

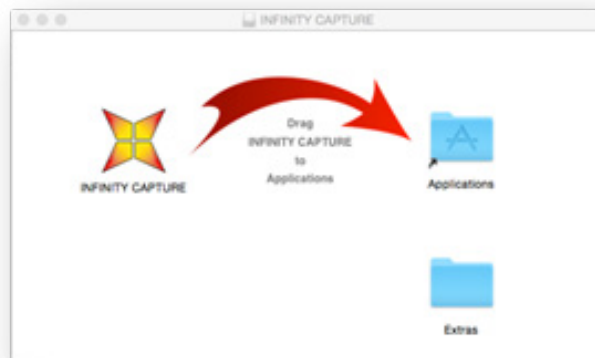
INSTALL GUIDE

Instructions for INFINITY CAPTURE & the plug-in for ImageJ on a Mac computer

For Mac OS X 10.9 or Higher

Software Installation

- 1) Download the INFINITY CAPTURE software using this link
- 2) Click to launch the downloaded **dmg** file and it will display the dialog shown below:

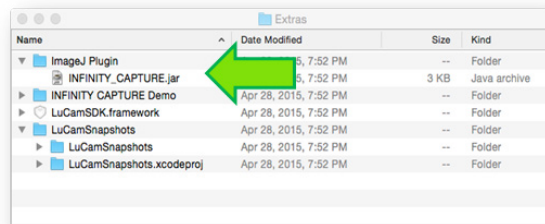


- 3) Click on the Lumenera icon, and drag it over the folder icon for **Applications** (as indicated by the curved arrow). The INFINITY CAPTURE application has now been installed.

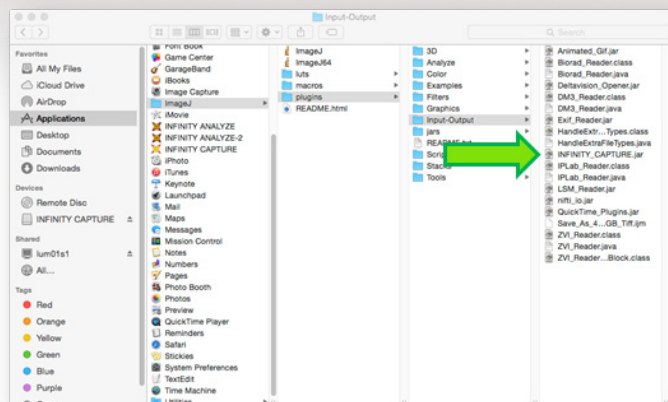
- 4) If you are planning on using ImageJ with the INFINITY camera then click to open the **Extras** folder – otherwise skip to the next section.

Note: ImageJ must already be installed on your computer with the ImageJ folder located in your Applications folder. Click to access the [ImageJ web site](http://imagej.nih.gov/ij/) for instructions and free SW download.

- 5) In the **Extras** folder window, click to open the ImageJ Plugin folder, to reveal the INFINITY_CAPTURE.jar file.



6) Open a second folder window to the *Applications > ImageJ > Plugins > Input-Output* folder



7) Drag the INFINITY_CAPTURE.jar file from the Extras folder window and drop it into the *Input-Output* folder location under ImageJ.

8) Connect the INFINITY camera's USB cable to the PC, and the power adapter (if one is required for your camera model)

INFINITY CAPTURE Application

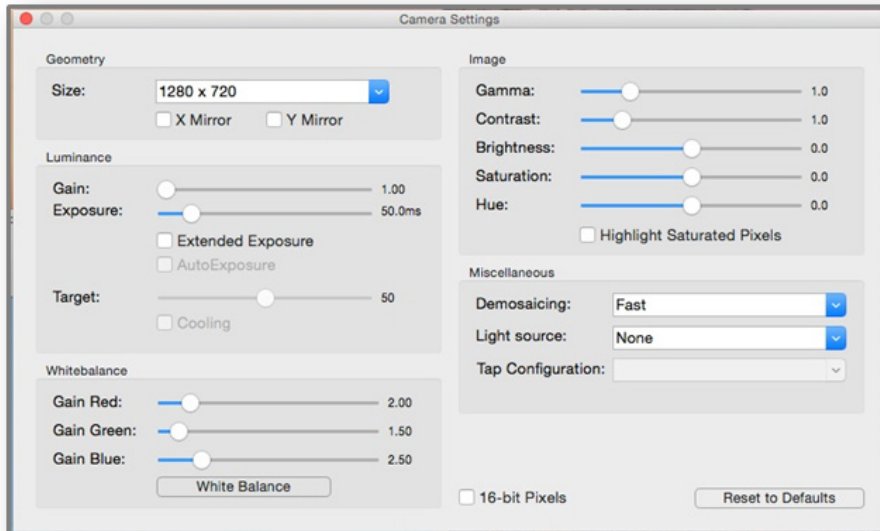
1) To run the stand-alone application of INFINITY CAPTURE, launch it from the Applications window. Use the Camera Settings switch to bring up the control panel.



2) Use the camera settings adjustments (dialog shown below) to produce the desired image quality. Use the manual exposure adjustment, or enable the Auto Exposure, to achieve a live preview image with suitable brightness. Remove the sample from the field of view and click the White Balance button. Return the sample to the field of view, framed and focused as desired. The camera should now be producing an image that very closely resembles what is seen in the microscope eyepieces. To further fine-tune the color response, choose from the list of Light sources provided in the dropdown list, to choose one that produces the most realistic results.



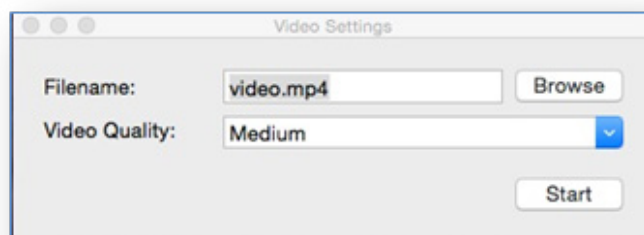
- A button enables an image to be captured into a separate window. The image window includes a button enabling the captured image to be saved to a specified file and folder.
 - A button allows for a video clip to be recorded with prompts to define the saved filename and folder
- Note:** *video clip recording rates are constrained by the write speed of the computer hard drive, expect lower frame rates in the output video than are available for live preview.*



3) Use the camera control functions in the dialog to control the camera performance. Choose between manual *Exposure* adjustments and the continuous *Auto Exposure*, to control image brightness. Perform a *White Balance* operation with the sample removed from the field of view, as an initial setup, and also after each time the lamp intensity is altered or filters are applied to the optical path. For optimal color response, select a suitable option from the *Light Source* dropdown list.

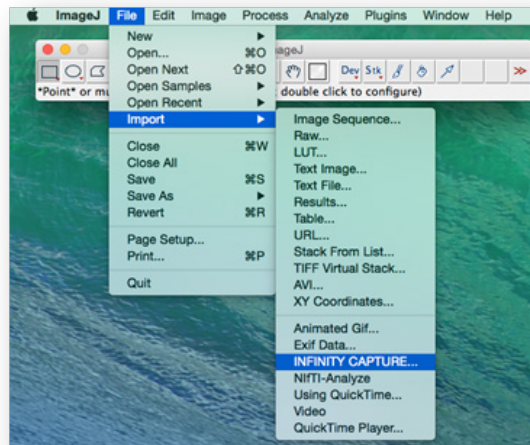
4) Images can be captured by using the Still Image button in the upper left, and then saved using the button on the capture panel (not shown).

5) Click on the Video button to open the video settings dialog which provides options for the video capture format and file save name & folder location



ImageJ Plug-in

- 1) If you completed the installation step to put the INFINITY CAPTURE jar file in the ImageJ plugins folder, then the camera can now be directly accessed through ImageJ
- 2) To control the camera and to acquire images directly into ImageJ, close the INFINITY CAPTURE application and launch ImageJ. The camera live preview and control settings are accessed by selecting the *File > Import > INFINITY CAPTURE...* menu options.



- 3) The camera controls are the same as shown above for the stand-alone INFINITY CAPTURE. When the Still Image button is chosen, the captured image is handed over to ImageJ automatically. The ImageJ post-processing functions, and image saving can be applied to the captured image.

