

# Installation instructions Sigma Software

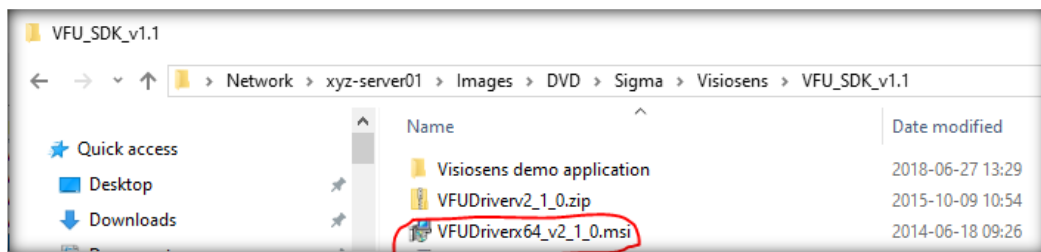
This document describes how to install or update all software required to operate the Sigma.

## Required

- PC running Windows 10, 64-bit
- DVD with installation software

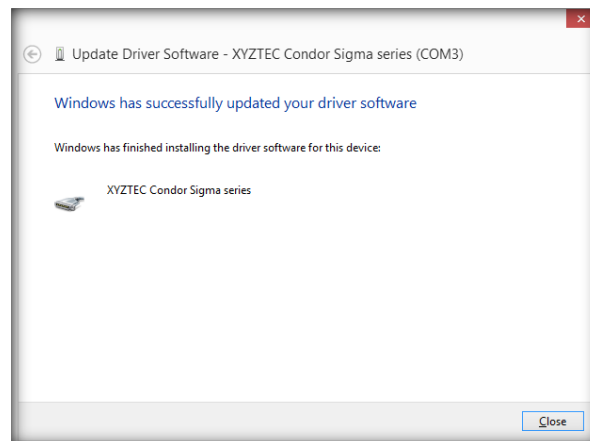
## Initial installation

1. Install SQL server (express) 2014 or newer
2. Run the installer for the Visiosens camera (if applicable)  
From Sigma\Visiosens\VFU\_SDK\_v1.1:
  - Install VFUDriverx64\_v2\_1\_0.msi

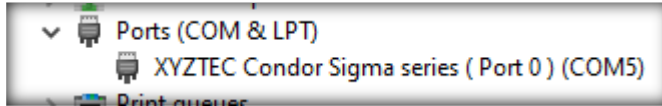


- If Windows complains, select 'Run anyway'
  - Plug in the camera
  - Copy 'Visiosens demo application' to for example the root and create a shortcut to VFUWpfDemoApp.exe on the desktop  
(This application is used to verify the working of the Visiosens camera's with the original software supplied by the customer)
  - Run the vEye test application (supplied by the manufacturer of the camera) by double clicking the icon installed on the desktop
  - Select XYZTEC
  - Select 'stream'
  - You should now see a life image
3. Run the installer for the IDS camera (if applicable)

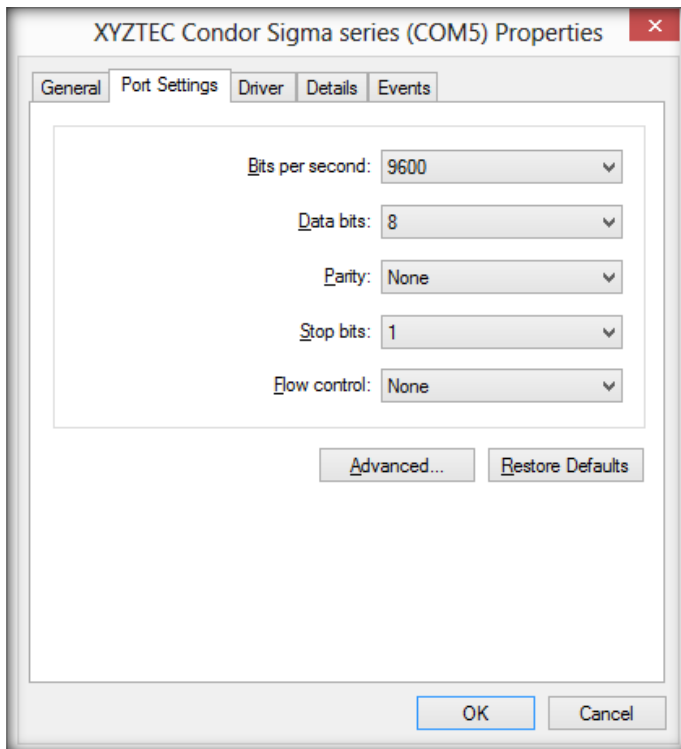
4. For supporting the image recognition algorithms:  
Run “w\_ccomp\_xe\_redist\_ia32\_2011.1.127.msi” from the “Intel” directory  
This are the so called (Intel) Threading Building Blocks (TBB) and (Intel Performance Primitives (IPP) libraries, which are used by to find an image’s focus and will probably be used for image recognition later.  
(‘ia32’ refers to a 32 bit version of these libraries. Since the PC software for controlling the Sigma runs in 32 bit mode, even on 64-bit machine, this is the version of the library that should be installed.)
5. Run the installer of the Sigma software (Usually named like setupCondorSigma\_5.11.7208.20558.exe)
6. Install the device driver to communicate with the tweezers, if applicable
  - Attach a tweezer to the PC
  - Open device manager
  - Select ‘update driver’ from ‘XYZTEC Micro tweezer’
  - Browse to the ‘Sigma\XYZTEC\Drivers\USB Driver Microchip’ directory of the installation DVD
7. Install the device driver to communicate with the Sigma:
  - Attach the Sigma to the PC with a USB cable
  - Open device manager
  - Select ‘update driver’ for each ‘XYZTEC Sigma’ device, still listed under unknown devices.
  - Browse to the location of xyztec\_sigma.inf (‘Sigma\XYZTEC\Drivers\USB Driver Sigma’)
  - Select it.



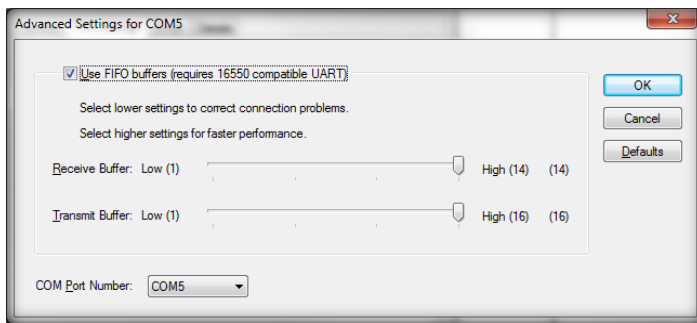
- Note that no device driver will actually be installed. The .inf file merely hooks up the existing Microsoft supplied device driver (usbser.sys) to the Sigma.
- Assign the correct COM ports to the drivers  
Windows will have assigned COM ports to the drivers. Check these using the device manager:



Though the Sigma software may be configured to talk over every COM port (by editing `CondorSigma.exe.config`) it is best to configure all systems alike, using COM5, so that when updating the software by xcopying new files (including the configuration file) the system does not need to be reconfigured. The COM port assignment may be changed by changing its properties (click with right mouse button), select the Port Settings tab:



- Next press the 'Advanced' button:



And select the COM5.

- Unplug the cable, wait a few seconds and plug it in again for the changes to take effect (or reboot the PC)

- Install 'WMFPreview'. That is a Windows file explorer shell extension to display thumbnails of .wmf files (like the files used for result code images) in Windows file explorer. The installer is in the 'Sigma\WMFPreview' subdirectory of the DVD

- Create the SPC Database



- The tab marked 'General software settings' should display options to create an initial database. The location of the database may be selected. The software will wait 10 seconds and close. Restart the software.

- Switch on the sigma

- After initialization, view the log file and look for exceptions
- View the 'info screen', 'messages' tab and look for (resolvable) errors

- Assign methods to each sensor in the RMU

- Disable the CPU C-states in the Bios. (Set it to C0).

- This disables all power saving (power saving makes the CPU a lot slower, resulting in a lower framerate).

The IDS camera relies on this setting to be disabled.