

Product form picture



Benchtop low-speed centrifuge

TD3WS

operation instruction

Before use, please read the operation
instruction handbook



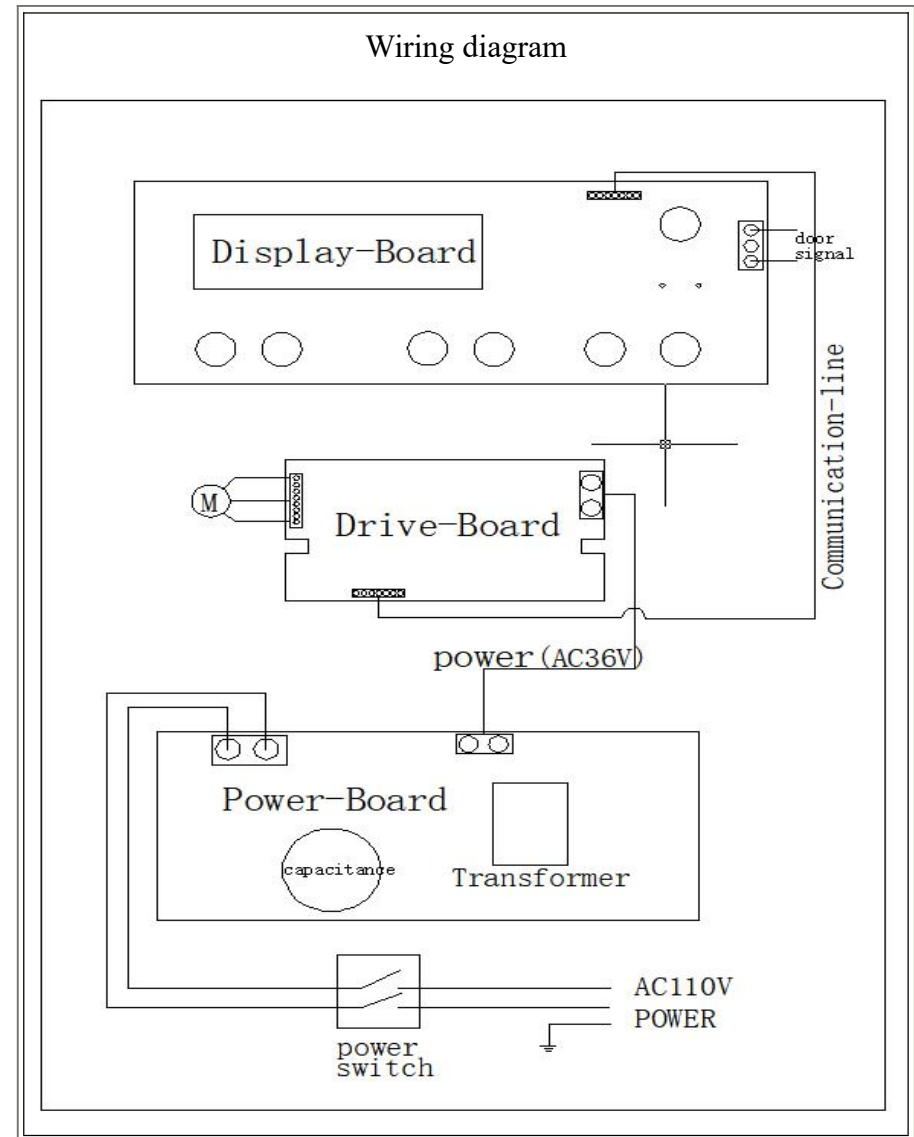
Safety alerts and precautions:

1.Safety alerts:

- 1.Before use, please read the operation instruction handbook.
- 2.Do not use in wet, hot or dusty locations to avoid instrument failure.
- 3.When the instrument is running, it must not move the instrument and must not open the door cover of the instrument.
- 4.The countertop of the installation instrument should be solid and flat, there should be no shaking phenomenon, all four rubber machine feet should be in full contact with the countertop and uniform force.
- 5.Centrifuge tube added liquid as evenly as possible, if the difference between the addition will produce large vibration, at this time should be stopped to check, so that the addition meets the requirements, centrifugal test tube must be placed in even symmetry, not singular into or asymmetrical into the rotor.
- 6.After each use, open the instrument door cover, allow the water in the centrifugal cavity to evaporate, and clean the inner cavity of the instrument. The instrument must have a reliable ground wire when using a power supply.

2.Precautions:

- 1.Do not strongly collide, vibrate or re-throw the instrument to avoid non-serviceable consequences of damage to the mechanical or electrical parts of the instrument.
- 2.Do not use the instrument in wet or hot places to avoid extensive damage to the electrical part of the instrument.



Benchtop low-speed centrifuges
Packing list

No.	Name	Specification	Quantity	Note
1	Host	TD3WS	1	Paper box
2	Rotor	8 x 15ml	1	
3	Rotor			
4	Rotor			
5	Accessories/tools			
6	Operation instruction		1	
7	Power cord		1	
8	Packing list		1	

【Product Name】Centrifuge

【Model】TD3WS

【Product performance structure and composition】It consists of a control system, centrifugal cavity, drive system, rotor, refrigeration system (If it is a refrigerated centrifuge) and safety protection.

【Scope of application】This product is suitable for use by trained professional operators and technicians.

【Taboo】It is taboo to use without professional operators or personnel without relevant operational qualifications.

【Precautions】See above.

【Alerts and suggestive content】Stop prompts

【Operating instructions】See below

【Label, packaging identification sample】Please read the instructions



【Storage conditions/methods】

Rooms with ventilation/drying/light avoidance/non-corrosive gases should be stored.



1.Overview

This manual adapts to TD3WS benchtop low-speed centrifuges can be widely used in biochemistry, genetic engineering, radioimmunology and other fields, is an ideal experimental instrument for research institutes. This machine uses DC variable frequency motor, microcomputer control, liquid crystal display, lift speed, low noise, small vibration, electronic door lock safe and reliable. (See Table 1/Table 2 for major technical performance)

Table 1: Technical parameters

Model	TD3WS
Max. Speed	4000 rpm
Max. RCF	2200 xg
Max. Capacity	8 x 15 ml
Speed Accuracy	± 10 rpm
Presentation	LED
Timer Range	1sec~99min
Motor	DC brushless motor
Power Supply	AC110 V 60 Hz 5 A
Full Power	120 W
Noise	≤65 db
Dimensions(LxDxH)	12.2 x 10.6 x 8.7 in / 310 x 270 x 220 mm
Weight(w/o rotor)	13.2 lb / 6 kg

(3)Centrifuge countdown to "0", automatically stop, speed of 0, buzzer prompt.

(4)In operation, press the "RCF" key, showing the current speed of centrifugal force.

(5)When the rotor stops, open the door cover to remove the centrifuge tube.

(6)Turn off the power after use.

5.Safety precautions:

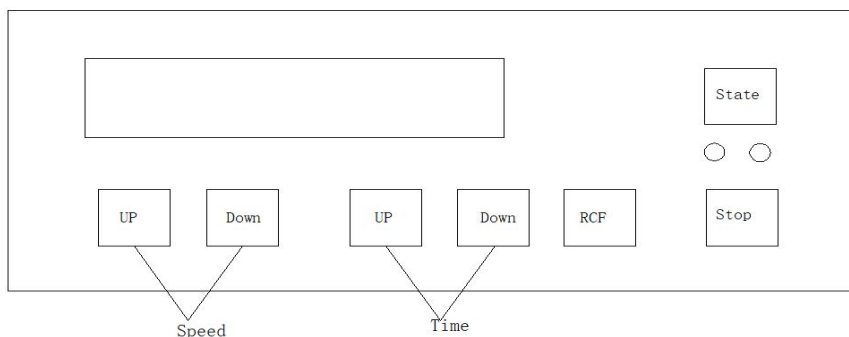
(1)Centrifuge in operation, Do not move centrifuges, Do not force open the door cover.

(2)The per centrifuge should be solid and flat, and the four rubber machine feet should be in contact with the table and evenly stressed, so as not to produce vibration.

(3)Centrifuge tube liquid as far as possible visual uniformity, if the difference between the addition of liquid too large operation will produce large vibration, at this time should stop inspection, so that the addition meets the requirements, centrifugal test tube must be placed in even symmetry.

(4)If there is a centrifugal test tube rupture in operation, should be immediately stopped processing.





- 1). Open the door cover, install the rotor, screw tight.
- 2). After the addition of centrifuge tube into the rotor, centrifuge tube must be placed in even symmetry (centrifuge tube test fluid visually uniform), after the hand gently rotate the rotor.
- 3). Close the door cover, pay attention to make the door cover locked, finish by hand to check whether the door cover is closed, otherwise the centrifuge does not run.
- 4). Plug in the power supply and press the power switch (the power switch is on the back of the centrifuge).
- 5). Set speed or time: centrifuge in the stop, start state, speed and time parameters can be set according to the requirements of the experiment.
 - (1) When setting the speed and time, press the "▲" or "▼" key to the experimental requirements value, release the key, the digital tube flashes 3 times, you can automatically confirm the set parameters.
 - (2) When the above two steps are completed, and then press the start button centrifuge to start running, the control panel shows the speed and the remaining centrifuge time.

Table 2: Instrument rotor parameters

Number	Name	Max. Speed	Max. RCF	Capacity	Tube Size(mm)
NO.1	Fixed angle rotor	4000 rpm	2200 xg	6 x 15 ml	Φ12.4 x 106
NO.2		4000 rpm	2200 xg	8 x 15 ml	Φ12.4 x 106
NO.3		4000 rpm	2200 xg	12 x 7 ml	Φ12.4 x 106

2. structural characteristics:

1). The machine uses brushless DC motor direct drive, No sparks in operation, No toner pollution, the noise is small, can meet the requirements of laboratory work.

2). The use of special shock-absorbing system, shock-absorbing effect is good.

3). The use of microcomputer control, high speed control accuracy, touch panel can facilitate the user to accurately set operating parameters.

3. installation requirements:

1). The instrument is placed on a solid work surface (preferably reinforced concrete countertop).

2) The instrument should be placed on the table level, to ensure reliable contact between the four feet and the table.

3). Indoor should be dry, good ventilation, relative humidity remains below 85%, indoor temperature should be 5 °C to 35 °C

4. Operating procedures: