

8-Tube Laboratory Centrifuge with Timer

Operating Manual

Laboratory Equipment

Intended use

Low-speed separation of samples in 15 ml tubes, such as serum and plasma separation, urine sediment preparation and basic cell pelleting, in clinical, pathology, research and teaching laboratories.

Intended users

Trained laboratory personnel.

Read this manual completely before first use and keep it with the product. This document provides general operating, care and safety guidance. Where the product is supplied with manufacturer labeling or instructions, those take precedence. For questions, a replacement copy, or a digital copy of this manual, email sales@scimedstore.com.

1. Safety

Safety warnings and cautions

- Connect only to a grounded outlet with the supply voltage marked on the unit. On 110V mains, use the supplied step-up transformer.
- Always balance the load: place tubes of equal weight directly opposite each other. Never run an unbalanced rotor.
- Never open the lid or try to stop the rotor by hand while it is turning. Wait until the rotor has come to a complete stop.
- Treat all clinical samples as potentially infectious. Use capped tubes, wear gloves, lab coat and eye protection, and follow your laboratory's biosafety procedures.
- Inspect tubes for cracks before use. Do not exceed the tube manufacturer's rated speed.
- Do not centrifuge flammable, explosive or corrosive materials.
- If the centrifuge vibrates strongly or makes unusual noise, switch it off immediately and wait for the rotor to stop before investigating.
- Unplug before cleaning or servicing. Do not allow liquids to enter the motor housing.

2. Package contents

- Centrifuge
- 8 x 15 ml autoclavable polypropylene tubes
- Step-up transformer for 110V mains

Check contents on receipt. Report missing or damaged items to sales@scimedstore.com within 48 hours of delivery.

3. Specifications

Maximum speed	3,500-4,000 RPM
Speed control	5-step regulator
Capacity	8 tubes x 15 ml
Rotor	Swing-out head
Motor	Copper-wound, resiliently mounted
Timer	Built-in mechanical timer
Power	220V (step-up transformer supplied for 110V mains)
Body	Powder-coated steel with hinged lid
Approx. RCF at maximum speed	1,900-2,400 x g depending on rotor radius

4. Unpacking and setup

- 1 Unpack the centrifuge and check for transport damage, including the rotor and buckets.
- 2 Place it on a rigid, level, stable bench with clearance around it. Do not place it near the bench edge.
- 3 Check that the supply voltage matches the unit (220V). On 110V mains, connect the unit to the supplied step-up transformer, then plug the transformer into a grounded outlet.
- 4 Check that the rotor turns freely by hand and that buckets swing freely.

- 5 Set the speed regulator to its lowest position and the timer to zero before switching on.

5. Operation

Running a centrifuge cycle

- 1 Fill tubes to equal volumes and cap them.
- 2 Load tubes into the buckets in opposite pairs so the rotor is balanced. If you have an odd number of samples, add a balance tube filled with water to the same weight.
- 3 Close the lid securely.
- 4 Set the timer to the time required by your laboratory method.
- 5 Switch on and increase the speed regulator step by step to the setting required by your method.
- 6 Stay near the centrifuge for the first few seconds to confirm it runs smoothly.
- 7 When the timer ends, return the regulator to its lowest position and wait for the rotor to stop completely.
- 8 Open the lid and remove tubes carefully without disturbing the separated layers.

6. Cleaning and disinfection

- Switch off and unplug before cleaning.
- Remove the buckets and wipe the rotor, buckets and chamber with a cloth dampened with mild detergent or a compatible laboratory disinfectant. Dry thoroughly.
- In case of tube breakage or a spill, wait at least 10 minutes before opening the lid to let aerosols settle, then decontaminate per your laboratory's biosafety procedure. Remove broken glass with forceps.
- The 15 ml polypropylene tubes are autoclavable. Do not autoclave the centrifuge body, rotor or motor.
- Do not use abrasive cleaners.

7. Maintenance and storage

- Keep the chamber clean and dry; leave the lid open briefly after cleaning to dry.
- Inspect rotor, buckets and trunnions regularly for corrosion, cracks or wear and replace damaged parts.
- Check the power cord and transformer for damage.
- Refer motor and electrical repairs to qualified service personnel.

8. Troubleshooting

Problem	Likely cause	What to do
Centrifuge does not start	No power, timer not set, or transformer not switched on	Check the outlet, transformer and cord; set the timer.
Strong vibration or noise	Unbalanced load or bench not level	Stop and wait for the rotor to stop; rebalance tubes and check the bench is level.
Poor separation	Speed or time too low for the sample	Check the speed and time required by your method and adjust.
Tube broken in bucket	Cracked tube or tube not rated for the speed	Decontaminate as described in Cleaning; use undamaged tubes rated for the speed.
Rotor does not stop after timer ends	Rotor coasting down normally or timer fault	Allow it to coast to a stop; if it keeps running under power, switch off at the mains and contact service.

9. Disposal

- Decontaminate the centrifuge before disposal if it may have been in contact with biological material.
- Dispose of the centrifuge and transformer as electronic waste in accordance with local regulations.
- Dispose of samples and used tubes per your laboratory's biohazard waste procedure.

10. Warranty and support

Products are covered by SciMed's standard warranty (12 months from purchase unless a different period is stated on your invoice). Warranty terms: scimedstore.com/pages/warranty.

Support, spare parts and additional copies of this manual: sales@scimedstore.com. Please include your order number and a photo of the product or issue.

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