### Living up to Life





# Leica EZ4 and Leica EZ4 W

For Quality that Lasts! Stereomicroscopes for Assembly, Inspection and Quality Control

### Dependable and Rugged for Industry and Routine Research

Manufacturers depend on affordable and reliable quality control to insure production profitability. Visual quality control is an important part of a consistent quality management process. The Leica E Series is designed to help you eliminate expensive quality defects, waste, and insufficient productivity. For R&D, the dependable, maintenance-free Leica E Series ensures efficient laboratory operations while minimizing downtime. Providing a bright object field that is rich in detail and a great working distance that allows a variety of microscope tools, the Leica E Series is ideal for sample identification and sorting.

#### INTRODUCING THE LEICA E SERIES STEREOMICROSCOPES

Leica Microsystems presents four affordable stereomicroscopes featuring renowned Leica StereoZoom<sup>®</sup> performance for industrial quality control and routine laboratory applications.

- > Leica EZ4 with fixed 10× eyepieces
- > Leica EZ4 with fixed 16× eyepieces
- > Leica EZ4 with open eyetubes (optional eyepiece selection)
- Leica EZ4 W with integrated high definition digital camera and free LAS (Leica Application Software)

#### **BENEFITS AT A GLANCE**

> The Leica E Series features a 4.4:1 zoom range.

- The complete product line for quality assurance includes a model for digital documentation (Leica EZ4 W) and measurements (Leica EZ4, optional eyepiece selection).
- > Features high-quality image, color, and detail fidelity
- Mechanical precision provides decades of maintenance-free operation
- Ideal for learning and performing quality control and routine laboratory techniques
- Leica's exclusive LED illumination system is dimmable for incident and transmitted light.
- > Features unique 3-way incident light technology
- Precise zoom and focus systems provide the finest, most exact control







## Leica EZ4: Reliable Routine Inspection

#### EYEPIECES

4

- Provide optimal viewing for those with and without eyeglasses
- Soft eyecups protect eyeglasses and can be removed and cleaned
- Sealed in place (exception: Leica EZ4 with open eyepiece tubes)
- Feature 60° viewing angle and adjustable interpupillary distance from 50 mm to 75 mm

#### ILLUMINATION & MICROSCOPE STAND

- LED incident light and transmitted light illumination can be activated independently or combined; membrane keypad provides comfortable control
- Base provides excellent stability and has an integrated low handrest for comfort
- Water-tight glass stage plate and membrane keypad are sealed to prevent accidental damage from spilled liquids and are easy to clean
- Vibration-resistant feet prevent sliding and movement while adjusting the instrument
- Built-in hand grip provides easy, safe carrying and transport

#### OPTICS

- > Features a 4.4:1 zoom range
- Magnification changer remains sensitive, precise, and smoothly adjustable, even after years of intense use
- Tension adjustable focus drive is easy to move for comfortable focusing
- Renowned Leica image quality, resolution, and detail definition

## Leica EZ4 W: Digital Documentation Made Easy

The NEW Leica EZ4 W camera offers an economical, integrated solution for viewing fast live images in High Definition (HD). The complete system allows the user to view specimens on a High Definition display and through the eyepieces, with or without a computer connection for versatile workstation possibilities.



#### LEICA EZ4 W ADVANTAGES

- > WiFi mode to wirelessly broadcast an HD image directly to your mobile device for independent annotation and image capture
- Download the Leica AirLab app for camera setup, annotations, measuring, image capture, and sharing to email, photo folders, or other social media connections
- > USB mode to connect directly by cable to your PC for fastest live image of moving objects
- The Leica EZ4 W is compatible with the full range of Leica imaging software modules for versatility.
- Ethernet mode to connect to your own network and allow for the maximum number of mobile devices to access the image
- SD mode to capture directly onto a memory card when mobile devices and PC's are not available
- Always connect to an HD display for maximum flexibility
- Handheld remote for convenient fine tuning of camera settings, capturing onto the SD card, and viewing the gallery of images saved on the SD card
- The Leica EZ4 W camera is powered directly from the microscope minimizing infrastructure and cost.

### **Perfect Illumination in Every Situation**

#### MAXIMUM VARIABILITY

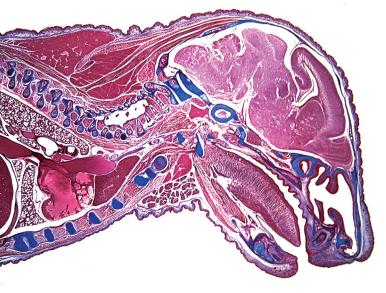
Innovative LED illumination provides many options. The built-in incident light can be used individually or in combination with the transmitted light version. The image does not reflect the incident light LEDs in the glass stage plate. It is also possible to dim the light to desired brightness. With the membrane keypad, illumination settings are easily and exactly reproduced.

#### **REALISTIC ILLUMINATION**

The Leica EZ4 and Leica EZ4 W use the most modern LED technology that provides the light spectrum of daylight which allows you to evaluate and compare samples in true color. Since the illumination is not UV or infrared, warming is minimal and temperaturesensitive samples are well-protected.

#### MAINTENANCE-FREE FOR LIFE

Compared to incandescent light, the lightemitting diodes used in the Leica EZ4 and Leica EZ4 W are insensitive to vibration. They have a minimum lifespan of 25,000 hours with constant color temperature throughout their entire life. Due to low heat generation and efficient heat management, Leica EZ4 and Leica EZ4 W do not require a fan. The viewed image remains current-free, and digital recordings are vibration-free.



Mouse in transmitted light, profile

 The membrane keypad for comfortable incident and transmitted light adjustment and for dimming the LEDs

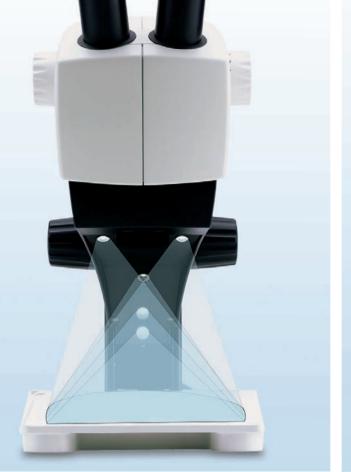
- 2: Highest luminosity with all 5 power LEDs
- 3: Steep incident light with the 3 upper diodes













All 5 LEDs provide maximum brightness



Steep incident light for shadow-free illumination of the sample



Transmitted light for transparent and semi-transparent samples

# **Specifications / Features**

Stereomicroscope	Leica ES2	Leica EZ4 10×	Leica EZ4 16×	Leica EZ4 open	Leica EZ4 W Digital 10×	
Optical system	10° Greenough, parfocal	10° Greenough, parfocal	10° Greenough, parfocal	10° Greenough, parfocal	10° Greenough, parfocal	
Magnification changer	2-level, 3:1	zoom 4.4:1	zoom 4.4:1	zoom 4.4:1	zoom 4.4:1	
Eyepieces for spectacle wearers	10×/20 fixed	10×/20 fixed	16×/15 fixed	replaceable, fixed or adjustable: 10×/20, 16×/16 20×/12 not suitable for spectacles	10×/20 fixed	
Diopter correction				from +5 to –5 (adj. eyepieces)		
Viewing angle	60°	60°	60°	60°	60°	
Working distance	100 mm	100 mm	100 mm	100 mm	100 mm	
Magnification range	10×/30×	8× to 35×	13× to 56×	8× to 70×	8× to 35×	
Max. resolution	159 Lp/mm	170 Lp/mm	170 Lp/mm	170 Lp/mm	170 Lp/mm	
Max. num. aperture	0.053 nA	0.057 nA	0.057 nA	0.057 nA	0.057 nA	
Object field diameter	20 mm/6.7 mm	5.7 to 25 mm	4.3 to 18.8 mm	3.4 to 25 mm	5.7 to 25 mm	
Eyecups	replaceable	replaceable	replaceable	replaceable	replaceable	
Interpupillary distance	50 to 75 mm	50 to 75 mm	50 to 75 mm	50 to 75 mm	50 to 75 mm	
Beam path	100 % visual	100 % visual	100 % visual	100 % visual	50 % visual / 50 % camera	
Focusing drive torque		individually adjustable, 75 mm stroke (all instruments)				
Grip	integrated	integrated	integrated	integrated	integrated	
LED illumination system		integrated, independent or combined incident and transmitted light (all instruments)				
Control	On/Off switch	membrane switch	membrane switch	membrane switch	membrane switch	
Incident light method	angled incident light with 3 LEDs	choice of 3 methods: maximum intensity with 5 LEDs, top light with three LED's, side light with 2 LED's				
Dimmer	-	yes, for incident and transmitted light	yes, for incident and transmitted light	yes, for incident and transmitted light	yes, for incident and transmitted light	
Auto OFF	-	after 2 hours	after 2 hours	after 2 hours	after 2 hours	
LED service life	approx. 25,000 h	approx. 25,000 h	approx. 25,000 h	approx. 25,000 h	approx. 25,000 h	
Light quality	homo	geneous daylight 6,500° reflec	ted, 4,500° transmitted, free o	f UV and IR radiation (all instr	uments)	
Maintenance	maintenance-free	maintenance-free	maintenance-free	maintenance-free	maintenance-free	
Power supply		universal from 100 V t	o 240 V, voltage-sensitive, inte	egrated (all instruments)		
Digital camera					integrated 5.0× mega-pixel CMOS camera	
<ul> <li>WiFi mode</li> <li>USB mode</li> <li>Ethernet mode</li> </ul>					<ul> <li>WiFi broadcasting</li> <li>USB cable connection to PC</li> <li>Ethernet cable</li> </ul>	
› SD mode					connection to network Capture to SD card	
HDMI port					High Definition output for desktop or large HD displays	
Integrated slot					SD (Secure Digital)	
Recording					switch for image capture	
Software					<ul> <li>Leica software</li> <li>for PC/MAC</li> <li>Leica apps for mobile</li> <li>devices</li> </ul>	
Graticules, stage micrometers				for length stage micrometer usable in adjustable eyepieces		



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 three divisions, where we rank Leica Microsystems - an international company with a strong network 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.

#### 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.

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Brazil · São Paulo	+55	11 2764-2411	11 2764-2400
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Denmark · Ballerup	+45	4454 0101	4454 0111
France · Nanterre Cedex	+33	811 000 664	1 56 05 23 23
Germany · Wetzlar	+49	64 41 29 40 00	64 41 29 41 55
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