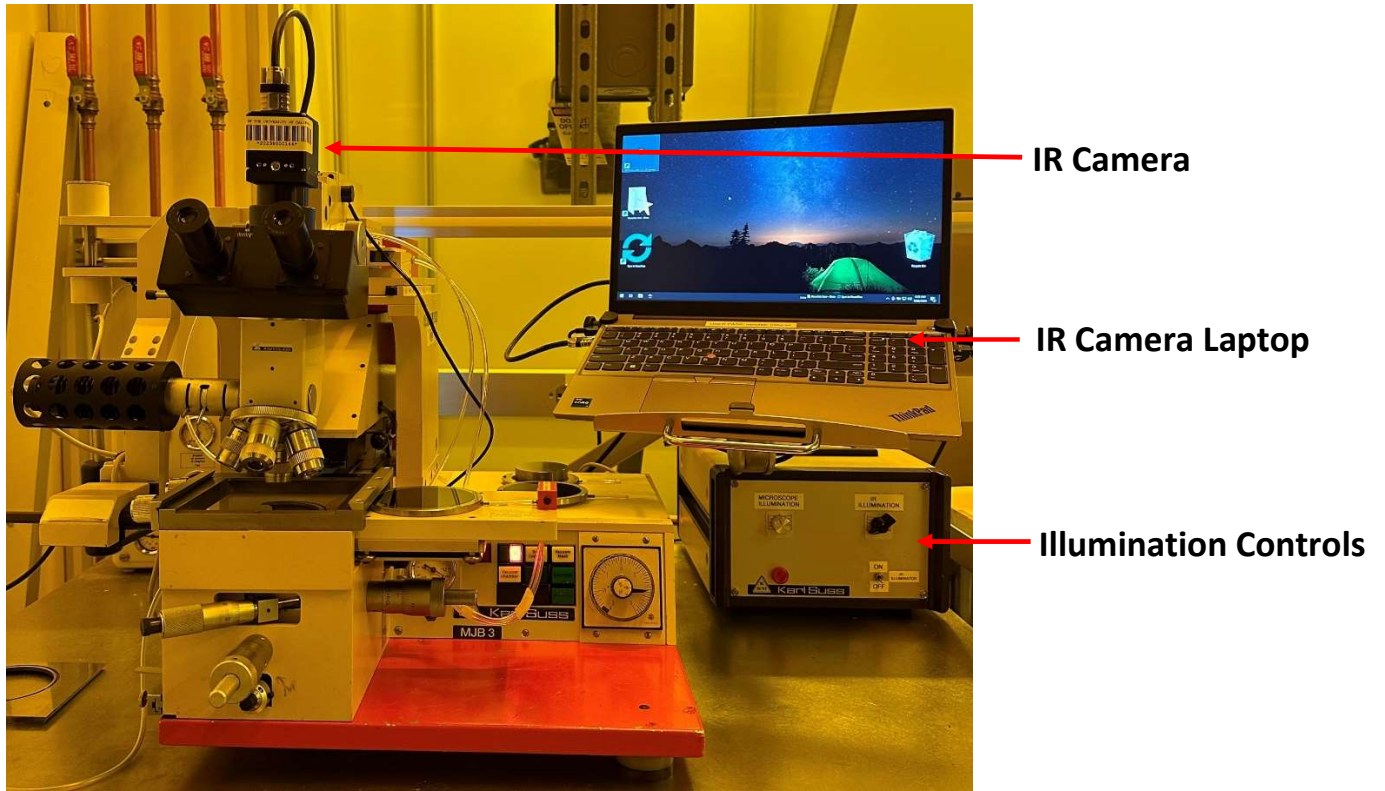


MJB 3 IR Camera Operation

Overview

This document describes the operation of the MJB 3 IR backside alignment camera.



Restrictions & Precautions

- Never use metal tweezers on the IR chucks!
- Use of the wrong chuck spacer will damage the IR illuminator.

Operation

1. Ensure that you have the correct chuck spacer and chuck installed before proceeding. Refer to the 'MJB 3 IR Alignment Mode Conversion' document for more information.



2. Load your mask and substrate per the 'MJB 3 SOP'.
3. Select the 5X objective.
NOTE: The 2.5X objective requires the microscope to be raised up considerably (3-4 turns of the focus knob).

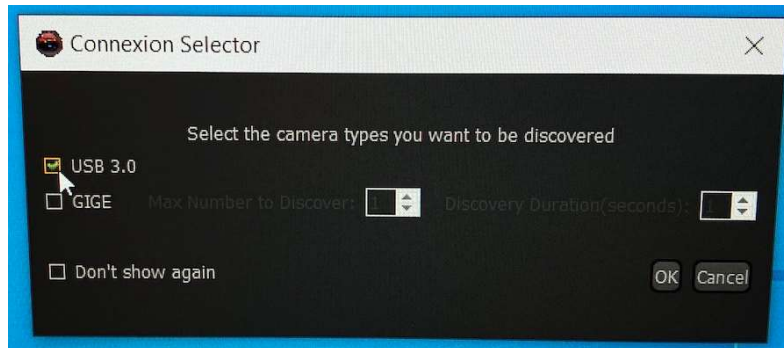
MJB 3 IR Camera Operation

4. Launch the IR Camera Software “NITVision”



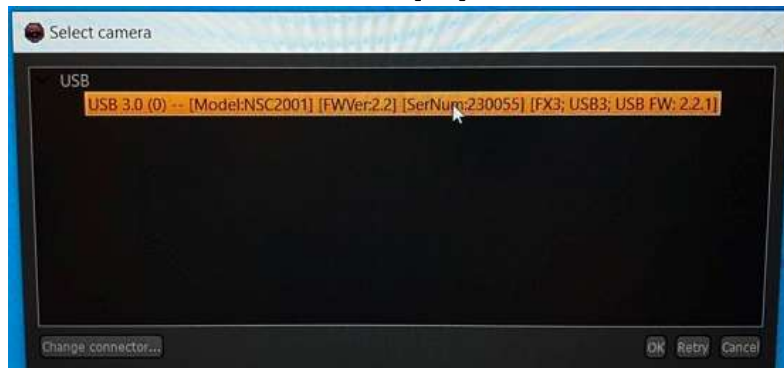
a.

5. On the popup window “Connexion Selector” check the box [v] USB 3.0 and click [OK]



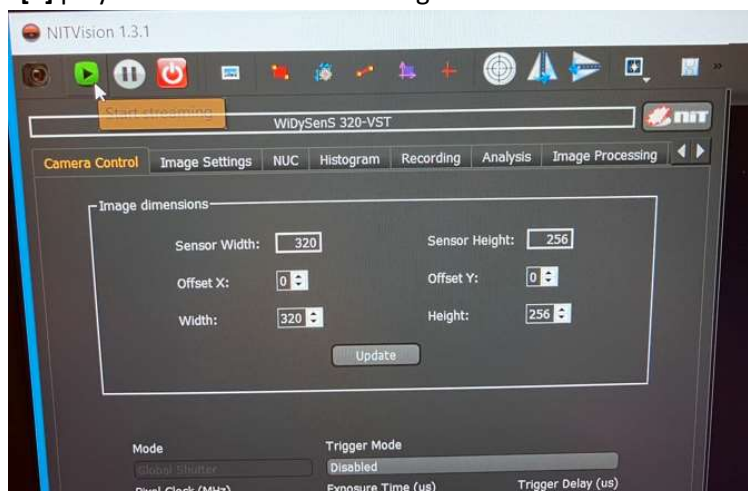
a.

6. Click to select the “USB 3.0” line and click [OK]



a.

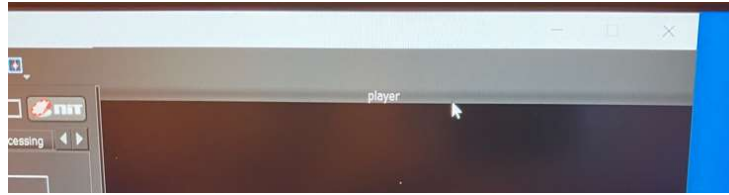
7. Click the [▶] play button to “start streaming” to show the live camera view.



a.

MJB 3 IR Camera Operation

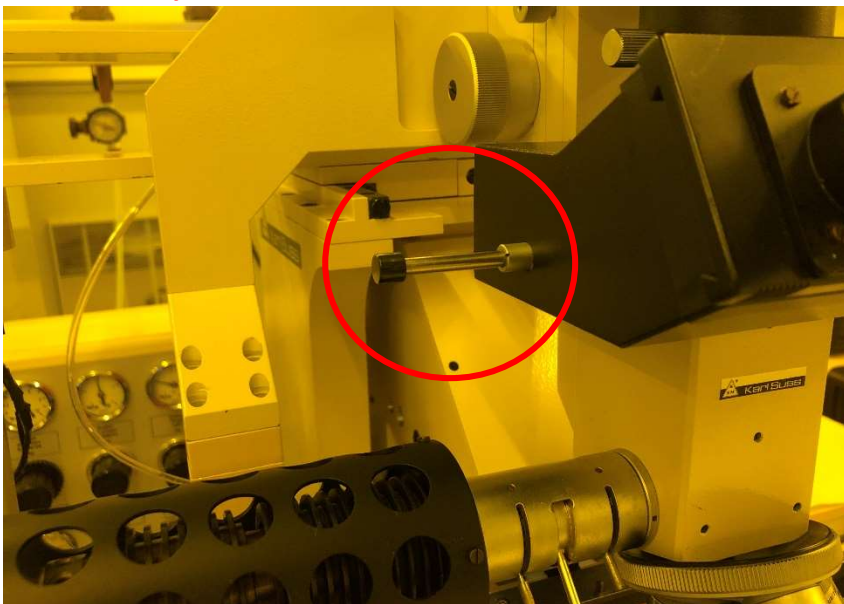
8. Optionally expand the IR camera viewer as so:
 - a. Double-click the "Player" title bar



- i.
 - b. Use the "pinch out/expand" gesture on the trackpad to zoom in on the IR camera video feed to fill the window.
9. Move the IR ILLUMINATOR switch on the illumination control box up to the ON position. The illuminator will extend into the chuck spacer.



10. Use the IR ILLUMINATION knob to adjust the IR ILLUMINATOR light output to the desired level.
NOTE: If you do not see an image on the monitor, make sure the beam splitter knob is pulled out all the way.



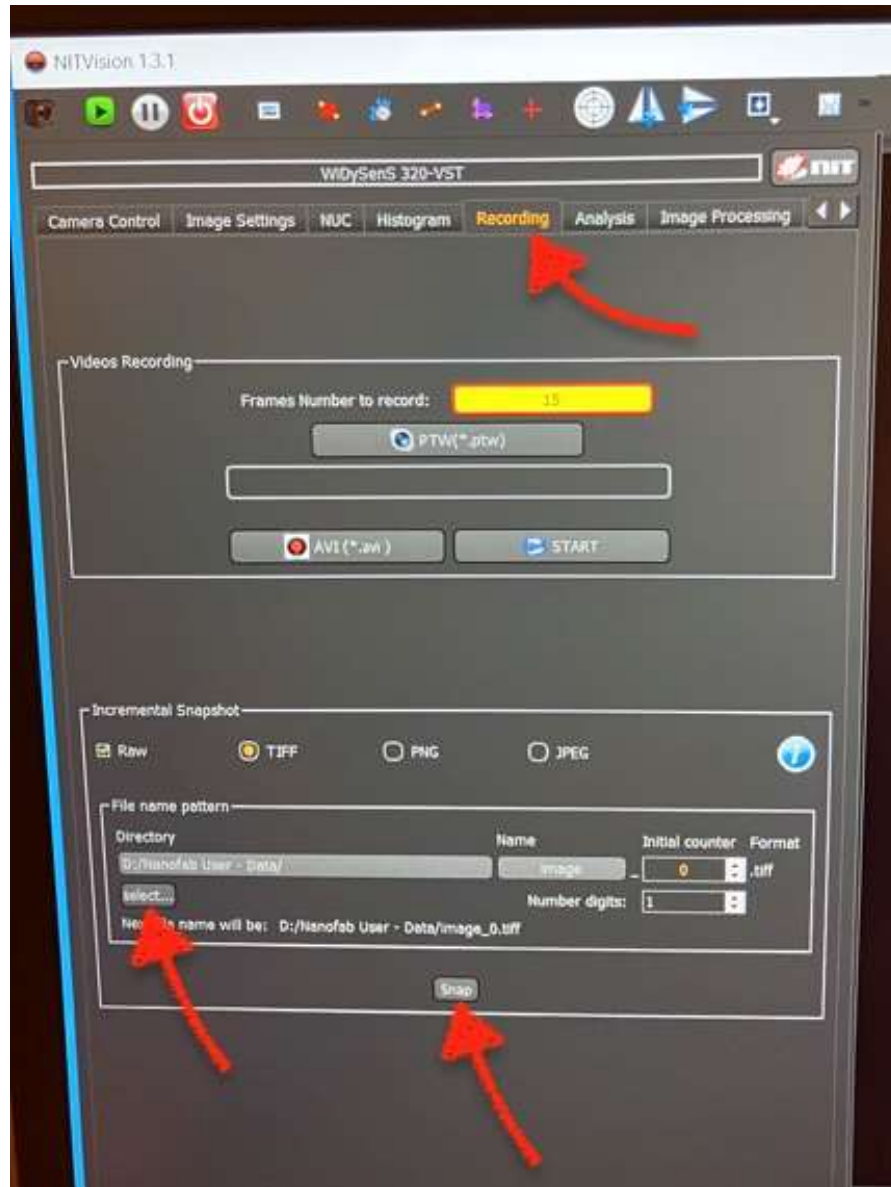
NOTE: The MICROSCOPE ILLUMINATION knob is used for adjusting topside alignment light output (visible light, viewed through the eyepieces).

11. Align and expose your substrate per the 'MJB 3 SOP', or proceed with IR microscope imaging.

MJB 3 IR Camera Operation

12. To save images on the IR Camera:

- a. Switch to the **[Recording]** Tab in NITVision Software
- b. Click the **[Select]** button to choose a directory to save images. Save into the “*Nanofile Users*” folder on the desktop, into a subdirectory named according to your group name. (See [this FAQ](#) for more details.)
- c. Click **[Snap]** to save the current camera image to a file. Each click will save a new image.



- d.
13. When you are finished using the aligner:
- a. Turn the IR ILLUMINATION knob back down to 0 (also the MICROSCOPE ILLUMINATION if it was used).
 - b. Move the IR ILLUMINATOR switch down to OFF.
 - c. Close the *NITVision* software.
 - d. Optional: Run the “Sync to Nanofiles” shortcut to immediately synchronize saved images to the Nanofiles FTP server.