



ZWO Micro-Manager

Plug-in Manual

Revision 1.0

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Table of Contents

Instruction.....	3
1. Driver install.....	4
2. Camera control.....	4
2.1 Hardware configure.....	4
2.2 Frame capture.....	6
2.3 Device property.....	9
3. Filter wheel control.....	10
3.1 Hardware configure.....	10
3.2 Switch filter.....	11

**Change history**

date	revision	comment
2017.1.11	1.0	new document
2017.1.13	1.1	add filter wheel

Instruction

[Micro-Manager](#) is software for control of microscopes. It works with almost all microscopes, cameras and peripherals on the market, and provides an easy to use interface that lets you run your microscopy-based experiments. It is Open Source, and is free, cross-platform code-base (Windows, Mac and Linux).

1. Driver install

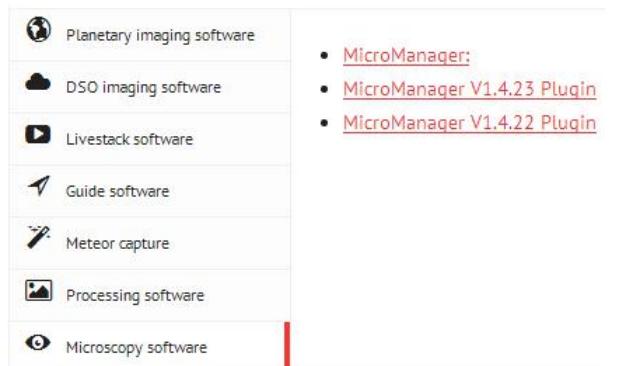
Download plug-in installer of corresponding version's Micro-Manager from [ZWO official website](#),

Windows: ASI_Micromanager_setup.exe,

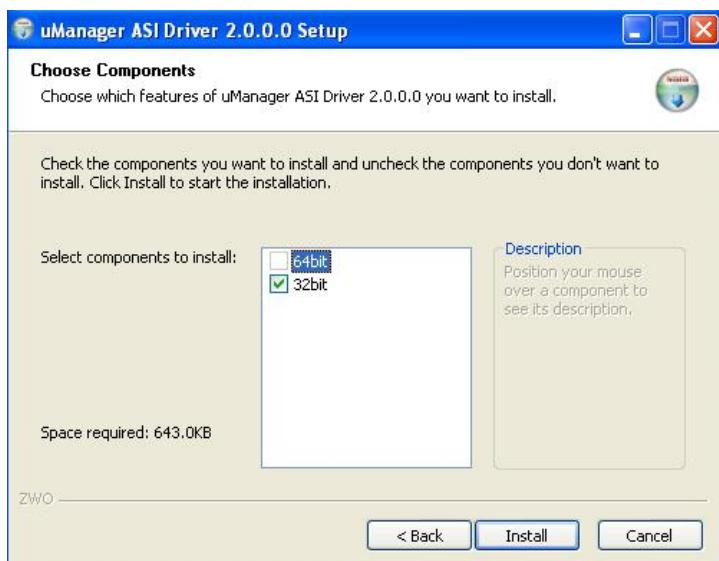
MacOSX: uManager_1_4_23_ASICamera_Mac.dmg or

uManager_1_4_22_ASICamera_Mac.dmg,

Currently the latest version we support is MicroManager1.4.23, it supports ASI camera and EFW filter wheel of our company.



Take the installer for Windows as an example, run the setup program

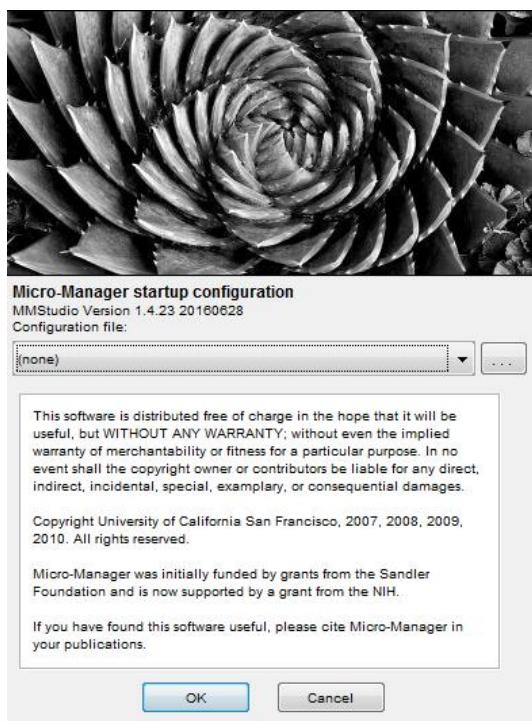


2. Camera control

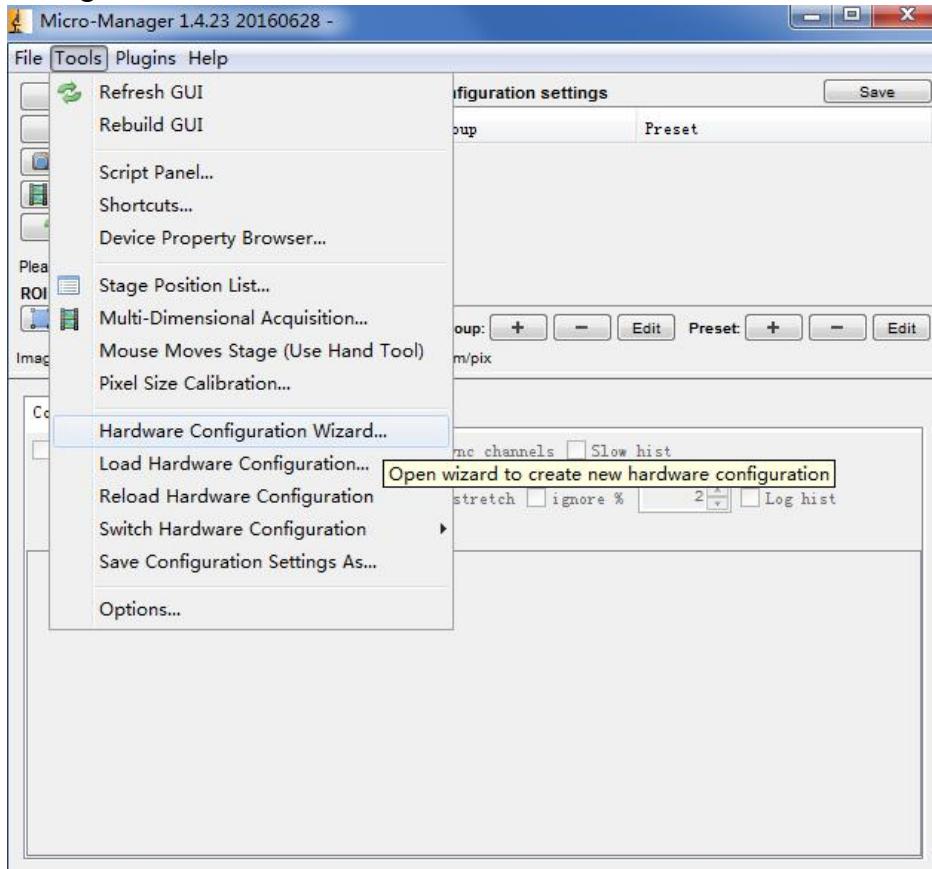
2.1 Hardware configure

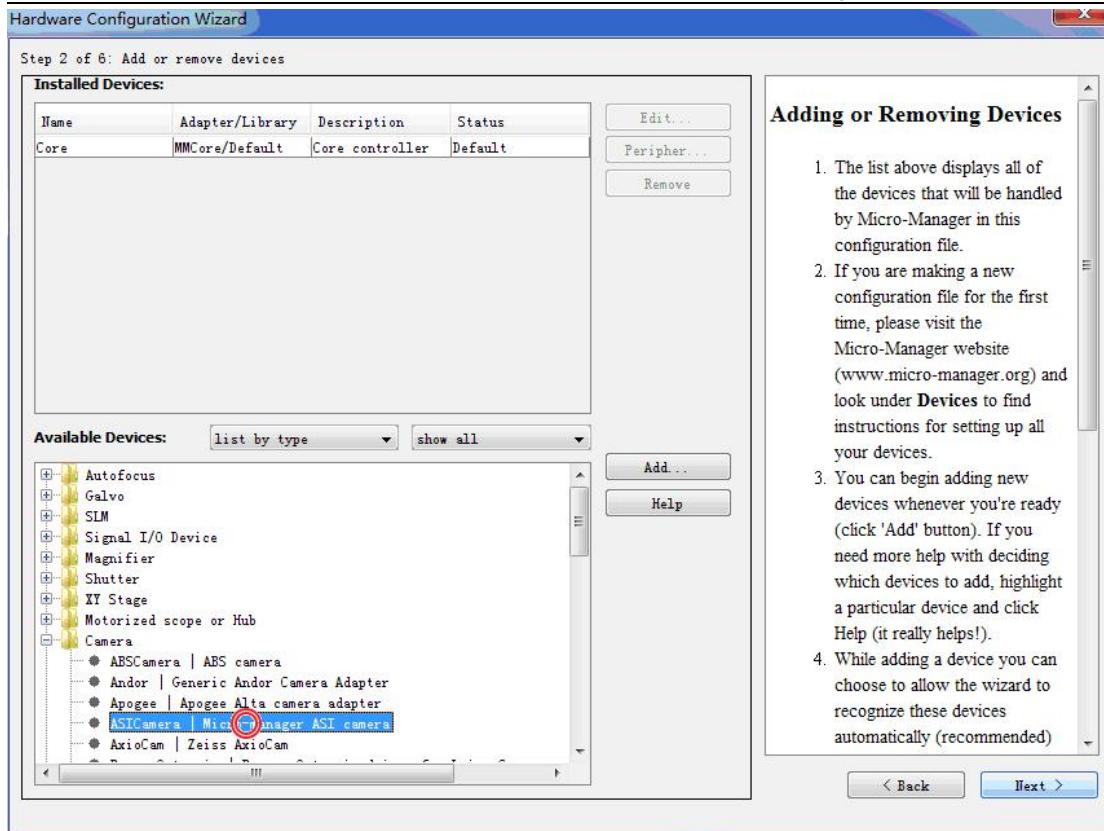


When launch first time, choose none.

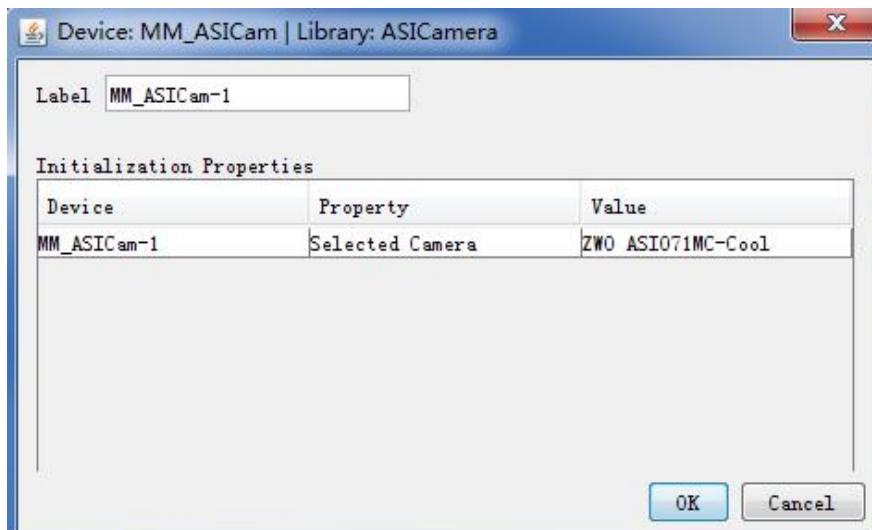


Configure ASI camera



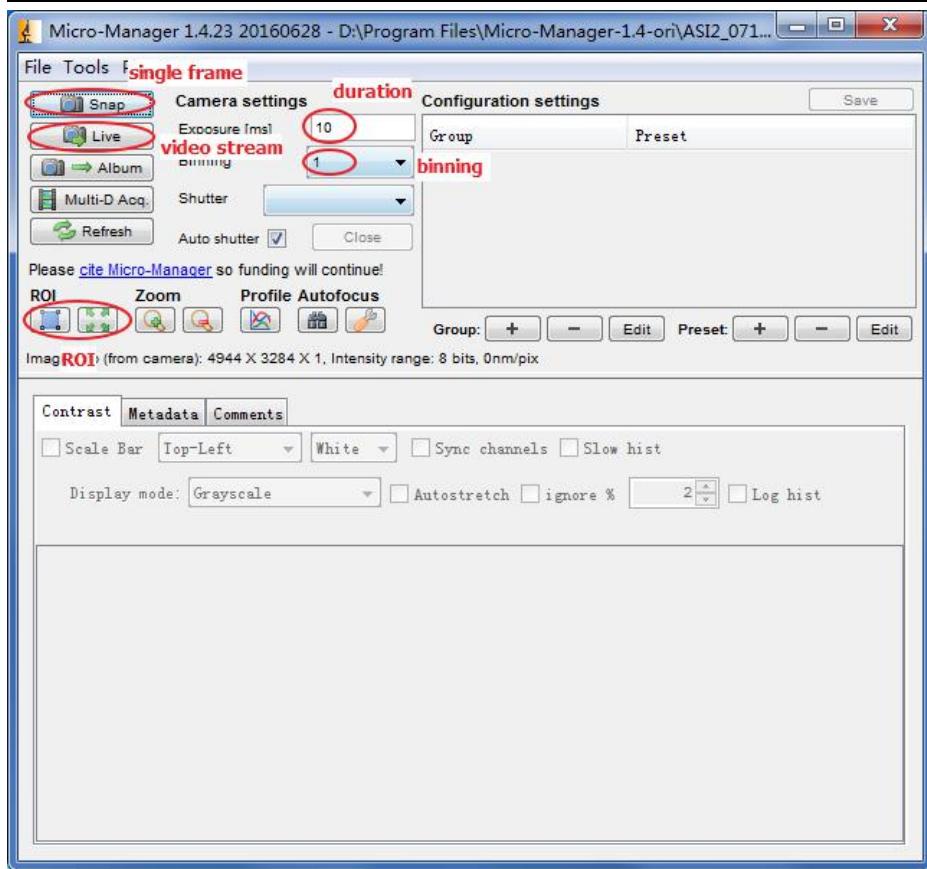


Choose camera model

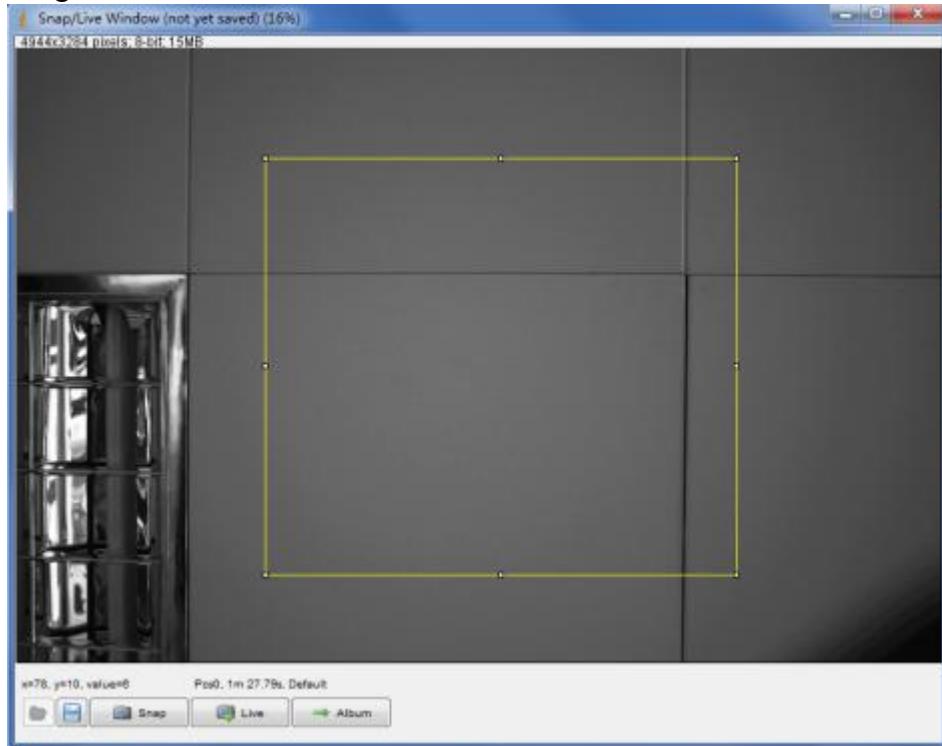


Finally save configuration

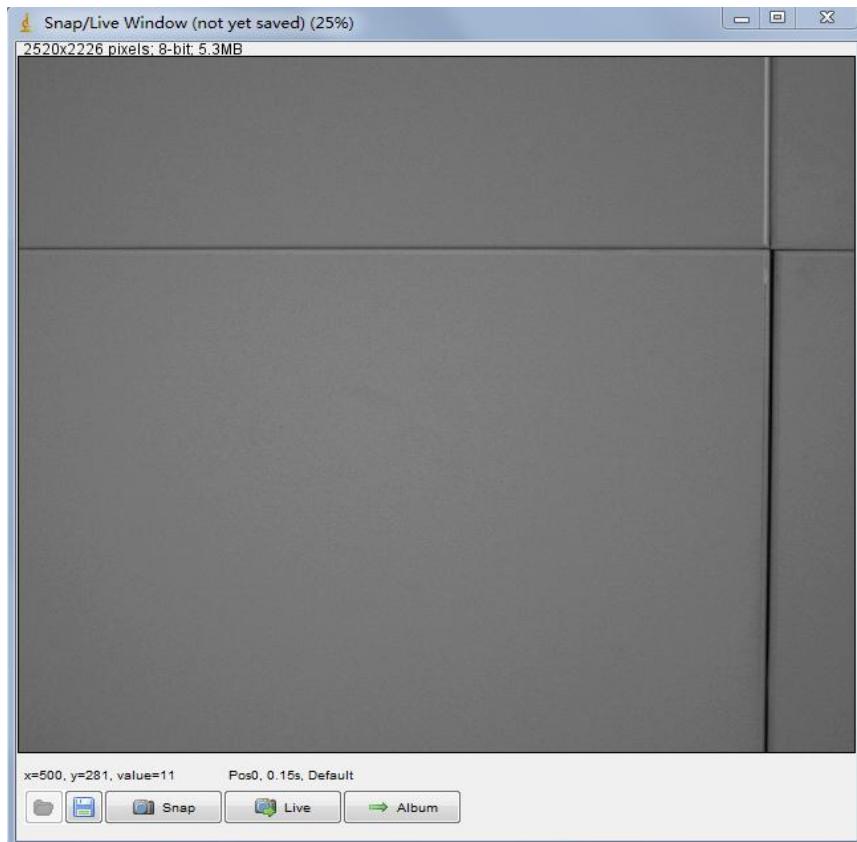
2.2 Frame capture



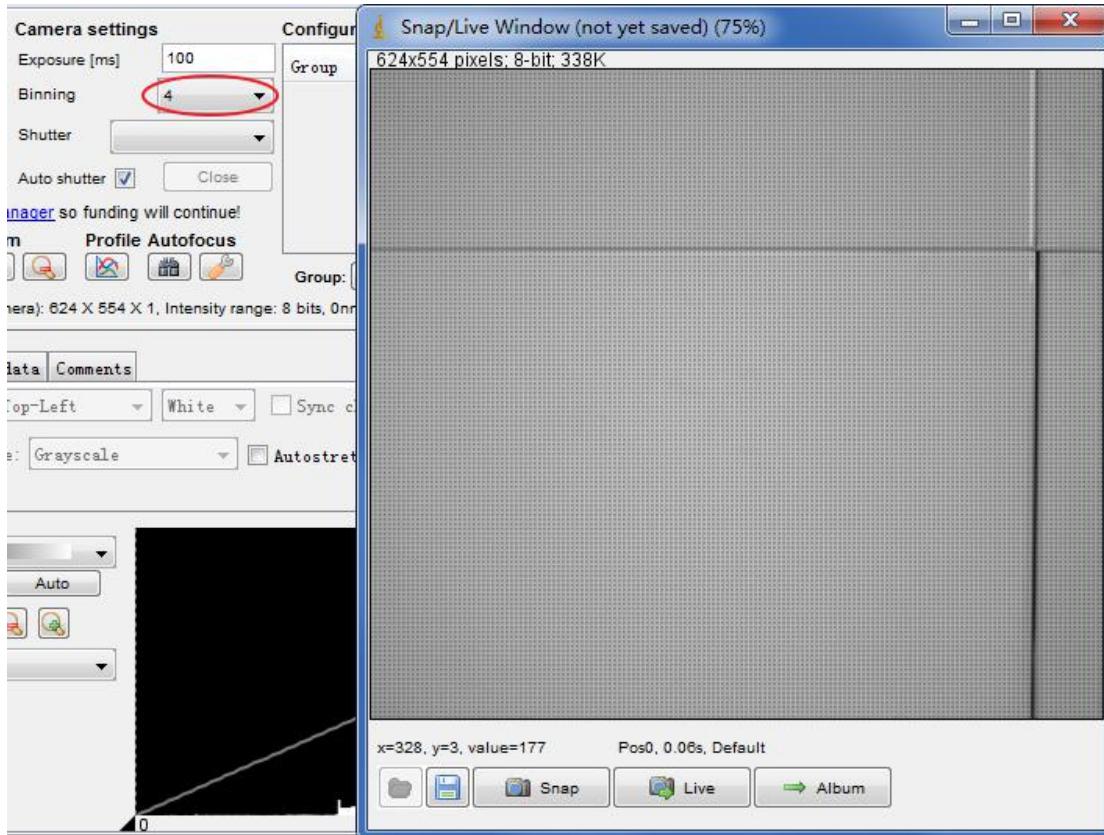
Drag a area as RIO



New region

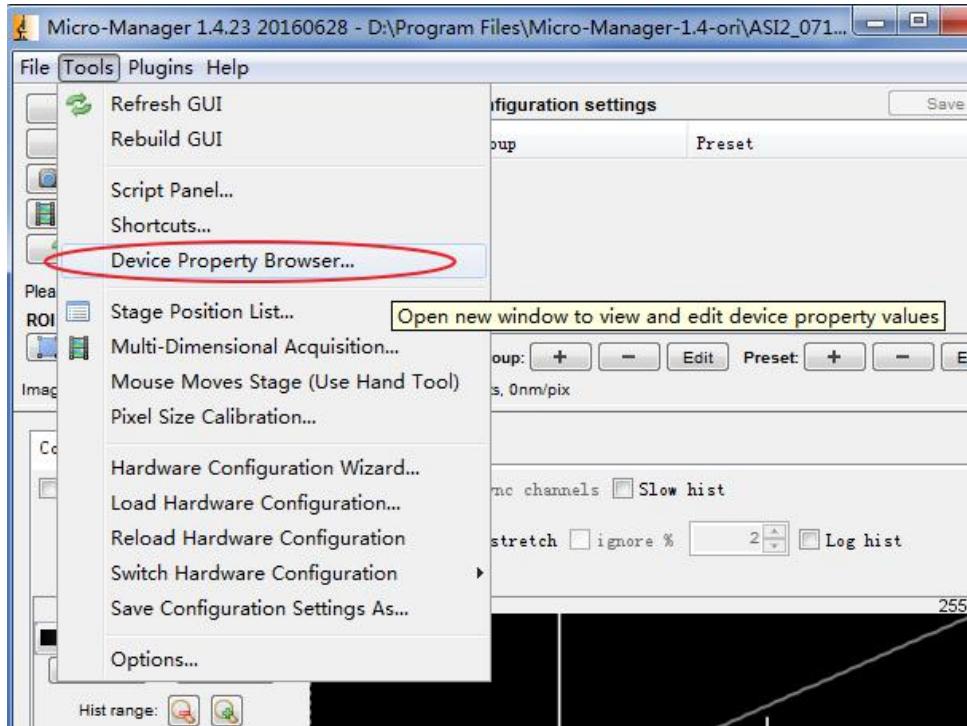


This camera supports bin1/2/3/4, below picture is bin4



2. 3 Device property

Open property panel



Device Property Browser

Show cameras

Show shutters Show read-only properties

Show stages Show discrete changers

Show other devices

Property	Value
MM_ASICam-Anti-dew Switch	off
MM_ASICam-Binning	1
MM_ASICam-CCDTemperature	23.9
MM_ASICam-CameraName	ZWO ASI071MC-Cool
MM_ASICam-Cooler Power Percentage	0
MM_ASICam-Cooler Switch	off
MM_ASICam-Description	ASICamera Camera Device Adapter
MM_ASICam-Exp Auto	off
MM_ASICam-Flip	none
MM_ASICam-Gain	397
MM_ASICam-Gain Auto	off
MM_ASICam-Gamma	50
MM_ASICam-Hardware Bin	off
MM_ASICam-Offset	0
MM_ASICam-PixelType	RAW8
MM_ASICam-Target Temperature	0
MM_ASICam-TransposeCorrection	0
MM_ASICam-TransposeMirrorX	0
MM_ASICam-TransposeMirrorY	0
MM_ASICam-TransposeXY	0
MM_ASICam-USB Host	USB3
MM_ASICam-USBTraffic	40
MM_ASICam-USBTraffic Auto	off
MM_ASICam-White Balance Auto	off
MM_ASICam-White Balance Blue	87
MM_ASICam-White Balance Red	70

anti-dew switch
 binning
 sensor temperature

 cooler power percent
 cooler switch

 auto exposure
 flip
 gain
 auto gain
 gamma
 hardware bin
 offset
 image type
 target temperature

USB traffic
 auto USB traffic
 auto white balance
 white balance (blue)
 white balance (red)

Image type

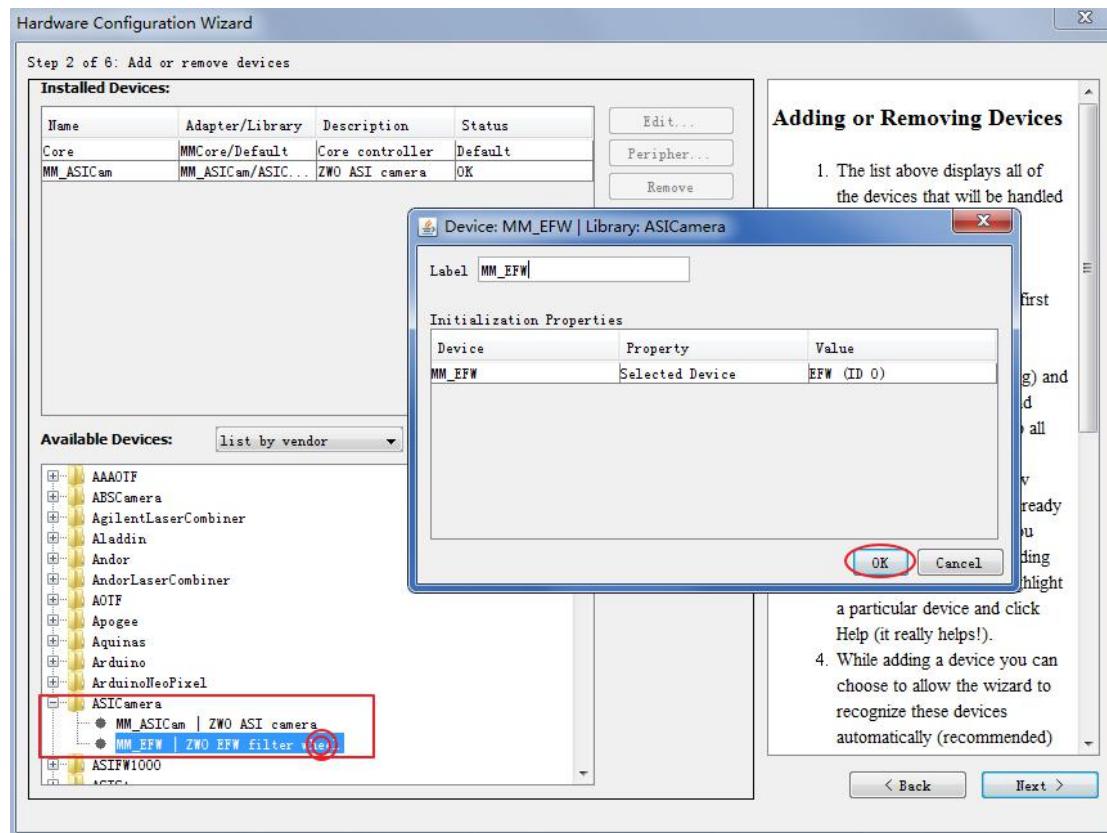
MM_ASICam-PixelType	RAW8
MM_ASICam-Target Temperature	RAW12
MM_ASICam-TransposeCorrection	RAW16
MM_ASICam-TransposeMirrorX	RAW8
MM_ASICam-TransposeMirrorY	RGB24
MM_ASICam-TransposeXY	RGB48
MM_ASICam-USB Host	Y8

3. Filter wheel control

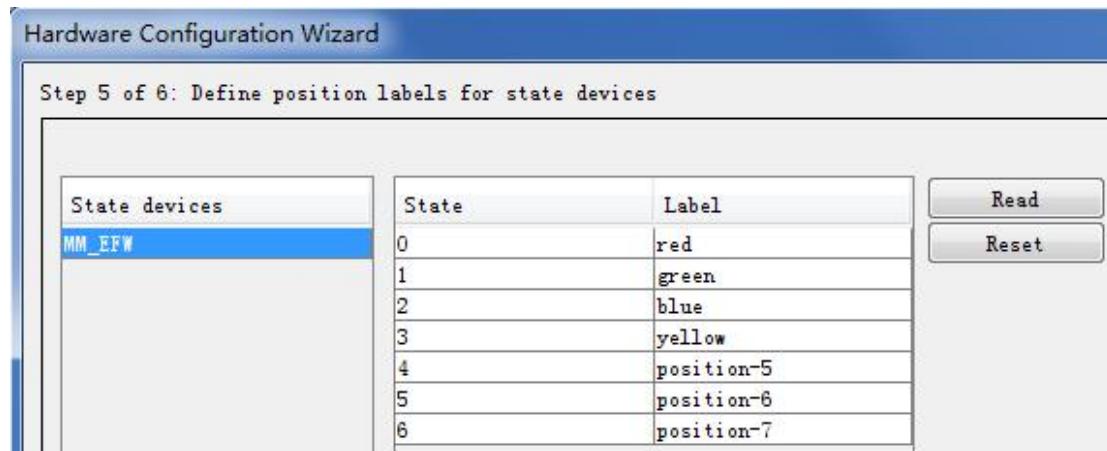
3.1 Hardware configure



Open menu->Tools->hardware configuration wizard, view as list by vendor mode, double click EFW under ASICamera.



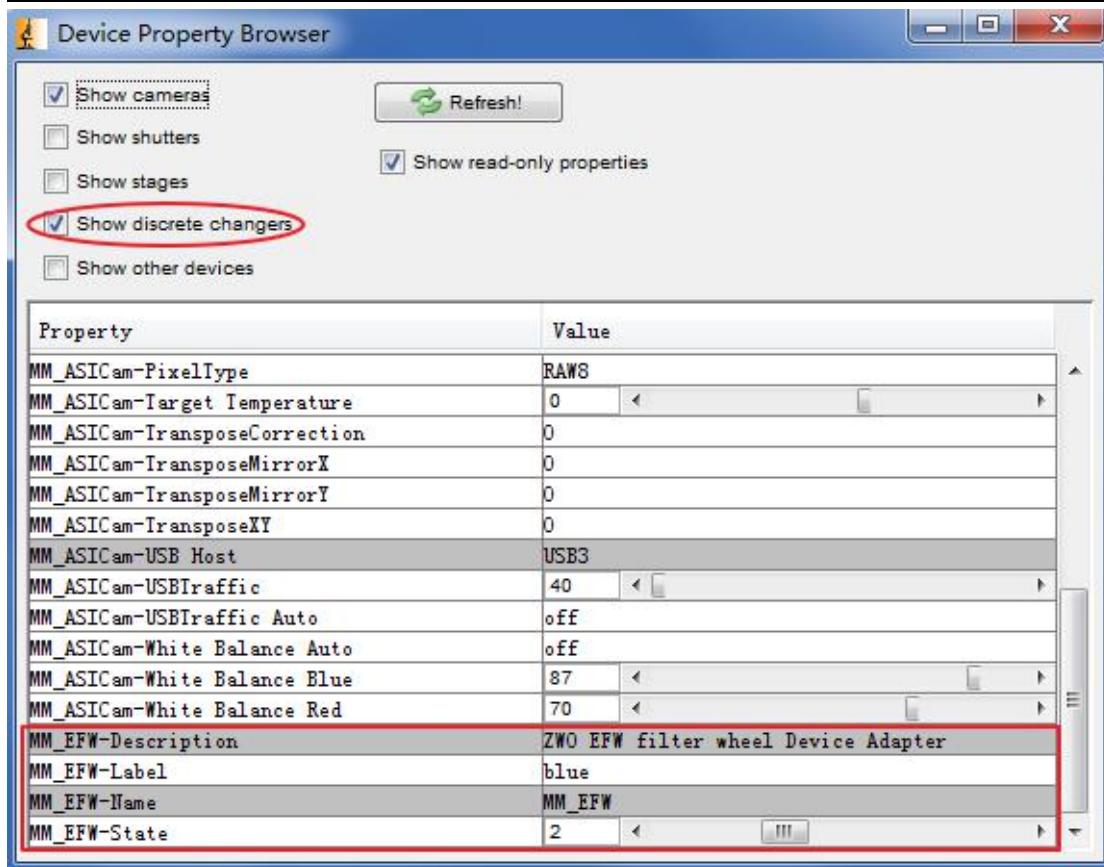
Edit filter name



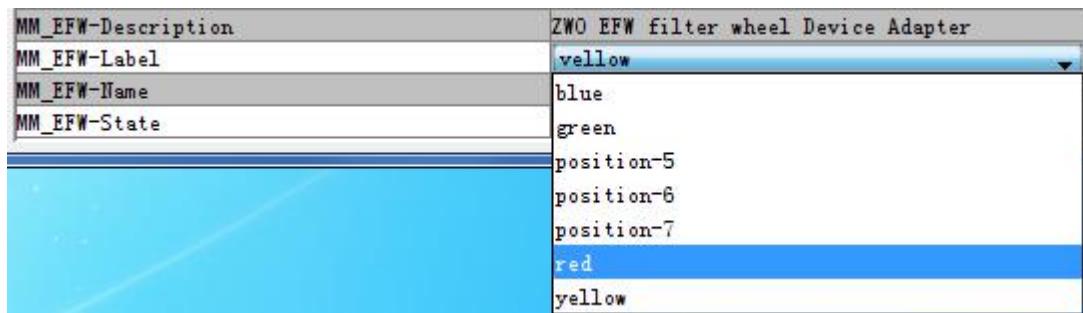
Finally save configuration

3.2 Switch filter

Open menu->Tools->Device Property Browser



Switch filter by adjusting Label or State, the UI is frozen during wheel is rotating, it'll refresh when switch is completed.



or

