

BS-2043BD1 LCD Digital Biological Microscope



BS-2043BD1

Introduction

BS-2043BD1 LCD digital biological microscope is a high quality biological microscope with a 4.0MP high sensitive camera and 10.1" tablet PC with Android system, which are ideal choice for basic research and teaching experiments. With infinity color correction optical system and excellent compound eye illumination system, BS-2043 can get uniform illumination, clear and bright images at any magnification.

User-friendly design, simple and convenient operation, even students can easily operate. Maintains excellent reliability and durability, suitable for high-intensity use in the education area.

Feature

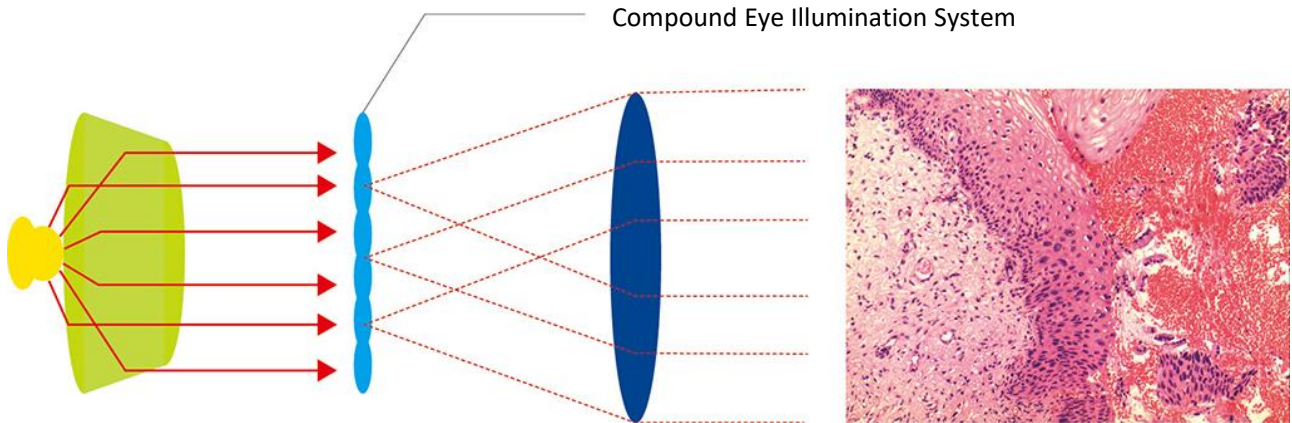
- 1. Infinite Color Corrected Optical System provides sharp and comfortable images.**
- 2. User-friendly Design to Increase Comfort and Safety.**

BS-2043 series microscope body adopts a smooth curve design, eliminating all sharp edges, rackless stage is optional; the frame has handles for easy handling; the microscope is stable, compact and beautiful, the charging adapter is built-in, saving laboratory space.

- 3. Compound Eye Illumination System provide uniform and comfortable illumination.**

BS-2043 innovatively adopts the compound eye illumination system to improve the contrast rate and effectively improve the illumination uniformity of the specimen surface. The brightness of the entire field of view is uniform. Even at the edge of the field of view, uniform and bright background brightness can be

achieved under any magnification. Soft light, not harsh, not only the imaging effect is more ideal, but also can reduce the sense of fatigue, improve the observation experience and working efficiency. The LED light source is environment-friendly. Compared with halogen lamps, it consumes less energy and provides about 100,000 hours of sustainable lighting.



4. Continuous Adjustable Light Intensity, Easy to Operate.

The dimming knob is equipped on the right side of the microscope frame, which can easily adjust the illumination brightness by gently rotating. Continuous adjustable light intensity can effectively overcome the brightness jump phenomenon in traditional microscopes, and avoid the dizziness caused by instantaneous strong light.



5. Easy to Store Power Cord.

BS-2043 has a storage box on the back, which makes full use of the built-in space of the body and can be used to store the power cord conveniently. BS-2043 is designed to make your desktop clean and tidy.

6. With various optional accessories, easy to achieve observation methods of bright field, phase contrast, simple polarization, dark field and others.

(1) Bright Field Observation.

The compound eye illumination system is equipped with professional plan achromatic objectives and has bright imaging. It can be used to observe cell structures and analyze plant slices.

(2) Phase Contrast Observation.

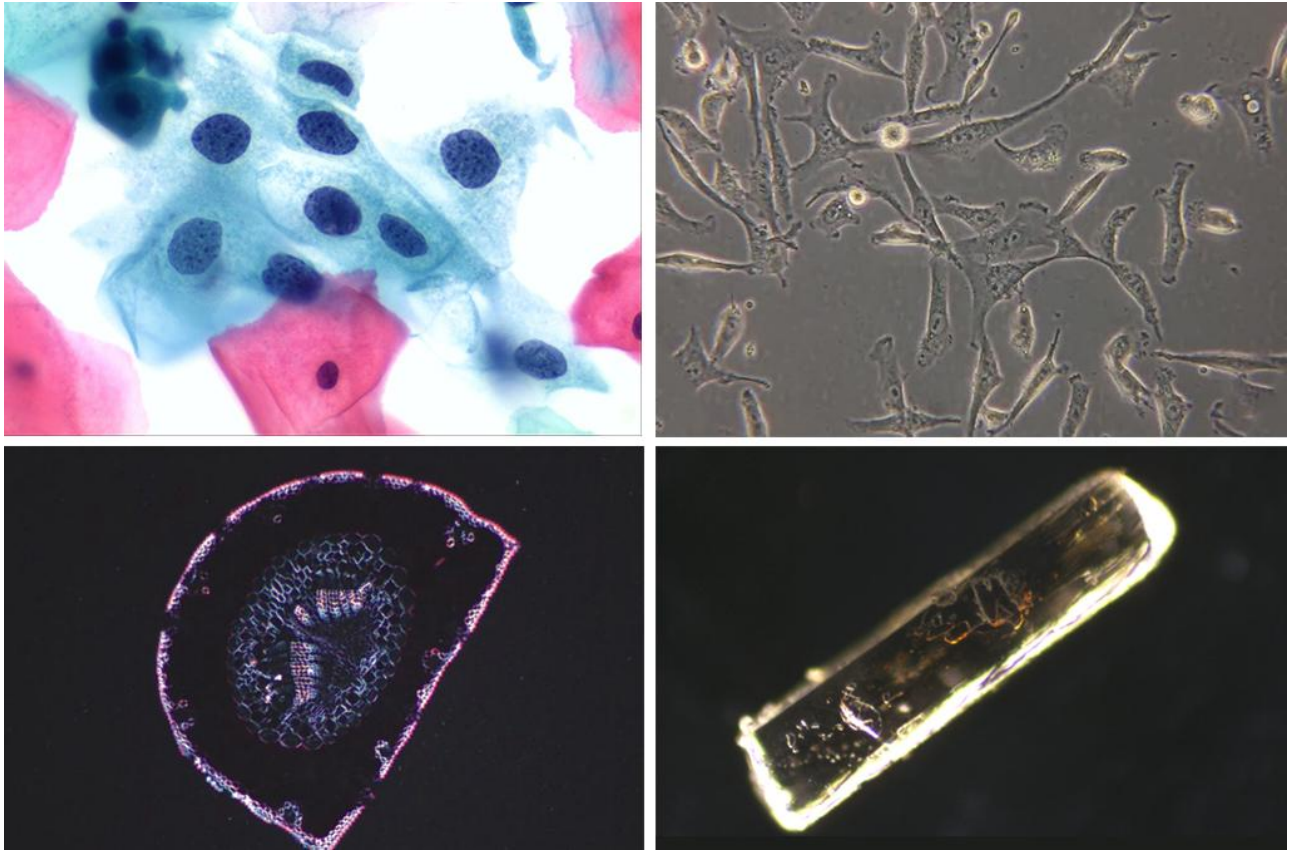
It is applicable to observe the specimens with high transparency, such as cells, bacteria and other small, transparent objects in biological specimens.

(3) Simple Polarization Observation.

It can judge substances with birefringence characteristic such as animals, plant cells and humoral crystals.

(4) Dark Field Observation.

There is no need to replace the special dark field condenser, as long as the dark field plates are inserted into the condenser and the diaphragm is switched, the dark field lighting can be realized.



From left to right, up to down is:

- ① Endometrial Carcinoma 40X Bright Field
- ② Adherent Cells 10X Phase Contrast
- ③ Pine Needles 10X Polarization
- ④ Sodium Glutamate Crystal 10X Dark Field

7. Flexible to operate.

The microscope camera has a 10.1" touch screen, it could be controlled by buttons, this camera also could be controlled by mouse.

8. Multi output.

The microscope camera has multiple output, USB and HDMI output simultaneously or WIFI and DHMI output simultaneously, there is no interference.

9. Excellent imaging performance.

The microscope camera supports auto and manual white balance, it could capture sharp and real images. The frame rate of 1080P could reach 30fps. The camera also has wide dynamic range, it could improve the image performance in the light and dark area.

Application

BS-2043BD1 LCD digital biological microscope is an ideal instrument in biological, pathological, histological, bacterial, immune, pharmacological and genetic fields. It can be widely used in education, medical and sanitary

establishments, such as schools, hospitals, clinics, laboratories, medical academies, colleges, universities and related teaching labs and research centers.

Specification

Item	Specification	BS-2043BD1	
Camera	Display: 10.1 inch LCD touch screen, wide angle display	●	
	Sensor: CMOS 4.0 mega pixels sensor, with WDR technology	●	
	System Support: Windows 7, 10, iOS10, Android5.1.1	●	
	Resolution: 15fps@2688×1520, 30fps@1920×1080	●	
	Interface: HDMI, USB2.0, mini USB2.0, WIFI	●	
	Operation System: Android system, built-in 16G memory(10G usable)	●	
	Power Supply: 12V 3.3A	●	
	Accessories: HDMI cable, USB cable, 16G SD card	●	
Optical System	Infinite Color Corrected Optical System	●	
Viewing Head	Seidentopf trinocular head, 30° inclined, Interpupillary 47-75mm, Light splitting ratio: Eyepiece:Trinocular=8:2, eyepiece tube: Ø23.2mm	●	
Eyepiece	High eyepoint wide field plan eyepiece PL 10×/20mm with adjustable diopter	●	
	High eyepoint wide field plan eyepiece PL 10×/20mm with adjustable diopter, with eyepiece micrometer	○	
	Eyepiece pointer	○	
	Eyepiece micrometer	○	
Objective	Infinite plan Achromatic Objectives	4×, NA=0.10, WD=11.9mm	●
		10×, NA=0.25, WD=12.1mm	●
		20×, NA=0.40, WD=1.56mm	○
		40×(S), NA=0.65, WD=0.36mm	●
		60×(S), NA=0.85, WD=0.3mm	○
		100×(S, Oil), NA=1.25, WD=0.21mm	●
	Infinite Plan Phase Contrast Objective	10×, NA=0.25, WD=12.1mm	○
		20×, NA=0.40, WD=1.56mm	○
		40×(S), NA=0.65, WD=0.36mm	○
		100×(S, Oil), NA=1.25, WD=0.21mm	○
Nosepiece	Reversed Quadruple Nosepiece	●	
	Reversed Quintuple Nosepiece	○	
Stage	Double Layers Mechanical Stage 150mm×140mm, moving range 76mm×50mm, double slide holder, accuracy: 0.1mm	●	
	Rackless Double Layers Mechanical Stage 150mm×162mm, moving range 76mm×50mm, double slide holder, accuracy: 0.1mm, Wear-resistant and anti-corrosion treatment on the stage surface	○	
Condenser	N.A.1.25 compound eye illumination condenser group (with plug-in phase contrast and dark field plate slot), condenser preset center and height adjustable	●	
Focusing	Low position coaxial focusing system, moving range 25mm, with upper limit and tightness adjustment, fine division 0.002mm	●	
Illumination	Adaptive 100V-240V switching power supply, single high brightness 3W LED (cold/warm color optional, cold color temperature 4750K-5500K, warm color temperature 2850K-3250K) (preset center), light intensity can be continuously adjusted	●	

Filters	Blue filter Φ 45mm	○
	Green filter Φ 45mm	○
	Yellow filter Φ 45mm	○
	Neutral filter Φ 45mm	○
Polarizing Kit	Polarizer	○
	Analyzer	○
Dark Field Plate	Dark field insert plate (used for 4x-40x objectives)	○
Centering Telescope	Centering Telescope Φ 23.2mm (used with phase contrast plate and objective)	○
Phase Contact Plate	10x, 40x Phase Contact Insert Plate (used for 10x, 40x phase contrast objectives)	○
	20x, 100x Phase Contact Insert Plate (used for 20x, 100x phase contrast objectives)	○
C-mount Adapter	0.35x C-mount adapter, adjustable	○
	0.5x C-mount adapter, adjustable	○
	0.65x C-mount adapter, adjustable	○
	1x C-mount adapter, adjustable	●
Packing	1 set/carton, 58x56x28cm, GW: 10kgs, NW: 8kgs	●

Note: ● Standard Outfit, ○ Optional