

Blood Roller Mixer, 4 Rollers

Operating Manual

Laboratory Equipment

Intended use

Gentle continuous rolling and inversion of blood collection tubes, reagent suspensions and cell suspensions to keep samples evenly mixed before testing or processing.

Intended users

Trained laboratory personnel in clinical, hematology, blood bank, research and teaching laboratories.

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 (230V AC).
- Unplug the unit before cleaning, moving or servicing.
- Do not allow liquids to enter the housing. Do not operate with wet hands.
- Treat all blood samples as potentially infectious. Wear gloves, lab coat and eye protection and follow your laboratory's biosafety procedures.
- Use only tightly capped tubes. Do not mix open or cracked tubes.
- Keep hair, loose clothing, jewelry and fingers away from moving rollers.
- Do not use the unit if the power cord or housing is damaged.
- When used in a cold room or incubator, keep the cord and plug outside wet areas and allow condensation to dry before switching on after moving between temperatures.

2. Specifications

Rollers	4 rollers, 230 mm length
Rotation speed	30 / 36 RPM (selectable)
Motor	Low-noise motor
Operating environment	Cold room at 4°C or incubator up to 60°C / 80% RH
Typical mixing time	15-20 min
Mixing method	Continuous roller inversion
Power	230V AC, 50 Hz

3. Unpacking and setup

- 1 Unpack the mixer and check for transport damage.
- 2 Place the unit on a stable, level, dry surface (bench, cold room shelf or incubator shelf) with space around it for ventilation.
- 3 Check that the supply voltage marked on the unit matches your supply.
- 4 If moved from a cold to a warm environment, allow the unit to reach room temperature and any condensation to dry before connecting power.
- 5 Plug the power cord into a grounded outlet.

4. Operation

Mixing tubes

- 1 Check that all tubes are tightly capped and labeled.
- 2 Lay the tubes horizontally across the rollers, spacing them evenly along the roller length.
- 3 Select the speed: 30 RPM for gentle mixing of blood, or 36 RPM for thicker suspensions, according to your laboratory method.

- 4 Switch the unit on with the power switch and check that the tubes roll smoothly without sliding off.
- 5 Mix for the time required by your laboratory procedure (typical blood sample homogenization is 15-20 min).
- 6 Switch the unit off and allow the rollers to stop before removing tubes.

Use in a cold room or incubator

- 1 Place the unit inside the cold room (4°C) or incubator (up to 60°C / 80% RH) before loading samples.
- 2 Route the power cord so the door closes without crushing it.
- 3 Operate as described above and check the unit periodically during long runs.
- 4 After use in high humidity, wipe the unit dry and allow it to air out before storage.

5. Cleaning and disinfection

- Switch off and unplug the unit before cleaning.
- Wipe the rollers and housing with a soft cloth lightly dampened with mild detergent or a laboratory disinfectant compatible with the materials.
- In case of a sample spill or tube breakage, stop the unit, unplug it and decontaminate per your laboratory's biosafety procedure. Handle broken glass with tongs or forceps.
- Do not immerse the unit or spray liquid directly onto it.
- Do not autoclave any part of the unit.

6. Maintenance and storage

- Store in a clean, dry place when not in use.
- Check the power cord and plug regularly for damage.
- Check the rollers for smooth, even rotation and remove any residue that could cause tubes to slip.
- Refer repairs to qualified service personnel. Do not open the housing.

7. Troubleshooting

Problem	Likely cause	What to do
Unit does not start	No power or loose cord	Check the outlet, plug and power switch; have the fuse or supply checked by qualified personnel.
Rollers turn unevenly or stall	Overloading or residue on rollers	Reduce the load, space tubes evenly and clean the rollers.
Tubes slide off the rollers	Tubes placed unevenly or speed too high	Center tubes across the rollers and use the lower speed.
Unusual noise	Debris or worn parts	Switch off and unplug; remove any debris. If noise continues, contact service.
Sample not well mixed	Mixing time too short	Extend mixing time per your laboratory procedure.

8. Disposal

- Decontaminate the unit before disposal if it may have been in contact with biological material.
- Dispose of the unit as electronic waste in accordance with local regulations. Do not discard in household waste.
- Dispose of blood samples and contaminated materials per your laboratory's biohazard waste procedure.

9. 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.

SciMed Scientific Equipment LLC · San Jose, California, USA · scimedstore.com