ZM303
Indicator

User Instructions
# Table of Contents

## Chapter 1 General information and warnings
- About this manual ................................................................. 7
- Text conventions ........................................................................ 7
- Special messages ........................................................................ 7
- Installation .................................................................................. 7
  - Safe handling of equipment with batteries ......................... 8
  - Wet conditions ........................................................................ 8
- Routine maintenance .............................................................. 8
- Cleaning the machine ............................................................. 9
- Training ...................................................................................... 9
- Sharp objects ............................................................................ 9
- FCC and EMC declarations of compliance ............................ 9
  - United States ........................................................................ 9
  - Canada .................................................................................. 9
  - European Countries ............................................................... 9
- Declaration of conformity ......................................................... 10

## Chapter 2 Introduction
- Front panel .............................................................................. 11
- Annunciators ............................................................................. 12
- Powering up the ZM303 .......................................................... 13
- Entering a negative number .................................................... 14

## Chapter 3 Indicator applications
- General weighing application .................................................. 15
  - SELECT key default function ............................................. 15
  - Gross weighing ..................................................................... 15
  - Net weighing ......................................................................... 16
    - Using Pushbutton Tare ..................................................... 16
    - Using Entered Tare .......................................................... 17
    - Using Preset Tare ............................................................. 17
  - Using setpoints .................................................................... 18
- Printing ..................................................................................... 19
- Accumulator application .......................................................... 20
  - SELECT key default function ............................................. 20
  - Special key functions .......................................................... 20
  - Accumulator operation ........................................................ 20
- Counting application .............................................................. 21
  - SELECT key default function ............................................. 21
  - Special key functions .......................................................... 21
- Sample operation ..................................................................... 21
- Dribble sampling ..................................................................... 21
- Bulk sampling .......................................................................... 22
- Piece weight entry .............................................................. 23
- Checkweighing application ..................................................... 24
  - SELECT key default function ............................................. 24
  - Special key functions .......................................................... 24
  - Checkweigh operation .......................................................... 24
  - Weighing a target object ....................................................... 25
  - Setting upper and lower limits ............................................ 25
  - Setpoint operation in the checkweighing application .......... 26
Total format ......................................................................................................... 53
Clear total ............................................................................................................ 54
Print ..................................................................................................................... 54
Reset ................................................................................................................... 54
Count.......................................................................................................................... 56
Count ......................................................................................................................... 57
Mode ...................................................................................................................... 57
Print total ............................................................................................................. 57
Total format ......................................................................................................... 58
Clear total ............................................................................................................. 58
Checkweighing application supervisor menu ......................................................... 60
Check ..................................................................................................................... 61
Outputs - Latch & Unlatch ...................................................................................... 61
Under divisions .................................................................................................... 61
Over divisions ........................................................................................................ 62
Reset ..................................................................................................................... 62
Batching application supervisor menu .................................................................... 63
Batch ..................................................................................................................... 63
Type ....................................................................................................................... 64
Mode ...................................................................................................................... 64
Display ................................................................................................................... 65
Preact ..................................................................................................................... 65
Negative fill .......................................................................................................... 66
Notes on batching .................................................................................................. 66
2 Speed .................................................................................................................. 66
Ingredient .............................................................................................................. 67
Independent Setpoints ......................................................................................... 67
Fill/Discharge ....................................................................................................... 67
Peak Hold application supervisor menu ............................................................... 68
Peak hold ............................................................................................................... 68
Reset ..................................................................................................................... 69
Remote Display application supervisor menu ....................................................... 70
1 General information and warnings

1.1 About this manual

This manual is divided into chapters by the chapter number and the large text at the top of a page. Subsections are labeled as shown by the 1.1 and 1.1.1 headings. The names of the chapter and the next subsection level appear at the top of alternating pages of the manual to remind you of where you are in the manual. The manual name and page numbers appear at the bottom of the pages.

1.1.1 Text conventions

Key names are shown in bold and reflect the case of the key being described. If a key has a dual function it may be referred to by its alternate function.

Displayed messages appear in bold italic type and reflect the case of the displayed message.

Annunciator names appear as italic text and reflect the case of the annunciator.

1.1.2 Special messages

Examples of special messages you will see in this manual are defined below. The signal words have specific meanings to alert you to additional information or the relative level of hazard.

CAUTION!
This is a Caution symbol.
Cautions give information about procedures that, if not observed, could result in damage to equipment or corruption to and loss of data.

NOTE: This is a Note symbol. Notes give additional and important information, hints and tips that help you to use your product.

1.2 Installation

NO USER SERVICEABLE PARTS. REFER TO QUALIFIED SERVICE PERSONNEL FOR SERVICE.
1.2.1 Safe handling of equipment with batteries

**CAUTION:** Danger of explosion if battery is incorrectly replaced. Replace only with the same or equivalent type recommended by the manufacturer. Dispose of used batteries according to the manufacturer’s instructions.

**ATTENTION:** Il y a danger d’explosion s’il y a remplacement incorrect de la batterie, remplacer uniquement avec une batterie du même type ou d’un type équivalent recommandé par le constructeur. Mettre au rebut les batteries usagées conformément aux instructions du fabricant.

1.2.2 Wet conditions

Under wet conditions, the plug must be connected to the final branch circuit via an appropriate socket / receptacle designed for washdown use.

**Installations within the USA** should use a cover that meets NEMA 3R specifications as required by the National Electrical Code under section 410-57. This allows the unit to be plugged in with a rain tight cover fitted over the plug.

**Installations within Europe** must use a socket which provides a minimum of IP56 protection to the plug / cable assembly. Care must be taken to make sure that the degree of protection provided by the socket is suitable for the environment.

1.3 Routine maintenance

**IMPORTANT:** This equipment must be routinely checked for proper operation and calibration. Application and usage will determine the frequency of calibration required for safe operation.

Always isolate the indicator from the power supply before starting any routine maintenance to avoid the possibility of electric shock.
1.4 Cleaning the machine

Table 1.1 Cleaning DOs and DON’Ts

<table>
<thead>
<tr>
<th>DO</th>
<th>DO NOT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wipe down the outside of standard products with a clean cloth, moistened with water and a small amount of mild detergent</td>
<td>Attempt to clean the inside of the machine</td>
</tr>
<tr>
<td>Use harsh abrasives, solvents, scouring cleaners or alkaline cleaning solutions</td>
<td></td>
</tr>
<tr>
<td>Spray the cloth when using a proprietary cleaning fluid</td>
<td>Spray any liquid directly on to the display windows</td>
</tr>
</tbody>
</table>

1.5 Training

Do not attempt to operate or complete any procedure on a machine unless you have received the appropriate training or read the instruction books.

To avoid the risk of RSI (Repetitive Strain Injury), place the machine on a surface which is ergonomically satisfactory to the user. Take frequent breaks during prolonged usage.

1.6 Sharp objects

Do not use sharp objects such as screwdrivers or long fingernails to operate the keys.

1.7 FCC and EMC declarations of compliance

United States

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

Canada

This digital apparatus does not exceed the Class A limits for radio noise emissions from digital apparatus set out in the Radio Interference Regulations of the Canadian Department of Communications.

Le présent appareil numérique n’émet pas de bruits radioélectriques dépassant les limites applicables aux appareils numériques de la Classe A prescrites dans le Règlement sur le brouillage radioélectrique édicté par le ministère des Communications du Canada.

European Countries

WARNING: This is a Class A product. In a domestic environment, this product may cause radio interference in which the user may be required to take adequate measures.
1.8 Declaration of conformity
2 Introduction

The ZM303, shown in Figure 2.1, is an easy to use indicator for weighing with a numeric keypad. The ZM303 comes in three housing types: stainless steel, aluminum desktop and stainless steel panel mount. It comes with one of two display types for indoor or outdoor use. The indicator has a USB port, two serial COM ports and an Ethernet port. Available options are Analog Output, Current Loop/RS485/RS422, USB Device and Wireless 802.11g internal module cards.

The indicator also has three logic level inputs with configurable functions and three setpoint outputs. See the Specification literature for a full list of specifications.

![Figure 2.1 Front panel of the ZM303 indicator display](image1)

![Figure 2.2 Outdoor display example](image2)

The ZM303 can connect to USB flash drives, printers, remote displays, computers and other peripheral devices via USB, ethernet and serial connections.
2.1 Front panel

The front panel, shown in Figure 2.1, consists of the keys and display.

Never press a key with anything but your finger. Damage to the overlay may result if sharp or rough objects are used.

The normal function of the keys on the front panel are listed below. Some keys will have special functions in certain applications. Details are provided in the individual application sections.

<table>
<thead>
<tr>
<th>Key</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>TARE</strong></td>
<td>Press to perform a tare function. Also prompts for a keyboard tare, if enabled. Acts as an up arrow key for menu navigation. Allows you to access minus and comma signs.</td>
</tr>
<tr>
<td><strong>SELECT</strong></td>
<td>Press to toggle between the active display values. Press and hold to enter the setpoint editor. Acts as a down arrow key for menu navigation. Allows you to access minus and comma signs.</td>
</tr>
<tr>
<td><strong>PRINT</strong></td>
<td>Press to send information to a peripheral device through a configured communications port. Performs accumulator function, if enabled. Acts as a left arrow key for menu navigation.</td>
</tr>
<tr>
<td><strong>UNITS</strong></td>
<td>Press to scroll through the available units of measure while in normal operating mode. Acts as a right arrow key for menu navigation.</td>
</tr>
<tr>
<td><strong>ZERO</strong></td>
<td>Press to zero the display. Acts as an ENTER key to accept a displayed value or function.</td>
</tr>
<tr>
<td><strong>SAMPLE</strong></td>
<td>Press to setup counting functions.</td>
</tr>
<tr>
<td><strong>START</strong></td>
<td>Press to start or resume a batching specific action.</td>
</tr>
<tr>
<td><strong>STOP</strong></td>
<td>Press to stop a batching specific action.</td>
</tr>
<tr>
<td><strong>ID</strong></td>
<td>Press to show the current ID value. Press and hold to enter a new ID value.</td>
</tr>
<tr>
<td><strong>F1</strong></td>
<td>Press to select application specific choices. Aborts a numeric entry and acts as an ESCAPE key in the menu navigation. Also used to display or enter an accumulator channel. Press and hold to view the password entry screen for menu access.</td>
</tr>
</tbody>
</table>
2.1 Annunciators

The annunciators on the display are shown and labeled in Figure 2.3.

These annunciators will light during operation to inform the user of the weighing mode, active unit of measure, etc.

Table 2.1 Circle Annunciator assignments

<table>
<thead>
<tr>
<th>Annunciator</th>
<th>Indicates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Circle 1 (left most)</td>
<td>Network activity</td>
</tr>
<tr>
<td>Circle 2</td>
<td>Custom unit</td>
</tr>
<tr>
<td>Circle 3</td>
<td>Pieceweight</td>
</tr>
<tr>
<td>Circle 3 &amp; 4</td>
<td>Minimum</td>
</tr>
<tr>
<td>Circle 4 &amp; 5</td>
<td>Maximum</td>
</tr>
</tbody>
</table>

Figure 2.3 Annunciators
2.2 Powering up the ZM303

The indicator is always active as long as power is received. Power can be supplied by:

- AC power cord connected to a properly grounded outlet (100 VAC - 240 VAC, 50 or 60 Hz)
- Optional external battery pack with 4 D cells (12 hr operation with one loadcell. 11 hr with four loadcells)
- AC to DC power converter. (12 to 36 VDC)

2.3 Entering a negative number

To enter a negative number, press the C key to clear the current value from the display. With only one digit displayed press SELECT. The first character will be the (-) negative sign. Enter the rest of the digits normally.
3 Indicator applications

This indicator has several weighing applications that can be enabled through a password protected menu. Only one application can be enabled at a time. The applications available are:

- General Weighing (explained on page 15)
- Accumulator (explained on page 20)
- Parts Counting (explained on page 21)
- Checkweighing (explained on page 24)
- Batching (explained on page 27)
- Peak Hold (explained on page 30)
- Remote Display (explained on page 31)

The indicator comes with the default application called General Weighing active.

3.1 General weighing application

This section applies if the General Weighing application is active.

3.1.1 SELECT key default function

In the General Weighing application you can view the gross, net and tare display values by repeatedly pressing SELECT.

3.1.2 Gross weighing

To change unit of measure, press UNITS.

To perform gross weighing, power up the unit and follow these steps:

1. Empty the scale and press ZERO to zero the display …
   
   0 is displayed and the center-of-zero annunciator lights.

2. Place item to be weighed on the scale …
   
   Weight is displayed.

3. Repeat steps 1 and 2.
3.1.3 Net weighing

Net weighing is available via three types of tare entry.

- **Pushbutton tare**: When enabled press TARE to tare the weight on the scale.
- **Entered tare**: When enabled key in a tare weight and press TARE to set.
- **Preset tare**: When enabled press TARE to recall a preset tare numbered 1-10.

---

*Pushbutton and Entered Tares can be enabled simultaneously. If Preset Tare is enabled, Pushbutton and Entered Tares are automatically disabled.*

---

There is an auto tare clear feature. If this is enabled, after a weighment, when the weight falls into the gross zero band, tare is cleared to zero.

*Definition: Gross zero band - this is a configured value that defines a window around gross zero. This is used in several ways in different applications.*

The three types of tare are explained below.

**Using Pushbutton Tare**

To perform a net weighment using pushbutton tare, power up the unit and follow these steps:

1. With no weight on the scale, if the display does not read 0 press ZERO …
   - 0 is displayed and the center-of-zero annunciator lights.
2. Place item to be tared on the scale …
   - Weight is displayed.
3. Press TARE …
   - 0 is displayed and the NET annunciator lights.
4. Place material to be weighed into or on the tared item on the scale …
   - Net weight of material is displayed.
5. Repeatedly press SELECT to view the gross, tare, and net values.
6. If repeated weighments use the same tared item, you do not need to establish a new tare value as described in step 2 and 3.

*To manually clear a tare weight, remove all weight from the scale and press TARE.*
Using Entered Tare

To perform a net weighment using entered tare, the following steps describe a typical operation:

1. With no weight on the scale, if the display does not read 0 press ZERO …

   0 is displayed and the center-of-zero annunciator lights.

2. Key in the tare value of the container or box that will be used to hold the material that requires a net weight value, and press TARE …

   Tare weight is displayed as a negative value and the NET annunciator lights.

3. Place the container or box and material to be weighed on the scale …

   Net weight of material is displayed.

4. If repeated weighments use the same tared item, you do not need to establish a new tare value as described in step 2.

5. To remove the tare weight from the scale, enter 0, then press TARE …

   The tare is cleared and the scale is in gross weigh mode.

Using Preset Tare

Preset tares are entered in a password protected menu. There can be up to 10 tares numbered 1-10. To perform a net weighment using one of the preset tares, follow these steps:

1. With no weight on the scale, if the display does not read 0 press ZERO …

   0 is displayed and the center-of-zero annunciator lights.

2. Press TARE …

   Tare number entry screen appears.

3. Key in the preset tare number and press ZERO …

   Tare weight is displayed as a negative value and the NET annunciator lights.

4. Place container or box and material to be weighed on the scale …

   Net weight of material is displayed.

5. Repeat step 4 until you are finished using that tare weight.

Tare is removed automatically if Auto Tare Clear is enabled. To remove the tare weight manually, select a preset tare register that has a value of 0 for the tare.
3.1.4 Using setpoints

Setpoints are values (weight) at which outputs are triggered automatically. Outputs can control relays connected to valves, lights, other machinery, etc. Setpoint outputs can be configured in the setpoint menu shown in Figure 3.1.

Press SETUP

```
<table>
<thead>
<tr>
<th>Setpnt</th>
</tr>
</thead>
<tbody>
<tr>
<td>out1</td>
</tr>
<tr>
<td>out2</td>
</tr>
<tr>
<td>out3</td>
</tr>
</tbody>
</table>

Key in setpoint
```

Figure 3.1 Setpoint menu

See the note below for an overview of how setpoints function.

**Default Setpoint operation**

Outputs must be enabled for setpoints to operate. See the Service Manual:

**Below Configured Value:**
- Outputs are ON
- Annunciators are ON

**Above Configured Value:**
- Outputs are OFF
- Annunciators are OFF

The annunciator and output will turn off when weight goes above the setpoint for that output and will remain off until the weight falls below the setpoint.

Follow these steps to configure the outputs:

1. With the indicator powered up, press SETUP …

   *SETPnt* is displayed. Refer to the Setpoint menu, shown in Figure 3.1 while following the steps below

2. Press SELECT …

   *out1* is displayed.

3. Press SELECT …

   Current value is displayed with the last digit flashing.

4a. Key in a value and press ZERO to accept the value …

   *out1* is displayed.

**OR**

4b. Press UNITS to select the next output …

   *out2* is displayed.
5. Repeat steps 3 - 4b for each output.
6. Press F1 twice to return to normal weighing mode with the setpoints active.

### 3.1.5 Printing

To print the current weight information, press PRINT. The configured print format will be output through the configured port to the connected peripheral device. The indicator can be configured to only allow one print for each weighing sequence. If PRINT is pressed when so configured, the message cAnt will appear.

Refer to Default print formats on page 43.
3.2 Accumulator application

This section applies if the Accumulator application is active.

3.2.1 SELECT key default function

In the Accumulator application you can view the Gross, Net, Tare, Gross Total, Net Total and Transaction Count display values by repeatedly pressing SELECT.

3.2.2 Special key functions

The following key has an extra function in this application:

F1 Press F1 and the active accumulator channel (chAn X) appears. Scroll through the list of channels (chAn 1 - chAn 10), using PRINT or UNITS. Press ZERO to activate that channel.

3.2.3 Accumulator operation

The accumulator application can be used to record totals of individual weighments.

Follow these steps:
1. Press ZERO to zero the scale, if necessary …
   0 is displayed.
2. Place item on the scale …
   Weight is displayed.
3. Press PRINT to add weight to the accumulator and to print the selected print format …
   The PRINT annunciator lights briefly.
4. Remove weight from the scale. Weight must return to inside the gross zero band before another print and accumulation can be recorded.
5. Repeat steps 2 through 4 for each weighment you want to accumulate.

You can use gross or net weighing with the accumulator application as it stores both gross and net totals. You have 10 accumulator channels that can be used to store totals for up to 10 separate products.

If enabled, press and hold PRINT for three seconds to print and/or clear the active accumulator values. These functions are enabled or disabled in a password protected menu.
3.3 Counting application

This section applies if Counting is active.

3.3.1 SELECT key default function

In the Counting application you can view the gross, net, tare, count and piece weight display values by repeatedly pressing SELECT.

3.3.2 Special key functions

The following keys have an extra function in this application:

- **SAMPLE**: Press SAMPLE to perform the sample operation as described below in the Dribble and Bulk sections.
  - Press and hold SAMPLE to perform the piece weight entry as described below.
- **F1**: F1 works the same as the SAMPLE key when pressed.

3.3.3 Sample operation

There are two types of sampling to select from; bulk and dribble. Either type is selectable under a password protected menu.

- **Dribble sampling**: In this sampling method you can count out the specified number of items onto the scale and when you are ready, press the SAMPLE or F1 key and the scale starts to calculate piece weight and then shows the count.

- **Bulk sampling**: In this sampling method you place the specified number of items on the scale all at once (in bulk) and the scale automatically starts to calculate piece weight and then shows the count. This is the default sampling method.

Each method is described below.

3.3.4 Dribble sampling

With the dribble sampling method active, follow these steps to count.

1. Press ZERO to zero the scale, if necessary.

2. Use a tare method to tare a container, if necessary. See Net weighing on page 16.

3. Press SAMPLE or F1 ...

   **ZEroring** is briefly displayed. This means the indicator is zeroing itself.
   A numeric value (XX) is then displayed. This is the current sample size.

4a. Accept the current sample size by pressing ZERO

   OR
4b. Enter a new sample size and press ZERO …

Add is displayed. Count the number of sample items onto the scale and when ready press SAMPLE or F1 …

buSY is briefly displayed, followed by one of two possible outcomes:

a. If the sample met the minimum sample requirements and the weight is stable, the display will show the correct number of parts on the scale and COUNT is lit.

b. If the sample size was not large enough or if the weight was unstable, Abort is briefly displayed and the display returns to gross weighing mode. Repeat steps 3 through 5 using a larger sample size.

5. Place the parts on the scale to be counted. To accumulate the count and number of transactions, press PRINT while in count mode.

6. If enabled, press and hold PRINT for three seconds to print and/or clear the active count total. These functions are enabled or disabled in a password protected menu.

3.3.5 Bulk sampling

With the counting application and the bulk sampling method active, follow these steps to count.

1. Press ZERO to zero the scale, if necessary.

2. Use a tare method to tare a container, if necessary. See Net weighing on page 16.

3. Press SAMPLE or F1 …

Zeroing is briefly displayed. This shows the indicator is zeroing itself. A numeric value (XX) is then displayed. This is the current sample size.

4a. Accept the current sample size by pressing ZERO OR

4b. Enter a new sample size and press ZERO …

Add is then displayed.

5. Place the correct number of samples on the scale all at the same time.

buSY is briefly displayed, followed by one of two possible outcomes:

a. If the sample met the minimum sample requirements and the weight is stable, the display will show the correct number of parts on the scale and COUNT is lit.

Minimum sample weight is the gross zero band value. The initial sample count is 5 pieces. The maximum number of pieces that can be sampled is 9999.
3.3 Counting application

b If the sample size was not large enough or if the weight was unstable, **Abort** is displayed and the display returns to gross weighing mode. Repeat steps 3 through 5 using a larger sample size.

---

Minimum sample weight is the gross zero band value. The initial sample count is 5 pieces. The maximum number of pieces that can be sampled is 9999.

---

6. Place the parts on the scale to be counted. To accumulate the count and number of transactions, press **PRINT** while in count mode.

7. If enabled, press and hold **PRINT** for three seconds to print and/or clear the active count total. These functions are enabled or disabled in a password protected menu.

### 3.3.6 Piece weight entry

Piece weight can be entered manually.

1. Press and hold **SAMPLE**.

   The current piece weight is displayed.

2. Key in a new value and press **ZERO** to accept.
3.4  Checkweighing application

This section applies if your indicator has the Checkweighing application enabled.

3.4.1  SELECT key default function

In the Checkweighing application you can view the gross, net and tare display values by repeatedly pressing SELECT.

3.4.2  Special key functions

The following keys have an extra function in this application:

TARGET  Press TARGET to set the target weight or upper and lower limits, as described below.

F1  F1 works the same as the TARGET key when pressed.

3.4.3  Checkweigh operation

Checkweighing allows a quick, visual check of the acceptability or unacceptability of an item's weight. Figure 3.2 shows the checkweighing bargraph at the top of the display.

There are two ways to set a target weight:

- **Weigh the target object** - If you use this method the acceptable weight will be the actual weight of the target sample ± a predefined range (default is ±1 division).
- **Key in upper and lower weight limits** - If you use this method the acceptable weight is any weight which falls between the upper and lower limits.

Each of these is explained below.

The checkweighing annunciators are based off of net weight so if a tare is active only the net weight is considered for checkweighing. If there is no tare, gross weight is used as the basis for the annunciators.
3.4.4 Weighing a target object

With the indicator in checkweighing mode, follow these steps to set a target by weighing an object.

1. Press ZERO to zero the scale, if necessary.
2. Enter a tare if necessary. Refer to Net weighing on page 16 for instructions.
3. Place an object of the desired weight on the scale and press TARGET …

   The weight is displayed and the middle bargraph segment lights as well as the SP2 annunciator.

4. Remove the object and replace with the next object to be checked.

   The bargraph will show if the weight is under, over or within the target weight range. If the weight is under, SP1 annunciator and the UNDER bar segments will light. If the weight is over, SP3 annunciator and the OVER bar segments will light.

5. Repeat step 4 until you are finished weighing items.

   The current target weight will be active until you repeat steps 1 through 3 with a new item of a different weight.

3.4.5 Setting upper and lower limits

With the indicator in checkweighing mode, follow these steps to set a target by setting upper and lower limits.

1. Press ZERO to zero the scale, if necessary.
2. Enter a tare if necessary. Refer to Net weighing on page 16 for instructions.
3. With weight inside the gross zero band, press TARGET …

   Lo will be displayed briefly and then the current value for the lower accept weight.

4. Press ZERO to accept this or key in a new lower accept weight and press ZERO …

   Hi is briefly displayed and then the current value for the upper accept weight.

5. Press ZERO to accept this or key in a new upper accept weight and press ZERO …

   The display returns to normal weighing mode.
6. Place a weight on the scale …

   If the weight is below the lower accept weight, the left bargraph segments will light.

   Any weight between the lower and upper acceptable weights will cause the middle bargraph segment to light to show the weight is within the target range.

   If the weight is above the upper acceptable weight, the right bargraph segments will light.

7. Remove the item from the scale and repeat step 6 to check other items.

8. To set new upper and lower limits, repeat steps 1 through 5.

### 3.4.6 Setpoint operation in the checkweighing application

**Inside the Gross Zero Band** = All outputs and annunciators are off.

**Under Target or Below Low Accept Weight** = $SP1$ annunciator and Output 1 are on.

**Inside Target** = $SP2$ annunciator and Output 2 are on.

**Over Target or Above Upper Accept Weight** = $SP3$ annunciator and Output 3 are on.

Outputs can be set as latched or unlatched in a password protected menu.

**If outputs are unlatched**

   The annunciators and outputs follow the status of the bargraph except in gross zero band.

**If outputs are latched**

   The annunciators’ and outputs’ status is determined by where the first stable weight occurs after an item is placed on the scale. The latched annunciator and output is reset OFF only when weight returns inside the gross zero band.

---

*Outputs have to be enabled (see Service manual)*
3.5 Batching application

This section applies if your indicator has the Batching application active.

3.5.1 SELECT key default function

In the Batching application you can view the gross, net and tare display values by repeatedly pressing SELECT.

3.5.2 Special key functions

The following keys have an extra function in this application:

- **START**: Press START to start a batch operation.
- **STOP**: Press STOP to stop a batch operation.
- **F1**: F1 acts as a START and a STOP key on successive presses.

---

The Batch application has added selections for Preact values (1-3) in the Setpoint menu, shown below:

```
Press SETUP

<table>
<thead>
<tr>
<th>Out1</th>
<th>Out2</th>
<th>Out3</th>
<th>Preact1</th>
<th>Preact2</th>
<th>Preact3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Key in setpoint value</td>
<td>Key in setpoint value</td>
<td>Key in setpoint value</td>
<td>Key in preact value</td>
<td>Key in preact value</td>
<td>Key in preact value</td>
</tr>
</tbody>
</table>
```

---

3.5.3 Batching operation

Batching allows the indicator to control up to three motors, timers, augers, gates, etc. using the three outputs for the purpose of making batches based on weight.

There are four types of batching operation:

- 2-speed single ingredient
- Ingredient filling (up to three ingredients)
- Independent setpoints filling
- Fill/discharge operation

Other parameters, that are set in a password protected menu, affect the batching operation.

The bargraph will sequentially light up to show from 0 to 100% of the batch weight in all types of batching except the independent setpoints.
3.5.4 2-Speed filling

2-Speed is for a single ingredient with a dual speed filling control (Fast/Slow), typically a valve or hopper gate that can be full open, partially open or closed. When the fill starts both SP1 and SP2 are turned on (outputs activated) which should set the dual speed control to full open (Fast speed). When the Out 1 value is reached SP1 and Output 1 are turned off and this should set the dual speed control to partial open condition (Slow speed). When Out 2 value is reached SP2 and Output 2 are turned off to close the control device and complete the fill.

1. Press SETUP or press and hold SELECT to access the setpoint editor.
2. Set Out1 to the fast fill value and Out 2 to the slow fill value.

Example: To fill a product to 100 lb with the last 5 lb on slow fill: Out 1 should be set to 95 and Out 2 should be set to 100.

3. To start or restart the 2-speed filling process, press START or F1.
4. To stop the filling process, press STOP or F1. (F1 toggles the process on and off.)

3.5.5 Ingredient filling

Ingredient filling is for batching up to 3 different ingredients controlled by Out 1, 2 and 3 values. If Out 2 value is 0 then it operates as a single ingredient filler. If Out 3 value is 0 then it operates as 2 ingredient batcher.

1. Press SETUP or press and hold SELECT to access the setpoint editor.
2. Set Out1 to the ingredient 1 value, Out 2 to the ingredient 2 value and Out 3 to the ingredient 3 value.
3. To start or restart the batching process, press START or F1.
4. To stop the batching process, press STOP or F1. (F1 toggles the process on and off.)

3.5.6 Independent setpoints

Independent Setpoint works like the general weighing mode setpoints with the addition of start/stop controls. You can also do negative weight/discharge using this mode.

1. Press SETUP or press and hold SELECT to access the setpoint editor.
2. Set Out1, Out 2 and Out 3 values.
3. To start or restart the setpoints, press START or F1.
4. To stop the process, press STOP or F1. (F1 toggles the process on and off.)
3.5.7 Fill/Discharge

Fill/Discharge mode is typically used for applications that use negative filling to dispense a smaller amount of product from a large vessel, tank or hopper type scale. The vessel (tank or hopper) is filled to a set gross weight and then multiple operations of filling via negative amount of weight into bags or containers can be completed before the vessel (tank or hopper) requires a recharge or refill.

**Fill**

Out 1 is assigned as the gross fill amount for the vessel (tank or hopper) and START or F1 key starts the fill. The fill is based only on gross weight. If you have Out 1 set to 2000 and the scale already has 500 lb remaining, the Output 1 will cutoff (and annunciator SP1 turns off) when the additional 1500 is added for a total gross of 2000 lb.

**Discharge**

Out 2 is assigned as the discharge fill amount (negative weight) with the TARE key used to initiate the discharge cycle. The scale will tare prior to activating Output 2 (SP2 annunciator will light). An operator can perform multiple discharge operations. When the vessel gross weight is low, perform a refill.

1. Press SETUP or press and hold SELECT to access the setpoint editor.
2. Set Out1 to the gross fill weight in the vessel or container. Set Out 2 to the weight of the product to be discharged into smaller bags or containers.
3. To start or restart the large vessel fill process, press START or F1.
4. To stop the large vessel filling process, press STOP or F1.
5. Press TARE to start the bag filling process.
6. To stop bag filling process, press STOP or TARE.
3.6 Peak hold application

This section applies if your indicator has the Peak Hold application active.

3.6.1 SELECT key default function

In the Peak Hold application you can view the gross, max and min display values by repeatedly pressing SELECT.

3.6.2 Special key functions

The following key has an extra function in this application:

F1  F1 resets the min and max peak weights to the current gross weight.

3.6.3 Peak hold operation

Only the highest weight applied to the scale is displayed when the peak weight value is selected to be displayed. Minimum weight is designated by a pair of green circle annunciators. Maximum weight is designated by a different pair of green circle annunciators. See Figure 3.3.

![Figure 3.3 Min/Max annunciators](image)

With the Peak application active, follow these steps to perform and view peak weighments.

1. Repeatedly press SELECT until the two green circle annunciators on the right light up. See Figure 3.3. This means you are now viewing the peak or maximum weight.

2. With no weight on the scale, press ZERO, if necessary press F1 to reset any previous peak value on the display.

3. Place weight on the scale and then remove it …

   The display will show the peak weight recorded during the weighment.

4. To reset the peak, press F1 …

   The minimum and maximums are reset to the current gross weight.
5. Repeat the steps to perform another peak weighment.

Below is an example of the minimum weight display. Note the pair of circle annunciators that are lit.

![Minimum weight display]

Below is an example of the maximum weight display. Note that a different pair of circle annunciators are now lit.

![Maximum weight display]

### 3.7 Remote display application

This section applies if you have the Remote Display application active.

The indicator can be configured to work as a remote display with other compatible indicators or the GSE 350/355IS.
4 Menus

Password protected menus are available to configure the indicator and/or view information.

4.1 Accessing the menus

Follow these steps to access the menus in the ZM303.

1. With the indicator powered up and in normal operating mode, press and hold F1 …

   *Pass* is displayed, prompting you to enter the password.

2. Key in the password for the menu you want and press the ZERO key …

   The first item in the top level of the menu you accessed is displayed.

3. Use the navigation keys, shown below, to navigate through the menu structure. The symbols in the chart appear on the bottom of the keys.

   - Press **SELECT**/ ▼ to move down in a menu
   - Press **TARE**/ ▲ to move up in a menu, except at the bottom item in a menu, then use **ZERO**/ ▼ or **F1**
   - Press **PRINT**/ ◄ to move left in a menu
   - Press **UNITS**/ ► to move right in a menu
   - Press **ZERO**/ ▼ to accept a value or choice and move up in the menu.
   - Press **F1** to escape and move up in the menu

4.2 Menu annunciators

The menu structure is made up of menu items, parameters, value entry screens and lists from which you choose one item. To help you know where you are in the menu, the bargraph at the top of the display is on while the indicator is in the menus and will change appearance according to the following rules:

- **All segments flashing**: This means you are in the menu structure but not in any of the following screens.
- **Center flashing / others solid**: This means you are in a parameter prompt screen.
- **Center flashing / others off**: This means you are in a numeric entry screen. Enter a number and press **ZERO** to accept.
- **Right flashing / others off**: This means you are in a list. Scroll through the choices with the **PRINT** and **UNITS** keys and press **ZERO** to accept.
4.3 Exiting the menus

1. If you are at the bottom item in a menu use ZERO to accept a choice or value and move up a level, or use F1 to escape and move up one level without accepting the choice or value. From that point, press TARE repeatedly until ...

   SAVE no is displayed. This means “Do not save changes.”

2. Press UNITS to scroll through the choices: SAVE no, SAVEYES and CANCEL. Press ZERO to accept the displayed choice.

   If you choose SAVE no or SAVEYES the indicator exits the menu and returns to normal weighing mode.

   OR

   If you choose CANCEL, the indicator remains in the menu.

4.4 USER level menus

The USER level menus are available to the user. The other menu levels are for supervisors and technicians only.

The USER level (password 111) contains the User, About, and Audit menus arranged as shown in Figure 4.1.

![Figure 4.1 USER level (password 111) menus](image-url)
4.5 User menu

The User menu is shown in Figure 4.2.

![User menu diagram]

**Figure 4.2 User menu**

Use this menu to set the time and date, to enter a site ID, and view the physical seal status. Each is explained below:

### 4.5.1 Time

**User ↓ Time**

*The ↓ and → symbols used in this section stand for direction moved in the menu. So User ↓ Time, shown above, illustrates that you move down from User to Time. This will help you keep track of where you are in the menu structure.*

1. Access the User menu (see Accessing the menus on page 32) and press **SELECT** …
   
   *tiME* is displayed. Use this to set the time and clock style.

2. Press **SELECT** …
   
   *SEt* is displayed.

3. Press **SELECT** …
   
   *h- x* is displayed, with the *x* flashing. This is a numeric entry screen for the hour value.
4. Key in the hour of the day using military (24 hr) time and press **ZERO** to accept …

\[M- \ x\] is displayed, with the \(x\) flashing. This is a numeric entry screen for the minute value.

5. Key in the minute value and press **ZERO** to accept …

\[S- \ x\] is displayed, with the \(x\) flashing. This is a numeric entry screen for the second value.

6. Key in the seconds value and press **ZERO** to accept …

\(SEt\) is displayed.

7. Press **UNITS** …

\(STYLE\) is displayed. Use this to set the style of clock for printouts. Choices are **12hr**, **12hr-AP** (AM/PM) and **24hr** (military time).

8. Press **SELECT** …

**12hr** is displayed.

9. Press **UNITS** to scroll through the choices. Press **ZERO** to accept the displayed choice …

\(STYLE\) is displayed.

10. Press **TARE** …

\(tiME\) is displayed.

### 4.5.2 Date

**User \(\rightarrow\) Time \(\rightarrow\) Date**

1. From **tiME**, press **UNITS** …

\(dAtE\) is displayed.

2. Press **SELECT** …

\(SEt\) is displayed.

3. Press **SELECT** …

\(y- \ x\) is displayed, with the \(x\) flashing. This is a numeric entry screen for the year value.

4. Key in the year and press **ZERO** to accept …

\[M- \ x\] is displayed, with the \(x\) flashing. This is a numeric entry screen for the month.

5. Key in the month value and press **ZERO** to accept …

\[d- \ x\] is displayed, with the \(x\) flashing. This is a numeric entry screen for the day value.

6. Key in the day value and press **ZERO** to accept …

\(SEt\) is displayed.
7. Press **UNITS** …

   *STYLE* is displayed. Use this to set the style of date for printouts.
   Choices are **MMDD2Y**, **MMDD4Y**, **DDMM2Y** and **DDMM4Y**.

8. Press **SELECT** …

   **MMDD2Y** is displayed.

9. Press **UNITS** to scroll through the choices. Press **ZERO** when your choice is displayed …

   The choice is made and *STYLE* is displayed.

10. Press **TARE** …

    **dAtE** is displayed.

### 4.5.3 Site ID

User ↓ Time → Date → Site ID

1. From **dAtE**, press **UNITS** …

   **SitE id** is displayed.

2. Press **SELECT** …

   A numeric entry screen is displayed.

3. Key in a site ID number on the numeric keypad and press **ZERO** to accept …

   **SitE id** is displayed.

### 4.5.4 Seal

User ↓ Time → Date → Site ID → Seal

1. From **SitE id**, press **UNITS** …

   **SEAL** is displayed.

2. Press **SELECT** …

   **unSEALE** or **SEALEd** is displayed. This is the status of the physical seal inside the indicator. If the unit is sealed, no changes can be made to the configuration of the indicator.

3. Press **F1** to return to the **SEAL** display.

4. To exit the menu, see *Exiting the menus on page 33*. 

---

*Note: This content is a portion of the ZM303 Indicator User Instructions.*
4.6 About menu

The About menu is shown in Figure 4.3.

Figure 4.3 About menu

Use this menu to display information about the various items shown in Figure 4.3. Each is explained below:

4.6.1 Boot

About ﬁ Boot

1. Access the About menu and press SELECT …
   
   boot is displayed.

2. Press SELECT …
   
   PArtno is displayed

3. Press SELECT …
   
   The bootloader PN is displayed.

4. Press ZERO to return to the PArtno display.

5. Press UNITS …
   
   Version is displayed.

6. Press SELECT …
   
   The version number of the bootloader is displayed.
7. Press ZERO to return to the Version display.
8. Press TARE to return to the boot display.

4.6.2 Firm and App

About Boot → Firm and App

1. From boot, press UNITS …
   FirM is displayed. This stands for firmware.
2. Repeat the same pattern of key presses in steps 2 through 7 to view the part number and version for the FirM and APP menu items.

4.6.3 Serial

About Boot → Firm → App → Serial

1. With APP displayed, press UNITS …
   SEriAL is displayed.
2. Press SELECT …
   The indicator’s serial number is displayed.
3. Press TARE to return to the SEriAL display.

4.6.4 Option

About Boot → Firm → App → Serial → Option

1. From SEriAL, press UNITS …
   oPtion is displayed.
2. Press SELECT …
   Version is displayed. This stands for the software version of the currently installed option card. This can be useful service information.
3. To view the version, press SELECT …
   The software version number is shown.
4. Press ZERO …
   oPtion is displayed.
5. Press UNITS …
   tYPE is displayed. This stands for the type of option card installed. The four option cards are: Analog, 802.11g wireless, USB-d, and Current Loop/RS485/RS422.
6. Press SELECT …
   The currently installed option card name is displayed.
4.6 About menu

7. Press ZERO ...

*Type* is displayed.

8. Press TARE ...

*Option* is displayed.

4.6.5 Enet

About ↓ Boot → Firm → App → Serial → Option → Enet

*If the indicator is connected to an ethernet network, the values displayed will be the current assigned addresses.*

1. From *Option*, press UNITS ...

*EnEt* is displayed. Use this item to view the values for the IP, Subnet, Gateway and MAC addresses.

2. Press SELECT ...

*IP* is displayed. Use this item to view the four part IP address.

3. Press SELECT ...

1 XXX is displayed. This is first octet of the IP address.

4. Press ZERO ...

2 XXX is displayed. This is second octet of the IP address.

5. Press ZERO ...

3 XXX is displayed. This is third octet of the IP address.

6. Press ZERO ...

4 XXX is displayed. This is fourth octet of the IP address.

7. Press ZERO ...

*IP* is displayed.

8. Press UNITS ...

*Subnet* is displayed.

9. Repeat this sequence of key presses for the *Subnet, Gateway and MAC* addresses.

10. When finished press TARE ...

*EnEt* is displayed.
4.6.6 Dload

About ➥ Boot ➥ Firm ➥ App ➥ Serial ➥ Option ➥ Enet ➥ Dload

1. From EnEt, press UNITS …

   **dLoAd** is displayed. This stands for download. Under **sSERiAL** you can view the serial number of the software application that created the configuration file. Under **dSEriAL** you can view the serial number of the software application that downloaded the configuration file. This is used for security and licensing purposes.

2. Press SELECT …

   **sSERiAL** is displayed.

3. Press SELECT …

   The 1st half of the serial number of the creating application of the configuration file is displayed.

4. Press ZERO to show the 2nd half.

5. Press F1 …

   **sSERiAL** is displayed.

6. Press UNITS …

   **dSEriAL** is displayed.

7. Press SELECT …

   The 1st half of the serial number of the downloading application of the configuration file was downloaded to, is displayed.

8. Press ZERO to show the 2nd half.

9. Press F1 …

   **dSEriAL** is displayed.

10. Press TARE until **About** is displayed.

11. To exit the menu, see Exiting the menus on page 33.
4.7 Audit menu

The Audit menu is shown in Figure 4.4.

Use this menu to display audit counters for configuration and calibration and to print the information. Each is explained below:

4.7.1 Counter

1. Access the Audit menu and press **SELECT** …
   
   *countEr* is displayed. This has two counters that tell you how many times the indicator has been configured and calibrated.

2. Press **SELECT** …
   
   *conFig* is displayed.

3. Press **SELECT** again …
   
   A number appears showing how many times the indicator has been configured.

4. Press **ZERO** …
   
   *conFig* is displayed.

5. Press **UNITS** …
   
   *cALib* is displayed.

6. Press **SELECT** …
   
   A number appears showing how many times the indicator has been calibrated.

7. Press **ZERO** …
   
   *cALib* is displayed.

8. Press **TARE** …
   
   *countEr* is displayed.
**4.7.2 Print**

Audit ↓ Counter → Print

1. From *counter*, press **UNITS** …

   *Print* is displayed.

2. Press **SELECT** …

   *Port1* is displayed. This is the first of three choices: *Port 1*, *Port 2* or *uSb*. Use these to select which port to print the audit report through.

3. Press **UNITS** to scroll through the choices and press **ZERO** when your choice is displayed …

   The audit log is printed through the chosen port and *Print* is displayed.

4. This completes the Audit menu. To exit the menu, see *Exiting the menus on page 33*. 
5 Communications

The ZM303 can communicate through these ports:

- Serial
- Ethernet
- USB
- Wireless 802.11g

5.1 Default print formats

Below are examples of the default formats that are available:

General Weighing (Format #1)

<table>
<thead>
<tr>
<th>Gross 272.04 lb</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tare 95.88 lb</td>
</tr>
<tr>
<td>Net 176.16 lb</td>
</tr>
</tbody>
</table>

Accumulated Gen. Weigh (Format #2)

<table>
<thead>
<tr>
<th>Transaction Count: 10</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gross 272.04 lb</td>
</tr>
<tr>
<td>Tare 95.88 lb</td>
</tr>
<tr>
<td>Net 176.16 lb</td>
</tr>
</tbody>
</table>

Counting (Format #3)

| Count 176 |

Checkweighing (Format #4)

| Net 176.16 lb |

Batching (Format #5)

| G 272.04 lb |

Peak Weighing (Format #6)

| Peak Gross 1000.02 lb |

Remote Display (Format #7)

| 272.04 lb G |

The indicator can be configured for many other outputs to match the application.
6 Error messages

The following error messages may be displayed during use of the indicator:

<table>
<thead>
<tr>
<th>Message</th>
<th>Display</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overload</td>
<td><img src="overload.png" alt="Image" /></td>
</tr>
<tr>
<td>Can’t fit on display</td>
<td><img src="cantfit.png" alt="Image" /></td>
</tr>
<tr>
<td>Underload</td>
<td><img src="underload.png" alt="Image" /></td>
</tr>
<tr>
<td>Can’t</td>
<td><img src="cant.png" alt="Image" /></td>
</tr>
<tr>
<td>Entry not in valid range</td>
<td><img src="entrynotinnv.png" alt="Image" /></td>
</tr>
<tr>
<td>Password entry failed</td>
<td><img src="password.png" alt="Image" /></td>
</tr>
<tr>
<td>Remote display not receiving data from the master indicator</td>
<td><img src="nodata.png" alt="Image" /></td>
</tr>
<tr>
<td>Indicator did not reach a stable zero weight within time window set for automated weighing process.</td>
<td><img src="indicator.png" alt="Image" /></td>
</tr>
</tbody>
</table>
7 Supervisor menu

This menu allows a supervisor to change those functions of an application that are configurable. Access the supervisor menu using the password 1793. Refer to Accessing the menus on page 32 for instructions.

Wherever there is an option to print information in the any of the supervisor’s menus, the information will print out of Port 1, Port 2 or to USB, whichever is configured.

The menus are always explained in a sequential manner to cover all information in a logical fashion. You will probably never access all the menu items in this manner. You can navigate to the area of the menu that needs to be changed by using the navigation key chart shown with each menu.

The Supervisor menu changes based on the active application. Go to the appropriate section.

- General Weighing application supervisor menu on page 46
- Accumulator application supervisor menu on page 52
- Counting application supervisor menu on page 56
- Checkweighing application supervisor menu on page 60
- Batching application supervisor menu on page 63
- Peak Hold application supervisor menu on page 68
- Remote Display application supervisor menu on page 70
7.1 General Weighing application supervisor menu

Figure 7.1 shows the Supervisor menu when you are in the General Weighing application.

Appears only if Preset Tare is enabled

The Setpoint menu is the same for all the applications so will only be explained once here. Exceptions are noted in the text.

Follow these steps to set the items in the Supervisor menu.
7.1 General Weighing application supervisor menu

7.1.1 Setpoint

Super↓ Setpoint

The ↓ and → symbols used in this section stand for direction moved in the menu. So Super ↓ Setpoint, shown above, illustrates that you move down from Super to SetPnt. This will help you keep track of where you are in the menu structure.

1. With the General Weighing application active, access the Supervisor menu. Refer to Accessing the menus on page 32 for instructions. From Super, press SELECT …

SetPnt is displayed. Use this to:

- set the function of the setpoint annunciators
- enter up to three setpoint values
- select inputs for up to three inputs
- print the setpoint settings
- reset all setpoint settings to factory defaults.

Annunciators

Setpoint ↓ Edit ↓ Annun

2. Press SELECT …

Edit is displayed.

3. Press SELECT …

Annun is displayed. (Annun is not included in the Batch application Supervisor menu. Skip steps 3 through 5).

This stands for annunciators, referring to the SP1, SP2 and SP3 setpoint annunciators. By default (off) these annunciators are ON when the displayed weight is below the setpoint value or OFF above the setpoint value. If you select on, the annunciators work in the opposite fashion—OFF when below, ON when above.

4. Press SELECT …

The current setting is displayed (off or on).

5. Press UNITS to toggle between the choices and when your choice is displayed, press ZERO to accept …

Annun is displayed.

Outputs

Setpoint ↓ Edit ↓ Annun → Out

6. Press UNITS …

out1 is displayed. This is the weight value for setpoint 1.

7. Press SELECT …

The current value is displayed with a flashing right digit.
8. Press ZERO to accept the displayed value or key in a new value and press ZERO to accept …

\textit{out1} is displayed.

9. Press UNITS …

\textit{out2} is displayed.

\underline{Inputs}

Setpoint \downarrow \textit{Edit} \downarrow \textit{Annun} \rightarrow \textit{Out} \rightarrow \textit{In}

10. Repeat steps 7 through 9 for \textit{out2} and \textit{out3}. Press UNITS when finished …

\textit{in1} is displayed. This stands for input 1. Use this to assign a function to input 1 when an external switch is tripped. Default choice is \textit{none}. The choices are listed in Figure 7.1.

11. From \textit{in1}, press SELECT …

The current choice is displayed.

12. Press UNITS to scroll through the choices and when your choice is displayed, press ZERO to accept …

\textit{in1} is displayed.

13. Press UNITS …

\textit{in2} is displayed.

14. Repeat steps 11 through 13 for \textit{in2} and \textit{in3}. Press TARE when finished …

\textit{Edit} is displayed.

\underline{Print}

Setpoint \downarrow \textit{Edit} \rightarrow \textit{Print}

15. Press UNITS …

\textit{Print} is displayed. Use this to print the settings under \textit{SEtPnt}.

16. Press SELECT …

\textit{Port 1} is displayed.

17. Press F1 to abort the print process or press UNITS to scroll to the desired port and press ZERO to print the information …

\textit{Print} is displayed after either action.

\textbf{Inputs and Outputs must be enabled ON in a separate password protected menu. Some input choices will not apply in the application that is active.}
7.1 General Weighing application supervisor menu

---

**Reset**

Setpoint ↓ Edit → Print → Reset

18. Press **UNITS** …

    \( \text{rESEt} \) is displayed. Use this to reset the settings under **Edit** to factory defaults.

19. Press **SELECT** …

    \( \text{no} \) is displayed.

20. Press **ZERO** to abort the reset or press **UNITS** …

    \( \text{YES} \) is displayed.

21. Press **ZERO** to reset the settings to factory defaults …

    \( \text{rESEt} \) is displayed.

22. Press **TARE** …

    \( \text{SEtPnt} \) is displayed. If Preset Tare is not enabled, skip to step 7. If it is enabled continue to the next step.

---

7.1.2 Tare

Super ↓ Setpoint → Tare

1. Press **UNITS** …

    \( \text{tArE} \) is displayed.

    Use this to:

    - set values for up to 10 preset tares
    - print the values of the preset tares
    - reset all preset tares to factory defaults of 0

    The following steps describe the procedures.

---

Tare Register 1-10

Tare ↓ Edit ↓ Tare 1-10

2. Press **SELECT** …

    \( \text{Edit} \) is displayed.

3. Press **SELECT** …

    \( \text{tArE 1} \) is displayed. This is the first of the 10 preset tare values you can set.

4. Press **SELECT** …

    The current value is displayed with a flashing right digit.

5. Press **ZERO** to accept the displayed value or key in a new value and press **ZERO** to accept …

    \( \text{tArE 1} \) is displayed.
6. Press **UNITS** …

   \textit{tArE 2} is displayed.

7. Repeat steps 4 through 6 for \textit{tArE 2} through \textit{tArE 10}. Press **TARE** when finished …

   \textit{Edit} is displayed.

---

**Printing**

\textbf{Tare \textup{\downarrow} Edit \textup{\rightarrow} Print}

8. Press **UNITS** …

   \textit{Print} is displayed. Use this to print the preset tare values.

9. Press **SELECT** …

   \textit{Port 1} is displayed.

10. Press F1 to abort the print process or press **UNITS** to scroll to the desired port and press **ZERO** to print the information …

   \textit{Print} is displayed after either action.

---

**Reset**

\textbf{Tare \textup{\downarrow} Edit \textup{\rightarrow} Print \textup{\rightarrow} Reset}

11. Press **UNITS** …

   \textit{rESEt} is displayed. Use this to reset the all the preset tares to the factory default of 0.

12. Press **SELECT** …

   \textit{no} is displayed.

13. Press **ZERO** to abort the reset or press **UNITS** …

   \textit{YES} is displayed.

14. Press **ZERO** to reset the settings to factory defaults …

   \textit{rESEt} is displayed.

15. Press **TARE** …

   \textit{tArE} is displayed.

---

7.1.3 **Battery**

\textbf{Super \downarrow Setpoint \rightarrow Tare \rightarrow Battery}

1. Press **UNITS** …

   \textit{bAttErY} is displayed. Use this to enable the battery and to set a timeout length (in minutes). If this time expires with no scale or keypad activity, the battery will be shut off.
7.1 General Weighing application supervisor menu

Enable

Battery ↓ Enable

*Only enable the battery and set the tMout value if the ZQ-BAT option is being used. If battery use is enabled, setpoint output 3 cannot be used for setpoints in checkweighing or batching applications. It is used as a shutoff signal to the ZQ-BAT battery option.*

2. Press SELECT …

    EnAbLE is displayed. Choices are oFF and on. Choose oFF to disable battery usage. Choose on to enable battery usage.

3. Press UNITS to toggle between the choices and when your choice is displayed, press ZERO to accept …

    EnAbLE is displayed.

Timeout

Battery ↓ Enable → Timeout

4. Press UNITS …

    tMout is displayed. This stands for timeout Use this to set the length of time before inactivity of the scale and keypad cause battery power to be shutoff. Values between 1 and 3600 minutes are valid.

5. Press SELECT …

    A numeric entry screen appears.

6. Key in a value, in minutes and press ZERO to accept …

    tMout is displayed.

7. This completes the Supervisor menu for General Weighing. Repeatedly press TARE until the indicator returns to normal weighing mode.

    The current weight value is displayed.
7.2 Accumulator application supervisor menu

Figure 7.2 shows the Supervisor menu when you are in the Accumulator application:

Follow these steps to set the items in the Supervisor menu.

The Setpnt, Tare and bAttErY submenus in Figure 7.2 are the same as described in General Weighing application supervisor menu on page 46. Go there for information on those submenus. The unique submenus to this application are described below.
7.2.1 Accumulator

Super ↓ Setpoint → Tare → Accum

1. With the Accumulator application active, access the Supervisor menu using password 1793. Refer to Accessing the menus on page 32 for instructions. From Super, press SELECT ...

SetPnt is displayed.

2. Press UNITS until ...

Accum is displayed. Use this to set the items relating to accumulation. Under Accum you can do the following:

- Enable/Disable the ability to print the accumulated total (Prt tot).
- Key in a print format number for printing the total accumulated weight information (tot Fmt).
- Enable/Disable the ability to clear the total accumulation information when the total is printed (clr tot).
- Print the accumulation report for all 10 memory channels (Print).
- Reset all 10 accumulator memory channel values to 0 (rESEt).

The following steps describe the procedure to set these items.

Print total

Accum ↓ Print Total

3. From Accum, press SELECT ...

Prt tot is displayed. This stands for print total.

4. Press SELECT ...

off is displayed.

5. Press ZERO to keep the print total function disabled or press UNITS to toggle to on and press ZERO to enable printing of the accumulated total ...

Prt tot is displayed.

If enabled, during normal operation the user can press and hold PRINT for three seconds and the selected total print format (see step 8 below) will be sent out any port that is set up to printed. The display will flash Prn-tot.

Total format

Accum ↓ Print Total → Total Format

6. Press UNITS ...

tot Fmt is displayed. This stands for the total print format.

7. Press SELECT ...

The current print format number is displayed with a flashing right-most digit. (Default is format 8)
8. Press ZERO to accept the existing setting or key in a new format number and press ZERO …

\[ tot \text{ FMt} \] is displayed.

---

**Clear total**

Accum ↓ Print Total → Total Format → Clear Total

9. Press UNITS …

\[ cLr \text{ tot} \] is displayed. This stands for clear total. Choose on to enable clearing the accumulated total when printed. Choose off to disable this function.

If enabled, the total is cleared if the user presses and holds the PRINT key for three seconds. The message \( cLr\cdot\text{tot} \) will flash. The total is printed prior to clearing if this was enabled in step 5 above.

10. Press SELECT …

The current setting is displayed.

11. Press UNITS to toggle between the choices and when your choice is displayed, press ZERO to accept …

\[ cLr \text{ tot} \] is displayed.

---

**Print**

Accum ↓ Print Total → Total Format → Clear Total → Print

12. Press UNITS …

\[ Print \] is displayed. This stands for print the accumulation report. Choose a port to print the accumulated totals report for all 10 memory channels.

13. Press SELECT …

\[ Port \ 1 \] is displayed.

14. Press F1 to abort the print process or press UNITS to scroll to the desired port and press ZERO to print the information …

\[ Print \] is displayed after either action.

---

**Reset**

Accum ↓ Print Total → Total Format → Clear Total → Print → Reset

15. Press UNITS …

\[ rESEt \] is displayed. Use this to reset all the items under Accum to the factory defaults.

16. Press SELECT …

\[ no \] is displayed.

17. Press ZERO to abort the reset or press UNITS …

\[ YES \] is displayed.
18. Press ZERO to reset the settings to factory defaults …

`rESEt` is displayed.

19. Press TARE …

`AccuM` is displayed.

20. Press UNITS …

`bAttErY` is displayed. The battery menu is identical in all the applications. Refer to step 1 on page 50 for information on setting up the battery.

21. This completes the Supervisor menu for the Accumulation application. Repeatedly press TARE until the indicator returns to normal weighing mode.

The current weight value is displayed.
7.3 Counting application supervisor menu

Figure 7.3 shows the Supervisor menu when you are in the Counting application:

Follow these steps to set the items in the Supervisor menu.

The Setpnt, Tare and bAttErY submenus in Figure 7.3 are the same as described in General Weighing application supervisor menu on page 46. Go there for information on those submenus. The unique submenus to this application are described below.

The cnt Acc submenu is the same described in the Accum sub menu in the Accumulator application. Refer to step 3 on page 53.
7.3 Counting application supervisor menu

7.3.1 Count

Super ↓ Setpoint → Tare → Count

1. With the Count application active, access the Supervisor menu using password 1793. Refer to Accessing the menus on page 32 for instructions. From Super, press SELECT ...

   SetPnt is displayed.

2. Press UNITS twice ...

   count is displayed. Use this to set the items relating to counting:

   - Select between bulk and dribble mode.
   - Enable/Disable the ability to print the count total (Prt tot).
   - Key in a print format number for printing the total count information (totFmt).
   - Enable/Disable the ability to clear the total count information when the total is printed (clr tot).

   The following steps describe the procedure to set these items.

Mode

Count ↓ Mode

3. Press SELECT ...

   ModE is displayed. There are two modes for sampling: bulK and dribbLE.

   Bulk In bulk sampling you place the specified number of items on the scale all at once (in bulk) and the scale automatically starts to calculate piece weight when the weight stabilizes. The count is then displayed.

   Dribble In dribble sampling method you count out the specified number of items onto the scale and when you are ready, press the SAMPLE key and the scale calculates piece weight and then shows the count.

4. With ModE displayed, press SELECT ...

   bulK is displayed.

5. Press UNITS to toggle between the choices and when your choice is displayed, press ZERO to accept ...

   ModE is displayed.

Print total

Count ↓ Mode → Print Total

6. Press UNITS ...

   Prt tot is displayed. This stands for print total.

7. Press SELECT ...

   no is displayed.
8. Press ZERO to keep the print total function disabled or press UNITS to toggle to YES and press ZERO to enable printing of the count total …

\[\text{Prt tot}\] is displayed.

If enabled, during normal operation the user can press and hold PRINT for three seconds and the selected total print format (see step below) will be sent out any port that is set up to printed. The display will flash \[\text{Prn-tot}\].

**Total format**

**Count \downarrow Mode \rightarrow Print Total \rightarrow Total Format**

9. Press UNITS …

\[\text{tot Fmt}\] is displayed. This stands for the total print format.

10. Press SELECT …

The current print format number is displayed with a flashing right-most digit. (Default is format 8)

11. Press ZERO to accept the existing setting or key in a new format number and press ZERO …

\[\text{tot Fmt}\] is displayed.

**Clear total**

**Count \downarrow Mode \rightarrow Print Total \rightarrow Total Format \rightarrow Clear Total**

12. Press UNITS …

\[\text{cLr tot}\] is displayed. This stands for clear total. Choose YES to enable clearing the count total when printed. Choose no to disable this function.

If enabled, the total is cleared if the user presses and holds the PRINT key for three seconds. The message \[\text{cLr-tot}\] will flash. The total is printed prior to clearing if this was enabled in step 8 above.

13. Press SELECT …

The current setting is displayed.

14. Press UNITS to toggle between the choices and when your choice is displayed, press ZERO to accept …

\[\text{cLr tot}\] is displayed.

15. Press TARE …

\[\text{count}\] is displayed.

16. Press UNITS …

\[\text{bAttErY}\] is displayed. The battery menu is identical in all the applications. Refer to step 1 on page 50 for information on setting up the battery.
17. This completes the Supervisor menu for the Counting application. Repeatedly press TARE until the indicator returns to normal weighing mode.

The current weight value is displayed.
### 7.4 Checkweighing application supervisor menu

Figure 7.4 shows the Supervisor menu when you are in the Checkweighing application:

![Figure 7.4 Supervisor menu for the Checkweighing application](image)

Follow these steps to set the items in the Supervisor menu.

*The Setpnt, Tare and bAttErY submenus in Figure 7.4 are the same as described in General Weighing application supervisor menu on page 46. Go there for information on those submenus. The one exception is that out1, out2 and out3 are not in the Setpnt menu. They do not apply in the Checkweighing application. The unique submenus to this application are described below.*
7.4.1 Check

Super ↓ Setpoint → Tare → Check

1. With the Checkweighing application active, access the Supervisor menu using password 1793. Refer to Accessing the menus on page 32 for instructions. From SuPEr, press SELECT …

SETPnt is displayed.

2. Press UNITS twice …

checK is displayed. This stands for checkweigher. Use this to set the items relating to checkweighing:

- Set conditions for using the outputs. (outPutS)
- Set under divisions for acceptable target weight (undrdiv)
- Set over divisions for acceptable target weight (oVErdIV)
- Reset the target values to zero.(rESEt)

Outputs - Latch & Unlatch

Check ↓ Outputs ↓ Latch & Unlatch

3. Press SELECT …

outPutS is displayed. There are two choices for outputs, LAthCh and unLAtch. If you choose LAthCh, this means that the weight has to stabilize before the annunciator and output for the appropriate condition (Under, Accept or Over) is activated. If you choose unLAtch, the annunciator and output will change instantly as the weight changes checkweigh condition.

In latch mode, once activated the annunciator and output will remain unchanged until the item is removed and the gross weight returns to inside the gross zero band.

4. From outPutS, press SELECT …

LAthCh is displayed.

5. Press UNITS to toggle between the choices and when your choice is displayed, press ZERO to accept …

outPutS is displayed.

Under divisions

Check ↓ Outputs → Under divisions

6. Press UNITS …

undrdiv is displayed. Use this to set the number of divisions (0-100) below the target weight that is still within the accept window.

7. Press SELECT …

The current value is shown with a flashing right-most digit.
8. Press ZERO to accept the current value or key in a new value and press ZERO to accept …

_unrdiv_ is displayed.

**Over divisions**

---

**Check ➔ Outputs ➔ Under divisions ➔ Over divisions**

9. Press UNITS …

_oVerdiv_ is displayed. Use this to set the number of divisions (0-100) above the target weight that is still within the accept window.

10. Press SELECT …

The current value is shown with a flashing right-most digit.

11. Press ZERO to accept the current value or key in a new value and press ZERO to accept …

_oVerdiv_ is displayed.

**Reset**

---

**Check ➔ Outputs ➔ Under divisions ➔ Over divisions ➔ Reset**

12. Press UNITS …

_rEsEt_ is displayed. Use this to reset the all the checkweigher variables to the factory defaults.

13. Press SELECT …

_no_ is displayed.

14. Press ZERO to abort the reset or press UNITS …

.YES_ is displayed.

15. Press ZERO to reset the settings to factory defaults …

.rEsEt_ is displayed.

16. Press TARE …

.chEcK_ is displayed.

17. Press UNITS …

.bAttErY_ is displayed. The battery menu is identical in all the applications. Refer to step 1 on page 50 for information on setting up the battery.

18. This completes the Supervisor menu for the Checkweighing application. Repeatedly press TARE until the indicator returns to normal weighing mode.

The current weight value is displayed.
7.5 Batching application supervisor menu

Figure 7.5 shows the Supervisor menu when you are in the Batching application:

Follow these steps to set the items in the Supervisor menu.

The Setpnt, Tare and bAttErY submenus in Figure 7.5 are the same as described in General Weighing application supervisor menu on page 46. Go there for information on those submenus. The unique submenus to this application are described below.

7.5.1 Batch

Super → Setpoint → Tare → Batch

1. With the Batching application active, access the Supervisor menu using password 1793. Refer to Accessing the menus on page 32 for instructions. From SuPER, press SELECT …

SetPnt is displayed.
2. Press **UNITS** twice …

   *bAch* is displayed. Use this to set the items relating to batching:

   - Set the type of batch operation. (**tYPE**)
   - Select auto or manual operation. (**ModE**)
   - Set gross or net display mode. (**diSP**)
   - Set the conditions for preact. (**PrEAed**)
   - Select negative filling operation. (**nEG Fil**)

<table>
<thead>
<tr>
<th>Type</th>
<th>Batch ↓ Type</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

3. Press **SELECT** …

   **tYPE** is displayed. There are 4 choices under Type: **2 SPEEd**, **iNGrEd**, **iNdEP** and **Fil-dSc**. Each is explained below:

   - **2 SPEEd** Choose 2 speed when you have one ingredient with a speed control device.
   - **iNGrEd** Choose ingredient for sequential filling for up to 3 products at a single speed.
   - **iNdEP** Choose independent when the filling process is run based on the values set for the outputs.
   - **Fil-dSc** Choose fill-discharge when performing a fill operation (negative weight) from something like a hopper scale.

   See *Notes on batching on page 66* for information about settings for each of these types of batching.

4. Press **SELECT** …

   The current setting is displayed.

5. Press **UNITS** to scroll through the choices and when your choice is displayed, press **ZERO** to accept …

   **tYPE** is displayed.

<table>
<thead>
<tr>
<th>Mode</th>
<th>Batch ↓ Type → Mode</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

6. Press **UNITS** …

   **ModE** is displayed. Mode has two choices: **Auto** or **MAnuAL**. There is a detailed description for each type in the section titled *Batching application on page 27*.

7. Press **SELECT** …

   The current setting is displayed.

8. Press **UNITS** to toggle between the choices and when your choice is displayed, press **ZERO** to accept …

   **ModE** is displayed.
Display

Batch ↓ Type → Mode → Display

9. Press UNITS …

\( \text{diSP} \) is displayed. Display has two choices: \( \text{NEt} \) or \( \text{GroSS} \). Each is explained below:

- **NEt**: Choose Net to base batching on net weights.
- **GroSS**: Choose Gross to base batching on gross weights.

10. Press SELECT …

The current setting is displayed.

11. Press UNITS to toggle between the choices and when your choice is displayed, press ZERO to accept …

\( \text{diSP} \) is displayed.

Preact

Batch ↓ Type → Mode → Display → Preact

12. Press UNITS …

\( \text{PrEAct} \) is displayed. This stands for auto-preact.

Preact can be used to compensate for product weight that continues to fill into the bag or container after the setpoint output turns off and before the final weight stabilizes. If a preact value is automatically calculated or manually entered, the actual cutoff weight will equal the entered setpoint value minus the preact value.

\( \text{PrEAct} \) has three choices: **Manual**, **Auto**, or **cLEAr**. Each is explained below:

- **Manual**: When **Manual**, preact is not automatically calculated and is only used if the value was entered manually in the SETPNT submenu for PREACT 1, 2 and 3.
- **Auto**: When set to **Auto**, preact is automatically calculated. The amount of compensation is calculated based on the average variance between the entered setpoint value and the actual fill weights recorded during the most recent batch cycles. Auto Preact is only available in certain Batch Types as noted in their descriptions. Calculated Preact values can be viewed in the SETPNT submenu for PREACT 1, 2 and 3.
- **cLEAr**: When **cLEAr** is selected, the current preact values will be set to 0. If **PrEAct** was set to **Auto**, a new set of compensation values will be calculated on continuing batches. If preact was set to **oFF**, then preact will be disabled or new values can be manually entered in the setpoint menu.

13. Press SELECT …

The current setting is displayed.
14. Press **UNIT**S to scroll through the choices and when your choice is displayed, press **ZER**O to accept …

    *PrEAct* is displayed.

**Negative fill**

Batch ↓ Type → Mode → Display → Preact → Negative Fill

15. Press **UNIT**S …

    **NEG FIL** is displayed. This stands for negative fill. This has two choices: *oFF* or *on*. Each is explained below:

    Choose *oFF* to disable negative fill. (default)

    Choose *on* to enable negative fill. Operation varies depending on Type chosen. See *Notes on batching on page 66*.

16. Press **SELECT** …

    The current setting is displayed.

17. Press **UNIT**S to scroll through the choices and when your choice is displayed, press **ZER**O to accept …

    **NEG FIL** is displayed.

18. Press **TARE** …

    **bAtch** is displayed.

19. Press **UNIT**S …

    **bAttErY** is displayed. The battery menu is identical in all the applications. Refer to step 1 on page 50 for information on setting up the battery.

20. This completes the Supervisor menu for the Batching application. Repeatedly press **TARE** until the indicator returns to normal weighing mode.

    The current weight value is displayed.

### 7.5.2 Notes on batching

**2 Speed**

*MODE* setting does not apply to 2 SPEED.

If *DISP* is set to **NET**, an autotare will occur prior to the start of the fill.

If *DISP* is set to **GROSS**, no autotare will occur and the fill cutoffs are based on actual Gross weight.

If *PREACT* is set to **AUTO**, this only effects the cutoff value of Out 2. See details of PREACT below.

If *NEG FILL* is set to **YES**, then *DISP* should be set to **NET** so that an autotare occurs prior to start and the cutoffs will be based on negative entered values for Out 1 and Out 2.
Ingredient

If **MODE** is set to **AUTO**, the batch process will continue until the final ingredient is completed. Between each ingredient there will be a slight delay to allow for motion, final weight and preact calculations.

If **MODE** is set to **MANUAL**, this requires that you press **F1** or **START** between each ingredient to complete the fill cycle.

If **DISP** is set to **NET**, an autotare will occur prior to each ingredient and the Out 1, 2 and 3 fill weights will be based on Net weight.

If **DISP** is set to **GROSS**, no autotare will occur and the Out 1, 2 and 3 fill weights would be based on the Gross weight of the accumulated ingredients. If Ingredient 1 amount is 10, Ingredient 2 amount is 20 and ingredient 3 amount is 30 then you would enter Out 1 = 10, Out 2 = 30 (10 + 20) and Out 3 = 60 (10 + 20 + 30).

Output cutoffs are based on the actual displayed Gross weight so if inaccurate amounts of ingredient are experienced during the batch then it may affect the amount of each subsequent ingredient that is added.

If **PREACT** is set to **AUTO**, then it will be calculated for each ingredient to adjust the cutoff weight accordingly.

If **NEG FILL** is set to **YES**, it will only operate for a single ingredient with OUT 1 used for discharge filling based on negative weight.

Independent Setpoints

Out 1, 2 and 3 values operate the Outputs independently. Press **F1** or **START** for initial start.

If **MODE** is set to **AUTO**, this will allow the outputs to activate automatically using the gross zero band as an interlock for Auto Start.

If **MODE** is set to **MANUAL**, this will require pressing the **F1** or **START** key to activate the outputs. The outputs will remain deactivated after the last Out X weight has been reached. A value of 0 disables the independent output.

If **DISP** is set to **NET**, this uses net weight and if **DISP** is set to **GROSS**, this uses gross weight for cutoff value

**PREACT** setting does not apply to INDEPENDENT

If **NEG FILL** is set to **YES**, this allows operation of Out 1, 2 and 3 values in negative weight mode.

Fill/Discharge

**MODE** setting does not apply to Fill/Discharge

**DISP** setting does not apply to Fill/Discharge

If **PREACT** is set to **AUTO** it only applies during the Out 2 discharge cycle.

**NEG FILL** setting does not apply to Fill/Discharge
7.6 Peak Hold application supervisor menu

Figure 7.6 shows the Supervisor menu when you are in the Peak Hold application:

The Setpnt and bAttErY submenus in Figure 7.5 are the same as described in General Weighing application supervisor menu on page 46. Go there for information on those submenus. The unique submenus to this application are described below.

7.6.1 Peak hold

Super ➔ Setpoint ➔ P-hold

1. With the Peak Hold application active, access the Supervisor menu using password 1793. Refer to Accessing the menus on page 32 for instructions. From Super, press SELECT ...

   Setpnt is displayed.

2. Press UNITS twice ...

   P-hoLd is displayed. Use this to reset the min/max peak. If the F1 key is disabled, which is the normal key to reset min/max, the supervisor needs an alternate method to reset these values.
Reset

P-hold ↓ Reset

3. Press SELECT ...

   \textit{rESEt} is displayed.

4. Press SELECT ...

   \textit{no} is displayed.

5. Press UNITS to toggle between the \textit{no} and \textit{YES} choices. Press ZERO to accept...

   The min/max are reset and \textit{rESEt} is displayed.

6. Press TARE repeatedly to return to normal weighing operation.
7.7 Remote Display application supervisor menu

Figure 7.7 shows the Supervisor menu when you are in the Remote Display application:

1. With r-diSP displayed press SELECT …

   ModE is displayed.

2. Press SELECT …

   rd or 350iS is displayed. Choose which type of remote display will be connected to the indicator.

3. Press UNITS to toggle between the choices and press ZERO to accept …

   ModE is displayed.

4. This completes the Supervisor menu for the Remote Display application. Repeatedly press TARE until the indicator returns to normal weighing mode.

   The current weight value is displayed.

When set as a remote display, the indicator will only function as a remote display for the connected master indicator.

The Setpnt and bAttErY submenus in Figure 7.7 are the same as described in General Weighing application supervisor menu on page 46. Go there for information on those submenus. The unique submenu to this application is described below.