

Magnetic Stirrer with Hot Plate, 2000 mL, 220V

Operating Manual

Laboratory Equipment

Intended use

Bench-top stirring and heating of liquids in laboratory vessels up to 2000 mL, such as dissolving solids, preparing buffers and melting agar.

Intended users

Trained laboratory staff, teachers and supervised students.

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 (220V).
- The top plate gets very hot and stays hot after switching off; do not touch it until it has cooled.
- Do not heat flammable liquids on the hot plate; work in a fume hood when heating volatile or hazardous materials.
- Do not heat sealed or closed containers.
- Use only heat-resistant laboratory glassware and do not exceed 2000 mL.
- Unplug before cleaning and do not let liquids enter the housing.
- Keep the power cord away from the hot plate surface.
- Wear eye protection, gloves and a lab coat.

2. Package contents

- Magnetic stirrer with hot plate
- PTFE-coated stir bar

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

3. Specifications

Maximum working capacity	2000 mL
Stir speed	Adjustable, up to 1200 RPM
Stir bar	PTFE-coated, included
Top plate	Ceramic-coated
Temperature control	Analog dial
Controls	Independent stir and heat
Power supply	220V AC

4. Unpacking and setup

- 1 Place the unit on a stable, level, heat-resistant bench away from flammable materials.
- 2 Check that the stir and heat controls are turned to off or minimum.
- 3 Plug the unit into a grounded 220V outlet.
- 4 Place the vessel in the center of the plate and drop the stir bar in gently.

5. Operation

Stirring only

- 1 Place the vessel with liquid and stir bar in the center of the plate.
- 2 Switch on and turn the speed control up slowly.
- 3 Increase speed until a smooth vortex forms without splashing.

- 4 If the stir bar jumps or spins off-center, reduce speed and increase again slowly.
- 5 Turn the speed to zero and switch off when finished.

Heating and stirring

- 1 Start stirring as above before turning on the heat.
- 2 Turn the heat dial to a low setting and increase gradually.
- 3 Monitor the liquid temperature with a thermometer; the dial sets heating power, not an exact temperature.
- 4 Do not leave heating unattended.
- 5 Turn the heat dial to off, then stop stirring.
- 6 Let the plate cool before removing the unit or cleaning it.

6. Cleaning and disinfection

- Switch off, unplug and let the plate cool fully before cleaning.
- Wipe the top plate and housing with a damp cloth and mild detergent.
- Clean spills promptly once cool; do not pour liquid onto the unit.
- Wash the stir bar with water and mild detergent.
- Do not use abrasive cleaners on the ceramic top.

7. Maintenance and storage

- Store in a dry place with the cord loosely coiled.
- Inspect the power cord and plug before use; do not use if damaged.
- Keep stir bars with the unit and replace worn or chipped ones.
- Have electrical faults repaired only by qualified personnel.

8. Troubleshooting

Problem	Likely cause	What to do
Unit does not turn on	No power or wrong voltage	Check outlet, plug and that the supply is 220V
Stir bar does not spin	Bar off-center or speed too low	Center the vessel and increase speed slowly
Stir bar jumps or rattles	Speed too high or liquid too viscous	Reduce speed; use a mechanical stirrer for very viscous liquids
Slow heating	Heat setting low or large volume	Increase setting gradually and allow more time
Liquid overheats	Heat setting too high	Reduce the heat dial and monitor with a thermometer

9. Disposal

- Dispose of the unit as electrical waste according to local regulations.
- Dispose of used solutions according to your laboratory's chemical waste procedures.

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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