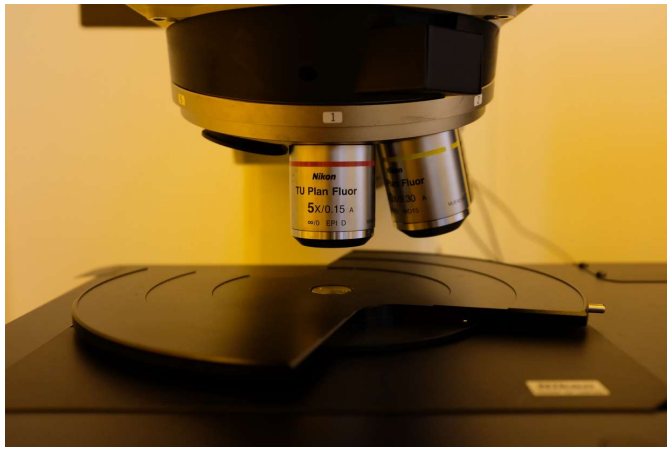
1

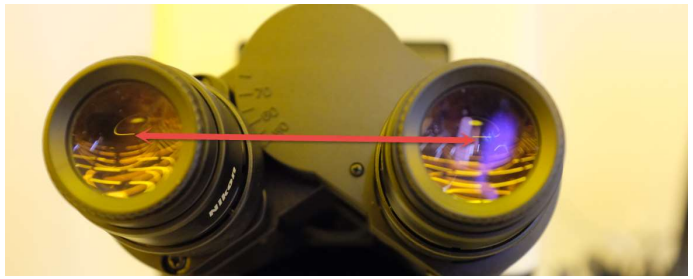
Nikon LV200 (no DIC)

ALWAYS start and **end** with lowest power objective!

Goal – Do NOT touch sample with objective lens.
Why? – To avoid lens damage or sample damage (100x objective is $6K)
Lower power objectives generally have longer working distances (20X is an exception)



- **Adjust intraocular distance**



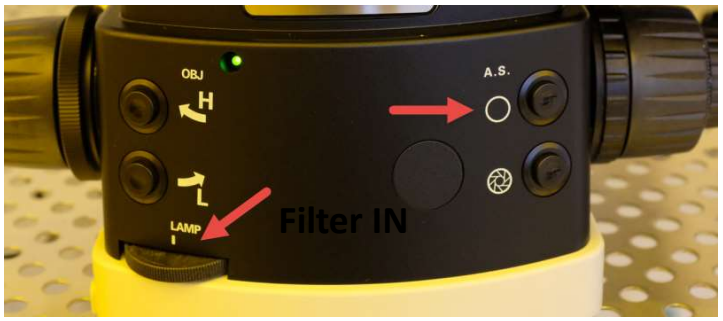
- **Adjust eyepiece focus if needed**



Place sample on stage

2

- Turn on LED lamp
- Make sure Aperture is fully open



- Insert filter if using light sensitive resist
- Pull out Focusing Target rod to use Focusing Target

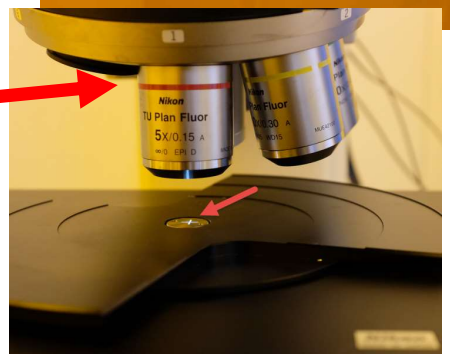
Filter IN

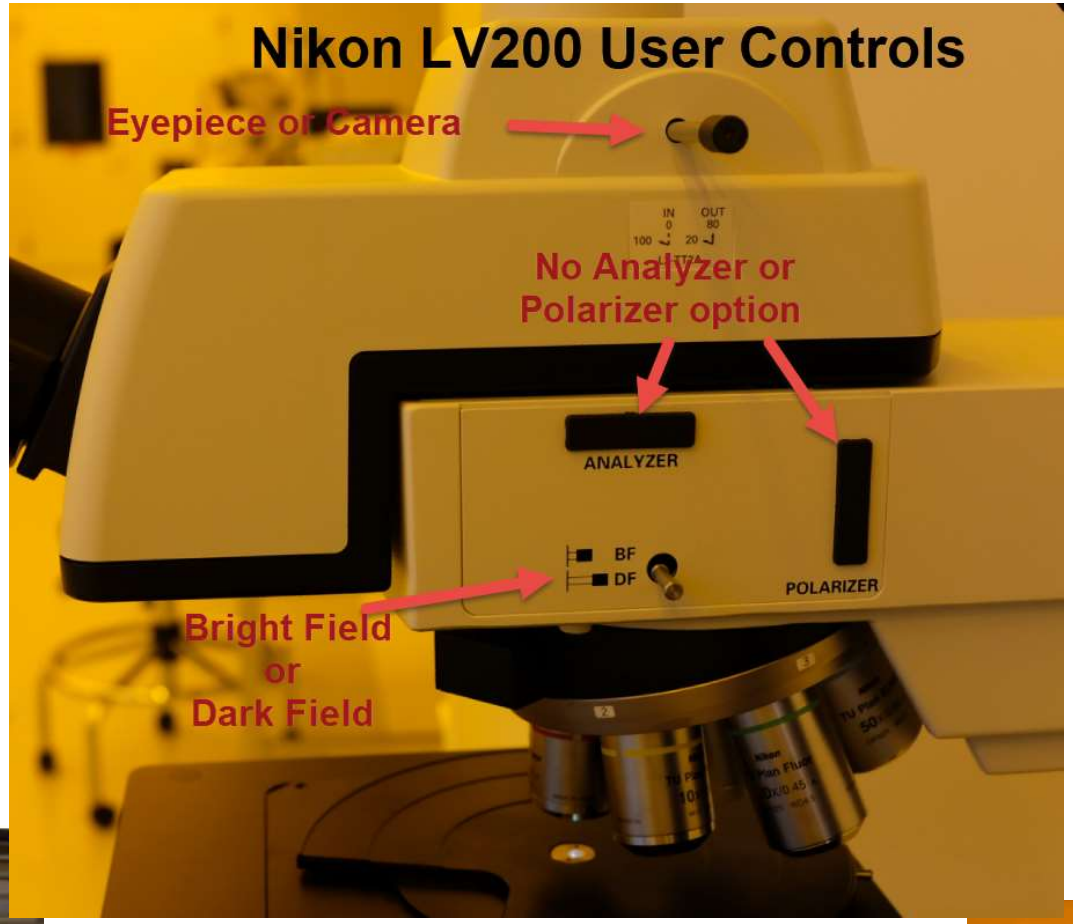


Filter OUT



- Focus on substrate using focus target and lowest power objective





Steps to get an image

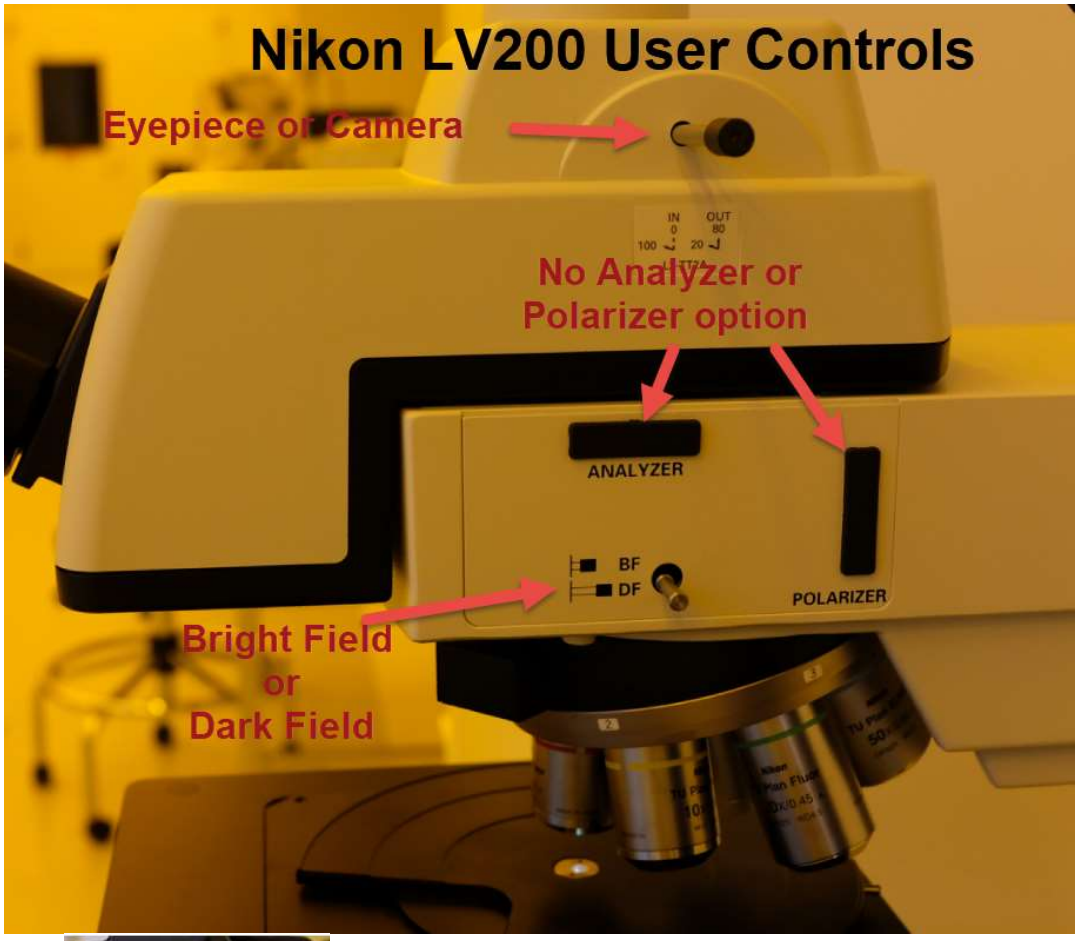
1. Rotate lowest power objective into place
2. Set mirror to Eyepiece or Camera
3. Push BF/DF rod in for Bright Field
4. Open Aperture stop
5. Pull out Focus Target rod to focus.

Aperture Stop



Focus Target rod in i.e. Focus Target not in light path





Eyepiece/Camera
Mirror that directs either 100% of light to eyepiece or 80% to camera and 20% to eyepiece.

Bright Field/Dark Field
When out (DF), illumination light travels outside the lens and illuminates the substrate at angles higher than the lens can collect, therefore only scattered light is collected. Useful to find particles and scratches.



Aperture Stop
Limits ANGLE of illuminating light. Fully open = best resolution. Closing Aperture stop reduces stray light and can increase contrast for some spatial frequencies.

Move stage in X/Y

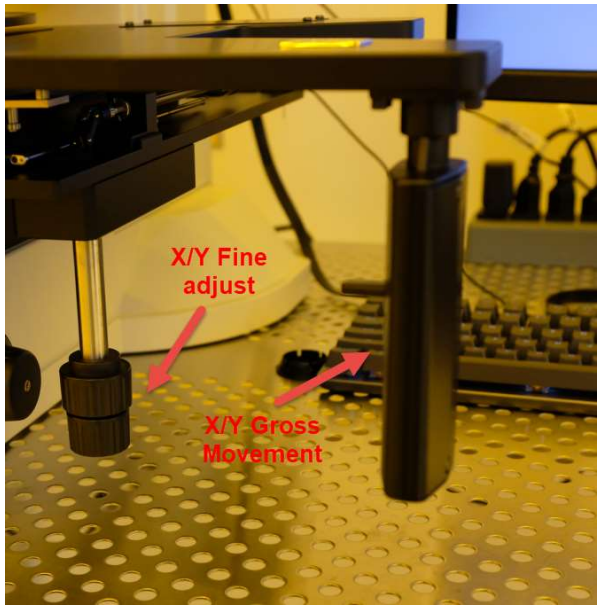


Image capture is NOT available on this microscope.

It is possible to adjust the image on the monitor by moving the cursor to the left edge of the screen which will bring up a menu.

Does the focus drift?

- Adjust the Torque ring counter clockwise



Is the stage stuck?

- Adjust the Clamp ring clockwise

