Spinning Disk - Visitron (Irchel) - 1: Start Up

How to start up the Visitron Spinning Disk hardware at the Center for Microscopy and Image Analysis, Room Y23-F-14.

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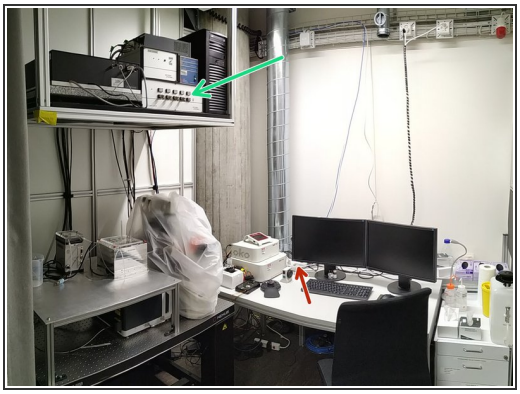
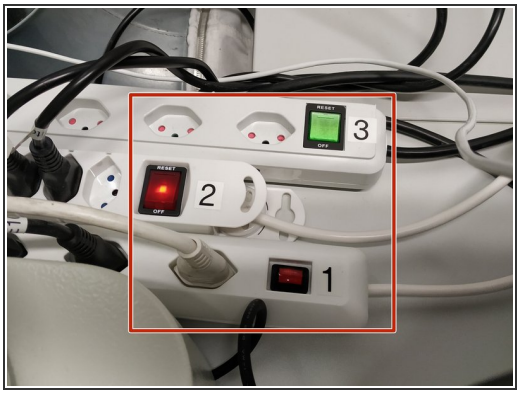
INTRODUCTION

How to start up the Visitron Spinning Disk hardware at the Center for Microscopy and Image Analysis, Room Y23-F-14.

Step 1 — Switching ON Hardware



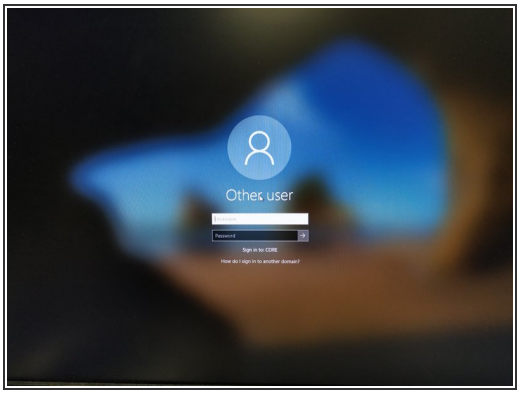


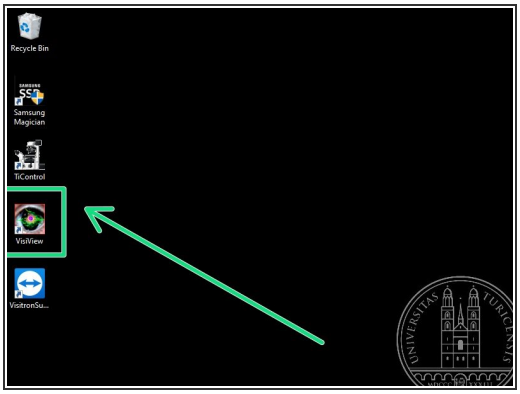
- Switch ON all **power supplies** (1, 2 and 3).

ⓘ Power supplies: **1** - Microscope, cooled LED for TL, incubation system; **2** - PC components; **3** - lasers, LEDs etc.

- **Turn ON** the **laser keys** needed for your imaging experiment (4).

Step 2 — Sign-in and start software



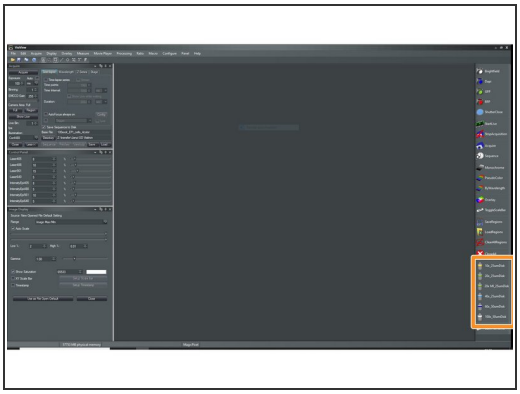


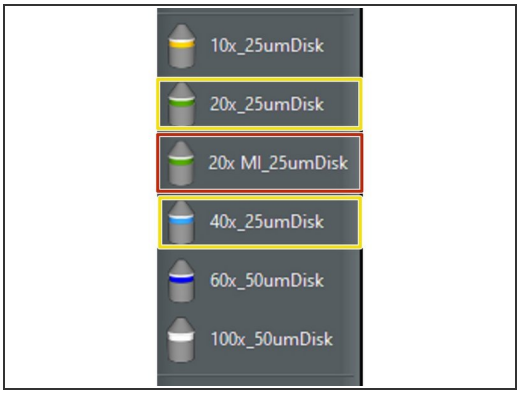
- **Turn ON** the **PC** via the external knob on the table if necessary.

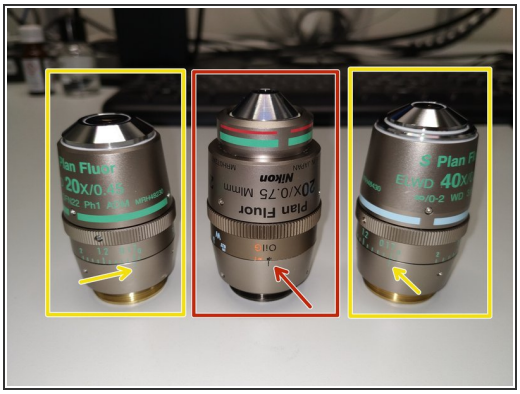
ⓘ Sometimes the PC does not switch ON via the power supply 2, that's why there is an additional knob.

- **Sign-in** with your **ZMB core** credentials.
- Start the **"VisiView"** software by double clicking on the icon.

Step 3 — Objectives







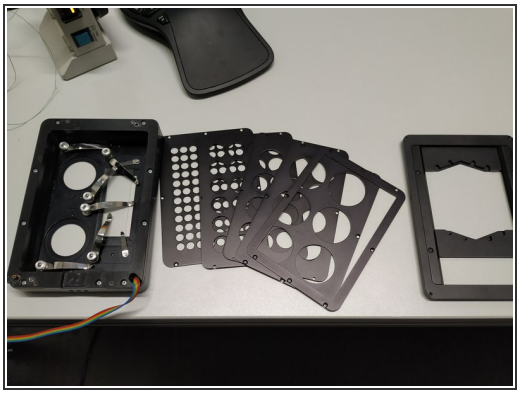
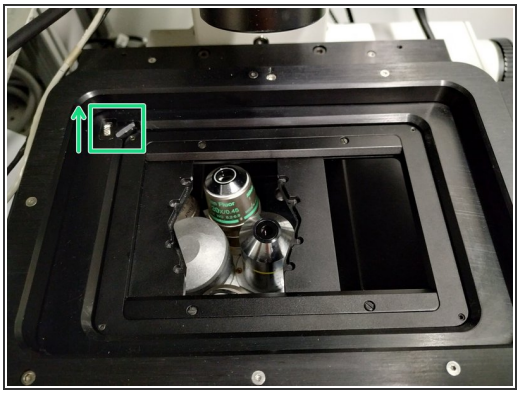
- You can toggle between objectives via the software task bar.

⚠ For some objectives the **correction collar** has to be adjusted.

- On the **20x** and **40x dry** the **cover glass thickness** needs to be adjusted (0 - 2 mm). Standard is usually 0.17 mm.
- On the **20x MI** (multi-immersion, Oil, Glycerin or Water) it needs to be set to the **immersion media** applied (Oil, G, W).

⚠ Please, DO NOT remove the objectives for adjustment. They can be easily accessed on the system.

Step 4 — Stage Inserts

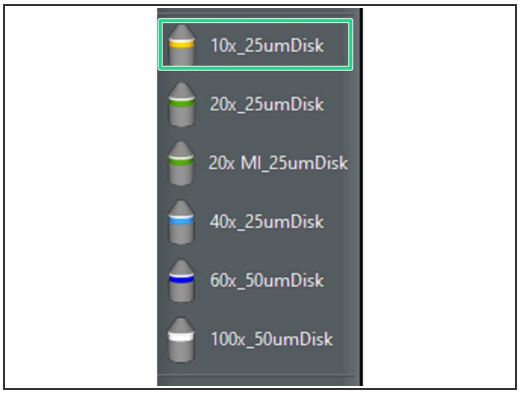



- **Move** the objectives **down** by using the "Focus wheel" (check on the front panel if the "Z"-value decreases)

ⓘ Available **stage inserts**: for environmental control (with associated inserts for slides, petri dishes and different well plates) and a universal holder.

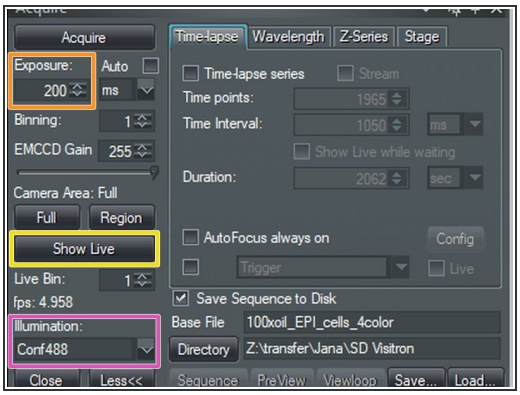
- **Install** the needed stage insert and tighten it with the **little screw** (arrow direction indicates how to tighten the screw).

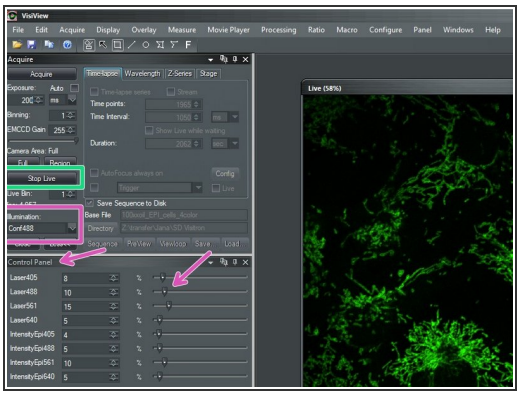
Step 5 — Mounting your sample

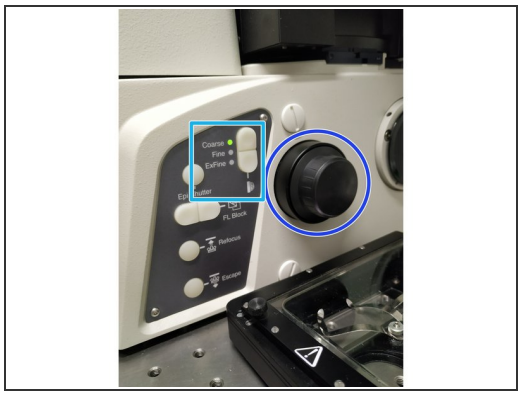



- Choose the **10x dry objective** via the software.
- **Mount** your sample on the stage.
- **Move** your sample over the objective with the help of the **Joystick**: Fast movement - straight shifting of the knob, slow movement - tilting of the knob.
- To guaranty only slow movement press the assigned button "Slow - On/Off".

Step 6 — Focus your sample



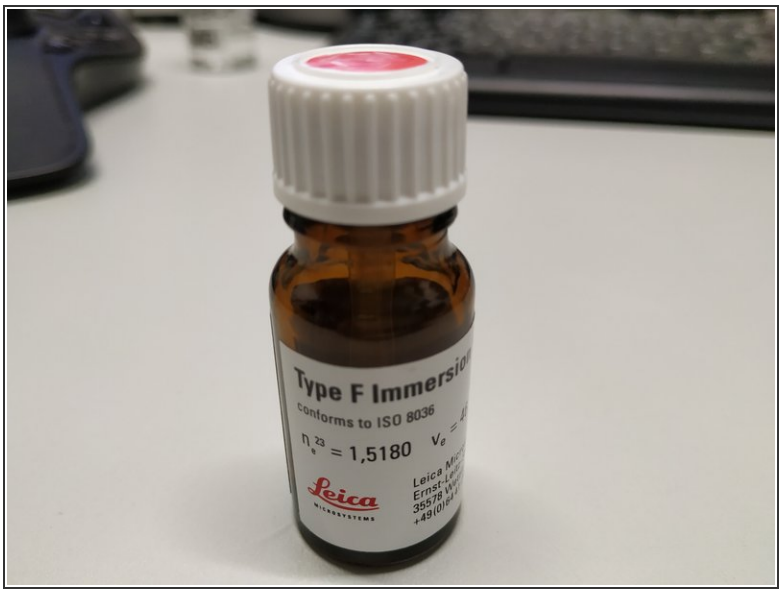




- Choose the light source under **"Illumination"**.
- Set intensity in the **"Control Panel"** window with the slider.
- Set **"Exposure"**.
- Click **"Show Live"**.
- **Focus** your sample via the focus wheel on the microscope stand.
- You can toggle in between "Coarse", "Fine" and "Exfine" mode for the focus.
- Click **"Stop Live"** once you've focused.

ⓘ The "Live" image will disappear.

Step 7 — Switching objective, and/or exchanging sample



ⓘ After focusing you might want to switch to a higher magnification.

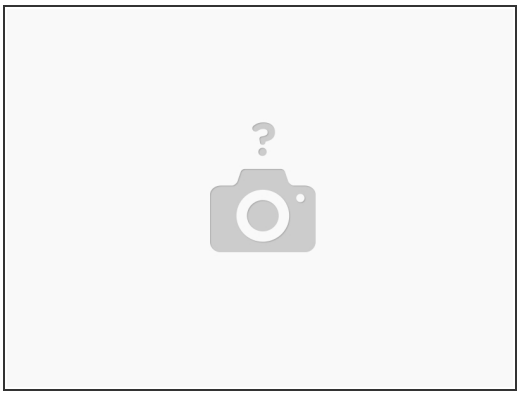
- Press the **"Escape" button** . Toggle to the appropriate objective via the software.

Check the correction collar and in case of immersion objective - apply "Type-F" immersion liquid (either on the sample or directly to the objective).

- Press **"Refocus"** and focus your sample as described in the previous step.

ⓘ The "Escape" and "Refocus" buttons are also very useful when exchanging samples.

Step 8 — Acquiring images



For acquisition of multicolor images in 2D, 3D, live cell and/or at multi-positions refer to the corresponding guide.

