

2-Step Slit Lamp Biomicroscope, Complete Package

Operating Manual

Ophthalmic Diagnostic Equipment

Intended use

Binocular slit lamp biomicroscope for magnified examination of the anterior segment of the eye and adnexa using a variable slit beam and filters.

Intended users

For use by trained eye-care professionals (optometrists, ophthalmologists and supervised technicians). Follow your facility's protocols and applicable regulations.

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

- For use by trained eye-care professionals. Follow your facility's protocols and applicable regulations.
- Connect only to a grounded outlet with the supply voltage marked on the unit.
- Switch off and unplug before changing the lamp or fuse, and allow the lamp to cool; the lamp housing becomes hot.
- Use the lowest illumination intensity and shortest exposure needed for the examination to limit light exposure to the patient's eye.
- Do not allow liquids into the power supply or illumination housing.
- Lock the instrument base and keep cables clear before moving the patient or table.
- Clean and disinfect the chin rest and forehead rest between patients.

2. Package contents

- Slit lamp biomicroscope
- 15x eyepieces
- Halogen bulb
- Mirror
- Testing rod
- Dust cover
- Fuse
- Instruction manual
- Installation guide

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

3. Specifications

Microscope type	Galilean binocular
Objectives	1x, 1.6x (2-step)
Eyepieces	10x and 15x
Total magnification	10x / 16x / 24x (10x eyepieces); 15x / 24x / 36x (15x eyepieces)
Slit rotation	0° to 180° continuous
Illumination tilt	5°, 10°, 15°, 20°
Slit diaphragm	6 apertures: 12, 9, 7, 3, 0.2 mm and wedge
Filters	Cobalt blue, green (red-free), yellow, open
Lamp	6 V 20 W halogen
Power supply	110 V or 220 V (as specified at order)
Table	Not included

4. Unpacking and setup

- 1 Unpack all parts and check them against the package contents list.
- 2 Mount the slit lamp on a suitable ophthalmic instrument table (not included) following the installation guide.
- 3 Fit the eyepieces (10x or 15x) and check they are seated.
- 4 Connect the power supply, checking the supply voltage matches the unit marking, and plug into a grounded outlet.
- 5 Use the testing rod to focus the eyepieces for your eyes and set the interpupillary distance.
- 6 Fit fresh chin rest paper if used and clean the chin and forehead rests.

5. Operation

Positioning the patient

- 1 Seat the patient comfortably and adjust the table height.
- 2 Ask the patient to place the chin on the chin rest and the forehead against the forehead band.
- 3 Adjust the chin rest height so the patient's eyes align with the canthus mark.
- 4 Ask the patient to look at a fixation point as directed.

Examination

- 1 Switch on the illumination at a low setting.
- 2 Select the objective (1x or 1.6x) for the required magnification.
- 3 Set the slit width and height using the slit aperture controls.
- 4 Set the illumination angle and slit rotation as needed.
- 5 Use the joystick to bring the eye into focus and move across the area being examined.
- 6 Select the cobalt blue, green or yellow filter as required by the examination technique.
- 7 Increase magnification for detailed areas, reducing light intensity where possible.
- 8 Switch off the illumination when the examination is complete.

Shutting down

- 1 Turn the illumination to minimum and switch off the power supply.
- 2 Lock the instrument base.
- 3 Clean the chin and forehead rests.
- 4 Fit the dust cover when the instrument is not in use.

6. Cleaning and disinfection

- Switch off and unplug before cleaning.
- Wipe the chin rest, forehead band and handles with a disinfectant compatible with plastics after each patient, per facility protocol.

- Clean the eyepieces, objectives and mirror with lens tissue and lens cleaner; do not use abrasives or alcohol on coated optics.
- Wipe the body with a soft, lightly damp cloth.
- Do not spray liquids directly onto the instrument.

7. Maintenance and storage

- Keep the dust cover on when not in use.
- Replace the halogen lamp with the specified type when it fails; let the old lamp cool first and avoid touching the new bulb glass with bare fingers.
- Replace a blown fuse only with the specified rating, and investigate the cause if it blows again.
- Check that mechanical movements, slit controls and the joystick move smoothly.
- Refer electrical repairs and optical alignment to qualified service personnel.

8. Troubleshooting

Problem	Likely cause	What to do
No illumination	Power off, blown fuse or failed lamp	Check power and fuse; replace the lamp if needed.
Slit image dim	Low intensity setting, dirty mirror or aging lamp	Increase intensity, clean the mirror, or replace the lamp.
Image out of focus	Eyepieces not set for user	Refocus the eyepieces using the testing rod.
Double image through eyepieces	Interpupillary distance not set	Adjust eyepiece separation until a single image is seen.
Instrument drifts on the table	Base lock not engaged	Engage the base lock when not moving the instrument.
Slit edges uneven	Dirty slit diaphragm or optics	Clean optics; contact service if the problem continues.

9. Disposal

- Dispose of used halogen lamps in accordance with local regulations.
- Dispose of the instrument as electronic waste in accordance with local regulations.

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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