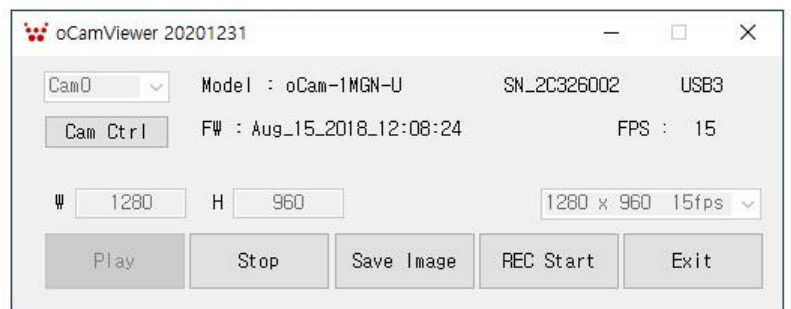


# *oCamViewer*

## *User Manual*



**2021. 2.**

**WITHROBOT Inc.**



## Revision History

| Rev | Date    | Description             | Author |
|-----|---------|-------------------------|--------|
| 1.0 | 2018. 8 | 1 <sup>st</sup> Release | PD     |
| 2.0 | 2021. 2 | Video Recording Added   | PD     |
|     |         |                         |        |



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# 1. INTRODUCTION

## Features

The oCamViewer is a companion software supporting the oCam cameras provided by the WITHROBOT Inc. with the following main functions.

- To view camera video.
- To check and change the camera settings.
- To save camera still image.
- To record camera video.

The oCamViewer supports Windows and Linux and its source code is open to public for reference.

## To Install

You can download the executable files and the source codes of the oCamViewer from the following site.

<https://github.com/withrobot/oCam/tree/master/Software>

The oCamViewer for Windows can be executed without installation once downloaded.

The oCamViewer for Linux needs to be built following the procedure described below.

[https://github.com/withrobot/oCam/tree/master/Software/oCam\\_viewer Linux](https://github.com/withrobot/oCam/tree/master/Software/oCam_viewer_Linux)



## 2. HOW TO USE

### To View Camera Image on Windows

Before starting the oCamViewer, it is necessary to connect the oCam camera to a PC.

Once started, a main window will pop-up as shown below. If the oCam camera is connected correctly, the camera model name, serial number, connection type (USB2 or USB3) and camera firmware version number will be shown on the main window.

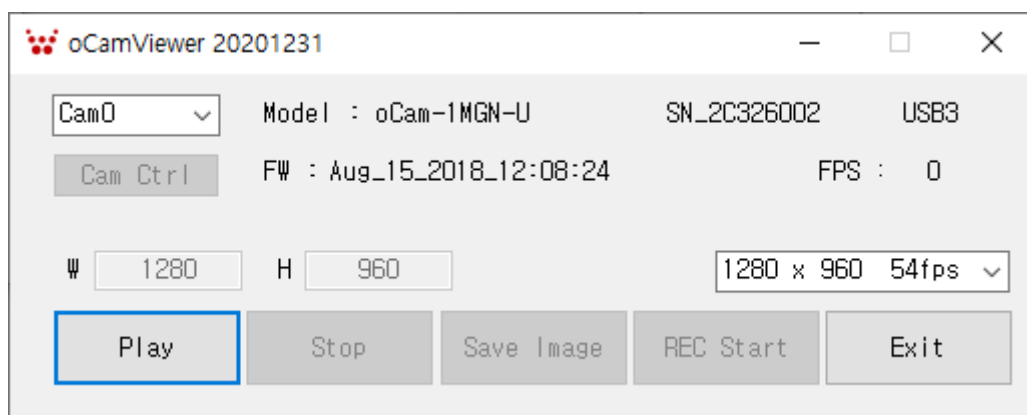


Figure 1. oCamViewer Main Window – oCam-1MGN-U is connected.

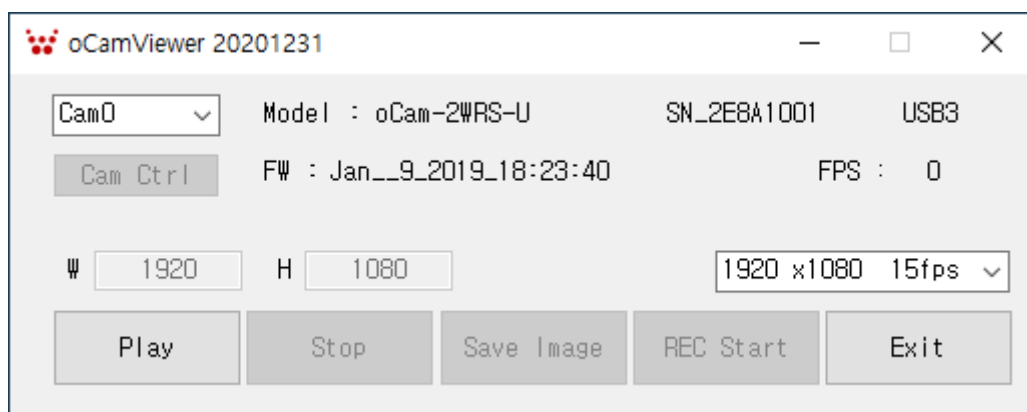


Figure 2. oCamViewer Main Window – oCam-2WRS-U is connected.

On clicking the [Play] button on the main window with an oCam camera is connected, the camera is activated, and the camera image is shown on the display window.



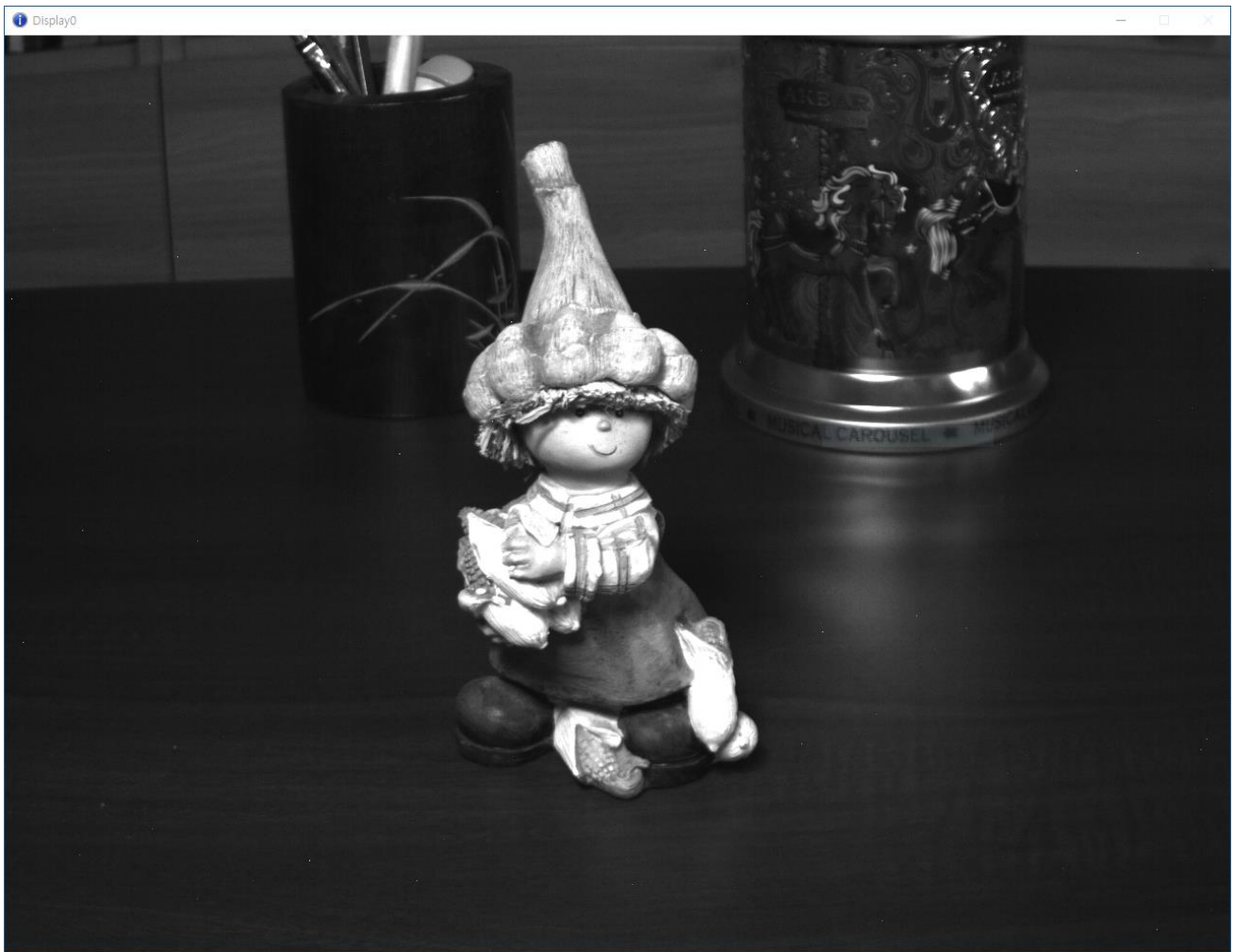


Figure 3. Camera Image – Display Window

With the oCam camera is activated and the camera is displayed, the buttons of [Stop], [Save Image] and [REC Start] will be enabled on the main window.

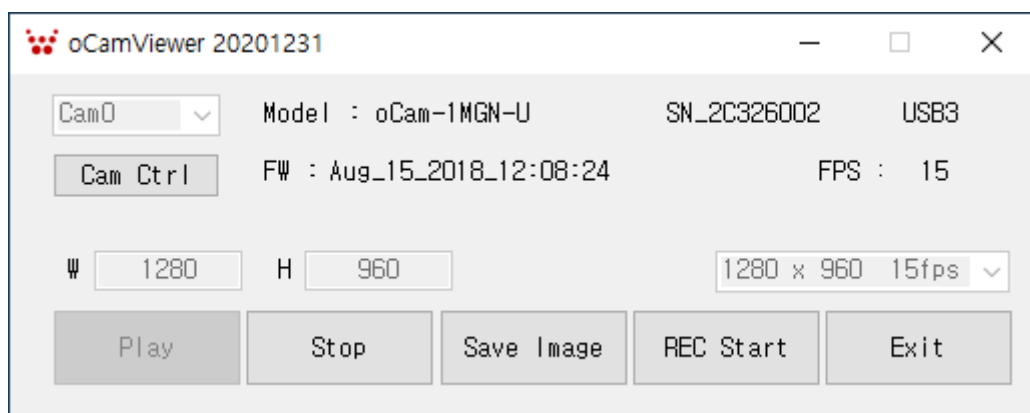


Figure 4. Main Window with oCam camera is activated.

To disconnect an oCam camera, click [Stop] button.

## To Control Camera Settings on Windows

To change the camera resolution, click the down arrow while the camera is disconnected and select the resolution of choice on the pop-up list.

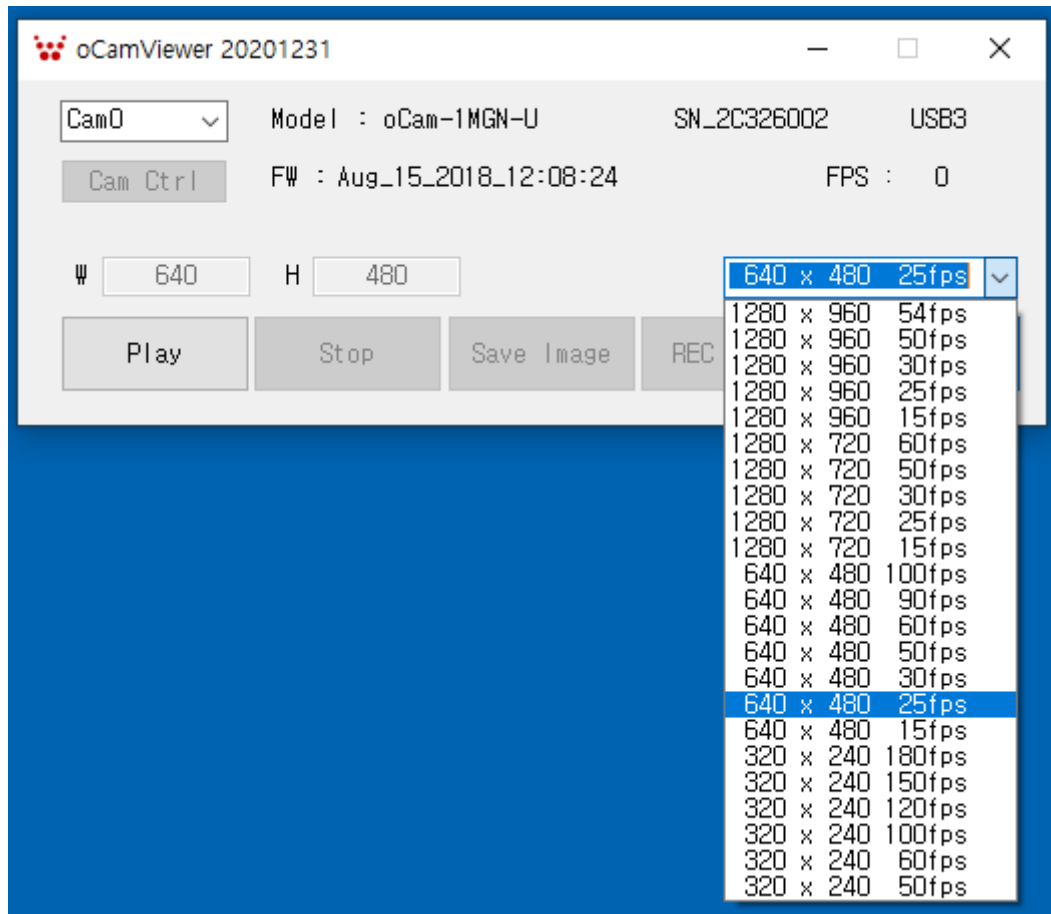


Figure 5. To change the camera resolution – oCam-1MGN-U

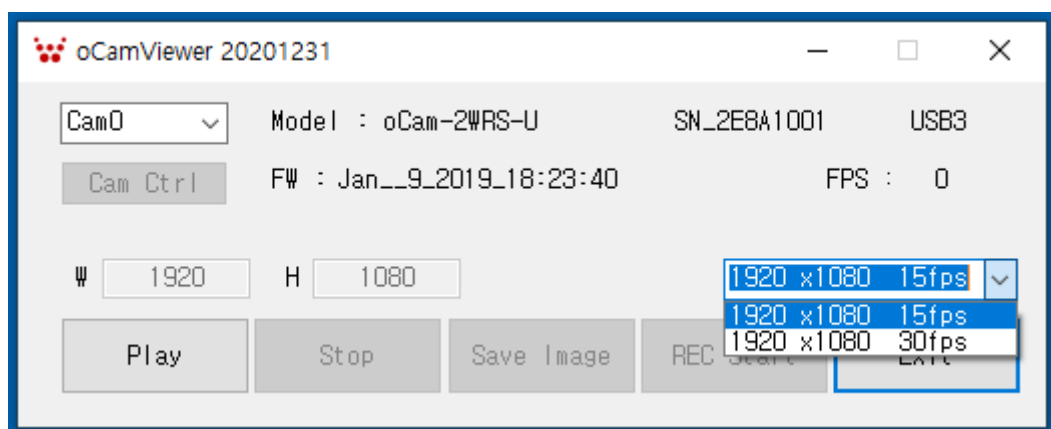


Figure 6. To change the camera resolution – oCam-2WRS-U

To check and change the camera settings, such as camera exposure time, click [Cam Ctrl] button while the oCam camera is activated and the camera image is being displayed.

Depending on the camera model, the supported items will be enabled on the camera control window, "CamCtrl".

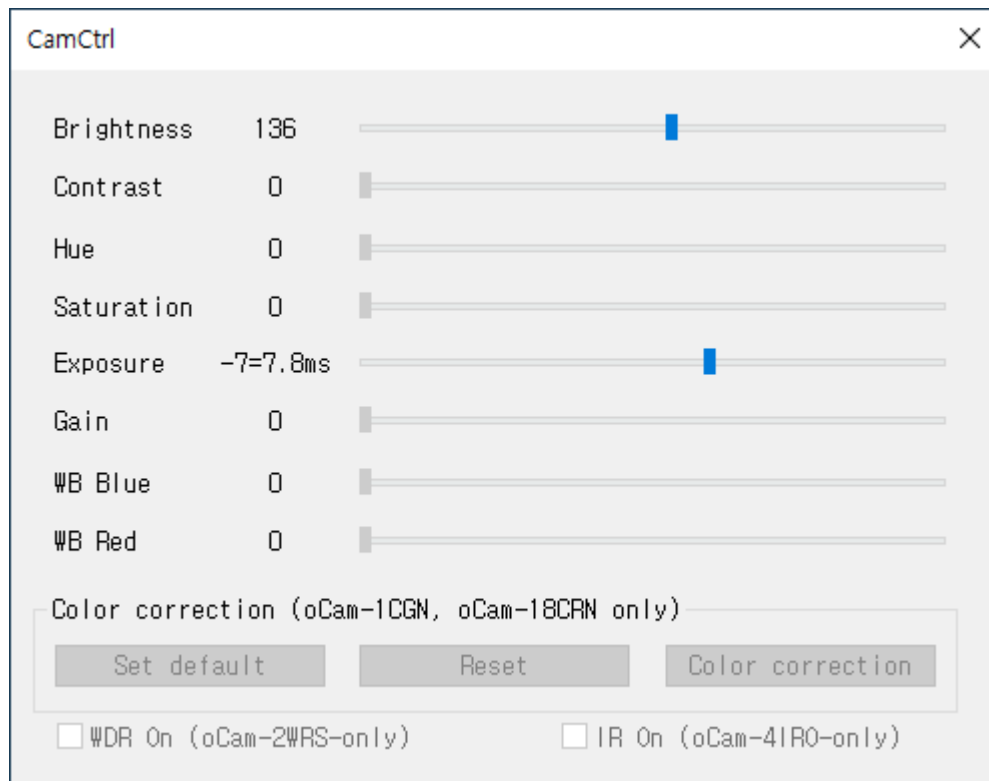


Figure 7. Camera Settings and Controls – oCam-1MGN-U



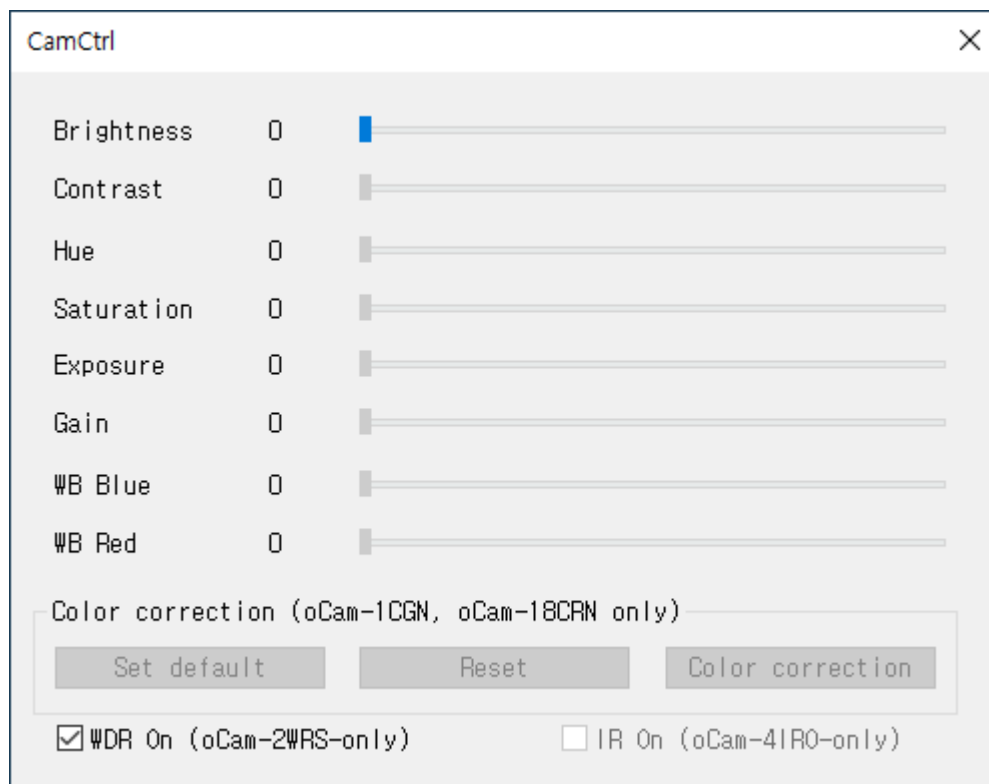


Figure 8. Camera Settings and Controls – oCam-2WRS-U



## To Save Camera Image on Windows

The oCam camera image can be saved as either still image or video.

To save as still image, click [Save Image] button on the main window while the oCam camera is activated and the camera image is being displayed.

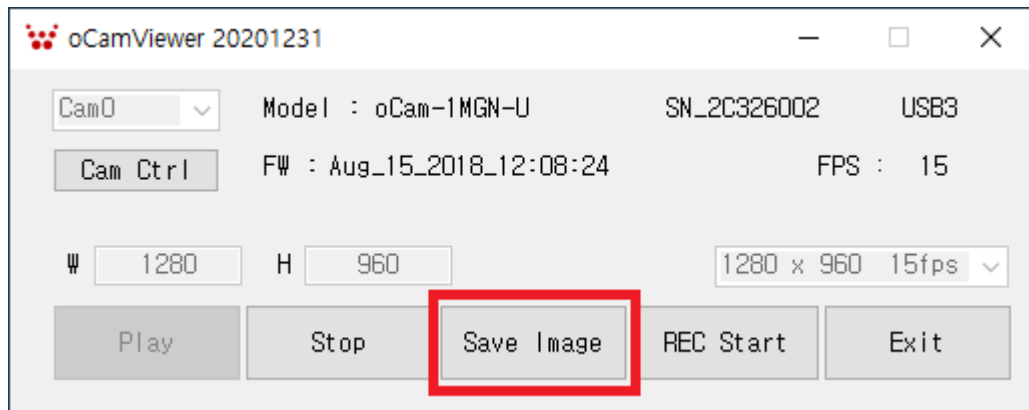


Figure 9. To save camera image – still image format.

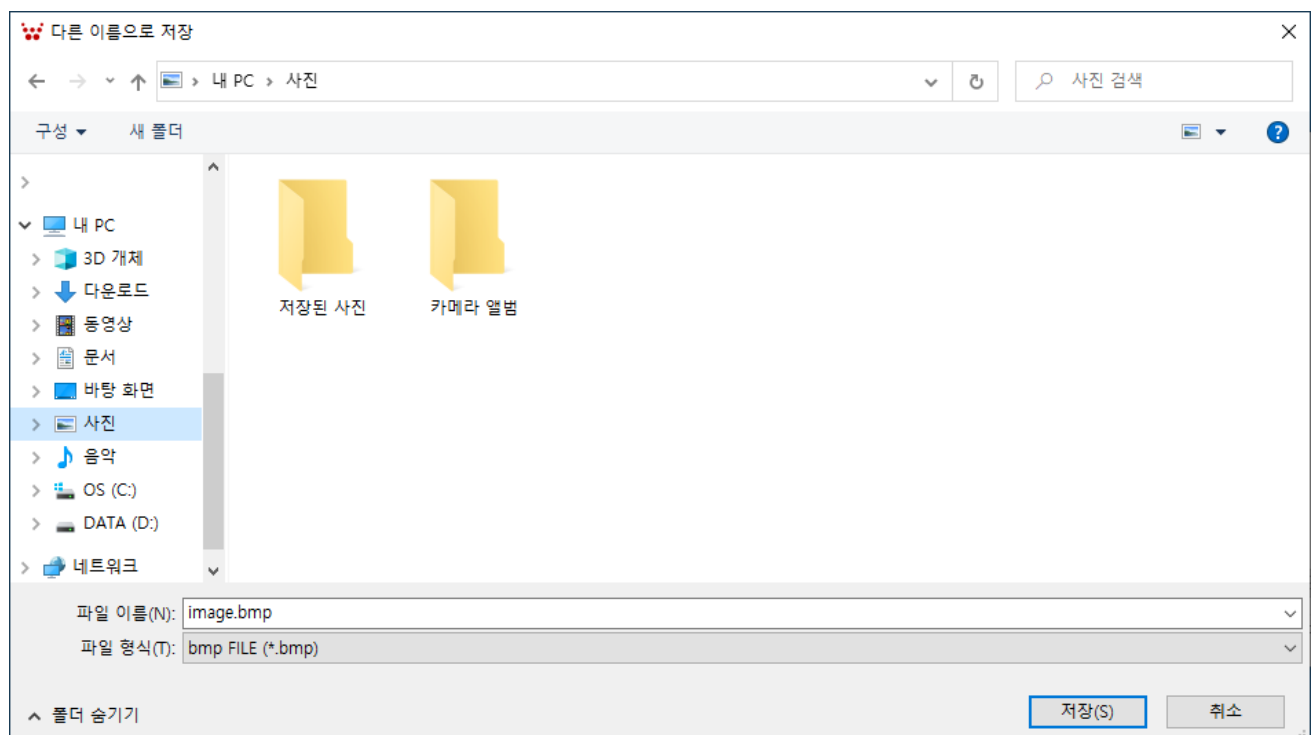


Figure 10. To save camera image – folder selection and file name.

On clicking the [Save] button, the camera still image will be stored in BMP format.

To save as video, click [REC Start] button on the main window while the oCam camera is activated and the camera image is being displayed.

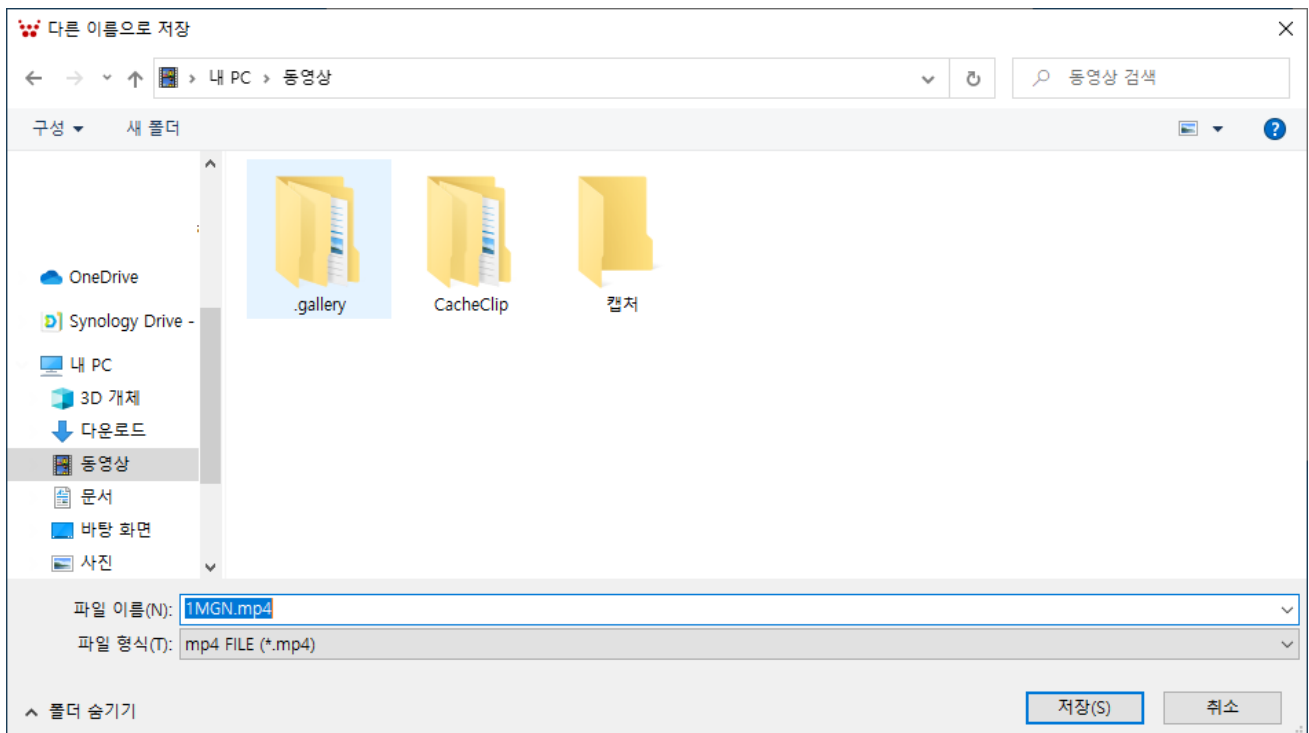


Figure 11. To save camera video – folder selection and file name.

On clicking the [Save] button, the camera video will be stored in MP4 format.

To stop recording, click the [REC Stop] button on the main window.

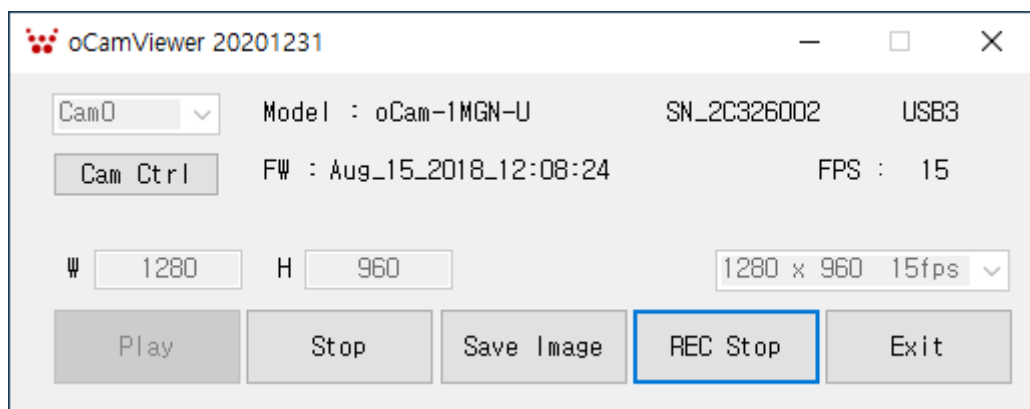


Figure 12. To stop video recording.

## To View Camera Image on Linux

Before starting the oCamViewer, it is necessary to connect the oCam camera to a PC.

Once started, a main window will pop-up as shown below.

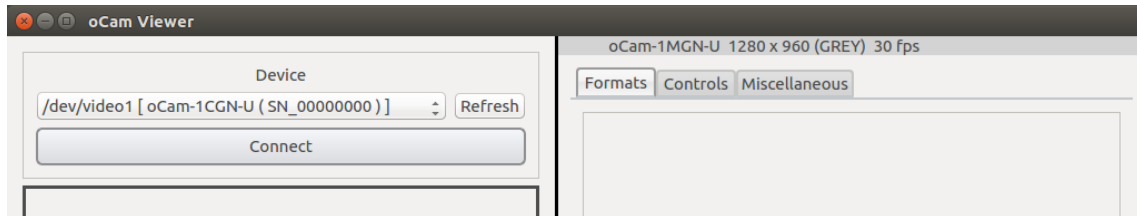


Figure 13. oCamViewer – Linux Version

To connect and activate a oCam camera, select a camera model under "Device" and click [Connect] button. Then, a camera display window will pop-up.



## To Control Camera Settings on Linux

To change the camera resolution, select "Format" on the right panel and select one on the drop-down list, and then click [Apply] button.

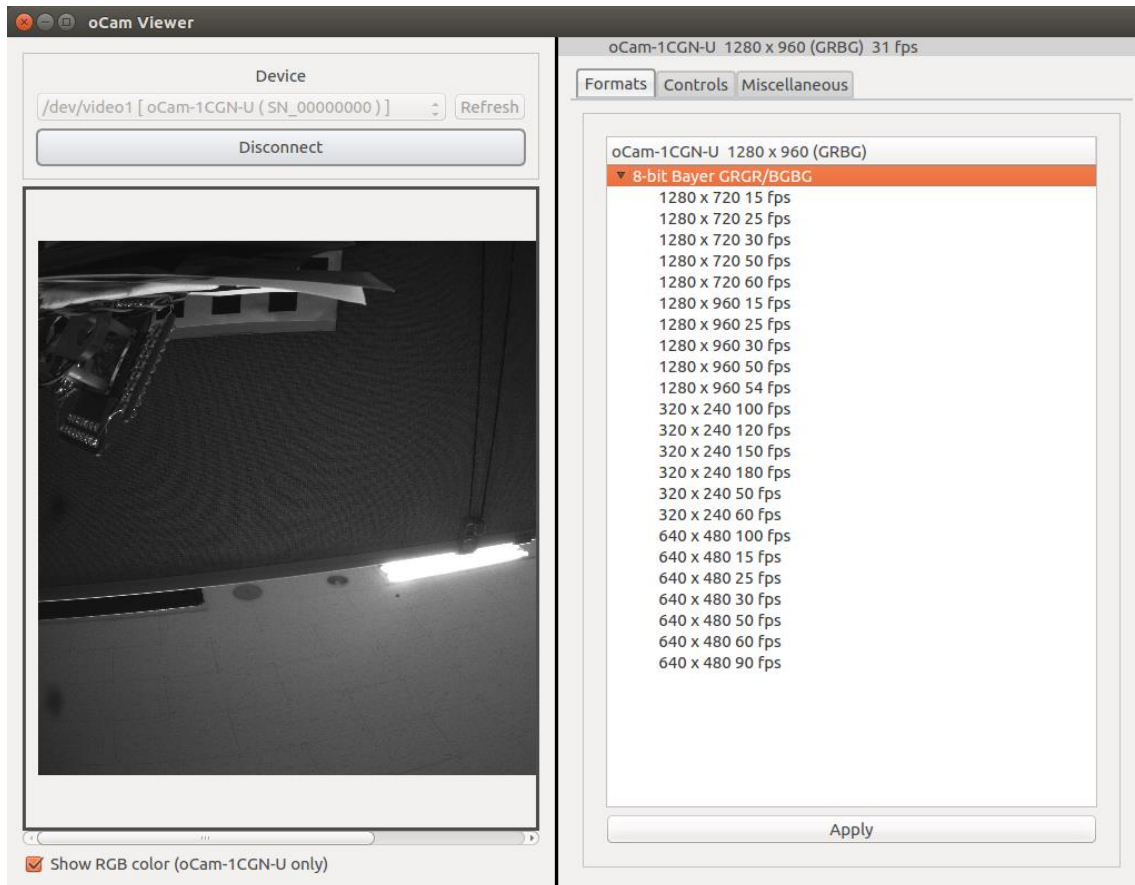


Figure 14. Camera resolution selection on oCamViewer Linux version.



Camera settings can be controlled on the "Controls".

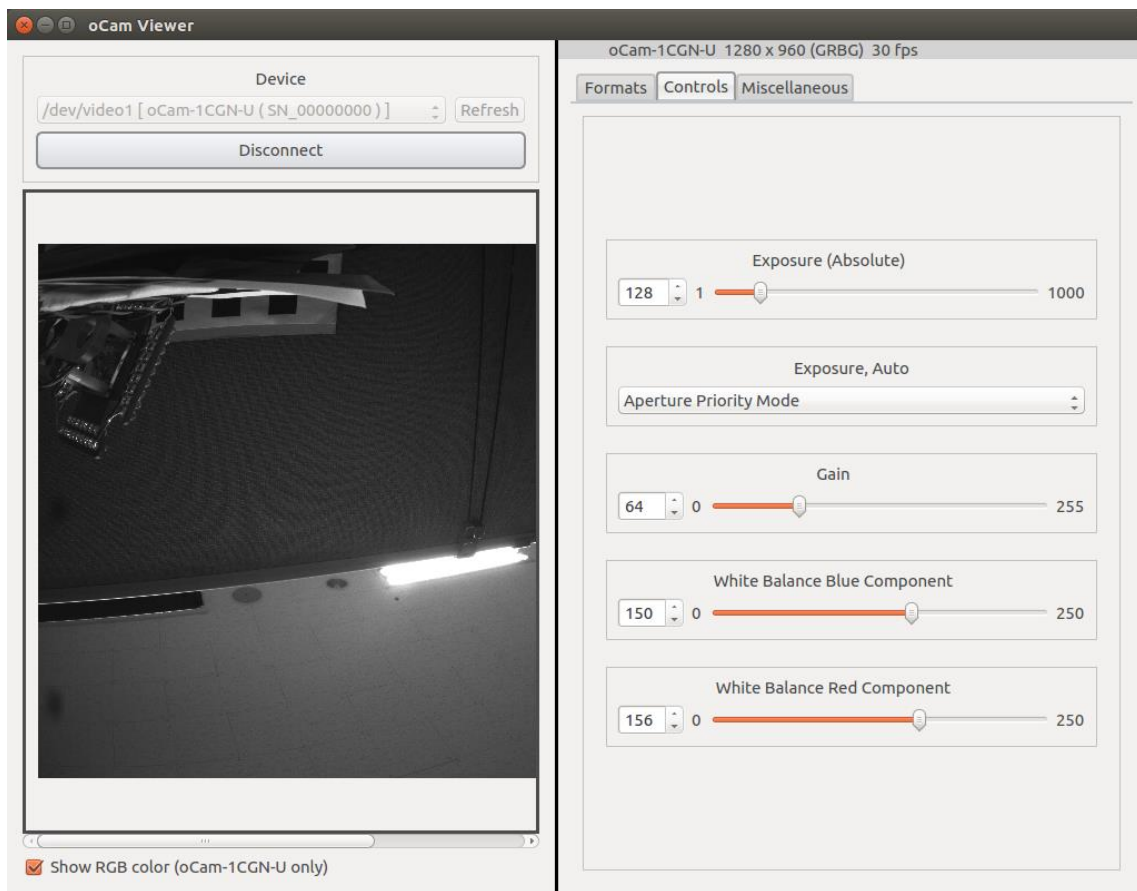


Figure 15. Camera setting control on oCamViewer Linux version.



## APPENDIX

### How To Check Camera Connection

On Windows, the connection of an oCam camera can be checked on the Device Manager.

When connected normally, an oCam camera will be displayed under the "Camera" category.

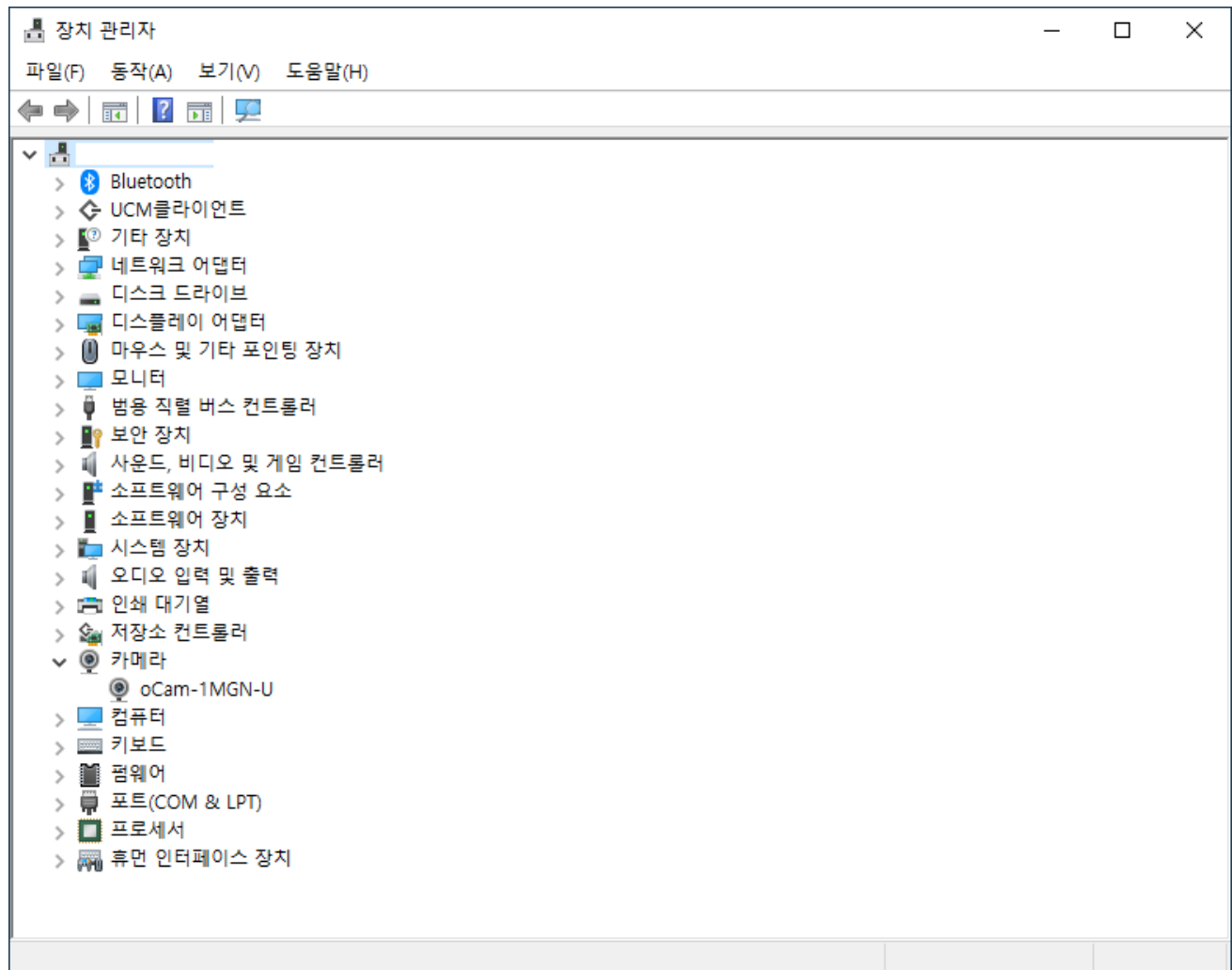


Figure 16. oCam camera connection check on Windows Device Manager

On Linux, the connection of an oCam camera can be checked using the "lsusb" command.

```
$ lsusb
Bus 004 Device 026: ID 04b4:00f9 Cypress Semiconductor Corp.
```



## How to Update the Camera Firmware

- The latest camera firmware is available at the following site.

<https://github.com/withrobot/oCam/tree/master/Firmware>

- The firmware update software (UpdateFW.exe) and the instruction to use the UpdateFW.exe are available at the following site.

[https://github.com/withrobot/oCam/tree/master/Firmware/Update\\_FW](https://github.com/withrobot/oCam/tree/master/Firmware/Update_FW)

- The oCamViewer source code is available at the following site.

<https://github.com/withrobot/oCam/tree/master/Software>

## Technical Support

- E-Mail: [withrobot@withrobot.com](mailto:withrobot@withrobot.com)

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