

**JWP**

**Electronic waterproof weighing scale with  
single/double display**

# **Operation Instructions**

**Xiamen Jadever Scale Co., Ltd.**



# CONTENTS

## Introduction

Major technical indexes.....	2
Functions of operation keys and prompts.....	3
Operation instruction.....	4
Preparations before use.....	4
ON/OFF.....	4
Zeroing.....	4
Direct weighing.....	4
Weighing without tare.....	4
Power-saving function.....	5
Indication of power.....	5
Charging.....	5
Setting and using of parameters.....	5
Brightness adjustment.....	10
Precautions.....	10
Product warranty.....	12

# Introduction

We appreciate your using our JWP series water-proof electronic balance/counter with single/double display and stainless steel case.

As a water-proof electronic balance which is developed by adopting the latest technology, it features high accuracy, stable performance, accurate weighing, adequate resistance to vibration, rapid display, firmness and durability, and convenient after-sale service. Multiple measures have been taken to improve water-proof and moisture-proof performances of the product; in particular, the sensor elements specially developed by our company are adopted, on which series treatments have been done to the anti-corrosive and anti-overloading performances of the sensors. This greatly lengthens the service life of sensors. Therefore, besides applications in general retail of goods and quantitative packing, this product is especially suitable for applications under conditions of high humidity, such as food and aquatic products processing. This product has been awarded multiple national patents.

Please carefully read the Operation Instructions before using it.

## 1. Major technical indexes

### 1.1 Basic parameters

Parameter Item	Model					
	JWP-600	JWP-1.5K	JWP-3K	JWP-6K	JWP-15K	JWP-30K
Max. weighing capacity	600g	1.5kg	3kg	6kg	15kg	30kg
Min. weighing capacity	20e					
Verification scale interval e	0.2g	0.5g	1g	2g	5g	10g
Display scale interval d1	0.1g	0.2g	0.5g	1g	2g	5g
Display scale interval d2	0.05g	0.1g	0.2g	0.5g	1g	2g
Max. taring capacity	100% of Max. weighing weight					
Accuracy grade	III					
Dimension of balance pan	19×23 Cm <sup>2</sup>					

- 1.2 Operation temperature :  $-5\sim+35^{\circ}\text{C}$
- 1.3 Storage temperature :  $-25\sim50^{\circ}\text{C}$
- 1.4 Power supply : Built-in 6V4.5Ah hermetic lead acid batteries, charged by built-in charger
- 1.5 Net weight : 4kg/set
- 1.6 Package : 4 sets/box, 20kg,  $70\times 36\times 32\text{cm}^3$

## 2. Functions of operation keys and prompts

### 2.1 Operation keys



ON/zeroing key for powering on and zeroing the balance.



Tare key for taring.



OFF key for powering off the balance.



Set/numeric key for setting parameters and inputting figures

### 2.2 Prompts

- dc x.xx : Prompt for battery voltage. It will be displayed on the screen during self-verification after powering on to indicate that the current voltage of batteries is x.xxV.
- : Prompt for overload. It will be displayed on the screen when the weight to be weighed exceeds  $100\%FS+9e$ , at the same time, buzzer ticks to indicate overloading, at this time, the weight should be reduced.
- bAtLo- : Prompt for low voltage of batteries. It will be displayed on the screen after powering on if the voltage of the built-in batteries is insufficient; the display will resume to be normal if a weight is loaded on the balance. In this case, the balance may be used for a short time but it should be powered off as soon as possible and charge the batteries with the built-in charger.
- c\_End : Prompt for completed charge. It will be displayed on the screen in a flashing manner when the batteries are fully charged.

Err-0: It indicates that the zero point of sensor exceeds the normal range, and the tare should be reduced correspondingly.

### 3. Operation instruction

#### 3.1 Preparations before use

Adjust the feet and observe the level to make the balance located at a level plane.

#### 3.2 ON/OFF

##### 3.2.1 ON:

Press down key [On/ZERO] to power on the balance, the buzzer ticks and the software version is displayed on the screen, and then dc-x.xx (the figure indicates the voltage of batteries) is displayed on the screen, then the system begins self verification. All figures from 9 to 1 will be displayed in counting-down manner, and the screen shows the maximal weighing capacity of this balance, and then zeroing will be displayed on the screen and the “zeroing” lamp lights up, showing that the balance enters the weighing status.

##### 3.2.2 OFF

Press down key [OFF] to stop the balance.

##### 3.2.3 Auto power off

In case the balance is set to Auto power off, it will be powered off automatically if it stays at zero point for over ten minutes (refer to 3.9.3).

##### 3.2.4 Power off at low voltage

The balance will be powered off forcibly when the voltage of batteries is lower than 5.6V.

#### 3.3 Zeroing

In case an article with tare shows on the screen a value that is not greater than 4% of Max. weighing capacity, press down key [On/ZERO] to make the screen show zero and “ZERO” lamp lights up.

#### 3.4 Direct weighing

Put an article on the balance pan, and the screen will directly show the weight of the article.

#### 3.5 Weighing without tare

First put a container or a package on the balance pan, press down key [TARE], the screen shows zero, the “ZERO” lamp goes out, and “TARE” lamp lights up, then put the article to

be weighed in the abovementioned container or package, and the screen shows the net weight of the article. Remove the article together with the container or package, the screen shows the minus value of tare and “ZERO” lamp lights up. At this time, press down key [TARE] and the “TARE” lamp goes out and the zero status of gross weight resumes.

### 3.6 Power-saving function

The balance will enter power-saving status automatically when it stays at zero point for over 40 seconds, at this time, the screen will display only the last zero.

The screen will resume its normal display automatically when an article to be weighed is put onto the balance pan or a key is operated.

### 3.7 Indication of power

Power indicator lamp : “High” indicates a voltage of batteries higher than 6.3V, “Medium” indicates a voltage within 6~6.3V, and “Low” indicates a voltage below 6V, that is, the power of batteries will be used up soon.

### 3.8. Charge

This balance is powered by the built-in 6V/4.5Ah maintenance-free hermetic lead acid batteries. In case the voltage of batteries is insufficient and the balance is at its zero point, the screen will show “-bAtLo-”, at this time, the balance may be used for the time being, but the built-in batteries should be charged as soon as possible. Charging method: open the battery door on the bottom of the balance, insert the plug of input lead of the charger into a socket connected with the municipal power supply. The power indicator lamp on the main panel will flash to indicate that the charging is underway. It will take about 12 hours to complete the charging (it is unnecessary to power on the balance for charging the batteries).

### 3.9 Setting and using of parameters

Hold down [SET (0~9)] for 3 seconds to enter the setting status, the screen will display the table of main functions, and press down sequentially [SET (0~9)] to display various items of the main functions:

rAngE (setting of upper and lower limits)

UnItS (selection of measuring units)

A-oFF ( selection of AUTO POWER OFF )

FILt (setting of display mode)

ZERo (setting of the automatic zeroing range at zero point)

bUZZEr (buzzer ON/OFF when used under upper/lower limits)

d (selection of scale interval)

on-rA (selection of powering on range)

d-dP (selection of single/double side display)

While setting parameters, key [SET (0~9)] is used for selection purpose, and key [TARE] for confirmation.

### 3.9.1 rAngE (Setting of upper/lower limits)

3.9.1.1 When rAngE is displayed in the table of main functions, press down key [TARE] to begin the setting of upper/lower limits, press down key [SET (0~9)] to select On/off to open or close upper/lower limits, and press down key [TARE] to confirm the selection.

3.9.1.2 By selecting On and pressing down key [TARE] to confirm the selection, users will enter the setting status of weight at upper/lower limits. At this time, "Lower Limit" lamp flashes and the value to be set at the top digit will flash concomitantly, indicating that the figure at this digit may be set. The value will be increased by 1 every time when key [SET (0~9)] is pressed down for once; When the desired figure at this digit is displayed, confirm by pressing down key [TARE], and users begin setting the figure at the next digit with the same procedures as above. The setting failure at a digit indicates that the setting range is exceeded, and users should press down key [TARE] to begin setting the next digit. After the completion of the above setting, the system will exit the setting status of lower limit and enter the setting status of upper limit automatically. Lamp "Upper Limit" will flash, at this time, the upper limit may be set (with the same procedures as that for lower limit setting). The system will return to the weighing status automatically after the setting completes.

3.9.1.3 The set value of upper limit must be greater than that of lower limit, otherwise, oFF will be displayed, upper/lower limits will be closed and the system will be exited.

### 3.9.1.4 Alarm indication: m is the weight of an article

When  $m \geq$  the value of upper limit, lamp "Upper Limit will flash.

When the value of lower limit  $< m <$  the value of upper limit, lamp "Conformity" will light up (do not flash).

When  $m \leq$  the value of lower limit, lamp "Lower Limit" will flash.

Note: no alarm will be sent before the weight display becomes stabilized, and none of the above three lamps will light up at this time.

### 3.9.2 UnitS (Selection of measuring units)

3.9.2.1 When UnitS is displayed in the table of main functions, press down key [TARE] to enter and display the measuring unit currently used; all units will be displayed one by one in turns by pressing down key [SET (0~9)] sequentially. Press down key [TARE] to confirm the desired unit displayed. The existing units include H9 (Kg), 9 (g), PcS (counting), Lb.Lb (decimal pound), and Lb.oZ (pound.ounce).

#### 3.9.2.2 Counting function:

1. Press down key [TARE] to enter this function when PCS is displayed on the screen;
2. Hold down key [On/ZERO], the screen will resume its zero status after displaying CoUnt;
3. Put the sampled article of known quantity on the weighing pan, and the value of internal code of this article will be displayed on the screen.
4. Press down key [TARE] after the display becomes stabilized, and the figure at the top digit will flash (indicating to input the known quantity);
5. The flashing figure at the digit will be increase by 1 every time key [SET (0~9)] is pressed down for once;
6. When the figure reaches the desired value, press down key [TARE] to confirm, at the same time, the figure at the next digit will flash;
7. Set the figure with the procedure in 5, and then press down key [TARE] to confirm it and begin setting the figure at the next digit;
8. After completing the setting of the last digit, the number of the articles will be displayed on the screen, at the same time, lamp "Counting" will light up.



9. Power on the balance again. The balance is still in Counting status, select a measuring unit to exit the counting status and enter the weighing status.

Note: 1. The number of the articles sampled should be as much as possible, but their total weight must not be greater than the maximal weighing capacity of the balance, and the number of the sampled articles under maximal weighing capacity should be less than 30000.

2. If no value of the previously sampled article exists in Memory, lamp "Counting" will flash when the system enters the counting function, indicating that the first sampling operation needs to be carried out; in case the lamp "Counting" lights up, it indicates that the value of the previously sampled article exists in Memory.
3. The maximal known quantity to be inputted should not exceed 1/2 of the value of internal code.

### 3.9.3 A-oFF (selection of AUTO POWER OFF)

When A-oFF is displayed in the table of main functions, press down key [TARE] to enter this function. Press down key [SET (0~9)] to select NO or YES and then press down key [TARE] to confirm the selection. NO indicates that the balance won't be powered off automatically, and YES indicates that the balance will be powered off automatically if it stays at zero point for over 10 minutes.

### 3.9.4 FILt (Setting of display mode)

When FILt is displayed in the table of main functions, press down key [TARE] to enter this function. Press down key [SET (0~9)] to select FILt-1 or FILt-2 or FILt-3, and then press down key [TARE] to confirm the selection.

FILt-1: indicates that the re-display is slow when a weight is loaded.

FILt-2: indicates that the re-display is a little bit faster when a weight is loaded.

FILt-3: indicates that the re-display is fast when a weight is loaded.

### 3.9.5 ZERo (Setting of the automatic zeroing range at zero point)

When ZERo is displayed in the table of main functions, press down key [TARE] to enter this function, the screen will display x.xE (x.x indicates the automatic zeroing range at zero point, and it is expressed in calibration scale intervals. It will be

set to 0.5E, 1.0E, 1.5E, 2.0E, 2.5E, 3.0E, 3.5E, 4.0E, 4.5E and 5.0E) respectively by pressing down key [SET (0~9)]. Press down key [TARE] to confirm and return to the weighing status.

### 3.9.6 bUZZEr (Buzzer ON/OFF when used under upper/lower limits)

When bUZZEr is displayed in the table of main functions, press down key [TARE] to enter this function, and press down key [SET (0~9)] to select ON or OFF. ON indicates that the buzzer will be used to tick when the balance is used under upper/lower limits, and OFF indicates that no tick will be send out. Press down key [TARE] to conform the selection.

### 3.9.7 d (Selection of scale intervals)

When d is displayed in the table of main functions, press down key [TARE] to enter this function, press down key [SET (0~9)] to select scale intervals, and press down key [TARE] to confirm the selection. Each weighing operation has 3 scale intervals, and the re-display of the article weight will be slow in case a smaller scale interval is selected.

### 3.9.8 on-rA (Selection of powering on range)

When on-rA is displayed in the table of main functions, press down key [TARE] to enter this function, press down key [SET (0~9)] to select 20 or 100, and press down key [TARE] to confirm the selection. 20 indicates that the powering on range is limited within 20%, and 100 indicates that no limit is imposed on the powering on range. In case the zero point upon powering on is greater than 20% of the maximal weighing capacity, Err-0 and Err-04 will be displayed upon powering on, and the tare should be reduced to less than 20% of the maximal weighing capacity.

### 3.9.9d-dP (Selection of single/double side display)

When d-dP is displayed in the table of main functions, press down key [TARE] to enter this function. Press down key [SET (0~9)] to select YES or NO, and then press down key [TARE] to confirm the selection. YES indicates that the values will be displayed on both sides, and NO indicates that the values will be displayed only on one side (no display on the side facing clients, this function helps to save

power).

### **3.10 Brightness adjustment**

Hold down key [On/ZERO] to display LC-1 under the weighing condition, press down key [SET (0~9)] to select LU-1 or LU-2, and press down key [TARE] to confirm the selection. LU-1 indicates the power-saving status (recommended), and LU-2 indicates a condition for brighter display.

## **4. Precautions**

### **4.1 Common precautions**

- 4.1.1 Please carefully read the operation instruction before using the balance so that you may understand more about this product for your convenient use .
- 4.1.2 This balance is a measuring instrument subject to mandatory verification, therefore it should be regularly sent to the authority responsible for the verification to maintain its accuracy.
- 4.1.3 Overload is strictly forbidden. Never throw a heavy substance at the balance or impact it heavily. Any part of the balance damaged due to the above maloperations is out of our warranty.
- 4.1.4 Never let the balance contact chemicals such as solvents to avoid corrosion.
- 4.1.5 Keep the balance clean, and no foreign matter is allowed to exist around the balance pan, otherwise, the accuracy of balance may be affected.
- 4.1.6 Users must not open the lead seal on the bottom of balance. Should any trouble occur, please contact dealers or manufacturer of the balance.

### **4.2 Precautions for application of the hermetic lead acid batteries**

- 4.2.1 The batteries in this balance are maintenance-free hermetic lead acid batteries, which features low self-discharge rate and long service life. Its operation temperature is  $-10^{\circ}\text{C}\sim+40^{\circ}\text{C}$ , and its discharging and charging cycle is about 300 times at a temperature of about  $20^{\circ}\text{C}$ .
- 4.2.2 Make sure that the connection with the negative electrode and the positive electrode is correct while replacing the batteries, otherwise, the batteries will

be damaged and a fire may be caused. The correct connection is as follows: the red line is to be connected with the plug with red mark, and the black line is to be connected with the plug with black mark.

- 4.2.3 The batteries should be recharged in a timely manner when its power is run out (the indication of low power appears on the screen). In case a balance will be left idle for a long time, its batteries should be fully charged before its storage, and should be charged at least once every three months.
- 4.2.4 The capacity of batteries will decrease gradually along with the increase of charging/discharging times, that is, the operation time of recharged batteries will become shorter and shorter, which reflects the characteristics of the rechargeable batteries. The original batteries should be replaced with new ones if the former needs charging soon after the previous charging,
- 4.2.5 Considering that the lead acid batteries are consumable, and its service life depends on users' application methods, therefore, the warranty period for batteries is only one month.