# How to Use oCamViewer

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# 1. INTRODUCTION

This is an abbreviated instruction manual to use the oCamViewer program, version 180824.

# System Requirements:

- Windows 7, 8 and 10
- Operating system of 32 bit or 64 bits
- USB 3.0 port



Figure 1. oCamViewer – Image Display Window and Main Control Window

# 2. HOW TO USE

#### **Main Control Window**

With the oCam camera connected at the USB 3.0 or USB 2.0 port of the Windows host system, , the main control window will appear on starting the program.

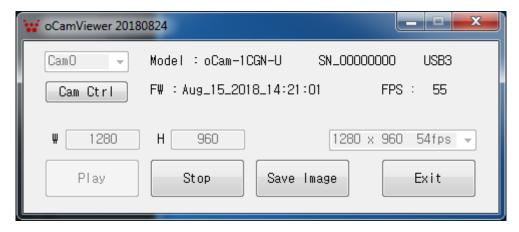


Figure 2. Main Control Window

- **[Cam Ctrl]** : Click to open the Detail Control Window. It is active (enabled) only when the camera is connected and the video stream is being received.
- **Model**: Type of oCam automatically detected.
- **SNXXXXX**: Serial number of oCam automatically detected.
- USB3 / USB2: When connected, the type of USB interface is automatically detected and displayed.
- **FW**: The version of oCam firmware automatically detected.
- **FPS**: The "Frames Per Second" value actually being received by the host system. It can be different from the oCam camera set value, especially when the exposure time is bigger than the appropriate value. For example, if the oCam camera is set to be 100fps, the actual FPS can be lower than 100 if the exposure time is set to be too long.
- **W / H**: Image size of the set resolution.
- Resolution List: To change and select a resolution, open the drop list and click one to select it.

- **[Play]**: Click to connect the camera. It is active (enabled) only when the camera is disconnected and the video stream is not being received.
- **[Stop]**: Click to disconnect the camera. It is active (enabled) only when the camera is connected and the video stream is being received.
- [Save Image]: Click to save current still image in BMP format.
- **[Exit]**: Click to terminate the program.

#### **Detail Control Window**

Only the parameters that can be set at the current situation or model are active (enabled).

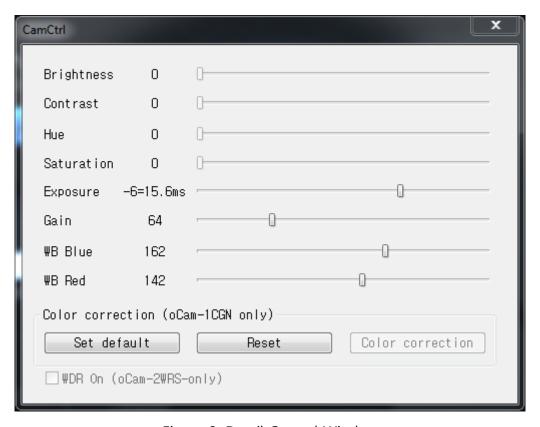


Figure 3. Detail Control Window

- **Brightness**: Slide bar to change the brightness value.
- **Contrast**: Slide bar to change the contrast value.
- **Hue**: Slide bar to change the hue value.

- **Saturation**: Slide bar to change the saturation value.
- **Exposure**: Slide bar to change the exposure value.
- **Gain**: Slide bar to change the main gain value.
- WB Blue: Slide bar to change the blue component of the white balance value.
- **WB Red**: Slide bar to change the red component of the white balance value.
- **[Set Default]**: This is applicable only to oCam-1CGN-U. Click to change the active gain values to default values. The changed value, however, will not be stored in the camera.
- **[Reset]**: This is applicable only to oCam-1CGN-U. Click to change the active gain values and erase the stored values.
- **[Color correction]**: This is applicable only to oCam-1CGN-U. Click to change the gain values automatically to get the white balance and store them in the camera. Before this, it is necessary to perform the Reset function. Once stored, the new gain values will be maintained even for power off and will be active on next power on.

# **APPENDIX**

### How to Install / Update / Replace USB Driver

Even though the oCam cameras are UVC compliant so that it is not needed to install any additional drivers for the host systems that are UVC compliant, it is need to install appropriate USB driver for downloading the oCam firmware.

When connected to a Windows host, oCam can appear as one of the following three on device manager;

- Normal device under camera (for Windows 10) or imaging devices (for Windows 7). This
  means that oCam firmware is installed and working fine as an UVC camera.
- "Cypress FX3 USB BootLoader Device" under "Universal Serial Bus controllers". This means that oCam firmware is erased but Windows FX3 USB driver is installed and working fine so that you can download a firmware to oCam.
- "WestBridge" under "Other devices". This means that neither oCam firmware nor Windows FX3 USB driver is installed.

It is recommended to perform the following procedure to check and re-install the Windows FX3 USB driver for downloading or updating the oCam firmware;

For Windows 7,

- 1. Connect the oCam to check if it appears under the "imaging devices". If you have erased the firmware successfully, it should not appear.
- 2. If "Cypress FX3 USB BootLoader Device" appears under "Universal Serial Bus controllers", the oCam firmware is erased and the FX3 USB driver is installed and is working. If it is needed to erase the driver and refresh it, right click on "Cypress FX3 USB BootLoader Device" and uninstall it with "Delete the driver software for the device" checked.

- 3. Disconnect the oCam and reconnect it to check if the FX3 USB driver is deleted. "WestBridge" should appear under "Other devices".
- 4. Right click on "WestBridge" and update the driver by selecting the folder "x64" or "x86" under "Drivers for FX3/Win7" depending on the system type.
- 5. Disconnect the oCam and reconnect it to check if the FX3 USB driver is installed. "Cypress FX3 USB BootLoader Device" should appear under "Universal Serial Bus controllers".

Now oCam is ready to be updated with the oCam firmware using the "UpdateFW" executable.

For Windows 10,

- 1. Connect the oCam to check if it appears under the "camera". The firmware was erased successfully, it should not appear.
- 2. If "Cypress FX3 USB BootLoader Device" appears under "Universal Serial Bus controllers", the oCam firmware is erased and the FX3 USB driver is installed and is working. If it is needed to erase the driver and refresh it, right click on "Cypress FX3 USB BootLoader Device" and uninstall it with "Delete the driver software for the device" checked.
- 3. Disconnect the oCam and reconnect it to check if the FX3 USB driver is deleted. "WestBridge" should appear under "Other devices".
- 4. Right click on "WestBridge" and update the driver by selecting the folder "x64" or "x86" under "Drivers for FX3/Win10" depending on the system type.
- 5. Disconnect the oCam and reconnect it to check if the FX3 USB driver is installed. "Cypress FX3 USB BootLoader Device" should appear under "Universal Serial Bus controllers".

Now oCam is ready to be updated with the oCam firmware using the "UpdateFW" executable.

The driver file is available at

 $\underline{\text{http://withrobot.com/en/technical-data/?uid=20\&mod=document\&pageid=1}}$ 

# **Contact for Technical Support**

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