



EZ3400

Operators Manual



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TECHNICAL SPECIFICATIONS

SIZE

10.25" long x 8.0" high x 4" wide (260mm x 190mm

DISPLAY RESOLUTION

.01, .02, .05, .1, .2, .5, 1, 2, 5, 10, 20, 50, 100

WEIGHT

4.5 lbs (2.04 Kg)

DISPLAY UPDATE RATE

Selectable: 1, 2, 3, 4 times/sec.

HELP MESSAGES

Context sensitive help messages in 10 languages

Long messages are scrolled

MAX. DISPLAY RESOLUTION

Adjustable to 40,000 counts max.

TRANSDUCER EXCITATION

8 volts D.C. Nominal

Capable of driving ten 350 Ohms transducers

Short circuit proof

ZERO TRACKING

Selectable, On/Off

SPAN ACCURACY

$\pm (.1\% + .005\% / ^\circ\text{F})$ or $(.1\% + 0.009\% / ^\circ\text{C})$ full scale ± 1 output count

ATC

Auto Temperature Compensation of the internal circuitry for high accuracy weighing measurements

MOTION DETECTION

Selectable, On/Off

TRANSDUCER SIGNAL

Compatible with transducers having full scale indicator transfer characteristics greater than 0.25 mv/v

ZERO ACCURACY

$(.005\% / ^\circ\text{F})$ or $(0.009\% / ^\circ\text{C})$ full scale ± 1 output count for 0.5 mv/v transducer

"AUTO RANGE"

(Selectable) To increase display counts at weight values of 300 and 600 display counts.

ENVIRONMENTAL ENCLOSURE

IP65, IEC 529

CONNECTOR

AMP plastic weather resistant circular connector. Gold contacts.

WEIGH ALGORITHM

4 internally selectable digital filters to optimize performance
(General, Slow, Fast and Lock-on)

POWER REQUIREMENTS

10.5 to 16.0 V.D.C.

160 mA nominal with four 350 Ω L.C.

HOLD MODE

Used in mobile applications to stabilize displayed weight while moving the scale

SET UP AND CALIBRATION

Via front panel

NON-VOLATILE MEMORY

EEPROM for balance

GROSS RANGE

999,999 max. display

OPERATING TEMP

-29 $^{\circ}\text{C}$ to 60 $^{\circ}\text{C}$ -20 $^{\circ}\text{F}$ to 140 $^{\circ}\text{F}$

LOW BATTERY WARNING

Enabled at 10.5V nominal

REMOTE INPUTS

Tare / Advance Recipe / Re-enter Preset

POUND/KILOGRAM

Selectable

DISPLAY

STD EZ 6 Digit LCD 1.0. high

EZ VIEW6 Digit LCD 1.7" high

SAFETY DURING USE



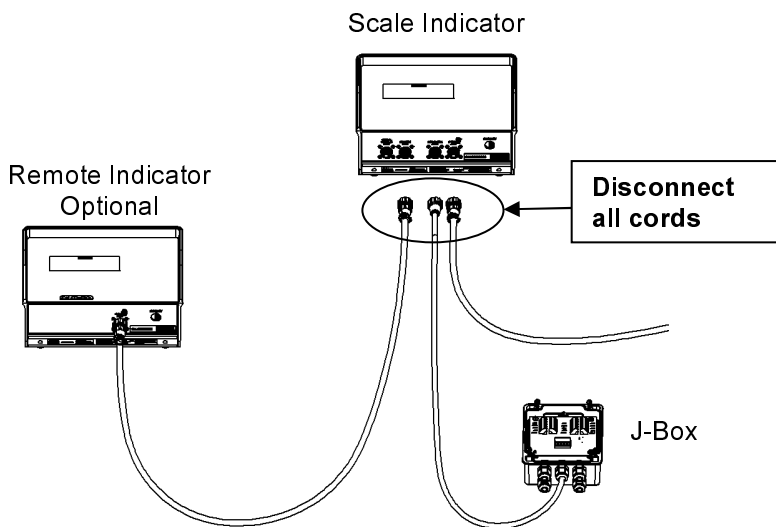
Caution

Cleaning

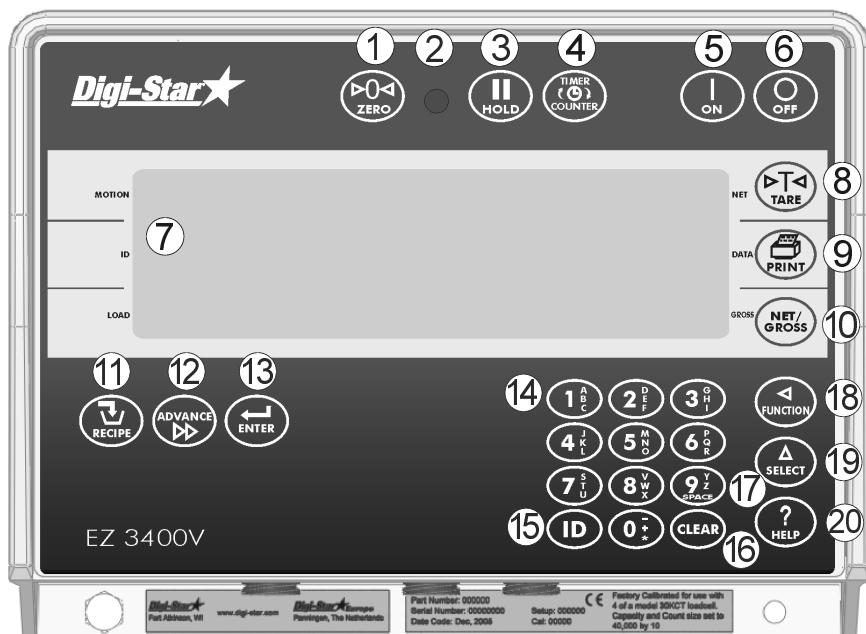
Do not use running water (high pressure cleaners, hoses) to clean the indicator.

Charging Battery and Welding

Disconnect all cables from the weighing indicator before charging the battery or welding on the machine. If cables are left connected, the weighing indicator and connected load cells could be damaged.












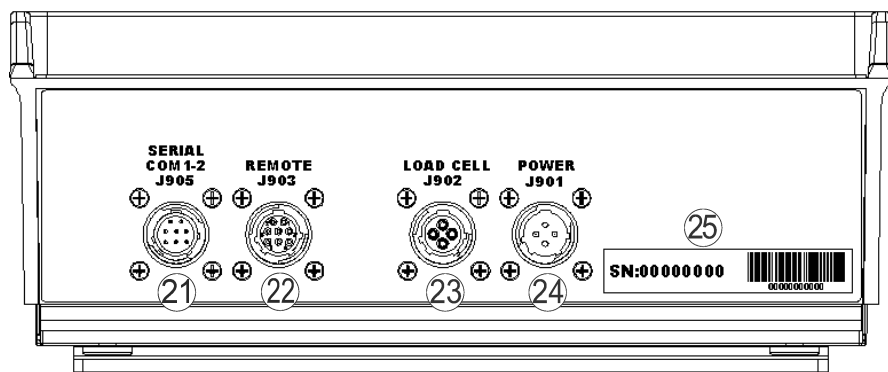
INDICATOR OVERVIEW



Note: See page 38-40 for installation instructions.

- ① – press and hold for 3 seconds to zero balance.
- ② Pre-Alarm Light – Starts flashing and alarm sounds when weight is within preset limit. See page 17.
- ③ – holds displayed weight when moving machine.
- ④ – See pages 14 - 19.
- ⑤ – turns indicator on. Pressing while on will run self test.
- ⑥ – turns indicator off.
- ⑦ Display Window – Displays current actions.
- ⑧ – temporary zero (Net mode).
- ⑨ – records to memory or prints displayed weight.
- ⑩ – toggles between Net and Gross weights.

- 11  – selects recipes in memory, program recipes, see page 21.
- 12  – proceeds to next item.
- 13  – accepts change or proceed to next item.
- 14 Keypad – input numbers or letters as required.
- 15  – used to enter label numbers for weight value to be displayed and printed.
- 16  – clear current command.
- 17  – add space in command.
- 18  – performs tasks displayed by select.
- 19  – displays additional tasks.
- 20  – view for additional information.




- 21 Serial/Printer Port – optional, communicate with computer and other digital input/output devices.
- 22 Remote Port – optional remote display.
- 23 Load Cell Port – for J-Box cord.
- 24 Power Port – for power cord.
- 25 Serial Number Plate – Serial Number of indicator.

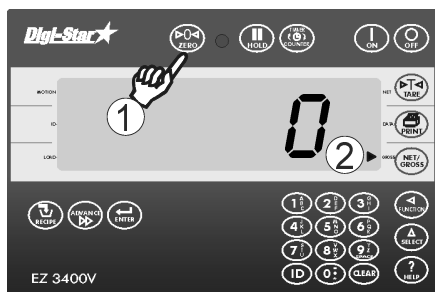
OPERATION


Turn on Indicator




1. Press .

Zero Balance Indicator



1. Press and hold  for 3 seconds to zero balance indicator.
2. Indicator ready to weigh when flashing arrow points to GROSS.


Tare and Net/Gross

Tare is a temporary zero (Net Weight) to display total weight (Gross Weight) Press .



1. Starting weight displayed.
Example: 4000



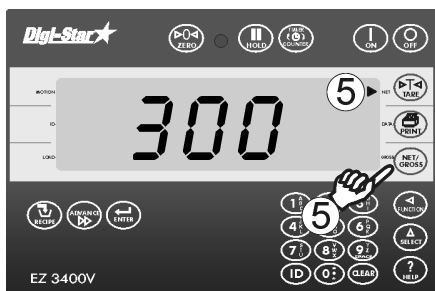
2. Press  to set weight to zero.
Flashing arrow points to NET.



3. Add more weight. Example: 300



4. Press  to show GROSS weight of starting weight of 4000 pounds plus added 300 pounds.
Flashing arrow points to GROSS.



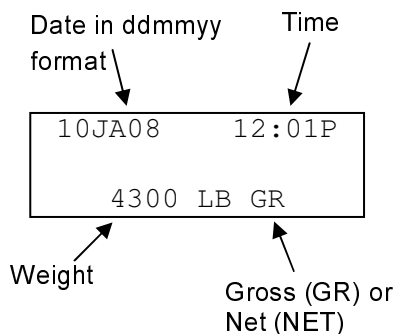
5. Press . 300 pounds displays; flashing arrow points to NET.

Print Key

Note: Optional serial port must be installed for printing.



1. Press  to send data to printer or PC.




Using the M+, RM and CM Options

Use these options to weigh truck or wagon one axle at a time.



1. Add weight on scale. Example: 500 pounds.



2. Repeatedly press  until M^+ is displayed.



3. Press **FUNCTION**; 500 pounds and *RM* briefly display. 500 pounds added to indicator memory and indicator in gross weight mode.



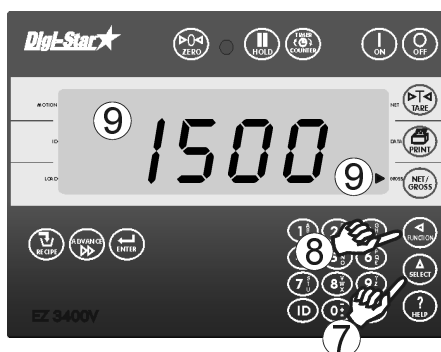
4. Put another weight on scale.
Example: 1000 pounds.





5. Repeatedly press **SELECT** until *M+* is displayed.



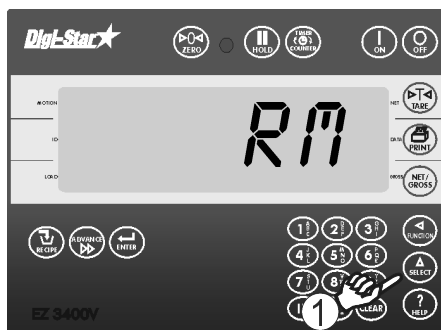
6. Press **FUNCTION**. Indicator adds 1000 pounds to 500 pounds in memory and *RM* flashes.




7. Repeatedly press  until *RM* is displayed.
8. Press .
9. Total of both weights, 1500 pounds, displays. Indicator switches to GROSS weight mode.



(See page 11 to print weight in memory.)

Printing Weight from Memory

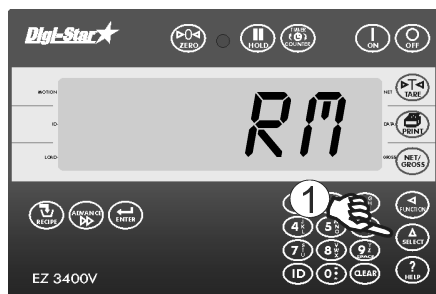


1. Repeatedly press  until *RM* displayed.




2. Press  to show weight in memory. Example: 1500 pounds
3. Press  while weight displayed.

Weight Averaging



1. Repeatedly press  until *RM* is displayed.



2. Press  twice within three seconds to perform weight average.

3. Display shows *COUNT 2* if number of individual weights to average is two. Example weight of 1000 pounds and 500 pounds averaged.




4. Displays *AVERAG*.



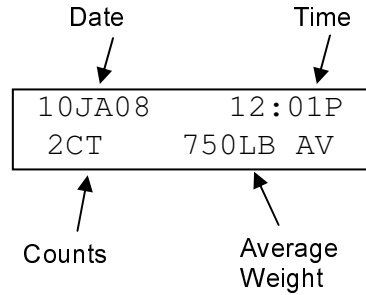
5. Display shows average of two weights in memory. After displaying average weight, indicator returns to gross weight mode.

Printing Average Weight



1. Press  while average weight displayed.

Sample output format shown below:



ADVANCED COMMANDS

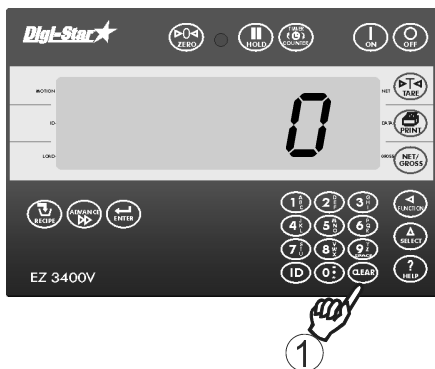
Preset

Enter amount to be loaded or unloaded, alarm sounds as zero is approached.



1. Enter desired preset weight.
2. Press **ENTER** indicator rounds weight to nearest display count.
3. Once preset entered, display shows weight loaded or unloaded in one of three display modes shown on page 12.

Clear Preset Alarm



1. Press **CLEAR** to clear preset value.

Preset Displays Gross Mode




1. Press **NET/GROSS**.

As ingredients load or unload display counts up or down to preset value alternates between flashing word *PRESET* and amount, until 5 percent of weight is loaded or unloaded.

Load/Unload Mode



1. Press .

Displays amount remaining to load or unload. As ingredients are loaded or unloaded, display counts down from entered weight to zero.

Net Mode





1. Press  twice.




Displays weight added since preset entered. As ingredients are loaded or unloaded, display counts up or down.

Preload A Tare Value

Weighing containers after already loaded. If weight of container is known, a tare weight is preloaded in indicator and only net weight displayed.



Pre-Tare: enter 405, press , press  to turn on.

1. Press and hold  for 3 seconds to zero balance the indicator.
2. Add weight to container.
3. Enter known weight of unloaded container.
4. Press .
5. Press .

Mixer Timer



1. Press **TIMER COUNTER**.
2. Enter time, press **TIMER COUNTER**. Time runs down, alarm sound and timer shows negative for over mixing of set time.
3. Press **CLEAR**.

Restart Mix Timer



1. Press **TIMER COUNTER** twice without entering value starts timer using previous time

To Clear Memory



1. Repeatedly press until **CM** displayed.
2. Press .

Review Accumulation Values

See total amount of each feedline since last time values were erased.



1. Repeatedly press until **ACCUM** displayed.
2. Press .
3. Press displays accumulation of other ingredients.
4. Press to change between ingredients and pens.
5. Press .

Erase Accumulation Values



1. Repeatedly press until ingredient displays.

Example: corn silage.



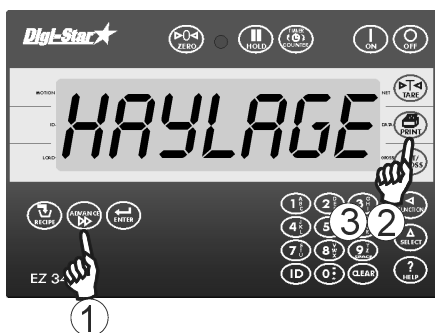
1. Press **ID** to change between ingredients and pens.
2. Hold **CLEAR**. Indicator scrolls *CLEAR TO ERASE, CLEAR/CLEAR TO ERASE ALL*
3. Press **CLEAR** to erase ingredient accumulation for corn silage.
4. Press **CLEAR** again to erase all accumulations.
5. Press **NET/GROSS**.

Print Accumulation Values - One Feedline



1. Press **ADVANCE** to display first ingredient. Repeatedly press **ADVANCE** to display other ingredients.
2. Press **ID** to change between ingredients and pens.
3. Press **PRINT** to print accumulation value for that feedline.
4. Press **NET/GROSS**.

Print Accumulation Values - All Feedlines



1. Press **ADVANCE** to display first ingredient.
2. Press **PRINT** to print ingredient currently displayed.
3. Press **PRINT** again to print all ingredients in memory.

COMMONLY USED DIRECT ACCESS NUMBERS



Ingredient Name Table

The Ingredient Name Table contains 99 entries made up of ingredients and pens that are used when programming a recipe.

Number Of Ingredients

Defines how many ingredients are in the Ingredient Name Table. The default is 30 ingredients and 69 pens.







1. Enter **473** press .
2. Enter the number of ingredients
3. Press  to save.

Pre-Alarm

Select weight or percentage method, enter value to activate early warning indicator reaching preset.



1. Enter **401**, press .
2. Press  again to choose between WEIGHT and PERCENT.
3. Press  to save.
4. Enter Pre-Alarm value. Press  to save.

Auto Advance

Allows hands free operation of programmed recipes. When auto advance feature activated, indicator automatically advances to next ingredient once tolerance, and delay time requirements met.

Tolerance

Sets Auto Advance to trigger prior to reaching preset weight by weight or percentage.



1. Enter **442** and press **SELECT**.
2. Press **SELECT** to choose tolerance method.
3. Press **ENTER** to save.
4. To change percentage, press **SELECT** until desired value is shown. To change weight, enter value.
5. Press **ENTER** to save.

NOTE: OFF setting always advances after preset amount reached.

Example: Preset = 1000 lbs. If tolerance is set to 5%, Auto Advance will activate at 950 lbs or 95% of preset weight.

Delay Time

Changes time indicator waits before automatically advancing to next feedline.

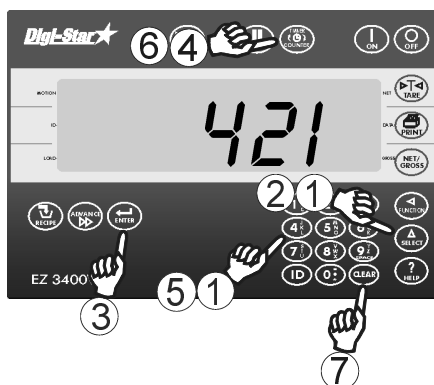


1. Enter **443** and press **SELECT**. Enter delay time in seconds.
2. Press **ENTER** to save.

NOTE: Set to 0 prevents automatic advance.

Rotate Counter

Indicator counts mixer auger rotations.



NOTE: Feature requires optional sensor kit.

1. Enter **421** press **SELECT**.
2. Press **SELECT** picks REV option.
3. Press **ENTER** to save.
4. Press **TIMER COUNTER**.
5. Enter number of rotations.
6. Press **TIMER COUNTER** rotation counter counts down. Counter reaches zero, alarm light and buzzer on.
7. Press **CLEAR**.

Restart Rotation Counter



1. Press **TIMER COUNTER** twice to start rotation counter using previous count.

Drive Ratio

Drive ratio is number of turns seen by sensor divided by number of mixer rotations.



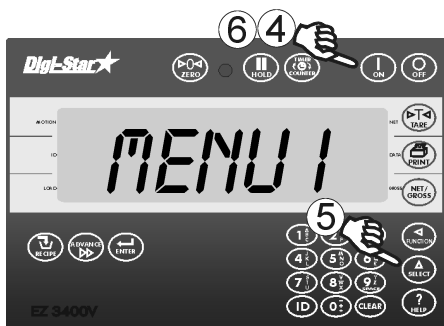
1. Enter **422** and press **SELECT** to enter drive ratio value.
2. Press **ENTER** to save.

MENUS AND ACCESS NUMBERS

Access To Menus



1. Press and hold **NET/GROSS** and **ON**.
2. Press **SELECT** to choose required menu.
3. Press **ON** to enter selected menu.



4. Press **ON** to scroll options.
5. Press **SELECT** to change options.
6. Press **ON** to save changes.

MANUAL PROGRAMMING OF RECIPES

There are three different entry methods for entering ingredients:

Amount Per Animal (this is the default setting)

Allows entry of ingredient amounts required for feeding one animal. Indicator calculates preset amounts required for each ingredient.

Percent (%) Per Load




Enter ingredient amounts in (%). Indicator calculates amounts for each ingredient. Total of all ingredients must equal 100% in this mode.

Amount Per Load

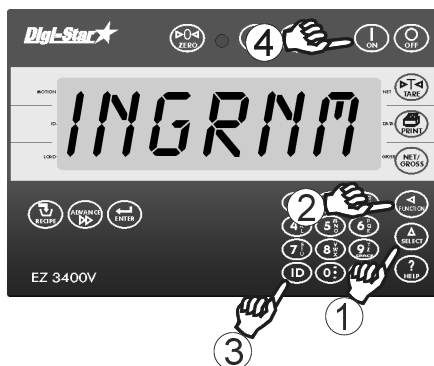
Allows entry of ingredient amounts required per load.

Change Entry Method







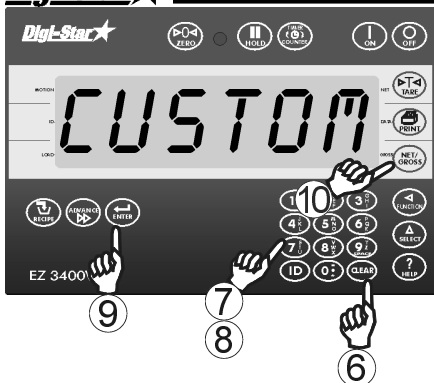
1. Enter **441** press .
2. Repeatedly press  to scroll following entry methods:
 1 = Amount per Animal
 2 = Percent (%) per Load
 3=Amount per Load
3. Press  to set entry method.

Ingredient Re-Name



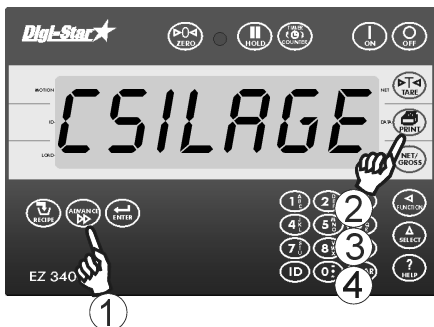
Ingredient names are listed in a standard table and can be changed using the following 9 steps.

1. Repeatedly press  until **INGRNM** displays.
2. Press .
3. Press  to change between ingredients and pens.
4. Press  again to edit name. Display briefly shows **EDIT** and flashing cursor displayed.



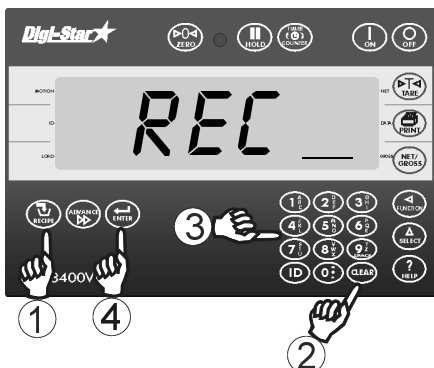
5. Repeatedly press **CLEAR** to erase ingredient.
6. Press “1” key once enters 1, twice enters A, three times for B, other numbers on keypad work same.
7. Pause for one second after entering a number or letter and they shift to left so a new letter or number can be added.
8. Press **ENTER**.
9. Press **NET/GROSS** to exit.

Print Ingredient Names




1. Press **ADVANCE** to display first ingredient.
2. Press **PRINT** to print total accumulations for this ingredient.
3. Press **PRINT** again to print accumulations for all ingredients currently used in all recipes.
4. Press **PRINT** again to print names for all ingredients. Ingredients not used by recipe, show unused.

Enter New Recipe




1. Press and hold **RECIPE** until indicator beeps and displays *PROGRAM* then displays either first recipe programmed or *REC__*. This indicates recipe number can be entered.
2. Press **CLEAR**.
3. Enter recipe number.
4. Press **ENTER** to enter number.




5. Press  to scroll available ingredients.



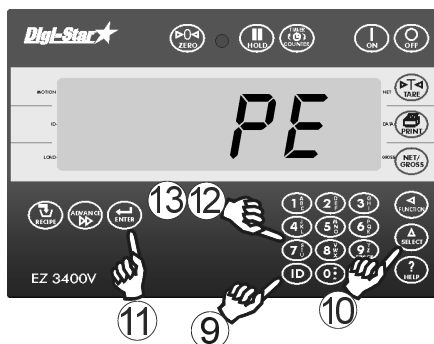
6. Press  to select ingredient on screen.


7. Enter amount of ingredient required. (see note)


8. Press  to store amount.

Repeat steps 5-8 for each ingredient required.

Note: In percent/load entry mode a 75% ingredient, for example, should be entered as 75.00 on display. 5.75% ingredient entered as 5.75.



9. Press  to change to pens.

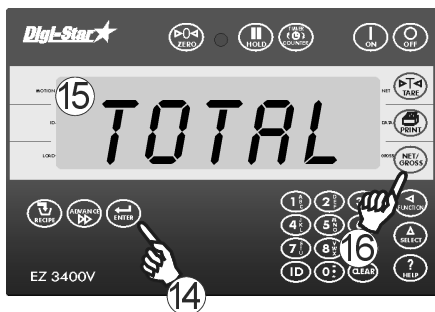
10. Press  to scroll available pens.

11. Press  to select pen on screen.

12. Enter amount for pen.

13. Press  to store amount.

Repeat steps 10-13 for each pen required.



14. Press **ENTER** to complete recipe.
15. Indicator calculates and displays *TOTAL* amount of recipe.
Repeat steps 1 - 15 until all recipes programmed.
16. Press **NET/GROSS** to exit.

Edit Recipe



1. Press and hold **RECIPE** until indicator beeps and displays *PROGRAM*.
2. Repeatedly press **RECIPE** until recipe number displayed.
3. Press **ENTER** to edit this recipe.



4. First ingredient name displayed followed by *AMOUNT*.
5. Enter new amount.
6. **ENTER** stores and advances to next feedline.



7. Press **SELECT** to return to previous ingredient.

Repeat steps 5-6 for each feedline change.

8. Press and hold **RECIPE** to insert a new ingredient. This will insert just before the current ingredient on the screen.



9. Press **ID** to switch between ingredients and pens.

10. Press **SELECT** to scroll available ingredients or pens.

11. Press **ENTER** to select ingredient or pen.

12. Enter amount required.

13. Press **ENTER** to store amount.



14. Press and hold **ZERO** to erase an ingredient. Message *ZERO TO ERASE* scrolls.

15. Press **ZERO** to erase the current ingredient or pen displayed on the screen.

16. Press **NET/GROSS** to exit.

Erase A Recipe



1. Press and hold **RECIPE** until indicator beeps and displays *PROGRAM* followed by first recipe number.
2. Repeatedly press **RECIPE** until desired recipe number displayed.
3. Press and hold **ZERO** message *PRESS ZERO TO ERASE RECIPE OR NET/GROSS TO EXIT* scrolls.
4. Press **ZERO** to erase recipe.
5. Press **NET/GROSS** to exit.

Review A Recipe







1. Repeatedly press **RECIPE** until recipe shown.
2. Press **ADVANCE** to display each ingredient, weight or % and total for recipe.
3. Press **NET/GROSS** to exit.

Printing Single Recipe







NOTE: Optional serial port must be installed for printing.

1. Press  to display first recipe. Repeatedly press  to display other recipes.
2. Press  to print recipe.
3. Press .

Printing All Recipes





1. Press  to display first recipe.
2. Press  to print recipe.
3. Press  again to print all recipes in memory.
4. Press .

RUNNING A RECIPE

Using Amount Per Animal




1. Repeatedly press  until recipe displayed.
2. Press  to accept recipe.
3. Indicator displays *LOADING RECIPE*.




4. Indicator displays *RESIZE* followed by *PEN*.
5. Indicator displays flashing number. Change number to amount of animals to feed.

NOTE: If using percent/load, change number to weight amount for pen.

6. Press .



7. After *RESIZING* all pens, indicator displays ingredient to load and how much to load. As ingredient loaded indicator counts down to zero.
 8. Press  to next ingredient.
- (See page 18 for auto advance)



9. After last ingredient loaded, indicator displays *START DELIVERIES*.

10. Indicator displays pen to unload and how much to unload. As pen is unloaded indicator counts down to zero.

11. Press **ADVANCE** to progress to next pen.






12. After last pen unloaded, indicator displays *RECIPE COMPLETE TOTAL*.

OTHER FUNCTIONS

Hold

Hold mode prevents displayed weight from changing while moving.





1. Press .
2. Press  indicator normal.
3. If weight added in hold mode, press  to cancel hold.

Note: This feature is disabled on all legal for trade systems.


Using Dimmer Option



1. Repeatedly press  until *DIMMER* is displayed.
2. Press  to dim backlight.

Function and Select Keys



1. Repeatedly press  to give following options:

Ingrnm: Rename ingredient.


Menu: View menus 1,2,3,4 and calibrate. See page 32.

Setup: Change setup and calibration numbers. See page 37.

M+: Adding weight to weight memory.


RM: Recall weight memory.

CM: Clear weight memory.


Dimmer: High/Low backlight control. Toggle between high/low using .


Accum: Displays amount of recipe ingredients loaded or unloaded.

Help: Explains operation of select and function key.

2. Once desired option displayed, press  to activate.

MENUS AND CALIBRATION

Enter D.A.N. press  to display setting name, allows value change.

Press  to save setting.

| SETTING [display] | D.A.N NO. | OPTIONS [displayed] BOLD=DEFAULT | | DESCRIPTION |
|---|--------------|--|--|---|
| MENU 1. BASIC FEATURES IN MOST INDICATORS | | | | |
| LANGUAGE (LANGAG) | 101 | English Dutch French German Italian Portuguese Spanish Danish Hungarian Spanish | (ENGLISH) (NEDERL) (FRANCS) (DEUTSH) (ITAL) (PORT) (ESPAÑ) (DANSK) (MAGYAR) (VESTA) | Select language to be displayed. |
| DISPLAY RATE (D RATE) | 102 | 1,2,3,4 | | Update display times per second. |
| MOTION (MOTION) | 103 | ON/OFF | | If ON -motion arrow flashes for unstable weight and will prevent Ingredient or pen advancing. |
| WEIGH METHOD (W MTHD) | 105 | 1=General, 2=Fast, 3=Slow, 4=Lock-On | | Select weigh method |
| TR HOLD (TR HLD) | 107 | ON/OFF | | Display gross weight if TR key is held for 3 seconds. |
| SCALE ID SETUP (SCALEID) | 108 | NEW EZ | | Identity of scale location (truck id or Mixer number). |
| 1 PRESS ZERO (I ZERO) | 115 | ON/OFF | | If ON -press and hold the Zero key to Zero/Balance scale. |
| MENU 2. CLOCK, PRINTER, COMMUNICATIONS FEATURES | | | | |
| TIME FORMAT (TIME F) | 201 | 24 HR AM/PM | | Select time format - AM/PM or 24 hour |

| SETTING [display] | D.A.N NO. | OPTIONS [displayed] BOLD=DEFAULT | DESCRIPTION |
|----------------------------|--------------|---|--|
| 1 TIME (TIME) | 202 | XX:XX:XX | Select key changes time, function key chooses hh:mm:ss. |
| DATE FORMAT (DATE F) | 203 | 1-mm-dd 2-mm/dd/yy 3-mm/dd/yyyy 4-dd-mm 5-dd/mm/yy 6-dd/mm/yyyy 7-ddmoyy 8-ddmoyyyy. | Select date format |
| DATE (DATE) | 204 | Enter XXXXXX | Select key changes date -function key chooses mm/dd/yy . |
| ONE LINE PRINT (1L PRT) | 212 | ON/OFF | If ON -indicator data will be printed on one line. |
| PRINT FORMAT (PRTFMT) | 216 | AUTO WTONLY DOWNLD DT+TM ID+TM IDWTTM ANIMAL 3200-A 3200-B 32-TMR DATCH1 FDINFO WTRCTM EIDINF EID EIDVID | Select alternate & comma (CSV) formats. |
| REMOTE (REMOTE) | 218 | | If ON indicator communicates with cab control display. |
| ZERO OUTPUT (ZEROUT) | 219 | | Perform the Zero/Balance for the SCOREM #11 weight output and the analog output (4-20mA) |
| SCALE NUMBER (SCL NO) | 231 | | Select scale number for cab control communication |



| SETTING [display] | D.A.N NO. | OPTIONS [displayed] BOLD=DEFAULT | DESCRIPTION |
|--|--------------|--|--|
| REMOTE DISPLAY (<i>RMDISP</i>) | 234 | | Select type of remote display |
| ANALOG LOW WEIGHT (<i>LOW WT</i>) | 241 | | Enter analog weight value to equal 4mA or 0 volts |
| ANALOG HIGH WEIGHT (<i>HIGHWT</i>) | 242 | | Enter analog weight value to equal 20mA or 5 volts |
| ANALOG SELECT (<i>ANROUT</i>) | 243 | | Select 0-5V,4-20mA or 0-20mA output |
| MENU 3. SCALE CALIBRATION SETTINGS | | | |
| DISPLAY COUNT (<i>COUNT</i>) | 301 | .01,.02,.05,.1,.2,5,1,2,5, 10 , 20, 50,100 | Select display count size of weigh values. |
| DISPLAY UNIT (<i>LB-KG</i>) | 303 | LB/KG | Display pounds -lb or kilograms -kg |
| CAPACITY (<i>CAP</i>) | 304 | 40000 | Enter MAXIMUM weight measurable on scale. |
| MENU 4. PRESET, BATCHING & COUNTER FEATURES | | | |
| PRE ALARM (<i>P MTHD</i>) & (<i>P-ALM</i>) | 401 | WEIGHT PERCNT | Select weight or percentage method, then enter a value to activate an early warning that indicator is reaching the preset. |
| REMOTE INPUT (<i>RM INP</i>) | 402 | MIXCTR INGRED PRESET | Set function of remote input line on the power cord. |
| ALARM OUTPUT (<i>AL OUT</i>) | 403 | PRESET TR | Select preset or TR to control relay, horn & lamp. |
| BUZZER (<i>BUZZER</i>) | 404 | 1-4, ON/OFF | ALARM BUZZER - allows user to turn off alarm horn. |
| PRELOAD TARE (<i>PRETAR</i>) | 405 | ON/OFF | If ON -tare weights can be entered using the numeric keypad |
| TIMER/ COUNTER (<i>TMRCTR</i>) | 421 | REV TIME | Select time or mixer revolutions to decrement mix timer/counter. |

| SETTING [display] | D.A.N NO. | OPTIONS [displayed] BOLD=DEFAULT | DESCRIPTION |
|--|--------------|-------------------------------------|---|
| DRIVE RATIO (<i>DRATIO</i>) | 422 | 0001.00 | Enter the number of input pulses that equal 1 mixer revolution. |
| GROSS SET POINT (<i>SETPNT</i>) | 423 | 5000 | Set a gross weight in long form that will activate +12VDC Alarm Output on Power cord. |
| GROSS SET POINT CHNG (<i>SETCHG</i>) | 424 | 500 | Set required weight change to turn off +12VDC Alarm Output. |
| GROSS SET POINT DELAY (<i>SETDEL</i>) | 425 | 0-10 | Set the time delay that must expire before the +12VDC Alarm Output can Turn On/Off. |
| GROSS SET PNT OUTPUT (<i>SETOUT</i>) | 426 | OVER/UNDER | Select when the +12VDC Alarm Output becomes active. |
| SET POINT COUNT (<i>SETCTR</i>) | 427 | 0-9 | Counts activation of Code 423 |
| ENTRY METHOD (<i>EMTHD</i>) | 441 | 1,2,3 | Select batch 1- amount/animal 2-percent/load 3- amount/load |
| TOLERANCE (<i>TOLER</i>) | 442 | OFF, .5, 1-5, 7, 10 | Select tolerance weight percentage to accept ingredient. |
| INGR. ADVANCE DELAY (<i>DELAY</i>) | 443 | MANUAL, 1-3, 5, 7, 10, 20, 30, 60 | Select seconds to delay before advancing to next ingredient. |
| INGREDIENT NAMES (<i>INGRNM</i>) | 444 | ON/OFF | If ON displays ingredient names while batching |
| ACCUMULATION (<i>ACCUM</i>) | 445 | ON/OFF | If ON ingredient weights are accumulated while batching |
| INGREDIENT RE-SIZING (<i>INGSIZ</i>) | 449 | 1-ING/OFF | Selects automatic ingredient re-size mode |
| PISPLAY SCOOP % (<i>SCOOP%</i>) | 452 | ON/OFF | If ON displays scoop % to load |

| SETTING [display] | D.A.N NO. | OPTIONS [displayed] BOLD=DEFAULT | DESCRIPTION |
|--------------------------------------|--------------|-------------------------------------|---|
| DOUBLE KEY PRESS PREV (DBKEY) | 465 | ON/OFF | Select method ignores double pressing of keys when advancing ingr. While loading mixer. |
| NUMBER OF INGREDIENTS (NUMING) | 473 | 30,0-99 | Defines how many ingredients are in the Ingredient Name Table. |
| CALIBRATION | | | |
| DEAD WEIGHT CAL ([CAL]) | 802 | | Calibration method using weights |
| SETUP NUMBER ([SETUP]) | 871 | | Quick entry method selects weigh method 1-4lbs, 5-8 kg, gain 1-9, display counts 1-9 and capacity *1000 |
| CALIBRATION NUMBER ([CAL]) | 872 | | Weight displayed at 0.4mV/V for these load cells |

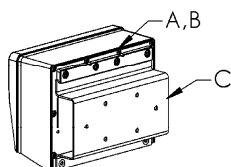
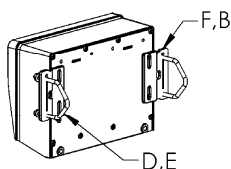
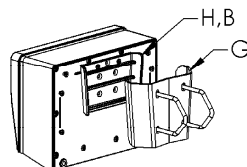
Change Setup And Calibration Numbers



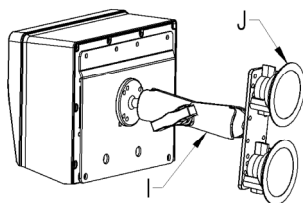
1. Enter **871** press 
 2. Indicator shows *SETUP* briefly then show a 6 digit number. Enter new number.
 3. Press 
- Follow same procedure to change calibration number, except use **872**.

INSTALLATION

Indicator Mounting

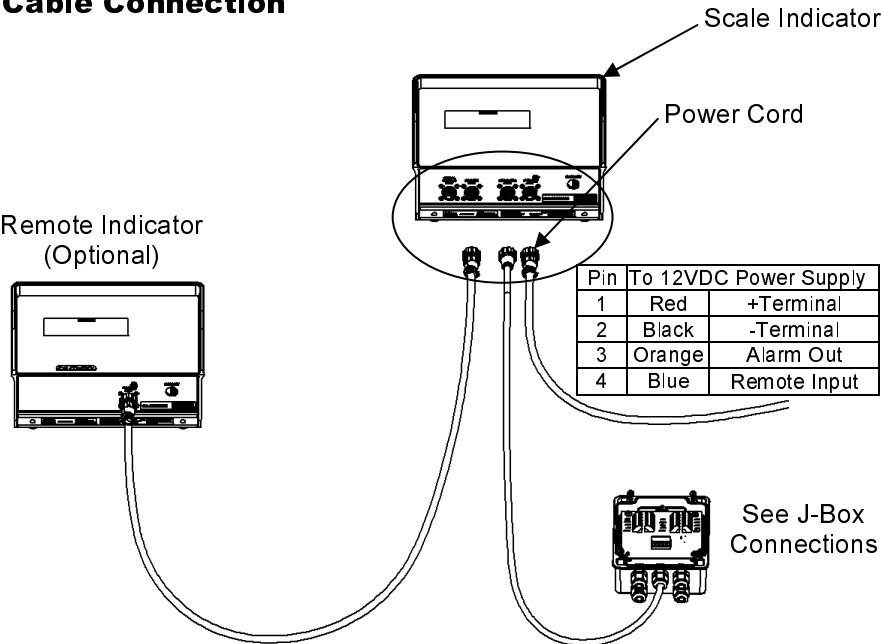

RAIL MOUNT

WING MOUNT

WEDGE MOUNT

| KEY | PART NUMBER | DESCRIPTION |
|-----|-------------|---|
| A | 404353 | BRACKET-EZ3 PLASTIC RAIL * |
| B | 403780 | SCR-#10 X 5/8 FHSTS BLACK ZP |
| C | 840459 | SUPPORT-HAT BRACKET |
| D | 405069 | U-BOLT 1/4-20 X 3.25 ZP |
| E | 405084 | NUT-1/4-20 TOP LOCKING FLANGE |
| F | 403770 | BRACKET- WING MOUNT * |
| G | 405124 | PACK-WEDGE MOUNT BRACKET WITH U-BOLTS & FLANGE NUTS |
| H | 405244 | EZ3 WEDGE MOUNT |

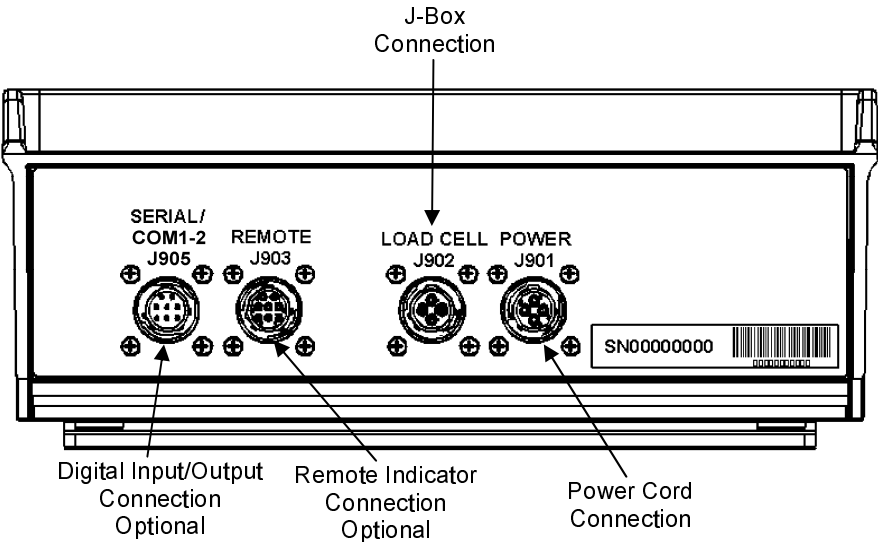

RAM MOUNT

| KEY | PART NUMBER | DESCRIPTION |
|-----|-------------|--|
| I | 404799 | RAM MOUNT FOR EZ III INDICATOR WITH HARDWARE |
| J | 404230 | RAM SUCTION CUP W/TWIST LOCK |

Cable Connection



Indicator Connection Diagram

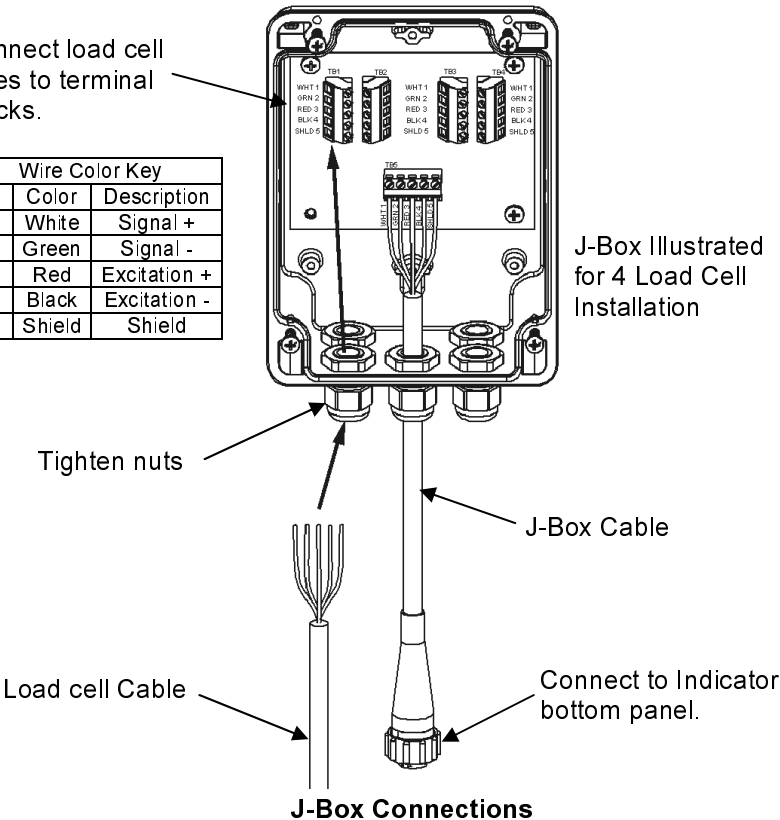


Bottom Panel Cable Connections

Connect Load Cells to J-Box

Connect load cell wires to terminal blocks.

| Wire Color Key | | |
|----------------|--------|--------------|
| | Color | Description |
| 1 | White | Signal + |
| 2 | Green | Signal - |
| 3 | Red | Excitation + |
| 4 | Black | Excitation - |
| 5 | Shield | Shield |



Load Cell Direction



Observe direction of arrow when installing load cell

OPTIONAL EQUIPMENT

Cab Control (Wireless)



- Wireless remote with full key control of indicator on mixer
- Mount remote in easy view of loading
- Improves loading accuracy

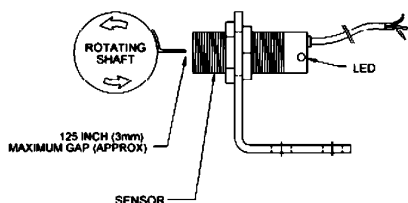
Functions

- Communicates with multiple mixers
- Easily call-up recipes without leaving loader

Specification

- Internally mounted 2.4 GHz radios
- Up to 1000 foot range
- 24 channels
- 12 or 24 volt DC system

Rotation Counter Sensor



Use with indicators equipped with rotation counter port. Sensor allows operator to program indicator to count auger or PTO rotations for accurate mix.

Transmitter/Receiver



Transmitter (shown) with factor installed receiver in indicator. Use to zero indicator from remote location. Operating range about 90 feet.

Features

Remote Indicators



RD440 small remote display with 1" high numbers

RD2400V backlit remote display with 1.7" high numbers

RD2400V backlit remote display w/transmitter and installed receiver

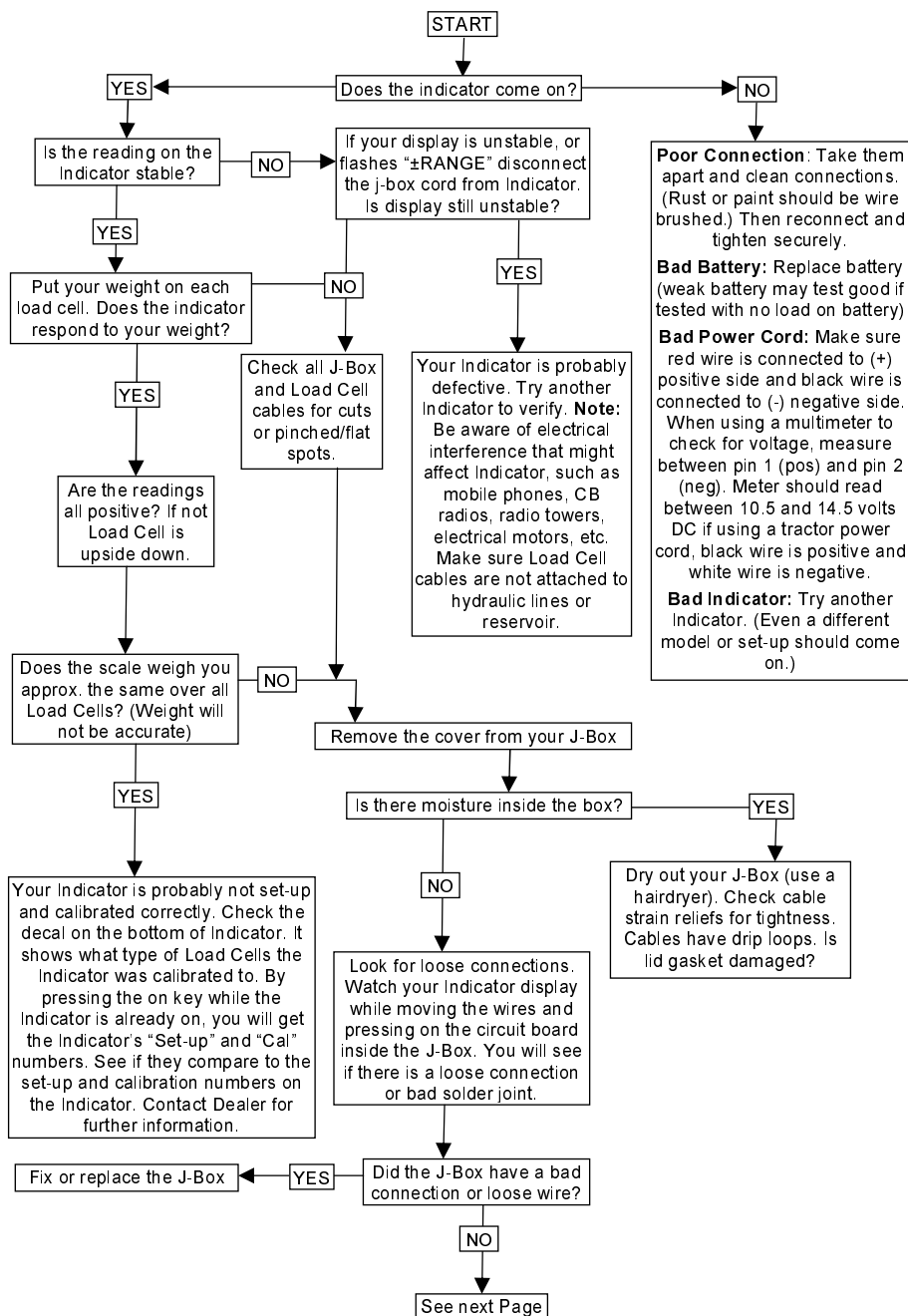
RD2400 backlit remote display with 1" high numbers

RD2400 backlit remote display w/transmitter and installed receiver

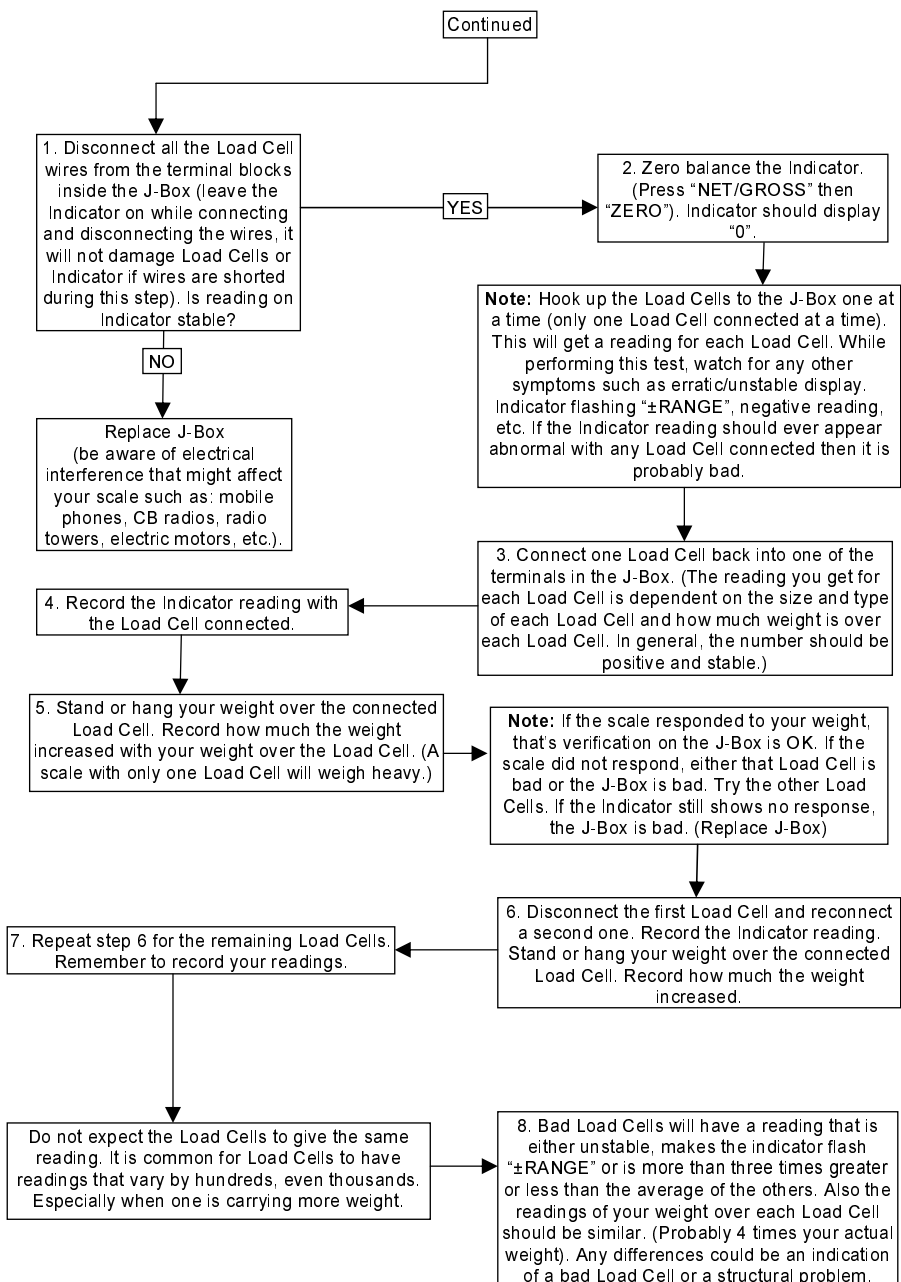
RD4000 remote display

TROUBLESHOOTING

FLOW CHART



FLOW CHART



LEGAL-FOR-TRADE CERTIFICATION

United States

In the US, the Legal-for-Trade certification is regulated by the National Type Evaluation Program (NTEP). The NTEP certificate number is 08-40.

Canada

Measurement Canada is the Canadian agency that regulates Legal-for-Trade scales. The approval number from Measurement Canada is AM-5678C.

Legal for Trade Features

Digi-Star Legal-for-Trade indicators are modified to comply with US and Canadian regulatory agencies. Some of these modifications are:

Load Cell Disconnect Sensor

Indicator displays *+RANGE* or *-RANGE* without flashing load when cells are disconnected.

Hold Function

The Hold function has been disabled. (EZ3400, EZ3600 and EZ4600)

Printing

Printing weight values is not allowed while in motion, during self-calibration, or if any error conditions such as *+RANGE*, *OVRCAP* or *OVRFLW*. are active.

Lock-On Weigh Method

Lock on weigh method (for animal weighing) cannot be enabled.

Tare

Cannot tare a negative weight.

Labeling

The capacity and division information is shown on the front of the indicator.

Sealed to Prevent Un-authorized Modifications



The scale indicator is sealed by a Category 1 Audit Trail. To access the audit trail in the normal weighing mode, press and hold the “ON” key. This will display the current parameter and calibration event count values. Pressing any key will return the indicator to the weighing mode. The audit trail system is always active and cannot be altered. Audit trails are stored in flash memory and do not require batteries to maintain the audit trail values.

Changing any of the following parameters will change the Calibration event count value or parameter audit event count value. This will void your Legal-for-Trade certification unless performed by properly trained personnel.

- Setup
- Calibration
- Capacity
- Display Count
- Display Units
- Weigh Method
- Motion
- WMA1-1 through WMA2-3
- LFT Option Setting

On Legal-For-Trade Units Only

Perform the following procedure on an empty and clean machine before the unit is to be “site-certified”.

- Install the LFT indicator on the machine and connect all load cells.
- Zero/balance the scale with no load on the machine.
- Enter “871” and press . Press  to accept.