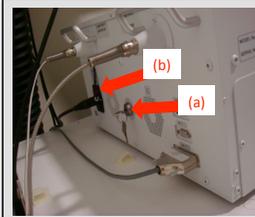## How to switch ON/OFF the PerkinElmer UltraVIEW spinning disk system

1. Turn on laser control box with both (a) key and (b) main switch.
   Included in the box are the controls for the diode laser lines 405 nm, 440 nm and 640 nm.

key   key

LEVEL knob   LEVEL knob

2. If 488 nm, 514 nm and 568 nm laser lines are needed, turn on Argon and Krypton lasers with keys on power packs.
   <u>Turn ON and OFF must be done in STAND BY!</u>
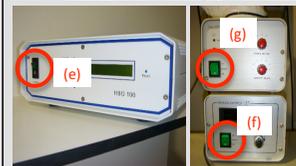
STAND BY switch & indicator light

Keep the LEVEL knobs as low as possible to protect the lasers from overpowering. Recommended is the 9 o'clock position (or lower). Never turn LEVEL knobs higher than 12 o'clock.
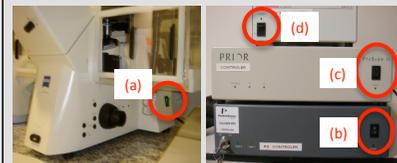
3. Turn on:
   (a) microscope
   (b) ERS control box
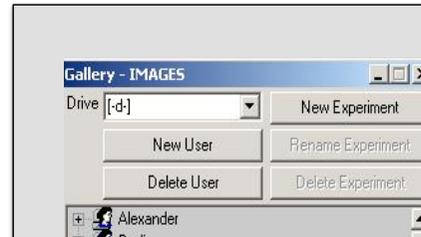   (c) ProScan II controller
   (d) camera controller

(Optional) Turn on (e) epifluorescence and controls for (f) temperature and (g) heating units.

4. Turn on computer, log in and start the UltraVIEW ERS Imaging Suite software for image capture and analysis.

Turn OFF the system in reverse order.

A quick guide to image capture

1. Start the **UltraVIEW ERS Imaging Suite** software.

2. In the Gallery Tree View, create a **New User** and **New Experiment** as required.

3. Focus the sample under the microscope using brightfield or epifluorescent illumination.

4. Switch lightpath to sideport (to confocal scanning unit).

5. In the **Hardware Controller**, select **Fast Sequential** for fast, dual colour excitation discrimination experiments, or **Emission Discrimination** to use bandpass filters.
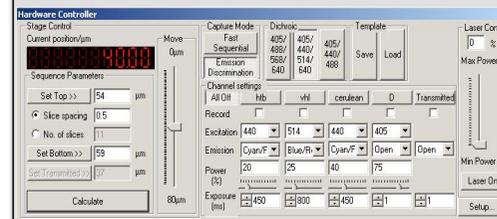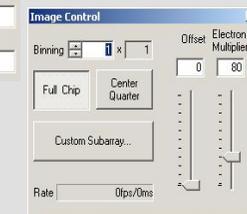
6. Click the appropriate **Dichroic**.

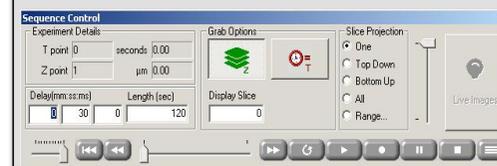7. Select the required laser line and then adjust the **Power**.

8. In **Grey Levels**, use **Autoscale** if required to help find the sample.
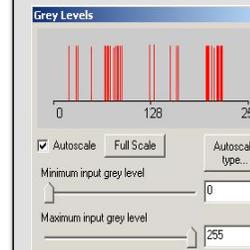
9. Optimise camera settings: **Exposure** (in **Hardware Controller**), **Binning**, **Gain**, **Custom Subarray** (in **Image Control**).

10. Choose the required channels by selecting the **Record** check boxes (in **Hardware Controller**).

11. Define acquisition criteria: **z, t, delay**.

12. Click **Record** to start acquisition.