

Instruction Manual

For

TD4C

Tabletop Low Speed Centrifuge

Safety Notices

We appreciate your business with our TD4C centrifuge. To prevent any potential accident, please operate centrifuges according to the following safety protocol.

1. Unplug the main power cord, when performing maintenance or when centrifuge is expected not being used for a long period of time.
2. Load the rotor with samples arranged symmetrically. Opposing tubes must be of equal weight. If necessary, use "water blank" tubes to balance sample tubes of unequal weigh. Do not conclude that tubes are balanced by sight over volume. Use the pan balance provided in the centrifuge room for balancing tubes in rotors for the centrifuge.
3. Never exceed the maximum speed posted for the rotor!
4. Never use the rotor that appears damaged (e.g. O-rings missing, scratched, corroded, and cracked).

● **Model Type**

It is small & light tabletop low speed centrifuge

● **FUNCTION**

User will first put the centrifugal sample into the tubes, then put the tubes into this ordinary centrifugal instrument to make a physical separation as per the different densities of components of this sample based on setting certain centrifugal speed & time, like separating blood (3500rpm, 8minutes) which will appear 3 layers including PPP, PRP, & Red cells, finally user will take the tubes out of the centrifuge to extract the material he needs.

● **Main specification and technical parameters**

Max speed:	4000rpm	Max RCF	1880xg
Max volume	8×20ml	Noise	≤55dBA
Timer	0~99min	Net weight	6.5KG
Dimension	310×270×220mm	Power supply	AC110V 60HZ 1A
Speed accuracy	±20rpm	Package	Carton box

● **Available rotors**

Those 8×15ml, 6×10/15ml, 12×5ml, 12×7ml, 8×10/7/5ml rotors are available for you. You can choose one of them in the process of centrifugal working theory and specialties.

It is driven by brush-less direct current motor directly, it has the following specialties: time and speed digital display, electric lock, simple construction, reliable and easy to operate, checking the tubes in the same level in your eyes instead of weighing the tube, cause of the auto-balance function.

● **Unpacking**

Please Check whether there are serious damages on the package as soon as you received the centrifuge, if so, please contact us directly, if not, please unpacking the package, take out the instruction manual, checking the components and accessories according the packing list in the instruction manual. If you found something missing, please tell us.

- **Installation:**

The centrifuge should be installed on a flat, stable surface. Most customers use a table or desk. When all four feet are touching the surface, connect the power supply to the unit and then plug it in. Make sure the socket is grounded, avoid an electric shock. (Most European electric sockets are grounded).

- **Operation:**

1. Checking whether the round nut in the rotor is loose, if so, fasten them.

2. Prepare the tubes; put the test liquids into the tubes, checking whether they are in the same level with your eyes.

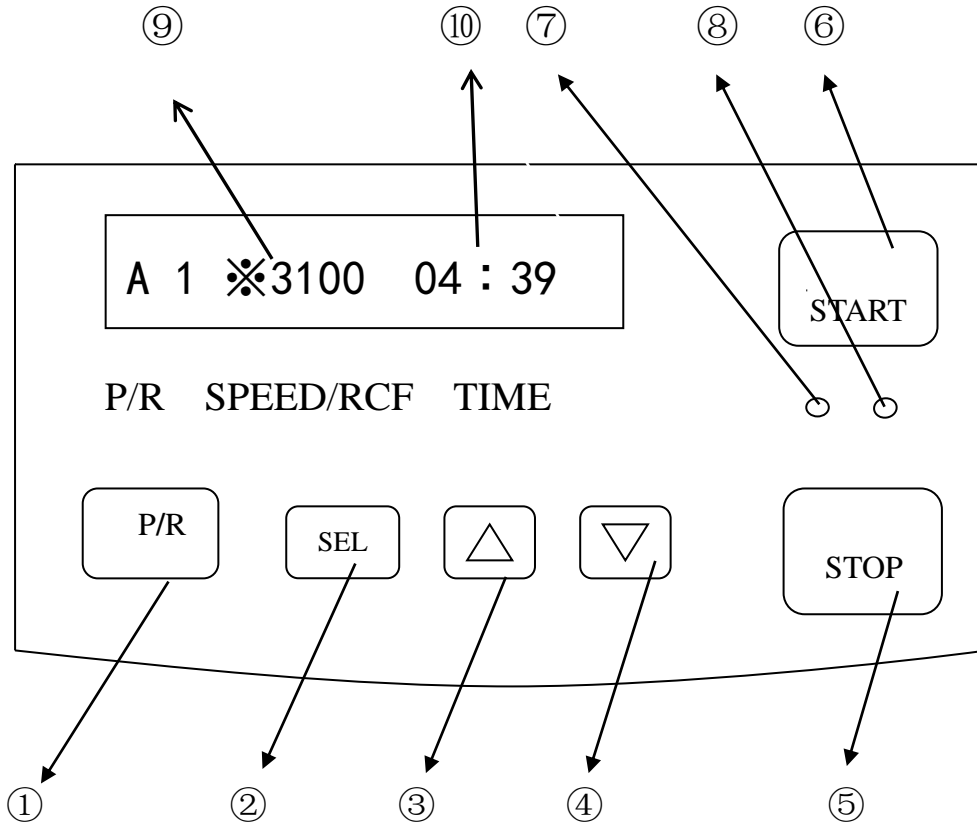
3. Load tubes on the tube rack symmetrically; otherwise it will be resulted in severe vibration in the process of centrifugal.

4. Close the lid, make sure it is locked

5. Set parameters

The time and speed will be showing on the panel, switches and buttons as the following figure:

Picture1 Show as per Speed



Name	Function
① Program and rotor button (P/R)	Control the program and rotor no.
② Selection button (SEL)	Select Speed, RCF, time parameter
③ Increase button (▲)	Increase all the parameters
④ Decrease button (▼)	Decrease all the parameters
⑤ <u>Stop</u> button	Stop centrifuge
⑥ <u>Start</u> button	Start the centrifuge to work
⑦ Working indicator	Working status
⑧ Stop indicator	Stop working status
⑨ Speed/RCF screen	Can display the speed and RCF
⑩ Time Screen	Can display time

Plug in and turn on the switch, the digital window in the panel will be brighten.

❖ **The parameters pre-selection**

1) Set speed

At first, Press ② “SEL” button, the position “A 1 ※3100” will be flicker in the digital window⑨, then Press speed button③/④(▲/▼)to adjust the speed. Range is 0rpm to 4000rpm. (rpm=rotations per minute).

2) Set the time

Press ② “SEL “ button until the position “ 04:39” will be flicker in the digital window⑩, then Press time button③/④(▲/▼) to adjust the time. Range is 0 to 99 minutes.

3) Set the brake (acceleration and deceleration)

Press ② “SEL “button to hold seconds. The time window ⑩ will show bX. Use the button ▲/▼ to set the brake rate. There are ten possibilities ranging slowest to fastest from b0 to b9.

(PS: we will set suitable “b5 “before loading! So generally speaking, customers don’t need to do this step again)

❖ **Start the centrifuge**

Press the start button ⑥, the start indicator ⑦will be brighten, the centrifuge starts to work, the speed window⑨ will show the rpm and the time window⑩ begin to count down the remaining time. It takes about 1min for the centrifuge to reach maximum speed.

❖ **Stop the centrifuge**

When the centrifuge is finished or you push the STOP button⑤, the time window will show 0, the stop indicator ⑧ will brighten and the speed window

⑨ will show 0. Open the lid and take out the tubes.

❖ **Open the lid**

Take out the tubes, centrifugation finished.

❖ **Power off**

Push the switch down. The display panel is off, but the whole machine is still on. If the machine will not be used for a long time, unplug it from the wall.

❖ **Trouble shooting**

Check that the machine is turned on! (The top part of the switch is pushed in).
Check the power connection and fuses in the machine. Replace if necessary.
If the centrifuge still doesn't work, then please contact us. Unauthorized repair attempts inside the machine will void the warranty.

❖ **Quality Warranty**

1. We have one –year warranty on our machines.
2. Customers will only be charged for parts on repairs of machines older than 12 months.
3. We will respond to any troubleshooting or maintenance queries within 24 hours.
4. After the machine fixed, our professional technician will file it and keep track of the usage of the machine.

Thank you!