Awaiba Viewer
Quick Start

AWAIBA

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1 Introduction

Awaiba Viewer is a software that allows the user to grab data from the sensors and evaluate several boards.

This document explains how to install Awaiba Viewer.

Awaiba Viewer is compatible with Windows XP, 7, 8 and 8.1.

1.1 FPGA Files

The FGPA files can be found in **Program Data/Awaiba/Awaiba Viewer/FPGA Files** folder, after installing the viewer.

1.2 Drivers

For the boards to be recognized in the Windows Operative System, they have to have a specific driver which is installed with the Awaiba Viewer.

The drivers are located in **Program Data/Awaiba/Awaiba Viewer/driver**

2 Awaiba Viewer installation

This section describes how to install the Awaiba Viewer software.

Note: Do not connect the device to the computer before installing this software!

1) Start the setup-Awaiba Viewer_Vx.x.x.exe:

2) Choose the most suitable language between the following options:
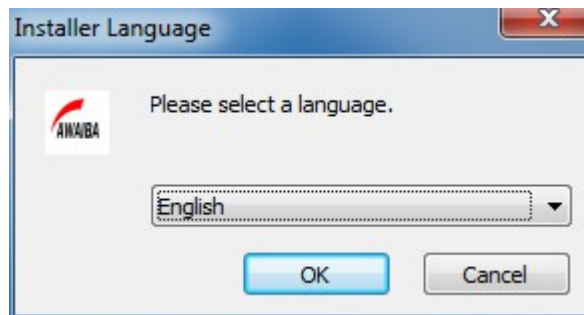
- English
- Japanese
- Korean

Figure 1: Choose the suitable language

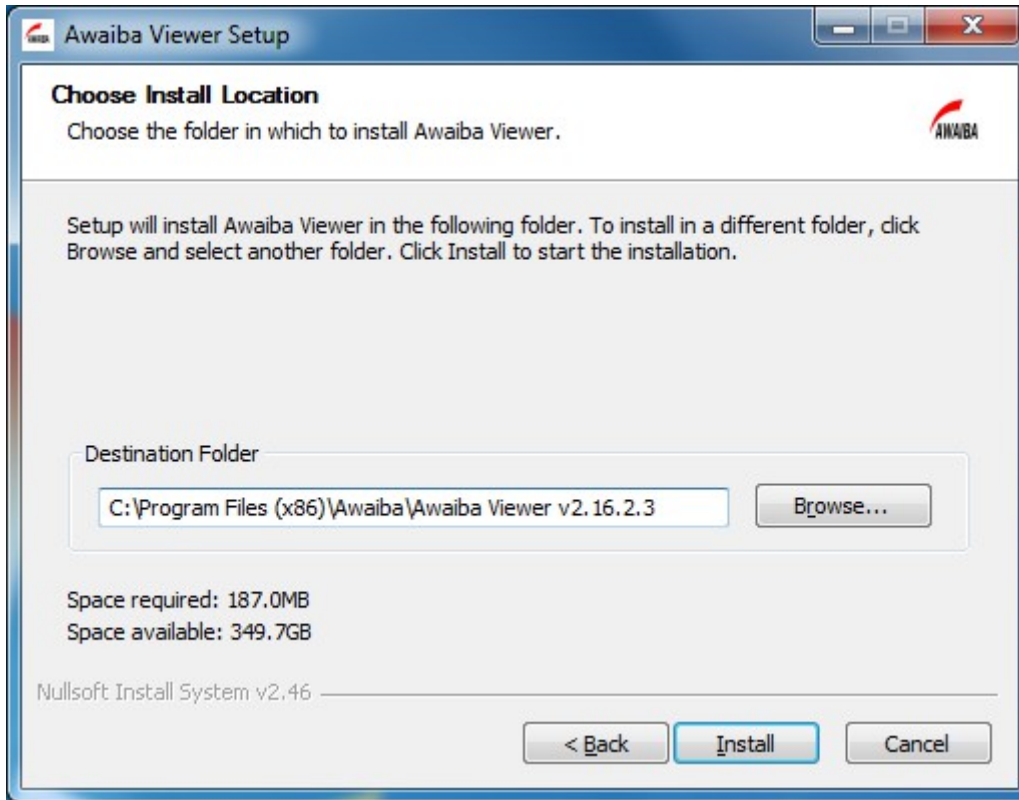3) Select the installation folder.

Figure 2: Choose installation location

4) Select the media folder (where correction masks, screenshots and videos will be saved).
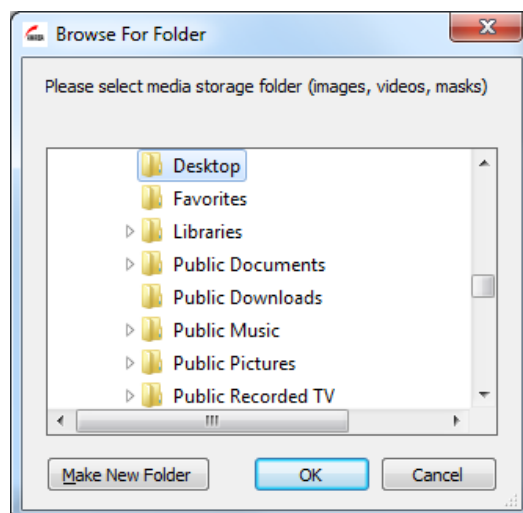

Figure 3: Choose the media storage folder

5) Select where the correction masks folder are, as in figure 3. This will copy all the correction masks (awplt, awblc and awwlc files) from that folder, to the folder chosen in figure 4.
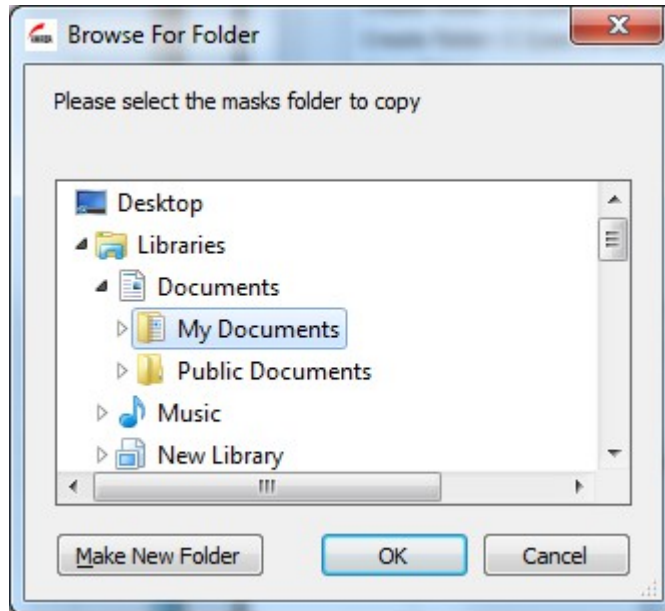
Figure 4: Choose mask copy folder
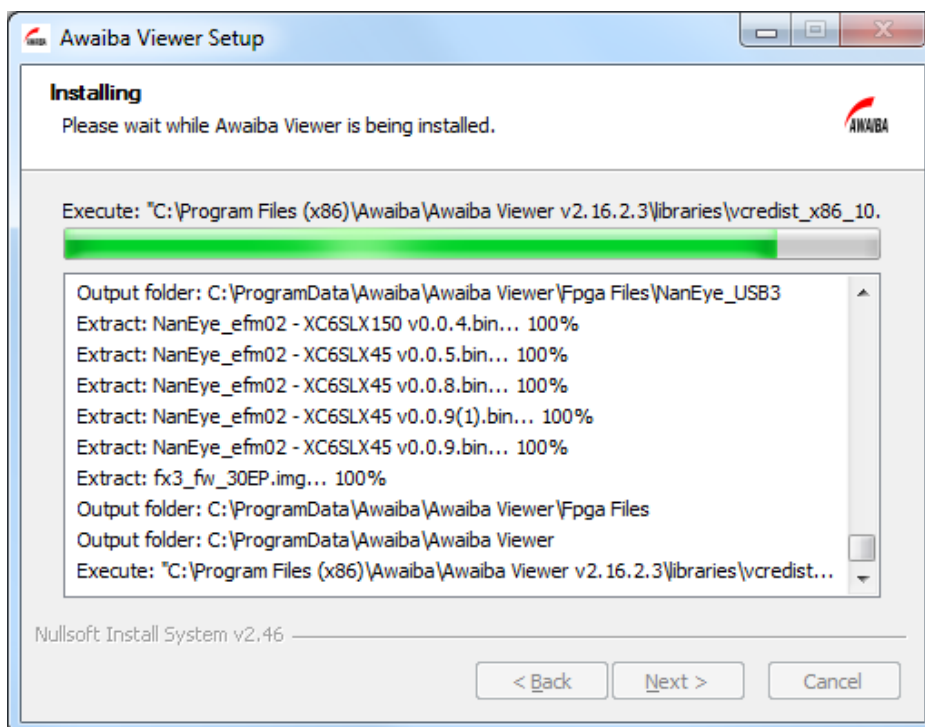
6) Installs the drivers for all the boards.

Figure 5: Installing Awaiba Viewer

7) Installation completed.
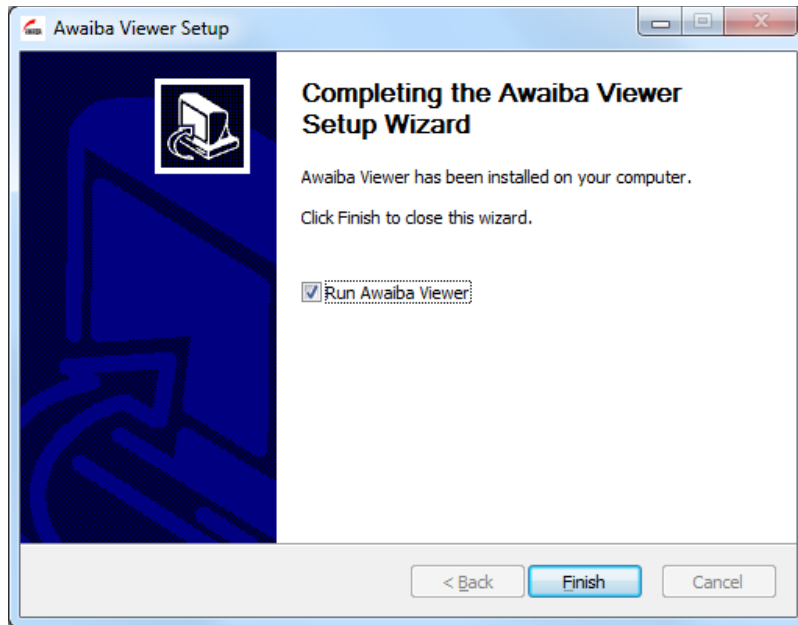
Figure 6: Installation completed

2.1 Plugging the devices to the computer

1) Plug the devices and wait for it to be automatically recognized. Please check on the **Device Manager** if your device is recognized as shown in table 1 and figure 7.

Board	Device Manager: Correctly installed driver
EFM01	Cesys USB Device (EFM01)
NanoUSB2.2	Cesys USB Device (NANOUSB)
NanoUSB3	Cypress FX3 USB BootLoader Device
Idule Module	Imaging Devices - iPokr

Table 1: Device manager correctly installed driver

Figure 7: Device Manager - Correctly installed drivers

3 Start Options

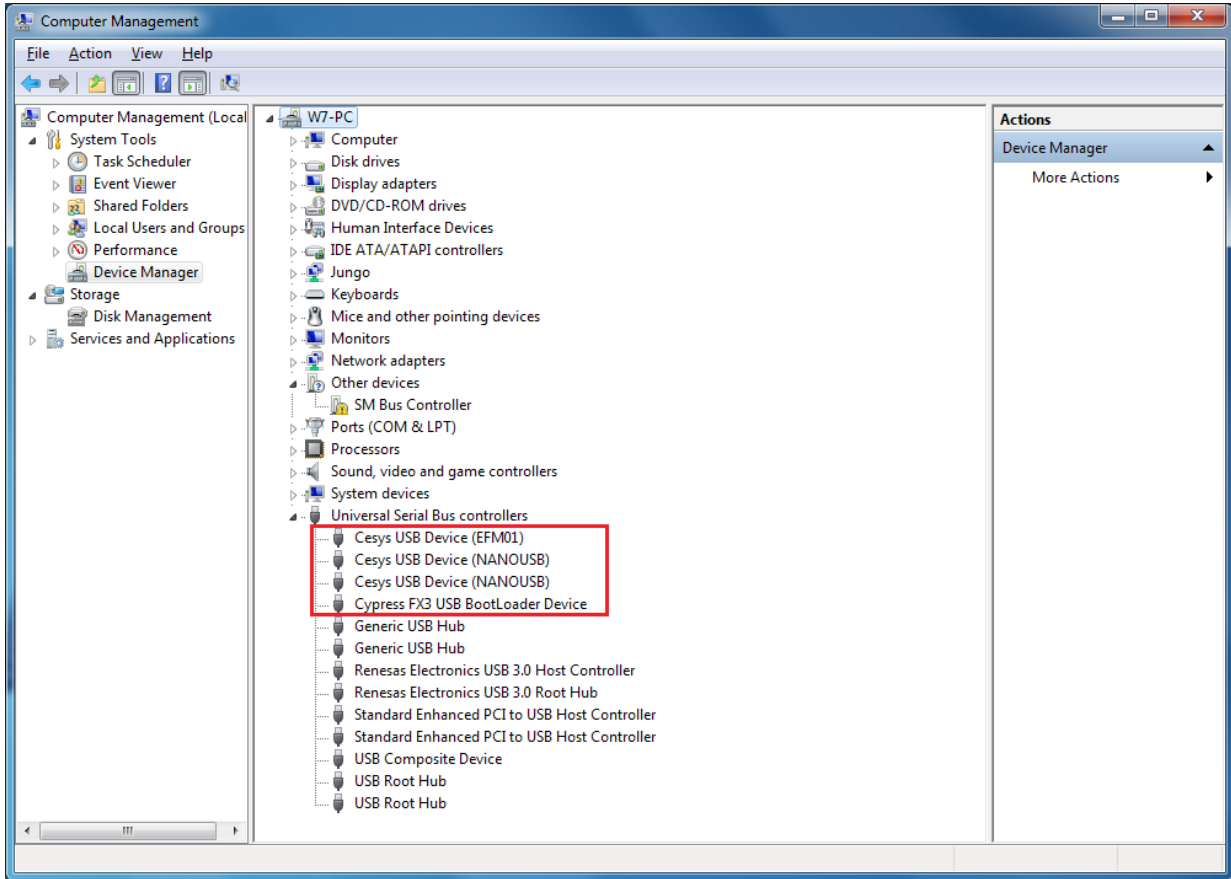If the board is correctly recognised as shown in the previously chapter then you can start the Awaiba Viewer choosing the **Sensor**, **Board** and **Viewer** following the most suitable combination available in table 2.

If the board is not recognised correctly please check chapter 4.

Sensor	Board	Viewer	Connector
NanEye2D	EFM01	Awaiba Viewer	N/A
	NanoUSB2.2 Fiber Demo	Awaiba Viewer	
		Stereo Viewer	
	NanoUSB3	Awaiba Viewer	J1, J2, J3, J4
		Stereo Viewer	
		Quad Viewer	
NanEyeGS	IduleCam0 IduleCam1	Awaiba Viewer	N/A
		Stereo Viewer	
	NanoUSB3	Awaiba Viewer J8	
		Awaiba Viewer J9	
		Stereo Viewer	
NanEye GS with 20cm Cable	NanoUSB3	Awaiba Viewer J8	
		Awaiba Viewer J9	
		Stereo Viewer	

Table 2: Awaiba Viewer start options

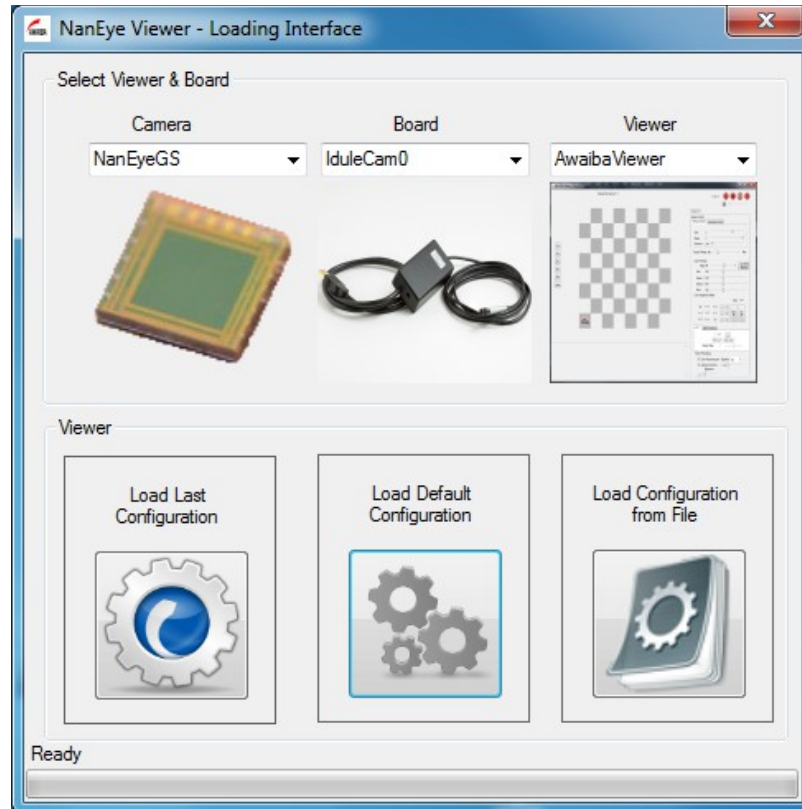Figure 8 shows Awaiba Viewer initial interface.

Figure 8: Awaiba Viewer initial interface

After choosing **Load Default Configuration** the Viewer interface is displayed as exemplified in figure 9.
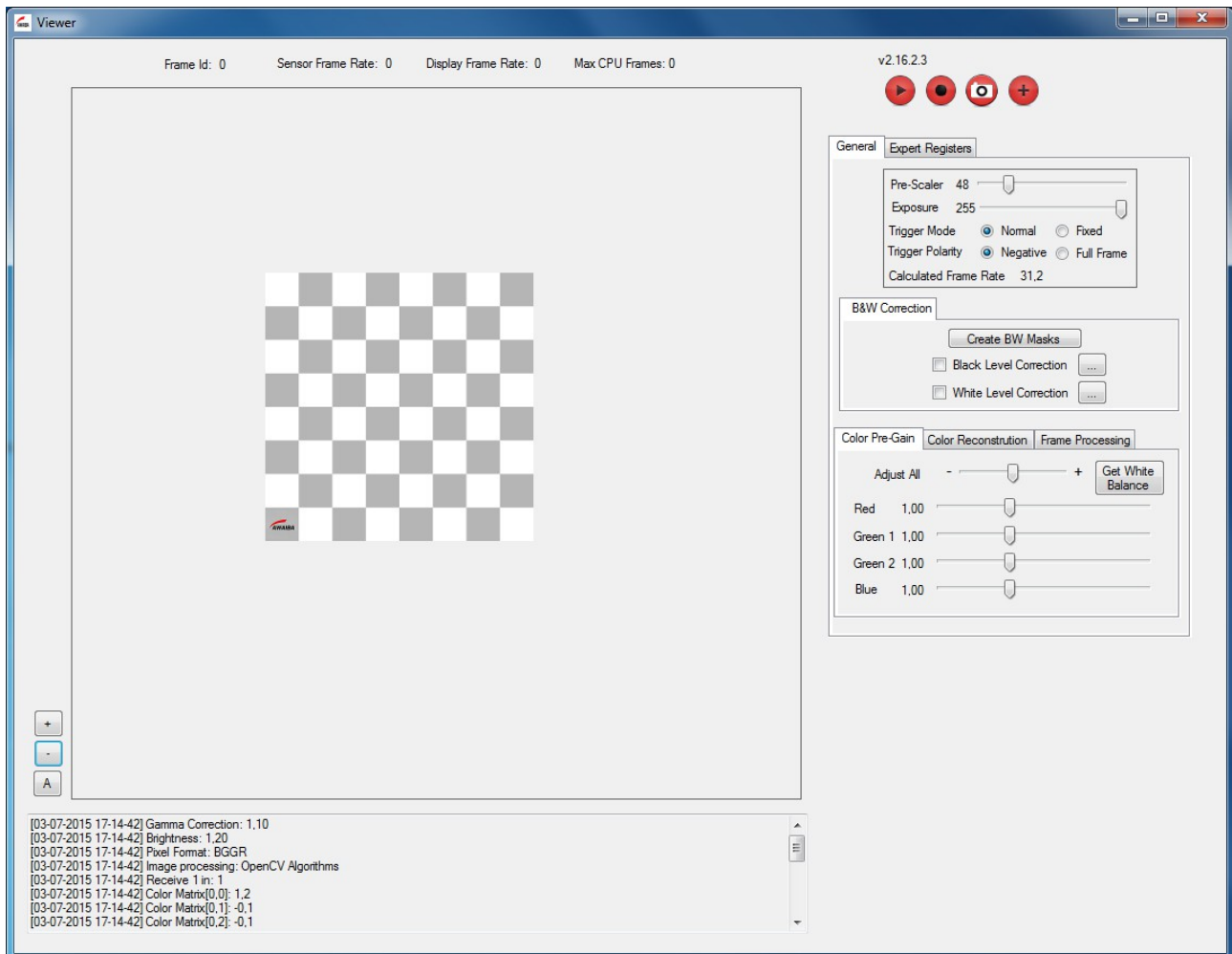
Figure 9: Awaiba Viewer interface example

Figure 10 shows the fast menu.

Figure 10: Fast menu

From left to right:

- Play/Stop Grabbing Images
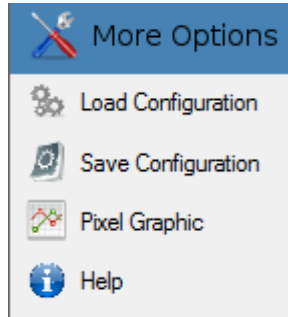- Record Videos
- Take Snapshots
- Menu More Options (figure 11)

Figure 11: Menu More Options

3.1 Pixel Graphic

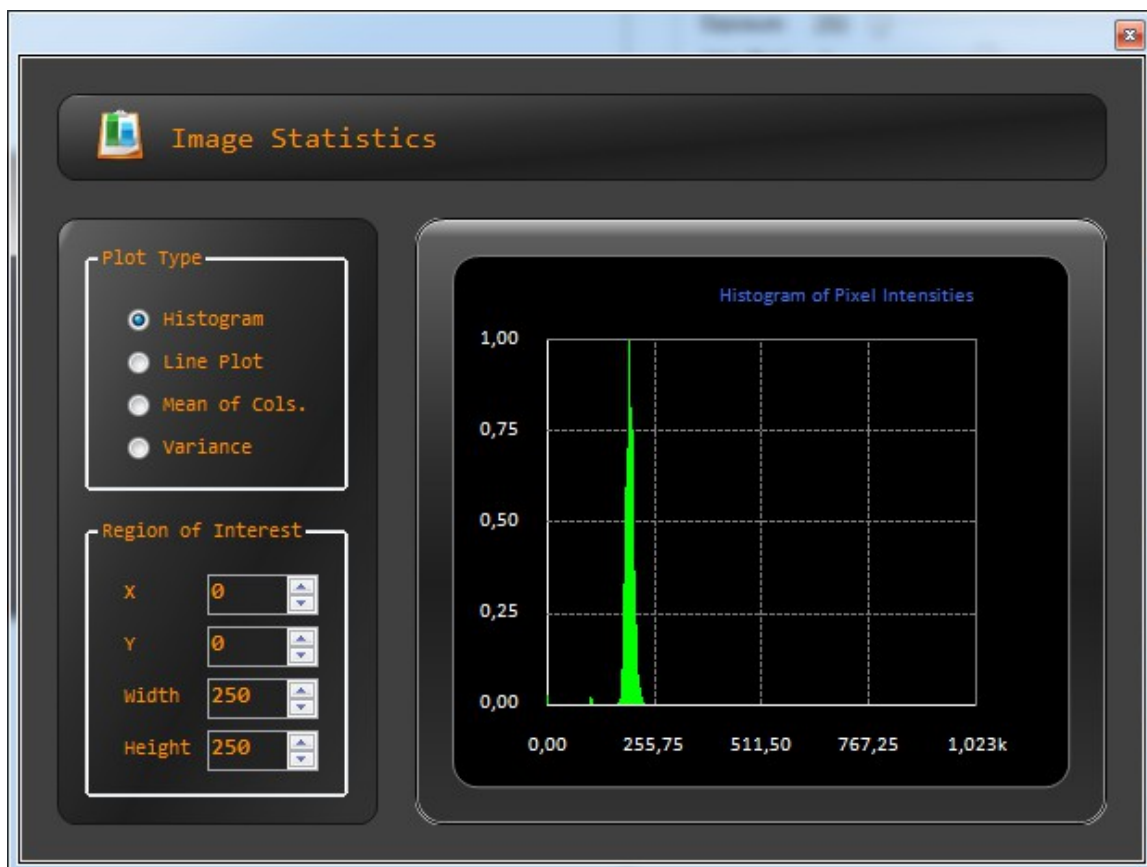The pixel intensity can be analysed through the histogram in figure 12.

Figure 12: Pixel Graphic

3.2 Record Videos

When the user selects record a video, a message is displayed (figure 13) to choose Raw Images or Processed Images.
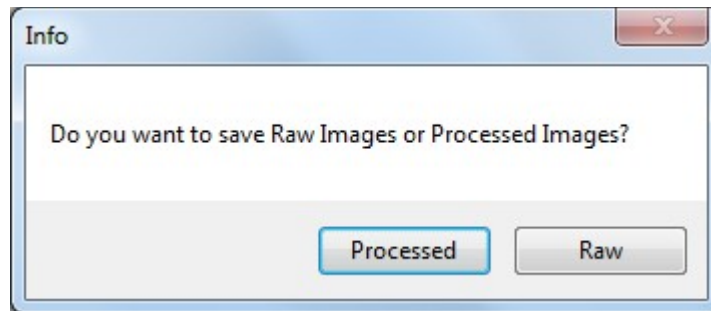

Figure 13: Selects Processed Images or Raw Images to make a video

Processed Images:

- • Saves AVI format
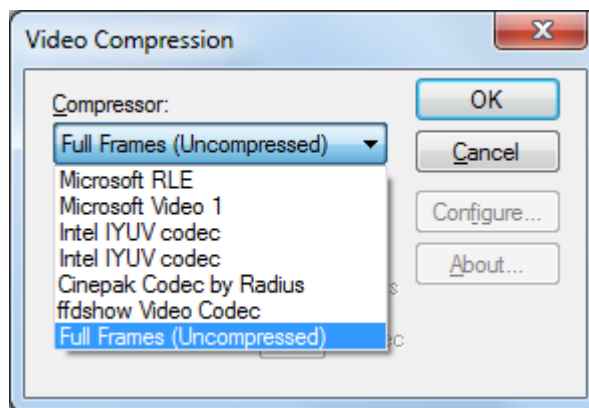- • Chooses between codecs installed in the PC (figure 14)

Figure 14: Choose the type of compressor

Raw Images:

- • Saves in awvideo format
- • Saves raw 10 bit pixels

To watch the raw video, in awvideo format, the user can use the **AwVideo Visualizer**.

The videos are saved in user data folder (the folder chosen when installing the viewer) in the Videos folder.

3.3 Snapshots

When saving a snapshot, it will save the Raw Image (10 bits) as it comes from the sensor and also the Processed Image (the image as the user see on your screen, after all the algorithms applied).

Processed Image:

- PNG format
- 24 Bits per Pixel

Raw Image:

- PGM format
- 10 bit raw pixels

The images are saved in user data folder (the folder chosen when installing the viewer) in the Snapshots folder. It saves as **Raw_Sen[0]** for the Raw Image and as **Processed_Sen[0]** to the Processed Image. The "0" is the sensor ID.

4 Debug

4.1 Driver not installed Correctly

If **Device Manager** shows:

- Cesys Device (EFM01, loading stage...)
- Cesys Device (NANOUSB, loading stage...)

Or if you get the following message error in **Awaiba Viewer**:

- Error Msg: There is no Nano USB connected / Camera not connected

In both cases you need to reinstall the driver.

Please take a look into **Program Data\Awaiba\Awaiba Viewer\driver\cesys\udk3 and please run udk3-usb-driver-windows-1.1.exe** to update the driver.

If the issue persist please run the Service.bat in **Program Files\Awaiba\Awaiba Viewer v2.16.2.3\driver\cesys\udk3\svc\ceusb\RunService**. After this, it should install the driver successfully.

If you need any further assistance please contact our technical team through **support@awaiba.com**.

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