

Student Compound Microscope 40x-1000x

Operating Manual

Laboratory Equipment

Intended use

A compound light microscope for viewing prepared and freshly mounted specimens on glass slides at 40x to 1000x total magnification. Intended for biology teaching, routine specimen examination and STEM education.

Intended users

Students, teachers, laboratory staff and educators. Younger students should use the microscope under adult or teacher supervision.

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 properly grounded outlet with the supply voltage marked on the unit.
- Unplug the unit before cleaning, inspection or moving it.
- Do not allow liquids to enter the housing. Do not operate with wet hands or a damaged power cord.
- Use only the power adapter supplied with the microscope.
- Handle glass slides and cover slips with care; they can break and cause cuts.
- Never point the microscope or mirror at the sun or look at direct sunlight through the optics.
- Carry the microscope with two hands, one on the arm and one under the base.
- Supervise students at all times, especially when handling slides, stains or the power adapter.

2. Package contents

- Microscope
- 50 blank slides
- 2 prepared slides
- LED lamp
- Power adapter
- Rechargeable battery
- Cardboard carrying case

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

3. Specifications

Total magnification	40x / 100x / 600x / 1000x (objective x eyepiece combinations)
Objectives	4x / 10x / 40x, spring-loaded
Eyepieces	H10x wide-field and 25x
Optical system	Glass achromatic
Body	Metal construction
Illumination	LED
Power	110V / 220V adapter plus rechargeable battery
Battery life	Approx. 8-12 hours per charge (per listing)
Focus	Coaxial coarse and fine focus
Stage	Mechanical stage with X-Y positioning knobs

4. Unpacking and setup

- 1 Remove the microscope from the carrying case and place it on a stable, level table.
- 2 Remove any protective covers and check that the objectives and eyepieces are secure.

- 3 Insert the H10x eyepiece into the eyepiece tube.
- 4 Charge the rechargeable battery fully before first use, or connect the power adapter to a grounded outlet.
- 5 Rotate the nosepiece so the 4x objective clicks into position over the stage.

5. Operation

Viewing a slide

- 1 Switch on the LED illumination and set the brightness to a comfortable level.
- 2 Place a slide on the stage, cover slip facing up, and secure it with the slide holder.
- 3 Use the X-Y knobs to center the specimen over the light opening.
- 4 Looking from the side, raise the stage (or lower the objective) with the coarse focus until the 4x objective is close to the slide.
- 5 Look through the eyepiece and slowly move the stage away with the coarse focus until the image appears.
- 6 Sharpen the image with the fine focus knob and adjust the brightness as needed.

Changing magnification

- 1 Center the area of interest at low magnification before switching.
- 2 Rotate the nosepiece to the 10x objective and refocus using the fine focus only.
- 3 For higher magnification, rotate to the 40x objective and use the fine focus only; the spring-loaded objective helps protect the slide if contact occurs.
- 4 For the highest total magnification, replace the H10x eyepiece with the 25x eyepiece.
- 5 Increase illumination as magnification increases.
- 6 Return to the 4x objective before removing the slide.

6. Cleaning and disinfection

- Switch off and unplug before cleaning.
- Remove dust from lenses with a blower or soft brush first.
- Clean eyepiece and objective lenses gently with lens tissue; use lens-cleaning solution sparingly on the tissue, not directly on the lens.
- Do not use abrasives or harsh solvents on lenses or painted surfaces.
- Wipe the stage and body with a soft, slightly damp cloth and dry immediately.

7. Maintenance and storage

- Store in the carrying case or under a dust cover in a dry place.
- Leave an eyepiece in the tube at all times to keep dust out of the optics.
- Lower the stage and set the 4x objective in position before storage.
- Recharge the battery periodically during long storage.

- Do not disassemble the objectives or eyepieces.

8. Troubleshooting

Problem	Likely cause	What to do
No light	Battery discharged or adapter not connected	Charge the battery or connect the power adapter; check the switch and brightness setting
Image dark at high magnification	Brightness too low	Increase illumination
Cannot focus	Slide upside down or objective not clicked into place	Turn the slide cover slip up; rotate the nosepiece until it clicks; start focusing again at 4x
Blurry or spotty image	Dirty lens or slide	Clean the eyepiece, objective and slide with lens tissue
Specimen disappears when changing objective	Specimen not centered	Return to low magnification, center the specimen, then switch again

9. Disposal

- Dispose of broken slides in a sharps or broken-glass container.
- Dispose of the rechargeable battery and electrical parts at an electronics or battery recycling point per local rules.
- Recycle the cardboard case with paper waste.

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.

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