Axio Zoom.V16
Standard Operation Protocol

Contents

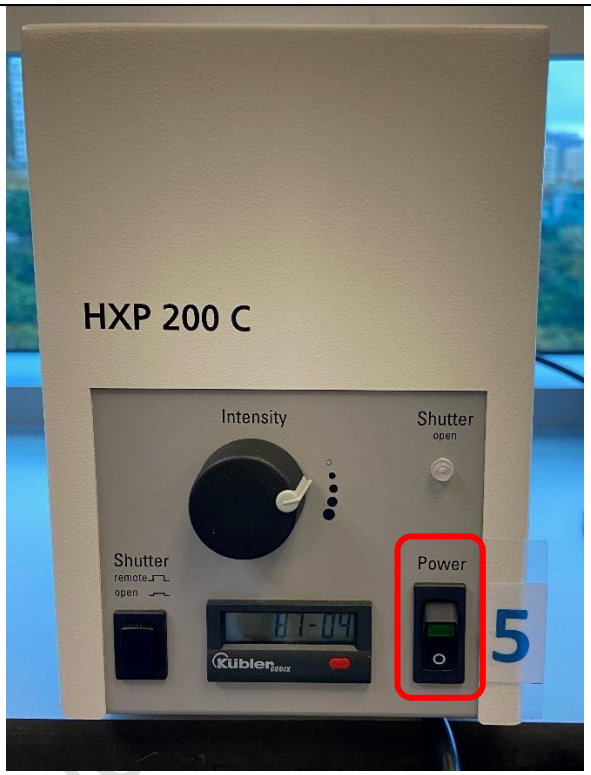
A. System start up

1. Turn on switch number ①, ② and ③.	 
2. Press I/O button for 3 seconds to turn ON HIP module.	
3. Change base brightfield light intensity with dial.	

4. [Optional] Turn on switch ④ if fluorescence mode is required. Skip this step if not applicable.

⚠ If you accidentally turned the unit on, **wait for >10 minutes** before turning it off.

Select appropriate fluorescence channel and press 'Shutter' for excitation light.



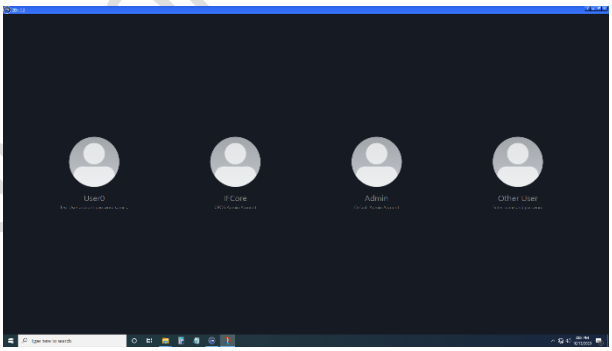
5. VisiLED modular ring light ⑤. ⚠ This module is not installed to the setup in routine condition. Please contact admin via imaging.cpos@hku.hk **2 days in advance** for arrangement.	
6. Confirm light path is selected to 'Eye' 👁	

B. Acquiring an image

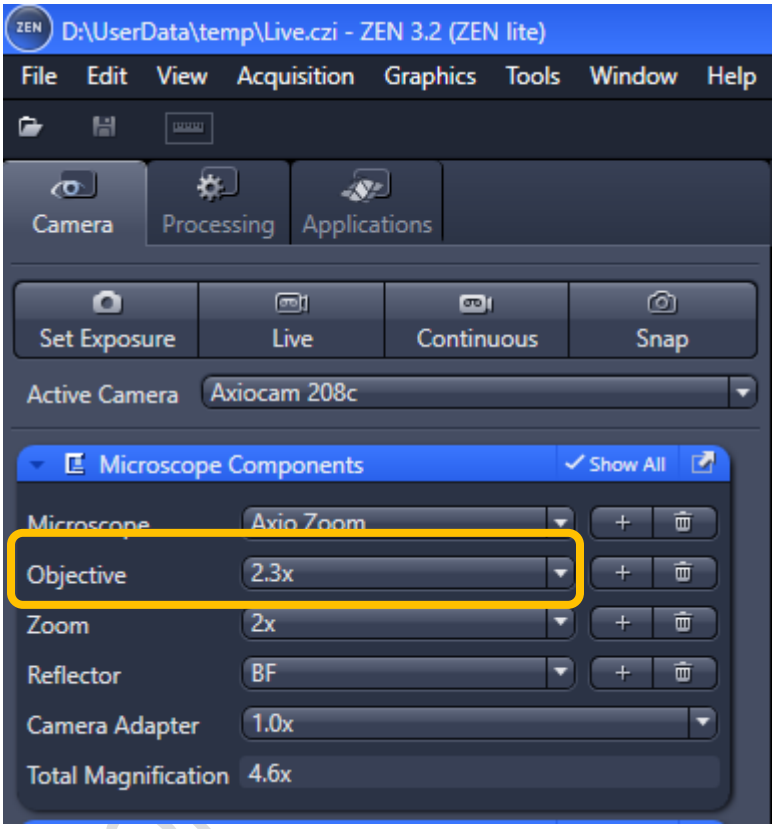
1. Turn ON PC. ⑥

2. Select ZEN software Blue edition

3. Select ‘User’ and no password is needed.



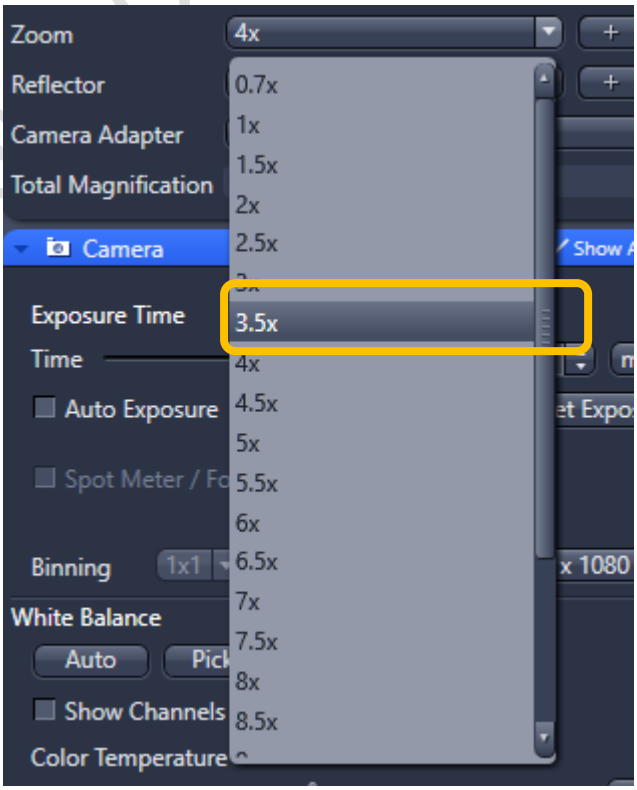
4. In microscope components window, select appropriate 'objective'. Current setup you may choose 0.5 X or 2.3X objective.



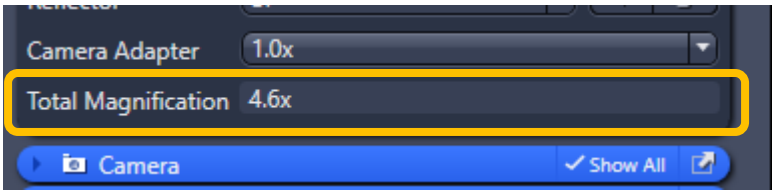
5. Select appropriate 'Zoom' ratio.

Calculation with the following:

$$Zoom\ ratio = \frac{(\text{magnification displayed by H. I. P.})}{10 \times (Lens\ magnification)}$$



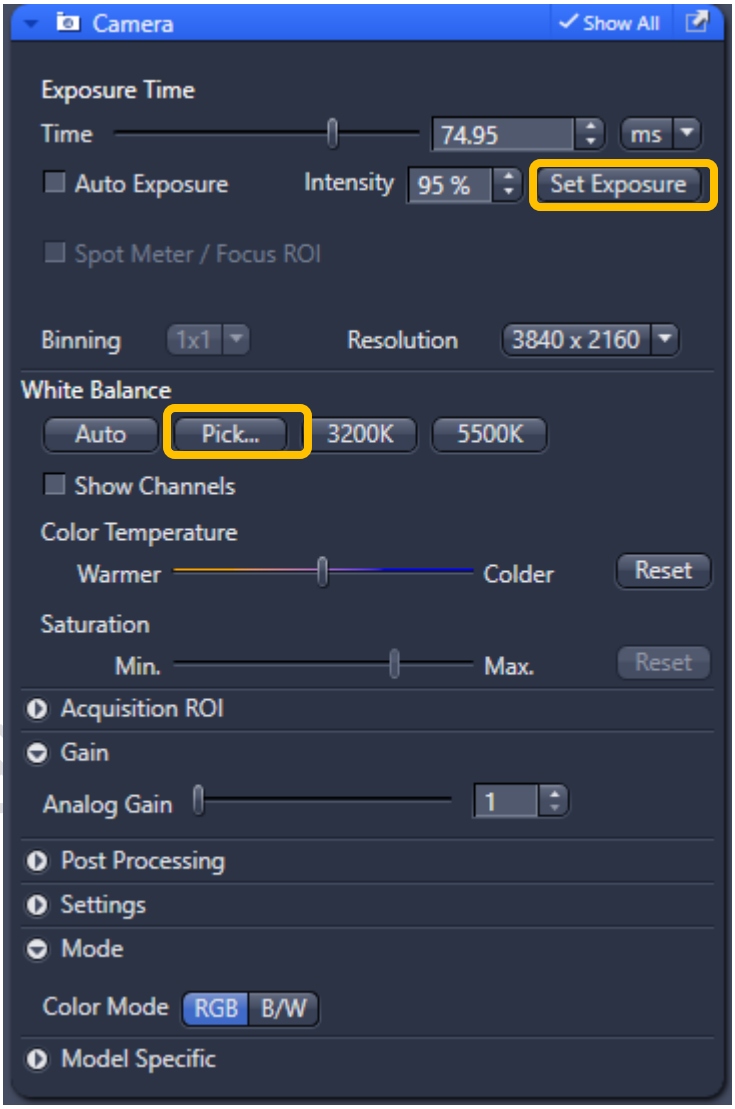
6. For correct scaling label, make sure 'Total Magnification' displayed by the software is **1/10 of the number displayed on H.I.P. panel**.



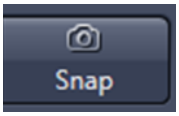
7. Confirm light-path is set to 'Camera'

8. Set exposure time for the image so that there is no oversaturation peak in 'Display' histogram. For convenience press Set Exposure.

   If you would like to designate an area to be white balance reference. Pick... and then pick on white area in your image.

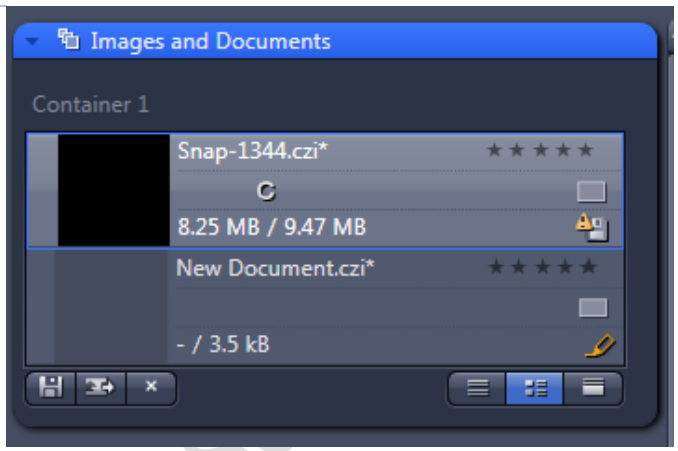


9. Click on 'Snap' to capture an image.



C. Saving an image file

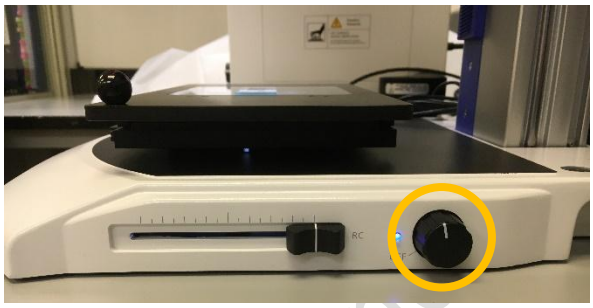
1. Go to right hand side Image Library column to find your latest acquired image. Double click on the image you wish the save. Click on 'Save' button.
2. Alternatively,
   Right click on the image you wish to save and then click 'save selected' from the pull down menu appeared.
3. Navigate to D:\\ (Hard drive 'D') Data\
4. Create a folder with your PI's name and + 'Lab' wording suffix. Applicable if no such folder exists and you are the first one in your lab using this microscope.
5. Navigate into the folder you have just created.
6. Choose file format as '.czi' acronym for 'Carl Zeiss Image'
7. Type in name (preferably no spacing).
8. Click 'Save'
9. Warning Icon  or  indicates unsaved or changes has been made to your .czi file.



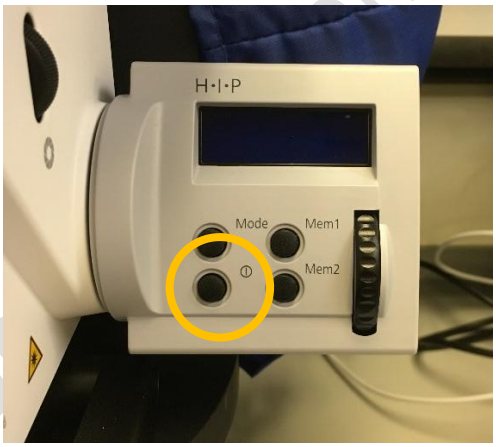
10. Image upload.
    Please see guide on Desktop 'Upload guide'.
11. Image Export.
    Please see ZEN Blue 2.3 SOP.

D. System power down

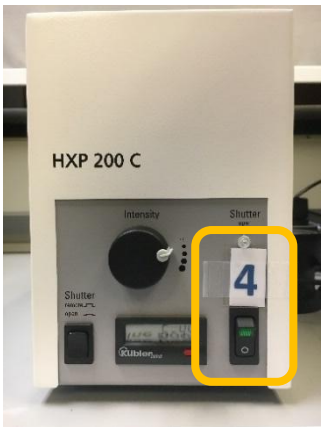
1. Delete all unwanted image files.
2. Exit ZEN software.
3. Remove your sample from stage.
4. Turn off base LED light source (if applicable).



5. Turn off H.I.P. control panel.



6. Turn off HXP200V ④ (if applicable).



7. Turn off ③, ② & ① on wall port.
8. Put back microscope cover

   ⚠ watch out not to bend fluorescent light guide exiting microscope at the back.
9. Sign Logbook before leaving.