WATERPROOF WEIGHING SCALE USER'S MANUAL



Ver: 8.80 (2015-06)

Instruction Manual

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NOTICE

- 1. Do not use the scale in extreme temperature areas.
- 2. Do not strike and stress. (Not over the Maximum Capacity)
- 3. The scale should be put on an air flowing and dry place with a clean surface, and be charged every three months when it can not be used for a long time. When it needs to be used again please charge it before use.
- 4. As a counting meter for force check, scale should be checked termly to ensure the accuracy.
- 5. Do not open the lead sealing bottom of scale yourself. You should contact with the dealer or company.

Prepare Issues before Use

- 1. Please place the scale on the stable and flat table, no vibration. Adjust the four feet of the scale to make the scale balanced, till the air bladder of the gradient is in the center of the circle.
- 2. Do not place the scale in the environment which is near to temperature extremes or ail-flowing extremes, direct sunshine or the wind alleyway of air conditioning.
- 3. Before opening the scale, the scale plate can not be touched with anything.
- 4. After opening the scale, the barycenter of scale should be located in the center of the scale plate, which will ensure the precision.
- 5. Scale should be charged when the power voltage is not enough after opening scale.

1. Product Instruction

1.1 Product Features

HACCP international food safety standard and CE, RoHS approval certificates are all available.

Designed by professional institutions and up to the IP68 Waterproof level

More suitable for product line with anti-vibration design

Dual display LED or LCD

Protection by Automatic overload alarming

Functions of auto calibration and auto zero tracking

Functions of weighing alarm

Counting

Parameters changeable

Voltage indication and low voltage alarm

Auto-off power function

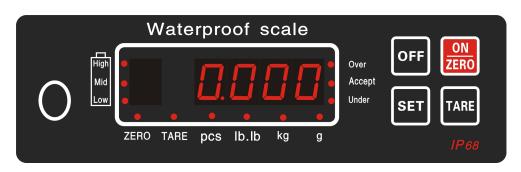
Printing & Data output function

Long work time with sealed lead-acid battery (6V4Ah)

1.2 Product Model and Parameters

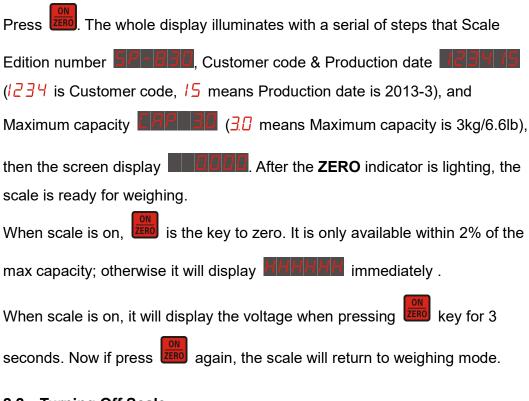
| Model | 1.5 | 3 | 7.5 | 15 | 30 | |
|--|---|--------------|-----------------|-------------|-------------|--|
| Max. capacity | 1.5 kg/3.3lb | 3kg/6.6lb | 7.5kg/16.5lb | 15kg/33.0lb | 30kg/66.1lb | |
| Mini. Capacity | 10g/0.35oz | 20/0.70oz | 40/1.41oz | 100/3.52oz | 200/7.05oz | |
| Verification interval | 0.5g/0.015oz | 0.5g/0.015oz | 1g/0.03oz | 2g/0.07oz | 5g/0.17oz | |
| Actual interval | 0.5g/0.015oz | 0.5g/0.015oz | 1g/0.03oz | 2g/0.07oz | 5g/0.17oz | |
| Max. tare | 1.5 kg/3.3lb | 3kg/6.6lb | 7.5kg/16.5lb | 15kg/33.0lb | 30kg/66.1lb | |
| Accuracy | | | | | | |
| Working temperature | erature -10 °C ~ + 40 °C /14 ° F ~ +104 ° F | | | | | |
| Power supply 6V4Ah sealed lead-acid battery (With Special-purpose charge | | | ger) | | | |
| Plate size 18.6 × 22.3 | | | 2.3 cm (7.3x8.7 | inch) | | |

1.3 Component Diagram



2. Functions and Operations

2.1 Turning on Scale/ Zero Operation



2.2 Turning Off Scale

Scale can be turned off forcibly by pressing OFF

2.3 Tare/Unit Operation

Place the container on the scale until the display indicates the weight number steadily.

Press TARE, then the display indicates and the TARE indicator is lighting. Place the weighing objects into the container, and then scale shows the Net weight. Move the container and the weighing objects off, and then scale will show the minus weight of the container. Then press TARE again, the tare weight can be cleared, that the TARE indicate out and the scale is set to zero.

When scale is on , press for more than 3 seconds to change the weight unit.

It is not available until the weighing number displays steadily. It can work successively, but it must under the max capacity.

2.4 Set Operation

can be used with other keys together. See detailed features below in the related sections.

can be used to set the Printing & Data output function, When the function of printing or data transmission is on

2.5 Power Immediate Indication

Power voltage is indicated under 3 levels. When it is displaying and the low level indicator flashing (LCD battery graphics frame flashing), you should recharge immediately. Otherwise it will be auto turned off in 15 minutes.

2.6 Power Saving Operation

You could choose to open or close the assistant display to save power. After the indicated value steadied for 10 minutes, the scale will be Auto-off.

After the indicated is at zero for 40 seconds, the scale will show

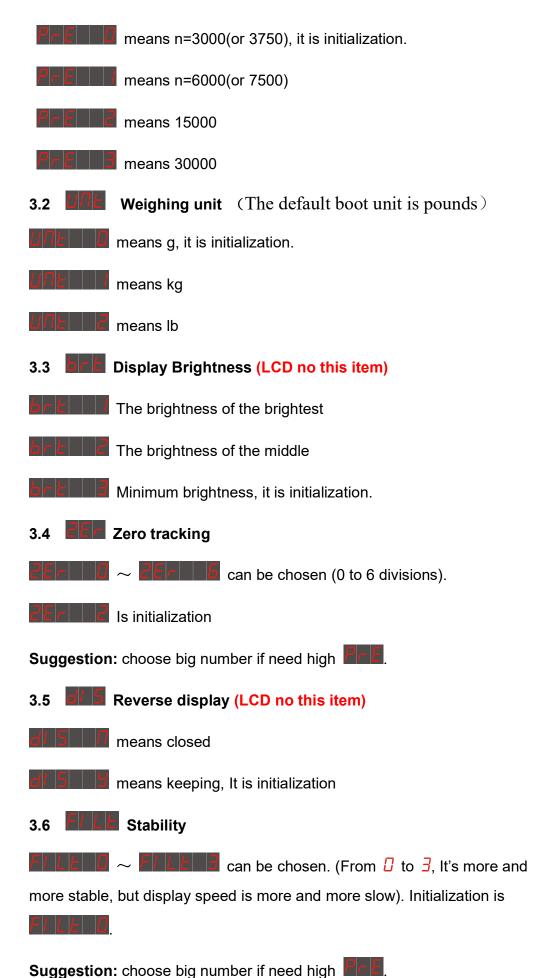
2.7 Power Charge Operation

The power of this scale is provided by sealed lead-acid battery (6V4Ah) inside. When the power voltage indicator shows that the power is low, the LED (or LCD) is displaying and the low level indicator flashing (LCD battery graphics frame flashing), scale should be charged by the charger in battery storehouse. While charging, the power indicator will coruscate circularly, after electric quantity is full, it will show and the all level indicator flashing (LCD battery graphics flashing), it need about 10 hours. The battery should be charged at least once every 3 months

3. Environment Parameter Setting

When scale is on, the same time press on set and take, you can enter the display of environment parameter setting. Press to choose and confirm and save, then into next item. If no need to change, press to return to weighing mode.

3.1 Display Precision



Power Saving Mode is to close this function (but LCD backlight is still on). is that if the scale is at zero for 40 seconds, the screen will show and it returns to normal when weighing. (LCD backlight is off until weighing again.) is that if the scale is at zero for 40 seconds, the screen will show and it returns to normal when weighing. (LCD backlight is off until weighing again.) And then if it stays steady 3.8 **Display Update Speed** is Slow Speed is Fast Speed, it is initialization. **Creep Tracking Range** ~ can be chosen (Lager number means lager **dr. Land** is Initialization. range). Printing & Data Output Mode (When custom made, it's valid) is to close this function, it is initialization. is continuous data output is steady data output is manual data output (Use set to control manual output) **Output Data Type** is Weighing data, it is initialization. is English data. No this item when

When setting is done, the scale will auto restart.

4. Weighing Alarm and Counting

4.1 Weighing Alarm Function Setting press both set and together for 3 seconds. it will go to setting mode and display is to close this function. is to alarm within the range. is to alarm out of the range. 4.1.2 When display or press press indicator is lighting. The light shows the value set last time and the digit which can be adjusted is blinking. Now press to change the digit, press to change the digit value, and press to confirm. Then the setting of lower limits is done and the **Over** indicator is lighting. Use the same way to finish the setting of upper limits. 4.1.3 When finished setting, it returns to weighing mode and the Weighing Alarm function is on. Now if, Weight ≤lower limits, the **Under** indicator is lighting. lower limits < Weight ≤upper limits, the **Accept** indicator is lighting. Weight > upper limits, the **Over** indicator is lighting. and together for 3 seconds, it will go to 4.1.4 At zero, press both to choose and press setting mode. Press then the function will be closed.

The setting value is the current Weighing unit or the Counting number. If changing the weighing unit, this function will be closed and the current setting value will be auto-cleared.

If changing the precision, this function will be closed and the current

setting value will be cleared.

4.2 Counting Function Setting

4.2.1 When scale is on, place the given value sample on the pan, and press keys together for 3 seconds, then it displays is off. Press to choose and press to confirm. 4.2.2 When choosing it is back to weighing mode. When , it displays and the first digit is blinking. to change the blinking digit, press to change the blinking digit value, and press to confirm. After setting it will be auto turn on, enter counting and counting indicate lighting. If not at zero, press both together for 3 seconds, and and 4.2.3 by pressing tare key, then the function is off.

5. Data Transmission Function

5.1 Data Transmission: RS232, RS485 and Bluetooth for choosing.

5.2 Baud Rate: 9600

5.3 Weighing Data Format: 18 bytes in total

| t | ST | *XXXXXXX | SP | g | CR | LF |
|------|----|----------|----|---|----|----|
| Data | | | | | | |
| Note | Α | В | С | D | E | Н |

A (2 bytes) State Code. ST; stable US: unstable OL: overload

B (8 bytes) Display the weight [* is (-) or (SP),X is digit or point]

C (1 byte) SP; spacebar (ASCII 20H)

D (5 bytes) Weight Unit: g or kg or lb.lb; For example: g SP SP SP SP

E (1 bytes) CR: enter (ASCII 0DH)

H (1 bytes) LF: Line Feed (ASC II 0AH)

5.4 Print Format

English Print Format

EENO: xxxx

DATA: xxxx/xx/xx (Y/M/D) TIME: xx:xx:xx (H/M/S)

W.T.: xxx.x

6. Signs' Meaning

Version Number

Indicate that the weighing object is overloaded.

Data is unstable. .

Output of load cell is lower

Output of load cell is higher or Turn on zero is higher

A reminder that it will shut off in 1 minute, power should be

charged since the power voltage is too low.

Power has been charged fully.

Data is abnormal, press to turn on and re-calibrate

7. Fault and solution

| Item | Fault | Reason | Solution |
|------|--------------|---------------------------|-------------------|
| 1 | Weighing not | Loadcell parameter | Re-calibration |
| | correct | changed | |
| | | Loadcell doesn't function | Change loadcell |
| 2 | Display not | Have eyewinker around | Clear |
| | steady | loadcell | |
| | | Loadcell doesn't function | Change loadcell |
| | | PCB damaged | Change PCB |
| 3 | Can't weigh | Loadcell doesn't function | Change loadcell |
| | | PCB damaged | Change PCB |
| 4 | Display | Over zero of loadcell | Re-calibration or |
| | HHHHHH | | Change loadcell |
| | | PCB damaged | Change PCB |
| 5 | Display | Lower zero of loadcell | Change loadcell |
| | LLLLL | PCB damaged | Change PCB |

| 6 | Rear display doesn't show | User patameter error | Read users' manual and re-set |
|----|--|---------------------------------|-------------------------------------|
| | | PCB damaged | Change PCB |
| 7 | Display not whole | PCB damaged | Change PCB |
| 8 | Can't charge but charge indicate is lighting | Battery damaged | Change battery |
| 9 | Can't charge and | Charger damaged | Change charger |
| | charge indicate isn't lighting | PCB damaged | Change PCB |
| 10 | Work time is short after charging | Battery ageing | Change battery |
| 11 | Have base number after | Have eyewinker around loadcell | Clear |
| | remove weight | Range of zero tracking is small | Read users' manual and re-set |
| | | Loadcell damaged | Change loadcell |
| 12 | Can't finish calibration | Have eyewinker around loadcell | Clear |
| | | Loadcell damaged | Change loadcell |
| | | PCB damaged | Change PCB |
| 13 | Display | Data is abnormal | Press set to |
| | | | turn on and re-calibrate |
| | | | 10 Galibrate |

For the same fault, please check and repair orderly.

After change any parts, please fill glue, install according to technology and calibrate again.