Machine Vision Camera SDK Plugin (Halcon)

User Manual

User Manual

About this Manual

This Manual is applicable to Machine Vision Camera SDK Plugin (Halcon).

The Manual includes instructions for using and managing the product. Pictures, charts, images and all other information hereinafter are for description and explanation only. The information contained in the Manual is subject to change, without notice, due to firmware updates or other reasons. Please find the latest version in the company website.

Please use this user manual under the guidance of professionals.

Legal Disclaimer

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Chapter 1 Overview

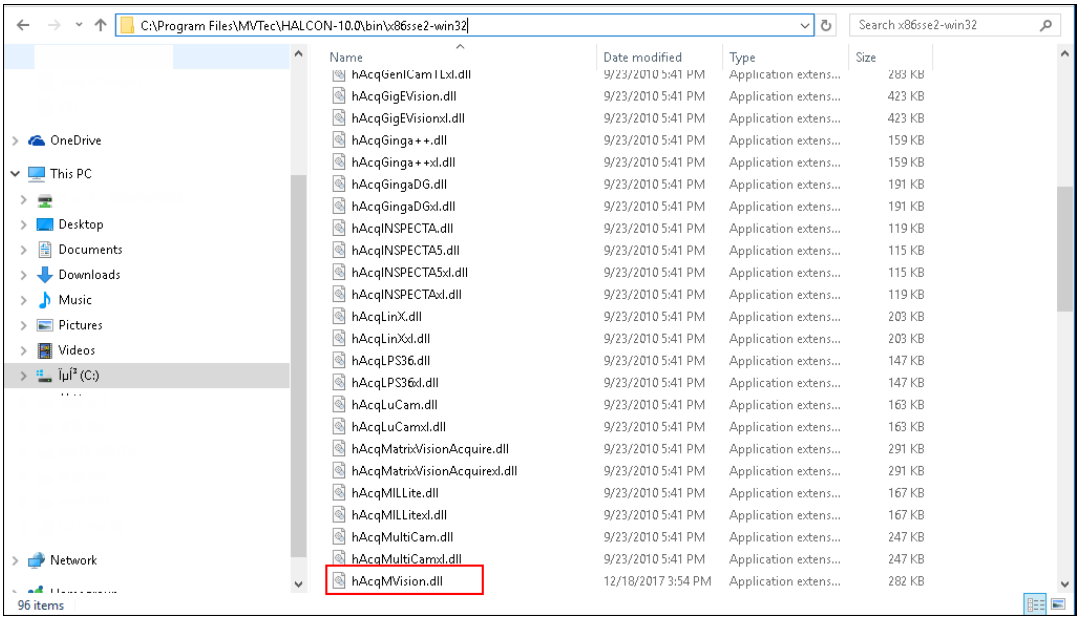
This manual mainly introduces the used plugin of connecting machine vision camera based on Halcon system.

Chapter 2 Configuration

2.1 Copy Dynamic Link Library

Steps:

1. Copy the file hAcqMVision.dll to corresponding directory: *C:\Program Files\MVTec\HALCON-10.0\bin\x86sse2-win32*.
   The path of file hAcqMVision.dll is: *Development\ThirdPartyPlatformAdapter\ HalconHDevelop*, which is under the MVS installation directory. If the system is 64-bit, copy the file to: *C:\Program Files\MVTec\HALCON-10.0\bin\x86sse2-win64*. Also, if the Halcon XL is used, hAcqMVisionxl.dll is copied in the same way.



2.2 Configure Camera Parameters

Open MVS, and configure the IP address and parameters of machine vision camera.

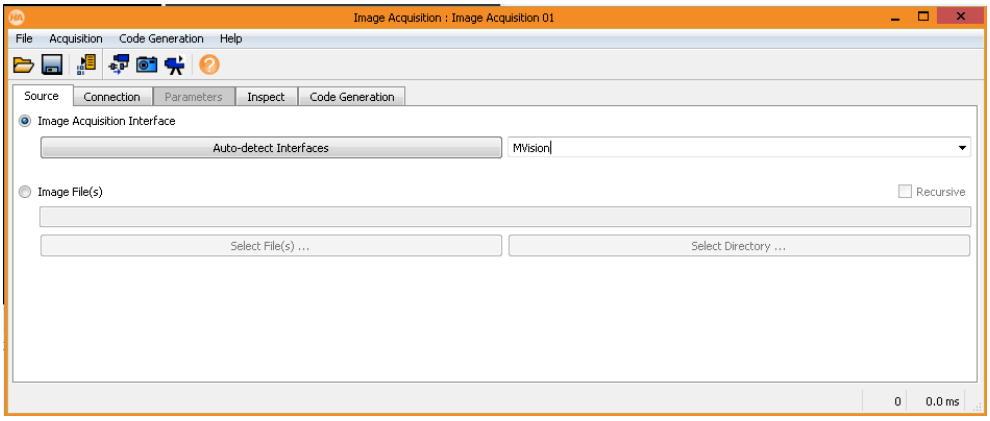
Note:

Ensure that PC and camera are on the same network segment, and camera can get stream from MVS.

2.3 Configure Camera Connection

Steps:

1. Select driver.
   1) Run Halcon system.



2) **Click Help and Image Acquisition to open Image Acquisition window.**

3) **Select Image Acquisition Interface.**

4) **Select MVision in the drop-down list.**

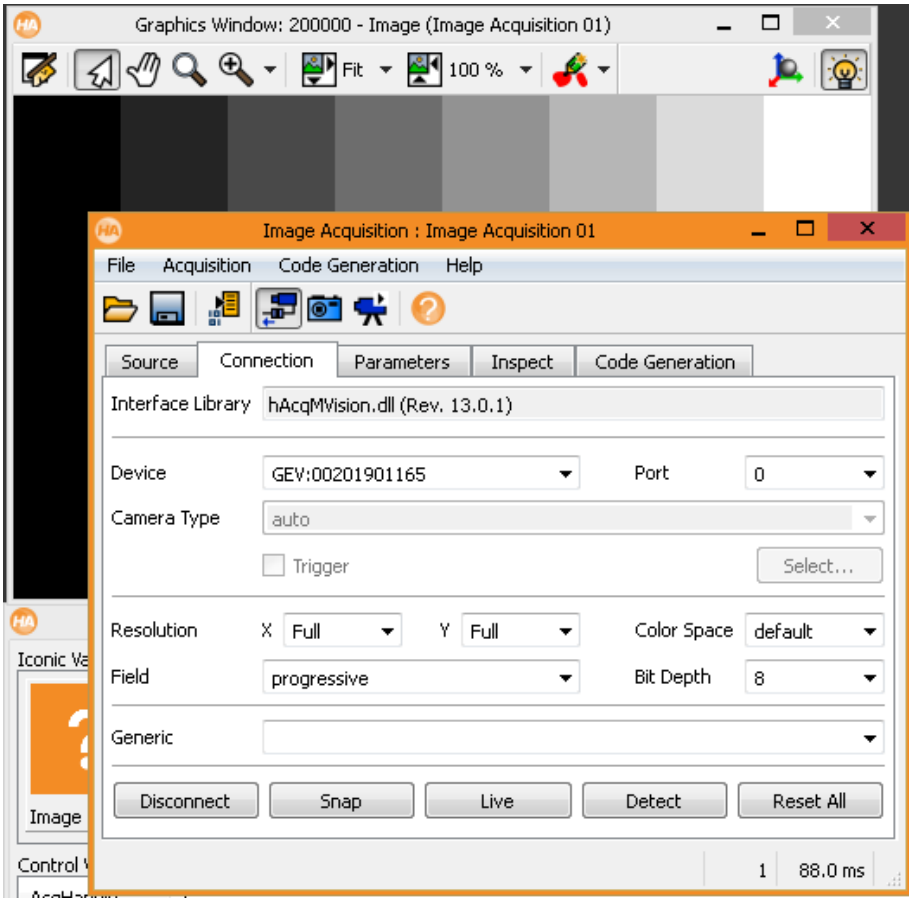
2. Select device.

1) **Click Connection tab to open connection page.**

2) **Select device in the device list as you desired.**

3) **Click Connect.**

3. Set image acquisition.



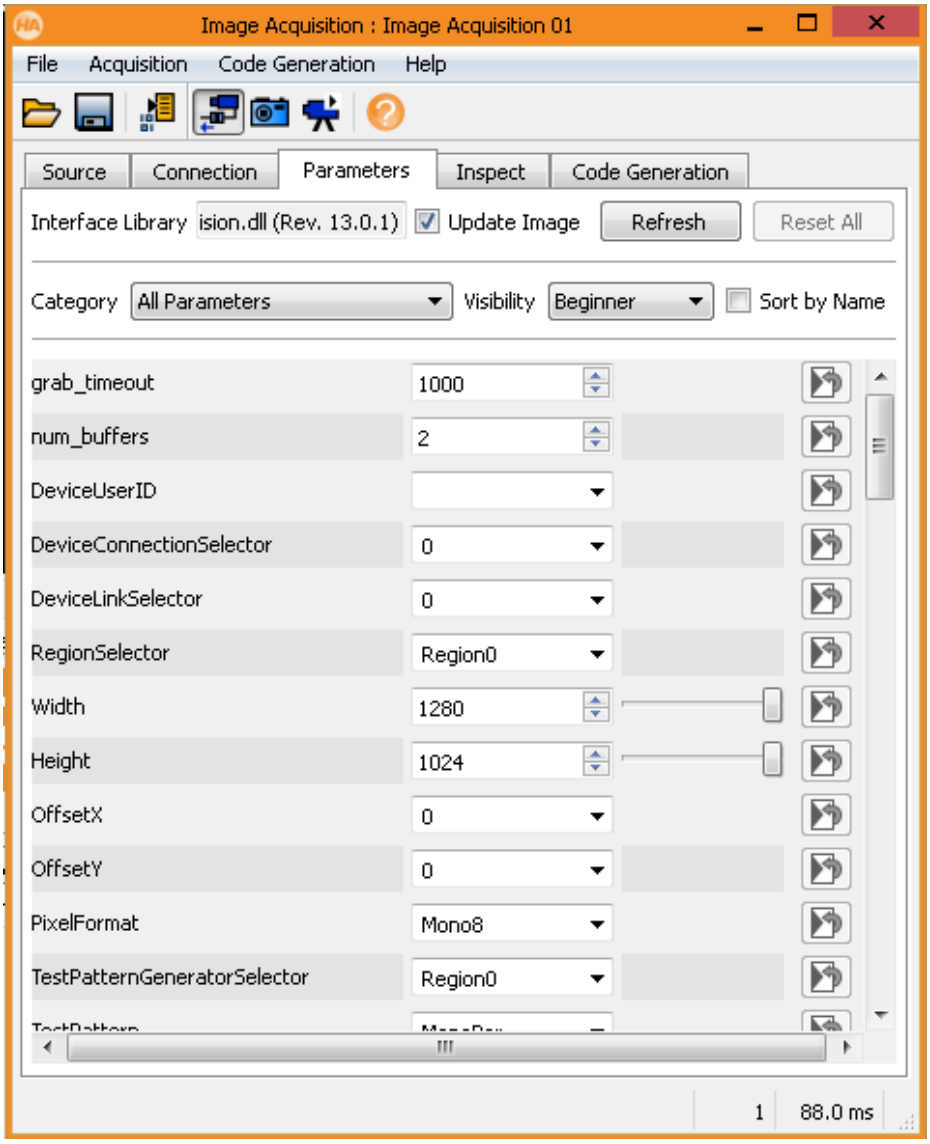
4. Click Live to start live view.

You can view the image in Graphics Window.

Note:

If the Graphics Window is not open, click Visualization and Open Graphics Window to open it.

5. Configure parameters.



1) **Click Parameters tab of Image Acquisition window.**
2) **Configure the common attributes parameters of machine vision camera.**

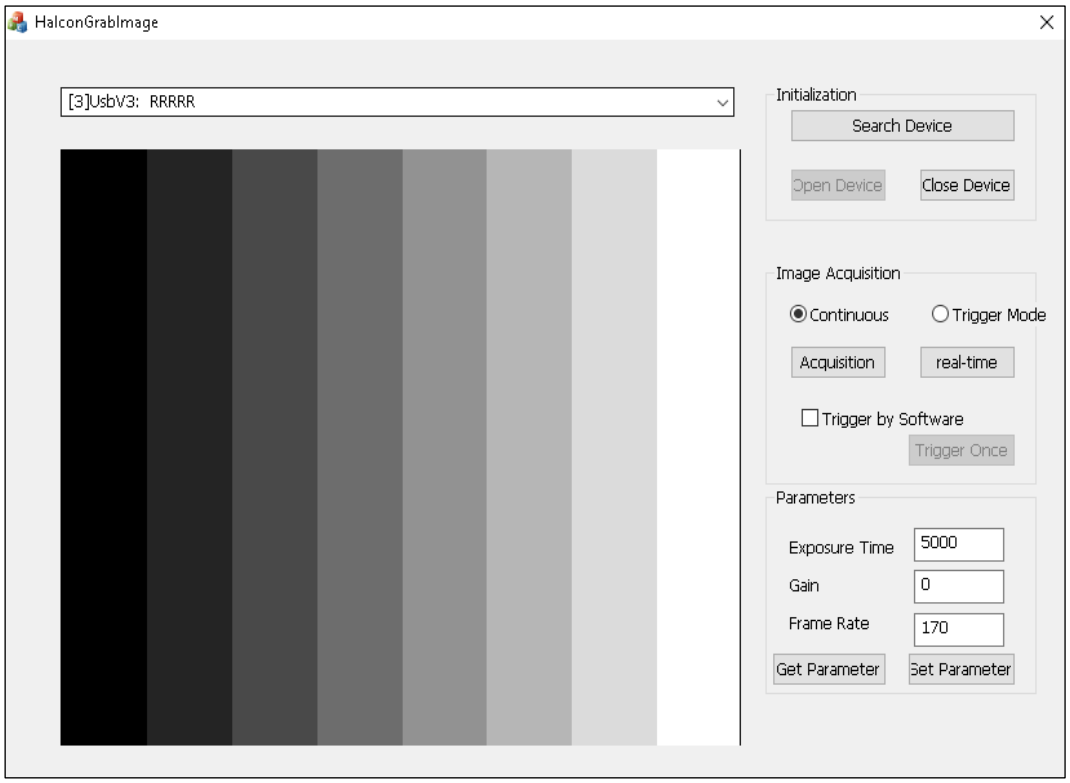
Notes:

- **You can rename the dll file, but the prefix "hAcq" should be reserved.**
  For example, if the dll file is renamed as hAcqABCRobot.dll, you should select the ABCRobot driver in the drop-down list.
- **The nodes of appendix are supported by the plugin. Refer to Appendix 1 for details.**
- **The Demo based on Halcon language of getting streams is provided in the Halcon directory of MVS installation folder.**

2.4 Remarks

(1) The *.dll* file can be renamed but the "hAcq" part must be preserved. For example, if renamed as hAcqImageAcquisition.dll, then it will show as ImageAcquisition in the driver list.

(2) The plugin supports all the nodes in the camera.

(3) If some parameters are missing, it is recommended to set the user level as Guru and refresh the attribute list.

(4) The Halcon demo is under the Halcon file of the MVS path and it uses Halcon interfaces for getting images. This is a MFC project, and the interface is as following.