Saved from manuals.plus.
Open the live page for links to other documents and user manuals.

HSL B0BY18XXN4

HSL Trinocular Compound Microscope with 9-inch LCD Screen (Model: B0BY18XXN4) - Instruction Manual

Comprehensive Guide for Setup, Operation, and Maintenance

1. Introduction

This manual provides detailed instructions for the HSL Trinocular Compound Microscope, designed for professional use by clinicians, high school and college science students, and enthusiastic hobbyists. It features a 9-inch LCD digital screen, a handheld microscope, and offers magnification levels from 40x to 1000x.
Key features include:

- **Trinocular Design:** Allows for simultaneous viewing through eyepieces and the digital screen.
- **9-inch HD LCD Display:** For direct viewing, video recording, and image capture.
- **Multiple Magnification:** 40x, 100x, 400x, 1000x with 10X WF eyepieces and 195 achromatic DIN objective lenses.
- **Adjustable Illumination:** ABBE condenser and adjustable brightness LED light.
- **Handheld Microscope:** 50x-200x magnification, connectable to the main display.
- **Robust Construction:** High-end double-layer mechanical stage for precise operation.

2. Setup and Assembly

Carefully unpack all components and ensure all items listed in the packing list are present. Place the microscope on a stable, level surface.

2.1 Unboxing and Initial Inspection

Before assembly, inspect all parts for any signs of damage. If any components are missing or damaged, please contact customer support.

▶ **Watch video online**
HSL 001 Trinocular microscope

Video 1: Overview of the HSL Trinocular Microscope, demonstrating its components and basic functionality. This video provides a visual

guide to the product's features and how it operates.

2.2 Component Identification

Familiarize yourself with the main parts of the microscope:

- **Microscope Body:** The main frame housing optical and mechanical components.
- **Eyepieces:** Insert into the binocular head.
- **Objective Lenses:** Mounted on the revolving nosepiece.
- **Stage:** Where specimens are placed.
- **Focus Knobs:** Coarse and fine adjustment.
- **Illumination System:** Light source and condenser.
- **LCD Screen:** Attaches to the trinocular port.
- **Handheld Microscope:** Connects to the LCD screen.

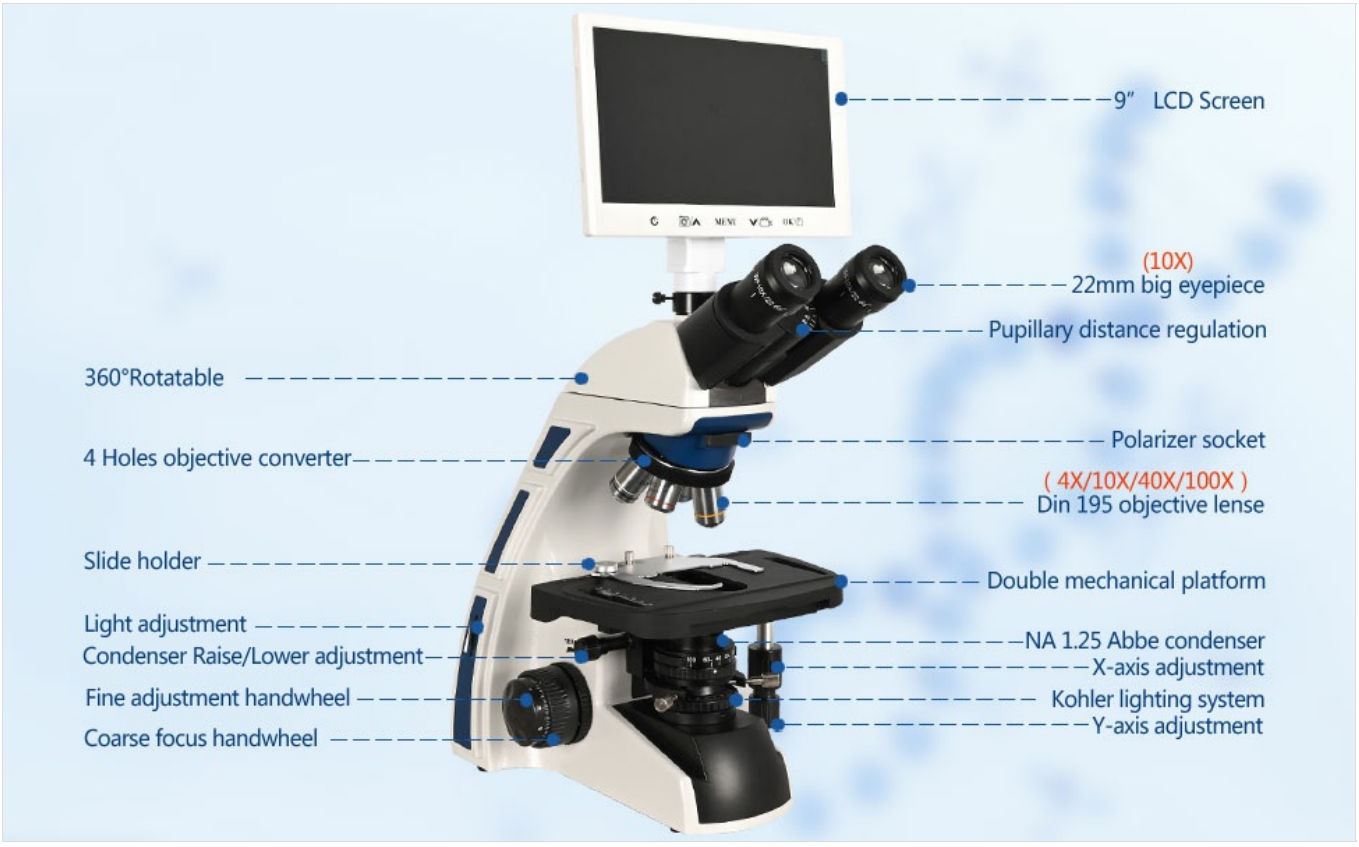

Image 1: A detailed diagram labeling the various parts of the HSL Trinocular Compound Microscope, including the LCD screen, eyepieces, objective lenses, stage, and focus mechanisms.

2.3 Power Connection

Connect the power adapter to the microscope and plug it into a suitable electrical outlet (100V-240V compatible).

3. Operating Instructions

3.1 Preparing a Specimen

Place a prepared slide onto the mechanical stage. Use the stage clips to secure it. Adjust the X-Y axis knobs to center

the specimen under the objective lens.



Image 2: Close-up view of the microscope's large mechanical stage, showing a specimen slide in place, the Abbe condenser, and the X-Y axis adjustment knobs.

3.2 Adjusting Magnification

The microscope features a revolving nosepiece with 4x, 10x, 40x, and 100x achromatic DIN objective lenses. Rotate the nosepiece to select the desired magnification. Always start with the lowest magnification (4x) for initial focusing.



Image 3: A detailed view of the objective lenses mounted on the revolving nosepiece, indicating the different magnification levels available.

3.3 Focusing the Image

Use the coarse focus knob for large adjustments and the fine focus knob for precise adjustments to bring the specimen into sharp view. Adjust the interpupillary distance and diopter on the eyepieces for comfortable binocular viewing.



Image 4: Illustration of the coarse and fine focus adjustment knobs, essential for bringing specimens into clear view.

3.4 Illumination Control

Turn on the LED light source. Adjust the brightness using the rheostat. The ABBE condenser can be adjusted vertically and its aperture diaphragm can be opened or closed to control the light intensity and contrast for optimal viewing.



Image 5: A close-up of the adjustable Abbe condenser, highlighting its role in controlling the light path and contrast for specimen

viewing.

3.5 Using the 9-inch LCD Display

The 9-inch HD LCD display provides a convenient way to view specimens without using the eyepieces. It can also record videos and take pictures. Connect the display to the trinocular port. Use the included SD card for storage. A USB data cable allows connection to a computer for larger screen viewing.



Image 6: Demonstrates the two primary viewing modes: directly via the 9-inch LCD screen and connected to a computer for larger display and data management.

3.6 Handheld Microscope Functionality

The included 50x-200x handheld microscope can be connected to the 9-inch LCD display for observing larger objects or surfaces that cannot be placed on the main stage.



Image 7: Shows the handheld microscope connected to the main LCD screen, illustrating its use for examining objects not suitable for the main stage.

4. Maintenance

Proper maintenance ensures the longevity and optimal performance of your microscope.

- **Cleaning Lenses:** Use a soft, lint-free cloth and lens cleaning solution specifically designed for optical instruments. Avoid touching lens surfaces with bare hands.
- **Cleaning Body:** Wipe the microscope body with a soft, damp cloth. Do not use harsh chemicals or abrasive cleaners.
- **Storage:** When not in use, cover the microscope with the provided dust cover to protect it from dust and debris. Store in a dry, cool place.
- **Regular Checks:** Periodically check all screws and moving parts to ensure they are secure and functioning

smoothly.

5. Troubleshooting

This section addresses common issues you might encounter.

Problem	Possible Cause	Solution
No illumination	Power cord disconnected, bulb faulty, brightness set to minimum.	Check power connection, replace bulb if necessary, increase brightness.
Image blurry/out of focus	Incorrect focus adjustment, objective lens dirty, slide upside down.	Adjust coarse and fine focus, clean objective lens, reorient slide.
Dark or uneven field of view	Condenser not adjusted correctly, aperture diaphragm closed too much.	Adjust condenser height, open aperture diaphragm.
LCD screen not displaying image	Connection issue, screen power off, incorrect input selected.	Check cable connections, ensure screen is powered on, select correct input source.

6. Specifications

Feature	Detail
Brand	HSL
Model	B0BY18XXN4
Magnification Maximum	1000x
Objective Lens Description	Achromatic
Light Source Type	LED
Material	Metal and Optical-grade Glass
Color	Black
Real Angle of View	45 Degrees
Item Weight	10.64 Kilograms (23.4 pounds)
Voltage	240 Volts (Compatible with 100V-240V)
Compatible Devices	Laptop, Personal Computer
Package Dimensions	23.15 x 15.31 x 12.71 inches

7. Warranty and Customer Support

The HSL Trinocular Compound Microscope comes with a two-year warranty. For any after-sales issues, technical assistance, or warranty claims, please contact HSL customer support directly. Refer to the product packaging or the official HSL website for specific contact information.

© 2025 HSL. All rights reserved.

Ask a question about this manual

Ask about setup, troubleshooting, compatibility, parts, safety, or missing instructions. Manuals+ will review the question and use this page's manual context to help answer it.

Name

Anonymous

Email

you@example.com

After a successful submission, we securely hash the supplied account or form email before sending it to Microsoft Advertising for conversion attribution. Privacy details.

Question

Example: How do I reset this device or fix this error?

Details

Model number, symptoms, what you tried, or the section of the manual you are using.

Submit question

Answered questions about this manual

How can I order a replacement power cord for the HSL Trinocular Compound Microscope with 9-inch LCD Screen (Model: B0BY18XXN4)?

To order a replacement power cord or adapter for your HSL Trinocular Compound Microscope (Model: B0BY18XXN4), you should contact the manufacturer directly, as specific part numbers for the power adapter are not listed in...

Read full answer

Open the live page

https://manuals.plus/asin/B0BY18XXN4

More documents and user manuals: **https://manuals.plus/**