

QUICK START – LEICA TCS SP8

System Start Up

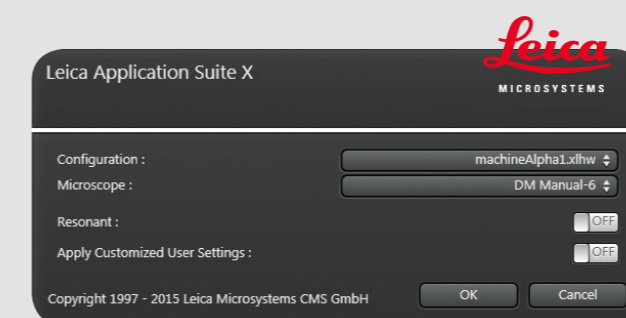


Turn on the microscope control box.

➔ **For system configuration with CSU:** Turn on the PC and await the booting process. Then turn on the power supply for the scanner **1** and the lasers **2** by pushing the green buttons and turn the laser key **3**, to open the laser shutter.

For system configuration with FSU: Turn on the power supply for the PC **1**, the scanner **2** and the lasers **3** by pushing the green buttons and turn the laser key **4**, to open the laser shutter.

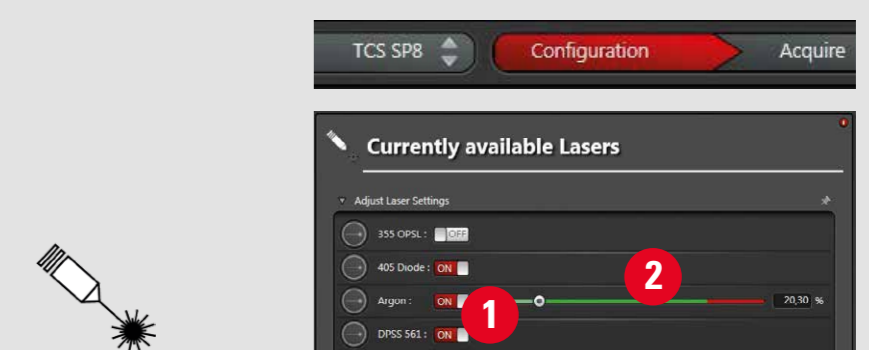
Software Start Up



➔ Start LAS X by double-clicking the LAS X icon.

➔ Make sure there is the correct selection for **Configuration** and **Microscope**. Turn on **Apply Customized User Settings** to choose **User Settings** saved in a preceding session. Turn off **Apply Customized User Settings** to start LAS X with the default settings. Click **OK** and follow the instructions (i.e. **Initialize Stage**).

Laser Start Up

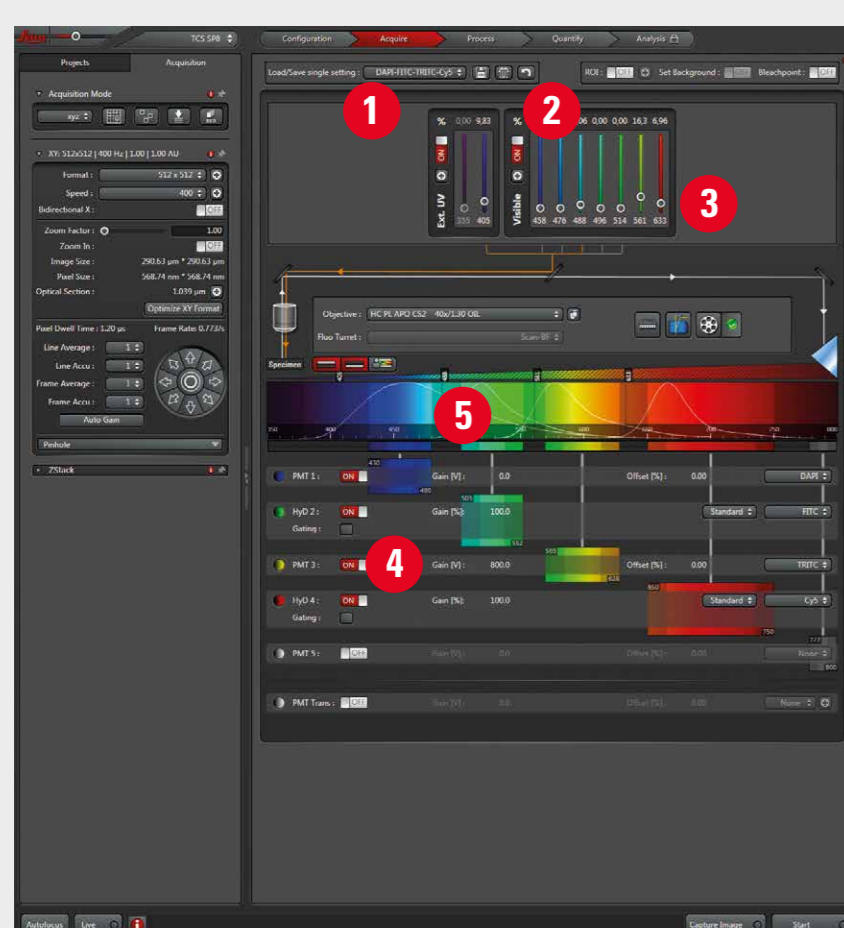


Go to **Configuration**.

➔ **1 Activate lasers (ON)**
2 Use the slider to set the laser power of the Argon laser (458 nm–514 nm) to 20–30%.

Image Acquisition

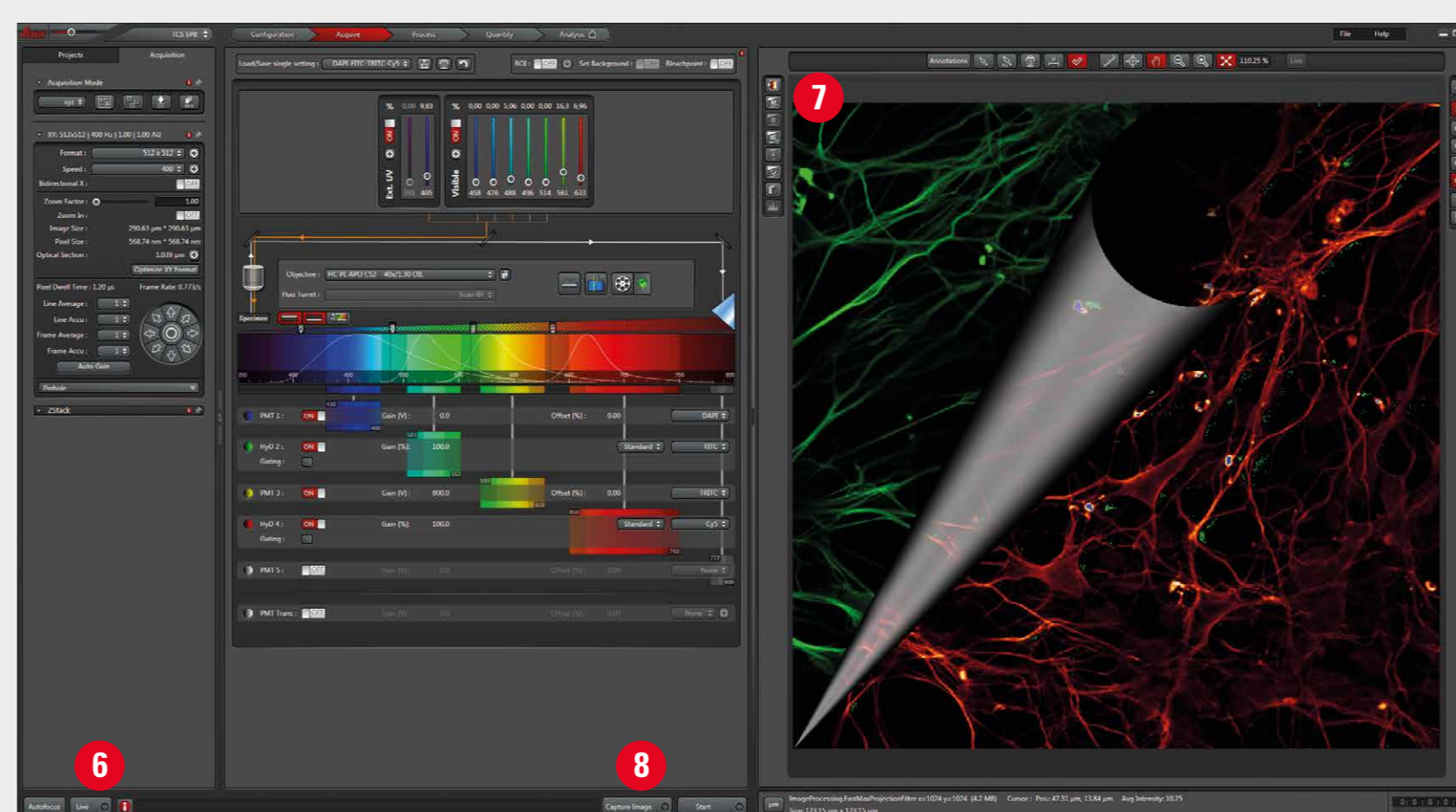
Go to **Acquire**



1 Choose a **single setting** from the list (i.e. FITC/TRITC) and continue with step 6. Steps 2 to 5 are automatically set.

If no appropriate **single setting** is available, proceed manually with steps **2** to **5**:

- 2** Activate lasers (**ON**).
- 3** Set excitation laser line(s).
- 4** Activate PMT/HyD (**ON**), define **Gain** and **Offset**.
- 5** Position PMT slider at maximum emission.



6 Start **Live scan***.
7 Click **QLUT** to switch to **Glow**. Change **Z Position** by turning the respective wheel on the control panel until you get the brightest signal (focal plane).

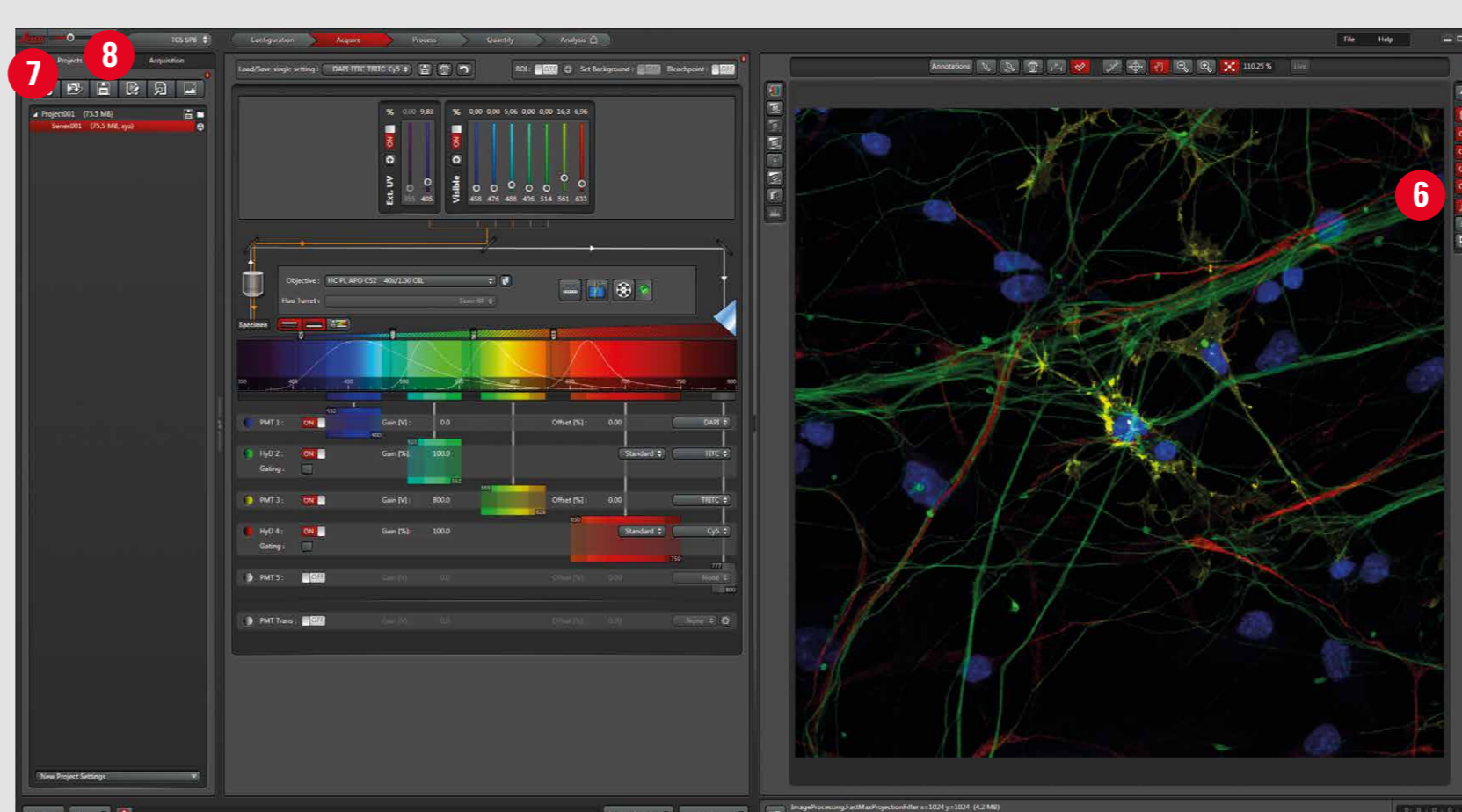
Optimize image settings manually by adjusting steps **3** to **5**, until the image contains a few blue (saturated) pixels. Go back to original **LUT 7** by clicking twice.

8 **Capture Image***. **Save Project** (see below, Z-Series Acquisition).

Z-Series Acquisition



- 1** Open **Z-Stack Dialog**.
- 2** Set **Focal Plane**.
- 3** Set **Begin- and End-Position**.
- 4** Click **System Optimized** to define the number of slices.
- 5** Click **Start** to acquire the z-series*.



- 6** Click **Max**, to generate a maximum projection.
- 7** To save the experiment go to tab **Project** and
- 8** click on **Save**.

System Shut Down

Follow exactly the sequence described to shut down the system:

1. Deactivate all lasers in the laser configuration window (see Laser Start Up section), wait approx. 5 min. until ventilation of Argon laser has shut-off.
2. Close software.
3. Shut down PC.
4. Shut down CSU or FSU, respectively, in reverse order (see **System Start Up** section).



*** CAUTION!**

Laser light in objective plane from now on. User manual must be strictly observed.

