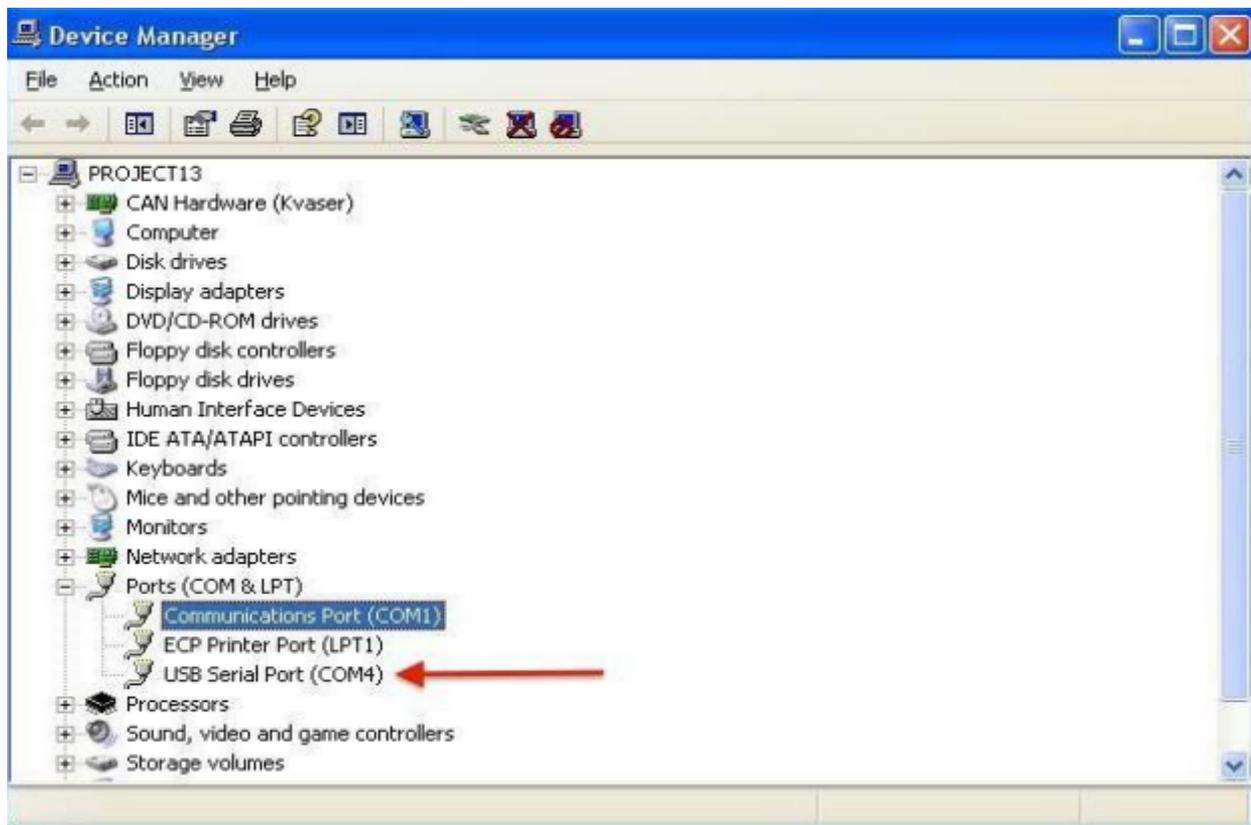
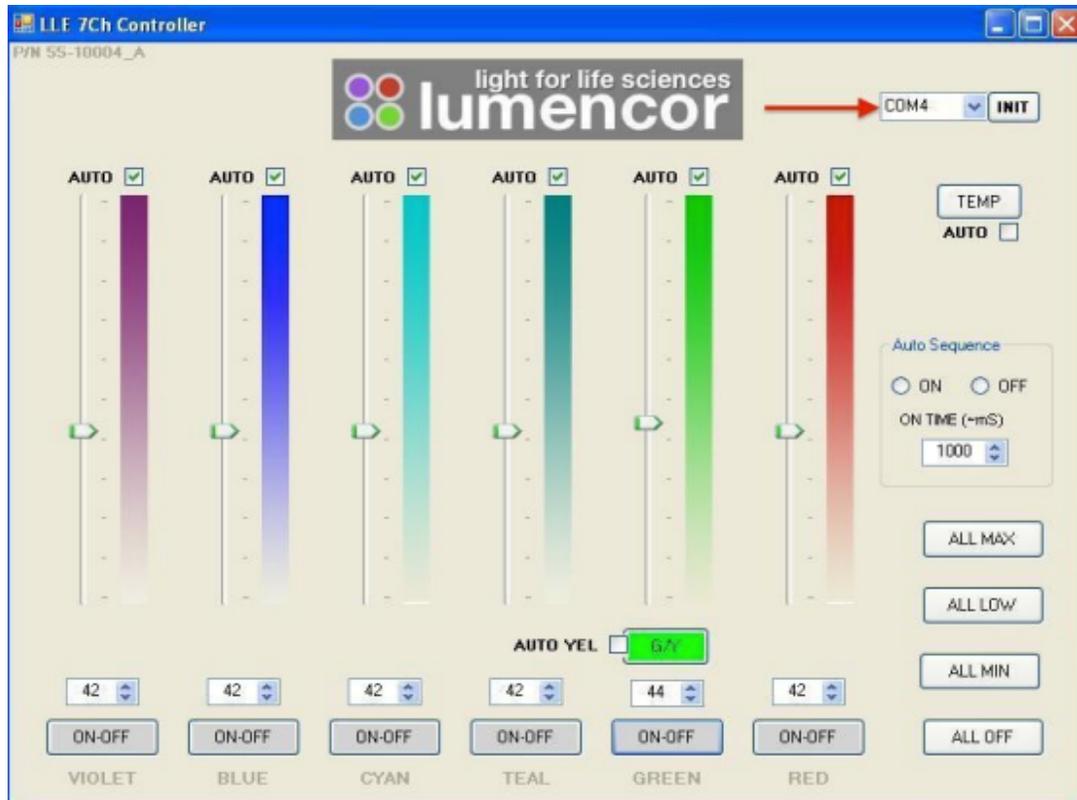


SPECTRA X GUI Instructions

1. Download and install the [SPECTRA X Windows GUI](#)
2. Plug the RS232-to-USB cable (29-10011) from the SPECTRA X into a USB port on the computer.
3. Power on the SPECTRA X. Check the Windows device manager to confirm that Windows has registered the RS232-to-USB converter and assigned a COM port number. If you don't see a USB serial port in the device manager, you may need to install a [driver for the converter](#).



4. Run the GUI in Windows. Set the COM port in the selection box to the same value shown for the USB serial port in the device manager.
5. Press the "INIT" button in the GUI
6. Press the TEMP button to confirm that the computer is talking to the light engine. The response should be a temperature reading close to ambient from the sensor on the SPECTRA X controller board.



7. You now have a functional serial connection to the light engine and all the other controls in the GUI should be operational (note that the G/Y button is not active). Do not turn on any of the light sources without a light guide or optical fiber attached to the output adapter. For safety, the light guide or fiber must be directed into an enclosed optical path.

8. Output intensity can be set from 0–100%; however operation in the range 0–5% is not recommended. Setting the intensity slider to zero is not functionally equivalent to turning light output off using the ON-OFF button. In this condition, the fan will continue to run as the light sources are still energized, even though their output may not be detectable.

9. If the SPECTRA X has the near-infrared output option installed (as specified on the certificate of conformance supplied with the light engine), the “TEAL” controls in the GUI will control the near-infrared output.

10. For further information, please refer to the downloadable [SPECTRA X operations manual](#).