

ENT Operating Microscope, 3-Step Magnification

Operating Manual

Surgical Microscope

Intended use

Operating microscope providing magnified, coaxially illuminated stereoscopic viewing for ENT, otology and head and neck procedures in the operating room or procedure room.

Intended users

For use by trained healthcare professionals. 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.
- Connect only to a grounded outlet with the supply voltage marked on the unit.
- Make sure the table clamp or floor stand is secure and the stand brakes are locked before use.
- Balance the arm before positioning it over the patient; an unbalanced arm can drift or drop.
- Use the lowest light intensity that gives an adequate view, according to clinical judgment.
- The lamp housing can become hot; let it cool before changing the bulb.
- Switch off and unplug before cleaning, changing the bulb or fitting accessories. Do not let liquids enter the housing.
- Use sterile drapes or handle covers as required by facility protocol.

2. Specifications

Magnification	3-step: 5x, 10x, 20x
Eyepieces	SWF 15x, paired
Head	90° inclined
Objective lens	F = 200 mm (250, 300, 400 mm optional)
Working distance	200 mm with standard objective
Focusing	Manual coarse and fine focus
Illumination	Cold coaxial halogen, 15V/150W, variable intensity
Arm	Counter-balanced pantographic arm, 320° rotation
Stand	Varies by variant: table clamp stand or floor stand
Power supply	110V or 220V AC (specified at order)
Accessories	Varies by variant: none, beam splitter, beam splitter + CCD camera, or beam splitter + CCD camera + LCD monitor

3. Unpacking and setup

- 1 Attach the table clamp securely to the operating table or cart, or position the floor stand and lock its brakes.
- 2 Mount the microscope head on the arm and tighten all fixing knobs.
- 3 Fit the eyepieces and the objective lens.
- 4 Fit optional beam splitter, camera and monitor according to their instructions, if supplied.
- 5 Connect the light source and plug the power cord into a grounded outlet of the correct voltage.
- 6 Adjust the arm balance so the head stays where it is placed.
- 7 Set the eyepiece dioptré and interpupillary distance for the operator.
- 8 Switch on the light and check the intensity control works.

4. Operation

Positioning and focusing

- 1 Position the head over the surgical field at about the working distance of the objective.
- 2 Set the magnification changer to 5x.
- 3 Turn on the illumination at a low level and increase as needed.
- 4 Focus with the coarse focus, then the fine focus.
- 5 Change to 10x or 20x with the magnification lever as needed and refocus with the fine focus.
- 6 Reposition the arm gently using the handles; do not pull on the eyepieces.

End of procedure

- 1 Turn the light intensity to minimum and switch off the light source.
- 2 Move the head away from the patient and fold the arm.
- 3 Remove drapes and dispose of them per facility protocol.
- 4 Switch off and unplug the unit.
- 5 Fit the dust cover once the lamp has cooled.

5. Cleaning and disinfection

- Switch off and unplug before cleaning.
- Clean eyepieces and objective with lens tissue and an optical cleaning solution only.
- Wipe the arm, stand and housing with a facility-approved disinfectant on a damp cloth.
- Do not spray liquids directly onto the unit.
- Do not autoclave any part unless labeled as autoclavable.

6. Maintenance and storage

- Cover the microscope with a dust cover when not in use.
- Check the arm balance and fixing knobs before each use.
- Replace the halogen bulb when light becomes dim or fails, using the bulb type marked on the light source.
- Store with the arm folded and the stand brakes locked.
- Arrange service by qualified personnel for electrical, optical or arm faults.

7. Troubleshooting

Problem	Likely cause	What to do
No light	Power off, cable loose or bulb failed	Check power and cable connections; replace the bulb if needed
Dim light	Intensity set low or bulb aging	Increase intensity; replace the bulb if still dim
Arm drifts up or down	Arm not balanced or knobs loose	Readjust the counter-balance and tighten fixing knobs
Image blurred	Dioptré not set or dirty optics	Set the eyepiece dioptré; clean optics with lens tissue
Image goes out of focus after changing magnification	Normal refocusing needed	Refocus with the fine focus knob
No camera image on monitor	Camera or monitor cable not connected or not powered	Check camera, cables and monitor power

8. Disposal

- Dispose of used drapes as medical waste per facility protocol.
- Dispose of the microscope, light source, camera and monitor as electrical waste according to local regulations.

9. 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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