

LD820™ INDICATOR



User Manual

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COMPLETE YOUR WARRANTY
& WIN



Fill out your product's warranty form to be entered for a chance to win in our quarterly giveaway.



NOTIFICATIONS

SAFETY SUMMARY

The following general safety precautions must be observed during all phases of operation, service, and repair. Failure to comply with these precautions, or with specific warnings elsewhere in this manual, violates safety standards of design, manufacture, and intended use. Intercomp assumes no liability for the customer's failure to comply with these requirements.



WARNING Due to the danger of introducing hazards, do not substitute parts or perform any unauthorized modifications.

NOTICE

All rights reserved. The information contained in this publication is derived in part from proprietary and patent data of the Intercomp Corporation. This information has been prepared for the express purpose of assisting operating and maintenance personnel in the efficient use of the instrument described herein. Publication of this information does not convey any rights to use or reproduce it or to use it for any purpose other than in connection with the installation, operation, and maintenance of the equipment described herein. Intercomp Corporation assumes no responsibility for damages resulting from the use of the information contained herein.

WARRANTY

INTERCOMP CORPORATION (hereafter called "the company") warrants the products which this document accompanies to be free of defects in materials and workmanship, and to operate according to design specifications for a period of one (1) year after receipt by the original purchaser. After authorized return to the company at the purchaser's expense, the company shall evaluate any returned equipment under warranty claim and shall make such repairs or replacements as may be judged necessary, in as expeditious a manner as possible.

IN THE EVENT that the company determines the claim to be made as a result of improper use, abuse, modification, shipping damage, or other factors beyond the reasonable control of the company, the company will advise the purchaser of the estimated repair costs. The company makes no warranty other than that contained in this statement. No agent other than an executive officer of Intercomp Corporation is empowered to modify in any manner this statement of warranty.

SPECIFICATIONS

ELECTRICAL

| FUNCTION | SPECIFICATION |
|------------------------|--|
| Voltage | 7 - 16 Vdc |
| Power Surge Protection | Protected against 100 V automotive load dump 12/24 V jump start, and reverse polarity. |

ENVIRONMENTAL

| FUNCTION | SPECIFICATION |
|---------------------|--|
| Humidity | 10 to 95% non-condensing |
| Ambient Temperature | Storage: -40 °F to +167 °F / -40 °C to +75 °C Operating: -22 °F to +140 °F / -30 °C to +60 °C |

RADIO

| FUNCTION | SPECIFICATION |
|----------------------|---|
| Radio Frequency | ISM 2.4 GHz, 802.15.4 DSSS*, Bluetooth® |
| License Requirements | None. Pre-approved US/FCC, CAN/IC, EUR/CE |
| Range | 200 ft / 60 m indoor, 300 ft / 90 m line of sight |
| Bluetooth Range | 100 ft / 30 m typical, depending on mobile device |

* Radio Notes: Frequency: ISM 2.4 GHz (2.400 GHz - 2.483 GHz), with 12 channels (CH 1-12) within that range with each center frequency = 2405 MHz + (CH * 5) MHz Power output 63 mW (18dBm), 10mW (10dBm) for international variant. Antenna is internal surface mount with - 1.5dbi gain, omni-directional.



WARNING FCC Radio Frequency (RF) exposure requirements for mobile transmitting devices dictate that a separation distance of 20 cm or more should be maintained between the antenna of this device and persons during device operation. To ensure compliance, operations at closer than this distance is not recommended. The antenna used for this transmitter must not be co-located in conjunction with any other antenna or transmitter.

PHYSICAL

| FUNCTION | | SPECIFICATION |
|-------------|----------------------------|---|
| Dimensions | | 11 in x 7.7 in x 4.4 in / 279 mm x 196 mm x 112 mm |
| Alarms | PREACT Weight: | An audio beeper and blinking red LED, centered above the LCD screen, alert when the operation approaches the PREACT weight setting, when in LOAD or UNLOAD mode. The beep and blink rate increase as the load/unload weight approaches the PREACT weight or percentage of weight. |
| Connections | RS232: | Quantity 3 Multiple formats including Scoreboard Output, Feed Management Interface, and Transmission Gear Output. RS232/COM connectors provide power for up to TWO (2) RD800 remote displays |
| | Relay Outputs: | Quantity 2 Max current output 15 A (combined) |
| | Digital Inputs: | Quantity 2 |
| | Digital Outputs: | Quantity 2 |
| | Load Cell Inputs: | 1 - 5 depending on panel, all load cell inputs summed together |
| | Load Cell Maximum Load: | TWENTY-FOUR (24) 350-ohm load cells |

INDICATOR DISPLAY



DISPLAY SCREEN

6 Digit, 2 in / 51 mm Alpha-Numeric LCD Display

PUSH BUTTONS

| | | | | | | | |
|--|-------------------|--|-----------------|--|-------------------|--|---------------|
| | ON / OFF | | HOLD / UP ARROW | | BIN / RIGHT ARROW | | STORE / ENTER |
| | ZERO | | MENU / SETUP | | RM | | LOAD |
| | TARE / LEFT ARROW | | M+ / DOWN ARROW | | NUMERIC KEYPAD | | UNLOAD |
| | GROSS / NET | | PRINT / EXPORT | | CLEAR | | START / STOP |

PUSH BUTTON DESCRIPTIONS

| PUSH BUTTON | FUNCTION | DESCRIPTION |
|---|--------------------------|--|
|  | ON / OFF | Press the ON/OFF Button (Red Button with Power Symbol) to turn the indicator ON or OFF. The firmware version is displayed when powering OFF. When in the Mode or Calibration Menu, press to exit the menu without saving the current setting. |
|  | ZERO | Press and hold the ZERO Button to zero the scale when there is no load. NOTE: The ZERO Button will not function while in Bin Weight Viewing Mode. |
|  | TARE / LEFT ARROW | Press the TARE/LEFT ARROW Button to set the displayed weight as the TARE weight. When accessing a Bin, press the TARE Button to zero the Bin. Press both the TARE Button and the CLEAR Button to clear a saved TARE weight and return to GROSS weight. |
|  | GROSS / NET | Press the GROSS/NET Button to toggle between Gross and Net weight. The top of the display will show GROSS or NET. Press the GROSS/NET Button while in Bin Mode to display the Gross/Net weight. |
|  | HOLD / UP ARROW | Press the HOLD/UP ARROW Button to lock the current weight. When operating in Hold Mode, HOLD is displayed on the upper-right corner of the screen. Press the HOLD Button again to return to normal weighing Mode. DO NOT add or remove weight while in Hold Mode. If weight is added or removed while in Hold Mode, the weight difference will not be recorded. NOTE: The HOLD feature is disabled by default. To enable the HOLD feature, access the Mode Menu and change "Hold.E" from NO to YES or enter the code 1070. |
|  | MENU / SETUP | Press the MENU/SETUP Button to access the menus and cycle through menu options. Press the MENU/SETUP Button to exit the menu. |
|  | M+ / DOWN ARROW | Press the M+/DOWN ARROW Button to cycle through HIGH, MED, LOW, OFF to change the brightness of the backlight. Default is HIGH. Indicator will power ON with the last brightness setting selected. |
|  | PRINT / EXPORT | Reserved for future use. |

| PUSH BUTTON | FUNCTION | DESCRIPTION |
|---|---|---|
|  | <p>BIN / RIGHT ARROW</p> | <p>Press the BIN/RIGHT ARROW Button to cycle through BIN numbers. The screen will display the BIN number selected or the GROSS/NET weight.</p> <p>Use the BIN Button to set a preset bin weight for up to ten (10) individual bins or seed boxes. When operating in Bin Mode, only the selected bin and TOTAL GROSS weight values will change. The other stored bin weight values will not change.</p> <p>NOTE: The ZERO Button will not function while in Bin Weight Viewing Mode.</p> |
|  | <p>RM</p> | <p>Press the RM Button to:</p> <ul style="list-style-type: none"> • Start a Split Unload, if Split on Load is set to NO • Start a Load, if Split on Load is set to YES |
|  | <p>NUMERIC KEYPAD</p> | <p>Press the keypad buttons to enter numeric inputs into the system when accessing the Mode Menu and Calibration Menu.</p> |
|  | <p>CLEAR</p> | <p>Press the CLEAR Button to return to the normal display if in Load/Unload Ready mode.</p> |
|  | <p>STORE / ENTER</p> | <p>Press the STORE/ENTER Button to cycle through menu options and to store a numeric entry.</p> |
|  | <p>LOAD</p> | <p>Press the LOAD Button to:</p> <ul style="list-style-type: none"> • Start a Load, if Split on Load is set to NO • Start a Split Unload, if Split on Load is set to YES |
|  | <p>UNLOAD</p> | <p>Press the UNLOAD Button to control the unload operation.</p> |
|  | <p>START / STOP</p> | <p>Press the START/STOP Button to start and stop load and unload operations.</p> |

COMPATIBLE INTERCOMP PRODUCTS

The LD820™ Indicator is designed to be used with the:

- HH520™ RFX® Wireless Handheld
- RD800™ AG Remote Display
- iAgWeigh™ app
- iExactWeigh™ app

HH520™ RFX® Wireless Handheld



RD800™ AG Remote Display



DOWNLOAD APP

Intercomp iAgWeigh™

- for iPhone® and iPad® available from the App Store®

Minimum Device Specifications:

- iOS® 12.0
- iPhone 5S, iPod touch® 6th Generation, iPad 5th Generation, iPad mini® 2
- supports all iPad Air® and iPad Pro® devices

iAgWeigh is designed to be used with an iPad. The iPhone / iPod touch version of the app only connects to an iPad, not an indicator.

Intercomp iExactWeigh™

- for iPhone® and iPad® available from the App Store®

Minimum Device Specifications:

- iOS® 12.0
- iPhone 5S, iPod touch® 6th Generation, iPad 5th Generation, iPad mini® 2
- supports all iPad Air® and iPad Pro® devices

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MODE MENU

1. Press the **MENU/SETUP Button** to access Mode Menu. ***MENU*** will be displayed.
NOTE: Codes can only be entered when ***MENU*** is displayed. Press the **CLEAR Button** if the wrong number is pressed to reenter the code.
2. Enter the desired code (see table) and press the **STORE/ENTER Button**. The display name will show on screen. Press the **STORE/ENTER Button** again to see and change the current setting.
 Some settings require a number to be entered with the keypad buttons. Some settings require using the arrow keys to cycle through and select a preset option.
3. Press the **STORE/ENTER Button** to save the setting and exit the menu. The indicator can now be powered OFF.

NOTE: Press either the **MENU/SETUP** or **STORE/ENTER Button** repeatedly to cycle through all Mode Menu options. If cycling through the menu, pressing the **STORE/ENTER Button** will save your entry but will not exit the menu. Press the **ON/OFF Button** to exit the Mode Menu at any time and return to the normal display.

| CODE | DISPLAY | FUNCTION | SETTING | DEFAULT |
|------|---------|-------------------------------|---|---------|
| 1010 | T LOAD | Time After Load / Unload | Adjustable 0 - 60 seconds 0 = screen remains in unload mode | 2 |
| 1020 | BINS | Number of Bins | 0 - 10 | 00 |
| 1040 | UNITS | Unit of Measure | lb or kg | lb |
| 1050 | AVE.RT | Average Rate | 1 - 100 | 30 |
| 1070 | HOLD.EN | Hold Enable | YES or NO | NO |
| 1080 | SC.MODE | Scoreboard Mode | OFF, STD, BAR, GTN, TXT.BAR | BAR |
| 1090 | COM1.BD | RS232 Baud Rate Port 1 | 1200, 2400, 4800, 9600, 19200, 38400, 57600, 115200, or 230400 | 115200 |
| 1092 | COM2.BD | RS232 Baud Rate Port 2 | 1200, 2400, 4800, 9600, 19200, 38400, 57600, 115200, or 230400 | 9600 |
| 1094 | COM3.BD | RS232 Baud Rate Port 3 | 1200, 2400, 4800, 9600, 19200, 38400, 57600, 115200, or 230400 | 9600 |
| 1096 | COM4.BD | RS232 Baud Rate Port 4 | 1200, 2400, 4800, 9600, 19200, 38400, 57600, 115200, or 230400 | 9600 |
| 1100 | SC ID | Scale ID | 1 - 100 | 001 |
| 1110 | DISP.O | Unload / Dispense Output Mode | 0 = No relay output control 1 = auger or clutch ON/OFF control | 1 |

| CODE | DISPLAY | FUNCTION | SETTING | DEFAULT |
|------|--|--|---|-----------------------|
| 1112 | LOAD.O | Load Output Mode | 0 = No relay output control 1 = auger or clutch ON/OFF control | 0 |
| 1114 | INP1.C | IN1 Input Control | OFF, MOMEN, LATCH, MOMEN2 | MOMEN |
| 1140 | TARE.S | TARE Sync | 0 = normal weight 1 = weight + tare/bin 2 = weight + tare + load/unload | 2 |
| 1150 | PRE.TYP | PREACT Type | WEIGHT or SPEED | WEIGHT |
| 1152 | PRE.WGT | PREACT Weight | 0 - 999999 | 20 |
| 1154 | PRE.SPD | PREACT Speed | 0.0 - 9999.9 lb/s | 20.0 |
| 1160 | BEEPER | Beeper Enable | YES or NO | YES |
| 1170 | TOLERA | Load / Unload Tolerance | 0 - 999999 The maximum weight variance allowed after load/unload. | 0 |
| 1180 | MOTION | Motion Weight Limit | 0 - 999999 0 = no motion detected Weight must change over 1.5 seconds to detect motion. | 0 |
| 1190 | PRE.ALAR | PREACT Alarm | 0 - 999999 The weight for the alarm to start sounding and blinking. | 50 |
| 1200 | FD.PROT | Feed Management Protocol | 0 = Disable 1 = Enable | 0 |
| 1220 | AUTO.LK AL.MIN AL.REL AL.RNGE | Auto Lock Min Weight Reset Percent Motion Range | YES or NO 1 - 10000 1 - 99 1 - 1000 | NO 300 75 20 |
| 1350 | CLICK.F | Remote Display Clicker Function | OFF, TARE, ZERO NOTE: RD800 must be connected to COM1 to use this function. | OFF |
| 1390 | COM1.F | RS232 Port 1 Format | OFF, SCORE, FEEDMG, TGEAR | FEEDMG |
| 1392 | COM2.F | RS232 Port 2 Format | OFF, SCORE, FEEDMG, TGEAR | TGEAR |
| 1394 | COM3.F | RS232 Port 3 Format | OFF, SCORE, TGEAR | SCORE |
| 1396 | COM4.F | RS232 Port 4 Format | OFF, SCORE, TGEAR | OFF |
| 1398 | BT.F | Bluetooth Output Format | OFF, SCORE, FEEDMG, TGEAR, SCALEP | SCALEP |

| CODE | DISPLAY | FUNCTION | SETTING | DEFAULT |
|------|---------|----------------|-------------------|-----------------------|
| 1500 | YEAR | Year | 4-Digit Year | No Default |
| | MONTH | Month | 3-Character Month | |
| | DATE | Day | 1 - 31 | |
| | HOUR | Hour (12 hour) | 1 - 12 | |
| | MINUTE | Minute | 0 - 59 | |
| | AM/PM | AM/PM | AM, PM | |

MODE MENU SETTINGS

Press the **MENU/SETUP Button** to access Mode Menu. ***MENU*** will be displayed.



NOTICE Codes **1152** PRACT Weight, **1170** Tolerance, **1180** Motion, and **1190** PRACT Alarm use the currently set unit of measure, lb or kg.

The unit cannot be changed within these settings.

| CODE | DESCRIPTION |
|--|---|
| 1010 | <p>Enter code 1010 and press the STORE/ENTER Button to access the Time After Load/Unload setting.</p> <p>The screen will display T LOAD. Press the STORE/ENTER Button.</p> <p>The screen will display 2 (the default) or the current setting.</p> <p>Use the keypad to enter a time between 0 and 60 seconds. This is the time the display will stay in LOAD/UNLOAD Active Mode before returning to LOAD/UNLOAD Ready Mode, after the PRACT weight is reached or when the load/unload operation is cancelled.</p> <p>Enter 0 to keep the display in LOAD/UNLOAD Mode indefinitely after the action has been completed.</p> <p>Press the STORE/ENTER Button to save the setting and exit the menu.</p> |
| 1020 | <p>Enter code 1020 and press the STORE/ENTER Button to access the Number of Bins setting.</p> <p>The screen will display BINS. Press the STORE/ENTER Button.</p> <p>The screen will display 0 (the default) or the current setting.</p> <p>Use the keypad to enter the number, between 0 and 10, of bins or seed boxes. Press the STORE/ENTER Button to save the setting and exit the menu.</p> <p>The indicator screen will display the current Bin number.</p> <p>There are two methods to enter the desired weight for the selected Bin:</p> <ul style="list-style-type: none"> • Press and hold the BIN Button until a dashed line is displayed and use the keypad to enter the desired weight. • Apply weight directly to the scale. <p>Press the STORE/ENTER Button to save the Bin weight.</p> |
| <p>NOTE: The ZERO Button will not function while in Bin Weight Viewing Mode.</p> | |
| 1040 | <p>Enter code 1040 and press the STORE/ENTER Button to access the Unit of Measure setting.</p> <p>The screen will display UNITS. The unit of measure (default lb) in the upper left corner of the display screen can now be changed.</p> <p>Press any arrow button to toggle between lb and kg.</p> <p>With the desired unit of measure on screen, press the STORE/ENTER Button to save the setting and exit the menu.</p> |

| CODE | DESCRIPTION | | | | | | | | | | |
|----------------|--|------------|-----------------------|------------|-----------------|------------|-------------------------------------|------------|-------------------------|----------------|--|
| 1050 | <p>Enter code 1050 and press the STORE/ENTER Button to access the Average Rate setting.</p> <p>The screen will display AVE.RT. Press the STORE/ENTER Button.</p> <p>The screen will display 30 (the default) or the current setting.</p> <p>Use the keypad to enter a number between 1 and 100 for the Average Rate.</p> <p>Enter 1 to disable the averaging function.</p> <p>Press the STORE/ENTER Button to save the setting and exit the menu.</p> <p>NOTE: The Average Rate setting represents the number of readings used to calculate the average rate. Averaging more readings provides a more stable weight display, but the final value may take longer to calculate. The average weight setting applies at 10 Hz, meaning an Average Rate setting of 20 results in a 2 second rolling average weight displayed on the screen.</p> | | | | | | | | | | |
| 1070 | <p>Enter code 1070 and press the STORE/ENTER Button to access the Hold Enable setting.</p> <p>The screen will display HOLD.EN. Press the STORE/ENTER Button.</p> <p>The screen will display NO (the default) or the current setting.</p> <p>Press any arrow button to toggle between YES and NO.</p> <p>With the desired option on screen, press the STORE/ENTER Button to save the setting and exit the menu.</p> | | | | | | | | | | |
| 1080 | <p>Enter code 1080 and press the STORE/ENTER Button to access the Scoreboard Mode setting.</p> <p>The screen will display SC.MODE. Press the STORE/ENTER Button.</p> <p>The screen will display BAR (the default) or the current setting.</p> <p>Press any arrow button to cycle through the options.</p> <p>With the desired option on screen, press the STORE/ENTER Button to save the setting and exit the menu.</p> <p>Setting Options:</p> <table border="1" style="margin-left: 40px;"> <tbody> <tr> <td>OFF</td> <td>RS232 output disabled</td> </tr> <tr> <td>STD</td> <td>Standard output</td> </tr> <tr> <td>BAR</td> <td>Standard output with bar graph data</td> </tr> <tr> <td>GTN</td> <td>Gross, tare, net output</td> </tr> <tr> <td>TXT.BAR</td> <td>Standard output with bar graph data and text</td> </tr> </tbody> </table> | OFF | RS232 output disabled | STD | Standard output | BAR | Standard output with bar graph data | GTN | Gross, tare, net output | TXT.BAR | Standard output with bar graph data and text |
| OFF | RS232 output disabled | | | | | | | | | | |
| STD | Standard output | | | | | | | | | | |
| BAR | Standard output with bar graph data | | | | | | | | | | |
| GTN | Gross, tare, net output | | | | | | | | | | |
| TXT.BAR | Standard output with bar graph data and text | | | | | | | | | | |

| CODE | DESCRIPTION | | | | | | | | | |
|-------------|---|------|------|-------|-------|-------|--------|--------|--------|--------|
| 1090 | <p>Enter code 1090 and press the STORE/ENTER Button to access the RS232 Baud Rate Port 1 setting.</p> <p>The screen will display COM1.BD. Press the STORE/ENTER Button.</p> <p>The screen will display 115200 (the default) or the current setting.</p> <p>Press any arrow button to cycle through the options.</p> <p>With the desired option on screen, press the STORE/ENTER Button to save the setting and exit the menu.</p> <p>NOTE: Baud Rate is the speed data is transmitted through a continuous serial output connected to a scoreboard or secondary display.</p> <p>Setting Options:</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="text-align: center;">1200</td> <td style="text-align: center;">2400</td> <td style="text-align: center;">4800</td> <td style="text-align: center;">9600</td> <td style="text-align: center;">19200</td> <td style="text-align: center;">38400</td> <td style="text-align: center;">57600</td> <td style="text-align: center;">115200</td> <td style="text-align: center;">230400</td> </tr> </table> | 1200 | 2400 | 4800 | 9600 | 19200 | 38400 | 57600 | 115200 | 230400 |
| 1200 | 2400 | 4800 | 9600 | 19200 | 38400 | 57600 | 115200 | 230400 | | |
| 1092 | <p>Enter code 1092 and press the STORE/ENTER Button to access the RS232 Baud Rate Port 2 setting.</p> <p>The screen will display COM2.BD. Press the STORE/ENTER Button.</p> <p>The screen will display 9600 (the default) or the current setting.</p> <p>Press any arrow button to cycle through the options.</p> <p>With the desired option on screen, press the STORE/ENTER Button to save the setting and exit the menu.</p> <p>NOTE: Baud Rate is the speed data is transmitted through a continuous serial output connected to a scoreboard or secondary display.</p> <p>Setting Options:</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="text-align: center;">1200</td> <td style="text-align: center;">2400</td> <td style="text-align: center;">4800</td> <td style="text-align: center;">9600</td> <td style="text-align: center;">19200</td> <td style="text-align: center;">38400</td> <td style="text-align: center;">57600</td> <td style="text-align: center;">115200</td> <td style="text-align: center;">230400</td> </tr> </table> | 1200 | 2400 | 4800 | 9600 | 19200 | 38400 | 57600 | 115200 | 230400 |
| 1200 | 2400 | 4800 | 9600 | 19200 | 38400 | 57600 | 115200 | 230400 | | |
| 1094 | <p>Enter code 1094 and press the STORE/ENTER Button to access the RS232 Baud Rate Port 3 setting.</p> <p>The screen will display COM3.BD. Press the STORE/ENTER Button.</p> <p>The screen will display 9600 (the default) or the current setting.</p> <p>Press any arrow button to cycle through the options.</p> <p>With the desired option on screen, press the STORE/ENTER Button to save the setting and exit the menu.</p> <p>NOTE: Baud Rate is the speed data is transmitted through a continuous serial output connected to a scoreboard or secondary display.</p> <p>Setting Options:</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="text-align: center;">1200</td> <td style="text-align: center;">2400</td> <td style="text-align: center;">4800</td> <td style="text-align: center;">9600</td> <td style="text-align: center;">19200</td> <td style="text-align: center;">38400</td> <td style="text-align: center;">57600</td> <td style="text-align: center;">115200</td> <td style="text-align: center;">230400</td> </tr> </table> | 1200 | 2400 | 4800 | 9600 | 19200 | 38400 | 57600 | 115200 | 230400 |
| 1200 | 2400 | 4800 | 9600 | 19200 | 38400 | 57600 | 115200 | 230400 | | |

| CODE | DESCRIPTION | | | | | | | | | |
|-------------|---|------|-------------------------|-------|--------------------------------|-------|--------|--------|--------|--------|
| 1096 | <p>Enter code 1096 and press the STORE/ENTER Button to access the RS232 Baud Rate Port 4 setting.</p> <p>The screen will display COM4.BD. Press the STORE/ENTER Button.</p> <p>The screen will display 9600 (the default) or the current setting.</p> <p>Press any arrow button to cycle through the options.</p> <p>With the desired option on screen, press the STORE/ENTER Button to save the setting and exit the menu.</p> <p>NOTE: Baud Rate is the speed data is transmitted through a continuous serial output connected to a scoreboard or secondary display.</p> <p>Setting Options:</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="text-align: center;">1200</td> <td style="text-align: center;">2400</td> <td style="text-align: center;">4800</td> <td style="text-align: center;">9600</td> <td style="text-align: center;">19200</td> <td style="text-align: center;">38400</td> <td style="text-align: center;">57600</td> <td style="text-align: center;">115200</td> <td style="text-align: center;">230400</td> </tr> </table> | 1200 | 2400 | 4800 | 9600 | 19200 | 38400 | 57600 | 115200 | 230400 |
| 1200 | 2400 | 4800 | 9600 | 19200 | 38400 | 57600 | 115200 | 230400 | | |
| 1100 | <p>Enter code 1100 and press the STORE/ENTER Button to access the Scale ID setting.</p> <p>The screen will display SC ID. Press the STORE/ENTER Button.</p> <p>The screen will display 1 (the default) or the current setting.</p> <p>Use the keypad to enter a number between 1 and 100 for the Scale ID.</p> <p>Press the STORE/ENTER Button to save the setting and exit the menu.</p> | | | | | | | | | |
| 1110 | <p>Enter code 1110 and press the STORE/ENTER Button to access the Unload/Dispense Output Mode setting.</p> <p>The screen will display DISP.O. Press the STORE/ENTER Button.</p> <p>The screen will display 0 (the default) or the current setting.</p> <p>Use the keypad to enter either 0 or 1 for the output mode.</p> <p>Press the STORE/ENTER Button to save the setting and exit the menu.</p> <p>Setting Options:</p> <table border="1" style="width: 50%; margin-left: auto; margin-right: auto; border-collapse: collapse;"> <tr> <td style="text-align: center; width: 10%;">0</td> <td style="width: 90%;">No relay output control</td> </tr> <tr> <td style="text-align: center;">1</td> <td>Auger or clutch ON/OFF control</td> </tr> </table> | 0 | No relay output control | 1 | Auger or clutch ON/OFF control | | | | | |
| 0 | No relay output control | | | | | | | | | |
| 1 | Auger or clutch ON/OFF control | | | | | | | | | |
| 1112 | <p>Enter code 1112 and press the STORE/ENTER Button to access the Load Output Mode setting.</p> <p>The screen will display LOAD.O. Press the STORE/ENTER Button.</p> <p>The screen will display 0 (the default) or the current setting.</p> <p>Use the keypad to enter either 0 or 1 for the output mode.</p> <p>Press the STORE/ENTER Button to save the setting and exit the menu.</p> <p>Setting Options:</p> <table border="1" style="width: 50%; margin-left: auto; margin-right: auto; border-collapse: collapse;"> <tr> <td style="text-align: center; width: 10%;">0</td> <td style="width: 90%;">No relay output control</td> </tr> <tr> <td style="text-align: center;">1</td> <td>Auger or clutch ON/OFF control</td> </tr> </table> | 0 | No relay output control | 1 | Auger or clutch ON/OFF control | | | | | |
| 0 | No relay output control | | | | | | | | | |
| 1 | Auger or clutch ON/OFF control | | | | | | | | | |

| CODE | DESCRIPTION | |
|-------------|---|--|
| | <p>Enter code 1114 and press the STORE/ENTER Button to access the IN1 Input Control setting. This setting is for an optional external switch used to initiate an unload operation.</p> <p>The screen will display INP1.C. Press the STORE/ENTER Button.</p> <p>The screen will display MOMEN (the default) or the current setting.</p> <p>Press any arrow button to cycle through the options.</p> <p>With the desired option on screen, press the STORE/ENTER Button to save the setting and exit the menu.</p> <p>Setting Options:</p> | |
| 1114 | OFF | The DI1 line will not control anything. |
| | MOMEN | The indicator starts an unload when the INPUT1 signal transitions from high to low. The RELAY1 output will increase and stay high until the Preact weight is reached. The indicator will start the next unload with the next momentary press (INPUT1 line high, then low). The indicator will stop an unload mid-process with another momentary press. |
| | LATCH | The indicator starts an unload when the INPUT1 signal is high and stays high. The RELAY1 output will increase and stay high until the Preact weight is reached. The indicator will start the next unload when the INPUT1 signal is low and then high again. The indicator will stop an unload mid-process if the INPUT1 signal is low. |
| | MOMEN2 | The indicator starts an unload when the INPUT1 signal transitions from high to low. The RELAY1 output will remain low initially. When the Preact weight is reached, the output will be high for two seconds and then return low. |
| | <p>Enter code 1140 and press the STORE/ENTER Button to access the TARE Sync setting. TARE Sync sets the wireless protocol type to match the intended wireless indicator. Keep the default setting of 2 for compatibility with an Intercomp HH520 wireless handheld and/or Intercomp mobile app.</p> <p>The screen will display TARE.S. Press the STORE/ENTER Button.</p> <p>The screen will display 2 (the default) or the current setting.</p> <p>Use the keypad to enter either 0, 1, or 2 for the TARE Sync setting.</p> <p>Press the STORE/ENTER Button to save the setting and exit the menu.</p> <p>Setting Options:</p> | |
| 1140 | 0 | normal weight message |
| | 1 | weight + tare/bin message |
| | 2 | weight + tare + load/unload |

| CODE | DESCRIPTION |
|--|---|
| 1150 | <p>Enter code 1150 and press the STORE/ENTER Button to access the Preact Type setting.</p> <p>The screen will display PRE.TYP. Press the STORE/ENTER Button.</p> <p>The screen will display WEIGHT (the default) or the current setting.</p> <p>Press any arrow button to toggle between WEIGHT and SPEED.</p> <p>With the desired option on screen, press the STORE/ENTER Button to save the setting and exit the menu.</p> |
| 1152 | <p>This setting only applies if WEIGHT is selected as the Preact Type.</p> <p>Enter code 1152 and press the STORE/ENTER Button to access the Preact Weight setting.</p> <p>The screen will display PRE.WGT. Press the STORE/ENTER Button.</p> <p>The screen will display 20 (the default) or the current setting.</p> <p>Use the keypad to enter a number between 0 and 999999 for the Preact Weight.</p> <p>Press the STORE/ENTER Button to save the setting and exit the menu.</p> |
| <p>NOTICE: Preact Weight setting, code 1152, has no influence on the Load/Unload operation when the Preact Speed setting, code 1154, is selected.</p> | |
| <p>NOTE: The Preact Weight can also be confirmed/edited when setting up each UNLOAD. Refer to the UNLOAD – OUTPUT MODE 1 section.</p> | |
| 1154 | <p>This setting only applies if SPEED is selected as the Preact Type.</p> <p>Unload Time = Unload Weight / Preact Speed</p> <p>Enter code 1154 and press the STORE/ENTER Button to access the Preact Speed setting.</p> <p>The screen will display PRE.SPD. Press the STORE/ENTER Button.</p> <p>The screen will display 20 (the default) or the current setting.</p> <p>Use the keypad to enter a number between 0 and 9999.9 lb/s for the Preact Speed.</p> <p>Press the STORE/ENTER Button to save the setting and exit the menu.</p> |
| 1160 | <p>Enter code 1160 and press the STORE/ENTER Button to access the Beeper Enable setting.</p> <p>The screen will display BEEPER. Press the STORE/ENTER Button.</p> <p>The screen will display YES (the default) or the current setting.</p> <p>Press any arrow button to toggle between YES and NO.</p> <p>With the desired option on screen, press the STORE/ENTER Button to save the setting and exit the menu.</p> |

| CODE | DESCRIPTION |
|-------------|--|
| 1170 | <p>Enter code 1170 and press the STORE/ENTER Button to access the Load / Unload Tolerance setting.</p> <p>The Load / Unload Tolerance is the maximum weight variance allowed while still allowing the load or unload action to complete.</p> <p>The screen will display TOLERA. Press the STORE/ENTER Button.</p> <p>The screen will display 0 (the default) or the current setting.</p> <p>Use the keypad to enter a number between 0 and 999999 for the maximum tolerance.</p> <p>Press the STORE/ENTER Button to save the setting and exit the menu.</p> |
| 1180 | <p>Enter code 1180 and press the STORE/ENTER Button to access the Motion Weight Limit setting.</p> <p>Set the Motion Weight Limit to stop the load / unload if no motion is detected over a period of 1.5 seconds.</p> <p>The screen will display MOTION. Press the STORE/ENTER Button.</p> <p>The screen will display 0 (the default, Motion Weight Limit disabled) or the current setting.</p> <p>Use the keypad to enter a number between 0 and 999999 for the maximum weight limit.</p> <p>Press the STORE/ENTER Button to save the setting and exit the menu.</p> |
| 1190 | <p>Enter code 1190 and press the STORE/ENTER Button to access the Preact Alarm setting.</p> <p>The screen will display PRE.ALR. Press the STORE/ENTER Button.</p> <p>The screen will display 50 (the default) or the current setting.</p> <p>Use the keypad to enter a number between 0 and 999999 for the Preact Alarm weight. This is the weight at which the alarm will begin beeping and blinking.</p> <p>Press the STORE/ENTER Button to save the setting and exit the menu.</p> |
| 1200 | <p>Enter code 1200 and press the STORE/ENTER Button to access the Feed Management Protocol setting.</p> <p>The screen will display FD.PROT. Press the STORE/ENTER Button.</p> <p>The screen will display 0 (the default, Feed Management Protocol disabled) or the current setting. Select 1 to enable Feed Management Protocol.</p> <p>Press any arrow button to toggle between 0 and 1.</p> <p>With the desired option on screen, press the STORE/ENTER Button to save the setting and exit the menu.</p> |

| CODE | DESCRIPTION |
|------|--|
| 1220 | <p>Enter code 1220 and press the STORE/ENTER Button to access the Auto Lock setting. When enabled, this feature is designed to lock onto the weight of a livestock animal as it walks onto the scale. When locked, an L will display on screen with the weight.</p> <p>The screen will display AUTO.LK. Press the STORE/ENTER Button.</p> <p>The screen will display NO (the default) or the current setting.</p> <p>Press any arrow button to toggle between YES and NO.</p> <p>With the desired option on screen, press the STORE/ENTER Button to save the setting and continue to the Auto Lock Minimum Weight setting.</p> <p>Press the ON/OFF Button to exit the menu without changing any other Auto Lock settings.</p> <p>The screen will display AL.MIN. Press the STORE/ENTER Button. This is the minimum weight required to activate Auto Lock.</p> <p>The screen will display 300 (the default) or the current setting.</p> <p>Use the keypad to enter a weight between 1 and 10000.</p> <p>Press the STORE/ENTER Button to save the setting and continue to the Auto Lock Release Percent setting.</p> <p>The screen will display AL.REL. Press the STORE/ENTER Button. After the weight on the scale drops by this percent, Auto Lock resets and the display returns to showing live weights.</p> <p>The screen will display 75 (the default) or the current setting.</p> <p>Use the keypad to enter a percent between 1 and 99.</p> <p>Press the STORE/ENTER Button to save the setting and continue to the Auto Lock Stable Range setting.</p> <p>The screen will display AL.RNGE. Press the STORE/ENTER Button. This number is the amount of detectable motion the scale must drop below before activating Auto Lock.</p> <p>The screen will display 20 (the default) or the current setting.</p> <p>Use the keypad to enter a number between 1 and 1000.</p> <p>Press the STORE/ENTER Button to save the setting and exit the menu.</p> <p>NOTE: Press the CLEAR Button to reset if a false locked weight is registered. The display will return to showing live weight, unless there is still a stable weight on the scale greater than the AL.MIN, then a new weight may immediately re-lock.</p> |

| CODE | DESCRIPTION | | | | | | | | |
|---------------|---|------------|-----------------------|--------------|---|---------------|--|--------------|---|
| 1350 | <p>Enter code 1350 and press the STORE/ENTER Button to access the Remote Display Clicker Function setting. This can enable a function for the one button clicker remote of the RD800 display (available separately).</p> <p>NOTE: RD800 must be connected to COM1 to use this function.</p> <p>The screen will display CLICK.F. Press the STORE/ENTER Button. The screen will display OFF (the default) or the current setting. Press any arrow button to cycle through the options. With the desired option on screen, press the STORE/ENTER Button to save the setting and exit the menu.</p> <p>Setting Options:</p> <table border="1" style="margin-left: 40px;"> <tr> <td style="text-align: center;">OFF</td> <td>Function is disabled.</td> </tr> <tr> <td style="text-align: center;">TARE</td> <td>Remote clicker will perform Tare function.</td> </tr> <tr> <td style="text-align: center;">ZERO</td> <td>Remote clicker will perform Zero function.</td> </tr> </table> | OFF | Function is disabled. | TARE | Remote clicker will perform Tare function. | ZERO | Remote clicker will perform Zero function. | | |
| OFF | Function is disabled. | | | | | | | | |
| TARE | Remote clicker will perform Tare function. | | | | | | | | |
| ZERO | Remote clicker will perform Zero function. | | | | | | | | |
| 1390 | <p>Enter code 1390 and press the STORE/ENTER Button to access the RS232 Port 1 Format setting.</p> <p>The screen will display COM1.F. Press the STORE/ENTER Button. The screen will display FEEDMG (the default) or the current setting. Press any arrow button to cycle through the options. With the desired option on screen, press the STORE/ENTER Button to save the setting and exit the menu.</p> <p>Setting Options:</p> <table border="1" style="margin-left: 40px;"> <tr> <td style="text-align: center;">OFF</td> <td>No protocol selected.</td> </tr> <tr> <td style="text-align: center;">SCORE</td> <td>Scoreboard output format Refer to Scoreboard Modes section.</td> </tr> <tr> <td style="text-align: center;">FEEDMG</td> <td>Feed Management protocol</td> </tr> <tr> <td style="text-align: center;">TGEAR</td> <td>Transmission Gear output Refer to Transmission Gear Output section.</td> </tr> </table> | OFF | No protocol selected. | SCORE | Scoreboard output format Refer to Scoreboard Modes section . | FEEDMG | Feed Management protocol | TGEAR | Transmission Gear output Refer to Transmission Gear Output section . |
| OFF | No protocol selected. | | | | | | | | |
| SCORE | Scoreboard output format Refer to Scoreboard Modes section . | | | | | | | | |
| FEEDMG | Feed Management protocol | | | | | | | | |
| TGEAR | Transmission Gear output Refer to Transmission Gear Output section . | | | | | | | | |

| CODE | DESCRIPTION | | | | | | | | |
|--------------------|---|------------|----------------------|--------------|---|---------------|---|--------------|---|
| <p>1392</p> | <p>Enter code 1392 and press the STORE/ENTER Button to access the RS232 Port 2 Format setting.</p> <p>The screen will display COM2.F. Press the STORE/ENTER Button.</p> <p>The screen will display TGEAR (the default) or the current setting.</p> <p>Press any arrow button to cycle through the options.</p> <p>With the desired option on screen, press the STORE/ENTER Button to save the setting and exit the menu.</p> <p>Setting Options:</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="text-align: center;">OFF</td> <td>No protocol selected</td> </tr> <tr> <td style="text-align: center;">SCORE</td> <td>Scoreboard output format Refer to Scoreboard Modes section.</td> </tr> <tr> <td style="text-align: center;">FEEDMG</td> <td>Feed Management protocol</td> </tr> <tr> <td style="text-align: center;">TGEAR</td> <td>Transmission Gear output Refer to Transmission Gear Output section.</td> </tr> </table> | OFF | No protocol selected | SCORE | Scoreboard output format Refer to Scoreboard Modes section . | FEEDMG | Feed Management protocol | TGEAR | Transmission Gear output Refer to Transmission Gear Output section . |
| OFF | No protocol selected | | | | | | | | |
| SCORE | Scoreboard output format Refer to Scoreboard Modes section . | | | | | | | | |
| FEEDMG | Feed Management protocol | | | | | | | | |
| TGEAR | Transmission Gear output Refer to Transmission Gear Output section . | | | | | | | | |
| <p>1394</p> | <p>Enter code 1394 and press the STORE/ENTER Button to access the RS232 Port 3 Format setting.</p> <p>The screen will display COM3.F. Press the STORE/ENTER Button.</p> <p>The screen will display SCORE (the default) or the current setting.</p> <p>Press any arrow button to cycle through the options.</p> <p>With the desired option on screen, press the STORE/ENTER Button to save the setting and exit the menu.</p> <p>Setting Options:</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="text-align: center;">OFF</td> <td>No protocol selected</td> </tr> <tr> <td style="text-align: center;">SCORE</td> <td>Scoreboard output format Refer to Scoreboard Modes section.</td> </tr> <tr> <td style="text-align: center;">TGEAR</td> <td>Transmission Gear output Refer to Transmission Gear Output section.</td> </tr> </table> | OFF | No protocol selected | SCORE | Scoreboard output format Refer to Scoreboard Modes section . | TGEAR | Transmission Gear output Refer to Transmission Gear Output section . | | |
| OFF | No protocol selected | | | | | | | | |
| SCORE | Scoreboard output format Refer to Scoreboard Modes section . | | | | | | | | |
| TGEAR | Transmission Gear output Refer to Transmission Gear Output section . | | | | | | | | |

| CODE | DESCRIPTION | | | | | | | | | | |
|---------------|--|------------|----------------------|--------------|---|---------------|---|--------------|---|---------------|---|
| 1396 | <p>Enter code 1396 and press the STORE/ENTER Button to access the RS232 Port 4 Format setting.</p> <p>The screen will display COM4.F. Press the STORE/ENTER Button.</p> <p>The screen will display OFF (the default) or the current setting.</p> <p>Press any arrow button to cycle through the options.</p> <p>With the desired option on screen, press the STORE/ENTER Button to save the setting and exit the menu.</p> <p>Setting Options:</p> <table border="1" style="width: 100%;"> <tr> <td style="text-align: center;">OFF</td> <td>No protocol selected</td> </tr> <tr> <td style="text-align: center;">SCORE</td> <td>Scoreboard output format Refer to Scoreboard Modes section.</td> </tr> <tr> <td style="text-align: center;">TGEAR</td> <td>Transmission Gear output Refer to Transmission Gear Output section.</td> </tr> </table> | OFF | No protocol selected | SCORE | Scoreboard output format Refer to Scoreboard Modes section . | TGEAR | Transmission Gear output Refer to Transmission Gear Output section . | | | | |
| OFF | No protocol selected | | | | | | | | | | |
| SCORE | Scoreboard output format Refer to Scoreboard Modes section . | | | | | | | | | | |
| TGEAR | Transmission Gear output Refer to Transmission Gear Output section . | | | | | | | | | | |
| 1398 | <p>Enter code 1398 and press the STORE/ENTER Button to access the Bluetooth output Format setting.</p> <p>The screen will display BT.F. Press the STORE/ENTER Button.</p> <p>The screen will display SCALEP SVR(the default) or the current setting.</p> <p>Press any arrow button to cycle through the options.</p> <p>With the desired option on screen, press the STORE/ENTER Button to save the setting and exit the menu.</p> <p>Setting Options:</p> <table border="1" style="width: 100%;"> <tr> <td style="text-align: center;">OFF</td> <td>No protocol selected</td> </tr> <tr> <td style="text-align: center;">SCORE</td> <td>Scoreboard output format Refer to Scoreboard Modes section.</td> </tr> <tr> <td style="text-align: center;">FEEDMG</td> <td>Feed Management protocol</td> </tr> <tr> <td style="text-align: center;">TGEAR</td> <td>Transmission Gear output Refer to Transmission Gear Output section.</td> </tr> <tr> <td style="text-align: center;">SCALEP</td> <td>Intercomp Scale Protocol Use this mode when connecting to an Intercomp Mobile App, including iExactWeigh or iAgWeigh. For more information, refer to the manual of the app being used.</td> </tr> </table> | OFF | No protocol selected | SCORE | Scoreboard output format Refer to Scoreboard Modes section . | FEEDMG | Feed Management protocol | TGEAR | Transmission Gear output Refer to Transmission Gear Output section . | SCALEP | Intercomp Scale Protocol Use this mode when connecting to an Intercomp Mobile App, including iExactWeigh or iAgWeigh. For more information, refer to the manual of the app being used. |
| OFF | No protocol selected | | | | | | | | | | |
| SCORE | Scoreboard output format Refer to Scoreboard Modes section . | | | | | | | | | | |
| FEEDMG | Feed Management protocol | | | | | | | | | | |
| TGEAR | Transmission Gear output Refer to Transmission Gear Output section . | | | | | | | | | | |
| SCALEP | Intercomp Scale Protocol Use this mode when connecting to an Intercomp Mobile App, including iExactWeigh or iAgWeigh. For more information, refer to the manual of the app being used. | | | | | | | | | | |

| CODE | DESCRIPTION |
|------|--|
| 1500 | <p>Enter code 1500 and press the STORE/ENTER Button to access the Date and Time setting.</p> <p>The screen will display YEAR. Press the STORE/ENTER Button.</p> <p>The screen will display the current year setting.</p> <p>Use the keypad to enter a year between 1970 and 2099.</p> <p>Press the STORE/ENTER Button to save the setting.</p> |
| | <p>The screen will display MONTH. Press the STORE/ENTER Button.</p> <p>The screen will display the current month setting.</p> <p>Use the keypad to enter a month between 1 and 12 (1 = Jan, 2 = Feb, etc.).</p> <p>Press the STORE/ENTER Button to save the setting.</p> |
| | <p>The screen will display DATE. Press the STORE/ENTER Button.</p> <p>The screen will display the current date setting.</p> <p>Use the keypad to enter a date between 1 and 31.</p> <p>NOTE: If an invalid date is entered, e.g. Feb 30, ERROR will display and then MONTH will display so the information can be re-entered.</p> <p>Press the STORE/ENTER Button to save the setting.</p> |
| | <p>The screen will display HOUR. Press the STORE/ENTER Button.</p> <p>The screen will display the current hour setting.</p> <p>Use the keypad to enter an hour between 1 and 12.</p> <p>Press the STORE/ENTER Button to save the setting.</p> |
| | <p>The screen will display MINUTE. Press the STORE/ENTER Button.</p> <p>The screen will display the current minute setting.</p> <p>Use the keypad to enter a minute between 1 and 59.</p> <p>Press the STORE/ENTER Button to save the setting.</p> |
| | <p>The screen will display the current AM/PM setting.</p> <p>Press any arrow button to toggle between AM and PM.</p> <p>Press the STORE/ENTER Button to save the setting and exit the menu.</p> |

LOAD / UNLOAD OPERATION

LOAD / UNLOAD STATUS LED

The Load / Unload LED in the middle of the indicator, above the display screen, indicates the status of the dispense operation. **LOAD** or **UNLOAD** will also be displayed on screen.

- **LED OFF, no LOAD or UNLOAD displayed:** Normal Mode. Dispense not ready. Optional external key(s) operate in Pass-Through Mode and will not trigger a dispense action.
- **LED OFF, LOAD or UNLOAD displayed:** Load / Unload Ready. The indicator is ready to start a Load / Unload action. Optional external key(s) can start a dispense operation.
- **LED SOLID RED, LOAD or UNLOAD displayed:** Load / Unload Action Active.
- **LED BLINKING RED, LOAD or UNLOAD displayed:** Load / Unload Active. Weight has reached the Preact Alarm weight. Blink rate increases as the weight approaches zero.

PASS-THROUGH MODE: DEFAULT MODE – DISPENSE NOT READY

When the indicator is in Normal Mode (neither LOAD nor UNLOAD showing on the display), the signal on the external switch input DI1 will not trigger a dispense operation. Instead that signal will pass through to the external output OUT1. If needed, press the **CLEAR Button** to return from dispense mode to normal mode.

STRG / HH520 REMOTE HANDHELD

When using an optional remote to control the internal relay for the dispense operations, make sure the indicator is in Normal Mode (Dispense Not Ready, LED OFF). Press the **CLEAR Button** to reset the LED and return the indicator to Normal Mode. For more information, refer to the manual of the remote being used.

PREACT SETTING

The PREACT setting compensates for product that is still in-flight as the auger/conveyor is stopped or a door/gate is being closed at the end of an Auto Dispense operation. Factors influencing the PREACT setting adjustment include chute size or length, gate time opening and closing, or product type and weight.

An audio beeper and blinking red LED (centered above the LCD screen) provide a PREACT Weight countdown alarm when in LOAD or UNLOAD mode to alert when the operation approaches the weight, or percentage of weight, entered for the PREACT. The beep and blink rate increase as the weight approaches the PREACT weight setting.

If a seed tender is dispensing too much seed, increase the PREACT WEIGHT setting value by the overfill weight amount.

EXAMPLE: If the final dispense weight is over by 10 lb, increase the PREACT WEIGHT setting by 10 lb.

If the seed tender is dispensing too little seed, decrease the PREACT WEIGHT setting value by the under-fill weight amount.

NOTE: If either the Load / Unload Tolerance or Motion Weight Limit settings are activated, the Load / Unload operation will end, even if the PREACT setting has not been reached.

To adjust the PREACT settings, refer to the [Mode Menu section](#):

- **1150** PREACT Type – Set the PREACT type to Weight or Speed.
- **1152** PREACT Weight – Set the PREACT Weight for the load / unload to stop.
- **1154** PREACT Speed – Set the PREACT Speed (lb/s) for the load / unload to stop.
Unload Time = Unload Weight / PREACT Speed
- **1170** Load / Unload Tolerance – Set the Load / Unload Tolerance to the maximum allowable weight variance for a load / unload procedure.
- **1180** Motion Weight Limit – Set the Motion Weight Limit to the maximum amount of weight to stop the load / unload procedure if no motion is detected over a period of 1.5 seconds.
- **1190** PREACT Alarm – Set the weight at which the audio and visual alarm alerts.

And the [Calibration Menu section](#):

- **2010** Unload Timer Load – Enter a number here to set the weight over which the alarm stops using the PREACT Speed method and starts using the PREACT Weight method. Enter 0 to allow the PREACT Type setting, code 1150, to determine whether the Weight or Speed PREACT method is used.

TYPICAL LOAD / UNLOAD SETTING EXAMPLE

For systems wired with direct auger or conveyor control, the Load / Unload settings can be used to activate automatic relay control to end the operation. In this example, the output will power OFF automatically when the weight is within 50 lb of the target weight, allowing time for the in-flight product to finish dispensing. The PRE.WGT setting is also prompted during each unload operation and can be adjusted to fine tune the amount dispensed.

1. Set **DISP.0** code **1110** or **LOAD.0** code **1112** to 1
2. Set **TOLERA** code **1170** to 0
3. Set **MOTION** code **1180** to 0
4. Set **PRE.ALR** code **1190** to 0
5. Set **UTL** code **2010** to 0
6. Set **PRE.TYP** code **1150** to WEIGHT
7. Set **PRE.WGT** code **1152** to 50

AUDIO VISUAL ALARM SIGNALS

Audio and visual alarms alert the operator to manually stop the flow of product as it reaches the target weight. In this example, the alarm will start blinking when the weight is within 200 lb of the target weight, the alarm rate increasing as the weight approaches the target. When the weight is within 20 lb of the target weight, the operation will end, and the indicator will return to normal mode.

1. Set **DISP.0** code **1110** or **LOAD.0** code **1112** to 0
2. Set **TOLERA** code **1170** to 20
3. Set **MOTION** code **1180** to 0
4. Set **PRE.ALAR** code **1190** to 200
5. Set **UTL** code **2010** to 0
6. Set **PRE.TYP** code **1150** to WEIGHT
7. Set **PRE.WGT** code **1152** to 0

LOAD – OUTPUT MODE 0: NO AUTOMATIC CONTROL



NOTICE Set Load Output Mode to 0:

Go to the Mode Menu, enter Code **1112** (Load Output Mode, **LOAD.O**) and press the **STORE/ENTER Button**.

Use the keypad to enter 0.

Press the **STORE/ENTER Button** to save the setting and exit the menu.

1. Press the **LOAD Button**. The screen will briefly display LOAD followed by 5 digits. The weight from the last load displays by default.
2. Enter the amount of weight to be loaded and press the **STORE/ENTER Button**. LOAD will be displayed at the top of the screen and the LED will be solid red. The screen will display the weight to load. The indicator is now in Load Ready Mode.
3. Press the **START/STOP Button** to start load operation. The screen will display the live weight and the weight remaining to be loaded. The displayed weight will decrease as the weight on the scale increases. If a scoreboard display with bar graph is used, the bar graph will increase from 0% to 100% during the load operation. As the loading process approaches the Pre-Alarm weight, the LED will begin to blink, and the alarm will begin to beep. The blink and beep rate increases as the load approaches the pre-alarm weight setting.
4. When loading is complete, the displayed weight will be near zero. The indicator may display a small positive or negative number representing the weight under or over the desired target weight. If the Tolerance and Motion settings are enabled, the load action will stop when the load reaches the entered parameters. Press the **START/STOP Button** to stop and return to Load Ready Mode.
5. Press the **START/STOP Button** to repeat a load operation with the same weight.

LOAD – OUTPUT MODE 1: AUGER OR CLUTCH ON/OFF CONTROL



NOTICE Set Load Output Mode to 1:

Go to the Mode Menu, enter Code **1112** (Load Output Mode, **LOAD.O**) and press the **STORE/ENTER Button**.

Use the keypad to enter 1.

Press the **STORE/ENTER Button** to save the setting and exit the menu.

1. Press the **LOAD Button**. The screen will briefly display LOAD followed by 5 digits. The weight from the last load displays by default.
2. Enter the amount of weight to be loaded and press the **STORE/ENTER Button**. LOAD will be displayed at the top of the screen.
 - a. If the weight is LESS than the Unload Timer Weight, the screen will briefly display **PRE.SPD** (PREACT Speed). Enter a speed between 0 and 9999.9 lb/s. Default is 20 lb/s. Press the **STORE/ENTER Button**. The screen will briefly display READY, then show the target weight. The indicator is now in Load Ready Mode.
 - b. If the weight is GREATER than the Unload Timer Weight, the screen will briefly display **PRE.WGT** (PREACT Weight). The default, 20, or previously saved number will be displayed followed by 5 digits. Enter a weight between 0 and 999999 and press the **STORE/ENTER Button**. The screen will briefly display READY, then show the target weight. The indicator is now in Load Ready Mode.
3. Press the **START/STOP Button** to start load operation. The relay output is enabled. The LED will be solid red. The screen will display the live weight and the weight remaining to be loaded. The displayed weight will decrease as the weight on the scale increases. If a scoreboard display with bar graph is used, the bar graph will increase from 0% to 100% during the load operation. As the loading process approaches the Pre-Alarm weight, the LED will begin to blink, and the alarm will begin to beep. The blink and beep rate increases as the load approaches the pre-alarm weight setting.
4. When loading is complete, the displayed weight will be near zero. The indicator may display a small positive or negative number representing the weight under or over the desired target weight. If the Tolerance and Motion settings are enabled, the load action will stop when the load reaches the entered parameters. Press the **START/STOP Button** to stop and return to Load Ready Mode.
5. Press either the **START/STOP Button** to repeat a load operation with the same weight, or the **CLEAR Button** to return to normal display mode.

UNLOAD – OUTPUT MODE 0: NO AUTOMATIC CONTROL



NOTICE Set Unload/Dispense Output Mode to 0:

Go to the Mode Menu, enter Code **1110** (Unload/Dispense Output Mode, **DISP.O**) and press the **STORE/ENTER Button**.

Use the keypad to enter 0.

Press the **STORE/ENTER Button** to save the setting and exit the menu.

1. Press the **UNLOAD Button**. The screen will briefly display UNLOAD followed by 5 digits. The weight from the last load displays by default.
2. Enter the weight to be unloaded. Press the **STORE/ENTER Button**. The screen will briefly display READY, then UNLOAD. The indicator is now in Unload Mode.
3. Press the **START/STOP Button** to unload the product. The display will show the live weight and the weight remaining to be unloaded. The displayed weight will decrease as the weight on the scale decreases. If a scoreboard display with bar graph is used, the bar graph will decrease from 100% to 0% during the unloading operation.
4. When unloading is complete, the displayed weight will be near zero. The indicator may display a small positive or negative number representing the weight under or over the desired target weight. Press the **START/STOP Button** to stop and return to Unload Ready Mode. The screen will display the weight to unload. Pressing the **CLEAR** or **GROSS/NET Button** will also return the display to Unload Ready Mode.
5. Press the **START/STOP Button** to repeat an unload operation with the same settings.

UNLOAD – OUTPUT MODE 1: AUGER OR CLUTCH ON/OFF CONTROL



NOTICE Set Unload/Dispense Output Mode to 1:

Go to the Mode Menu, enter Code **1110** (Unload/Dispense Output Mode, **DISP.O**) and press the **STORE/ENTER Button**.

Use the keypad to enter 1.

Press the **STORE/ENTER Button** to save the setting and exit the menu.

1. Press the **UNLOAD Button**. The screen will briefly display UNLOAD followed by 5 digits. The weight from the last load displays by default.
2. Enter the amount of weight to be loaded and press the **STORE/ENTER Button**. UNLOAD will be displayed at the top of the screen.
 - a. If the weight is LESS than the Unload Timer Weight, the screen will briefly display **PRE.SPD** (PREAMT Speed). Enter a speed between 0 and 9999.9 lb/s. Default is 20 lb/s. Press the **STORE/ENTER Button**. The screen will briefly display READY, then UNLOAD. The indicator is now in Unload Ready Mode.
 - b. If the weight is GREATER than the Unload Timer Weight, the screen will briefly display **PRE.WGT** (PREAMT Weight). The default, 20, or previously saved number will be displayed followed by 5 digits. Enter a weight between 0 and 999999 and press the **STORE/ENTER Button**. The screen will briefly display READY, then UNLOAD. The indicator is now in Unload Ready Mode.
3. Press the **START/STOP Button** to unload the product. The relay output is enabled. The display will show the target weight and the weight remaining to be unloaded. If a scoreboard display with bar graph is used, the bar graph will decrease from 100% to 0% during the unloading operation. As the unloading process approaches the Pre-Alarm weight, the LED will begin to blink, and the alarm will begin to beep. The blink and beep rate increases as the load approaches the pre-alarm weight setting.
4. When unloading is complete, the displayed weight will be near zero. The indicator may display a small positive or negative number representing the weight under or over the desired target weight. The relay will be disabled, and the auger/conveyor will automatically stop, when the PREAMT Weight or Speed criteria is met or when the Tolerance or Motion settings are activated. The LED will power OFF. Product will dispense until complete. The target weight is displayed after an adjustable Time After Dispense delay.
5. Press the **START/STOP Button** to repeat an unload operation with the same settings. If a new PREAMT setting is needed, press the **Unload Button** to enter a new setting.

UNLOAD PRODUCT IN MULTIPLE ROWS/TANKS

This option is useful when wanting to automatically unload product equally across multiple bins.



NOTICE By default, the **LOAD Button** performs the LOAD function and the **RM Button** performs the SPLIT function. If desired, the functions of the **LOAD** and **RM Buttons** may be switched. Enable Split on Load for the **LOAD Button** to perform the SPLIT function and the **RM Button** to perform the LOAD function.

Go to the Calibration Menu, enter Code **2020** (Split on Load, **SPL.LD**) and press the **STORE/ENTER Button**.

Press any arrow button to toggle to YES.

Press the **STORE/ENTER Button** to save the setting and exit the menu.

1. Press the **LOAD Button** (if Split on Load is set to YES) or the **RM Button** (if Split on Load is set to NO). This allows the product to be unloaded equally across a set number of rows/tanks.
2. The screen will briefly display **S.LOAD**, followed by the weight to be split between the rows/tanks. The weight can be edited using the keypad. Enter the desired weight and press the **STORE/ENTER Button** to save the setting and move to the next step.
3. The screen will briefly display **SPLIT**, followed by the number of rows/tanks that will receive product. The number of rows/tanks can be edited using the keypad. Enter the desired number and press the **STORE/ENTER Button** to save the setting and move to the next step. The indicator will automatically calculate the split weight (total weight divided by the number of rows/tanks).
4. The screen will briefly display **UNLOAD**, followed by the Split Weight Unload amount calculated in step 3. The Split Weight Unload amount can be edited using the keypad. Enter the desired number and press the **STORE/ENTER Button** to save the setting and move to the next step.
5. Press the **START/STOP Button** to unload the product. The relay output is enabled (if Unload / Dispense Output Mode is set to 1). If a scoreboard display with bar graph is used, the bar graph will decrease from 100% to 0% during the unloading operation. When unloading is complete, the displayed weight will be near zero. The indicator may display a small positive or negative number representing the weight under or over the desired target weight.
6. As the unloading process approaches the Pre-Alarm weight, the LED will begin to blink, and the alarm will begin to beep. The blink and beep rate increases as the load approaches the pre-alarm weight setting.
7. The unload action will automatically stop when the Preact Weight or Speed criteria is met or when the Tolerance or Motion settings are activated.
8. Press the **START/STOP Button** to repeat an unload operation with the same settings.

CALIBRATION MENU

1. Press the **MENU/SETUP Button** to access Calibration Menu. ***MENU*** will be displayed.

NOTE: Codes can only be entered when ***MENU*** is displayed. Press the **CLEAR Button** if the wrong number is pressed to reenter the code.

2. Enter the desired code (see table) and press the **STORE/ENTER Button**. The display name will show on screen. Press the **STORE/ENTER Button** again to see and change the current setting.

Some settings require a number to be entered with the keypad buttons. Some settings require using the arrow keys to cycle through and select a preset option.

3. Press the **STORE/ENTER Button** to save the setting and exit the menu. The indicator can now be powered OFF.

NOTE: To access the Calibration Menu and cycle through the options, enter code **477** and press the **STORE/ENTER Button**. Press either the **MENU/SETUP Button** or the **STORE/ENTER Button** to cycle through all Calibration Menu functions. If cycling through the menu, pressing the **STORE/ENTER Button** will save your entry but will not exit the menu. Press the **ON/OFF Button** to exit the Mode Menu at any time.

| CODE | DISPLAY | FUNCTION | SETTING | DEFAULT |
|------|---------|--------------------------------|--|---------|
| 2010 | UTL | Unload Timer Load | 0 - 99999.9 | 0 |
| 2020 | SPL.LD | Split on Load | YES or NO | NO |
| 2024 | REV LC | Reverse Load Cell Signal Wires | YES or NO | NO |
| 2030 | RF.ENAB | Radio Enable | YES or NO | YES |
| | RF.CH | Radio Channel | 01 - 12 | 04 |
| | RF.ID | Radio Network ID | 0 - 65534 | 8000 |
| | RF.ENCP | Radio Encryption Enable | YES or NO | NO |
| | - | Radio Encryption Key | 0 - 65534 | 00000 |
| 2050 | RF.DEF | Restore Radio Defaults | 0 or 3 | 0 |
| 2060 | AZT | AZT (Auto Zero Tracking) | 3d, 0.5d, OFF, 0.6d, 1d | 3d |
| 2070 | GRAD | Graduation Size | 0.02, 0.05, 0.1, 0.2, 0.5, 1, 2, 5, 10, 20, 50, or 100 | 2 |
| 2080 | CAPCTY | Scale Capacity | 1 - 999999 | 999999 |

CALIBRATION SETTINGS

Press the **MENU/SETUP Button** to access Calibration Menu. ***MENU*** will be displayed.

| CODE | DESCRIPTION |
|------|---|
| 477 | <p>Enter code 477 and press the STORE/ENTER Button to cycle through the Calibration Menu options.</p> <p>Press either the MENU/SETUP Button or the STORE/ENTER Button to cycle through all Calibration Menu functions. If cycling through the menu, pressing the STORE/ENTER Button will save your entry but will not exit the menu.</p> <p>Press the ON/OFF Button to exit the Mode Menu at any time.</p> |
| 2010 | <p>Enter code 2010 and press the STORE/ENTER Button to access the Unload Timer Load setting.</p> <p>The screen will display UTL. Press the STORE/ENTER Button.</p> <p>The screen will display 0 (the default) or the current setting.</p> <p>Use the keypad to enter a number between 0 and 99999.9 for the Unload Timer Load setting. This is the weight limit over which the alarm stops using the PRACT Speed method and starts using the PRACT Weight method.</p> <p>Enter 0 to allow the PRACT Type setting, code 1150, to determine whether the Weight or Speed PRACT method is used.</p> <p>Press the STORE/ENTER Button to save the setting and exit the menu.</p> |
| 2020 | <p>Enter code 2020 and press the STORE/ENTER Button to access the Split on Load setting.</p> <p>The screen will display SPL.LD. Press the STORE/ENTER Button.</p> <p>The screen will display NO (the default) or the current setting.</p> <p>Press any arrow button to toggle between YES (LOAD Button starts a Split Unload, RM Button starts a Load) and NO (LOAD Button starts a Load, RM Button starts a Split Unload).</p> <p>With the desired option on screen, press the STORE/ENTER Button to save the setting and exit the menu.</p> |
| 2024 | <p>Enter code 2024 and press the STORE/ENTER Button to access the Reverse Load Cell Signal Wires setting. When enabled, YES, this setting reverses the load cell signal (-SIG and +SIG) inputs, with the result being the same as if the physical load cell wires were reversed.</p> <p>The screen will display REV LC. Press the STORE/ENTER Button.</p> <p>The screen will display NO (the default) or the current setting.</p> <p>Press any arrow button to toggle between YES and NO.</p> <p>With the desired option on screen, press the STORE/ENTER Button to save the setting and exit the menu.</p> |

Enter code **2030** and press the **STORE/ENTER Button** to access the Radio Enable setting.

The screen will display **RF.ENAB**. Press the **STORE/ENTER Button**.

The screen will display **YES** (the default) or the current setting.

Press any arrow button to toggle between YES (enabled) and NO (disabled).

With **NO** displayed, press the **STORE/ENTER Button** to save the setting and exit the menu.

With **YES** displayed, press the **STORE/ENTER Button** to save and continue to the Radio Channel setting.

The screen will display **RF.CH**. Press the **STORE/ENTER Button**.

The screen will display **4** (the default) or the current setting.

Use the keypad to enter a number between 1 and 12 for the Radio Channel.

Press the **STORE/ENTER Button** to save and continue to the Radio Network ID setting.

NOTE: If using multiple wireless scale systems in the same location it is best practice to set each system at least two channels apart. Example: Scale System 1 set to Channel 4 and Scale System 2 set to Channel 7.

The screen will display **RF.ID**. Press the **STORE/ENTER Button**.

The screen will display **8000** (the default) or the current setting.

2030

NOTE: The default, 8000, is recommended for most uses.

Use the keypad to enter a number between 0 and 65534 for the Radio Network ID.

Press the **STORE/ENTER Button** to save and continue to the Radio Encryption Enable setting.

The screen will display **RF.ENCP**. Press the **STORE/ENTER Button**.

The screen will display **NO** (the default) or the current setting.

Press any arrow button to toggle between YES (enable encryption) and NO (disable encryption).

- With **NO** displayed, press the **STORE/ENTER Button** to save and continue to code **2050**.
- With **YES** displayed, press the **STORE/ENTER Button** to save and continue to the Radio Encryption Key setting.
The screen will display **0** (the default).
Use the keypad to enter a number between 1 and 65534 for the Radio Encryption Key.
Press the **STORE/ENTER Button** to save and continue to code **2050**.

NOTE: If this product came from a third-party vendor, the encryption key may have already been set to the product's serial number. To reset this back to the default of no encryption key, either set **RF.ENCP** to NO or refer to code 311 in the [Calibration Mode Menu section](#).

| CODE | DESCRIPTION | | | | | | | | | | | | |
|-------------|--|------------|-------------|------------|-------------|-----------|-----|---|----|----|----|----|----|
| 2050 | <p>Enter code 2050 and press the STORE/ENTER Button to access the Restore Radio Defaults setting.</p> <p>The screen will display RF.DEF. Press the STORE/ENTER Button.</p> <p>The screen will display 0 (the default).</p> <p>Use the keypad to enter either number 0 (no changes) or 3 (restore factory default radio settings).</p> <p>NOTE: Entering any number other than 3 will cancel without making changes. Press the STORE/ENTER Button to save the setting and exit the menu.</p> | | | | | | | | | | | | |
| 2060 | <p>Enter code 2060 and press the STORE/ENTER Button to access the Auto Zero Tracking (AZT) setting. If the displayed weight is within the number of grads shown for a specific amount of time, the weight will be automatically zeroed.</p> <p>The screen will display AZT. Press the STORE/ENTER Button.</p> <p>The screen will display 3d (the default) or the current setting.</p> <p>Press any arrow button to cycle through the grad options.</p> <p>With the desired option on screen, press the STORE/ENTER Button to save the setting and exit the menu.</p> <p>Setting Options:</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td style="text-align: center;">3d</td> <td style="text-align: center;">0.5d</td> <td style="text-align: center;">OFF</td> <td style="text-align: center;">0.6d</td> <td style="text-align: center;">1d</td> </tr> </table> | 3d | 0.5d | OFF | 0.6d | 1d | | | | | | | |
| 3d | 0.5d | OFF | 0.6d | 1d | | | | | | | | | |
| 2070 | <p>Enter code 2070 and press the STORE/ENTER Button to access the Graduation Size setting.</p> <p>The screen will display GRAD. Press the STORE/ENTER Button.</p> <p>The screen will display 2 (the default) or the current setting.</p> <p>Press any arrow button to cycle through the Graduation Size options.</p> <p>With the desired option on screen, press the STORE/ENTER Button to save the setting and exit the menu.</p> <p>Setting Options:</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td style="text-align: center;">0.01</td> <td style="text-align: center;">0.02</td> <td style="text-align: center;">0.05</td> <td style="text-align: center;">0.1</td> <td style="text-align: center;">0.2</td> <td style="text-align: center;">0.5</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> <td style="text-align: center;">5</td> <td style="text-align: center;">10</td> <td style="text-align: center;">20</td> <td style="text-align: center;">50</td> </tr> </table> | 0.01 | 0.02 | 0.05 | 0.1 | 0.2 | 0.5 | 1 | 2 | 5 | 10 | 20 | 50 |
| 0.01 | 0.02 | 0.05 | 0.1 | 0.2 | 0.5 | 1 | 2 | 5 | 10 | 20 | 50 | | |
| 2080 | <p>Enter code 2080 and press the STORE/ENTER Button to access the Scale Capacity setting.</p> <p>The screen will display CAPCTY. Press the STORE/ENTER Button.</p> <p>The screen will display 999999 (the default) or the current setting.</p> <p>Use the keypad to enter a number between 1 and 999999 for the Scale Capacity. Press the STORE/ENTER Button to save the setting and exit the menu.</p> <p>NOTE: If the scale exceeds the capacity setting, CAP will be displayed on screen.</p> | | | | | | | | | | | | |

CALIBRATION PROCEDURES

The LD820™ Indicator has multiple calibration options available for conducting a comprehensive calibration of the weigh system.

- **mV/V CALIBRATION**

The mV/V calibration can be adjusted only if: A certified Load Cell Simulator is available and there is a requirement to change the mV/V calibration.

- **CODE CALIBRATION**

Calibrate the system by entering the load point (lb or kg) per load cell, signal (mV/V), and number of load cells in the system. This information is typically on the load cell label.

- **FIELD CALIBRATION FACTOR ADJUSTMENT**

Field Calibration Factor Adjustment is used to view or edit the Field Cal Factor directly.

- **FIELD CALIBRATION WEIGHT ENTRY ADJUSTMENT**

The Field Calibration Weight Entry Adjustment should only be attempted if the scale is working, but the weights are inaccurate. Adjust the displayed weight by entering the Displayed Weight and a Certified Weight. The indicator will automatically calculate an internal factor which is applied to all displayed weights for future weighing. It is best to perform field calibration only if the scale system is operating at 25% or greater of its expected peak operating capacity.

- **WEIGHT CALIBRATION**

Weight Calibration should only be attempted if the calibration has been lost. Apply known weight(s) and enter the value of those weights into the indicator. The scale must be unloaded at the start of the procedure, with a known weight ready to be loaded.



WARNING When a Code or Weight Calibration is performed, the Field Calibration Adjustment is automatically reset to the default setting of 1.0000.

CALIBRATION MODE MENU



WARNING Diagnostic Use Only

Contact Intercomp Service before proceeding.

1. Press the **MENU/SETUP Button** to access Calibration Mode Menu. ***MENU*** will be displayed.

NOTE: Codes can only be entered when ***MENU*** is displayed. Press the **CLEAR Button** if the wrong number is pressed to reenter the code.

2. Enter the desired code (see table) and press the **STORE/ENTER Button**. The display name will show on screen. Press the **STORE/ENTER Button** again to see and change the current setting.

Some settings require a number to be entered with the keypad buttons. Some settings require using the arrow keys to cycle through and select a preset option.

3. Press the **STORE/ENTER Button** to save the setting and exit the menu. The indicator can now be powered OFF.

| CODE | DESCRIPTION |
|------|---|
| 20 | mV/V Calibration. Calibrate mV/V input using a certified LC simulator. |
| 21 | Code Calibration. Set system calibration by entering cell load and mV/V info. |
| 30 | Field Calibration Factor Adjustment. |
| 31 | Field Calibration Weight Entry Adjustment. |
| 121 | Raw Counts display diagnostic. 0 mV/V = 50000 10000 per mV/V |
| 122 | Raw mV/V display. Output based on mV/V calibration. |
| 311 | Default and save all radio settings to the radio. |
| 711 | To return all settings to default and save (leaving calibration untouched): Press the MENU/SETUP Button , enter 711 and press the STORE/ENTER Button . The display will show Default , then 0 . Enter 711 again and press the STORE/ENTER Button . SAVE will display if the command was successful. |
| 911 | NOTE: Follow the same steps to enter any 7xx customer code. To return ALL settings AND calibration to default and save: Press the MENU/SETUP Button , enter 911 and press the STORE/ENTER Button . The display will show Fac.Def , then 0 . Enter 911 again and press the STORE/ENTER Button . SAVE will display if the command was successful. |
| 1001 | Weight Calibration. Apply weight(s) to calibrate. |

MV/V CALIBRATION



WARNING The mV/V Calibration parameters will be overwritten when advancing through the mV/V Calibration menu.

Do not advance through the mV/V Calibration menu unless the following conditions are met:

1. A certified Load Cell Simulator is available.
2. There is a requirement to change the mV/V calibration.

The mV/V calibration of the indicator is done at the factory prior to shipment. A certified load cell simulator is required to perform the mV/V adjustment.

NOTE: When performing a mV/V Calibration on a system with multiple cell connectors, connect the simulator to the CH1 input only.

1. Press the **MENU/SETUP Button** to access Calibration Mode Menu. ***MENU*** will be displayed.
2. Enter code **20** and press the **STORE/ENTER Button** to access mV/V Calibration. Press the **MENU/SETUP Button** to save the entry.
3. The screen will display **SIM-00**. Set the simulator to 0 mV/V. Press the **STORE/ENTER Button**.
4. The screen will display **SIM-LL**. Press the **STORE/ENTER Button**.
5. Set the simulator to the desired value. Use the keypad to enter the same value into the indicator.
6. Press the **STORE/ENTER Button** to save the setting and exit the menu.

| DISPLAY | FUNCTION | SETTING | DEFAULT |
|---------------|---------------------------|-------------------------|---------------|
| SIM-00 | Simulator Set to 0.0 mV/V | 0 | n/a |
| SIM-LL | Simulator Set to x.x mV/V | Enter simulator setting | 1.0000 |

CODE CALIBRATION

1. Press the **MENU/SETUP Button** to access Calibration Mode Menu. ***MENU*** will be displayed.
2. Enter code **21** and press the **STORE/ENTER Button** to access Code Calibration. Press the **MENU/SETUP Button** to save the entry.
3. The screen will display **CC-LD**. Press the **STORE/ENTER Button**. Use the keypad to enter each load cell's rated capacity at a specific mV/V output. The capacity may be listed on the load cell label or data sheet. Press the **STORE/ENTER Button**.
4. The screen will display **CC-SIG**. Press the **STORE/ENTER Button**. Use the keypad to enter the mV/V output corresponding to the load entered in step 3. The value may be listed on the load cell label or data sheet. Press the **STORE/ENTER Button**.
5. The screen will display **CC-NUM**. Press the **STORE/ENTER Button**. Use the keypad to enter the number the number of cells in the system. Press the **STORE/ENTER Button** to save the setting and exit the menu.

| DISPLAY | FUNCTION | SETTING | DEFAULT |
|---------------|-----------------------|------------------|---------------|
| CC-LD | Load Point (lb or kg) | 1 - 999999 | 10000 |
| CC-SIG | Signal (mV/V) | 0.1000 - 99.9999 | 1.0000 |
| CC-NUM | Number of Load Cells | 1 - 99 | 1 |

FIELD CALIBRATION FACTOR ADJUSTMENT

View or edit the Field Calibration Factor directly.

EXAMPLE: To increase the weight by 1%, increase the factor by 1%. If the factor is set at the default setting of 1.0000, change the setting to 1.0100 to increase weights by 1%.

NOTE: The Field Calibration Factor is reset to 1.0000 when performing a new Code or Weight calibration.

1. Press the **MENU/SETUP Button** to access Calibration Mode Menu. ***MENU*** will be displayed.
2. Enter code **30** and press the **STORE/ENTER Button** to access Field Calibration Factor Adjustment.
3. The screen will display **FLD.FAC**. Press the **STORE/ENTER Button**.
4. The screen will display **1.0000** (the default) or the current setting.
5. Calculate the new Field Calibration Adjustment value and use the keypad to enter the new factor to be applied to all displayed weights. Press the **STORE/ENTER Button** to save the setting and exit the menu.

NOTE: Make note of the Field Calibration Factor Adjustment and this step can be skipped for future calibrations. Perform a Code Calibration, code 21, with the Field Calibration Factor.

| DISPLAY | FUNCTION | SETTING | DEFAULT |
|----------------|------------------------|-----------------|---------------|
| FLD.FAC | Field Cal Factor Value | 0.1000 - 9.9999 | 1.0000 |

FIELD CALIBRATION WEIGHT ENTRY ADJUSTMENT



WARNING

Do not perform a Field Calibration Weight Entry Adjustment unless the following conditions are met:

1. A certified or trusted weight is available to compare against the displayed gross weight.
2. The indicator displays the gross weight prior to starting the adjustment.

Adjust the displayed weight by entering the Displayed Weight and a Certified Weight. The indicator will automatically calculate an internal factor to be applied to all subsequent displayed weights.

1. Press the **MENU/SETUP Button** to access Calibration Mode Menu. ***MENU*** will be displayed.
2. Enter code **31** and press the **STORE/ENTER Button** to access Field Calibration Weight Entry Adjustment.
3. The screen will display **DISP.LD**. Press the **STORE/ENTER Button**. If there is a load on the scale, the weight will be displayed (it can be edited), if not use the keypad to enter the current load weight. Press the **STORE/ENTER Button**.
4. The screen will display **CERT.LD**. Press the **STORE/ENTER Button**. Use the keypad to enter the certified or trusted gross weight. Press the **STORE/ENTER Button** to save the setting and exit the menu. An internal Field Cal Factor will be automatically calculated and applied to all subsequent displayed weights.

| DISPLAY | FUNCTION | SETTING | DEFAULT |
|----------------|-------------------------|------------|---------|
| DISP.LD | Displayed Load (weight) | 1 - 999999 | n/a |
| CERT.LD | Certified Load (weight) | 1 - 999999 | n/a |

WEIGHT CALIBRATION



WARNING The Weight Calibration parameters will be overwritten when advancing through the Weight Calibration menu.

Do not advance through the Weight Calibration menu unless the following conditions are met:

1. The required number of known weight(s) is available.
2. There is a requirement to change the Weight Calibration.

The scale must be unloaded at the start of the calibration. A known weight(s) must be readily available to be loaded on the scale.

1. Press the **MENU/SETUP Button** to access Calibration Mode Menu. ***MENU*** will be displayed.
2. Enter code **1001** and press the **STORE/ENTER Button** to access Field Calibration Factor Adjustment.
3. The screen will display **LL-00**. Make sure there is no weight applied to the scale. Press the **STORE/ENTER Button**.
4. The screen will display **LL-01**. Apply and stabilize the load on the scale for the first calibration point. Press the **STORE/ENTER Button**.
5. Use the keypad to enter the amount of weight for the first calibration point. Press the **STORE/ENTER Button**.
6. If needed, repeat steps 3 through 5 to enter up to two additional calibration points.
7. When done entering calibration points, press the **STORE/ENTER Button** or power OFF the indicator to save the setting and exit the menu.

| DISPLAY | FUNCTION | SETTING | DEFAULT |
|--------------|-------------------|-------------------|---------|
| LL-00 | No Weight Applied | - | n/a |
| LL-01 | Weight Applied | Load first weight | n/a |

OUTPUT OPTIONS

The LD820 has output / interface types which can be assigned to one of the FOUR (4) RS232 COM ports or to a Bluetooth wireless connection.

Refer to the [Mode Menu section](#) to select the desired output and baud rate:

- **1080** Scoreboard Mode
- **1090** RS232 Baud Rate Port 1
- **1092** RS232 Baud Rate Port 2
- **1094** RS232 Baud Rate Port 3
- **1096** RS232 Baud Rate Port 4
- **1390** RS232 Port 1 Format
- **1392** RS232 Port 2 Format
- **1394** RS232 Port 3 Format
- **1396** RS232 Port 4 Format
- **1398** Bluetooth Output Format

SCALEP

Select this option for Bluetooth connection to compatible Intercomp mobile apps.

SCOREBOARD OUTPUT

The Scoreboard Output communicates using this format:

| Format | Description |
|--------------|-------------|
| Data Bits | 8 |
| Parity | None |
| Stop Bit | 1 |
| Flow Control | None |

SCOREBOARD MODES

If the LD820 includes the Serial Output option, four scoreboard modes are available under code **1080** in the Mode Menu.

- **STD**

Standard output: Indicator transmits current GROSS, NET or BIN weight (lb or kg) at a rate of ten times per second on the RS232 output.

- If a load / unload is in progress, the weight loaded/unloaded will be transmitted.

EXAMPLE:

"3000 lb<cr><lf>"

"2865 lb<cr><lf>"

- **BAR**

Standard output with bar graph data: Indicator transmits the same data as STD and an additional command to control a bar graph display.

EXAMPLE:

"3000G<cr>@^100<cr>" (G for Gross or N for Net, 100% bar graph filled)

"2856G<cr>@^22<cr>" (22% bar graph filled)

- **GTN**

Gross, tare, net output: Indicator transmits the time and date above a four-line output of the GROSS, TARE, NET weights, and a blank line.

EXAMPLE:

"MAY 08, 2024 03:45PM<cr><lf>"

"G: 3000 lb<cr><lf>"

"T: 1200 lb<cr><lf>"

"N: 1800 lb<cr><lf>"

"<cr><lf>"

- **TXT.BAR**

Standard output with bar graph data and text: Indicator transmits the same data as BAR and also may include text.

EXAMPLE:

"G 3000<cr>@^100<cr>" (G for Gross or N for Net, 100% bar graph filled)

"G 2856<cr>@^22<cr>" (22% bar graph filled)

"TXTMSG<cr>@^100<cr>" (Displays TXTMSG on scoreboard. 100% bar graph filled)

FEED MANAGEMENT INTERFACE

The Feed Management Interface communicates using this format:

| Format | Description |
|--------------|-------------|
| Data Bits | 8 |
| Parity | None |
| Stop Bit | 1 |
| Flow Control | None |

TRANSMISSION GEAR OUTPUT

The Transmission Gear Output communicates using this format:

| Format | Description |
|--------------|-------------|
| Data Bits | 7 |
| Parity | Even |
| Stop Bit | 1 |
| Flow Control | None |

The Transmission Gear output will always transmit the gross weight regardless of what mode is displayed on screen. It will be transmitted at a rate of 10 times per second on the RS232 output.

Data Format:

- Start of text character <STX>
- Six-digit serial gross weight (whole number) value
- LB or KG unit of measure
- Space character
- SG to identify serial gross weight (ER is displayed if there is a scale error)
- End of text character <ETX>
- Checksum character value that includes all bytes starting after the <STX> up through, but not including the <ETX>. The Checksum calculation is shown below.
- Carriage return <CR>

Example: <STX>000150LB SG<ETX><Checksum><CR>

Checksum Calculation:

1. XOR the bits of each character in the data string
2. AND the result with decimal 63 (0x3F) to keep the lower 6 bits
3. OR the results with decimal 64 (0x40) to make it a printable character

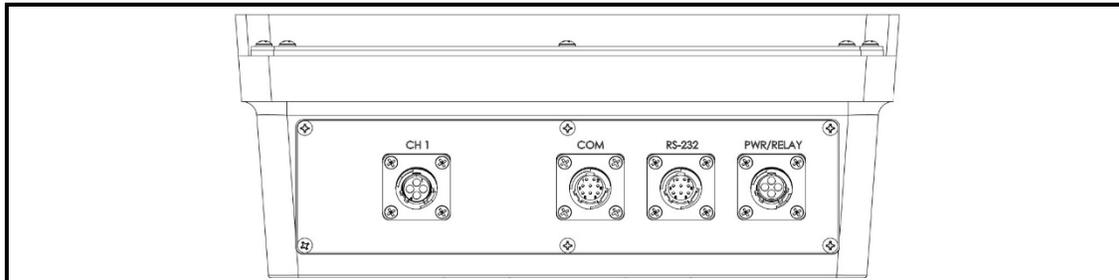
TROUBLESHOOTING

ERROR MESSAGES

| DISPLAY | DEFINITION | DESCRIPTION |
|----------------|---|--|
| EEPE | EEPROM FAILURE Calibration Information Lost or Corrupted | A failure in the EEPROM memory, including calibration, or a new circuit board that has not been calibrated. Either recalibration or a 911 reset of all calibration and settings, may clear the error. If the problem continues, the control panel will need to be replaced. |
| LC ERR | Load Cell Error | A load cell may have failed or there may be a bad connection to the load cells. Unplug ONE (1) load cell at a time and check if the error message remains. If the error message goes away after unplugging a load cell, either the load cell connection needs to be secured or the load cell needs to be replaced. In rare cases, this may also be a failure of the A/D board. |
| LOW.BAT | Low Battery (Supply) Voltage | The indicator measured the supply voltage, and it is too low. Check the power supply voltage and wiring. |
| CAP | Overload or Calibration Information Lost or Bad Load Cell | The weight is greater than the scale capacity limit set in the Calibration menu. Refer to Scale Capacity code 2080. Reduce the load on the scale. If the error message continues, there may be a load cell failure or bad connection. With no load on the scale, press and hold the ZERO Button to reset the zero position. |
| DISP | Number Cannot Be Displayed | A common cause is pressing the ZERO Button with a full load on the scale. When the load is removed, the full number with a minus sign will not fit on the display. Press the ZERO Button to clear the error. |

INDICATOR PIN CONNECTIONS

1 INPUT OPTION

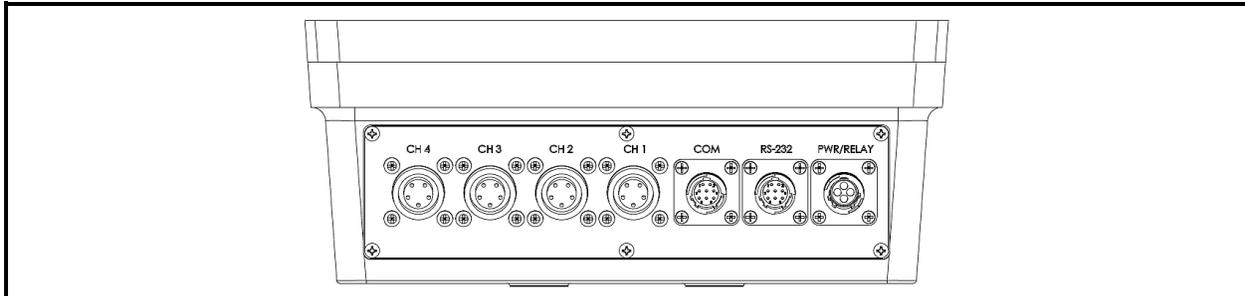


1CH (AMP 4-pos socket) / COM (AMP 8-pin plug) / RS232 (AMP 8-pin plug) / Power-Relay (AMP 4-pin plug)

| CH 1 | | COM | | RS232 | | PWR/RELAY | |
|------|---------------|-----|-------------|-------|-----------|-----------|------|
| 1 | +EXC | 1 | ADIN1 | 1 | ADIN1 | 1 | +12V |
| 2 | -SIG | 2 | RS232 TX3 | 2 | RS232 TX1 | 2 | GND |
| 3 | +SIG | 3 | ADIN2 | 3 | RS232 RX1 | 3 | OUT1 |
| 4 | -EXC & Shield | 4 | RS232 TX4 * | 4 | RS232 TX2 | 4 | DI1 |
| | | 5 | +12VON | 5 | +12VON | | |
| | | 6 | GND | 6 | GND | | |
| | | 7 | ADIN3 | 7 | RS232 RX2 | | |
| | | 8 | GND | 8 | GND | | |

NOTE: * The RS232 TX4 is not currently supported for the LD820 Indicator.

4 INPUT OPTION

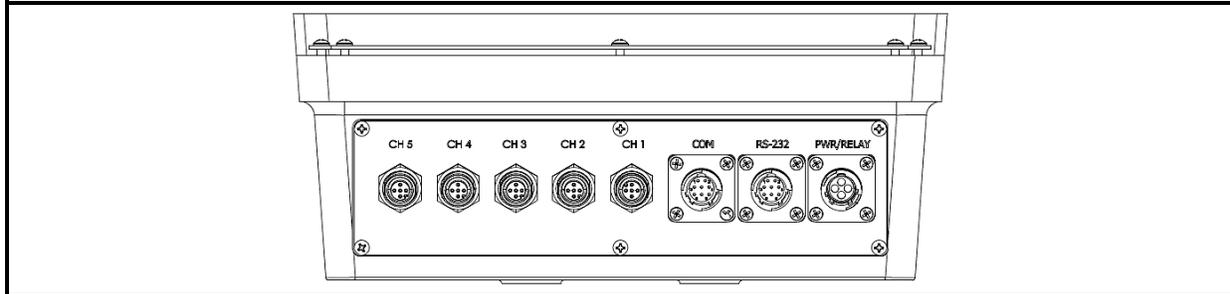


1CH 4 Input (MIL 5-pos socket) / COM (AMP 8-pin plug) / RS232 (AMP 8-pin plug) / Power-Relay (AMP 4-pin plug)

| CH 4 | | CH 3 | | CH 2 | | CH 1 | | COM | | RS232 | | PWR / RELAY | |
|------|---------|------|---------|------|---------|------|---------|-----|-------------|-------|-----------|-------------|------|
| A | -SIG | A | -SIG | A | -SIG | A | -SIG | 1 | ADIN1 | 1 | ADIN1 | 1 | +12V |
| B | +EXC | B | +EXC | B | +EXC | B | +EXC | 2 | RS232 TX3 | 2 | RS232 TX1 | 2 | GND |
| C | +SIG | C | +SIG | C | +SIG | C | +SIG | 3 | ADIN2 | 3 | RS232 RX1 | 3 | OUT1 |
| D | -EXC | D | -EXC | D | -EXC | D | -EXC | 4 | RS232 TX4 * | 4 | RS232 TX2 | 4 | DI1 |
| E | -SHIELD | E | -SHIELD | E | -SHIELD | E | -SHIELD | 5 | +12VON | 5 | +12VON | | |
| | | | | | | | | 6 | GND | 6 | GND | | |
| | | | | | | | | 7 | ADIN3 | 7 | RS232 RX2 | | |
| | | | | | | | | 8 | GND | 8 | GND | | |

NOTE: * The RS232 TX4 is not currently supported for the LD820 Indicator.

5 INPUT OPTION



1CH 5 Input (M12 5-pin socket) / COM (AMP 8-pin plug) / RS232 (AMP 8-pin plug) / Power-Relay (AMP 4-pin plug)

| CH 5 | | CH 4 | | CH 3 | | COM | | RS232 | | PWR/RELAY | |
|------|--------|------|--------|------|--------|-----|-------------|-------|-----------|-----------|------|
| 1 | +EXC | 1 | +EXC | 1 | +EXC | 1 | ADIN1 | 1 | ADIN1 | 1 | +12V |
| 2 | +SIG | 2 | +SIG | 2 | +SIG | 2 | RS232 TX3 | 2 | RS232 TX1 | 2 | GND |
| 3 | -SIG | 3 | -SIG | 3 | -SIG | 3 | ADIN2 | 3 | RS232 RX1 | 3 | OUT1 |
| 4 | -EXC | 4 | -EXC | 4 | -EXC | 4 | RS232 TX4 * | 4 | RS232 TX2 | 4 | DI1 |
| MID | SHIELD | MID | SHIELD | MID | SHIELD | 5 | +12VON | 5 | +12VON | | |
| CH 2 | | CH 1 | | | | 6 | GND | 6 | GND | | |
| 1 | +EXC | 1 | +EXC | | | 7 | ADIN3 | 7 | RS232 RX2 | | |
| 2 | +SIG | 2 | +SIG | | | 8 | GND | 8 | GND | | |
| 3 | -SIG | 3 | -SIG | | | | | | | | |
| 4 | -EXC | 4 | -EXC | | | | | | | | |
| MID | SHIELD | MID | SHIELD | | | | | | | | |

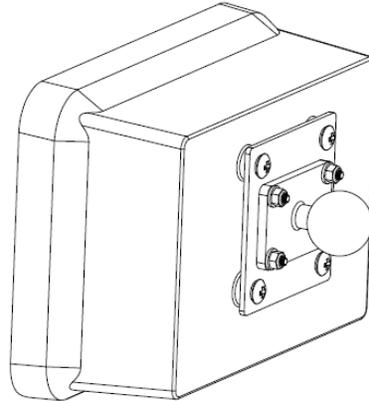
NOTE: * The RS232 TX4 is not currently supported for the LD820 Indicator.

OPTIONAL ACCESSORIES

The indicator comes with rubber standoffs for mount installation. The hole spacing on the back of the indicator for mount installation is 3 in x 3 in.

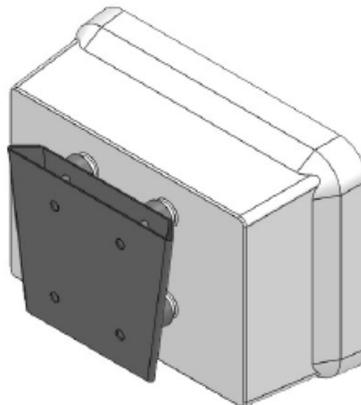
RAM MOUNT

An optional ram style mount is available for securing the LD820™ Indicator to a mounting point on a vehicle or tender. The mount is installed on the rear of the indicator. Installation with rubber stand-offs included with the mount is recommended. Refer to part number 137258.



WEDGE MOUNT

An optional wedge style mount is available for securing the LD820™ Indicator to a mounting point on a vehicle or tender. The mount is installed on the rear of the indicator. Refer to part number 137073.



EU DECLARATION OF CONFORMITY



Product Description: LD820™ Indicator

We, Intercomp Company
3839 County Road 116
Medina, Minnesota 55340 USA

Declare under the sole responsibility of Intercomp Company that the LD820™ Indicator to which this declaration relates is in conformity with the relevant Union harmonization legislation, and meets the essential health and safety requirements, and is in conformity with the relevant EC Directives listed below using the relevant section of the following standards and other normative documents.

| | |
|--|--|
| Directive 2001/95/EC | On general product safety |
| Directive 2014/30/EU | Electromagnetic Compatibility (EMCD) Directive |
| IEC 61326-1 | Electrical equipment for measurement, control and laboratory use - EMC requirements |
| EN 61000-6-1:2019 | Generic standards, residential, commercial and light industry environment |
| EN 61000-6-2:2019 | Immunity for industrial environments |
| EN 61000-6-3:2021 | Emission standard for residential, commercial and light-industrial environments |
| EN 62311:2020 | Assessment of electronic and electrical equipment related to human exposure restrictions for electromagnetic fields (0 Hz - 300 GHz) |
| Directive 2014/53/EU | Radio Equipment Directive (RED) |
| EN 300 328 V2.2.2 (2019) | Wideband transmission systems |
| Directive 2011/65/EU as amended by 2015/863 | On the restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS 3) |
| Directive 2012/19/EU | On waste electrical and electronic equipment (WEEE) |
| 45501:2015 | Metrological aspects of non-automatic weighing instruments |

The safety issues of this measurement equipment have been evaluated under the self-certification provisions of the relevant directives. This product complies with all safety-relevant provisions referring to protection against electrical hazards and other hazards, such as mechanical hazards, fire hazards, noise, and vibration.

The related technical construction files are held for inspection in the U.K. at Intercomp Europe Limited.

Signed for and on the behalf of Intercomp Company:

Mark Browne / Quality Manager
Medina, Minnesota USA
August 20, 2025

SERVICE CONTACT INFORMATION

For service and support, contact your Equipment OEM or Local Dealer.

Inform the Service Department the product is an AG Scale System.

Be prepared to provide the following information:

1. Serial Number(s) of the System and/or Components.
2. Date the system was purchased.
3. Location where the system was purchased.

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