



Six Easy Steps to Align Your Compound Microscope (also known as Koehler illumination)

1. Focus on the sample with the 10x objective.

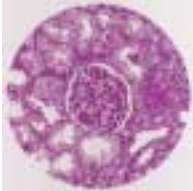


Image focused at 10x.
Because the condenser is not yet aligned, the image is a little fuzzy.

knobs located at 8 o'clock and 4 o'clock directly below the condenser.



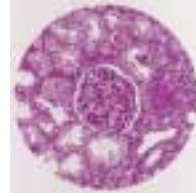
Image of field diaphragm is focused and centered

2. Close the *Field Diaphragm*. This is typically on the base of the microscope below the stage. Sometimes it is a knob located on the right side of the microscope (E800, E1000)



Image of the field diaphragm is out of focus and not centered

- 5 **Open the image of the field diaphragm until it just disappears** from view with the 10x objective. (Note: you will need to open it all the way if you are using objectives lower than 10x.



Properly adjusted image

3. **Focus the image of the field diaphragm** to a sharp octagon using the condenser focus knob found on the left side of the microscope directly behind the condenser. The condenser is lens unit located directly below the stage.



Image of field diaphragm is focused but not centered

6. **Adjust the image for optimum contrast** (most pleasing to your eye) using the *condenser diaphragm*. The control for the condenser diaphragm is located on the front of the condenser itself. (It is located on the right side of the stand near the back on the E800M and E1000M)



In this example the aperture is stopped down too far, and the image has very high contrast and appears "grainy". There is an inverse relationship between contrast and resolution.

4. **Center the image of the field diaphragm** using the silver knurled *condenser centering*