



MicroWeigh Tank/Floor Scale

WeighTech, Inc. Staff
Waldron, Arkansas
1-800-457-3720

April 24, 2013

Contents

1	Introduction	4
1.1	MicroWeigh Features	4
1.2	MicroWeigh Applications	4
2	Keypad Operation	4
3	Main menu items	5
3.1	“Power off”	5
3.2	“Washdown”	5
3.3	“Totals”	5
3.4	“Calibrate”	5
3.5	“Setup Menu”	5
3.6	“Audit cfg”	5
3.7	“Audit cal”	5
3.8	“Tare”	6
4	How to Step Through Menus	6
4.1	Menus can contain several different items	6
4.2	How to enter a number	6
4.3	How to select from a list	7
5	General Scale Operations	7
5.1	Scale On Procedure	7
5.2	Scale Off Procedure	8
5.3	Zero Procedure	8
5.4	Units Procedure	8
5.5	Tare Operation	8
6	Setup Procedure	8
7	Remote display	9
8	Calibration Procedure	9
8.1	Entering the calibration menu	9
8.2	Keying in cal weight	9
8.3	Calibration Example	10
8.4	Establishing a zero	10
8.5	Accepting a cal weight	10
9	Scale Parameters	10
9.1	“Units”	10
9.2	“Capacity”	10
9.3	“Resltn”	11
9.4	“Stability”	11
9.5	“Motion sns”	11

9.6	“Prefilter”	11
9.7	“AZT”	11
9.8	“AZT band”	11
9.9	“Calibrate”	11
9.10	“IZ set”	11
9.11	“lb units”	12
9.12	“kg units”	12
9.13	“g units”	12
9.14	“oz units”	12
9.15	“Defaults”	12
10	Menus	12
10.1	Main Level	12
10.2	Setup Menu	12
10.3	Total Menu	13
10.4	Parameters	13
10.5	Info Menu	14
11	Troubleshooting	14
11.1	Load cells	14
11.2	Before calling WeighTech...	15
12	Replacement Parts	15
13	Wiring Diagram	16
14	Load Cell Color Codes	17

1 Introduction

With the WeighTech MicroWeigh a combination of state-of-the-art technology with common down-to-earth basics creates a digital indicator that makes troubleshooting and actual maintenance repair so simple that anyone can be trained to make repairs on this indicator in just minutes.

1.1 MicroWeigh Features

- High impact ABS alloy construction.
- Highly visible, easy-to-read display with adjustable contrast and backlight.
- Environmentally sealed touch-sensitive operator control panel.
- Standard units of measure include grams, kilograms, ounces, and pounds.
- RS-232 and Infrared communications are standard with RS-485 option available.
- Wireless data collection using a PDA with WeighTech data-sync software.

1.2 MicroWeigh Applications

- Standard weighing
- Tank or vat weighing
- Checkweighing (boxes, bags, and pieces)
- Bench and floor scales
- Batch weighing

2 Keypad Operation

The WeighTech MicroWeigh keypad is a watertight sealed touch sensitive sensor. The keys are actually sensitive to contact area, not force. Press lightly with the ball of your fingertip as though you were giving fingerprints. Best results come from using the ball of your finger, not the very tip. Most objects will not trigger the keypad—knives, screwdrivers, tools, etc. do not have enough surface area in contact with the key to register as a keypress. (You might get it to trigger with a medium sized conductive bolt head, if you have skin in contact with the bolt.)

One consequence of the design of the touch sensitive keypad is that it is sensitive to water streams. For this reason, WeighTech includes a unique “washdown mode” to prevent unwanted keypad activity during washdown/sanitation/cleanup intervals. When the indicator is in washdown mode, the indicator will weigh normally but the keypad is locked out.

To unlock the keypad, you must play follow the leader. One key will be lit. Press it. Another key will then light up. Press it. Continue until the indicator displays “Exit

washdown”. The indicator will require that you press five keys in a row correctly before it will unlock the keypad. Any wrong keypress will restart the counter back to five. The odds are extremely slight that random water splashing would ever be able to trigger the correct keys in the correct order to unlock the keypad.

3 Main menu items

3.1 “Power off”

Touch the enter key to select this menu item, which will power down the indicator. If the auto-on jumper is installed on the interface board, the indicator will immediately turn back on.

3.2 “Washdown”

This function puts the indicator in washdown mode to prevent inadvertent keypad activity. See the washdown section of this manual for more information.

3.3 “Totals”

This function leads to the totals submenu.

3.4 “Calibrate”

This function allows you to calibrate the scale. Refer to the calibration section of this manual for details.

3.5 “Setup Menu”

Enter the setup submenu, where scale parameters can be viewed or set.

3.6 “Audit cfg”

Displays the audit counter for configuration. Every time a sealed scale parameter is modified this counter will increment by one. This setting is non-volatile (it will be retained even if the batteries go dead) and cannot be altered except by modifying an audited configuration parameter.

3.7 “Audit cal”

Displays the audit counter for calibration. Every time the scale is calibrated this counter will increment by one. This setting is non-volatile (it will be retained even if the batteries go dead) and cannot be altered except by performing a calibration.

3.8 “Tare”

Keypad entered tare: Touch the Enter key to set a new pushbutton tare by scrolling through digits one place at a time. Keypad tare values are entered in the current units, and are limited to be greater than gross zero weight and less than the indicator capacity. Entering a tare of zero will clear any existing tare from indicator.

4 How to Step Through Menu

From the main weight display, press the “Menu/Help” key. You are now in a menu, and the keys now have different functions:

Cancel Help Enter Down Up

- “Cancel” will back you out of the menu one level at a time.
- “Help” will display information about the current choice (option).
- “Enter” has various functions, depending on where you are in the menu.
- The “Down” key will scroll backward through the menu choices.
- The “Up” key will scroll forward through the menu choices.

4.1 Menus can contain several different items

An item with a “*” on the right end will do something when you press the enter key—something might be turn the indicator off, drill down into another menu, clear totals, or start a calibration routine. The item with a numeric value (scale capacity, for instance) at the right side of the display might allow you to change the number by pressing the enter key. An item with text (such as “on” or “off”) at the right side of the display might allow you to select from a list of options by pressing the enter key. Some items are just for reference and cannot be changed at all. Examples of reference items would be the software name and revision—these are set when the software is written and cannot be changed.

4.2 How to enter a number

Using the calibration routine as an example: Press the “Enter” key. The indicator display will show “Cal weight _” and the cursor will be blinking. The blinking cursor is the clue that you can enter an arbitrary number using the up, down, right, and enter keys. Pressing the up/down keys will scroll through the list (0 1 2 3 4 5 6 7 8 9 - .) in turn. When the desired number appears, press the right arrow (menu/help) key. The blinking cursor will advance one digit to the right, leaving your selected number in place. Continue this sequence until the desired numeric value is visible on the display. Press the “Enter” key to accept the value, or the “Cancel” key to abort.

Example: Enter a calibration weight of 25 pounds

- Start with the indicator at a normal weight display (“0.00 lb”)

- Press the “Menu/Help” key
- Scroll through the main menu using the up or down arrow keys until “Calibrate **” is displayed on the indicator
- Press the “Enter” key to start the calibration routine
- The indicator may display “Password” if a calibration password is required. If so, enter it (default calibration password is “Zero” “Zero” “Zero”)
- The indicator should now be displaying “Cal Weight” and a blinking cursor.
- Press the up arrow key. The display should now show “Cal weight 1”
- Press the up arrow key again. The display should now show “Cal Weight 2”
- Press the right arrow key to accept the first digit (2) and advance the blinking cursor to the next digit. The indicator should display “Cal weight 2_”
- Press the up arrow key five times to select a 5 as the second digit. The indicator should now display “Cal weight 25”
- Press the “Enter” key to accept 25 pounds as a calibration weight.
- The indicator will display “Cal-zero weight”. Press the “Cancel” key to abort the calibration process.

4.3 How to select from a list

This is very much like stepping through a menu. Some settings (such as displayed resolution) must be limited to one of several predetermined values. To edit one of these settings, press the “Enter” key. The currently selected value will move from the far right of the display to the left. This indicates that you may use the up and down arrow keys to scroll through a list of possible values for this setting. Once you’ve selected a value for the setting, press the “Enter” key to complete the selection process. As always, pressing the “Cancel” key will cancel the selection and restore the setting to the previous value.

5 General Scale Operations

5.1 Scale On Procedure

Touch the “Zero / On” key. Indicator will come on and display will read “MicroWeigh by WeighTech” and then continue to the weigh mode. At this point the scale is ready for product or operator input.

5.2 Scale Off Procedure

To turn the scale off touch the “Menu / Help” key. The indicator will display “Power off *”. At this point touch the “Print / Enter” key and scale display will go blank, and the indicator will be off. (If the auto-on jumper is installed on the interface board, the indicator will immediately power up.)

5.3 Zero Procedure

To zero the indicator touch the “Zero / On” key and the indicator will take a new zero. If the current weight reading is unstable, under capacity, or over capacity, no new pushbutton zero will be established.

5.4 Units Procedure

To change the units of measure touch the “Units / Cancel” key. The units will change between pounds, kilograms, grams and ounces (assuming all the units are enabled in the “Parameter” menu) each time that the key is touched.

5.5 Tare Operation

Press and hold the tare button to establish a pushbutton tare reference. If a valid tare is established, the indicator will switch to the net weight display. If the gross weight is equal to or less than gross zero, any existing tare value will be cleared, the display will show “Tare cleared” for about one second, and the display will revert to gross weight display.

Toggle between net and gross display modes by touching the “Tare” button. If no tare reference has been established, the indicator will not switch to net weight mode.

An arbitrary tare weight can be entered from the tare setting in the main menu (keypad tare). Scroll and select digits one at a time to enter the desired value. The indicator will not accept a keypad tare value in excess of scale capacity, or less than zero. Entering a value of zero will clear any existing tare and return the indicator to the gross weight display mode. Units for the entered weight is the same as the currently displayed units. (To enter a six pound tare, be sure that the display is showing weight in pounds before entering the keypad tare.)

6 Setup Procedure

Once load cells and indicator are wired, power up indicator and set capacity and resolution. Typical values for capacity with a floor scale or tank scale would be 1000, 2500, or 5000 pounds. Recommended resolution is either 1 or 2 pounds. Display rate setting of 1 may be too fast for a big scale: try 2 or 4 to slow down the display.

Check load cell level and platform rocking: Go into the “Setup Menu”, select “Parameters”, then select “Level Display”. The indicator will prompt for “gain”—1000 is a good starting value. (Adjust gain as needed—a larger gain will make the level display less sensitive, and a smaller number will make it more sensitive.) The indicator

will then display a live reading of each load cell output. In a perfect world, all four load cells would show the same reading with no weight on the platform. If the platform isn't level, some load cells will read higher or lower than the others. In extreme cases, a rocking platform will force two load cells to read about the same, one much higher, and one much lower. Adjust the feet on each load cell to level the platform. If the load cells are well balanced, the displayed readings should be about equal on all four load cells. You can also use this display function to check that each load cell is wired properly—if any of the four readings appears to be stuck or fluctuates wildly, check the load cell wiring.

Balance the load cells: Go to “Setup Menu”, “Parameters”, “Balance”. Follow the prompts. The indicator will ask you to first remove all test weights from the load platform. Do so and touch the enter button. (Indicator displays “zeroing....”) Next, the indicator will prompt “Weight a corner”. Place a good sized pile of test weights on one corner, as close to the load cell as possible. Touch the “enter” button. (Indicator displays “Balancing...”, then “Cells: ” with an asterisk for each cell that has been correctly balanced so far.) Move the same pile of test weights to another corner and repeat for each load cell. Once the indicator has seen a test weight on each load cell, it will display “Compensating...”. The indicator is now ready for calibration.

Calibrate scale: Go to “Setup Menu”, “Parameters”, “Calibrate”. The calibration procedure is the same as for ordinary MicroWeigh scale software.

7 Remote display

An indicator can be used as a remote display. Connect the two indicators with the RS-485 port and set the “Setup menu” / “Info menu” / “RS-232” setting to “WT mstr” on the master indicator, and “WT rmt” on the remote indicator. Power cycle both indicators. The current weight reading from the master should now be visible on the remote.

8 Calibration Procedure

8.1 Entering the calibration menu

With the indicator on and displaying weight, touch the “Menu / Help” key. The display will read “Power off *”. Use the up / down arrows until the display reads “Calibrate *”. Touch the “Print / Enter” key and the display should then show “Password”. At this point key in the calibration password. (The default calibration password is “Zero” “Zero” .)

8.2 Keying in cal weight

The display will show “Cal weight _” and the cursor will be blinking. Using the up, down, and right keys to enter the size of your calibration weight in pounds (i.e. 1, 2, 5, or 10). Press “Enter” to accept the cal weight, or “Cancel” if you make a mistake.

8.3 Calibration Example

(Entering a 25.00 lb cal weight value.) The blinking cursor is the clue that you can enter an arbitrary number using the up and down keys. Pressing the up/down keys will scroll through the list (0 1 2 3 4 5 6 7 8 9 - .) in turn. When the desired number appears (2), press the right arrow “Menu / Help” key. The blinking cursor will advance one digit to the right (2 _), leaving your selected number in place. Continue this sequence until the desired numeric value is visible on the display (25_) (25._) (25.0_) (25.00). Press the “Enter” key to accept the value, or the “Cancel” key to abort.

8.4 Establishing a zero

The indicator will display “Cal-zero weight”. Clear the weighing platform of any foreign objects and once all vibration has died out, press the “Enter” key. Make sure that the platform is not disturbed during this process. Indicator will display “Zeroing...” as it takes an average reading of the zero offset weight (about three seconds).

8.5 Accepting a cal weight

The indicator will then display “Cal-add weight”. Add weight to the weighing platform (the weight should be the same amount as the keyed in cal weight) then touch the “Enter” key. The indicator will display “Scaling...” for about three seconds as it performs internal calculations. Finally, the indicator will display “Cal done” for about one second once the calibration cycle is complete.

9 Scale Parameters

To get to the parameters touch the “Menu/Help” key (indicator will display “Power off *”). Use the up or down arrows until the indicator displays “Setup Menu”. Touch the “Print/Enter” key and the indicator will prompt for a password. The password for this step will be as follows: starting from the left side of the keypad touch each key in turn from left to right. After entering the password the indicator will display “Parameters *”. At this point touch the “Print/Enter” key to access the parameters. Use the up and down arrows to scroll through and view each parameter.

9.1 “Units”

This parameter controls the setup unit of the indicator. Select from pounds (lb), kilograms (kg), grams (g), and ounces (oz). Once set, the indicator capacity, resolution, and calibration weights will be entered in this unit. The units parameter is both sealed and audited.

9.2 “Capacity”

Capacity sets the maximum capacity of the indicator, in setup units. This parameter is both sealed and audited. Factory default is 0, which must be changed before the

indicator will weigh.

9.3 “Resltn”

Parameter that sets the resolution of the indicator. Resolution is limited to values available on the scroll list. Resolution is set in terms of the setup units. This parameter is both sealed and audited.

9.4 “Stability”

This parameter controls how many consecutive weight readings are required to be within the motion sense band before the weight indication is considered to be stable. The indicator reads the analog input 7.5 Hz (7.5 times per second), so the default setting of four requires about a half second of stable weight. Either the net or gross light will come on when the weight is stable. This parameter is both sealed and audited.

9.5 “Motion sns”

Amount of motion, in divisions, allowed before the weight is considered unstable. Default is one division. This parameter is both sealed and audited.

9.6 “Prefilter”

Length of the prefilter buffer. Larger numbers provide slower and cleaner weight readings. Default is 2. This parameter is both sealed and audited. Range?

9.7 “AZT”

Auto zero tracking on/off. This parameter is neither sealed nor audited. When on, stable weights within the “AZT band” of zero will automatically rezero the scale.

9.8 “AZT band”

Amount of weight, in divisions, that can be automatically zeroed out at one time. Default is 1 division. Parameter is sealed and audited.

9.9 “Calibrate”

This function starts the indicator calibration routine. It is sealed and audited. Refer to the calibration section of this manual for details.

9.10 “IZ set”

When this parameter is on, the indicator will attempt to establish a new initial zero every time the indicator powers on. HB44 limits the amount of weight that can be initially zeroed to 20% of scale capacity. (This initial zero does not reduce the indicator capacity.) This parameter is both sealed and audited.

9.11 “lb units”

Select on/off to enable or disable the pounds (lb) units when the Unit key is pressed in weighing mode. This parameter is both sealed and audited.

9.12 “kg units”

Select on/off to enable or disable the kilograms (kg) units when the Unit key is pressed in weighing mode. This parameter is both sealed and audited.

9.13 “g units”

Select on/off to enable or disable the grams (g) units when the Unit key is pressed in weighing mode. This parameter is both sealed and audited.

9.14 “oz units”

Select on/off to enable or disable the ounces (oz) units when the Unit key is pressed in weighing mode. This parameter is both sealed and audited.

9.15 “Defaults”

Restore all configuration parameters to factory default. This function is sealed and audited. Restoring factory defaults will require that the indicator be calibrated and reconfigured before it will weigh.

10 Menus

10.1 Main Level

<i>Power off</i>	Turn off the indicator
<i>Washdown</i>	Disable keypad to prevent false keypresses during washdown
<i>Totals</i>	Display total weight, batch count, and average batch weight
<i>Calibrate</i>	Enter quick calibration routine
<i>Setup menu</i>	Bunch of stuff...see below
<i>Audit cfg</i>	Number of times an audited config parameter has been changed (HB44)
<i>Audit cal</i>	Number of times indicator has been calibrated (HB44)
<i>Tare</i>	Current tare weight

10.2 Setup Menu

<i>Parameters</i>	Scale settings
<i>Weighment</i>	Weighment target and database control
<i>Info menu</i>	Troubleshooting features
<i>Clock</i>	Set time/date
<i>Contrast</i>	Control display intensity

10.3 Total Menu

<i>Count</i>	Total number weighments
<i>Grs</i>	Total gross weight
<i>Net</i>	Total net weight
<i>Tare</i>	Total tare weight
<i>Clear totals</i>	Clear totals—you will be asked to confirm by pressing “Enter” a second time

10.4 Parameters

<i>Setup units</i>	Setup units: used for entering capacity and resolution (defaults to pounds)
<i>Capacity</i>	Scale capacity, in setup units
<i>Resltn</i>	Scale resolution, in setup units
<i>Stability</i>	Number of consecutive readings required for stability
<i>Motion sns</i>	Number of divisions allowed before weight is considered unstable
<i>Anti-jitter</i>	Turn on to reduce display hunting
<i>Disp rate</i>	Control number of updates: larger numbers are slower (recommend 2 to 4 for floor scales)
<i>Filter</i>	Std/Super: Select which weighing filter is used. Default to std
<i>Filter fact</i>	Weighing filter speed: range of 0-0.9. Larger numbers make the filter slower, but weights are more stable
<i>Prefilter</i>	Super filter adjustment—bigger numbers make the filter slower
<i>AZT</i>	On/Off: Autozero tracking on/off, only affects weights near zero
<i>AZT band</i>	Amount of weight (in divisions) that can be zero tracked out
<i>Cells</i>	Number of load cells connected to indicator (1-4)
<i>Balance</i>	Start digital autobalance routine to compensate load cells
<i>Calibrate</i>	Start calibration routine
<i>Level display</i>	Display raw load cell output to check for rocking and leveling
<i>IZ set</i>	Set initial zero at power up (default to off)
<i>lb units</i>	On/Off: Enables the units toggle key to include pound units
<i>kg units</i>	On/Off: Enables the units toggle key to include kilogram units
<i>g units</i>	On/Off: Enables the units toggle key to include gram units
<i>oz units</i>	On/Off: Enables the units toggle key to include ounce units
<i>Remote 1</i>	Zero/Tare/Units/Print/None: Remote input function select (quick press)
<i>Remote 2</i>	Zero/Tare/Units/Print/None: Remote input function select (long press)
<i>Address</i>	Scale communications address/ID number
<i>Cntst</i>	If enabled, the three key quick contrast adjustment is active
<i>Defaults</i>	Restore scale to factory default settings (all settings will be lost!)

10.5 Info Menu

<i>ADC 1</i>	Raw counts display from analog to digital converter on input 1
<i>ADC 2</i>	Raw counts display from analog to digital converter on input 2
<i>ADC 3</i>	Raw counts display from analog to digital converter on input 3
<i>ADC 4</i>	Raw counts display from analog to digital converter on input 4
<i>Offset</i>	Calibration zero offset, in raw counts
<i>App</i>	Name of firmware app (<i>quad_1</i>)
<i>Build</i>	Software revision info (<i>Build 52</i>)
<i>Date</i>	Date firmware was compiled (<i>04/24/2013</i>)
<i>Time</i>	Time of firmware compilation (<i>11:11:12</i>)
<i>Batt</i>	Current power supply/battery input voltage, in V
<i>S1+</i>	Load cell #1 positive signal voltage (should be about half of excite voltage with good load cell)
<i>S1—</i>	Load cell #1 negative signal voltage (should be almost exactly the same as S1+ voltage)
<i>S2+</i>	Load cell #2 positive signal voltage (should be about half of excite voltage with good load cell)
<i>S2—</i>	Load cell #2 negative signal voltage (should be almost exactly the same as S2+ voltage)
<i>S3+</i>	Load cell #3 positive signal voltage (should be about half of excite voltage with good load cell)
<i>S3—</i>	Load cell #3 negative signal voltage (should be almost exactly the same as S3+ voltage)
<i>S4+</i>	Load cell #4 positive signal voltage (should be about half of excite voltage with good load cell)
<i>S4—</i>	Load cell #4 negative signal voltage (should be almost exactly the same as S4+ voltage)
<i>Excite</i>	Load cell excitation voltage (should be about 4.5V)
<i>Debug msg</i>	On/Off: Turn this parameter on for more extensive messages during boot and dump cycle
<i>Off timer</i>	Minutes to automatic shutoff, set to 0 to disable auto-off
<i>Remote dsp</i>	Toggle remote display serial output (RS-232) on/off
<i>Bootload</i>	WeighTech use only

11 Troubleshooting

11.1 Load cells

Go to the “Info menu” and verify that the “Excite” voltage is about 4.5V. A reading of less than 1V probably indicates a short from excite to ground. Confirm by removing the load cell connections. If the excite voltage reads normal with the load cell disconnected, you’ve got a short in the cable or a bad load cell.

Check to see that the signal voltage in the “Info menu” are about half of excite and equal. If one signal voltage is near zero, or near 4V, you may have a disconnected signal wire. Check that connection at the interface board. If the signal voltages are not near

zero or 4V, but are more than a 0.5V different, you may have the load cell miswired, or a bent load cell.

If the indicator constantly shows “OVERLOAD” or “UNDERLOAD”, follow the instructions above. In addition, go to the “Info menu” and watch the “ADC” reading (raw counts). It shouldn’t vary more than 100-300 counts with a good load cell and a stable environment. With no load on the cell, it should be within +/- 10,000 counts of zero. (Deadload can cause the no load reading to shift.) If the no load reading is really large (say, greater than one million counts or less than negative one million counts) and the connections are solid, you probably have a bent load cell.

Unstable or noisy weights? Perform all the steps listed above. A really good test is to temporarily disconnect the load cell and substitute a known good load cell simulator (available for purchase from WeighTech), or a known good load cell. Calibrate the scale with a convenient test weight and check to see if the weight reading is stable. If so, the noisy load cell has probably been damaged or water-soaked. If the indicator still displays a noisy weight with a load cell simulator, the problem may be in the indicator. Contact WeighTech for further assistance.

11.2 Before calling WeighTech...

Write down a few key pieces of information. Gather the indicator serial number from the front panel, the software application name and build number from the “Info menu”, and grab the current settings if you have access to a Palm. If anything on the indicator has changed, been replaced, or been modified, mention that to the service technician too. If the problem involves fill rates, hangs, or questions regarding machine capabilities, be ready to describe the product, product flow rate, and any bag/box/tote/combo sizes. If you’re calling about unstable weight readings, over/underload, or other load cell related problems, have the ADC, excite, and signal readings from the “Info menu” handy. When calling, be prepared to describe what is wrong (“it doesn’t work!” isn’t a good description—“hopper gate doesn’t shut in off mode” is much better) and what you expected to see.

12 Replacement Parts

Part Number	Description
1000-29	Load cell, 2.5 k weigh bar assembly
EF0009	Strain relief, MicroWeigh
EP0004	Detachable load cell connector, MicroWeigh interface board
HW0018	MicroWeigh housing screw (pack of 4)
HW0019	Screw, 6-19 x 0.375, trilobe PPH, MicroWeigh (pack of 10)
WE0028	Main gasket, MicroWeigh
WE0029-1	Power cord, detachable, MicroWeigh
WE0031	Front housing assembly, MicroWeigh (specify firmware name and revision)
WE0032-1	Back housing, w/o interface board
WE0081-101	Interface board, quad input



JOB: QUAD SCALE

PLANT:

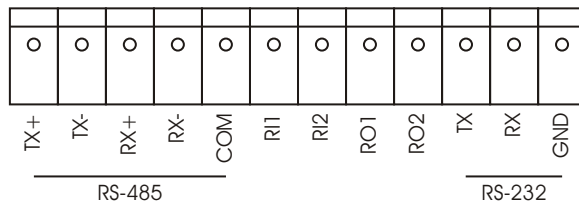
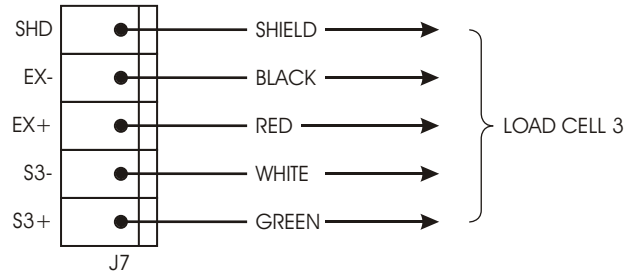
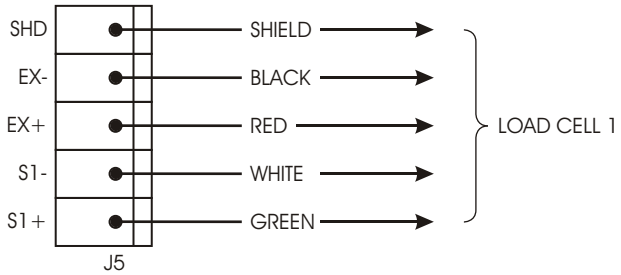
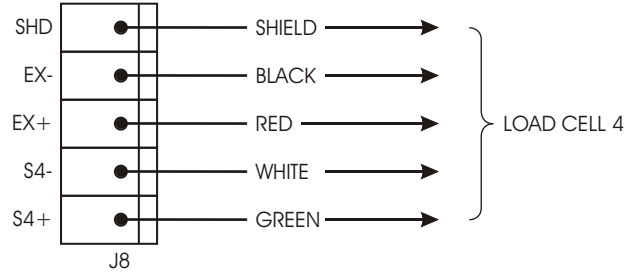
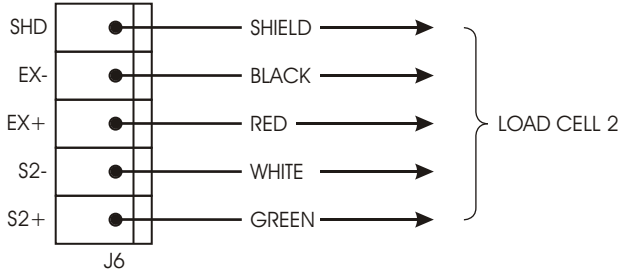
LOCATION:

PAGE: 1 OF 1

DRAWN BY: NEWELL

DATE: 9-2-2011

FIRMWARE: QUAD_1



14 Load Cell Color Codes

Manufacturer	Models	Signal +	Signal -	Excite +	Excite -	Shield	Sense +	Sense -
Advanced Transducers		Green	White	Red	Black	Bare wire		
Allegany Technology		Red	White	Green	Black	Bare wire		
Artech		Green	White	Red	Black			
Beowulf		White	Red	Green	Black			
BLH	C2P1 C3P1 T2P1 T3P1	White	Red	Green	Black	Yellow		
Cardinal		White	Red	Green	Black	Bare wire		
Celtron	CSB DSR LOC SQB STC STC-SS DSR CLB HED DLB LPS HOC MOC	Green Green Red	White White White	Red Red Green	Black Blue Black	Bare wire Bare wire Bare wire		
Dillon	Canister Tension Compression Z-cell	Black Black White	Red Red Green	Green White Red	White Green Black	Orange Orange Orange		
Force Measurement		Green	White	Red	Black	Bare wire		
GSE		White	Green	Red	Black	Bare wire		
HBM	BLC BLF JRT PWS RSC SBF SB3 USB U1T Z6 BBS PLC B35 SP4	White White Green White	Red Red White Red	Green Green Red Green	Black Black Black Black	Yellow Bare Yellow Yellow	Orange	Blue
Interface	SSM 1200 3200	Green	White	Red	Black	Bare wire		
Kubota		Green	Blue	Red	White	Yellow		
National		White	Red	Green	Black	Yellow		
NCI		White	Green	Red	Black	Bare wire		
Pennsylvania		Green	White	Orange	Blue	Bare wire		
Phillips		Green	Grey	Red	Blue	Bare wire		
Revere Transducer	62HU 63HU 363 953 9523 92CC 93CC 42U 43U 263D 462 5102 5103 5123 5223 5723 6762 9102 9103 9123 9363 392B 642 652 692B2 BSP HPS USP1 792 933 SHB SSB CP1 CSP1	Green Green	White White	Red Red	Black Black	Bare wire Orange		
Rice Lake	RL20000 RL20000SS RL20001 RL20001HE RL30000 RL35023 RL35023S RL35082 RL35082S RL35083 RL39123 RL39523 RL50210 RL65044 RL70000 RL75016 RL75016SS RL75040A RL75058 RL75060 RL75223 RL90000 RLETB RLETS RLHSS RLMK4 RL50500 RL70000SS RL71000HE RL75016HE RLMK15 RLMK21 RL75061 RLMK1 RL1521	Green Green	White White	Red Red	Black Blue	Bare wire Bare wire	Yellow	Blue
Sensotec	White	Green	Red	Black	Bare wire			
Sensortronics	60001 60008 60018 60030 60036 60040 60048 60048SS 60050 60051 60060 60060-0101 60063 65007 65016 65016SS 65016W 65023 65023S 65023SS 65024 65040A 65040S 65058 65058S 65061A 65083 65083S 65114 60007 60064 65088-1000 65088-1114	Green White White	White Red Red	Red Green Green	Black Black Black	Bare wire Orange		
Tedea Huntleigh	4158 3411 3421 240 1010 1022 1040 1042 1140 1250 1260 1320 9010 605 1030 1240 1241 355 620 3510	Green Green Red	White White White	Red Red Green	Black Black Black	Bare wire Bare wire Bare wire	Blue Blue	Brown Brown
Toledo		White	Red	Blue	Black	Bare wire	Green	Grey
Weigh-Tronics		White	Red	Green	Black	White/Orange		

WeighTech, Inc.
1649 Country Elite Avenue
Waldron, AR 72958

Toll free: (800)-457-3720
Phone: (479)-637-4182
Fax: (479)-637-4183

Email: info@weighttechinc.com
Web: www.weighttechinc.com