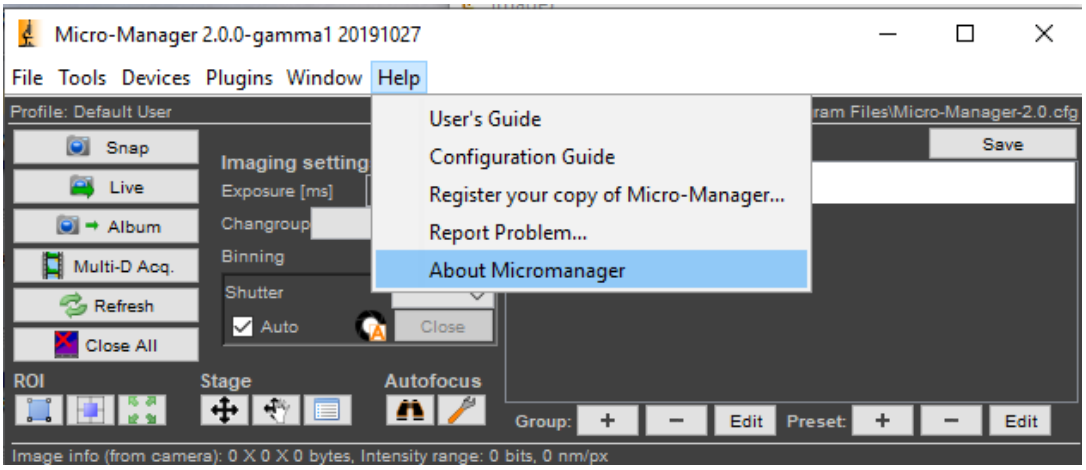
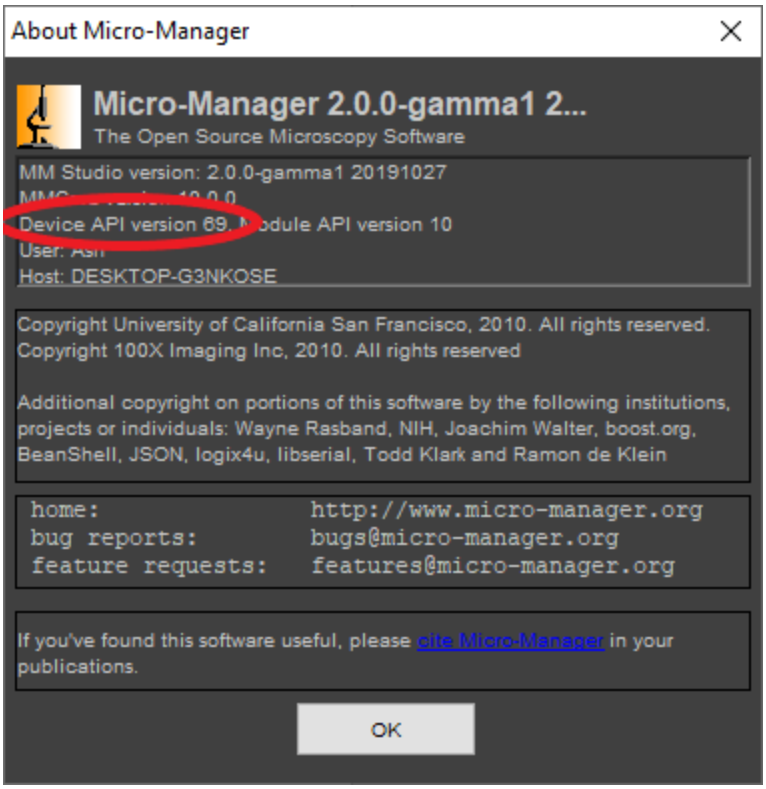
Indigo Scientific
Optical HREM & microscopy imaging systems

Opening Jenoptik Camera in Micro Manager (WINDOWS 64BIT)

IMPORTANT NOTE:
The DijSDK driver for micro manager requires a Device API version number of 69 to work.
To find out if your version of micro manager is compatible go to:
Help -> About Micromanager





If the number circled in red is not 69, this version of micro-manager is not compatible.

1. Download Micromanager

In this example we will use a specific version of Micro-Manager in our case
Micro-Manager 2.0.0gamma ver: 20191027

DOWNLOAD:
https://download.micro-manager.org/nightly/2.0.0-gamma/Windows/MMSetup_64bit_2.0.0-gamma1_20191027.exe

We recommend downloading this version as this is known to work. Later versions may not contain Device API version 69 and therefore will not work.

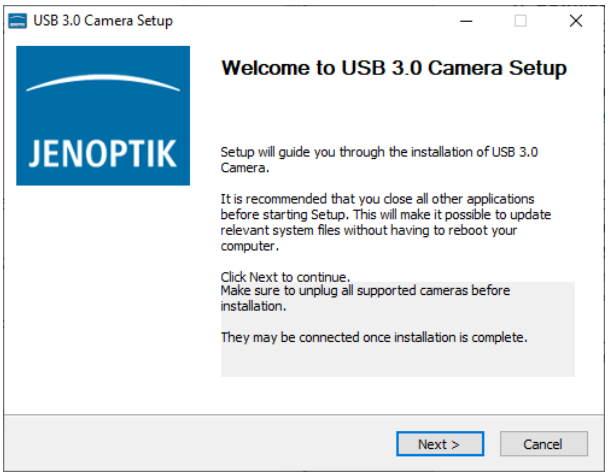
2. Continue Installation through the wizard in micro manager and install.

3. Use Gryphax Installer

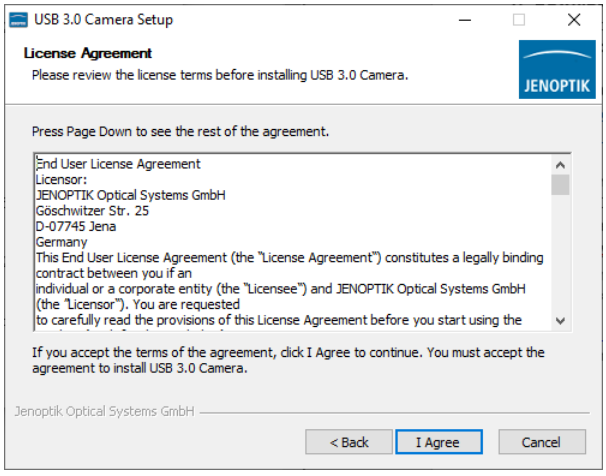
a) Download the gryphax installer from the website (GRYPHAX Version 2.2.0.1234 WINDOWS 64 Bit (EXE | 64,06 MB)):

GRYPHAX Software Download Registration | Jenoptik
DIRECT DOWNLOAD:
https://www.jenoptik.com/-/media/websitedocuments/optics/progres/software-gryphax/usb-30-camera-2-2-0-1234-win64.exe

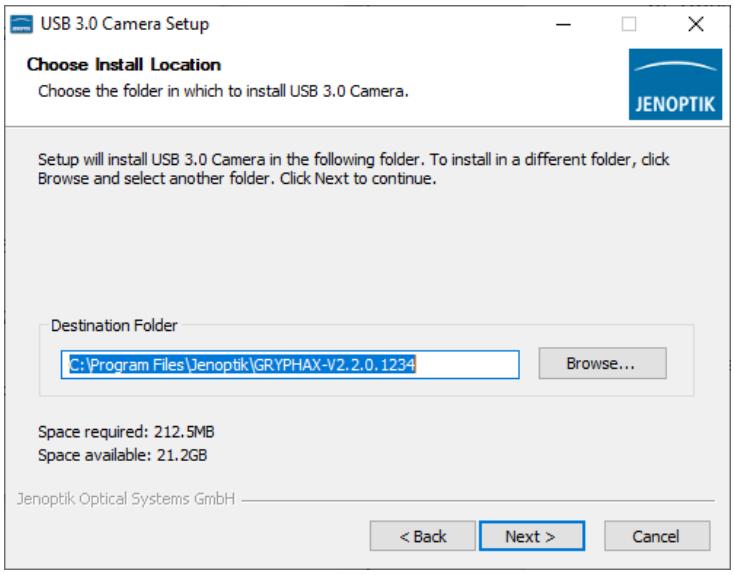
b) Open the installer.
Select next at the welcome page.



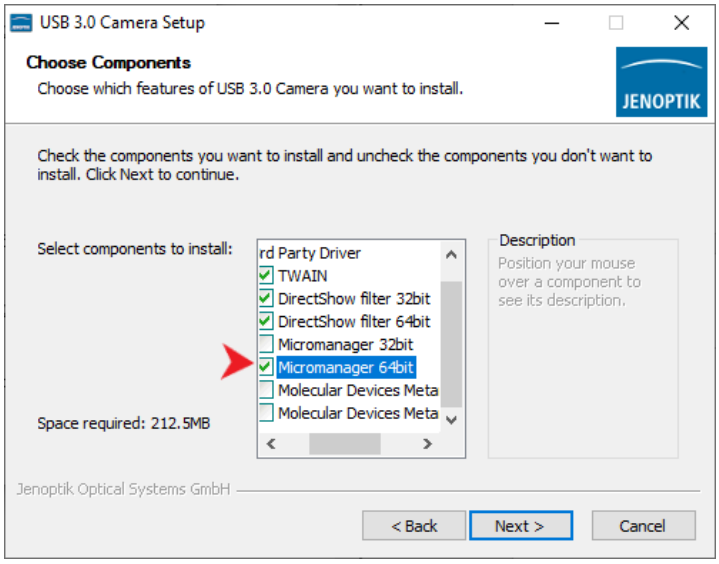
Agree to the license agreement.



Select the Install Location and click next.

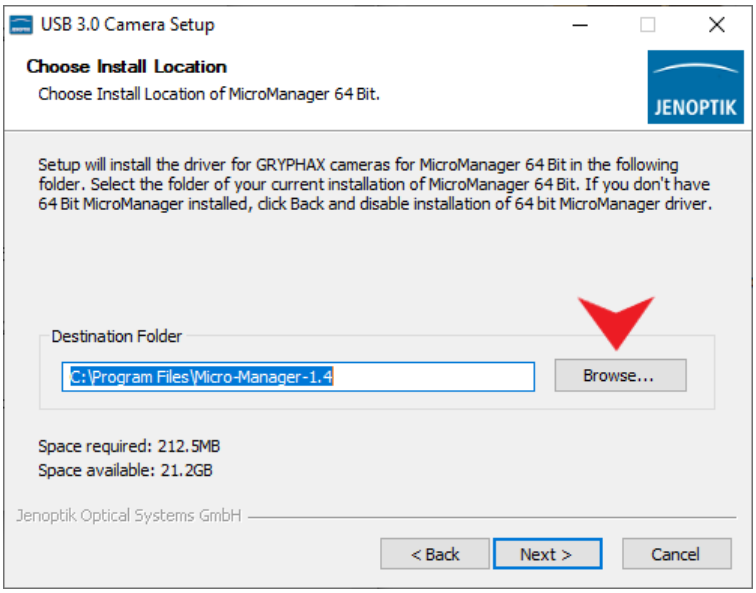


Check the box 'Micromanger 64bit' and click next



Click Browse in the Install Dialog

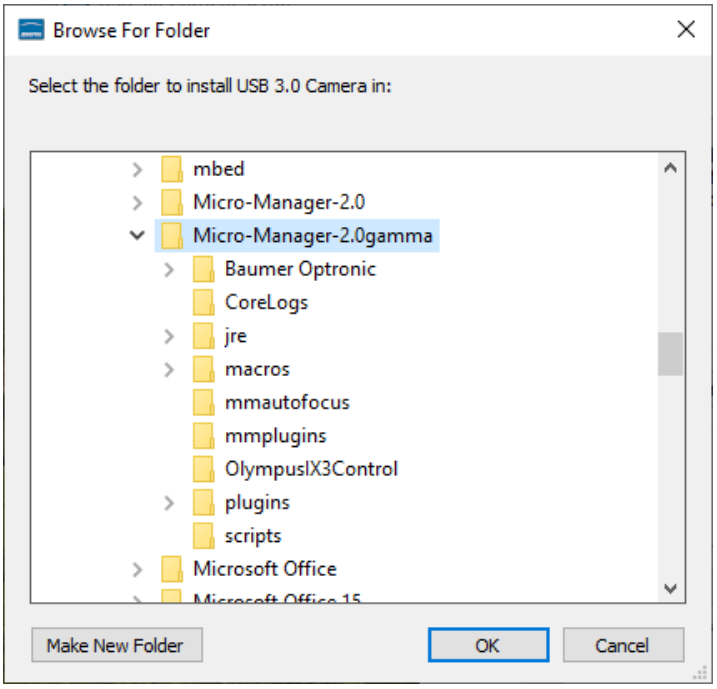
*** DO NOT USE THE PRE-WRITTEN PATH TO MICRO MANAGER 1.4***



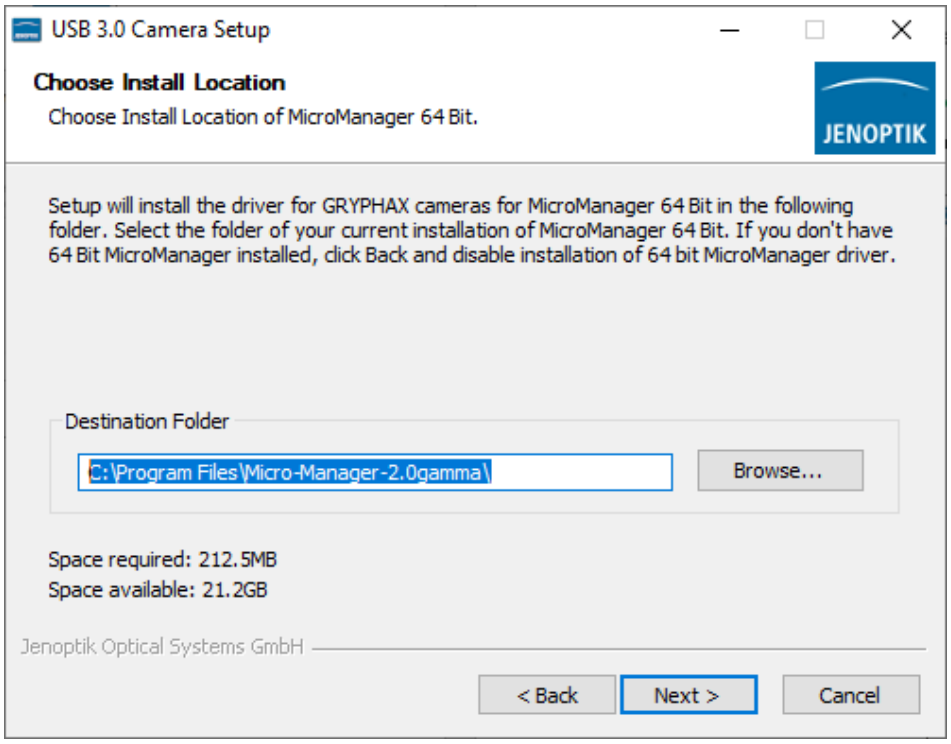
Locate the install folder for Micro-Manger-2.0gamma

USE PATH MICRO-MANAGER-2.0gamma

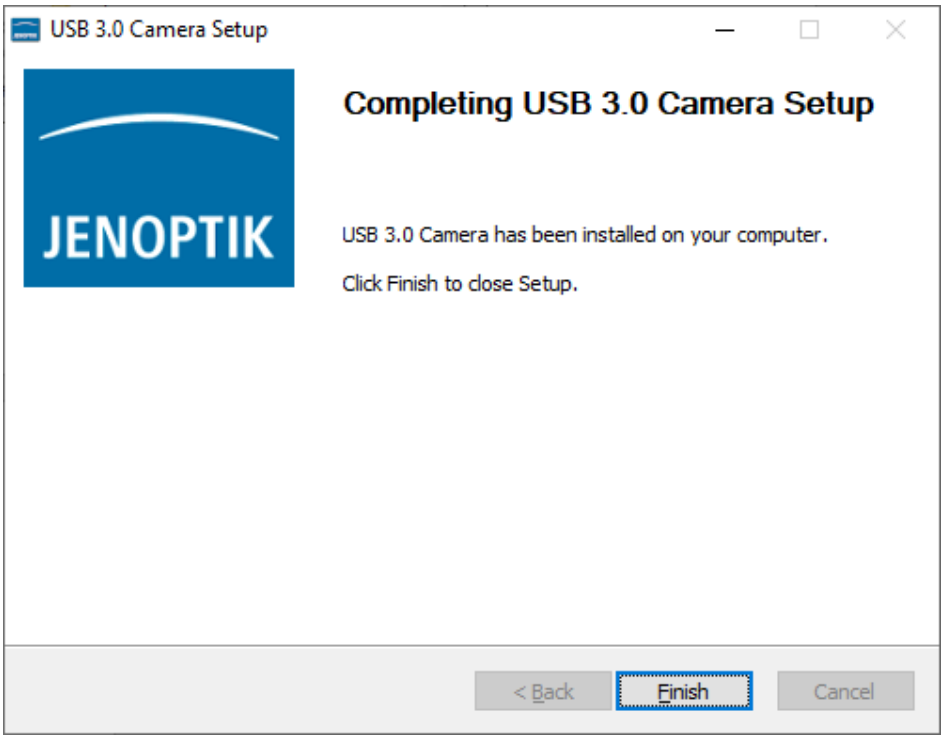
The path will be: (THIS PC) C:\Program Files\Micro-Manager-2.0gamma



With a final screen that looks like this, now install, and wait for this to complete:

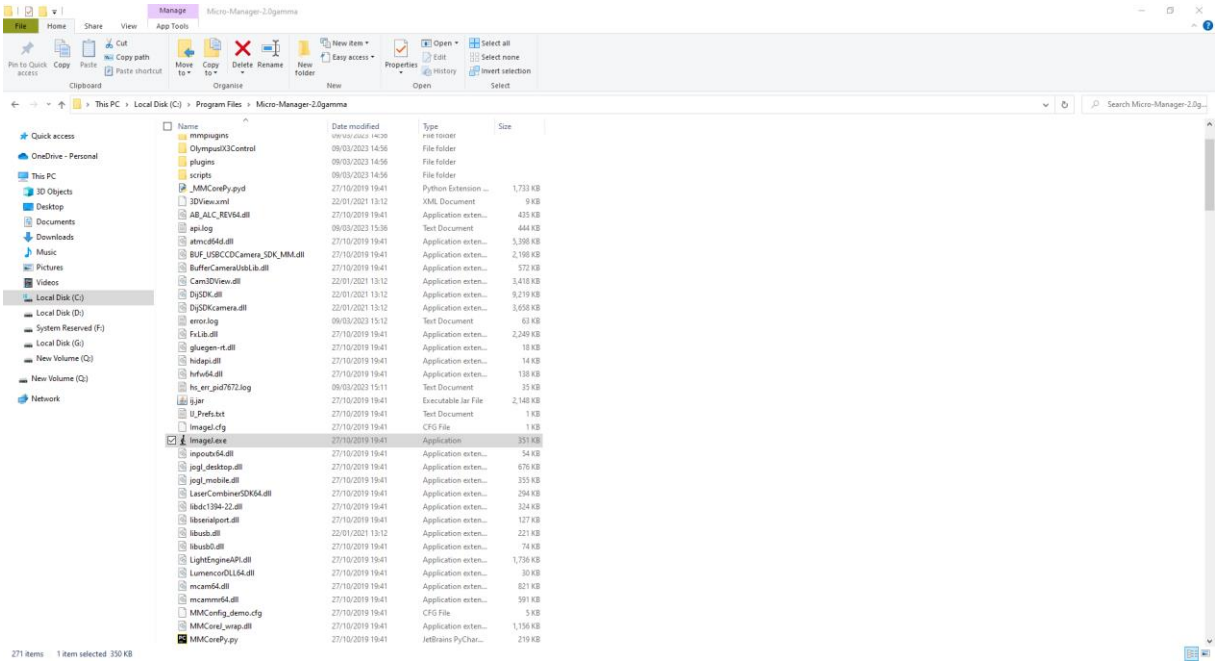


On completion click Finish



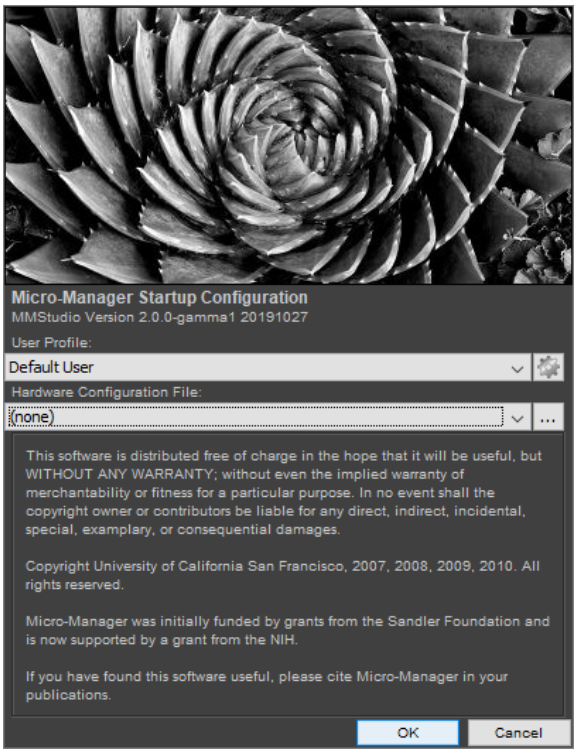
4. Setup Micro-Manager

a. Locate the .exe file to start micromanager.



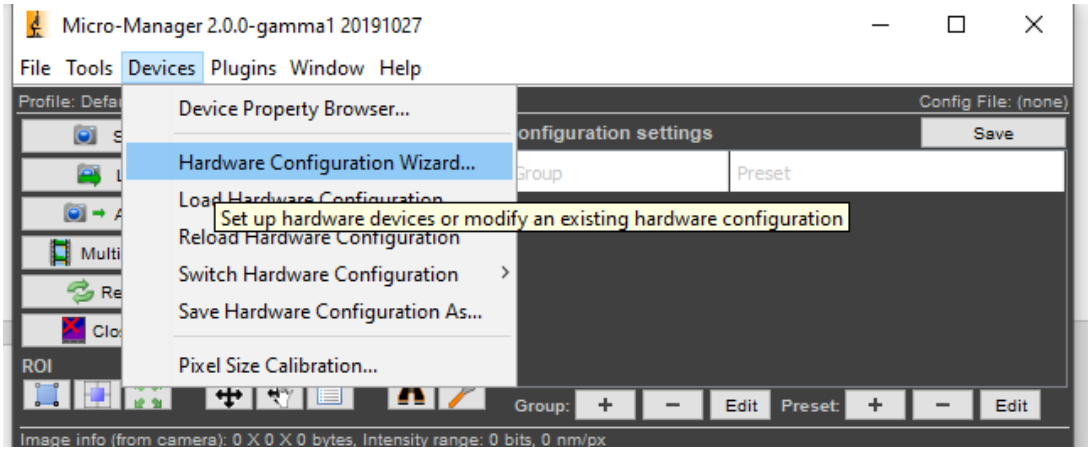
The file path will be:
C:\Program Files\Micro-Manager-2.0gamma\ImageJ.exe

b. Double click on the ImageJ.exe to start micromanager:

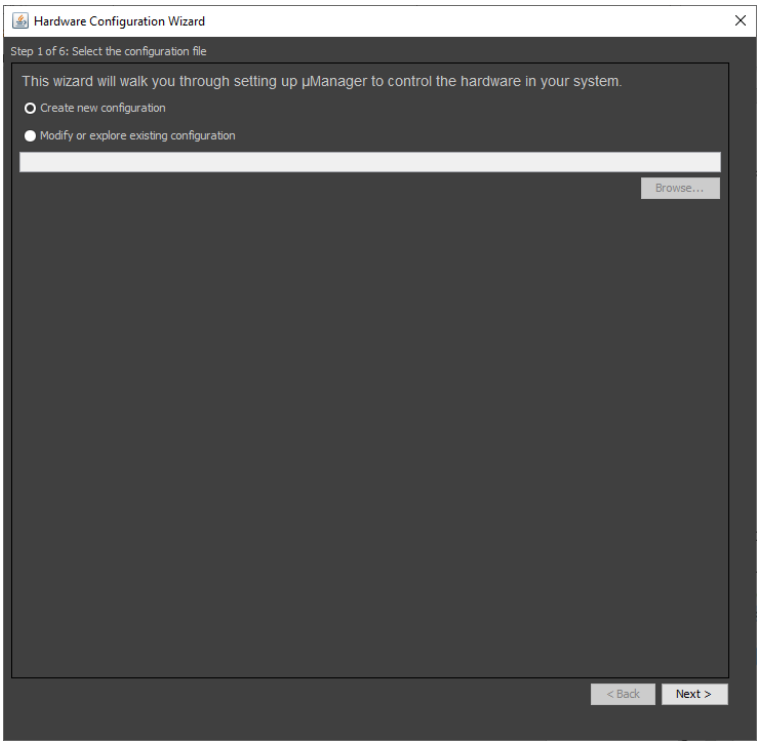


Ensure the 'Default Configuration File' drop down is set to none and click OK

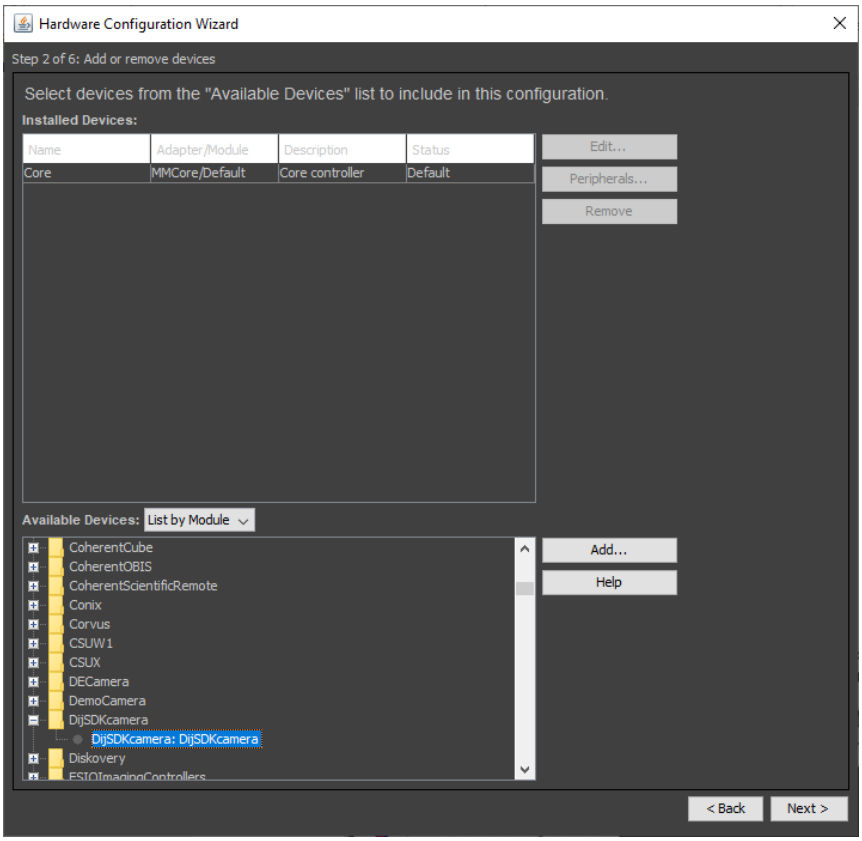
c. Click on Hardware Configuration Wizard under Devices as seen as below:



d. Select ‘Create new configuration’ as below and click the next button:

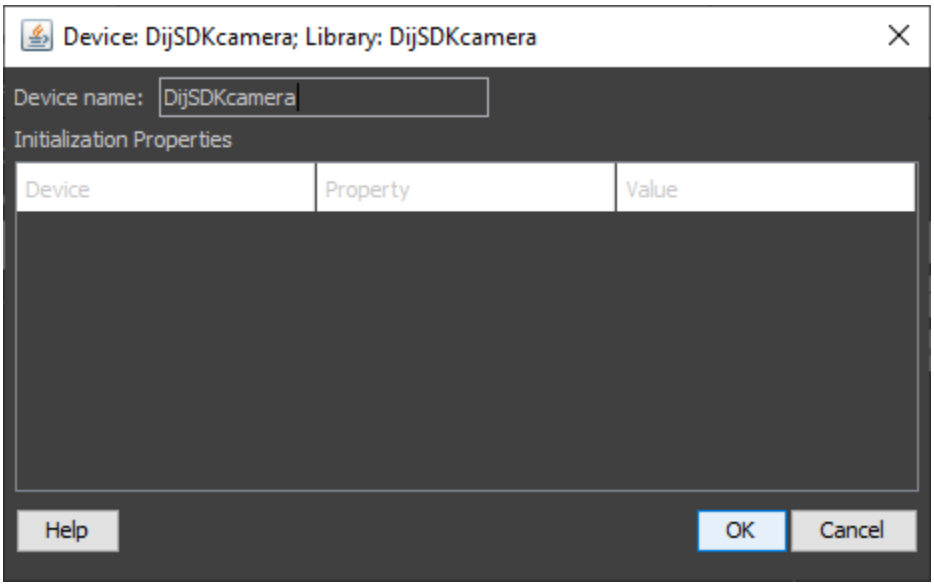


e. Locate the folder ‘DijSDKCamera’ select the contents of the folder as below:

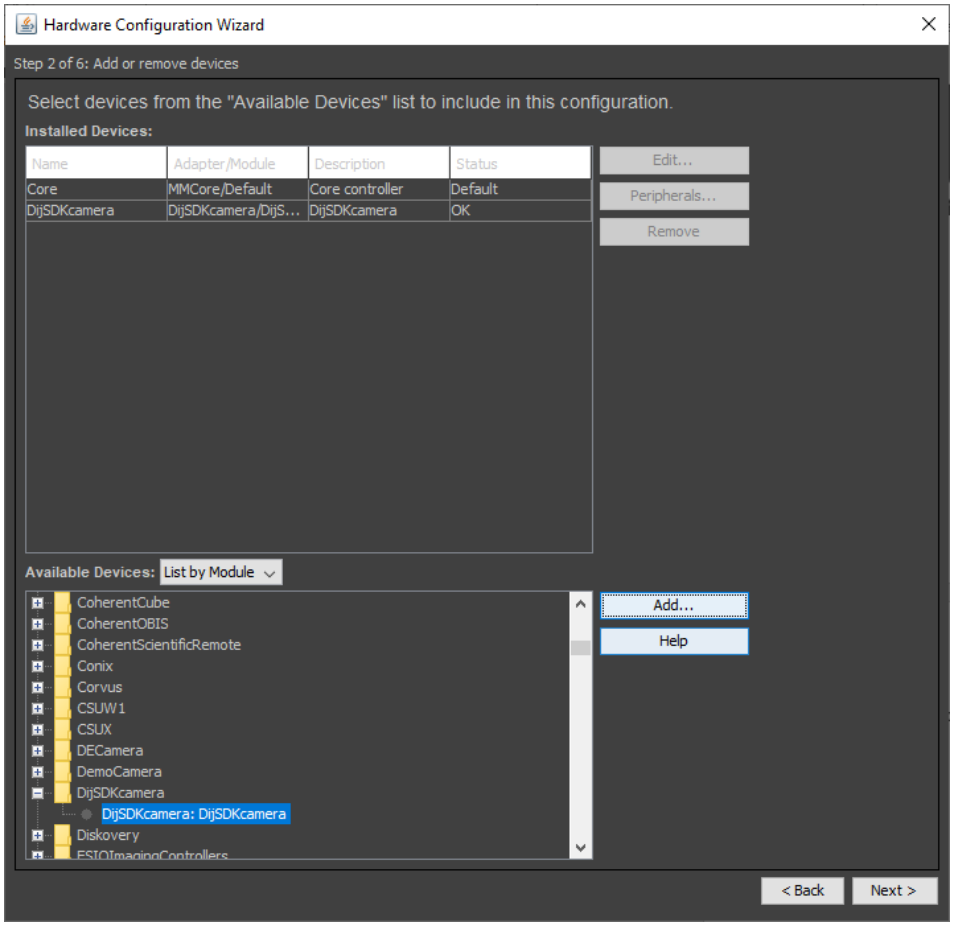


f. Click the add button.

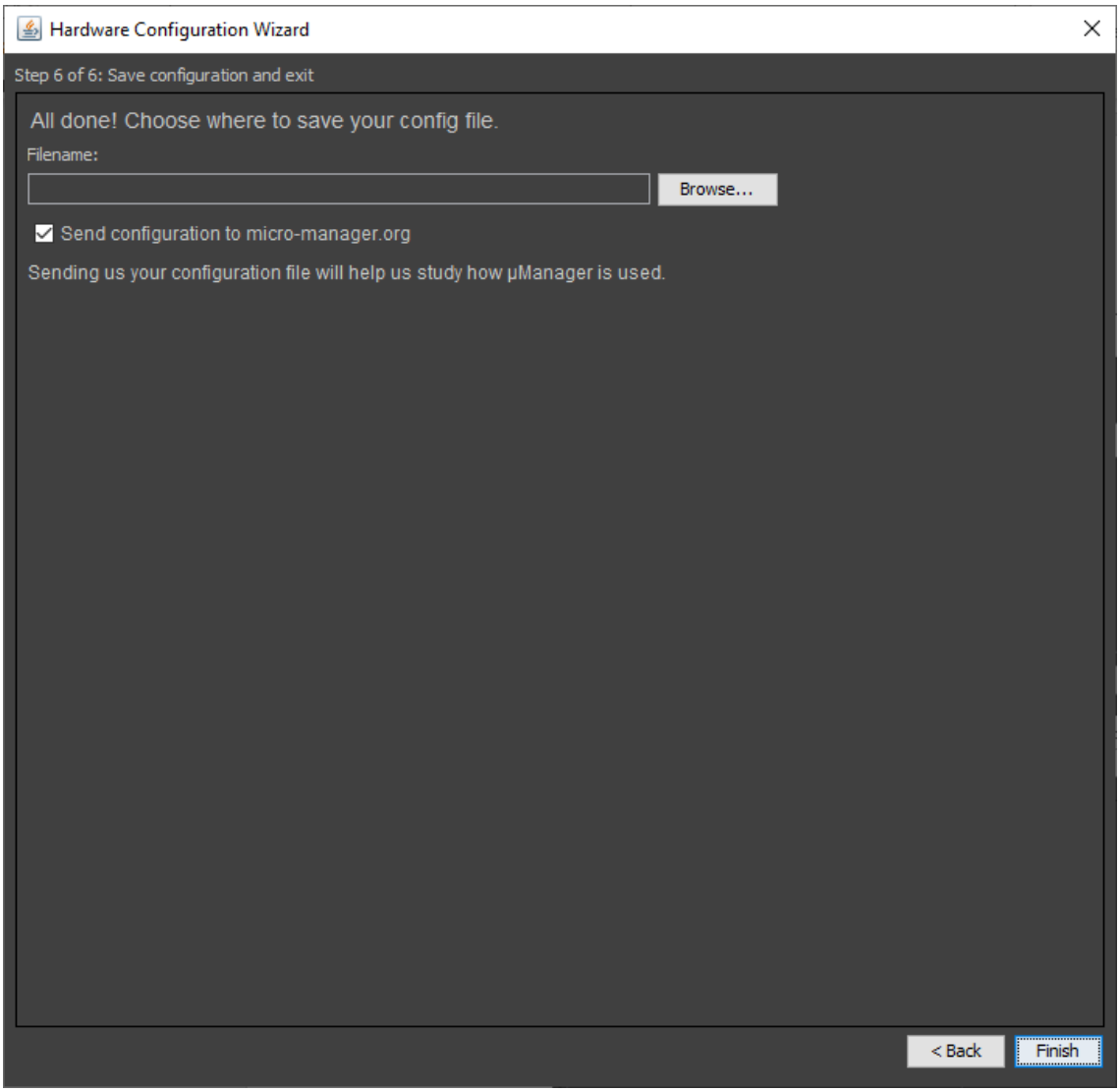
g. A pop up will appear, keep the name, and select ok.



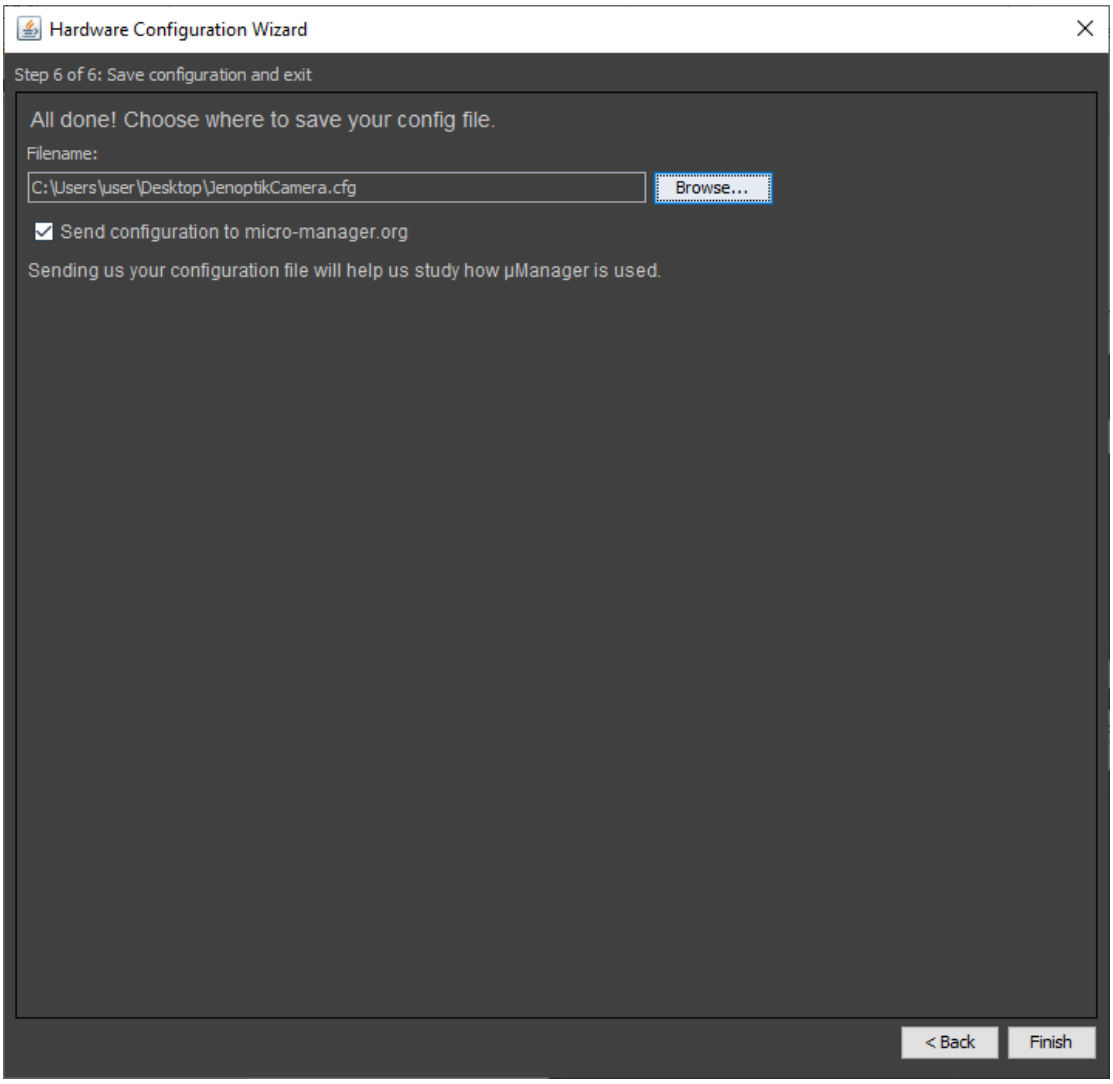
h. Now the camera SDK should appear in the device list (like below), click next.



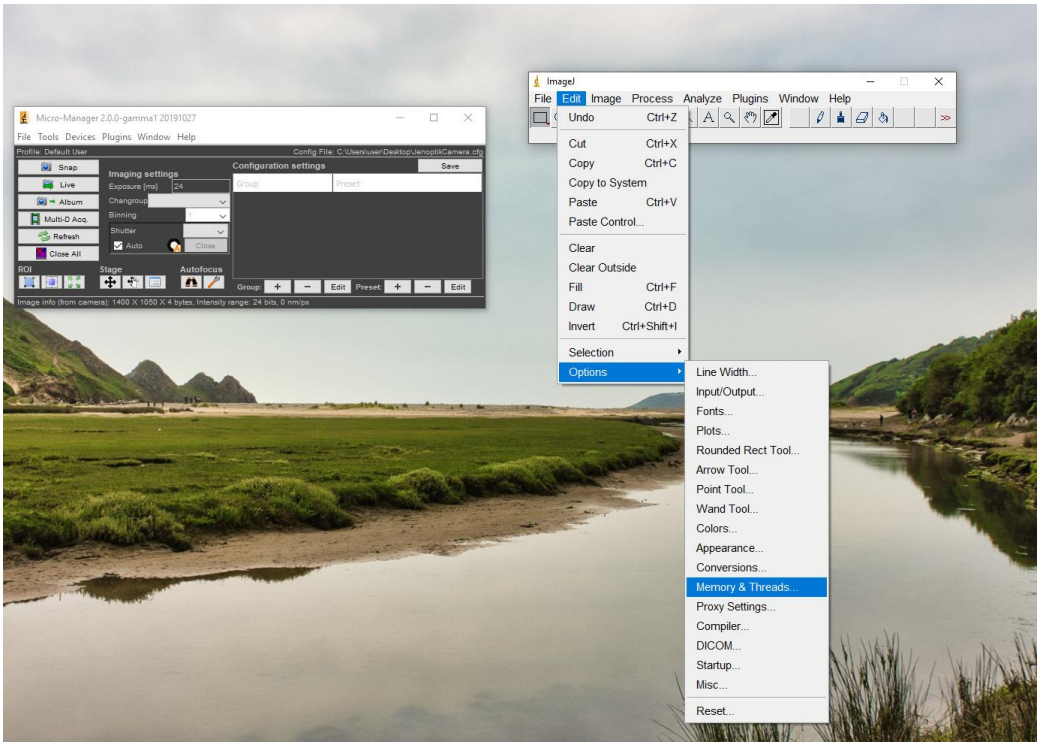
i. Leave all settings as default and click next on the wizard until you reach the page below:



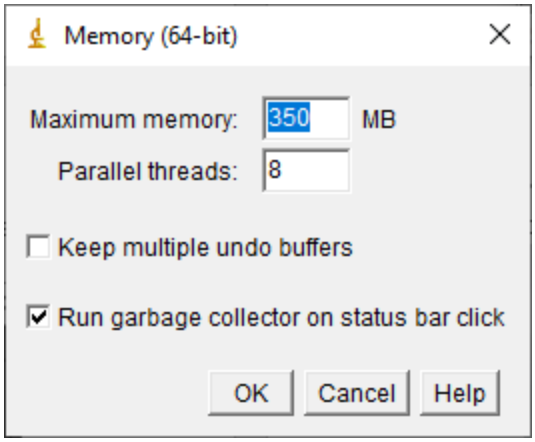
j. Select a place to store the config file e.g desktop and name it something memorable to remember where it is, such as JenoptikCamera and click finish.



k. Now you must change ImageJs memory allocation by going to the ImageJ control panel and selecting Edit -> Options -> Memory & Threads

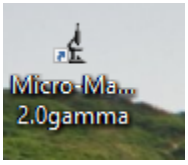


l. Once open change the Maximum Memory to 350 MB

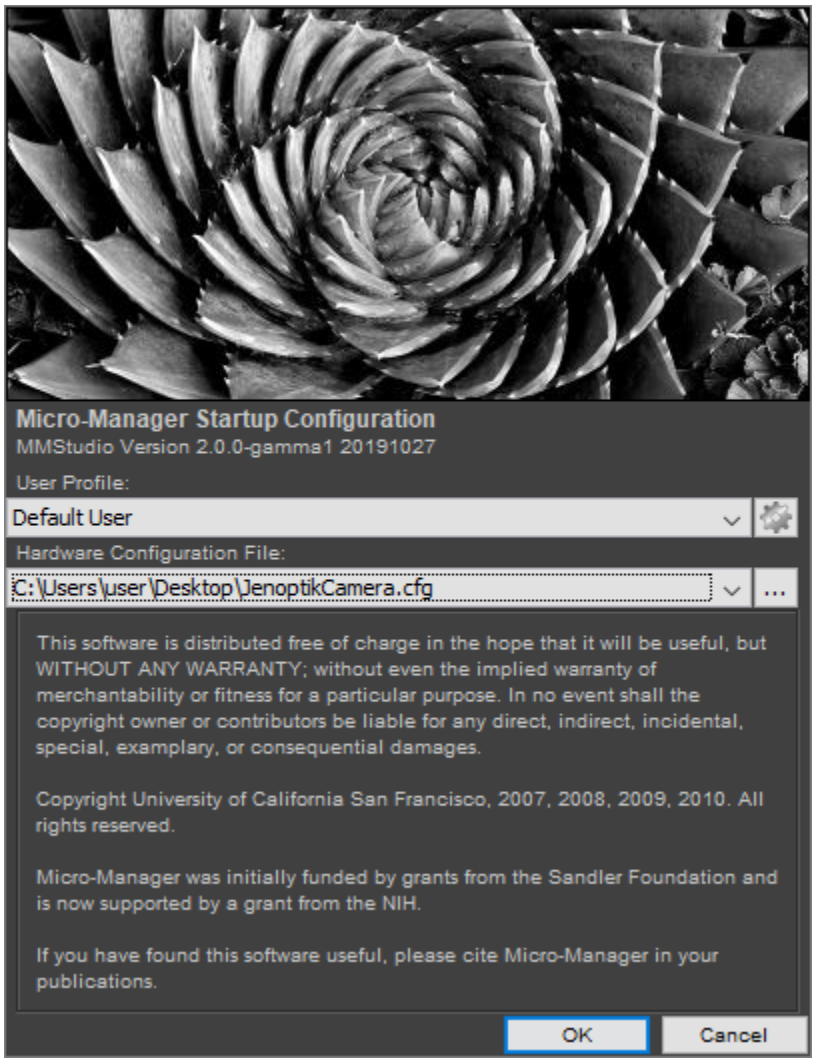


5. Opening Micromanager with configuration.

a. Now you can open micromanager from the desktop/menu icon, double click this.



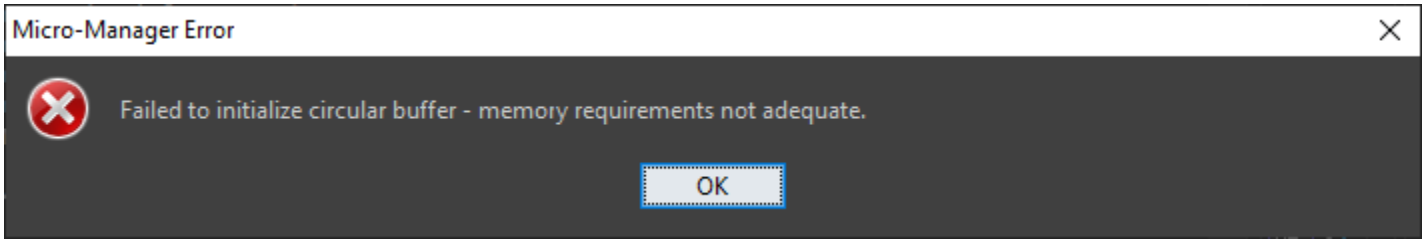
b. Once open be sure to select the configuration file created previous, in our case 'Jenoptik Camera'



c. Now you are setup to run a Gryphax Camera in MicroManager

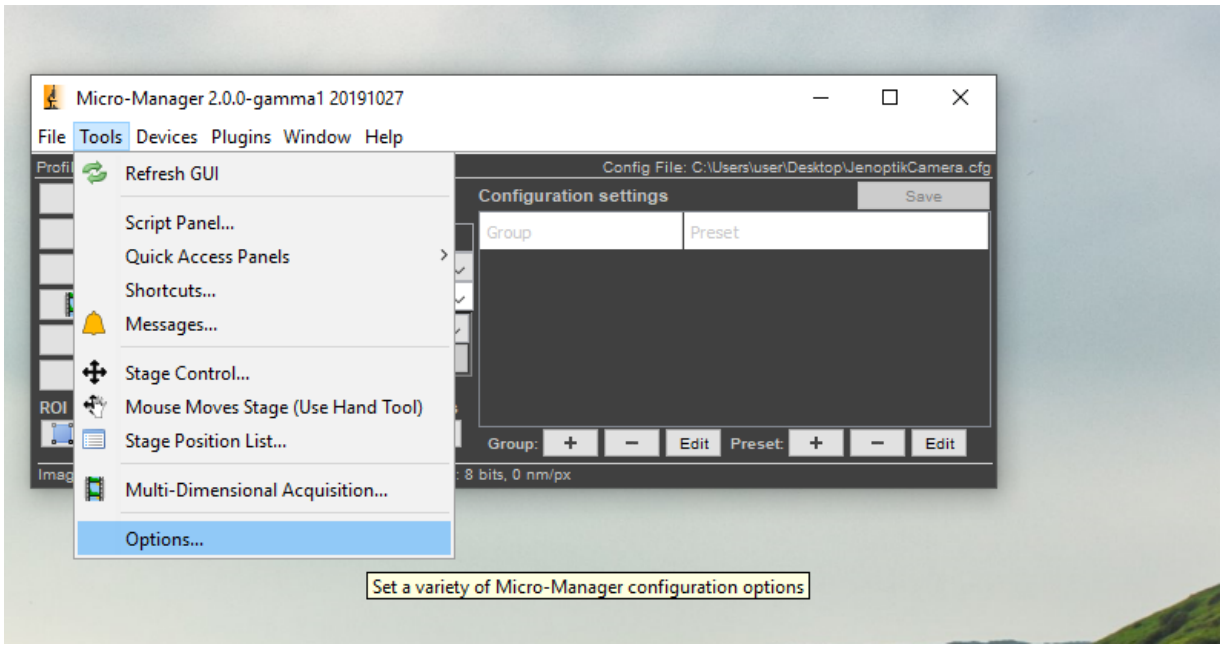
6. Changing sequence buffer size

If you run into issues with errors such as the error message below, the sequence buffer size has to be increased:

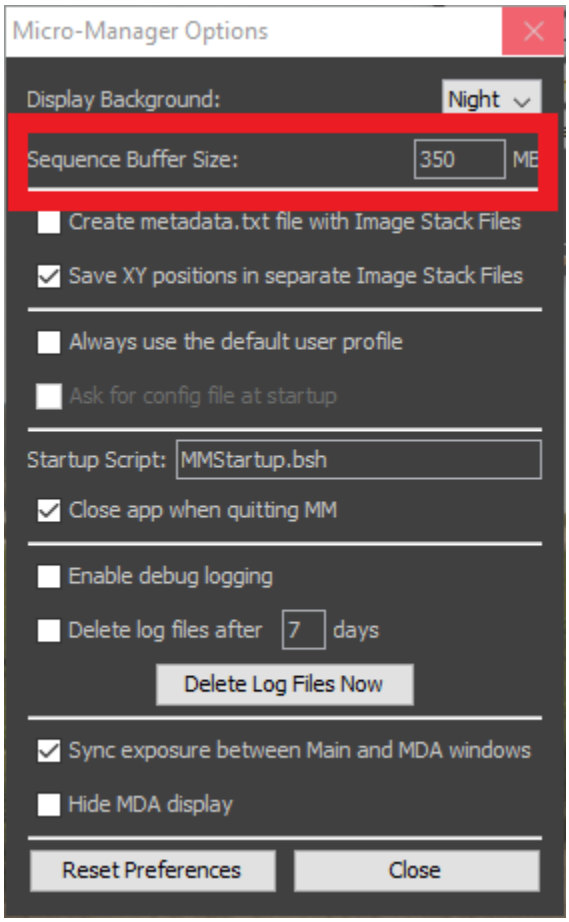


To do this:

a) Open options by going to Tools -> Options

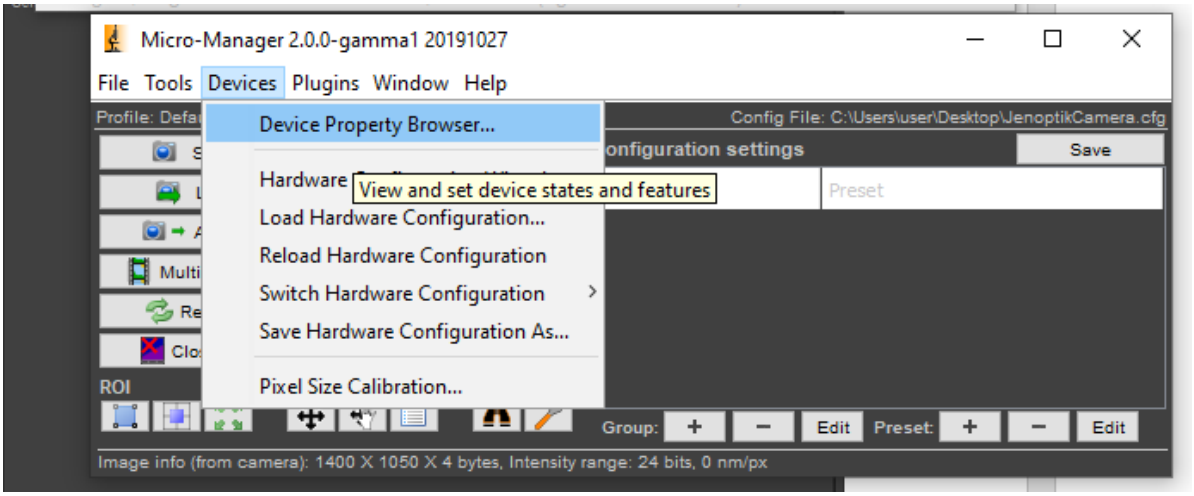


b) Change this value to 256MB or above like below and click ‘close’ after this the error should stop, come out of the software and open again to ensure the change.

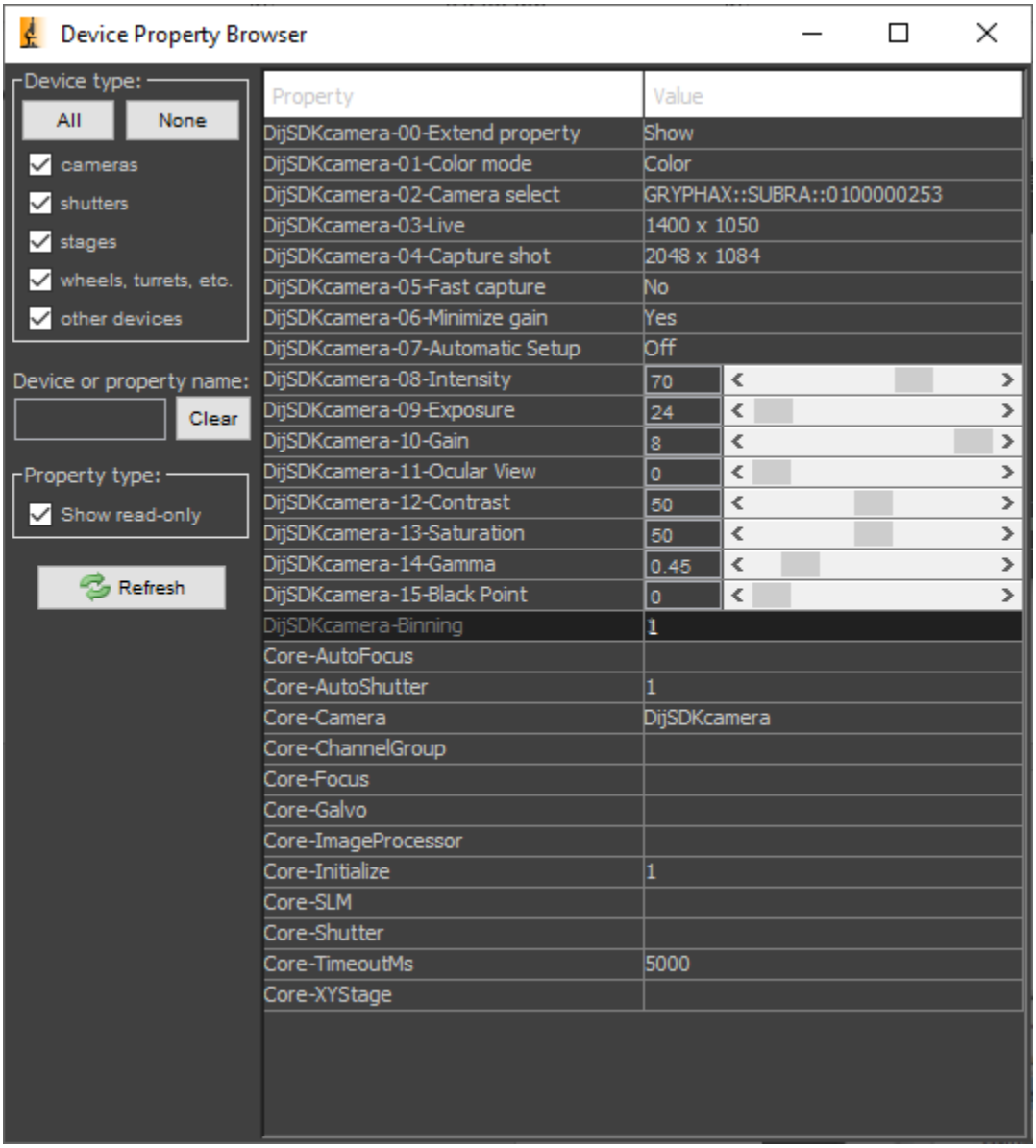


7. Settings and Parameters

a. To Open settings click Device Property Browser under Devices



b. Here you can edit settings for the camera.



c. To access all parameters, select the drop down next to the tag labeled extended property and click show. Now you can access more settings.