COUNTING SCALE

USER'S MANUAL

Press [M+] to confirm it after selection. The display will show next menu.
Or press [UNITS WEIGHT/CANCEL] key to exit.

7). **SELECTION OF BACKLIGHT MODE** (**"BACKL?"**)

There are three backlight modes ("OFF","ON" and "AUTO") selectable. "ON" means backlight keeping on, "OFF" means backlight keeping off, and "AUTO" means backlight be in auto mode, i.e. backlight is OFF in the zero status, ON in the status there are load on the platform. The default status is in AUTO mode.

Press [M+] in the "BACKL?" menu to enter it, choose the desired mode by shift key ([ZERO/>]), press [M+] to confirm it. The display will show next menu. Or press [UNITS WEIGHT/CANCEL] key to exit.

4. SPECIFICATIONS

1). Response: 2-5 seconds
2). Display: Large LCD display with display
3). Tare: 100% of capacity
4). Zero: 4% of capacity
5). Overload alarm: auto software alarm over0.3% of capacity
6). Over load capacity: auto protect over 125% of capacity
7). Power source: DC 6V 4Ah rechargeable battery
　　　　　　　　　AC 220V/DC10V 500mA adaptor
9). Temperature: storage: -10~+50 C operate: 0-40 C
10). Humidity: storage: 5%-90% R.H. operate: 10%-80% R.H.

5. ERRORS AND SOLUTIONS

The display will show error message when error happens. The following shows the solution of the errors.

A. "------"
a. Check the scale platform whether in proper position or not.
b. Contact with local agent.

B. "LO.BAT" and "OFF"
The LCD display shows "LO.BAT" for several seconds, shows "OFF" next. Then switch the scale off automatically. The solution is as follow.
a. Because of low battery , connect a proper adaptor to the scale. Switch the scale on and recharge the battery.
c. Contact with local agent.

CONTENTS

3. DESCRIPTION OF USER SELECTION

Press [QUANTITY CHECK/<] key while holding [CE] key in the weighing mode to enter user selection mode. The LCD display will show "FILT?" on the first line in flashing and "SELXX" on the second line.

1). SELECTION OF FILTER GRADE ("FILT?")

There are two filter modes (mode 1 and mode 2) in the scale. They have four grades (0-3) to select each. The higher grade, the higher the stability is, but the slower reaction is. For example, "**SEL1.0**" means the reaction of the scale is the quickest, but its stability is the lowest. "**SEL2.3**" means the reaction of the scale is the lowest, but its stability is the highest.

In the **[FILT?]** menu, press [M+] to enter selection of filter grade mode. Then select the grade (e.g. "**SEL1.2**", means mode 1 be in grade 1, mode 2 be in grade 2) by shift key ([ZERO/>]), and press [M+] to confirm it. The display will show next menu. Or press **[UNITS WEIGHT/CANCEL]** key to exit.

.2). SELECTION OF STABILITY ("STAB?")

There are five stable grades(0—4). In the "STAB?" menu, press [M+] to enter it. Then choose the grade by shift key ([ZERO/>]). The original grade is 1. The higher grade, the higher stability is. Press [M+] to confirm it. The display will show next menu. Or press **[UNITS WEIGHT/CANCEL]** key to exit.

3). SELECTION OF ZERO TRACING GRADE ("ZTRC?")

There are five zero tracing grade (0-4). In the "ZTRC?" menu, press [M+] to enter it. Then choose the grade by shift key ([ZERO/>]). The default grade is 1. The higher grade, the larger zero tracing range. Press [M+] to confirm it. The display will show next menu. Or press **[UNITS WEIGHT/CANCEL]** key to exit.

Note: It only active when there are loads on the platform.

4). SELECTION OF ZERO DISPLAY RANGE ("Z.DSP")

There are five zero display ranges (0—4). In the "**Z.DSP?**" menu, press [M+] to enter it. Then choose the range by shift key ([ZERO/>]). The default grade is 1. The higher range, the larger the zero display range is. Press [M+] to confirm it. The display will show next menu. Or press **[UNITS WEIGHT/CANCEL]** key to exit.

Note: It only active when there are no loads on the platform.

5). SELECTION OF UNITS   ("UNIT?")

This function is used for setting the default unit. The unit selected will be kept in the scale when turn on the scale each times. There are four units (**kg, g, lb and oz**) to be selected. Press [M+] in the "**UNIT?**" menu to enter it, choose the desired unit by shift key ([ZERO/>]). Press [M+] to confirm it after selection. The display will show next menu. Or press **[UNITS WEIGHT/CANCEL]** key to exit.

6). SELECTION OF AUTO CALIBRATION FOR UNIT WEIGHT ("ACAL?")

a. This function is used for calibrating the unit weight automatically. Press [M+] in the "**ACAL?**" menu to enter it, choose ON (or OFF) by [ZERO/>] key.

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A. Sample number alarm:

If the total weight of sample is below limit value, it will indicate lack of sample. Add the sample piece with counting until the indicator disappears. Then set the new numbers of sample through numerical key then press **[SAMPLE/BACK LIGHT]** key.

B. Unit weight alarm:

"**LACK OF PIECE WEIGHT**" indicator will appear if the averagec unit weight or set unit weight is not enough for accurate counting operation. Operator may use scale even this indicator appears, but counting error might occur.

C. Alarming by press [QUANTITY CHECK/<<]:

This scale has a useful check function to inform operator that the total piece counts quantity has reached the upper limit desired. This function is designed for packing purpose. For example, if the operator wishes to count 1,000 +/-1 pieces for each package, he/she can set the upper limit as 1,001 pieces, and lower limit as 999 pieces as following:

Press **[QUANTITY CHECK/<<]**, choose ON by **[ZERO/>]** and press **[M+]** to enter it. Key in 999 at LXXXX and press **[M+]** to confirm, then key in 1001 at HXXXX, press **[M+]** to confirm. After such setting, if total quantity is under 999, beep sounds slowly. If over 1,001, beep sounds quickly. If between 999 and 1001,beep doesn't sound. To exit the quantity check mode by pressing **[QUANTITY CHECK/<<]** and choosing OFF by **[ZERO/<]**
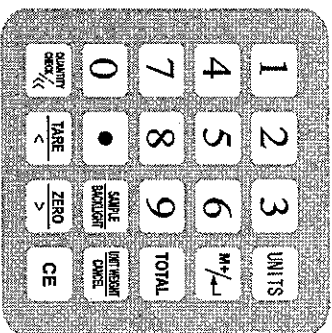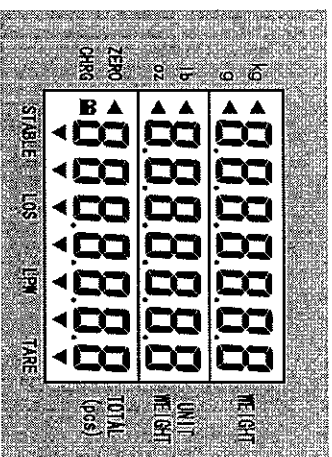
a.Over load alarming: When the load on the platform is over 3% of maxim capacity, the beep will be sound and must remove the load from platform immediately.

b. Low battery alarming: When ⊞ appears on the display, you're requested to recharge the scale over 12 hours. When the scale is in recharging, the mark ⊞ will be in flashing. The mark ⊞ will disappear after recharge has finished.

REMARKS:

1). Both the LCD display and the keyboard are waterproof. However, completely immersing the scale into water may cause serious damage.

2). When ⊞ appears on the LCD, you're requested to recharge the scale over 12 hours. When the scale is in recharging, the mark ⊞ will be in flashing. The mark ⊞ will disappear after recharge have finished.

3). As usual, you should keep the backlight off if the backlight is not used. You should turn off the power when the scale is not used. Besides, you're requested to recharge the sealed lead-acid battery as frequently as possible.

4). If the scale is used for a long period or is recharged over 20 hours but could not work for a long time, it means that the battery is over used. In this case, you're requested to replace the battery or ask your local distributor for replacement.

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1. DISPLAY PANEL AND KEYBOARD

1). DISPLAY PANEL

kg g lb oz: There are four units selectable.

ZERO: The sign"▲"appears when scale is in zero position.

TARE: The sign"▼"appears when tare function being used.

CHRG: The sign"⊞"appears when the voltage of battery is low and the sign flashes when it is being charged.

STABLE: The sign"▲"appears when the reading is stable.

Lack of Sample: The sign"▼"appears when the sample number on the platform is not enough for accurate counting operation..

Lack of Piece Weight: The sign"▼"appears when the sample unit weight is not heavy enough for accurate counting operation..

WEIGHT: The first line of display indicates the gross or net (when the tare function activated) weight on the platform.

UNIT WEIGHT: The second line of display indicates the average or set unit piece weight.

TAL: The third line of display indicates the accumulated total piece number on the platform.

2). KEYBOARD

[UNITS]: Selecting Units

[0-9] and [.]: Inputting number

[M+]: accumulating the counts data, the data are memorized by pressing this key and could be accumulated up to 99 counts. At setting status, this key can be used as shift key.0

[TOTAL]: is used for recalling the counts data, which restored each time and total weight, which is accumulated.

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[UNITS WEIGHT/CANCEL]: setting the unit weight data into scale in a normal operation. At setting status, this key can be used as cancel and exit key.

[SAMPLE /BACK LIGHT]: setting the counted sample numbers on the platform into scale memory and setting backlight in the weighing mode.

[QUANTITY CHECK/<]: is used for the alternation between normal counting mode and quantity check operation mode, and for setting alarm number.

[TARE/<]: tarring weight, deducting the weight of container. At setting status, this key can be used as shift key

[ZERO/>]: setting or re-adjusting the scale in correct zero position for accurate weighing operation. At setting status, this key can be used as shift key.

[CE]: canceling the set numerical data or canceling the previous unit weight data.

2. OPERATION

1). Power on:

Place the scale horizontally by adjust four foots at the bottom of the scale, and keep the bubble at center of gradienter (See **Fig.1**), and change the Battery Selection Switch (See **Fig.2** Battery/dry cell power switch) to suitable mode, Turn on the power switch at the bottom of the scale (See **Fig.2**). The display will show 0—9 sequentially and battery voltage value (over 5.5v) for several seconds. Then the value of weighing will be zero and the zero sign "▲"appears.

2). Zeroing:

If the value of weighing is not zero (the arrow "▲"does not appear) before weighing, press [ZERO/>] key back the value of weighing to zero (the arrow "▲"appears) for accurate weighing operation.

3). Tare Function:

A. Deduct gross weight (Unknown package weight):

a. Place the empty container on the platter.

b. Press [TARE/<] key then zero and tare indicator "▲"is turned **on** the weight display shows zero.

c. When remove the container from the platter after reduced the weight, then the weight display shows minimum sign.

B. Pre-tare (Known package weight):

a. Input package weight value by numerical keys.

b. Press [TARE/<] key, here display net weight.

4). Sample setting (there are two methods of sample setting):

A. **Number setting**: (in case of the unknown unit weight)

a. Place the certain numbers of sample on the platform

b. Set the numbers of sample through numerical keys, which will show in the second line of display.

c. Press the [SAMPLE/BACK LIGHT] key within 5 seconds, the second line of display will show the average weight of per piece and the third line display the numbers of sample.

B. Unit weighs setting (in case of unit weight is already known):

a. Set the unit weight data by pressing numerical keys, numbers are displayed with flickering in UNIT WEIGHT display.

b. Press [UNITS WEIGHT/CANCEL] key, then flickering will stop.

c. Press [CE] key for canceling the previous unit weight and sample setting.

5). Accumulating:

Accumulation: Press [M+] key at weighing mode to enter accumulate mode. The total pieces and the times of counts will be accumulated automatically (99 times can be accumulated). The first line displays the times of counts, the second line displays the total of pieces. Press [CE] key to return to weighing mode.

Recall: Press [TOTAL] key to recall the times of counts which restored each time and total weight which is accumulated. Press [CE] key to return to weighing mode.

Clear memorized data: Press [TOTAL] key to recall the memorized data, then press [QUANTITY CHECK/<] key to clear the memorized data and return to weighing mode.

6). Units selection:

Select the current unit in the weighing mode by press [UNITS] key. Kg, g, lb or oz is available. In this case, it will be return to previous unit when switch the power on again.

7). Backlight set in manual:

Select the back light mode in weighing mode by pressing [SAMPLE/BACK LIGHT] key. In this case, it will return to previous mode when switch the power on.

8) Alarming function:

To avoid counting error, this scale has a useful alarming function to inform operator the possible counting error in case of sample number shortage or weight shortage of sample unit weight.
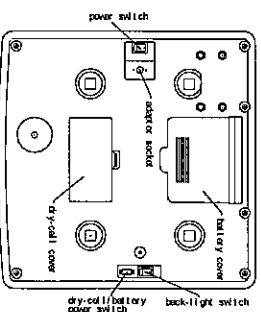
(Fig. 1)

Fig.2 view of bottom

power switch

adapter socket

dry-cell cover

dry-cell battery power switch

battery cover

back-light switch

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