



## ANALYTICAL BALANCE

BAL11-210



# INDEX

1. Model specification and index	2
2. Working Condition	2
3. Operation Requirements	3
4. Operation	3
5. Calibration	4
6. Weighing	5
7. Tare	5
8. The counting operation of balance	6
9. Cautions	6
10. Package list	7

Precision electronic balance 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.

## 1. Model specification and index

Model	Specification	Readability	Size of weighing tray
BAL11-210	210g	0.001g	Φ90mm

Table 1

## 2. Working Condition

Working Temperature: 0°~40°C,

Maximum Consumed Power: 5W

Temperature Fluctuation: 5°C/h,

Power Supply: 220V±10%, 50HZ±1HZ

Comparative Humidity: 50%~85%

## 3. Operation Requirements

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

## 4. Operation

(1) Power-on

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

# 5. Calibration

## (1) Calibration Requirements

When distinct errors appeared in the weighing of balance, the balance shall be recalibrated to make weighing accurate. The recalibrated balance 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 balance is operated.

## (2) Calibration Procedure

### One-point Calibration

Turn on the balance it shall display the weighing mode as "0.000", then press the "Tare" 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 "0.000" will be displayed;. The calibration is finished.

### Three-point Calibration

Turn off the balance, then press the "COU" button and turn on the balance 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 "0.000" will be displayed;  
The calibration is finished.

# 6. Weighing

(1) Turn on the balance to make it warm up stably and display "0.000".

(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.

# 7. Tare

(1) If there is a container on the weighing tray, the balance displays the weight of container.

(2) Press "TARE" and then "0.000" will be displayed. It indicates that the tare has been deducted.

(3) Place the thing into container and the balance will display the weight of thing.

## 8. The counting operation of balance

(1) Press "COU" button 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 with mode value on the weighing tray and then press "confirm" button". Then "===== " will be displayed. Very soonly, 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 "COU" button and then "===== " will be displayed. The balance 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 balance, the display will show "-----" and indicate the thing is overloaded. The weighing thing shall be removed to avoid damaging the balance.

## 9. Cautions

(1) Switch on power resource according to requirements to make balance 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 balance, 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. Package list

Electronic balance 1 set

Instruction book 1 copy

Weighing tray 1

Electrical wire 1

The parts to choose and buy

Standard weight

***LABSTAC***

Labstac LLC

82 Wendell Avenue, STE 100, Pittsfield, MA, 01201, USA

Email: [contact@labstac.com](mailto:contact@labstac.com) | Website: [labstac.com](http://labstac.com)