

BS-3090M Motorized Research Zoom Stereo Microscope



BS-3090M

Introduction

BS-3090M is a research level motorized zoom stereo microscope with infinite parallel Galileo optical system. Based on Galileo optical system and Apochromatic objective, it can provide real and perfect microscopic images on details. The excellent ergonomics and user-friendly operating system can truly allow users to experience a simple and comfortable work. The zoom ratio is 18:1, with 10× eyepiece, the magnification range is 7.5×-135×.

Users can use the controller to control the zoom magnification, focusing and illumination brightness, the LCD screen on the controller can display the working status of the microscope, the motorized stereo microscope can greatly improve the efficiency for your research works.

BS-3090M can meet the research demands of life sciences, biomedicine, microelectronics, semiconductors, materials science and other fields of research needs.

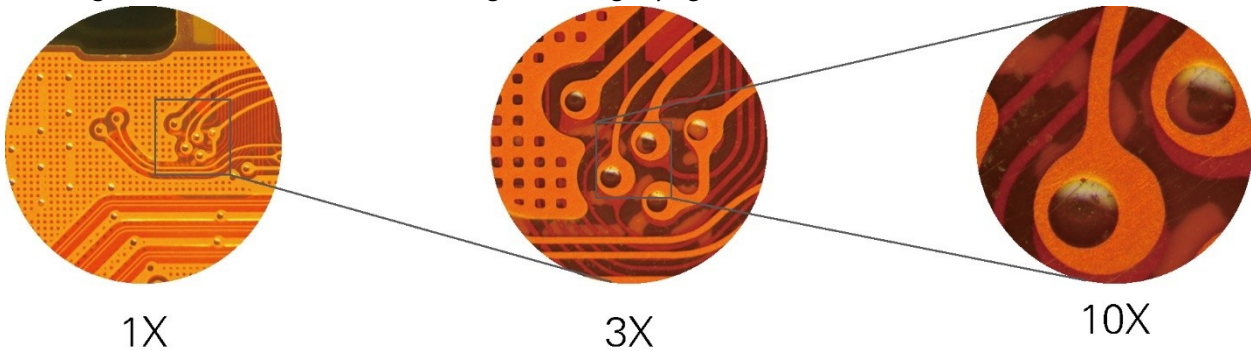
Feature

1. Trinocular viewing head for comfortable operation.

The interpupillary distance and diopter can be adjusted, users can operate the microscope with the most comfortable gesture. This can minimize the visual fatigue caused by long-term observation. Trinocular tube with C-mount can be used to connect different digital cameras.

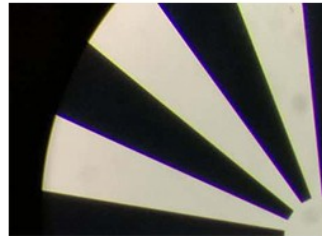
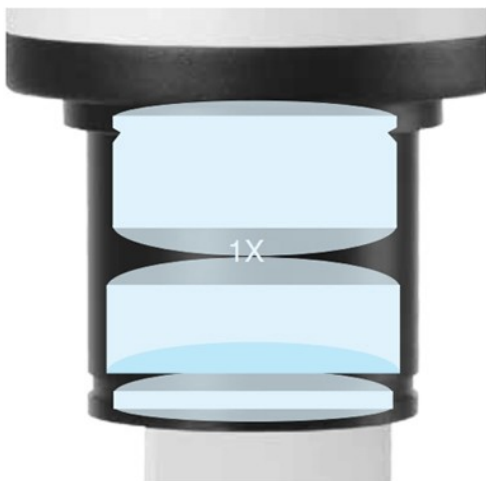
2. Large zoom ratio 18:1.

BS-3090M has large zoom ratio of 18:1, zoom range from 0.75X to 13.5X, with click stop for main magnifications, the images remain clear and smooth during zoom magnifying.

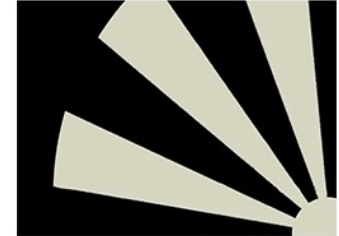


3. Apochromatic objective.

Apochromatic design has significantly improved the color reproduction of the objective. Correcting the axial chromatic aberration of red/green/blue/purple, and converge them on a focal plane, the objective is able to present the real color of the samples. The 1X objective is NA0.15.



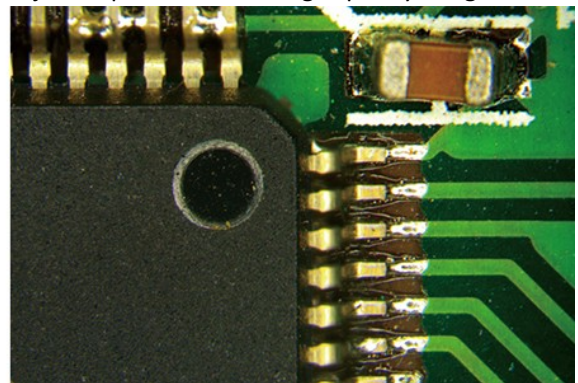
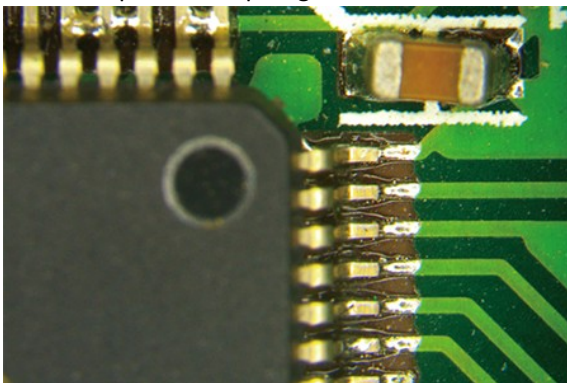
Other objective imaging



Apochromatic objective imaging

4. Aperture diaphragm adjustment.

Shift the aperture diaphragm lever in front of the microscope to adjust depth of field for high-quality image.



5. LED fluorescent attachment.

The EPI-Fluorescent Attachment is equipped with 5-hole turntable fluorescent modules, it can accommodate up to four fluorescent modules and one bright field module. Four band LED light source is used to change the light source color and adjust the brightness through the LED light source controller. It includes following parts:

- (1) Epi-fluorescent Attachment.
- (2) $1/4 \lambda$ Plate.
- (3) Control Box.
- (4) Light Shading Plate.
- (5) Light Source.
- (6) Bright Field Filter Cube.
- (7) Fluorescent Filter Cube

Fluorescent filters	Excitation	Dichroic Mirror	Barrier Filter
B Filter	BP460-495	DM505	BA510
G Filter	BP510-550	DM570	BA575
U Filter	BP330-385	DM410	BA420
R Filter	BP620-650	DM660	BA670-750
FL-FITC	BP460-495	DM505	BA510-550
FL-DAPI	BP360-390	DM415	BA435-485

FL-TRITC	BP528-553	DM565	BA578-633
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6. Motorize Controller

The controller can be used to control the zoom magnification, focusing and illumination brightness, the LCD screen on the controller can display the working status of the microscope.



Application

BS-3090M has great value in a variety of applications such as life science and medical research, including dissection, Zebrafish research, live cell imaging, IVF, biological experiment, chemical analysis and cell culture. It also can be used in Industrial areas for PCB, SMT surface, electronics inspection, semiconductor chip inspection, metal and materials testing, precision parts testing, coin collecting, gemology and gemstone setting, engraving, repair and inspection of small parts.

Specification

Item	Specification	BS-3090M	BS-3090MF(LED)
Optical System	Infinite Parallel Galileo Zoom Optical System	●	●
Viewing Head	20° inclined trinocular head; binocular: trinocular=100:0, 0:100; interpupillary distance 50-76mm; fixed eyepiece tube with lock screw	●	●
Eyepiece	High eye-point wide field plan eyepiece PL10×/23mm, diopter adjustable	●	●
	High eye-point wide field plan eyepiece PL15×/16mm, diopter adjustable	○	○
	High eye-point wide field plan eyepiece PL20×/12mm, diopter adjustable	○	○
Zoom Range	Zoom range: 0.75X-13.5X, click stop for 0.75×, 1×, 2×, 3×, 4×, 5×, 6×, 8×, 10×, 11×, 12×, 13×, 13.5×, with built-in aperture diaphragm	●	●
Objective	Plan Apochromatic Objective 1×, W.D.: 60mm, N.A.: 0.15	●	●
Zoom Ratio	1: 18	●	●
Focusing Unit	Motorized three-speed focusing, focusing range of 110mm. Through the remote-control box, three-speed motorized focusing can be realized. The focusing accuracy supports coarse focusing, fine focusing and ultra-fine focusing, and the highest accuracy≤0.01-0.1mm/s	●	●
Base	Plan base with transmitted LED illumination, glass insert plate size: diameter 180mm, with OIC function	●	●
Illumination	LED transmitted illumination, brightness adjustable	●	●

	LED Ring light	○	○
	Cold light source	○	○
Camera Adapter	0.5×/1× C-mount adapters	○	○
Fluorescent Attachment	EPI-Fluorescent Attachment with 5-hole turntable fluorescent modules, it can accommodate up to four fluorescent modules and one bright field module. Four band LED light source, brightness adjustable, with B, G, U, R fluorescent filters	○	●
Packing	1set/carton, Net/Gross weight: 20/22kgs, Carton size: 59×55×81cm	●	
	1set/2 cartons, carton 1: Net/Gross weight: 20/22kgs, Carton size: 59×55×81cm; carton 2: 38×45×26cm, Net/Gross weight: 7/8kgs		●

Note: ● Standard Outfit, ○ Optional

Sample Image

