

Startup Procedure for the Leica SP5 X Confocal

1. Check the valve on the nitrogen tank to ensure it is open. Do NOT adjust the regulator.
2. Turn on the mercury lamp power supply (#1). Sign in on the user login sheet and write down the current clock time under 'Start Time'.
3. Turn on the PC Microscope switch (#2), the Scanner Power switch (#3) and the Laser Power switch (#4).
4. Turn the laser safety key to the "On-1" position
5. When the computer is finished booting up, login to your Windows account.
6. Double click on the "LAS AF Confocal" icon to launch the confocal software.
 - a. Check that the configuration is correct: "machine" should be selected.
 - b. If you need to use the resonant scanner (used for high-speed imaging), check the box "Activate Resonant Scanner".
 - c. Click 'Ok' to start the software.
 - d. Note! If you are planning to do tile-scanning or the mark-and-find features associated with the motorized stage, you MUST: tilt back the illuminator arm of the microscope and lower all objective lenses down as far as possible before you click "Yes" in the initialization pop-up window. If you don't need these features, simply click on "No."
7. In the configuration tab, select the Laser window and turn on the lasers you need by checking on the boxes.
 - a. Lasers on the system include: Argon laser (458, 476, 488, 496, 514nm), 405 Diode and white light laser (470-670nm in 1 nm increments).
 - b. If using the argon laser, adjust the output to approximately 30%.
 - c. If using the WLL, adjust the power output to 70%.

Shutdown Procedure for the Leica SP5 X Confocal

Check Google Calendar to see if someone is signed up to use the microscope after you.

If someone is booked within one hour after you are finished with the microscope...

1. Save your images.
2. Exit the software and log out of your Windows account.
3. Fill out the logbook. Record the clock time in the "OFF" space of the user log.
4. Clean the oil and glycerol objective lens(es) with Sparkle and lens paper. Lower the lenses down.

If someone is booked >1 hr after you are finished with the microscope...

1. Save your images.
2. Check the software to see if the argon laser was turned on.
3. Exit the software.
4. Log out of your Windows account and shutdown the computer.
5. Turn the laser safety key to the "Off-0" position.
6. Note! If the argon laser was on, wait until the fan clicks off before continuing the shut down procedure (it takes about 3 minutes for the fan to automatically shut off).
7. Clean the oil and glycerol objective lens(es) with Sparkle and lens paper. Lower the lenses down.
8. After the fan shuts off, turn off the Laser Power switch (#4), Scanner Power Switch (#3) and the PC Microscope switch (#2).
9. Turn off the mercury lamp power supply (#1).
10. Fill out the logbook. Note the clock time in the "OFF" space of the user log.
11. Put the cover on the microscope.

** Please note: Never look into the laser beam coming through the objective lens, as you may damage your eyes or risk going blind. Never look at UV light coming through the objective lens; it may damage your eyes.