

OMÂNO

Biological Microscope Instruction Manual

OM36 and OM36L



www.microscope.com

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Safety

- Do not disassemble any parts of the microscope, except where noted in the instruction manual.
- In case of a problem with the microscope, contact a professional repairman or the manufacturing factory.
- The microscope should be kept at temperatures between 0C – 40C / 32F – 104F, with a maximum humidity of 85%.
- Do not place the instrument in direct sunlight or under direct indoor light. This environment can influence the quality of the specimen imaging.
- Do not place the instrument in a dusty environment. When not in use, cover the microscope with a dust cover.
- Keep the instrument on a level and sturdy surface.
- Carry the microscope with two hands, one hand underneath the base unit and the other grasping the vertical pole of the microscope.

Parts List for a Complete Microscope Set

- One Binocular body with base either the OM36 or OM36L
- Two eyepieces: wide field 10X
- Four(4) objectives (4x, 10x, 40x, 100x[oil])
- One blue filter
- One bottle of immersion oil
- One AC/DC adapter power block (OM36L only)
- One plastic dust cover
- One manual

Features

The OM36 and the OM36L are excellent biological microscopes. These quality microscopes provide clear images in a variety of settings. They can be used for medical purposes, public health, scientific research, examining biological specimens. Also the OM36 and OM36L meet all requirements for all medical schools.

Assembling the Microscope

- 1) The microscope head or body can be rotated on the stand and used from any direction. There are two normal positions:
 - a) The viewer sits behind the microscope, with the eyepieces and focusing knob on the same side and closer to the viewer.
 - b) The viewer sits in front of the microscope, with the eyepieces toward the viewer and focusing knob away from the viewer.
(Set-up as shown in figure 1)
- 2) Tighten the knob (11) to prevent the elevator from sliding down.
- 3) Place the eyepiece (1) into the eyepiece tubes (2).

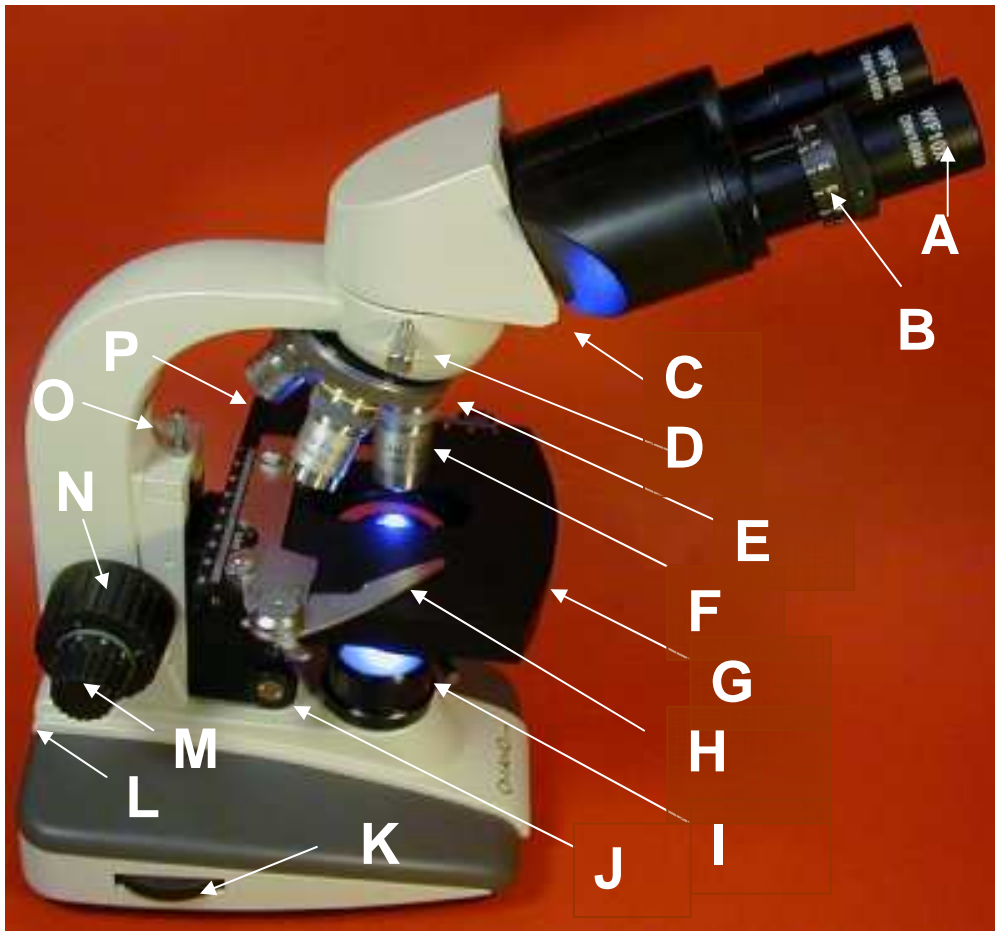


Fig. 1

- | | |
|----------------------------|---|
| A. Eyepiece | K. Lighting Brightness Wheel |
| B. Dioptic adjustment ring | L. Power Switch |
| C. Prism cap | M. Fine Focus Adjustment |
| D. Securing Screw | N. Coarse Focus Adjustment |
| E. Objective Turret | O. Stage height stop adjustment |
| F. Objective | P. Mechanical stage adjustment knob (below stage) |
| G. Working stage | |
| H. Mechanical Slide Holder | |
| I. Light Diffuser | |
| J. Condenser Focus knob | |

Operation

Operation

1. Insert the plug into an AC outlet. Switch on the light source and adjust the light intensity for your application.
2. Put a specimen slide into the specimen holder. Choose objective and screw into the nosepiece according to their magnifying power and then choose and insert the needed eyepieces into the eyepiece tubes.
3. Turn the nosepiece to bring the required objective into the light path.
4. Interpupillary distance (distance between the eyes) can be adjusted by sliding the eyepiece tubes left or right.
5. Bring the specimen close to the objective with the coarse adjustment knob until you can get a rough image through the eyepiece. Focus accurately with the fine adjustment knob.
6. Regulate the field diaphragm to the smallest, move the condenser up and down to focus on the image of the field iris diaphragm. Use the condenser centering knobs to bring the diaphragm image into the center of the field of view. Increase diameter of field iris diaphragm until it is just outside the field of view. Regulate the diameter of aperture diaphragm and the light intensity of the light source until background intensity is suitable for the image.
7. When the 4X objective is in use, the condenser should be lowered until the whole view field illuminated. Put the frosted glass on the holder under the condenser, then rotate it into the field of view.
8. After coarse focus has been accomplished, lock the prefocusing lever clockwise rotation, then the stage movement is limited in the upward direction to prevent accidental damage to specimen or objective front lens.
9. Adjust the stage movement knobs, move the object into the center of the field of view.
10. When replacing condenser, first lower the condenser with the condenser height adjustment until it can easily be removed without touching the stage, loosen clamping screw, replace suitable condenser, raise it back work position, then adjust setting center screw to make condenser being in the center of light path.

When replacing lamp(OM36 only), please turn off the switch and unplug the power cord, and wait for the bulb to cool for 30 minutes before replacing.

Maintenance

- 1) When not in use:
 - a. Always cover the microscope with the dust cover when not in use.
 - b. Store in a dry place.
 - c. In humid or moist environments, it is advisable to store the microscope in a waterproof container with a drying agent.
- 2) Do not touch the optical lens with bare fingers.
- 3) Dust should be cleaned off with pressurized air or with a soft brush.
- 4) Clean smudges, fingerprints, oils, etc from the lens with clean lens paper or a soft clean cloth moistened with a small amount of absolute alcohol-ether mixture. If an alcohol-ether mixture is unavailable, use isopropyl alcohol.
- 5) Clean the microscope body and stand using a moist, soft cloth with a small amount of detergent.
- 6) Use water only on plastic surfaces.
 - a. Do not use paint thinner or other solvents.
 - b. Do a final wipe with a moist soft cloth.
 - c. Dry all surfaces after cleaning.

Power and Illumination for the OM36L

- The input voltage is 110v~240v AC 50/60hz. into the AC/DC adapter power block.
- The output voltage is 4.5v @1000ma out of the AC/DC adapter power block.
- Do not overcharge the internal batteries. Remove AC power when batteries are charged (approximately 2 hours).
- If the internal batteries need replacement, slide the battery cover forward (in direction of arrow) and lift off. Three NiMH "AA"s are used. Replace when microscope fails to hold a charge.
- The LEDs do not require maintenance.

Specifications

- The inter-pupillary adjustment distance is 50-80mm.
- The dioptric adjustment range ± 5 diopter.

WARRANTY

This product is covered by a limited lifetime warranty. For full details, please see www.microscope.com.

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The company exclusively sells and supports Omano microscopes, which provide an ideal balance between high quality optics and affordability. They are designed to provide value for everyday microscope applications.

At The Microscope Store, you will always receive knowledgeable and courteous service. Please call us toll free with any questions on (877) 409-3556.

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