DETECTO®

solace
IN-FLOOR DIALYSIS SCALES

Solace In-Floor Dialysis Scale

Digital Weight Indicator
Models 855RM / 855RMP
Setup and Calibration

INTRODUCTION

Thank you for purchasing our Detecto Solace In-Floor Dialysis Scale. The Solace series scales are flush-mounted platform scales that feature stainless steel decks, and include a pit frame, trim ring, and interface cable to the included multi-color, touchscreen LCD indicator, and printer.

This manual is provided to guide you through installation and operation of your indicator. Please read it thoroughly before attempting to install or operate your indicator and keep it handy for future reference.

This manual is for the following models of the Solace In-Floor Dialysis scales:

ID-3636S-855RMP	ID-4848S-855RMP
ID-3636SH-855RMP	ID-4848SH-855RMP
ID-4836S-855RMP	ID-7248S-855RMP
ID-4836SH-855RMP	ID-7248SH-855RMP

COPYRIGHT

DISCLAIMER

While every precaution has been taken in the preparation of this manual, the Seller assumes no responsibility for errors or omissions. Neither is any liability assumed for damages resulting from use of the information contained herein. All instructions and diagrams have been checked for accuracy and ease of application; however, success and safety in working with tools depend largely upon the individual accuracy, skill, and caution. For this reason, the Seller is not able to guarantee the result of any procedure contained herein. Nor can they assume responsibility for any damage to property or injury to persons occasioned from the procedures. Persons engaging the procedures do so entirely at their own risk.

FCC COMPLIANCE STATEMENT

This equipment generates, uses, can radiate radio frequency and if not installed and used in accordance with the instruction manual, may cause interference to radio communications. It has been designed within the limits for a Class A computing device pursuant to Subpart J of Part 15 of FCC rules to provide reasonable protection against such interference when operated in a commercial environment. Operation of this equipment in a residential area may cause interference in which case the user will be responsible to take whatever measures necessary to correct the interference.

You may find the booklet “How to Identify and Resolve Radio TV Interference Problems” prepared by the Federal Communications Commission helpful. It is available from the U.S. Government Printing Office, Washington, D.C. 20402. Request stock No. 001-000-00315-4.

Serial Number _____

Date of Purchase _____

Purchased From _____

_____

_____

_____

RETAIN THIS INFORMATION FOR FUTURE USE

PRECAUTIONS

Before using this scale, read this manual and pay special attention to all "NOTIFICATION" symbols:

IMPORTANT

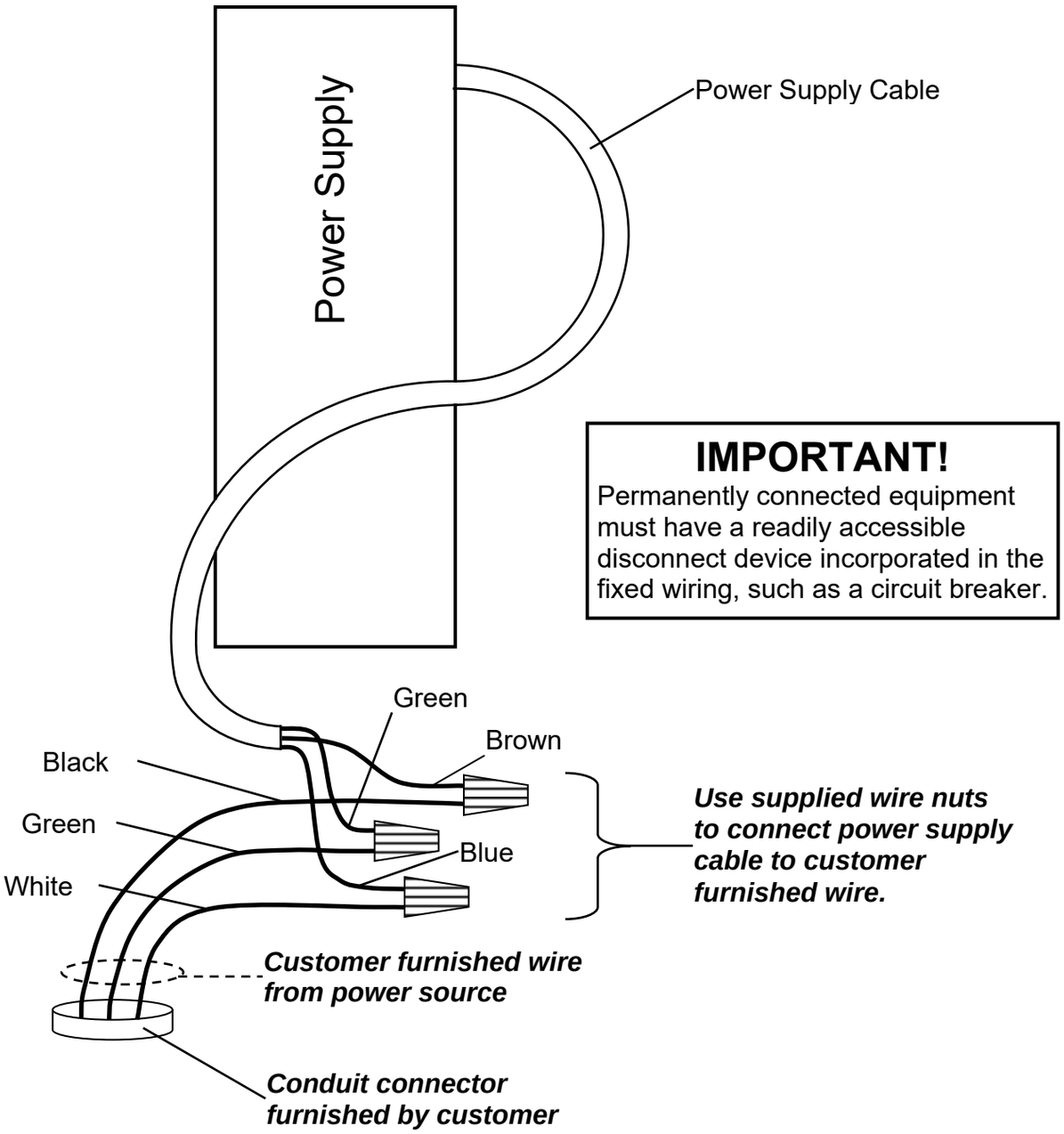
ELECTRICAL WARNING

SPECIFICATIONS

Specification	Description
Capacity:	1,000 lb x 0.2 lb / 450 kg x 0.1 kg
Platform Construction:	Anti-corrosion stainless steel
Indicator/Printer:	Recessed-mount, touchscreen model 855 indicator / thermal ticket printer combo with stainless steel cover plate
Display Type:	3.2 in (diagonal) full color TFT display 320x240 resolution
Keypad:	Mechanical switch type with 7 buttons: Power, Zero, Lock/Release, ID, Cycle Display Mode, Menu, Print
Number of Characters:	Weight: 5 digit, 0.9 in (23 mm) high; Height: 4 digit, 0.35 in (9 mm) high; BMI: 3 digit, 0.35 in (9 mm) high
Country of Origin:	USA made
Operating Environment:	Operating Temperature Range: 14 to 104 ºF (-10 to +40 ºC) Humidity: 0 to 90% non-condensing
Digital Filtering:	StableSENSE® Adjustable Filtering
Power:	100 to 240 VAC 50/60Hz, 15W
Includes:	In-floor scales come with model 855RMP digital weight indicator/printer combo, pit frame, scale, stainless steel deck, and trim ring
Handrail:	Wraparound tubular handrail with padded handgrip included on models with H nomenclature (for example: ID-4848SH- 855RMP)
Platform Sizes:	Standard sizes include 36 x 36 in / 91 x 91 cm, 48 x 36 in / 122 x 91 cm, 48 x 48 in / 122 x 122 cm, and 72 x 48 in / 183 x 122 cm
Approvals:	OIML

AC POWER CONNECTION

1. Trim jacket back 2-inches from end of power supply cable, and strip insulation back from the three individual wires approximately 3/8 inch.
2. Remove conduit knockout from enclosure, and replace with conduit connector per local Electrical Code.
3. Run AC Hot, Neutral and Ground wires through conduit into box area. Trim and strip these as required to connect with the power supply cable.
4. Using supplied wire nuts connect the 3-wires from the power source to the 3-wires from the power supply. Remember that Black wire connects to Brown, and White wire connects to Blue.



UNITS SELECTION

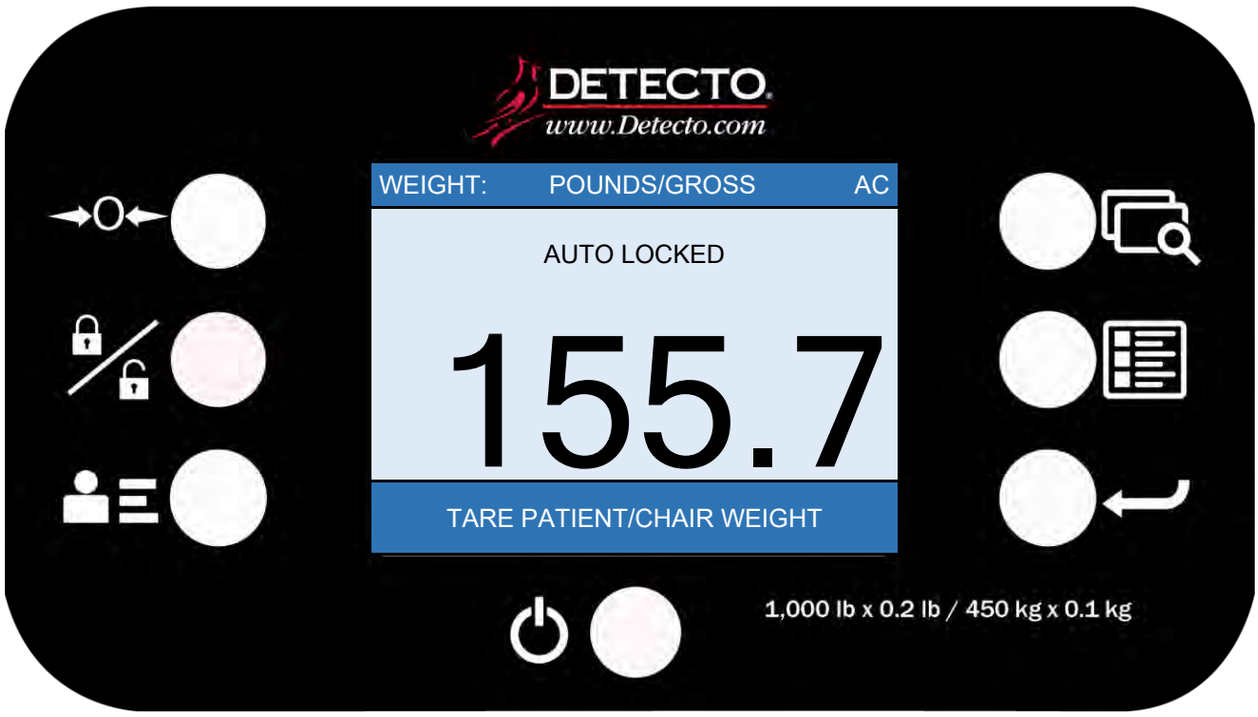
When the indicator is powered on for the first time, the display will prompt for the weighing and height units to use, LB/IN or KG/CM.

1. Press ⏻ key to turn the indicator on.
2. The indicator display will show the software version for a few seconds, the Detecto logo briefly and then change to the Select Units screen.

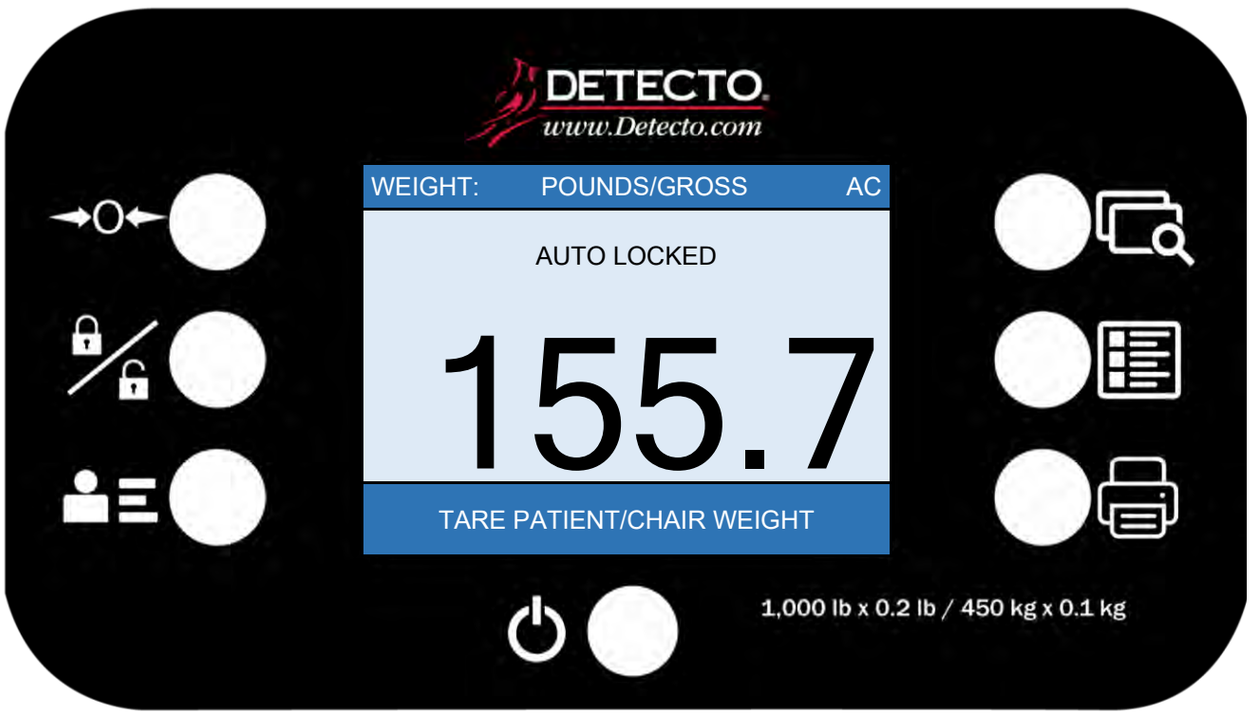
3. Press the LB/IN key at the bottom left of the screen to select pounds for weighing units and inches for height measurement.
4. Press the KG/CM key on the bottom right of the screen to select kilograms for weighing units and centimeters for height measurement.
5. The indicator is now ready for operation.
6. Once the units setting is selected, it will be kept.

NOTE: If it is desired to change the units setting, refer to the INDICATOR SETUP section, Setup Menu Page 1, Units: selection.

KEYPAD FUNCTIONS



855RM Keypad (without Printer)



855RMP Keypad (with Printer)

DO NOT operate the keys or touchscreen with pointed objects (pencils, pens, etc..). Damage to keys or touchscreen resulting from this practice is NOT covered under warranty.

This is the **Power** key. With the indicator off, pressing this key will apply power to it and turn on the display. If the indicator is already on, pressing the key will turn it off.

This is the **Zero** key. Press and release this key to reset the display to zero, up to 100% of the indicator capacity.

This is the **Lock/Release** key. Press and release this key, or touch the weight readout on the display to cause the weight, height, and BMI to lock on the current values until the key is pressed again or the weight readout on the display is touched again. While the weight is locked, the weight status will change to LOCKED in order to denote that the weight is being held.

This is the **ID** key. Press and release this key to open the ID entry screen where you can use the touch screen to enter in a numeric ID. This ID is NOT used for tracking patient measurements. The ID that is entered is only transmitted out of the communication port when the ↵ key is pressed. To change or edit the ID, simply press the **ID** key again to return to the ID entry screen.

This is the **Display Mode** key. Press and release this key to cause the display to cycle between display modes: Weight/Height/BMI or Weight only.

This is the **Menu** key. Press and release this key to launch the Menu screen. The first screen that is displayed is the Setup Review screen where you can see all of the settings at a glance. To continue into setup, touch the Setup key at the bottom right of the touch screen.

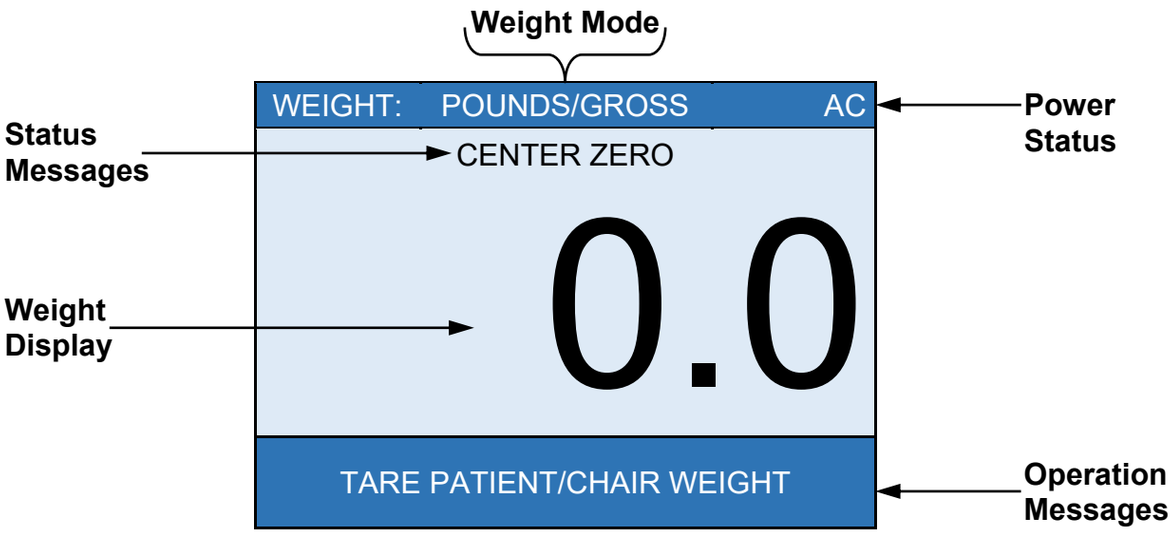
This is the **Enter** key. Press and release this key to signal completion of the entry of data and cause the indicator to output the current weight, height, and BMI for data capture for EMR/EHR purposes. The options include Cardinal SMA, Welch Allyn, Tanita, or IEEE 11073-10415 formats.

855RMP ONLY

This is the **Print** key. Press and release this key to cause the indicator to output the current patient information (ID and Gross, Tare and Net Weight) to the printer for record keeping.

ANNUNCIATORS

The annunciators are displayed on the Weight screen to show that the indicator is in the mode corresponding to the annunciator label or that the status indicated by the label is active.



AC

This is shown on the Weight screen to indicate that the indicator is powered by standard 120V AC power.

POUNDS/GROSS

This is shown on the Weight screen to indicate that the weight displayed is gross weight in pounds.

KILOGRAMS/GROSS

This is shown on the Weight screen to indicate that the weight displayed is gross weight in kilograms.

CENTER ZERO

This is shown on the Weight screen to indicate that the weight is within +/- 1/4 division of the center of zero.

LOCK

This is shown on the Weight screen to indicate that the indicator is locked onto the displayed weight. In operation after obtaining a stable weight value, pressing the key will cause the indicator to lock onto the weight and turn on the annunciator. Pressing the key a second time will unlock the display and turn off the annunciator.

SETUP

Your Solace Digital Weight Indicator has been pre-configured at the factory and should not require changes for use in most applications. However, if the factory settings do not meet the requirements of your operation, the following describes the setup process for your indicator.

NOTE: The keypad and touchscreen are not to be operated with pointed objects (pencils, pens, fingernails, etc.). Damage to the keypad or touchscreen resulting from this practice will NOT be covered under warranty.

Menu Functions

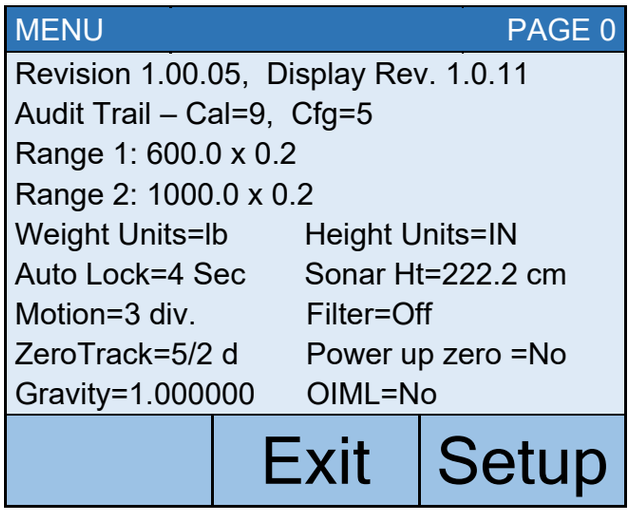
After pressing the **Menu** key to enter the Setup menu, the first screen of the menu is a Setup Review screen where all of the settings can be reviewed at a glance. The Audit Trail Counters for the metrological settings and the non-metrological settings are available for review on this screen as well. Each prompt in the menu screens will show the current value of the setting next to the prompt to easily identify what the current setting for that parameter is.

Setup Menu Keys

- Press the **Setup** key on the Setup Review screen to enter into the indicator configuration.
- Press the **>>>** key on the bottom right of the Setup Menu screen to advance to the next menu page.
- Press the **<<<** key at the bottom left of the Setup Menu screen to return to the previous menu page.
- Press the **Exit** key to exit Setup and return to the Weight screen.

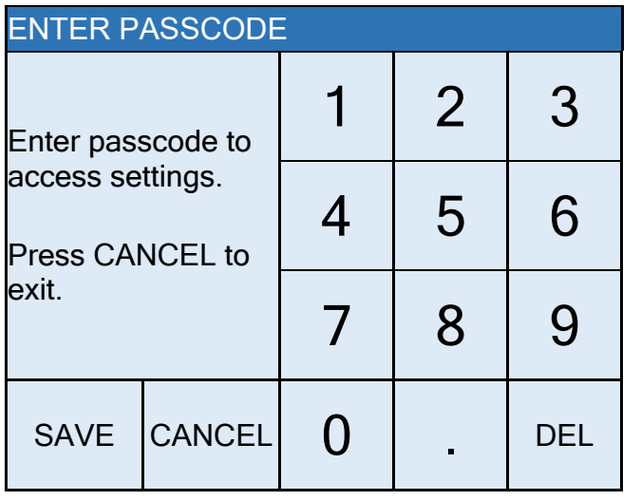
To Enter Setup

1. Press ⏻ key to turn the indicator on.
2. The indicator will show the Detecto logo briefly and then change to the Weight screen.
3. With the Weight screen displayed, press the **Menu** key.
4. The display will change to show the Setup Review screen.



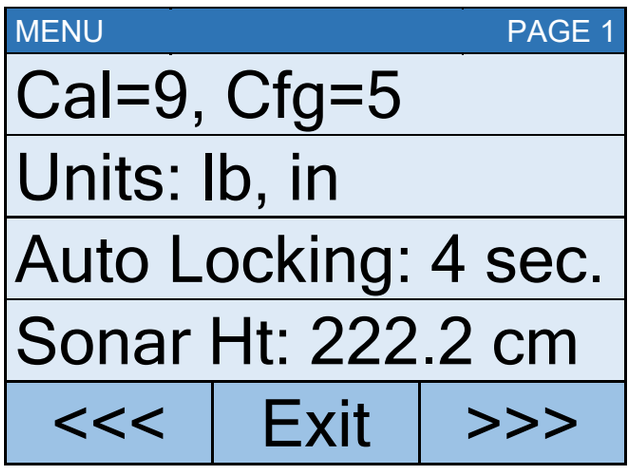
5. Press **Setup** on the touchscreen.

6. The display will change to show the ENTER PASSWORD screen.



7. Using the 10-key on the touchscreen, enter 64870 and then press the **Save** key.
8. The indicator is now ready for setup and calibration

Setup Menu Page 1



Cal=XX, Cfg=YY – Audit Trail Counters

These are the Audit Trail Counters for the number of times that the metrological and non-metrological settings have been changed. This is for information purposes only.

Units:

Touching this key will toggle the weighing and height units between (lb, in) or (kg, cm). Note that the units cannot be toggled if OIML is enabled.

NOTE: When you calibrate the indicator, ensure that the proper base units are selected here *before* attempting to calibrate. It is safe to change the units without calibrating, just be sure not to change any other metrological settings when you are using the converted units as this may place your calibration to an invalid state.

Allowable settings are lb, in (pounds, inches) or kg, cm (kilograms, centimeters)

Auto Locking:

This setting is used by the indicator to hold a stable patient weight for a desired amount of time. For example, if a value of 5 seconds is used, then when the indicator locks onto a stable patient weight, it will remain locked for 5 seconds before automatically releasing the weight.

Touching this key will open the entry screen for the auto-locking feature of the indicator. The value entered is a time in seconds. Using the numeric keys, enter a new value and then press the **Save** key to save it.

Allowable values for auto locking are 0 to 60.

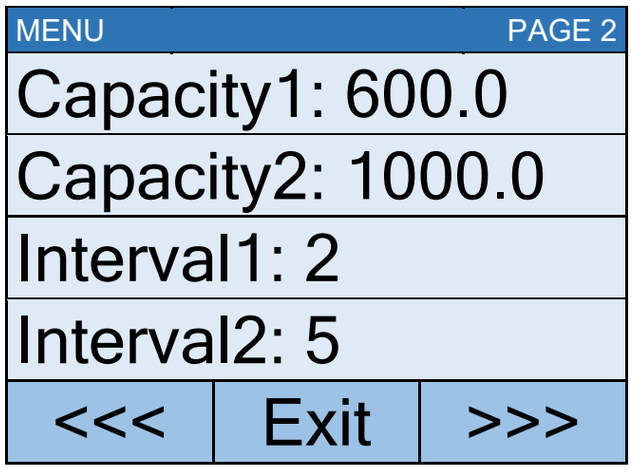
Sonar Ht:

This is the height in centimeters from the scale platform to the bottom of the sonar sensor enclosure. This value is used to determine the patient's height and should be measured and entered as accurately as possible to guarantee accurate height measurements using the sonar height rod.

Touching this key will open the entry screen for the sonar sensor height. The value entered is in centimeters. Using the numeric keys, enter a new value and then press the **Save** key to save it.

- Press the **>>>** key to advance to Setup Menu Page 2.
- Press the **<<<** key to return to the Setup Review screen.
- Press the **Exit** key to exit Setup and return to the Weight screen.

Setup Menu Page 2



Capacity1:
Touching this key will open the capacity screen. This will allow you to set the capacity of the first range. Using the numeric keys, enter a new value and then press the **Save** key to save it.

The first range of the scale should be set to 600.0.

Capacity2:
Touching this key will open the capacity entry screen for the second weight range. This value MUST be greater than Capacity1 if used. Using the numeric keys, enter a new value and then press the **Save** key to save it.

The second range of the scale should be set to 1000.0.

NOTE: To disable the second weight range, set Capacity2 to a value of (0) zero.

Interval1:
Touching this key will open the interval entry screen. This will allow you to set the scale interval for the first range. Using the numeric keys, enter a new value and then press the **Save** key to save it.

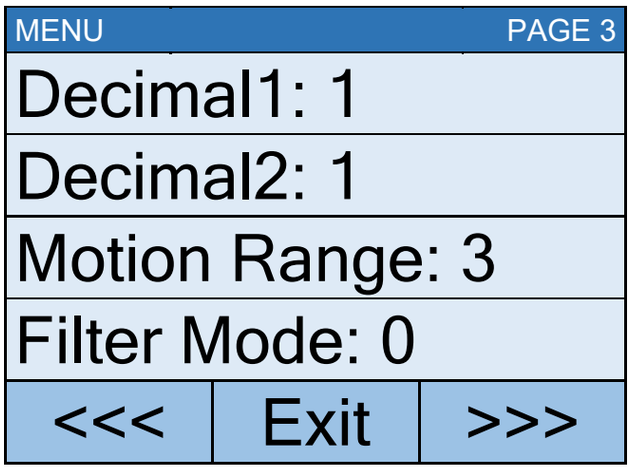
Allowable values for interval 1 are 1, 2, or 5.

Interval2:
If a second range capacity has been set, then Interval 2 will be used as the interval of the second weight range if enabled (see Capacity2). Using the numeric keys, enter a new value and then press the **Save** key to save it.

Allowable values for interval 1 are 1, 2, or 5.

- Press the **>>>** key to advance to Setup Menu Page 3.
- Press the **<<<** key to return to Setup Menu Page 2.
- Press the **Exit** key to exit Setup and return to the Weight screen.

Setup Menu Page 3



Decimal1:

Touching this key will open the decimal entry screen. This will allow you to set the decimal point precision for the first weight range. Using the numeric keys, enter a new value and then press the **Save** key to save it.

Allowable values for decimal point precision are 0 – 3.

0 = ####### 1 = ######.# 2 = #####.## 3 = ####.###

Decimal2:

Touching this key will open the decimal entry screen. This will allow you to set the decimal point precision for the second weight range if enabled (see Capacity2). Using the numeric keys, enter a new value and then press the **Save** key to save it.

Allowable values for decimal point precision are 0 – 3.

0 = ####### 1 = ######.# 2 = #####.## 3 = ####.###

Motion Range:

Touching this key will open the motion range entry screen. This will allow you to set the number of scale divisions of movement that will be allowed before indicating unstable. Using the numeric keys, enter a new value and then press the **Save** key to save it.

Allowable values for motion are 0 – 20.

Filter Mode:

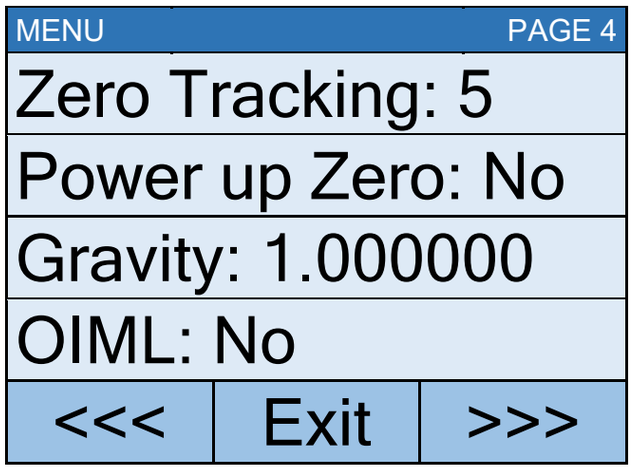
Pressing this key will open the weight filtering screen. This will allow you to set the amount of digital filtering being applied to the scale. Using the numeric keys, enter a new value and then press the **Save** key to save it.

Allowable values for filter mode are 0 – 3.

0 = Off 1 = Minimal 2 = Moderate 3 = Maximum

- Press the **>>>** key to advance to Setup Menu Page 4.
- Press the **<<<** key to return to Setup Menu Page 3.
- Press the **Exit** key to exit Setup and return to the Weight screen.

Setup Menu Page 4



Zero Tracking:

Touching this key will open the zero tracking screen. This will allow you to set the number of half (1/2) divisions that the indicator will attempt to maintain zero on the scale. Using the numeric keys, enter a new value and then press the **Save** key to save it.

Allowable settings for zero tracking are 0 – 100.

Power up Zero:

Touching this key will toggle the power up zeroing of the scale to Yes or No. If enabled, this will cause the indicator to attempt to zero the scale on power up.

Allowable values for Power up Zero are Yes or No.

Gravity:

Gravity compensation accounts for latitudes and elevations that are different from where the indicator was calibrated. In order to calculate the value for this parameter, use the gravitational constant of the location where the indicator was calibrated divided by the gravitational constant of where the indicator will be installed:

Gravitational Constant (Calibration location)
---------- = value
Gravitational Constant (Operation location)

This should give you a value close to 1 that you can enter in to compensate for variation in gravity due to elevation/latitude.

Touching this key will open the gravity compensation entry screen. Using the numeric keys, enter a new value and then press the **Save** key to save it.

NOTE: If you do not wish to use the compensation feature, it must be set to 0 (zero) in order to disable it.

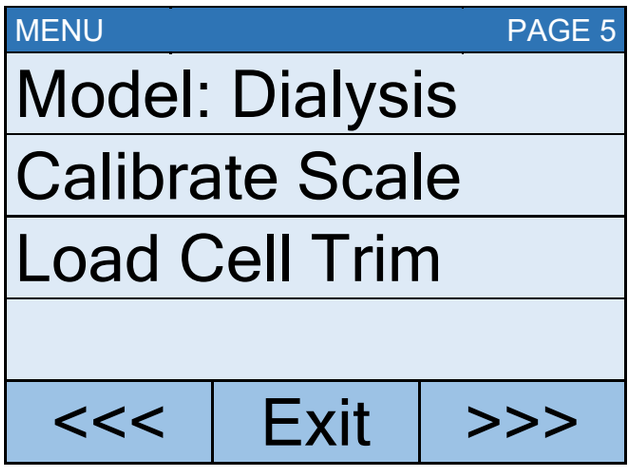
OIML:

Touching this key will toggle the OIML setting to Yes or No. The prompt window will show the current state of the OIML setting. This setting should be enabled for all EU models to comply with regulations.

Allowable values for OIML are Yes or No.

- Press the **>>>** key to advance to Setup Menu Page 5.
- Press the **<<<** key to return to Setup Menu Page 4.
- Press the **Exit** key to exit Setup and return to the Weight screen.

Setup Menu Page 5



Model:

This will change the default settings and operation of the indicator. For instance, select “Icon” as the model in order to use the stand-up type indicator with the sonar height measurement. For wheelchair type scales with tare functionality, select “Wheelchair” as the model. For other types of scales, select “Other”.

Touch this key to open the model selection screen. Using the numeric keys, enter a new value and then press the **Save** key to save it.

Allowable values for model are 0 – 3.

0 = icon 1 = Wheelchair 2 = Other 3 = Dialysis

Calibrate Scale

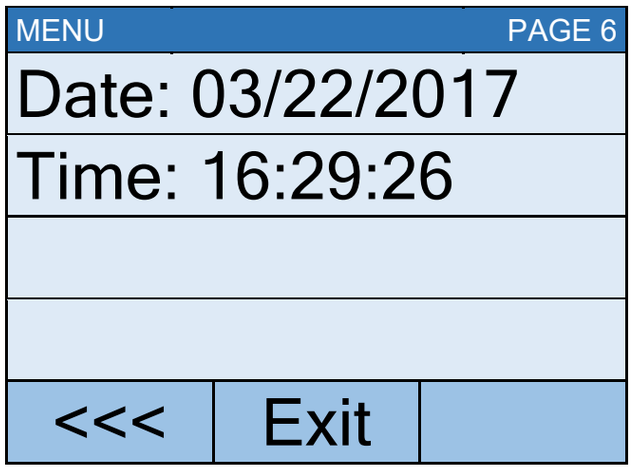
Touching this key will allow for calibration of the scale. Refer to the CALIBRATION section of this manual for instructions to select the calibration mode and how to perform calibration.

Load Cell Trim

Touching this key will allow for trimming (adjusting the output of) the load cells in the scale. Refer to the LOAD CELL TRIM section of this manual for instructions on how to trim the load cells.

- Press the **>>>** key to advance to Setup Menu Page 6.
- Press the **<<<** key to return to Setup Menu Page 4.
- Press the **Exit** key to exit Setup and return to the Weight screen.

Setup Menu Page 6



Date:

Touching this key will allow you to enter the date starting with the year. After pressing Date:, the screen will show “Key in the Year and press SAVE”.

Year

Enter the 4-digits (YYYY) for the year and then press the **Save** key.

Month

With the “Key in the month and press SAVE” screen displayed, enter the 2-digits (MM) for the month and then press the **Save** key.

Day

With the “Key in the Day and press SAVE” screen displayed, enter the 2-digits (DD) for the day and then press the **Save** key.

The display will change to show to Setup Menu Page 6.

Time:

Touching this key will allow you to enter the time starting with the hour. After pressing Time:, the screen will show “Key in the Hour HH”.

Hour

Enter the 2-digits (HH) for the hour and then press the **Save** key.

Minute

With the “Key in the minute MM” screen displayed, enter the 2-digits (MM) for the minute and then press the **Save** key.

Second

With the “Key in the Second SS” screen displayed, enter the 2-digits (SS) for the seconds and then press the **Save** key.

The display will change to show to Setup Menu Page 6.

- Press the **<<<** key to return to Setup Menu Page 5.
- Press the **Exit** key to exit Setup and return to the Weight screen.

CALIBRATE SCALE

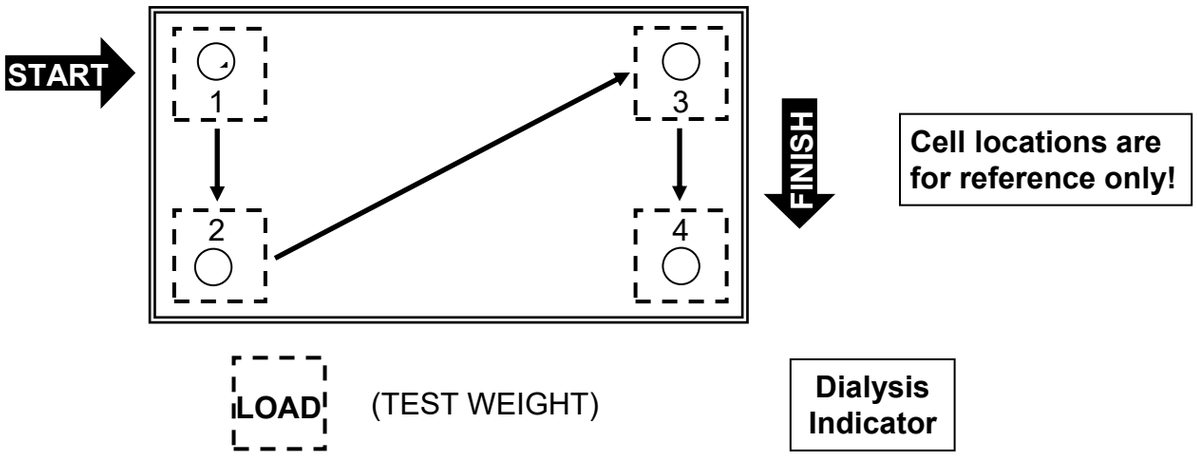
Calibration Modes

The Solace Weight Indicator has four modes that can be used to perform calibration. The modes are as follows:

1 = SmartCal®

SmartCal is the most precise method of calibration. It requires that a calibrated load be placed over each load cell of the scale platform only once. In this method, the indicator will be able to derive calibration constants, which will be used to combine information from each load cell into scale weight.

During SmartCal, the indicator will prompt for the test load to be applied over a particular load cell. With a scale that has four load cells, the order will simply be cell 1, cell 2, cell 3, and cell 4. This order is used so that calibration can be done using a test weight with a minimal amount of maneuvering required. Refer to the illustration below.



Load Cell and Load Placement

2 = Two Calibration Points

This is a standard calibration method requiring an empty scale and one weight. This method uses two calibration points (an empty scale and the full test load on the scale) to establish a zero (no load) calibration value and to span the indicator.

3 = Three Calibration Points

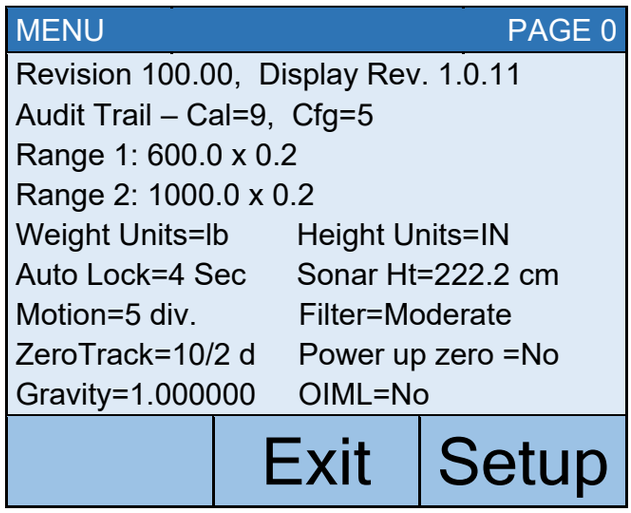
This method requires an empty scale, two weights and uses three calibration points, (an empty scale, half the test load, and the full test load on the scale). The three points correspond to zero (no load) weight, mid-point weight and test load (weight).

4 = Four Calibration Points

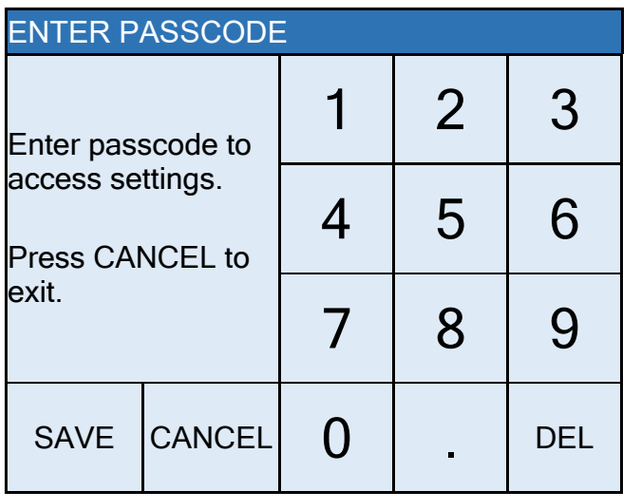
This method requires an empty scale, three weights and uses four calibration points, (an empty scale, one-fourth the test load, half the test load, and the full test load on the scale). The four points correspond to zero weight, quarter-point weight, mid-point weight, and test load (weight).

To Enter Calibration

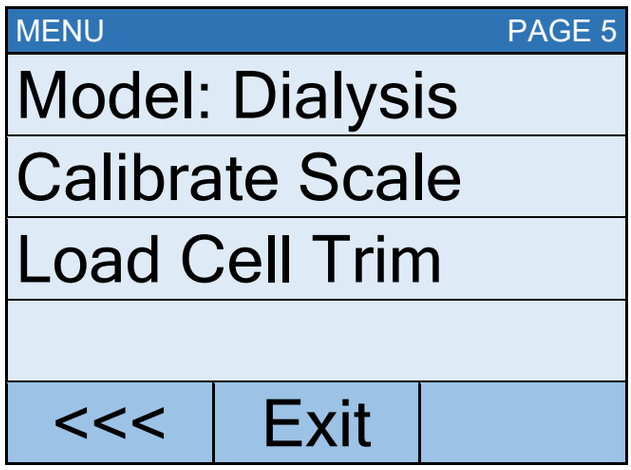
1. Press ⏻ key to turn the indicator on.
2. The indicator will show the Detecto logo briefly and then change to the Weight screen.
3. With the Weight screen displayed, press the **Menu** key.
4. The display will change to show the Setup Review screen.



5. Press **Setup** on the touchscreen.
6. The display will change to show the ENTER PASSWORD screen.

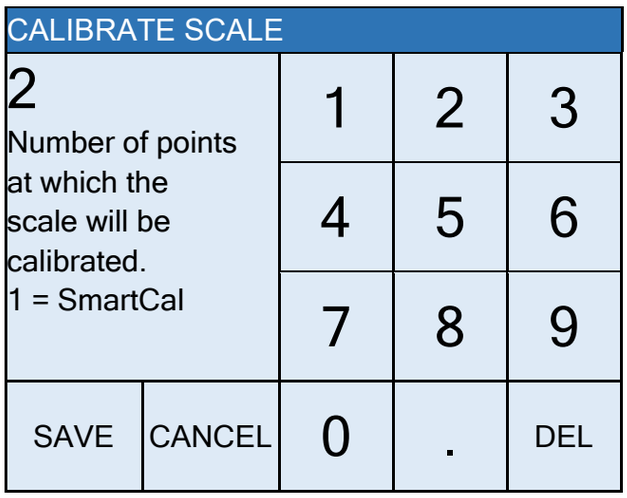


7. Using the 10-key on the touchscreen, enter 64870 and then press the **Save** key.
8. Press the **>>>** key to advance to the Setup Menu Page 5.



9. Select Calibrate Scale from Setup Menu Page 5.

10. The display will change to show the “Number of Points” screen.

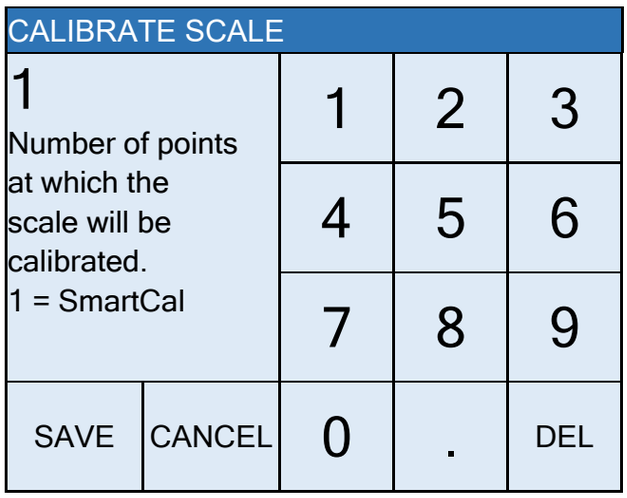


11. With the “Number of Points” screen displayed, select 1 if a SmartCal calibration is desired, otherwise select the number of points to use (2, 3, or 4) on the touchscreen, and then press the **Save** key.

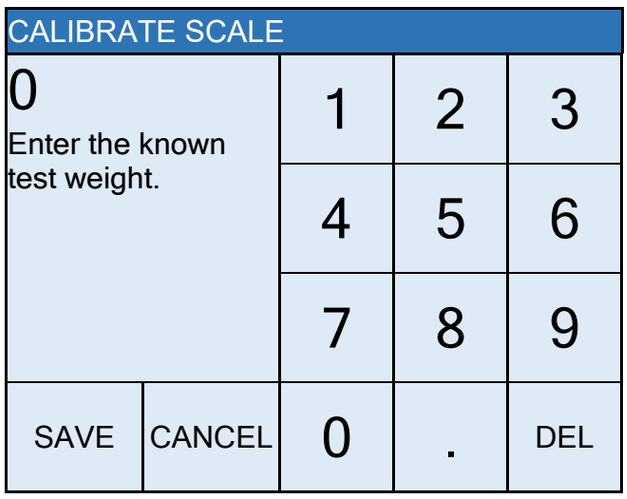
12. Proceed to next sections of the manual for the type of calibration selected.

1 = SmartCal®

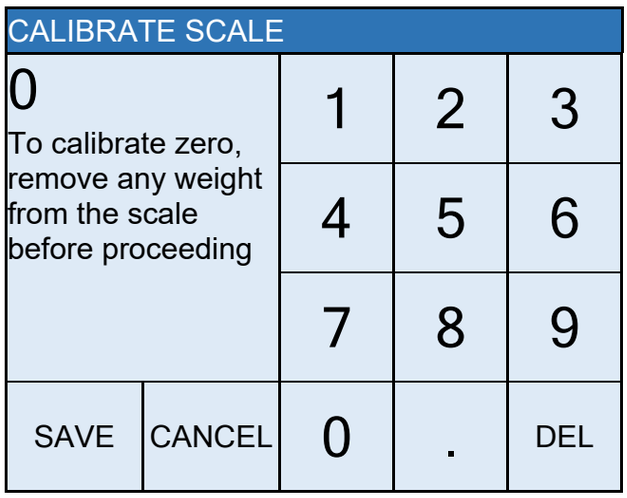
1. With the “Number of Points” screen displayed, press the 1 key on the touchscreen and then press the **Save** key.



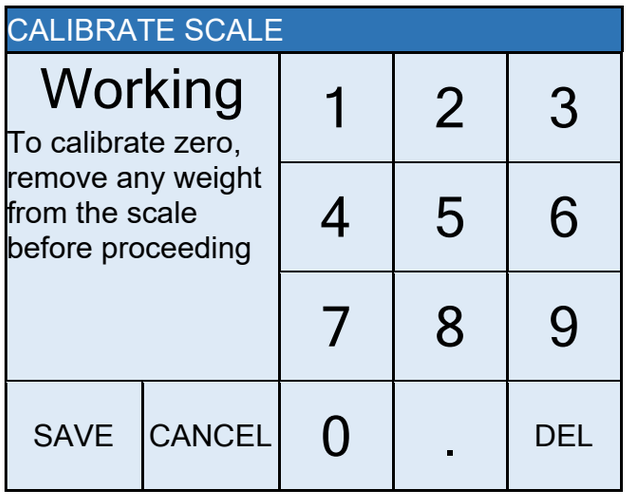
2. The display will change to show “Enter the known test weight”. Enter the value for the test weight and then press the **Save** key.



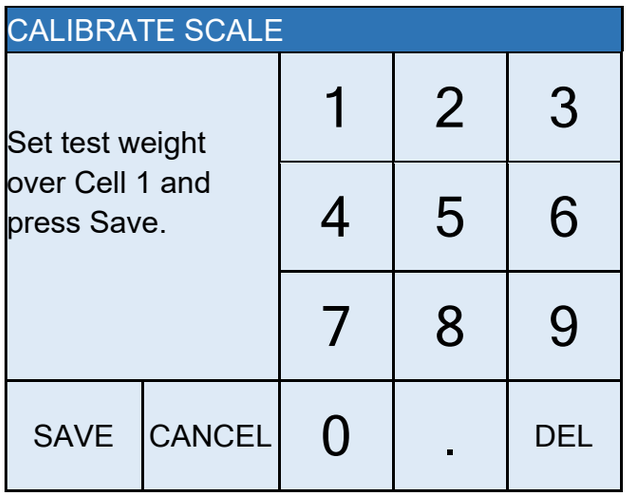
3. The display will change to show “To calibrate zero, remove any weight from the scale before proceeding”. Make certain the scale is empty and then press the **Save** key.



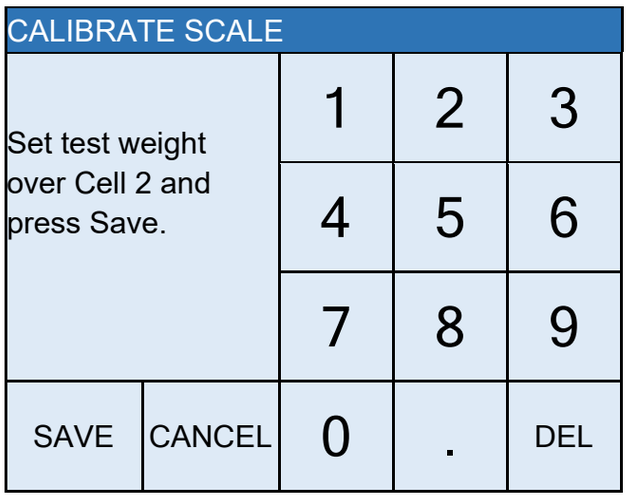
4. The display will change to show “Working” for a few seconds and then change to show “Set test weight over Cell 1”.



5. Place the calibrated test weight on the scale over Cell 1 and then press the **Save** key.



6. The display will change to show “Working” for a few seconds and then change to show “Set test weight over Cell 2”.



7. Place the calibrated test weight on the scale over Cell 2 and then press the **Save** key.

8. The display will change to show “Working” for a few seconds and then change to show “Set test weight over Cell 3”.

CALIBRATE SCALE				
Set test weight over Cell 3 and press Save.		1	2	3
		4	5	6
		7	8	9
SAVE	CANCEL	0	.	DEL

9. Place the calibrated test weight on the scale over Cell 3 and then press the **Save** key.
10. The display will change to show “Working” for a few seconds and then change to show “Set test weight over Cell 4”.

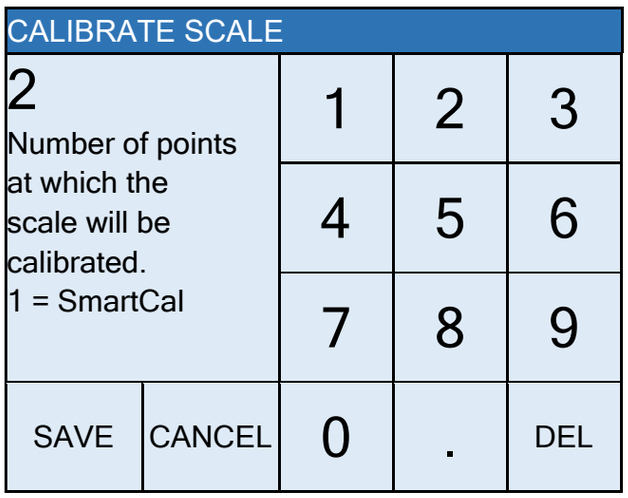
CALIBRATE SCALE				
Set test weight over Cell 4 and press Save.		1	2	3
		4	5	6
		7	8	9
SAVE	CANCEL	0	.	DEL

11. Place the calibrated test weight on the scale over Cell 4 and then press the **Save** key.
12. The display will change to show “Working” for a few seconds and then return to Setup Menu Page 5.
13. Calibration is now complete.

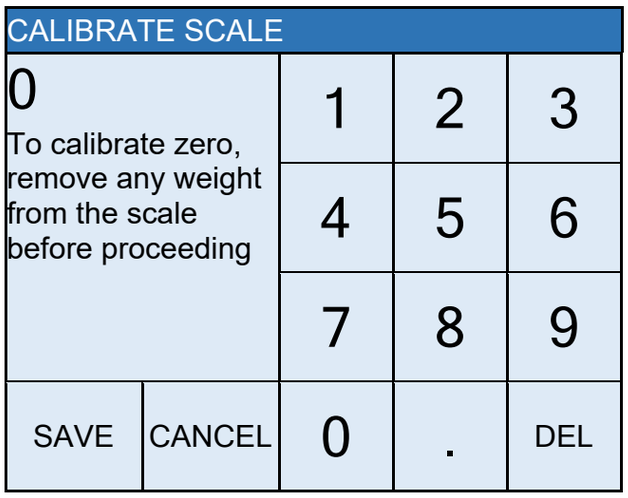
- Press the **Exit** key to exit Setup and return to the Weight screen.

2 = Two Calibration Points

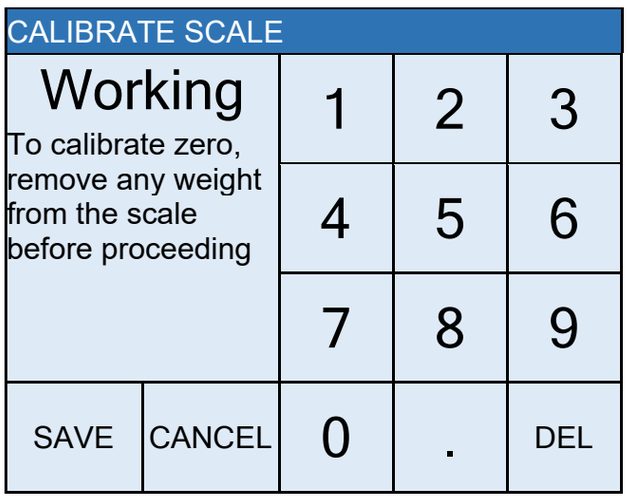
1. With the “Number of Points” screen displayed, press the 2 key on the touchscreen and then press the **Save** key.



2. The display will change to show “To calibrate zero, remove any weight from the scale before proceeding”. Make certain the scale is empty and then press the **Save** key.

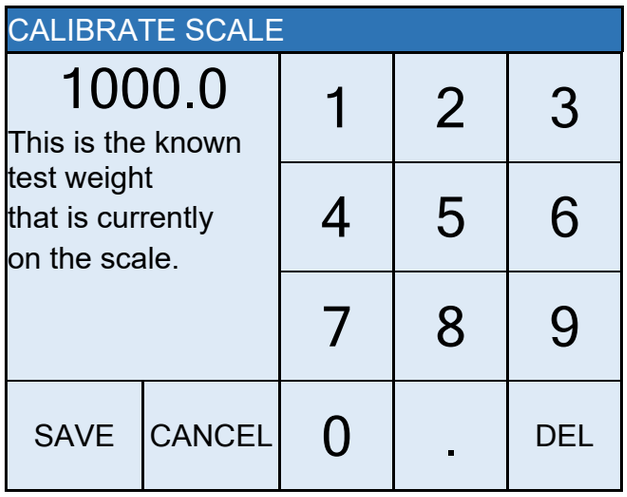


3. The display will change to show “Working” for a few seconds.



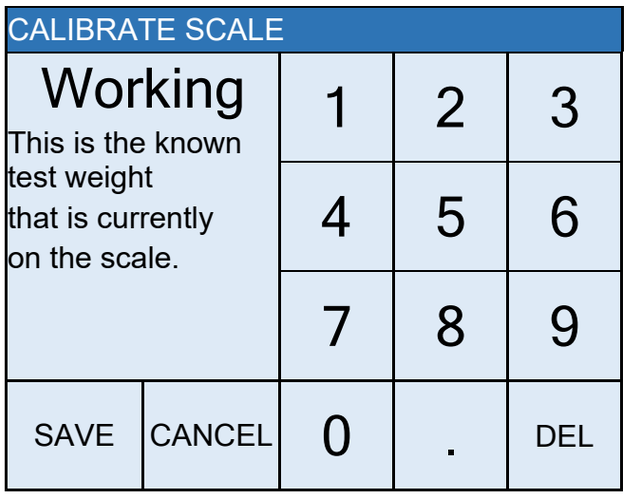
4. The display will then change to show the “Known test weight” screen.

5. Place the calibrated test weight (full test load) on the scale, enter the value for the test weight, and then press the **Save** key.



NOTE: A minimum of 50% of the scale's capacity is required, however 70% to 100% is recommended.

6. The display will change to show “Working” for a few seconds and then return to Setup Menu Page 5.

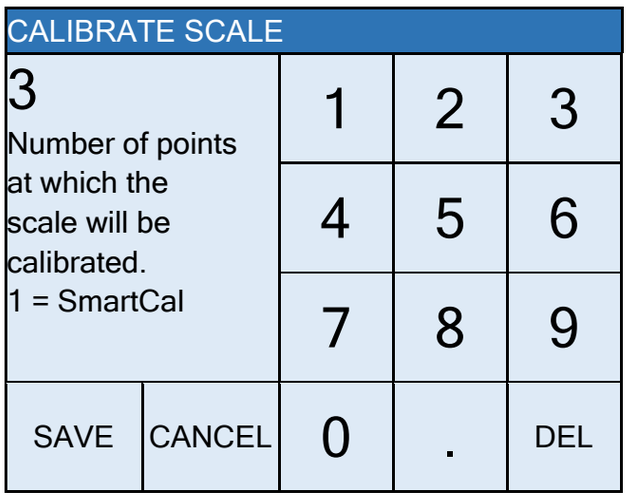


7. Calibration is now complete.

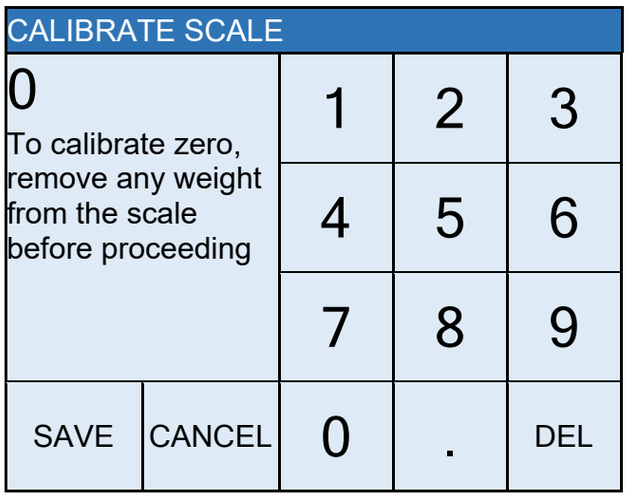
- Press the **Exit** key to exit Setup and return to the Weight screen.

3 = Three Calibration Points

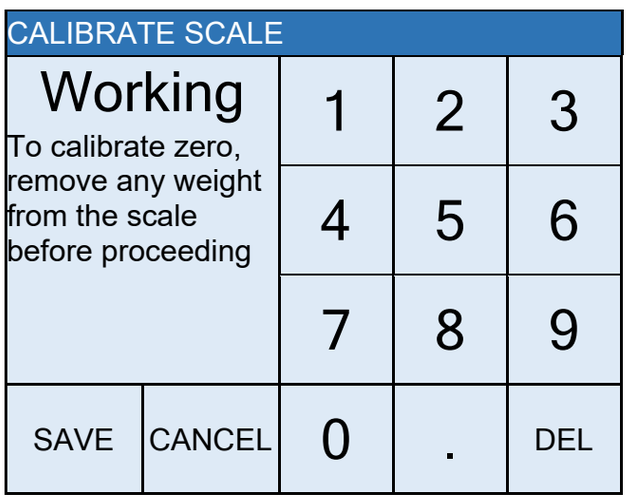
1. With the “Number of Points” screen displayed, press the 3 key on the touchscreen and then press the **Save** key.



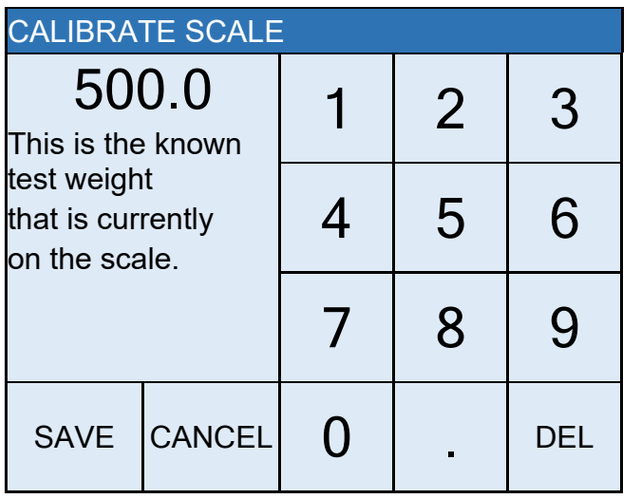
2. The display will change to show “To calibrate zero, remove any weight from the scale before proceeding”. Make certain the scale is empty and then press the **Save** key.



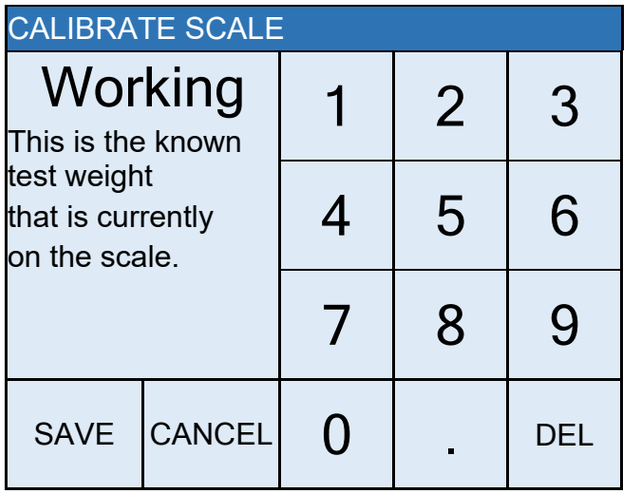
3. The display will change to show “Working” and after a few seconds change to show the “Known test weight” screen.



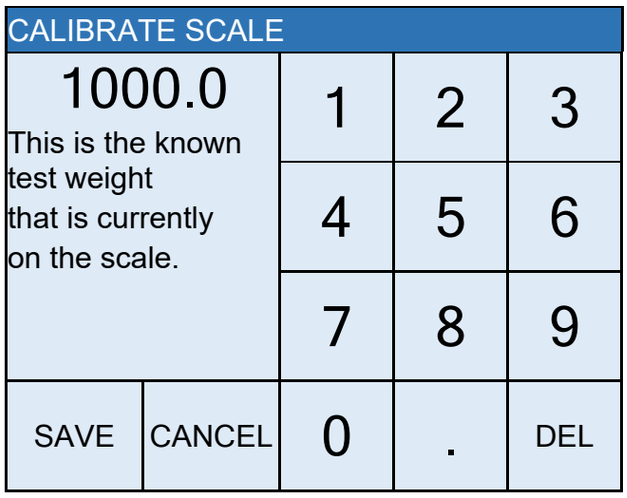
4. With the “Known test weight” screen displayed, place the <u>first</u> calibrated test weight (half the test load) on the scale, enter the value for the test weight and then press the **Save** key.



5. The display will change to show “Working” for a few seconds.



6. With the “Known test weight” screen displayed, place the <u>second</u> calibrated test weight (full test load) on the scale, enter the value for the test weight and then press the **Save** key.



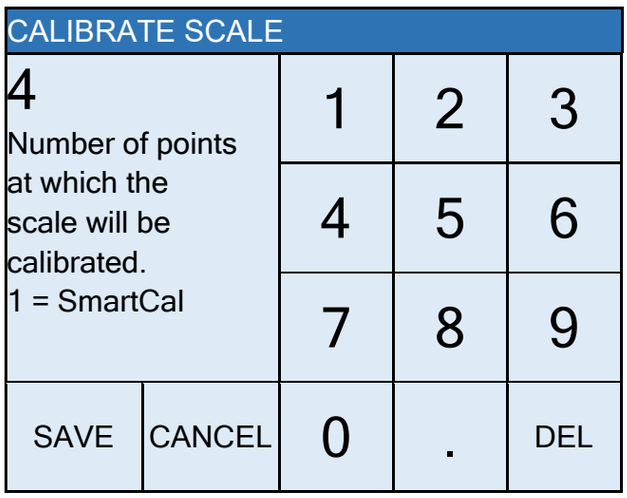
NOTE: A minimum of 50% of the scale's capacity is required for the full test load, however 70% to 100% is recommended.

7. The display will change to show “Working” for a few seconds and then return to Setup Menu Page 5.
8. Calibration is now complete.

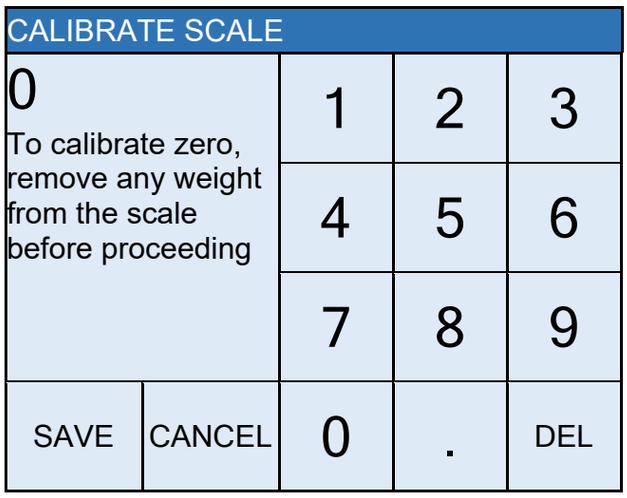
- Press the **Exit** key to exit Setup and return to the Weight screen.

4 = Four Calibration Points

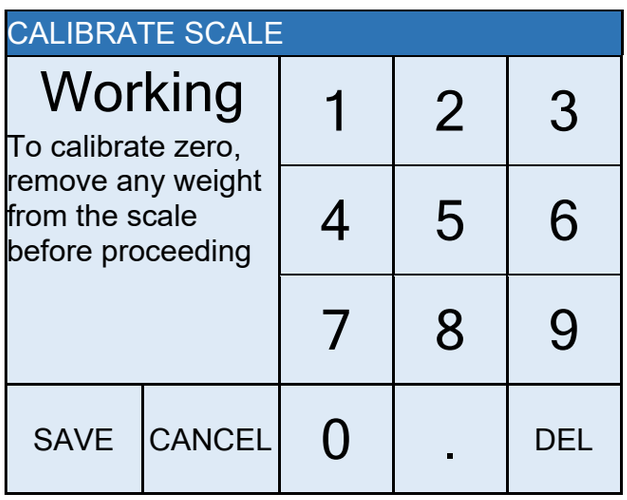
1. With the “Number of Points” screen displayed, press the 4 key on the touchscreen and then press the **Save** key.



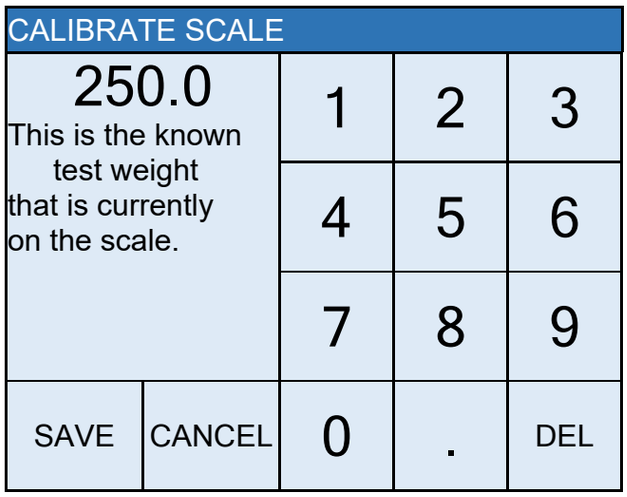
2. The display will change to show “To calibrate zero, remove any weight from the scale before proceeding”. Make certain the scale is empty and then press the **Save** key.



3. The display will change to show “Working” and after a few seconds change to show the “Known test weight” screen.

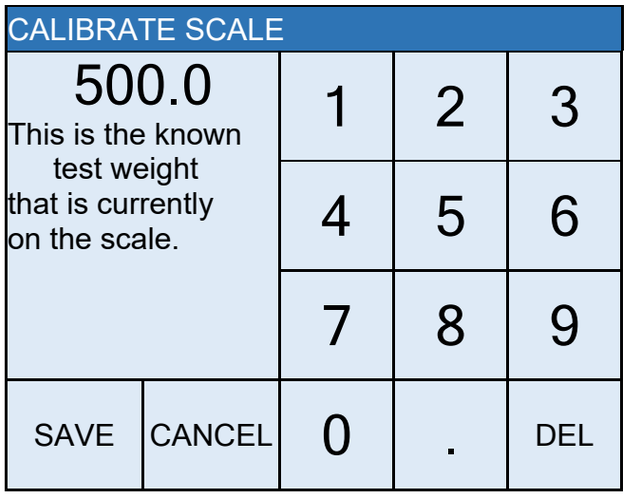


4. With the “Known test weight” screen displayed, place the <u>first</u> calibrated test weight (one fourth the test load) on the scale, enter the value for the test weight, and then press the **Save** key.



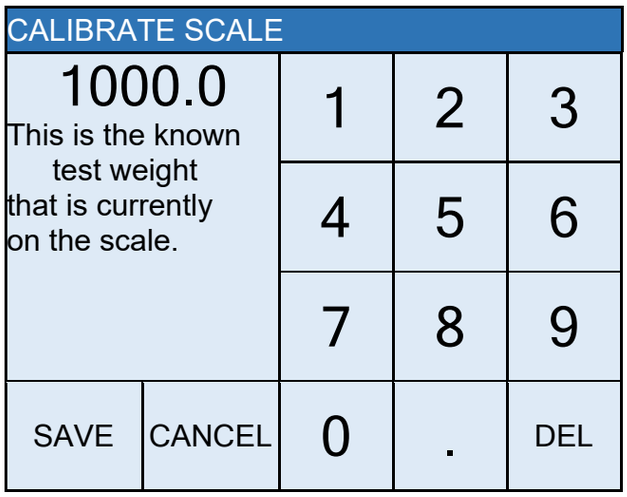
5. The display will change to show “Working” and after a few seconds change to show the “Known test weight” screen.

6. With the “Known test weight” screen displayed, place the <u>second</u> calibrated test weight (half the test load) on the scale, enter the value for the test weight and then press the **Save** key.



7. The display will change to show “Working” for a few seconds.

8. With the “Known test weight” screen displayed, place the third calibrated test weight (full test load) on the scale, enter the value for the test weight and then press the **Save** key.



NOTE: A minimum of 50% of the scale's capacity is required for the full test load, however 70% to 100% is recommended.

9. The display will change to show “Working” for a few seconds and then return to Setup Menu Page 5.

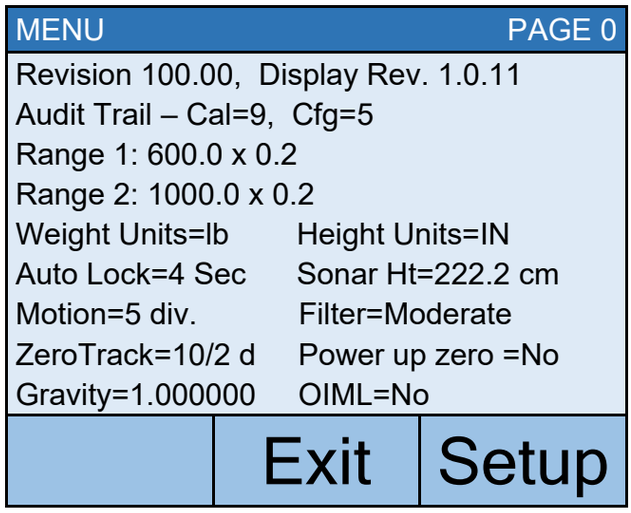
10. Calibration is now complete.

- Press the **Exit** key to exit Setup and return to the Weight screen.

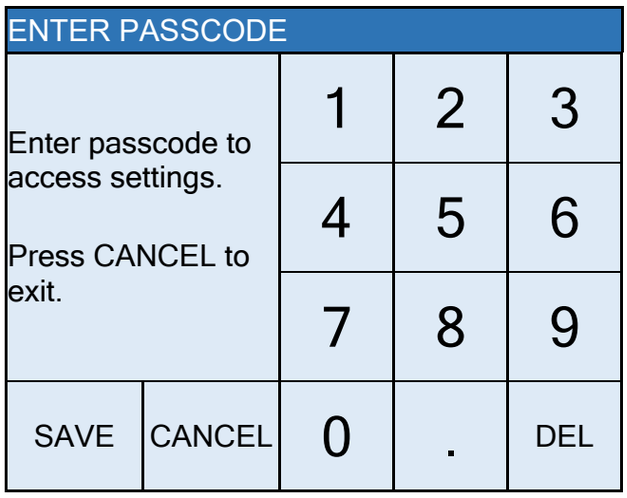
LOAD CELL TRIM

To Enter Load Cell Trim

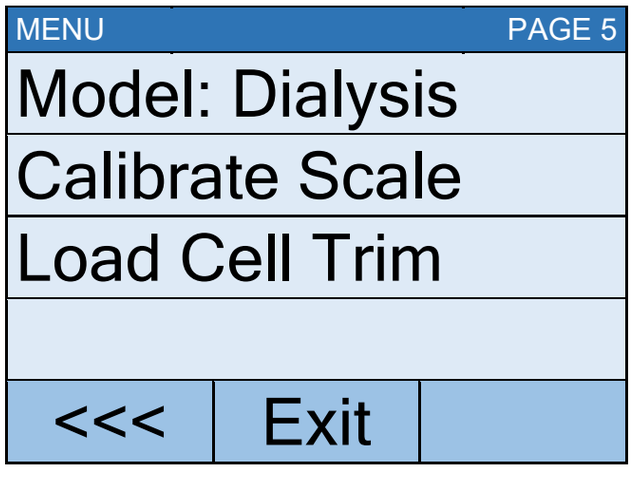
1. Press ⏻ key to turn the indicator on.
2. The indicator will show the Detecto logo briefly and then change to the Weight screen.
3. With the Weight screen displayed, press the **Menu** key.
4. The display will change to show the Setup Review screen.



5. Press **Setup** on the touchscreen.
6. The display will change to show the ENTER PASSWORD screen.



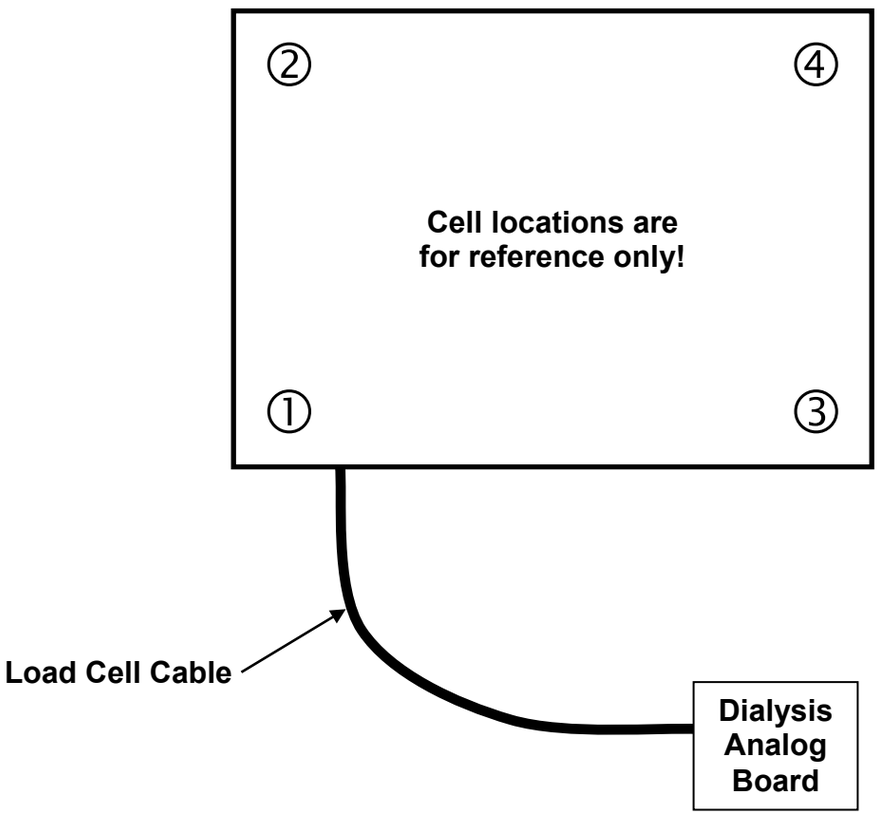
7. Using the 10-key on the touchscreen, enter 64870 and then press the **Save** key.
8. Press the **>>>** key to advance to the Setup Menu Page 5.



LOAD CELL TRIM		
1: 2.941 mV	-	+
2: 3.334 mV	-	+
3: 3.148 mV	-	+
4: 1.747 mV	-	+
0.00	Exit	

9. Place a test weight of at least 10% of the scale capacity on each corner of the scale, one at a time, and note the reading for each corner.
10. Place a test weight on the corner with the lowest reading and adjust the appropriate cell mV reading until the reading agrees with the highest reading obtained in Step 9.

    Press the + key to increase the mV reading *OR* press the – key to decrease the mV reading for each cell.
11. Repeat Step 10 until all corners have the same reading.



12. Press the **Exit** key to exit Load Cell Trim and return to the Setup Page 5.
13. Press the **Exit** key to exit Setup and return to the Weight screen.

ERROR AND OPERATION MESSAGES

The Solace is equipped with diagnostic software that tests various portions of the indicator's circuitry and verifies proper operation. Should a problem be detected, an error or status message will be displayed. The following lists these messages and their meaning.

AUTO LOCKED
This message appears if the weight/height has been automatically locked.

BELOW ZERO
The scale weight reading is below zero.

CAL REQUIRED
The indicator requires calibration. Weight will show as dashes. Consult your scale service representative.

CENTER ZERO
The scale weight reading is at center of zero.

ERROR CANNOT ZERO
Scale cannot zero due to motion on scale.

LOCKED
This message appears if the weight/height has been manually locked.

MOTION
The scale is in motion based on motion range setting.

OVER CAPACITY
The scale weight exceeds scale capacity.

OVERFLOW ERROR
This message appears if there are too many characters to display on the screen. This message appears if there are too many characters to display on the screen.

BEFORE YOU CALL FOR SERVICE

Problem	Possible Solutions
Display does not turn on	• Is AC power cord fully inserted into wall receptacle? • Check wall receptacle for proper AC power. Try another electrical appliance in same receptacle. Does it work? • Check circuit breaker. • Has there been power failure?
Incorrect weight is displayed	Insure that an adjacent object is not touching the scale platform. Have proper operation procedures been followed?
Weight is not displayed	Refer to Error and Operation Messages.

CARE AND CLEANING

NOTE: The indicator contains no user-serviceable parts and maintenance should be limited to an occasional cleaning.

- Always remove power before cleaning.
- Do not pour or spray water directly on the indicator to clean. The indicator is not waterproof and covering it with water will damage it and void the warranty.
- DO clean the indicator with a damp soft cloth and mild non-abrasive detergent.
- Do not use wire brushes, abrasives, or cleaning tools such as steel pads and scrapers, which will scratch the surface. Instead, use soft cloths or plastic scouring pads for cleaning.
- When possible use treated water. Hard water can leave behind deposits. Soft water is much gentler on the indicator's surface.
- Avoid the use of acetone, thinner or other volatile solvents, and abrasive type cleaners for cleaning. If required, a mild solvent such as mineral spirits can be used to remove oil, grease, tars, wax, and similar substances. Use a cloth dampened with mineral spirits, and apply only to contaminated areas. Follow up the use of this mild solvent with detergent cleaning and rinsing.

STATEMENT OF LIMITED WARRANTY

Conditions Which Void Limited Warranty

This warranty shall not apply to equipment which:

A.) Has been tampered with, defaced, mishandled or has had repairs and modifications not authorized by Detecto.

B.) Has had serial number altered, defaced, or removed.

C.) Has not been grounded according to Detecto's recommended procedure.

Freight Carrier Damage

Claims for equipment damaged in transit must be referred to the freight carrier in accordance with freight carrier regulations.

This warranty sets forth the extent of our liability for breach of any warranty or deficiency in connection with the sale or use of the product. Detecto will not be liable for consequential damages of any nature, including but not limited to, loss of profit, delays or expenses, whether based on tort or contract. Detecto reserves the right to incorporate improvements in material and design without notice and is not obligated to incorporate improvements in equipment previously manufactured.

The foregoing is in lieu of all other warranties, express or implied including any warranty that extends beyond the description of the product including any warranty of merchantability or fitness for a particular purpose. This warranty covers only those Detecto products installed in the forty-eight (48) contiguous continental United States.

DETECTO®
A Division of Cardinal Scale Manufacturing Co.

08/27/2014
Printed in USA
D268-WARRANTY-DET-A

Printed in USA

3300-0298-0M Rev B 05/18