

## Biological Microscope

### Intermediate 100x-1000x Biological Microscope

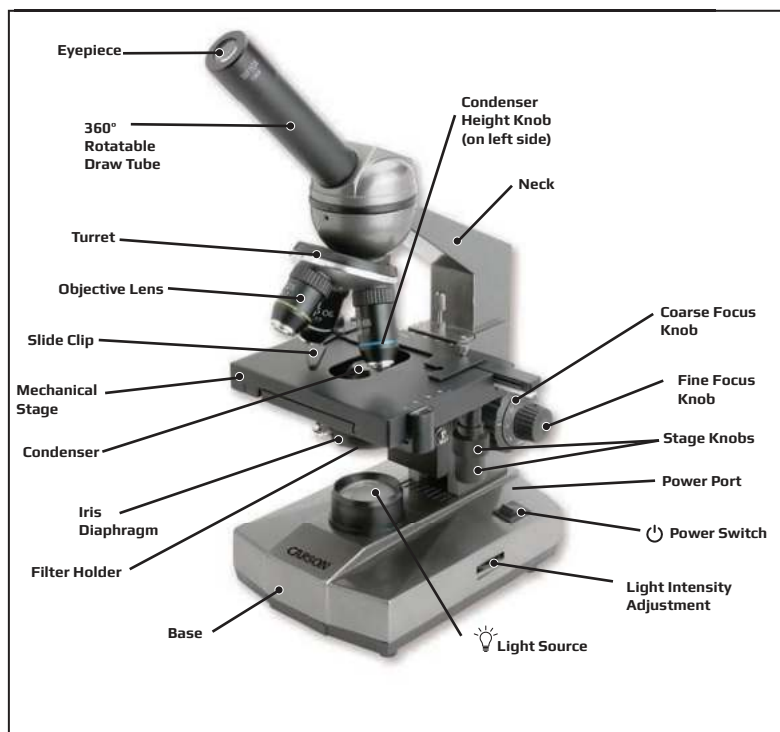
Congratulations on selecting your new Microscope! In order to achieve optimum performance, please follow instructions for proper use and care.

#### PRODUCT SPECIFICATION

|                      |                                   |             |   |
|----------------------|-----------------------------------|-------------|---|
| Monocular Tube:      | Inclined Tube 45°, Rotatable 360° | Focus:      | Coaxial with Course and Fine Adjustment |
| Total Magnification: | 100x-1000x*                       | Stage:      | Double Layer Mechanical (115mm x 125mm) |
| Eyepiece:            | WF10x                             | Condenser:  | Abbe NA 1.25 with Iris Diaphragm        |
| Objectives:          | 10x, 40x, 100x OIL*               | Filter:     | Blue Filter (32mm) with Holder          |
| Illumination:        | Bright White LED                  | Power Cord: | AC110V-240V, 50/60Hz                    |

\*With Oil Immersion

#### MS-100 DIAGRAM



#### SETTING UP

1. Place microscope on a secure surface.
2. Insert the end of the power cord into the microscope's Power Port and plug the opposite end into any standard outlet.
3. Place Eyepiece in the Draw Tube.
4. Position slide on the Mechanical Stage and secure with Slide Clip. Use the Stage Knobs to move front-back (top knob) and left-right (lower knob) until area of interest is located in center of stage.
 

**Note:** Wipe both sides of slide (prepared, wet mount, dry mount, smeared) with a damp microfiber cloth before using.
5. Turn on Light Source by turning Power Switch to the on position.
6. Rotate Turret so that the 10x Objective Lens (always begin with lowest power) is directly above specimen.

#### FOCUSING

1. Look into Eyepiece and you should see a white circular field.
2. Slowly adjust the Coarse Focus Knob to find image. Then focus with Focus Knob, turning very slowly until the area of interest is sharp and clear.
3. To achieve best image and maximum contrast, adjust Intensity and/or Iris Diaphragm.

**Please note,** the Condenser is preset to be 1-3mm from bottom of specimen slide. Although the condenser height can be adjusted with knob, we recommend leaving it at factory setting. Adjust condenser height **only** when absolutely necessary.

**Warning:** When focusing, be careful that the Objective Lens and Condenser do not touch the specimen. This can cause damage to the Objective Lens, Condenser and/or specimen.

## MAGNIFICATION

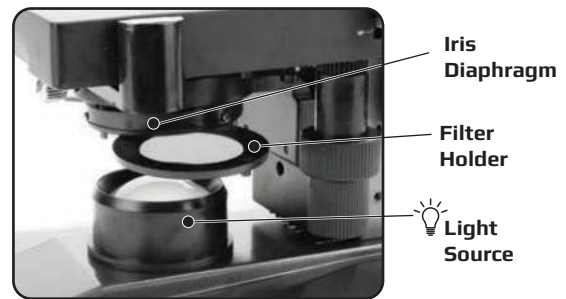
| Eyepiece | Objective Lens | Total Magnification |
|----------|----------------|---------------------|
| 10x      | 10x            | 100x                |
| 10x      | 40x            | 400x                |
| 10x      | 100x*          | 1000x*              |

\*With Oil Immersion

1. To change magnification, rotate the Turret so that the desired Objective Lens is directly above specimen. Refocus as needed.
2. The 100x Objective is only designed for oil immersion microscopy, wherein the specimen and Objective Lens are coated with immersion oils (not included).

## COLOR FILTERS

Color filters may be used to enhance contrast on clear or stained slides. To use the included Blue Color Filter, rotate the Filter Holder (located under the diaphragm) outwards. Place the filter flat inside the top part of the holder, and then fully rotate the filter holder back into position.



## CARE & CLEANING

- When moving the microscope, hold by the neck or base of the microscope body. Never hold by the eyepiece, draw tube, or turret.
- If the focusing or mechanical stage motion becomes stiff and hard to move, the mechanical sliding portions on the focusing track or stage may need one or two drops of lubricating oil (not included).
- Cleaning:
  1. Unplug power cord and use a slightly damp microfiber cloth to clean microscope body.
  2. Use a slightly damp microfiber cloth and rub gently to remove dust or debris on eyepiece or objective lens. Do NOT rub with a dry cloth. This can scratch the eyepiece and/or objective lens.
  3. To keep your microscope free from dirt, debris, dust or moisture, cover microscope with dust cover.

### Customer Service:

If you experience any difficulties, please contact us and we will be happy to help you.



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For warranty information, visit [www.carson.com/warranty](http://www.carson.com/warranty)

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