Table Of Contents

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 left bottom side 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 switch located on the right side of scale should be on. Then press the button "ON/OFF" to turn on the scale.

When the scale is used with the battery only, press the key "ON/OFF" directly to turn on the scale.

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.

II. Explanation Of Display Symbols

COUNT

◄ 000000 | **PCS**
◄
◄

WEIGHT   **g**

→0← ◄ 000000
◄
NET ◄

UNIT WEIGHT

◄ 000000 | **g/PC**
◄
◄
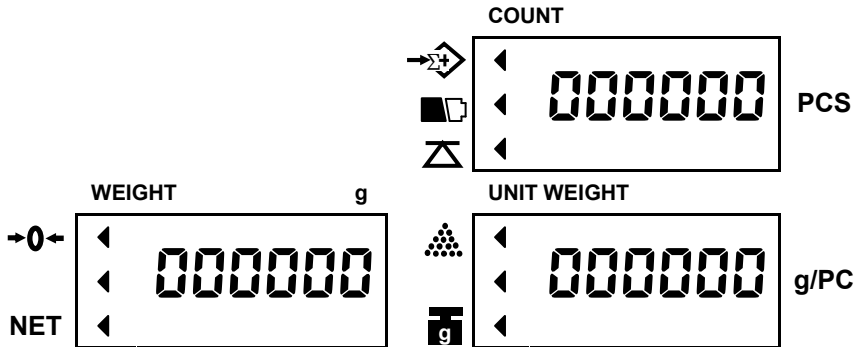
Display Windows

● 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
NET	Scale is in TARE mode.
→0←	Scale is in ZERO mode.
→Σ+	Scale is in ACCUMULATION mode.
△	The display reading is in STABLE condition.
(pyramid of dots)	Lack of Sample Weight If the total sample weight on the pan is less than **10 display divisions**, a triangular indicator will appear to remind the user to add more samples until the indicator disappears.
g	Lack of Unit Weight If the unit weight is less than **1/10 display divisions**, a triangular indicator will appear to remind the user that the displayed unit weight is too small for getting accurate quantity calculations.
(battery icon)	Low Voltage

III. Keypad Functions

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

IV. Operations

(I) Switch on & off

Click the **on & off** button to 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.

COUNT

0 **PCS**

WEIGHT **g**

→0←

2.0000

NET

Sample Weight

UNIT WEIGHT

0 **g/PC**
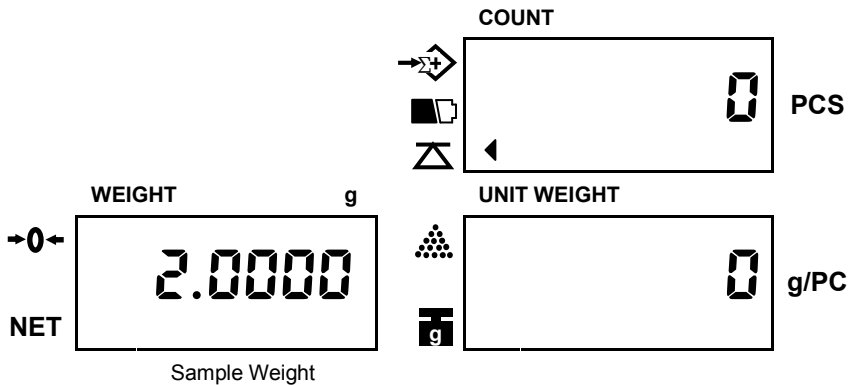
2.   Input the quantity of item on the pan.

COUNT

40 **PCS**

WEIGHT **g**

→0←

2.0000

NET

Sample Weight

UNIT WEIGHT

50 **g/PC**

Input sample size
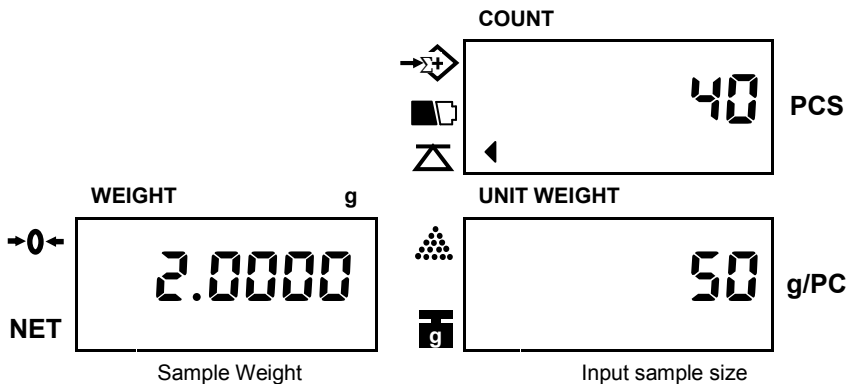
3. Press **SMPL** key

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".

COUNT

- - - - - -   PCS

WEIGHT   g   UNIT WEIGHT

2.0000   5AnnP   g/PC

NET

Sample Weight   (SAMPLE)
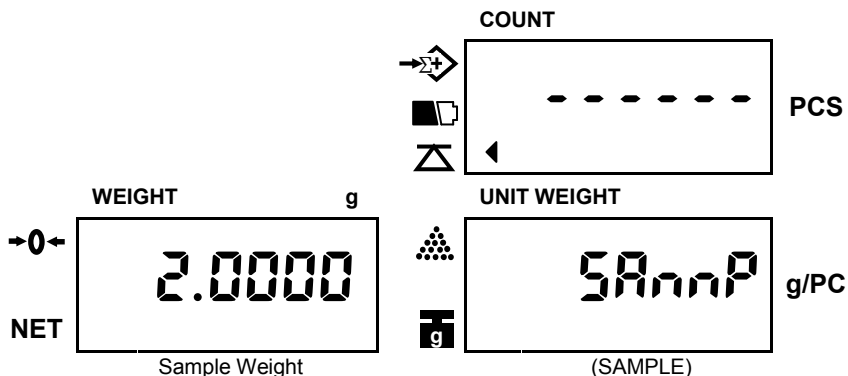
4. The sampling operation is completed while stable display appears as below :

COUNT

50   PCS

WEIGHT   g   UNIT WEIGHT

2.0000   40   g/PC

NET

Sample Weight   Unit Weight

★ 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 (VIII) of **V.**).

Known unit weight

    1. Input the known unit weight.

COUNT

→∑+

■▭

⊼ ◀

0   **PCS**

WEIGHT   **g**

→0← ◀   **0.0000**

NET

UNIT WEIGHT

40 **g/PC**

Known unit weight

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

    into counting mode.

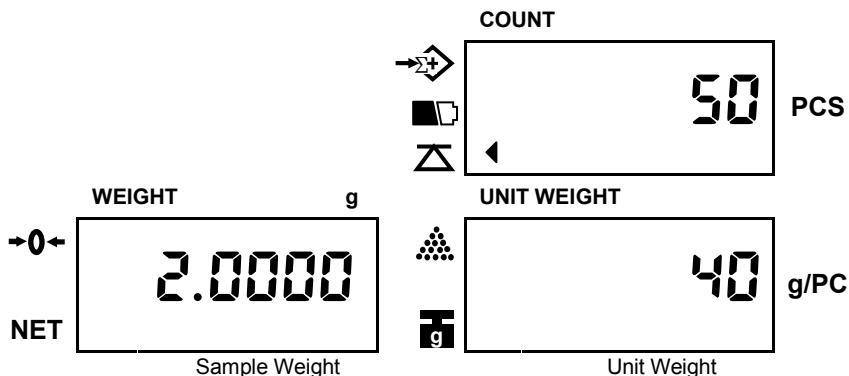   **Note:** The system default is "Unit Weight". If the "**U.WT**" key

    is clicked when the value (ex.:0) in COUNT window is

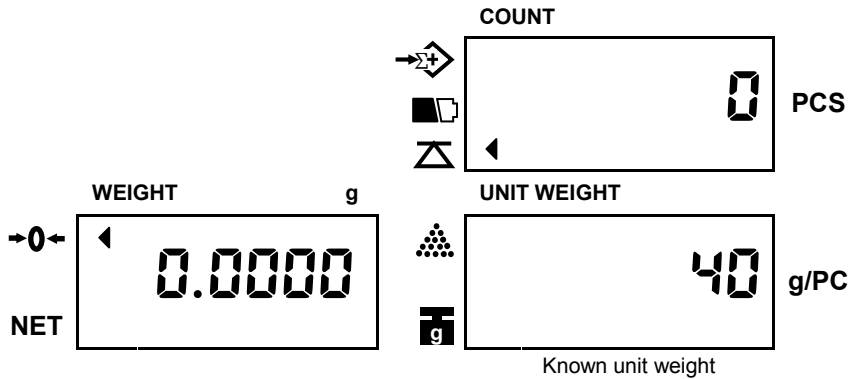   blinking, then the numerical value input will be as "Unit

    Weight".

COUNT

→∑+

■▭

⊼ ◀

0   **PCS**

WEIGHT   **g**

→0← ◀   **0.0000**

NET

UNIT WEIGHT

40 **g/PC**
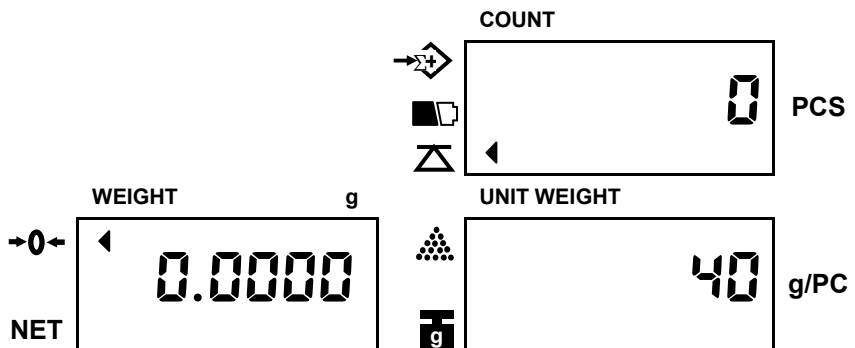
(IV) Preset unit weight in numeric keys
How to store unit weight in memory cells

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

COUNT

0 PCS

WEIGHT g **UNIT WEIGHT**

→0← **0.0000** **35** g/PC

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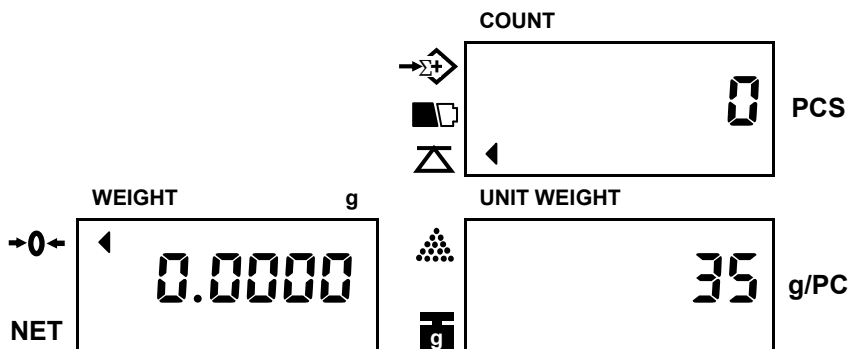
2. Give a long press of the **MEMORY** key.

COUNT

0 PCS

WEIGHT g **UNIT WEIGHT**

→0← **0.0000** **5 - -000** g/PC

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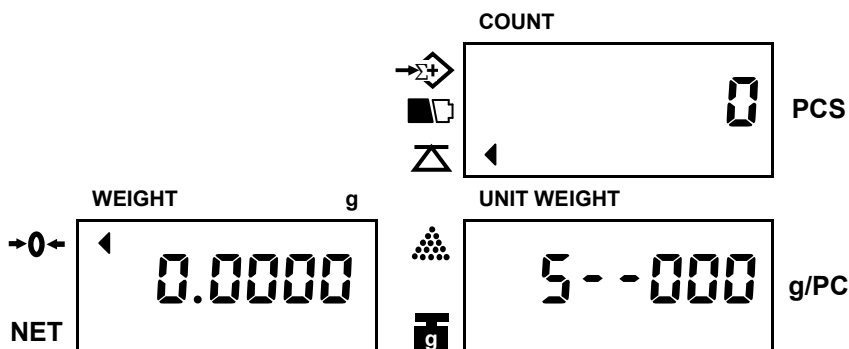
3. Enter a address cell (1~200, total 200 cells available) by pressing any of the numeric keys (**0 ~ 9**), then press the **ENTER** key to store the unit weight into the address cell.

Note: An error massage "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 **MEMERY** key twice. The stored unit weight will appear in the unit weight display.

8.

(V) Subtract container's weight
weight unknown

1. Place a container on the pan.

COUNT

PCS

0

WEIGHT   **g**   **UNIT WEIGHT**

→0←

0.9600   0   **g/PC**

NET

Container's weight

2. Press **TARE** key

COUNT

- - - - - -   **PCS**

WEIGHT   **g**   **UNIT WEIGHT**

→0←

- - - - - -   tArE   **g/PC**

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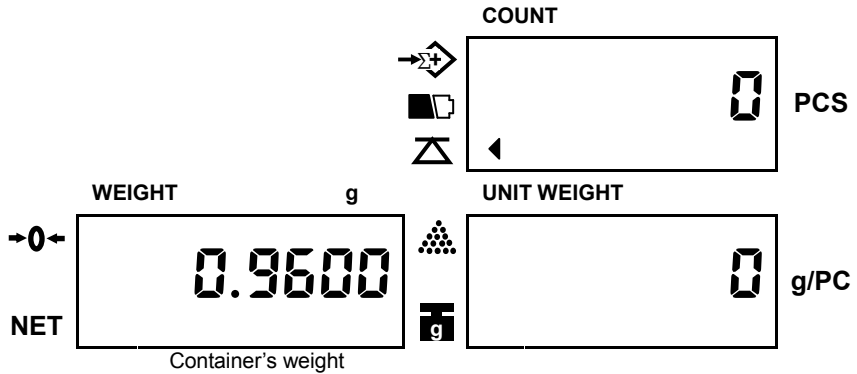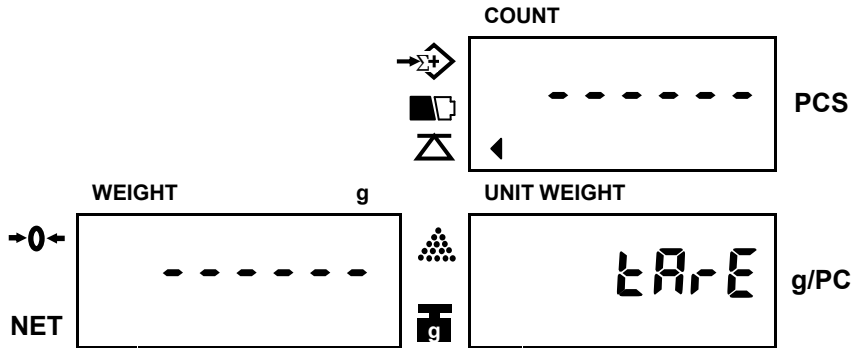
3. The scale will enter into counting mode while stable display appears as below.

COUNT

0   **PCS**

WEIGHT   **g**   **UNIT WEIGHT**

→0←

0.0000   0   **g/PC**

NET ◄

9.
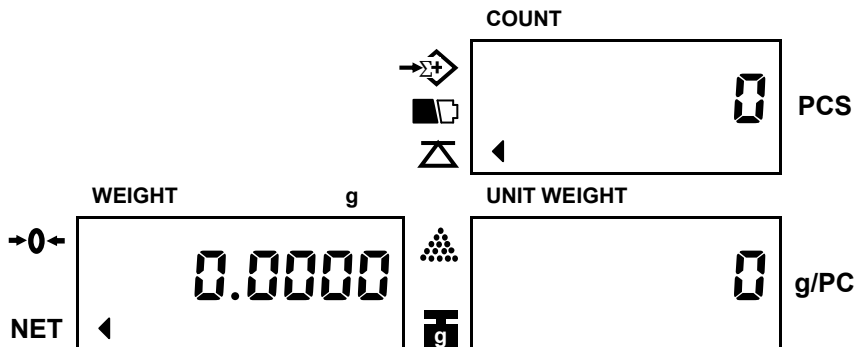
Container's weight known

1. Nothing on the pan

	COUNT	
→Σ+		
■▯	0	PCS
乙 ◀		

WEIGHT	g	UNIT WEIGHT	
→0← ◀ 0.0000	⚬⚬⚬	0	g/PC
NET	g		

Press **P.TARE** key

	COUNT	
→Σ+ ◀		
■▯ ◀	000000	PCS
乙 ◀		

WEIGHT	g	UNIT WEIGHT	
→0← ◀		◀	
◀ 0.0000	⚬⚬⚬	◀ PrEtA	g/PC
NET ◀	g	◀	

Input container's weight known

	COUNT	
→Σ+		
■▯	- - - - - -	PCS
乙 ◀		

WEIGHT	g	UNIT WEIGHT	
→0← ◀		⚬⚬⚬	
0.9600		PrEtA	g/PC
NET	g		

Input container's weight

10.

Press **P.TARE** key

COUNT

- - - - - - PCS

WEIGHT   g   UNIT WEIGHT

→0←   ◄   **-0.9600**   **0**   g/PC

NET   ◄

2. Scale is loaded

COUNT

125 **PCS**

WEIGHT   g

→0←

2.5000

NET

Gross weight
On the pan

UNIT WEIGHT

20 **g/PC**

Unit weight of item
to be counted

Press **P.TARE** key

COUNT

- - - - - - **PCS**

WEIGHT   g

→0←   ◄

0.0000

NET

UNIT WEIGHT

PrEtA **g/PC**

Input container's weight known

COUNT

→Σ+

■▯

△ ◀ - - - - - **PCS**

WEIGHT   g

→0←

NET

0.5000

UNIT WEIGHT

▲
g

PrEtA **g/PC**

Press **P.TARE** key

COUNT

→Σ+

■▯

△ ◀ 100 **PCS**

WEIGHT   g

→0←

NET ◀

2.0000

Net weight on
the pan

UNIT WEIGHT

▲
g

20 **g/PC**

Unit weight of item
to be counted

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.

13.

(VI) Weight/Quantity accumulation

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

COUNT

5 **PCS**

WEIGHT   **g**

➔0➔

1.0000

NET

Weight on the pan

UNIT WEIGHT

200 **g/PC**

2. Press **ADD** key.

COUNT

– – – – – – **PCS**

WEIGHT   **g**

➔0➔

– – – – – –

NET

UNIT WEIGHT

Add **g/PC**
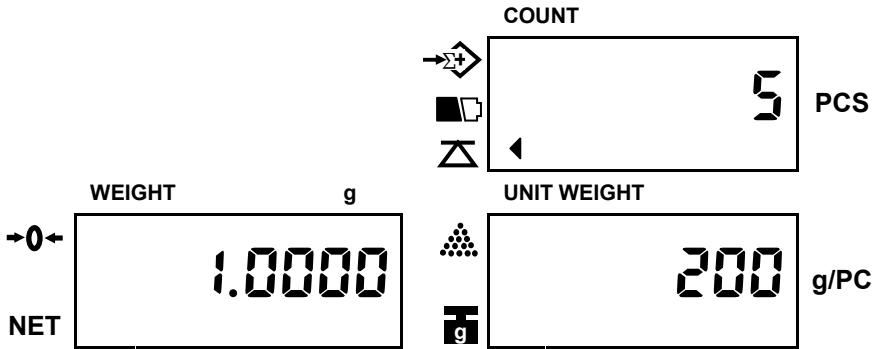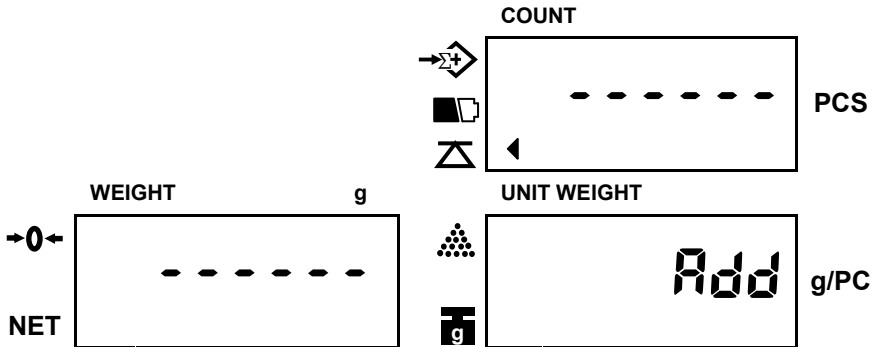
3. Display readings to be stable as below.

COUNT

5 **PCS**

WEIGHT   **g**

➔0➔

1.0000

NET

Total accumulated weight

UNIT WEIGHT

≡01≡ **g/PC**

Total accumulation times
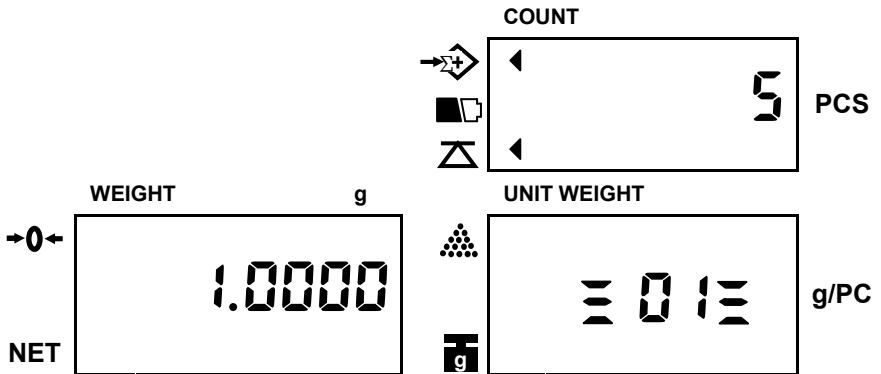
★ **Accumulation effective only when stays at zero.**

14.

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

COUNT

5 **PCS**

WEIGHT	**g**	**UNIT WEIGHT**

→0←

1.0000

NET

200 **g/PC**

Weight on the pan   Unit weight
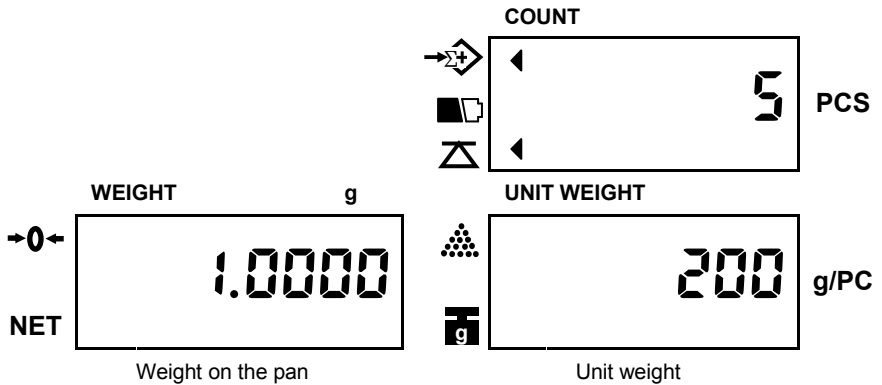
5. Press **TOTAL** key to enter into accumulation status mode.
   At this moment, total accumulated weight is shown In
   WEIGHT window, total accumulation times is shown in UNIT
   WEIGHT window and TOTAL PIECES window displays
   accumulated count.
   Press **TOTAL** key again to revert to counting 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.

COUNT

0 **PCS**

WEIGHT **g**

→0← ◄ **- - H 1 - -**

NET

High limit

UNIT WEIGHT

0 **g/PC**

Window for displaying high limit value to be input

2. Key in the desired high limit value.

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

COUNT

0 **PCS**

WEIGHT **g**

→0← ◄ **- - H 1 - -**

NET

High limit

UNIT WEIGHT

2000 **g/PC**

High limit 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)

COUNT

5 **PCS**

WEIGHT g

UNIT WEIGHT

→0← ◀ **--LO--**

NET

Low limit

2000 **g/PC**
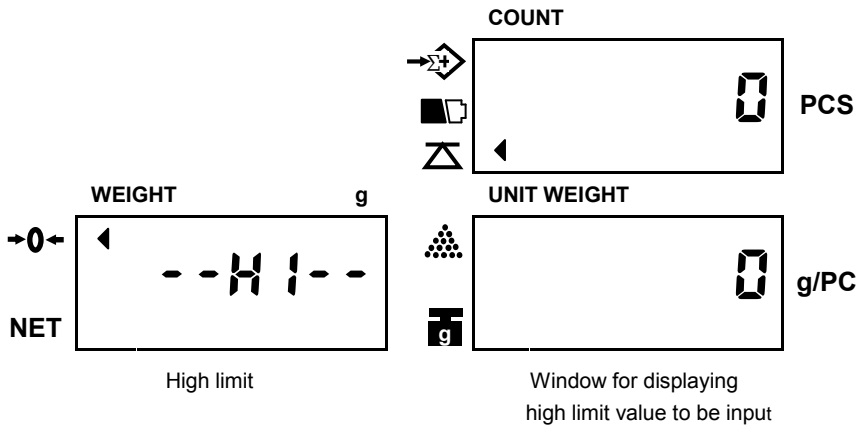
High limit value keyed in
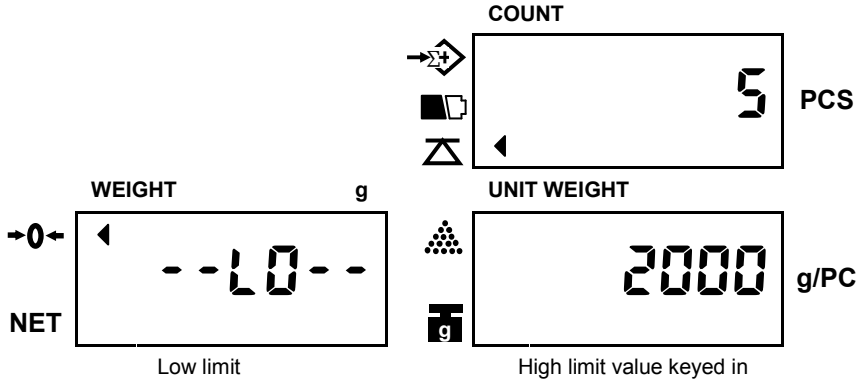
4. Press **SMPL** key to complete counting check range preset procedure and return to normal counting mode.

COUNT

0 **PCS**

WEIGHT g

UNIT WEIGHT

→0← ◀ **0.0000**

NET

0 **g/PC**

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

(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.

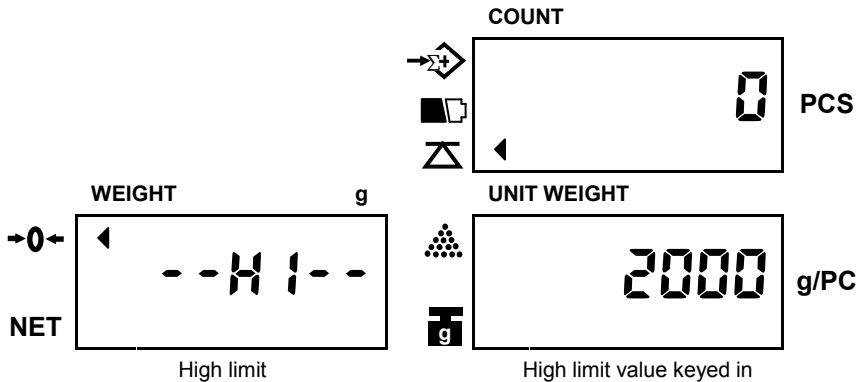Procedures

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

COUNT

0 **PCS**

WEIGHT g	UNIT WEIGHT
→0← ◀ --H1--	0 g/PC
NET	
High limit	Window for displaying high limit value to be input

2. Key in the desired high limit value.

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

COUNT

0 **PCS**

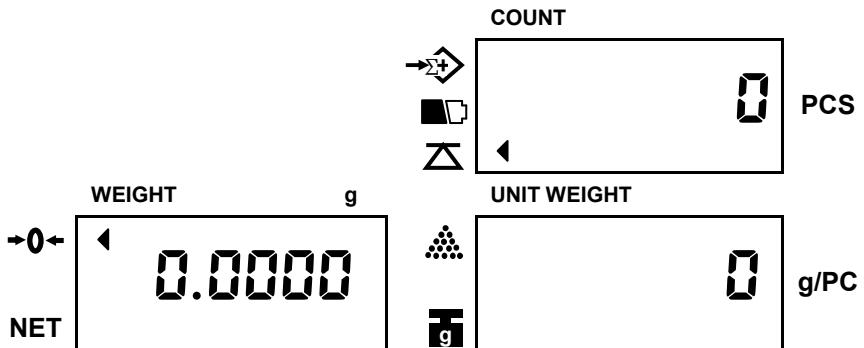| WEIGHT g	UNIT WEIGHT
→0← ◀ --H1--	3.0000 g/PC
NET	
High limit	High limit value keyed in

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)

COUNT

1.0000 **PCS**

WEIGHT   g   UNIT WEIGHT

→0←   --Lo--   3.0000 **g/PC**

NET
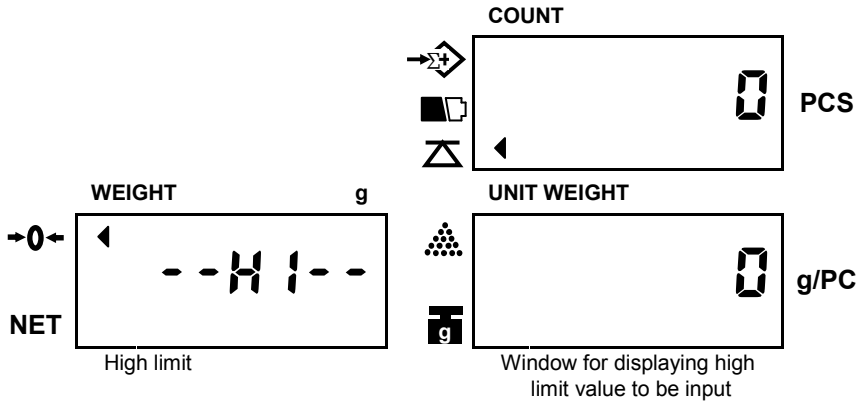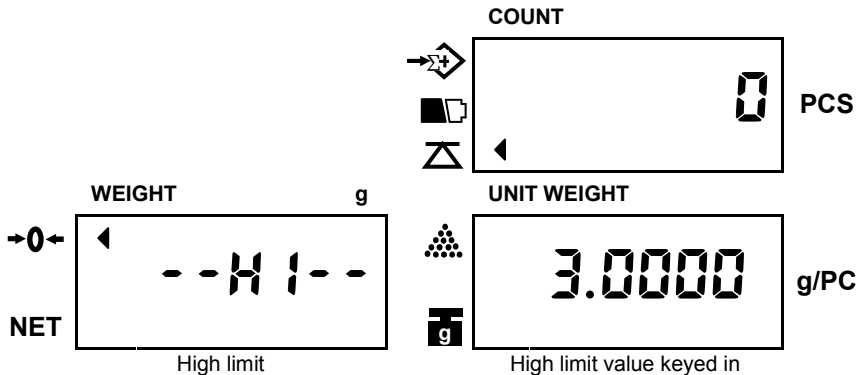
Low limit   High limit value keyed in
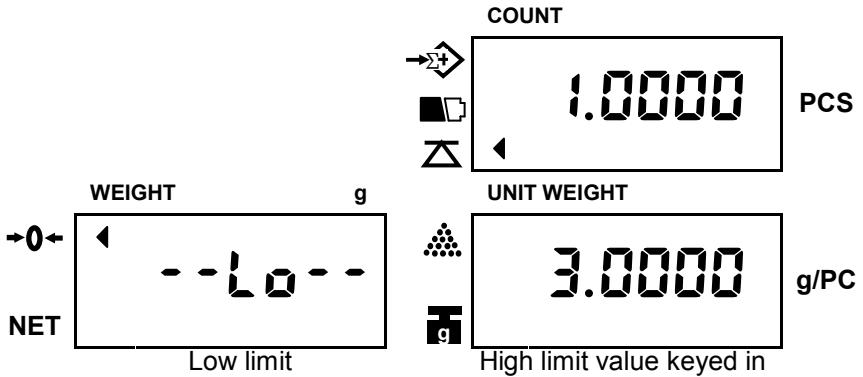
4. Press **U.Wt** key to complete weight check range preset

procedures and return to normal counting mode.

COUNT

0 **PCS**

WEIGHT   g   UNIT WEIGHT

→0←   0.0000   0 **g/PC**

NET
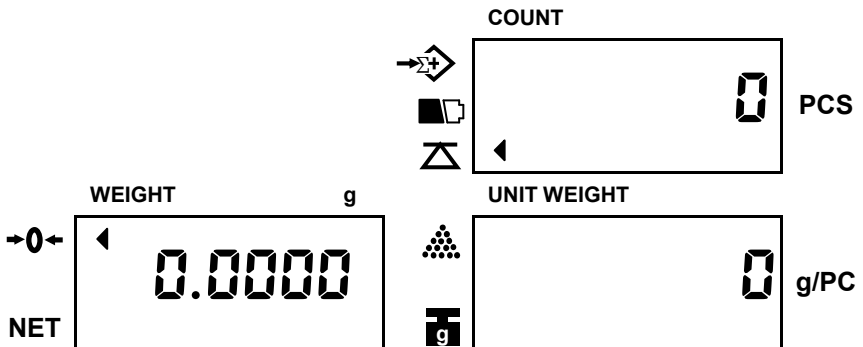
Note: An error massage "E4" appears When the **LO** value is

set higher than **HI** value.

➤ **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.
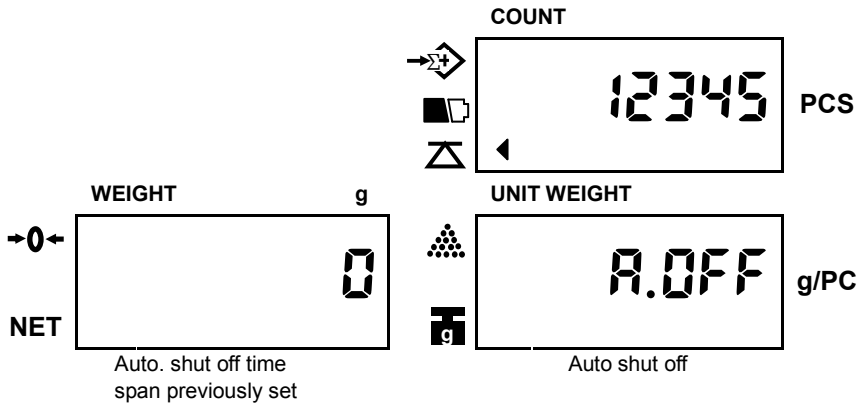
★ The display shows "error" to prompt the mistake when the pass word is wrong.

★ 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.

Auto. shut off time span previously set

Auto shut off

2. Press **MOVE** key to revolve the system-preset time span (2 min., 5 min., 8 min., and o)

3. Press **CLEAR** key to determine and return to normal counting mode or press **ENTER** key for determination and move to next.

(II) Zero Tracking Range

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

COUNT

```
12345
```
PCS

WEIGHT   g   **UNIT WEIGHT**

```
                2
```
```
                trAC
```
g/PC

NET

Zero tracking range   Zero tracking
(0~4)
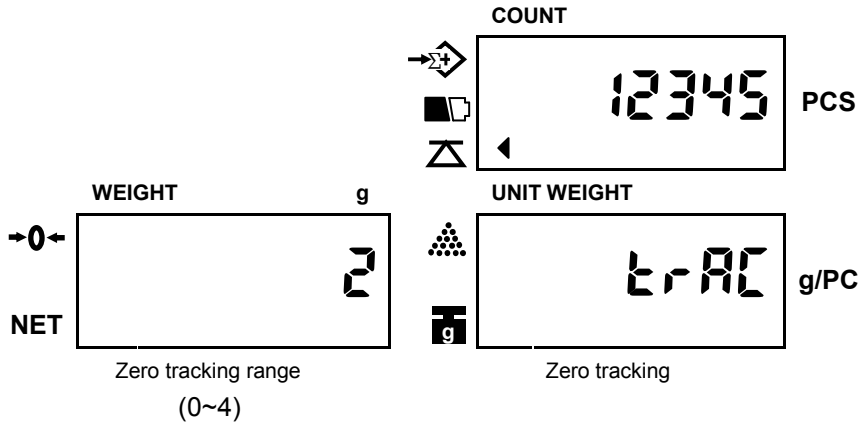
2. Press **MOVE** key to revolve the system-preset zero tracking range (0=off, 1=0.5d, 2 =1d, 3=2d, 4=3d). The larger number selected, the wider range.

3. Press **CLEAR** key to determine and return to normal counting mode or press **ENTER** key for determination and move to next.

(III) Zero display range

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

COUNT

12345 **PCS**

WEIGHT   **g**   **UNIT WEIGHT**

→0←   2   2Ero **g/PC**

NET

     Zero display range   Zero display
       (0 ~ 4)

  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.

(IV) Stable class range
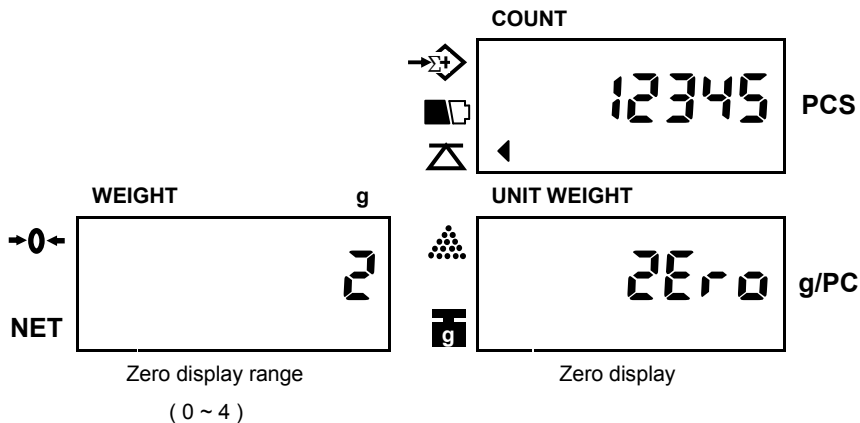
1. Keep pressing **ENTER** key in USER PROGRAMMING FUNCTION MODE and release until the following displays appear.

COUNT

```
12345   PCS
```

WEIGHT   g   UNIT WEIGHT

```
        2          F iLt   g/PC
```

NET

Stable class range   Stable class
(0 ~ 5)

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.

3. Press **CLEAR** key to determine and return to normal counting mode or press **ENTER** key for determination and move to next.
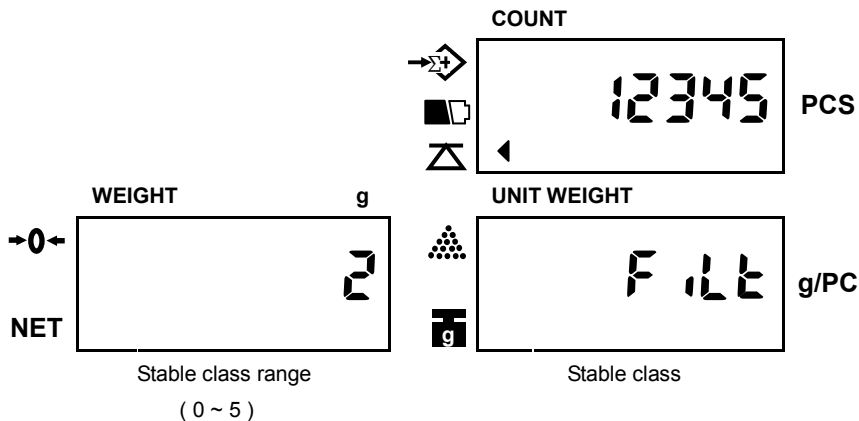
(V) Zero return range

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

COUNT

| 12345 | **PCS** |

| **WEIGHT** g | | **UNIT WEIGHT** | |
| 1 | | $t.rAtE$ | **g/PC** |

Zero return range   Zero return

(0 ~ 5)

2. Press **MOVE** key to revolve the system-preset zero return class range (level: 0, 1, 2, 3, 4, 5). The larger number selected, the more stable zero point.

3. Press **CLEAR** key to determine and return to normal counting mode or press **ENTER** key for determination and move to next.
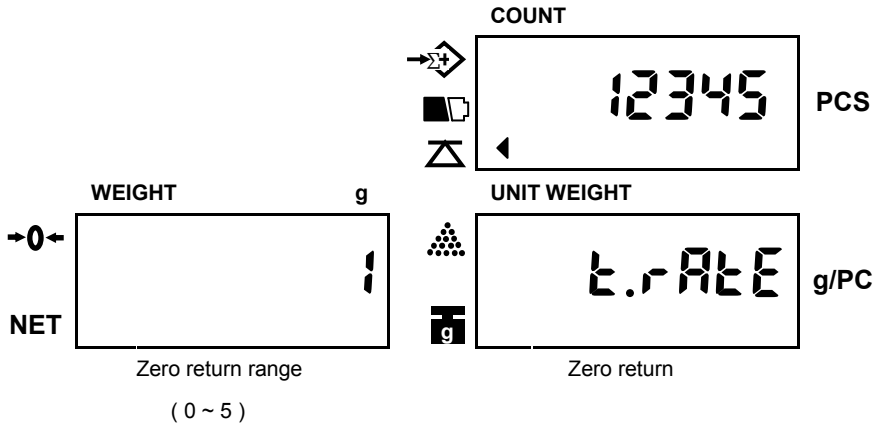
(VI) Backlight type

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

COUNT

12345 PCS

WEIGHT   g   UNIT WEIGHT

→0←   **0**

NET   **bL** g/PC

        Backlight type   Backlight

    2. Press **MOVE** key to revolve the system-preset backlight

       type (0 – auto. backlight, 1 – manual backlight)

    3. Press **CLEAR** key to determine and return to

       normal counting mode or press **ENTER** key for
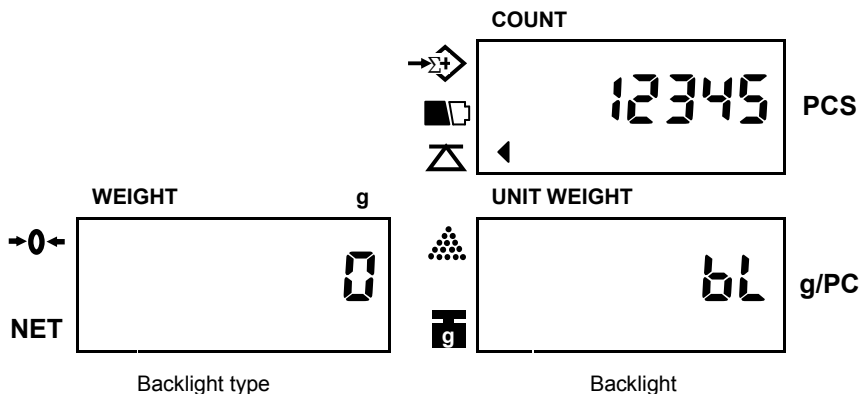
       determination and move to next.

● <u>Auto. Backlight</u>

    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.
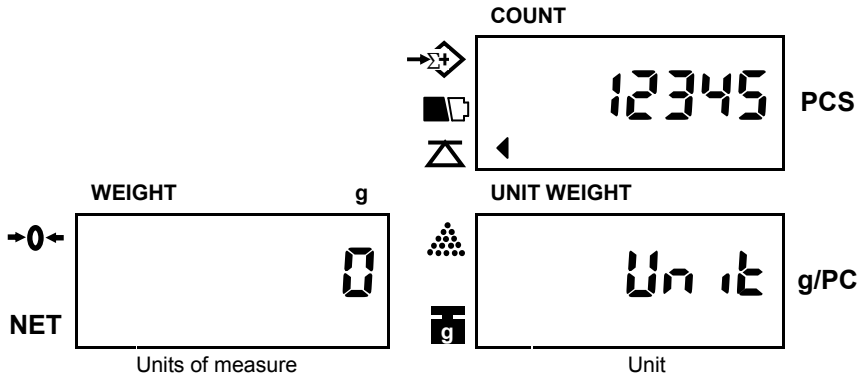
● <u>Manual backlight</u>

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

  ★   Scale will keep the backlight type selected in memory for next use.

(VII) Change unit of measure from kg/g to Pound

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

COUNT

```
12345  PCS
```

WEIGHT   g   **UNIT WEIGHT**

→0←
```
0                    Unit  g/PC
```
NET

Units of measure   Unit

2. Press **MOVE** key to revolve the system-preset units of measure. (o – kg or g , 1 – lb)

3. Press **CLEAR** key to determine and return to normal counting mode or press **ETNER** key for determination and move to next.
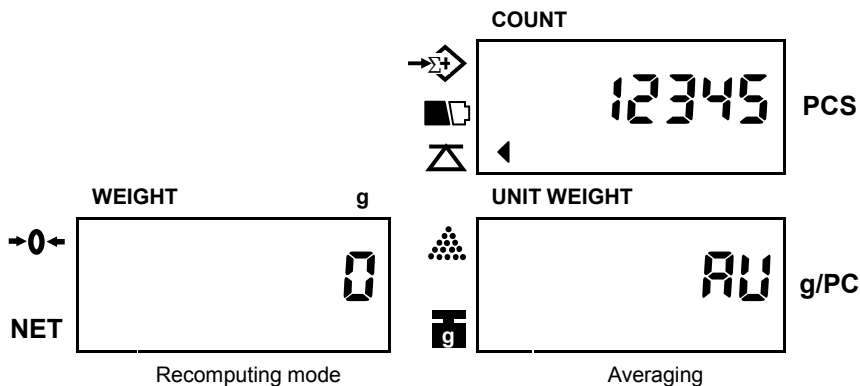
(VIII) Unit weight recomputing

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

COUNT

`12345` PCS

WEIGHT   g   UNIT WEIGHT

→0←

`0`   `AU` g/PC

NET

Recomputing mode   Averaging

2. Press **MOVE** key to revolve the system-preset recomputig mode.

    0 – disable recomputing function

    1 – enable recomputing function

3. Press **CLEAR** key to determine and return to normal counting mode or press **ETNER** 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, 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.

(IX) Check alarm type

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

COUNT

12345 **PCS**

WEIGHT   **g**   **UNIT WEIGHT**

➜0➜   *0*   *PASS* **g/PC**

NET

check alarm type   check alarm

2. Press **MOVE** key to revolve the system-preset check alarm types.

   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.
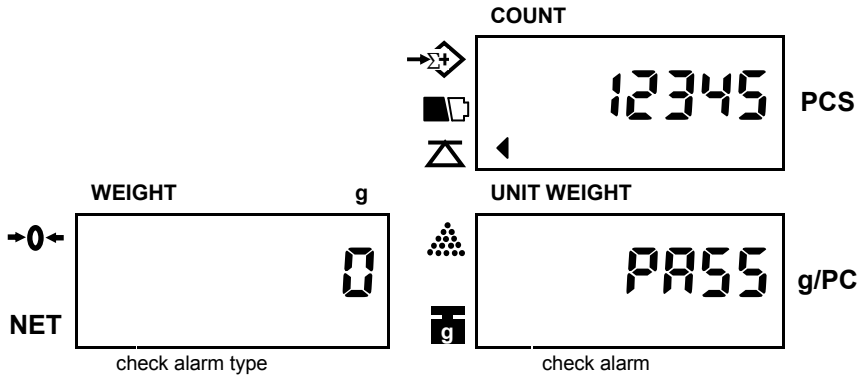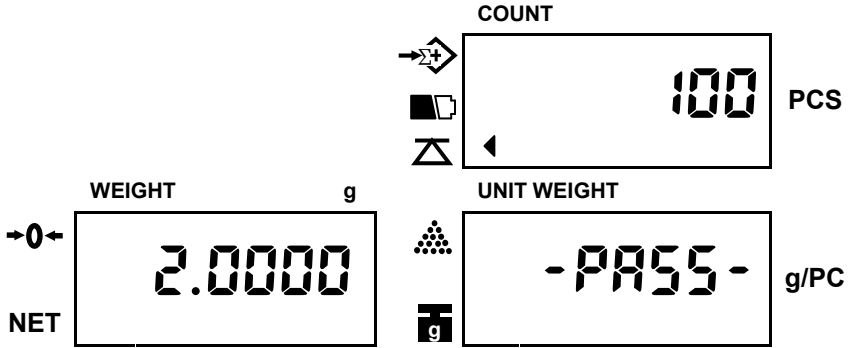
Inside type

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

Ex. 1   Counting check alarms

COUNT

100 PCS

WEIGHT   g   UNIT WEIGHT

→0←   **2.0000**   **-PASS-** g/PC

NET

EX. 2   Weight check alarms

COUNT

100 PCS

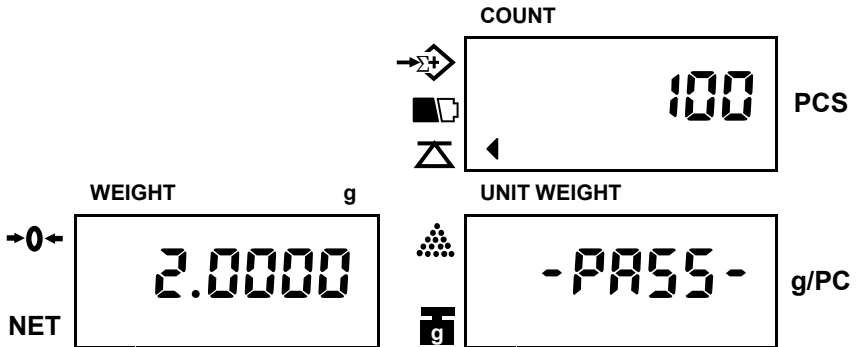WEIGHT   g   UNIT WEIGHT

→0←   **2.0000**   **-PASS-** g/PC

NET

Outside type

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

Ex. 1   Counting check alarms

COUNT

12345 **PCS**

WEIGHT   **g**

→0←

2

NET

UNIT WEIGHT

- - H 1 - - **g/PC**

Over high limit

Ex. 2   Weight check alarms

COUNT

100 **PCS**

WEIGHT   **g**

→0←

2.0000

NET

UNIT WEIGHT

- - Lo - - **g/PC**

Below low limit

30.
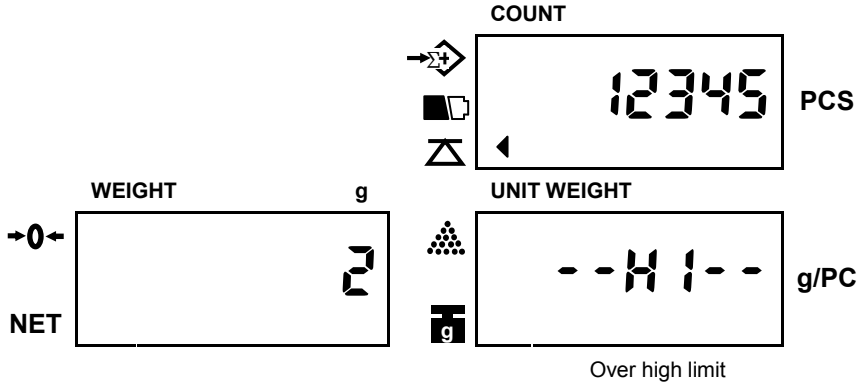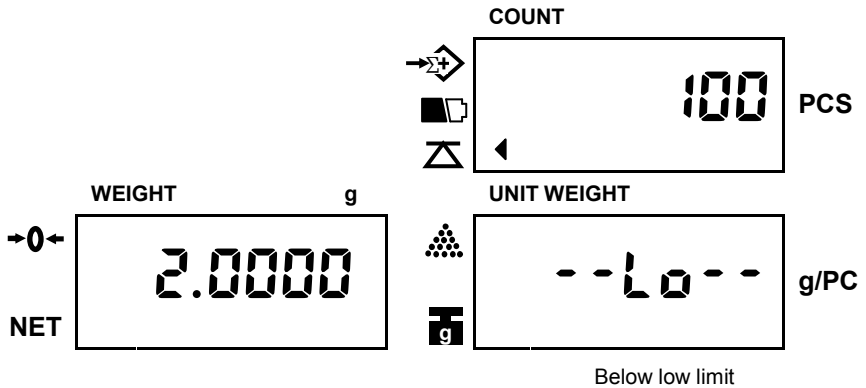
(Ⅹ) Baud Rate setting

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

COUNT

12345 **PCS**

WEIGHT g   **UNIT WEIGHT**

→0← 0 $rAtE$ **g/PC**

NET

2. Press **MOVE** key to revolve the system-preset baud rate. (0 – 2400 , 1 – 4800, 2-9600)

3. Press **ENTER** key to determine and return to next setting.

(XI) Transmit method setting
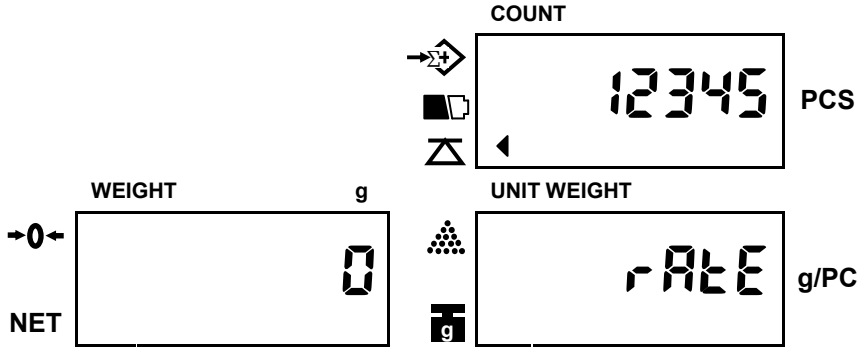
1. Keep pressing **ENTER** key in USER PROGRAMMING FUNCTION MODE and release until the following displays appear.

COUNT

12345 **PCS**

WEIGHT g UNIT WEIGHT

→0←

1 **にr n** **g/PC**

NET

2. Press **MOVE** key to revolve the system-preset transmit method.

"1" = transmit by pressing a key

"2" = series transmit

"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.
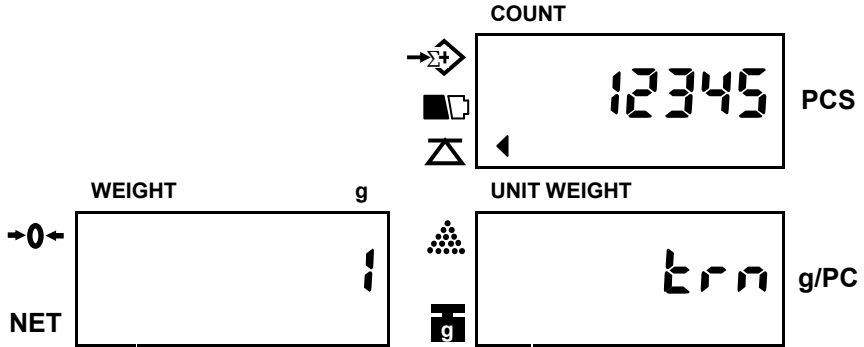
(XII) Label format setting (available when a label printer is connected.)

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

COUNT

$$12345$$ **PCS**

WEIGHT   **g**   **UNIT WEIGHT**

→0←

$$0$$ $$Forn$$ **g/PC**

NET

2. Press **MOVE** key to revolve the system-preset file name of the format. (form0~9)

3. Press **ENTER** key to determine and return to next setting.

(XIII) Cancel Tare setting
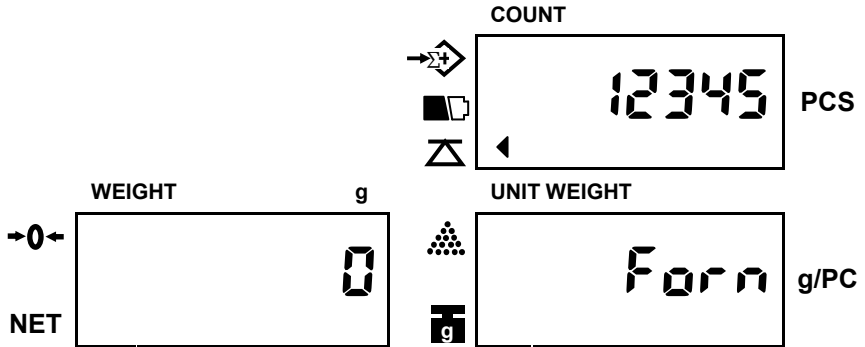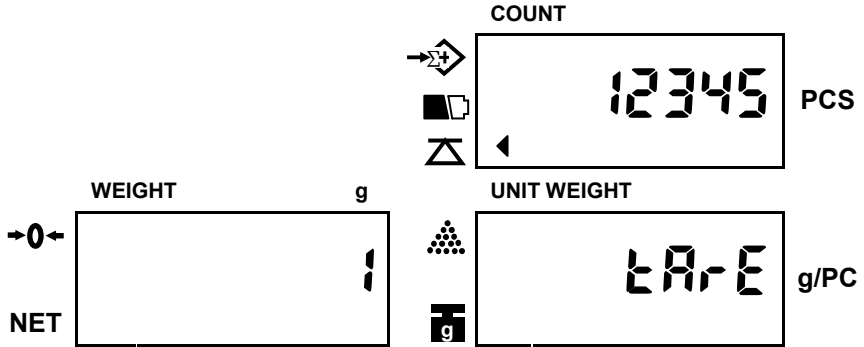
1. Keep pressing **ENTER** key in USER PROGRAMMING FUNCTION MODE and release until the following displays appear.

COUNT

1 2 3 4 5 **PCS**

WEIGHT g **UNIT WEIGHT**

→0← 1 tArE **g/PC**

NET

2. Press **MOVE** key to revolve the system-preset Cancel Tare mode.

"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 to indicate the error. Turn off and turn on the solve the error.)
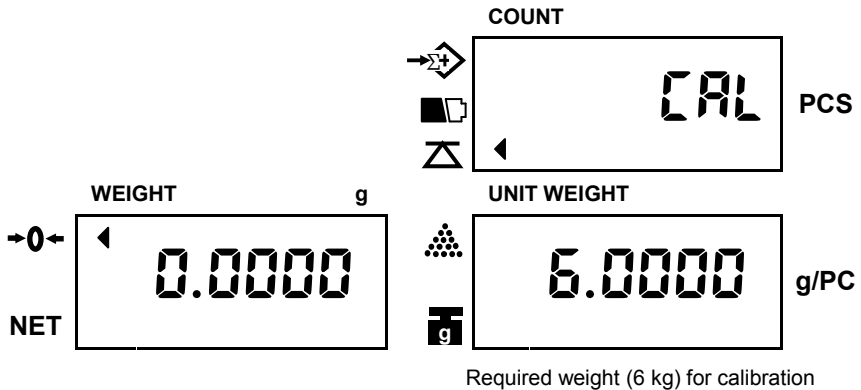
3. Press **ENTER** key to determine and return to normal counting mode.

★ **Turn off the scale after all USER PROGRAMMING FUNCTIONS are set and restart for use.**

VI. Calibration (can only be done in kg)

1. Turn on the scale, and key in "000419" during counting down (self-check) to zero to enter into Simple Calibration mode.

   The displays will indicate as below eventually. (Take 6kg scale for instance)

   COUNT

	CAL **PCS**

   WEIGHT　　　　　**g**

   →0←　◄ **0.0000**

   NET

   UNIT WEIGHT

   6.0000 **g/PC**

   Required weight (6 kg) for calibration

2. Put a weight on the pan same as what exactly shown in the UNITWEIGHT.

   The displayed reading in the UNIT WEIGHT window starts blinking. The scale will stop blinking and return to normal counting mode.

   Calibration is now completed.

   ★ Required weight for calibration can be changed by using numeric keys while in step 2 above.

   ★ Press **CLEAR** key to escape from calibration mode at any time.

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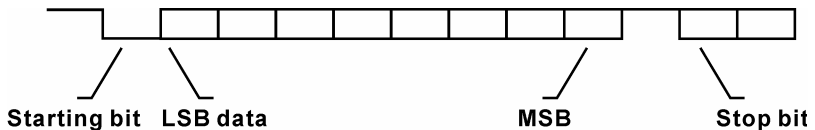
Note: The battery should be recharged every 3 months if the scale is not used for long time.

VIII.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

Starting bit	LSB data							MSB		Stop bit

3. Data Format of Series transmit:

   Net=Net Weight   Pcs=Quantity   U/W=Unit Weight

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

   Press the **ADD** key again

   Record#02

   Net   3000.00   g

   U/W   10.0000   g

   Pcs   300

Press the **TOTAL** key

Total

Net   5000.00   g

U/W   10.0000   g

Pcs   500

Net=Net Weight   Pcs=Quantity   U/W=Unit Weight

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:

Total

Net   5000.00   g

U/W   10.0000   g

Pcs   500

Net=Net Weight   Pcs=Quantity   U/W=Unit Weight
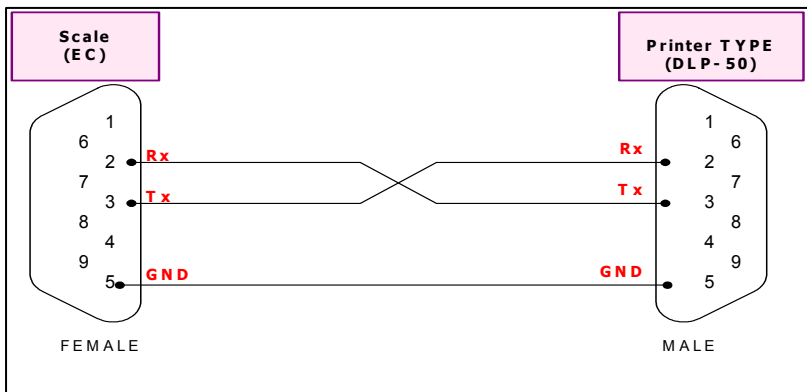
5. Format of Automatic and Series transmit without accumulation:

Net   60.00 kg

U/W   12   g

PCS   5000

Net=Net Weight   Pcs=Quantity   U/W=Unit Weight

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

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

Variable Name	Specifications	Size
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.

IX.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.

ERROR CODE	POSSIBLE CAUSES	HANDLING
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.

X. Technical Data

Capacity(g)		3000	6000	15000	30000
Readability(e=d)	High	0.1	0.2	0.5	1
	Low	0.2	0.5	1	2
External Resolution	High	1/30,000			
	Low	1/15,000	1/12,000	1/15,000	1/15,000
Internal Resolution		1/600,000			
Display Type		LCD			
Weight Units		kg or g, lb			
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 with 12 hour recharge time			
Calibration		Automatic external with kg/g mass, factory calibration recovery			
Safe Overload Capacity		120% of capacity			
Product weight		4.5kg			
Dimension(mm)		360(W) x 360(D) x 106(H)			
Platter Size(mm)		304(W) x 220(D)			