Allied Vision

DOCUMENTS OVERVIEW

Vimba Quickstart Guide

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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 coding examples
- Third-party applications: GenICam-compliant transport layers, *Vimba Cognex Adapter*

Vimba Viewer

Use *Vimba Viewer* to instantly view images from your Allied Vision camera and to try out camera features without any programming. To setup your camera with Vimba Viewer, see the *Vimba Viewer Guide*.

Using Vimba Viewer

1. Connect the camera to the PC.
2. Start *Vimba Viewer*.
   The *Camera Selector* opens.
3. In the *Camera Selector*, to open a camera, click the appropriate list item:

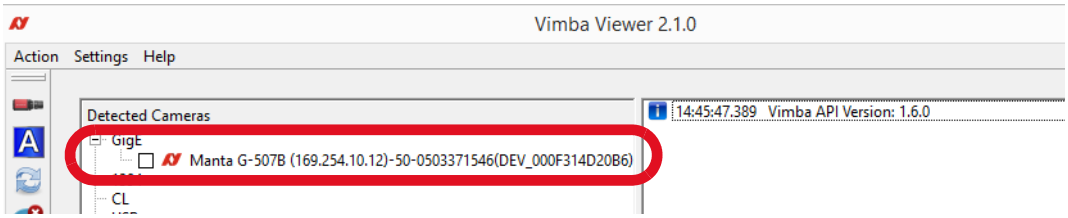

Figure 1: Camera Selector, opening a camera by default

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

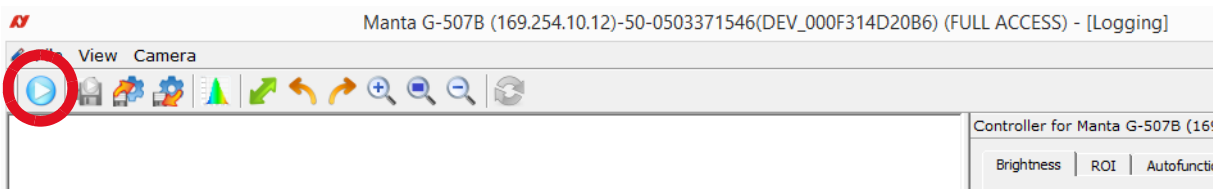

Figure 2: Main window, starting image acquisition

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 interface settings.

5. Correct the interface settings:

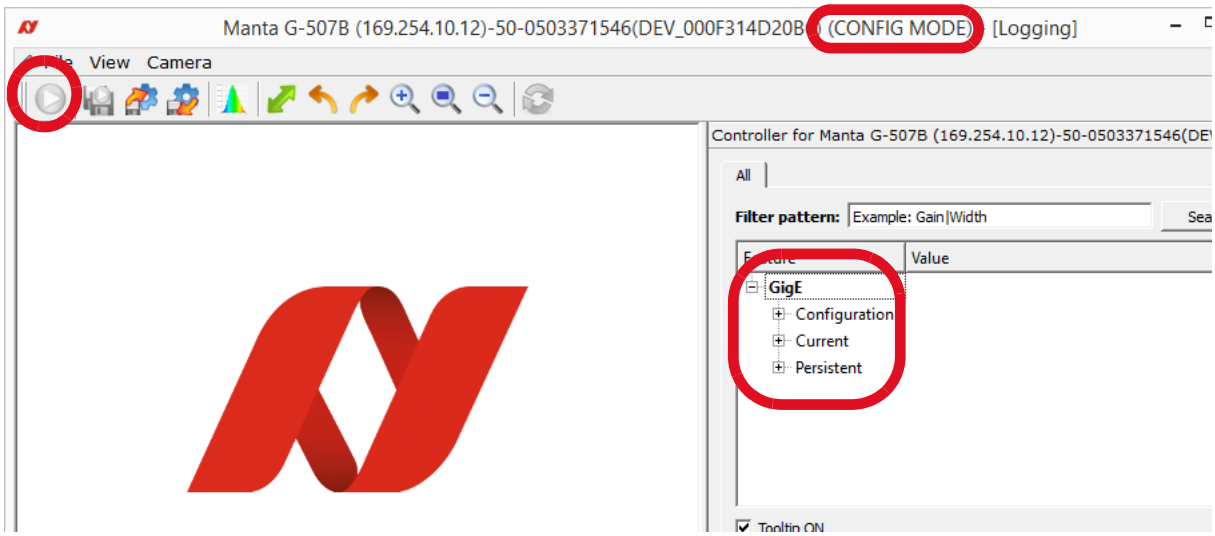

Figure 3: Main window, configuring the GigE interface settings

6. After correcting the interface settings, close the *Main window*.
7. In the *Camera Selector*, to open a camera, right-click the appropriate list item.
8. Click **Open FULL ACCESS**:

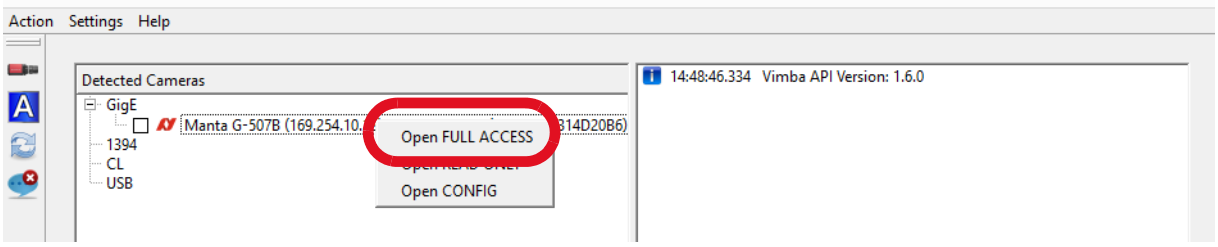

Figure 4: Camera Selector, opening a camera

The *Main window* opens automatically.

9. Start image acquisition, see Step 4.

Goldeye CL cameras

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

More information on camera installation

Further information available online

Select your Allied Vision camera on our website and find detailed information in its installation manual:

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

More information on camera setup

For information about setting up your camera, click Help and read the PDF document.

Development

Depending on your programming language and the camera interface, different documents are relevant.

In any case, starting with the *Vimba Manual* is recommended. To ease programming with *Vimba*, read the documentation in the order suggested in the table below:

Documentation availability

The 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
4	Vimba Features	Vimba Features Manual.pdf	x	x	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

Coding examples

For a practical introduction programming with Vimba, **Vimba examples** are helpful.

Linux examples

Linux does not provide access via start menu or ExamplesOverview.hta. Under *Linux*, see in the *Vimba* installation directory:

- VimbaCPP/Examples
- VimbaC/Examples

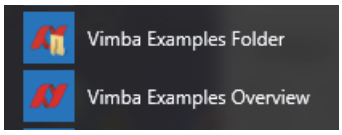

Figure 5: Windows Start Menu, access to Vimba Examples

In the Examples directory, ExamplesOverview.hta provides an overview of and links to the enclosed examples:

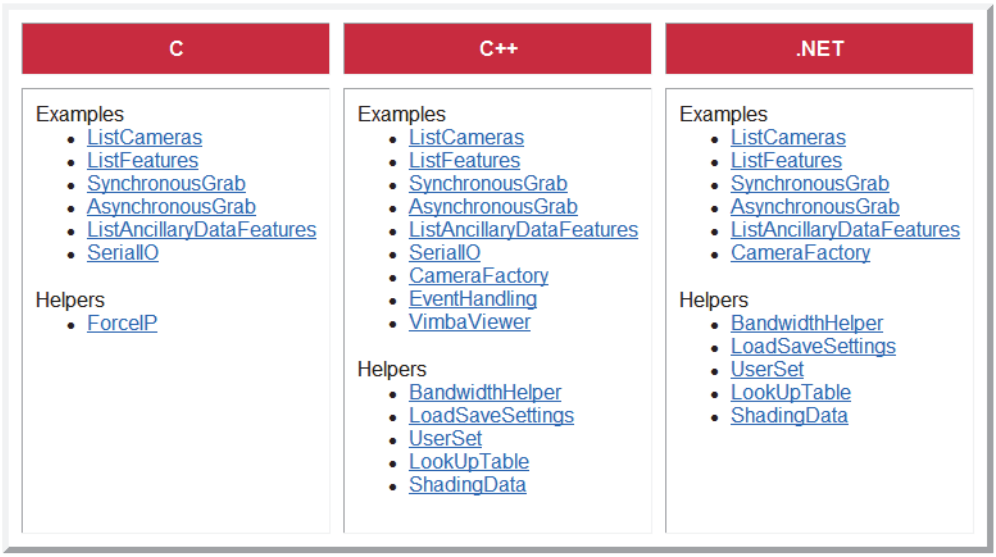

Figure 6: ExamplesOverview.hta (Windows only)

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 non-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 CognexAdapter* (*Windows* only). For more information see Vimba Cognex Manual.pdf.

For extended functionality of the *Vimba Cognex Adapter*, see Vimba1394TLFeaturesManual.pdf, GigE_Features_Reference.pdf, USB_Features_Reference.pdf, or Goldeye_Features_Reference.pdf.

Contact us

Technical information:
https://www.alliedvision.com

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

Allied Vision Technologies GmbH
Taschenweg 2a
07646 Stadtroda, Germany

Tel: +49 36428-677-0
Fax: +49 36428-677-28
Email: info@alliedvision.com

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