



User Guide: SW200DL



Version 2.0

Welcome to your Swift SW200 dual-light edition microscope! Whether you are a seasoned professional or a beginner hobbyist, Swift has the perfect microscope for you.

This guide will introduce you to the components of your new microscope and help you begin using it. For more information about our microscopes, software downloads, product manuals, or customer service requests, please visit www.swiftoptical.com.

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I. Specifications

Model	SW200DL
Observation tube	Monocular, 360° rotatable
Inclination	30°
Eyepiece	Wide-field 10X and 25X
Nosepiece	Triple revolving
Objectives	4X, 10X, and 40X Achromatic
Magnifications	40X, 100X, 250X, 400X, and 1000X
Stage	Plain stage with slide clips
Stage size	90mmx90mm
Condenser	Single lens condenser with 6-hole disc diaphragm
Focusing	Coaxial coarse and fine focus knobs
Illumination	Upper LED light (Applicable to 4X/10X objectives only) Bottom LED light
Power	100-240V AC adapter or 3 AA batteries (included)

II. Parts of the microscope



III. Assembly and set up

Carefully remove the microscope from the box and set it on a sturdy, flat surface. Remove the plastic cover from the eyepiece holder on the microscope's head, then place an eyepiece into the holder. Locate the power adapter and attach it to the microscope, then plug it in. Turn the microscope on by pressing the power button.

IV. Using the microscope

Turn the microscope on and choose the lower lamp setting. Use the illumination intensity control dimming handwheel to set the lamp to the lowest brightness setting.

Secure a slide via the slide clips on the stage.

Rotate the monocular head to either the forward- or backward-facing position, depending on what is most comfortable for viewing. Look through the eyepiece and adjust the bulb brightness to a comfortable intensity with the dimmer wheel.

Always start with the lowest magnification objective lens centered over the stage, in this case the 4x objective. Look through the eyepiece and bring the image into focus by slowly turning the larger coarse adjustment focus knob to bring the stage closer to the objective.

Once an image forms, switch to the blue fine adjustment focus knob to fine-tune for clarity or to see the various layers of the specimen you are examining. Manually move the slide across the stage to look at different parts of the specimen slide.

Increase magnification by rotating the nosepiece clockwise to a higher magnification objective, taking care not to strike the slide with the objective. If you cannot move the objective into place without making contact with the slide, use the coarse focus knob to move the stage down and away to make room before changing magnification.

*To use the microscope in incident mode, switch the illumination to the upper light built into the body. Place a solid specimen (such as hair, pollen, etc.) onto the stage with the objective lenses on the lowest magnification setting. Repeat the steps for focusing to see magnified details.

V. Caring for your microscope

As with any quality instrument, your microscope should be stored in a cool, dry place. Use the dust cover to protect the microscope when not in use. If necessary, clean the lenses with a soft brush or compressed air to gently remove dust. Avoid touching the optical surfaces directly and never disassemble the optical components of the microscope. When not using an eyepiece, use the plastic cover to protect the eyepiece holder and ocular lens.

VI. Troubleshooting

If you have a problem, you may be able to correct it yourself. Here are some common issues and easy solutions you can try before calling customer support for service.

*Caution: Never disassemble the electrical, mechanical, or optical components. This servicing should only be done by a Swift technician.

Issue	Possible cause	Solution
Visual field is uneven, or image is dark at the edges	Nosepiece is not locked in place to center the objective lens	Turn nosepiece until you hear a click to center the objective lens
	Slide is not centered over the bulb, leaving part of the specimen unilluminated	Center the slide over the bulb
	Dirty objective or eyepiece lens	Clean with compressed air or soft brush
	Disc diaphragm hole selection is too small	Rotate the disc diaphragm to a larger hole
Visual field is blurry or dirty	Dirty objective or eyepiece lens	Clean with compressed air or soft brush
	The slide is dirty	Clean the slide with glass cleaner or lens cloth
	Eyepiece or objective lens not fully screwed into place	Tighten eyepiece or objective lenses
Poor image quality	No cover slip on the specimen	Place glass cover slip over the specimen
	Slide is too thick or too thin	Use a lab-quality slide
	Slide is placed upside down on the stage	Flip the slide over so that the cover slip is facing up
	Dirty objective lens	Wipe the lens off with soft cloth and glass cleaner
	Disc diaphragm hole selection is too small	Rotate the disc diaphragm to a larger hole

Image moves while adjusting focus	Slide is shifting on the stage	Reposition slide more securely in the clips
Light is too dim	Disc diaphragm hole selection is too small	Rotate the disc diaphragm to a larger hole
	Lamp setting is too low	Increase intensity on the control knob
	Voltage is too low	Use the supplied power adapter
Objective lens collides with the slide when switching from a lower to a higher power objective	Slide is upside down or too thick	Use a lab-quality slide or flip the slide over so the cover slip is facing up
	Stage is set too close to the objectives	Lower the stage with the coarse focus knob
	Safety rack stop needs adjustment	Adjust the safety rack stop to stop the stage farther from the objectives
Image won't come into focus when using a high-powered objective	Slide is upside down	Flip the slide over so the cover slip is facing up
Lamp does not turn on	No power source	Check that the adapter is fully connected or that batteries are installed
	Bulb has burned out	Replace the bulb
Lamp flickers while on	Bulb is not inserted into the socket correctly	Check to make sure the bulb is fully screwed into the socket
	Power adapter is not fully plugged in	Check to make sure that the adapter is fully connected to wall socket and to the microscope

VII. Warranty information and customer support

Unsere Mikroskope werden nach ISO 9001 Standards gefertigt. Die Swift Garantie ist wie folgt festgelegt:

- Fünf (5) Jahre Garantie für Mikroskope bei Fertigungsfehlern. Die Garantie beinhaltet nicht die Abnutzung durch normalen Gerätebetrieb, Fehler durch zugekaufte Komponenten, unerlaubte Reparaturen, Unfälle, Umbauten, Transport oder falsche Nutzung.
- Ein (1) Jahr Garantie für elektrische und optionale Video-Komponenten. Dies beinhaltet nicht Leuchtmittel, Akkus, Sicherungen oder elektrische Kabel.

Jede Garantie beginnt mit dem Kaufdatum. Swift garantiert die kostenlose Reparatur oder den Ersatz der unter die Garantie fallenden defekten Komponenten inklusive Arbeitskosten während der Garantiezeit. Ein Kaufbeleg ist notwendig. Der Käufer ist für den Transport der defekten Ware zum Warenhaus und zurück verantwortlich. Die Garantie beinhaltet nicht die Abnutzung durch normale Gerätenutzung, falsche Nutzung und unerlaubte Reparaturen. Der Garantie-Service erfolgt durch von Swift Optical Instruments, Inc. autorisierte Techniker. Eine Bestätigung des Garantiefalls erfolgt durch den Techniker.

*Für Kunden außerhalb der USA bietet Swift Optical Instruments, Inc. den lokalen Standard Garantie Service. Länder-übergreifende Transportkosten hin und zurück inklusive Zoll und Steuern liegen in der Verantwortung des Kunden.

Für weitere Informationen oder um eine Reparaturanfrage zu stellen, wenden Sie sich bitte an unsere Kundendienstabteilung:

Nordamerika

Tel: (+1) 877-967-9438, option 1 (USA)

Email: customersupport@swiftoptical.com

Europa

Tel: (+44) 208-638-8819 (UK)

Email: customersupport@swiftoptical.com

*Um die Kunden in Europa effizient bedienen zu können, empfehlen wir, die Hotline währendder Arbeitszeit von 8.00 bis 16.00 Uhr (Londoner Zeit) anzurufen.

Haftungsausschluss: Wir arbeiten ständig an der Verbesserung unserer Geräte, um sie den Kundenwünschen anzupassen. Diese Verbesserungen können Modifikationen in Mechanik und Optik unserer Mikroskope beinhalten. Aus diesem Grund können Beschreibungen, Illustrationen und Spezifikationen dieser Bedienungsanleitung vom erworbenen Produkt abweichen.

Swift Optical Instruments, Inc.

(877) 967-9438

www.swiftoptical.com