

LW Scientific E8C-U8AV-1503

E8C-U8AV-1503 Variable Speed E8 Centrifuge

User Instruction Manual

Brand: LW Scientific | Model: E8C-U8AV-1503

1. INTRODUCTION

The LW Scientific E8C-U8AV-1503 Variable Speed E8 Centrifuge is a precision instrument designed for efficient and reliable separation of various fluids in laboratory settings. Engineered and assembled in an ISO-certified facility, this model offers advanced features for optimal performance and user convenience.

This manual provides essential information for the safe and effective operation, maintenance, and troubleshooting of your E8 Centrifuge. Please read it thoroughly before initial use and keep it for future reference.

2. KEY FEATURES

- **Angled Rotor:** Equipped with an 8-tube capacity angled rotor for efficient sample processing.
- **Versatile Tube Compatibility:** Designed to hold 3ml to 15ml size tubes.
- **Maintenance-Free Motor:** Features a durable 12-volt DC motor requiring minimal upkeep.
- **Clear View Port:** Integrated clear view port in the lid allows for convenient use with a tachometer to monitor speed.
- **Stable Operation:** Suction-cupped feet provide enhanced stability and prevent slipping during operation.
- **Variable Speed Control:** Allows for precise adjustment of RPM for different sample types and separation requirements.
- **Quiet Operation:** Engineered for reduced noise levels, contributing to a peaceful work environment.
- **Lower Chamber Temperatures:** Helps maintain cooler test-tube samples during centrifugation.
- **Compact Design:** Shorter height allows the unit to fit conveniently under most laboratory cabinets.
- **Auto-Calibrating Speed Function:** Ensures precision results through automatic speed calibration.
- **Auto-Brake Feature:** Stops the rotor in less than 30 seconds, saving time in busy laboratory settings.

3. SETUP

1. **Unpacking:** Carefully remove the centrifuge from its packaging. Inspect the unit for any signs of damage incurred during shipping. Report any damage to your supplier immediately.

2. **Placement:** Place the centrifuge on a stable, level, and vibration-free surface. Ensure adequate clearance around the unit for proper ventilation. The suction-cupped feet should firmly adhere to the surface.
3. **Power Connection:** Connect the power cord to the centrifuge and then to a grounded electrical outlet with the correct voltage (110/220v, as specified for your model).
4. **Rotor Inspection:** Ensure the rotor is securely seated and free from any obstructions.
5. **Lid Operation:** Familiarize yourself with the lid latch mechanism. The lid must be securely closed before operation.

4. OPERATING INSTRUCTIONS

4.1 Safety Precautions

- Always ensure the lid is securely latched before starting the centrifuge.
- Never open the lid while the rotor is spinning. Wait until the rotor has come to a complete stop.
- Always balance tubes of equal weight and volume opposite each other in the rotor. Unbalanced loads can cause excessive vibration, damage the unit, and pose a safety risk.
- Do not operate the centrifuge if it is visibly damaged or if it makes unusual noises.
- Use only tubes compatible with the centrifuge's rotor and capacity (3ml to 15ml).

4.2 Basic Operation

1. **Load Samples:** Open the centrifuge lid. Carefully place your balanced sample tubes into the rotor slots. Ensure tubes are securely seated.
2. **Close Lid:** Close the lid firmly until the latch engages.
3. **Set Timer:** Use the timer knob on the front panel to set the desired spin duration (up to 30 minutes).
4. **Adjust Speed:** Use the speed control knob to set the desired RPM. Refer to your specific protocol for recommended speeds for different sample types (e.g., blood, urine, fecals, semen).
5. **Start Centrifugation:** Press the "ON" power button. The rotor will begin to spin and accelerate to the set speed.
6. **Monitor Progress:** The clear view port allows for visual confirmation of rotor operation.
7. **Completion:** Once the set time elapses, the centrifuge will automatically stop. The auto-brake feature will bring the rotor to a stop quickly.
8. **Unload Samples:** Wait for the rotor to come to a complete stop before opening the lid and carefully removing your samples.

5. MAINTENANCE

- **Cleaning:** Regularly clean the exterior of the centrifuge and the rotor chamber with a soft, damp cloth and a mild, non-abrasive detergent. Do not use harsh chemicals or solvents.
- **Disinfection:** If biological samples are processed, disinfect the rotor and chamber according to laboratory safety protocols. Ensure all cleaning and disinfecting agents are compatible with the materials of the centrifuge.
- **Rotor Care:** Inspect the rotor for any signs of wear, corrosion, or damage. Ensure all tube sleeves are clean and intact.
- **Power Cord:** Check the power cord for any fraying or damage.
- **Storage:** When not in use, store the centrifuge in a clean, dry environment, away from direct sunlight and extreme temperatures.
- **Professional Servicing:** For any internal issues or performance concerns, contact qualified service personnel. Do not attempt to repair the unit yourself.

6. TROUBLESHOOTING

Problem	Possible Cause	Solution
Centrifuge does not power on.	No power supply; power cord disconnected; faulty outlet.	Check power connection; try a different outlet; ensure power button is pressed.
Excessive vibration or noise during operation.	Unbalanced load; unit not on a level surface; damaged rotor.	Ensure tubes are balanced; place on a stable, level surface; inspect rotor for damage.
Rotor does not reach set speed.	Incorrect speed setting; motor issue.	Verify speed knob setting; if problem persists, contact service.
Lid will not close or open.	Obstruction; latch mechanism issue.	Check for obstructions; ensure rotor is stationary before opening.

If you encounter issues not listed here or if solutions do not resolve the problem, please contact LW Scientific customer support.

7. SPECIFICATIONS

Attribute	Detail
Model Number	E8C-U8AV-1503
Brand	LW Scientific
Rotor Type	Angled, 8-place
Tube Capacity	3ml to 15ml tubes
Motor	12 volt DC, Maintenance-Free
Power Input	110/220v (Variable Speed Model)
Dimensions (L x W x H)	Approx. 15 x 14.1 x 12.5 inches
Weight	Approx. 9.5 Pounds
Manufacturer	Thomas Scientific

8. PRODUCT IMAGES



Figure 8.1: Front view of the E8 Centrifuge, highlighting the control panel with power, timer, and speed adjustments.



Figure 8.2: Top view of the E8 Centrifuge with the lid open, revealing the 8-place angled rotor designed for sample tubes.



Figure 8.3: Side profile of the E8 Centrifuge, illustrating its compact form factor and stable base.



Figure 8.4: Rear view of the E8 Centrifuge, displaying the power connection port.

9. WARRANTY AND SUPPORT

For information regarding product warranty, technical support, or service, please contact LW Scientific directly or refer to the warranty card included with your purchase. Keep your purchase receipt as proof of purchase for warranty claims.

LW Scientific is committed to providing quality support for their products. Do not attempt to service the unit yourself, as this may void your warranty and could lead to injury or damage to the device.

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and use this page's manual context to help answer it.

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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.

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