Allied Vision

DOCUMENTATION OVERVIEW

Vimba Quickstart Guide

V2.1.3
September 2017

Vimba tools for every purpose

Vimba is the all-in-one solution for working with Allied Vision cameras.

- Vimba Viewer: The fastest way to get an image
- Development: APIs for C, C++, and .NET with source code examples
- Third-party applications: GenICam-compliant transport layers, Vimba Cognex Adapter

Vimba Viewer

With Vimba Viewer, you can instantly view images from your Allied Vision camera and try out camera features without programming. To setup your camera with Vimba Viewer, see the Vimba Viewer Guide.

Using Vimba Viewer

1. Connect the camera to the host.
2. Start Vimba Viewer.
   The Camera Selector window opens.
3. Click the camera you want to open.

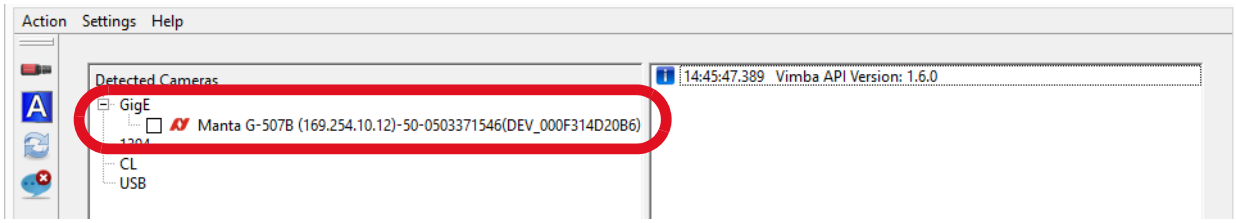

Figure 1: Opening a camera

   The Main window opens.
4. To start image acquisition, click the **Freerun** button.

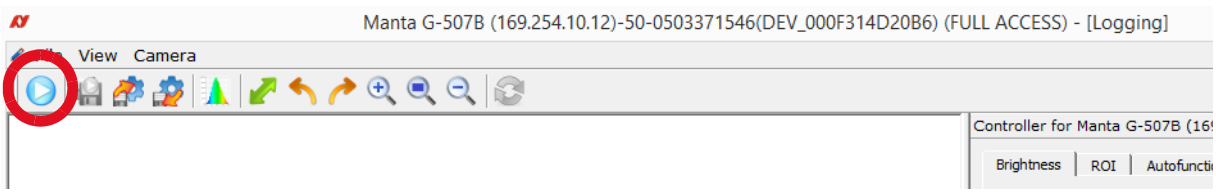

Figure 2: Main window, starting image acquisition

GigE/CL cameras, grayed out Freerun button

GigE cameras

In this case, the Main window is in Config Mode to allow the configuration of the GigE settings.

1. Correct the GigE settings (you can find instructions in the GigE Installation Manual).

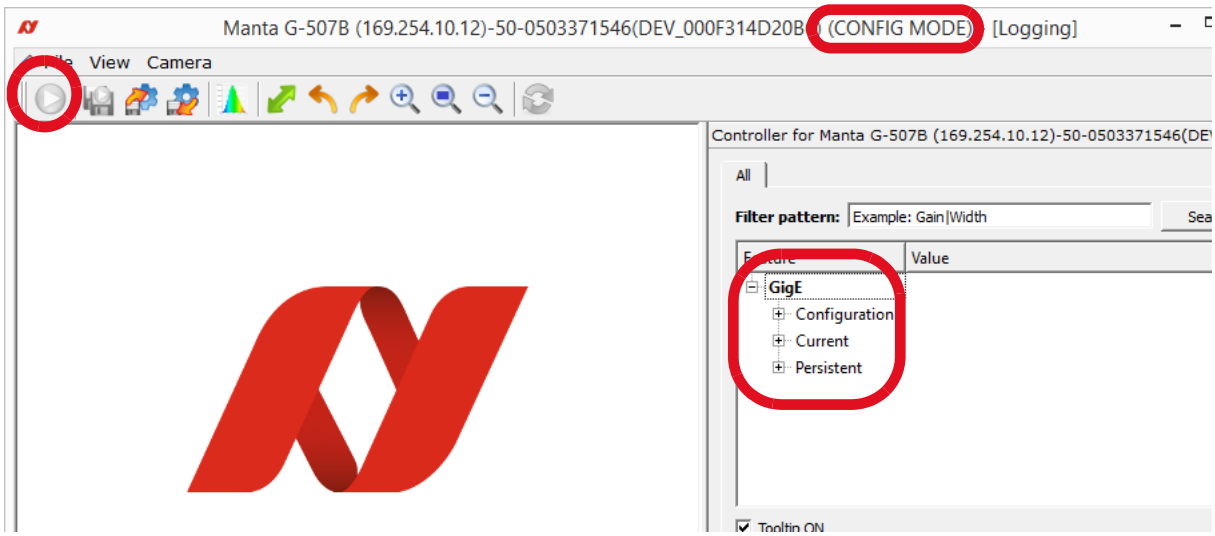

Figure 3: Main window, configuring the GigE settings

2. After correcting the GigE settings, close the Main window.
3. In the Camera Selector window, right-click the camera.
4. Click **Open FULL ACCESS**.

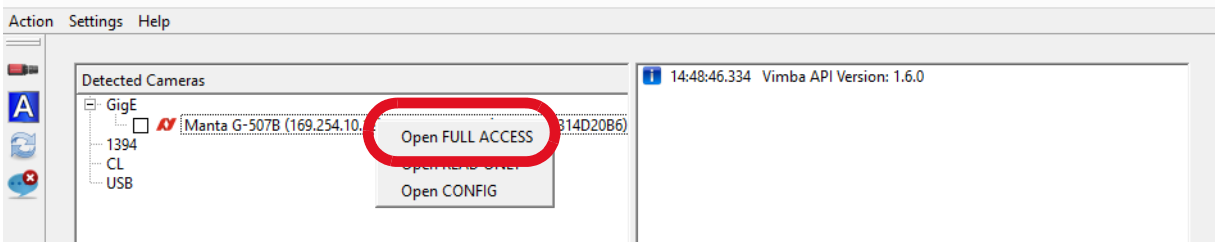

Figure 4: Camera Selector, opening a camera

The Main window opens.

5. Start image acquisition, see Step 4.

Goldeye CL cameras

You can use Vimba Viewer to configure Goldeye CL cameras and to set features. To acquire images, use the software provided by the frame grabber manufacturer.

More information on camera installation

Download technical documentation

Select your Allied Vision camera on our website and find detailed technical documentation:

https://www.alliedvision.com/en/support/technical-documentation.html

Development

Depending on the API, operating system, and the camera interface, different documents are relevant.

In any case, read the Vimba Manual first. To ease programming with Vimba, read the documentation in the order suggested in the table below.

Documentation availability

Documentation is available for the installed components only.

Reading order	Component	Documentation	x = necessary / o = optional						
			C	C++	.NET	IEEE 1394	GigE	USB	CL
1	Vimba	Vimba Manual.pdf	x	x	x				
2	Vimba C API	Vimba C Manual.pdf	x						
	Vimba C++ API	Vimba CPP Manual.pdf		x					
	Vimba .NET API	Vimba NET Manual.pdf			x				
3	Camera Features	Vimba1394TLFeaturesManual.pdf				x			
		GigE_Features_References.pdf					x		
		USB_Features_Reference.pdf						x	
		Goldeye_Features_Reference.pdf							x
5	Vimba Image Transform Library	Vimba ImageTransform Manual.pdf	o	o					
6	Transport Layer	Vimba1394TLFeaturesManual.pdf				o			
		VimbaGigETLFeaturesManual.pdf					o		
		VimbaUSBTLFeaturesManual.pdf						o	
		VimbaCLConfigTLFeaturesManual.pdf							o

Table 1: Manuals for the developer

Windows only

Programming examples

For a quick start, programming examples are included in the Vimba installation.

Windows

Vimba programming examples are listed in the Allied Vision Vimba app overview.

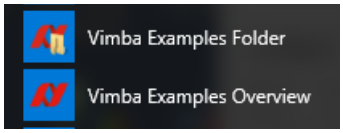

Figure 5: Allied Vision Vimba app, access to Vimba Examples

Vimba Examples Overview provides links to the programming examples.

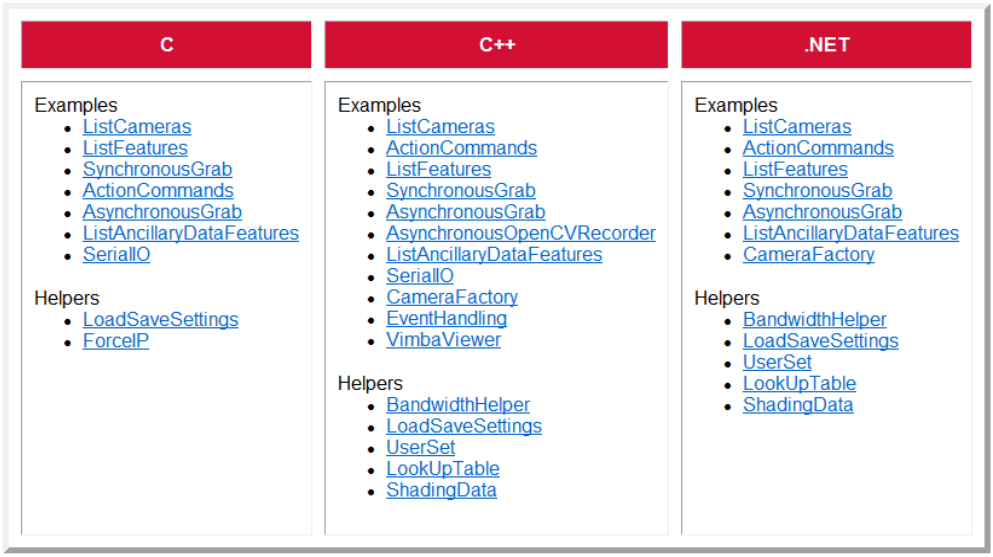

Figure 6: Examples Overview (Windows only)

Linux

you can find the programming examples in the Vimba installation directory:

- VimbaCPP/Examples
- VimbaC/Examples

Third-party applications

Vimba provides GenICam-compliant TLs (transport layers) for GigE, USB, 1394, and Goldeye CL cameras from Allied Vision. To use these cameras with a third-party application, read the documentation in the order suggested in Table 2.

Applications not compliant with GenICam

After the Vimba installation, GenICam-compliant third-party applications automatically find and use the Vimba TL.

For third-party applications not compliant with GenICam, read the corresponding manual.

Reading order	Component	Documentation	x = necessary o = optional			
			IEEE 1394	GigE	USB	CL
1	GenICam-compliant third-party applications	Please read the documentation of the third-party application. Depending on the third-party application, also see the following:				
2	Camera Features	Vimba1394TLFeaturesManual.pdf	x			
		GigE_Features_References.pdf		x		
		USB_Features_Reference.pdf			x	
		Goldeye_Features_Reference.pdf				x
3	Transport Layer	Vimba1394TLFeaturesManual.pdf	o			
		VimbaGigETLFeaturesManual.pdf		o		
		VimbaUSBTLFeaturesManual.pdf			o	
		VimbaCLConfigTLFeaturesManual.pdf				o

Table 2: Manuals for the third-party application user

Windows only

Cognex Adapter

Cognex VisionPro is supported by the Vimba Cognex Adapter (Windows only). For more information, see Vimba Cognex Manual.pdf.

Contact us

Connect with Allied Vision by function

https://www.alliedvision.com/en/meta-header/contact-us.html

Support

https://www.alliedvision.com/en/support/contact-support-and-repair.html

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