



**High-speed centrifuge
EG20K12**



User Manual

Precautions:

- 1、 Read the instruction carefully before installing and using the centrifuge!**
- 2、 Before the first time using the centrifuge, please open the centrifuge lid and remove the EPE.**
- 3、 Please ensure the locker nut of rotor has been securely tightened before operation.**
- 4、 Don't open the centrifuge lid until the rotor stop.**
- 5、 Centrifuge tubes should be of the same types, should be filled equally and placed symmetrically in the rotor.**
- 6、 Power supply must be grounded. Do not use unsafe sockets.**

1、 Application

This product is mainly applicable to the assay and the extraction of suspension in hospitals and research institutions.

2、 Technical parameters

Applicable power	AC220v 50Hz	Power	≤300VA
Timing range	15sec./99min./long term	Speed accuracy	≤100rpm
Speed range	500-20000rpm	Temperature rise of rotors	≤room temperature +10℃
RCF range	1-27500g	Maximum noise volume	≤60dB
Dimensions	245x260x145mm ³	Net weight	≈7.5Kg

3、 Composition and structure

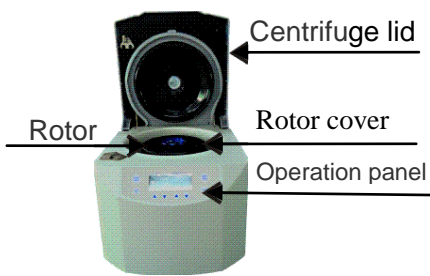


Figure 1: Front view

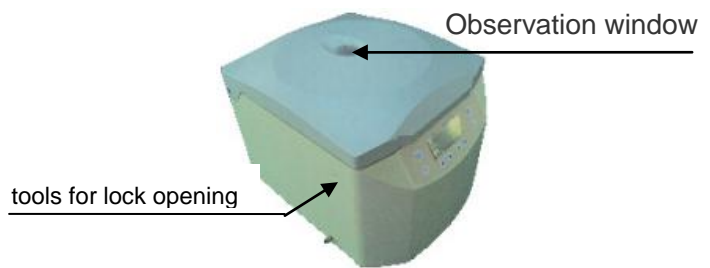


Figure 2: The strakes

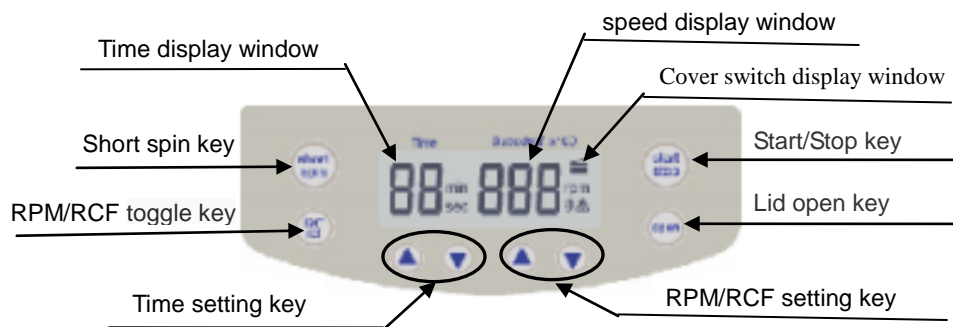


Figure 3: Operation panel view

4、 Operation procedures

- a、 Preparation work: Place this centrifuge on a solid platform. Check the power socket and turn on the power switch.
- b、 Press “**open**” key to open the Centrifuge lid.
- C、 Take off the rotor cover. Centrifuge tubes should be of the same types, should be filled equally and placed symmetrically in the rotor.
- d、 Close the rotor cover:
Make the central nut aligned with the position slot of the rotor.
Press down the rotor cover and lock it.
- e、 Close the lid:

LCD will demonstrate “ = ” when you press down the lid and properly locked.



Figure 4: fixing the cover for normal rotor

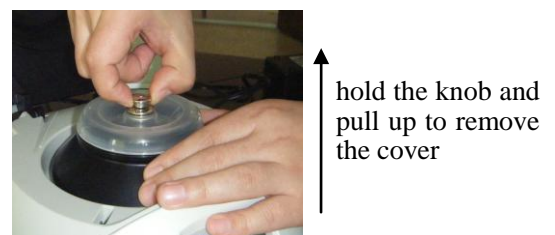


Figure 5: removing the cover for normal rotor

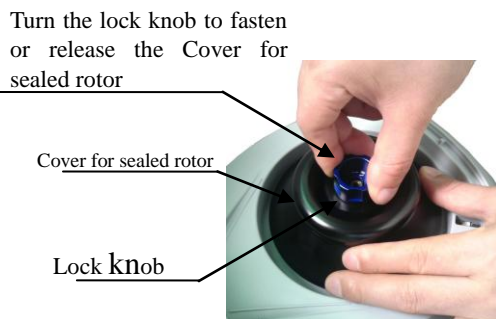


Figure 6: fixing or removing the Cover for sealed rotor



Figure 7: assembling/disassembling the sealed rotor

assembling or disassembling the sealed rotor:

- 1、 Do not remove the cover when assembling or disassembling the sealed rotor
- 2、 insert the key into the hexagon hole in the cover lock knob, turn anti clockwise to release the rotor group, else to lock it

f、 Operating parameters setting:


- 1) Time setting: Press “ ▲▼ ” key, reading will display cyclically.
- 2) Speed setting: Press “ ▲▼ ”, it will range from 500-20000rpm.
- 3) Speed/Centrifugal force switch: In standby mode, press both “ ▲▼ ” key to switch display mode of speed/centrifuge force.
- 4) During operation, press time/speed button” ▲▼ ” to alter time or speed. (The parameters

on LCD will flash 2sec, and then the centrifuge will confirm new parameter set.)

g、 Timing centrifuge:

After finishing time and speed set, press "**start/stop**" button to start operation .LCD will demonstrate countdown, when reaching set speed.

h、 Stop centrifuge:

During operation, press "**start/stop**" button to stop operation. Elapsed time will be displayed on LCD. The centrifuge will open automatically when rotors stop. "  " means lid is opening.

i、 Short spin centrifuge:

In standby mode, press the "**short spin**" button for as long as the run should last. It will display timing during operation. Speed will increase up to 6000rpm during operation.

5、 Precautions

- Power supply must be firmly grounded. Do not use unsafe sockets.
- Don't open the centrifuge lid until the rotors fully stop.
- Place the centrifuge on a steady platform, check for balance and make sure good air circulation.
- Close the rotor cover before operation, and check if it is locked properly.

6、 Intelligent fault detection

Display content	Meaning	Solution
Er01	Speed is too low.	Increase speed setting, try again.
Er04	Electric locks position error.	Re-press the "open" button.
Er05	Door switch false triggering	Re-press the "open" button.
Er07	Speed is too high.	Try again. If error recurs, please contact the manufacturer or supplier.

*Please contact the supplier if there are other fault codes or the methods above cannot solve the problems.

7、 FAQ

Error	Reason	Workaround
No display	Power off.	Check the power supply. (socket or power cord)
The centrifuge lid cannot open.	Rotor is still running.	Don't open the centrifuge lid until the rotors fully stop.
	The electric locks are damaged or position error.	Refer to Intelligent fault Er04、 05, or manual opening the lid.
Abnormal noise	Rotors or rotors cover are not installed properly.	Replace rotors and close the cover.
	Centrifuge tubes are asymmetrical or filled unequal.	Centrifuge tubes should be placed symmetrically by even number.
	Centrifuge tubes are broken during	Carefully remove all splinters or

	operation.	residual liquid and replace tubes.
Centrifuge ineffective	Speed is too high or too low.	Reset speed or centrifuge force.
	Centrifuge time is too short.	More centrifuge time.
	Protein or RNA samples which are too sensitive to chamber temperature.	Please use a refrigerated centrifuge.

8、 Lock opening in emergency

- a. Press “open” button in the case of error code 04/05.
- b. Power off , restart and then press “open” button in the case of other error code.
- c. Manual unlock
 - 1) Power off and move the centrifuge to the edge of the platform so that the turning knob on the bottom is visible.
 - 2) Turn the knob according to arrow direction.



Figure8: Manual opening the lid