



WATERPROOF SCALE

Operation Instruction

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I. BEFORE USING THE SCALE

To enable you to use this scale correctly, we suggest you read this manual carefully.

1. Do not use scale in areas with excessive water and don't spray the scale or indicator with water when cleaning. Erase all water from the scale and indicator with a clean dry duster cloth.
2. Load placed on platter must not exceed the maximum weighing capacity of the scale.
3. Keep the scale away from high temperature and damp conditions.
4. If the scale is not going to be used for some time, please clean and store it in a plastic bag under dry condition. A desiccant sachet is suggested to be included to prevent moisture build up. In addition, the internal rechargeable battery should be recharged very three months.
5. Before using the scale after a long period of storage, please ensure that the internal battery is fully charged.

Note : Care should be taken not to leave the internal battery on charge for too long, as this may decrease life of battery.

II. PREPARING TO USE THE SCALE

1. Put the scale on a firm level surface from vibrations for accurate weight readings.
2. Adjust the four leveling feet to set the level of scale platform.
3. Avoid operating the scale in direct sunlight or drafts of any kind.
4. Take away any weight that might be on the platform before the scale is switched on.
5. Once the scale has been switched on, it will go through a LCD display test and then re-zero to be ready for use.
6. Please note when power indication displays on the screen, the rechargeable battery needs to be charged.
7. All goods weighed should be placed in the center of platform for accurate weighing. The footprint of the goods being weighed should not overstep the edges of platform.

III. INTRODUCTION

3.1 FEATURES

1. ABS plastic with Stainless steel house case.
2. Multi- weighing units: kg, lb, lb.oz, g, pcs
3. Working temperature: -5°C~40°C.
4. User-friendly design:
 - ✧ IP 68 waterproof protection design.
 - ✧ Auto calibration
 - ✧ AC / DC power supply
 - ✧ Green LED display with saving power function
 - ✧ Auto power-off design to ensure the performance stability
5. Variable calibration settings depending on the different calibration division.
 - ✧ Standard division (under 10,000 internal resolution): Capacity and weight calibrations are available for accurate weighing.
 - ✧ High precision division (over 10,000 to 40,000 internal resolution): Linearity, capacity and weight calibrations are available for accurate weighing.
6. Options
 - ✧ RS-232 interface.
 - ✧ Print-out interface

7. High performance in A/D converter
 - ✧ Sample rate: up to 40 times / second
 - ✧ Internal resolution: 600,000
 - ✧ External resolution: 1/1000 ~ 1/30000
 - ✧ Non-linearity: < 0.016% of full scale
 - ✧ Input range of load cell: 0 ~ 16mv
 - ✧ Load cell excitation: + DC5V
8. Waterproof design
 - ✧ Waterproof rubber button;
 - ✧ Waterproof adapter
 - ✧ All sealing PCB design
 - ✧ Waterproof load-cell.

3.2 POWER SUPPLY

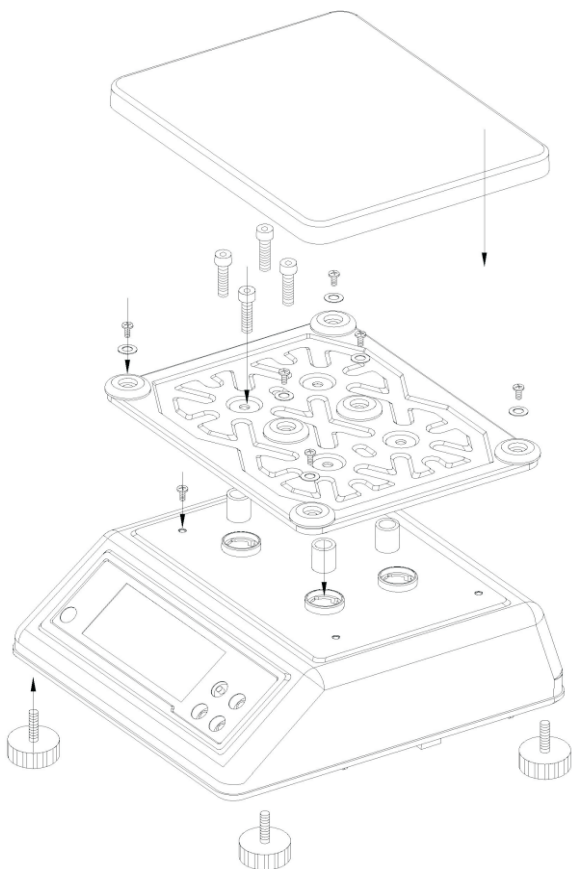
1. Power source: Waterproof adapter AC 110~220V / 50Hz, DC 12V / 500ma
2. Rechargeable battery: DC 6V / 4Ah (Option)

3.3 LOW BATTERY WARNING

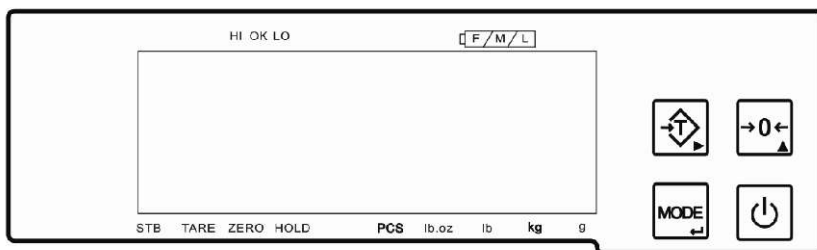
Please note when battery capacity indication is displayed shortly on the display , the internal battery needs to be recharged. The scale will power off automatically without recharging after the low battery symbol shows upon for 20 to 30 hours on the display. As a recommendation, the scale should be fully recharged before using the scale again.

3.4 SPECIFICATIONS

| Model | KW1000G-3 | KW1000G-6 | KW1000G-15 | KW1000G-30 |
|----------------|--|-----------|------------|------------|
| Capacity | 3kg x 0.5g | 6kg x 1g | 15kg x 2g | 30kg x 5g |
| Max. Tare | 3kg | 6kg | 15kg | 30kg |
| Resolution | 1/3000~1/30000 | | | |
| Platter size | 230 x 185mm | | | |
| Display | 6 digits Green LED display | | | |
| Rated Voltage | AC\DC 100~240V ; 6V/4Ah Rechargeable battery | | | |
| Temp. range | 0 °C ~ 40 °C | | | |
| IP protection | IP68 | | | |
| Humidity | <100% RH | | | |
| Dimension | 260 x 245 x 110mm | | | |
| Gross weight | 4.5 KG | | | |
| Carton packing | Single packing / 4pcs each carton | | | |




Assembly Drawing







Front panel Keyboard

IV. LED INDICATION SYMBOLS


| Indication | DESCRIPTIONS |
|---|--|
| STB | Reading is stable. |
| TARE | There has tare weight in the scale |
| ZERO | The scale has been zero. |
| HOLD | Weighing is hold. |
|  F/M/L | Battery Capacity, Shining is charging. |
| Kg,lb,lb.oz,g,PCS | Weighing unit |
| III, OK,LO | Checking weighing |

V. KEYBOARD FUNCTION

| KEYS | DESCRIPTIONS |
|--|---|
|  | Turn on / off. The indicator will be turned on when pressing the key. |
|  | Deduct the container weight. Press this key to deduct container weight and net weight will display. |
|  | To re-zero the scale. Range of re-zero is $\pm 2\%$ of full scale. |
|  | Weighing unit switching. Confirm Key. |

VI. GENERAL PARAMETER SETTING

* Plug the circuit breaker JP1 into 'off', and the following operation can be performed.

Press and hold [MODE] & [→0←] key for 3 seconds, the screen will display . Press [MODE] to enter the menu. It is the menu of general function setting.

6.1 SETTING OF AUTOMATIC POWER OFF

Set "OFF = 0", it is parameter of automatic power off function.

There are choices for preset shut down time: 0~60min. Choices 1~60minutes denotes respectively that indicator will power off automatically if there is no changes on weighing value and no operation on keyboard. Choice 0 denote that automatic power function is not available.

Press [▶] & [▲] to select then press [MODE] to confirm.

6.2 SETTING OF BUZZER

Set “bP on”, it is parameter of Buzzer function.

Press [▲] to select “On” or “OFF” to turn on/off the buzzer. Non-buzzing mode will help decreasing power consumption. Press [MODE] to confirm.

6.3. SETTING OF STANDBY MODE

Set “Pr. AB”. It is parameter of LED display is closed for saving power.

A for Standby mode. B for the effective time.

A=0, means LED is lighted all the time.

A=1, means Only STB indication is lighted.

A=2, means Only Zero indication is lighted.

A=3, means the Date & time display.

A=4, means the Company name, the date & time display.

B=1~9, means the effective time 1~9min. After the time, the back light mode will operate.

Press [▶] & [▲] to select then press [MODE] to confirm.

6.4 SETTING OF CHECK WEIGHING FUNCTION

Set “-HOL-”. It is parameter of Check weighing function.

The indicator has a check weighing function which allows scale to check weigh, making the set point weight quick and accurate. Ignore the function to press [MODE] to next step.

Press [▶] to enter setup menu. Below is the operation:

Step 1: The screen displays [XXXX kg] and “HI” indication is shining, please to set the highest weight.

If scale is over this weight, “HI” indication is shining with alert buzzer.

Press [▶] & [▲] key to set the point weight, then press [MODE] to confirm and next to step 2.

Step 2: The screen displays [XXXX kg] and “LO” indication is shining, please to set the lowest weight, if scale is under this weight, “LO” indication is shining with alert buzzer.

Press [▶] & [▲] key to set the point weight, then press [MODE] to confirm and finish.

For example: For one 30kg scale, desired weight is 10kg, deviation value is ± 0.2 kg.

Step 1: Pressing [▶] & [▲] key to set the point weight “10.20kg”, the screen will display [10.20 kg] and “HI” indication is shining, then press [MODE] to confirm and next to Step 2.

Step 2: Pressing [▶] & [▲] key to set the lowest weight 9.80kg, the screen will display [9.80 kg], “LO” indication is shining, then press [MODE] to confirm and next step.

Step 3: After back to normal weighing, load the goods in scale, if over or under this two points weight, the “HI” or “LO” indication will be shining with alert buzz to announce to user. But the weight is in the range of setting, the “OK” indication will show without alert buzz.

6.5. SET OF EFFECTIVE TERM IN CHECK WEIGHING MODE

Set “SPt X”. It is parameter of the effective term of check weighing mode. It only works when the check weighing function is working.

X=0, means the indicator will keep checking and alert, even if the reading is unstable.

X=1, means the indicator will alert after the reading is stable.

X=2~9, means the indicator will alert when the reading appear same times that preset the number. It happens in reading is unstable.

Press [▲] key to select and press [MODE] to confirm and next step.

6.6. SETTING OF AUTO SHUTDOWN PROTECTION FOR LOW BATTERY

Set “**FlO X**”. It is parameter of Auto shutdown protection function.

It displays **[PLO XX]**. “XX” means the lowest percentage of battery capacity. When the capacity of battery is lower than the setting value, the indicator will be shutdown and need to be charged. It is very helpfully to increase the life of battery.

Press **[▲]** key to select from “0-40” and press **[MODE]** to confirm and exit to weighing mode.

VII. SETTING OF WEIGH UNIT

Press and hold **[MODE]** key for 3 seconds, the screen will display **[Unit = X]**. It is the menu of unit weigh setting. X is from 0-4 for 5 kinds of unit weigh.

Number description: 0 = g, 1= kg, 2 = lb, 3= lb.oz, 4= PCS (Counting mode)

Press **[▲]** key to select and press **[MODE]** to confirm and exit to weighing mode.

VIII. COUNTING FUNCTION OPERATION

Attention: In counting mode, the scale isn't allowed for weight unit switching function. *The function must set to “Unit=4” in Term XII Setting of Weigh unit.*

This mode is used to indicate the number of pieces of an item that placed on the pan. To ensure accuracy, the parts that counted must be consistent in weight.

The scale uses a sampling method to determine the average pieces weight of the items that counted. For example, 30kg scale, sample weight is 200g, it is 100pcs sample units.

12.1 How to enter in Counting weighing mode.

After set the Unit weight to “**UnitE= 4**”, the screen displays “**n 0**” and PCS indication displays.

12.2 How to operation

Step 1: Place the sample items on the pan/container all at once.

Step 2: When the weight display stable with STB indication.

Step3: Press **[MODE]** enter to Counting Mode. The screen displays “**n XXXXX**”.

“**XXXXX**” means the number of items that placed in the pan.

Step 4: Press Pressing **[▶]** & **[▲]** key to input the sample number, then press **[MODE]** to confirm.

Step 5: Upload the sample unit and place the item in the pan that need to be counted. The screen displays the total pieces of items and “**PCS**” indication is on . If need to set new sample, do same operation as above again.

For example: said 30kg scale, sample weight is 200g, it is 100pcs sample units.

Step 1: Place the 200g sample unit in the pan.

Step 2: Press **[MODE]** enter counting mode and it displays “**n XXXXX**”.

Step 3: Press **[▶]** & **[▲]** key to input the sample number, and it displays “**n 00100**”.

Step 4: Press **[MODE]** to confirm and upload the sample unit.

Step 5: Loading the weight, said to “400g”, the screen will be display “**n 200**”.

IX. ERROR SIGNAL

There will shows error signal when the scale have some problem.

Error 1: means calibration isn't workable, weight is too light or division is too high.

Error 2: means wrong zero, check the load cell if it is damaged.

Error 3: means displayed value exceed display range after unit change.

Error 4: means ISN=0

Error 5: means overload, loaded weight exceed the full range.

Error 6: means cannot zero.

Error 7: means cannot tare.

Error 8: means cannot M+Print.

Error 9: means cannot unit conversion.

Error 10: means not connect the battery or battery damage.

X. WARRANTY

We guarantee one-year of free maintenance since the date of purchase for any non-manmade faults in normal working conditions. For maintenance, please send the equipment with the guarantee card to our sales service.

Attention: we are always improving the machine, there is not pre-notice if there are something different comparing with the precious ones.