

SWIFT SC503-CK

SWIFT Cam 5 Megapixel Microscope Camera (Model SC503-CK) User Manual

This manual provides detailed instructions for the installation, operation, and maintenance of your SWIFT Cam 5 Megapixel Microscope Camera.

1. PRODUCT OVERVIEW

The SWIFT Cam 5 Megapixel Microscope Camera (Model SC503-CK) is designed to capture high-resolution images and videos through your microscope. It features a 5-megapixel sensor, a reduction lens for accurate field of view, and versatile mounting options. The camera connects to your computer via USB 3.0 for fast data transfer and is compatible with Windows, Mac, and Linux operating systems.

Package Contents

- SWIFT Cam 5 Megapixel Digital Camera (SC503)
- Reduction Lens
- Eyepiece Tube Adapters (23.2mm, 30mm, 30.5mm)
- USB 3.0 Cable
- Software CD (for Windows, Mac, Linux)
- Calibration Kit



Image 1.1: The SWIFT Cam 5 Megapixel Microscope Camera (Model SC503) unit.



Image 1.2: SWIFT Cam 5 Megapixel Microscope Camera with included accessories: software CD, USB 3.0 cable, and eyepiece adapters.

2. SETUP AND INSTALLATION

2.1 Software Installation

1. Insert the provided Software CD into your computer's optical drive.
2. Follow the on-screen instructions to install the Swift Imaging software for your operating system (Windows, Mac, or Linux). If your computer does not have an optical drive, please visit the official SWIFT website to download the latest software version.
3. Once the installation is complete, restart your computer if prompted.

2.2 Camera Mounting

The camera can be mounted on a trinocular port or an eyepiece tube of your microscope.

1. **For Trinocular Port:** Insert the camera directly into the trinocular port of your microscope. Ensure it is seated firmly.
2. **For Eyepiece Tube:**
 - Remove one of the eyepieces from your microscope.
 - Select the appropriate eyepiece tube adapter (23.2mm, 30mm, or 30.5mm) that matches the diameter of your microscope's eyepiece tube.
 - Attach the chosen adapter to the camera's reduction lens.
 - Insert the camera with the attached adapter into the eyepiece tube. Ensure a snug fit.



Image 2.1: Close-up view of the 23.2-30.5mm and 23.2-30mm eyepiece tube adapters.



Image 2.2: The SWIFT Cam 5 Megapixel Microscope Camera mounted on a microscope's trinocular port.

2.3 USB Connection

Connect the provided USB 3.0 cable to the camera's USB port and then to an available USB 3.0 port on your computer. The camera requires a USB 3.0 connection for optimal performance and data transfer speeds.

3. OPERATING INSTRUCTIONS

3.1 Launching the Software

After successful installation and connection, launch the Swift Imaging software from your computer's applications menu or desktop shortcut.

3.2 Live View and Focusing

1. Upon launching, the software should display a live view from the camera.
2. Adjust the microscope's focus knobs to achieve a clear and sharp image on your computer screen.
3. The reduction lens ensures that the camera displays an accurate field of view, matching what you would typically see through the microscope's eyepieces.

3.3 Capturing Images and Videos

The Swift Imaging software provides controls for capturing still images and recording videos. Refer to the software's help documentation for detailed instructions on specific features such as:

- Adjusting resolution and exposure settings.
- White balance and color correction.
- Time-lapse photography.
- Measurement and annotation tools.
- Saving and exporting captured media.

3.4 Calibration

Utilize the included calibration kit and the software's calibration features to ensure accurate measurements of your samples. Follow the instructions within the Swift Imaging software for the calibration procedure.

4. MAINTENANCE

4.1 Cleaning

- **Camera Body:** Wipe the camera body with a soft, dry, lint-free cloth. Do not use liquid cleaners or solvents.
- **Lens:** Use a lens cleaning brush or air blower to remove dust. For smudges, use a specialized lens cleaning solution and a microfiber cloth. Avoid touching the lens surface directly.

4.2 Storage

When not in use, store the camera in a clean, dry environment, away from direct sunlight and extreme temperatures. Use the original packaging or a protective case to prevent dust accumulation and physical damage.

4.3 Software Updates

Periodically check the official SWIFT website for software updates to ensure optimal performance and access to new features.

5. TROUBLESHOOTING

- **Camera Not Detected:**
 - Ensure the USB 3.0 cable is securely connected to both the camera and a USB 3.0 port on your computer.
 - Verify that the camera drivers are correctly installed. Reinstall the software if necessary.

- Try connecting to a different USB 3.0 port or another computer to rule out port or computer issues.

- **Poor Image Quality / No Image:**

- Adjust the microscope's focus.
- Check the microscope's illumination settings.
- Clean the camera lens and microscope optics if dust or smudges are present.
- Ensure the camera is properly seated in the microscope port or eyepiece tube.

- **Low Frame Rate:**

- Confirm that the camera is connected to a USB 3.0 port. USB 2.0 ports will significantly reduce frame rates.
- Close other demanding applications on your computer.
- Lower the resolution setting in the Swift Imaging software.

- **Software Issues:**

- Ensure your operating system meets the minimum requirements for the Swift Imaging software.
- Reinstall the software.
- Consult the software's help documentation or the SWIFT support website.

6. SPECIFICATIONS

Model Number	SC503-CK
Sensor Resolution	5 Megapixels
Connectivity	USB 3.0
Operating System Compatibility	Windows, Mac, Linux
Lens Type	Reduction Lens
Mounting Adapters Included	23.2mm, 30mm, 30.5mm
Voltage	1.76 Volts
Power Source	USB Rechargeable
Package Dimensions (L x W x H)	15.3 x 15 x 9.8 cm
Package Weight	677 grams
GTIN/UPC	712317297232

7. WARRANTY AND SUPPORT

For warranty information, technical support, or any inquiries regarding your SWIFT Cam 5 Megapixel Microscope Camera, please refer to the documentation included with your purchase or visit the official SWIFT website for customer service contact details.

