

SciMed Wireless Binocular Indirect Ophthalmoscope

Operating Manual

Ophthalmic Diagnostic Instrument

Intended use

Cordless, rechargeable head-worn binocular indirect ophthalmoscope for wide-field stereoscopic examination of the retina and fundus, used with a handheld condensing lens.

Intended users

For use by trained healthcare professionals (ophthalmologists, optometrists, retina specialists and supervised residents). 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 healthcare professionals. Follow your facility's protocols and applicable regulations.
- Use the lowest light intensity and shortest examination time that give an adequate view, especially for infants, photosensitive patients and patients with recent eye surgery.
- Do not look directly into the light source.
- Use only the supplied charger, connected to the supply voltage marked on it. Do not charge near flammable materials or leave a damaged battery charging.
- Do not use the device if the battery, cable, charger or housing is damaged, swollen or overheating.
- Do not allow liquids to enter the head unit, battery or charger.
- Switch off and disconnect from the charger before cleaning.
- Pupil dilation and condensing lens selection are at the examiner's judgment and according to clinical protocol.

2. Package contents

- Wireless binocular indirect ophthalmoscope head unit
- Battery (headband-integrated or 3000 mAh pocket-clip with 1.2 m cable, per variant)
- 110V mains charger
- Padded adjustable headband
- User manual
- Warranty card

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

3. Specifications

Illumination	2000 lux LED, adjustable 2-100%
Battery	Varies by variant: Head Mounted - headband-integrated lithium; Pocket Battery - 3000 mAh pocket-clip Li-ion with 1.2 m cable
Runtime	Varies by variant: Head Mounted 4-6 hr; Pocket Battery 6-8 hr
Headband weight	Varies by variant: Head Mounted approx. 620 g; Pocket Battery approx. 520 g
Charging	110V mains charger, approx. 3 hr full charge
Pupillary distance	47-75 mm
Patient protection	Built-in IR and UV filter
Apertures and filters	Multiple, interchangeable

4. Unpacking and setup

- 1 Charge the battery fully before first use (approx. 3 hours) using the supplied 110V charger.
- 2 For the Pocket Battery variant, connect the 1.2 m cable from the battery to the head unit and clip the battery to your clothing.

- 3 Put on the headband and adjust the crown and circumference straps for a secure, comfortable fit.
- 4 Adjust the optics height and tilt so the viewing window sits level in front of your eyes.
- 5 Set the pupillary distance (47-75 mm) so you see a single, fused image.
- 6 Switch on and align the light spot with the center of your field of view on a flat surface at arm's length.

5. Operation

Fundus examination

- 1 Prepare the patient and dilate the pupils according to clinical protocol.
- 2 Select the aperture and filter appropriate for the pupil size and examination.
- 3 Switch on at a low brightness and increase only as needed.
- 4 Stand at arm's length, direct the light into the patient's pupil and obtain a red reflex.
- 5 Hold a handheld condensing lens close to the patient's eye and move it toward you until the fundus image fills the lens.
- 6 Ask the patient to look in different directions to examine the periphery, keeping your head, the lens and the patient's pupil aligned.
- 7 Switch off the light when the examination is complete.

Charging and battery care

- 1 Recharge when the light becomes dim or after each clinic session.
- 2 Connect the supplied charger to the battery and plug it into a 110V outlet.
- 3 Allow about 3 hours for a full charge, then disconnect.
- 4 Store with a partial charge if not used for a long period, and recharge periodically.

6. Cleaning and disinfection

- Switch off and disconnect the charger before cleaning.
- Clean the viewing window and optical surfaces with lens tissue only. Do not use abrasive cleaners or solvents on optics.
- Wipe the headband, head unit housing and battery with a soft cloth lightly dampened with mild detergent or a compatible disinfectant per facility protocol.
- Do not spray liquid directly onto the device or immerse any part.
- Do not autoclave any part of the device.

7. Maintenance and storage

- Store in a clean, dry place away from heat and direct sunlight.
- Inspect the battery, cable and charger regularly for damage.
- Keep the optics covered or stored in a case to protect them from dust and scratches.

- Refer battery replacement and repairs to qualified service personnel.

8. Troubleshooting

Problem	Likely cause	What to do
No light	Battery discharged or cable disconnected (Pocket Battery variant)	Recharge the battery and check the cable connection.
Light dim	Low battery or low brightness setting	Recharge and check the brightness control.
Double image	Pupillary distance not set correctly	Readjust the PD until a single image is seen.
Light spot not centered in view	Optics not aligned with the beam	Readjust optics tilt and alignment using a flat surface at arm's length.
Battery does not charge	Charger not connected or faulty	Check charger connections and outlet; contact service if the problem continues.
Headset uncomfortable	Straps not adjusted	Readjust crown and circumference straps; consider the Pocket Battery variant for long sessions.

9. Disposal

- Remove the battery and recycle it at a battery collection point. Do not discard in household waste or incinerate.
- Dispose of the device and charger 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.

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