

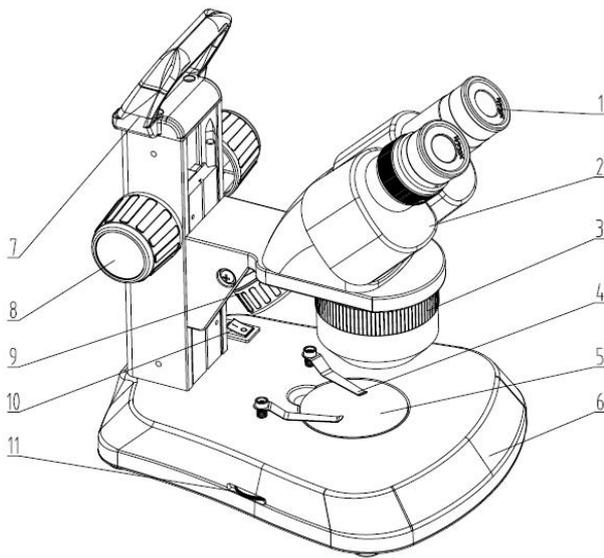
1309 Stereo Microscope Operation Manual

Please read carefully before using the microscope

1. Applications

Widely used in electrical industry, assembly and inspection of precision instrument, dissection and study of propagation, also applied in field of school, carving, geology, archeology etc.

2. Name of the parts and accessories



1. Eyepiece
2. Prism Box
3. Objective cover
4. Clips
5. Working stage
6. Base
7. Handle
8. Focusing Knob
9. Incident Illumination
10. Power Switch
11. Dimmer

3. Main Data

1) Optical Data (mm)

Eyepiece		WF5×	WF10×	WF15×	WF20×	
Objective	1×	Field of View	22	20	15	10
		Working Distance	57	57	57	57
	2×	Field of View	12	10	7.5	6.5
		Working Distance	80	80	80	80
	3×	Field of View	8	6.7	5	4.3
		Working Distance	61	61	61	61
	4×	Field of View	6	5	3.7	3.2
		Working Distance	57	57	57	57

(Note: Objective:1X/2X/3X or 1X/2X/4X. Optional eyepiece WF5X,WF15X,WF20X)

2) Electrical Data

Power Supply: 3*1800mA Rechargeable batteries

Input Voltage: 4.5V 1A

Lighting System: Incident Illumination 1*1W LED, transmitted Illumination 5*20mA LED, separated brightness adjustment system

3) Structure data

Eyepiece: WF10X Objective: 1X/2X/3X or 1X/2X/4X

45° inclined binocular head, left ocular-tube is with diopter adjustment $\pm 5\text{dp}$, the interpupillary distance is between 54~76mm

4. Operation

1) Environment

Dry and dustless room, temperature between $-5^{\circ}\text{C}\sim+40^{\circ}\text{C}$.

2) Power control

Turn on the switch, adjust the brightness of Incident and Transmitted light by the two dimmers.

3) Selecting of working stage

a) Normally frosted glass stage equipped with microscope when packing, locked by screw. You can use transmit light to observe transparent object.

b) Black and white working stage is packed with the microscope accessories for choice. When use, please loosen the screw and take off the glass stage. Normally use the white side. For white or other transparent object, you need to use black side to improve the contrast with Incident light.

4) Usage of eye's cover

The eye's covers are packed with the microscope as accessory. Please put them on the eyepiece when you need.

5) Focusing、 Changing magnification、 Adjusting diopter & interpupillary distance

Place the specimen on the centre of the working stage, rotate magnification knob (or objective cover) to a high power, then turn the knob slowly till you can see clearly image on right eyepiece; Then observe through left eyepiece, adjust diopter if not clear, then turn around the left and right prism house till the interpupillary distance are suitable. If need to change the magnification, just turn around magnification knob (or the objective cover). If necessary, you can adjust head's height by locking knob.

6) Battery and adapter

This model use battery and AC adapter for power supply.

When use battery, please open battery box and put 3pcs batteries in it. Then close the battery box.

When use AC adapter, please input the plug to the socket on microscope.

5. LED lamp and battery replacement

1) Replace the incident bulb

Firstly remove objective cover via taking off 4 screws. Secondly take off the lampshade, replace the burned bulb with new bulb by input the feet to the porcelain socket fully. Then set the lampshade on again.

2) Replace the transmitted bulb

Firstly loosen the screw, then take off frosted glass and filter, take out the burned bulb and replace with new bulb by input the feet on the porcelain socket fully, at last set back the frosted glass and screw.

Note: Usually longer pins means anode.

3) Replace battery

Open battery box under base of microscope, take out old batteries and replace new batteries. Please put out batteries when don't use for long time.

6. Maintaining and storage

- 1) Microscope is a precision instrument, you should place carefully, avoid impact during transportation.
- 2) Put it in a dry and clean place, avoid high temperature and shock.
- 3) Do not touch the lens directly by your finger.
- 4) Keep the optical surface clean, dust on the surface you can wipe off by hair drier.
- 5) Do not use organic things to wipe the surface of microscope, especially plastic surface, please clean with neutral scour.
- 6) All the optical and mechanism part are adjusted and could not take apart by yourself.
- 7) Add grease on moving part regularly.
- 8) Put the microscope in a cool and dry place and cover it with dust cover when not be used for a long time.