HY-500B

Generic HY-500B 5MP USB Microscope Camera Instruction Manual

Model: HY-500B (EKBCAXNHN-FULLKIT)

1. INTRODUCTION

This manual provides detailed instructions for the setup, operation, and maintenance of your Generic HY-500B 5MP USB Microscope Camera. This digital industrial camera, equipped with a 150X C-Mount Lens, is designed for observation and analysis, offering high-definition imaging capabilities.

2. PACKAGE CONTENTS

Please verify that all items listed below are included in your package:

- 1 x 5.0MP Microscope Camera
- 1 x USB Line
- 1 x Software Disc
- 1 x 150X C-Mount Lens
- 1 x Foldable Stand
- 1 x LED Light
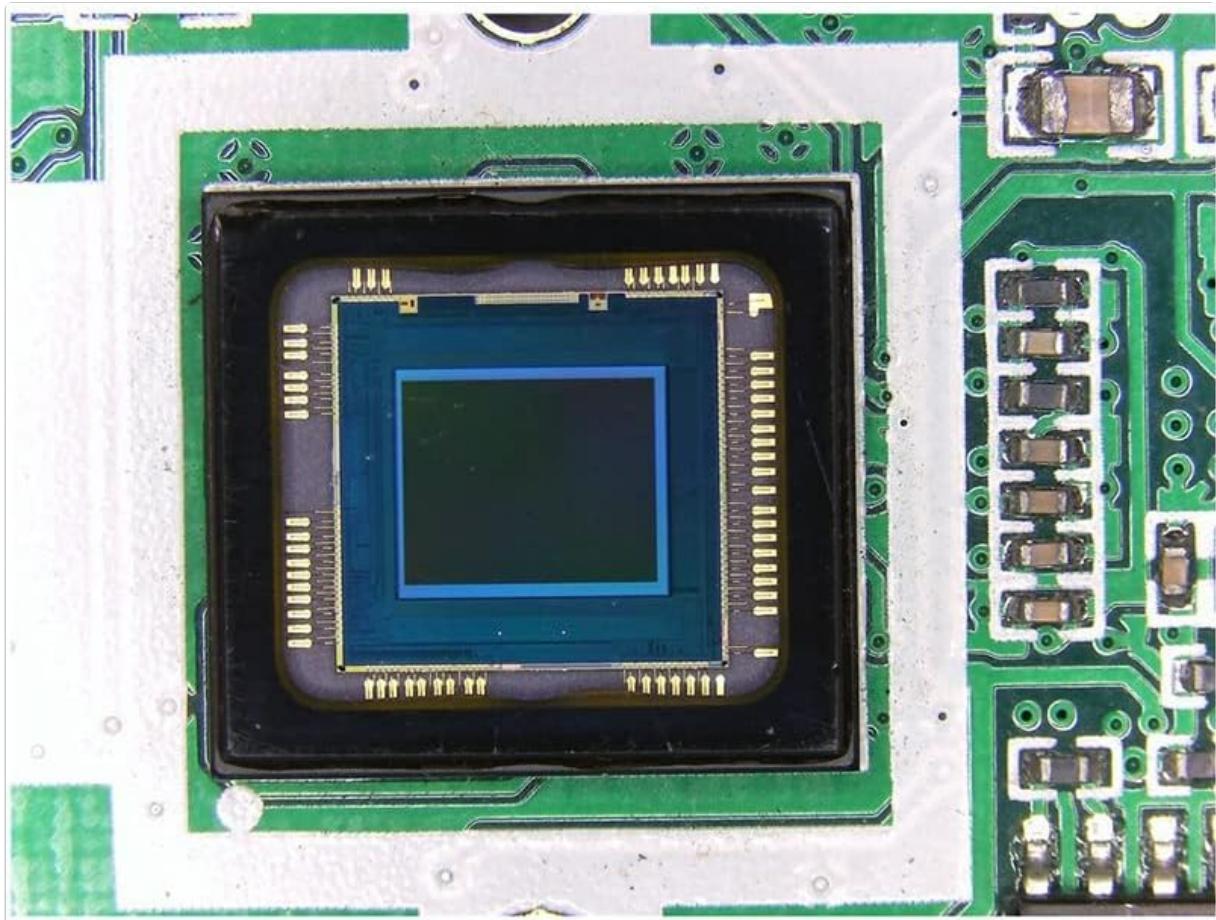
Image: The complete HY-500B kit, showing the camera, 150X C-mount lens, foldable stand, and LED light.

3. SPECIFICATIONS

- **Camera Resolution:** 5.0 Megapixels
- **Lens Type:** C-Mount Zoom Lens
- **Zoom Ratios:** 5:1
- **Magnification Power:** 0.11X - 2X (with 150X C-Mount Lens)
- **Spectral Response:** 400nm 1000nm
- **Dynamic Range:** 74 dB (Linear), 85 dB (HDR)
- **Sensitivity:** 2400 mV/Lux-sec
- **USB Cable Length:** 1.5 Meter
- **Camera Dimensions:** 100mm (Length) * 28mm (Diameter)
- **Item Weight:** Approximately 1.76 pounds (800 Grams)
- **Model Number:** EKBCAXNHN-FULLKIT
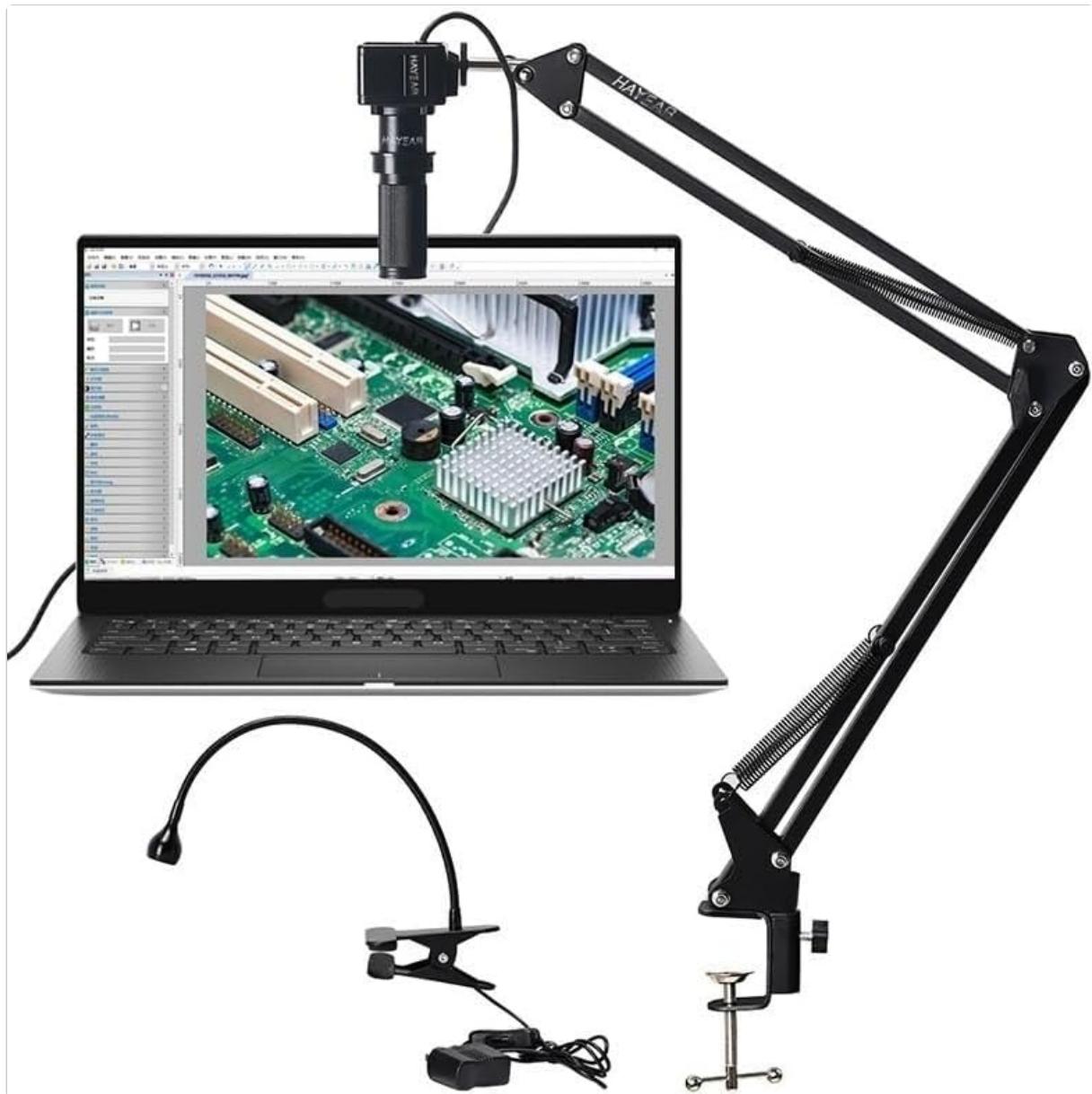
Image: Detailed view of the 5MP camera sensor, highlighting its internal components.

4. SETUP GUIDE

1. **Assemble the Stand:** Secure the foldable stand to a stable surface using its clamp. Adjust the arm to your desired position.
2. **Attach the Camera and Lens:** Screw the 150X C-Mount Lens onto the 5.0MP Microscope Camera. Then, mount the assembled camera and lens unit onto the foldable stand's holder.
3. **Connect the LED Light:** Attach the LED light to the stand and position it to illuminate your observation area. Connect its power source if separate.
4. **Connect to Computer:** Plug the USB line from the microscope camera into an available USB port on your computer.
5. **Install Software:** Insert the provided Software Disc into your computer's optical drive. Follow the on-screen instructions to install the necessary drivers and observation software. If your computer lacks an optical drive, please contact support for alternative software download options.

Image: The HY-500B camera and lens mounted on the foldable stand, with the LED light positioned for illumination.

5. OPERATING INSTRUCTIONS

1. **Launch Software:** Open the installed microscope observation software on your computer. The camera feed should appear automatically.
2. **Place Specimen:** Position the object you wish to observe directly under the microscope lens.
3. **Adjust Focus:** Use the focus ring on the 150X C-Mount Lens to achieve a clear image.
4. **Adjust Magnification:** The C-Mount lens offers a zoom ratio of 5:1, providing magnification from 0.11X to 2X. Rotate the zoom ring on the lens to change the magnification level.
5. **Control Illumination:** Turn on the LED light and adjust its position and brightness to ensure optimal lighting for your specimen.
6. **Capture Images/Videos:** Utilize the software interface to capture still images or record video footage of your observations. Refer to the software's help documentation for specific controls.

Image: The 5MP USB microscope camera, ready for lens attachment and operation.

6. MAINTENANCE

- **Cleaning the Lens:** Use a soft, lint-free cloth specifically designed for optical lenses to gently wipe the lens surface. For stubborn smudges, a small amount of lens cleaning solution can be applied to the cloth, not directly to the lens.
- **Cleaning the Camera Body:** Wipe the camera body and stand with a dry, soft cloth. Avoid using harsh chemicals or abrasive materials.
- **Storage:** When not in use, store the microscope camera and its components in a clean, dry, and dust-free environment. Use protective caps for the lens and camera sensor if available.
- **Cable Care:** Avoid bending or kinking the USB cable excessively to prevent internal damage.

7. TROUBLESHOOTING

No Image Displayed in Software:

- Ensure the USB cable is securely connected to both the camera and the computer.
- Verify that the camera drivers are correctly installed. Reinstall from the software disc if necessary.
- Try connecting to a different USB port on your computer.
- Restart the observation software or your computer.

Image is Blurry:

- Adjust the focus ring on the 150X C-Mount Lens until the image is sharp.
- Ensure the specimen is properly positioned and stable.
- Check if the lens or camera sensor is dirty and clean as per maintenance instructions.

LED Light Not Working:

- Check the power connection for the LED light.
- Ensure the light is switched on (if it has a separate switch).

8. WARRANTY AND SUPPORT

This product is manufactured with high-quality materials to ensure durability and stability. We are committed to providing excellent after-sales service.

If you encounter any questions, require assistance, or need to report an issue, please do not hesitate to contact our customer support team. We are available to serve you wholeheartedly.

Please refer to your purchase documentation for specific warranty terms and contact information.