



## ZOOMSTEREOMICROSCOPE, MODEL PRIMOZOOM II

- If the black/white stage plate is mounted then please replace it with the glass stage plate. The frosted side of the glass stage plate should face down.
- The optical head is placed on the stand, if this is not already done. Remove the cover from the underside of the objective tube (not always mounted).
- Put the mains cord in a socket and turn on the stereo microscope. The model has two illumination sources; top light (incident light) or bottom light (transmitted light). The illumination can be adjusted on the right side of the stand.
- The lamp for the top illumination comes with a blue filter. This can be removed if a brighter light is wanted.

### General use of the stereo microscope:

- Place an object under the objective revolving tube, and use the large focusing knobs to adjust the sharpness.
- If a sharp image cannot be attained due to the height of the object, then carefully release the lock screw on the vertical post and find the correct height. Remember to lock the lock screw again.
- The magnification can be changed by turning the horizontal zoom knob (marked with 1 to 4). This knob is found on the optical head.
- It is possible to turn the optical head 360 degrees. This is done by loosening the large lock screw on the left side of the optical head.
- Place the black/white stage plate on top of the glass stage plate, if you want to see an object on a black or white background. Incident light is used for this purpose.
- The glass stage plate should not be removed. Using the black/white plate on top of the glass plate prevents the plastic plate from damage if the transmitted light is not turned off.

- Interpupillary distance is adjusted on the stereo microscope by moving the eyepiece tubes/prism housings. Look into the eyepieces and move the prism housings (light colour) closer together or further apart. The interpupillary distance is adjusted when a single circular field is observed when viewing with both eyes.

### Diopetre adjustment:

- Put the diopetre rings on the eyepieces in neutral position (marked with a silver ring on the black eyepiece tube).
- Choose the highest magnification and adjust the focussing knobs to the best possible view.
- Choose the lowest magnification and do not use the focussing knobs.
- Now adjust the sharpness for each eye by turning the diopetre ring for each eyepiece.
- This concludes the diopetre adjustment. The sharpness should now be maintained for the magnification range. It is, however, possible that a minor correction of the focus is necessary for people with certain astigmatisms.

### Adjustment of the height:

- The stereomicroscope is mounted on a pole stand. As mentioned above, this makes it possible to see large (and high) objects under it. Please be aware that the stereo microscope gets unstable, if the optical head is turned away from the main stand. It is important to fasten the stereomicroscope to a table if it is used in such a manner.

### Bulbs:

- The incident and transmitted light uses different bulbs. The bulb must have the correct Voltage and Wattage, otherwise the stereomicroscope's electronic might be damaged. Top light is equipped with a halogen bulb with reflector 12V/10W
- Bottom light is equipped with a 12V/10W halogen bulb

### Changing the bulb for the bottom light:

- Pull out the plug from the mains and let the microscope cool down for some minutes. Carefully place the microscope on one side.
- Loosen the big clamp screw on the lamp housing and open it.
- Pull out the old bulb and replace it with a new. It is a 2-pin halogen bulb 12 V / 10 Watt.
- Warning: Please notice that the old bulb can be very hot. Take care of your fingers.
- It is important that the new bulb is handled very carefully and is not touched directly with the fingers. Otherwise the glass surface is damaged by the fingerprints and the life of the bulb is significantly reduced. Use a clean cloth, plastic or a piece of lens paper between the fingers and the bulb when handling the bulb. Close the lamp housing.

### **Changing the bulb for the top light:**

- Pull out the plug from the mains and let the microscope cool down for some minutes.
- Unscrew the front black ring on the lamp.
- Pull out the old bulb and replace it with a new. It is a 2-pin halogen bulb with reflector 12 V / 10 Watt.
- Warning: Please notice that the old bulb can be very hot. Take care of your fingers.
- It is important that the new bulb is handled very carefully and is not touched directly with the fingers. Otherwise the glass surface is damaged by the fingerprints and the life of the bulb is significantly reduced. Use a clean cloth, plastic or a piece of lens paper between the fingers and the bulb when handling the bulb. Reattach the front black ring on the lamp.

### **Fuses:**

The fuses are mounted in the bottom of the main microscope body. They can be found under the plastic covers labelled "FUSE".

### **Maintenance:**

- Put the stereomicroscope on a dry and clean place.
- The surface of the lenses must never be touched with fingers or hard things. If the glass surfaces are dirty use a clean and previously unused piece of lens paper to clean it.
- Remove dust from the glass surface with a clean lens brush or an air dust cleaner for optics.
- Always use a specialized optical cleaning agent and wipe the glass surface gently several times. Each time with a fresh piece of lens cleaning paper.

### **Accessories (not included):**

Eyepiece 20x

Remember to turn the power switch off and to disconnect the power cord from the main supply, when the bulb is changed. The longevity of the stereomicroscope can be improved if it is protected against dust, humidity, high temperatures and shocks.