

# **TEKSCOPE**

## **STEREO MICROSCOPE**

### **S/ST SERIES**

#### **INSTRUCTIONS**



This instruction manual is for the Stereo Microscope SST series. To ensure the safety and obtain optimum performance and familiarize yourself fully with the use of this microscope, we recommend that you read this manual thoroughly before operating the microse. Retain this instruction manual in an easily accessible place near the microscope for

further reference.

## CONTENTS

BEFOREUSE.....	1
1.Nomenclature.....	2
2.Operation	
2-1 Set the specimen.....	4
2-2 Mumunate.....	4
2-3 Adjust focus.....	4
2-4 Adjust the interpupillary distance.....	5
2-5 Replace the slide-in objective.....	5
2-6 Replace the lamp.....	5
3.Configuration chart.....	6
4.Technical parameter.....	10
5.Troubleshooting.....	12

## **1. Before use** **ST30/40 SERIES**

### **1-1 NOTICE**

- 1) Microscope is a precision instrument, so handle with care, avoiding impact or abrupt movement during transportation.
- 2) Microscope ought to be placed in a dry and clean place. Do not expose the microscope in the sun directly. Avoid high temperature and violent vibration. Following environment is required: Indoor temperature: 0°C-40°C, Max relative humidity: 85%.
- 3) To keep the image clear, do not leave fingerprints or stains on the surfaces of the lens.
- 4) Check to ensure the power-supply voltage is consistent with your microscope's voltage rating before use.

### **1-2 MAINTENANCE**

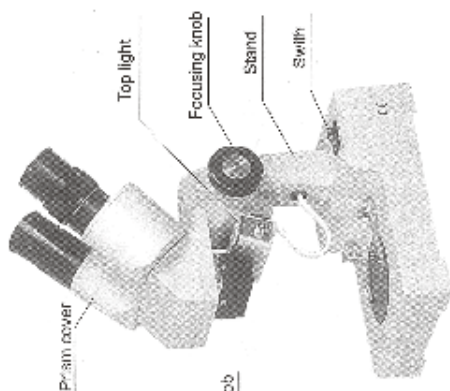
- 1) All lenses must be kept clean. Fine dust on the surface of the lens should be blown off with hand blower or wiped off gently with a soft lens tissue. Fingerprints or oil marked on it should be wiped off with a tissue moistened with a small amount of 3:7 mixture of alcohol and ether.
- 2) Never use the organic solution to clean the other surface (especially the plastic surfaces). If necessary, please choose the Neutral detergent.
- 3) Do not take the microscope apart for fearing that it is damaged.

4)After using, cover the microscope with the dust-cover provided and store it in a dry and clean place free from Moisture to prevent rust.

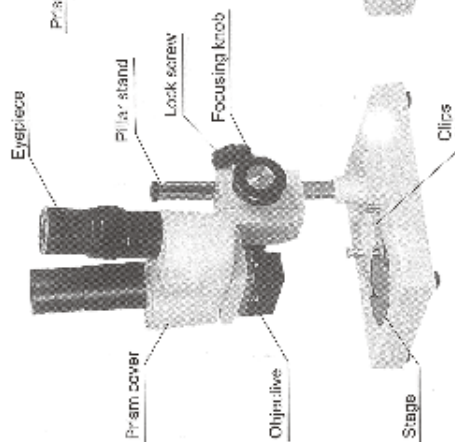
1

*1.Nomenclature*

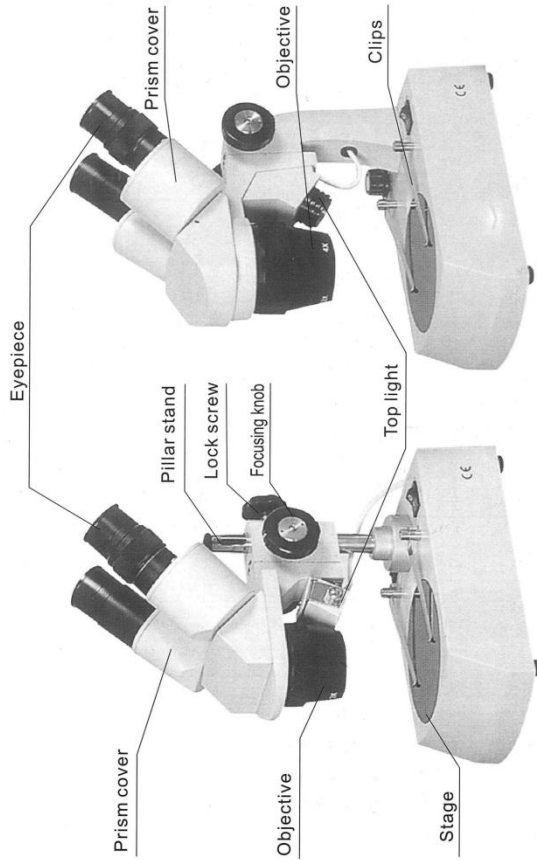
***ST30/40 SERIES***



S-20A-L



S-10-P



ST-40A-2L

ST-30-2L

First, take the styrofoam container out of the carton and place it levelly on the table. Open the container carefully to avoid the optical items dropping down and being damaged. Check the microscope and its accessories in the container carefully to ensure they are well.

### **2-1 Set the specimen**

Set the specimen on the stage plate and clamp the slide with the clips.

### **2-2 Illuminate**

For “P” type, use the daylight or other light.

For “L” type or “2L” type, insert the plug of main cable into the power socket and turn on the switch to get the specimen illuminated.

### **2-3 Adjust focus**

1) For S-10, S-20, ST-30, ST-40 series.

Loosen the lock-screw, and look through the right eyepiece while moving stereo head-bracket up and down until the outline of the object is found in the field of view, and then tighten the lock-screw to fix the height of the stereo head on the pillar.

Rotate the focus-knob until the image is sharp and clear. Then adjust the diopter-adjust-ring of the left eye tube to get the image sharp and clear.

2) For S-10A, S-20A, ST-30A, ST-40A Series

Look the image is sharp and clear. Then turn the diopter of the Left eye tube to get the image sharp and clear. Then turn the diopter of the left eye tube to get the image sharp and clear.

### **2-4 Adjust the interpupillary distance**

Push and pull the prism cover til the observation is  
Comfortable.

#### **2-5 Replace the slide-in objective**

Loosen the lock-screw on the objective mount and pull out the  
Objective from the right horizontally. Then, insert an alternate  
Objective to the correct position. Last, tighten the lock screw.

#### **2-6 Replace the lamp**

- 1) Before changing the lamp, you must cut off the power and  
wait until the lamp cools down.
- 2) If changing the top lamp, loose the lock-screw on the  
lamp-house and take down the lamp-cover and replace with a  
new one.
- 3) If changing the bottom lamp, remove the stage from the base  
and then replace with a new one.



### 3-1 ST-30 series configuration

Configuration		Model					
Parts	Description	ST-30-F	ST-30-T	ST-30-2L	ST-30-V-F	ST-30-V-L	ST-30V-2L
Eyepiece (Pair)	WF12X18mm						
	WF10X20mm	●	●	●	●	●	●
	WF10X25mm						
	WF15X12mm						
	WF20X10mm						
Objective2 (Pair)	LN56mm						
	N31mm	●	●	●	●	●	●
	S256mm						
	40X8mm	●	●	●	●	●	●
	60X6mm						
Eye cap (Pair)		●	●	●	●	●	●
Dimension	45° inclined	●	●	●	●	●	●
Stand	Arm stand				●	●	●
	Filler stand	●	●	●			
Stage light	Flou stage	●			●		
	Top light stage		●			●	
	Topbottom light stage			●			●
Clips		●	●	●	●	●	●
Bulb	Tungsten bulb		●	●		●	●
	Halogen bulb						
Plate	φ60mm B-W plate	●	●		●	●	
	φ95mm B-W plate			●			●
	φ95mm Glass plate			●			●
Dust cover		●	●	●	●	●	●
Dark field condenser	S-NU40K						
Gen clamp	S-ST-6C						

### 3-2 ST-40 series configuration

Configuration		Model						
Parts	Description	ST-40-F	ST-40-L	ST-40-2L	ST-40A-P	ST-40A-L	ST-40A-2L	Gem-Microscope
Eyepiece (Pair)	WF5X/18mm							
	WF10X/20mm	●	●	●	●	●	●	●
	WF10X/20mm							
	WF15X/13mm							
	WF20X/10mm							
Objective (Pair)	1X/56mm							
	2X/81mm	●	●	●	●	●	●	●
	3X/56mm							
	4X/58mm	●	●	●	●	●	●	●
	6X/66mm							
Eye-cap (Pair)		●	●	●	●	●	●	
Binocular	45°inclined 360°rotating	●	●	●	●	●	●	
Stand	Arm stand				●	●	●	
	Pillar stand	●	●	●				●
Stage light	Plan stage	●			●			
	Top light stage		●			●		
	Top/bottom light stage			●			●	●
Clips		●	●	●	●	●	●	●
Bulb	Tungsten bulb 12V10W		●	●				●
	Halogen bulb 12V10W					●	●	
Plate	φ 60mmB/W plate	●	●		●	●		
	φ 95mmB/W plate			●			●	●
	φ 95mm Glass plate			●			●	●
Dust-cover		●	●	●	●	●	●	●
Dark field condenser	S/ST-DK							●
Gem clamp	S/ST-GC							●

## **4. TECHNICAL PARAMETER ST30/40 SERIES**

4-1 ST-30, ST40 series are equipped with pillar stands.

4-2 Diopter adjustment:  $\pm 5\Omega$  Interpupillary adjustment: 55-75mm.

4-3 ST-30, ST-40, are equipped with turret type Objective 2x/4x.

There 1x/3x, and 1x/2x for option.

1) ST-30, series

Turret Objectives	Magnification	Object field (mm)	Working distance (mm)
1X/2X	1X/2X	20.00/10.00	53.00
2X/4X	2X/4X	10.00/5.00	53.00
1X /3X	1X /3X	20.00/6.70	53.00

2) ST-40 series

Turret Objectives	Magnification	Object filed (mm)	Working distance (mm)
1X/2X	1X/2X	20.00/10.00	57.00
2X/4X	2X/4X	10.00/5.00	57.00
1X /3X	1X /3X	20.00/6.70	57.00

4-4 All these models have the same eyepieces WF10X. There are Eyepieces WF5X, WF15X, WF20X for option.

4-6 The power supply, The electronics is CE and GS approved.

100V-120V $\pm 10\%$ , 50/60Hz

Lamp: LED

The electronics is assembled according to UL safety regulation.

11

## **5. Troubleshooting S/ST SERIES**

The good performance of the microscope can't be made fully because of unfamiliar using, this table will give some advices.