

SWIFT SC1003-CK

SWIFT Cam SC1003-CK 10 Megapixel Microscope Camera User Manual

INTRODUCTION

This manual provides comprehensive instructions for the setup, operation, and maintenance of your SWIFT Cam SC1003-CK 10 Megapixel Microscope Camera. Please read this manual thoroughly before using the device to ensure proper functionality and to achieve optimal results.

PACKAGE CONTENTS

Verify that all items listed below are included in your package. If any items are missing or damaged, please contact SWIFT customer support.

- SWIFT Cam SC1003-CK 10 Megapixel Microscope Camera
- Reduction Lens
- Eyepiece Adapters (30mm and 30.5mm)
- USB 3.0 Cable
- Software CD
- Calibration Kit



Image: Contents of the SWIFT Cam SC1003-CK package, showing the camera, USB cable, and various adapters.

SETUP

1. Mounting the Camera:

The SC1003-CK camera offers versatile mounting options:

- **Trinocular Port:** Insert the camera directly into the dedicated trinocular port of your microscope.
- **Eyepiece Tube:** For binocular or monocular microscopes, remove one eyepiece and insert the camera into the eyepiece tube. The reduction lens fits standard 23.2mm eyepiece ports. Use the included 30mm or 30.5mm adapters for larger tubes as needed.



Image: Illustration of the camera being mounted into a microscope's eyepiece tube and connected to a computer via USB.



Image: The SC1003-CK camera properly mounted on a trinocular microscope, ready for use.

2. Connecting to Computer:

Connect the camera to your computer using the provided USB 3.0 cable. The USB 3.0 connection ensures high-speed data transfer for live viewing and image capture.



Image: A close-up view of the camera's USB 3.0 port, highlighting the blue connector.

SOFTWARE INSTALLATION AND USE

1. Software Installation:

Insert the included software CD into your computer's CD drive. Follow the on-screen instructions to install the necessary drivers and application software for Windows, Mac, or Linux operating systems.

Note: If your computer lacks a CD drive, please visit the official SWIFT website for software downloads. Be aware that some users have reported compatibility issues with newer macOS versions; ensure you download the latest version compatible with your operating system.

2. Launching the Software:

After installation, launch the SWIFT imaging software. The software interface will display the live feed from your microscope camera.

3. Initial Calibration:

Before taking measurements or analyzing images, it is crucial to calibrate each of your objective lenses within the software. This ensures accurate scaling for your captured images.

OPERATING INSTRUCTIONS

1. Live View:

Once the camera is connected and the software is running, you will see a live feed of your microscope's view

on your computer screen. The reduction lens ensures an accurate field of view corresponding to the microscope's magnification.



Image: A microscope with the SC1003-CK camera connected to a laptop, showing a live microscopic image on the screen.

2. **Focusing:**

Adjust the focus using your microscope's coarse and fine adjustment knobs. For optimal focusing, especially at higher magnifications, it is recommended to initially set the software to a lower resolution. Once a clear focus is achieved, you can increase the resolution before capturing the image or video.

3. **Capturing Images and Videos:**

Use the software interface to capture still images (photos) or record videos. Refer to the software's help documentation for specific controls and features, such as exposure, white balance, and advanced image processing options.



Image: The SC1003-CK camera shown alongside a computer screen displaying captured microscopic images.

4. Saving and Exporting:

Captured images and videos can be saved to your computer's storage. The software typically supports various file formats for easy sharing and further analysis.

MAINTENANCE

- **Cleaning:** Use a soft, lint-free cloth to gently wipe the camera body. For the lens, use specialized lens cleaning solution and a microfiber cloth to avoid scratches.
- **Storage:** Store the camera in a dry, dust-free environment when not in use. Keep it away from extreme temperatures and direct sunlight.
- **Software Updates:** Periodically check the SWIFT website for software updates to ensure optimal performance and compatibility with your operating system.

TROUBLESHOOTING

Problem	Possible Cause	Solution
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Problem	Possible Cause	Solution
No image displayed in software.	<ul style="list-style-type: none"> ◦ Camera not properly connected. ◦ Software not installed or launched. ◦ Incorrect camera selected in software. 	<ul style="list-style-type: none"> ◦ Ensure USB cable is securely connected to both camera and computer. ◦ Install and launch the SWIFT imaging software. ◦ Verify the correct camera device is selected within the software settings.
Slow live view or image generation.	<ul style="list-style-type: none"> ◦ High resolution setting. ◦ Computer performance limitations. 	<ul style="list-style-type: none"> ◦ Reduce the resolution setting in the software for live viewing and focusing. Increase resolution only for final capture. ◦ Ensure your computer meets the minimum system requirements for the software.
Difficulty achieving clear focus.	<ul style="list-style-type: none"> ◦ Microscope focus issues. ◦ Software resolution too high. 	<ul style="list-style-type: none"> ◦ Adjust microscope's coarse and fine focus knobs. ◦ Lower the software's live view resolution for easier focusing, then increase for capture.
Software compatibility issues (especially Mac).	<ul style="list-style-type: none"> ◦ Outdated software version. ◦ Operating system updates. 	<ul style="list-style-type: none"> ◦ Download the latest software version from the official SWIFT website. ◦ Check the software's system requirements for compatibility with your specific OS version.

SPECIFICATIONS

Feature	Detail
Model Number	SC1003-CK
Brand	SWIFT
Resolution	10 Megapixels
Connectivity	USB 3.0
Compatible Devices	Personal Computer, Laptop
Operating System Compatibility	Windows, Mac, Linux
Eyepiece Port Compatibility	23.2mm (with 30mm and 30.5mm adapters)
Reduction Lens	Included, ensures accurate field of view
Dimensions (L x W x H)	10 x 15 x 15 cm
Weight	660 grams
Lens Description	Achromatic

Power Source	None (USB powered)
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WARRANTY AND SUPPORT

For warranty information and technical support, please refer to the documentation included with your product or visit the official SWIFT website. SWIFT provides customer support to assist with any product-related inquiries or issues.

Official Website: www.swiftoptical.com (Example link, actual link may vary)