

# Operation Manual



BBAL-411 to 419

# Weighing Scale

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Electronic scale is a kind of intellectual measuring instrument with weighing, counting and other many functions. The product introduces imported Integrated circuit and enjoys stable and reliable performance, easy operation and accurate weighing and counting. As a kind of measuring instrument, it has been widely used by enterprises and scientific research institutions.

## 01 Model Specification and Index

Model	Specification	Readability	size of weighing tray
411 to 415	60-300kg	10g	410X510mm
416 to 419	60-150kg	1g	410X510mm

## 02 Working Condition

Working Temperature: 0°~40°C,  
 Maximum Consumed Power: 5W  
 Temperature Fluctuation: 5°C/h,  
 Power Supply: 220V, 50/60HZ  
 Comparative Humidity: 50 % ~85 %

## 03 Operation Requirements

When it is operated, electronic scale shall be placed on stable working platform to avoid the influences from mechanical vibration, direct sunshine and air current etc.

## 04 Operation

(1) Power-on

(2) Switch on the power supply behind the scale and the display indicates in turn “8.8.8.8.8.8.” “Max weighing capability of scale”, “=, =, =, =, =”. At last it shall display the weighing mode as “XXX.XX”. If any error founded in display, you may turn on and turn off the scale once more. Then it will be operated normally.

## 05 Calibration

### (1) Calibration Requirements

When distinct errors appeared in the weighing of scale, the scale shall be recalibrated to make weighing accurate. The recalibrated scale shall be placed on the stable working platform without the influences from the vibration of air current and strong electromagnetic wave. The calibration results will be more accurate 20 minutes later after the scale is operated.

### (2) Calibration Procedure

#### One-point Calibration

Turn on the scale it shall display the weighing mode as “0.00”, then press the “CAL” button until shows “CAL”, then release. Display blinkingly the stand weight value and then place same value standard weight; The “= = = = =” will be displayed; then display stably weight value and remove weight. then “= = = = =” will be displayed. the “0.00” will be displayed. The calibration is finished.

#### Three-point Calibration

Turn off the scale, then press the “CAL” button and turn on the scale simultaneously until the display shows “CAL”, then release. The calibration procedure shall be undertaken as blow:

Display blinkingly the first point stand weight value and then place the same value standard weight;

Display stably weight value and then remove weight. The “= = = = =” will be displayed;

Display blinkingly the second point stand weight value and then place the same value standard weight;

Display stably weight value and then remove weight. The “= = = = =” will be displayed;

Display blinkingly the third point stand weight value and then place the same value standard weight;

Display stably weight value and then remove weight. The “0.00” will be displayed;

The calibration is finished.

## 06 Weighing

- (1) Turn on the scale to make it warm up stably and display “0.00”.
- (2) Place a thing on the weighing tray and display the weight of the thing. It indicates the weight is already stable when the display value is not changed again.

## 07 Tare

- (1) If there is a container on the weighing tray, the scale displays the weight of container.
- (2) Press “TARE” and then “0.00” will be displayed. It indicates that the tare has been deducted.

## 08 The counting operation of scale

Press “COU”, and power on at the same time, then display the “COU”, and press “TARE”, to choose the counting mode, when it go to zero, press “MODE”, and “COU” will be displayed. Then display blinkingly one of value of counting mode, “5,10,20, 40, 50, 100, 200, 300, 400, 500” Press “TARE” and choose one mode value. Place the things with same quantity and then press “confirm” button”. Then “= = = = =” will be displayed. Then it will display stable mode value and then the setting of counting operation is finished. After that, counting operation could be conducted. Place the things in the weighing tray and display will show the quantity of thing.

Counting operation requires the weight of weighed thing must heavier than the four times of minimum reading value or the difference of counting could be great if not counting can't be done.

(2) Quit the counting operation:

Press the “Mode” button and then “= = = = =” will be displayed. The scale may quit counting operation state immediately and return the weighing state.

(3) Overload warning

When weighing thing is over the maximum weighing value of the scale, the display will show “- - - - -” and indicate the thing is overloaded. The weighing thing shall be removed to avoid damaging the scale.

## 09 Cautions

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- (1) Switch on power resource according to requirements to make scale warm up before usage.
- (2) Working environment and conditions shall conform to the environment requirements.
- (3) The weight of all weighing things on the weighing tray can't exceed the required weighing range.
- (4) When weighing is not accurate, calibration shall be undertaken by use of standard weight according to concerning requirements.
- (5) If user found any deflection in the scale, don't try to disassemble the machine shell and repair it to avoid damaging the precision parts in the machine. Please take it to the distributor or send it to the manufacturer and let them repair.

## 10 Minimum weight choose

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Press "COU" and Power on at the same time, when it show "1d" and you can press "COU" to choose the 1d to 5d( the d means resolution)

## 11 Indicator light

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If display show "FULL", it means the battery full, so please stop in charge.  
If display show "LO-BAT" means low battery , so please in charge.  
If display show "LO-BAT"+ alarm voice means the battery will finish.

## 12 Baud rate

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Press "TARE" and power on, it will show the baud rate, then press "COU" to confirm.

## 13 Package list

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Electronic scale	1 set
Instruction book	1 copy
Weighing tray	1
Electrical wire	1



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