Visitron Spinning Disk



Startup

- Switch on the labeled power strips **1**, **2** and **3**, in this order. Wait a second or two between powering on the next one.
- Switch on the lasers you need via the keys (4).
- Turn on the computer (5).



• Select the camera: for the sCMOS camera (fast, high resolution), push in the handle on the spinning disk unit. For the EM-CCD (low resolution, high sensitivity), pull it out.

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- Windows login: pick the right user account (FRAP or Imaging).
- Launch VisiView. If you have not turned on all lasers, an info message will pop up, listing inactive lasers. Acknowledge this by clicking OK. Likewise, acknowledge Hard drive not found warnings with OK.
- Startup dialog:
 - Camera: enter the selected camera (*sCMOS* or *EM-CCD*).
 - Objective: choose the one you wish to use from the drop-down list.
 - Objective to load position: Yes (recommended) moves the objective to the lowest (safe) position. Choose No (are you sure?) only if you had to restart VisiView and want to keep the current focus.
 - Keep settings/postions: No (recommended) clears any stage positions and illumination settings from the previous user. Choose Yes only if you had to restart VisiView.

| Startup Settings | | x |
|----------------------------|-------------------|--------------|
| Camera | sCMOS | ~ |
| Objective | 5x A-Plan | \mathbf{v} |
| Objective to load position | Yes (recommended) | \mathbf{v} |
| Keep settings/positions | No (recommended) | \mathbf{v} |
| ОК | | |

Channel/wavelength settings: in the top menu, select Configure \rightarrow Focus.

- Acquire wavelengths at each Z is preferred for z-stacks of rapidly moving objects (shortest possible intervals between different channels).
- Z Series for each wavelength is overall faster (requires less movements of the filter wheel).

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• File format settings: in the top menu, select *Configure* \rightarrow *System*. In the dialog popping up, select the Acquisition tab. Select file format:

| System Setup X | | |
|--|--|--|
| General Dock Acquisition Display Admin | | |
| Stream | | |
| ⊙ No action | | |
| O Disable Stream at incompatible settings | | |
| O Disable stream + incompatibility warning | | |
| ◯ Warn but leave stream enabled | | |
| Save File | | |
| Metamorph STK format 🛛 🗹 auto | | |
| Use legacy acquisition | | |
| Deactivate disk space check | | |
| ✓ Use multi threaded data copy | | |
| Use legacy ScanSlide | | |
| | | |
| | | |
| | | |
| OK Cancel | | |

- *Metamorph STK format* is recommended for all kinds of multidimensional acquisitions.
- o OME Tiff format is recommended only for simple, single-channel FRAP experiments. This format stores FRAP regions within the metadata. Make sure to check the *auto* checkbox. VisiView will then automatically select the proper OME Tiff subtype (32 bit with the file extension *.ome.tif, or the 64 bit version as *.ome.btf).

Shutdown

- On the touch panel of the microscope, press the Load Position button.
- Remove your sample. •
- Clean all used immersion objectives with lens cleaning paper.
- Exit VisiView.
- When leaving the system for the next user: sign out from Windows.
- Full shutdown: shut down the computer. Swith off all laser keys (4). Power off the power strips ٠ in reverse order (3, 2, 1). Put the dust cover over the microscope (spare the EM-CCD).