



**High-speed centrifuge
EG14K24**



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 | 1424 | 500-14000rpm | Temperature rise of rotors | ≤room temperature +10°C |
| RCF range | 1424 | 24-18670g | Maximum noise volume | ≤60dB |
| Dimensions | 245x260x145mm ³ | | Net weight | ≈7.5Kg |

3、 Composition and structure

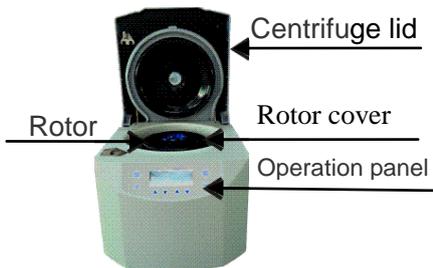


Figure 1: Front view

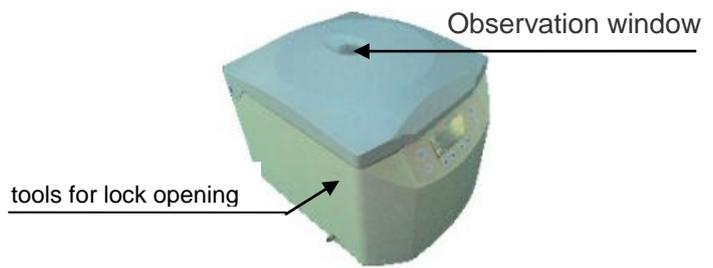


Figure 2: The strokes

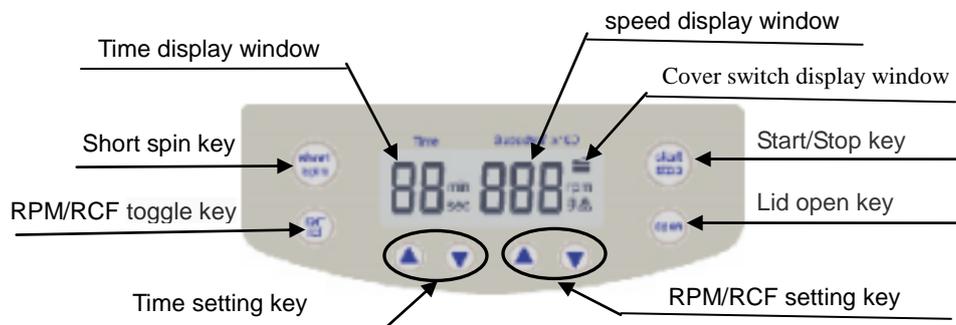


Figure 3: Operation panel view

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

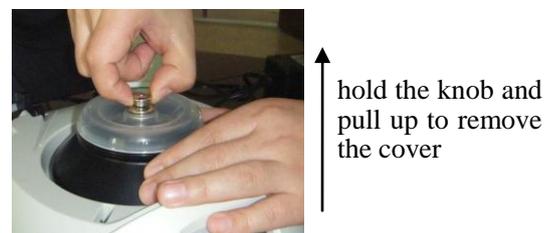


Figure 5: removing the cover for normal rotor

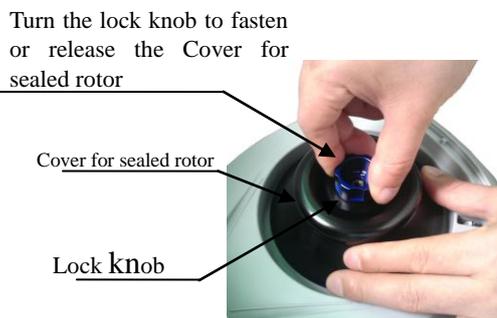


Figure 6: fixing or removing the Cover for sealed rotor



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 500-14000rpm.
- 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