

## BS-1080M Motorized Zoom Measuring Video Microscope



### BS-1080ML-BA4

#### Introduction

BS-1080M series motorized zoom measuring video microscope has motorized control of zoom magnification. These series microscopes have free calibration feature, the magnification can be shown on the screen. Working with different CCD adapters, auxiliary objectives, stands, illumination and 3D attachment, these series motorized zoom measuring video microscopes can meet most of the requirements in SMT, electronics and semiconductor areas.

#### Feature

1. 0.6-5.0X automatic electric zoom, smart cruise setting.
2. High precision optical system design, continuous cruise the center keep same, repeat precision can reach 0.001 $\mu$ m.
3. High precision electronic feedback system, No need PC. No need installing software, connect HDMI monitor directly.
4. Real time display the optical magnification and image magnification. User don't need calibrate again, measuring directly.
5. Modular design, various magnification CCD mount and auxiliary objective optionally, and supply different function modules, such as coaxial device, polarized coaxial device, fine focus objective device, DIC element etc.
6. Built-in smart measuring software. One click save high-definition images and measurement data, mouse operate directly, easy and convenient.

7. High hardness aluminum alloy material, anodic oxidation treatment, more durable in use.

8. Widely used in industrial inspection, SMT, circuit board, semiconductor, biomedical and scientific research ,etc.

## Main Function



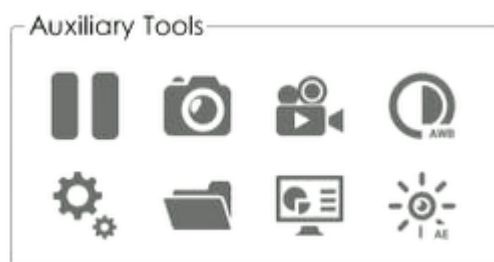
Real time display optical magnification and imaging magnification



Built-in high precision electronic feedback system, Smart cruise scanning setting



Measuring function:  
Support point, line distance, parallel lines, circle, arc, rectangle, polygon etc.



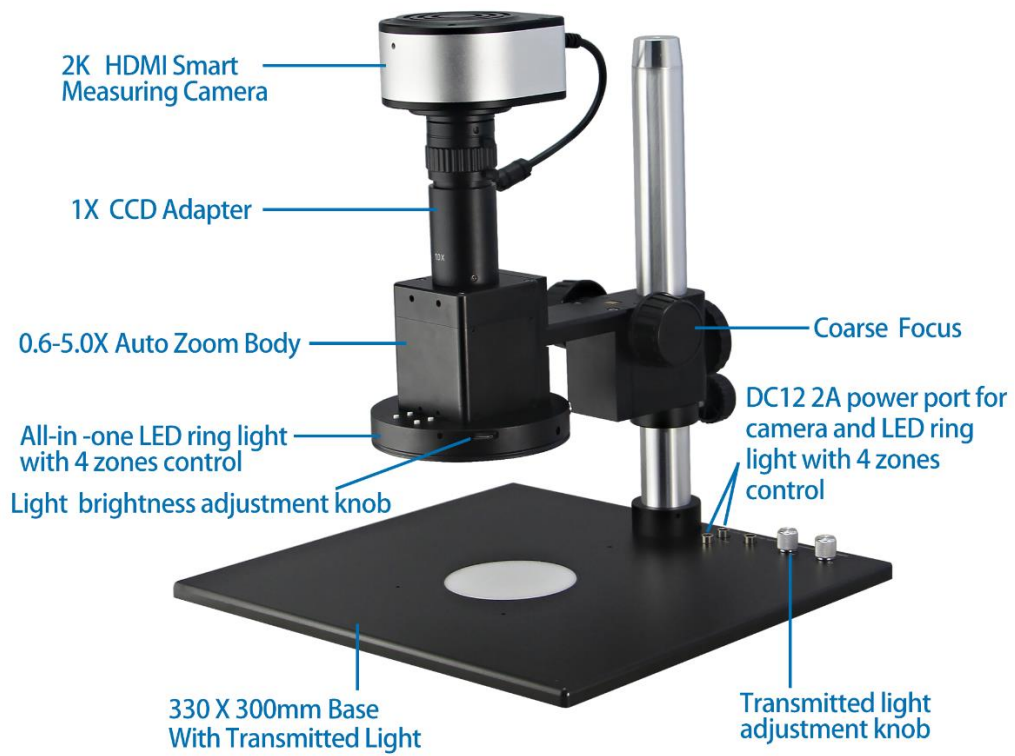
Automatic white balance, auto exposure, auto edge improve measuring precision.  
Take photo and vide to U disk.  
Preview image online.

**Optical Parameter**

Model		BS-1080M	
Lens	Optical Magnification	0.6-5.0X	
	Zoom method	Auto zoom	
	FOV	12x6.75-1.44x0.81mm	
	Total Magnification	28-240X(based on 15.6 inch monitor)	
	Working Distance	86mm	
Camera	Resolution	1920*1080	
	Frame	60fps	
	Sensor	1/2"	
	Pixel Size	3.75x3.75 $\mu$ m	
	Output	High resolution HDMI output	
	Light Source	LED Ring Light with 4 Zones Control	
	Measuring function	Support measuring of point, line, parallel lines, circle, arc, angle, rectangle, polygon etc.	
	Save function	Take photo and video to U disk	
Stand	Base size	330*300mm	
	Height of post	318mm	
	Focus	Coarse focus	
Light	Ring light	12V 13W all in one LED ring light with 4 zones control 228PCS LED quantity	
	Transmitted light	12V 5W transmitted light	

Magnification	Working distance	FOV	Depth of Field	NA	Resolution
0.6X	85.6mm	12x6.75mm	3.12mm	0.021mm	0.016mm
0.8X	85.6mm	9x5.06mm	2.04mm	0.025mm	0.014mm
1.0X	85.6mm	7.2x4.05mm	1.21mm	0.033mm	0.010mm
2.0X	85.6mm	3.6x2.03mm	0.38mm	0.053mm	0.006mm
3.0X	85.6mm	2.4x1.35mm	0.20mm	0.067mm	0.005mm
4.0X	85.6mm	1.8x1.01mm	0.13mm	0.079mm	0.004mm
5.0X	85.6mm	1.5x0.81mm	0.09mm	0.090mm	0.004mm

**Product Pictures**



BS-1080ML-BA1L



BS-1080M Main body



BS-1080MC Main body(With coaxial device)



BS-1080ML-BA1



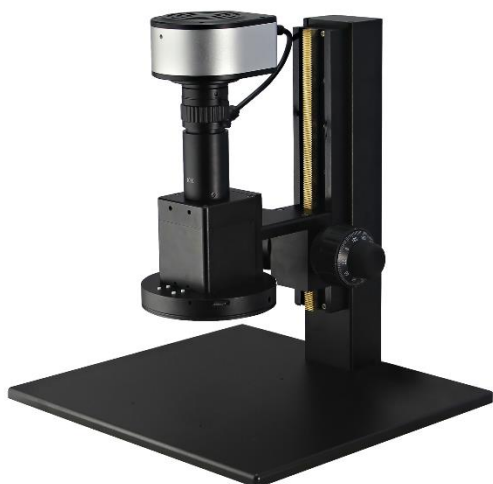
BS-1080ML-BA1L



BS-1080ML-BA2



BS-1080ML-BA2L



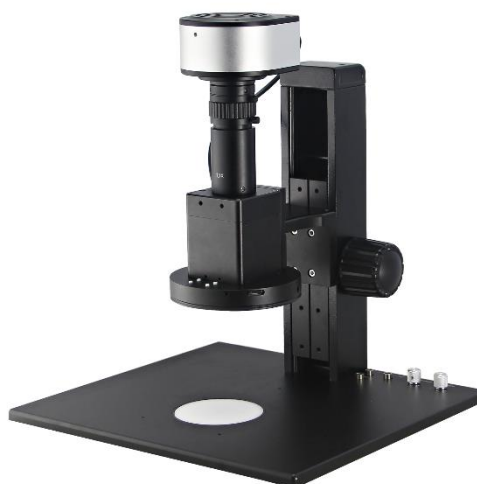
BS-1080ML-BA3



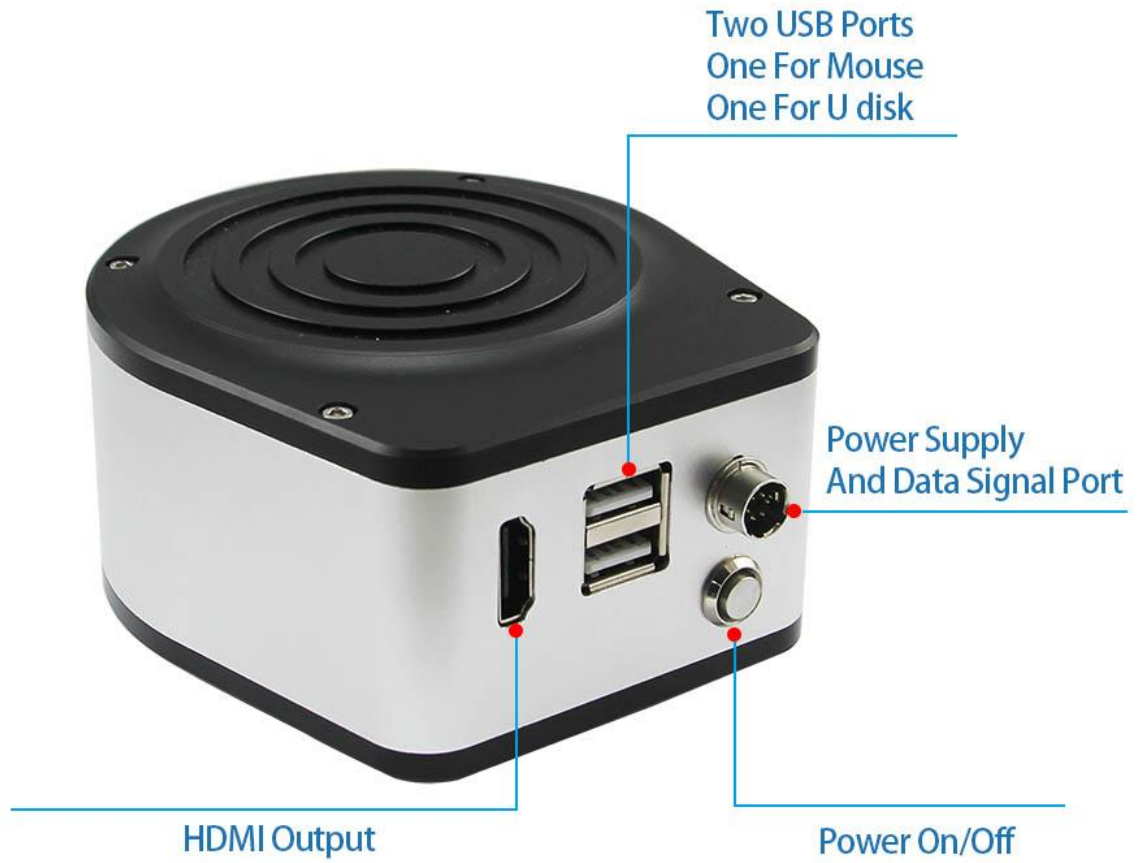
BS-1080ML-BA4



BS-1080ML-BA9



BS-1080ML-BA9L



Digital Camera Diagram

Optional Accessories



CCD adapter



Auxiliary objective



Coaxial device



Polarized coaxial device



LED point light



LED point light with Program controlled



Side LED ring light



LED bar light



Infinity Plan Achromatic Objective



95mm M Plan Apo Objective



Model	Name	Specification
<b>CCD adapter</b>		
BM108021	0.3X CCD mount	Standard C-mount
BM108022	0.45X CCD mount	Standard C-mount
BM108023	0.5X CCD mount	Standard C-mount
BM108024	0.67X CCD mount	Standard C-mount
BM108025	0.75X CCD mount	Standard C-mount
BM108026	1X CCD mount	Standard C-mount
BM108027	1.5X CCD mount	Standard C-mount
BM108028	2X CCD mount	Standard C-mount
BM108029	3X CCD mount	Standard C-mount
<b>Auxiliary objective</b>		
BM108030	0.3X Auxiliary objective	Use with 1X objective, working distance 270mm
BM108031	0.4X Auxiliary objective	Use with 1X objective, working distance 195mm
BM108032	0.5X Auxiliary objective	Use with 1X objective, working distance 160mm
BM108033	0.6X Auxiliary objective	Use with 1X objective, working distance 130mm
BM108034	0.75X Auxiliary objective	Use with 1X objective, working distance 105mm
BM108035	1.5X Auxiliary objective	Use with 1X objective, working distance 50mm
BM108036	2.0X Auxiliary objective	Use with 1X objective, working distance 39mm
BM108047	Coaxial device	Use with $\phi$ 11mm LED point light
BM108048	Polarized coaxial device	Use with $\phi$ 11mm LED point light
BM108049	11mm LED point light	3W, brightness adjustment, used for LC6511 and LC6511P
BM108050	11mm LED point light with Program controlled	3W, brightness adjustment, used for LC6511 and LC6511P
<b>Infinity Plan Achromatic Objective</b>		
BM108037	Infinity Plan Achromatic Objective	Mag. 5X; Numerical Aperture:0.12; W.D. 26.1mm
BM108038	Infinity Plan Achromatic Objective	Mag. 10X; Numerical Aperture:0.25; W.D. 20.2mm
BM108039	Infinity Plan Achromatic Objective	Mag. 20X; Numerical Aperture:0.40; W.D. 8.8mm
BM108040	Infinity Plan Achromatic Objective	Mag. 40X; Numerical Aperture:0.60; W.D. 3.98mm
BM108041	Infinity Plan Achromatic Objective	Mag. 50X; Numerical Aperture:0.7; W.D. 3.68mm
BM108042	Infinity Plan Achromatic Objective	Mag. 60X; Numerical Aperture:0.75; W.D. 1.22mm

BM108043	Infinity Plan Achromatic Objective	Mag.60X; Numerical Aperture:0.7; W.D. 3.18mm
BM108044	Infinity Plan Achromatic Objective	Mag.80X; Numerical Aperture:0.8; W.D. 1.25mm
BM108045	Infinity Plan Achromatic Objective	Mag.100X; Numerical Aperture:0.85; W.D. 0.4mm
<b>95mm M Plan Apo Objective</b>		
BM108046	95mm M Plan Apo Objective	Mag.: 2X; N.A.: 0.055; W.D: 34.6mm
BM108047	95mm M Plan Apo Objective	Mag.: 3.5X; N.A.: 0.1; W.D: 40.93mm;
BM108048	95mm M Plan Apo Objective	Mag.: 5X; N.A.: 0.13; W.D: 44.5mm
BM108049	95mm M Plan Apo Objective	Mag.: 10X; N.A.: 0.28; W.D: 34mm
BM108050	95mm M Plan Apo Objective	Mag.: 20X; N.A.: 0.29; W.D: 31mm
BM108051	95mm M Plan Apo Objective	Mag.: 50X; N.A.: 0.42; W.D: 20.1mm