



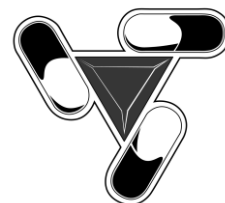
Rx Cloud



[torbalcloud.com](http://torbalcloud.com)

# Instruction Manual:

## DRX-500s CLOUD





## Table of Contents

### Introduction, Setup, and Initial Configuration

1. Cautionary Notes and Precautions.....	3
1.1 Important Handling Cautions and Warnings.....	4
2. Specifications.....	5
3. Keys and Indicators.....	6
3.1 Display Indicators.....	6
4. Parts Description.....	8
5. Unpacking and Getting Started .....	9

### Configuration of DRX Pill Counting Scale

6. DRX Workstation - Main Menu, Function Setup and Overview.....	11
6.1 Pill Counting.....	12
6.2 Compounding.....	13
6.3 Network Setup.....	14
6.4 Configuration.....	15
6.4 Calibration .....	15

### Performing Pill Counting

7. Pill Counting – Counting Prescription Drugs for the first time (F2).....	16
8. Pill Counting – Counting Prescription Drugs which have been stored on the Torbal Cloud .....	20
9. Rx and NDC Verification - integrated into pill counting .....	23
10. Rx and NDC Verification – independent of pill counting (F3).....	25
11. Advanced Pill Counting Accuracy (APA).....	26
12. Pill Fragment Detection.....	27
13. Updating the Database while filling a prescription (Update on reminder) .....	28
13.1 Automatic.....	28
13.2 Manual.....	30
14. Updating the Database Formulary (Automatic Database Updating F5) .....	32
15. Modifying the Average Piece Weight .....	34

### Using the Online Account

16. Torbal Cloud Account Access and Login.....	36
17. Status.....	36
17.1 Workstation (Workstation Status).....	36
17.2 Activity (System Activity Graphs).....	36
18. Reports (Details for performed Counting Transactions, Users and Individual Stations).....	37
18.1 Most Frequently Counted.....	37
18.2 E-mail Reports (Automatic E-mail reporting and e-mail alerts).....	37
19. Users.....	38
20. My Account.....	39
20.1 Settings .....	39

### Weighing and Compounding

21. Calibration.....	40
22. Weighing (F1).....	41
22.1 Zeroing the Scale.....	42
22.2 Taring.....	42
22.3 Clearing the Tare.....	43
23. Compounding and Recipe Making .....	44



23.1	Saving and Printing Recipes.....	46
23.2	Using the Filling Meter.....	48
24.	Using the Scale's Alphabet for Data Entry.....	49
25.	Sealing the scale.....	50
33.1	Paper Seal.....	50
33.2	Wire Seal.....	51
26.	Common Errors and Troubleshooting.....	52
27.	Technical Information.....	54
28.	Maintenance.....	55
29.	Accessories.....	55
30.	Replacement Parts.....	55
31.	Limited Warranty.....	56

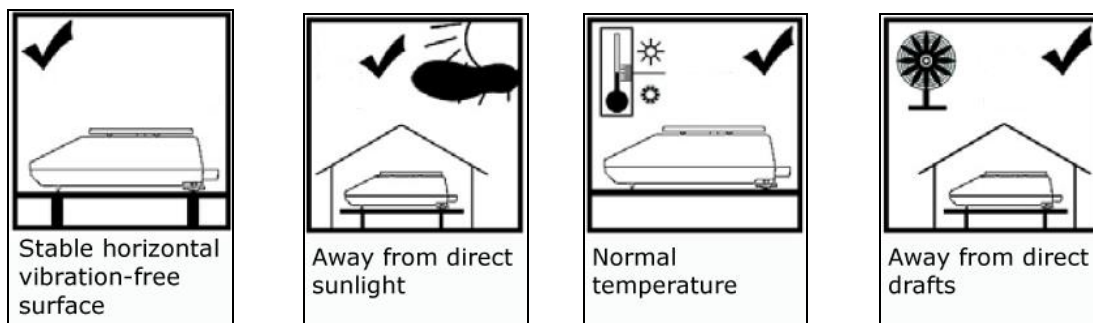


## Chapter 1: Cautionary Notes



The TORBAL Precision scale is a sensitive and delicate instrument. Always handle your scale with care.

The correct location and proper environment makes an important contribution to the accuracy of the weighing results of TORBAL precision scales.

### The optimum location for your scale:



- Stable, vibration-free base as horizontal as possible
- Away from direct sunlight
- Not exposed to high temperature variations
- Away from direct drafts
- The best location is on a stable bench away from direct drafts, doors, windows, radiators and air conditioner vents.



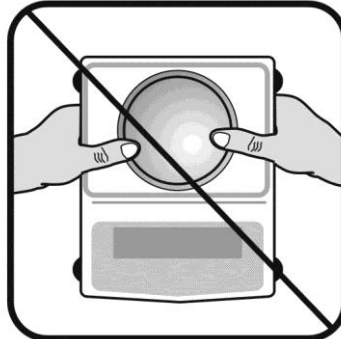

<b>CAUTION:</b> 	<ul style="list-style-type: none"><li>• The scale is designed for indoor use only..</li><li>• Do not operate the scale in hazardous areas or conditions.</li><li>• Do not use the scale in locations subject to high humidity or dust levels.</li><li>• Do not connect cables in ways other than those mentioned in this manual.</li><li>• Be sure to set the scale on a firm, stable, horizontal surface.</li><li>• Never stand on or lean on this product. Equipment may fall or collapse, causing breakage and possible injury.</li><li>• Before moving the product, unplug it and unplug all cables connected to it.</li><li>• When storing, transporting or returning the scale for service, always use the original packaging.</li></ul>
<b>WARNING:</b> 	<ul style="list-style-type: none"><li>• Never attempt to repair, disassemble or modify the scale yourself. Tampering with the scale may result in injury and cause more damage to the equipment.</li><li>• Be sure to use the specified power source.</li><li>• Do not allow foreign matter to fall into the scale.</li><li>• If water or other liquid spills into the scale, do not continue to use it. Unplug the power cord immediately and contact technical support.</li></ul>



## 1.1. Important handling Cautions and Warnings




Always handle your scale with care. Damage caused by improper handling is not covered under the scale's warranty.

	Never drop or throw any articles onto the scale's pan or onto any other parts of the unit!
	DO NOT let the scale fall or drop from its tabletop surface!
	When moving the scale do not press or apply force onto the scales pan!
	DO NOT pass or handle liquids directly over the scale to avoid spillage and liquid damage!



## Chapter 2: Specifications

	Model
	DRX500s Cloud
Capacity	500g
Automatic Internal Calibration	YES
Readability (d), Verification Unit (e), Minimum Load	d = 0.001g, e = 0.01g, Min = 0.02g
Repeatability (Standard Deviation)	0.001g
Linearity	+/- 0.002g
Stabilization time (typical)	Approx. 3sec
Tare Range	-500g
Accuracy Class	II
NTEP Certified for Prescription use and Pill Counting	YES
Pan Dimension	120mm
Draft Shield	Optional
Scale Dimension	239mmW x 273mmD x 91mmH
Operating Temperature	+18°C to +33°C
RS232 Port	Bidirectional – Standard (Scanner Connection)
Ethernet Network Port	RJ45 – Standard (TCP/IP Network Connection)
PS2 Keyboard Port	Standard
Power Supply	Input: 120VAC 60Hz 15W Output: 12VDC 2.1A
Display Type	Graphical LCD
Display Size	134mmW x 40.4mmH / 240W x 64H dots
Weighing Units	Grams
Scale's Net Weight (lb/kg)	4kg / 8.8lbs
Application Modes	Pill Counting, NDC Verification, Compounding
Barcode Scanner	Single Line Laser (Standard)   High Performance Omni Directions (Optional)
Printing	YES
MW (Minimum Piece Weight)	30mg (3e)
MSS (Minimum Sample Size)	10 pieces
Sample Size Selection	10, 30, 60, 90, 100




## Chapter 3: Keys and Display Indicators

Key	Primary Function	Secondary Function
I/⏻	Power On and Power Off	N/A
↔T	Tare – used to tare the weighing pan	N/A
→0←	Zero – used to zero the scale	Number “6” key
ENTER ←	Enter – used to accept and confirm commands	Allows to re-enter an Rx Size value
MENU	Menu – used to access the main menu	Number “9” key
CLR	Clear – used to clear, log and cancel operation	N/A
▲▼◀▶	Navigation Keys – used to navigate through the menus	N/A
↺↻	N/A	N/A
Σ	Sigma – used to logout and switch users or update average piece weights	Period “.”
→	Data Transfer – used to send print data to a printer or transfer data to a PC via the RS232 communication port	Number “7” key
▼	Calibration Key – used to initialize automatic internal calibration	Number “8” key
F1	Weighing	Number “1” key
F2	Pill Counting	Number “2” key
F3	NDC Verification (independent of pill counting)	Number “3” key
F4	Compounding	Number “4” key
F5	Drug Information Details	Number “5” key

### 3.1. Display Indicators

Display Indicator	Description	Explanation
OFF	Power Off	The scale is turned OFF and in standby mode.
AUT	AZSM (Automatic Zero Setting Mechanism)	AZSM (Automatic Zero Setting Mechanism) is active and the scale maintains a “center of zero” condition within +/- 5d
NET	Net Result	A tare was taken and the scale subtracted the tare weight from the gross weight to obtain the net weight.
→0←	Zero	The scale is maintaining a “center of zero” condition.



	Stability Indicator	The weighing result has stabilized and an accurate reading may be taken.
APA	Advanced Pill Counting	The APA feature is enabled and the algorithm was activated
PFD	Pill Fragment Detection	Possible Pill Fragment or Broken Pill
pcs	Pieces	In pill counting this indicator shows that the result is a piece count





## Chapter 4: Parts Description



**Scale – Front View**



**Scale – Rear View**



**Scale Power Adapter**



**User Access Cards**



**Scanner Cable**



**Network Patch Cables**



**Scales Pan**



**Pan Base**



**Scanner** (sv models)



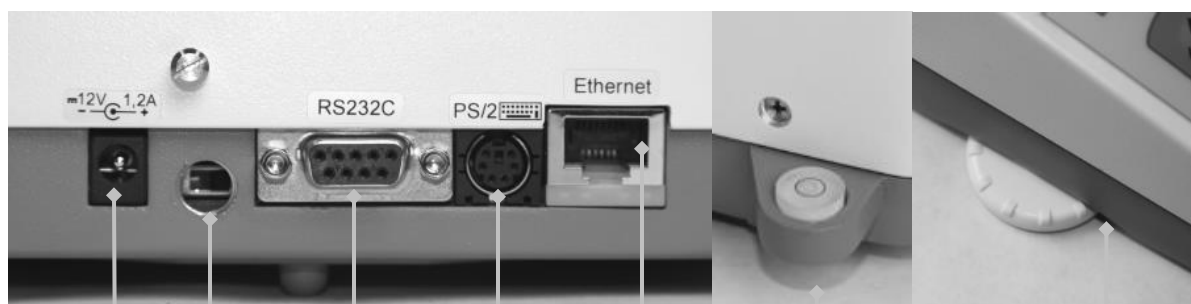
**Scanner Stand** (sv models)



**Scanner** (sf models)



**Scanner Stand** (sf models)



A/C Adapter  
Socket

Service Switch

RS232  
Scanner Port

PS2  
Keyboard Port

Ethernet  
Network Port

Level Indicator

Leveling Feet



## Chapter 5: Unpacking and getting started

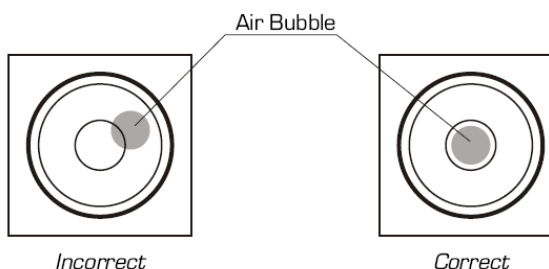
1. Carefully remove the scale, pan, scanner, and all of its components from the packaging and place them on a stable base where the scale will not be affected by any mechanical vibrations or air movements.
2. After removing the pan base and the pan from their packaging, carefully install the pan base onto the scale by placing it on the pan support located in the middle of the scale. Once the pan base has been installed, gently place the pan on the base as shown below.



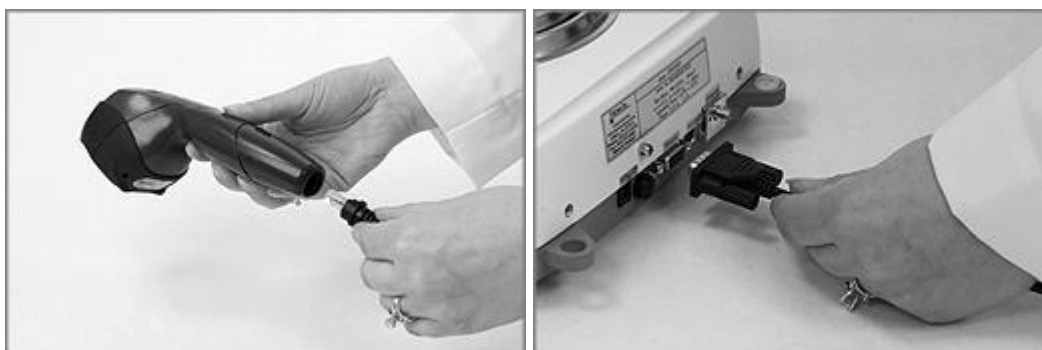
3. Level the scale by adjusting the rear feet until the level indicator shows the “air bubble” is in the center position of the sight glass. The level indicator is located on the rear left side of the scale.



Level Indicator Sight Glass:



4. Set-up the scanner by plugging the RJ45 connector into the scanner and the RS232 connector into the scale. The RS232 port is located at the rear of the scale. Tighten the connector screws to secure the cable and prevent it from unintentional unplugging.



5. Connect the scale to the internet with the network cable by plugging it into the Ethernet port.



6. Power the scale ON by plugging in the AC adapter into the adapter socket located in the rear of the scale.



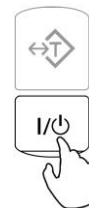
7. The scale will perform initialization and automatic calibration. When completed the scale will automatically connect to the Torbal Cloud Server. If this is the first time the scale is powered on the following message will be displayed: “The unit is locked out! Please consult the administrator”. In order to begin using the scale, activate your account at [www.torbalcloud.com](http://www.torbalcloud.com). To login use the user ID and password which were provided at the time of purchase. Once the account is activated the scale will automatically enter the pill counting mode.

**NOTE:**

Calibration will initialize automatically whenever the scale is turned on. The scale will also calibrate whenever the temperature changes by 1 degree Celsius and at two-hour intervals. Calibration will initialize only if the scale has been stable and idle for 60 seconds, in order not to interrupt counting operations.

When the AC adapter is plugged into the wall outlet for the first time, the scale will automatically and frequently initialize temperature calibration as the internal parts of the scale warm up. Once the internal temperature stabilizes, the scale will initiate the time – interval calibration approximately every two hours. The scale loses internal temperature only when the unit is completely unplugged from the wall electrical outlet. When the unit is turned off with the On/Off key, the scale goes into standby mode and internal temperature is maintained.

To put the scale into standby mode, leave the AC adaptor plugged into both the scale and the wall outlet and press the Power “OFF” button ( ). The “OFF” indicator will light up in the upper left corner of the display signaling the scale is in standby mode, i.e.:





## Chapter 6: DRX Workstation Scale – Main Menu, Function Setup and Overview

Main Menu is used to configure the scale's functions. Configuration is done by enabling or disabling individual function features.



1. To enter the Main Menu function setup press the **Menu** key.
2. The scale will display a list of functions that can be configured.
3. Use the arrow navigation keys to navigate up and down the menu.
4. Once a desired function is highlighted press **Enter** to enter the configuration setup screen for the selected function. The scale will display a list of features and functions that can be reconfigured.



## 6.1 Pill Counting

PILL COUNTING SETUP	
1. Rx verification	disabled
2. Default sample size	10
3. Prescription Size	enabled
4. External keyboard	enabled
5. Advanced Pill count. accur.	enabled
6. Deviation Warning	disabled

<b>Rx Verification</b>	When enabled, this feature becomes an integrated part of the pill counting function. You will be asked to verify NDC codes before each counting transaction. Usually the stock bottle NDC bar code is compared to the NDC bar code printed on the Rx Label. [Factory Default setting: <b>Disabled</b> ]
<b>Default Sample Size</b>	The sample size is the number of pills that have to be counted manually in order to establish an individual pill weight. This must be performed when counting the drug for the first time and entering it into the database. [Factory Default setting: <b>10</b> ]
<b>Prescription Size</b>	When performing a counting transaction, the Prescription Size feature assists in achieving cut off at the proper pill count. When the feature is enabled, in addition to the displayed pill count, a remaining to fill countdown is displayed. The display indicates how many more pills must be placed in the vial to achieve the desired count, and indicates “0” at the target count. This feature helps to prevent overfilling. If too many pills are added, an overfill indicator displays the number of pills that should be removed from the vial. [Factory Default setting: <b>Enabled</b> ]
<b>External Keyboard</b>	This feature must be enabled if an external PC keyboard is connected to the scale via the PS2 port. [Factory Default setting: <b>Disabled</b> ]
<b>Advanced Pill Counting Accuracy (APA)</b>	APA is an advanced pill counting algorithm that can adjust for production LOT pill weight variations and provide even greater accuracy when counting large quantities. [Factory Default setting: <b>Disabled</b> ]
<b>Pill Fragment Detection</b>	PFD is an algorithm that detects possible pill fragments, tablet chips, or broken pills. The algorithm work in conjunction with APA and requires the operator to make designated paused during counting at specified count ranges. [Factory Default setting: <b>Disabled</b> ]
<b>Automatic Database Update</b>	The feature allows to quickly and efficiently update drug average piece weights by using the Advanced Pill Counting Accuracy (APA) algorithm. In order to update, the feature requires the user to perform two or three short stops while filling a prescription. [Factory default setting: <b>3 Stop</b> ]
<b>Update on Reminder</b>	The feature allows specifying the method of updating an Average Piece Weight of a drug when prompted with an update reminder. The Automatic mode allows performing the update during a count, by making two short stops during filling. When set to Manual, updating is performed by manually counting a new sample size. [Factory default setting: <b>Automatic</b> ]
<b>Drug Production LOT Entry</b>	This feature allows to key-in and assigning each drug the actual production LOT number. Assigning a lot number allows you to track database drug entries and update average piece weight as production lots change. Using this feature and updating drug weights improves counting accuracy and contributes to proper database maintenance. [Factory Default setting: <b>Disabled</b> ]
<b>Onscreen Instructions</b>	When enabled this feature displays step-by-step instructions that lead users through the pill counting function. The instructions appear at the bottom of the LCD display. [Factory Default setting: <b>Enabled</b> ]
<b>Default Settings</b>	Selecting this option rests the function configuration and restores factory defaults.



## 6.2 Compounding



<b>Ingredient Labeling</b>	This feature allows you to assign unique names or labels to individual ingredients within the compound. The name of the ingredient and its weight is stored in the scale's memory. [Factory Default setting: <b>Disabled</b> ]
<b>Remaining to Fill</b>	When enabled, you will be asked to key in the desired weight of an ingredient before filling. This allows the scale to track the filled weight and display the remaining amount. If too much weight is placed, an excess indicator will be displayed, along with the amount of weight that should be removed. [Factory Default setting: <b>Disabled</b> ]
<b>Filling Meter</b>	This feature should be used with the "remaining to fill feature". The meter is a non-linear indicator that assists you in the filling process. The meter indicates a cut-off point at which the indicator becomes very sensitive, therefore it allows you to stop filling at the desired weight with greater accuracy. [Factory Default setting: <b>Disabled</b> ]
<b>External Keyboard</b>	This feature must be enabled if an external PC keyboard is connected to the scale via the PS2 port. [Factory Default setting: <b>Disabled</b> ]
<b>Onscreen Instructions</b>	When enabled this feature displays step-by-step instructions that lead users through the pill counting function. The instructions appear at the bottom of the LCD display. [Factory Default setting: <b>Enabled</b> ]
<b>Default Settings</b>	Selecting this option resets the function configuration and restores factory defaults.





## 6.3 Network Setup

```
NETWORK SETUP
1. Network mode      online
2. Login Setup
3. Unit Id
4. Exit
```

```
USER ID
1. Login feature:    enabled
2. Login type       : BARCODE
3. Auto log out     : 5 min.
4. Exit
```

<b>Network Mode</b>	<p>The network mode allows the scale to operate online or offline. When operating online the scale connects to the TORBAL CLOUD Server. Drug related data such as drug name, strength, and average piece weight is always saved on the server. The offline mode allows scales to function as stand alone devices without the use of a barcode scanner. When the scale is offline, drug information is not available and an average piece weight must be established each time a counting transaction is performed.</p> <p>[Factory Default setting: <b>Online</b>]</p>	
<b>Login Setup</b>	Configures the login method	
	<b>Login Feature</b>	When enabled, users are required to login to the scale prior to use. This allows the Torbal Cloud to track user activity and provide detailed user reports. When disabled the scale connects to the Torbal Cloud anonymously and login is not required. [Factory Default setting: <b>Disabled</b> ]
	<b>Login Type</b>	Users are able to login to the scale with the use of a password or by scanning a barcode ID. When set to "Password" the scale will require a users to key in a password manually through the use of the scale's keypad. When set to "Barcode" the scale will require that a barcode ID is scanned in order to authenticate the user. It is recommended to change login type to barcode. [Factory Default setting: <b>Password</b> ]
	<b>Auto log out</b>	This feature automatically logs out users whenever the scale is not in use for duration of the preset time interval. Automatic logout can be set to 2, 5, 10, 15, 30 minutes or it can be completely disabled. Manual logout can be performed at any time with the sigma key ( $\Sigma$ ) [Factory Default setting: <b>OFF</b> ]
<b>Unit ID</b>	Allows to set DRX Scale identifiers	
	<b>Serial No.</b>	The scale's serial number is preprogrammed and saved into the scales internal memory. The serial number cannot be altered or changed and it must match the nameplate located in the rear of the scale.
	<b>Unit name/ID</b>	In this field a unique name or an identification number other than the serial number can be assigned. The name entered in the field should match the description of the scale entered on the Torbal Cloud server account.
	<b>Location</b>	The location field is used to identify the scales physical location within the pharmacy. The name entered in the field should match the location of the scale entered on the Torbal Cloud server account.

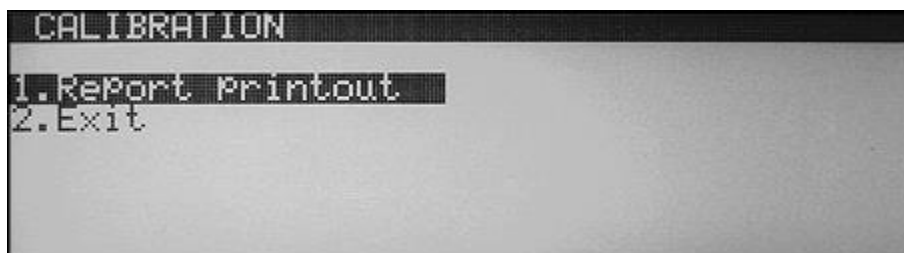


## 6.4 Configuration



<b>Power Save</b>	Configures the scale's display	
	<b>Contrast</b>	This feature allows adjusting the contrast of the scales LCD. [Factory Default setting: 8]
	<b>Backlight</b>	The backlight feature allows the user to disable, enable, or auto disable the display backlight. To automatically disable the backlight after inactive use, set the feature to ½ .[Factory Default setting: <b>Enabled</b> ]
<b>RS232C</b>	The RS232 settings are used to configure the scale's RS232 port. The port can be used for an external printer connection. Data can be sent to the printer with a push of the data transfer button (Sending: button + after stable.) or automatically after a stable result is obtained (Sending: after stable.)	
<b>Time and Date</b>	The time and date feature allows setting the current date and time. It is very important to sent the scale with the current date and time.	
<b>Reset</b>	This option will restore all scale configuration parameters to factory defaults.	
<b>Buzzer</b>	This feature disables or enables the keypad's audio feedback buzzer.	

## 6.5 Calibration



<b>Calibration report</b>	This function prints automatic internal calibration data. This data may be required for trouble shooting purposes.
---------------------------	--

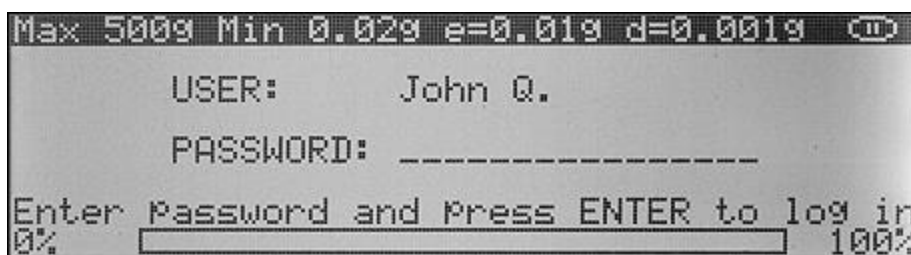
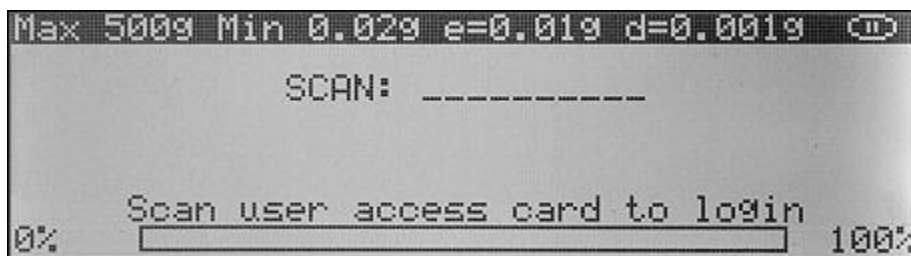




## Chapter 7: Pill Counting – Counting Prescription drugs for the first time (F2)

Follow these steps if this is the first time a particular drug is counted and it has not available in the Torbal Cloud database.

1. If required login to the scale by scanning your user access card, or use the navigation keys to select your user ID and key in or type in your password.



**Note:** If the scale is logged in by another user, use the sigma  $\Sigma$  key to log out.



2. Place a vial or a counting container on the pan. The container weight will be displayed. Wait for the weight to stabilize and press the “T” key to tare.



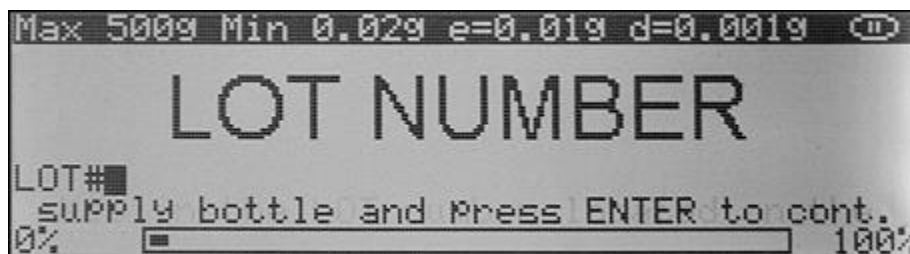


3. Once the scale has finished tarring “SCAN” will appear on the display indicating to scan the NDC code associated with the drug. Scan the NDC code by placing it under the scanner light.

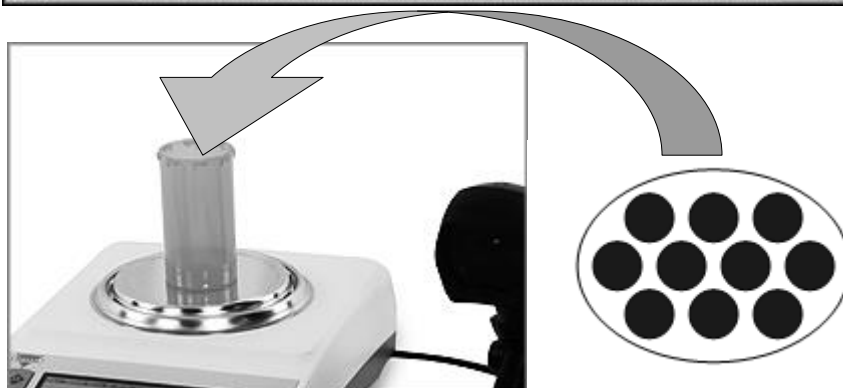


If NDC verification has been enabled, two NDC codes must be scanned to allow the scale to check for a match between the two codes.

4. If “Drug Production Lot entry” has been enabled, key in or type in the production lot number located on the supply bottle. The lot number can be 10 characters long (alpha-numeric).

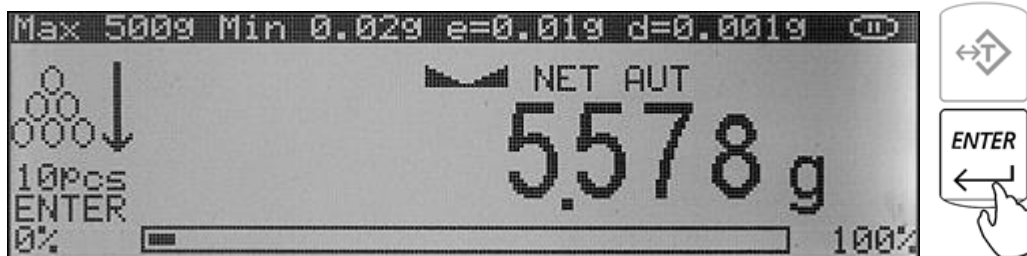


5. The scale will now display “SAMPLE WEIGHT” indicating to manually count the sample size and place the pills in the container located on the pan.



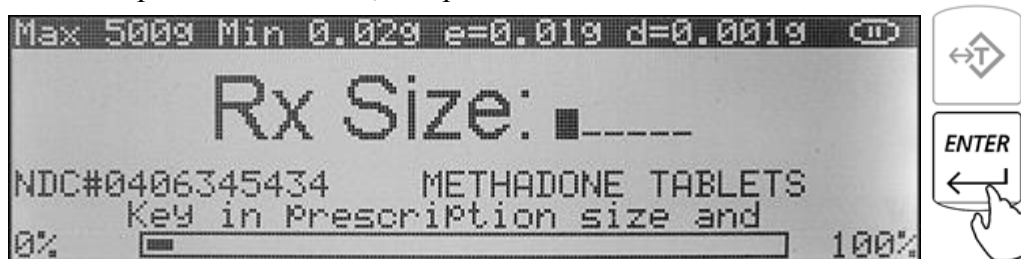


6. The weight of the sample will be displayed as it is placed in the container. Once the weight of the sample stabilizes and the stability indicator appears on the display, press the “Enter” key to confirm and accept the sample size. The scale will store the drug average piece weight on the Torbal Cloud Server.



**Note:** Minimum individual piece weight allowed is 30mg (3e). With a sample size of 10 pieces, the sample weight must be equal to or greater than 300mg (30e). Attempting to set a sample size of 10 pieces with a total sample weight which is lower than 300mg (30e) will result in an error.

7. The scale will display “Rx size”. Using the scales keypad or an external keyboard, key in the prescription size or the number of pills to be counted, and press “Enter”.



**Note:** If the wrong Rx value has been entered press the “Enter” key once again to reenter the Rx Size.

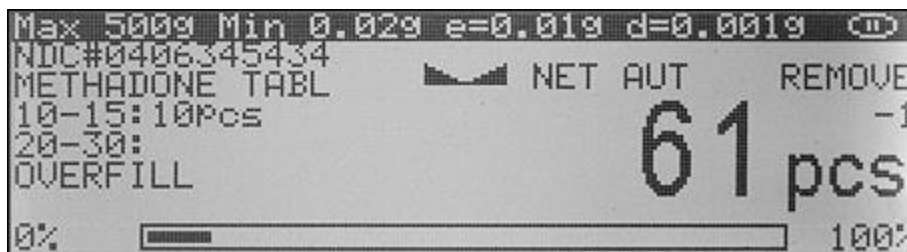
8. “FILL” will flash on the display for approximately 5 seconds indicating the user should begin filling; at any time during the fill command add the remaining pills. Flashing stops once the counting begins.



Note: If filling does not begin while the “FILL” command is displayed, after approximately 5 seconds the scale will display a pill count (the value of the sample size).

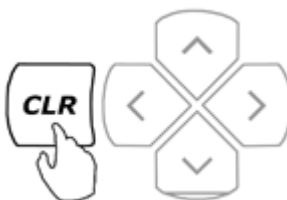


9. The display will now indicate the number of pills in the container. Stop filling when the desired count has been reached.



**Note:** A count down meter in the upright corner of the display indicates the progress of the count. Acount of 0 means the script is filled. If too many pills are placed into the container the “Overfill” indicator will be displayed.

10. Once an accurate piece count has been taken press the “CLR” key to log and complete the transaction. Before pressing the “CLR” key make sure that a final accurate count is displayed.



**Note:** If too many pieces have been placed into the container, use tweezers, a pharmacy spoon, or a similar instrument to remove the excess. After making the adjustment place the vial back on the pan to reconfirm your count. The transaction cannot be completed or cleared unless the final count is displayed.

Aborting the transaction can be performed by pressing the “F2” Key. The functionality of F2 aborting may be enabled on the server under “Security rules” in the “Config/Server” tab.

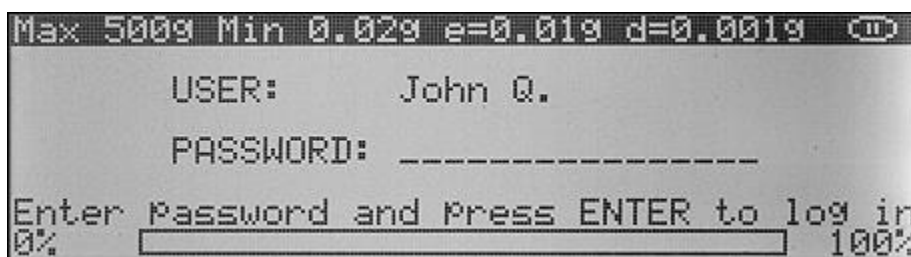
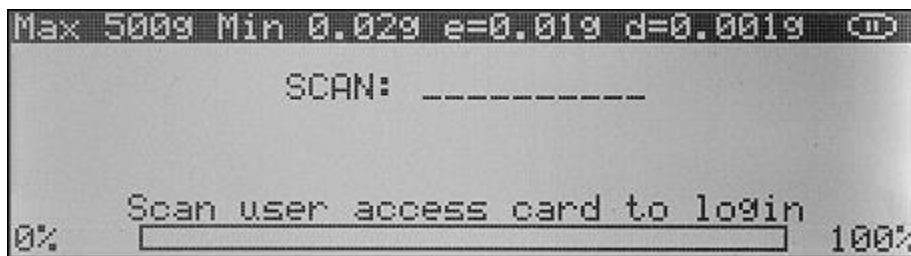






## Chapter 8: Pill Counting – Counting Prescription Drugs which have been stored on the Torbal Cloud (F2)

1. Login to the scale by scanning your user access card, or use the navigation keys to select your user ID and key in or type in your password.

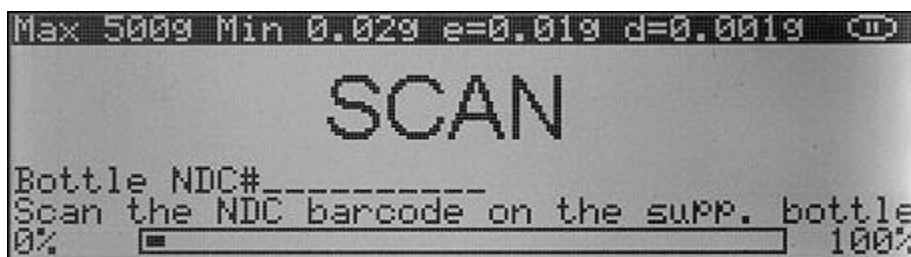


**Note:** If the scale is logged in by another user, use the sigma  $\Sigma$  key to log out.

2. Place a vial or a counting container on the pan. The container weight will be displayed. Wait for the weight to stabilize and press the “T” key to tare.



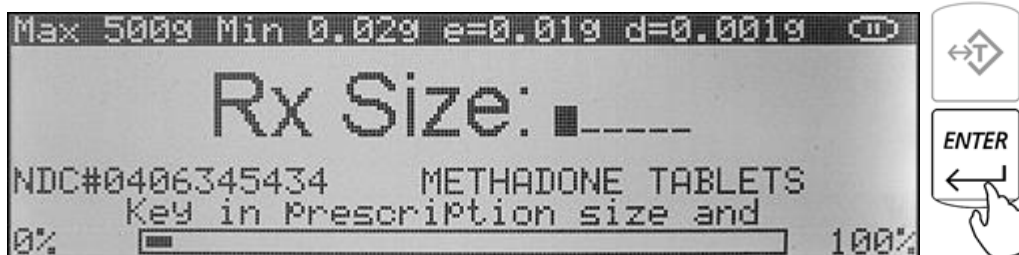
3. Once the scale has finished tarring “SCAN” will appear on the display indicating to scan the NDC code associated with the drug. Scan the NDC code by placing it under the scanner light.





If NDC verification has been enabled, two NDC codes must be scanned to allow the scale to check for a match between the two codes.

4. The scale will display “Rx size”. Using the scales keypad or an external keyboard, key in the prescription size or the number of pills to be counted, and press “Enter”.



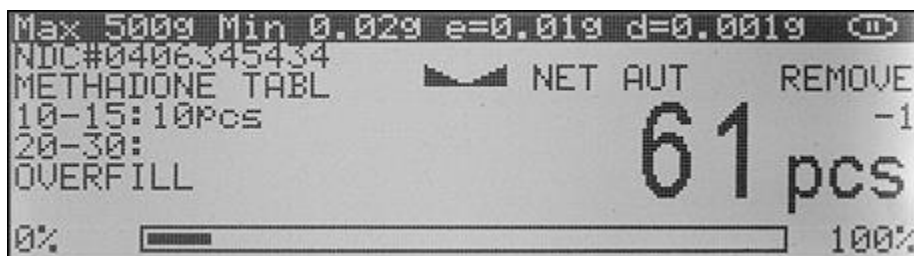
**Note:** If the wrong Rx value has been entered press the “Enter” key once again to reenter the Rx Size.

5. “FILL” will flash on the display for approximately 5 seconds indicating the user should begin filling; at any time during the fill command add the remaining pills.



Note: If filling does not begin while the “FILL” command is displayed, after approximately 5 seconds the scale will display a pill count (the value of the sample size).

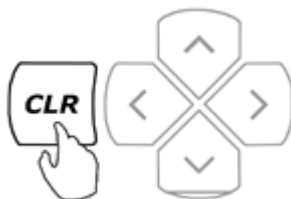
6. The display will now indicate the number of pills in the container. Stop filling when the desired count has been reached.



**Note:** A count down meter in the upright corner of the display indicates the progress of the count. If too many pills are placed into the container the “Overfill” indicator will be displayed.



7. Once an accurate piece count has been taken press the “CLR” key to log and complete the transaction. Before pressing the “CLR” key make sure that a final accurate count is displayed.



<b>Note:</b>	<p>If too many pieces have been placed into the container, use tweezers, a pharmacy spoon, or a similar instrument to remove the excess. After making the adjustment place the vial back on the pan to reconfirm your count. The transaction cannot be completed or cleared unless the final count is displayed.</p> <p>Aborting the transaction can be performed by pressing the “F2” Key. The functionality of F2 aborting may be enabled on the server under “Security rules” in the “Config/Server” tab.</p>
--------------	--





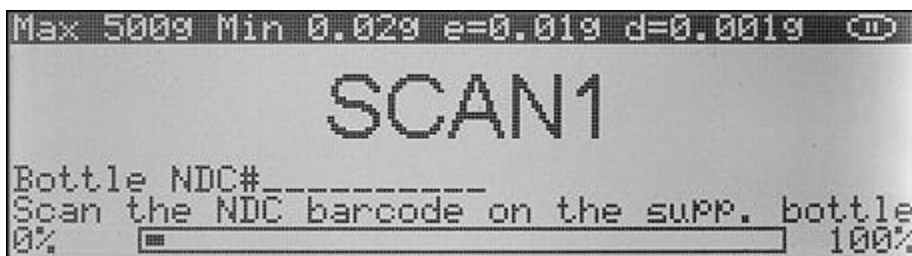
## Chapter 9: Rx and NDC Verification - integrated into pill counting

NDC Verification can be used within the pill counting feature or as an independent function.

**Note:** The verification feature may be performed only if a 10 or 11 digit NDC barcode is printed on the Rx label in a format that is compatible with the scanner.

After enabling NDC Verification through the pill counting setup menu, anytime a counting operation is performed, two NDC codes must be scanned to allow the scale to check for a match.

1. Once the first step of the counting operation has been completed and the scale has tared the counting container or a vial, "SCAN 1" will appear on the display indicating you should scan the first NDC code associated with the drug (usually the supply bottle). Scan the NDC code by placing it under the scanner light. The code will appear on the display in a field labeled "Bottle NDC # \_\_\_\_."



2. The scale will then indicate to scan the second code. "SCAN 2" will appear on the display. Scan the second NDC code by placing it under the scanner light. Once the code has been scanned, the scale will check whether there is a match between the two codes. The code will appear on the display in a field labeled "Rx NDC # \_\_\_\_." If the match is wrong "FAILED" will appear on the display. The second NDC code will be highlighted on the display and the procedure must start over. To start over press Enter.







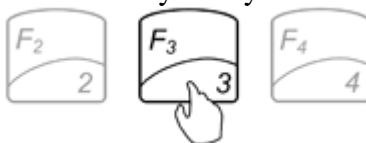
3. If verification is successful, “MATCH OK” will be displayed, the scale will continue with the counting operation.



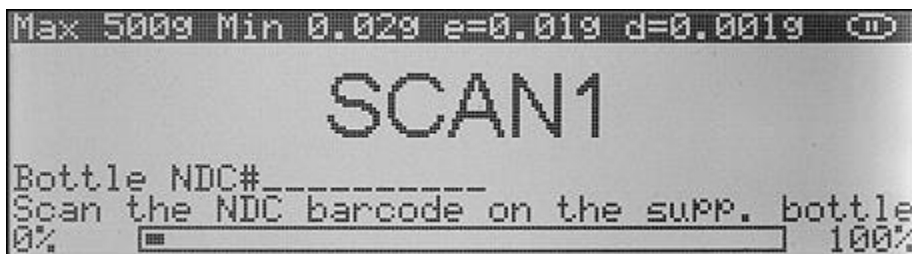


## Chapter 10: Rx and NDC Verification - independent of pill counting (F3)

To enter the NDC verification feature, press the F3 key at any time.



1. “SCAN 1” will appear on the display, indicating to scan the first NDC code associated with the drug (usually the supply bottle). Scan the NDC code by placing it slowly under the scanner light. The code will appear on the display in a field labeled “Bottle NDC # \_\_\_\_.”



2. The scale will then indicate to scan the second code. “SCAN 2” will appear on the display. Scan the second NDC code by placing it under the scanner light. Once the code has been scanned, the scale will check whether there is a match between the two codes. The code will appear on the display in a field labeled “Rx NDC # \_\_\_\_.” If the match is wrong “FAILED” will appear on the display. The second NDC code will be highlighted on the display and the procedure must start over. To start over press Enter.



3. If verification is successful, “MATCH OK” will be displayed, Press CLR to start the next verification.



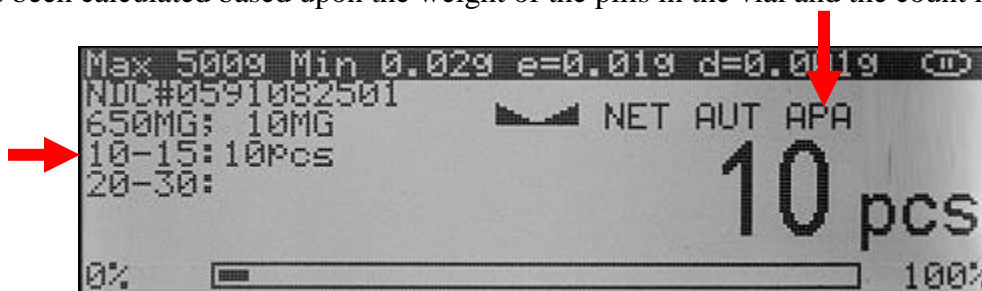


## Chapter 11: Advanced Pill Counting Accuracy (APA)

When enabled APA will correct for possible average pill weight variations that may exist between a currently counted drug, and the average piece weight of that drug that is stored on the Torbal Cloud Server. To use the APA feature follow the steps below.

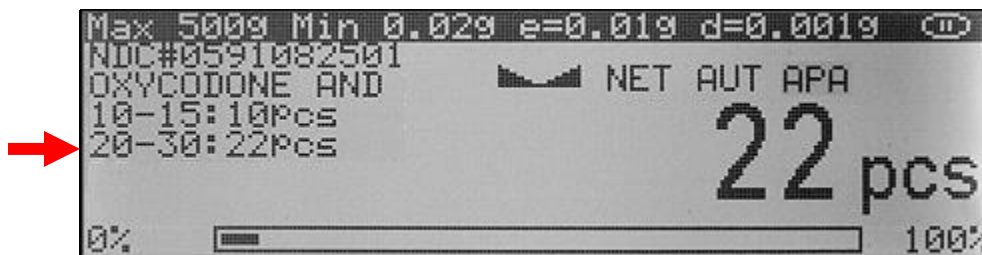
1. Follow all steps required to perform a pill counting transaction (Chapter 12, steps 1 through 5).

Once the “FILL” command is displayed, slowly begin to count the pills. In order to activate APA stop the count between **10** and **15** pieces. When a count in the range of 10 to 15 pieces is reached, stop and wait for the scale to stabilize the result. Once the result is stable the scale will calculate a new average piece weight. The scale will sound a buzzer and the APA indicator will appear in the upper right corner of the display. A new average pill weight has been calculated based upon the weight of the pills in the vial and the count may be continued.



**Note:** Stopping outside of this range will not activate the APA feature.

2. For an even greater accuracy, APA can be activated once again when stopping the count between 20 and 30 pieces. Activating APA in this range can be particularly useful when counting large quantities.



**Note:** If APA was not performed or activated at the 10 to 15 range it will not activate at the 20 to 30 range. The new average piece weight established by the APA feature is not stored on the Torbal Rx Server



## Chapter 12: Pill Fragment Detection

When enabled the feature allows to check for possible pill fragments or broken pills when performing a count. The feature signals a warning by displaying a PFD indicator on the display whenever a fragment is detected that is smaller than 40% or larger than 60% of the counted pill weight. You must enable APA in order to use Pill Fragment Detection. PFD is activated only at the 2<sup>nd</sup> and 3<sup>rd</sup> APA range. PFD will not activate between 1 and 15 pills.

1. Follow all steps required to perform a pill counting transaction.
2. Once command “FILL” is displayed begin to count the pills. In order to check for a possible Pill Fragment you must stop the count between 10 and 15 pieces.
3. When you reach a count of 10 to 15 pieces stop and wait for the scale to stabilize.
4. Once the scale is stable it will calculate a new average piece weight and perform APA.
5. Continue counting and pause the count between 20 and 30 pills. PFD will be no activated to check for possible pill fragments.
6. Continue counting and pause at all remaining APA ranges to activate PFD.



## Chapter 13: Updating the Database while filling a prescription (Update on reminder)

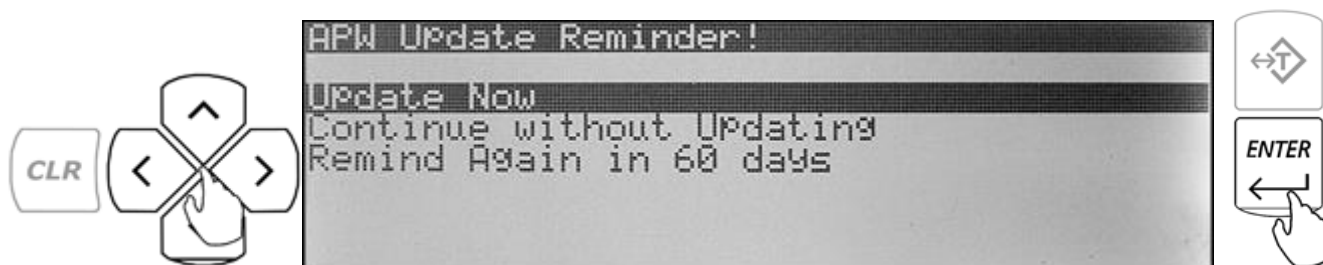
The feature reminds users to update drug data. Using this feature assures the highest long-term counting accuracy. It is strongly recommended that the user update the database periodically as drugs may be reformulated, modified and released under new production lot numbers.

\*Note: Handbook 44 Sect 2.20 UR.3.12 Correct Stored Piece Weight states “For prescription scales with a counting feature, the user is responsible for maintaining the correct stored piece weight. This is especially critical when a medicine has been reformulated or comes from different lots.” Manufacturers do not supply piece weight information for pills. For these reasons, a factory-stored database is not furnished with the unit, and it is strongly recommended that the pharmacist build and update the database as new supply bottles are used.

<b>Note:</b>	Users which have “Allow APW updates” feature disabled under user attributes will be automatically logged-out and update will not be allowed.
--------------	--

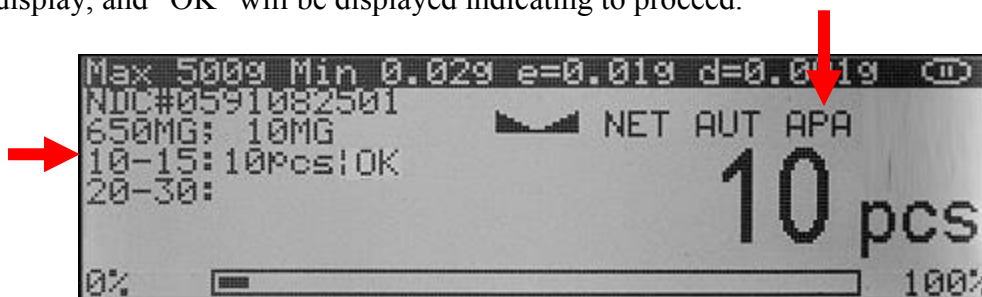
### 13.1 Automatic

1. Follow all steps required to perform a pill counting transaction (Chapter 12, steps 1 through 5). When the supply bottle NDC number is scanned, the scale checks the length of time that has passed since the drug had been last entered or modified in the database which is stored on the Torbal Cloud Server. If the length of time is longer than what has been pre-programmed in the “Database Maintenance / APW Configuration” tab, the scale will display a reminder notice before proceeding with the counting operation. When the update reminder is displayed use the navigation keys to select “Update Now” or choose between the available options and press ENTER.

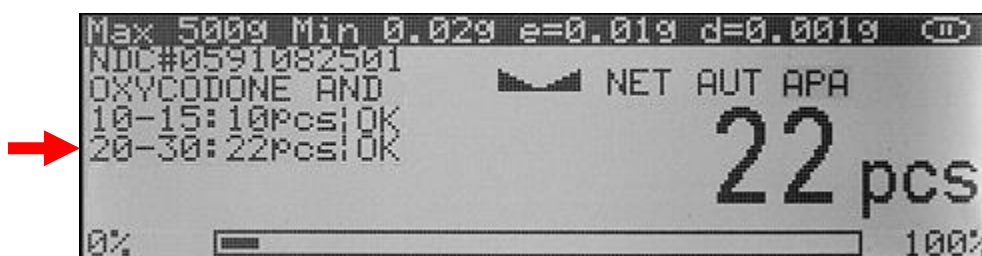




2. After selecting “Update Now” you may continue with the counting process. The middle left section of the display will show two stop ranges which indicate to pause counting anywhere between 10 to 15pcs (Stop 1), and 20 to 30pcs (Stop 2). When a count of 10 to 15pcs is reached, stop and wait for the scale to stabilize the result. The scale will sound a buzzer, an APA indicator will appear in the upper right corner of the display, and “OK” will be displayed indicating to proceed.



3. Continue filling and Stop at the second range between 20 and 30pcs. After completing the second “Stop” you may continue with filling your prescription and reaching a desired count.



4. Once an accurate count has been taken, press the CLR key to log and complete the transaction. The scale will display “NDC Successfully Updated” indicating that a new average piece weight has been calculated and stored on the server.



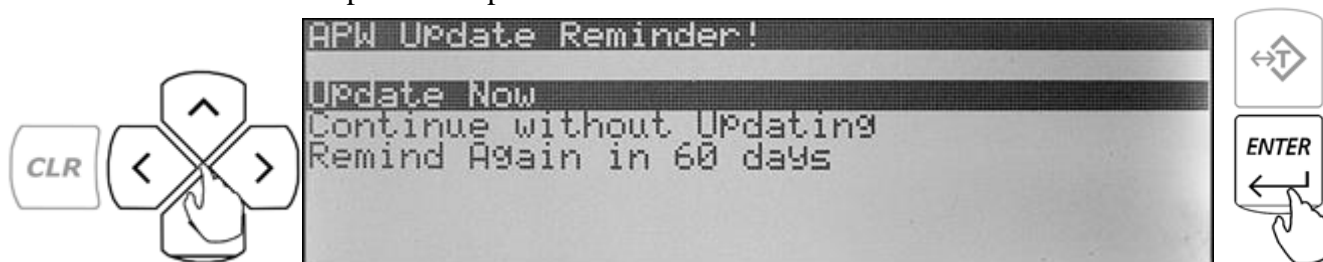
**Note:** In order to successfully complete the update you must pause the count at both “Stop ranges” in sequence. Stop 2 will not activate without completing Stop 1 first.



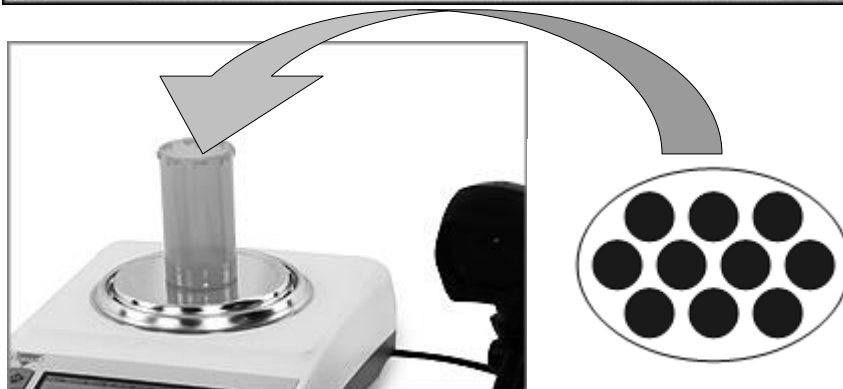


## 13.2 Manual

1. Follow all steps required to perform a pill counting transaction (Chapter 12, steps 1 through 5). When the supply bottle NDC number is scanned, the scale checks the length of time that has passed since the drug had been last entered or modified in the database which is stored on the Torbal Cloud Server. If the length of time is longer than what has been pre-programmed in the “Database Maintenance / APW Configuration” tab, the scale will display a reminder notice before proceeding with the counting operation.
2. When the update reminder is displayed use the navigation keys to select “Update Now” or choose between the available options and press Enter.

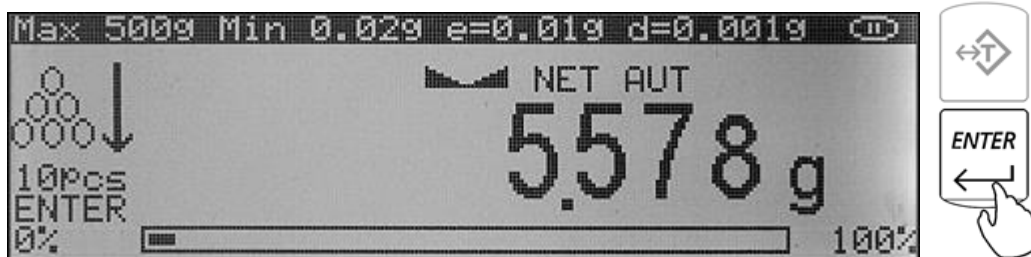


3. After selecting “Update Now” the scale will display “Sample Weight” indicating to manually count the sample size and place it in the container located on the pan.





- The weight of the sample will be displayed as it is placed in the container. Once the weight of the sample stabilizes and the stability indicator appears on the display, press the Enter key to confirm and accept the new sample. The scale will update and store the new Average Piece Weight on the Torbal Server.



- Continue with completing the count.



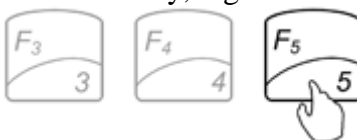


## Chapter 14: Updating the Database Formulary (Automatic Database Updating F5)

In order to assure the highest long-term counting accuracy, it is strongly recommended that the database be periodically updated, as drugs may be reformulated, modified and released under new production lot numbers.

\*Note: Handbook 44 Sect 2.20 UR.3.12 Correct Stored Piece Weight states “For prescription scales with a counting feature, the user is responsible for maintaining the correct stored piece weight. This is especially critical when a medicine has been reformulated or comes from different lots.” Manufacturers do not supply piece weight information for pills. For these reasons, a factory-stored database is not furnished with the unit, and it is strongly recommended that the pharmacist build and update the database as new supply bottles are used.

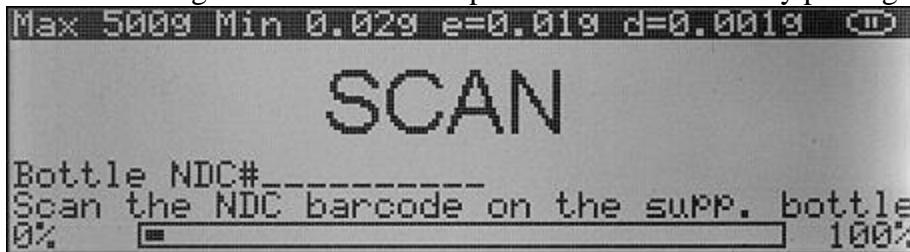
1. To access the updating function press the F5 key, login first if required.



2. Place a vial or container on the pan. The container weight will be displayed. Wait for the weight to stabilize and press the T key to tare.



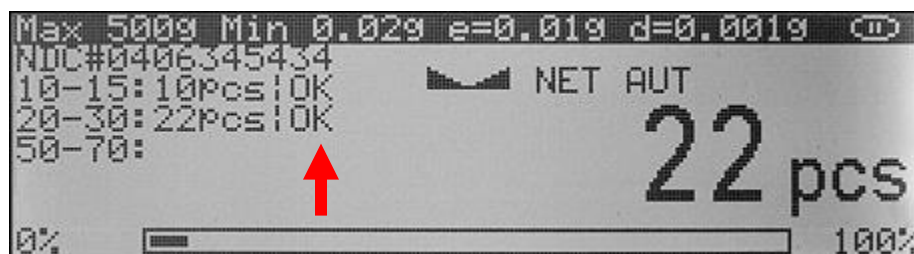
3. Once the scale has finished tarring “Scan” will appear on the display indicating to scan the NDC code of the drug which needs to be updated. Scan the NDC by placing it under the scanner light.



4. The middle left section of the display will show stop ranges which indicate to pause counting anywhere between 10 to 15pcs (Stop 1), 20 to 30pcs (Stop 2), and 50 to 70 (Stop 3).



5. When a count of each range is reached, stop and wait for the scale to stabilize the result. Once the result is stable the scale will activate the APA algorithm. The scale will sound a buzzer, an APA indicator will appear in the upper right corner of the display, and "OK" will be displayed indicating to proceed.



6. Continue filling and stop at the second and third range. Once the third range "Stop" is completed the scale will automatically finish the transaction. The scale will display "APW for NDC # Successfully Updated" indicating that a new average piece weight has been calculated and stored on the server.

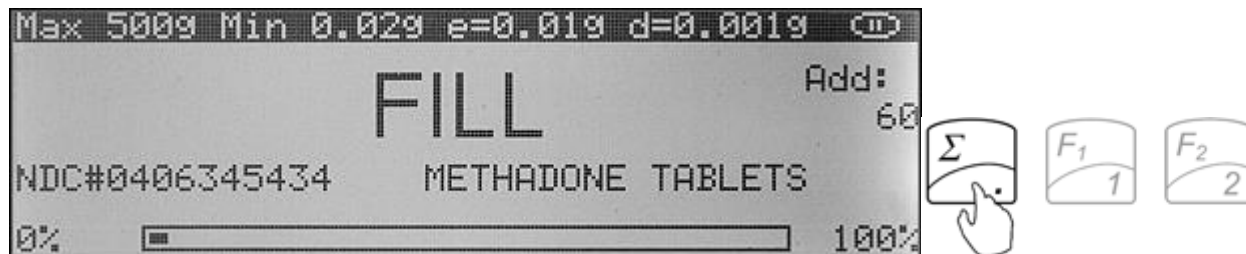




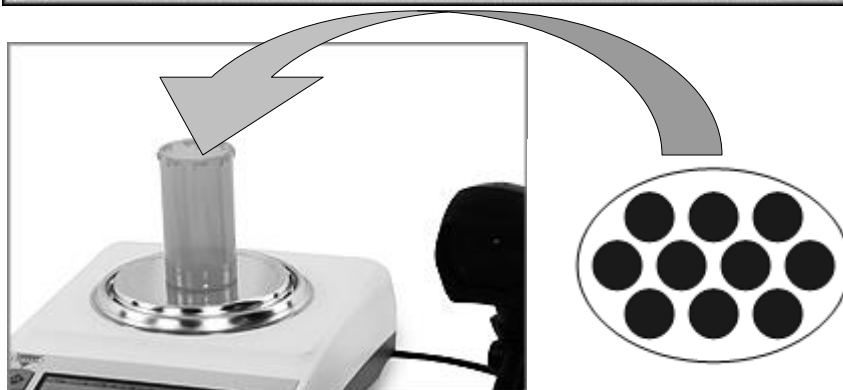
## Chapter 15: Modifying the Average Piece Weight

To modify a previously stored sample piece weight, follow the directions below:

1. Follow all steps required to perform a pill counting transaction (Chapter 12, steps 1 through 5)
2. Once command “FILL” begins to flash on the display, press the sigma key ( $\Sigma$ ) to modify the data associated with the drug. The Fill command will flash for approximately five seconds.

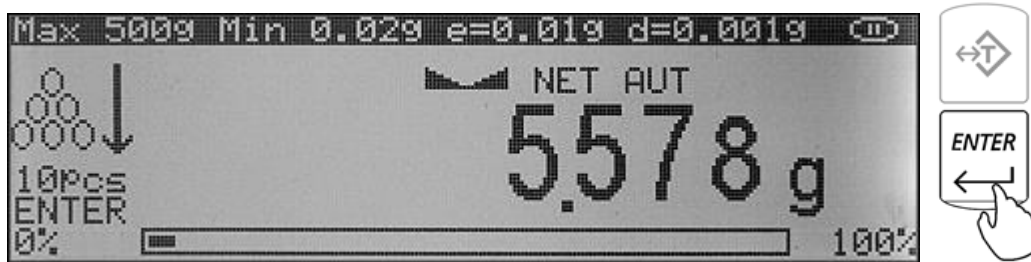


3. The scale will display “Sample Weight” indicating to manually count the sample size and place it in the container located on the pan.





- The weight of the sample will be displayed as it is placed in the container. Once the weight of the sample stabilizes and the stability indicator appears on the display, press the Enter key to confirm and accept the new sample. The scale will update and store the new Average Piece Weight on the Torbal Server.



- Follow all remaining steps of the pill counting transaction.

<b>Note:</b>	Users which have “Allow APW updates” feature disabled under user attributes will be automatically logged-out and update will not be allowed.
--------------	--






## Chapter 16: TORBAL CLOUD Account access and login

- To access your account use your web browser and go to <https://www.torbalcloud.com/login.htm>
- Login using the user ID and password that were given to you at the time of purchase.
- If this is the first time logging into the account you will be asked to register and activate the account.
- The DRX-500s scale will not be able to perform pill counting transactions without activating the account first.

## Chapter 17: Status

### 17.1 Workstation

The workstation tab provides a quick overview of the DRX scale workstations on the system. This tab also allows users to lock scales out of the system should that be necessary.

 Edit scale parameters:	Allows user to set a unique description and location name for the scale.
 Lock the scale:	Allows the administrator to lock the scale out of the system. When locked out scales will be denied login access to the server. This function maybe particularly useful if the administrator decides that the scale has malfunctioned.
 Delete this scale:	Allows the administrators to remove scales from the Torbal Cloud Account.

### 17.2 Activity

The activity tab provides the administrator with transaction graphs and charts that show user and workstation transactions.

<b>Workstation usage</b>	Pie graph which shows the amount of pill counting transactions performed by each station (expressed in percent).
<b>Transaction activity</b>	A line graph which shows the transaction activity trend performed in the selected time period.
<b>Workstation transactions</b>	A bar graph which shows the number of transactions performed by each DRX workstation.
<b>User transactions</b>	A bar graph which shows a number of transactions performed by each user.



## Chapter 18 : Reports

The reports tab allows administrators to view detailed logs of performed pill counting transactions. Reports can be sorted by user, or a particular DRX workstation. Each report is displayed based on a selected time frame (Today, This week, This monthly, This year, All, Select range).

<b>All transactions</b>	Details of all transaction performed on DRX workstations.
<b>User transactions</b>	Transactions performed by selected users. To select a user, single click on the users employee ID in the “Select user table”.
<b>Unit transactions</b>	All transactions performed on a selected DRX workstation scale. To select a scale click on the workstation serial number or a workstation description name in the “Select unit” table.
<b>Failed verification</b>	Transactions which did not pass the Rx verification check.
<b>Miscounts</b>	All transactions which were miscounted based on the prescription size entered by the user.

### 18.1 Most Frequently Counted

<b>Most frequently drugs</b>	List of most frequently counted drugs on the Torbal DRX-5SXsystem. This report is based on transactions performed by all DRX workstations.
<b>Most frequently drugs by station</b>	List of most frequently counted drugs counted by a selected DRX workstation scale. To select a DRX workstation scale place a check mark next to the workstation serial number in the select units table. Workstations can be grouped by checking off more than one unit.

### 18.2 E-mail Reports

The email reports tab is used to configure automatic e-mail reporting and e-mail alerts.

<b>Instant email alert</b>	Instant email alerts are sent out to administrators automatically when a transaction fails Rx verification, a user causes a miscount, or when an APW updated is requested by a user which does not have APW update permissions.
<b>Automatic Reporting Via E-mail</b>	<p><b>Email recipients:</b> Type in the email addresses of the administrators or recipients which will receive system reports and email alerts.</p> <p><b>Reporting time:</b> Set the time at which you would like the Torbal Cloud server to automatically send out a report to the recipients. To enable reporting place a checkmark next to a desired occurrence period (i.e. Daily) Reports are generated automatically by the server at 12:00am and are sent at the selected time. Before enabling reporting be sure that SMTP settings have been configured and tested.</p> <p><b>Report details:</b> Configure system reports to your needs and requirements.</p>



## Chapter 19: Users

The User tab is used to manage existing users or set up new ones.

<b>Users</b>	<p><b>Scale Operators:</b> Users that are only allowed to access the scale. Scale operators are not allowed to sign into the Torbal Cloud admin panel.</p> <p><b>Account Administrator:</b> Users that can login the Torbal Cloud admin panel. This profile cannot be used to log into the scale.</p>
<b>User options</b>	<p><b>Add user:</b> Allows to add and set up new system users.</p> <p><b>Edit user:</b> Allows to edit existing users.</p> <p><b>Change password:</b> Allows to change an existing user password.</p> <p><b>Delete user:</b> Allows to delete an inactive user from the system.</p> <p><b>Barcode:</b> Allows scales operators to login into the scale with barcode ID.</p>



## Chapter 20: My Account

### 20.1 Settings

The “Settings” tab allows performing account configurations.

<b>Security Rules</b>	<b>Allow anonymous login</b> Enable only when the login feature is disabled on the DRX workstation scales, and users are not required to login with a password or an access card.  <b>Allow transaction aborting</b> When enabled users are allowed to abort a pill counting transaction by pressing the “F2” key at anytime. Aborted transactions are not logged by the server and are not visible in report logs.
<b>Transaction reports</b>	Allows to delete and purge unneeded transaction reports and logs.
<b>Report tab view</b>	Used to configure the appearance of reports displayed in the “Reports” tab. Unused or unnecessary columns can be disabled to make the report easy to read.
<b>Time</b>	Used to set Torbal server date and time. If the Torbal server is connected to the internet it is recommended to enable “Synchronize time with the internet”. If no internet connection is available, disable internet synchronization, and set the time and date manually.





## Chapter 21: Calibration

The DRX 5 Series scales are equipped with Automatic Internal Calibration. Calibration is automatically performed every time the scale is turned ON or initialized. Calibration is also performed every time the internal temperature of the scale changes by 1° C or at 2 hour time intervals (whichever comes first).

When first plugged into the electrical wall outlet, temperature calibration will be performed regularly as the internal temperature of the scale increases to its operating level. Once the temperature stabilizes temperature calibration will be performed less frequently. To maintain the internal temperature of the scale leave the unit plugged into the wall outlet and turn the scale OFF by using the ON/OFF key.

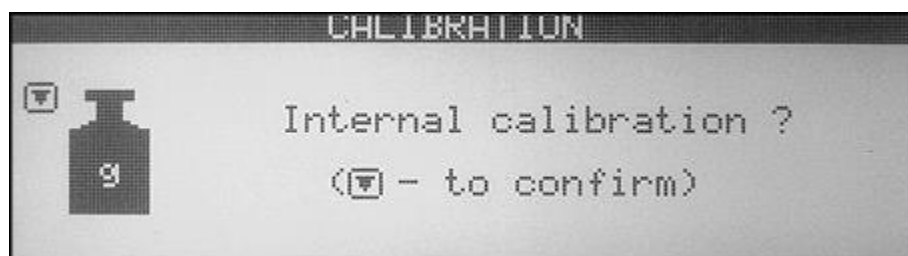
The calibration algorithm is designed not to interrupt the scale while it is in use. Therefore if calibration is required the scale will wait until the unit has been inactive for 60 seconds (pan free of any weight, keys have not been pressed, scale is stable).

The scale can be also calibrated at any time with the calibration key. To calibrate the scale follow the steps below:

1. Make sure the pan is free of any weight and the scale is stable.
2. Press the calibration key ▽.



3. The scale will display a command asking to confirm internal calibration.




4. In order to confirm internal calibration and proceed with calibration press the calibration key ▽ again.



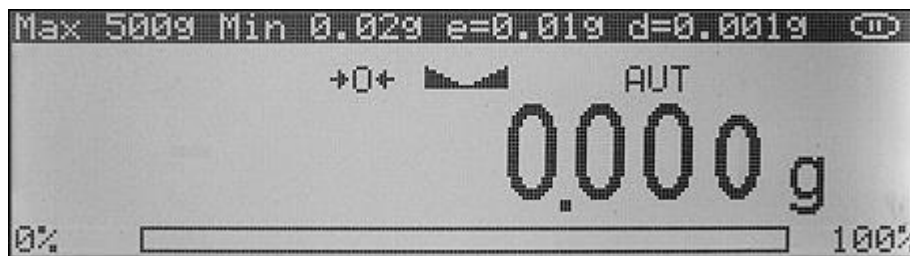


## Chapter 22: Weighing (F1)

1. To begin weighing, press the power button (I/⏻) to turn the scale on.
2. The scale will initialize and calibrate itself, and then automatically enter Weighing Mode. The scale is ready to begin weighing as soon as the stabilization (  ) and center of zero (→0←) indicators appear on the display, i.e.: If the scale initialized in a different mode, use the **F1** key to enter weighing.



3. When weighing, always place the mass in the middle of the pan. The weighed result may be taken when the stabilization indicator appears on the display.



### 22.1 Zeroing the Scale

1. The DRX is armed with the Auto Zero Setting Mechanism (AZSM). AZSM automatically maintains a center of zero condition within +/- .5d or 5mg.
2. The scale may be re-zeroed manually to obtain a new center of zero. To re-zero the scale manually if it is out of the AZSM range, make sure the weight and the stabilization indicator are shown on the display and press the zero key →0←.



3. The display will show a dotted line, which indicates that the scale has begun the re-zeroing process.



4. When finished re-zeroing, the scale will return to Weighing Mode and the display will indicate 0.000g. A new center of zero has been set, and the scale is ready for weighing.



## 22.2 Taring

1. If a container is used for weighing, it may be tared. In taring the container, the scale subtracts the weight of the container from the gross weight to obtain the net weight.
2. To tare the weighing container, place it in the middle of the pan. The container's weight will be shown on the display.



3. Once the stabilization indicator appears on the display, the container is ready to be tared. To tare the container, press the T key.

4. The display will show a dotted line which indicates the scale has begun the taring process.



5. When finished taring, the balance will return to Weighing Mode. The display will indicate 0.000g, and the NET indicator will be shown on the display signaling the next weight taken is a NET result.



**Note:** Taring the scale will reduce the capacity of the scale by the tare weight. The remaining capacity is displayed as a percentage.

**Note:** Do not touch or move the scale during the taring process.



## 22.3 Clearing a Tare

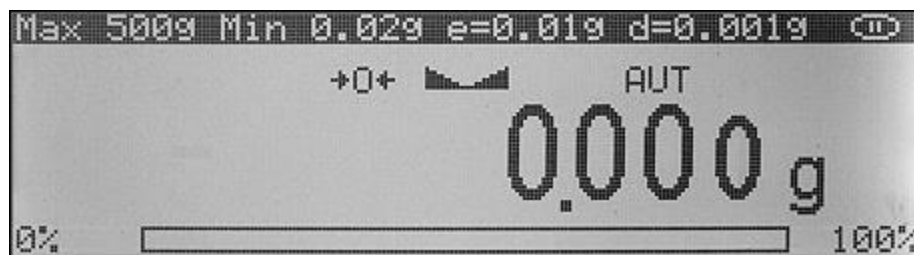
1. To clear the tare, remove the tared object along with the NET weight from the pan. The scale will then display a negative NET tare result.



2. To clear the tare, press the T button.
3. The display will show dashed lines, indicating the tare is clearing.



4. When finished clearing the tare, the scale will return to Weighing Mode.



**Note:** Clearing a tare will increase the capacity of the scale by the tare weight.





## Chapter 23: Compounding and Recipe Making

1. To enter the compounding mode, press F4.



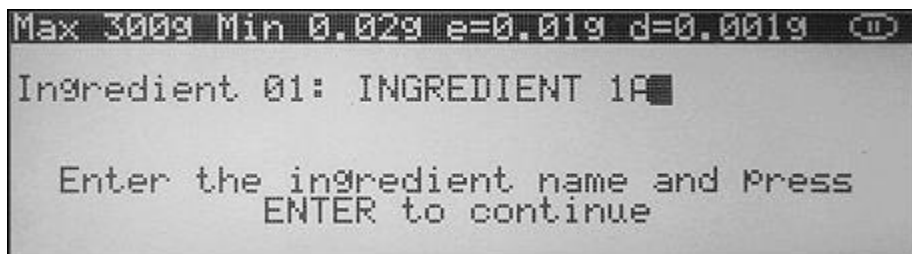
2. “TARE” will appear on the scale’s display, indicating that it is ready to tare a container.



3. Place a container on the pan and tare it by pressing the T key.



4. The scale is now ready for the first ingredient.
5. If “Ingredient Labeling” has been enabled, the scale will signal you to name the ingredient. To key in the ingredient name you may use the scale’s alphabet or an external keyboard (strongly recommended).





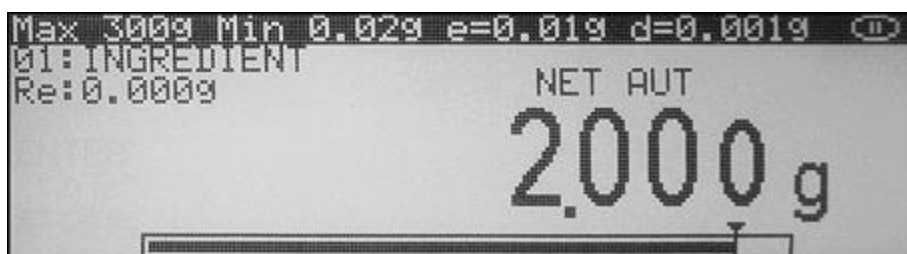
- If the “Remaining to Fill” feature is enabled, the scale will indicate to key in the weight of the ingredient which will be weighed. Using the scale’s keypad, key in the weight of the ingredient and press Enter.



Max 300g Min 0.02g e=0.01g d=0.001g (II)  
Ingredient 01: INGREDIENT 1A  
Remaining : 2.000 g  
Enter ingredient weight and Press ENTER  
to begin filling



- Once the information has been entered, the scale will indicate that you can begin adding the ingredient. Add the ingredient until the desired weight is displayed and the stability indicator appears on the display.

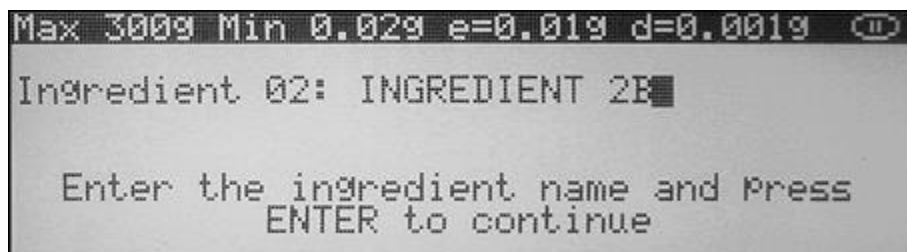


Max 300g Min 0.02g e=0.01g d=0.001g (II)  
01: INGREDIENT  
Re: 0.000g  
NET AUT  
2.000 g

- Once a desired weight is displayed press Enter to store the ingredient in the scale’s memory.



- Once the ingredient has been entered into the scale’s memory, the scale is ready for the next ingredient. Repeat Steps 1 through 7 for each ingredient.



Max 300g Min 0.02g e=0.01g d=0.001g (II)  
Ingredient 02: INGREDIENT 2E  
Enter the ingredient name and Press  
ENTER to continue

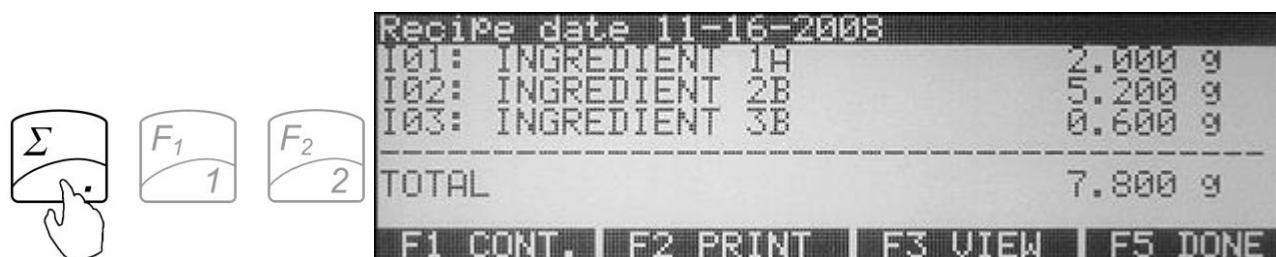
The ingredients are retained in the scale’s memory until the recipe has either been completed or cleared (CLR). An ingredient can be removed from the pan before the next ingredient is added.





## 23.1 Saving and Printing Recipes

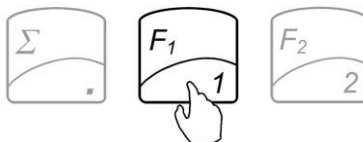
To view the recipe total, or to print and save recipes press the Sigma ( $\Sigma$ ) key before taring and entering an ingredient.



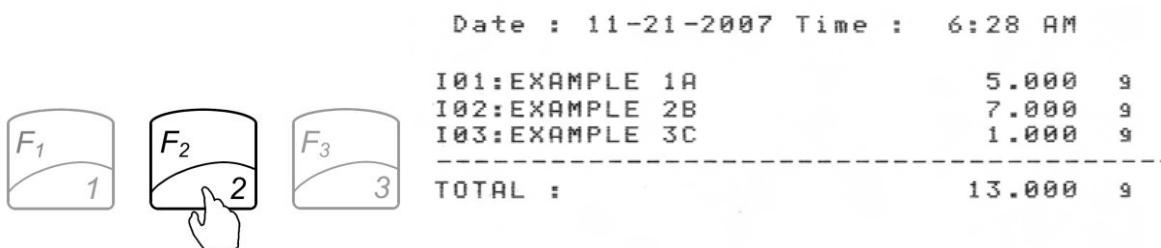
Once the sigma key has been pressed, the scale will display the current recipe. The recipe can be saved in the scales permanent and electronically erasable memory .

Select a desired command while the recipe is displayed:

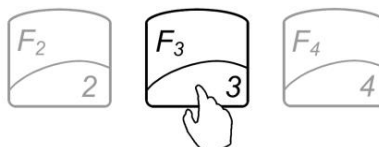
F1 Cont.: Press F1 to exit and continue adding ingredient to the recipe.



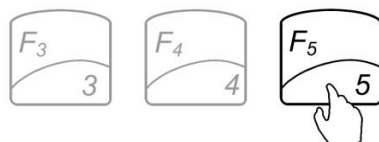
F2 Print.: Press F2 to print the recipe at its current stage.



F3 View.: Press F3 to view saved recipes.

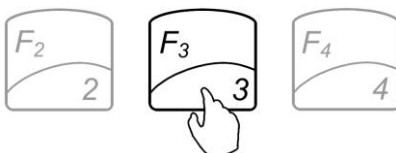


F5 Done.: Press F5 to finish and save the recipe.

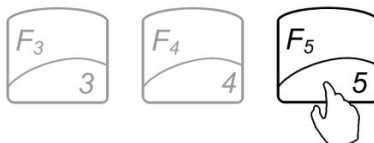




To save the recipe before exiting, press F3, as indicated on the display.



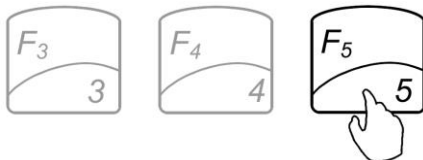
To exit without saving, press F5.



If F3 is pressed, the scale will display slots in which a recipe can be saved. By using the navigation keys select the slot into which you wish to save the recipe and press Enter. The scale will allow you to assign a name to the recipe; if a name is not necessary, leave the field blank and press Enter. To overwrite a previously saved recipe, simply select it with the navigation keys before saving a new one.

No.	Recipe name	Recipe date
001	<empty slot>	
002	<empty slot>	
003	<empty slot>	
004	<empty slot>	
005	<empty slot>	

To exit the Recipe view without saving it, select F5.





## 23.2 Using the Filling Meter

If the “Remaining to Fill” feature is enabled, the remaining to fill weight will be displayed in the upper left corner of the display.

The filling meter will assist you in the filling process. The filling meter helps to stop filling at the desired target weight which was entered as the remaining to fill weight.

1. Locate the arrow at the right end of the filling meter. The arrow represents the desired filling weight that had been programmed as the remaining to fill weight.
2. When an ingredient is added, the filling meter begins to move towards the arrow. The meter reaches the arrow when the desired weight has been placed on the pan.



3. The filling meter is non- linear. As the weight is placed on the pan, the meter begins to move slowly and becomes more sensitive as it approaches the desired weight. The resolution of the meter becomes greater as more weight is placed on the pan. This allows a more precise and accurate weight. Slow down the addition of weight into the pan when the meter is approximately three quarters full, since at that point you have added approximately 90% of the desired weight.





## Chapter 24: Using the Scale's Alphabet for Data Entry

If an external PC Keyboard is not connected to the scale and you are using “Production LOT” labeling, use the scale's keypad to enter letters of the alphabet and other characters. Each number key has an assigned set of characters and letters. Press the key until the desired letter or a character is displayed. Once selected, the scale will move to the next character automatically. For list of character and assigned numbers see the chart below.

KEY	CHARACTERS
<b>F1/1</b>	1 . , ‘ ? ! “ - ( ) / _ : ; + * = < > [ ] { }
<b>F2/2</b>	2 A B C a b c
<b>F3/3</b>	3 D E F d e f
<b>F4/4</b>	4 G H I g h i
<b>F5/5</b>	5 J K L j k l
<b>/6</b>	6 M N O m n o
<b>/7</b>	7 P Q R S p q r s
<b>/8</b>	8 T U V t u v
<b>MENU/9</b>	9 W X Y Z w x y z
<b>/0</b>	0 double press for space

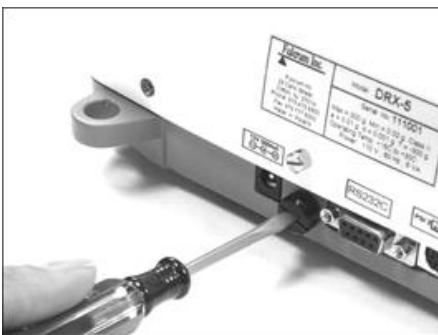


## Chapter 25: Sealing the scale

Depending on the laws of the state in which it is used, the scale may have to be sealed by a Weights and Measures official. The scale can be sealed either with paper or with wire.

### 25.1 Paper Seal

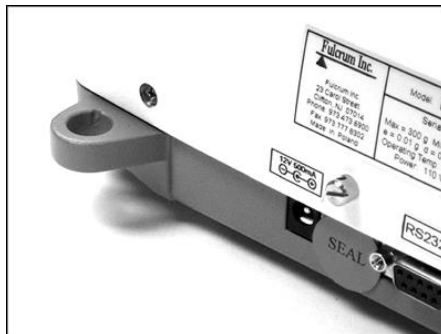
1. To seal the scale with a paper seal or a sticker, gently use a flathead screwdriver to remove the calibration wire seal screw located in the rear of the scale.



2. Once the wire seal screw has been removed and the calibration switch exposed, gently insert the flush sealing screw provided with the scale in the place of the wire seal screw.



3. Once the flush sealing screw is in place, the paper seal can be simply placed over the opening as shown in the picture below.



**WARNING:** Do not attempt to screw the flush sealing screw all the way in. Stop when the screw is flush with the casing of the scale.

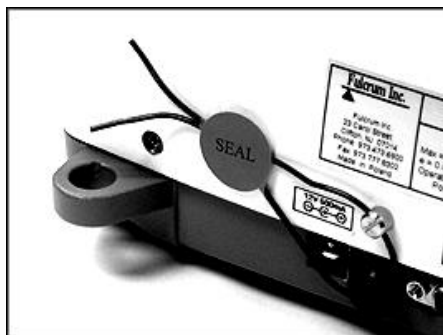


## 25.2 Wire Seal

1. To seal the scale with a wire seal, insert the wire into the opening of the calibration screws located at the rear of the scale.



2. The seal may then be placed over the wire. Do not attempt to remove the calibration screw as it will rip the wire and break the seal.







## Chapter 26: Common Errors and Troubleshooting

Error	Cause	Explanation / Solution
<i>Load error!</i>	Scale load at start up exceeds 10% of the scale MAX capacity	The pan was not empty while the scale was initiating at startup. Clear the pan and restart the scale.
<i>Capacity exceeded!</i>	Scale range exceeded	The scale has exceeded its weighing capacity. Reduce the weight.
<i>Zero range exceeded!</i>	Attempt to zero the scale that is beyond the scale's Zero range	Reduce the weight to be zeroed and try again.
<i>Tare range exceeded!</i>	Attempt to tare the scale that is beyond the Tare range	Place a weight on a pan before taking a tare.
<i>Tare value not cleared!</i>	Attempt to zero the scale without clearing a prior tare	Remove weight from pan and clear store tare values.
<i>Unit weight too low!</i>	In Pill Counting Individual sample weight is less than 3e	Be sure that the individual piece weight is greater than 3e

<i>Load error! (C01)</i>	Load error while initializing. The pan mass is below 10% of the stored value.	Do not touch or move the scale while calibration is in progress. The pan MUST be empty and properly installed.
<i>Load error! (C02)</i>	Load error while initializing. The pan mass is over 10% of the stored value.	Do not touch or move the scale while calibration is in progress. The pan MUST be empty and properly installed.
<i>Load error! (C03)</i>	Load error while calibrating. The internal calibration mass is below 10% of the original stored mass.	Do not touch or move the scale while calibration is in progress. The pan MUST be empty and properly installed.
<i>Load error! (C04)</i>	Load error while calibrating. The internal calibration mass is over 10% of the original stored mass.	Do not touch or move the scale while calibration is in progress. The pan MUST be empty and properly installed.
<i>Load error! (C05)</i>	Load error while performing second tare during calibration. Mass of the pan is less by more than 1e from the first stored value.	Do not touch or move the scale while calibration is in progress. The pan MUST be empty and properly installed.
<i>Load error! (C06)</i>	Load error while performing second tare during calibration. Mass of the pan is over by more than 1e from the first stored value.	Do not touch or move the scale while calibration is in progress. The pan MUST be empty and properly installed.
<i>Load error! (C07)</i>	Load error during second calibration. The difference on the internal calibration mass from the first to the second calibration is more than 1e.	Do not touch or move the scale while calibration is in progress. The pan MUST be empty and properly installed.
<i>No external calibration! (C08)</i>	Initial internal calibration test not permitted without prior external calibration	Contact Technical Support
<i>Calibration failure! (C09)</i>	Internal calibration failed because of timeout in final calibration stage (timeout in 30 seconds without stabilization)	Contact Technical Support

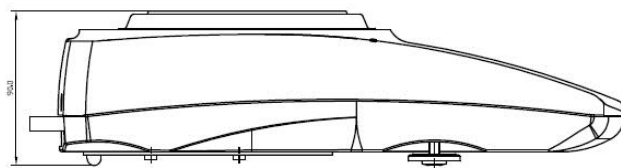
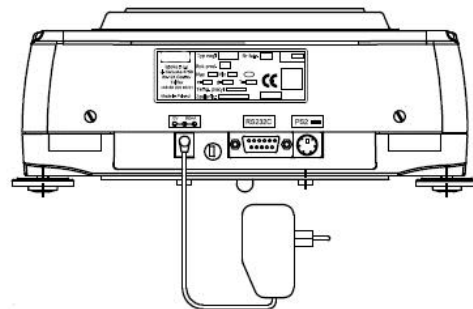
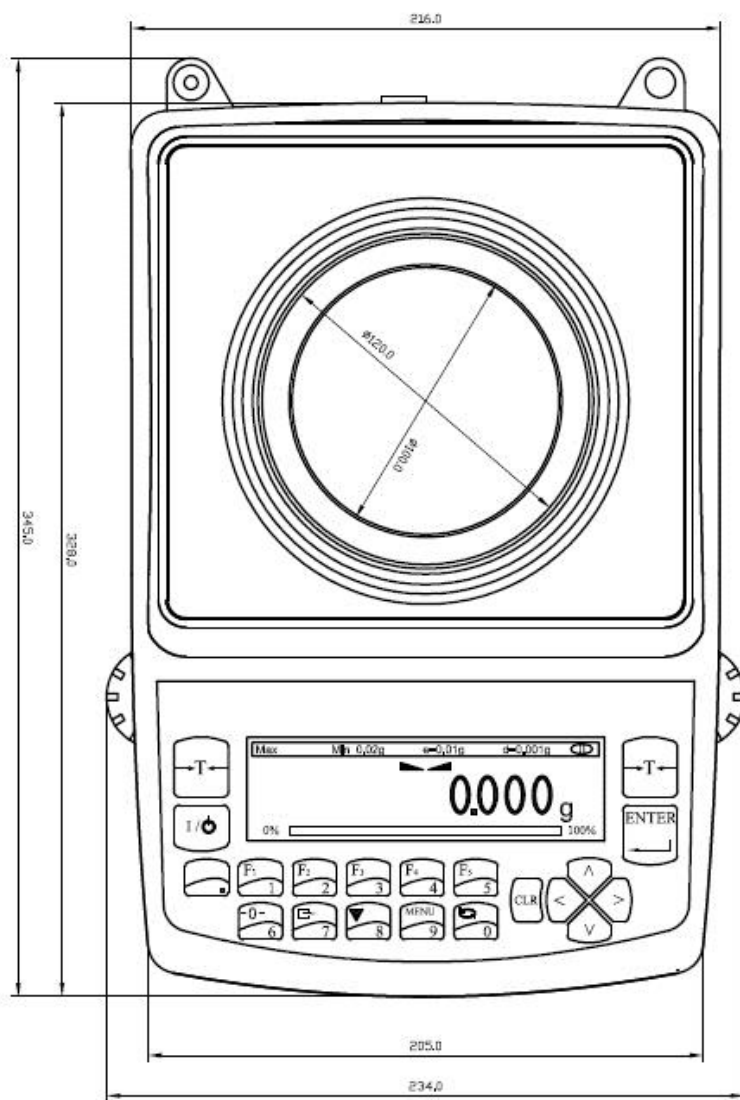


If any of the following errors are displayed, please contact technical support at (973)-473-6900

<i>EEPROM1 Error</i>	EEPROM1 memory error (shortage of memory, memory is damaged, or check sum error)
<i>EEPROM2 Error</i>	EEPROM2 memory error (shortage of memory, memory is damaged, or check sum error)
<i>EEPROM Error!</i>	EEPROM1 or EEPROM2 memory error
<i>CRC Error xx</i>	Check sum error number xx in EEPROM memory
<i>Service switch OFF!</i>	Attempt to access the Service mode with the Service Switch in the OFF position
<i>A/D range exceeded!</i>	A/D converter range exceeded
<i>A/D converter read error!</i>	No response from A/D converter
<i>Temperature sensor error!</i>	No response from the temperature sensor
<i>Service switch ON!</i>	Attempt to access the Service Mode without a service command



## Chapter 27: Technical Information





## Chapter 28: Maintenance

### Cleaning and maintaining your Prescription Scale:

- Before cleaning the scale always unplug the A/C adapter from the electrical outlet.
- Use a soft, slightly damp cloth to clean the exterior housing of your scale,.
- Wipe the scale gently. Do not allow any liquid to enter into the scale.
- Do not apply extensive pressure to the LCD display.
- Do not use chemicals or benzene when cleaning the surface. Corrosive chemicals may damage the finish.
- Alcohol may be used only to clean the scale's stainless steel pan or the draft ring.

## Chapter 29: Accessories

Description	Part No.
Draft Shield Cover	301055
Dust Cover	301056
RXP-4 Thermal Printer	301060
RS232 Split Cable	301057

## Chapter 30: Replacement Parts

Description	Part No.
A/C Adaptor	301053
Pan Assembly	501094
RS232 Printer Cable	301050
Scanner w/ Cable	701108
Server Power Supply	701103
Network Patch Cables	701106
User Access Cards	n/a (User Access Cards)



## Chapter 31: Limited Warranty

### **PURCHASER'S 12-MONTH WARRANTY**

Warranty is valid only if the attached warranty registration card is completed and returned within 30 days.

This product is a precision device made to exacting standards of scientific accuracy. It is guaranteed to have been adjusted and inspected for proper workmanship and performance, and certified for its currently advertised specifications before shipment.

Fulcrum Products are warranted against defects in material and workmanship under normal use and service. This warranty is extended only to the first purchaser. This limited warranty will not apply if, upon inspection, it is found that the product was tampered with, misused, overloaded, or abused. mishandled, placed in an improper environment, improperly installed or adjusted, used for a purpose other than that for which it was designed, or repaired by unauthorized personnel.

Fulcrum's liability under this warranty is limited to furnishing labor and parts necessary to remedy the defect covered by this warranty and restore the product to normal operating condition. Purchasers may be charged a minimum repair fee for in-warranty products returned for repair if those products are determined to be problem free.

To make a claim under this limited warranty, obtain an RMA number from Fulcrum and return the product, carefully packed in its original packaging, shipping prepaid, with the RMA number written on the return package.

# Fulcrum Inc.



**Fulcrum Inc.**

100 Delawanna Ave. Suite 120

Clifton, NJ 07014

Tel. (973)473-6900

Fax. (973)777-8302

[www.fulcruminc.net](http://www.fulcruminc.net)

[www.torbalscales.com](http://www.torbalscales.com)