



# **ZWO Micro-Manager Plug-in Manual**

Revision 1.0

Jan, 2017

All materials related to this publication are subject to change without notice and its copyright totally belongs to Suzhou ZWO CO.,LTD.



# 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

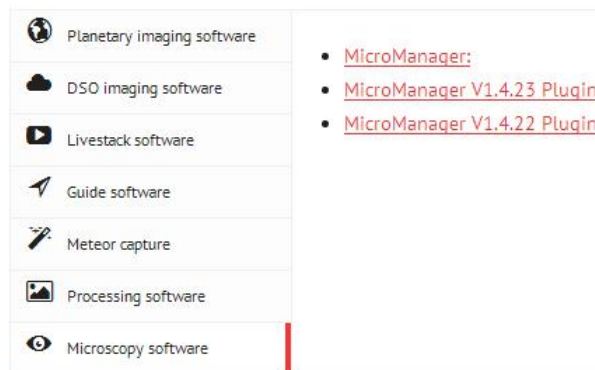
Download plug-in installer of corresponding version's Micro-Manager from [ZWO official website](#),

Windows: ASI\_Micromanager\_setup.exe,

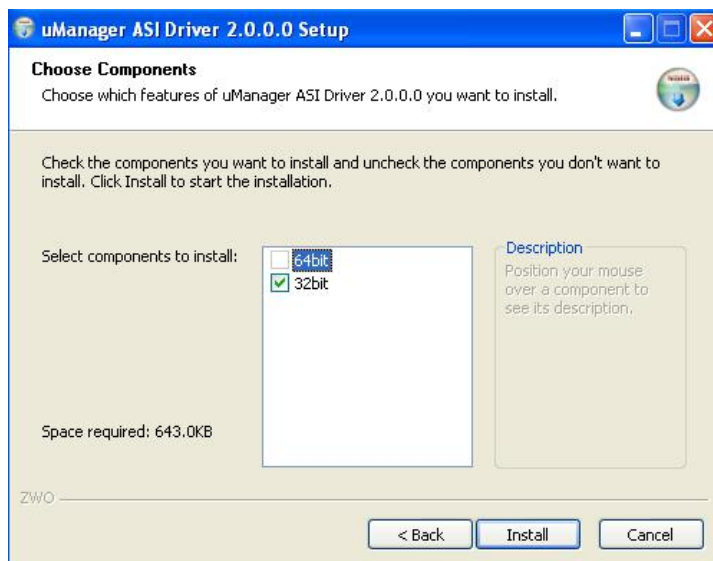
MacOSX: uManager\_1\_4\_23\_ASICamera\_Mac.dmg or

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.



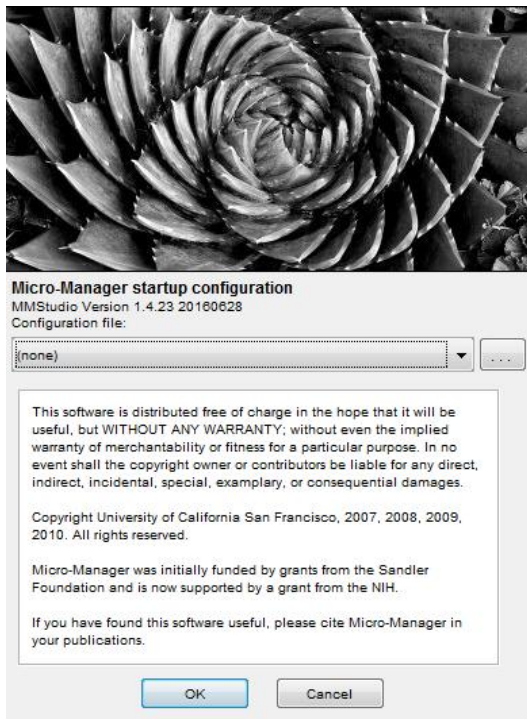
Take the installer for Windows as an example, run the setup program



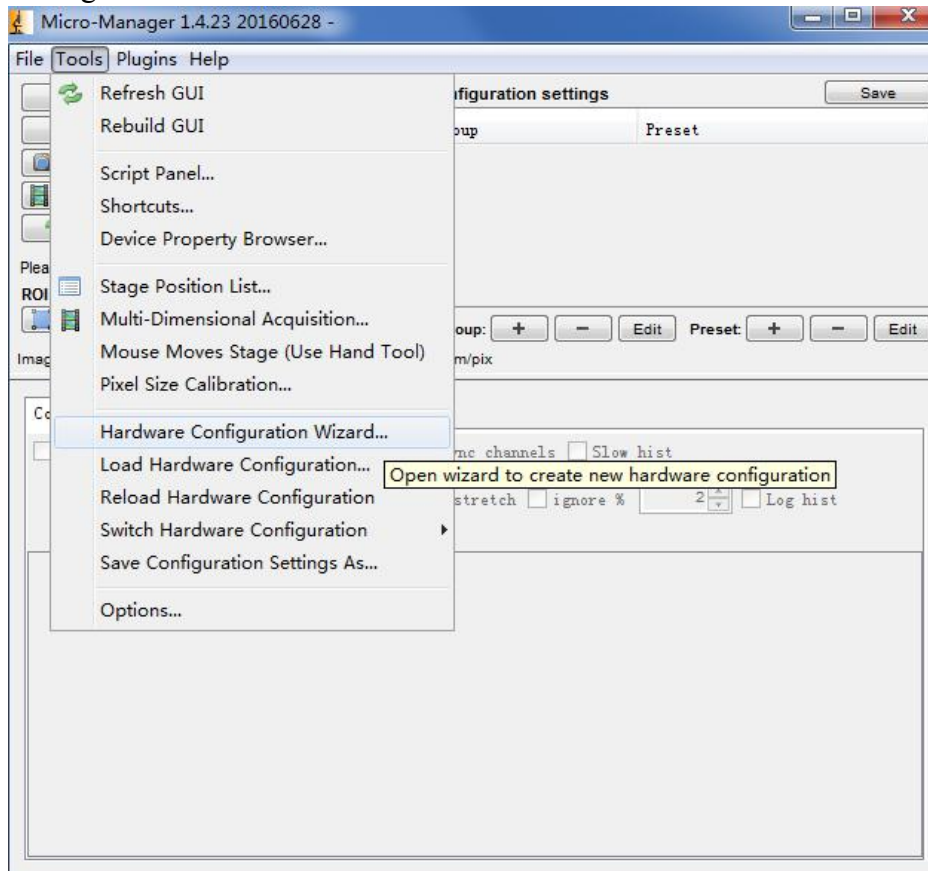
## 2. Camera control

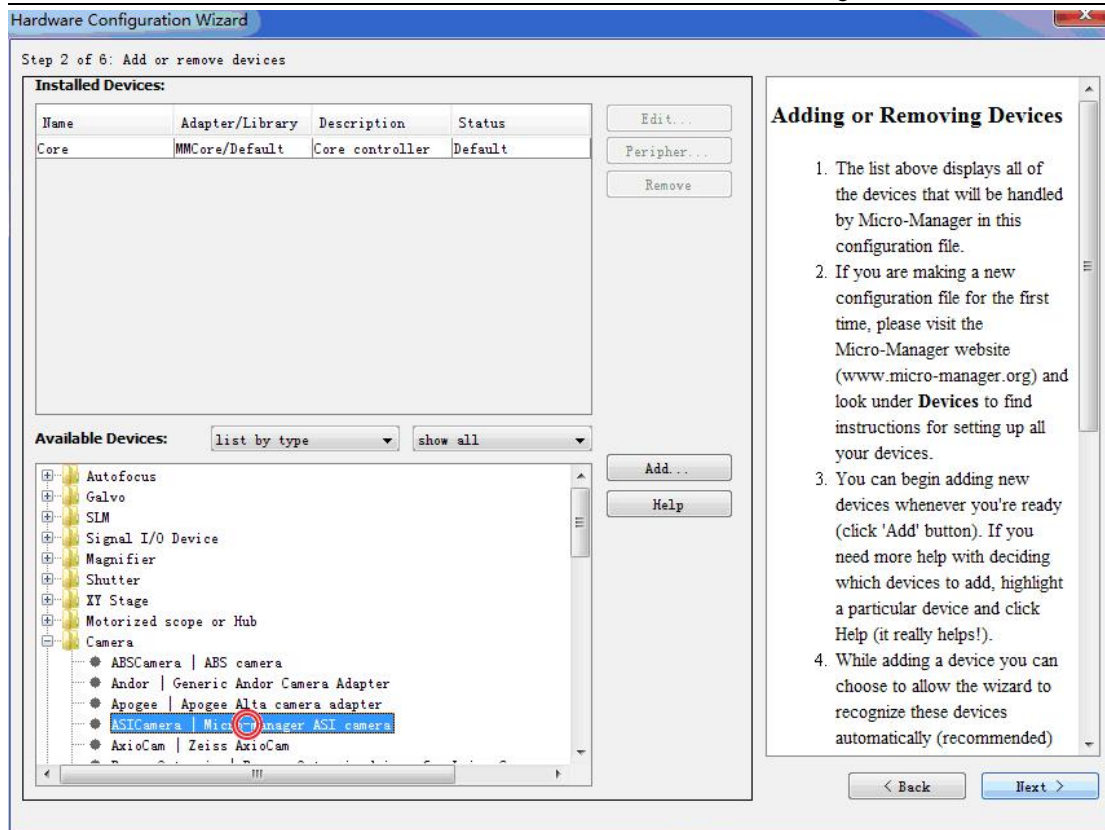
### 2.1 Hardware configure

When launch first time, choose none.

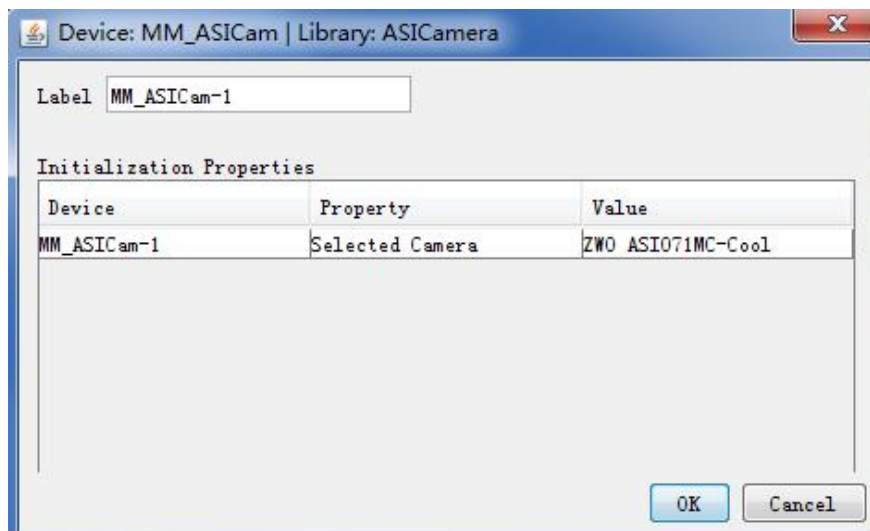


## Configure ASI camera



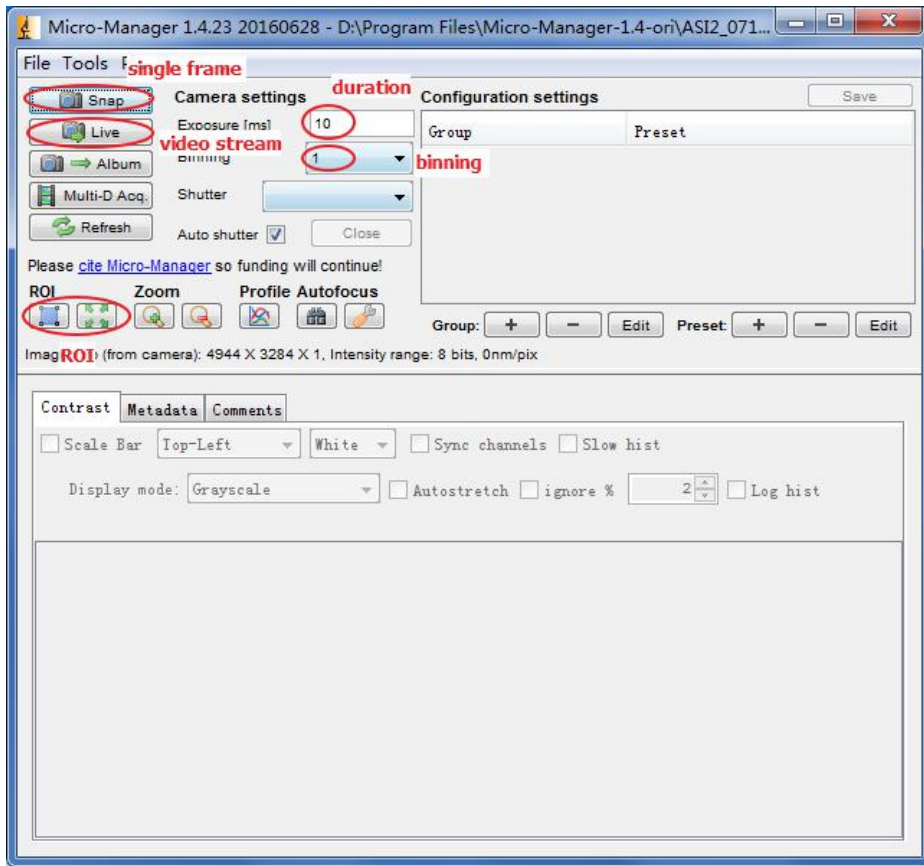


Choose camera model

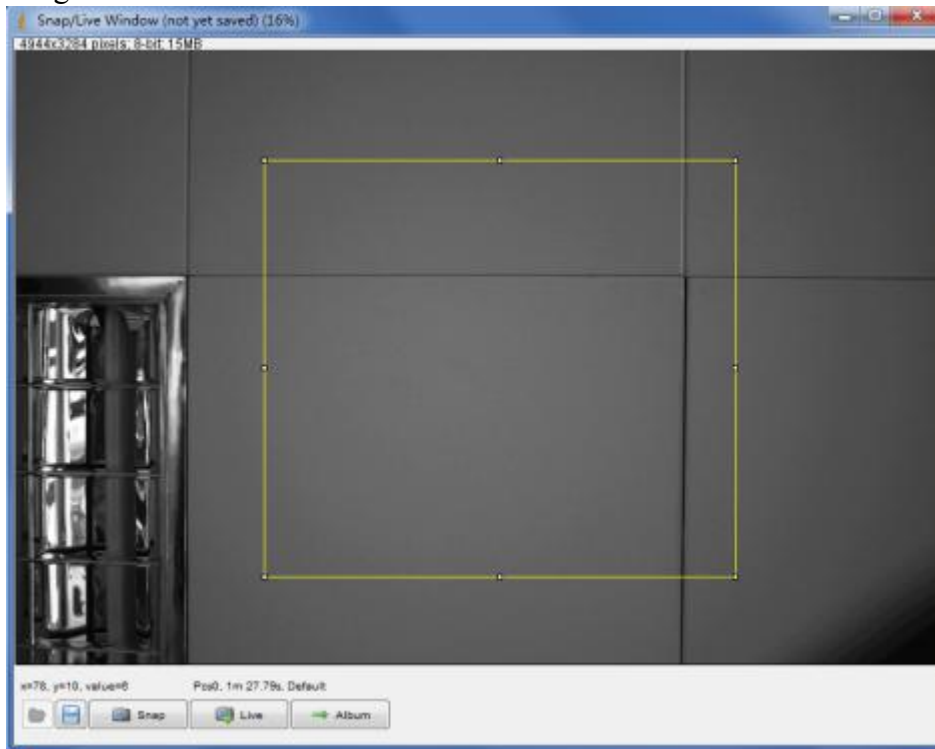


Finally save configuration

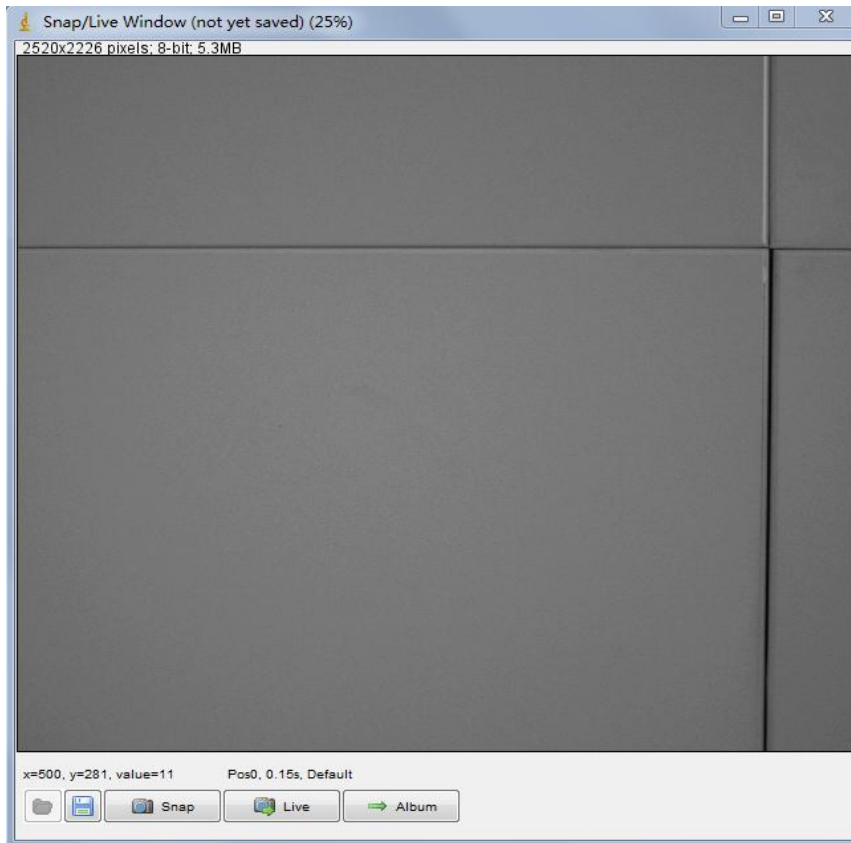
## 2.2 Frame capture



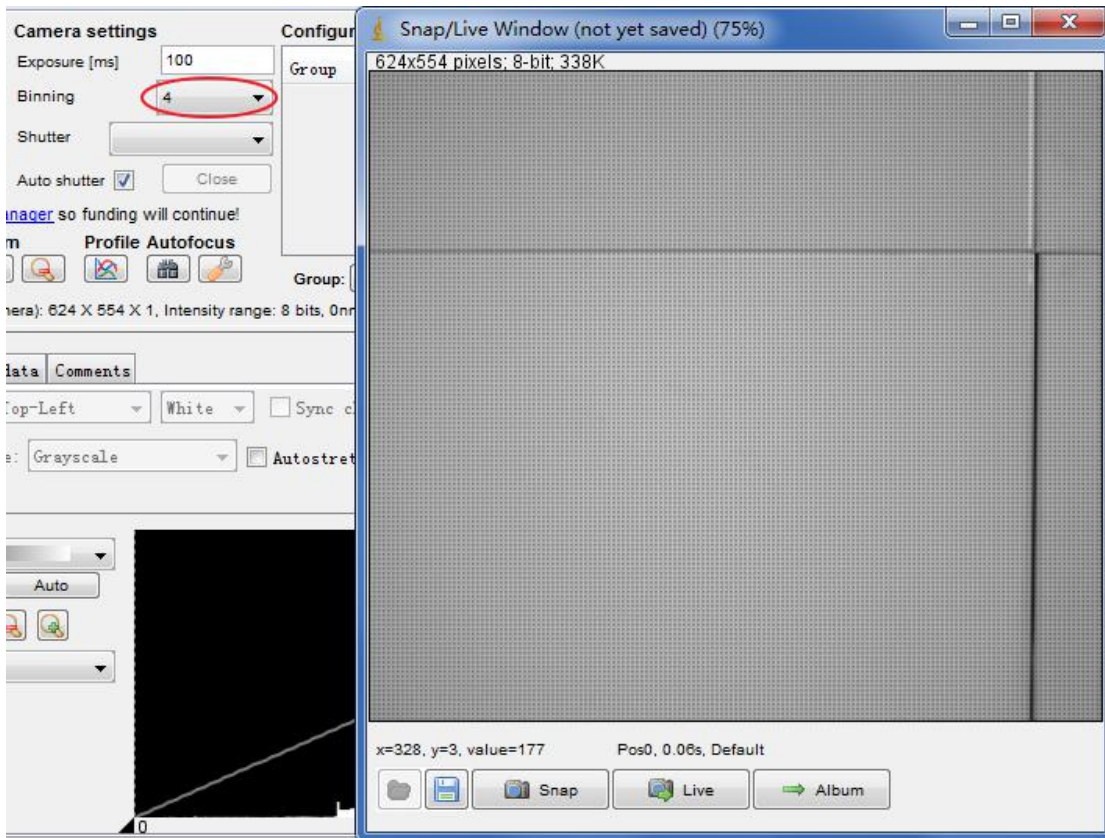
Drag a area as RIO



New region



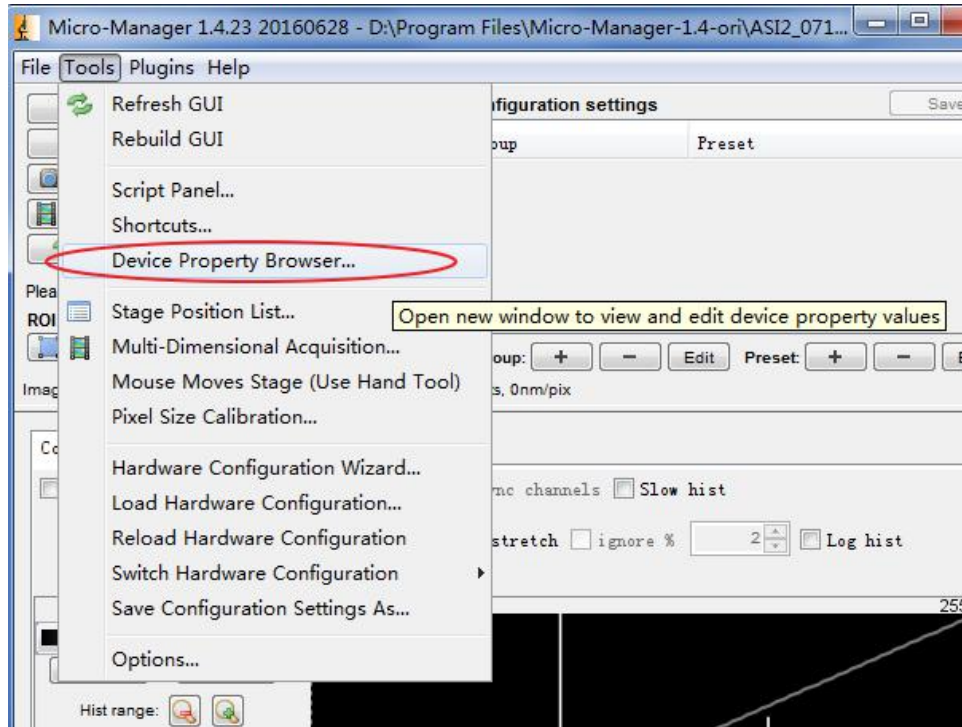
This camera supports bin1/2/3/4, below picture is bin4

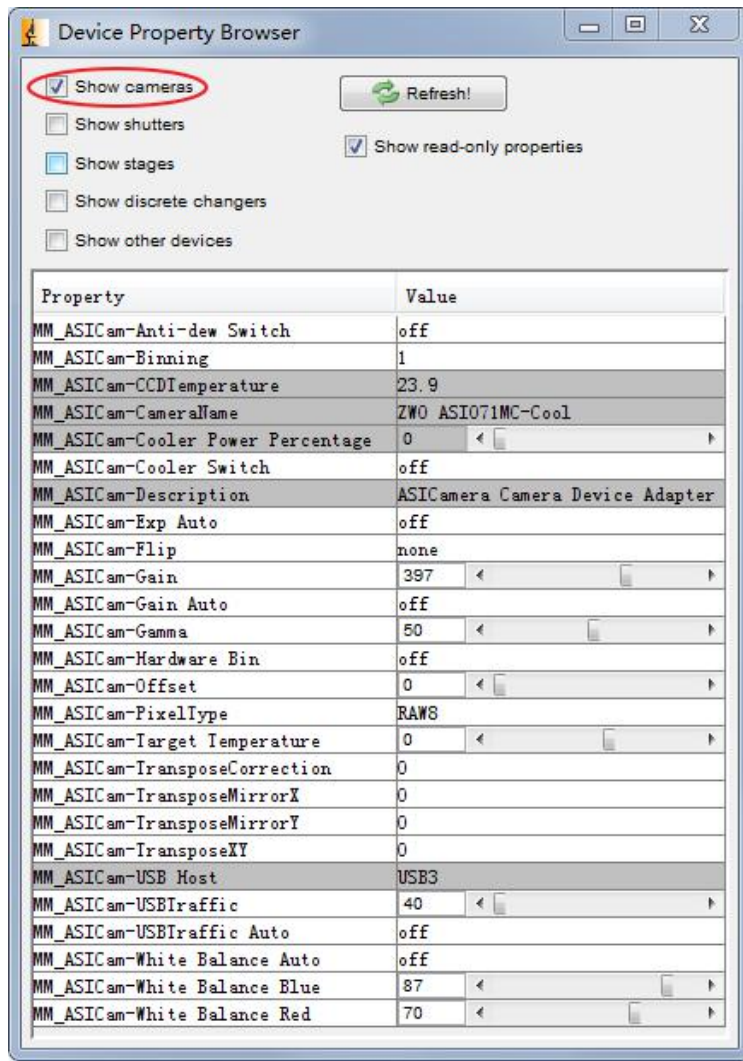




## 2.3 Device property

Open property panel





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)

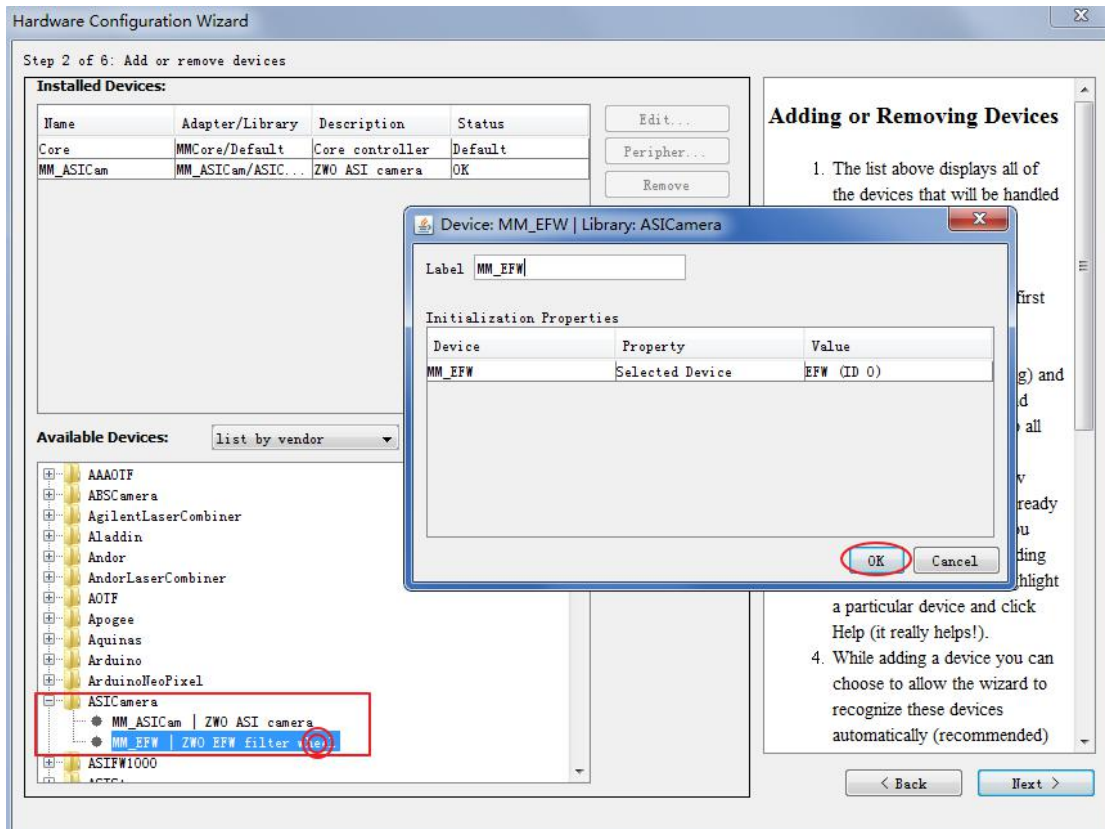
### Image type

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	T8
MM_ASICam-USBTraffic	

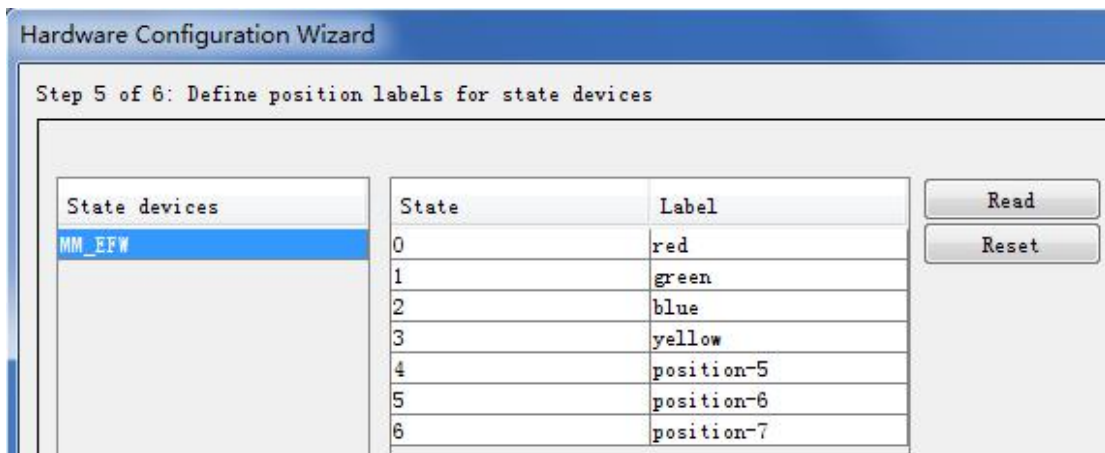
## 3. Filter wheel control

### 3.1 Hardware configure

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



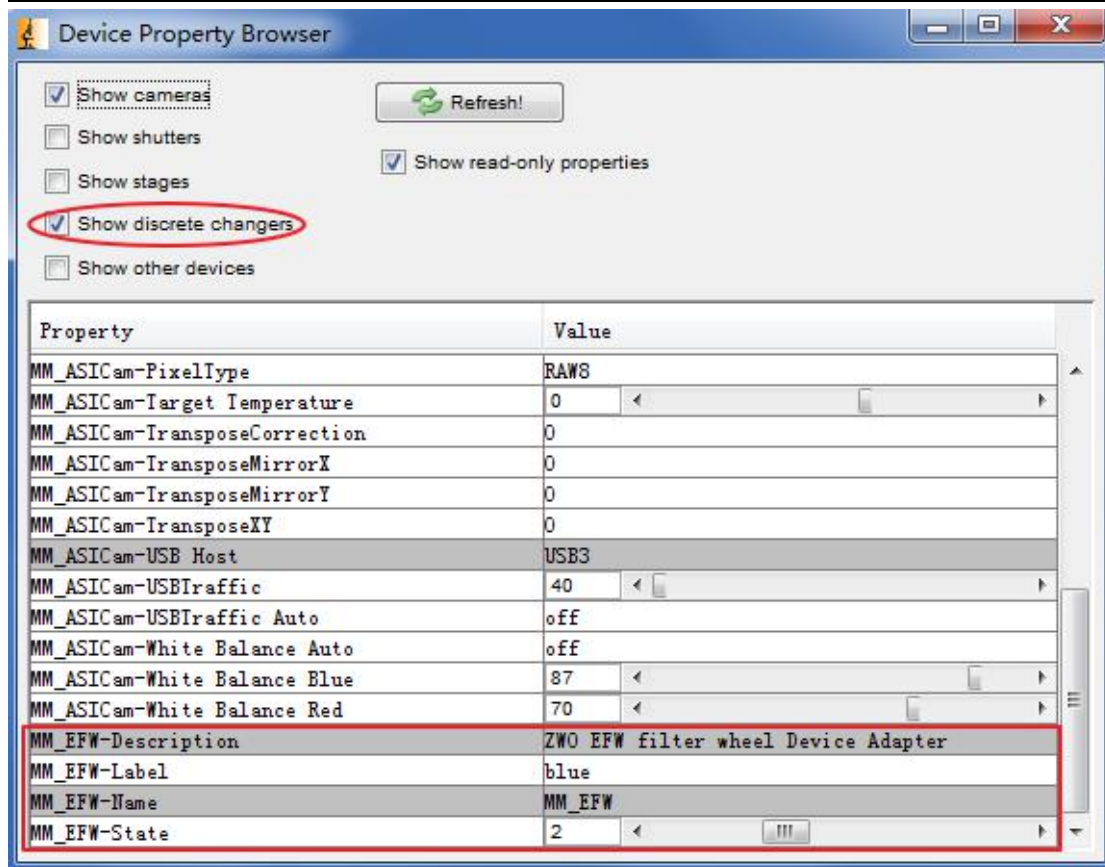
Edit filter name



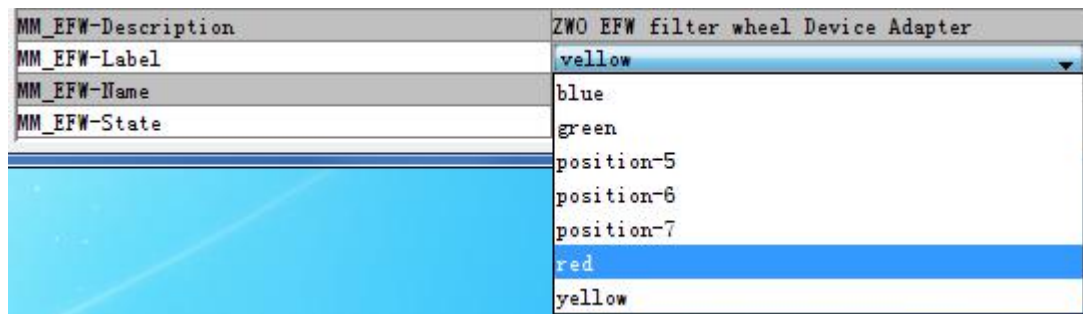
Finally save configuration

## 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

