



LC-8 Series Lab Centrifuges

Operations Manual (Items: C3100 and C3200)



Introduction:

Thank you for purchasing the LC-8 Lab Centrifuge. Please read this manual thoroughly prior to operating the instrument.

The centrifuge is designed for low speed applications and separations in tubes ranging from 5ml to 15ml.

Specifications:

Speed:	3500 rpm / 1500xg (C3100) 5000 rpm / 3070xg (C3200)
Capacity:	8 x 15ml
Speed Increment:	100rpm
Timer:	20 se. to 99 min.
Dimensions:	11.6(W) x 14.4(D) x 8.3(H) in. 29.5(W) x 36.5(D) x 21(H) cm
Weight:	15 lbs / 6.8 kg
Electrical:	120V or 230V, 50-60Hz, 150W
Rotor Radius:	10.96cm

Installation:

Place the centrifuge, on a flat and level surface nearby an electrical outlet. It should not be near a heat source or in direct sunlight.

Operation:

- Connect the power cord to the centrifuge and to an outlet of the appropriate voltage. Place the power switch into the on "I" position.
- Open the lid and load your samples into the included rotor. Always ensure a balanced load (Please see the following section, **loading the Rotor**, for details.)



NEVER Attempt: to remove samples until the rotor has come to a complete stop.

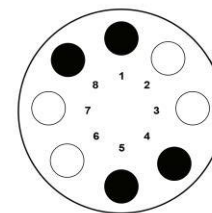
- Close the lid and set the desired time and speed (in rpm or rcf) on the digital display.
- To set the time use the ▲▼ buttons on the left side of the control panel and select the desired time (from 20 seconds to 99 minutes)
- To set the speed, use the ▲▼ buttons on the right side. The default speed is in rpm, to toggle the speed to the rcf setting, press the ▲▼ simultaneously.
C3100 Speed Range: 400 to 3,500rpm
C3200 Speed Range: 400 to 5,000rpm
- To start the centrifuge, first ensure that the rotor is fully tightened and that the lid is fully closed, then press the "START/STOP" key.
- When the time has expired, the rotor brakes to a stop, the lid will automatically open and the samples can be retrieved. At any point during the run, the centrifuge can be stopped by pressing the "START/STOP" key.

Loading the Rotor:

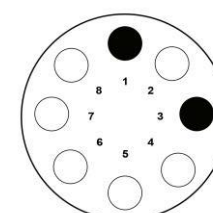
To ensure safe operation and long life of the instrument, samples must always be loaded into the rotor in a balanced fashion.

Tubes of the same volume must always be loaded symmetrically across from one another and contain the same volume of liquid. See below:

Properly Balanced



NOT Properly balanced



Emergency Lid Release

In the event of a power failure or a problem with the operation of the lid lock, the centrifuge features an emergency lid release. To activate the release, locate the red tab on the front right side of the instrument and pull it downward until the lid releases. NEVER attempt to use the emergency lid release while the rotor is still spinning.

Cleaning and Maintenance:

The centrifuge rotor can be removed for cleaning by hand or by using a small wrench to loosen the center set screw. Once removed, the rotor can be cleaned with isopropyl alcohol or can be sterilized in an autoclave at 121°C for 20 minutes.

Service and Contact:

In the event that service or technical support is required, please contact Benchmark Scientific by email: info@benchmarkscientific.com or phone at 908-769-5555.