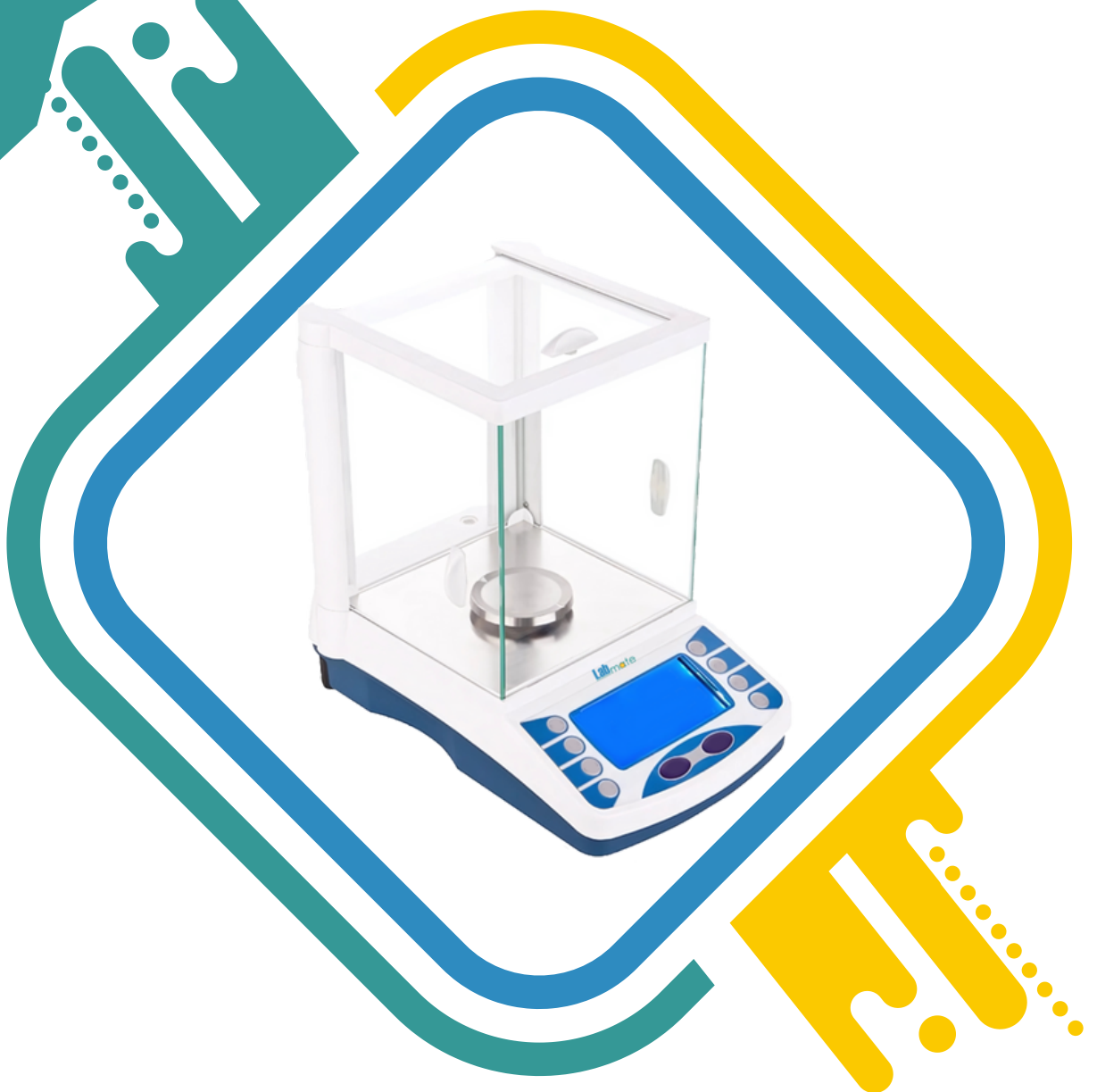




Precision Balance

LMBP-B103

Operation Manual

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1. Introduction

Precision Balance LMBP-B103 is designed to handle a diverse range of weighing and measurement applications and is ideal for quality assurance facilities. It stimulates quick and efficient navigation with an informative color touch-screen display. It features a loading capacity of 0 to 500 g with 1 mg readability. Easily observe the inside sample through a motorized glass shield to protect against dust, grease, and other foreign contaminants.

2. Features

- Designed with a backlit LCD display with adjustable contrast for clear observation
- Supplied with level adjustment facility for an accurate and reliable result
- Configured with automatic calibration and multi-point correction system
- Integrated with electromagnetic load sensor to maintain temperature stability and uniformity
- Self-diagnostic functions include shorter stabilizing time
- Intended with an antistatic coating windshield to ensure safety and longevity
- In-built RS232 interface for easy connection with printer and PC
- Featuring measuring units including grams, milligrams, carats, ounces, and troy ounce

3. Specifications

Model No	LMBP-B103
Weighing Range	0 - 500 g
Readability	1 mg
Calibration	External
Calibration Weight	200 g
Repeatability	0.0002 g
Pan Size	Φ 80 mm
Stable Time	≤ 8 s
Ambient Temperature	20 °C ± 7.5 °C
Relative Humidity	50 - 80 %
Operating Modes	Basic weighing, Parts counting, Density weighing, Check weighing, Percentage weighing, Animal weighing
Voltage	220 V; 50 Hz
Dimension	520 × 380 × 500 mm
Net Weight	10 kg

4. Applications

It is commonly used in research and pharmaceutical laboratories to determine the mass of solids, liquids, powders, and granular substances.

5. Software Operations

5.1 Unpacking the balance

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

5.2 Calibration the balance

The balance needs calibration when it is not accurate. the steps as:

- Keep the balance in a stable environment and stable table. Warm up the balance for more than 1 hour.
- Press the " **CAL**" key, and it will show and shine: CAL-XXX.XXXX, put on the same value weight. Then the value will keep stable.
- Then they show the value of the weight, then move away weight.
- Calibration finish.

5.3 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.

5.4 Setting up the Balance

5.4.1 Assembling the Balance

- Locate balance on a 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.

5.4.2 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.

5.5 Operation settings

5.5.1 Sensitivity Setting

Keep pressing **ON** when "Stab" is shown in the display, then the operation is a blow:



- Poorest Sensitivity



- Poor Sensitivity

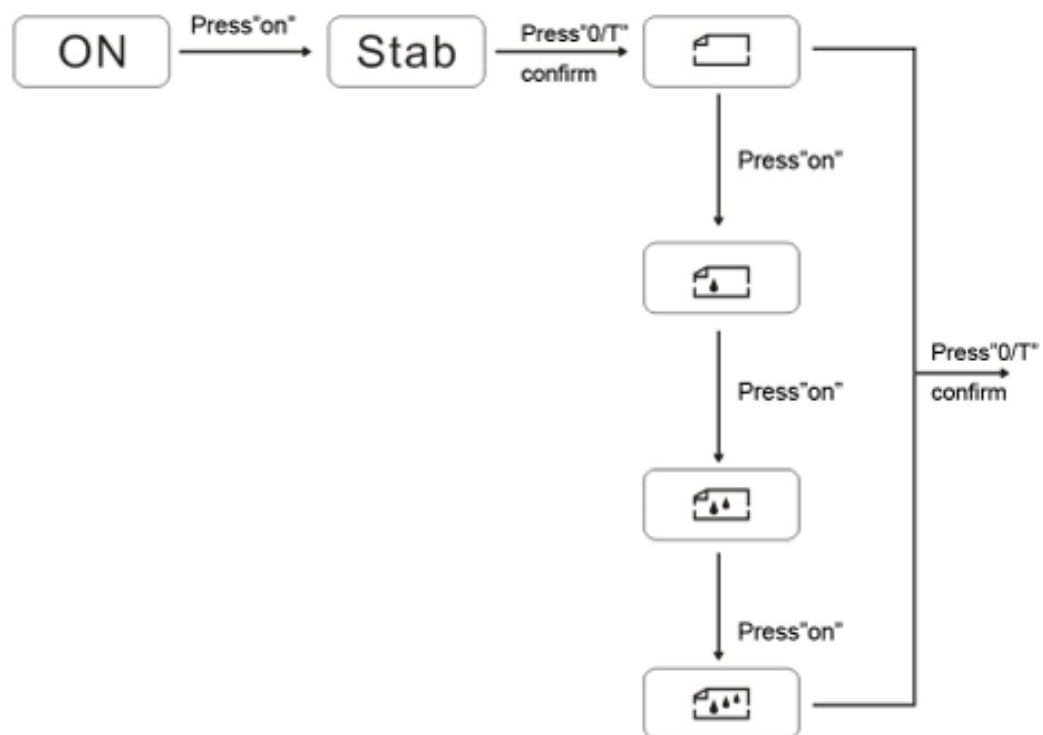


- Normal Sensitivity



- High Sensitivity

Press →0/T← to save the setting



5.5.2 Speed Setting

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



- Highest Speed



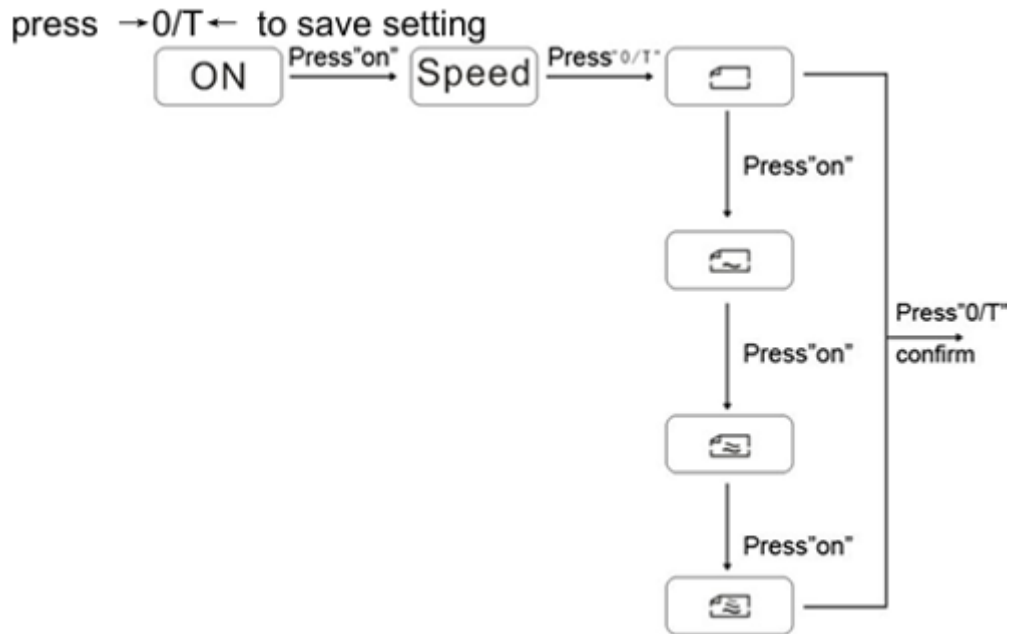
- High Speed



- Normal Speed

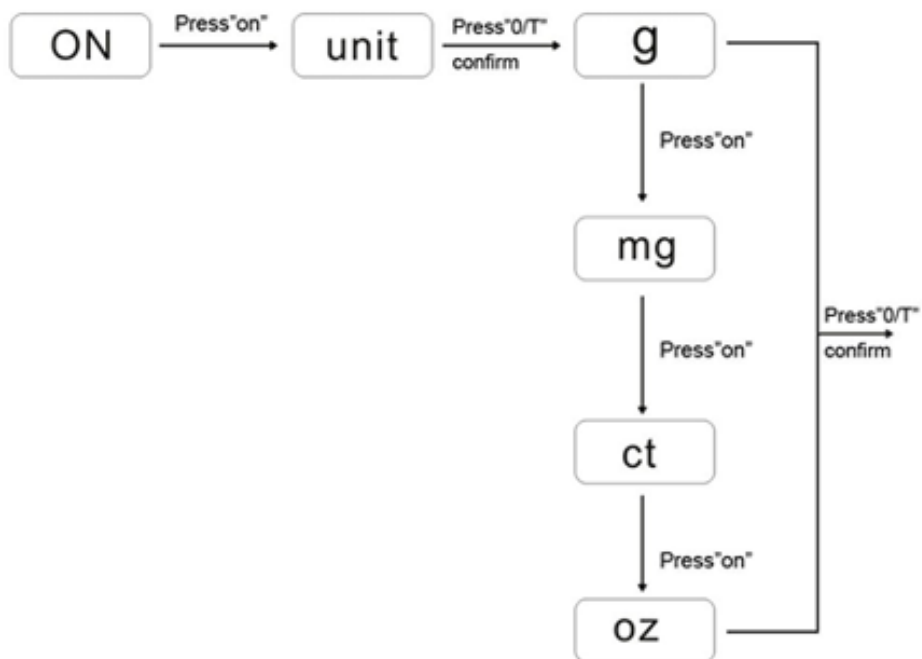


- Low Speed



5.5.3 Weighing Unit Setting

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

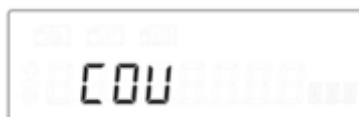


5.6 Counting Function

There are counting functions in the balance, and the User can use these to count the quantity. And kindly keep the products have the same weight, and the minimum weight must be $\geq 0.5\text{mg}$.

The details operation is as follows :

- 1) Press the “ON” key, enter the menu, then press the “ON” key, until it shows “COU”.



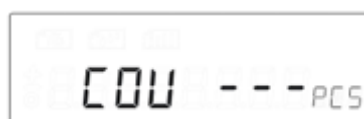
- 2) Press “0/T” to enter the counting function, it shows “COU 5pcs”.



- 3) Press “ON” choose the quantity for the sample, and set the same weight, press “0/T” enter



- 4) It will show the number after COU, then User can begin the counting



- 5) After the Counting, press “ON” and choose “weight”, press “0/T” back to the weighing.



6. Accessories

Standard Accessories

Model	Accessory
LB-01	Plier
LB-02	Universal Adapter
LB-03	Dust Cover
LB-04	Calibration Weight



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