



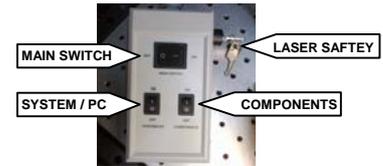
## Quick guide on LSM 780 with Airyscan / ELYRA PS.1

This microscope is a laser device. **Never look into the laser beam**, not even to simply view the specimen, you risk to get blind! A **personal introduction** is **mandatory** for every new user!

### Start-up procedure

In order to get stable temperature conditions inside the black laser safety housing the microscope stand should not be switched off.

→ MAIN SWITCH and SYSTEMS / PC stays always on !



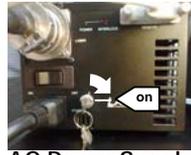
Remote Control

1. If needed switch on the LSM Argon Multiline-Laser (458, 488, 514 nm)

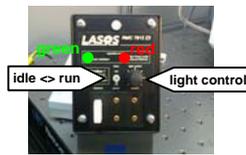
a) *Switch on.*    b) *Turn key to 'on'-position.*    c) *Switch from idle to run with light control at 9 o'clock position.*



AG Power Supply



AG Power Supply



AG Control Panel

*Wait for green LED.*  
*Afterwards adjust light control to a position one tick mark before red light.*

2. Switch on COMPONENTS and check if laser safety key is turned to 'on'-position as well. Wait for the components to initialize (wait until 'noise' from the scan heads has stopped).

3. Start the PC and login as 'LSM user'. Wait for windows to finish start-up procedure.

4. Start the ZEN Software via the icon on the desktop and select 'Start System'.

**NOTE:** Always remove the dust from the instrument before opening. Subsequently a special cleaning of the objectives might be needed if you go for super resolution. This is an inverted microscope stand; you must use only tiny drops of immersion oil!

### Troubleshooting

**NOTE:** If ZEN comes up with errors during startup, you need to restart ZEN and COMPONENTS.

1. Close the ZEN software (if needed 'kill' it the hard way, e.g., via task manager).
2. Click 'Kill ZEN.cmd' on the desktop to terminate all ZEN background processes.
3. Switch off COMPONENTS → Switch on COMPONENTS → Wait a minute → Start ZEN again.

### Standby

1. Switch the LSM Argon Multiline-Laser to 'idle' (at Control Panel).
2. Make sure the LEDs of the CoolLED light source are off (On/Off Button at CoolLED control pad).

**IMPORTANT:** If you finished work and keep the LSM running for a following user, don't run away before you have contacted him/her! Make clear that he/she took over the responsibility for the system.

### Shutdown

**NOTE:** Only shutdown if you are the last user for the day, otherwise let the system on 'Standby'.

1. Switch the LSM Argon Multiline-Laser to 'idle' (at AG Control Panel), and then turn the power supply key switch to 'off'-position (at AG Power Supply).
2. Use the ZEN software to turn off all other laser (Acquire → Laser).
3. Exit the ZEN software and shutdown Windows.
4. Clean all objectives. Clean the front lenses with lens paper and the metal parts with tissue. Take special care to completely remove all oil.
5. Clean the stage, move the focus to work position and close the black safety housing.
6. Switch off COMPONENTS (at Remote Control).
7. Make sure the LEDs of the CoolLED light source are off (On/Off Button at CoolLED control pad).
8. Enter all details on the list.
9. Wait until the ventilator of the LSM Argon Laser Power Supply has been stopped. Afterwards switch off the Argon Lasers Power Supply (at AG Power Supply).

**NOTE:** MAIN SWITCH and SYSTEMS / PC stays always on. Do not switch off .

