Operators Manual

TMR4610

Ft. Atkinson, Wisconsin USA

Panningen, The Netherlands

www.digi-star.com
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1.0 INTRODUCTION

Thank you for your purchase of a Digi-Star TMR4610 scale indicator. Your TMR4610 is the culmination of more than 30 years of agricultural weighing engineering and expertise. With proper operation and preventative maintenance, the TMR4610 will last for many years.

The Digi-Star TMR4610 is primarily designed for weighing agricultural animal feed products during the loading and unloading of mobile and stationary feed mixers. The TMR4610 can also be used on feed delivery boxes, forage wagons, grain carts, and animal scales.

The TMR4610 is not for use with applications for which the TMR4610 is not intended, or as outlined in this manual.

Use of the TMR4610 outside of its intended purposes may result in inaccurate weight measurement or damage to instrument.
2.0 TMR4610 SPECIAL FEATURES

Preset Weight

The TMR4610 indicator provides simple to use and very useful Preset Weight feature. Using the numeric keypad, the operator can enter the desired weight of product that the operator wants to load or unload. Once loading or unloading begins the TMR4610 will count down to 0 (zero). As the weight approaches 0 the audio and visual alarms will begin to pulse with the frequency of the pulses increasing the closer the preset weight gets to 0. At 0 the alarm light and buzzer will sound continuously.

See section 10.3 for details.

Rotation Counter / Timer

The Rotation Counter / Timer provides the useful benefit of monitoring mix revolutions or mix time and a warning light, buzzer, or external signal will indicate when the desired mix revolutions or time has been achieved. For this the TMR4610 uses an optional Rotation Counter Sensor (See Option Equipment Section: 17.0) which is fitted to the drive line of the feed mixer. See section 11.7 for details.

Maintenance Message

The Maintenance Message is available with the Machine Hour Meter function noted above and provides the ability for the equipment manufacturer or equipment owner to utilize the TMR4610 to display a specific Service or Maintenance message after a predetermined period of operation like a Change Oil message in an automobile.

See section 11.9 for details.

Machine Hour Meter

The TMR4610 when fitted with the Rotation Counter Sensor can be configured to record hours of operation. The Machine Hour Meter can provide valuable information to aid the user in determining when maintenance and upkeep is required.

See section 11.6 for details

Three-line LCD Display White Back Light

A much brighter three-line LCD display to read in day light hours. With a bright white back light, the LCD can be seen at greater distances at night.

Log-In / Log-Out

This feature is designed for customers with more than one TMR4610 being used for feeding. The operator can log out of the current TMR4610 being used for feeding and all the feeding information will be saved on the USB. Then the operator can go and log in to a different TMR4610 and install the USB, this will load all the feeding information. This allows the operator to continue feeding from exactly where they left off.
3.0 ACCURACY STATEMENT

READ THIS SECTION BEFORE USING THE SCALE SYSTEM

Digi-Star Scale Systems are designed and manufactured to provide the greatest accuracy possible. However, proper installation and use are required in order to obtain the highest level of accuracy.

When using the scale system, the following must be considered to realize the best possible performance and accuracy.

- Load cells must be installed with the proper orientation. Most Digi-Star load cells have a label indicating either the “TOP” or bending direction of the load cell. Inspect load cells to determine if the load cells are installed correctly. Incorrect installation of load cells will result in inaccurate measurement.
- Load cells should not be subjected to any strains or loads other than the weight of the load. Stress or strain caused by misalignment or other factors when accurate weight readings are desired will negatively affect the accuracy.
- The weighing unit should be stationary with minimum movement, and on a level surface, to ensure that weight readings are as accurate as possible.
  - The effect of movement on accuracy depends on the speed and roughness of the ground and application. Rougher terrain and faster and/or greater movement increases the degradation of accuracy.
  - A level surface is defined as being less than a 5" (13cm) change in rise over 10' (3.0m) of run. As the slope of the terrain increases, degradation of accuracy will also increase.
### 4.0 TECHNICAL SPECIFICATIONS

<table>
<thead>
<tr>
<th>Specification</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>SIZE</strong></td>
<td>10.25&quot; long x 8.0&quot; high x 4&quot; wide (260mm x 190mm x 105mm)</td>
</tr>
<tr>
<td><strong>WEIGHT</strong></td>
<td>4.5 lbs. (2.04 Kg)</td>
</tr>
<tr>
<td><strong>HELP MESSAGES</strong></td>
<td>Context sensitive help messages in 10 languages; Long messages are scrolled</td>
</tr>
<tr>
<td><strong>LOAD CELL EXCITATION</strong></td>
<td>8 volts D.C. Nominal, Capable of driving ten 350 Ohms transducers, Short circuit proof</td>
</tr>
<tr>
<td><strong>AUTO TEMPERATURE COMPENSATION</strong></td>
<td>Of internal circuitry for high accuracy weighing measurements</td>
</tr>
<tr>
<td><strong>LOAD CELL SIGNAL</strong></td>
<td>Compatible with Load Cells with greater than 0.25 mv/v</td>
</tr>
<tr>
<td><strong>CONNECTORS</strong></td>
<td>AMP plastic weather resistant circular connector. Gold plated contacts.</td>
</tr>
<tr>
<td><strong>POWER REQUIREMENTS</strong></td>
<td>10.5 to 16.0 V.D.C. 160 mA nominal with four 350Ω L.C.</td>
</tr>
<tr>
<td><strong>SET UP AND CALIBRATION</strong></td>
<td>Via front panel or saved when downloading the setting files.</td>
</tr>
<tr>
<td><strong>GROSS RANGE</strong></td>
<td>999,999 max-display</td>
</tr>
<tr>
<td><strong>LOW BATTERY WARNING</strong></td>
<td>Enabled at 10.5V nominal</td>
</tr>
<tr>
<td><strong>POUND/KILOGRAM</strong></td>
<td>Selectable</td>
</tr>
<tr>
<td><strong>DISPLAY</strong></td>
<td>LCD with 84 Character Display.</td>
</tr>
<tr>
<td><strong>DISPLAY RESOLUTION</strong></td>
<td>.01, .02, .05, .1, .2, 5, 1, 2, 5, 10, 20, 50, 100</td>
</tr>
<tr>
<td><strong>DISPLAY UPDATE RATE</strong></td>
<td>Selectable: 1, 2, 3, 4 times/sec.</td>
</tr>
<tr>
<td><strong>MAX. DISPLAY RESOLUTION</strong></td>
<td>Adjustable to 40,000 counts max.</td>
</tr>
<tr>
<td><strong>ZERO TRACKING</strong></td>
<td>Selectable, On/Off</td>
</tr>
<tr>
<td><strong>SPAN ACCURACY</strong></td>
<td>± (.1% + .005%/ °F) or (.1% + 0.009% °C) full scale ± 1 output count</td>
</tr>
<tr>
<td><strong>MOTION DETECTION</strong></td>
<td>Selectable, On/Off</td>
</tr>
<tr>
<td><strong>ZERO ACCURACY</strong></td>
<td>(.005%/ °F) or (0.009% °C) full scale ±1 output count for 0.5 mv/v transducer</td>
</tr>
<tr>
<td><strong>ENVIRONMENTAL ENCLOSURE</strong></td>
<td>IP65, IEC 529</td>
</tr>
<tr>
<td><strong>WEIGH ALGORITHM</strong></td>
<td>3 internally selectable digital filters to optimize performance (General, Slow, and Fast)</td>
</tr>
<tr>
<td><strong>HOLD MODE</strong></td>
<td>Used in mobile applications to stabilize displayed weight while moving the scale</td>
</tr>
<tr>
<td><strong>NON-VOLATILE MEMORY</strong></td>
<td>Standard</td>
</tr>
<tr>
<td><strong>OPERATING TEMP</strong></td>
<td>-29°C to 60°C             -20°F to 140°F</td>
</tr>
<tr>
<td><strong>2 REMOTE INPUTS (Power/Remote ports)</strong></td>
<td>Tare / Print / Hold / Net Gross / M+ / Zero / TR Hold / Re-enter Preset / Switch / INGRED</td>
</tr>
</tbody>
</table>
5.0 SAFETY DURING USE

⚠️ **Danger**: Indicates an imminently hazardous situation that, if not avoided, could result in death or very serious injury.

⚠️ **Warning**: Indicates a potential hazardous situation that, if not avoided, may result in death or very serious injury.

⚠️ **Caution**: Indicates a potential hazardous situation that, if not avoided, may result in a minor injury.

**NOTE!**

**Cleaning**: Do not use running water, pressure washer or hoses to clean the indicator or touch screen.

**Charging Battery**: Disconnect all cables from the indicator and touch screen before charging the battery or welding on the machine. If cables are left connected, the indicator, touch screen and connected load cells could be damaged.
6.0 FEED MANAGEMENT SOFTWARE

TMR Tracker is a full-featured Windows based feed management system. TMR tracker also offers operators additional management tools including: Operator control, pen review, on line feed data exchange with nutritionists, ingredient tracking and numerous reports. TMR Tracker is an indispensable management tool for forward thinking operations.

For additional information go to www.tmrtracker.com
7.0 INDICATOR OVERVIEW

1. **零（ZERO）** - Press and hold for three seconds to zero balance.

2. **Pre-Alarm Light** - Starts flashing and alarm sounds when weight is within preset limit.

3. **Holds displayed weight when moving machine**

4. **Mixing timer runs down, alarm sounds / Rotation counter is added to count shaft rotations, alarm sounds.**

5. **Turns indicator on. Pressing while on will run self-test.**

6. **Turns scale indicator off.**

7. **Display Window** – Displays current actions.

8. **Press TARE button for temporary zero when adding more weight.**

9. **Records to memory or prints displayed weight.**

10. **Toggles between NET and GROSS weights.**

11. **Selects recipes in memory**

12. **Enter user’s ID number and feeding ID number when using the keypad.**
13 CLEAR – Clear the characters on LCD (backspace)
14 – Press in list mode to begin pen unloading.
15 – Accepts change or proceeds to next item.
16 Directional Arrows – Moves through list of information. Left arrow (-) and right arrow (+)
17 Keypad – Input numbers or letters
18 – Performs tasks displayed when using the select button
19 – Display additional tasks for the user.
20 – Shows additional information for last key pressed.

Indicator Connections Overview

21 Load Cell Port – For J-Box Cord.
22 Remote Port – Optional remote display.
23 Serial/Printer Port – Communicate with computer and other digital input/output devices.
24 Power Port – For Power Cord.
25 Serial Number Plate – Serial Number of Indicator.
26 USB Drive Port – Insert USB Drive to upload/download data
8.0 OPERATION

8.1 Turn on Scale

1. Press \( \text{ON} \) .

8.2 Zero Balance Indicator

1. Enter User ID Number if required.
2. Press \( \text{ID} \) .

1. Press and hold \( \text{ZERO} \) for three seconds to zero balance scale.
2. Flashing arrow on side of display points to gross next to the display window, scale is ready to weigh.
8.3 Tare and Net Gross

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

1. Weight displayed, Press TARE sets zero weight.

2. Display reads zero and flashing arrow on side of display points to NET.

3. Add more weight and display reads added weight value.
4. To show total of original weight of 1500 pounds plus added 400 pounds, press flashing arrow on side of display points to GROSS.

8.4 Print Key

1. Press . Indicator sends data to printer or PC. Flashing arrow on side of display points to DATA. Shown below is an example of AUTO print format;

```
RECIPE# 1  BATCH# 2
27MY17 5:00PM
AMOUNT/ANIMAL = 300
INGRED LOADED PRESET
-------------------------
CORN 1400LB NE 1375LB PR
HAY 2650LB NE 2750LB PR
CSILAG 4130LB NE 4125LB PR
HAYLAG 5510LB NE 5500LB PR
PEN-01 -6250LB NE 6250LB PR
PEN-02 -7510LB NE 7500LB PR
```

---
9.0 DATA TRANSFER

9.1 USB Drive Mode

To upload data:
Insert USB Drive.

1. Press \( \text{ON} \) or \( \text{OFF} \).

Note: When unused recipes are found on indicator, the indicator displays, Warning—unused recipes found in EZ —Press \( \text{ON} \) to load new recipes from USB drive –Press \( \text{OFF} \) to exit.

Remove USB drive when complete.

To download data:
Insert USB Drive, indicator automatically sends data to USB Drive. Remove USB Drive.

9.2 RF Datalink Modes

<table>
<thead>
<tr>
<th>Operation</th>
<th>Message</th>
</tr>
</thead>
<tbody>
<tr>
<td>DataLink connects with indicator</td>
<td>( \leftrightarrow \text{PC} \rightarrow )</td>
</tr>
<tr>
<td>DataLink sends data to indicator</td>
<td>( \text{DL} \leftrightarrow \text{IN} )</td>
</tr>
<tr>
<td>Indicator receives data</td>
<td>( \text{ALL FEED LINES RECEIVED} ) ( \rightarrow ) ( \text{PRESS RECIPE KEY TO CONTINUE} )</td>
</tr>
<tr>
<td>Data compete, indicator sends data to DataLink</td>
<td>( \leftrightarrow \text{PC} \rightarrow )</td>
</tr>
<tr>
<td>Data sending</td>
<td>( \text{DL} \rightarrow \text{OUT} )</td>
</tr>
</tbody>
</table>

To send data to PC if operator does not complete all feeding at end of feeding schedule. Press \( \text{SELECT} \) until display shows message (right column), press \( \text{FUNCTION} \) to perform transfer.

The indicator marks uncompleted data as completed and sends feeding data to DataLink.

**NOTE:** Indicator may also be manually programmed.
9.3 LOG IN

With the addition of the TMR4610 to the TMR batching family of indicators, a new feature was created. The Log In/Log Out feature could be used in the following scenarios.

- Equipment failure – feedlines can be sent to a different indicator to be completed.
- Shift Feeding – Multiple scales could be used to complete feedings by shift

**METHOD #1 – Manual Mode**

1. Repeatedly press the FUNCTION key until “LOG” is displayed.
2. Press and hold the FUNCTION key.
3. The LOG screen will be displayed.
4. Press the 1 key to perform a “log in” and follow the prompts.

**Warning:** When a log in is performed, all internal feedline memory will be overwritten.

5. When completed, indicator will prompt to remove USB drive

**METHOD #2 – Automatic Mode**

**NOTE:** To use Auto mode, (MSTORE – D.A.N 6215) setting will need to be set to SELECT – see Media Storage pg. 18.

1. Insert USB, indicator should display the SELECT screen.
2. Press the 1 key to perform a “log in” and follow the prompts.

**Warning:** When a log in is performed, all internal feedline memory will be overwritten.
9.4 LOG OUT

METHOD #1 – Manual Mode

1. Repeatedly press the FUNCTION key until “LOG” is displayed.
2. Press and hold the FUNCTION key.
3. The LOG screen will be displayed.
4. Press the 2 key to perform a “log out” and follow the prompts.
5. When completed, indicator will prompt to remove USB drive

NOTE: When a log out is performed, the indicator will create 2 files.
DS_DONE – All completed records.
DS_BATCH IMAGE – All undone records and partial drops.

METHOD #2 – Automatic Mode

NOTE: To use Auto mode, (MSTORE – D.A.N 6215) setting will need to be set to
SELECT – see Media Storage pg. 18.

1. Insert USB, indicator should display the SELECT screen.
2. Press the 2 key to perform a “log out” and follow the prompts.
3. When completed, indicator will prompt to remove USB drive
9.5 ADDITIONAL SETTINGS

MEDIA STORAGE
(MSTORE – D.A.N 6215)
QSTART – Data is automatically uploaded/downloaded when media is installed.
MANUAL – Media does not need to stay installed into indicator. Transfer is done manually by use of the USB > EZ and EZ > USB options found in the SELECT and FUNCTION keys.
SELECT – When media is inserted, indicator will prompt user to complete one of the following:
Upload/Download, Log In, or Log Out.

PARTIAL FEED
(PARTFD – D.A.N 6219)
Allows a portion of a pen’s PRESET weight to be delivered and saved as a separate feedline. The original feedline’s PRESET is updated to remove what was delivered.
For use with LIST mode feeding.
MIMIC TYREL TCX-1300

(TC1300 – D.A.N 6221)

This feature causes the indicator to weigh and behave differently while batching. The ingredient or pen preset weight display includes all weight changes that have occurred since the last ingredient or pen weight was logged. The TARE key can be used to clear any weight displayed prior to loading or unloading.

ADDED FEATURES

(These settings only apply when TC1300 is enabled.)

- Enter or Print will perform a partial drop.
- When performing a partial drop, indicator will jump to next pen.
- Disable Ingredient/Pen toggle – Under normal operation, if ingredient/pen is idle for 8 seconds, the ingredient/pen name will be displayed again.
- Partial drops sent to printer
10.0 INDICATOR DATA FORMATS

Data sent to indicator sent in two formats:

**Complete Loads Mode:** Each load built by PC software. It assigns pens to recipe and builds exact load for pens.

**Recipe and Pen List Mode:** PC software sends recipe data and pen data in two different fields. Operator selects recipe to build and pen deliveries.

10.1 Loading and Feeding Complete Loads Mode

Starting a Recipe

1. Press 📐.

2. Scrolls feeding number, first recipe and pen number.

3. Press UP and DOWN arrows to find desired recipe.

4. Desired recipe in display line, press 📐.
10.2 Resize Recipe Weight

Indicator gives option to resize pen load weight.

1. Enter new weight or keep original weight.
2. Press \[ \] to accept pen values without resizing.

Note: Press \[ \] to resize by number of head in pen.

Note: Press \[ \] to accept pen values without resizing.

Note: If indicator warns resized amount is over capacity, this may damage the mixer.

To continue, press \[ \] to override.

**TMR Models:** Additional Resize Functionality

Additional functionality was added to the resize (RESIZE – D.A.N. 6013) feature in TMR indicators. Pre-version allowed the user to select between headcount or load size. This release allows the user to select the following selections:

- **OFF** – No resize options
- **SELECT** – Original functionality, prompts user when recipe is started. User can toggle between head change and load weight change by pressing the SELECT key.
- **LOAD** – When prompted, only LOAD size is available for resizing.
- **ANIMAL** – When prompted, only ANIMAL is available for resizing.
10.3 Loading Recipe

1. First ingredient weight flashes in display. Load ingredient.

2. Weight approaches zero, alarm will flash and sound.

3. **Manual Advance:** Weight reached, press $\uparrow$ again to start next ingredient.

   **OR**

   **Auto Advance:** When preset weight reached, indicator advances to next ingredient.

**Ingredients loaded, indicator displays first pen to unload.**

1. **Manual Advance:** Press $\uparrow$ to go to pen. When weight reached, press $\uparrow$ to accept. Press $\uparrow$ again to start next pen.

   **OR**

   **Auto Advance:** When preset weight reached, indicator advances to next pen. Last pen completed, indicator displays recipe complete.

**Note:** Do Not Press $\uparrow$ (List Mode Only).

**Note:** If different pen needed press UP or DOWN arrows to find desired pen.

Press $\uparrow$ for pen delivery.

---

**Indicator Data Formats**

```
SOY  
FD-1 CTR-000  ING SOY  
ZN-0-REC MILK  PRE-2760  
G-0 USE ADVANCE TO LOG
```

```
START  
PEN 6  PRE-20640
```

---

**Note:** Do Not Press $\uparrow$ (List Mode Only).
10.5 Recipe and Pen List Mode

Starting a Recipe

1. Press 

2. Display reads:
   Example:
   Line 1: RECIPE R1
   Line 2: R1 – 25000 TOT- 50000
   Line 3: R2 – 20000 TOT- 18000
   Line 4: R3: 20000 TOT- 10000

3. Press UP and DOWN arrows to select recipe, \( \rightarrow \) to start.

Resize Recipe Weight

Indicator will display: RESIZE, then resize weight.

1. Enter desired recipe weight using key pad.

2. Press \( \rightarrow \), indicator resizes ingredients to recipe’s total weight and displays first Ingredient to load.

Note: Indicator warns resized amount over capacity, press \( \rightarrow \) to override.
10.6 Loading Recipe

1. First ingredient weight flashes in display. Begin loading ingredient.

2. Weight reached, alarm will flash and sound.

3. **Manual Advance:** Weight reached, Press .
   Press again to start next ingredient.
   OR
   **Auto Advance:** When preset weight reached, indicator advances to next ingredient.

10.7 Unloading Pens

1. When ingredient loading is complete, display reads recipe complete. Then press the key (or use D.A.N. 6217 to enable AUTOPEN)

2. Press UP or DOWN arrows to select desired pen.

3. Press .

4. Pen and weight displayed, begin unloading to the pens.

5. **Manual Advance:** Weight reached, press . Press again to start next pen.
   OR
   **Auto Advance:** When preset weight reached, indicator advances to next pen.

6. When unloading is complete press to start next recipe.
11.0 ADVANCE COMMANDS

11.1 Unload Partial Pens

1. Press DOWN arrow to advance to next pen without finishing current pen.

**Note:** If pen tolerance is set and feeding stopped before preset weight reached, alarm sounds, Indicator displays: Pen underfed – press print to remove pen from list – press on to keep pen,

For Pen Tolerance; D.A.N. 6223 PENCHK

11.2 Go Back to Skipped Ingredient

1. Press UP or DOWN arrows to move back.

2. Press 🔴.

**Note:** Ingredient weight changed more than 4 display counts cannot restart that ingredient. For feature used to control skipped ingredient, use D.A.N. 6011 ISTART.

**Example:** If minimum display change is 10 lbs./kg---More than 40 lbs. Cannot restart that ingredient. One count is equal To 10 lbs./Kg.
11.3 Change Feeding Number

1. Press ID.
2. Enter user number.
3. Press .
4. Enter feeding number (1-9).
5. Press .

11.4 Clear Scale Memory

1. To clear scale memory enter D.A.N. 8201, then press . Message will be displayed:

On=Clear, Clear=Reuse, Net=exit

Press ON to erase feeding memory.
Press CLEAR to reuse feeding.
Press NET to exit
11.5 Re-Use Recipe/Pen Data

Note: When re-using data stored in indicator, it takes recipe and pen information and removes completed weights loaded or unloaded and marks them undone. It will accumulate data day to day.

Download data to USB Drive before re-using recipe and pen data stored. D.A.N. 6214, ERASFD Feature will erase the DONE feed-lines, when info is downloaded to the USB.

Note: For continuous re-use, set D.A.N. 6205 to on.

11.6 Mixer Time

The mix timer allows the operator to set a timer to alert the operator when the mixing is completed. This can be manually entered or entered as part of the recipe using the TMR TRACKER or other software package.

1. Press .

2. Use the numeric keypad to enter the amount of time.

3. Press .

4. The Mix Timer will begin to count down. When it reaches zero the alarm light and buzzer will turn on.

5. Press to enter the weighing mode.

6. Press the or key to re-enter the batching mode.
11.7 Rotation Counter

The rotational counter is used much like the timer. It allows the indicator to count the number of revolutions of a mixer shaft and notifies the operator when a set count is reached.

**Note:** First enter D.A.N. 4301, Press \[\text{SELECT}\]. Choose TIMER or COUNTER, by pressing \[\text{SELECT}\]. Then press \[\text{TIMERS/CONTROL}\].

1. Press \[\text{TIMERS/CONTROL}\].
2. Use the numeric keypad to enter the number of rotations.
3. Press \[\text{OK}\].
4. The Rotation Counter will begin to count down. When the counter reaches zero the alarm light and buzzer will turn on.
5. Press \[\text{CLEAR}\] to enter the weighing mode.
6. Press the \[\text{MIXER}\] or \[\text{TIME}\] key to re-enter the batching mode.

11.8 Drive Ratio

**Drive ratio value is:** number of turns seen by the sensor divided by the number of Mixer rotations.

1. Enter D.A.N. 4302 and press \[\text{SELECT}\] to enter the drive ratio value.
2. Press \[\text{I ON}\].
11.9 Maintenance Message

Message can be used to alert the user of maintenance needed to be done on the equipment.

Rotation Counter Sensor Kit--(p/n: 408088) needed for this feature. For proper maintenance schedule, refer to equipment operator's manual(s).

1. Enter D.A.N. 8011 then press .
   The user may edit the maintenance message using keypad or upload via USB.

2. Mantmg 1 is displayed on LCD, then edit maintenance message by using keypad.

Example: Pressing key pad “1” one time will show 1, pressing two times will show “A”, pressing three times will show “B”, pressing four times will show “C”.

Note: Message is 120 characters total split into 20 (6) character prompts.
11.10 Add a Pen to Pen List

(List Mode Only)
1. Enter pen name or number
2. Press
3. Press

1. Press UP or DOWN arrows to find desired recipe.
2. Press

1. Enter amount to unload to pen.
2. Press

1. Enter number of animals/pen.
2. Press

1. If zones are active display reads:

Enter zone 0-9

2. Press
12.0 COMMONLY USED DIRECT ACCESS NUMBERS (D.A.N.)

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

1. Enter 4001 and press
2. Press again to change between WEIGHT and PERCENT.
3. Press
4. Enter Pre-Alarm value. Press

12.2 Manual Pen Advance
Ingredients automatically advance, Pens manually advance.

1. Enter 6009 manual pen advance and press
2. Press , choose on/off.
3. Press

12.3 Auto Ingredient 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.
12.4 Ingredient Tolerance
Sets weight “window” to accept loaded weight before auto advance.

![Diagram](image1.png)

1. Enter 6003 and press ![select](image2.png). Press ![select](image2.png) again to choose desired percentage off, or any entered using the keypad.

2. Press ![enter](image3.png).

**Note:** OFF setting always advances after ingredient amount reached.

12.5 Pen Tolerance

![Diagram](image4.png)

1. Enter 6005 and press ![select](image2.png). Press ![select](image2.png) again to choose weight or percent

2. Press ![enter](image3.png), screen will display pentol.

3. Enter weight or percentage desired.

4. Press ![enter](image3.png).

12.6 Batch Advance Delay
Changes time indicator, waits before automatically advancing to next ingredient.

![Diagram](image5.png)

1. Enter 6008 and press ![select](image2.png). Press ![select](image2.png) again to select delay time or enter delay time using key pad.

2. Press ![enter](image3.png).

**Note:** Set to Manual prevents automatic advance.
12.7 Scale ID or Truck ID

Each indicator has a scale ID.

12.8 Scale Number

Used with cab control option.

12.9 Resize Option

Make weight changes to pens, unload weight or recipe load size.

Commonly Used Direct Access Numbers

(D.A.N.)

1. Enter 1003 and press SELECT.

2. Press and hold CLEAR for three seconds to erase old ID, enter the new ID.

3. Press.

Note: TMR Tracker or other 3rd party Software ID must match.

1. Enter 2002 and press SELECT.

2. Press SELECT again to move up the list and press SELECT to move down the list.

3. Press.

Note: Do not use the same number for two different Indicators.

1. Enter 6014 and press SELECT. Press SELECT again to change to ON/OFF.

2. Press I ON.
12.10 Change Time

1. Enter 1202 and press .
2. Press LEFT arrow to move cursor
3. Press UP arrow to set time.
4. Press .

12.11 Change Date

1. Enter 1204 and press .
2. Press LEFT arrow to move cursor.
   Format DDMMYY, Press UP arrow to set date.
3. Press .
13.0 MANUAL PROGRAMMING OF RECIPES

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.

### 13.1 Switch to Manual Programming

1. Enter 6054 and press .
2. Press again to switch from pc to scale.

Select PC to program recipes with computer.

Select SCALE to manually program recipes with scale indicator.

3. Press .

### 13.2 Change Entry Method

1. Enter 6101 and press .
2. Repeatedly press scrolls

Select one of the following entry methods:

- 1 = Amount per Animal
- 2 = Percent (%) per Load
- 3 = Amount per Load

3. Press .
13.3 Ingredient Re-name

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

1. Repeatedly press select until rename displays.
2. Press function quickly and hold for three seconds.
3. Then first ingredient is shown. Use UP or DOWN arrows to select ingredients to edit. (Press RIGHT arrow to display pens. Press LEFT arrow to display ingredients)
4. Press again to edit ingredient. Display briefly shows edit and flashing cursor is displayed.
5. Press and hold clear, erases ingredient
6. Press “1” key once enters 1, twice enters A, three times for B, other numbers on keypads work the same.
7. Pause for one second after entering a number/letter and they shift to the left.
8. Press.
9. When done entering ingredients, press to exit.

13.4 Print Ingredients Names

1. Repeatedly press until rename is displayed.
2. Press quickly and hold for three seconds.
3. Press , prints total accumulations for ingredient displayed.
4. Press again prints accumulations for all currently used recipes.
5. Press again, prints names for all ingredients. Ingredients not used by recipe and shows unused.
6. When being printed, DATA will have a flashing arrow.
13.5 Enter New Recipe

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.

1. Press and hold until indicator beeps and displays program then displays either first recipe programmed or rec.

2. This indicates recipe number can be entered using keypad.
   Example: REC-01, REC-02, REC-03

3. Press to add recipe.

4. Press UP and DOWN arrows to scroll ingredients.

5. Press to select ingredient shown on display.

6. Enter amount of ingredient required. (See note below)

7. Press to store amount.

Repeat steps 4-7 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.
8. Press RIGHT arrow to change pens.

9. Press UP & DOWN arrows to scroll available pens.

10. Press to select pen on screen.

11. Enter amount for pen.

12. Press to store amount.

13. Press completes recipe.

14. Indicator calculates and displays total amount of recipe.

Repeat steps 1-14 until all recipes programmed.

15. Press to exit.
13.6 Edit Recipe

Manual Programming of Recipes

1. Press and hold \(\text{PROGRAM}\) until indicator beeps and displays program.

2. Press UP or DOWN arrows until recipe number is displayed.

3. Press \(\text{EDIT}\) to edit this recipe.

4. First ingredient name displayed followed by amount.

5. Enter new amount using keypad.

6. Press \(\text{STORE}\), stores and advances to next ingredient.

   Repeat steps 5 and 6 for new amounts

7. Press DOWN or UP arrow until done is displayed

8. Press \(\text{DONE}\) to exit recipe being edited.

   **NOTE:** Ingredients / Pens can now be added and removed from a programmed recipe.

9. Press UP arrow to return to previous ingredient/pen.

10. Press and hold RIGHT arrow for three seconds to insert a new ingredient/pen.

    **NOTE:** This will insert the ingredient/pen just before the current ingredient shown on display, when in recipe edit mode.
Manual Programming of Recipes

11. Press RIGHT arrow to display pens. Press LEFT arrow to display ingredients.

12. Press UP or DOWN arrow to scroll available ingredients or pens.

13. Press ⬇️ to select ingredient or pen.

14. Enter amount required.

15. Press ⬆️ to store amount.

To erase ingredient /pen:

16. Press and hold LEFT arrow to erase a feed-line.

17. Press LEFT arrow to erase the current ingredient or pen displayed on the screen.

18. Repeatedly press ⬆️ to finish editing.

19. Indicator calculates and displays total amount of recipe.

1. Press and hold 🔇 until indicator beeps and displays program followed by first recipe number.

2. Repeatedly press UP & DOWN keys until desired recipe number displayed or keypad in recipe number and press ⬇️.


4. Press LEFT arrow to erase recipe.

5. Press CLEAR to exit.
### 13.8 Review a Recipe

![Image](image1.png)

1. Press ![Recipe](image1.png). Press UP and DOWN arrows to select recipe number.
2. Press LEFT or RIGHT arrow and scale indicator will automatically step through ingredients, then return to recipe number.
3. Press ![Exit](image1.png) or ![Clear](image1.png) to exit.

### 13.9 Printing Single Recipe

**Note:** Optional serial port must be installed for printing.

![Image](image2.png)

1. Press ![Print](image2.png) displays first recipe. Repeatedly press ![Print](image2.png) displays other recipes.
2. Press ![Print](image2.png) prints recipe.
3. Press ![Exit](image2.png).

---

**Manual Programming of Recipes**
13.10 Printing All Recipes

1. Press \( \text{REC} \) displays first recipe.
2. Press \( \text{REC} \) recipe.
3. Press \( \text{REC} \) again prints all recipes in memory.

13.11 Loading a Recipe

1. Repeatedly press \( \text{REC} \) until recipe displayed.
2. Press \( \text{REC} \) to accept recipe.

13.12 Unloading to Pens

1. Scale indicator displays recipe weight.
2. Begin unloading into a pen. As recipe unloads indicator displays recipe weight remaining.
14.0 OTHER FUNCTIONS

14.1 Hold

Hold mode prevents displayed weight from changing while moving mixer around.

1. Press \( \mathbb{II} \).
2. Press \( \mathbb{II} \) again, to return indicator to normal.
3. If weight is added while in hold mode press \( \mathbb{DIM} \) to cancel hold.

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

14.2 Using Dimmer Option

1. Repeatedly press \( \mathbb{DIM} \) until dimmer is displayed.
2. Quickly press \( \mathbb{DIM} \). Display back-light will dim.
3. Press \( \mathbb{DIM} \) again to brighten display back-light.
15.0 DIRECT ACCESS NUMBERS (D.A.N.)

15.1 Options Changed by User

To display menus 1, 2, 3, 4, 5, 6 and Calibrate:

1. Repeatedly press until MENU is displayed.
2. Press and hold to select Menus 1, 2, 3, 4, 5, 6 or Calibrate.
3. Repeatedly press to select Menus 1, 2, 3, 4, 5, 6 or Calibrate.
4. Press displays setting name and allows value changes.
5. Press either or to scroll through options for each setting/display.
6. Press to save setting and next option for menu displays.

<table>
<thead>
<tr>
<th>SETTING [display]</th>
<th>D.A.N. NO.</th>
<th>OPTIONS [displayed]</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>LANGUAGE (LANGAG)</td>
<td>1001</td>
<td>English</td>
<td>Select language to be displayed.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Dutch</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>French</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>German</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Italian</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Portuguese</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Spanish</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Danish</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Hungarian</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Spanish</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Polish</td>
<td></td>
</tr>
<tr>
<td>DISPLAY RATE (DRATE)</td>
<td>1002</td>
<td>1,2,3,4</td>
<td>Update display times per second.</td>
</tr>
<tr>
<td>SCALE ID SETUP (SCALID)</td>
<td>1003</td>
<td>4610</td>
<td>Identity of scale location (truck id or Mixer number).</td>
</tr>
<tr>
<td>ZERO TRACK (ZTRACK)</td>
<td>1004</td>
<td>ON/OFF</td>
<td>If ON - zero track adjust balance for buildup of snow &amp; mud.</td>
</tr>
<tr>
<td>SETTING [display]</td>
<td>D.A.N. NO.</td>
<td>OPTIONS [displayed]</td>
<td>BOLD=DEFAULT</td>
</tr>
<tr>
<td>------------------</td>
<td>-----------</td>
<td>--------------------</td>
<td>--------------</td>
</tr>
<tr>
<td>WEIGH METHOD (W MTHD)</td>
<td>1005</td>
<td>1=General 2=Fast 3=Slow</td>
<td></td>
</tr>
<tr>
<td>1 PRESS ZERO (1 ZERO)</td>
<td>1006</td>
<td>ON/OFF</td>
<td></td>
</tr>
<tr>
<td>AUTO OFF (AUTOFF)</td>
<td>1007</td>
<td>OFF, 15, 30, 45, 60</td>
<td></td>
</tr>
<tr>
<td>DISPLAY UNIT (LB-KG)</td>
<td>1008</td>
<td>LB/KG</td>
<td></td>
</tr>
<tr>
<td>SCROLL DELAY (SCROLL)</td>
<td>1101</td>
<td>0,1,2,3,4, 5, 6, 7, 8, 9</td>
<td></td>
</tr>
<tr>
<td>SAVE TARE (SAVTAR)</td>
<td>1102</td>
<td>ON/OFF</td>
<td></td>
</tr>
<tr>
<td>PRELOAD TARE (PRETAR)</td>
<td>1103</td>
<td>ON/OFF</td>
<td></td>
</tr>
<tr>
<td>TIME FORMAT (TIME F)</td>
<td>1201</td>
<td>24 HR AM/PM</td>
<td></td>
</tr>
<tr>
<td>TIME (TIME)</td>
<td>1202</td>
<td>HH:MM: SS, AM/PM</td>
<td></td>
</tr>
<tr>
<td>DATE FORMAT (DATE F)</td>
<td>1203</td>
<td>1-mm-dd 2-mm/dd/yy 3-mm/dd/yyyy 4-dd-mm 5-dd/mm/yy 6-dd/mm/yyyy 7-ddmmyy 8-ddmmyyyy</td>
<td></td>
</tr>
<tr>
<td>DATE (DATE)</td>
<td>1204</td>
<td>Enter ddmmyy</td>
<td></td>
</tr>
<tr>
<td>DATE CHECK (DT CHK)</td>
<td>1205</td>
<td>ON/OFF</td>
<td></td>
</tr>
<tr>
<td>REMOTE INPUT 1 (RMINP1)</td>
<td>1401</td>
<td>MIXCTR, TR HLD, INGRED, OFF, PRESET, SWITCH, TARE, PRINT, HOLD, NETGRS, M+, ZERO</td>
<td></td>
</tr>
<tr>
<td>SETTING [display]</td>
<td>D.A.N. NO.</td>
<td>OPTIONS [displayed] BOLD=DEFAULT</td>
<td>DESCRIPTION</td>
</tr>
<tr>
<td>------------------</td>
<td>------------</td>
<td>----------------------------------</td>
<td>-------------</td>
</tr>
<tr>
<td>REMOTE 1 SWITCH STATE (RiSTAT)</td>
<td>1403</td>
<td>OPEN/CLOSED</td>
<td>Set remote input line state that displays message and/or illuminates alarm lamp. D.A.N. 1401 set to “switch”.</td>
</tr>
<tr>
<td>REMOTE 1 SWITCH MESSAGE TIME (R1TIME)</td>
<td>1404</td>
<td>0...2-9</td>
<td>Set how often the remote switch message is displayed. Once every 0-9 seconds. D.A.N. 1401 set to “switch”.</td>
</tr>
<tr>
<td>REMOTE INPUT 2 (RMINP2)</td>
<td>1411</td>
<td>TR HOLD, INGRED, OFF, PRESET, SWITCH, TARE, PRINT, HOLD, NETGRS, M+, ZERO</td>
<td>Sets function of remote input line on the remote port.</td>
</tr>
<tr>
<td>REMOTE 2 SWITCH MESSAGE (R2MSG)</td>
<td>1412</td>
<td>OPEN, --, +, *, 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, A, B, C, D, E, F, G, H, I, J, K, L, M, N, O, P, Q, R, S, T, U, -V, -W, -X, -Y, -Z</td>
<td>Message that is displayed for remote input condition. D.A.N. 1411 set to “switch”.</td>
</tr>
<tr>
<td>REMOTE 2 SWITCH STATE (R2STAT)</td>
<td>1413</td>
<td>OPEN/CLOSED</td>
<td>Set remote input line state that displays message and/or illuminates alarm lamp. D.A.N. 1411 set to “switch”.</td>
</tr>
<tr>
<td>REMOTE 2 SWITCH MESSAGE TIME (R2TIME)</td>
<td>1414</td>
<td>0...2-9</td>
<td>Set how often the remote switch message is displayed. Once every 1-9 seconds. D.A.N. 1411 set to “switch”.</td>
</tr>
<tr>
<td>PROGRAM ID (PRG ID)</td>
<td>1998</td>
<td>Example: 15FE16</td>
<td>Displays current software version</td>
</tr>
<tr>
<td>ESTIMATED WEIGHT (EST WT)</td>
<td>1999</td>
<td>Enter weight value using key pad. Then press enter.</td>
<td>Manually adjust Gross weight of scale by changing zero/balance. Press “on” to continue.</td>
</tr>
</tbody>
</table>

**MENU 2 – COMMUNICATIONS FEATURES**

<p>| REMOTE (REMOTE) | 2001 | OFF, ON, MLTLNE | If ON indicator communicates with Cab Control Display |
| SCALE NUMBER (SCL NO) | 2002 | 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, ……48 | Select scale number for cab control communication |
| EXTERNAL RADIO (EXTRAD) | 2003 | ON/OFF | Enables external radio to be connected to the J905 port. |</p>
<table>
<thead>
<tr>
<th>SETTING [display]</th>
<th>D.A.N. NO.</th>
<th>OPTIONS [displayed] BOLD=DEFAULT</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>DDL ATTACHED (DDL)</td>
<td>2004</td>
<td>YES/NO</td>
<td>Enables connection of a DDL (Data Down-Loader)</td>
</tr>
<tr>
<td>SCOREBOARD MODE (SCOREM)</td>
<td>2101</td>
<td>0,1,2,3,4,5,6,7,8,11,12,15,27,37,38,39</td>
<td>Select scoreboard output</td>
</tr>
<tr>
<td>ZERO OUTPUT (ZEROUT)</td>
<td>2102</td>
<td>Weight displayed= Then press ZERO key and hold for three seconds.</td>
<td>Allows zero/balance for SCOREM #11 serial gross weight.</td>
</tr>
<tr>
<td>FRONT PANEL ZEROUT (ZEROFP)</td>
<td>2103</td>
<td>OFF/ON</td>
<td>Allows use of the zero key to zero/balance the serial gross weight.</td>
</tr>
<tr>
<td>OPERATION STATUS (OPSTAT)</td>
<td>2111</td>
<td>0, 2</td>
<td>Select operating data to be sent to a Remote Terminal</td>
</tr>
<tr>
<td>COM 1 BAUD RATE (C1 BD)</td>
<td>2201</td>
<td>1200, 2400, 4800, 9600, 14400, 19200, 38400, 57600, 115200</td>
<td>Sets baud rate for com port #1</td>
</tr>
<tr>
<td>COM 1 PARITY (C1 PA)</td>
<td>2202</td>
<td>NONE, ODD, EVEN</td>
<td>Sets parity for com port #1</td>
</tr>
<tr>
<td>COM 1 DATA BITS (C1DATA)</td>
<td>2203</td>
<td>7, 8</td>
<td>Sets data bits for com port #1</td>
</tr>
<tr>
<td>COM 1 DELAY (C1 DLY)</td>
<td>2204</td>
<td>0, .10, .25, .50, .75, 1-5</td>
<td>Selects seconds to delay before advancing to next line.</td>
</tr>
<tr>
<td>COM 2 BAUD RATE (C2 BD)</td>
<td>2211</td>
<td>1200, 2400, 4800, 9600, 14400, 19200, 38400, 57600, 115200</td>
<td>Sets baud rate for com port #2</td>
</tr>
<tr>
<td>COM 2 PARITY (C2 PA)</td>
<td>2212</td>
<td>EVEN, ODD, NONE</td>
<td>Sets parity for com port #2</td>
</tr>
<tr>
<td>COM 2 DATA BITS (C2DATA)</td>
<td>2213</td>
<td>7, 8</td>
<td>Sets data bits for com port #2</td>
</tr>
<tr>
<td>COM 2 DELAY (C2 DLY)</td>
<td>2214</td>
<td>0, .10, .25, .50, .75, 1-5</td>
<td>Selects seconds to delay before advancing to next line.</td>
</tr>
<tr>
<td>TARE AUTO PRINT (TAREAP)</td>
<td>2301</td>
<td>ON/OFF</td>
<td>If ON -tare auto-prints displayed weight.</td>
</tr>
<tr>
<td>ONE LINE PRINT (1L PRT)</td>
<td>2302</td>
<td>ON/OFF</td>
<td>If ON -indicator data prints on one line.</td>
</tr>
<tr>
<td>SETTING [display]</td>
<td>D.A.N. NO.</td>
<td>OPTIONS [displayed]</td>
<td>DESCRIPTION</td>
</tr>
<tr>
<td>------------------</td>
<td>------------</td>
<td>---------------------</td>
<td>-------------</td>
</tr>
<tr>
<td>AUTO PRINT (APRINT)</td>
<td>2303</td>
<td>ON/OFF</td>
<td>If ON - pressing keys auto-prints weight values.</td>
</tr>
<tr>
<td>PRINT FORMAT (PRTFMT)</td>
<td>2304</td>
<td>AUTO, WTONLY, DOWNLD, DT+TM, ID+TM, IDWTTM, BATCH1, PRTAC1, PRTAC2, PRTAC3, PRWTRC, WTRCTM,3200-A, 3200-B, SCLABC,32-TMR, FDINFO, FEED-1</td>
<td>Select alternate &amp; comma (CSV) formats.</td>
</tr>
<tr>
<td>PRINT ACCUMULATION (PRTACC)</td>
<td>2305</td>
<td>0</td>
<td>Shows a running total of weights printed.</td>
</tr>
<tr>
<td>REMOTE DISPLAY (RMDISP)</td>
<td>2401</td>
<td>EZ2, EZ3MUX, COG, NONE</td>
<td>Select type of remote display</td>
</tr>
<tr>
<td>REMOTE TERMINAL (RMTERM)</td>
<td>2402</td>
<td>ON/OFF</td>
<td>Sends display data to serial remote terminal interface</td>
</tr>
<tr>
<td>BAR GRAPH MODE (BARGRP)</td>
<td>2411</td>
<td>OFF, RIGHT, LEFT, MIDOUT, MID IN.</td>
<td>Selects output for a bar graph display when used with an RD4000 Remote Display</td>
</tr>
<tr>
<td>WEIGHT GRAPH (WTGRPH)</td>
<td>2412</td>
<td>ON/OFF</td>
<td>Enables graph to be used with weight when used with a RD4000 Remote Display.</td>
</tr>
<tr>
<td>BAR WEIGHT (BAR WT)</td>
<td>2413</td>
<td>12000</td>
<td>Enter the full scale gross weight for the bar graph display.</td>
</tr>
<tr>
<td>PRESET GRAPH (PRGRPH)</td>
<td>2414</td>
<td>ON/OFF</td>
<td>Enables graph to be used with presets when used with an RD4000 Remote Display.</td>
</tr>
<tr>
<td>TIMER GRAPH (TMGRPH)</td>
<td>2415</td>
<td>ON/OFF</td>
<td>Enables graph to be used with timers when used with an RD4000 Remote Display.</td>
</tr>
</tbody>
</table>

**MENU 3 - MOTION & WEIGHT**

<table>
<thead>
<tr>
<th>SETTING</th>
<th>D.A.N. NO.</th>
<th>OPTIONS [displayed]</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>DISPLAY COUNT (COUNT)</td>
<td>3001</td>
<td>.01,.02,.05,.1,.2,.5,1,2,5,10,20, 50,100</td>
<td>Select display count size of weigh values.</td>
</tr>
<tr>
<td>CAPACITY (CAP)</td>
<td>3002</td>
<td>40,000</td>
<td>Enter MAXIMUM weight measurable on scale.</td>
</tr>
<tr>
<td>WM1 ADJUST 1 (WMA1-1)</td>
<td>3003</td>
<td>10</td>
<td>Increase this number to smoothing weighing</td>
</tr>
<tr>
<td>WM1 ADJUST 2 (WMA1-2)</td>
<td>3004</td>
<td>4</td>
<td>0=off. Use value less than WMA1-1 for quick response weight.</td>
</tr>
<tr>
<td>SETTING [display]</td>
<td>D.A.N. NO.</td>
<td>OPTIONS [displayed] BOLD=DEFAULT</td>
<td>DESCRIPTION</td>
</tr>
<tr>
<td>------------------</td>
<td>-----------</td>
<td>---------------------------------</td>
<td>-------------</td>
</tr>
<tr>
<td>WM1 ADJUST 3</td>
<td>3005</td>
<td>4000</td>
<td>Enter the weight to active quick response weight. Default-10% of scale capacity.</td>
</tr>
<tr>
<td>WM2 ADJUST 1</td>
<td>3006</td>
<td>30, value must be less than 100 and more than 2.</td>
<td>Increase this number to smoothing weighing.</td>
</tr>
<tr>
<td>WM2 ADJUST 2</td>
<td>3007</td>
<td>10, value must be less than 100 and more than 0.</td>
<td>10=off. Use value less than WMA2-1 for quick response weight.</td>
</tr>
<tr>
<td>WM2 ADJUST 3</td>
<td>3008</td>
<td>4000</td>
<td>Enter the weight to active quick response weight. Default-10% of scale capacity.</td>
</tr>
<tr>
<td>MOTION</td>
<td>3101</td>
<td>ON/OFF</td>
<td>ON = Motion arrow flashes with unstable weight. Prevents: Print, Zero, Tare, Advance.</td>
</tr>
<tr>
<td>MOTION WEIGHT</td>
<td>3102</td>
<td>0</td>
<td>Enter weight used to detect motion. 0=Standard detection.</td>
</tr>
</tbody>
</table>

### MENU 4 - PRESET, ALARM, and TIMER

<table>
<thead>
<tr>
<th>PRE-ALARM METHOD (P MTHD)</th>
<th>4001</th>
<th>WEIGHT, PERCENT</th>
<th>Select weight or percentage method for pre-alarm.</th>
</tr>
</thead>
<tbody>
<tr>
<td>PRE-ALARM (P-ALM)</td>
<td>4002</td>
<td>100</td>
<td>Enter a value to activate an early warning that indicator is reaching the preset.</td>
</tr>
<tr>
<td>ALARM OUTPUT (AL OUT)</td>
<td>4003</td>
<td>OFF, PRESET, TR</td>
<td>Select preset or TR to control relay, horn &amp; lamp.</td>
</tr>
<tr>
<td>BUZZER (BUZZER)</td>
<td>4004</td>
<td>OFF, ON, 1-10</td>
<td>ALARM BUZZER - allows user to turn off alarm horn when loading/unloading.</td>
</tr>
<tr>
<td>RELAY (RELAY)</td>
<td>4005</td>
<td>OFF, PRESET, SETPNT</td>
<td>Selects the behavior of the +12VDC alarm output.</td>
</tr>
<tr>
<td>PRESET DELAY (PRTDLY)</td>
<td>4006</td>
<td>10</td>
<td>Set time to automatically advance/print entered preset.</td>
</tr>
<tr>
<td>GROSS SET PNT OUTPUT (SETOUT)</td>
<td>4101</td>
<td>OVER/UNDER</td>
<td>Select when the +12VDC Alarm Output becomes active.</td>
</tr>
<tr>
<td>GROSS SET POINT CHNG (SETCHG)</td>
<td>4102</td>
<td>500</td>
<td>Set required weight change to turn off +12VDC Alarm Output.</td>
</tr>
<tr>
<td>SETTING [display]</td>
<td>D.A.N. NO.</td>
<td>OPTIONS [displayed]</td>
<td>DESCRIPTION</td>
</tr>
<tr>
<td>------------------</td>
<td>------------</td>
<td>---------------------</td>
<td>-------------</td>
</tr>
<tr>
<td>GROSS SET POINT DELAY (SETDEL)</td>
<td>4103</td>
<td>0</td>
<td>Set time delay before the +12VDC Alarm Output Can Turn On/Off.</td>
</tr>
<tr>
<td>GROSS SET POINT (SETPNT)</td>
<td>4104</td>
<td>5000</td>
<td>Set a gross weight in long form that will activate +12VDC Alarm Output on Power cord.</td>
</tr>
<tr>
<td>SET POINT COUNT (SETCTR)</td>
<td>4105</td>
<td>0</td>
<td>Counts how many times set point is activated.</td>
</tr>
<tr>
<td>SET POINT WEIGHT SOURCE (STWTSC)</td>
<td>4106</td>
<td>SERIAL/NORMAL</td>
<td>Sets weight source for use with set point feature.</td>
</tr>
<tr>
<td>TOLERANCE METHOD (T MTHD)</td>
<td>4201</td>
<td>WEIGHT, PERCENT</td>
<td>Select weight or percentage method for preset tolerance.</td>
</tr>
<tr>
<td>TOLERANCE (TOLER)</td>
<td>4202</td>
<td>0</td>
<td>Select tolerance weight percentage to accept preset.</td>
</tr>
<tr>
<td>TOLERANCE OVERLOCK (OVERLK)</td>
<td>4203</td>
<td>OFF/ON</td>
<td>Prevents auto-advancing if preset exceeds tolerance.</td>
</tr>
<tr>
<td>TIMER, COUNTER (TMRCCTR)</td>
<td>4301</td>
<td>TIMER, COUNTER</td>
<td>Select time or mixer revolutions to decrement mix timer/counter.</td>
</tr>
<tr>
<td>DRIVE RATIO (DRATIO)</td>
<td>4302</td>
<td>1.00</td>
<td>Enter the number of input pulses that equal 1 mixer revolution. REVCTR needs to be enabled in the setup options. D.A.N. 4301 set to COUNTER.</td>
</tr>
</tbody>
</table>

**MENU 5 - COM PORT SETUP**

<p>| REMOTE DISPLAY PORT (RMDPRT) | 5001 | OFF, COM1, <strong>COM2</strong>, COM3, COM4 | Sets serial remote display output |
| RADIO PORT (RADPRT) | 5002 | OFF, COM1, COM2, <strong>COM3</strong>, COM4 | Sets internal radio port |
| EXTERNAL RADIO PORT (EXRPRT) | 5003 | OFF, COM1, <strong>COM2</strong>, COM3, COM4 | Sets external radio port |</p>
<table>
<thead>
<tr>
<th>SETTING [display]</th>
<th>D.A.N. NO.</th>
<th>OPTIONS [displayed] BOLD=DEFAULT</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>PRINTER PORT (PRPORT)</td>
<td>5005</td>
<td>OFF, COM1, <strong>COM2</strong>, COM3, COM4</td>
<td>Sets printer port</td>
</tr>
<tr>
<td>SCOREBOARD PORT (SCPORT)</td>
<td>5006</td>
<td>OFF, <strong>COM1</strong>, COM2, COM3, COM4</td>
<td>Sets scoreboard port</td>
</tr>
<tr>
<td>OPSTAT PORT (OPSTAT)</td>
<td>5007</td>
<td>OFF, <strong>COM1</strong>, COM2, COM3, COM4</td>
<td>Sets op-stat port</td>
</tr>
<tr>
<td>DDL PORT (DDLPRT)</td>
<td>5009</td>
<td>OFF, COM1, <strong>COM2</strong>, COM3</td>
<td>Sets DDL port</td>
</tr>
<tr>
<td>20MA MIRROR PORT (20MAMR)</td>
<td>5011</td>
<td>OFF, <strong>COM1</strong>, COM2, COM3</td>
<td>Sets port for 20MA signal to mirror</td>
</tr>
<tr>
<td>RECIPE PORT (RECPRT)</td>
<td>5012</td>
<td>OFF, COM1, <strong>COM2</strong>, COM3, COM4</td>
<td>Sets recipe output port</td>
</tr>
<tr>
<td>DEBUG PORT (DBGPRT)</td>
<td>5999</td>
<td>OFF, COM1, COM2, COM3, COM4</td>
<td>Sets debugger port</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>MENU 6.0 - APPLICATION SPECIFIC</th>
</tr>
</thead>
<tbody>
<tr>
<td>BATCH PRE-ALARM METHOD (BPMTHD)</td>
</tr>
<tr>
<td>BATCH PRE-ALARM (BP-ALM)</td>
</tr>
<tr>
<td>INGRED. TOLERENCE METHOD (ITMTHD)</td>
</tr>
<tr>
<td>INGREDIENT TOLERANCE (ITOLER)</td>
</tr>
<tr>
<td>PEN TOLERANCE METHOD (PTMTHD)</td>
</tr>
<tr>
<td>SETTING [display]</td>
</tr>
<tr>
<td>-----------------------------</td>
</tr>
<tr>
<td>PEN TOLERANCE</td>
</tr>
<tr>
<td>(PTOLER)</td>
</tr>
<tr>
<td>BATCH TOLERANCE</td>
</tr>
<tr>
<td>OVERLOCK</td>
</tr>
<tr>
<td>(BOVRLK)</td>
</tr>
<tr>
<td>BATCH ADVANCE DELAY</td>
</tr>
<tr>
<td>(BDELAY)</td>
</tr>
<tr>
<td>MANUAL PEN ADVANCE</td>
</tr>
<tr>
<td>(MANPEN)</td>
</tr>
<tr>
<td>INGREDIENT STARTED WEIGHT</td>
</tr>
<tr>
<td>(ISTART)</td>
</tr>
<tr>
<td>PEN WEIGHT</td>
</tr>
<tr>
<td>(PEN WT)</td>
</tr>
<tr>
<td>RESIZE RECIPE</td>
</tr>
<tr>
<td>(RESIZE)</td>
</tr>
</tbody>
</table>

**MENU 6.0.5-COMMON BATCHING**

<table>
<thead>
<tr>
<th>SETTING</th>
<th>D.A.N. NO.</th>
<th>OPTIONS [displayed]</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>RECIPE PRINT FORMAT</td>
<td>6051</td>
<td>SYSTEM, AUTO, 32-TMR</td>
<td>Defines how scale will print when in weighing mode or a batch.</td>
</tr>
<tr>
<td>(RECFMT)</td>
<td></td>
<td>BOLD=DEFAULT</td>
<td></td>
</tr>
<tr>
<td>RECIPE TOTAL</td>
<td>6052</td>
<td>(SCALE)PROG, LAST, PRGCOR, LSTCOR—ON, OFF(PC)</td>
<td>Selects Total amount to be displayed when starting recipe. <strong>D.A.N. 6054 select PC or SCALE</strong></td>
</tr>
<tr>
<td>(RECTOT)</td>
<td></td>
<td>BOLD=DEFAULT</td>
<td></td>
</tr>
<tr>
<td>INGREDIENT RE-SIZING</td>
<td>6053</td>
<td>(PC)OFF, 1 ING, 1+2ING, ----</td>
<td>Selects Automatic Ingredient Re-Sizing mode. <strong>D.A.N. 6054 select PC or SCALE.</strong></td>
</tr>
<tr>
<td>(INGSIZ)</td>
<td></td>
<td>(SCALE) OFF, 1ING, 1ING+P</td>
<td></td>
</tr>
<tr>
<td>PROGRAM RECIPE</td>
<td>6054</td>
<td>PC, SCALE</td>
<td>Selects program method, PC or at SCALE.</td>
</tr>
<tr>
<td>(PROGRAM)</td>
<td></td>
<td>BOLD=DEFAULT</td>
<td></td>
</tr>
<tr>
<td>SETTING [display]</td>
<td>D.A.N. NO.</td>
<td>OPTIONS [displayed] BOLD=DEFAULT</td>
<td>DESCRIPTION</td>
</tr>
<tr>
<td>------------------</td>
<td>------------</td>
<td>---------------------------------</td>
<td>-------------</td>
</tr>
<tr>
<td>ENTERY METHOD (E.MTHD)</td>
<td>6101</td>
<td>1-amount/animal, 2-percent/load, 3-amount/load</td>
<td>Select batching method. D.A.N. 6054 set to “SCALE”.</td>
</tr>
<tr>
<td>DISPLAY SCOOP % (SCOOP %)</td>
<td>6102</td>
<td>OFF, ON</td>
<td>If ON - displays scoop percentage to load. D.A.N. 6054 set to “SCALE”.</td>
</tr>
<tr>
<td>INGREDIENT NAMES (INGRNM)</td>
<td>6103</td>
<td>ON, OFF</td>
<td>If ON - displays ingredient names while batching. D.A.N. 6054 set to “SCALE”.</td>
</tr>
<tr>
<td>ACCUMULATION (ACCUM)</td>
<td>6104</td>
<td>ON, OFF</td>
<td>If ON – load/unload weights are accumulated while batching. D.A.N. 6054 set to “SCALE”.</td>
</tr>
<tr>
<td>FORCE USER ID (USERID)</td>
<td>6201</td>
<td>OFF, ON</td>
<td>If ON - operator MUST enter User ID to use scale. D.A.N. 6054 set to “PC”.</td>
</tr>
<tr>
<td>RECIPE KEYS (RECKEY)</td>
<td>6202</td>
<td>OFF, ON</td>
<td>If ON - disables certain keys when Loading / Unloading Recipe. D.A.N. 6054 set to “PC”.</td>
</tr>
<tr>
<td>BATCH NUMBER (BATNUM)</td>
<td>6203</td>
<td>PCCTRL, EZCTRL</td>
<td>Select either PC or EZ to control the batch number. D.A.N. 6054 set to “PC”.</td>
</tr>
<tr>
<td>SETTING [display]</td>
<td>D.A.N. NO.</td>
<td>OPTIONS [displayed]</td>
<td>DESCRIPTION</td>
</tr>
<tr>
<td>--------------------------------</td>
<td>------------</td>
<td>------------------------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>DOUBLE KEY (DBLKEY)</td>
<td>6204</td>
<td>OFF, ON</td>
<td>Ignore extra INGR ADVANCE keys while feeding.</td>
</tr>
<tr>
<td>RECIPE REMAIN ACTIVE (RE-USE)</td>
<td>6205</td>
<td>OFF, ON</td>
<td>Allows recipes to be RE-USED for another load.</td>
</tr>
<tr>
<td>RECIPE ENTRY METHOD (RETRY)</td>
<td>6206</td>
<td>RECIPE, BATCH#</td>
<td>Select recipe start method - recipe name or batch number.</td>
</tr>
<tr>
<td>SPLIT LOAD (SLOAD)</td>
<td>6207</td>
<td>OFF, ON</td>
<td>If ON – Pen presets are recalculated after each ingredient/pen.</td>
</tr>
<tr>
<td>START PRESET WEIGHT (STPRST)</td>
<td>6208</td>
<td>OFF, ON</td>
<td>If ON – Return the starting preset in the timer/bunk read field of feed-line</td>
</tr>
<tr>
<td>SMALL INGREDIENT DISPLAY (SMINGR)</td>
<td>6209</td>
<td>0</td>
<td>Enter value to display small ingredient message.</td>
</tr>
<tr>
<td>UNDONE RECIPES (UNDON)</td>
<td>6211</td>
<td>OFF, ON</td>
<td>If ON - displays all incomplete recipes.</td>
</tr>
<tr>
<td>DISPLAY RECIPE PENS (RECPEN)</td>
<td>6212</td>
<td>ON, OFF</td>
<td>If ON - pens are displayed when selecting recipes.</td>
</tr>
<tr>
<td>ERASE DONE FEEDLINE (ERASFD)</td>
<td>6214</td>
<td>OFF, ON</td>
<td>If ON - Erases done feed-lines after data transfer.</td>
</tr>
<tr>
<td>MEDIA STORAGE (MSTORE)</td>
<td>6215</td>
<td>QSTART, SELECT, MANUAL</td>
<td>Select Quick Start (AUTO), SELECT, MANUAL methods for transferring recipe information</td>
</tr>
<tr>
<td>SETTING [display]</td>
<td>D.A.N. NO.</td>
<td>OPTIONS [displayed]</td>
<td>DESCRIPTION</td>
</tr>
<tr>
<td>------------------</td>
<td>-----------</td>
<td>---------------------</td>
<td>-------------</td>
</tr>
<tr>
<td>RANGE TEST (R-TEST)</td>
<td>6216</td>
<td>OFF, ON</td>
<td>If ON –Feed-lines sent from Data-Link are marked &quot;done&quot;. <strong>Valid when using Data-Link System.</strong></td>
</tr>
<tr>
<td>AUTO START PENS (AUTPEN)</td>
<td>6217</td>
<td>OFF, ON</td>
<td>If ON -Starts Pens List after Recipe is loaded.</td>
</tr>
<tr>
<td>FEED ZONE (FDZONE)</td>
<td>6218</td>
<td>ALL, 1, 2, 3, 4, 5, 6, 7, 8, 9</td>
<td>Select feed zone for recipe deliveries.</td>
</tr>
<tr>
<td>PARTIAL FEEDING (PARTFD)</td>
<td>6219</td>
<td>OFF, ON</td>
<td>If ON –Partial feedings will be Recorded.</td>
</tr>
<tr>
<td>MIMIC TYREL (TCI300)</td>
<td>6221</td>
<td>OFF, ON</td>
<td>If ON - Records preset weights like a Tyrel TCX-1300 Indicator.</td>
</tr>
<tr>
<td>PEN CHECK METHOD {PCMTHD}</td>
<td>6222</td>
<td>WEIGHT, PERCENT</td>
<td>Select weight or percentage method for pen check option.</td>
</tr>
<tr>
<td>PEN CHECK {PENCHK}</td>
<td>6223</td>
<td>30</td>
<td>Enter value to verify if pen has been underfed. Set to “0” to disable.</td>
</tr>
<tr>
<td>PEN STARTED WEIGHT {PSTART}</td>
<td>6224</td>
<td>60</td>
<td>This weight threshold determines if the pen has been started.</td>
</tr>
</tbody>
</table>

**MENU 8.0 – SIGN-ON & MAINTENANCE MESSAGES**

| SIGNON SETTING (SIGNON) | 8001 | OFF, ON | Enables continuous display of sign-on message |
| SIGNON MESSAGE (SIGMSG) | 8002 | SIGMSG 1,2,3 | Enables editing of the sign-on message |
| MAINTENANCE MESSAGE (MANTMG) | 8011 | MANTMG 1, 2, 3, 4, 5, 6, 7, 8, 9, 10 | Enables editing of the maintenance message |
| MAINTENANCE MESS. TIME (MANTTM) | 8012 | 200, Time is entered using key pad. | Time for maintenance message to be triggered. |
| MAINTENANCE MESS. CLEAR {MANCLR} | 8013 | | Allows for clearing of maintenance message time or entry of new time. |
## MENU 8.1 – CALIBRATION

<table>
<thead>
<tr>
<th>SETTING [display</th>
<th>D.A.N. NO.</th>
<th>OPTIONS [displayed]</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>DEAD WEIGHT CAL (WT CAL)</td>
<td>8121</td>
<td>Follow instructions shown on LCD</td>
<td>Calibration method using weights</td>
</tr>
<tr>
<td>TEMPERATURE CALIBRATION (T CALB)</td>
<td>8123</td>
<td>OFF/ON</td>
<td>On=Scale adjusts for temperature changes</td>
</tr>
<tr>
<td>CALIBRATION MATCH (CAL MAT)</td>
<td>8124</td>
<td>ENTER KNOWN WEIGHT</td>
<td>Calibration method used for matching a known weight.</td>
</tr>
</tbody>
</table>

## MENU 8.2 – MEMORY MANAGEMENT

<table>
<thead>
<tr>
<th>SETTING</th>
<th>D.A.N. NO.</th>
<th>OPTIONS [displayed]</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLEAR MEMORY/REUSE</td>
<td>8201</td>
<td></td>
<td>Clears feedline memory = ON key or Reuse feedlines = CLEAR key.</td>
</tr>
<tr>
<td>CLEAR NVRAM</td>
<td>8202</td>
<td></td>
<td>Reset all internal data storage values stored in non-volatile memory. (TMR)</td>
</tr>
</tbody>
</table>

## MENU 8.7 – SETUP NUMBER AND SETTINGS

<table>
<thead>
<tr>
<th>SETTING</th>
<th>D.A.N. NO.</th>
<th>OPTIONS [displayed]</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>SETUP NUMBER (SETUP)</td>
<td>8711</td>
<td>146040</td>
<td>Quick entry method selects weigh method 1-4lbs, 5-8 kg, gain 1-9, display counts 1-9 and capacity *1000</td>
</tr>
<tr>
<td>Calibration Number (CAL)</td>
<td>8712</td>
<td>32640</td>
<td>Weight displayed at 0.4mV/V</td>
</tr>
<tr>
<td>SYSTEM DATE FORMAT (SYSDTF)</td>
<td>8719</td>
<td></td>
<td>Allows date format to be changed when printing stored records.</td>
</tr>
<tr>
<td>CALIBRAION MATCH (CALMAT)</td>
<td>8724</td>
<td></td>
<td>Allows adjustment to the calibration number by inputting two weight values.</td>
</tr>
<tr>
<td>DISPLAY POOL STATUS (D POOL)</td>
<td>8733</td>
<td></td>
<td>Show/Display pool status in internal memory</td>
</tr>
<tr>
<td>SETTING [display]</td>
<td>D.A.N. NO.</td>
<td>OPTIONS [displayed] BOLD=DEFAULT</td>
<td>DESCRIPTION</td>
</tr>
<tr>
<td>------------------</td>
<td>------------</td>
<td>----------------------------------</td>
<td>-------------</td>
</tr>
<tr>
<td>MISCELLANEOUS UTILITIES</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>KEYTEST</td>
<td>8888</td>
<td></td>
<td>Enables front panel key test</td>
</tr>
<tr>
<td>CLOCK</td>
<td>8997</td>
<td></td>
<td>Enables clock – press any key to return to weighing mode.</td>
</tr>
</tbody>
</table>
16.0 INSTALLATION

16.1 Indicator Mounting

For most applications, the equipment manufacturer provides the necessary mounting system and hardware, and mounts the Indicator for the End User.

Digi-Star provides several mounting options that allow the end user to customize the location and placement of the Indicator. The following section provides a list of the optional mounts.

In all cases the Digi-Star Indicator must be securely mounted to the equipment. Loose, or unsupported, Indicators can be damaged.

### KEY PART NUMBER DESCRIPTION

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

<table>
<thead>
<tr>
<th>KEY</th>
<th>PART NUMBER</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>404799</td>
<td>KIT-1.5&quot; RAM MOUNT WITH BOLT-ON BASE WITH HARDWARE</td>
</tr>
<tr>
<td>J</td>
<td>407544</td>
<td>KIT-1.5&quot; RAM MOUNT WITH DUAL U-BOLTS (FITS 0.5&quot;-1.5&quot; ROUND)</td>
</tr>
<tr>
<td>K</td>
<td>407434</td>
<td>KIT-1.5&quot; RAM MOUNT WITH TRIPLE SUCTION CUP BASE</td>
</tr>
</tbody>
</table>

### SIDE & UNIVERSAL MOUNTS

<table>
<thead>
<tr>
<th>KEY</th>
<th>PART NUMBER</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>K</td>
<td>408880</td>
<td>Mount for Large Indicators with hardware and magnet</td>
</tr>
<tr>
<td>L</td>
<td>408828</td>
<td>Mount for Large Indicators with hardware without magnet</td>
</tr>
<tr>
<td>M</td>
<td>408199</td>
<td>Universal mount short</td>
</tr>
</tbody>
</table>
16.2 Cable Connections

For accurate and reliable operation care, should be taken when routing and connecting cables to the Digi-Star Indicator.

- Cables should be secured and protected from damage and abrasion.
- Long cables should not “hang” by the cable connector at the Indicator but should be secured to a structure close to the Indicator leaving a short “tail” to connect to the Indicator.

Special Considerations for Power (+) and Ground (-):

- The Digi-Star Indicator is designed to operate at a continuous voltage ranging from 10.5 to 16.0 volts.
- Intermittent voltage drops to as low as 9.0 volts, such as when starting an engine, will be tolerated. Continuous low voltage will result in a Low Voltage warning on the display or the Indicator will power off.
- Voltage spike above 16 volts will damage the Indicator. Never weld or charge the battery on the equipment that the Indicator is mounted to without disconnecting the Indicator power cord. Never operate an Indicator on equipment with an engine charging circuit when the battery has been removed.

Digi-Star recommends that the red power (+) and black ground (-) are connected as follows:

- Power (+) can be either switched or keyed ON & OFF, or un-switched and always on.
- Power (+) and Ground (-) should come from a dedicated auxiliary power source when provided. When auxiliary power sources are not provided, power should come from the main power distribution system.
  - Fuse or circuit protection of at least 5 amps, but no more than 10 amps, should be provided. Although the Indicator is protected internally by an internal fuse a fuse or circuit protection is required to protect the power cable and equipment.
  - Ground (-) connection should be made to a main ground (the battery ground (-) is often connected to this location). Do not use the chassis or frame of the equipment as a ground.
## Indicator Connection Diagram

<table>
<thead>
<tr>
<th>Pin</th>
<th>To 12VDC Power Supply</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Red +Terminal</td>
</tr>
<tr>
<td>2</td>
<td>Black -Terminal</td>
</tr>
<tr>
<td>3</td>
<td>Orange Alarm Out</td>
</tr>
<tr>
<td>4</td>
<td>Blue Remote Input</td>
</tr>
</tbody>
</table>

Remote Indicator (Option)

See Indicator Connection Diagram

Scale Indicator

Power Supply

See Junction Box Connections
Bottom Panel Cable Connections
16.3 Connecting Load Cells to Junction Box

Connect load cell wires to terminal blocks. See wire color chart.

<table>
<thead>
<tr>
<th>Wire Color Key</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Color</td>
<td></td>
</tr>
<tr>
<td>1 White</td>
<td>Signal +</td>
</tr>
<tr>
<td>2 Green</td>
<td>Signal -</td>
</tr>
<tr>
<td>3 Red</td>
<td>Excitation +</td>
</tr>
<tr>
<td>4 Black</td>
<td>Excitation -</td>
</tr>
<tr>
<td>5 Shield</td>
<td>Shield</td>
</tr>
</tbody>
</table>

J-Box Illustrated for 4 Load Cells to be installed.

16.4 Load Cell Direction

Observe direction of arrow when installing load cell.
17.0 OPTIONAL EQUIPMENT

17.1 Cab Controls (Wireless)

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

17.2 Data Transfer Options

Kit Data Down Loader
Allows transfer of data from indicator to PC.
(Optional communication port must already be installed in indicator)

17.3 Transmitter/Receiver

Transmitter (shown) with factory installed receiver in indicator.
Use to zero indicator from a remote location.
Operating range about 90 feet.
17.4 Remote Indicators

RD440 small remote display
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

17.5 Rotation Counter Sensor (Kit p/n: 408088)

Use with TMR4610 indicator. Sensor allows operator to program indicator to count auger or PTO rotations for accurate mixing of feed. Also, used for keeping maintenance log for equipment. Example: At 50 hours of operation time PTO shaft is scheduled for greasing or engine oil is scheduled for changing. For proper equipment maintenance needed, refer to equipment operator manual.
EMC
DECLARATION OF CONFORMITY

Application of Council Directive(s) 2014/30/EC

Manufacturer's Name: Digi-Star, LLC
Manufacturer's Address: W5527 State Hwy 106
Fort Atkinson, WI 53538

European Representative Name: Digi-Star International
European Representative Address: J.F. Kennedylaan 235
5981 WX Penningen
The Netherlands

Model Name: GT560, TMR4610

Conformance to:
- EN 51326-1 electrical equipment for measurement, control, and laboratory use (See Report Number 319064.) ICES-003
- EN 55011, for Class B ISM equipment for industrial, scientific, and medical equipment. (See Report Number 319064.)

Equipment Type/Environment:
Electronic weighing scale systems; not legal for trade. For agricultural, commercial and industrial use.

Beginning Serial No.: 00001001
Year of Manufacture: 2016

I, the undersigned, hereby declare that the equipment specified above conforms to the above Directive(s).

Manufacturer

Signature

Full Name: Jason Griffith
Position: Director of Engineering – Sensors and ECUs
Place: Fort Atkinson, WI U.S.A.
Date: March 28, 2017
19.0 NOTES