

Living up to Life

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Leica
MICROSYSTEMS

Leica M50, M60 and M80

A fresh face for the laboratory: the Leica routine stereomicroscopes combine Leica's legendary optical quality, many smart ergonomic solutions, and the extensive Leica accessories program.





Routine Microscopy: Different Challenges Every Day

The optical brilliance and wide range of accessories make the Leica M50, M60 and M80 the ideal routine stereomicroscopes for life science applications.

The Leica **M50** stereomicroscope includes precise, reproducible magnification steps for repeated examinations, measurements, drawing or photography of biological specimens under identical scales and conditions. You can set one of five easily detectable positions without taking your eyes off the specimen. This ensures that the results remain comparable at all times without great effort.

The Leica **M60** and **M80** zoom stereomicroscopes can be used for a wide range of routine applications with switchable grid levels. The large working distance and brilliant imaging power show the finest details of your specimens without losing the field of view over large specimens.

Common to all three microscopes is the Leica range of accessories. Whether you need a variety of illumination types, a wide selection of objectives or the Leica swing arm system – there is a solution for every task!

LEICA M50 AND M60

- Magnification range 6.3 – 40×
- Five defined, step magnification levels (M50)
- Seven switchable, locking zoom levels
- High depth of field for observing specimens over an extended area

LEICA M80

- Zoom range 7.5 – 60×
- Eight switchable, locking zoom levels
- Optics with excellent contrast for a detailed view of the specimen

BENEFITS OF LEICA ROUTINE STEREOMICROSCOPES

- Modular product range: optimum adaptation of the microscope for the application
- Parfocally matched optical system: The sharpness remains constant when the magnification is changed
- Field number 23 for an even greater overview
- Easy integration into existing equipment thanks to a 76 mm standard interface
- Ergonomic design: best possible adaptation of the instrument to the user
- ESD-dissipating design helps prevent damage caused by electrostatic discharge
- Focus column with integrated cable channel keeps the workstation uncluttered

Humans as the Reference

Ergonomic accessories for Leica routine stereomicroscopes

Ergonomically designed workstations and work processes are essential for the well-being of people in the workplace. When correctly applied, ergonomically designed instrumentation can make a strong contribution to increased productivity.

The investment cost for ergonomically designed workstations amortizes quickly and can provide long-term benefits: better performance, and higher quality results.

The correct posture

Routine work at a microscope while sitting with an incorrect posture can cause tension in the muscles of the neck and back and, in the worst case, even postural defects of the spine. All the control elements of Leica stereomicroscopes are arranged for the greatest possible comfort of the user. In this way, they actively combat muscle tension and fatigue.

When matching the viewing height of the microscope to the physical height of a user, a few millimeters are crucial; just the wrong head posture could lead to headaches, neck pain, and decreased performance. Using a tube with variable viewing heights such as Leica Microsystems' new ergo tube can solve this problem with a few simple twists of the user's wrist.

ERGONOMICS

- Ergonomic design at the workstation improves employee well-being, and performance.
- The investment in ergonomics pays off quickly.

LEICA ERGONOMIC ACCESSORIES

- ErgoWedge® ±15°
- ErgoTube® 10° – 50°
- ErgoTube® 45°
- Straight Tube
- ErgoModule® 30 mm – 120 mm
- ErgoWedge® 5° – 25°
- ErgoWedge® ± 15°
- Manual and motorized cross-stage
- SmartTouch™





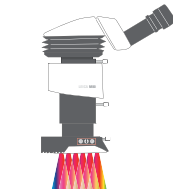
The Best Illumination

Leica LED system illumination for the greatest flexibility

With the **LED3000** series, Leica Microsystems offers a wide spectrum of special LED illuminators for the Leica M50/M60/M80 routine stereomicroscopes. In addition to the composition of the specimen, the information to be gained is most critical for selecting the right illuminator. Depending on the application and task, one or the other illuminator may provide the desired results. With a service lifetime of over 50,000 hours, maintenance costs and downtime shrink.

LEICA LED3000 RL

The compact Leica LED3000 RL ring illuminator uses the latest generation of LEDs and an LED auxiliary lens specially developed by Leica. This increases the brightness and homogeneity of the illumination. Conveniently adjustable segments are used to gain more data about the specimen without having to move it.

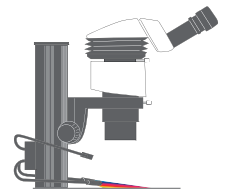


Ring illuminator

LEICA LED3000 SLI™

The double-armed gooseneck with integrated LED spotlights can be put into any imaginable position – outstretched for very flat oblique light (side light) for strong shading, up to high-angle incident light with minimal shading.

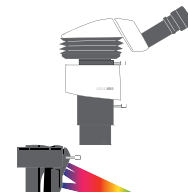
The operating concept is one-of-a-kind: The control for the light intensity is located on a separate gooseneck. This allows for ergonomic positioning depending on the user's preference.



Spotlight illumination

LEICA LED3000 MCI™

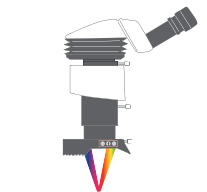
For Leica MCI™ illuminators, the flat angle of the oblique incident light creates a particularly high contrast for viewing the specimen: the finest differences and details are visible this way. The settings are fully reproducible.



Multi-contrast illumination

LEICA LED3000 NVI™

The LED3000 NVI™ illumination is primarily used for viewing deep recesses, since the light falls nearly vertically onto the specimen. Unlike coaxial illumination, the LED3000 NVI™ is also suited for uneven specimens and specimens that have no reflections.



Vertical illumination

The Right Base for Your Work

Leica Microsystems' stereomicroscope bases

Stereomicroscopes are ideal for situations where a large working distance, easily reproducible settings and, depending on the type of specimens, specialized accessories such as stands and illumination are necessary.

INCIDENT LIGHT OR TRANSMITTED LIGHT?

A wide selection of different bases is available to you, according to whether you are analyzing biopsies or, for example, observing zebra fish larvae in transmitted light. The small incident light base with optional transmitted light base is a flexible alternative to the Leica swing arm stands. Leica TL bases are available for the Leica M-series: with normal transmitted light, dark field or the Rottermann Contrast™ method depending on the model. The top-of-the-line model Leica TL5000 Ergo features built-in LED technology, particularly flat design and fully reproducible settings.

MORE THAN ROUTINE?

In vivo experiments must be carefully controlled to maintain optimum culturing conditions for the organism. The Leica MATS thermal stage keeps your specimens exactly at the temperature you have set, thus ensuring that your results will be as reliable as possible. An adapter also enables you to use the Leica "Live-on-stage" accessories with incubation systems and pH level control.

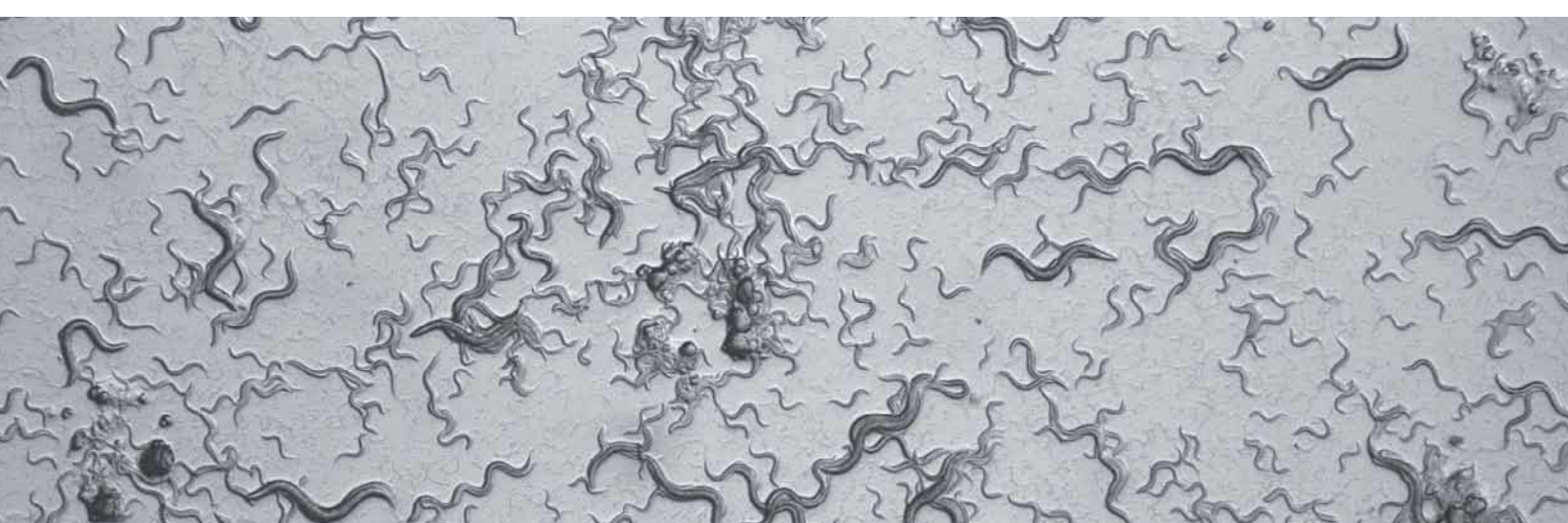
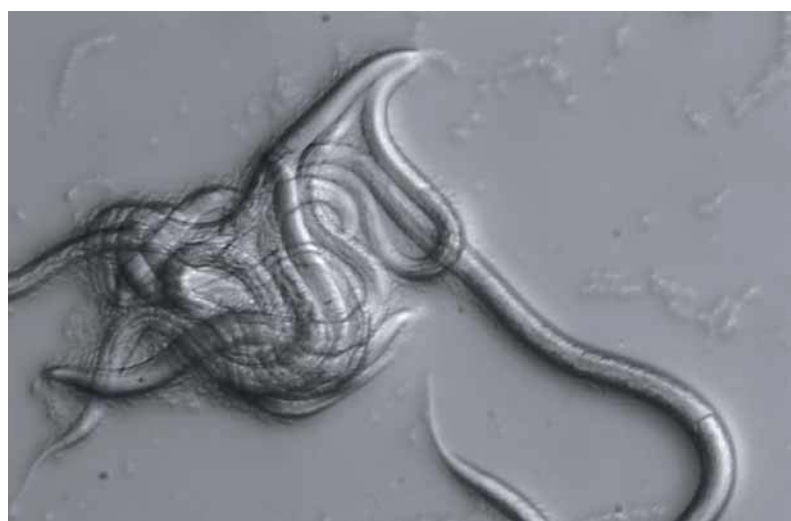
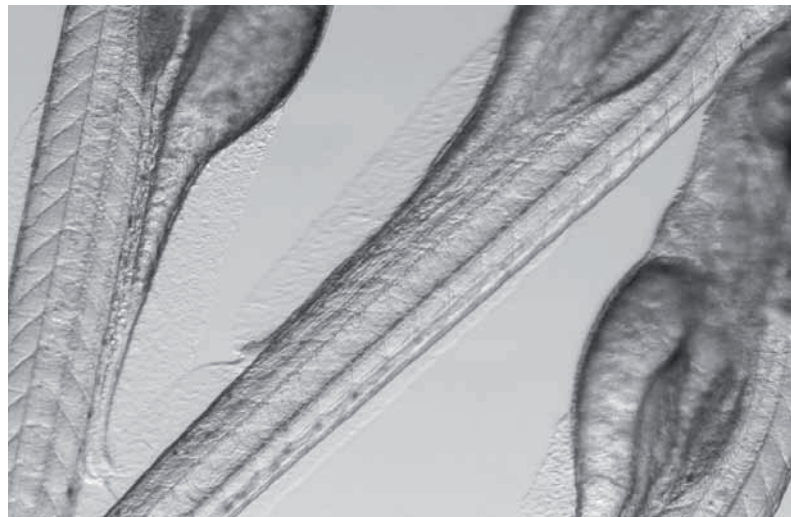
LEICA XL UNIVERSAL BASE FOR EXTRA LARGE SPECIMENS

With the Leica XL Universal Base, you can create a stationary stereomicroscope workstation to study even large specimens in complete comfort. It is compatible with all M-Series columns, and with an adapter, to all columns of the swing arm series. The optional XL cross-stage has a traverse path of 300 × 300 mm.

LEICA STEREOMICROSCOPE BASES

- Small, medium, and large Leica incident light bases for opaque research specimens etc.
- Leica XL Universal Base for large specimens, with optional XL cross-stage, travel paths of up to 300×300 mm.
- Leica swing arm and flex arm stands for examining large specimens.
- Leica TL series transmitted light bases for a wide variety of transmitted light methods and a wide spectrum of applications.





Flexible Even in the Smallest Detail

Leica stereomicroscopes in OEM production

Biological specimens place particularly high demands on a stereomicroscope. At the same time, true-to-life spatial representation of large fields and a generous working distance are also a given. Outstanding image quality, exceptional viewing comfort, and easy operation are essential for fast, accurate specimen manipulation. Leica Microsystems offers system components for routine stereomicroscopy that are individually adaptable to the vast range of biological applications.

The largest selection of achromatic and planachromatic objectives enables the microscope to be tailored to your test conditions. A large working distance provides a comfortable amount of space for preparing mice, insects, and other model organisms. Even large experimental setups can be accommodated with the Leica swing arm stand system. Powerful resolution up to 225 lp/mm with the M50/M60 and up to 308 lp/mm with the M80 ensure excellent image quality with constant light intensity at all zoom levels. The new LED3000 NVI vertical incident light provides shadow-free illumination of the specimen field. This enables you to prepare your specimens in working distances from 60 – 150 mm without contending with distracting shadows.

REQUIREMENTS

- Spatial representation
- Large fields of view
- Ample working space
- Outstanding image quality
- Viewing comfort and simple operation

LEICA M50 / M60 / M80

- CMO optics design with parallel beam paths – 3D viewing and full modularity
- Field number 23 for an even greater overview
- Working distance up to 303 mm – observation and preparation of even large specimens
- Consistent achromatic and planachromatic correction – Specimen details reproduced in true color and shape
- Powerful resolution: 225 lp/mm with the Leica M50 / M60 and 308 lp/mm with the Leica M80 with constant light intensity – maximum information collection
- Ergonomic operating concept – increased comfort in your daily work

The statement by Ernst Leitz in 1907, “**With the User, For the User,**” describes the fruitful collaboration with end users and driving force of innovation at Leica Microsystems. We have developed five brand values to live up to this tradition: Pioneering, High-end Quality, Team Spirit, Dedication to Science, and Continuous Improvement. For us, living up to these values means: **Living up to Life.**

Leica Microsystems operates globally in four divisions, where we rank with the market leaders.

LIFE SCIENCE DIVISION

The Leica Microsystems Life Science Division supports the imaging needs of the scientific community with advanced innovation and technical expertise for the visualization, measurement, and analysis of microstructures. Our strong focus on understanding scientific applications puts Leica Microsystems’ customers at the leading edge of science.

INDUSTRY DIVISION

The Leica Microsystems Industry Division’s focus is to support customers’ pursuit of the highest quality end result. Leica Microsystems provide the best and most innovative imaging systems to see, measure, and analyze the microstructures in routine and research industrial applications, materials science, quality control, forensic science investigation, and educational applications.

BIOSYSTEMS DIVISION

The Leica Microsystems Biosystems Division brings histopathology labs and researchers the highest-quality, most comprehensive product range. From patient to pathologist, the range includes the ideal product for each histology step and high-productivity workflow solutions for the entire lab. With complete histology systems featuring innovative automation and Novocastra™ reagents, Leica Microsystems creates better patient care through rapid turnaround, diagnostic confidence, and close customer collaboration.

MEDICAL DIVISION

The Leica Microsystems Medical Division’s focus is to partner with and support surgeons and their care of patients with the highest-quality, most innovative surgical microscope technology today and into the future.

