



Industrial Weighing Systems

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This document shows calibration instructions extracted from Manuals we have on file that may not necessarily match your current model.

For your reference only.

IWSystems provides repair services to instruments and load cells

On site calibrations

For additional information please contact us.

There are three levels of WI-130 setup you can access through the front panel:

User level

The first level is the **User** level. These are the most commonly changed values and parameters that you will use in the course of operating the WI-130.

Configuration level

The second level is the **Configuration** level. These items deal with some of the basic functions of the WI-130 and do not need to be accessed very often.

Calibration level

The third level is the **Calibration** level. This section will need to be accessed only when the scale is being calibrated, or if you change scale capacity or division size.

A different password is needed to access each level. Once you access the level you want, the display presents a series of soft key choices. By pressing the appropriate soft key and following text prompts on the display, you can set up your WI-130 to suit your needs.

Following are the instructions you need to access the setup of the WI-130.

1. Press and hold the **ESCAPE** key until the WI-130 beeps. . . The display asks for a password and looks like Figure 2.



Figure 2
Password display

Below are the passwords and details for the three setup levels.

You must key in the password within 5 seconds of accessing the password screen or the WI-130 returns to normal operation.

IMPORTANT NOTE

The WI-130 can be sealed for legal for trade use and the software protected from change by a hardware connection on the main board. If P19 is jumpered, the system is sealed and programs cannot be downloaded or altered. If P19 is not jumpered the system is not sealed and programs can be downloaded from the SimPoser software. A jumper on P19 does not affect the USER level. This level can be accessed and changed no matter what the condition of P19.

User level

The User level is not affected by the condition of P19 on the main board.

The values under SELECT in the flowchart to the right are not saved after a power down and power up.

The default User password is 111.

Key in 111 and press **ENTER**. . . the screen in Figure 3 is displayed.



Figure 3
User level soft key group

Figure 4 is a flowchart showing what soft keys or choices appear as you press the soft keys shown in Figure 3.

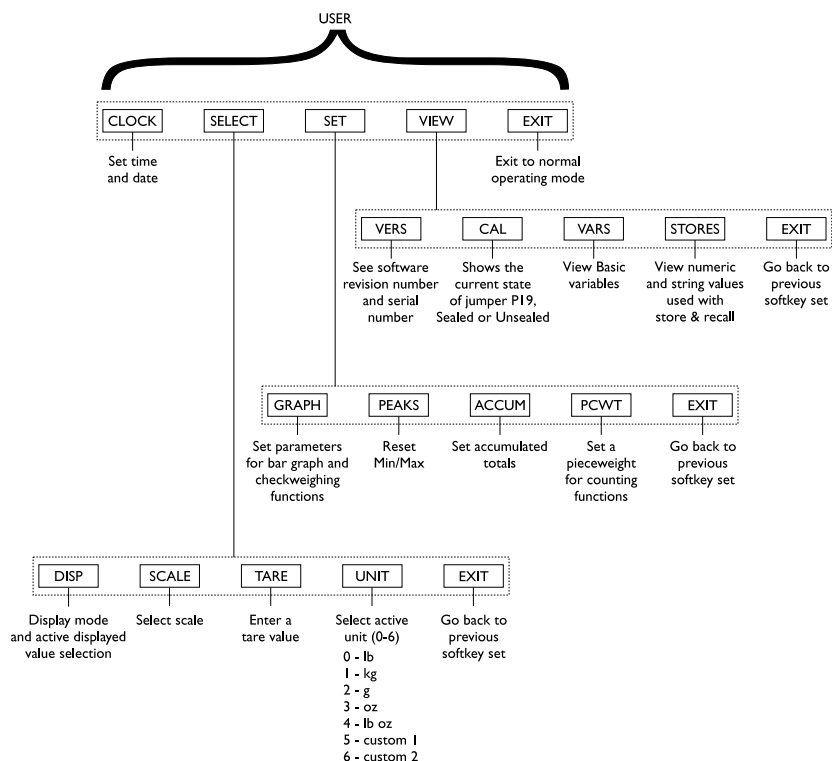


Figure 4
Soft key flowchart for User level

USER-CLOCK Level

Press the **CLOCK** soft key to access the time and date setting function.

1. The display shows the current hour value. If this is not correct key in a new value and press **ENTER** or press **ENTER** to accept the current value. . . The display shows the minutes value.
2. Repeat step 1 for minutes, seconds, year, month, day, and day of the week (0=Sunday, 1=Monday, etc.). . . Display returns to display shown in Figure 3.

USER-SELECT Level

While in the this level the display will show **USER-SELECT** in the top left to remind you of where you are in the **USER** level.

DISP (Display Mode)

The display mode you pick may not be the one that appears on the display. A display mode called out in the **WT BASIC** program overrides the setting you make through the front panel.

Variable (#11) is a variable value called out in a **WT-BASIC** program. **ADC** (#13) stands for Analog to Digital Counts.

SCALE

You cannot select a scale number unless it has been activated in the **SimPoser** program and downloaded to the **WI-130**.

TARE

UNIT

Press the **SELECT** soft key to access the **USER-SELECT** soft key group:

- **DISP** Press this key to set the current display mode.
- **SCALE** Press this key to select the scale number you want to use.
- **TARE** Press this key to enter a known tare weight.
- **UNIT** Press this key to select the active units of measure.
- **EXIT** Press this key to go back to the previous soft key set.

Following is a detailed description of the four functions listed above.

If you press the **DISP** soft key, follow these instructions:

1. The display shows the current display mode number. Press **ENTER** to accept this value or key in a new number from the list in Appendix 1, then press **ENTER** to accept it. The display asks for the **ACTIVE VALUE**. This is the active display value.

2. Choose one of the following active display values by keying in 0-13, then press **ENTER**. . . The display returns to the **USER-SELECT** screen.

0 = Gross	4 = Max	8 = Count Total	12=Piece Weight
1 = Net	5 = Rate of Change	9 = Trans. Total	13=ADC
2 = Tare	6 = Gross Total	10=Count	
3 = Min	7 = Net Total	11=Variable	

If you press the **SCALE** soft key the display will ask you to select a scale number. The currently active scale number is displayed. You can simply type a new scale number and press the **ENTER** key. If you have multiple scales attached to the indicator, this function chooses which scale's weight is displayed and which one the **ZERO** and **TARE** keys will affect.

If you press the **TARE** soft key the display will show the current tare value for the active scale. You may key in a new tare weight and press the **ENTER** key to override the previous tare weight.

If you press the **UNIT** soft key the display will ask you to key in a number (0-6) which represents the value you want to be active. Below are the seven units to choose from and the corresponding number you need to key in for this function:

0- lb	4- lb oz
1- kg	5- custom 1
2- g	6- custom 2
3- oz	

Press the **EXIT** soft key to return to the **USER** level soft key group.

USER-SET Level

Press the **SET** soft key to access the USER-SET soft key group shown below:

- **GRAPH** Press this key to set the parameters for bar graph and checkweighing functions.
- **PEAKS** Press this key to reset the Min/Max.
- **ACCUM** Press this key to set the accumulator totals.
- **PCWT** Press this key to set the pieceweight for counting functions.
- **EXIT** Press this key to go back to the previous soft key set.

Following is a detailed description of the four functions listed above.

GRAPH

If you press the **GRAPH** soft key, follow these instructions:

1. The current MIN setting is displayed. Press **ENTER** to accept this value or key in a new value and press **ENTER**. . . The UNDER value is displayed.
2. Repeat step one, accept or change the value, for UNDER, OVER, MAX, and BASIS values. BASIS is same as the active values (0-13) shown below. These values now apply when using the bar graph or checkweighing display.

Variable (#11) is a variable value called out in a WT-BASIC program. ADC (#13) stands for Analog to Digital Counts.

0 = Gross	4 = Max	8 = Count Total	12=Piece Weight
1 = Net	5 = Rate of Change	9 = Trans. Total	13=ADC
2 = Tare	6 = Gross Total	10=Count	
3 = Min	7 = Net Total	11=Variable	

PEAKS

If you press the **PEAKS** soft key the display asks if you want to reset the MIN and MAX values now in memory. You are given the choice of YES or NO. After choosing the display returns to the USER-SET level display.

ACCUM

If you press the **ACCUM** soft key, follow these instructions:

1. The display shows you the current GROSS TOTAL in the accumulator. You can change this by keying in a new number and pressing **ENTER** or press **ENTER** to move to the next ACCUM value. . . The display shows the NET TOTAL value.
2. Repeat step 1 for NET TOTAL, COUNT TOTAL, and TRANS(action) TOTAL. . . The display returns to the USER-SET screen.

PCWT

If you press the PCWT soft key the display shows the current value for the piece weight. Accept this by pressing the **ENTER** key or key in a new piece weight and press **ENTER**.

Press the **EXIT** key to return to the USER level soft key group.

USER-VIEW Level

Press the **VIEW** soft key to access the USER-VIEW soft key group:

- **VERS** Press this key to see WI-130 firmware revision date and time. Serial number is currently not used. Configuration information is displayed if a program has been downloaded from SimPoser software.
- **CAL** Press this key to view the state of jumper P19(Sealed/Unsealed).
- **VAR** Press this key to view the BASIC variables.
- **STORES** Press this key to view the numeric and string values used with store and recall.
- **EXIT** Press this key to go back to the previous soft key set.

Following is a detailed description of the four functions listed above.

VERS

If you press the **VERS** soft key you will see the firmware version number. Serial number is currently not used. When you press any key, if you have never downloaded a file from SimPoser, you will see only the word **CONFIGURATION** and no other information. If you have downloaded a file, the following information is displayed:

License # of the SimPoser software.
Name of license holder.
Version number of the SimPoser software.
Name of the downloaded file (application program).
Time and date of the last download.

Press any key again and the USER-VIEW level is displayed.

CAL

Press the **CAL** soft key to see the current state of jumper P19. The display will show **Sealed** or **Unsealed**.

VAR

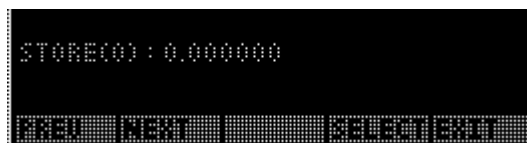
If you press the **VAR** soft key you will be able to scroll through the variables you have in your basic program. Press the **FIRST** soft key to see the first one and the **NEXT** soft key to scroll to the next one. Repeat this until you are through and press the **EXIT** soft key to return to the USER-VIEW level.

If no variables are defined the screen will show **NO VARIABLES DEFINED**.

STORES

If you press the **STORES** soft key, follow these instructions:

1. The display asks if you want to **DISPLAY NUMERICS?**, and gives you the choice of **YES** or **NO**. If you press **YES** the display will look like this:



There are three types of memory:

- Standard
- Expanded
- Memory Card

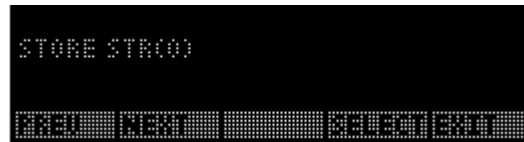
Standard memory has locations 0-1023 for numeric storage and 0-511 for string storage.

Expanded memory has locations 1024-8191 for numeric storage and 512-4095 for string storage.

The memory card has locations 8192-73727 for numeric storage and 4096-36863 for string storage.

If you do not have the memory installed, the location returns a zero.

2. Press **PREV** (previous) to see the previous numeric record. Press **NEXT** to see the next numeric record. Press **SELECT** and the display will let you enter a specific numeric record number. When you press **ENTER** that record number will be displayed.
3. If you press **NO** in step one the following screen is displayed.



4. This screen lets you view all the strings stored in your BASIC program. View them the same way you did the numeric values.
5. Press **EXIT** to return to the USER-VIEW level.

Press **EXIT** to return to the USER level. Press EXIT one more time and you are back to normal operation. You have now seen all the parts of the USER level. The next section of the manual covers front panel configuration.

Configure level

You must key in the password within 5 seconds of accessing the password screen or the W1-130 returns to normal operation.

When your changes are completed, secure and protect them by placing a jumper on P19!

The default password for the Configure level is 2045.

1. Press and hold the **ESCAPE** key for 3-5 seconds. You will hear a 2nd beep and the display will change. Key in 2045 and press **ENTER**. . . the screen in Figure 5 is displayed.



Figure 5
Configuration level display

Figure 6 is a flowchart showing what soft keys or choices appear as you press the soft keys shown in Figure 5.

Under Misc. (print format) in the flowchart to the right, the default print format 0 shows gross, tare and net weights. If you choose another print format (1-16) you need to define the format in SimPoser and download it to the WI-130.

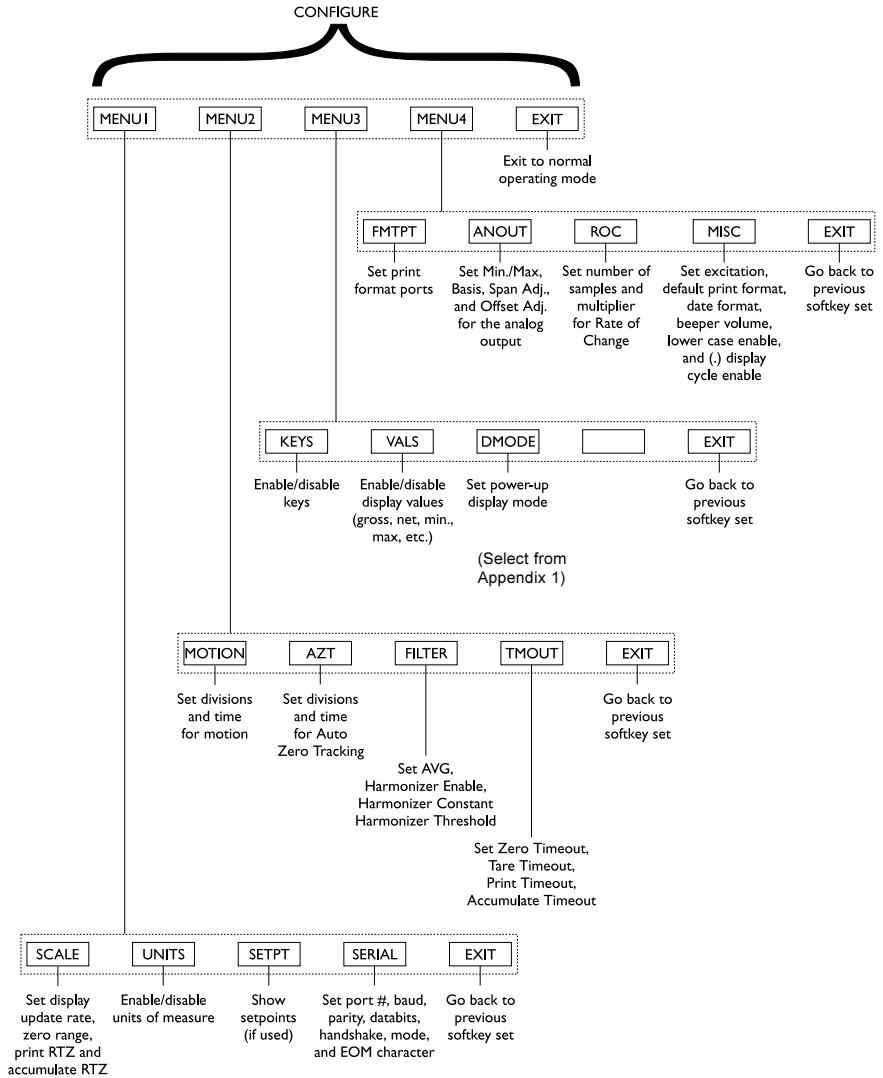


Figure 6
Soft key flowchart for Configure level

CONFIGURE-MENU 1 Level

Press the **MENU1** soft key to access the following soft key group:

- **SCALE** Press this key to set display update rate, zero range, print return to zero, and accumulate return to zero.
- **UNITS** Use this key to enable/disable units of measure.
- **SETPT** Use this key to show setpoints, if used.
- **SERIAL** Use this key to set port #, baud rate, parity, databits, handshake, mode, and EOM character.
- **EXIT** Press this key to go back to the previous soft key set.

Following are detailed instructions for setting these parameters.

If you press the **SCALE** soft key, follow these instructions:

When your changes are completed, secure and protect them by placing a jumper on P19!

SCALE

Any value for display update rate greater than 2 will be considered as the maximum update rate or 99.

*By default, when the **PRINT** key is pressed, a print operation and an accumulation take place. If you do not want the accumulation to occur, a WT-BASIC program assigning only the DO PRINT command to the **PRINT** key needs to be downloaded to the WI-130. A WT-BASIC program can also define an ACCUM. soft key and assign accumulation to that key only.*

UNITS

Custom unit names must be defined by SimPoser software program.

The custom conversion factor is the number to be multiplied by the weight (in calibration units) to get the desired custom unit. Example: 1 lb = 5 inches of a certain steel rod. Custom unit is inches. Calibration unit is lb. Conversion factor is 5. With six lbs of weight on the scale, 30 inches would be displayed. (Six lbs x 5 = 30 inches of steel)

SETPT

Setpoint operations must be defined by the SimPoser software program.

1. The display will show the *current display rate* (.1, .25, .5, 1, 2, 99). Accept this by pressing the **ENTER** key or key in a new value and press the **ENTER** key. . .
2. Repeat step one for *zero range* (0-100% allowed). . .
3. Repeat step one for *print return to zero* (0-100% of cap. allowed). . .
4. Repeat step one for *accumulate return to zero* (0-100% allowed). . .

The display shows the zero range value. If a non-valid number is keyed in the value will default to 99.

This is the percentage of capacity that you are allowed to zero using the **ZERO** hard key.

If you press the PRINT key, the weight must fall below this percentage of scale capacity before another print operation will be allowed.

If you perform an accumulation, the weight must fall below this percentage of scale capacity before another accumulation operation will be allowed.

If you press the **UNITS** soft key, follow these instructions:

1. The display asks if you want to enable the LB unit of measure and shows you the current state (ON or OFF). If the condition is as you want it, simply press the **ENTER** key. If you want to change the condition, press the YES or NO soft key, then the ENTER key to move to the next unit of measure. . .
2. Repeat step 1 for kilograms, grams, ounces, pounds & ounces, and custom units 1 and 2. The display asks for the conversion factor for each custom unit. Key in a value and press **ENTER**. . .

The kilogram unit of measure is the next one shown.

The display returns to the CONFIGURE-MENU1 display.

If you press the **SETPT** soft key the display asks you SHOW SETPOINTS? What this means is, if you say yes, the display will show when setpoints turn on and off by lighting small dots in the upper right corner. Press the **YES** soft key if you want to see these dots, and press **NO** if you do not.

SERIAL

If you press the SERIAL soft key, follow these instructions:

1. The display prompts you for serial port # to configure. Press **ENTER** if displayed port is OK or key in a new port number and press **ENTER**. . . The baud rate code number is displayed.
2. Press **ENTER** to accept the baud rate or key in a new baud rate code number from the table below and press **ENTER**. . . The parity code number is displayed.

Baud Rate Codes

0 = 300	4 = 9600
1 = 1200	5 = 19,200
2 = 2400	6 = 38,400
3 = 4800	7 = 56,700

3. Press **ENTER** to accept the parity or key in a new parity code number from the table below and press **ENTER**. . . The databits setting is displayed.

Parity Codes

0 = NONE	3 = SET
1 = ODD	4 = CLEAR
2 = EVEN	

4. Press **ENTER** to accept the databits setting or key in the new databits value (7 or 8) and press **ENTER**. . . The handshake protocol code number is displayed.

5. Press **ENTER** to accept the handshake protocol setting or key in a new code number for the handshake from the table below and press **ENTER**. . . The mode code number is displayed.

Handshake Protocol Codes

0 = NONE	2 = Xon / Xoff
1 = CTS	3 = BOTH

6. Press **ENTER** to accept the mode setting or key in a new code number from the table below and press **ENTER**. . . The EOM (end of message) value is displayed.

Serial Mode Control Codes

0 = BASIC control	2 = Disabled
1 = Keyboard	3 = Multidrop

Setting this parameter to SET will simulate 2 stop bits and no parity detection.

CTS is a hardware handshake (ready/busy) which requires two extra wires in your cable.

Xon/Xoff is a software handshake requiring no additional hardware.

EOM ASCII code #13 is carriage return.

BASIC Control - Control of the serial port is through the BASIC program executing in the WI-130.
Keyboard - Control of the serial port is through an attached keyboard.
Disabled - The serial port is not in use for this configuration.
Multidrop - The serial port is configured in RS-485 Multidrop mode.

7. Press **ENTER** to accept the EOM character or key in a new number from 0-256 and press **ENTER**. . . The display returns to the CONFIGURE-MENU1 display.

This completes the instructions for all the parameters of Menu 1.

CONFIGURE-MENU 2 Level

Press the **MENU2** soft key to access the following soft key group:

- **MOTION** Use this key to set the motion detection window size in divisions and the time window in seconds.

For example: If you set divisions to 3 and seconds to 1, if the weight value does not change more than 3 divisions in one second, the scale or weight is considered stable.
- **AZT** Use this key to enable AZT. If you enable AZT you can set the division size and seconds. The division size you pick defines a range above and below zero. When scale weight is inside this range for the number of seconds you picked, 1/2 of the weight will be zeroed. The indicator will repeat removing 1/2 the weight every X seconds. X being the number of seconds you have picked.
- **FILTER** Use this key to set up the Harmonizer filtering. A full explanation is given below. See Appendix 2 for tips on using Harmonizer.

The A-D weight conversion happens 60 times per second in the WI-130. AVG is the number of conversions you want to average. For example, if you pick 30, the unit will average the weight values from the last 30 conversions or 1/2 second and uses that value for displayed data.

The next choice you have is for turning the Harmonizer filtering on or off. If you turn the Harmonizer filtering on you need to set the Harmonizer Constant. Typical values are between 1-8. Set the number low for small vibration problems and higher for more dampening effect.

The purpose of the Harmonizer Threshold is so the indicator will respond quickly to large weight changes. Harmonizer Threshold is the amount of weight change, in calibration units, beyond which the Harmonizer will be temporarily disabled. For example, if you set this to 10 lbs, a weight change over 10 pounds occurring during the sample time (1/2 sec. in our example) will disable the Harmonizer until the weight change during the sample time drops below 10 lbs.

In the SimPoser software the Harmonizer constant choices are 0 through 6. This setting is to be made in the "real world" on a working system so there are more levels available from the front panel.

- **TMOU** Use this key to set Zero Timeout, Tare Timeout, Print Timeout and Accumulate Timeout. This is the amount of time the WI-130 will wait for motion to cease and perform the function after the key is pressed.

For example, if Zero Timeout is set to 3 seconds, when the **ZERO** key is pressed the unit will zero the scale if there is no motion. If there is motion and motion ceases within 3 seconds the unit will zero the scale. If motion doesn't cease the key press is ignored.

- **EXIT** Press this key to go back to the previous soft key set.

Following are detailed instructions for setting these parameters.

MOT'N (motion)

If you press the **MOT'N** soft key, follow these instructions:

1. The current value for the motion window size, in divisions, is shown. Press **ENTER** to accept this value or key in a new value and press **ENTER**. . . The current time window in seconds is displayed.
2. Press **ENTER** to accept this time period or key in a new value and press **ENTER**. . . The display returns to the CONFIGURE-MENU2 display.

AZT (auto zero tracking)

If you press the **AZT** soft key, follow these instructions:

1. The current value for the AZT window size, in divisions, is shown. Press **ENTER** to accept this value or key in a new value and press **ENTER**. . . The current time window in seconds for AZT is displayed.
2. Press **ENTER** to accept this time period or key in a new value and press **ENTER**. . . The display returns to the CONFIGURE-MENU2 display.

FILTER

If you press the **FILTER** soft key, follow these instructions:

1. The display shows the current value for the number of samples to average. Press **ENTER** to accept this value or key in a new value and press **ENTER**. . . The display shows the state of the Harmonizer filtering(ON or OFF).

When your changes are completed, secure and protect them by placing a jumper on P19!

2. Press **YES** to enable Harmonizer or **NO** to disable the Harmonizer parameter, then press **ENTER** . . . The current Harmonizer Constant value is displayed.
3. Press **ENTER** to accept this value or key in a new value and press **ENTER** . . . The current Harmonizer Threshold value is displayed. This value is in calibration units.
4. Press **ENTER** to accept this value or key in a new value and press **ENTER** . . . The display returns to the CONFIGURE-MENU2 display.

TMOUT (timeout)

If you press the **TMOUT** soft key, follow these instructions:

1. The current value for Accumulate Timeout is displayed. Press **ENTER** to accept this value or key in a new value and press **ENTER**.
2. Repeat step 1 for Print Timeout, Zero Timeout, and Tare Timeout. . . The display returns to the CONFIGURE-MENU2 display.

Press the **EXIT** soft key to return to the CONFIGURE display.

CONFIGURE- MENU 3 Level

Press the **MENU3** soft key to access the following soft key group:

- **KEYS** Press this key to enable or disable front panel keys.
- **VALS** Press this key to enable or disable the display values (gross, net, min., max., ect.)
- **DMODE** Press this key to pick a power-up display mode from the over 35 available. See *Appendix 1: Display Samples*.
- **EXIT** Press this key to go back to the previous soft key set.

Following are detailed instructions for setting these parameters.

KEYS

If you press the **KEYS** soft key, follow these instructions:

1. The current setting (enabled ON or OFF) for the **SELECT** hard key is displayed. Press **YES** to enable the key or **NO** to disable the key, then press **ENTER** . . . The current setting for the **UNITS** hard key is displayed.

2. Repeat step 1 for **UNITS, PRINT, TARE, ZERO, AUTOTARE, and KEYPAD TARE** . . .

The display returns to the CONFIGURE-MENU3 display.

VALS

If you press the **VALS** soft key, follow these instructions.

1. The current setting (enabled ON or OFF) for the **GROSS** display value is displayed. Press **YES** to enable the active value or **NO** to disable this active display value, then press **ENTER** . .

The current setting for the **NET** active value is displayed.

2. Repeat step 1 for all the display values (NET, TARE, MIN., MAX., ROC, G-TOT, N-TOT, C-TOT, #-TOT, COUNT, VARIABLE, PCWT, and ADC. . .

The display returns to the CONFIGURE-MENU3 display.

DMODE

If you press the **DMODE** soft key, press **ENTER** to accept the display mode number shown or key in a new number (see *Appendix 1*) and press **ENTER**.

The display returns to the CONFIGURE-MENU3 display. Press the **EXIT** key to return to the CONFIGURE display.

CONFIGURE-MENU 4 Level

Press the **MENU4** soft key to access the CONFIGURE-MENU 4 soft key set:

- **FMTPT** Press this key and enter the serial port # you want each of 16 print formats to be printed through.
- **ANOUT** Press this key to select the Minimum, Maximum and Basis parameters used with the optional Analog Output card.

Minimum Value

The Minimum Value is the lowest value that will be represented by the Analog Output.

Maximum Value

The Maximum Value is the highest value that will be represented by the Analog Output.

Selection Basis

Selection basis is the active display value upon which the output of the analog output will be based.

Span Adjust

Allows you to adjust the highest value of the analog output.

Offset Adjust

Allows you to adjust the lowest value of the analog output.

When your changes are completed, secure and protect them by placing a jumper on P19!

$$\frac{\text{Cal Unit}}{\text{Custom Unit weight in Calibration Units}} = \frac{1}{8} = 0.125$$

- **ROC** ROC stands for Rate of Change. Press this key to set up your WI-130 Indicator to calculate Rate of Change for flow rate, or weight/time, applications.

ROC Samples

The number of samples over which the rate of change of weight is determined. The WI-130 converts weight from A to D at 60 times per second. If ROC Samples is set to 60, the WI-130 is determining the rate of weight change over one full second.

ROC Mult

The ROC Multiplier allows you to enter a conversion factor to translate weight to some other unit of measure, such as gallons or some other weight unit based upon the calibration unit of measure.

ROC Examples:

If pounds is your calibration unit, pick a sample value of 60 and a multiplier of 1. The display will show the rate of change in pounds/second.

For gallons of water/second set the sample value at 60 and the multiplier to 0.125. Water = 8 lbs/gallon (8 lbs is close enough for our example) so their are 0.125 gallons per pound. See formula to the left.

To get gallons/minute, do not change the sample size but rather multiply the 0.125 by 60 to get a value equal to gallons/pounds/minute (7.5). The display will then show you a rate of change in gallons per minute. (This is the flow over the last second not over a whole minute's time.)

- **MISC** Press this key to set excitation, default print format, date order, beeper volume, lower case enable (for pre-formatted text only), and decimal (.) display cycle enable.
- **EXIT** Press this key to go back to the previous soft key set.

Following are detailed instructions for setting these parameters.

FMTPT

The default print format 0 shows gross, tare and net weights. If you choose another print format (1-16) you need to define the format in SimPoser and download it to the WI-130.

If you press the **FMTPT** soft key, follow these instructions:

1. The current serial port number assigned to Format 1 is displayed. Press **ENTER** to accept this serial port or key in a new serial port number and press **ENTER**. . . The serial port assignment for Format 2 is displayed.
2. Repeat step 1 for up to 16 print formats and press the **ENTER** key. . . The display returns to the CONFIGURE-MENU4 display.

ANOUT (analog output)

Example:

4mA-20mA output

Minimum value = 0 lbs gross

weight = 4mA output.

Max value = 1000 lbs gross

weight = 20mA output.

Basis is set to 0, which is gross

weight.

Adjustments to the actual output of the analog output pcboard are only allowed through the front panel of controls of the WI-130 and are dependent on the actual weight on the scale. Therefore, in the example above, a 1000 lb weight must be placed on the scale to allow adjustment of maximum value.

Offset Adjust and Span Adjust may have values between ± 5000 counts.

If you press the **ANOUT** soft key, follow these instructions:

1. The display shows the current value used to represent the MIN (minimum) output from the analog output card. Press **ENTER** to accept the current value or key in a new value and press **ENTER**. . . The display shows the current MAX value.
2. Press **ENTER** to accept the current MAX value or key in a new value and press **ENTER**. . . The display shows the current selection upon which the output is based.
3. Press **ENTER** to accept the current basis or key in a new value from the table below and press **ENTER**. . . The display shows the highest adjustment value.

-1 = Disabled	3 = Min	7 = Net Total	11 = Variable
0 = Gross	4 = Max	8 = Count Total	12 = Piece Weight
1 = Net	5 = Rate of Change	9 = Trans. Total	
2 = Tare	6 = Gross Total	10 = Count	
4. Press **ENTER** to accept the current highest adjustment value or key in a new value (-5000 to +5000) and press **ENTER**. . . The display shows the current lowest offset adjustment value.
5. Press **ENTER** to accept the lowest current offset adjustment value or key in a new value (-5000 to +5000) and press **ENTER**. . . The display returns to the CONFIGURE-MENU4 display.

ROC

If you press the **ROC** soft key, follow these instructions:

1. The display shows the current value for SAMPLES. Press **ENTER** to accept the current value or key in a new one and press **ENTER**. . . The current multiplier value is displayed.
2. Press **ENTER** to accept the current value or key in a new one and press **ENTER**. . . The display returns to the CONFIGURE-MENU4 display.

MISC

If you press the **MISC** soft key, follow these instructions.

1. The display shows current setting for the AC excitation. Press **ENTER** to accept the current setting or key in a new setting from the table below and press **ENTER**. . .

AC Excitation

0 = DC	2 = 600 Hz
1 = 300 Hz	3 = 1200 Hz

The display shows the default print format.

2. Press **ENTER** to accept the current print format as the default for the **PRINT** key or key in a new format (0-16) and press **ENTER**. . .

The display shows the date preference format.

3. Press **ENTER** to accept the date format or key in a new one from table below and press **ENTER**. . .

The display shows the beeper volume setting.

Date Preference Format

0 = MMDDYY	1 = DDMMYY
------------	------------

4. Press **ENTER** to accept the current volume level or key in a new level (see table below) and press **ENTER**. . .

The display shows the current type style selection for screen text.

Beeper Volume

0 = OFF	2 = Medium
1 = Low	3 = High

5. Press **ENTER** to accept the current type style selection or key in a new style from the table below and press **ENTER**. . .

The decimal display cycle is shown.

Type Style

0 = no lowercase	1 = lowercase
------------------	---------------

6. Press **ENTER** to accept the current decimal display cycle setting or key in a new value from the table below and press **ENTER**. . .

The display returns to the CONFIGURE-MENU4 display.

Decimal Display Mode

0 = OFF	1 = ON
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Press **EXIT** twice to return to normal operation. If you changed the configuration you will be asked if you want to save changes. Press **YES** if you do. **NO**, if not.

The default print format 0 shows gross, tare and net weights. If you choose another print format (1-16) you need to define the format in SimPoser and download it to the WI-130.

When your changes are completed, secure and protect them by placing a jumper on P19!

If the decimal display is ON you can scroll through all the display modes (see Appendix 1) by pressing the decimal (.) hard key on the indicator. Only the text supplied by your BASIC application program will be displayed.

Calibrate level

You must key in the password within 5 seconds of accessing the password screen or the WI-130 returns to normal operation.

The default password for the Calibrate level is 30456.

1. Press and hold the **ESCAPE** key for 3-5 seconds. You will hear a 2nd beep and the display will change. Key in 30456 and press **ENTER**. . . the screen in Figure 7 is displayed.



Figure 7
Calibrate level display

Figure 8 is a flowchart showing what soft keys or choices appear as you press the soft keys shown in Figure 7.

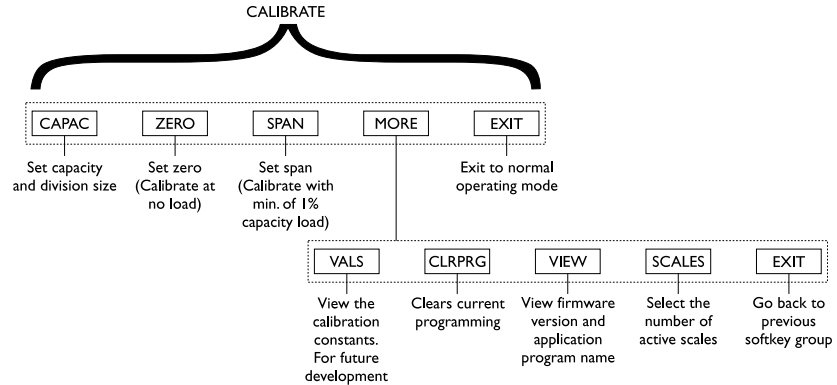


Figure 8
Soft key flowchart for Calibrate level

Press the **CAPAC** soft key to set the capacity and division size of the scale.

Press the **ZERO** soft key to set the zero reference (calibrate at no load).

Press the **SPAN** soft key to set the span (calibrate with load).

Press the **MORE** soft key to access the following soft key group:

- **VALS** Press this key to see the calibration constants. These numbers are for future development.
- **CLRPRG** Press this key to clear the BASIC program and the configuration of your WI-130. **DO THIS ONLY WHEN ABSOLUTELY NECESSARY.**
- **VIEW** Press this key to view the firmware version.
- **SCALES** Press this key to select the number of active scales.
- **EXIT** Press this key to go back to the previous soft key group.

Following are detailed instructions for setting or viewing the above parameters.

*In Legal for Trade applications the number of Active Scales **must** reflect the number of physical scales to be calibrated at the time the WI-130 is sealed.*

CAPAC (capacity)

If you press the **CAPAC** soft key, follow these instructions:

1. The display shows the current value for the capacity. Press **ENTER** to accept this value or key in a new capacity and press **ENTER**. . .
The current division size is displayed.
2. Press **ENTER** to accept the division size or key in a new one and press **ENTER**. . .
The display returns to the CALIBRATE display.

ZERO

If you press the **ZERO** soft key the display asks you to remove all weight from the scale then press **ENTER**. After the indicator has calibrated the zero point, 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 then returns to the CALIBRATE display.

SPAN

If you press the **SPAN** soft key, follow these instructions:

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. 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 CALIBRATE display.

You may use as little as 1% of full capacity to span the system but Weigh-Tronix recommends using as close to 100% of full capacity as possible.

The soft key group and functions accessed by the **MORE** soft key are explained on the previous page.

As you try to exit the calibration section the display will ask if you want any changes saved. Press the **YES** key if you want changes saved, **NO** if you do not.

This concludes the calibration section of the manual.