STALWART

Instruction Manual

Stereo Microscope

STM-3040 Series

This instruction manual is for the microscope STM -3040. To insure safety and obtain optimum performance and familiarize yourself fully with the use of this microscope .We recommend that you read the manual thoroughly before operating the microscope ,Attain this manual instruction in an easily accessible place near the microscope for the further reference.

CONTENT STM-3040

	CONTENT.	1
	Before use	2
1.	NAME OF CONPONTENTS.	3
2.	Assemblage	4
	2. 1 Figure	4
	2. 2 Process	5
3.	Adjustment	7
	3. 1 Binocular head	7
	3. 2 Stand	8
4.	Technical parameter	9
5.	Trouble shooting9)
6.	• Outfit 10)

BEFORE USE STM-3040

1. Notice

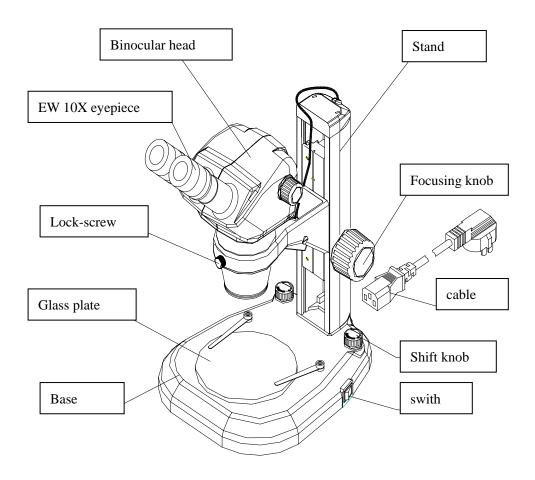
1. The microscope is composed of precision components , Handle with care to prevent abrupt.

- 2. Check the input voltage :be sure the input voltage which signed in the back of the microscope is consistent with the power supply voltage ,or it will bring a serious damage to the instrumnet .
- 3. Microscope should be place dry and clean place., Do not expose the microscope in the sun directly ,Avoiding high temperature and violent vibration.
- 4. Handle stand with one hand and the base with another hand when moving microscope.
- 5. If the bacterium solution or the water splash to the stage ,objective or viewing tube,pull out the cord at once ,and wipe up the microscope .Othervise ,the instrumnet will be damaged
- 6. The microscope illumination house will get hot when operating. Make sure enough room to disperse heat.
- 7. Connect with land to prevent lighting strake.
- 8. Professional people to take the electronic conponents to prevent electricity strake
- 9. Use the factroy supplied power cord ,pleased

2. Maitenance

- 1. All lenses had been precisely adjusted and do not take the microscope apart.
- 2. Do not take the Binocular head and focusing system apart ..
- 3. The instrument should be kept clean ,and prevent pollution while cleaning.
- 4. Wipe glass components softly, fingerprints and oil marked on it should be wipe off with a tissue moistened with a small mount of xylene or a 3:7 mixture of alcohol and ether
- 5. Never use the organic solution to clean the other surface, if necessary ,pleased choose neutral detergent.
- 6. Turn off electricity if microscope is moistured when operating .then wipe it off...
- 7. Do not take any parts of microscope apart, or else effecting microscope function.
- 8. The instrument should be kept in dry place .cover the microscope with the dust cover after the illumination house temperature come down $_{\circ}$

1. NAME OF CONPONTENTS



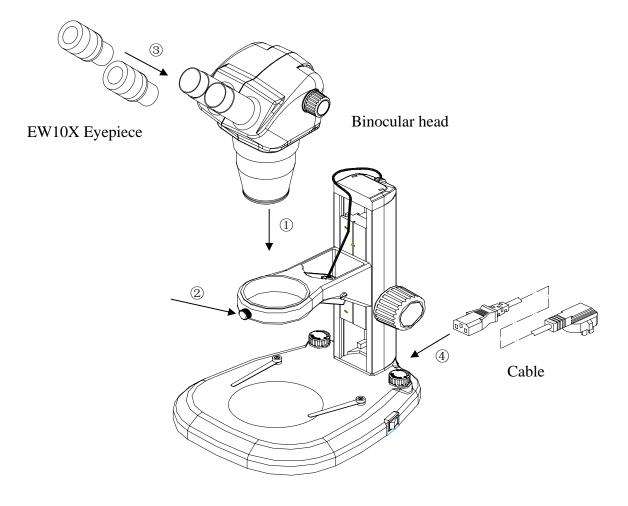
STM-3040 ZOOM STEREO MICROSCOPE

2. Assembly STM-3040

2.1 Assembly gragh

Gragh below indicate the assembly process.

ullet Check it is clean before assembling. do not scratch any components and the surface of glass $_{\circ}$



Stand

2.2 Assembly process

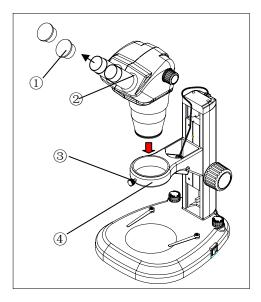


Fig 1

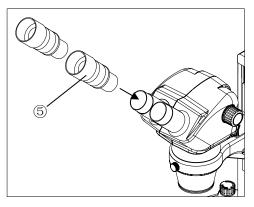


Fig 2

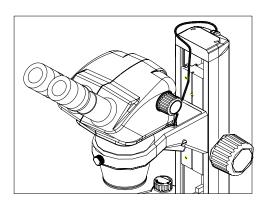


Fig3

2.2.1 Assembly binocular head(fig. 1)

Loosen the lock-screw ③ of stand④, put the binocular head ② into the hole of stand, tight the lock-screw。

2.2.2 eyepiece assembly(fig1\, fig2)

Take the dust cover① apart of binocular head②. Insert the 2pcs WF10X eyepiece into tube. The rubber on the eyepiece prevent extra light.Take away the rubber when observating with galsses

Working condition:

- 1. temperature: 0° C \sim 40 $^{\circ}$ C,
- 2 . Hot or moisture will damage the $instrument_{\,\circ}$
- 3. Place the instrument in a clear condition. cover it the instrument when no using
 - 4. The microscope should be placed without vibration

STM-3040

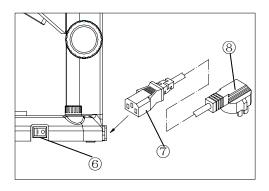


Fig 4

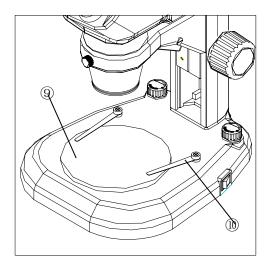


Fig 5

2.2.3Cable connecting (fig.4)

- 1. Turn to "O" position 6 before connecting power 7 .
- 2. Insert the pin ⑦into microscope plug safely ...
- 3. Insert the pin ®into the power plug.

2.2.4 Use the glass stage(fig.5)

Set the glass stage plate @ on the center of base, clamp the slide with two clips @ when using the plate.

- Using LED light illumination.
- Input: 100V~240V。

3. Adjustment STM-3040

3.1 Binocular head

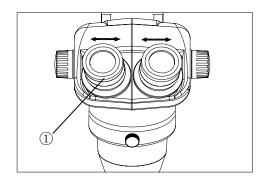


Fig 5

Interpupillary adjustment (fig.5)

Adjusting Interpupillary after observation for another one using \circ Hold the two tubes, ① adjust interpupillary to obtain a clear image. \circ

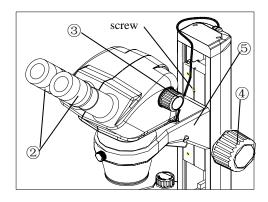


Fig6

3.1.2 doipter adjustment(fig.6)

- 1. Turn the doipter adjusting rings ②to the zero
- 2. Set the sample on the stage •
- 3. Turn the zoom adjusting knob³ to the 5X position, focusing the sample.
- 4. Turn the zoom knob③ to 0.8X position.

 Observe though the left side eyepiece.

 Adjusting the adoipter ring ② to focus sample. then look though the right eyepiece, adjusting the adoipter ring② to focus sample. •
- 5. Repeat process 3 and process 4 untill the image was located on focus, the image also the clear when change the magnification.
- working distance :115mm,set up the tray if necessary .
- operating: take the lock-screw down by screwdriver. Driver up the tray ⑤to a higher lock-screw hole. Tighten it。

3. 2 Stand

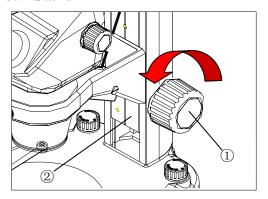


Fig 7

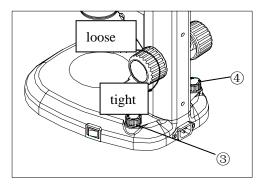


Fig 8

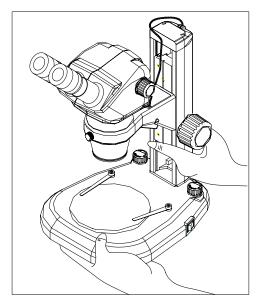


Fig 9

3.2.1. focusing knob adjustment (fig7, fig8)

- 1. Pull down the skateboard ②by focusing knob① in a low position to prevent the microscope head drop because of focusing knob loosen。
- 2. Hold two side focusing knob①. Left focusing knob keep still, turn the right focusing knob. Move up or down according to the strength of right focusing knob.降。
- 3. Light adjustment: adjust base illumination with right side knob③. Adjust Top illumination by left side knob④...

Attention:

- 1. Clean the touch-area after observing contagious sample.
- 2. Take away sample before move microscope.
- 3. Hold the stand and the base to prevent incline during move microscope.

STM-3040

4. Technical parameter

4.1 Zoom ratio: 6.1: 1

4.2 Zoom range: $0.8 \times \sim 5 \times$

4.3 Eyepiece: Φ 22 $10 \times$ Wide field ,interpupillary adjustable

4.4 Binocular head: incline at 45, interpupillary range:52~75mm

4.5 Working distance: 115mm4.6 range of movement: 105mm

4.7 Illumination: LED lamp illumination 4.8 input: $100\text{-}240\text{V}\sim$, 0.15A, 50/60HZ

5 Trouble shooting

The function of microscope will no work efficiently for the unfamiliar using. Check the table below if meet some troubles, then take proper action. Ask sales agent if the trouble will no be tackled after check.

To be a control of the control of th							
Trouble	Cause	Remedy					
1. Double images	Interpupillary distance	Readjust it					
	is not correct						
	Diopter adjustment is	Readjust it					
	not correct						
2. Dirt appears in the view	Dirt on the specimen	Clean specimen					
field	Dirt on the surfaces of	Clean eyepieces					
	eyepieces						
3. Image is not clear	Dirt on the surface of	Clear objectives					
	objectives						
4. Image is not clear while	Diopter adjustment is	Readjust diopter					
focusing change	not correct						
	Focusing is not correct	Readjust it					
5. The focusing knob is not	The focusing knob is	Loosen it to a suitable					
smooth	too tight	position					
6. The image is obscure	The focusing knob is to	Tighten it to a suitable					
because of the head	o loosen	position					
slipping down during							
observation							

6. Outfit STM-3040

Components	Specification	Quantity	Standard Outfit
Body	Main body stand	1	Standard
head	Binocular zoom head	1	Standard
Illumination	Transmit(LED)	1	Standard
	Reflex(LED)	1	Standard
	Ring fluorescence lamp		Optional
	10×eyepiece	2	Standard
eyepiece	20×eyepiece		Optional
Objective	0.5×auxiliary objective	1	Optional
	2×auxiliary objective		Optional
01 1 1	Black and white board	1	Standard
Observe board	Glass board	1	Standard
Cable	Cable	1	Standard