



# Counting Scale

## USER MANUAL

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# INSTRUCTIONS FOR USE

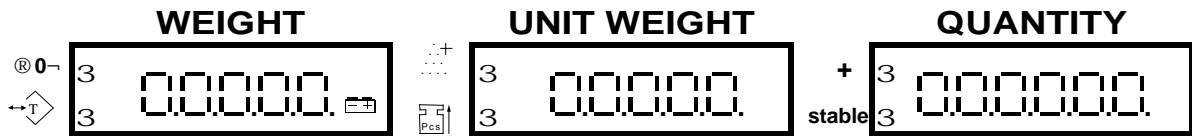
- 1) Please keep the scale in a cool and dry place. Do not store at high temperatures.
- 2) Please keep the scale clean and free from insect infestation.
- 3) Avoid objects impacting with the scale.
- 4) The load placed on the weigh pan must not exceed the maximum weighing capacity of the scale.
- 5) If the scale is not going to be used for some time, please clean it and store it in a plastic bag in dry conditions. A desiccant sachet may be included to prevent moisture build up.
- 6) If the scale is not going to be used for some time, the internal rechargeable battery should be recharged every three months. (If using dry batteries, take the dry batteries out before storing)
- 7) Remove the plastic drip cover from the scale for best accuracy.

# PREPARING TO USE THE SCALE

1. Locate the scale on a firm level surface free from vibrations for accurate weight readings.
2. Adjust the four levelling feet to set the scale pan level using the spirit level bubble located at the front of the scale.
3. Avoid operating the scale in direct sunlight or drafts of any kind.
4. If possible avoid connecting the scale to ac power outlet sockets which are adjacent to other appliances to minimise the possibility of interference affecting the performance of the scale.
5. Remove any weight that might be on the weigh pan before the scale is switched on and avoid leaving weight on the pan for long periods of time.
6. Once the scale has been switched on, it will go through a LCD display test and then re-zero to be ready for use.
7. The scale requires 15~20 minutes warm up before operation to ensure best accuracy.
8. Please note when  symbol appears on the screen, the internal battery needs to be recharged.
9. All goods weighed should be placed in the centre of the weigh pan for accurate weighing. The overall dimensions of the goods being weighed should not exceed the dimension of the weigh pan.

# CHAPTER 1 PRODUCT INTRODUCTION

## 1-1 DISPLAYS



## DIGITAL DISPLAYS

### 1. WEIGHT: (5 digits)

Weight of objects on the weigh pan or totalised weight.








### 2. UNIT WEIGHT: (5 digits)

Unit weight of objects on the weigh pan or number of weighing in the totaliser.

### 3. QUANTITY: (6 digits)

Quantity (count) of objects on the weigh pan or total quantity in the totaliser.

## SYMBOL ICONS “3”

1.  or Net or Tare : “Tare” displays the deduction of the container weight
2.  or Zero : “Zero” indication
3.  or M+ : “M+” Totaliser
4.  or ~ : “Stable” indication
5.  : If the piece weight is smaller than “Minimum Sampling Weight”, “3” will be displayed. In order to clear the symbol “3”, increase the size of the sample.
6.  : If the piece weight is smaller than “Minimum Unit Weight”, “3” will be displayed. The scale still weighs even though the piece weight is too small, this may affect the count accuracy.
7.  : “Low Power” warning.

## PERFORMANCE:

**High Precision Counting Scale** (1/15,000 and 1/ 30,000 Display Resolution)

Minimum Sampling Weight = at least 20d. Minimum Unit Weight = at least 0.2d

**Standard Counting Scale** (1/6,000 Display Resolution)

Minimum Sampling Weight = at least 40d. Minimum Unit Weight = at least 0.8d



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(d=division)



# 1-2 KEYBOARD FUNCTION

## STANDARD TYPE

7	8	9	SMPL	Q'TY PST
4	5	6	UNIT W.T.	PST CE
1	2	3	Z	M+
0	.	CE	T	MC

This is a "CLEAR" key to delete all the High Limit values. Please refer to page 21.

## ADDITIONAL FUNCTIONS TYPE I D Dual Weighing Unit

7	8	9	SMPL	Q'TY PST
4	5	6	UNIT W.T.	lb/kg
1	2	3	Z	M+
0	.	CE	T	MC

This Key is to select weight units of "lb" or "kg". Please refer to page 21.

7	8	9		
4	5	6		lb/kg
1	2	3		
0	.	CE		

This Key is to select weight units in "lb" or "kg". Please refer to page 21.





### ADDITIONAL FUNCTIONS TYPE II P Unit Weight Preset

7	8	9	SMPL	Q'TY PST
4	5	6	UNIT W.T.	U.W. PST
1	2	3	Z	M+
0	.	CE	T	MC

This key selects 10 pre-set stores of piece weight. Please refer to page 24.

7	8	9		
4	5	6		U.W. PST
1	2	3		
0	.	CE		

This key selects 10 pre-set stores of piece weight. Please refer to page 24.



# COMBINATION TYPE P Dual Weighing Units + Preset Piece Weight Stores

7	8	9	SMPL	Q'TY PST
4	5	6	UNIT W.T.	U.W. PST
1	2	3	Z	M+
0	.	CE	T	MC

This is a dual function key which selects:  
Preset piece weight stores and weighing units selection.  
Please refer to page 27.

7	8	9		
4	5	6		U.W. PST
1	2	3		
0	.	CE		

This is a dual function key which selects:  
Preset piece weight stores and weighing units selection.  
Please refer to page 27.



## 1-3 POWER SOURCES

### ***Applicable Power Sources***


1. AC 115V  $\pm$  10%
2. AC 230V  $\pm$  10%
3. 6V/1.2Ah Rechargeable battery
4. 6V/4Ah Rechargeable battery
5. 6V/10Ah Rechargeable battery
6. 9V DC via mains adapter

### ***Power Consumption***

Approximately DC 20 mA

Approximately DC 40 mA (With display Backlight)

### ***Low Power Warning***

When the  symbol is displayed, it indicates that the scale needs to be recharged or the dry batteries need to be replaced.

If the scale is not recharged after the low battery symbol is displayed, the scale will switch itself off after 20-30 minutes.

- 4** Red light: Scale needs to be recharged.  
Green light: Scale is recharged.



# CHAPTER 2 OPERATION

## 2-1 SWITCH SCALE ON

To switch on the scale, ensure that the weigh pan is empty and press the ON/OFF switch towards the (“ | ”) position and the scale will power on and set zero ready for weighing or counting operations.

- 4 If the scale has a RS232 option fitted, the interface card number will be displayed during the power up sequence.

## 2-2 SWITCH SCALE OFF

To switch the scale off, press the ON/OFF switch towards the (“ | ”) position.

## 2-3 DISPLAY BACKLIGHT

### AUTO BACKLIGHT

Press **[Z]** key, the unit weight displays **[E n t e r]** followed by pressing **[5]**  
When the weight is over 10 divisions or any key is pressed, the display backlight will be switched on. When the weight returns to zero or the weight on platform is less than 10 divisions, the display backlight will switch off after 5 seconds.

### BACKLIGHT ON

Press **[Z]** key, the unit weight displays **[E n t e r]** followed by pressing **[4]**  
Backlight is on all the time.

### BACKLIGHT OFF

Press **[Z]** key, the unit weight displays **[E n t e r]** followed by pressing **[6]**  
Backlight is off.

- 4 The backlight mode is stored in memory and will be restored when the scale is switched off and back on again.



## 2-4 SAMPLING SPEED & BACK TO ZERO SETTING

Sampling speed: 01 ~ 15 (01 = slow, 15 = Very fast)

The slower the sampling speed the more accurate the count will be.  
The faster the sampling speed the less accurate the count may be.

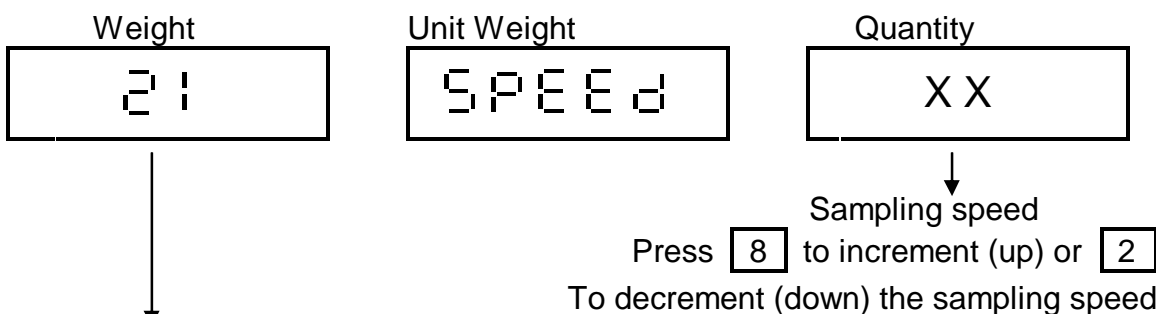
Zero display mask:

The standard auto zero tracking facility will normally ensure that the zero remains stable despite fluctuations in temperature or ac mains voltage etc. However in exceptional circumstances particularly mist conditions & other unstable environments a useful additional facility is available.

With the zero display mask it is possible to configure the scale not to show the first division of the weight. When configured the weight display will show zero as long as the weight is less than two display divisions.

1= 1<sup>st</sup> division is displayed as zero  
0= normal mode (1<sup>st</sup> division is displayed)

Press **[Z]** key, the unit weight displays **[E n t e r]** followed by pressing **[8]**



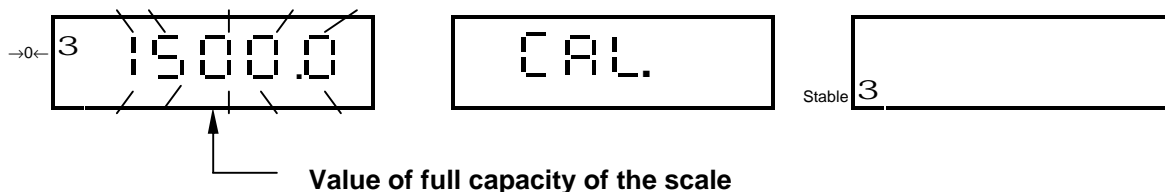
Zero display mask:

Press **[4]** to select 0 (normal mode) or  
**[6]** to select 1 (1<sup>st</sup> division is displayed as zero)

Press **[Q'TY PST]** to exit and save the settings.

## 2-5 AUTO CALIBRATION

⌘ When the scale is at zero, press and hold **[.]** followed by pressing **[U.W.]** **[PST]** until the weight display shows the scale capacity flashing, then release the keys.



- Place weights on the scale equivalent to full load capacity. When the scale is stable, it will calibrate automatically. While the scale is counting back to zero, remove all the weights from the scale. The Calibration procedure is finished.

- 4** If full load is not available in weights it is possible to enter a weight value of less than full load. Enter the weight value to be used and then place the weight on the scale, when the reading is stable the scale will automatically calibrate. While the scale is counting back to zero, remove all the weights from the scale. The Calibration procedure is finished. The new calibration will be stored and recalled when the scale is switched off and on again.

Press **[CE]** key to exit from the calibration mode.

- 4** Restore to the default setting: When the Auto calibration is miss-operated, and the scale should be **restored** to the default setting, please hold **[CE]** key and press **[U.W.]** **[PST]** key, the default setting will be restored after the scale counting back to zero.

## 2-6 ZERO FUNCTION

Press the **[Z]** key to re-zero the display with no load on the weigh pan. When the zero is set correctly the “3” icon will be displayed adjacent to the (**à 0B**) symbol on the weight display.

The zero setting range is  $\pm 2\%$  of the capacity of the scale.



## 2-7 UNIT WEIGHT CALIBRATION

- ◆ Two methods of unit weight calibration are available depending on the scale configuration they are either:-
  1. Auto Calibration ⇒ if weight is over 10% of the last sampling value, the scale will automatically re-calculate the unit weight.

Example:

Say the current unit weight is 2.5g. If the next batch of product of the same type has a slightly different unit weight say 2.8g, then because the difference between the two unit weights is greater than 10% the scale will average the two values and set a new unit weight of 2.65g. If the difference in unit weights are less than 10% then the unit weight is not re-calculated.

2. Manual Calibration ⇒ Press SMPL key to determine the unit weight.

- ◆ The Auto Unit Weight calibration is setting is a factory set option. If it is set to off then the auto unit weight calculation is disabled.

## 2-8 COUNTING

The piece weight of the items to be weighed must be established before counting operations are possible.

### 2-8-1 The Unit Weight of Object is Unknown

☒ Place a sample quantity of items on the scale

118.3

Sampling Weight

0

0

- Enter the number of items in the sample

118.3

Sampling Weight

100

Number Entered

i | ð

- 4 The quantity display will flash for about 3 seconds, whilst it is flashing press the **SMPL** key to complete the sampling routine. Otherwise, the number entered and displayed by the unit weight display will be used as the piece weight when the display stops flashing.

☒ When the quantity display is flashing, press the **SMPL** key.

118.3

Sampling Weight

SAMP

-----

- Once the scale stabilizes, the count is shown on the quantity display.

118.3

Sampling Weight

1.1833

Unit Weight

Stable 3

100

Sampling Quantity entered

### 2-8-2 The Unit Weight of Object is Known

☒ Enter the known weight of the item

③ 0.0

③

1.833

Unit Weight

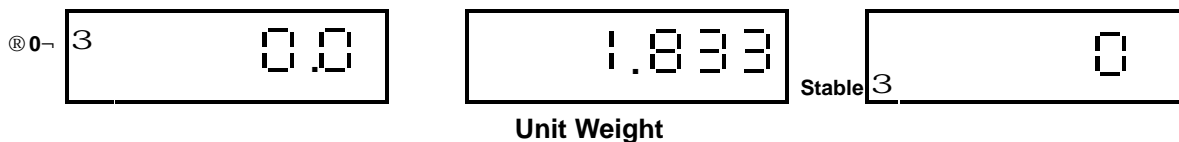
Stable 3

i | ð





- Press the **UNIT W.T.** key, the count is shown on the quantity display.

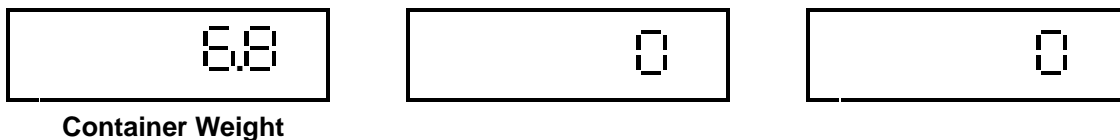


- ◆ The larger the sample weight is, the more accurate the count will be.
- ◆ With both the “Unit weight” and “Quantity” displays showing zero, pressing either the **UNIT W.T.** key or the **SMPL** key will recall the latest piece weight value.

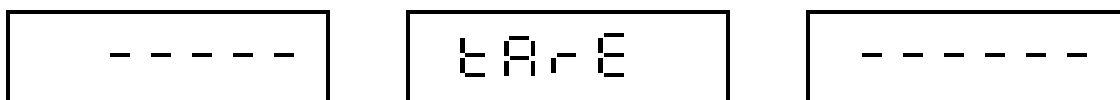
## 2-9 DEDUCTION OF CONTAINER WEIGHT

### 2-9-1 The Weight of Container is Unknown ( Tare )

☞ Place the container onto the scale.



- Press **T** Key.



☞ Once the scale stabilizes, it will display the net weight and the “3” icon next to the NET symbol will be displayed.



### 2-9-2 Clear Tare Value

When the container is removed from the scale, the weight display will show a negative sign. Press the **T** key again to clear tare value and the weight display will reset to zero, the “3” icon adjacent to the NET symbol will go off.

### 2-9-3 The Weight Container is Known (Pre-set Tare)

The User mode function to operate the “Pre-set tare” is to set “0” ⇒ The scale can not perform a pre-set tare when there is a weight on the scale.

☒ Nothing is placed on the scale.

③	00	0	Stable ③	0
---	----	---	----------	---

• Press **T** key.

③	00	P r e T A R	Stable ③	- - - - -
---	----	-------------	----------	-----------

Ž Enter the weight value of the container.

③	8.8	P r e T A R	Stable ③	- - - - -
	<b>Weight entered</b>			

• Press **T** key.

→T	- 8.8	0	Stable ③	- - - - -
----	-------	---	----------	-----------

The User mode function to operate the “Pre-set tare” is to set “1” ⇒ The scale can perform a pre-set tare when there is a weight on the scale.

☒ An object is placed on the scale.

177.5	1.7752	Stable ③	100
<b>Object Weight</b>	<b>Unit Weight</b>		<b>Object Quantity</b>

• Enter the weight value of the container

177.5	1.0	Stable ③	i 177.0
	<b>Weight Entered</b>		

Ž Press **T** key.

→T	176.5	1.7752	Stable ③	99
	<b>Net weight deducting container</b>	<b>Unit Weight</b>		<b>Deducted container Q'ty</b>



## 2-9-4 Clear The Pretare Value

When the container is removed from the scale, the weight display will show a negative sign. Press the  key to clear pre-tare value and the weight display will reset to zero, the “3” icon adjacent to the NET symbol will go off.

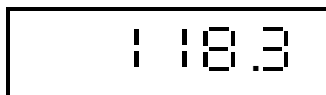


## 2-10 TOTALISING

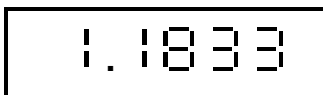
- 4 The totalising function can be used up to a maximum of 99 times before it must be reset. The totalising display is limited to six digits maximum.

### 2-10-1 Quantity totalising

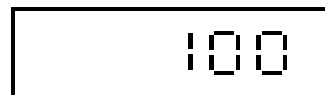
☒ Place a desired object onto the scale



Object Weight

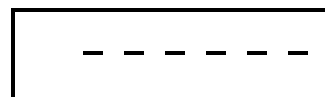
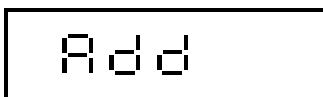
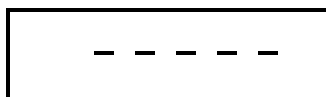


Unit Weight

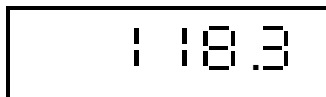


Object Q'ty Placed on Scale

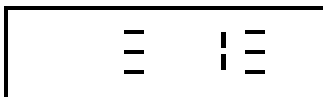
- Press **M+** Key



☒ Once the scale is stable.



Total Weight Totalised

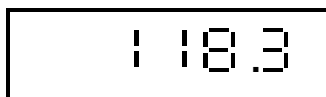


Total Number of Additions

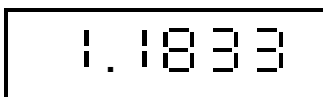


Total Quantity Totalised

- After 3 seconds, the scale will return to the counting mode.



Object Weight



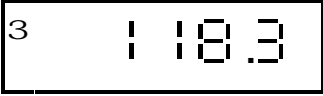
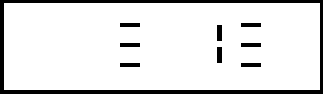

Unit Weight



Object Q'ty Placed on Scale

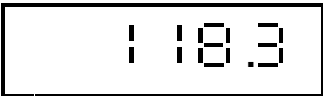


### 2-10-2 Recall Quantity Totalised

With both the weight and the unit weight displaying zero, press **M+** key to recall the totalised value.

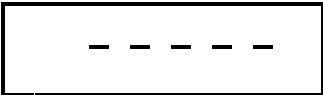

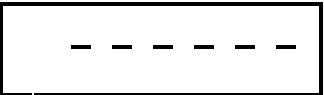
 <p>③ 118.3</p>	 <p>11</p>	 <p>M+ 3 3 100</p>
Total Weight Totalised	Total Number of additions	Total Quantity Totalised

### 2-10-3 Weight Totalising

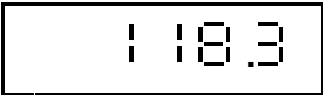
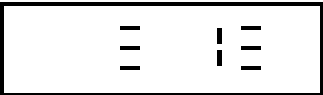

☒ With the unit weight display showing zero, place an object onto the scale.

		
Object Weight		

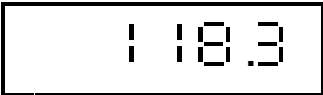


- Press **M+** key.

		
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☑ Once the scale has stabilized.

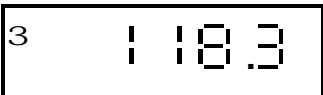
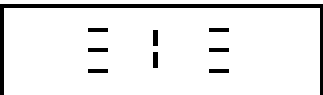

 <p>118.3</p>	 <p>11</p>	 <p>M+ 3 3 0</p>
Total Weight totalised	Total Number of additions	

- After 3 seconds, the scale will return to the weighing mode.

 <p>118.3</p>	 <p>0</p>	 <p>M+ 3 3 0</p>
Object Weight		

### 2-10-4 Recall Weight Total

With both the weight and the unit weight displays showing zero, press **M+** key to recall the totalised values.

 <p>③ 118.3</p>	 <p>11</p>	 <p>M+ 3 3 0</p>
Total Weight Totalised	Total Number of Additions	



## 2-10-5 Clear all Totalised Values

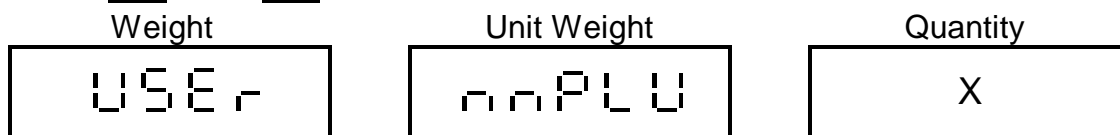
Press the MC key to clear all of the totalised values and the “3” symbol adjacent to the M+ icon on the overlay will switch off. The totals for weight, number of additions and quantity are all cleared back to zero.

NOTE: All totals will be lost if the scale is switched off.

# CHAPTER 3 USER INTERFACE SETTING

## 3-1 **M+** KEY ACTION

Press **Z** then **1** twice.



Press **0**, **1** or **2** to select the required mode

0 = When **M+** key is pressed, the display will show the totalised value. Then, the scale will count back to zero after 3 seconds.

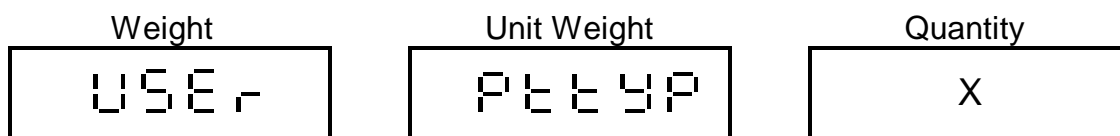
1 = When **M+** key is pressed, the display will show the totalised value. Then, the scale will count back to zero when the **CE** key is pressed.

2 = When **M+** key is pressed, the beeper only will sound and the display won't show the totalised value.

To exit and save the entry, press the **.** key

## 3-2 PRE-SET TARE

Press **Z** then **1** followed by **2**



Press **0** or **1** to select the required mode

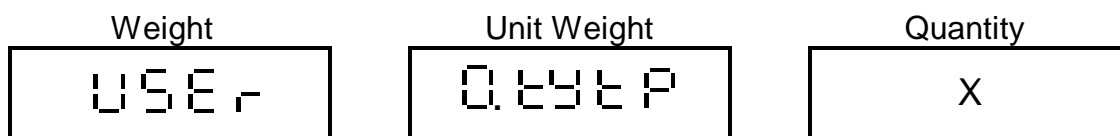
0 = Pre-set Tare function is not available when there is an object on the scale.

1 = Pre-set Tare function is available when there is an object on the scale.

To exit and save the entry, press the **.** key

### 3-3 PRE-SET QUANTITY CONDITIONS

Press **[Z]** then **[1]** followed by **[3]**



Press **[0]** or **[1]** to select the required mode

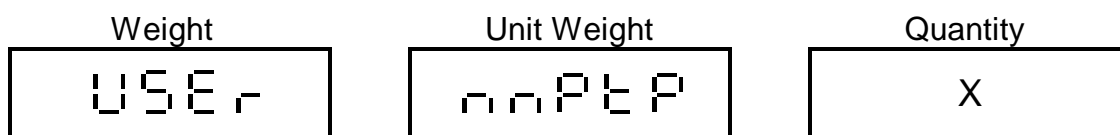
0 = The quantity will be accepted by the scale only when the weight is stable.

1 = The quantity will be accepted by the scale even if the weight is un-stable.

To exit and save the entry, press the **[.]** key

### 3-4 **[M+]** OPERATION

Press **[Z]** then **[1]** followed by **[4]**



Press **[0]** or **[1]** to select the required mode

0 = M+ will be operate when the weight is stable.

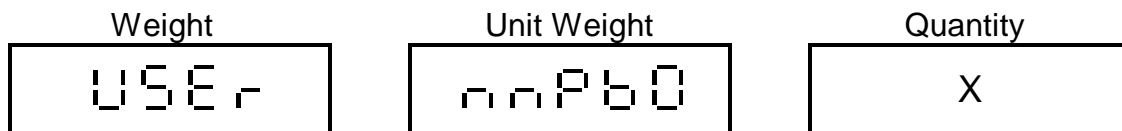
1 = M+ will be operate even when the weight is un-stable.

To exit and save the entry, press the **[.]** key



### 3-5 **M+** CONTINUOUS OPERATION (Only After Return to Zero)

Press **Z** then **1** followed by **5**



Press **0** or **1** to select the required mode

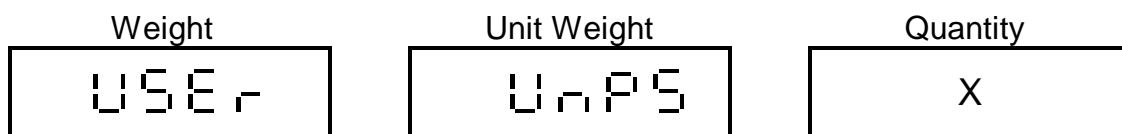
0 = After **M+** operation, next **M+** operation is allowed only after the scale Returns to Zero.

1 = After **M+** operation, next **M+** operation is allowed immediately, without the scale Returning to Zero.

To exit and save the entry, press the **.** key

### 3-6 MULTIPLE UAGE KEY U.W.PST / (kg/lb) FUNCTION SELECTION

Press **Z** then **1** followed by **6**



Press **0** or **1** to select the required mode

0 = Momentary press of "the key" operates the weighing units. (Major function)  
 Press and hold "the key" for 3 seconds operates the U.W.PST function. (Minor function)

1 = Momentary press of "the key" operates the U.W.PST function. (Major function)  
 Press and hold "the key" 3 sec. is dual units selection. (Minus function)

To exit and save the entry, press the **.** key

Note: The nature of the operation of this function will depend on the configuration of



EXCELL®

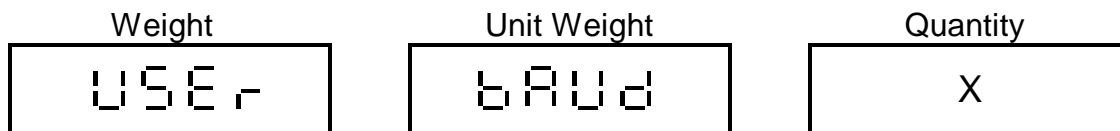
EXCELL PRECISION CO., LTD.

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the scale.

### 3-7 BAUD RATE SETTING (for only with the serial interface)

Press **[Z]** then **[1]** followed by **[7]**



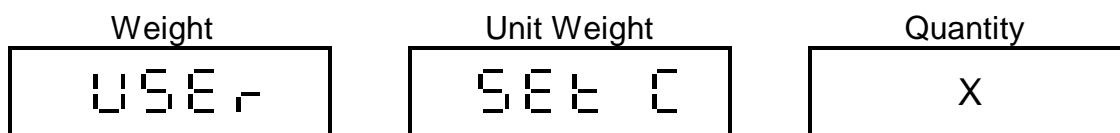
Press **[0]** ~ **[3]** to select the required baud

- 0 = 1200
- 1 = 2400
- 2 = 4800
- 3 = 9600

To exit and save the entry, press the **[.]** key

Transmit mode:

Press **[Z]** then **[1]** followed by **[8]**



Press **[0]** ~ **[3]** to select the required mode

- 0 = Press **[M+]** to transmit
- 1 = Continuous transmission
- 2 = Transmit only when weight is stable
- 3 = For EZ-2 printer

To exit and save the entry, press the **[.]** key



# CHAPTER 4 KEYBOARD TYPES

## 4-1 STANDARD TYPE

### 4-1-1 Quantity Preset

The scale can store a Hi Limit quantity value. The scale will make a warning beep and the unit weight window will display a blinking **-0.00-** if the quantity is over the Hi limit alarm value set.

#### Set the Hi Limit alarm value for Quantity Preset

##### Method 1 :

Place the sample object onto the weigh pan and increase the number of items gradually until the quantity reaches the desired Hi Limit alarm level. Press **Q'TY PST** key to store this "quantity preset" alarm value.

##### Method 2 :

Enter directly the Hi Limit quantity number using the keypad, then press the **Q'TY PST** key to store the value.

#### Clear the Hi Limit quantity value

To clear Hi Limit quantity value, press the **PST CE** key.

## 4-2 TYPE I D DUAL WEIGHING UNIT

### 4-2-1 Unit Selection

Press **lb / kg** key to select the weighing units required “lb” or “kg”.

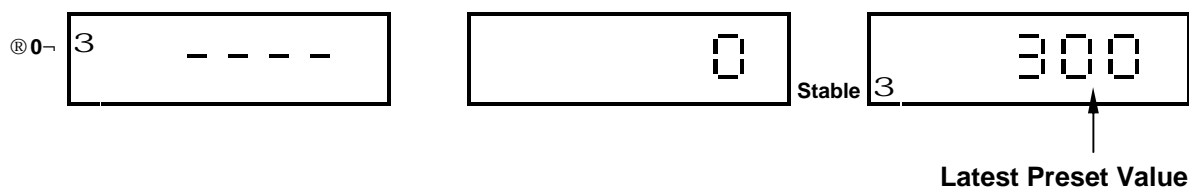
- ◆ The scale will save the current units when it is switched off and restore them when switched back on again.

### 4-2-2 Quantity Preset

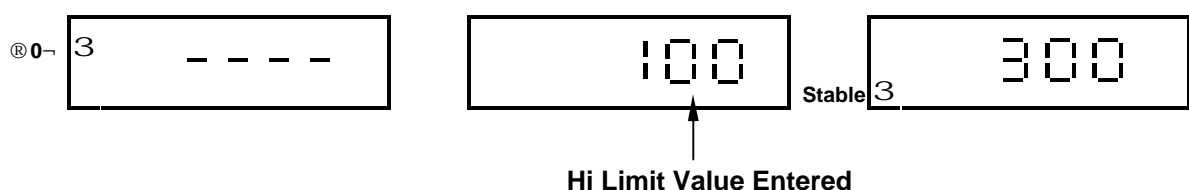
The scale can store a Hi Limit quantity value. The scale will make a warning beep and the unit weight window will display a blinking **-0.00-** if the quantity is over the Hi limit alarm value set.

#### Set the Hi Limit value for Quantity Preset

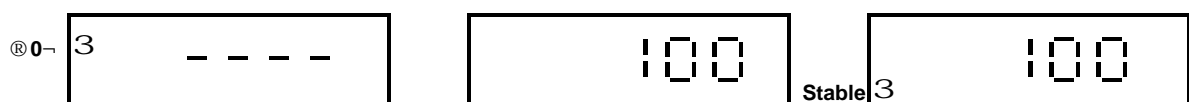
⌘ Press **Q'TY PST** key whether the scale has object on the weigh pan or not.



- Enter a desired Hi Limit value. Use **CE** key to correct the value entered.



⌘ Press **SMPL** key. Use **CE** key to correct the value entered.



- Press **Q'TY PST** key and the scale will return to counting mode.



### 4-2-3 Weight Preset

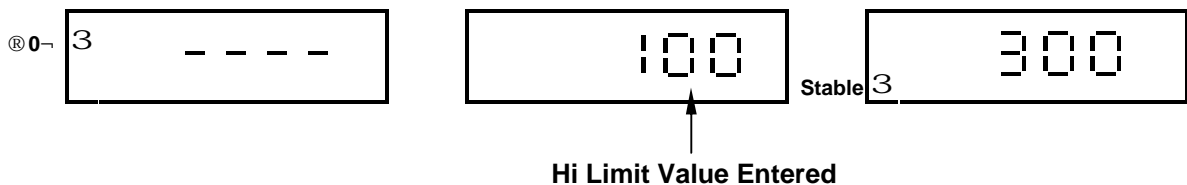
The scale can store a Hi Limit unit weight value. The scale will make a warning beep and the unit weight window will display a blinking **-LWPSE-** if the unit weight is over the Hi limit value stored.

#### Set the Hi Limit value for unit Weight

Ⓔ Press **Q'TY PST** key whether the scale has object on the weigh pan or not.

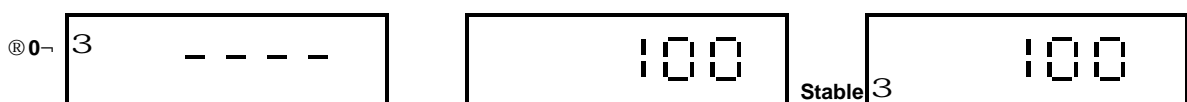


- Enter a desired Hi Limit value. Use **CE** key to correct the value entered.



4 The unit and the decimal points for the high limit value entered are the same as the value previously preset on the weight display.

Ž Press **UNIT W.T.** key. Use **CE** key to correct the value entered.



- Press **Q'TY PST** key, the scale will return to counting mode.



#### Clear the Hi Limit unit weight and quantity values

To clear the Hi Limit unit weight or Quantity preset enter "0" as the value in the appropriate entry field.



## 4-3 TYPE II $\bar{D}$ UNIT WEIGHT PRESET

### 4-3-1 Unit Weight Preset Stores

The scale can store 10 sets of unit weight presets. The stores are accessed using the number keys (  $\boxed{0}$  ~  $\boxed{9}$  ). Press the number key required and the display will show the unit weight previously saved in that store.

#### Set Unit Weight Preset

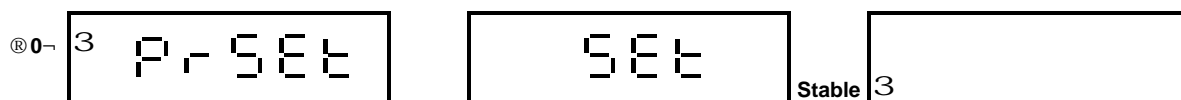
☒ Use the number  $\boxed{0}$  ~  $\boxed{9}$  to enter the unit weight value.



• Press  $\boxed{\text{U.W. PST}}$  key.



☒ Press  $\boxed{\text{U.W. PST}}$  key.



• Press any number  $\boxed{0}$  ~  $\boxed{9}$  key to save the unit weight in its store.



#### Recall the Unit Weight Preset

☒ Press  $\boxed{\text{U.W. PST}}$  key.



• Press any number  $\boxed{0}$  ~  $\boxed{9}$  key to recall the unit weight saved in its store.



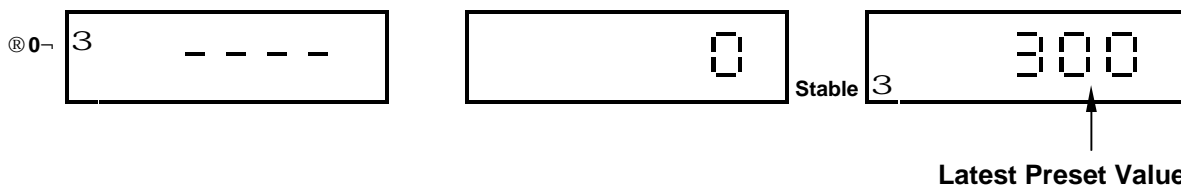


### 4-3-2 Quantity Preset

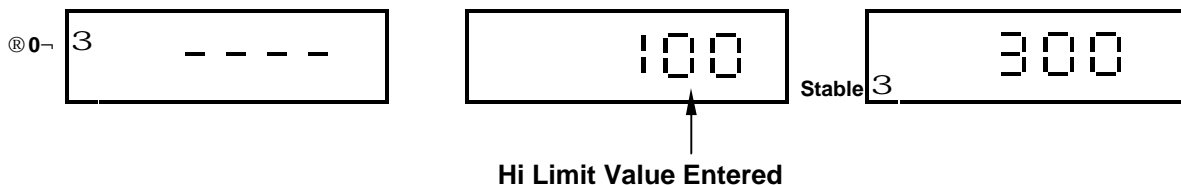
The scale can store a Hi Limit quantity value. The scale will make a warning beep and the unit weight window will display a blinking **-0.00-** if the quantity is over the Hi limit alarm value set.

#### Hi Limit Value for Quantity Preset

Press **Q'TY PST** key whether the scale has object on the weigh pan or not.



• Enter a desired Hi Limit value. Use **CE** key to correct the value entered.



Press **SMPL** key. Use **CE** key to correct the value entered.



• Press **Q'TY PST** key, the scale will return to counting mode.



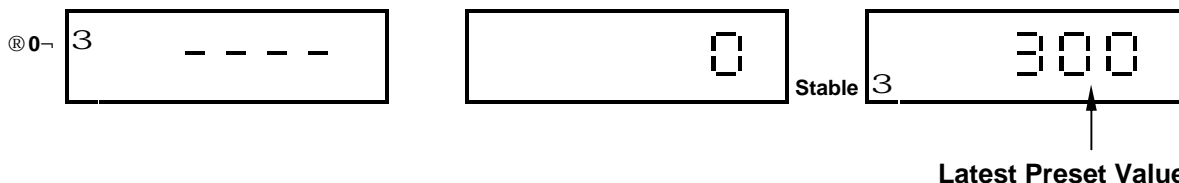


### 4-3-3 Weight Preset

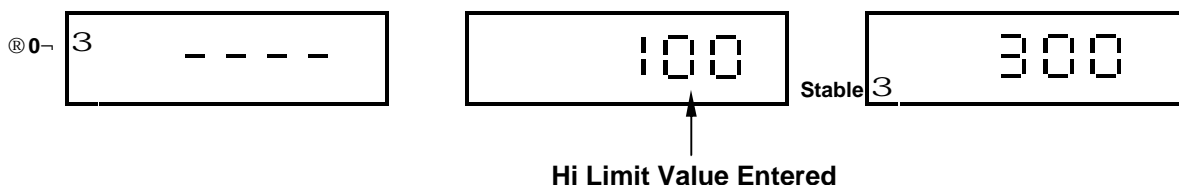
The scale can store a Hi Limit unit weight value. The scale will make a warning beep and the unit weight window will display a blinking **-LWPSE-** if the unit weight is over the Hi limit value stored.

#### Set the Hi Limit value for unit Weight

Press **Q'TY PST** key whether the scale has object on the weigh pan or not.



• Enter a desired Hi Limit value. Use **CE** key to correct the value entered.



4 The unit and the decimal points for the high limit value entered are the same as the value previously preset on the weight display.

Press **UNIT W.T.** key. Use **CE** to correct the value entered.



• Press **Q'TY PST** key, the scale will return to counting mode.










#### Clear the Hi Limit unit weight and quantity values

To clear the Hi Limit unit weight or Quantity preset enter "0" as the value in the appropriate entry field.

## 4-4 COMBINATION TYPE D DUAL WEIGHING UNIT + UNIT WEIGHT PRESET

7	8	9	SMPL	Q'TY PST
4	5	6	UNIT W.T.	U.W. PST
1	2	3	Z	M+
0	.	CE	T	MC

The combination key has two functions: Unit Weight and Unit Selection, please refer to INTERFACE section 6 below.

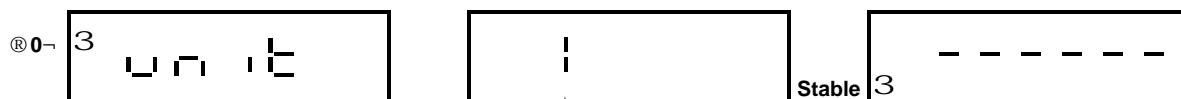
7	8	9		
4	5	6		U.W. PST
1	2	3		
0	.	CE		

The combination key has two functions: Unit Weight and Unit Selection, please refer to INTERFACE section 6 below.

### 4-4-1 Unit Selection

 Press the combination key.

(If the unit selection setting is a secondary function, press the combination key for about 3 seconds and the display will show the following)



Use the number 1 or 2 key to select 1 or

2

◆ Remarks : 1 ⇒ First unit

2 ⇒ Second unit

◆ The scale will save the current unit in use. At power on the last units in use will be used.

### 4-4-2 Unit Weight Preset Stores

The scale can store 10 sets of unit weight presets. The stores are accessed using the number keys ( **0** ~ **9** ). Press the number key required and the display will show the unit weight previously saved in that store.

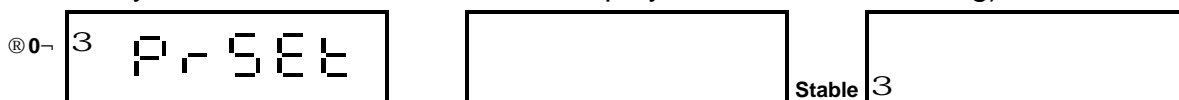
#### Set Unit Weight Preset

☒ Use the number **0** ~ **9** key to enter the unit weight value.



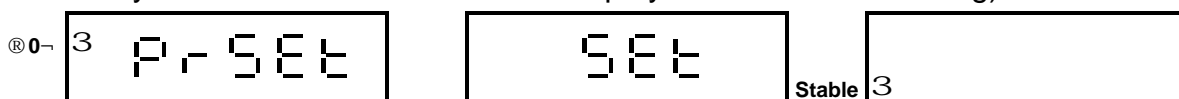
- Press the combination key.

(If the unit weight preset setting is a secondary function, press the combination key for about 3 seconds and the display will show the following)

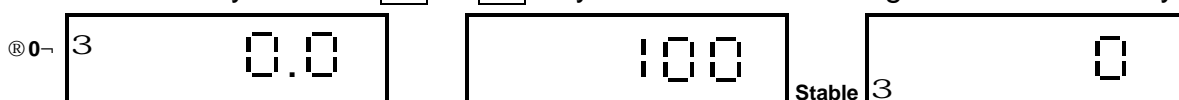


- ☒ Press the combination key.

(If the unit weight preset setting is a secondary function, press the combination key for about 3 seconds and the display will show the following)



- Press any number **0** ~ **9** key to recall the unit weight saved in this key.



#### Recall the Unit Weight Preset

☒ Press the combination key.

(If the unit weight preset setting is a secondary function, press the combination key for about 3 seconds and the display will show the following)



- Press the number **0** ~ **9** key to recall the unit weight saved in this key.



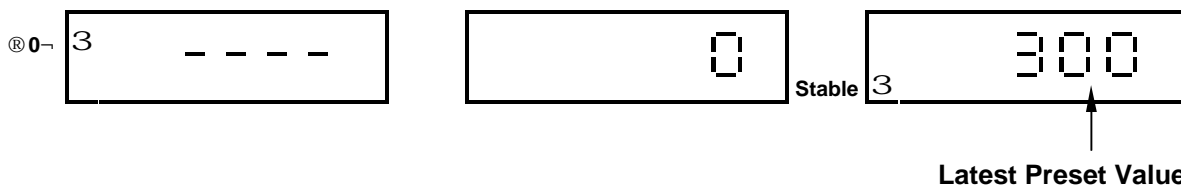


### 4-4-3 Quantity Preset

The scale can store a Hi Limit quantity value. The scale will make a warning beep and the unit weight window will display a blinking **-0.00-** if the quantity is over the Hi limit alarm value set.

#### Set the Hi Limit Value for Quantity Preset

Press **Q'TY PST** key whether the scale has object on the weigh pan or not.



• Enter a desired Hi Limit value. Use **CE** key to correct the value entered.



Press **SMPL** key. Use **CE** key to correct the value entered.



• Press **Q'TY PST** key, the scale will return to counting mode.

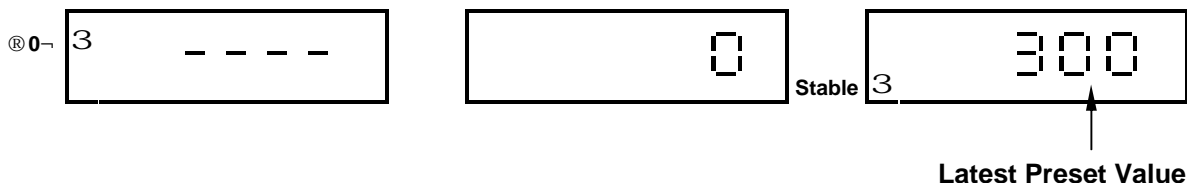


### 4-4-4 Weight Preset

The scale can store a Hi Limit unit weight value. The scale will make a warning beep and the unit weight window will display a blinking **-LWPSE-** if the unit weight is over the Hi limit value stored.

#### Set the Hi Limit value for unit Weight

Press **Q'TY PST** key whether the scale has object on the weigh pan or not.



- Enter a desired Hi Limit value. Use **CE** key to correct the value entered.



4 The unit and the decimal points for the high limit value entered are the same as the value previously preset on the weight display.

Press **UNIT W.T.** key. Use **CE** key to correct the value entered.



- Press **Q'TY PST** key, the scale will return to counting mode.



#### Clear the Hi Limit unit weight and quantity values

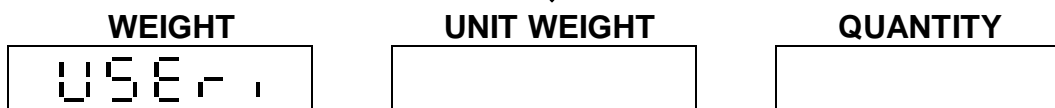
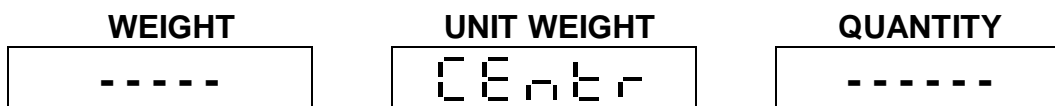
To clear the Hi Limit unit weight or Quantity preset enter "0" as the value in the appropriate entry field.

# CHAPTER 5 INTERFACE

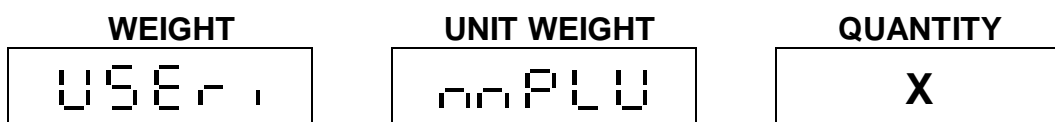
4 Function available for RS232 or PRINTER output, please refer to section 7 and 8 below.

## 5-1 TOTALISING

Press the **Z** key until the unit weight displays **Center** followed by pressing key **1**



- Press the **1** key.



Use the number **0**, **1** or **2** key to select 0, 1, or 2

0 ⇒ Press **M+** key and the window display will show the totalised value.  
After 3 seconds, the scale will return to counting mode.

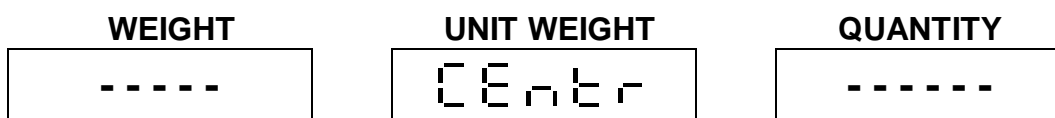
1 ⇒ Press **M+** key and the window display will show the totalised value.  
Press **CE** key and the scale will return to counting mode.

2 ⇒ Press **M+** key and the display window will not show the totalised value as the buzzer will beep.

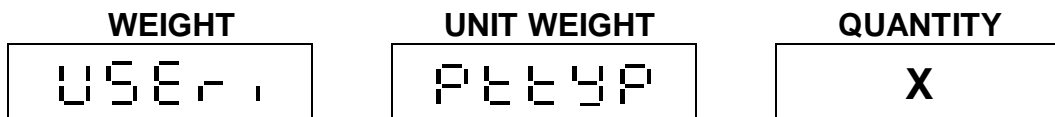
Press the **.** key to exit the setting mode and the scale will return to counting mode.

## 5-2 PRESET TARE OPERATION CONDITIONS

☒ Press the **[Z]** key until the unit weight displays **C E n t r** then press **[1]**



- Press the **[2]** key.



Use the number keys **[0]** or **[1]** key to select 0 or 1 \_\_\_\_\_

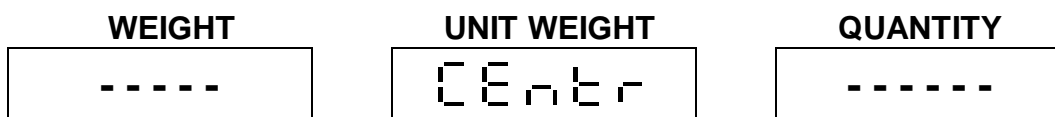
0 ⇒ Preset tare is not allowed if there is a weight on the scale.

1 ⇒ Preset tare will operate at any point throughout the weighing range.

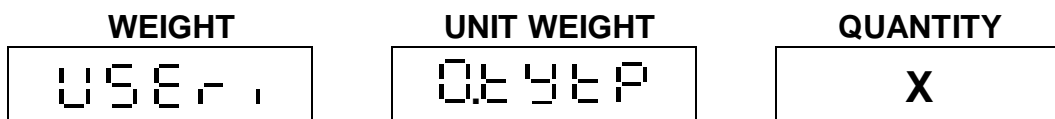
Press the **[.]** key to exit the setting mode and the scale will return to counting mode.

## 5-3 QUANTITY PRESET OPERATION CONDITIONS

Ⓔ Press the **[Z]** key until the unit weight displays **C E n t r** then press **[1]**



- Press the **[3]** key.



Use the number keys **[0]** or **[1]** to select 0 or 1

0 ⇒ The “Q’TY PST” will only operate when the weight is stable.

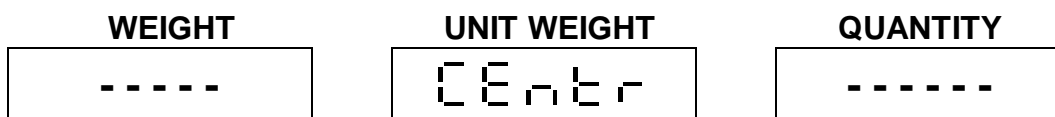
1 ⇒ The “Q’TY PST” will operate irrespective of the stability of the weight.

Press the **[.]** key to exit the setting mode and the scale will return to counting mode.

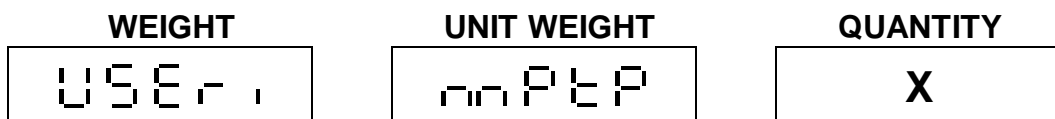


## 5-4 TOTALISING OPERATION CONDITIONS

Ⓔ Press the **[Z]** key until the unit weight displays **Center** then press **[1]**



- Press the **[4]** key.



Use the number keys **[0]** or **[1]** to select 0 or 1

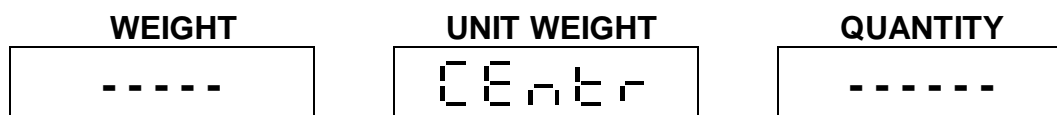
0 ⇒ Totalising will only be carried out when the weight is stable.

1 ⇒ Totalising will be carried out irrespective of the stability of the weight.

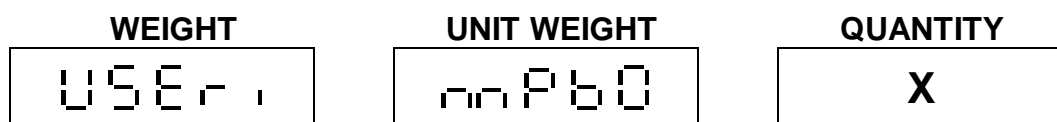
Press the **[.]** key to exit the setting mode and the scale will return to counting mode.

## 5-5 THE CONDITION TO ALLOW THE NEXT TOTALISING OPERATION

Press the **[Z]** key until the unit weight displays **CEnter** then press **[1]**



- Press the **[5]** key.



Use the number keys **[0]** or **[1]** to select 0 or 1

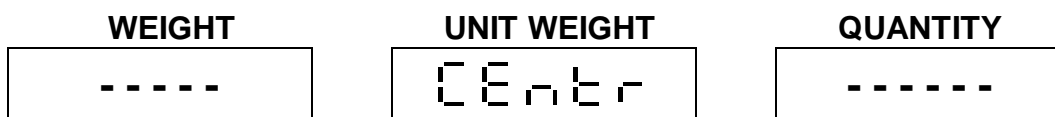
0 ⇒ The weight needs to return to zero before the next totalising operation is allowed.

1 ⇒ Allow next totalising operation without return to zero interlock.

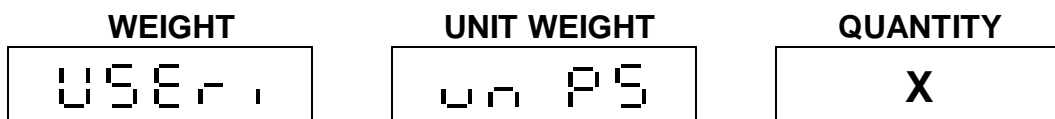
Press the **[.]** key to exit the setting mode and the scale will return to counting mode.

## 5-6 COMBINATION KEY OPERATION MODE

Ⓔ Press the **[Z]** key until the unit weight displays **CENTER** then press **[1]**



- Press the **[6]** key



Use the number keys **[0]** or **[1]** to select 0 or 1

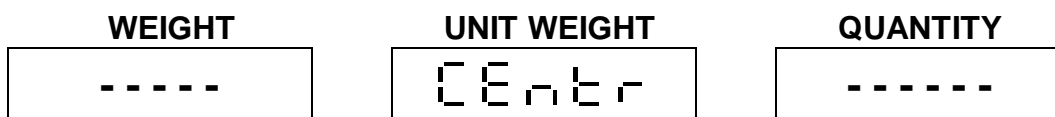
0 ⇒ Press the “Unit Selection” function key (main function) and hold it down for 3 seconds, the function of the key becomes “Unit Weight Selection” (secondary function)

1 ⇒ Press the “Unit Weight Preset” function key (main function) and hold it down for 3 seconds, the unit selection function becomes the secondary function.

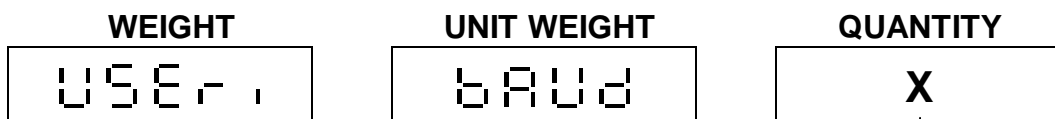
Press the **[.]** key to exit the setting mode and the scale will return to counting mode.

## 5-7 BAUD RATE SETTING

Ⓔ Press the **[Z]** key until the unit weight displays **C E n t r** then press **[1]**



- Press the **[7]** key.



Use number keys **[0]** to **[3]** key to select

0 ⇒ 1200

1 ⇒ 2400

2 ⇒ 4800

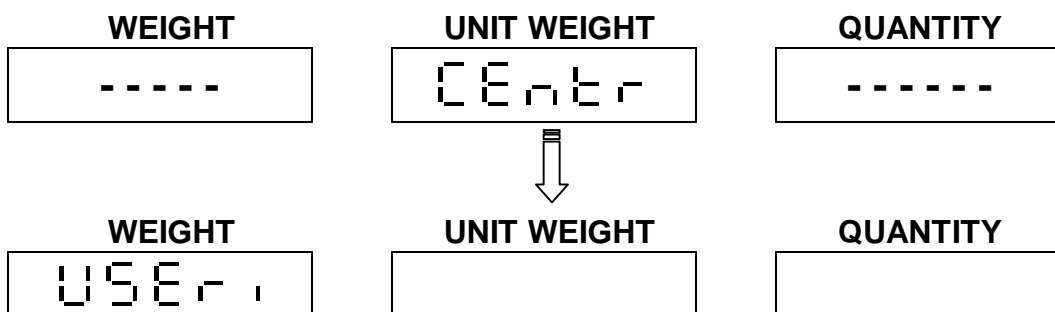
3 ⇒ 9600

Once the setting is done, re-start the scale by turning the power off / on.

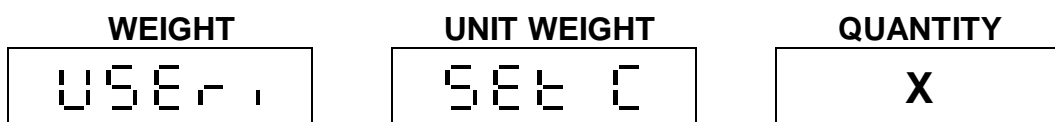
Press the **[.]** key to exit the setting mode and the scale will return to counting mode.

## 5-8 TRANSMIT MODE SELECTION

Ⓔ Press the **[Z]** key until the unit weight displays **C E n t r** then press **[1]**



• Press the **[8]** key.



Use the number keys **[0]** to **[3]** to select

- |                                       |                              |
|---------------------------------------|------------------------------|
| 0 ⇒ Press <b>[M+]</b> key to transmit | 2 ⇒ Stable transmit          |
| 1 ⇒ Stream transmit                   | 3 ⇒ <b>EZ-2 printer</b> only |

Once the setting is done, re-start the scale by turning the power off / on.

Press the **[.]** key to exit the setting mode and the scale will return to counting mode.

**4** The weight must be greater than a positive value to transmit the record information.

**4** Transmit mode data:

Press <b>[M+]</b> key to transmit	Stream transmit / Stable transmit
NO.	N/W
N/W	U/W
U/W	PCS
PCS	

Press **[MC]** key to transmit ( clear the totalised data from memory )

=====  
T/N  
T/W  
T/A



**NO.Ⓟ** No. of totalising operations  
**N/WⓅ** Net Weight  
**U/WⓅ** Unit Weight  
**PCSⓅ** Piece  
**T/NⓅ** Total no. of totalising operations  
**T/WⓅ** Total Weight  
**T/AⓅ** Total Amount