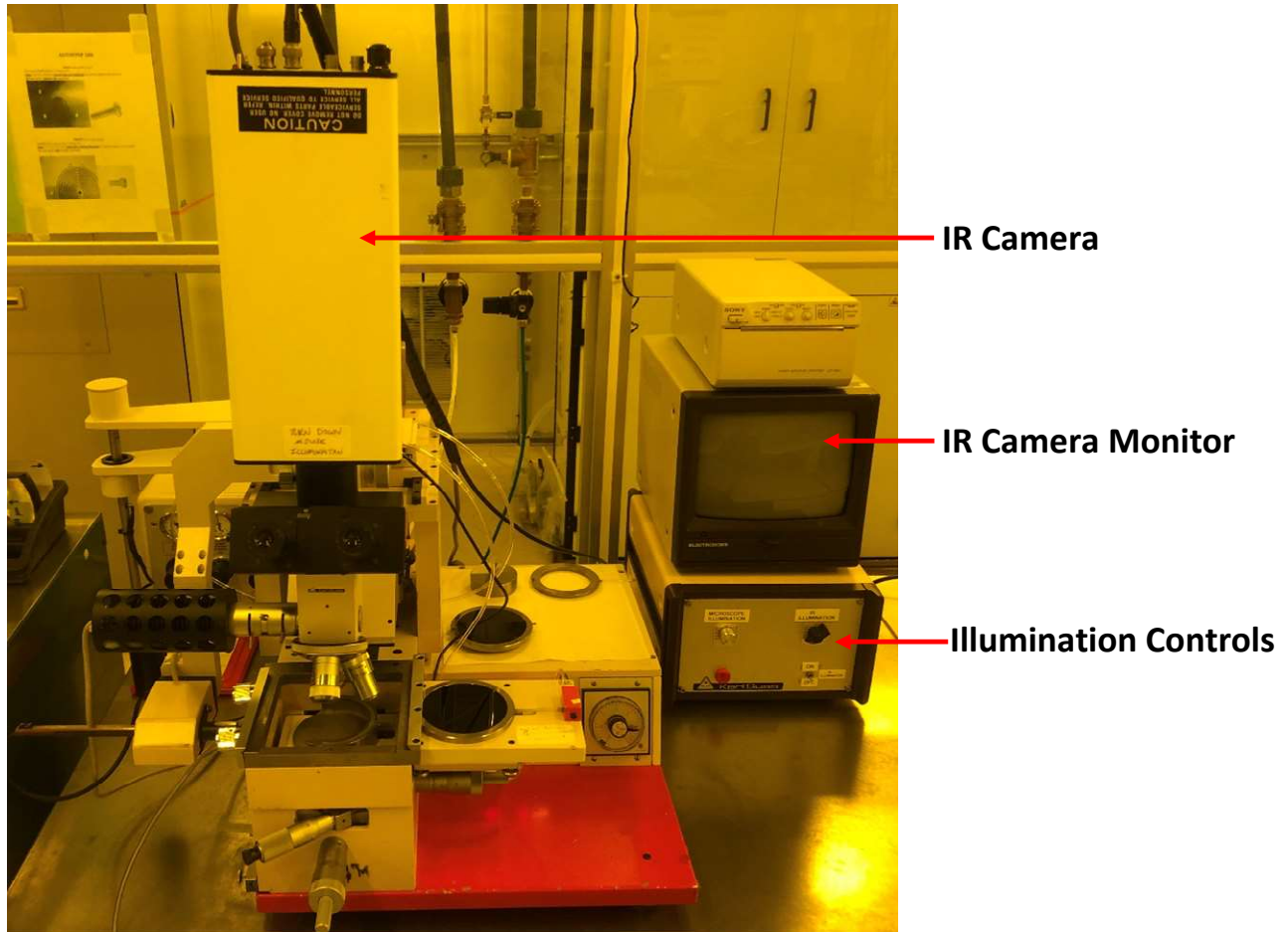


# MJB 3 IR Camera Operation

## 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.



## MJB 3 IR Camera Operation

2. Load your mask and substrate per the 'MJB 3 SOP'.
3. Select the 5X objective.
4. Turn on the IR camera using the POWER switch on the top of the camera, the camera is on when the red LED is illuminated.



5. Open the small panel on the front of the IR camera monitor and move the POWER switch to the ON position, it will take ~30 seconds to warm up.

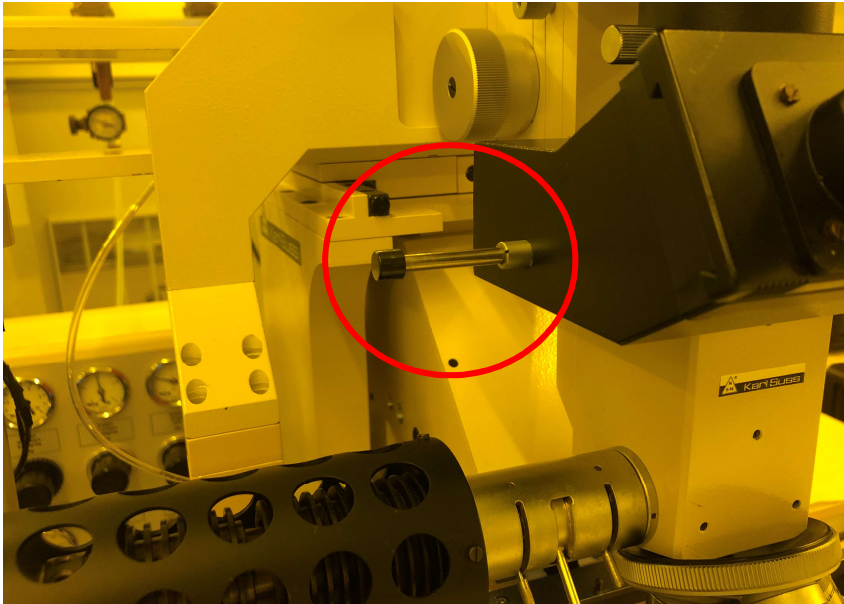


6. Move the IR ILLUMINATOR switch on the illumination control box up to the ON position. The illuminator will extend into the chuck spacer.



## MJB 3 IR Camera Operation

7. 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 beamsplitter 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).

8. Align and expose your substrate per the 'MJB 3 SOP'.
9. 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. Turn off the IR camera.
  - d. Turn off the IR camera monitor.