# STALWART

## **BIOLOGICAL MICROSCOPE STM-2000A/B/C**

# **INSTRUCTION MANUAL**

## **APPLICATIONS:**

The biological microscope, model STM-2000A/B/C, is provide with achromatic objectives and Huygence eyepieces. It can be widely used in colleges, hospitals, laboratories and research institutes.

#### **SPECIFICATIONS:**

## 1. Eyepiece:

Designation	Magnifications	field of view	focal length
	5X	20	49.979
Huygence eyepiece	10X	15	24.998
	12.5X	13	20.000

## 2. Objective:

Designation	Magnifications	Numerical	Focal	Working
_	_	Aperture	Length	Distance
	10X	0.25	17.13	7.316
Achromatic	40X	0.65	4.65	0.632

# 3. Total Magnifications:

Objective Total Magnification Eyepiece	10X	40X
5X	50X	200x
10X	100X	400X
12.5X	125X	500X

4. Area of the plain stage: 110mmX120mm

5. Condenser: Disc Diaphragm6. Diameter of filter: 32mm

7. Diameter of reflecting mirror: 50mm

#### **STRUCTURE**:

1. Arm and Mounting:

Mounting is the base of the microscope. It supports all weight of microscope. Arm as a main body of instrument fixes in the mounting.

2. Illumination system by light:

It composes reflecting mirror, disc diaphragm.

3. Eyepiece and objectives:

This instrument adopts Huygence eyepiece and achromatic objectives. It can give a nice and sharp image.

- 4. Plain Stage with Slide Clips
- 5. Fine and coarse focusing adjustment:

They have two knobs and are easy to operate.

#### **USAGE:**

- 1. Rotate the objectives in sequence, according to their magnification, into the thread holes of the nosepiece. Insert the eyepieces into the eyepiece tube.
- 2. Put the specimen on the stage. Adjust it and make the specimen in the center of the stage.
- 3. First use objective 10X,turn the coarse focusing knob and make the objective near specimen and then observe the image through eyepiece and turn the coarse focusing knob down until you can see the specimen image. After that turn the fine focusing knob until you get a sharp image.

#### **MAINTENANCE:**

- 1. The microscope is the same as other optical instruments. Need to be kept in cool, dry, dustless and acidless place. The instrument should be covered with dust guard after using.
- 2. Never disassemble the lens because they are corrected stringently. If there is stain on the lens, it can wipe out by alcohol, but you should pay attention not to seep it into the inside of the objectives so as not to dissolve glue. Dust on the lens can be wiped away by clean brush.
- 3. Coarse and fine focusing equipment and nosepiece are precisely constructed and should not be dismantled without authorization.
- 4. When not in use, keep the objectives in the objective box and cover the eyepiece tube with eyepiece tube cover.

#### **COMPLETE SET OF THE MICROSCOPE:**

Items	Contents	Quantity
1	Main body	1set
2	Eyepiece H5X H10X H12.5X	1pc apiece
3	Objective 10X, 40X	1pc apiece
4	Triple Nosepiece	1pc apiece
5	Reflecting mirror	1pc
6	Instruction manual	1сору