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# PRECAUTIONS

## Warning

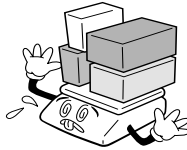
Precautions when installing the scale. To ensure that you get the most from your scale, please follow these instruction.

**Do not disassemble the scale.**

When any damage or defect occurs, contact your CAS authorized dealer immediately for proper repair.



**Do not overload beyond the maximum weight limit.**



**Scale must be grounded to minimize electricity static.**

This will minimize defect or electric shock.

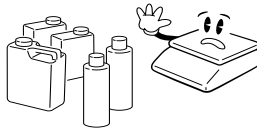


**Do not pull the plug by its cord when unplugging.**

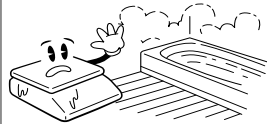
Damaged cord could cause electric shock or fire.



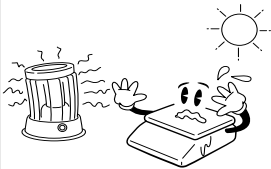
**To prevent from fire occurring, Do not place or use the scale near flammable or corrosive gas.**



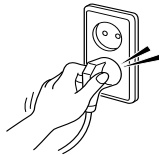
**To reduce electric shock or incorrect reading, Do not spill water on the scale or place it in humid condition.**



**Avoid placing the scale near heater or in direct sunlight.**

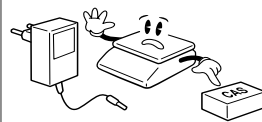


**Insert plug firmly to wall outlet to prevent electric shock.**



**Use proper Adapter.**

Incorrect adapter could damage the scale.

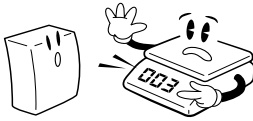


# PRECAUTIONS

## Attention

Make sure to plug your seal into the proper power outlet. For maximum performance, plug into a power outlet 30 minutes before the usage for warm up.

For consistent and accurate reading, maintain periodical check by your CAS authorized dealer.



Avoid sudden shock to the scale.



Grab on the bottom of the scale when moving.



Keep the scale away from other electromagnetic generating devices.

This may interfere with accurate reading.



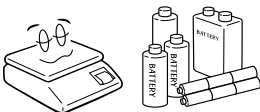
Place the scale on firm and temperature consistent environment.



By adjusting 4 corners of the scale, set the scale even using the built in scale leveling indicator.



Take the battery out when scale is not in use for long time. Leakage from the batteries is hazardous.



# I . Precautions Before Using The Scale

## Environment

The scale should always be used in an environment, which is free from excessive air currents, corrosives, vibration, and temperature or humidity extremes. These factors will affect displayed weight reading.

**DO NOT** install the scale:

- Next to open windows or doors causing drafts or rapid temperature changes.
- Near air conditioning or heating vents.
- Near vibrating, rotating or reciprocating equipment.
- Near magnetic fields or equipment that generates magnetic fields.
- On an unstable work surface
- In a dusty environment
- In direct sunlight.

## Leveling the Scale

The scale is equipped with a level indicator on the back side, right bottom of the front panel and four adjustable leveling feet. Adjust the leveling feet until the bubble appears in the center circle of the indicator.

## Turn on Scale

Do not turn on scale with anything on the platform.

When the scale is used with a power adapter, the “ON/OFF” switch located on the right side of bottom of the scale should be on. Then press the “ON/OFF” key on key pad to turn on the scale.

When the scale is used with the battery only, press the “ON/OFF” key on key pad directly.

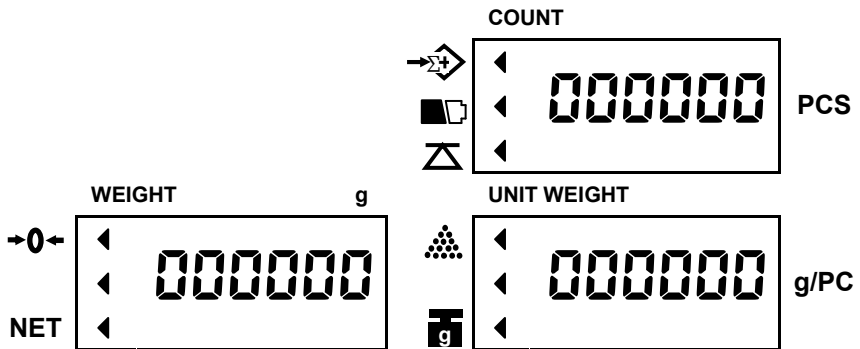
The scale will start to count down from nine to zero. The scale is then ready for use. Give a warm-up for 15~30 minutes before use.

※ **Attention** ※

There is a dust protection cover as standard.

Before turning on the scale, the dust protection cover should be attached on the body with using an adhesive tape so that the cover does not touch the pan. If the cover touches the pan, a weight value can be wrong.

## II. Explanation Of Display Symbols



### Display Windows

- **Weight Display –**

Totals 6 digits for weight accumulated or being measured on the pan.







- **Unit Weight Display –**

Totals 6 digits for unit weight or times of weight accumulated.

- **Count Display –**

Totals 6 digits for number accumulated or being counted on the pan.

## Indicated Symbols

| Symbols   | Specification   |
|---|---|
| <b>NET</b>  | Scale is in TARE mode.  |
|    | Scale is in ZERO mode.  |
|    | Scale is in ACCUMULATION mode.  |
|    | The display reading is in STABLE condition.   |
|    | Lack of Sample Weight<br>If the total sample weight on the pan is less than <b><u>10 display divisions</u></b> , a triangular indicator will appear to remind the user to add more samples until the indicator disappears.                  |
|   | Lack of Unit Weight<br>If the unit weight is less than <b><u>1/10 display divisions</u></b> , a triangular indicator will appear to remind the user that the displayed unit weight is too small for getting accurate quantity calculations. |
|  | Low Voltage   |

### III. Keypad Functions

| <b>Keys</b>   | <b>Specification</b>   |
|---------------|--|
| <b>0~9</b>    | Numeric keys   |
| <b>•</b>      | Decimal point key  |
| <b>C</b>      | Use this key to clear out the displayed numeric readings.  |
| <b>ZERO</b>   | If there is a minor weight displayed without anything on the pan, press the zero key to clear the display. |
| <b>TARE</b>   | Use this key to subtract the container's weight, indicates that the current weight reading is net weight.  |
| <b>SMPL</b>   | Use this key to input sample size.   |
| <b>U.WT</b>   | Use this key to input the known unit weight of item to be counted.   |
| <b>ALARM</b>  | Use this key to input the HIGH & LOW weight/quantity limit for check function.                             |
| <b>ADD</b>    | Use this key to accumulate weight/quantity measured.   |
| <b>TOTAL</b>  | Use this key to recall total weight, count & accumulation times.   |
| <b>P.TARE</b> | Use this key to preset TARE weight.  |
| <b>SET</b>    | Use this key to enter into User Programming Functions.   |
| <b>ENTER</b>  | Use this key to confirm the parameter setting.   |
| <b>MOVE</b>   | Use this key to move the parameter value in Set Mode.  |
| <b>MEMORY</b> | Use this key to memory a value to a location.  |
| <b>ON/OFF</b> | On/Off key   |

## IV. Operations

### (I) Switch on & off

Press the **on & off** key turn on or turn off the scale.

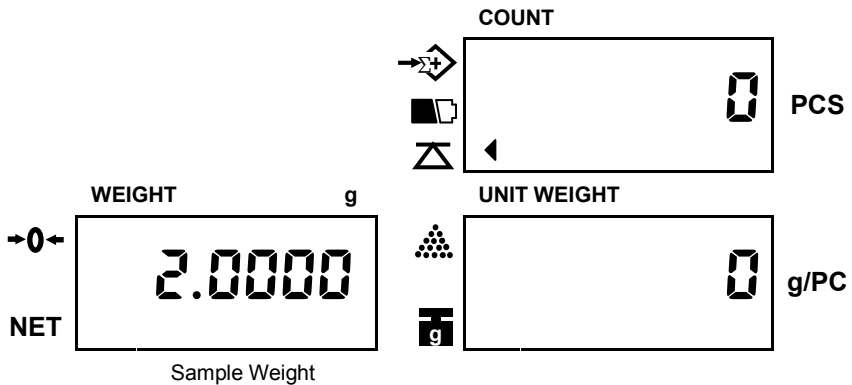
### (II) Zero the scale

Press **ZERO** key to return the display to zero in case there is any zero drifting while unloaded.

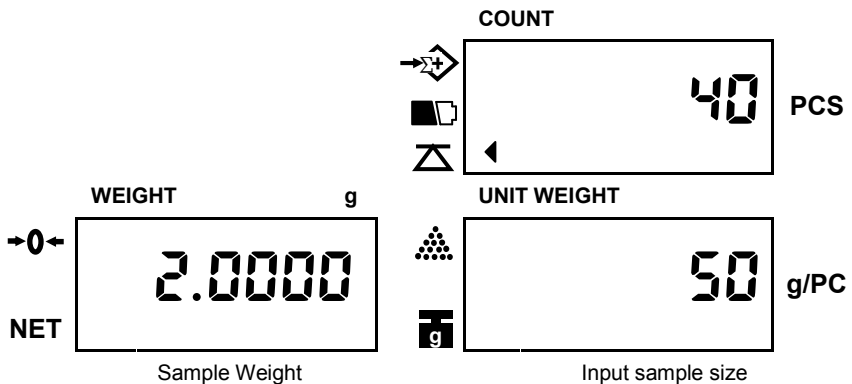
### (III) Sampling before counting

#### Unknown unit weight

1. Place a few pieces of item to be counted on the pan.



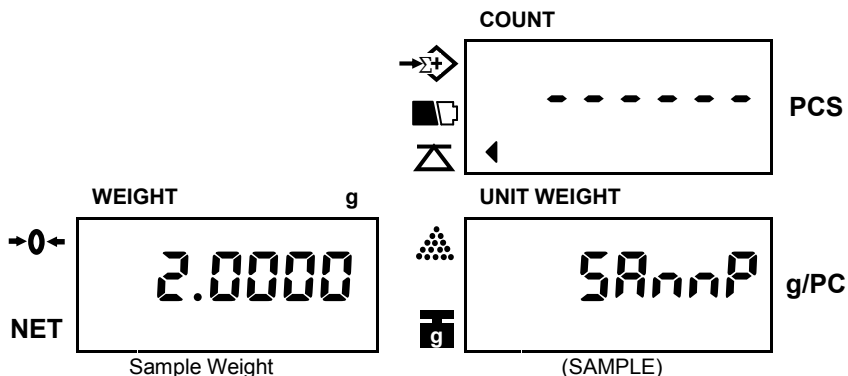
2. Input the quantity of item on the pan.



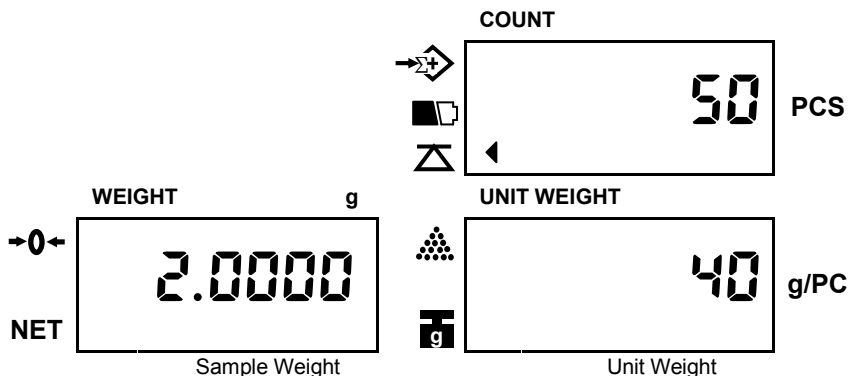


3. Press **SMPL** key

**Note:** The system default is “Unit Weight”. If the “SMPL” key is clicked when the value (ex.:40) in COUNT window is blinking, then the numerical value input will be as “Quantity”. If the “SMPL” key is not clicked when the value (ex.:40) in COUNT window is blinking, then the numerical value input will be as “Unit Weight”.



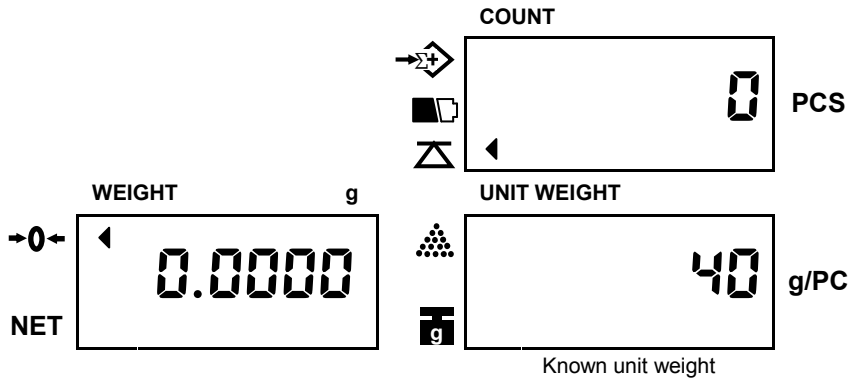
4. The sampling operation is completed while stable display appears as below :



- ★ The larger sample size, the more accurate unit weight
- ★ Press **SMPL** key to recomputing unit weight during in counting process if the setting of “Unit Weight Recomputing” set to “on” (Please refer to the section VII of **V**).

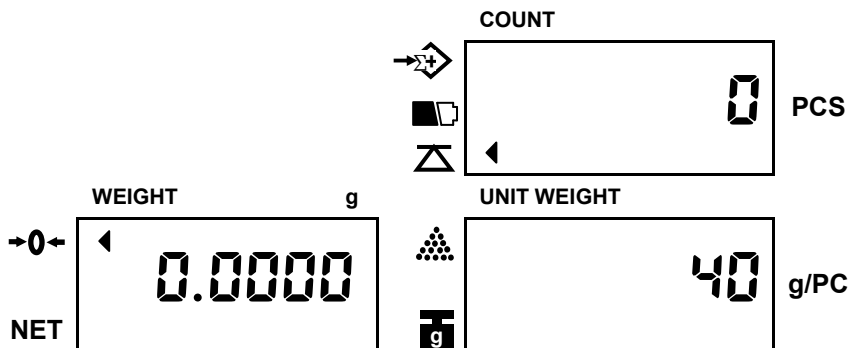
## Known unit weight

1. Input the known unit weight.



2. Press **U.Wt** key to complete sampling operation & enter into counting mode.

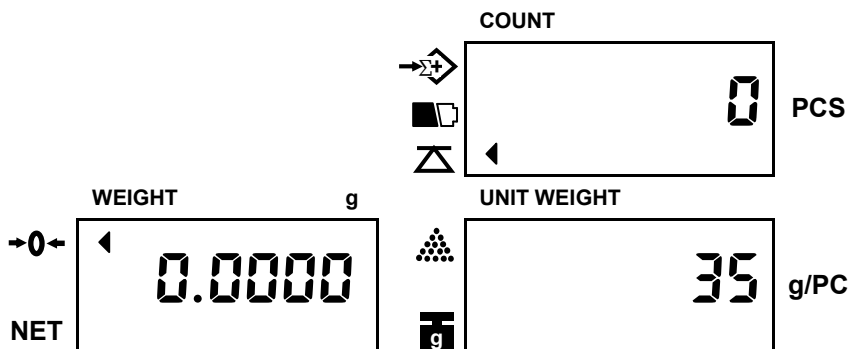
**Note:** The system default is "Unit Weight". If the "**U.WT**" key is pressed when the value (ex.:0) in COUNT window is blinking, then the numerical value input will be as "Unit Weight".



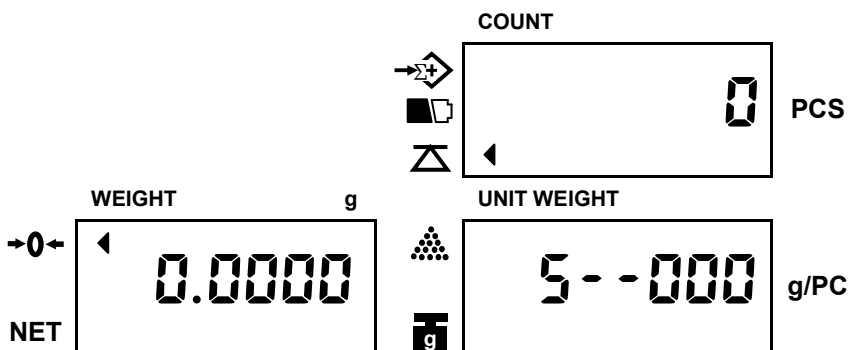
## (IV) Preset unit weight in numeric keys

### How to store unit weight in memory cells

1. To obtain unit weight by inputting the known value (ex.35g) or by sampling operation mentioned before.



2. Give a long press of the **MEMORY** key.



3. Enter a address cell (1~200, total 200 cells available) by pressing any of the numeric keys ( 0 ~ 9 ), then press the **ENTER** key to store the unit weight into the address cell.

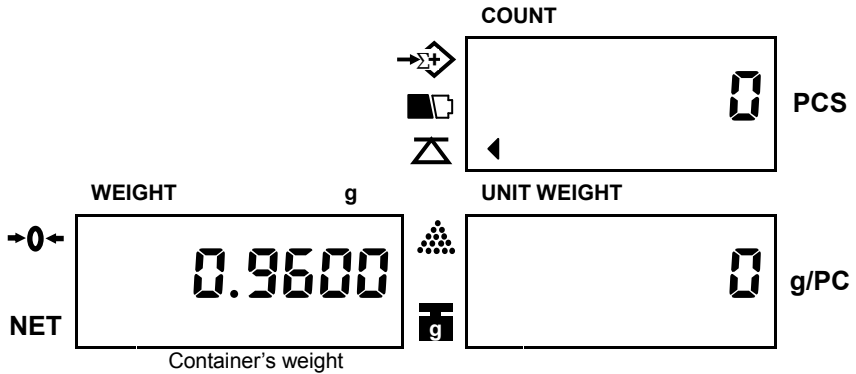
**Note:** An error message "E4" will appear if the address code is out of "1~200".

### How to recall the unit weight stored

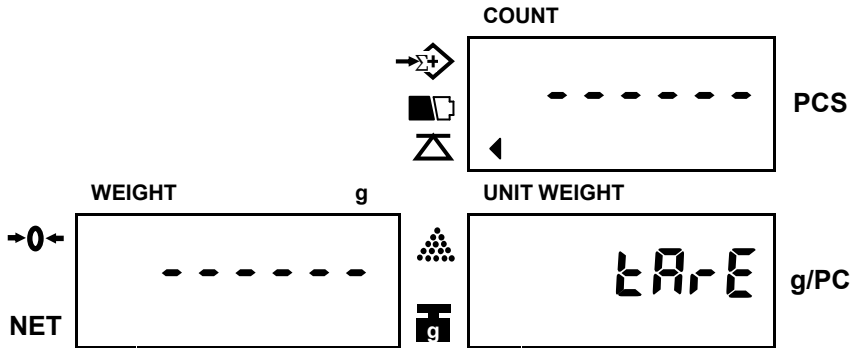
Press the numeric key with stored unit weight inside & keep pressing **MEMORY** key twice. The stored unit weight will appear in the unit weight display.

**(V) Subtract container's weight  
weight unknown**

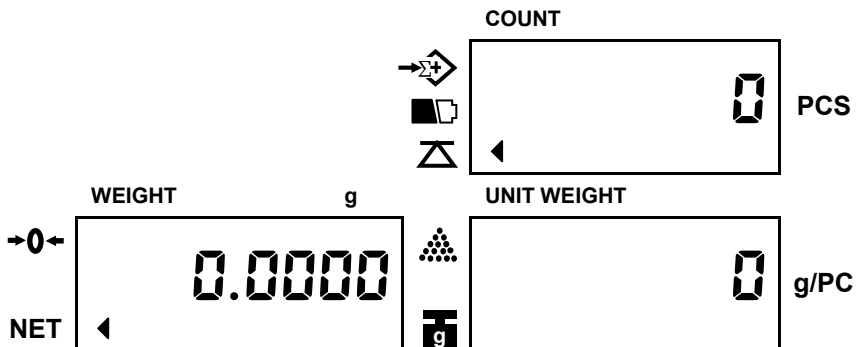
1. Place a container on the pan.



2. Press **TARE** key

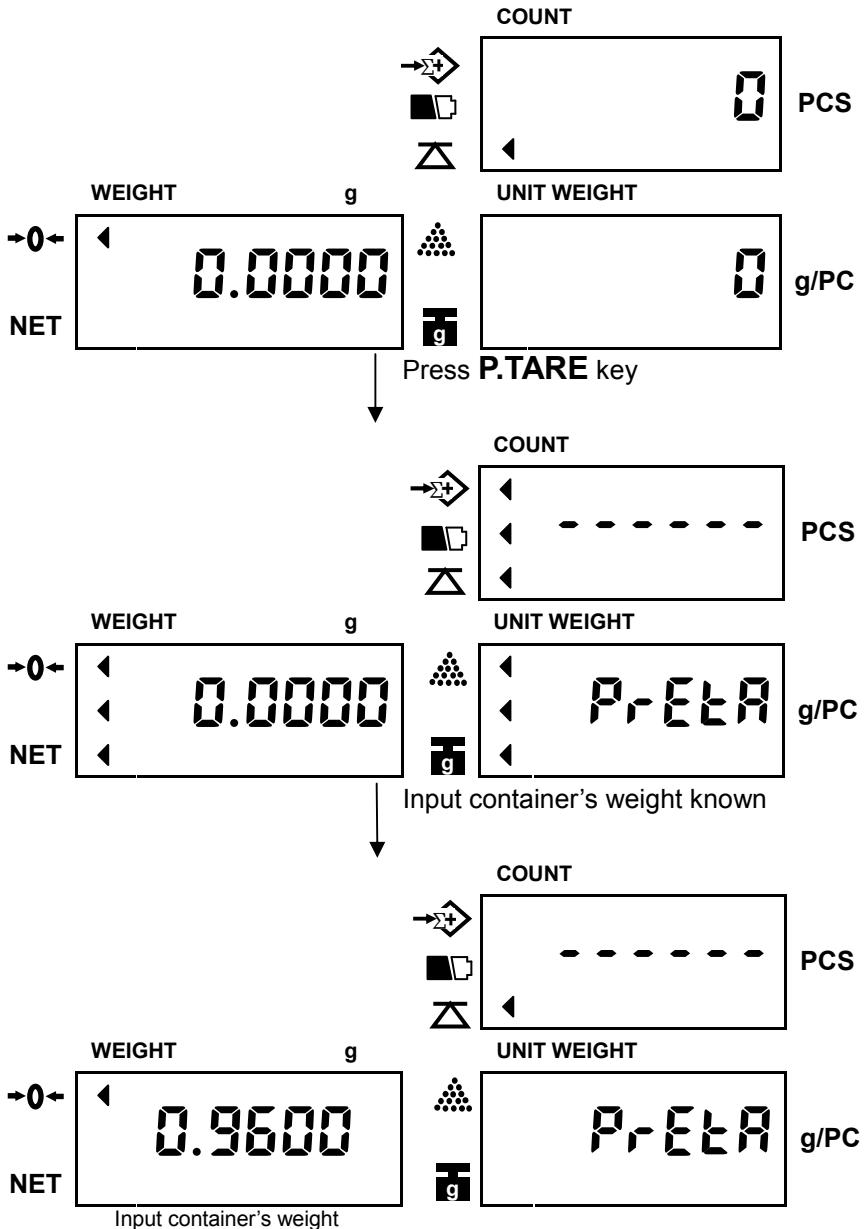


3. The scale will enter into counting mode while stable display appears as below.

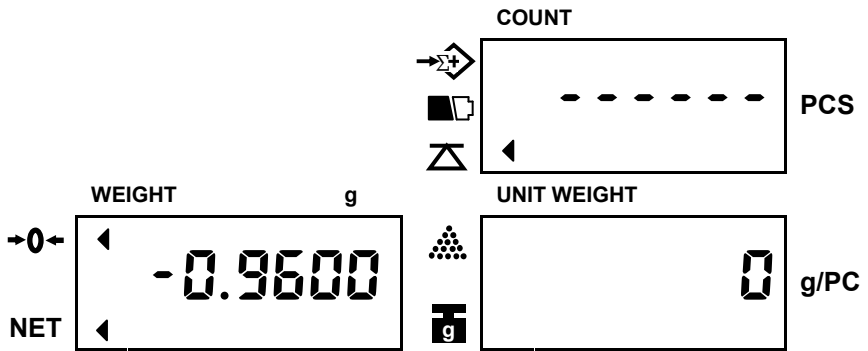


## Container's weight known

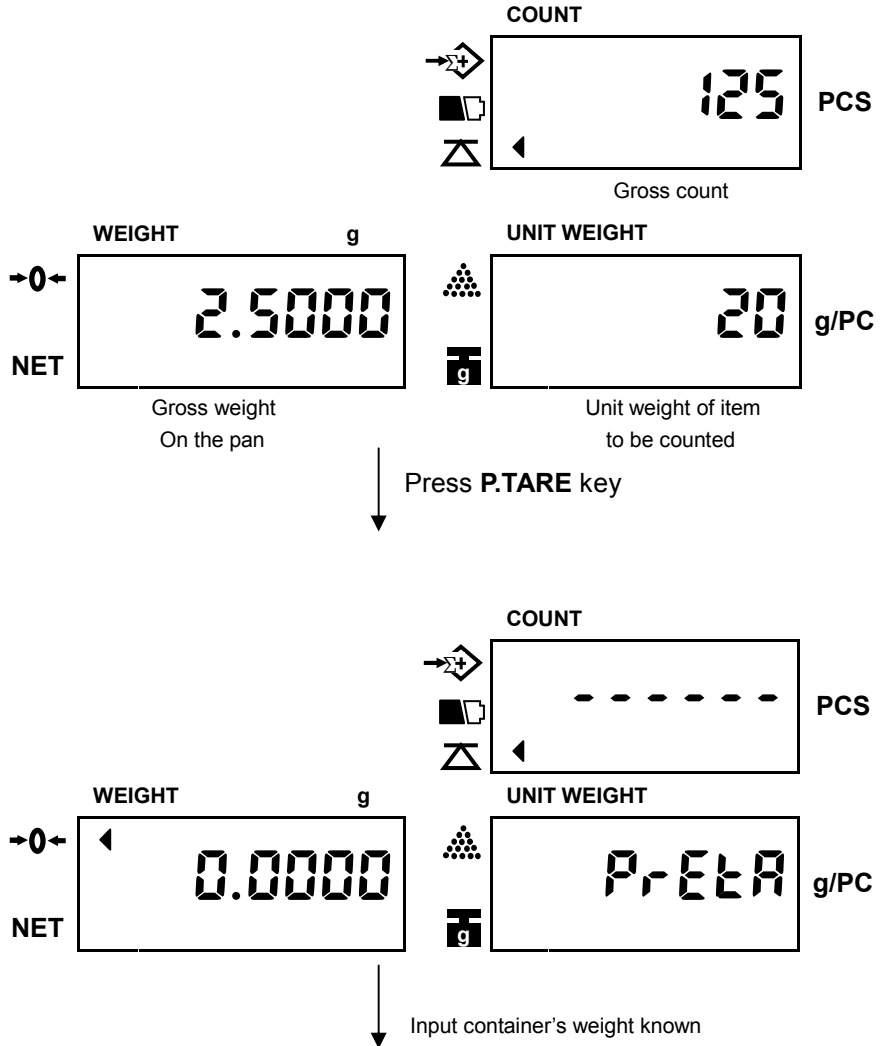
1. Nothing on the pan

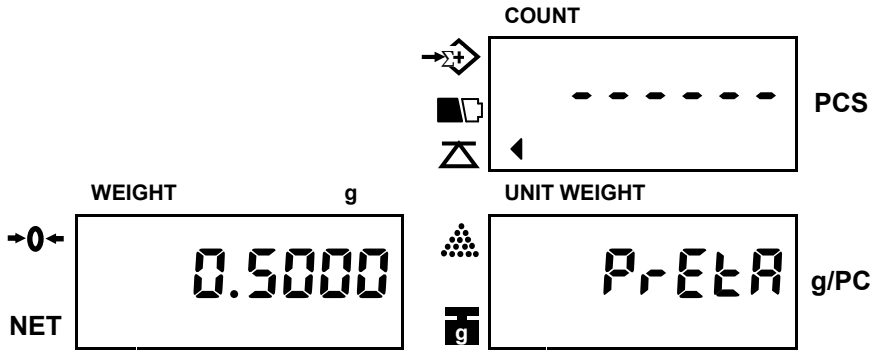


Press **P.TARE** key

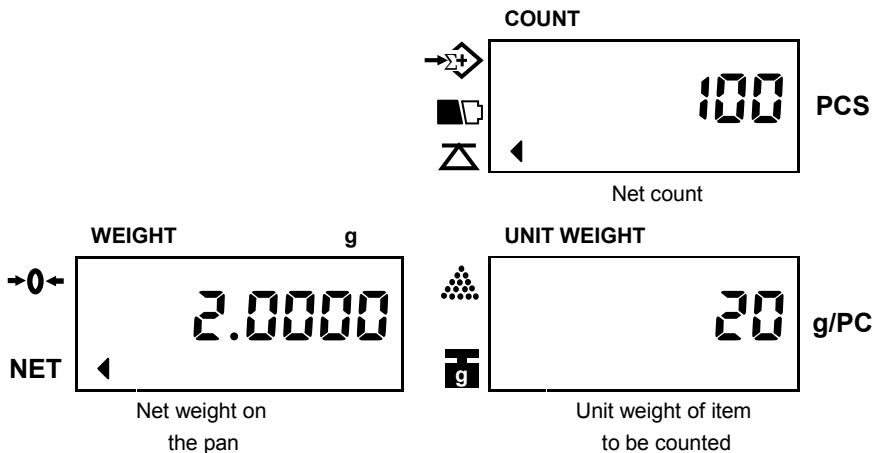


2. Scale is loaded





Press **P.TARE** key



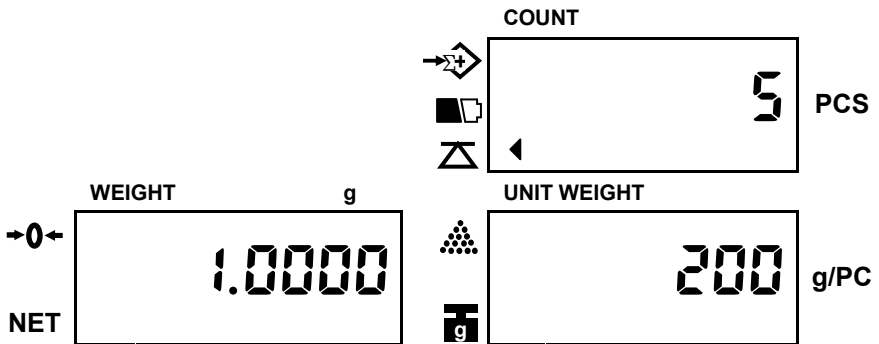
## ➡ Eliminate TARE

Remove all on the pan & the weight display will show a negative ( - ) container's weight. Pressing **TARE** key at this moment will bring the weight display to zero and TARE triangular indicator ( ◀ ) will disappear.



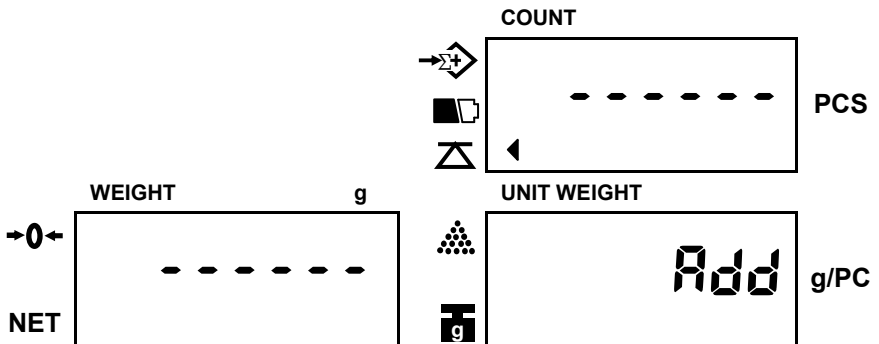
## (VI) Weight/Quantity accumulation

1. Place item to be weighed/counted on the pan.

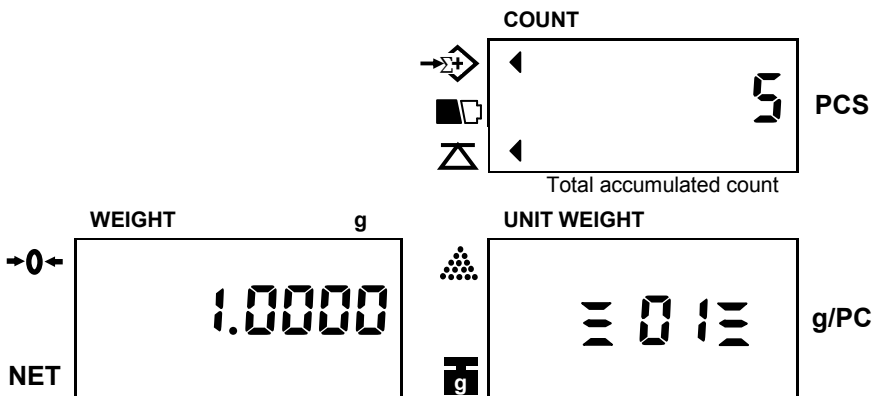


Weight on the pan

2. Press **ADD** key.



3. Display readings to be stable as below.

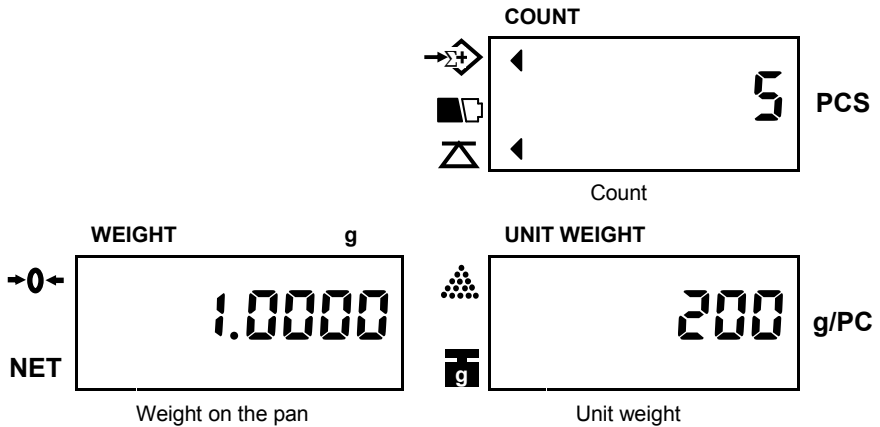


Total accumulated weight

Total accumulation times

★ Accumulation effective only when stays at zero.

4. Press **TOTAL** key or wait approx. 2 seconds, the scale will return to counting mode.



5. Press **TOTAL** key to enter into accumulation status mode. At this moment, total accumulated weight is shown In WEIGHT window, total accumulation times is shown in UNIT WEIGHT window and TOTAL PIECES window displays accumulated count.

Press **TOTAL** key again to revert to counting mode.

### ➡ Clear accumulation

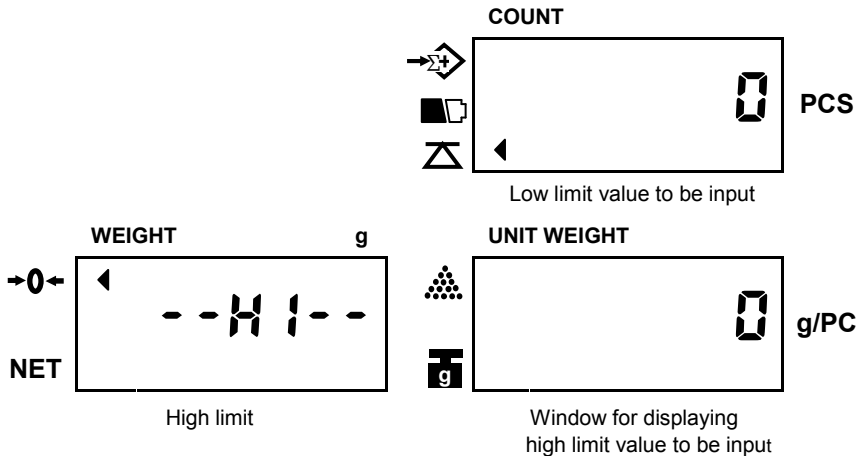
Press **TOTAL** key to enter into accumulation status mode and press **CLEAR** key to clear all accumulated data.

## (VII) Preset counting check range

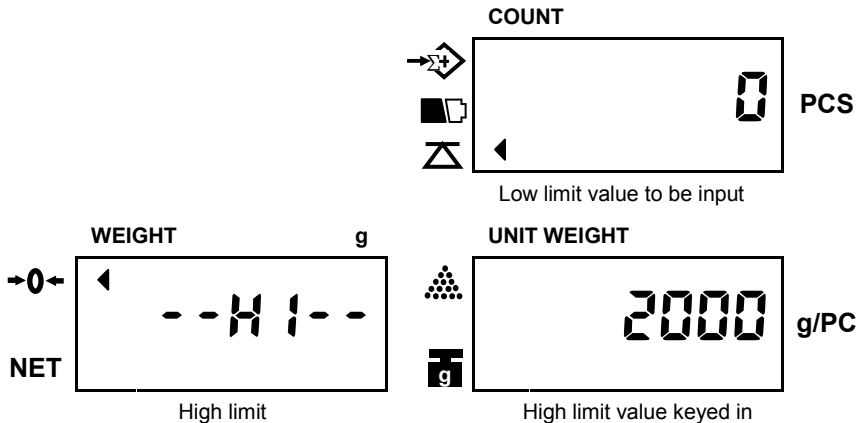
Users can set a Hi – Lo range for counting check, when the number of objects on the pan is within the preset counting check range, the alarm will sound beeps repeatedly.

### Procedures

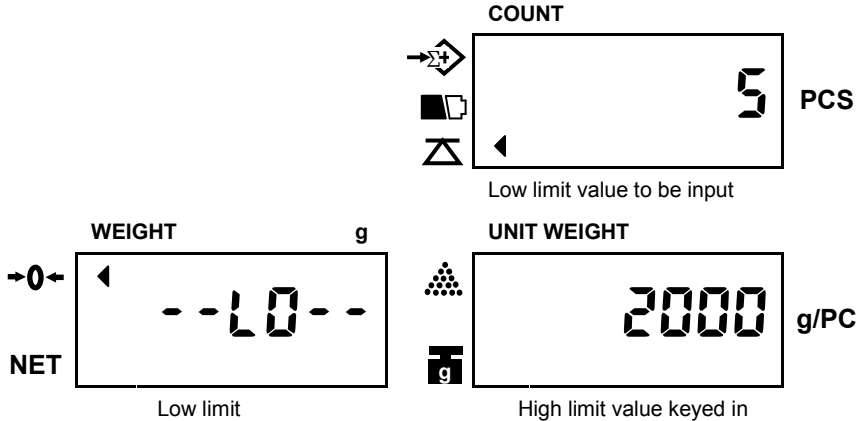
1. Press **ALARM** key while the scale is either loaded or unloaded.



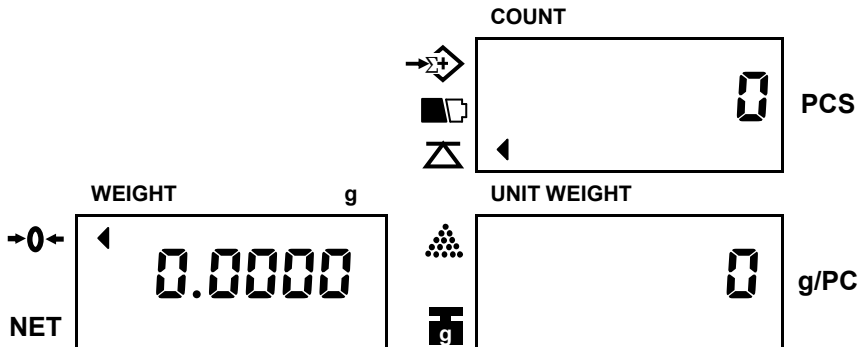
2. Key in the desired high limit value.  
(use **CLEAR** key to erase the value keyed in )



3. Press **ALARM** key again and key in the desired low limit value as indicated below. (Low limit value effective only after high limit is preset)



4. Press **SMPL** key to complete counting check range preset procedure and return to normal counting mode.



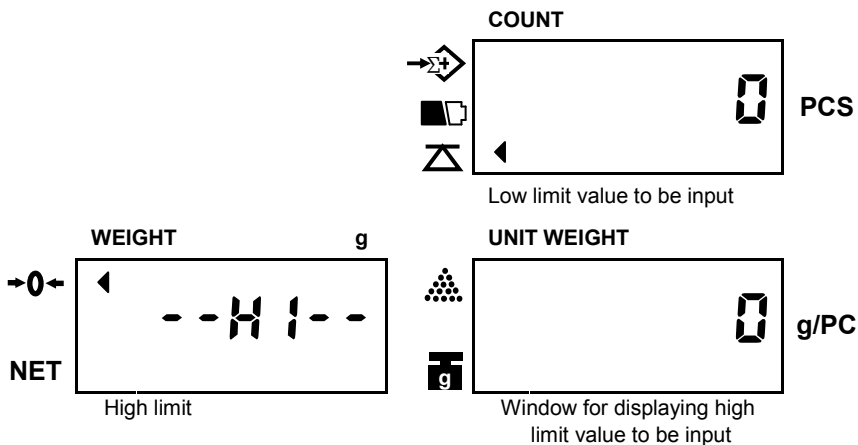
- Note:** 1) An error message "E5" appears When the **LO** value is set higher than **HI** value.  
 2) When both **HI** and **LO** vale setting are needed, the two must keep same decimal digits. (ex. **HI**=10g, **LO**=9.8g, then the setting must be "**HI**=10.0g, **LO**=9.8g".)

## (VIII) Preset weight check range

Users can set a Hi – Lo range for weight check when the weight of objects on the pan is within the preset weight check range, the alarm will sound beeps repeatedly.

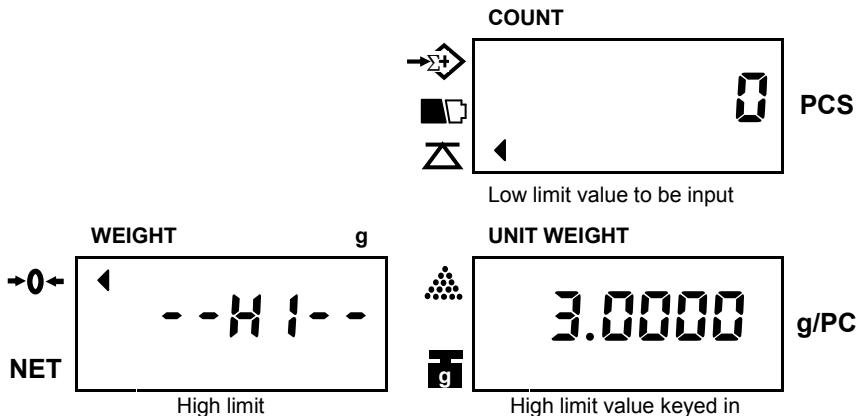
### Procedures

1. Press **ALARM** key while the scale is either loaded or unloaded.



2. Key in the desired high limit value.

(Use **CLEAR** key to erase the value keyed in)



3. Press **ALARM** key again and key in the desired low limit value as indicated below.

( ★ low limit value effective only after high limit is preset )

The diagram illustrates the process of setting a low limit value. It consists of three main display areas:

- COUNT:** Shows '1.0000' PCS. To the left of the display are three icons: a diamond with a right arrow, a battery, and a triangle. Below the display is the text 'Low limit value to be input'.
- WEIGHT:** Shows 'Lo' as a low limit. To the left of the display is a 'NET' label and a '0' with arrows. Below the display is the text 'Low limit'.
- UNIT WEIGHT:** Shows '3.0000' g/PC. To the left of the display are three icons: a diamond with a right arrow, a battery, and a triangle. Below the display is the text 'High limit value keyed in'.

4. Press **U.Wt** key to complete weight check range preset procedures and return to normal counting mode.

The diagram illustrates the final state after setting the low limit. It consists of three main display areas:

- COUNT:** Shows '0' PCS. To the left of the display are three icons: a diamond with a right arrow, a battery, and a triangle.
- WEIGHT:** Shows '0.0000' g. To the left of the display is a 'NET' label and a '0' with arrows.
- UNIT WEIGHT:** Shows '0' g/PC. To the left of the display are three icons: a diamond with a right arrow, a battery, and a triangle.

**Note:** 1) An error message "E5" appears When the **LO** value is set higher than **HI** value.

2) When both **HI** and **LO** value setting are needed, the two must keep same decimal digits. (ex. **HI**=10g, **LO**=9.8g, then the setting must be "**HI**=10.0g, **LO**=9.8g".)

### ➡ Clear high / low value preset

Follow the above preset procedures and key in " 0 " or press **CLEAR** key directly for high and low limit value.

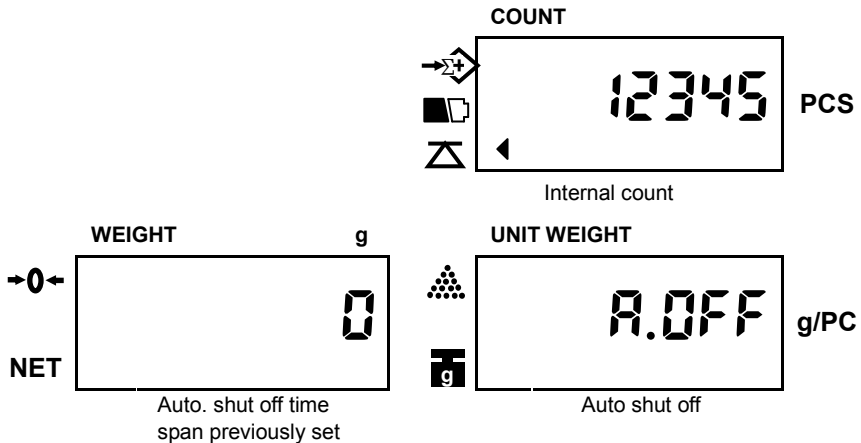
## V. User Programming Functions

In counting mode, press **SET** key to enter into USER PROGRAMMING FUNCTION MODE. After pressing “SET” key, the display shows “PASS WORD” to prompt to key in a pass word “101010” , then press “Enter” key to confirm the pass word. If the pass word is wrong, then the scale can not to enter into User Programming Function Mode.

- ★ The display shows “error” to prompt the mistake when the pass word is wrong.
- ★ If wrong pass word is entered for two times, then the scale will return to counting mode automatically.

### ( I ) Auto. shut off time span

1. When enter into “User Programming Functions” mode, the displays will indicate as below eventually.

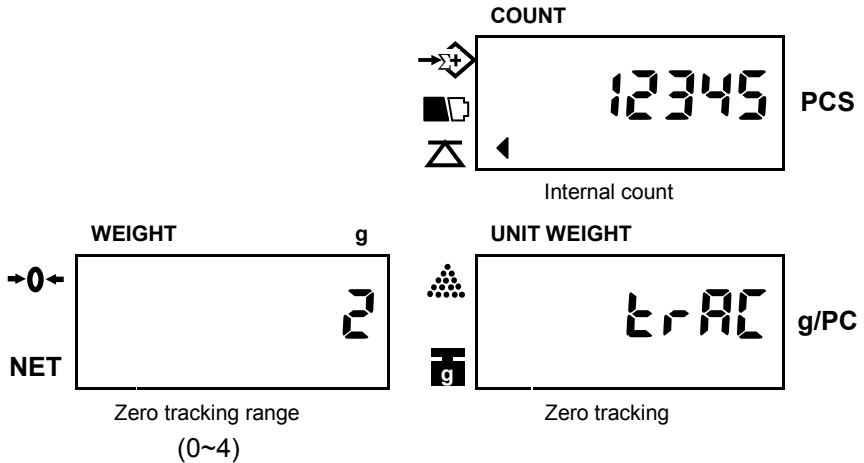


2. Press **MOVE** key to revolve the system-preset time span (2 min., 5 min., 8 min., and 0 ), (**Default setting: 0**)
3. Press **CLEAR** key to determine and return to normal counting mode or press **ENTER** key for determination and move to next.

★ **Turn off the scale to return to normal counting mode.**

## ( II ) Zero Tracking Range

1. Keep pressing **ENTER** key in USER PROGRAMMING FUNCTION MODE and release until the following displays appear.

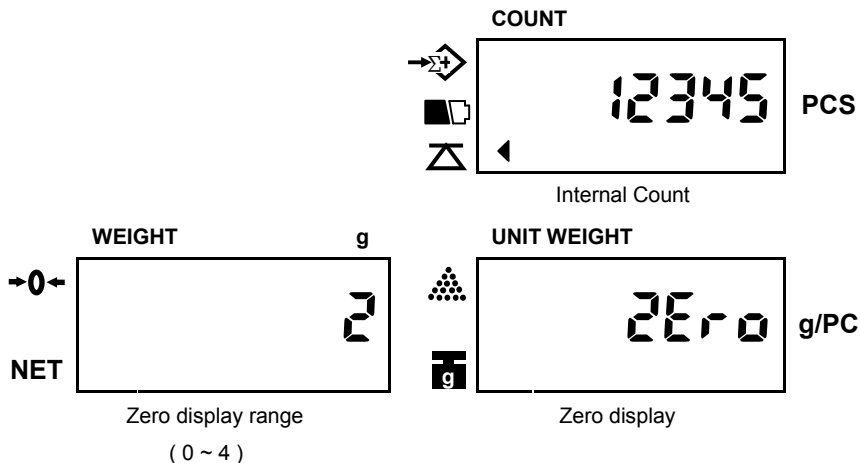


2. Press **MOVE** key to revolve the system-preset zero tracking range (0=off, 1=0.5d, 2=1d, 3=2d, 4=3d).  
The larger number selected, the wider range.  
(Default setting: 2)
  3. Press **CLEAR** key to determine and return to normal counting mode or press **ENTER** key for determination and move to next.
- ★ Turn off the scale to return to normal counting mode.



### (III) Zero display range

1. Keep pressing **ENTER** key in USER PROGRAMMIN FUNCTION MODE and release until the following displays appear.



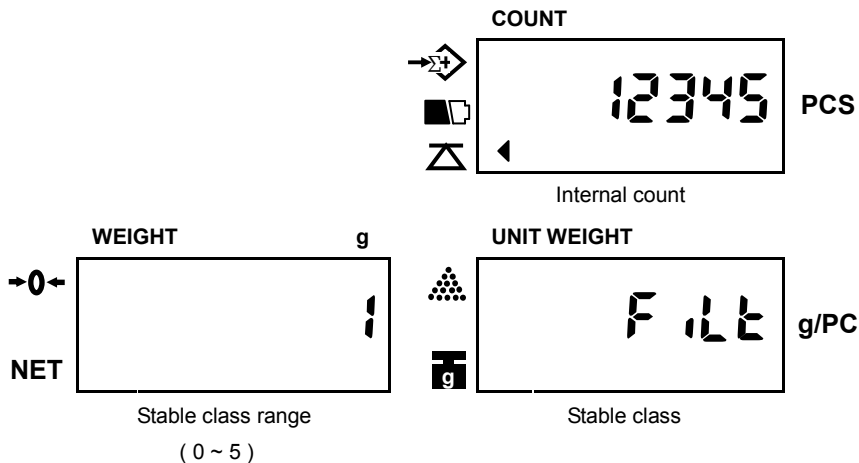
2. Press **MOVE** key to revolve the system-preset zero display range ( 0=off, 1=0.5d, 2=1d, 3=2d, 4=3d).  
The larger number selected, the wider range. Press **CLEAR** key to determine and return to normal counting mode or press **ENTER** key for determination and move to next.

(Default setting: 2)

★ Turn off the scale to return to normal counting mode.

## (IV) Stable class range

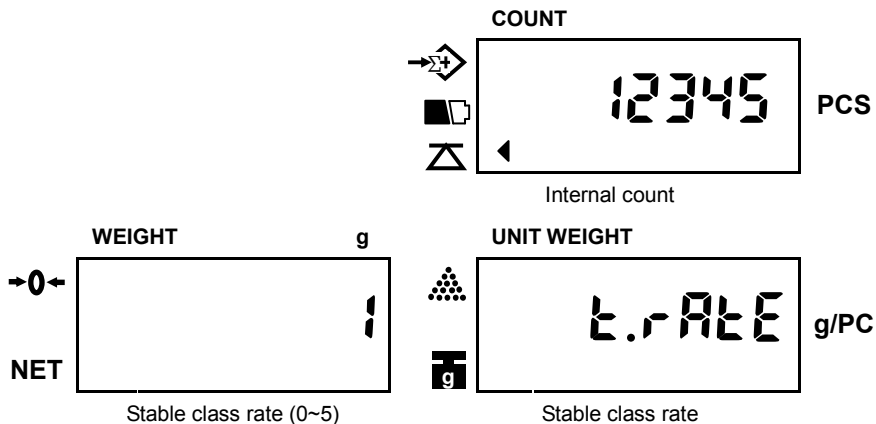
1. Keep pressing **ENTER** key in USER PROGRAMMING FUNCTION MODE and release until the following displays appear.



2. Press **MOVE** key to revolve the system-preset stable class range ( 0=off, 1=0.05d, 2=0.15d, 3=0.25d, 4=0.35d, 5=0.45d ). The smaller number selected, the shorter time for display stability.  
(Default setting: 1)
  3. Press **CLEAR** key to determine and return to normal counting mode or press **ENTER** key for determination and move to next.
- ★ Turn off the scale to return to normal counting mode.

## (V) Stable class rate

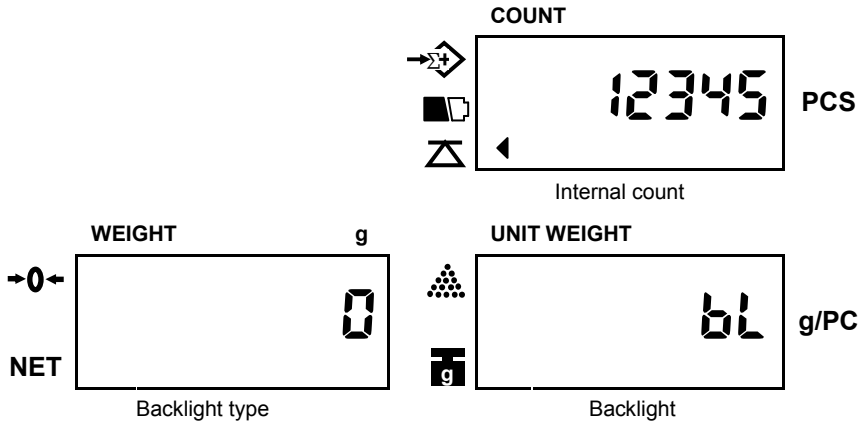
1. Keep pressing **ENTER** key in USER PROGRAMMING FUNCTION MODE and release until the following displays appear.



2. Press **MOVE** key to revolve the Stable Class Rate range  
The larger number selected, the more stable zero point.  
(Default setting: 1)  
( Level: 0, 1, 2, 3, 4, 5).
  3. Press **CLEAR** key to determine and return to normal counting mode or press **ENTER** key for determination and move to next.
- ★ Turn off the scale to return to normal counting mode.

## (VI) Backlight type

1. Keep pressing **ENTER** key in USER PROGRAMMING FUNCTION MODE and release until the following displays appear.




2. Press **MOVE** key to revolve the system-preset backlight type ( 0 – auto. backlight, 1 – manual backlight ).  
(**Default setting:** 0)
3. Press **CLEAR** key to determine and return to normal counting mode or press **ENTER** key for determination and move to next.

### ● Auto. Backlight

Backlight will be going on automatically whenever the scale is loaded by objects weigh greater than **9 display resolution** or any of keys is pressed. And it will be going off also automatically approx. 5 seconds after the scale returns to zero.

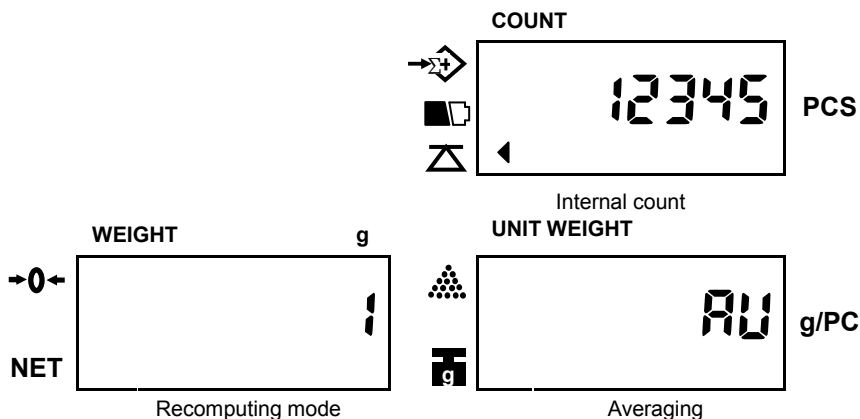
### ● Manual backlight

Press  (decimal point) key to switch on and off backlight.

- ★ Scale will keep the backlight type selected in memory for next use.
- ★ **Turn off the scale to return to normal counting mode.**

## (VII) Unit weight recomputing

1. Keep pressing **ENTER** key in USER PROGRAMMING FUNCTION MODE and release until the following displays appear.

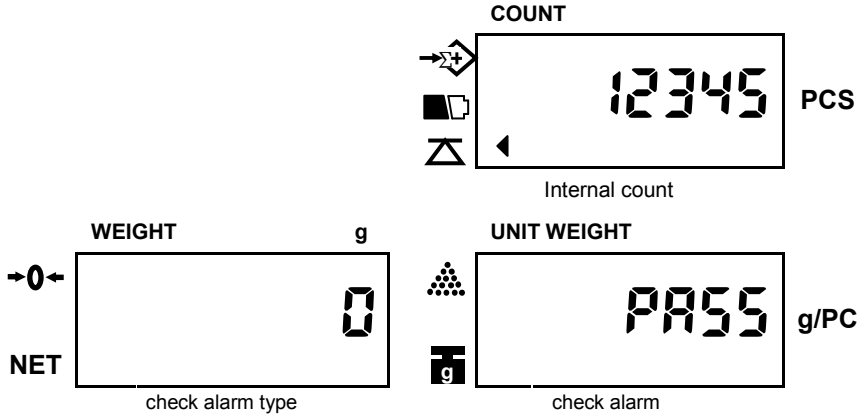


2. Press **MOVE** key to revolve the system-preset recomputing mode. (**Default setting:1**)
  - 0 – disable recomputing function
  - 1 – enable recomputing function
3. Press **CLEAR** key to determine and return to normal counting mode or press **ENTER** key for determination and move to next.
  - ★ The unit weight will be averaged again if you add the remaining quantity, gradually, by several lots. This will help eliminate errors caused by the **possible weight variation among each object** and lead to more accurate results.

When adding objects to the pan (**The weight value should not be less than 10 display divisions**), be sure that the quantity is LESS THAN those already on the pan. The alarm will sound a beep when the unit weight is averaged again.
  - ★ Recomputing function effective only after sampling operation is done.
  - ★ **Turn off the scale to return to normal counting mode.**

## (VIII) Check alarm type

1. Keep pressing **ENTER** key in USER PROGRAMMING FUNCTION MODE and release until the following displays appear.

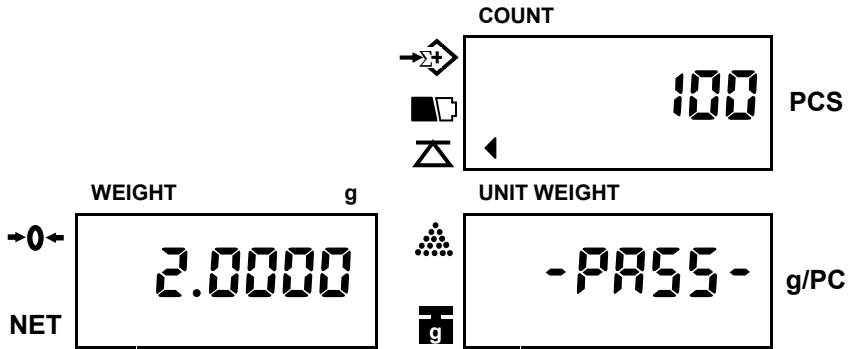


2. Press **MOVE** key to revolve the system-preset check alarm types. **(Default setting:0)**  
0 – Inside type, 1 – Outside type
3. Press **CLEAR** key to determine and return to normal counting mode or press **ENTER** key for determination and move to next.

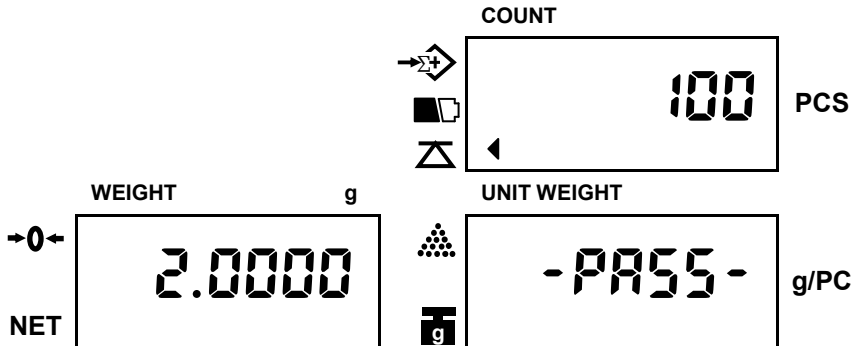
## Inside type

The alarm sounds beeps only when either total weight or total count falls inside the set range.

Ex. 1 Counting check alarms



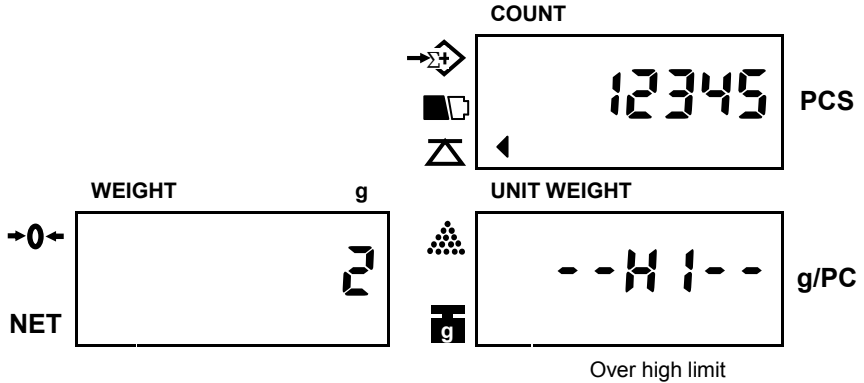
EX. 2 Weight check alarms



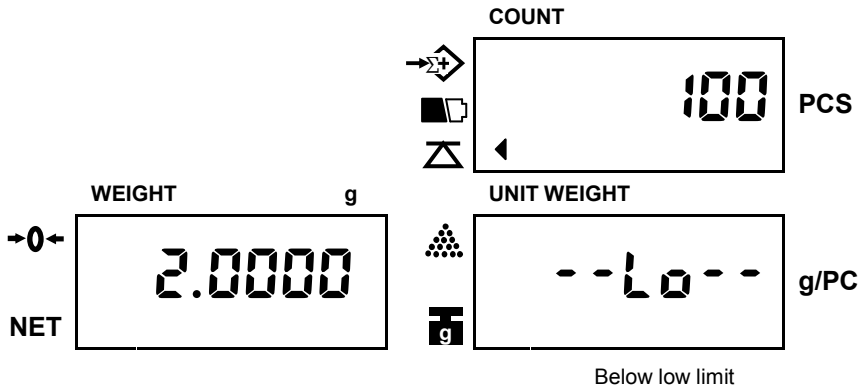
## Outside type

The alarm sounds beeps only when either total weight or total count falls outside the set range.

Ex. 1 Counting check alarms



Ex. 2 Weight check alarms



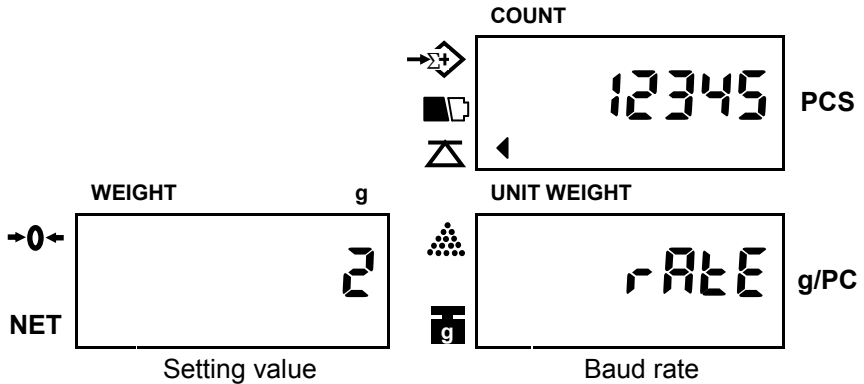
Press ENTER key to determine and return to next setting.

★ Turn off the scale to return to normal counting mode.



## (IX) Baud Rate setting

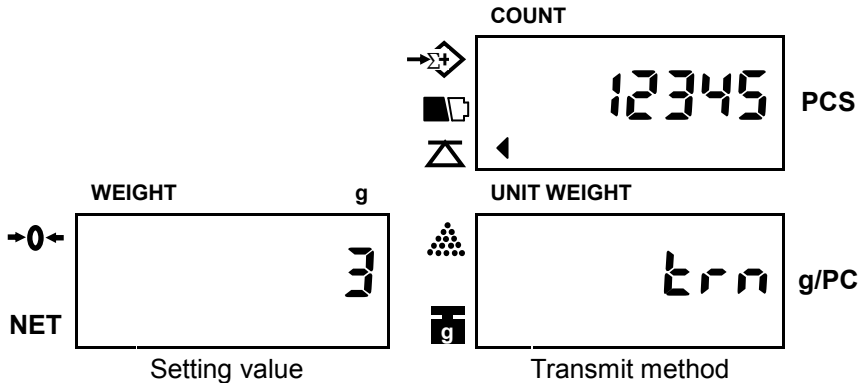
1. Keep pressing **ENTER** key in USER PROGRAMMING FUNCTION MODE and release until the following displays appear.



2. Press **MOVE** key to revolve the system-preset baud rate.  
(Default setting: 2)  
( 0 – 2400 , 1 – 4800, 2-9600)
  3. Press **ENTER** key to determine and return to next setting.
- ★ Turn off the scale to return to normal counting mode.

## (X) Transmit method setting

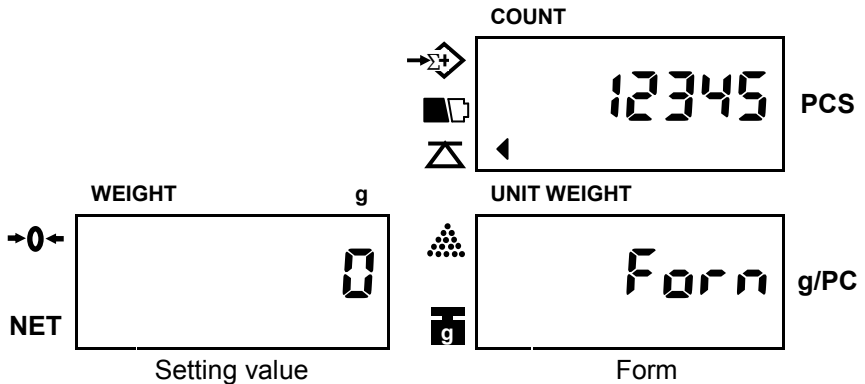
1. Keep pressing **ENTER** key in USER PROGRAMMING FUNCTION MODE and release until the following displays appear.



2. Press **MOVE** key to revolve the system-preset transmit method. **(Default setting=3)**
    - “1” = transmit by pressing a key (ex. DEP-50, PC)
    - “2” = series transmit (ex. DEP-50, PC)
    - “3” = transmit by pressing a key (for a label printer, such as: Model “DLP-50”)
    - “4” = auto-transmit (for a label printer, such as: Model “DLP-50”)
  3. Press **ENTER** key to determine and return to next setting.
- ★ Turn off the scale to return to normal counting mode.

(XI) **Label format setting (available when a label printer is connected.)**

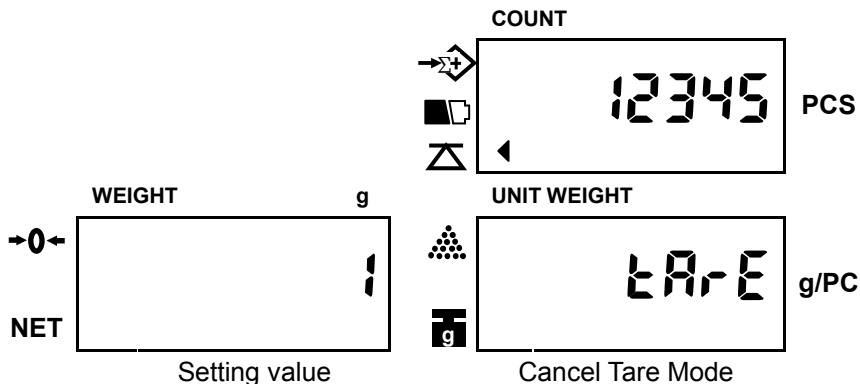
1. Keep pressing **ENTER** key in USER PROGRAMMING FUNCTION MODE and release until the following displays appear.



2. Press **MOVE** key to revolve the system-preset file name of the format. (**Default setting:** 0)  
Options : form0~9
  3. Press **ENTER** key to determine and return to next setting.
- ★ Turn off the scale to return to normal counting mode.

## (XII) Cancel Tare setting

1. Keep pressing **ENTER** key in USER PROGRAMMING FUNCTION MODE and release until the following displays appear.



2. Press **MOVE** key to revolve the system-preset Cancel Tare mode. (**Default setting:1**)

“1” – The tare can be canceled continuously.

“2” – The tare must be canceled for one time only.

(Note: If the canceled tare is not the value tared, then the buzzer will tweet for three times to indicate the error. Remove all the weight from the pan and then press TARE key or turn off and turn on the scale to solve the error.)

3. Press **ENTER** key to determine and return to normal counting mode.

★ **Turn off the scale to return to normal counting mode.**


## VI. Power supply & battery operation

### POWER SUPPLY

- AC Adaptor
- DC 12V/800mA or 12V/1000 mA

### BATTERY OPERATION

The scale can be operated from the battery if desired. The battery life is approximately 80 hours.

When the battery needs charging a symbol “” on the COUNT display will turn on. The scale can keep operating for about 10 hours when the symbol appears. The scale will automatically switch off to protect the battery. Before switching off automatically, a prompt words “Lobat off” will be shown three times to indicate the scale switch off due to battery empty.

To charge the battery, connect the power adapter, and turn on the switch on the right side of the scale.

The battery should be charged for 12 hours for full capacity.

There is an LED to indicate the status of battery charging on the display. If the LED is **Green** the battery has been charged. If it is **Red** the battery is nearly discharged and **Yellow** indicates the battery is increasing the charge level.

As the battery is used it may fail to hold a full charge. If the battery life becomes unacceptable then contact your distributor.

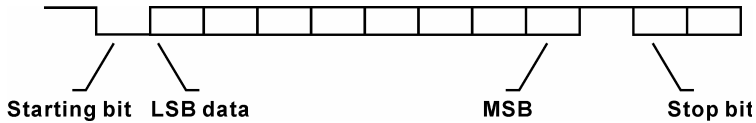
**Note:** The battery should be recharged every 3 months if the scale is not used for long time.

## VII.RS-232 Output

The scale can be ordered with as optional RS-232 output.

1. Mode E1A-RS 232C's UART signal
2. Format:

Baud rate: 9600 BPS  
 Data bits: 8 BITS  
 Stop bit: 1 BIT  
 Code ASCII  
 Connector:9 Pin Socket  
 Pin2 Input  
 Pin3 Output  
 Pin5 Signal Ground



| Data digit specification                 | 1     | 2 | 3 | 4 | 5 | 6     | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16        | 17 | 18 |
|--|-------|---|---|---|---|-------|---|---|---|----|----|----|----|----|----|-----------|----|----|
| 1 <sup>st</sup> row:<br>Netweight-Data   | title |   |   |   |   | space |   |   |   |    |    |    |    |    |    | unit      |    | CR |
| 2 <sup>nd</sup> row:<br>Unit weight-data | title |   |   |   |   | space |   |   |   |    |    |    |    |    |    | unit      |    | CR |
| 3 <sup>rd</sup> row:<br>Quantity-data    | title |   |   |   |   | space |   |   |   |    |    |    |    |    |    | CR(14 15) |    |    |
| 4 <sup>th</sup> row:<br>Tare weight-data | title |   |   |   |   | space |   |   |   |    |    |    |    |    |    | weight    |    | CR |
| 4 <sup>th</sup> row data.                |       |   |   |   |   | OA    |   |   |   |    |    |    |    |    |    |           |    |    |

NET--stable Net Weight

net--unstable Net Weight

PCS--stable Quantity

pcs--unstable Quantity

Tare--Tare Value

UW--Unit Weight

CR: OD OA

**Note:** The new line demands "OA" will appear when the total data has been transmitted.

### 3. Data Format of Series transmit:

- When scale is in stable mode:

NET: 2000.00 g  
U/W: 10.0000 g  
PCS: 200  
Tare: g

- When scale is in unstable mode:

net: 2000.00 g  
U/W: 10.0000 g  
pcs: 200  
Tare: g

|                         |                       |
|-------------------------|-----------------------|
| net=unstable Net Weight | NET=stable Net Weight |
| pcs=unstable Quantity   | PCS=stable Quantity   |
| UW=Unit Weight          | Tare=Tare Value       |

### 4. Transmit Format, when it is in Accumulation model and transmit by pressing “**ADD**” key and “**TOTAL**” key.

Press the **ADD** key

Record#01

NET: 2000.00 g  
U/W: 10.0000 g  
PCS: 200  
Tare: g

Press the **ADD** key again

Record#02

NET: 3000.00 g  
U/W: 10.0000 g  
PCS: 300  
Tare: g

Press the **TOTAL** key

TOTAL

NET: 5000.00 g

PCS: 500

NET=stable Net Weight      PCS=stable Quantity

UW=Unit Weight              Tare=Tare Value

**Note:** When it is in normal counting model (without accumulation operation), press the “**TOTAL**” key to print the data, the transmit format is as below:

- When scale is in stable mode:

**TOTAL**

NET: 5000.00 g

UW: 10.0000 g

PCS: 500

Tare: g

- When scale is in unstable mode:

net: 5000.00 g

UW: 10.0000 g

pcs: 500

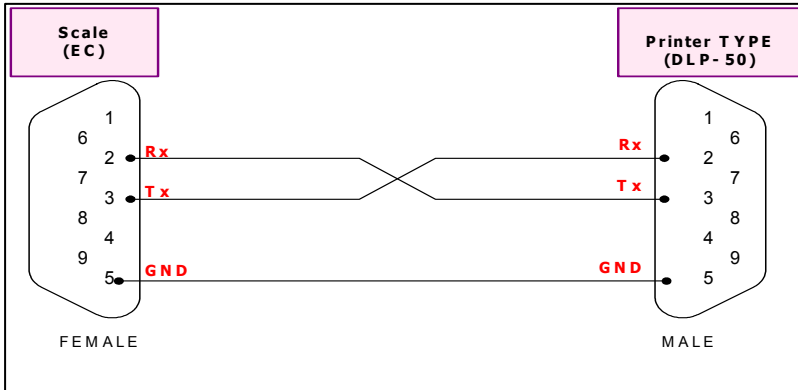
Tare: g

net=unstable Net Weight      NET=stable Net Weight

pcs=unstable Quantity        PCS=stable Quantity

UW=Unit Weight                Tare=Tare Value





Connect EC and Printer using same cable. [female (EC) – male (DLP-50)]

6. Variables (The prompt character) used in scale also in label printer

| <b>Variable Name</b> | <b>Specifications</b>      | <b>Size</b> |
|----------------------|----------------------------|-------------|
| SER                  | Accumulated times (Weight) | 2 byte      |
| NWA                  | Net weight                 | 7 byte      |
| NWB                  | Net weight(no dot)         | 6 byte      |
| TWA                  | Tare weight                | 7 byte      |
| TWB                  | Tare weight (no dot)       | 6 byte      |
| GWA                  | Gross weight               | 7 byte      |
| GWB                  | Gross weight (no dot)      | 6 byte      |
| TNA                  | Total net weight           | 7 byte      |
| TNB                  | Total net weight(no dot)   | 6 byte      |
| UWA                  | Unit weight                | 7 byte      |
| UWB                  | Unit weight (no dot)       | 6 byte      |
| QUA                  | Quantity                   | 7 byte      |
| QUB                  | Quantity (no dot)          | 6 byte      |
| TQA                  | Total Quantity             | 7 byte      |
| TQB                  | Total Quantity (no dot)    | 6 byte      |
| UNT                  | Weighing Unit              | 2 byte      |

- Note:** 1) Capital Letters are allowed for the Variable Name only.  
2) A value "0" will be given when the value exceeds the display range.

## VIII. Error Codes

During the initial power-on testing it is possible the scale may show error message.

The meaning of the error messages is described below.

| <b>ERROR CODE</b> | <b>POSSIBLE CAUSES</b>                                      | <b>HANDLING</b>                           |
|-------------------|---|---|
| E1,E2,E3          | 1.The scale pan is placed incorrectly.                      | Place the scale pan correctly.            |
|                   | 2.Turn on scale with something on the scale pan.            | Take away the goods, and switch on again. |
| E4                | Address code of Unit Weight is out of “1~200”.              | Correct the operation.                    |
| E5                | In alarm setting, the LO value is set higher than HI value. | Correct the operation.                    |
| OL                | Overload  | Take off the weight immediately.          |

If the error message still is shown after above ways, please recalibrate. If the problem still can not be solved then contact your dealer for further support.

## IX. Technical Data

|                                       |                              |   |       |        |        |
|---------------------------------------|------------------------------|---|-------|--------|--------|
| g<br>Version                          | Capacity                     | 3000g   | 6000g | 15000g | 30000g |
|                                       | Readability(e=d)             | 0.1g  | 0.2g  | 0.5g   | 1g     |
|                                       | External Resolution          | 1/30,000  |       |        |        |
|                                       | Capacity <b>M</b>            | 3000g   | 6000g | 15000g | 30000g |
|                                       | Readability(e=d) <b>M</b>    | 1g  | 2g    | 5g     | 10g    |
|                                       | External Resolution <b>M</b> | 1/3,000   |       |        |        |
| Internal Resolution                   |                              | 1/600,000   |       |        |        |
| Min Recommended Lack of Sample Weight |                              | 1g  | 2g    | 5g     | 10g    |
| Min Recommended Lack of Unit Weight   |                              | 0.01g   | 0.02g | 0.05g  | 0.1g   |
| Display Type                          |                              | LCD   |       |        |        |
| Weight Units                          |                              | g   |       |        |        |
| Zero Range                            |                              | ±2%   |       |        |        |
| Tare Range                            |                              | Full Capacity by Subtraction                                      |       |        |        |
| Stabilization Time                    |                              | ≤2 seconds  |       |        |        |
| Operation Temperature                 |                              | 0℃ ~ 40℃  |       |        |        |
| Humidity Range                        |                              | ≤90% relative humidity, non-condensing                            |       |        |        |
| Power                                 |                              | AC Adaptor DC 12V/1A or 12V/800mA                                 |       |        |        |
|                                       |                              | Internal rechargeable sealed acid battery                         |       |        |        |
| Battery Life                          |                              | 80 hours continuous use<br>with 12 hour recharge time             |       |        |        |
| Calibration                           |                              | Automatic external with “g” mass,<br>factory calibration recovery |       |        |        |
| Safe Overload Capacity                |                              | 120% of capacity  |       |        |        |
| Product weight                        |                              | 4.5kg   |       |        |        |
| Dimension(mm)                         |                              | 330(W) x 346(D) x 107(H)  |       |        |        |
| Pan Size(mm)                          |                              | 306(W) x 222(D)   |       |        |        |