

MICRO-LITE

CAT. NO. 31-33-01

REFERENCE MANUAL



BAUSCH & LOMB
OPTICAL COMPANY
ROCHESTER 2, NEW YORK

MICRO-LITE

MICROSCOPE ILLUMINATOR

CAT. NO. 31-33-01

The Bausch & Lomb Micro-Lite is compact, efficient, and inexpensive. Superiority has been revealed by many tests which have demonstrated its more even illumination, greater intensity of light, and cooler operation. You are assured of life long service from your Bausch & Lomb Micro-Lite.

The instrument is completely assembled when received and may be placed in service at once.

It incorporates a standard 60 watt, 120 volt, inside-frosted lamp—(G.E. No. 60A-120 IF)—and may therefore be operated from any 115-120 volt line, either AC or DC.

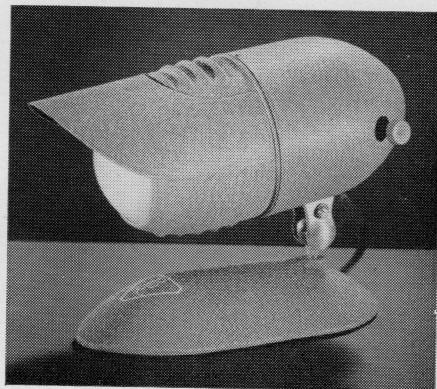
Micro-Lite is an illuminator in convenient form designed to provide a comfortable level of illumination for all visual observation of stained preparations with bright-field illumination. It may also be used for visual observations with the Bausch & Lomb Phase Contrast Accessories, in many instances, when a monocular type microscope is employed.

Proper Use of the Micro-Lite

Place the illuminator on the work table with its lens 6 to 8 inches away from, and directed toward, the microscope mirror. Insert the plug at the

end of the illuminator cord into a 115-120 volt outlet. Turn the illuminator on by means of the switch button at the right-rear of the lamphousing. Rotate the switch button clockwise to turn the illuminator on and off.

Place a specimen slide on the stage of the microscope. Tilt the microscope mirror to direct light up through the substage condenser and onto the specimen. Focus the microscope on the specimen using a 10× objective and 5× eyepiece. Move the specimen slide so that the field of view is practically free of structure. Rack the substage condenser up or downward until an image of the illuminator lens is seen in



Micro-Lite set up and ready for use.

the field. Tilt the microscope mirror to center the lens image in the field of view. A pencil point held at the center of the Micro-Lite lens should be imaged in the center of the eyepiece field. The structure of the rear surface of the Micro-Lite lens may show in the eyepiece field. A slight up or downward setting of the substage condenser will eliminate the image of this structure.

Notice whether the light in the eyepiece field is evenly distributed. If the field appears to be definitely brighter towards top or bottom, or to one side, correct the first condition by tilting the Micro-Lite down or upward slightly and resetting the microscope mirror. Turn the illuminator sidewise slightly and reset the mirror to correct the uneven crosswise illumination.

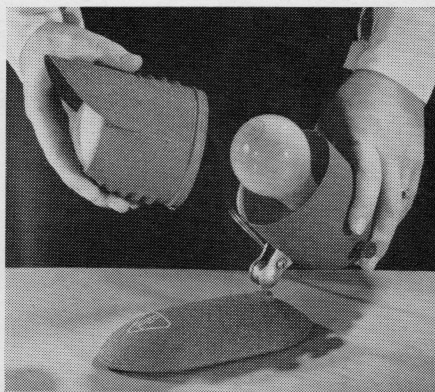
The Bausch & Lomb Micro-Lite will completely illuminate the field of a $10\times$ objective (16 mm E.F.) combined with a $5\times$ eyepiece with either the Abbe 1.25 N.A., or the achromatic, 1.40 N.A. substage condenser, when adjustments are carried out as described above. Full field can also be obtained with the $3.5\times$ (30 mm E.F.) objective by using, in the substage, the lower lens only of either of these two substage condensers.

The Micro-Lite affords full field and aperture illumination with any of the Bausch & Lomb objectives from the $3.5\times$ (30 mm E.F.) objective up to and including the $97\times$ (1.8 mm 1.25 N.A.) objective when used on a microscope stand incorporating the Bausch & Lomb variable focus substage condenser.

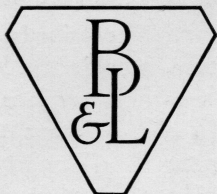
To Replace the Lamp in Your Micro-Lite

Tip the lamphousing back so that the lens of the Micro-Lite points directly upward. With a screwdriver or other suitable instrument, turn the lock screw—located at the center of the under side of the housing—part way out. Now lift the front section of the housing away. Screw out the old lamp and replace with a 60 watt 120 volt inside frosted lamp. Replace the front section of the lamphousing by introducing the upper side of the section into the rear portion of the housing first, so as to engage the projection at the upper edge of the rear section, in the hole in the upper edge of the front section of the housing. Set the front section fully in place engaging the lock screw on the underside, in the slot

provided in the edge of the rear section. Tighten the lock screw to hold the two sections of the lamphousing together.



Micro-Lite disassembled for lamp replacement.



Sketched below are the main offices and works of the Bausch & Lomb Optical Co., at Rochester, New York. There are other Bausch & Lomb plants in Rochester and Wellsville, N. Y.; Midland, Ontario, Canada; and Rio de Janeiro, Brazil. Sales offices are in many of the larger cities.

D1-750, 6, 1-54

PRINTED IN U. S. A.

