

UVC Viewer sample code for UVC Camera (Introduction)

OMRON SENTECH CO., LTD.

This UVC Viewer sample code is to demonstrate the function below for OMRON SENTECH UVC camera.

Camera connection

Image acquisition

Bitmap still image and Video saving

This is DirectShow based sample code. The development package such as “Windows SDK for Windows10” is required to build the sample code correctly.

Please refer to “UVC Viewer sample code for UVC Camera (Setup for building)” document for the detail of setting up development environment.

Introduction

This sample code is based on DirectShow.

The filter for still image saving is set and rendered automatically when the preview is started. The filter for Video saving is set and rendered automatically when saving movie is started.

Please refer the information in below link for DirectShow:

English

[https://msdn.microsoft.com/ja-jp/library/windows/desktop/dd407269\(v=vs.85\).aspx](https://msdn.microsoft.com/ja-jp/library/windows/desktop/dd407269(v=vs.85).aspx)

Japanese

<https://msdn.microsoft.com/ja-jp/library/cc353899.aspx>

Structure of sample code

This sample code is configured with below files:

CameraFunctions.h /.cpp

Camera control function with DirectShow

StUVCViewer.h /.cpp

Win32 API based GUI

BMPWriter.h

Bitmap still image save function

qedit.h

Header file for “SampleGrabber” still image saving class (from former version of DirectShow SDK package)

stdafx.h/resource.h/targetver.h/StUVCViewer.rc

Program related header and source files.

Still image and movie saving

Default folder path and file name of still image/AVI is:

Video file: [My Picture of current login user]¥UVC_Capture.avi

*If the operation environment has “Microsoft MPEG-2 Video Encoder” and is available for use, the video type and the sub file name will automatically switch to .mpg for saving.

Bitmap file: [My Picture of current login user]¥UVCViewerSnap%d.bmp

* “%d” is increment with the number of time saving the still image.

The number of saving times of still image resets when changing file name or restart this program.

Please note that when saving still image again with existing file name, the file will be overwritten.

The current saving folder information can be confirmed by:

Select “Set Video File Path” under “Capture” in the menu.

Select “Set Snap File Path” under “Capture” in the menu.

Precautions

There is some functionality limitation for this sample code based on its structure and DirectShow functionality.

- The frame rate cannot change while previewing the image. Please stop the preview then change the frame rate.
- There is no verification function for entering Video Path and BMP Path.
- There is no size limitation for Video file.
- The movie may not be created when Video path or file name is incorrect, or the sample does not have access permission.