IDS Software Suite 4.96.1 for Windows

System requirements 1

For operating the uEye cameras, the following system requirements must be met:

	USB 3.1/USB 3.0 camera	USB 2.0 camera	GigE camera
Interface	USB 3.0 port (Super Speed)	USB 2.0 port (High Speed 480 Mbps, "Full Powered" 500 mA)	Gigabit Ethernet port (1000 Mbps)
CPU	Intel i5 or better	Intel i3 or better	Intel i3 or better
Memory	min. 2 GB	min. 2 GB	min. 2 GB
Disk space	min. 500 MB	min. 500 MB	min. 500 MB
Operating system	 Windows 11 (64-bit) Windows 10 (32/64-bit) Windows 8.1/8 (32/64-bit) Windows 7 Service Pack 1 (32/64-bit) with SHA-2 code signing support (KB3033929) 	 Windows 11 (64-bit) Windows 10 (32/64-bit) Windows 8.1/8 (32/64-bit) Windows 7 Service Pack 1 (32/64-bit) with SHA-2 code signing support (KB3033929) 	 Windows 11 (64-bit) Windows 10 (32/64-bit) Windows 8.1/8 (32/64-bit) Windows 7 Service Pack 1 (32/64-bit) with SHA-2 code signing support (KB3033929)

Depending on the sensor model, the camera performance may be limited with the minimum system requirements.

Note on Windows 10 and Windows 11

IDS Software Suite has been tested with the following Windows 10 / Windows 11 version:

Edition: Windows 11 Pro
Version: 21H2
Edition: Windows 10 Pro
Version: 21H1

Note on Windows 7 and Windows 8.1/8

IDS Software Suite supports Windows 7, Windows 8.1 and Windows 8 with version 4.96.1 for the last time.

Configuration notes 1

USB interface

For best performance and stability, all USB drivers and the firmware must be updated to the latest version!

Current generation CPUs with energy saving technologies can cause bandwidth problems on the USB bus.

DHCP configuration of the network adapter

We recommend not to change the DHCP configuration of the network adapter while operating the uEye cameras. If you encounter difficulties, you should reboot your computer system with the desired configuration.

Graphics functions

Direct3D graphics functions

The uEye driver can use Direct3D to display the camera image with overlay information. To use the Direct3D functions, a suitable version of Microsoft DirectX runtime has to be installed on the system.

On Windows systems, you can use the supplied "DXDiag" diagnostic tool to check whether your graphics card supports Direct3D functions. To start the diagnostic tool, click "Run..." on the Windows start menu (shortcut: Windows+R) and enter "DXDiag" in the input box.

Note for 64-bit systems: On a 64-bit operating system, the setup installs only 64-bit DirectX libraries. If you are using a 32-bit application and do not have 32-bit DirectX libraries installed, using DirectX will fail. In this case, the 32-bit DirectX libraries must be installed manually.

OpenGL graphics functions

For OpenGL, version 1.4 or higher must be installed.

COM port driver

The COM port driver is supported.

Notes on older camera models 1

Older versions of the IDS Software Suite can be downloaded in the software archive on https://en.ids-imaging.com/downloads.html.

uEye CCD cameras

All uEye CCD cameras are supported by driver version 4.96.1 for the last time. For specific model numbers see https://en.ids-imaging.com/files/downloads/support/product-discontinuations/Discontinuation Letter Sony CCD 20150324.pdf.

uEye cameras with CMV2000/CMV4000 sensor models

The camera models UI-336xCP, UI-536xCP, UI-337xCP, UI-337xSE, UI-537xCP are supported by driver version 4.96.1 for the last time. For specific part numbers see https://en.ids-imaging.com/files/downloads/support/product-discontinuations/PDN_IDS_V1.1_2021-04-19_UI-336x_UI-536x.pdf.

GigE uEye ACP, USB3 uEye ACP

All GigE uEye ACP (UI-5xxxACP) and all USB3 uEye ACP (UI-3xxxACP) are supported by driver version 4.96.1 for the last time. For specific part numbers see https://en.ids-imaging.com/files/downloads/support/product-discontinuations/PDN IDS 2022-03-08 uEye ACP UI.pdf.

uEye cameras based on onsemi sensors

The following camera models are supported by driver version 4.96.1 for the last time:

UI-122xLE and UI-122xSE (USB2), UI-322xCP (USB3), UI-522xCP, UI-522xSE and UI-522xRE POE (GigE), For specific part numbers see https://en.ids-imaging.com/files/downloads/support/product-discontinuations/PDN IDS 2021-02-25 UI-122x UI-322x UI-522x.pdf

UI-146xLE and UI-146xSE (USB2), UI-546xSE and UI-546xRE POE (GigE), For specific part numbers see https://en.ids-imaging.com/files/downloads/support/product-discontinuations/PDN_IDS_2021-02-26_UI-146x_UI-546x.pdf

UI-155xLE and UI-155xSE (USB2), UI-555xSE and UI-555xRE POE (GigE), For specific part numbers see https://en.ids-imaging.com/files/downloads/support/product-discontinuations/PDN_IDS_2020-02-26_UI-155x_UI-555x_UV-155x_pdf

UI-164xLE and UI-164xSE (USB2), UI-564xSE and UI-564xRE POE (GigE), For specific part numbers see https://en.ids-imaging.com/files/downloads/support/product-discontinuations/PDN_IDS_2021-02-26_UI-164x_UI-564x.pdf

UI-3160CP-M-GL Rev.2, UI-3180CP-M-GL Rev.2

The UI-3160CP-M-GL Rev.2 and UI-3180CP-M-GL Rev.2 camera model are supported by driver version 4.96.1 for the last time. The camera models UI-3160CP-M-GL Rev.2.1 and UI-3180CP-M-GL Rev.2.1 are not affected. See also https://en.ids-imaging.com/files/downloads/support/product-changes/PCN_2018-02-08_Python2000-5000_v1.1.pdf

UI-3013XC

The UI-3013XC camera model is supported by driver version 4.92 for the last time.

UI-112xSE, UI-512xSE, and XS

The camera models UI-112xSE, UI-512xSE, and XS are supported by driver version 4.91 for the last time.

UI-1008XS

The UI-1008XS camera model is supported by driver version 4.81 for the last time.

GigE uEye RE

The GigE uEye RE camera family is supported by driver version 4.80 for the last time. The GigE uEye RE PoE camera familiy is not affected by this.

USB 2 uEye RE

The USB uEye RE camera family is supported by driver version 4.80 for the last time.

USB 2 uEye ME

The USB uEye ME camera family is supported by driver version 4.40 for the last time.

GigE uEye HE

The GigE uEye HE camera family is supported by driver version 3.82 for the last time.

USB uEye SE

The models UI-121xSE, UI-141xSE, UI-144xSE, UI-145xSE, and UI-154xSE-C have been discontinued and will not be tested with new drivers from version 3.80 onwards. IDS Imaging Development Systems GmbH therefore cannot guarantee that these models will provide full functionality with new driver versions and operate without problems.

uEye memory board USB uEye SE/USB uEye RE

The optional memory board of the USB uEye SE and USB uEye RE camera series has been discontinued. The functions required to operate the memory board are supported up to and including driver version 3.24.

Older USB 2 uEye CMOS cameras

All USB CMOS-cameras with USB board revision < 2.1 are not supported by driver versions > 3.10. How can you check whether your camera is affected?

Check the serial number of your camera. If it is less than 400 26 27000, your camera will not be compatible with driver versions > 3,10.

If your camera is not compatible with driver versions > 3.10, you can of course continue to use your present driver (up to version 2.40).

Installation 1

Update note

If you have any custom content in the existing installation directory, you should back it up to a separate directory before installation and make sure that this directory cannot be deleted or overwritten.

You need administrator privileges to install the software.

- GigE uEye network service
 - Once the software has been installed, the GigE uEye network service is automatically bound to all local network adapters.
 - We recommend disabling the network service for all network adapters that will not be used with GigE uEye cameras. The network service can be disabled via the IDS Camera Manager.
- Routing table under Windows
 - When the uEye services for a network card are disabled/enabled or deinstalled/installed, the entries in the routing table are deleted, which are assigned to the corresponding network card.
- Microsoft Visual C++ 2015-2019 Redisttributable
 Applications with graphical user interface like IDS Camera Manager additionally require "Microsoft Visual
 C++ 2015-2019 Redisttributable". If you use the installation program, the redistributable package prompts
 for installation (if it is not already installed). When installing via the command line in silent mode, you must
 install the package yourself.

Setup via installation program

- 1. Extract the archive.
- 2. Double-click on the extracted file to start the installation. The installation is menu-driven. For installation, the following options are available:
 - Recommended
 - Installs recommended drivers, developments files, 3rd party interfaces, and documentation.
 - Developer
 - Installs all drivers and services as well as development files and sample source code. Also the uEye .NET and uEye DirectShow programming interfaces are installed.
 - Full
 - Installs all components.
 - Minimum
 - Installs only drivers for USB and GigE cameras and the IDS Camera Manager but no 3rd party interfaces nor documentation.
 - Custom
 - When you choose custom installation, you have to individually select the components you want to install. Custom installation is recommended only for advanced users.

If you need to make changes to an existing installation, you can do this via the installation program with the "Modify program" option.

Setup via command line

You can start the setup from the command line to run the installation without the graphical user interface. The setup runs in the background when a command line is used, i.e. the command line returns immediately after a call, while the setup runs in the background. This behavior is different from the previous uEye batch installer.

If you want to get error codes during installation, you have to run the setup blocking with the Microsoft tool "start /wait setup.exe..." (see examples below).

Parameter	Description
/S	Silent installation
	Sets installation folder:
/D	 Note that "/D" has to be at the end of the setup call (see example below). Do not use spaces between "/D=" and the path. Escape the path with quotation marks if it contains spaces. Possible separators are back slash \ or slash /
/repair	Repairs a previous installation.
/remove	Removes a previous installation.
/insttype	Recommended Full Developer Minimal For further description see above.
/usb	Device drivers for USB cameras
/eth	Device drivers for GigE cameras
/comport	 Virtual COM port driver Configuring a virtual COM-Port via command line interface: Prerequisite: the COM-Port component is installed install [ComportID] - Creates a virtual COM port with the specified ID in the system. The virtual COM port still has to be linked to the camera. uninstall [ComportID] - Removes the virtual COM port with the specified ID from the system. The saved virtual COM port remains on the camera. link [DeviceID] [ComportID] - The virtual COM port with the specified ID is saved on the camera with the specified camera ID. unlink - The virtual COM port with the specified ID will be deleted on the camera with the specified camera ID.
/dshow_service	DirectShow service
/manager	IDS Camera Manager, e.g. for configuring the IP address of a GigE uEye camera.
/cockpit	uEye Cockpit
/demo	uEye Demo
/hotpixeleditor	uEye Hotpixel Editor
/sequencer	uEye Sequencer
/devfiles	Development files
/samplebinaries	Sample applications
/samplesources	Source code of sample applications
/documentation	Manual for IDS Software Suite
/documentation_dshow	Manual for uEye DirectShow interface
/documentation_labview	Manual for uEye .NET LabVIEW
/documentation_net	Manual for uEye .NET interface
/documentation_samples	Manual for sample programs
/documentation_visionpro	Manual for uEye VisionPro
/cognex	Driver for Cognex
/dshow	Driver for DirectShow
/labview	Driver for LabVIEW
/net	Driver for uEye .NET
/neurocheck	Driver for NeuroCheck
/halcon	Driver for HALCON
/unpack	Starts the setup in unpack mode, to create a custom setup. The compontents to be unpacked have to be specified with additional parameters. Example commands can be found below or in the install.ueye.txt file. Further options to reduce the size of the setup package after the extraction is completed:

	 In case only a specific CPU architecture is required, remove the irrelevant package (x64 or x86) Keep only these firmware files in the /usb and /eth folders that are specific to the camera models the setup has to support
/?	Help description

NOTICE! If you call the setup a second time with other components, the setup is changed and the components that are no longer specified are uninstalled.

Possible error codes are listed below.

Error code	Description
0	Success, no error
1	Nothing to uninstall, no installed version could be detected.
2	Setup was cancelled in the graphical interface.
3	No installation found to update.
4	Update not supported.
6	Setup was cancelled in the graphical interface.
7	An application is running that prevents the installation.
8	Not installed e. g. there is a previous version still installed.

Examples for silent setup

- Non-blocking call and background execution
 uEye_<version>_Full_<build>.exe /S /usb /cockpit /manager
- Blocking call and control of error codes

START /WAIT uEye <version> Full <build>.exe /S /usb /cockpit /manager & echo %errorLevel%

Querying the help description

uEye <version> Full <build>.exe /?

- Installation with install type "Recommended"
 uEye_<version>_Full_<build>.exe /S /insttype=Recommended
- Installation with changed installation directory

 uEye <version> Full <build>.exe /S /insttype=Recommended /D="c:/dev/your folder"

Examples for setup with unpack parameter

• Unpack with required components START /WAIT uEye_<version>_<build>.exe /S /unpack /usb /eth /cockpit /manager

This command creates a new directory with the subdirectories x86/ and x64/ for the respective Windows operating system architectures in addition to the executable setup file. All files for the corresponding configuration as well as the uEye Universal Installer are stored in this directory. Furthermore, depending on the specified components, an install.bat and an uninstall.bat are created for installation/uninstallation of the selected components.

The architecture-specific packages can then be adjusted manually (e.g. remove firmware files that are not required) and afterwards the corresponding package (x64 or x86) can be distributed on the target system.

Installation on target system via

>uui.exe --install api usb eth or alternatively via install.bat. The respective extracted components (e.g. here Camera manager and Cockpit, with appropriate selection also demo or samples) have to be installed via install.bat.

 Unpack without further components uEye <version> <build>.exe /unpack This command starts the unpack wizard. Installation of the x64 or x86 package on the target system corresponding to the target architecture:

-uui.exe --install api

Example for configuring virtual COM-Port via command line interface

```
> uui.exe --comport install 100
:: 255 is broadcast
> uui.exe --comport install 255
:: links camera with DeviceID 1 with comport 100
> uui.exe --comport link 1 100
```

Installation paths

Folder	Description
<installation directory="">/com</installation>	Driver files
<pre><installation directory="">/develop</installation></pre>	Development files (DLL, header, libraries), sample binaries and source codes
<installation directory="">/eth</installation>	Driver and firmware files for GigE cameras
<pre><installation directory="">/help</installation></pre>	Installed help manuals
<installation directory="">/interfaces</installation>	Installed files for 3rd party interfaces
<installation directory="">/legal</installation>	Legal notes on used open source code
<pre><installation directory="">/program</installation></pre>	Applications like IDS Camera Manager, uEye Cockpit etc.
<installation directory="">/usb</installation>	Driver and firmware files for USB cameras

First start 1

USB 3.1/USB 3/USB 2 uEye camera

After you installed the software, connect the camera to the PC, using the corresponding USB cable. The camera will be recognized automatically. When you connect a camera with a PC or a new USB port for the first time, it is detected as a new device and the firmware is uploaded to the camera. When the camera has been correctly installed, the LED on the back of the camera lights up green and the camera is displayed in the list of the IDS Camera Manager.

Note: When you connect a new USB device with a PC or a new USB port for the first time, **Windows update** searches automatically online for a suitable driver. This may take some time depending on your system.

USB 3/USB 3.1 uEye cameras under USB 2.0

USB 3/USB 3.1 uEye cameras are limited usable under USB 2.0. Depending on the camera model, not all camera functions are available in USB 2.0 mode. USB 3/USB 3.1 uEye cameras are optimized for USB 3.0 ports and are not tested by IDS Imaging Development Systems GmbH under USB 2.0.

Note that due to the high performance of modern sensors, some USB 3/USB 3.1 uEye models are not supported in USB 2.0 mode anymore, as the USB 2.0 interface does not provide enough power.

GigE uEye camera

After you installed the software, connect the camera with the network. Check the power supply to the camera. Use either an external power supply or - depending on the model - via PoE (Power over Ethernet).

NOTICE! Cameras with Power-over-Ethernet (PoE) can be powered from an external source or via PoE. The camera should not be supplied with both power sources at the same time, as this may cause irreparable damage to the camera.

Before you can use the camera on the network, you need to assign a valid IP address to the camera in the IDS Camera Manager.

List of contained files / dependencies

See list on https://en.ids-imaging.com/open-source.html

Uninstallation 1

To uninstall the uEye drivers and software, you also use the menu-driven uEye setup program. The GigE uEye network service is uninstalled automatically when you uninstall the uEye driver. After uninstalling the GigE uEye driver, you will have to restart your computer. You can only reinstall the driver after restarting the computer.

Known issues 1

This section lists known issues that might occur in this release.

Windows 7: UAC states "Unknown publisher"	The UAC (user account control) states that the publisher of the setup is unknown. This is due to the fact that the IDS certificates have changed. This problem only occurs on Windows versions that do not get any updates from Microsoft and therefore do not get the new Certificate Authorities (CAs). To solve the problem, you can install the certificates manually from https://www.digicert.com/kb/digicert-root-certificates.htm#roots • DigiCert Trusted Root G4
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- - DigiCert Trusted G4 Code Signing RSA4096 SHA384 2021 CA1

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