

DLAB DM0506

DLAB DM0506 Low-Speed Centrifuge Instruction Manual

Model: DM0506

1. INTRODUCTION

This manual provides essential information for the safe and efficient operation, installation, and maintenance of the DLAB DM0506 Low-Speed Centrifuge. The DM0506 is designed for the separation of blood or urine samples in medical routine practices within hospitals, clinics, or research institutes. It is supplied with a built-in fixed angle rotor A6-15P, capable of holding up to 6 tubes of 15mL, 10mL, 7mL, or 5mL capacity.

Please read this manual thoroughly before operating the centrifuge to ensure proper usage and to prevent potential hazards or damage to the instrument.

2. SAFETY INFORMATION

Adherence to the following safety guidelines is crucial for safe operation:

- Always operate the centrifuge on a stable, level, and vibration-free surface.
- Ensure the centrifuge is placed in an area with adequate ventilation.
- Do not open the centrifuge lid while the rotor is spinning. Wait until the rotor has come to a complete stop.
- Always balance samples precisely before loading them into the rotor. Unbalanced loads can cause severe vibration and damage to the instrument.
- Use only compatible tubes and accessories with the centrifuge.
- Do not operate the centrifuge if there are visible signs of damage to the unit, power cord, or rotor.
- Disconnect the power cord before performing any maintenance or cleaning.
- Keep hands, loose clothing, and hair away from the rotor area during operation.
- In case of a spill or breakage inside the centrifuge, immediately stop the unit, disconnect power, and follow appropriate decontamination procedures.

3. COMPONENTS OVERVIEW



Figure 1: DLAB DM0506 Low-Speed Centrifuge. This image shows the compact, white centrifuge unit with its transparent lid. The control panel on the front features a digital display, a large knob for settings, and 'Start' and 'Stop' buttons. Inside, the fixed-angle rotor is visible, pre-loaded with six red-capped sample tubes, demonstrating its capacity and design.

The DLAB DM0506 centrifuge consists of the following main components:

- **Main Unit:** The primary housing of the centrifuge.
- **Transparent Lid:** Allows for visual inspection of the rotor during operation and provides safety.
- **Control Panel:** Features a digital display, a rotary knob for setting parameters (speed, time), and dedicated START/STOP buttons.
- **Fixed Angle Rotor (A6-15P):** Built-in rotor designed to hold up to 6 tubes of 15mL, 10mL, 7mL, or 5mL.
- **Power Input:** Located at the rear of the unit for connecting the power cord.

4. SETUP

1. **Unpacking:** Carefully remove the centrifuge from its packaging. Retain the packaging materials for future transport or storage.

2. **Placement:** Place the centrifuge on a sturdy, level, and vibration-free workbench or laboratory surface. Ensure there is sufficient clearance (at least 10 cm) around the unit for proper ventilation. Avoid direct sunlight, excessive heat, or humid environments.
3. **Power Connection:** Connect the provided power cord to the power input at the rear of the centrifuge and then plug it into a grounded electrical outlet of the correct voltage.
4. **Initial Inspection:** Before first use, inspect the unit for any signs of shipping damage. Ensure the lid opens and closes smoothly and that the rotor is securely in place.

5. OPERATING INSTRUCTIONS

1. **Power On:** Press the power switch (if present, typically on the rear or side) or simply plug in the unit. The display will illuminate.
2. **Load Samples:** Open the centrifuge lid. Carefully load your samples into the rotor. It is critical to balance the rotor by placing tubes of equal weight directly opposite each other. For example, if using 2 tubes, place them at positions 1 and 4. If using 3 tubes, place them at positions 1, 3, and 5. If using 6 tubes, fill all positions.
3. **Close Lid:** Securely close the centrifuge lid. The unit will not operate if the lid is not properly latched.
4. **Set Parameters:**
 - Use the rotary knob on the control panel to adjust the desired speed. The speed can be set and displayed in RPM (Revolutions Per Minute) or RCF/G-force (Relative Centrifugal Force).
 - Rotate the knob to set the desired centrifugation time.
 - The defined program by the knob will be stored and activated when the power is turned on again.
5. **Start Centrifugation:** Press the 'START' button. The rotor will begin to accelerate to the set speed. The display will show the current speed and remaining time.
6. **Monitor Operation:** Observe the centrifuge during the initial phase of operation for any unusual vibrations or noises. If detected, press 'STOP' immediately and check sample balancing.
7. **Stop Centrifugation:** The centrifuge will automatically stop once the set time has elapsed. You can also press the 'STOP' button at any time to manually halt the operation. The rotor will decelerate until it comes to a complete stop.
8. **Unload Samples:** Once the rotor has completely stopped and the lid unlock indicator is active, open the lid and carefully remove your samples.

6. MAINTENANCE

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

- **Cleaning:**
 - Always disconnect the power cord before cleaning.
 - Wipe the exterior surfaces of the centrifuge with a soft cloth dampened with mild detergent or a laboratory-approved disinfectant. Avoid abrasive cleaners or solvents.
 - Clean the rotor and rotor chamber regularly, especially after spills. Use a soft brush or cloth. Ensure all parts are dry before re-using the centrifuge.
- **Inspection:** Periodically inspect the rotor for any signs of corrosion, cracks, or damage. Check the lid seal for wear and tear.
- **Storage:** When not in use for extended periods, store the centrifuge in a clean, dry, and dust-free

environment.

7. TROUBLESHOOTING

This section addresses common issues you might encounter:

- **Centrifuge does not power on:**
 - Check if the power cord is securely plugged into both the centrifuge and the electrical outlet.
 - Verify that the electrical outlet is functional.
- **Rotor does not spin or spins erratically:**
 - Ensure the lid is securely closed and latched.
 - Check if samples are properly balanced. Re-balance if necessary.
 - Verify that the set speed and time parameters are valid.
- **Excessive vibration or noise during operation:**
 - Immediately stop the centrifuge.
 - Re-check sample balancing. This is the most common cause.
 - Ensure the centrifuge is on a stable and level surface.
 - Inspect the rotor for any damage or debris.
- **Lid cannot be opened after operation:**
 - Wait for the rotor to come to a complete stop. The lid will not unlock until the rotor has fully stopped.
 - If the power was interrupted, consult the manufacturer's support for manual lid release procedures, if available.

If problems persist after attempting these troubleshooting steps, please contact DLAB customer support or your local distributor.

8. SPECIFICATIONS

Parameter	Value
Model Number	DM0506
Speed Range	300-5000 rpm
Rotor Type	Built-in fixed angle rotor A6-15P
Tube Capacity	6 tubes (15mL/10mL/7mL/5mL)
Speed Display	RPM or G-force
Dimensions (Package)	16.02 x 13.94 x 10.67 inches
Weight (Package)	13.73 Pounds
Country of Origin	China
Manufacturer	DLAB
Date First Available	August 20, 2020

9. WARRANTY AND SUPPORT

For information regarding warranty coverage, technical support, or service, please refer to the warranty card included with your product or contact your authorized DLAB distributor or the manufacturer directly. Please have your model number (DM0506) and purchase date available when contacting support.

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