



OPTO-EDU (BEIJING) CO., LTD.

A11.1323

Biological Microscope

Instruction Manual



Please read this manual carefully before use microscope!



A11.1323 is a very good choice for student, especially appreciated when budget is limited. All models are equipped with AC110/220V and internal battery, which can meet your different needs. Achromatic 4X, 10X, 40X objective enable utmost 400X optical magnification, which can clearly observe biological slices, biological cells, bacteria and living tissue culture etc.

A11.1323 Student Microscope	
Head	Monocular Head, 45° Inclined, 360° Rotatable
Eyepiece	WF10X
Objective	Achromatic 4X
	Achromatic 10X
	Achromatic 40X, Spring
Nosepiece	Triple Revolving Nosepiece
Stage	Plain Stage With Specimen Clips, Size 90x90mm
Condenser	Single Lens N.A.0.65 With Six-holes Disc Diaphragm
Focusing	Coaxial Coarse & Fine Focusing Adjustment, With Safty Stop
Light Source	LED Light
Power Supply	External AC/DC Adaptor, Or By 3xAA Batteries(Not Included)
Size	16x11x31cm, Net Weight 1.7KG

Student microscope is designed for tertiary institutions and primary and secondary schools, which convenient to observe biological slices, biological cells, bacteria and living tissue culture, fluid precipitation observation and research. It is widely used in teaching demonstration, biochemical experiments, clinical research ect.

How to Use

1. Open the package and take out the microscope, insert the desired eyepiece, put on the rubber eyepiece cover and tighten the anti-theft screws (ensure the eyepiece free rotation)
2. Take off the objective cover, switch on. Select appropriate light source (top light or bottom light).
3. Put the objects in the centre of stag, then adjust the focusing knob. Observe the right eyepiece to make the image clear (depending on the situation to select brightness).



Adjust the left diopter again to make left and right images both clear.

4. Rotate objective cover, select appropriate objective multiple.

5. When needed, can be screwed into auxiliary objective at the bottom of the lens cover.

6. If feel the torque too tight when using, rotate the focusing knob arduously; Or the torque too light, observing head auto-drop down, please use wrench to adjust the torque of inside focusing knob to be appropriate.

Maintenance and Care

1. Whether the instrument in use or storage, should avoid dust, humidity, cold, heat or PH steam.

2. Chemicals shall not be placed near the instrument, even more in the microscope cabinet (except desiccant).

3. When not in use, the whole instrument should be covered by dust cover to keep it clean. If there is dust on the lens surface, don't wipe it by hand, only by brush.

4. If there is dust on the lens surface, can use clean old linen or cotton cloth dipped in a small amount of pure alcohol and ether mixture (1:1), or benzoline and xylene to wipe gently. Don't touch the lens surface by finger.

5. Due to time, grease on gear, rack, sliding groove surface and sliding cylinder will bond with dust into dirt or hardened, lead to rotating the coarse knob difficultly, can use xylene to clean, then add a little acid-free animal grease or acid-free Vaseline, can't use other grease.

6. When microscope and eyepiece are not in use, should be covered with cloth or glass to prevent dust.