



Leica M820 F19

High performance microscope for Ophthalmic Surgery

Living up to Life

Leica
MICROSYSTEMS



Leica



M820 F19

High performance for best results

The Leica M820 F19 provides the ophthalmic surgeon with the high performance of Leica's 8-series optics on an easy to use and intuitive floor stand.



Leica Design by Christophe Apothéloz



Uniquely Leica



Crisp and sharp!

Leica's APO OptiChrome™ M820 Optics provide the highest resolution to see even the smallest anatomical details.



Safety for the patient, fatigue-free viewing for the surgeon!

Leica's exclusive direct illumination system offers the best clarity, contrast and colour at safe, low-light levels.



Double beam stereo illumination!

The unique 8-series double beam illumination system ensures a stable red reflex and three-dimensional vision for the surgeon.

See more with less light



The Leica M820 builds on the success of the 8-series

APO OptiChrome™

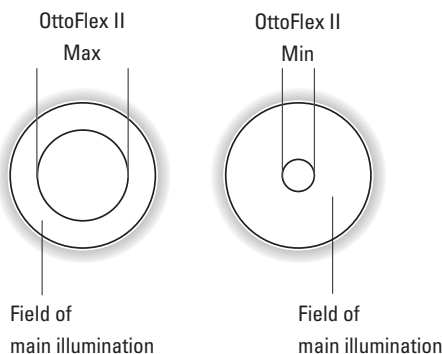
A sharp and crisp image is critical for all types of ophthalmic microsurgery. The proven technology of the Leica 8-series optics gives the surgeon natural colour, outstanding depth of focus and higher contrast for maximum detail recognition. The extraordinary degree of light transmission through the Leica M820 provides better patient safety by allowing the surgeon to use lower degrees of illumination.

Double beam stereo illumination is the key

Using two bulbs and two prisms, the Leica M820 creates true, three-dimensional illumination. The surgeon can quickly and accurately complete the surgical procedure because of the highly defined view seen through the microscope. Direct halogen illumination projects a crisp, sharp and homogenous image ... even at low light levels.

An extra boost for difficult visualization

OttoFlex™ II, an integrated independent illumination system, gives a brilliant red reflex even in low light conditions. Difficult anatomical conditions, such as small pupils or very advanced cataracts are more easily visualized through this unique system. Continuously adjustable from 4–35mm diameter, the OttoFlex™ II places the brightness where the surgeon needs it most.



Take control



Leica Two-in-One display control unit
mode (above) and video mode (below)



Simple and straight forward control unit

The touch screen control unit provides many innovative features, and is still very user friendly for the operating room staff. Up to 30 different users can input their individual, customised settings so the microscope is ready for each surgeon's individual needs.

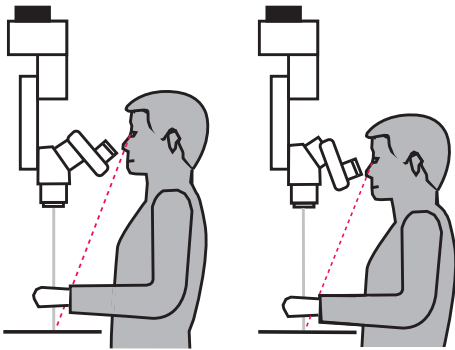
The unique StepCycle™ for more efficient surgical procedures

Different levels of light, focus and zoom are used during a typical surgical procedure. Each time the surgeon makes these adjustments, precious time is wasted. With StepCycle™, the surgeon can program predefined settings into the microscope. Throughout the surgical procedure, a touch of the button on the foot control will make his adjustments quickly and accurately.

Real time video is conveniently placed on the microscope

With one touch of a button, the Leica M820 control unit's display becomes a general use, real-time video monitor. Conveniently located on the microscope, the operating room staff can watch the ongoing surgical procedure without bringing a separate video cart into the room.

Widest range of ergonomics to ensure comfort



Surgeons can choose the binocular for their individual comfort needs

Largest selection of binoculars for individual needs

The physical comfort of the surgeon and assistant are important to the success of any surgical procedure. Since no two people are alike, having a wide choice of binoculars and objective lenses to choose from is very important. Leica provides the largest selection of interchangeable binoculars from any microscope company. Newest to the line are the UltraLow™ II which drop lower than conventional binoculars to compensate for stacking auxiliary accessories on the optics.

Going temporal? Swing around...

For those surgical procedures where an assistant is needed, especially with the growing number of temporal approach cataract surgeries, Leica Microsystems proudly presents the World's first two-beam path solution – the Leica Rotatable Beamsplitter. The easy side-to-side quick change of the assistant observer optics enables time-saving between cases, increases efficiency in the operating room and minimizes potential damages to the binoculars. Also the interface for the Leica Video Adapter is conveniently placed at the rear for maximum flexibility.



Leica Rotatable Beamsplitter

Leica M820 with Video Adapter at the rear and rotatable assistant microscope tube



Binocular Tubes

Perfect ergonomics in every situation

Easy to use from start to finish



Leica F19 compact stand manoeuvrable and affordable

The Leica F19 floor stand has an exceptionally small footprint. Its long reach and slim construction make the Leica M820 F19 very convenient in the limited space of today's operating rooms. Pivot points give the Leica F19 an easy manoeuvrability due to knobs that adjust using friction.

Auto Reset and it's ready to go

When the surgeon pushes the swingarm up and away from the operating table after each procedure, all the microscope functions are automatically reset. Now the microscope is ready for the next surgical case. The staff do not need to remember to reset the system before the next case, which saves time and provides peace of mind for staff and surgeon.

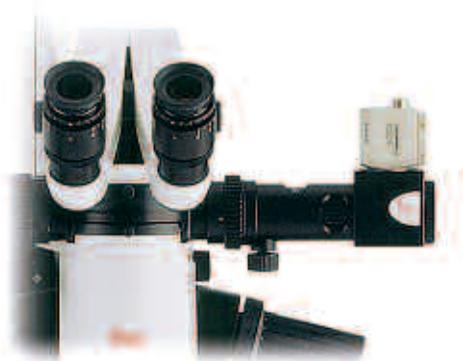
Choice of foot pedals for many functions

Leica offers three-foot pedal styles to meet the needs of all users. Standard functions, such as XY, zoom, focus and illumination can be controlled from all three choices. The 16-function cross pedal gives the user four additional options for individual tasks, such as inverter usage, StepCycle™ or room light function.



Wide selection of foot pedals to fulfill any ergonomic need

Flexibility for individual needs



Leica M820 with Leica Zoom Video Adapter



Leica M820 controlling
Oculus SDI/BIOM system



Leica precision slit lamp

Your choice of documentation

All the latest documentation options are available with the Leica M820. The Leica MDRS4 digital recording system, as well as many other commercially available digital video systems can be easily interfaced. Even classic, 35mm photography can still be performed.

The unique Leica Zoom Video Adapter

The Leica Zoom Video Adapter has a 3× optical zoom which gives the surgeon full freedom to adjust the monitor image for observers without affecting the surgeon's view. The monitor image can also be independently focused both before and during surgery by an easy to reach, fine focus adjustment knob, which can be covered by a sterilizable cap.

Interfacing for retinal procedures

The Leica M820 is designed to accept the most commonly used wide-angle observation systems and stereo image inverters. For the Oculus SDI/BIOM electronic inverter system, the surgeon can control its functions through the Leica 16-function foot pedal. For surgeons who want to use the Leica precision surgical slit illuminator, attachment to the Leica M820 is quick and easy. Laser shutters and laser filters can also be easily integrated.



“With the user, for the user”

Leica Microsystems

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.

• Surgical Division

The Leica Microsystems Surgical 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.

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.**

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and representatives in more than 100 countries

The Surgical Division, within Leica Microsystems (Schweiz) AG, holds the management system certificates for the international standards ISO 9001:2000 / ISO 13485:2003, and ISO 14001:2004 relating to quality management, quality assurance and environmental management.

