

## **Stereo-microscope adjustment**

1. Focus on a specimen in a Petri-dish, or on a mark on a piece of paper.
2. Go to the highest zoom factor – 6,4x or 8x.
3. Without touching the zoom control, make an adjustment to the rear focus knob.
4. Go to the minimum zoom.
5. Without touching the focus, adjust the eyepiece dioptre controls to form a sharp image in each eyepiece, for each eye one after the other.

The eyepieces are held securely in the binocular tubes, but if you remove and inspect one, you'll see that the top part of the eyepiece rotates and there is a line inscribed on the rotatable part of the eyepiece. This is the fiducial mark for zero dioptres.

Set the zero dioptre mark so this line is just level with the fixed part of the eyepiece. Replace each eyepiece in the binocular tube and adjust them in turn to give a sharp image.

6. Try to do this with each eye open (ie try to keep your unused eye open also) in order not to alter your eye's natural focus.

Short-sighted (nearsight, myopic) eyes will require a negative dioptre correction. The rotatable barrel of the eyepiece will screw inwards. Far-sighted (longsight, hyperopia) eyes requires a positive dioptre correction. The rotatable barrel of the eyepiece screws outwards.

People wearing spectacles can remove them, and use the dioptre adjustment controls on each eyepiece to correct for the refractive errors in each individual eye providing they only have short- or long-sight. If you have astigmatism, keep your glasses on.

The image will now remain in sharp focus throughout the zoom range.