

HY-LITER EZ-VIEW

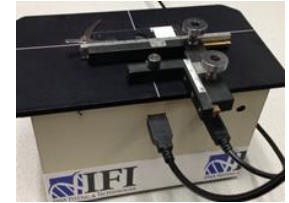
an inverted fluorescence viewer

EZ-VIEW Set Up Instructions

1. Install EZ VIEW software first. Open EZ-VIEW INSTALL.msi file which is on EZ-VIEW INSTALL DISK included in package.
2. At the end of the install, you will see two (2) new shortcuts on your desktop:
Lumaview and *USB Driver Setup*.



3. Open *USB Driver Setup* – follow prompts and install driver. After this has finished installing, you can delete the shortcut from your desktop.
4. Take EZ-VIEW out of the shipping box and place on desk or flat surface within 1.5 meters of your computer.
5. Install the small LED gooseneck lamp into the flat USB port on the middle back of the EZ View. Install the long USB cord into the square USB port on the back of EZ VIEW box.



6. Place SPERM HY-LITER positive control microscope slide into slide holder. In order to view slides on the EZ View, they must be placed upside down, cover slip facing the objective. Hold microscope slide face up as shown below, then turn slide upside down and position into slide holder.



7. Set switches for B (brightfield or white LED from gooseneck lamp) and F (fluorescence LED) to ON position. Please note: lights will not go on until software is fully installed.



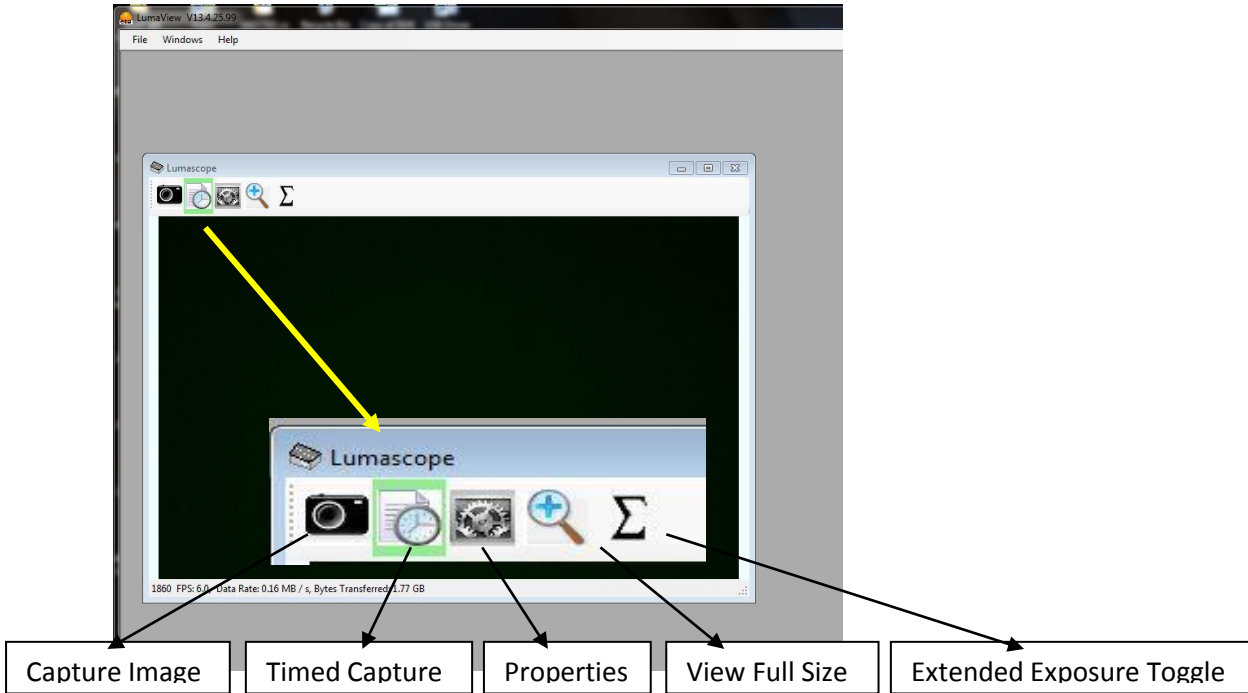
8. Insert the flat end of USB cord into a desktop/laptop USB port. It will take a moment for the computer to recognize the new hardware. Please wait until the USB driver is recognized and ready for use.

9. Double click the *Lumaview* shortcut on your desktop to open the software.



10. This will bring up the live camera window and controls. The control menu bar includes:

- Capture Image
- Timed Capture
- Properties
- View Full Size
- Extended Exposure Toggle

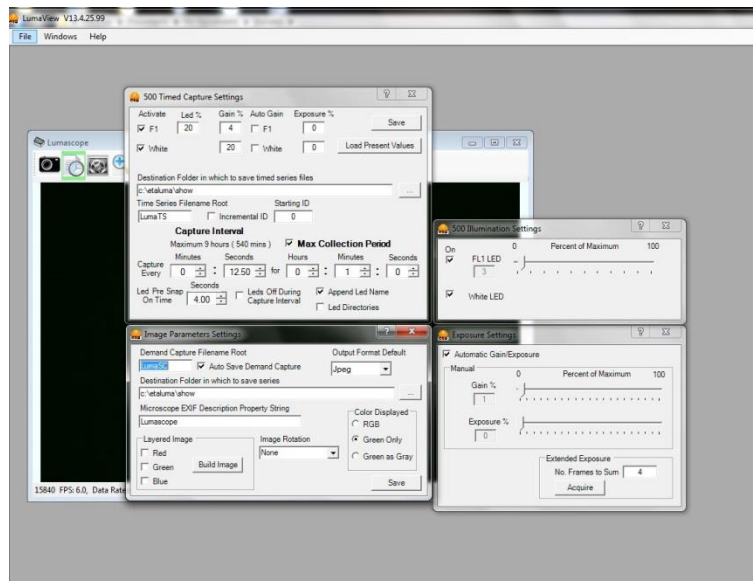


11. Click on the control for Properties.

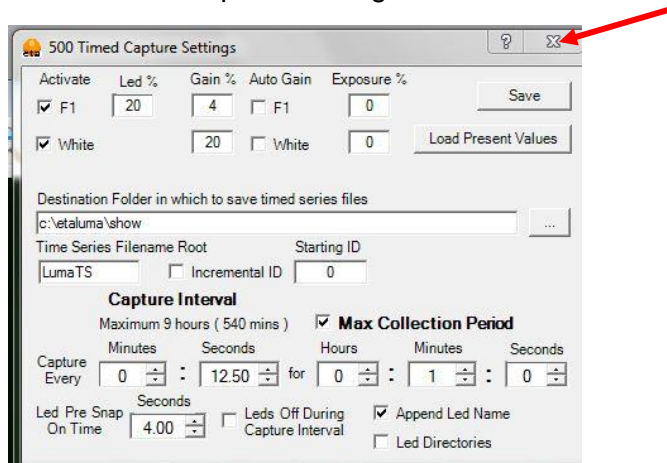


This will bring up four (4) separate windows as shown:

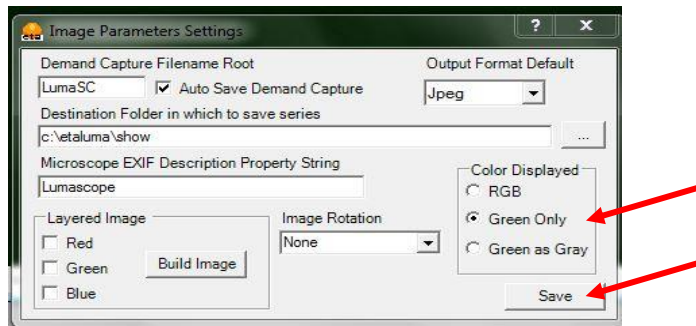
- Timed Capture Settings
- Image Parameters
- Illumination Settings
- Automatic Gain Exposure



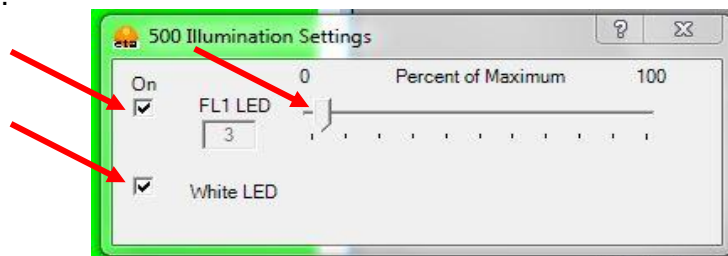
12. You will not use Timed Capture Settings. Please close this window.



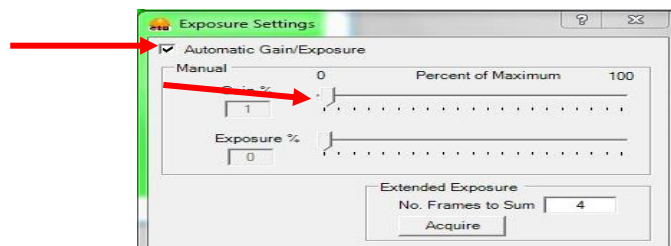
13. On Image Parameters window, Click on GREEN ONLY for the Color Displayed and hit SAVE. This will close window.



14. On Illumination Settings Window check both boxes to turn on the Fluorescence LED (FL1 LED) and the Gooseneck LED (White LED). Adjust the slider for FL1 LED for optimum brightness. Suggested setting is 3 as below.



15. On Exposure Settings window, select Automatic Gain/Exposure box and adjust gain slider to a setting of 1.

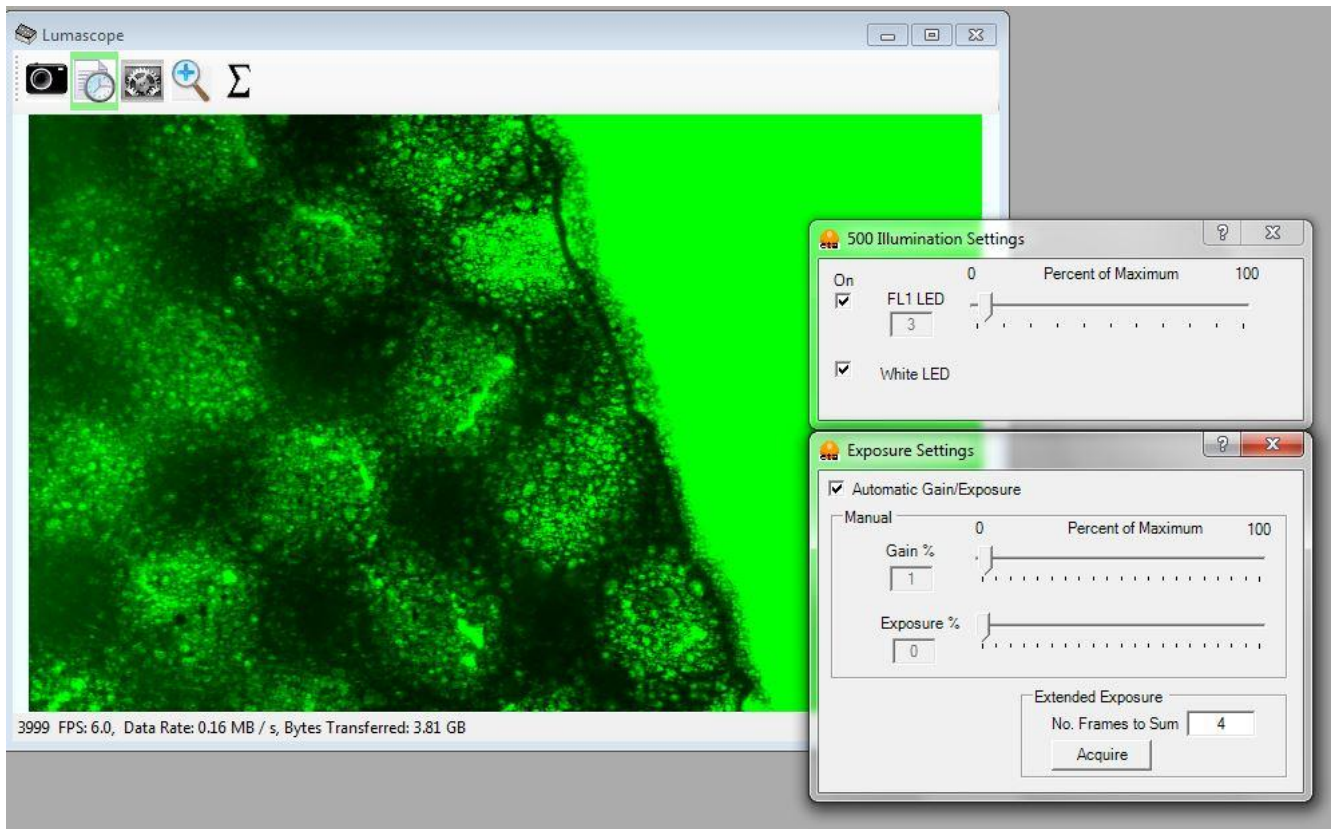




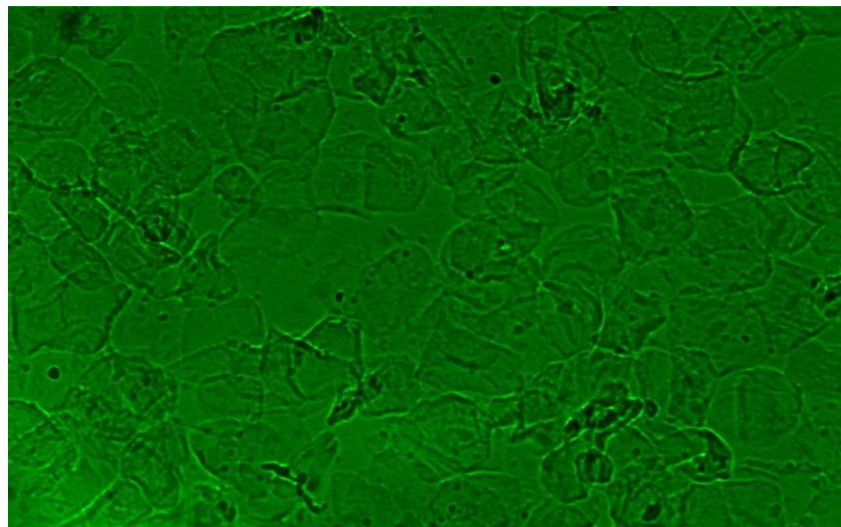
16. Now that light sources are both on, focus on slide. To find the correct focal plane, move the slide such that the masked area comes into view as shown below. Position the slide using the X-Y slide positioner knobs. Focus using the silver focus knob next to LED switches.

Use the focus knob to bring the masked area into focus – you are now at the correct focal plane.

Move to middle of the slide well to find cells.

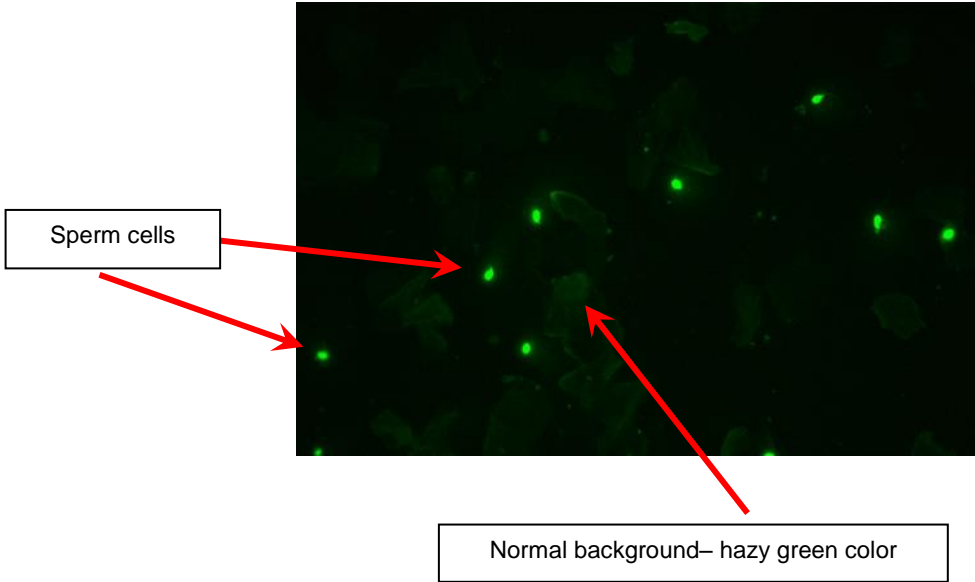


Adjust the gooseneck/white LED and the focus knob to bring the cells into view – see below. Please note: Room lighting can also act as a source for illuminating slide.

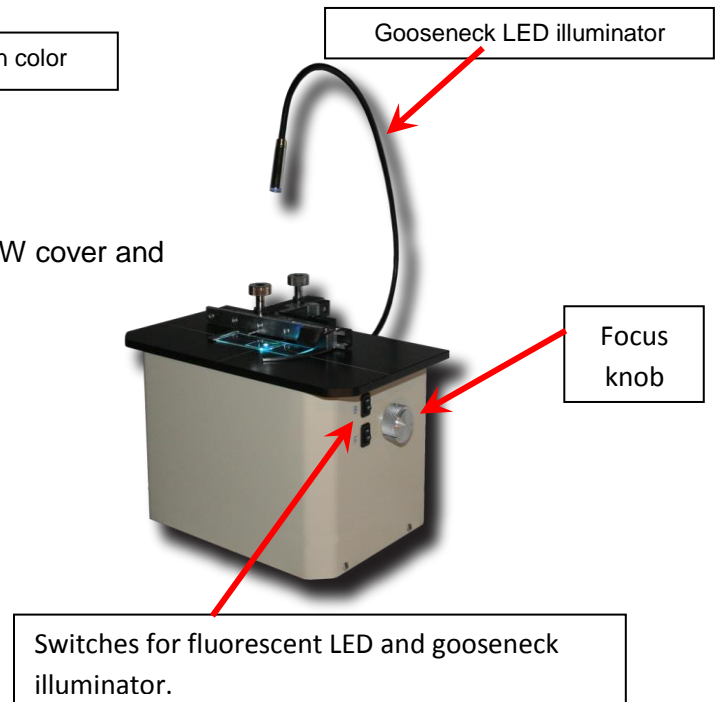
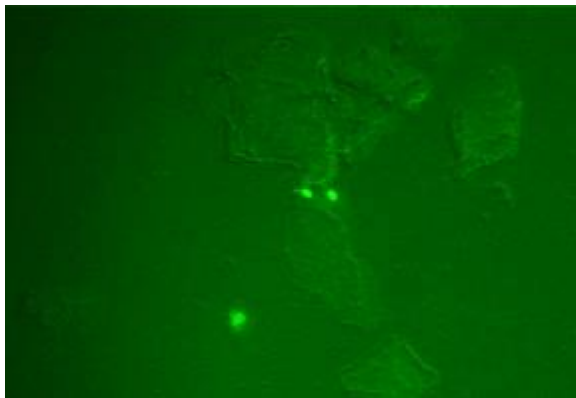


17. In order to view spermatozoa under fluorescence:

- 1) Cover the slide with EZ-VIEW COVER to shield the slide from ambient light and to provide a black background
- 2) Focus on the fluorescent sperm as shown.

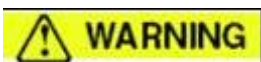


- 3) 3-D effects can be achieved by placing EZ VIEW cover and gooseneck on angles.



18. Capture image by left clicking on the image. This will save the image in your Etaluma folder on the hard drive. C:/etaluma/show.

CAUTION – Extremely bright light source. Do not leave fluorescence LED on in one spot too long or slide can photbleach/photoactivate. Use EZ VIEW COVER to shield your eyes from light source.



DO NOT LOOK INTO THE LIGHT FROM THE LED