OPERATING MANUAL

LABSTAC

PRECISION BALANCE

BAL21-2100

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INDEX

BAL series precision electronic balance is a kind of intellectual measuring instrument with weighing, counting and other many functions.

1. Model specification and index

Model	Capacity	Readability	Size of weighing Pan
BAL21-2100	100g-2100g	0.1g	Φ130mm

Table 1

2. Unit change

There are three unit can be choose ,press "UNIT" and choose the unit you need:g,ct,oz

3. Minimum weight setting

Under the weighing range you need, you can choose the minimum weight as your requirement, for example ,we choose the "0.00" accurate ,so we can set the minimum as following:
1. Turn on the balance when it display"0.00"
2. Press"0"+"COU",when it will display "1d"(there are 1d to 5d five digits can choose)
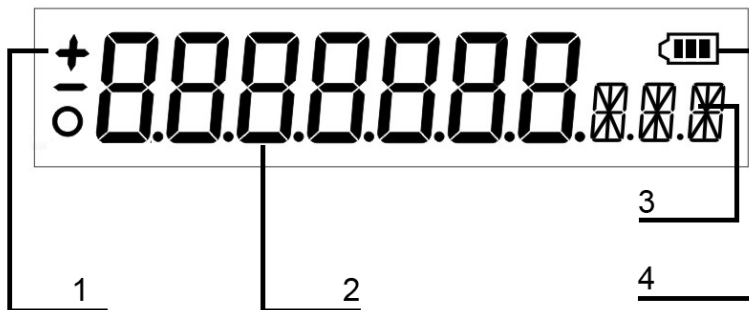3. Press "COU" or " CAL " to choose the minimum weighing you required.

4. Display Icon

Figure 1
1. Status icon :"+"and "-"is the reading state ,the "o" means the weighing process ,when it disappear ,the weighing is stable.
2. The digits :the digits means the object weight
3. The unit icon
4.The residual capacity of the battery(option)

5. Working Condition

Working Temperature: 0°～40°C，
Maximum Consumed Power: 5W
Temperature Fluctuation: 5°C/h，
Power Supply: 100-220V, 50HZ/60HZ
Comparative Humidity: 50％～85％

6. 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.

7. Operation

Power-on:Press the "ON/OFF"key, 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.XX". If any error founded in display, you may turn on and turn off the balance once more. Then it will be operated normally.

8. 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 "0.00", 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 balance,then press the"Cal"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 standard weight value then place the same value weight;
Display stably weight value and then remove weight. The "= = = = = =" will be displayed;
Display blinkingly the second point weight value and then place the same value 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 weight;
Display stably weight value and then remove weight. The "0.00" will be displayed;
The calibration is finished.

9. Package list

Electronic balance 1 set
Instruction book 1 copy
Weighing tray 1
Power adapter 1

10. Tare

(1) If there is a container on the weighing tray, the balance displays the weight of container.
(2) Press "TARE" and then "0.00" 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.

11.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 sonly , 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.
(2) 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.
(3) 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.
(4) 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.

12. Cautions

(1) Power on 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 things on the weighing tray can't exceed the required weighing range.