

Broad Range Zoom Microscope Head

Binocular and Trinocular Models

User Guide



Broad Range Zoom Microscope Head Assembly Instructions

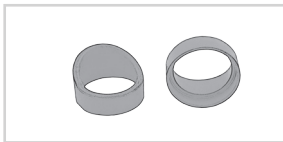
Parts Included



- Optical Head
 - ABR-Z32 or
 - ABR-Z33



- Pair of 10x Eyepieces
 - MP-EP10X-305



- Pair of Eyecups
 - MP-ECZ1



- Trinocular Port Adaptor (trinocular model only)
 - MP-HTT2

- Dust Cover (not shown)

Additional eyepieces and lenses are available; contact Customer Service for more information.

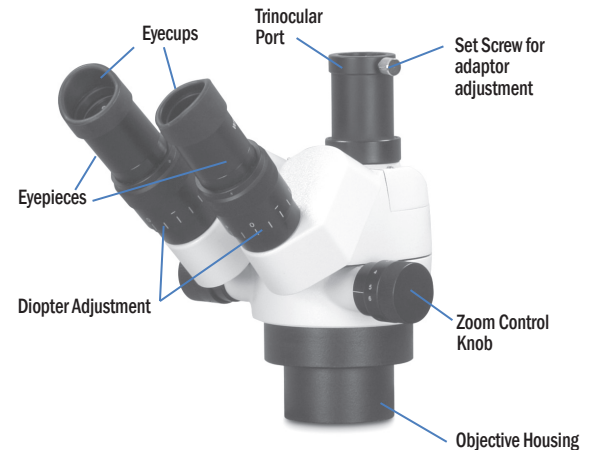
Specifications

Working Distance	100mm (3.93")
Primary Magnification	0.65X to 6.0X
Magnification with 10X eyepieces	6.5X to 60X
Zoom Ratio	9.2:1
Field of View	32.10mm – 3.83mm
Resolution	25 μ – 4 μ

Setup and Operation

- Mount head on stand**
 - Loosen the head retention screw, place the head into the ring mount, and secure with the head retention screw.
 - Remove the protective cover on the objective housing.
- Prepare eyepieces**
 - Remove the eyetube covers and insert eyepieces into the eyetubes.
 - Slide the eyecups over the eyepieces.
- Adjust interpupillary distance**
 - Place a specimen on the stage and bring it into focus.
 - While looking through both eyepieces, move eyepieces together or apart until the field appears as one circle.
- Adjust diopter** (Note: Each user should make this adjustment before use.)
 - Set a flat specimen on the stage plate and turn the zoom control knobs all the way toward you to the lowest setting.
 - Use the focus knobs (on stand) to bring the image into sharp focus.
 - Turn the zoom control to the highest setting and refocus.
 - Close your left eye and adjust the diopter on the right eyetube until the image is clear; then close your right eye and repeat the process.
 - When each eyetubes focuses sharply, the diopter is properly set.
- Adjust magnification**
 - First, focus on a specimen at the highest magnification setting (turn zoom control knobs all the way back) to ensure the specimen stays in focus at all magnifications.
 - Turn the zoom control knobs toward you to lower the magnification.

$$\text{Magnification} = \text{eyepiece value} \times \text{zoom value}$$



Trinocular Model

- Change the light path direction**
 - Slide the prism bar (left side of head, not shown) all the way in to direct the light to the binocular eyepieces.
 - Slide the prism bar out to directed light to the trinocular port. Note that you cannot simultaneously observe the sample with both the eyepieces and the trinocular port.
- Attach a camera to the trinocular port**
 - Use a compatible camera and camera adaptor.
 - Trinocular port ID = 27mm
 - Trinocular port adapter ID = 23mm
 - Refer to the manufacturer's instructions to install the camera and camera adapter.
- Adjust the camera adaptor so that it is parfocal** (the image in focus in the eyepieces is also in focus in the camera.)
 - Focus on a sample while looking through the eyepieces at the highest magnification, and then slide out the prism.
 - Loosen the set screw on the trinocular port and slide the tube up or down to adjust the adapter height until the image on the camera is in focus. Do not use the focusing knobs to focus the camera image.
 - Tighten the set screw to secure the adapter.

Westover Scientific Customer Service

Toll Free Customer & Technical Service	866-614-4022
Local and International Customer & Technical Service	425-368-0444
Fax	425-368-0555

Customer service hours are 7:00 a.m. to 4:00 p.m. Pacific Standard Time.

STATEMENT OF LIMITED PRODUCT WARRANTY: These models are warranted to be free of all defects in material and workmanship for a period of 12 months (1 year) from the date of delivery. The warranty does not apply to any instrument which has become worn, defective, damaged or broken due to abuse, misuse, tampering, or unauthorized repairs. Under this warranty, Westover Scientific will repair or replace, without charge to the purchaser, any part which upon our examination, appears to be defective in materials or workmanship. Returned Goods Policy for Repair or Replacement Parts: To return goods for repair or replacement, please contact Westover Scientific Customer Service.

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