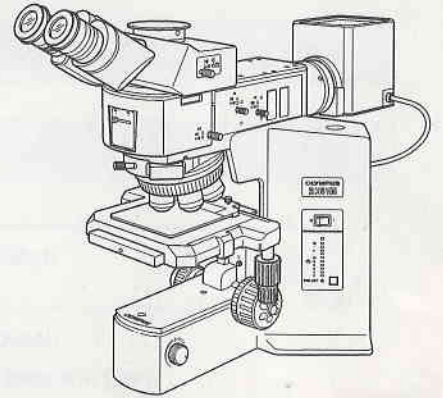


# OLYMPUS<sup>®</sup>



## INSTRUCTIONS

# BX51M

## SYSTEM METALLURGICAL MICROSCOPE

This instruction manual is for the Olympus System Metallurgical Microscope Model BX51M. To ensure the safety, obtain optimum performance and to familiarize yourself fully with the use of this microscope, we recommend that you study this manual thoroughly before operating the microscope. Retain this instruction manual in an easily accessible place near the work desk for future reference.



AX9869

# 6 SPECIFICATIONS

Item	Specification							
Optical system	UIS (Universal Infinity System) optical system							
Reflected light illumination	Reflected light illuminator (BX-RLA2), tube magnification 1X, super widefield (FN 26.5) compatible.							
	Available observations: ①Reflected light brightfield ②Reflected light darkfield ③Reflected light Nomarski DIC ④Reflected light simplified polarized light							
Electrical system	Rated input voltage: 100-120 V/220-240 V $\sim$ . 1.8 A/0.8 A, 50/60 Hz. Light intensity voltage range: 1.0 to 12.0 V DC (continuously variable) 12 V, 100 W long-life halogen bulb (pre-centered) 12V100WHAL-L (PHILIPS 7724) 12 V, 50 W long-life halogen bulb (pre-centered) 12V50WHAL-L (LIFE JC) Average life time: Approximately 2000 hr. when used as directed. Light preset switch: Preset voltage can be set arbitrarily between 1.0 and 12 V. Power consumption: 140 W							
Focusing system	Stage height movement by roller guide (rack & pinion) Stroke per rotation: 0.1 mm (fine), 17.8 mm (coarse) Full stroke range: 25 mm Upper limit stopper Tension adjustment on coarse focus adjustment knob.							
Revolving nosepiece	U-5RE-2 DIC slider insertion type: U-D6RE, U-D7RE, U-D5BDRE, U-D6BDRE, etc.							
Observation tube	U-BI30-2 Widefield binocular	U-TR30-2 Widefield trinocular	U-ETR3 Widefield erected trinocular	U-ETBI Widefield erected tilting binocular	U-SWTR-3 Super widefield trinocular	U-SWETR Super widefield erected trinocular	U-SWETTR2 Super widefield erected tilting trinocular	
	FN 22						FN 26.5	
	Tube tilting angle: Fixed			Tilting angle 25°	Tube tilting angle: Fixed			Tilting angle 35°
	Interpupillary distance adjustment: 50 to 76 mm							
Stage	U-SIC4R2/SIC4L2 Coaxial knobs on bottom right (left), 4 x 4 inch stage			U-SVRM/USVLM Stage with coaxial knobs on the bottom right (left)				
	Drive system: Rack & pinion drive Stroke: 100 Y-axis x 105 X-axis mm Y-axis lock: Fixing in Y-axis direction using a lock lever			Drive system: Wire drive Stroke 52 Y-axis x 76 X-axis mm X/Y-axis knob rotation tension adjustment available				
Operating environment	<ul style="list-style-type: none"> <li>• Indoor use.</li> <li>• Altitude: Max. 2000 meters</li> <li>• Ambient temperature: 5° to 40°C (41° to 104° F)</li> <li>• Maximum relative humidity: 80% for temperatures up to 31°C (88°F), decreasing linearly through 70% at 34°C (93°F), 60% at 37°C (99°F), to 50% relative humidity at 40°C (104°F).</li> <li>• Supply voltage fluctuations: <math>\pm</math>10%</li> <li>• Pollution degree: 2 (in accordance with IEC60664)</li> <li>• Installation (overvoltage) category: II (in accordance with IEC60664)</li> </ul>							