



Ultra



ULTRAM

SLIT LAMP SERIES

**PROGRESSIVELY ENGINEERED,
ELEGANTLY DESIGNED, & LOADED
WITH INTELLIGENT FEATURES.**

Truly the Next Generation of Slit Lamps



ULTRAM2

SLIT LAMP SERIES



ULTRAM4

SLIT LAMP SERIES



- » Galilean optics with 6° converging binocular tubes and 5-step rotating magnification drum
- » High-eyepoint, wide-field eyepieces
- » Standard 10x, 16x, and 25x magnification
- » Single-element, high-luminance LED illumination
- » Built-in background illumination system for digital imaging
- » Lower "compact" light source configuration consolidates all controls
- » Completely integrated (cable free), low-voltage electronic system
- » 0–14mm continuously variable aperture
- » Special Blue-correction LED, Red-free, and cobalt blue filters
- » Unique circular LED light indicates light source power
- » Single-handed joystick control with image-capture trigger switch
- » Power / rheostat control conveniently located next to joystick
- » Flexible LED patient fixation device
- » Self-contained headrest and baseplate assembly
- » Accommodates a variety of optional accessories and digital imaging components
- » Optional patient handrests available



- » Galilean optics with 6° converging binocular tubes and 5-step rotating magnification drum
- » High-eyepoint, wide-field eyepieces
- » Standard 6.3x, 10x, 16x, 25x, and 40x magnification
- » Single-element, high-luminance LED illumination
- » Built-in background illumination system for digital imaging
- » Lower "compact" light source configuration consolidates all controls
- » Completely integrated (cable free), low-voltage electronic system
- » Expanded chin rest design for easier patient access
- » 0–14mm continuously variable aperture
- » Special Blue-correction LED, Red-free, and cobalt blue filters
- » Unique circular LED light indicates light source power
- » Single-handed joystick control with image-capture trigger switch
- » Power/rheostat control conveniently located next to joystick
- » Flexible LED patient fixation device
- » Self-contained headrest and baseplate assembly
- » Accommodates a variety of optional accessories and digital imaging components

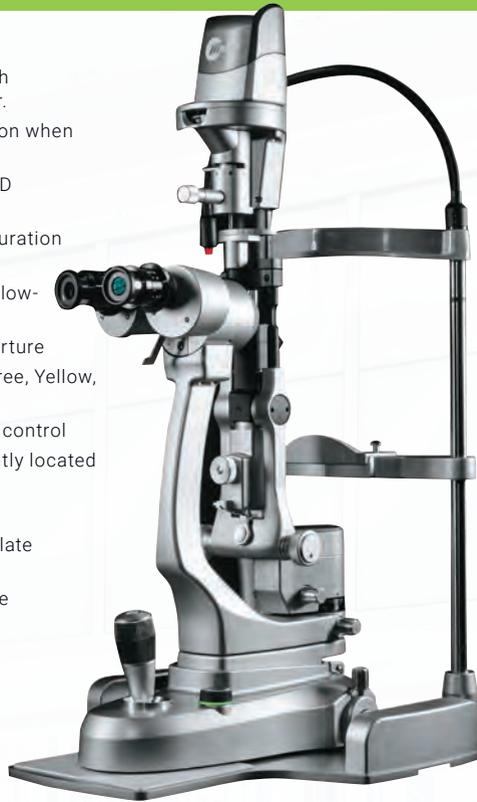
ALL ULTRA M SERIES SLIT LAMPS COME PRE-ASSEMBLED AND INCLUDE A STANDARD 3-YEAR WARRANTY.



ULTRAM3

SLIT LAMP SERIES

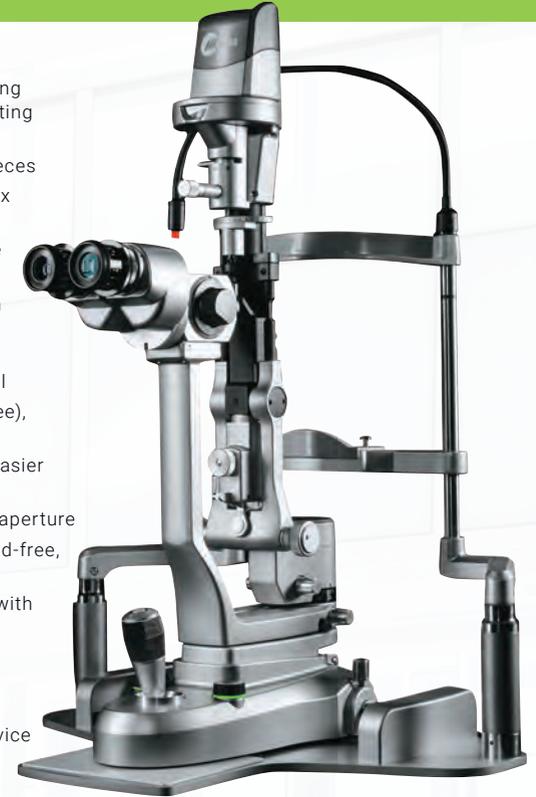
- » Converging / Greenough optics with 2-position "flip" magnification lever.
- » Standard 10x, 16x (25x magnification when 16x eyepieces used)
- » Single-element, high-luminance LED illumination
- » Vertical "tower" light source configuration with tilting control
- » Completely integrated (cable free), low-voltage electronic system
- » 0–14mm continuously variable aperture
- » Special Blue-correction LED, Red-free, Yellow, and cobalt blue filters
- » Single-handed joystick operational control
- » Power / rheostat control conveniently located next to joystick
- » Flexible LED patient fixation device
- » Self-contained headrest and baseplate assembly
- » Optional patient handrests available



ULTRAM5

SLIT LAMP SERIES

- » Galilean optics with 6° converging binocular tubes and 5-step rotating magnification drum
- » High-eyepoint, wide-field eyepieces
- » Standard 6.3x, 10x, 16x, 25x, 40x magnification
- » Single-element, high-luminance LED illumination
- » Built-in background illumination system for digital imaging
- » Vertical "tower" light source configuration with tilting control
- » Completely integrated (cable free), low-voltage electronic system
- » Expanded chin rest design for easier patient access
- » 0–14mm continuously variable aperture
- » Special Blue-correction LED, Red-free, Yellow, and cobalt blue filters
- » Single-handed joystick control with image-capture trigger switch
- » Power / rheostat control conveniently located next to joystick
- » Flexible LED patient fixation device
- » Self-contained headrest and baseplate assembly
- » Accommodates a variety of optional accessories and digital imaging components



EXPANDING THE BOUNDARIES OF TRADITIONAL SLIT LAMP DESIGN

ULTRAM SERIES PEDIGREE

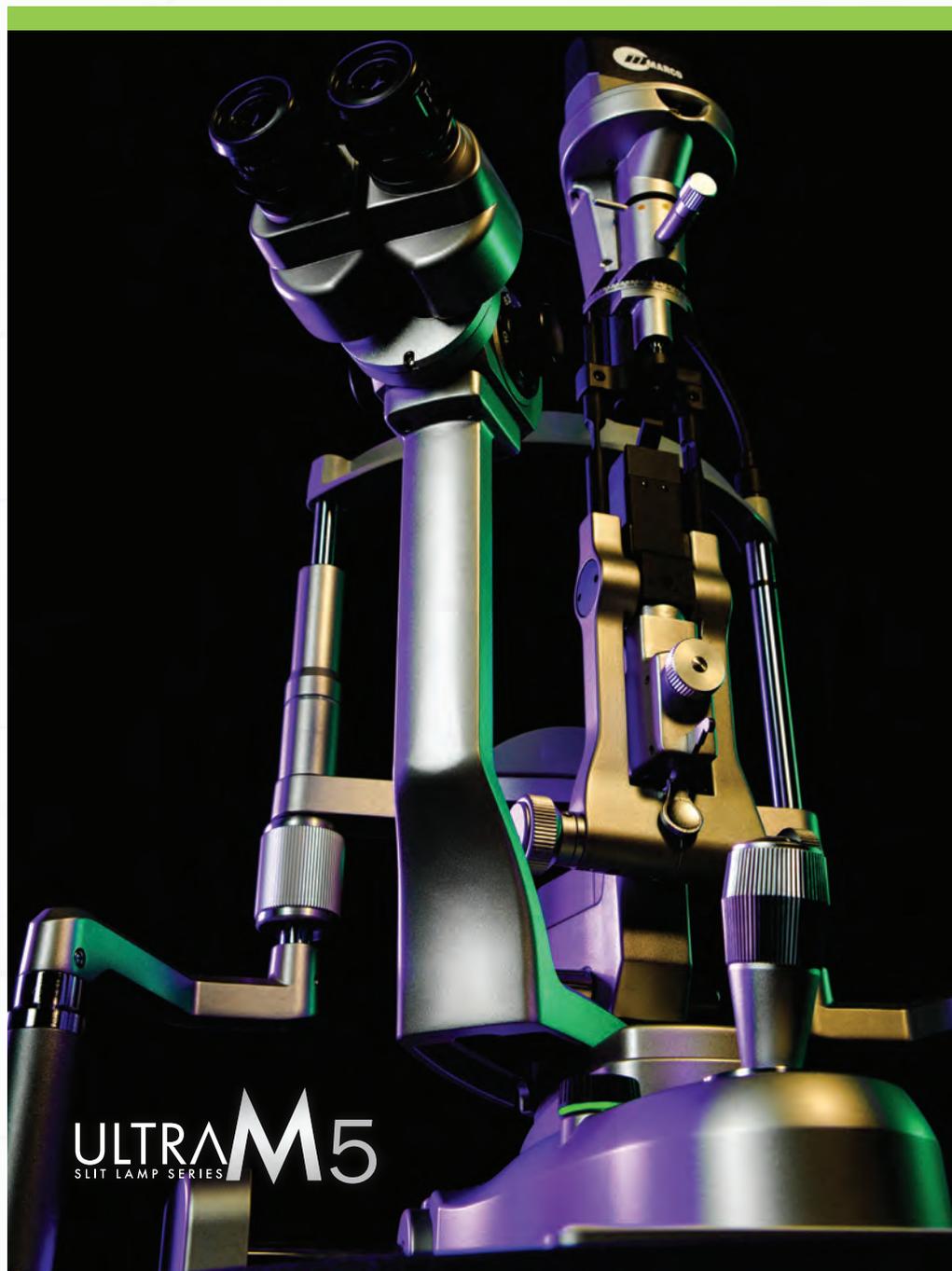
The Marco Ultra M Series of slit lamps expands the boundaries of traditional slit lamp design, function, and performance. Building on the modern methodologies of optical design and engineering that established the original Ultra Series as a market leader, the new Ultra M Series pays special attention to overall functionality, feel, and movement which was paramount to complementing the sleek new design.

EXCELLENCE IN DESIGN

Ultra M Series slit lamps feature a sophisticated, elegant design that breaks from conventional philosophies to embrace a more modern appearance. The entire dual LED system of the Ultra M Series has been integrated into the base of the slit lamp, eliminating bulky external transformers and exposed cables. While high-quality materials, paint and finish were carefully selected for lasting durability, the placement of primary functions and controls were left in comfortable, traditional locations.

PATIENT COMFORT

The chinrest design provides a more comfortable resting and grip position, effectively addressing some of the common challenges associated with examining the larger patient population. Plus, an innovative patient headrest design on the M4 and M5 models helps accommodate larger patients who sometimes have difficulty fitting into a standard headrest.



ULTRA M SERIES OPTICS



6-degree converging binocular tubes

ULTRA OPTICS QUALITY

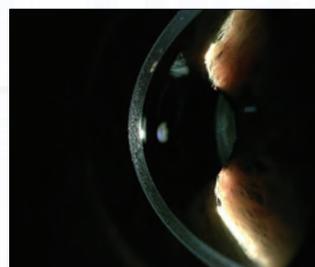
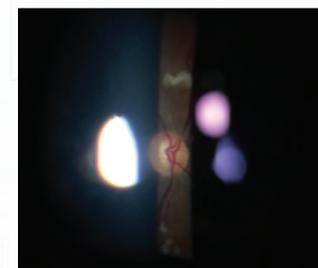
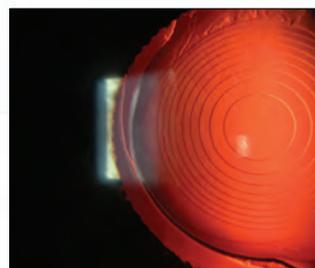
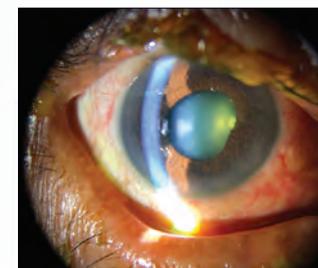
Without question, optics are the heart and soul of any slit lamp. The exacting tolerances established by our Ultra Optics have been enhanced with the Ultra M Series. Ultra Optics are precision ground to the highest specifications, utilizing a multi-layered, multi-coated system which transmits light more efficiently while improving contrast, color, and brightness of the viewed image. This sophisticated process not only produces superior light-gathering transmission, but measurably expands the field of view and increases the depth of focus. Quite simply, no other optical system is engineered like Marco Ultra Optics.

PHYSICIAN COMFORT & FEEL

In addition to the unique composition and structure of the Ultra Optical System, the Galilean microscope head on the M2, M4, and M5 models features a natural 6° convergence angle on the binocular tubes to assist with binocular fusion, reduce fatigue, and improve physician comfort. Another unique detail of the Ultra M Series is a flattened area on the magnification knob that helps identify low and high mag positions, allowing the operator to adjust power simply by feel.

ULTRA-CLEAR ANTERIOR & POSTERIOR OBSERVATIONS

Increased light transmission is paramount when utilizing digital slit lamp imaging systems, and the highest possible resolution is essential when quality images need to be captured and integrated into EHR systems. Ultra M Series slit lamps maintain superior resolution and clarity of the anterior segment while improving visibility of the fundus, resulting in the brightest, sharpest images.



ULTRA M SERIES ILLUMINATION



OPTIMIZED LED SYSTEM

The Ultra M Series illumination system has been engineered to maximize the benefits of superior LED technology: greater visibility and clarity of anatomy and tissue structure. The single-element, high-luminance LED produces a beautifully consistent and uniform light compared to multiple-element LEDs. With a color temperature of 3500K, the LED provides a much brighter, clearer, and sharper image.

INTEGRATED ELECTRONICS

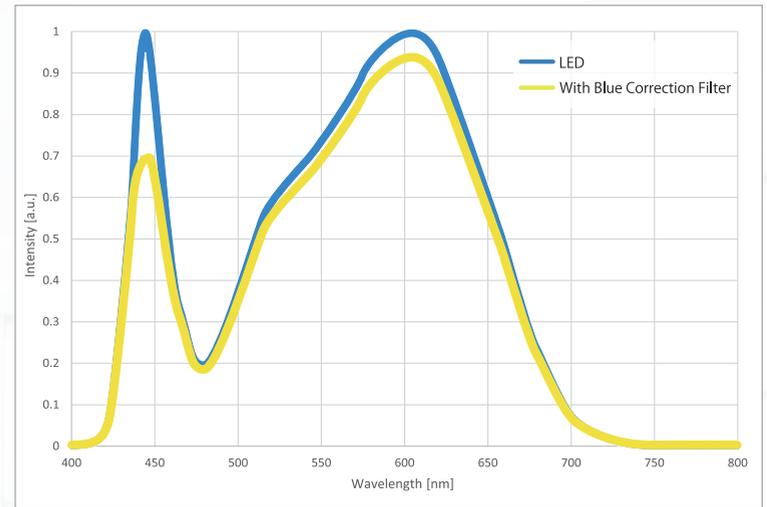
The electronic system of the Ultra M Series is fully integrated into the base of the slit lamp, eliminating bulky external transformers and exposed cables. Even additional cables necessary for attached imaging systems can be neatly concealed. The absence of these external components also provides more leg room for the patient and physician.

BACKGROUND ILLUMINATION SYSTEM

The Ultra M Series is optimized for advanced anterior segment imaging, documentation, and patient education. A unique, built-in background illumination system is creatively integrated into the primary LED light source of the M2, M4, and M5 slit lamps and is independently controlled by an additional rheostat located next to the joystick. Because the background and primary illumination share the same LED light source, the image color balance is not compromised. A joystick capture trigger is also standard for convenient and immediate image acquisition.



Integrated electronics with background illumination system.



FILTERED REDUCTION OF BLUE LIGHT

The blue LED correction filter offers a softer and more comfortable light as the peak of the blue band spectrum of LED light has been corrected for greater comfort during extended, high intensity exposure.



A continuously variable 0–14mm slit aperture provides a wider area of anterior segment illumination.

ULTRA M SERIES DESIGN FEATURES & ACCESSORIES

The self-contained patient headrest and baseplate assembly keeps all components together and secure.

A platformed patient headrest band provides a more comfortable and secure examination position for handheld lenses.



Self-contained base plate



Patient headrest band

An expanded patient headrest is standard on the M4 and M5 models, accommodating larger patients who have difficulty fitting into a traditional headrest.

The continuously adjustable (0–90°) inclined microscope head helps eliminate head and neck strain. A fixed-position inclined adapter is also available, creating a standard 13° examination angle.



Expanded patient headrest



Adjustable inclined microscope head



AT-9 Tonometer



AT-8 Tonometer

The AT-9 applanation tonometer mounts comfortably on the M3/M5 models and the AT-8 tonometer accommodates the M2/M4 slit lamps.

Assistantscope kits are available for the M2, M4, and M5 models



Assistantscope Kit



Ultra M5 Slit Lamp with iON imagingSM



Ultra M Series slit lamps are optimized for anterior segment imaging. The Marco iON ImagingSM System combines an intra-optics beam-splitter/camera adapter with the tremendous computing and imaging power of Apple[®] technology. Together, they create a highly sophisticated imaging system that emphasizes image quality, simplicity, and efficiency. The sleek, all-in-one device makes it easier than ever to capture, diagnose, integrate, and educate.

ULTRA M SERIES MODELS	ULTRA M2	ULTRA M4	ULTRA M3	ULTRA M5
TYPE BINOCULAR STEREOMICROSCOPE	Parallel (Galilean)	Parallel (Galilean)	Convergent (Greenough)	Parallel (Galilean)
LIGHT SOURCE	LED	LED	LED	LED
LIGHT SOURCE CONFIGURATION	Compact/horizontal	Compact/horizontal	Tower with Tilt	Tower with Tilt
BACKGROUND ILLUMINATION	Yes	Yes	Not standard	Yes
LIGHT FILTERS	Cobalt Blue, Red-free, Blue LED Correction	Cobalt Blue, Red-free, Blue LED Correction	Cobalt Blue, Red-free, Blue LED Correction, Yellow	Cobalt Blue, Red-free, Blue LED Correction, Yellow
SLIT WIDTH	0–14mm continuous variable	0–14mm continuous variable	0–14mm continuous variable	0–14mm continuous variable
APERTURE DIAPHRAGM DIAMETER (Ø)	14, 8, 5, 3, 0.3mm	14, 8, 5, 3, 0.3mm	14, 10, 5, 3, 2, 1, 0.2mm	14, 10, 5, 3, 2, 1, 0.2mm
TOTAL # POWER MAGNIFICATIONS	3 (10x, 16x, 25x)	5 (6.3x, 10x, 16x, 25x, 40x)	2 (10x, 16x) [3 (25x with 16x eyepieces)]	5 (6.3x, 10x, 16x, 25x, 40x)
MAGNIFICATION CHANGE	3 position rotating drum	5 position rotating drum	2 position switch revolving objective	5 position rotating drum
EYE PIECES	16x wide-field, high-eyepoint	16x wide-field, high-eyepoint	10x, (16x optional)	16x wide-field, high-eyepoint
FIELD OF VIEW (Ø)	23.3mm, 14mm, 8.8mm	35.9mm, 23.3mm, 14mm, 8.8mm, 5.5mm	18, 11.25 (with 10x eyepieces) 15, 9.3mm (with 16x eyepieces)	35.9mm, 23.3mm, 14mm, 8.8mm, 5.5mm
INTERPUPILLARY ADJUSTMENT	52–82mm	52–82mm	52–82mm	52–82mm
DIOPTRER ADJUSTMENT RANGE	(+/-) 7 diopters	(+/-) 7 diopters	(+/-) 8 diopters w 10x eyepieces (+/-) 10 diopters w 16x eyepieces	(+/-) 7 diopters
HORIZONTAL COARSE MOVEMENT	105mm	105mm	105mm	105mm
HORIZONTAL FINE MOVEMENT	15mm	15mm	15mm	15mm
VERTICAL MOVEMENT	30mm	30mm	30mm	30mm
FIXATION LIGHT SOURCE	Red LED on Flexible Arm	Red LED on Flexible Arm	Red LED on Flexible Arm	Red LED on Flexible Arm
EXPANDED PATIENT CHIN REST	Not standard (option only)	Yes	Not standard (option only)	Yes
CHIN REST ELEVATION	85mm	95mm	95mm	85mm
POWER SUPPLY	AC100V–240V (+/-10%)	AC100V–240V (+/-10%)	AC100V–240V (+/-10%)	AC100V–240V (+/-10%)
POWER CONSUMPTION	DC5V 2A	DC5V 2A	DC5V 2A	DC5V 2A
WEIGHT	11Kg	11.5Kg	12.5Kg	12.5Kg
DIMENSIONS/ILLUSTRATIONS	462mm h x 348mm w (front) 462mm h x 369mm w (side)	462mm h x 484mm w (front) 462mm h x 329mm w (side)	676mm h x 348mm w (front) 676mm h x 369mm w (side) [420mm to optics]	676mm h x 484mm w (front) 676mm h x 329mm w (side) [420mm to optics]



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