in a new one and press **ENTER**. . .

The display prompts you to apply the test weight load to the scale.

2. Add the test weight load to the scale and press ENTER. . .

The indicator determines the span and tells you when it is done. Above the text, the display should show you the correct test weight. If not perform the span again.

3. Press any key to return to the **CAL-SPEC-TZERO** display.

Press **ESC** to return to the **CAL-SPEC** display.

Press the **KEY IN** soft key if you want to set up a new indicator to replace another indicator and keep the original indicator's calibration settings. To do this you must have recorded the zero counts or mV/V values of the original indicator in order to transfer that information to the new indicator. This information can be found in the Calibrate menu under the **INFO** and **FAC-TOR** soft keys.

If you press KEY IN, you are asked if you want to set up the calibration using zero counts or mV/V. Choose one.

If you press **CNTS**, follow these steps:

1. The display shows the current zero counts value. Key in the value from the original indicator and press **ENTER**...

The display shows the current span weight.

- 2. Key in the span weight from the original indicator and press **ENTER**... The display shows the span counts.
- Key in the span factor from the original indicator and press ENTER... Display returns to the SPEC soft keys.

Calibration should be verified with certified test weights at your earliest convenience.

> Calibrate —CAL —SPEC —KEY IN

Calibrate

-CAL

-SPEC

-KEY IN

-CNTS

Calibrate —CAL —SPEC —KEY IN —MV/V	<ul> <li>If you press MV/V, follow these steps:</li> <li>1. The display prompts for the cal zero mV/V value. Key in the value from the original indicator and press ENTER The display shows the current cal weight.</li> <li>2. Accept the displayed cal weight, if it is the same as the cal weight of the original indicator, by pressing ENTER or key in the correct value from the original indicator and press ENTER The display shows the span mV/V.</li> <li>3. Accept the displayed span mV/V, if it is the same as the span mV/V of the original indicator, by pressing ENTER or key in the correct value from the original indicator, by pressing ENTER or key in the correct value from the original indicator and press ENTER Display shows the SPEC soft keys.</li> </ul>
Calibrate —CAL —SPEC —R-CAL	<ul> <li>If you press the <b>R-CAL</b> soft key, you can perform a reverse calibration. In other words, you start with a loaded scale, remove <b>all</b> the weight from the scale for spanning, then get your zero reading. This may require a container on a separate scale into which you discharge the material.</li> <li>1. Press the <b>R-CAL</b> soft key Display shows the title <i>Reverse Calibration Span</i> and prompts you to press <b>ENTER</b>.</li> </ul>
	<ol> <li>Press ENTER The indicator determines span point #1 and shows <i>DONE</i> when finished. The display prompts you to press any key to continue.</li> <li>Press any key</li> </ol>
	Display prompts you to enter a calibration weight. This is the weight that is currently on the scale. You will remove all this weight from the scale in step 5. This value is used for spanning the scale.
You may need to remove the weight and weigh it on another scale to determine this value.	<ol> <li>Key in the calibration weight value equal to the amount to be removed from the scale in step #5 and press the ENTER key The indicator prompts you: "REVERSE CALIBRATION ZERO: Remove load, Press ENTER."</li> </ol>
You need to remove all the weight from the scale in this step.	<ol> <li>5. Empty the scale and press ENTER</li> <li>The indicator acquires span point #2 and shows DONE when finished. Reference zero is acquired at this time.</li> </ol>
	6. Press any key to return to the SPEC display.

### Calibrate —CAL —SCOMM

The SCOMM soft key only appears if the SensorComm option is enabled.

Use the **SCOMM** soft key to access the corner and section balancing functions and to see information on the SensorComm and associated weight sensors.

1. Press SCOMM,

The following is displayed:

CALIBRATE-CAL-SCOMM

CRNR SECT INFO G\_CAL SWAP

The **CRNR** key is for calibrating the scale using corner weights. See *Corner Balancing / Calibrate—CAL—SCOMM—CRNR* section below.

The **SECT** key is for calibrating the scale using section weights. See *Section Weight Adjustment / Calibrate—CAL—SCOMM—SECT* section below.

The **INFO** key lets you view SensorComm and weight sensor specifications. See the section *INFO* soft key.

The **G-CAL** key lets you set the ghost calibration. See the section *Ghost Calibration / Calibrate—CAL—SCOMM—GHOST*.

The **SWAP** key allows you to quickly and easily replace a faulty weight sensor with a new one and be confident your accuracy remains high. For instructions on swapping weight sensors, see the section called *Sensor Swap Procedure / Calibrate—CAL—SCOMM—SWAP*.