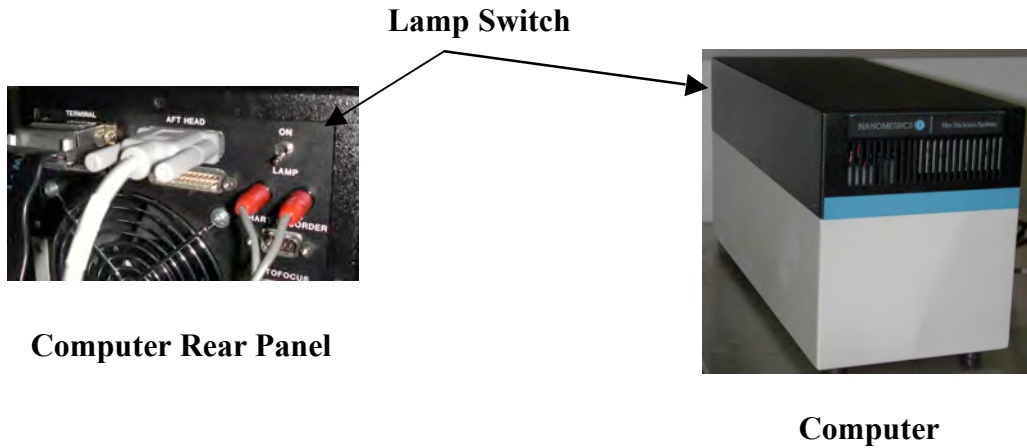


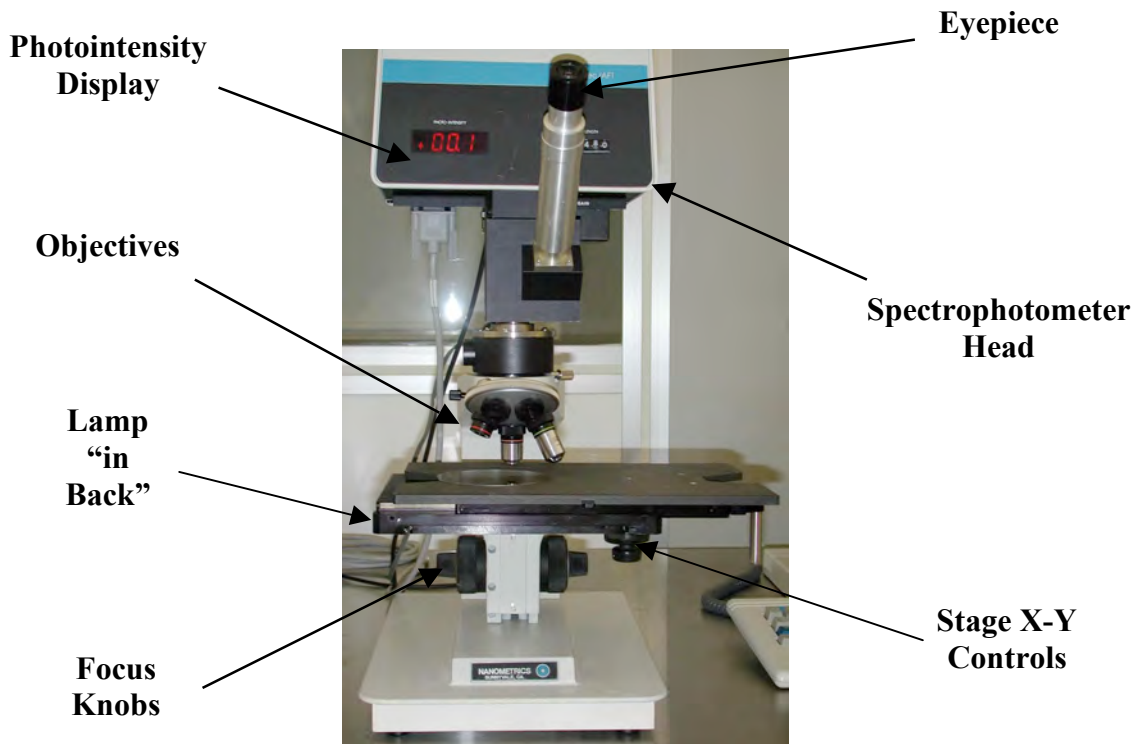
NanoSpec® Model 210 Quick Reference Guide

Automated Film Thickness Measurement System

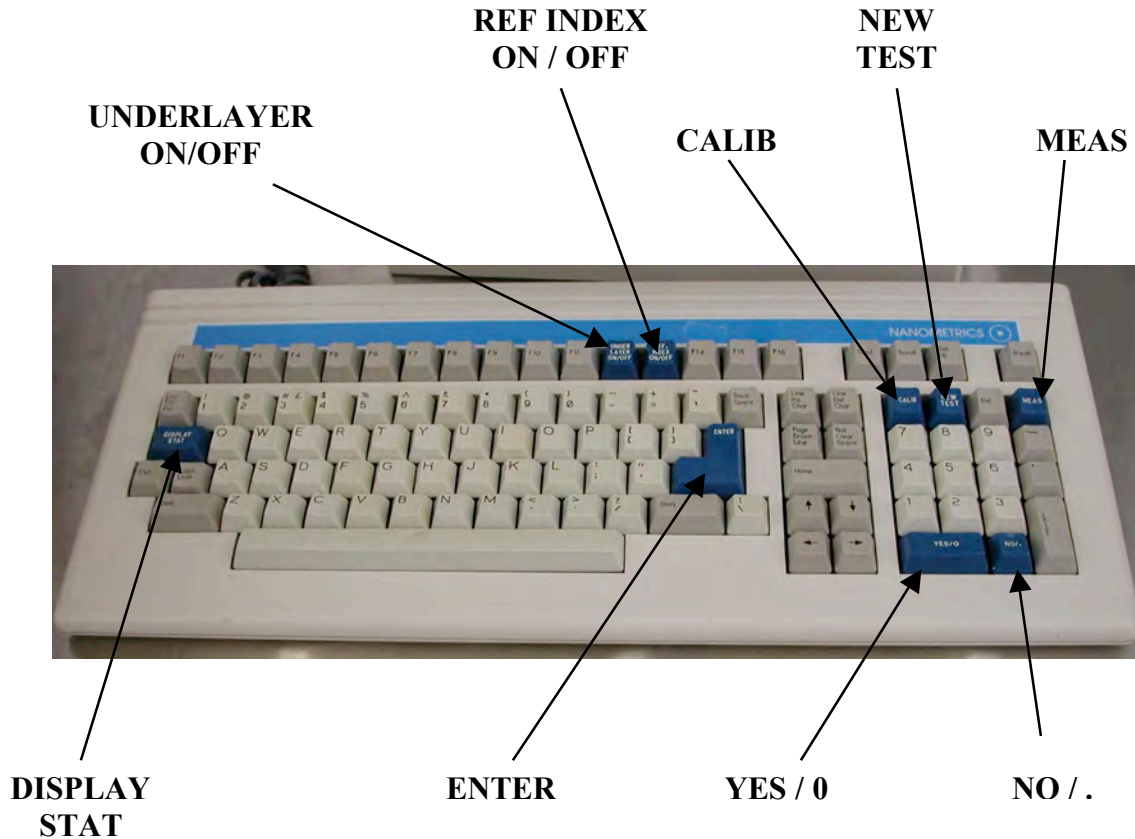
1. Lamp Switch must in on (up) position for at least 15 minutes before attempting measurements. Return switch to idle (down) position when measurements are complete.



2. Microscope and Spectrophotometer Head



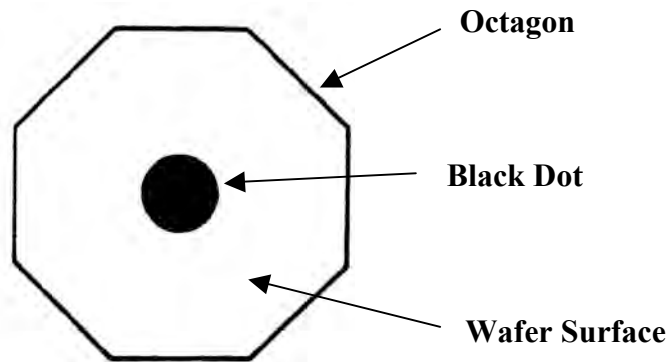
3. NANOmatics Special Keyboard Keys



- **CALIB** Wakes up the display monitor if screensaver is active. Stops any measurement in progress returning software to Available Programs Screen.
- **NEW TEST** Starts a new sequence using a previously invoked test program.
- **ENTER** Completes an alphanumeric entry. The computer has not accepted the keyboard entry until the <ENTER> key has been pressed.
- **MEAS** Starts a measurement. Also used to respond to computer prompts requiring a <Yes> answer. Holding down the <MEAS> key will result in continuous measurements.
- **YES/0** Is used to respond with a <Yes> answer to prompts ending with a question mark. This key is also used to enter a zero digit in a numerical entry.
- **NO/.** This key is used to respond with a <No> answer to prompts from the computer. Also used to enter a decimal point in a numerical entry.

- **DISPLAY STATISTICS** Displays statistics for measurements taken on an individual sample during a measurement session.
- **UNDERLAYER ON/OFF** Enables the measurement of the bottom layer of a dual layer film.
- **REF INDEX ON/OFF** Enables measurement of the refractive index.

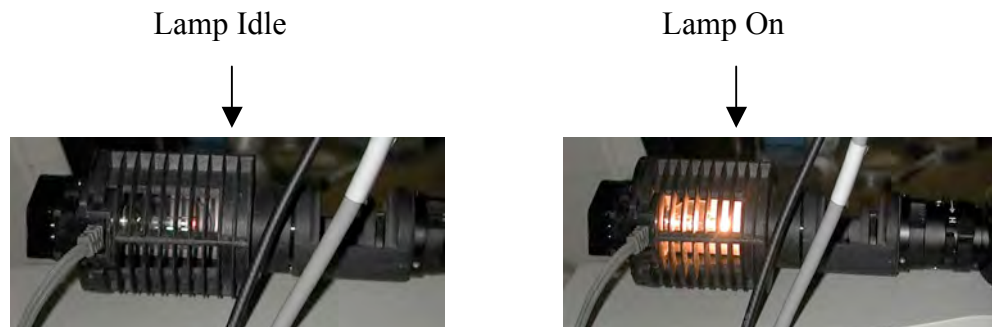
4. Focusing



- Look into the eyepiece. If the image is blurred turn the focus knobs until the Octagon has sharp clear edges. If the Octagon is in focus look at the wafer surface for fine focusing.
- The Black Dot defines the area being measured. Use the X-Y controls to move the microscope stages so that the Black Dot is in the center of the location or feature to be measured.
- If the Black Dot is larger than the feature to be measured change to a higher powered objective lens.

5. Making a standard measurement

- Make sure the lamp has been on for 15 minutes (switch position up)



- b. Press <CALIB>
Available Programs Menu should be displayed on the monitor
 - c. Using the special keys and the numeric section of the keyboard follow prompts on computer screen.
Verify focus before each measurement
 - d. You may exit current measurement or select a new program by pressing <CALIB>
6. When finished return Lamp Switch to Idle Position (down).