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› Thermo Scientific Centrifuge CL10 Benchtop, 230V User Manual

Thermo Scientific CL10

Thermo Scientific Centrifuge CL10 Benchtop User Manual

Model: CL10 | Brand: Thermo Scientific

1. INTRODUCTION

This manual provides essential information for the safe and efficient operation of the Thermo Scientific Centrifuge CL10 Benchtop. The CL10 is designed for low-speed clinical applications, offering a broad choice of rotors and user-friendly controls. It is capable of spinning various tube configurations with minimal sample temperature increase and very low noise levels.



Figure 1: Front view of the Thermo Scientific Centrifuge CL10 Benchtop, showing the control panel and lid.

2. SAFETY INFORMATION

Always read and understand all safety precautions before operating the centrifuge. Failure to do so may result in injury or damage to the instrument.

- Ensure the centrifuge is placed on a stable, level surface.
- Do not operate the centrifuge with a damaged power cord or plug.
- Always balance rotors correctly before operation to prevent imbalance detection and potential damage.
- Do not open the centrifuge lid while the rotor is spinning.
- Use only rotors and accessories approved by Thermo Scientific for this model.

3. SETUP

3.1 Unpacking and Inspection

1. Carefully remove the centrifuge from its packaging.
2. Inspect the unit for any visible damage incurred during shipping. Report any damage to the carrier and supplier immediately.
3. Verify that all components listed in the packing list are present.

3.2 Placement

Place the centrifuge on a sturdy, level laboratory bench capable of supporting its weight (approximately 101 lbs or 45.8 kg). Ensure adequate clearance around the unit for ventilation and access.

3.3 Power Connection

Connect the power cord to a grounded 230V electrical outlet. Ensure the power switch on the centrifuge is in the OFF position before connecting.

4. OPERATING INSTRUCTIONS

4.1 Rotor Installation and Balancing

1. Open the centrifuge lid.
2. Carefully place the desired rotor onto the motor shaft, ensuring it seats properly.
3. Secure the rotor according to the specific rotor manual (e.g., tightening the rotor nut).
4. Load samples into the rotor buckets. Ensure all tubes are balanced by weight. For example, if using 16 x 5/7mL Vacutainer tubes, ensure opposing tubes have equal weight. If using 6 x 50mL conical tubes, ensure opposing tubes are balanced.
5. Close the centrifuge lid securely.

4.2 Control Panel Overview

The CL10 features a digital microprocessor control panel for easy operation. Key controls include:

- **Speed/RPM Display:** Shows the current rotational speed.
- **Time Display:** Shows the remaining run time.
- **Start Button:** Initiates the centrifugation run.
- **Stop Button:** Halts the centrifugation run.
- **Parameter Adjustment Buttons:** Used to set speed, time, and other parameters.

4.3 Starting a Run

1. Turn on the main power switch.
2. Use the parameter adjustment buttons to set the desired speed (RPM) and run time.
3. Press the **Start** button. The centrifuge will accelerate to the set speed.
4. The digital display will show the current speed and remaining time.

4.4 Stopping a Run

The centrifuge will automatically stop when the set time expires. To stop a run manually:

- Press the **Stop** button. The rotor will decelerate and come to a complete stop.
- Wait until the rotor has completely stopped before attempting to open the lid. The lid will unlock automatically once the rotor is stationary.

5. MAINTENANCE

Regular maintenance ensures the longevity and optimal performance of your CL10 centrifuge.

5.1 Cleaning

- **Exterior:** Clean the exterior surfaces with a damp cloth and mild detergent. Avoid abrasive cleaners.
- **Rotor Chamber:** Periodically clean the rotor chamber with a damp cloth. Ensure no liquid enters the motor area.
- **Rotors and Accessories:** Clean rotors and accessories after each use, especially if spills occur. Refer to the specific rotor manual for detailed cleaning instructions.

5.2 Inspection

- Regularly inspect the power cord for any signs of damage.
- Check rotors and buckets for corrosion, cracks, or other damage. Replace damaged components immediately.

6. TROUBLESHOOTING

Problem	Possible Cause	Solution
Centrifuge does not power on.	No power supply; Power cord disconnected; Main power switch off.	Check power outlet; Ensure power cord is securely connected; Turn on main power switch.
Lid does not open after run.	Rotor still spinning; Lid lock malfunction.	Wait for rotor to come to a complete stop; Contact service if issue persists.
Excessive vibration during operation.	Unbalanced rotor/samples; Damaged rotor/buckets.	Ensure samples are balanced correctly; Inspect rotor and buckets for damage and replace if necessary.
Error message on display.	Specific error condition (e.g., imbalance, overspeed).	Refer to the specific error code in the comprehensive service manual or contact technical support.

7. SPECIFICATIONS

- Model:** CL10 Benchtop Centrifuge
- Brand:** Thermo Scientific
- Voltage:** 230V
- Rotor Capacity:** Up to 16 x 5/7mL Vacutainer tubes, 6 x 50mL conical tubes
- Noise Level:** Approximately 57 dBA at full speed
- Dimensions (Package):** 32 x 29 x 24 inches (81.3 x 73.7 x 61 cm)
- Weight (Package):** 101 Pounds (45.8 kg)
- Manufacturer:** Thermo Scientific
- ASIN:** B008OXWH2Y

8. WARRANTY AND SUPPORT

For warranty information, technical support, or service inquiries, please contact Thermo Scientific customer service. Refer to your purchase documentation for specific warranty terms and conditions.

Manufacturer: Thermo Scientific

Customer Support: Please visit the official Thermo Scientific website or refer to the contact information provided with your product for assistance.

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Ask about setup, troubleshooting, compatibility, parts, safety, or missing instructions. Manuals+ will review the question and use this page’s manual context to help answer it.

Name

Anonymous

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After a successful submission, we securely hash the supplied account or form email before sending it to Microsoft Advertising for conversion attribution. [Privacy details](#).

Question

Example: How do I reset this device or fix this error?

Details

Model number, symptoms, what you tried, or the section of the manual you are using.

Submit question