



Zeiss LSM980 inverted confocal (i980) condensed user guide

Grant acknowledgement

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Turn-on sequence

- 1) If the components switch is off, turn it on and wait for the touchscreen to boot.
- 2) While waiting, log into BRCLLogin.
- 3) Push down button on right-hand focus knob to lower objectives to load position.
- 4) Once touchscreen has booted, double click Zen acquisition software.
- 5) Choose "calibrate now" for stage if option is available.

Turn-off sequence

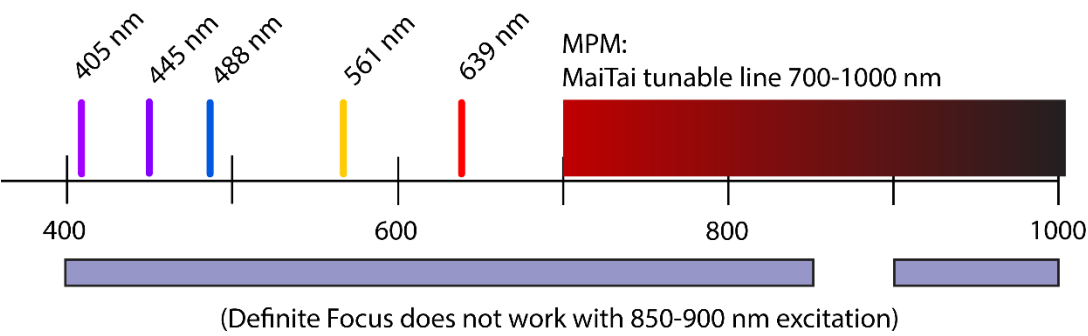
- 1) Make sure all your data is saved in the fileshare.
- 2) Push down button on right-hand focus knob to lower objectives to load position.
- 3) Exit the software.
- 4) Log out of BRCLLogin.
- 5) If you are the last user of the day, turn off the components switch.

Objectives

Mag	NA	Immersion media	Coverslip thickness (mm)	Correction collar	Working distance (mm)	Objective type
5x	0.16	Air	0.17	--	18.5	EC Plan-Neofluar 5x/0.16
10x	0.3	Air	0.17	--	5.2	EC Plan-Neofluar 10x/0.3
20x	0.8	Air	0.17	--	0.55	Plan-Apochromat 20x/0.8
40x	1.2	Water, Silicone oil or Glycerine	0.15 - 0.19	Coverglass thickness and immersion media	0.41 at coverglass 0.17	LD LCI Plan-Apochromat 40x/1.2 Immersion Corr DIC FCS
40x	1.4	Oil	0.17	--	0.13	Plan-Apochromat 40x/1.4 Oil
63x	1.4	Oil	0.17	--	0.19	Plan-Apochromat 63x/1.40 Oil DIC f/ELYRA

Note that there are problems with the touchscreen display. Objective information in the acquisition software is correct! Extra objective lenses kept on the shelf (not on the turret)

Laser Lines



Widefield filters (X-Cite Xylis excitation)

Name	Excitation band (nm)	Dichroic (nm)	Emission band (nm)
DAPI Set #49 (Hoechst, Pacific Blue, Coumarins, Blue dyes)	G365 (325-375)	395	445/50 (420-470)
GFP Set #38 (Fluorescein, GFP, Alexa-488, Cy2, Green dyes)	470/40 (450-490)	495	525/50 (500-550)
Cy3 Set #43 (rhodamine, Alexa-568, mCherry, tdTomato, PE)	550/25 (537.5-562.5)	570	605/70 (570-640)
Cy5 Set #50 (Alexa-647, APC, mRFP)	640/30 (625-655)	660	690/50 (665- 715)
Cy7 Set #115 (Alexa-750, Dylight-755, Zombie NIR)	710/87 (666.5-753.5)	760	814/91 (768.5-859.5)

NIR detector filters

Name	NIR1 (nm)	Dichroic (nm)	NIR2 band (nm)
Standard filter pack	660-705	730	755-920

Non-descanned multiphoton filters

