

Operation Manual



BCBL-101

Benchtop Low Speed Centrifuge

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

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01 Foreword

For users:

The manual will guide you how to install, test, use and maintain the Centrifuge. Please read the Instruction Book first.

Caution:

- The Centrifuge should be operated by the technical staff and maintained by professional engineer.
- Don't use and maintain the centrifuge before you read the Instruction Book.
- Please use the corresponding socket, and make sure its in a good • condition.
- When you move the machine, please keep the four corner of the base bear homogeneous power.

Notice:

- Before your operation, please read the Instruction Book carefully.
- Only professional engineer have the right to maintain the centrifuge.
- The centrifuge should be controlled by the technical staff and maintained by professional engineer.
- The weight of sample in each tube should be approximate; weight difference is no more than 1.5g. For angle rotor, the sample volume should be less than 80% of the total tube volume. As for swing rotor, the sample capacity will be no more than 90% of the total tube volume.
- Don't use the following material:
 1. Flammable and explosive material.
 2. Poisonous and radioactive material.

02 Specification & Rotors

Use:

Its' mainly used in the field of biochemistry and immunology . The instrument is mainly use in lab and clinic.

Technical Specification:

Max Speed	4000 r/min
Max RCF	2220xg
Timer Range	0-99 Min
Power Supply	AC220V 50Hz 5A
Dimension	330×420×370 mm (LxWxH)
Weight	15 Kg

Allocated Rotor's Specification Refer to Table I:

Rotor's No.	Volume	Max RPM	Max RCFxg
1. Angle Rotor	10ml x 18	4000	2220
2. Angle Rotor	5ml/10ml x 24	4000	2220
3. Angle Rotor	15ml/ 20ml x 12	4000	2220
4. Swing Rotor	15ml x 8	4000	2220

03 Working Principle

The principle and character of Products' Work The Product is controlled by microcomputer and equipped motor of no brush. It can be operated by programming. Moreover, there are many kinds of protection functions to ensure safe running of the machine. Concerning explanation of key please refer to Table II.

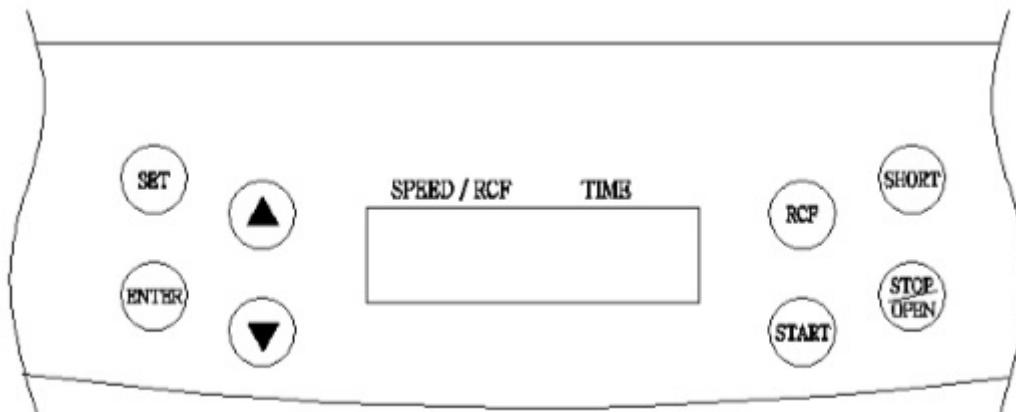


Table II

Functions of key:

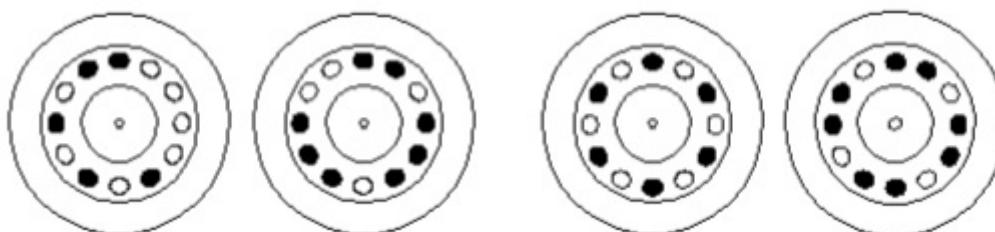
1. SET: Setup
2. ENTER: Ok
3. RCF: Centrifugal Force display
4. SHORT: Instantaneous centrifugation. (It will stop when you release SHORT key. It is mainly used in short-time centrifugation)
5. STOP/OPEN: Stop running & Door open
6. START: Start to run
7. ▲: Increase
8. ▼: Decrease
9. SPEED/RCF: This digital display window shows two types of data, it shows the speed of motor in normal. If you press the RCF key, it will show the value of RCF. Press RCF key again, you will see the figure of speed. Please note that when it shows RCF, there is a dot at the bottom of the display window.
10. TIME: Time input. The time will count down when it reach the speed you set

Requirement of the Instrument Install:

1. The table should be stable.
2. The power should be three phase with separate Earth wire without creep age.
3. The instrument should be located at a place of non-disturb of magnetic field and caustic gas.

Operating principle:

1. Open the gate, Press the OPEN key for three seconds by hand.
2. Install the rotor, put sample into tube, and then put the tube in rotor and close the door. Please note that the sample value should be less than the 90% of tube volume. The tubes shall be placed in symmetry with balance.



Wrong Installment

Right Installment

3. Setup the Rotor Number, the speed, the RCF and Operating Time.

For example

Speed (r/min)	Min
3000	15

Steps of setup:

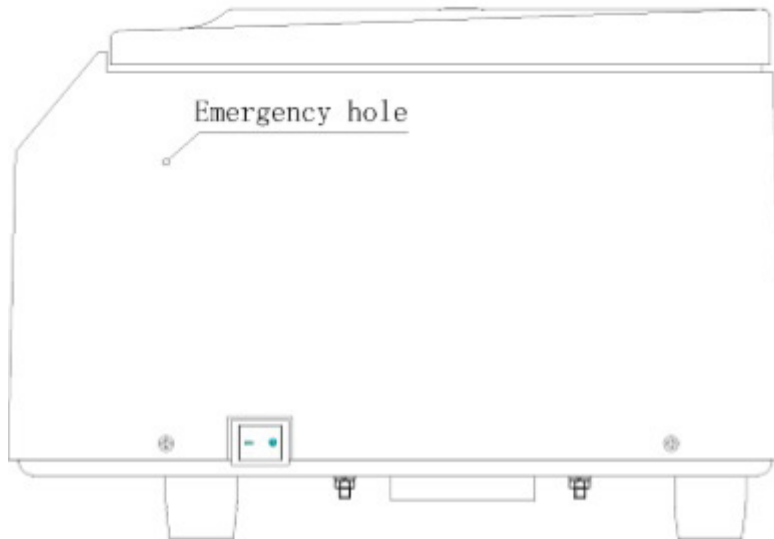
a. Setup the Speed: Press "SET" → press "▲" or "▼", → show "3000" → press ENTER
 b. Setup the time: Press "SET" → press "▲" or "▼", → show "15" → press ENTER
 At last the digital display shall show as following:

3000	15
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4. If you press the "START", Centrifuge should start working. (If you need to stop the Centrifuge when it is working, please press the "STOP".) Centrifuge should automatically stop working. You can't open the door until the speed turns zero. And then take out the sample, switch the machine off.

Notice:



1. Centrifuge has build-in electronic lock. Without plugged in, the door could not be opened. If power was cut when Centrifuge is working, or in any other reasons, the door can not be open, the Emergency hole we provided is available. Please note on the right side of the model, there is a hole, insert Emergency pole into the hole, the door can be opened.



2. Don't move machine when it is working.
3. Clean the rotor and locate it in drafty room if it hasn't used for a long time.
4. Drive shaft should be coated with Albany grease or Vaseline, in order to avoid rustiness and easily take out the rotor.
5. After finished, wipe the chamber and rotor; make sure they are in the dry state.



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