

Operation Manual



BBAL-108

Analytical Balance

Thank you for Choosing Biolab products. Please read the "Operating Instructions" and "Warranty" before operating this unit to assure proper operation.

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01 Know Your Balance

Thank you for selecting the our Analytical Balance.

This Instruction Manual will guide you of the installation, accessories, trouble-shooting, after sales service information, general maintenance of the balance, etc. it will also guide you through the various applications.

Please read this Manual thoroughly before starting the operations. If you need any clarifications, feel free to contact us.

The Biolab balances are ideal for laboratory and general purpose weighing. The balances can also be used for some advanced weighing functions.

Specification

Model	Range	Division	Repeatability	Linearity	Pan Size
BBAL-109	200g	0.1mg	0.2mg	0.5mg	ø 80mm

Features

- Stainless Steel Pan
- Super bright LCD display with backlight
- RS232 Interface
- Mains adapter supplied as standard
- Windshield supplied as standard
- Height adjustable feet
- Auto Calibration
- Selectable measure units: mg, g, oz, ct
- Memory for accumulated time

Applications

- Weighing
- Net weight / tare
- Below balance weighing
- Piece counting function

02 SPECIFICATIONS

Model	BBAL-109
Range	0-200g
Division	0.1mg
Repeatability	0.2mg
Linearity	0.5mg
Resp. Time	≤ 4 Sec.
Pan Size	ø80mm
Tare Range	Full
Interface	RS-232 bi-directional
Overall Dimensions	340 x 215 x 350mm
Operating temperature	+10°C to 40°C
Power Supply	Output voltage 5 VDC, 600mA through External Power Adapter as standard (Input Voltage 220 V)
Net Weight	7.5 kg

03 Unpacking The Balance

Remove the balance from the packing by carefully lifting it out of the box. Inside the box you will find everything needed to start using the balance

04 Calibration The Balance

The balance need calibration when it not accurate, the step as:

- Keep the balance in the stable environment and stable table, Warm up the balance more than 1hours.
- Press“CAL” key, and it will going internal calibration, when it show 200.0000g, the calibration finish.

05 Locating The Balance

The balance should not be placed in a location that will reduce the accuracy.

- Avoid extremes of temperature. Do not place in direct sunlight or near air conditioning vents.
- Avoid unsuitable tables. The table or floor must be rigid and not vibrate.
- Avoid unstable power sources. Do not use near large users of electricity such as welding equipment or large motors.
- Do not place near vibrating machinery.
- Avoid high humidity that might cause condensation. Avoid direct contact with water. Do not spray or immerse the balances in water.
- Avoid air movement such as from fans or opening doors. Do not place near open windows or air-conditioning vents.
- Keep the balance clean. Do not stack material on the balances when they are not in use.

06 Setting Up The Balance

6.1 Assembling The Balance

- Locate balance on solid surface, free from vibration
- Open the sliding door and gently place the stainless steel top.
- Level balance using the adjustable feet and the bubble level
- Connect the power to the balance
- For best performance, let the balance warm up for 30-60 min. and calibrate before using

6.2 Levelling The Balance

After placing the balance in a suitable place, level it by using the bubble level. To level the balance turn the two adjustable feet at the rear of the balance until the bubble in the bubble level is centred.

07 Operation Settings

7.1 Sensitivity Setting

Keep pressing ON, when "Stab" is shown in the display,.

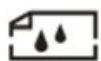
Then operation as blow:



-----**Poorest Sensitivity**



-----**Poor Sensitivity**



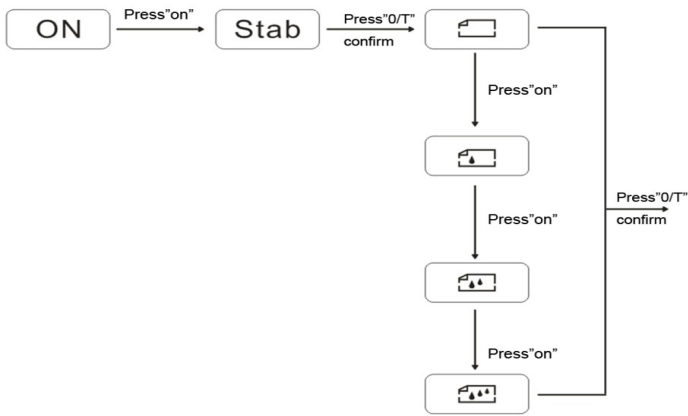
-----**Normal Sensitivity**



-----**High Sensitivity**




press →0/T← to save setting



7.2 Speed Setting

Keep pressing ON, when "speed" will show in the display,

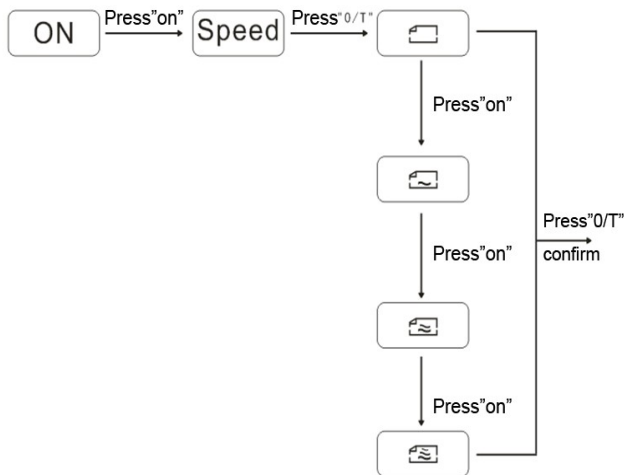
 ----- **Highest Speed**

 ----- **High Speed**

 ----- **Normal Speed**

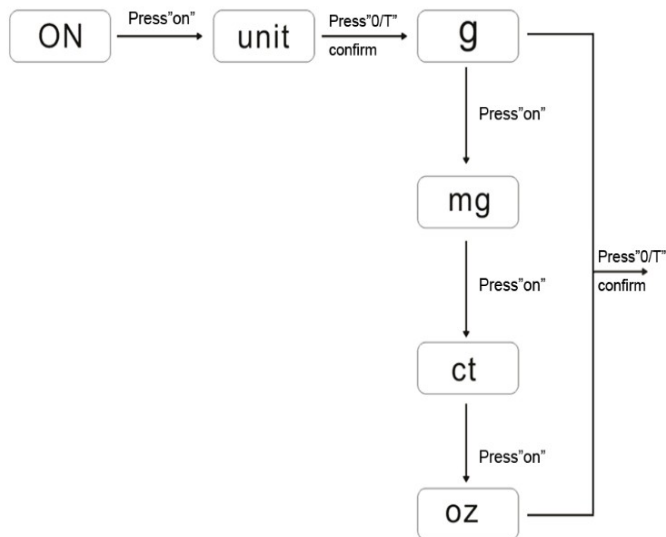
 ----- **Low Speed**

press →0/T← to save setting



7.3 Weighing Unit Setting

Keep pressing **ON**, when **Unit** is shown ,Then operation as blow:



7.4 Counting Function

There are counting functions in the balance, and you can use this for count the quantity. And please keep the products have the same weight, and the minimum weight must be $\geq 0.5\text{mg}$. The details operation as blow :

1. Press "ON" key, enter the menu, then press "ON" key, until it show "COU" :





2. Press "0/T" to enter the counting function, it show "COU 5pcs" :



3. Press "ON" choose the quantity for sample, and put on the same weight, press "0/T" enter :



4. It will show the number after COU, then you can begin the counting :



5. After the counting press "ON" and choose "weight", press "0/T" back to the weighing :



08 FAULT JUDGMENT

If you come across any problem, you can check it by you self and find the reasons.

FAULT	REASON	EXCLUDE
No display	Not connected to the power supply; Fuse is broken; Power transformer damage;	Plug in the power line; Replace the fuse; Replacement of power transformer; Contact factory
Weighing unstable	Bad working conditions; The wind screen is open ; Something between the table and balance ; The power unstable ; Weighing unstable ;	Keep the environment stable,close the windows and doors ; Close the glass door ; Take away the things ; Connect the stable power ;
The weighing digits wrong	The balance not calibration. Not tare before weighing. No adjust the level.	Calibration. Tare before weighing. Adjust the level feet.

09 DATA OUTPUT

1	Model or a decimal point
2	A space or a decimal point
3	A space or *
4	+ or - or a decimal point
5	data
6	Data or a decimal point
7	Data or a decimal point
8	Data or a decimal point
9	Data or a decimal point
10	Data or a decimal point
11	Data or a decimal point
12	Data
13	Unit 1
14	Unit 2
15	Unit 3
16	Enter
17	Wrap



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