

20x, 40x Binocular Stereo Microscope



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Parts of the Microscope

- 1. Evepiece
- 2. Diopter Adjustment
- 3. Interpupillary
- 4. Vertical Pole
- 5. Lock Screw
- 6. Focusing Knob

- 7. Rotary Case
- 8. Objective Lens
- 9. Illumination
- 10. Lamp On/Off Switch
- 11. Stage Clip
- 12. Stage Plate

Designed for biological studies such as specimen examination and can also be used for examining bacteria and for general clinical and medical studies. Simple design and use is especially useful for school classroom instruction.

Specifications

- 1. Interpupillary Adjustment: 55mm 75mm
- 2. Working Stage Diameter: 95mm
- 3. Focus Knob Adjustment Range: 60mm
- 4. Elevator Adjustment Range: 110mm
- 5. Left Diopter Adjustment Range: +/- 5
- Illumination: Input Voltage: 110V AC Output: Oblique illumination: 12V 10W Halogen Lamp

Operation

Remove components from package. Identify all parts before assembling. Tighten the knob on the stand to prevent the elevator from sliding down.

Environment Requirement:
Dry dust free room temperature between –5---+40 degrees Celsius.

2. Illumination Control:

Plug in the power cord into the outlet. Refer to the following table for illumination styles. For microscopes with dimmer control the brightness of the illumination can be adjusted.

3. Select the Stage:

- a. The frost glass stage is placed on the base and is fixed with a screw, it is used when a transparent specimen is being observed, and please use transmitted illumination.
- b. Black and white stage is kept in the packing as an accessory. When it is to be used, take off the glass stage and place the black and white stage on the base. Normally the white side is upward. If the specimen is white or in other bright colors, use the black side to improve the contrast with only incident illumination.

4. Placement of Specimen:

Place the clean specimen in the center of the stage and fix it with clippers if necessary.

5. Use of Rubber Eye-Guard:

One pair of rubber eye guards is contained in the packing. They are used to prevent the extra light from entering the eyepieces, to improve visibility.

6. Focusing, Diopter, and Adjusting Interpupillary Distance:

a. Adjust the focusing rack by loosening the lock-screw located behind the pillar stand. Move the entire focusing rack so that the image is roughly in focus, then re-tighten the lock-screw.

- b. Begin focusing by first looking with one eye through the eye tube without the diopter. Close your other eye. Bring the image into focus using the focusing knob.
- c. Once the image is focused through the first eye, look only through the other eyepiece, turning the diopter until the image is as clear as through the other side. Open both eyes and adjust the interpupillary distance until one clear image is seen.
- d. As you switch magnification levels, you may also need to re-center the specimen, and/or refocus the image.

7. Objective Power Switch:

To change the magnification setting of the objectives, use the rotary case housing 180 digress it click into place.

Note: In order to observe the specimen easily use the lower magnification objective first. Then, by rotating the case, the magnification can be changed.

Total Magnification	Objective Magnification	Eyepiece Magnification and Field Diameter (mm)
20x, 40x	2x, 4x	Wide Field 10x

Replacement of Lamp and Fuse

Warning: Disconnect the power line and cool down the bulbs before you change the lamp or fuse.

1. Replacement of the Incident Lamp:

Loosen the fixing screw of the shade and take off lamp. Replace the bulb with a new one. Plug in the feet of the lamp back to the holder and fix it with the same screw.

2. Replacement of the Transmitted Lamp:

Loosen the fixing screw of the glass stage and take off the glass. Take off the broken bulb through the stage hole and install a new one.

3. Replacement of the Fuse:

The fuse case is located at the back side of the base. Unscrew the fuse case cover and put in a new one.

Maintenance And Care

- 1. Microscope is a delicate precision instrument and it may be damaged by dropping and hitting.
- 2. Do not keep microscope under sun. It should be kept in a dry and clean environment and avoid heat and strong tremor.
- 3. To obtain clear image, do not touch lenses with your finger.
- 4. All lens surfaces should be kept clean. If the lens get dusty blow off the dust with a rubber syringe. If necessary clean the lenses with a lint free cloth dipped in either.

- 5. Do not use any organic material to clean the microscope surface, especially the plastic surface. It should be cleaned by neutral detergent.
- 6. Because the assembly of all parts has been done by skilled optical craftsmen at the factory, you should never attempt disassembly.
- 7. Apply a little bit grease regularly to the mechanical parts.
- 8. When not in use always cover the microscope with the dust cover and place it in a cool and dry place.

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1 YEAR LIMITED WARRANTY

MICROSCOPES

BARSKA warrants your microscope to be free from defects in materials and workmanship for one (1) year. BARSKA will repair or replace such product or part thereof which, upon inspection by BARSKA, is found to be defective in materials or workmanship. As a condition to the obligation of BARSKA to repair or replace such product, the product must be returned to BARSKA together with proof-of-purchase satisfactory to BARSKA.

The proper Return Merchandise Authorization Number (RMA) must be obtained from BARSKA in advance of return. Please e-mail service@barska.com or call 1.888.666.6769 for Return Merchandise Authorization number (RMA) before any returns. NOTE: All merchandise received without a valid RMA number will be returned to shipper at his/her own expense.

BARSKA products should be sent to the following address for warranty repairs. Products must be packed carefully and sturdily to prevent damage in transit, and returned freight prepaid to:

BARSKA 855 Towne Center Drive Pomona, CA 91767

For additional and updated information please visit our website at www.barska.com

Please include all of the following when returning BARSKA products for service and/or replacement:

- Please write your complete details (Name, Address, Telephone#, E-mail address, RMA#, etc.)
- 2. Purchase receipt or Proof of Purchase. (Original/Copy)
- 3. A brief explanation of the defect.
- 4. A Check/Money Order for \$45.00 to cover inspection, shipping and handling. *Please allow 6-8 weeks for delivery.

The customer shall be responsible for all costs of transportation and insurance, both to and from BARSKA, and shall be required to prepay such costs.

BARSKA shall use reasonable efforts to repair or replace any microscope covered by this warranty within 30 days of receipt. In the event repair or replacement shall require more than 30 days, BARSKA shall notify the customer accordingly. BARSKA reserves the right to replace any product which has been discontinued from its product line with a new product of comparable value and function.

This warranty shall be void and of no force of effect in the event a covered product has been modified in design or function, or subjected to abuse, misuse, mishandling or unauthorized repair. Further, product malfunction or deterioration due to normal wear is not covered by this warranty.

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This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

BARSKA reserves the right to modify or discontinue, without prior notice to you, any model or style microscope.

If warranty problems arise, or if you need assistance in using your microscope contact: BARSKA Customer Service Department Tel. 1.888.666.6769 Fax. 909.445.8169 Monday-Friday 8:30AM-5:00PM PST or e-mail: service@barska.com

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