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OOINLCorrect Loading Non-Linearity Correction Coefficients Instructions

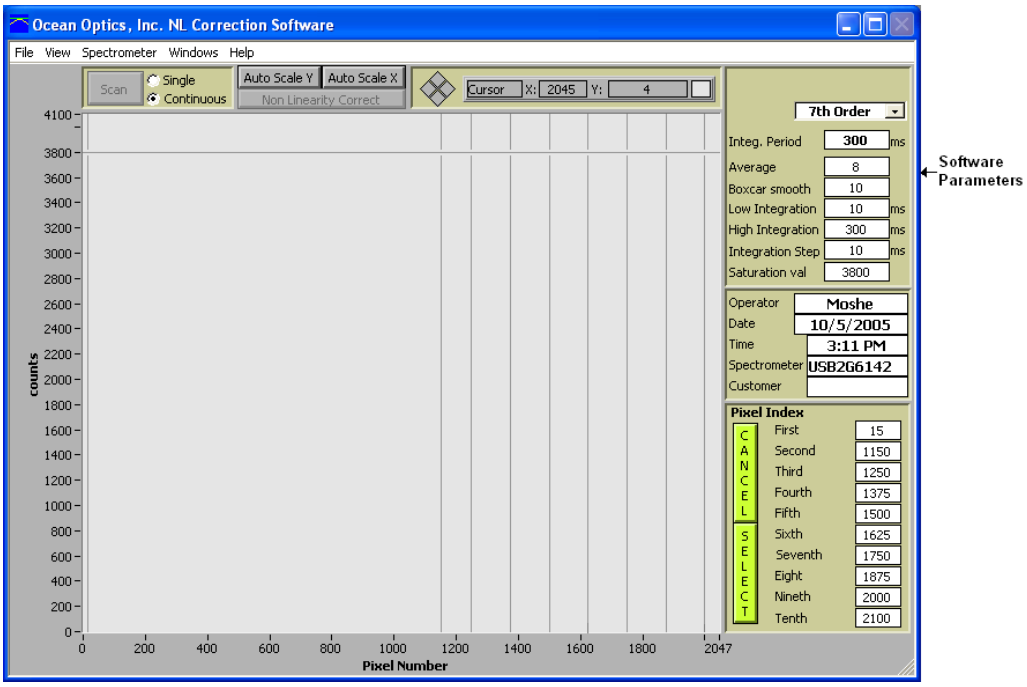
► *Procedure*

1. Run the OOINLCorrect software by selecting **Start | Programs | Ocean Optics | OOINLCorrect | OOINLCorrect**.
2. Choose **Spectrometer | Hardware Configuration** from the menu to set system parameters as follows:

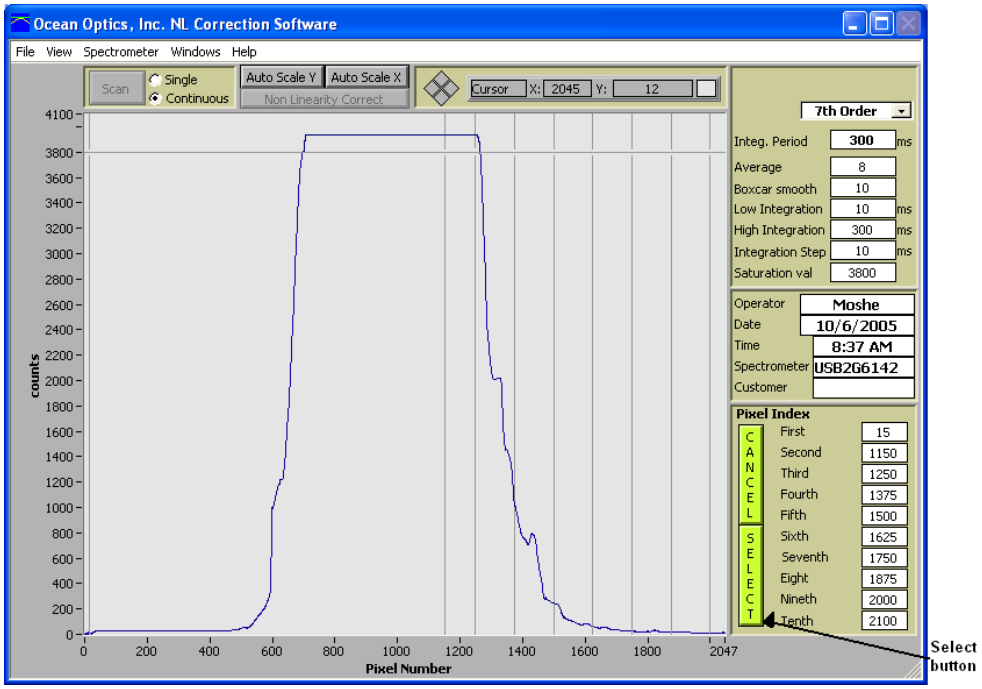
Parameter	Setting
Spectrometer type	S2000/PC2000/USB2000HR2000
A/D Type	USB2000
USB Serial Number	Serial number for your USB2000 Spectrometer

3. Click **OK**.
4. Set the software parameters on the right side of the screen as follows:

Parameter	Setting
Equation	7th Order
Integ. Period	300
Average	8
Boxcar smooth	10
Low integration	10
High integration	300
Integration step	10
Saturation val	3800

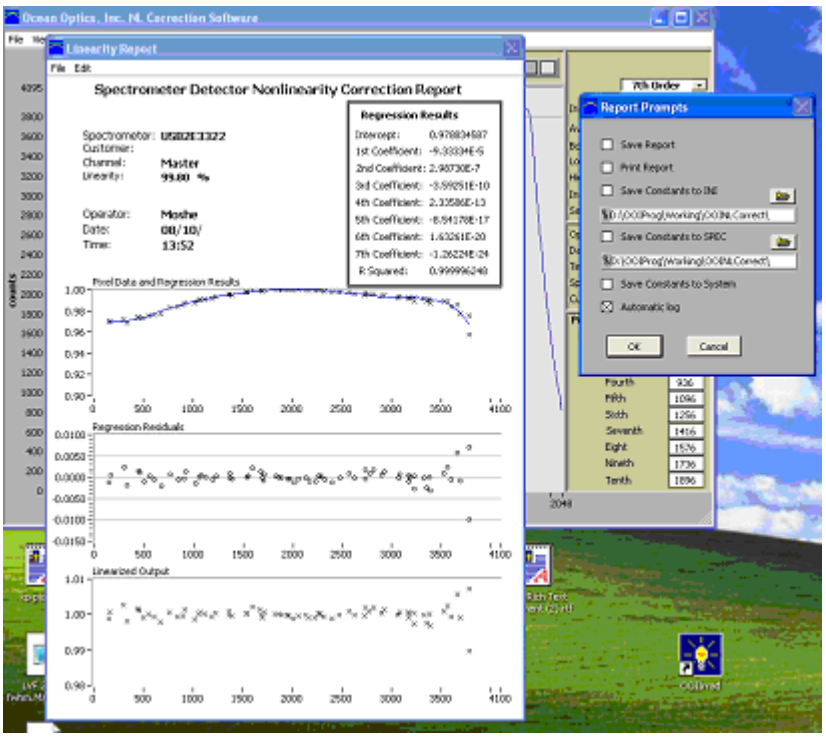


5. Choose **Spectrometer | Pixel Selection**
6. Click **OK.**
7. Adjust the light (attenuate if necessary) until the peak intensity is above the 3800 Saturation Val. You should have a nice curve above the 3800 line just saturated (goes flat) at about 4000 counts.
8. Click the **SELECT** button in lower right hand corner.



9. Choose **Spectrometer | Linearize** from the menu or click **Non Linearity Correct** to start the experiment. You will see spectra on the graph, starting from low light intensities increasing up to saturation. When the experiment is finished you will see a Linearity report displayed on the screen.

10. On the **Report Prompts** dialog box, select **OK**. If you see a *"file 'Moshe.txt' was not found in application's directory. Would you create a new file?"* dialog box, choose **New.** Then close the **Linearity Report** dialog box by selecting **File | Close.**

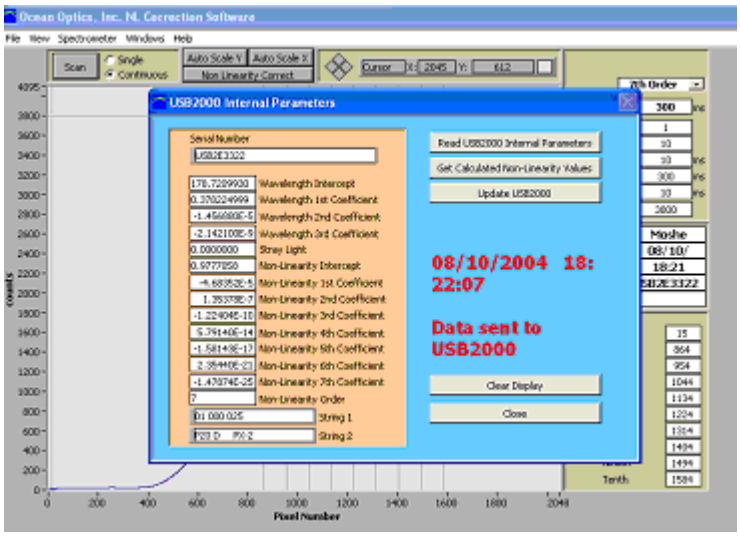


11. From the main menu choose **Spectrometer | USB2000 Data** from the main menu. The ***USB2000 Internal Parameters*** dialog box appears.

12. Click the **Read USB2000 Internal Parameters** button.

13. Click the **Get Calculated Non-Linearity Values** button.

14. Click the **Update USB2000** button to write the Non-Linearity correction coefficients to the USB2000's EEPROM.



15. Now that the Non-Linearity correction coefficients have been successfully written to the USB2000's EEPROM, you can view the coefficients with the OOIBase32 software. To do this:

    a. Open the OOIBase32 software.

    b. After arriving at the main menu (intensity vs. wavelength), select **Spectrometer** | **Configure** | **Detector Linearity** to view the coefficients.