Set up Analog cameras

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Which situation applies to you?

- You ordered computer, cameras, and MediaRecorder at Noldus IT.

The video capture card is already installed in the computer. Also MediaRecorder has been set up to use with these cameras. You can connect your cameras and start recording.

See Record video

- You bought the computer and cameras somewhere else

Follow the procedure below.

Procedure

1. Install the Picolo Alert PCIe card

2. Install the drivers for the Picolo Alert card

3. Connect the analog camera to the computer

Install the Picolo Alert PCIe card

Aim

To install the card that digitizes the output of analog cameras.
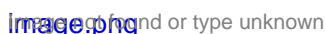
Prerequisites

- You use MediaRecorder with analog cameras.
- You did not buy a complete setup from Noldus IT. If you bought a complete setup from Noldus IT, the card has been installed in the computer., so you can skip this topic.

Procedure

1. Make sure your computer is turned off and the power cable is disconnected.
2. Open the computer.
3. Select a free PCIe expansion slot, and remove the corresponding extension cover. See PCIe slot properties for more information on different PCIe slots in a Dell computer.
4. Unpack the Euresys Picolo Alert PCIe card, place it into the slot, and press it carefully into position. If the card does not fit into place easily, remove it and repeat the operation.
image.png
IMPORTANT When touching the board, its electronic components can be damaged by static electricity. To avoid any such risk, make sure that you are grounded. You can ground yourself by putting on an earthing wristlet, and attaching its clip to the metal frame of the computer. If an earthing wristlet is not available, you can hold the metal frame with one hand while holding the Ethernet card in your other hand. Ensure also that your clothing does not touch any components while handling the card.
5. Fix the card to the chassis and re-fit the computer's cover.
6. Close the computer.

PCIe slot properties

Different PCIe slots have different properties, resulting in different performances. When possible, choose the slot that gives maximum performance. To estimate performance, take note of the slot version (2, 3, etc.; see the figure below). Do not use the graphic slots (see also the drawing of the available slots).
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Details of the PCIe slots in a Dell computer.

Compare this number with the following table:

- PCIe v1.x: 250 MB/s
- PCIe v2.x: 500 MB/s
- PCIe v3.0: ~1 GB/s
- PCIe v4.0: ~2GB/s

Note that values are given per lane; they should not be multiplied by the number of lanes in a slot (e.g. x4) since the card has a 1x connector).

Install the drivers for the Picolo Alert card

Aim

To install the software that allows communication between the Euresys card and the computer operating systems.

Prerequisites

- You use MediaRecorder with analog cameras.
- You did not buy a complete setup from Noldus IT.
- You installed the Euresys Picolo Alert card into the computer.

Procedure

1. Insert the MediaRecorder installation USB stick into your computer.
2. If you have the Picolo Alert card, open the folder Drivers and Tools\Drivers\Euresys\Alert and double-click the file **multicam-win10-6.15.1.3573.exe**
3. Follow the instructions on your screen.
4. When installation is finished, a message appears that the drivers were successfully installed. Click **Close**.
5. Installing the Picolo card drivers involves a a computer restart. After restart, the installation is finished.

Continue with installing MediaRecorder. See Installation

Connect the analog camera to the computer

important By default Windows 10 computers have the option Fast startup enabled. This means that the computer goes into standby instead of shutting down when you switch off the computer. This can sometimes cause MediaRecorder to stop responding when selecting an input of the H.264 video capture card. Therefore, for analog cameras it is especially important to select the correct power options. See Select correct power options in The steps to install MediaRecorder.

The connectors on the Picolo Alert PCIe video capture card

The Picolo Alert PCIe card has 4 BNC connectors. This card has an effective delivery bandwidth of 180MB/s.

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To connect the camera

If your camera has a BNC output connector, connect a coaxial cable, with BNC connectors on both sides, between Video Out of the camera and one of the BNC inputs of the breakout cable.

image.png

 If your camera does not have a BNC connection, use a converter.

Change video standard

Aim

To specify the correct video standard to be used by the Picolo Alert PCIe card.

Procedure

1. Open **Video settings** the first time you select the Picolo Alert PCIe card.
image.png image not found or type unknown
2. Select the correct video standard, depending on your cameras. It's typically PAL for Europe and NTSC for the US. You need to do this four times, selecting all four channels from the **Board** drop-down box (channels are numbered #0-#3). Press **Apply** after setting the correct Video Standard for each channel. image.png image not found or type unknown

You should see the preview after setting the Video Standard correctly. Failing this will result in a black preview. You can only modify this setting the first time before the preview is running, after that it will become disabled. To be able to modify it, simply deselect the camera from the video inputs, and then select it again, to make the setting editable once more.