

NEWTRY 800D

NEWTRY 800D Electric Centrifuge Machine Instruction Manual

Model: 800D

1. PRODUCT OVERVIEW

The NEWTRY 800D Electric Centrifuge Machine is a compact and efficient benchtop centrifuge designed for laboratory and scientific applications. It features adjustable time and speed controls, an efficient motor, and a durable high-strength plastic shell, making it suitable for various separation tasks.

Key Features:

- **Efficient Motor:** Motor components are designed for high tightness, stable operation, and zero error, ensuring efficient and reliable performance.
- **Pure Copper Coil:** Utilizes a 100% pure copper coil for stronger magnetic force, robust rotor power, higher rotation speed, and greater centrifugal force.
- **Smooth Operation:** The motor and base plate are connected by a damping column, and an integrated circuit ensures smooth rotor operation, minimizing vibration and enhancing stability.
- **Durable Construction:** Features a high-strength plastic shell with a simple and user-friendly structure.
- **Low Noise:** Equipped with a round centrifugal head and top cover to significantly reduce operational noise.



Figure 1: Front view of the NEWTRY 800D Electric Centrifuge Machine, showing the time and speed control knobs.

2. SAFETY INFORMATION

Please read all safety warnings and instructions carefully before operating the centrifuge. Improper use can lead to equipment damage or personal injury.

- Always place the centrifuge on a stable, level surface to prevent movement during operation.
- Ensure the power supply matches the machine's requirements (110V US Plug, 60HZ).
- Do not open the lid while the rotor is spinning. Wait until the rotor has completely stopped.
- Always load tubes symmetrically to maintain balance and prevent excessive vibration. Uneven loading can damage the machine and pose a safety risk.
- Do not overfill or underfill centrifuge tubes. It is recommended that the capacity of centrifuge tubes should be no less than 30% and no more than 80% filled.
- Use only appropriate centrifuge tubes that fit securely in the rotor.
- Keep hands and loose clothing away from the rotating parts.
- In case of unusual noise or vibration, immediately turn off the machine and unplug it.
- Do not operate the machine if any parts are damaged or missing.

The test tubes must be placed symmetrically, and the liquid level in each test tube must be basically the same.

MATTERS NEEDING ATTENTION



Figure 2: Diagram illustrating the importance of symmetrical loading of test tubes in the centrifuge rotor to ensure balanced operation.

AVAILABLE CENTRIFUGE TUBE

It is recommended that the capacity of centrifuge tubes should be no less than 30% and no more than 80% filled.



Conical Tube



Bottom Plastic Centrifuge Tube



Blood Collection Tube

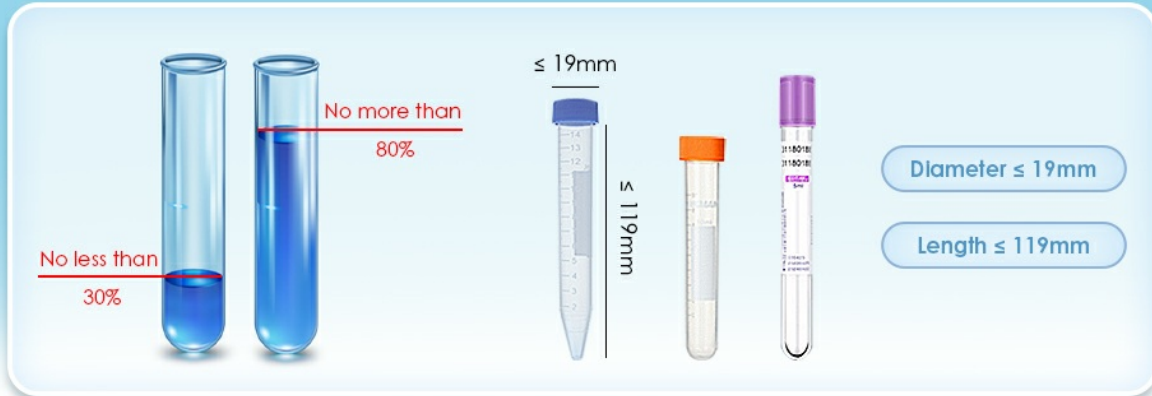


Figure 3: Guidelines for filling centrifuge tubes (30-80% full) and maximum tube dimensions (Diameter $\leq 19\text{mm}$, Length $\leq 119\text{mm}$).

3. COMPONENTS AND PARTS

The NEWTRY 800D Centrifuge consists of the following main components:

- **Main Unit:** Houses the motor, control panel, and rotor chamber.
- **Rotor:** The rotating component that holds the centrifuge tubes. The 800D model has a capacity for 6 tubes of 20ml each.
- **Control Panel:** Features a time adjustment knob and a speed adjustment knob.
- **Lid:** Covers the rotor chamber during operation.
- **Power Cord:** For connecting the unit to an electrical outlet.
- **Suction Cup Feet:** Located at the base for stability and vibration dampening.

TIME & SPEED REGULATING KNOB

With adjustable time and speed knobs, you can set specific times and speeds according to your needs.



Figure 4: Close-up view of the time (0-60 minutes) and speed (0-4000 RPM) regulating knobs on the centrifuge.



Figure 5: Side view of the NEWTRY 800D Centrifuge, highlighting its compact design and stable base.

4. SETUP INSTRUCTIONS

1. **Unpacking:** Carefully remove the centrifuge from its packaging. Inspect for any signs of damage during transit.
2. **Placement:** Place the centrifuge on a firm, level, and stable workbench or surface. Ensure there is adequate space around the unit for ventilation and safe operation. The suction cup feet should firmly grip the surface.
3. **Power Connection:** Connect the power cord to the centrifuge and then plug it into a grounded 110V US electrical outlet.
4. **Initial Check:** Before first use, ensure the time and speed knobs are set to '0' (off position).

5. OPERATING INSTRUCTIONS

Follow these steps to operate your NEWTRY 800D Centrifuge:

1. **Prepare Samples:** Fill your centrifuge tubes with the samples to be processed. Remember to adhere to the recommended filling levels (30-80% full).
2. **Load Tubes:** Open the centrifuge lid. Carefully insert the filled tubes into the rotor slots. It is crucial to load tubes symmetrically to ensure balance during centrifugation. If using an odd number of tubes, balance the rotor by placing a tube of equal weight (e.g., filled with water) opposite your sample tube.
3. **Close Lid:** Securely close the centrifuge lid. Ensure it is properly latched before starting operation.
4. **Set Time:** Turn the 'TIME' knob to set the desired centrifugation duration (0-60 minutes). The machine will start automatically once a time is set.
5. **Set Speed:** Turn the 'SPEED' knob to set the desired rotation speed (0-4000 RPM). Adjust the speed gradually if necessary.
6. **Start Centrifugation:** The machine will begin spinning once the time knob is turned from the 'OFF' position.
7. **Monitor Operation:** Observe the centrifuge during the initial moments of operation to ensure stable running and minimal vibration.
8. **Completion:** The centrifuge will automatically stop once the set time has elapsed. Wait for the rotor to come to a complete stop before opening the lid.
9. **Unload Samples:** Open the lid and carefully remove your processed samples.

GOOD WORK PERFORMANCE

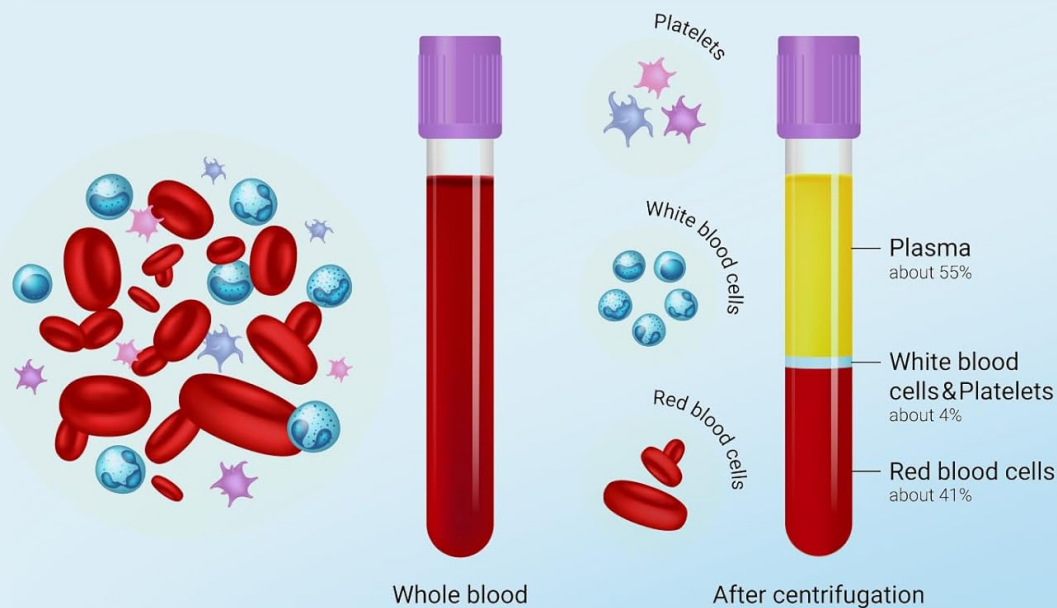


Figure 6: Illustration of blood sample separation into plasma, white blood cells, platelets, and red blood cells after centrifugation.

Your browser does not support the video tag.

Video 1: A brief demonstration of the NEWTRY Electric Centrifuge Machine in operation, showing the rotor spinning smoothly.

6. MAINTENANCE

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

- **Cleaning:** After each use, especially if there are spills, clean the rotor chamber and the exterior of the machine with a soft, damp cloth and a mild detergent. Do not use abrasive cleaners or solvents.
- **Drying:** Ensure all parts are thoroughly dry before closing the lid or storing the machine.
- **Rotor Care:** Periodically inspect the rotor for any signs of wear or damage. Ensure the tube sleeves are clean and free of debris.
- **Storage:** Store the centrifuge in a clean, dry, and dust-free environment when not in use.
- **Power Cord:** Check the power cord regularly for any damage. Do not use if the cord is frayed or damaged.

7. TROUBLESHOOTING

If you encounter issues with your centrifuge, refer to the following common problems and solutions:

Problem	Possible Cause	Solution
Machine does not start	No power supply; Time knob not set.	Check power connection; Ensure time knob is turned ON (not at '0').
Excessive vibration or noise	Uneven tube loading; Unstable surface; Damaged rotor.	Ensure tubes are loaded symmetrically; Place on a stable, level surface; Inspect rotor for damage.
Rotor does not reach set speed	Overloaded tubes; Motor issue.	Reduce sample volume; Contact customer support if issue persists.
Lid cannot be opened after operation	Rotor still spinning; Safety lock engaged.	Wait for rotor to stop completely; Do not force the lid.

8. SPECIFICATIONS

MACHINE PARAMETERS

SPEED RANGE: 0-4000R/MIN

TIMING RANGE: 0-60 MIN

MOTOR POWER: 50W

CAPACITY: 20ML X 6

CENTRIFUGAL FORCE: 1 435XG

NOISE: ≤ 50db



Figure 7: Visual representation of the centrifuge's key technical parameters.

Parameter	Value
Model	800D
Speed Range	0-4000 r/min
Timing Range	0-60 min
Motor Power	50W
Capacity	20ml x 6 tubes
Max. RCF (Relative Centrifugal Force)	1790 xg
Noise Level	≤ 50dB
Power Supply	110V US Plug, 60HZ
Package Dimensions	11.61 x 11.5 x 10.31 inches
Weight	6.61 Pounds

9. APPLICATIONS

The NEWTRY 800D Centrifuge is widely applicable in various fields requiring sample separation:

- Laboratory settings
- Hospitals and clinics
- Beauty salons (e.g., PRP preparation)
- Educational institutions (schools, universities)
- Agricultural research
- Food industry
- Scientific research
- Biochemistry



Figure 8: Visual representation of various environments where the centrifuge can be effectively utilized.

10. WARRANTY AND SUPPORT

NEWTRY products are manufactured to high-quality standards. For warranty information, technical support, or service inquiries, please refer to the warranty card included with your product or contact NEWTRY customer

service directly. Please have your model number (800D) and purchase date available when contacting support.

Return Policy: The standard return policy allows for refund/replacement within 30 days of purchase. Please refer to your retailer's specific return policy for detailed terms and conditions.