

Camera Installation



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Icons and illustrations may change depending on the version

Camera driver installation

Preparation

Download the camera drivers

Caution

- Before proceeding, please check your PC's bit architecture (32 or 64 bits?). Refer to section "How to check bits architecture" for details.
- > Before installing the driver, make sure the camera's USB cable is not connected.

Procedure

Check your bit number (32 or 64) and download the adequate driver package.

Open the executable installer:

uEye32_/////WHQL.exe

For 32bits architecture:

WHQL.exe

For 64bits architecture:

If the following security warning displays, please allow in order to continue.



Setup is starting. Choose your language for installation, English (United States), and click Next.

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iEye - Instalionield Wizard		×
Choose Setup Language	- Aller	
Select the language for the installation from the choices below.		
English (United States)		
German		
istallShield		
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Click on "Install driver".



Select "3. USB" and click Next.

DS uEye Setup 64-Bit 4.80.2.1 Setup Type Select the setup type that best suits your needs.	uEve
Click the type of setup you prefer. 1. Complete 2. USB and Gigabit Ethernet 3. USB 4. Custom	Description Installation of all uEye USB components except 3rd party drivers.
nstallShield 🛛	Back Next > Cancel

Click Next.



Click Next.



Click Install.





The installation carries on.

Setup Status	uĘve
uEye is configuring your new software installation.	
Installing	
nstallShield	
	Cancel

Un-check all three boxes and then click Next.

IDS uEye Setup 64-Bit			×
Additional features			uEye
Select or clear additional features.			
Install a desktop shortcut to 'uEye Cockpit'	and to 'IDS Cam	iera Manager'	
Install a quick launch shortcut to 'uEye Coc	kpit' and 'IDS C	amera Manager'	
Show quickstart HTML			
InstallShield			
	< Back	Next >	Cancel

If a CPU-related information box displays, just click OK to proceed.



The installation is now finished so click Finish.



(A PC reboot is recommended at this stage)

Now please connect the camera USB cable to the PC and wait for setup to complete.

When looking at the "devices" screen (in PC's settings), the camera should appear whenever connected.

If the camera model name is displayed it indicated a proper installation.

← Settings		<u></u>	×
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Find a setting			^
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Typing			
🖉 Pen & Windows Ink	XS		

Camera calibration: make the calibration grid

Preparation

- Get an engravable substrate providing high contrast when marked. Recommended material is Gravoply Laser white/black, 1.6mm (1/16in) thick. Sheet size must be at least 200x150mm (7.9x5.9in).
- Get the calibration grid pdf file.



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Caution

- > Camera and laser machine drivers must have been correctly installed prior to camera calibration.
- > Laser machine must be correctly adjusted prior to camera calibration.
- If the machine is re-adjusted (i.e.: origin adjustment, laser beam, etc), or the camera is moved, the calibration grid must be re-created, and recalibration is necessary.

Procedure:

On the computer

- 1. Open pdf (via Acrobat reader or Adobe Illustrator or others)
- 2. Go to print menu
- 3. Adjusting printing settings
 - a. <u>Select printer</u>: Gravograph LS series model
 - b. <u>Size</u>: actual size (no re-size or scaling)
 - c. <u>Orientation</u>: portrait
 - d. Location: top left corner (X=0 Y=0)
- 4. Go in the properties of the printer to adjust marking parameters. Laser power and speed parameters depend on the model. For a LS900IQ 40W model, the guideline is typically: power 30%, speed 100%, DPI 500. These settings must be applied to the <u>black</u> color, in <u>raster</u> mode, with origin set to 0,0. Power should be adjusted depending on the model's rated power. Models labelled as "XP" being faster, speed parameter should be reduced to approx. 60%.
- 5. Send document to printer.

Print settings may vary from a software to another, but here is an illustration of the parameters when using Adobe Acrobat Reader (free and commonly used pdf reader):



On the laser machine

- 6. Set the engravable material on the machine's table, well-adjusted in the top left corner. Any protection film on top of the engravable material should be removed first. Plate must oriented with its long side along X (horizontal) and its short side along Y (vertical) (resp. 200x150mm; 7.9in x 5.9in).
- 7. Perform a Z autofocus manually on top of the material (





Camera calibration: perform a calibration

Preparation

> Have the proper calibration grid for that machine.



Caution

- Camera calibration files are stored on the operating computer. If erasing them of if using another computer, recalibration is necessary.
- Camera calibration files are linked to a specific machine. If working with another machine, camera calibration must be performed again for that different machine.
- If the machine is re-adjusted (i.e.: origin adjustment, laser beam, etc), or the camera is moved, the calibration grid must be <u>marked again</u>, and recalibration is necessary.

Procedure:

- 1. Set the calibration grid on the machine's table, well-adjusted in the top left corner.
- 2. In FineCut settings, under the "Machine Setup" tab, click "Calibration Camera" to perform the calibration.

Plotter / User Setup	×
Plotter Machine Setup Plot Dialog Alert Display Other	7
Printer ~	
Origin Adjustment	
Origin ↔ 0 mm t 0 mm	
Mark Search Mode	
Offset ↔ Omm ÷ 0 mm ÷	
Cancel OK	

Troubleshoot the camera



If the camera feed displays it indicates the camera is working and properly installed.

Remember to close this application before attempting to use the camera with another application.

On older operating systems (Windows 7, 8, 8.1), some computer brands have issues connecting the camera on a USB port type 3.0. In that case, please try connecting a USB type 2.0 HUB to the USB3.0 port, then connect the camera to the HUB.

In order to check the installed version of the camera driver, use the "camera manager" (search windows for IDS) and click on "general information". The driver version is displayed on the top.

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General Information					×
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Driver designation ueye_usb_64.sys	Description USB kernel driver	Location C:¥WINDOWS¥system32¥drivers	Version 4.90.24.0	Update	^

How to check bits architecture

Windows 10

Click on the windows icon in the bottom left corner of the desktop to then access the settings menu.





ි Home	About		
Find a setting	٩		
	Device spec	ifications	
System	Device name		
Notifications & actions	Processor	Intel(R) Core(TM) i7-6700HQ CPU @ 2.60GHz 2.60 GHz	
J Focus assist	Installed RAM	16.0 GB	
	Device ID		
Dewer & sleep	Product ID	and the second second second	
Battery	System type	64-bit operating system, x64-based processor	
	Pen and touch	Pen support	
⊐ Storage	Rename this	PC	
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⊒ <mark>i</mark> Multi-tasking	Windows sr	pecifications	
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	Version	1803	
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	OS build	17134.829	
Remote Deskton			
Kemote Desktop	Change the pro	duct key or upgrade your edition of Windows	