

Illuminated Trial Lens Set, 225 Lenses, with Trial Frame

Instructions for Use

Ophthalmic Refraction Equipment

Intended use

Set of trial lenses and a trial frame for subjective refraction, retinoscopy verification and binocular vision assessment.

Intended users

For use by trained healthcare professionals (optometrists, ophthalmologists and supervised students). 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.
- Handle lenses by their rims or handles; glass lenses can chip or break if dropped.
- Do not use a chipped or cracked lens near a patient's eye.
- Fit the trial frame gently and check it is secure and comfortable before inserting lenses.
- Close and lock the case when not in use to prevent lenses falling out.
- Keep liquids away from the LED tray and its controller.

2. Package contents

- 225 trial lenses
- Trial frame
- Colored acrylic case with double lock, auto-rising tray and LED backlight

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

3. Specifications

Total lenses	225
Sphere range	+/- 20.00 D typical
Cylinder range	+/- 6.00 D typical
Prism range	0.5 to 10 prism diopters
Auxiliary lenses	Pinhole, cross cylinder, red/green filters, occluders, Maddox rod
Aperture	20 mm reduced aperture
Mount	Aluminum, 38 mm diameter
Lens material	Optical glass
Power basis	Plano back vertex
Color coding	Plus and minus lenses in different colors
Sphere handles	Yes
Trial frame	Adjustable adult frame
Illumination	Auto-rising tray with LED backlight

4. Unpacking and setup

- 1 Place the case on a stable surface and open the lid; the tray rises and the LED backlight illuminates the lenses.
- 2 Check that all lenses are in their marked slots.
- 3 Adjust the trial frame for the patient's interpupillary distance, temple length and nose bridge.
- 4 Place the frame on the patient and check the lens cells are centered on the pupils.

- 5 Have the test chart ready at the correct testing distance per your protocol.

5. Operation

Subjective refraction

- 1 Start with the patient's retinoscopy, autorefraction or current spectacle result as directed by your protocol.
- 2 Insert sphere lenses in the rear cell of the trial frame, holding them by the handle.
- 3 Refine sphere power using the patient's responses to the chart.
- 4 Insert cylinder lenses and set the axis using the frame's axis scale.
- 5 Refine cylinder axis and power with the cross cylinder.
- 6 Use auxiliary lenses (pinhole, occluder, red/green filters, Maddox rod) as required.
- 7 Record the final lens powers, axis and vertex used.
- 8 Return each lens to its correct slot immediately after use.

6. Cleaning and disinfection

- Wipe lenses with a soft lens cloth or lens tissue; use an optical cleaning solution for smudges.
- Do not use abrasives or rough cloths on lens surfaces.
- Clean and disinfect the trial frame nose pads and temples between patients per facility protocol.
- Do not autoclave unless labeled as autoclavable.
- Wipe the case with a dry or slightly damp cloth; keep moisture away from the LED tray.

7. Maintenance and storage

- Keep all lenses in their marked slots so the set stays complete.
- Close and lock the case after use.
- Store in a dry place away from heat and direct sunlight.
- Check lenses regularly for chips or scratches and replace damaged ones.

8. Troubleshooting

Problem	Likely cause	What to do
LED backlight does not light	Tray not fully raised or power source issue	Open the lid fully; check the LED controller and its power source
Patient reports blur with expected lens	Lens in wrong cell, dirty, or frame not centered	Check lens placement, clean the lens and re-center the frame
Cylinder axis reading unclear	Frame tilted on the face	Level the frame and adjust temples and nose bridge
Lens loose in frame cell	Lens not fully seated	Remove and reinsert the lens fully into the cell
Lens missing from slot	Lens not returned after use	Check the frame and work area; replace missing lenses to keep the set complete

9. Disposal

- Dispose of broken glass lenses as glass waste.
- Dispose of the LED tray and electronics as electrical waste according to 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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