

Vabiooth Camera Model

Vabiooth Split-Control Trinocular Microscope (Camera Model) Instruction Manual

Model: Camera Model | Brand: Vabiooth

INTRODUCTION

This manual provides detailed instructions for the proper setup, operation, and maintenance of your Vabiooth Split-Control Design Lab Compound Trinocular Microscope. Designed for both students and adults, this microscope offers superior image clarity and robust quality, featuring a camera with free software, a double-layer mechanical stage, an NA 1.25 Abbe condenser with iris diaphragm, and both fine and coarse focusing capabilities. Please read this manual thoroughly before use to ensure optimal performance and longevity of your device.

The Vabiooth logo is displayed in white text on a dark green rectangular background.

Figure 1: Overview of the Vabiooth Split-Control Trinocular Microscope.

SETUP

1. Unpacking and Assembly

- Carefully remove all components from the packaging.
- Place the microscope base on a stable, level surface.
- Attach the trinocular head to the microscope body.
- Insert the wide-angle eyepieces (10x, 16x, 25x) into the ocular tubes.
- Mount the objective lenses (4x, 10x, 40x, 100x) onto the revolving nosepiece.

Digital Camera with Free Software

Ture color large area array CMOS progressive scan image sensor.

Software compatible with Windows / XP / Vista/7/8/9 and Mac OS

Capturing imicroscope images, recording live video, measuring lengths, angles, areas,editing images.

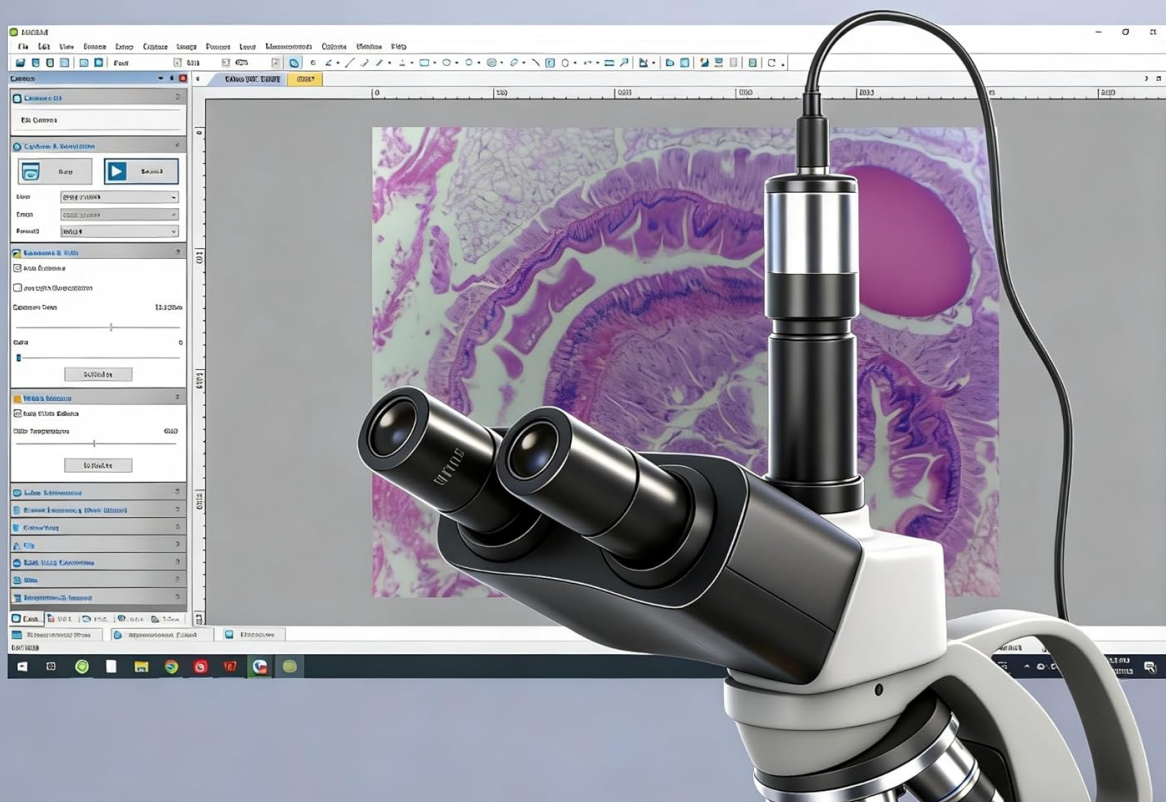


Figure 2: All microscope components should be carefully unpacked and prepared for assembly.

2. Power Connection

- Connect the power supply to the microscope and a suitable power outlet.
- The microscope features a rechargeable power supply for portability. Ensure it is charged before use.

3. Camera and Software Installation

- Insert the HD USB camera into the dedicated port on the trinocular head.
- Install the provided software on your Mac OS X, Windows (Vista, 7, 8, 10), or Linux computer.
- Follow the on-screen instructions for software setup and calibration.

Insightful Gift for Microcosm Enthusiasts

Featuring 12 included experiments/phone adaptor/prepared slides/experiment tools/FREE software.

This microscope set provides research-grade precision for academic exploration and detailed laboratory work.



Figure 3: The HD USB camera connected to the microscope and a computer for digital viewing and capture.

4. Initial Adjustments

- Adjust the interpupillary distance of the eyepieces to match your eyes.
- Use the diopter adjustment on the left eyepiece for individual eye focus.

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Video 1: Demonstrates the setup and initial adjustments of a Trinocular Microscope, including eyepiece and objective lens changes.

OPERATING INSTRUCTIONS

1. Placing a Specimen

- Place your prepared slide onto the double-layer mechanical stage.
- Secure the slide using the stage clips.
- Use the X- and Y-axis adjustment knobs to center the specimen under the objective lens.

Mechanical Stage & Focus



2-Layer mechanical stage provides smooth and precise movement for examination of specimen slides.



Separate coarse and fine focus knobs for speed focusing and accuracy.



Figure 4: The double-layer mechanical stage allows for precise movement of the specimen.

2. Adjusting Illumination

- Turn on the LED illumination using the power switch.
- Adjust the brightness using the dimmer control.
- Utilize the 1.25 NA Abbe condenser with iris diaphragm to control the light aperture and enhance contrast.

Rechargeable LED illumination

1.25 NA Abbe condenser with iris diaphragm for clear examination and light control
Rechargeable Power Supply for portability and convenience, eliminating the need for constant plugging.



Figure 5: The LED illumination and Abbe condenser provide adjustable lighting for optimal viewing.

3. Focusing and Magnification

- Start with the lowest power objective lens (4x).
- Use the coarse focus knob to bring the specimen into approximate focus.
- Switch to higher power objective lenses as needed, using the fine focus knob for precise adjustments.
- The Split-Control design ensures reliable and precise focusing.

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Video 2: Shows the general operation of a Vabiooth microscope, including focus and stage adjustments.

4. Using the Camera and Software

- View live images on your connected computer screen.
- Use the software to capture images, record videos, and perform measurements (lengths, angles, areas).
- The software also allows for image editing and processing.

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Video 3: Demonstrates the use of the microscope with a monitor, showcasing its digital viewing capabilities.

MAINTENANCE

1. Cleaning

- Always use a soft, lint-free cloth to clean the microscope body.
- For optical components (lenses, eyepieces), use specialized lens cleaning solution and lens paper. Avoid touching optical surfaces with bare hands.
- Ensure all parts are dry before storing.

2. Storage

- Store the microscope in a cool, dry place, away from direct sunlight and dust.
- Use the included carry bag for optimal device protection during storage and transport.
- Always rotate the lowest power objective lens into position and lower the stage before storing.



Figure 6: The microscope should be stored in its protective carry bag when not in use.

TROUBLESHOOTING

1. No Illumination

- Check if the power adapter is securely connected and the power switch is on.
- Ensure the microscope's internal battery is charged.
- Verify the dimmer control is not set to the lowest brightness.

2. Blurry Image

- Adjust the coarse and fine focus knobs.
- Ensure the objective lens is correctly rotated into position.
- Check the interpupillary distance and diopter settings for your eyes.
- Clean the objective lenses and eyepieces if smudges are visible.

3. Camera Not Displaying Image

- Verify the USB cable is securely connected to both the camera and the computer.
- Ensure the camera software is correctly installed and running.
- Check your computer's device manager to confirm the camera is recognized.

SPECIFICATIONS

Feature	Detail
Magnification Range	40X-5000X
Objective Lenses	4X, 10X, 40X, 100X (Oil)
Eyepieces	WF10X, WF16X, WF25X
Condenser	NA 1.25 Abbe Condenser with Iris Diaphragm
Focusing System	Split-Control Coarse & Fine Focus
Stage	Double-Layer Mechanical Stage (1.0mm divisions)
Illumination	Adjustable LED Light, Rechargeable Power Supply
Camera	HD USB Camera with Software (Mac OS X, Windows Vista/7/8/10, Linux compatible)
Package Dimensions	18.31 x 12.91 x 8.78 inches
Item Weight	8.72 pounds
Manufacturer	Vabiooth

WARRANTY

The Vabiooth Split-Control Trinocular Microscope comes with an 18-month manufacturer's warranty from the date of purchase. This warranty covers defects in materials and workmanship under normal use. For warranty claims or service, please contact customer support with your order number.

Additionally, a 30-day return/replacement policy is available for eligible purchases.

CUSTOMER SUPPORT

For any questions, technical assistance, or support inquiries regarding your Vabiooth microscope, please contact our Customer Care Center:

- **Email & WhatsApp:** Vabiooth@outlook.com
- **Phone:** +86 17306342950
- **Operating Hours:** Monday through Friday (EST 9:00-11:00 or 20:00-24:00), excluding public holidays.
- When contacting us, please provide your order number for faster service.



Figure 7: Vabiooth Customer Care Center contact details.

You can also quickly reach us on WhatsApp by scanning this QR code: [WhatsApp Link](#)

