Cary 5000 with Diffuse Reflectance Accessory

Important warnings!

- Do not unplug or plug in the external DRA attachment when the instrument is on. This will ruin the detectors of the integrating sphere
- Do not put white light into the DRA with the DRA electrically connected to the Cary.
- Minimize the amount of time that the integrating sphere is open. Long-term light exposure hurt the detector over time.
- Wear clean gloves while using the instrument
- Do not use liquid or powder samples in the integrating sphere.

Quick Start for using DRA

1. Turn on computer.
2. Click on the Cary Scan icon on the taskbar to start the Scan program.
3. Check that the lens and mirror are correct for your measurement. Ware gloves to change the mirrors or lens.
    a. Install Small Sample kit (SSK) or regular M3 mirror
    b. If using SSK install correct lens L2.
4. Make sure cover is closed on Cary and turn Cary on.
5. If you get an error turn off the Cary, make sure the Cary Scan program is running, and the cover is fully closed. Wait 15 seconds and turn the Cary back on.
6. Wait 20 minutes for the lamps to warm up.
7. If you need to change and/or align the optics, see the local user manual and remember never put white light into the integrating sphere when it is on. Do the alignment using 550 nm light.
8. Select **Setup**
    a. Set wavelength range, %T or %R
    b. Under Options tab: set slit height, SBW to 2 nm, and the detector and grating change wavelengths
    c. Under Baseline tab: chose zero/baseline
    d. Under Storage tab: Set your filename
9. Make sure all exits of Integrating sphere are blocked with full reflectors. (Look inside the IS to make sure that the exits are well covered.)
10. Choose **Baseline** and run 100% T and then when told block the sample beam at the entrance to Integrating sphere.
11. Mount your sample
12. Choose **Go** and Run Spectra
13. When done remove sample and remount reflectors.
14. Turn off Cary
15. Shut down computer.