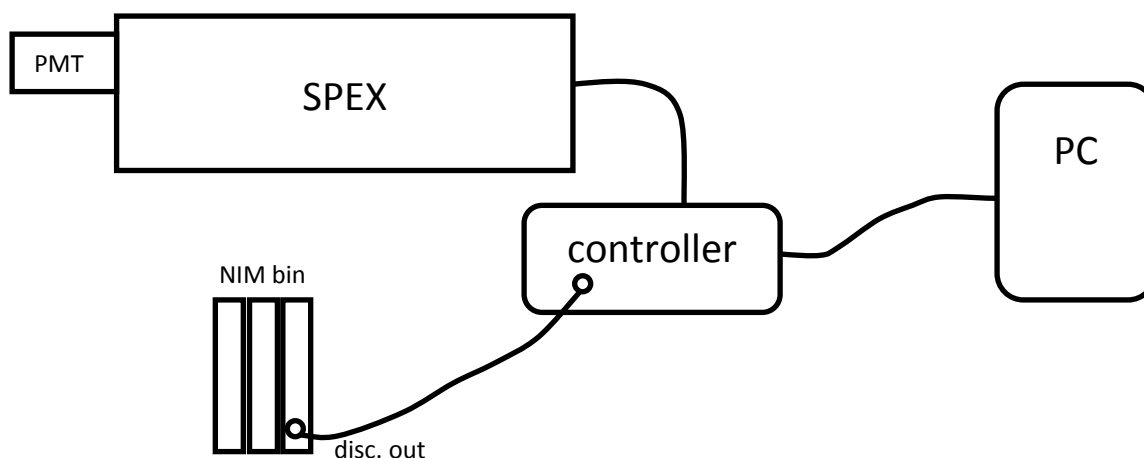


SPEX Spectrometer Quick Start

The Dell computer controls the SPEX monochromator with a LabView program called Spex.vi. This program can be accessed via the Windows desktop and is labeled SPEX.

The USB port of the computer serves as the communication channel to the SPEX spectrometer controller. The processed signal from the PMT is handled by the same controller.



1. Initialize (cold boot)

If the computer is off or the SPEX is non-responsive to the SPEX.vi program, use the following sequence to boot up:

- a. With the Turn SPEX controller OFF and the USB cable unplugged, turn the PC ON and allow it to boot up completely;
- b. Turn on the SPEX controller, plug in the USB cable, and start the SPEX.vi program.

2. SPEX Program (main aspects of the initial setup)

- 2.1 [Tab 1] "Current": When you first start the program, the computer does not know the current wavelength setting of the spectrometer; this tab input synchronizes the spectrometer wavelength setting with the computer.
- 2.2 [Tab 2] "Set": This tab allows you to simply change the wavelength, and allows you to position the spectrometer wavelength precisely in small steps. Using the up/down buttons, the wavelength can be jogged up or down. The radial control sets the coarseness of the jog steps. If the SET button is pressed when the current and set wavelengths already agree, the spectrometer will perform a backlash removal run.
- 2.3 [Tab 3] "Parameters" (optional): The parameters relevant to the experiment are saved with the data file.
- 2.4 [Tab 4] "Run": After setting the initial wavelength (to agree with the current wavelength of the SPEX), final wavelength, step size, and integration time, you press the RUN button to start a scan. Based on current behavior, you can stop the program during a scan – you'll lose the data acquired, but may not lose communication with the SPEX.
- 2.5 File Saving: At the end of a scan, you will be prompted for a filename.