

Nikon Spinning Disc Confocal Startup Procedure

1. Using the Remote Control:
 - A. Turn on the Microscope (RC1)
 - B. Turn on the Lasers (RC2)
 - C. If necessary, turn on the Environmental Chamber (RC3)

2. If widefield fluorescence is desired, turn on the HBO lamp:
 - A. Use the power switch in the back of the HBO housing
 - B. Using the keypad on the HBO housing, press “Local” and then “1”

3. Turn on the Computer.

4. Start Nikon Elements.
 - A. Please note that if you do not use the HBO lamp you will receive an error warning when Elements starts. You can ignore this warning.

5. Initialize Nikon Elements
 - A. Press the green check mark (✓) on the left hand side of the screen.

6. Make beautiful images.

7. Publish awesome papers.

When in doubt, contact Joe Dragavon:

Office: C315

Phone: (303) 735-6988

Cell: (720) 934-2933

Nikon Spinning Disc Confocal Shutdown Procedure

1. Save your beautiful images to your Network drive.
2. Exit Nikon Elements and disconnect from your Network drive.
3. Remove your sample from the stage and clean up the microscope
 - A: Clean oil from the objective, and remove your waste.
 - B. Lower the objective to a position below 1000 as indicated by the LCD screen on the microscope.
4. Open the reservation calendar:
 - A. If there is a user within 1 hour of the end of your session, turn off the Environmental Chamber (RC3) and then proceed to Step 8.
 - B. If the next user is more than 1 hour after the end of your session, then proceed to Step 5.
5. Using the Remote Control:
 - A. Turn off the Microscope (RC1)
 - B. Turn off the Lasers (RC2); **DO NOT TURN THE KEY!**
 - C. If necessary, turn off the Environmental Chamber (RC3)
6. If widefield fluorescence was used or is on, turn off the HBO lamp:
 - A. Using the keypad on the HBO housing, press “Local”, then “2”, and then “1”
 - B. Turn off the power switch in the back of the HBO housing
7. Turn off the Computer.
8. Publish awesome papers.

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Nikon Spinning Disc Confocal Environmental Control Startup Procedure

1. Turn on the heating element (RC3):
 - A. Allow at least 1 hour before you begin to image.
 - B. By default this is set to 37°C. Please ask if you would like a different temperature.
 - C. Be sure to close all of the doors on the incubation chamber.

2. Open the Compressed Air and CO₂ gas cylinders:
 - A. **DO NOT ADJUST THE REGULATORS!**
 - B. The gas mixture is set to 5% CO₂ by default. Please ask if you would like a different mixture.

3. Mount the Environmental Chamber Stage Insert:
 - A. Be sure that the appropriate adapter is used within the Insert for either imaging dishes or multiwell plates.
 - B. Secure the insert using the 4 mounting screws.

4. Connect the gas line to the Environmental Chamber Stage Insert.

5. Fill the Humidifying Unit with DI-H₂O if necessary:
 - A. Do not overfill the Unit.
 - B. Allow the humidified gas to flow through the Environmental Chamber Stage Insert for at least 15 minutes prior to use.

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Nikon Spinning Disc Confocal Environmental Control Shutdown Procedure

1. Turn off the heating element (RC3).
2. Close the Compressed Air and CO₂ gas cylinders:
 - A. DO NOT ADJUST THE REGULATORS!
3. Remove the Environmental Chamber Stage Insert:
 - A. Remove your sample
 - B. Disconnect the gas line
 - C. Completely loosen the mounting screws

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Compressed Air

CO₂