Installation of the USB device driver for use of the USB direct connection

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1. Introduction

The use of the **USB direct connection** for connection to the HeiTel devices requires the installation of a driver for the respective USB interface. Depending on the Windows operating system, device series and **CamControl LITE/PRO** software version, the driver installation can be different. Therefore please consider the driver installation instructions that are described in this document.

**Configuration**

Start **CamControl LITE**. Click **Setup**. The **Receiver options** dialogue box opens. Now in the **Options** list click **Extras**. Check in the **USB** section whether the option **Transmitter index with USB node** is activated or switch it where necessary to be active. Then click on the **OK** button.

**Standard settings for the USB direct connection**

The **USB direct connection** is made available, upon activation, at the top of the list in the ‘transmitter index’ of the **CamControl LITE/PRO** software. The default data for this transmitter data is as follows and cannot be changed:

- Transmitter name: **USB direct connection**
- IP address and port: **192.168.138.95:3000**

This connection data cannot be changed! If a non standard port number has been used in the transmitter e.g. 3001, an additional entry for USB connection will need to be added. The IP address would be **192.168.138.95:3001**. Please note the network settings of your device and consult the device manual if necessary.

**Additional USB connection**

Only one HeiTel device can be connected to a receiver PC via a USB connection at any one time. This is because the device IP address for the USB connection is always **192.168.138.95** and cannot be changed. Simultaneous use of two devices via USB will inevitably result in IP address conflicts!

**Additional driver installation**

If you are trying to connect to your HeiTel device using the direct USB connection, but using a different USB port on your PC/Laptop, Windows may require that the driver be loaded again (particularly on XP).
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2. **Requirements**

2.1. PC/Laptop with USB 2.0 hi-speed interface

2.2. USB 2.0 type A to B (printer style) cable for connecting to the transmitter with a maximum length of two meters

2.3. **CamControl LITE** or **CamControl PRO** software

2.4. One of the following HeiTel VideoGateway device series with the appropriate firmware and CamControl software. Please note the requirements of the dependent installation processes:

- **SVR series** (page 4): CamDisc SVR 4, CamDisc SVR 10, CamTel SVR 4, CamTel SVR 10, Cam4mobile 4, Cam4mobile 10

- **SVRs series** (page 9): CamDisc HNVR 10, CamDisc SVR 4s, CamDisc SVR 10s, CamServer 1, CamServer 2c, CamServer 2

- **VG series** (page 11): CamServer VG 2c/4c, CamDisc VG 2c/4c, CamDisc VG 2s, CamDisc VG 4, CamDisc VG 10, CamDisc VG 4s, CamDisc VG 10s, CamTel VG 4, CamTel VG 10, Cam4mobile VG 2c/4c, Cam4mobile VG 4, Cam4mobile VG 10s, CamDisc VG HNVR
3. Installation of the USB driver for SVR series

Currently, the USB function can only be used with the following devices if their firmware is version 1.58 or higher:

- CamDisc SVR 4 and CamDisc SVR 10 device (serial no.: CQxxxxxx und CVxxxxxx)
- CamTel SVR 4 and CamTel SVR 10 devices (serial no.: TQxxxxxx und TVxxxxxx)
- Cam4mobile 4 and Cam4mobile 10 devices (serial no.: MQxxxxxx und MVxxxxxx)

To use a USB direct connection with your CamControl LITE or CamControl PRO software, it will be necessary to have particular drivers installed. The drivers (which are part of the scope of delivery) are found in the subdirectory `Drivers` in your CamControl LITE/PRO software. After installing this driver, the configured interface corresponds to a network interface with a maximum transmission rate of 9.7 MBit/s.

3.1. Driver installation in Windows 8 and 8.1

The USB driver is essentially installed in Windows 8 and Windows 8.1 in the same way as the installation described in the chapter relating to VG series (page 11).

3.2. Driver installation in Windows 7

The USB driver is essentially installed in Windows 7 in the same way as the installation described below for Windows XP.

3.3. Driver installation in Windows Vista

Install the USB driver in Windows Vista in the same way as you would in Windows XP, following the steps described below.

Starting from firmware version 2.04 or higher please open the `Drivers` subdirectory in the program directory of your CamControl LITE/PRO software. Run the file `pl2502vista.exe` to install the USB driver. Follow the instructions.

A reconnection of the USB cable might be necessary after having run the driver installation manually.

3.4. Driver installation in Windows XP

Please install the USB driver as follows:

**Step 1**
Before you connect one of the appropriate HeiTel devices with a USB interface of your receiver PC, please install CamControl LITE/PRO software version 3.74 or higher.
Step 2
Switch on your HeiTel device and connect the USB cable to the corresponding USB socket on the front of the device. Next, connect the other end of the USB cable with a corresponding socket on your receiver PC (only after you have switched the PC on). As soon as your device is ready, the hardware assistant automatically displays a welcome dialogue:

![Welcome to the Found New Hardware Wizard](image)

Select the option **No, not this time** and confirm the selection with **Next >**.

Step 3
In the following dialogue screen, select the option **Install from a list or specific location (Advanced)**. Confirm your selection with **Next >**.

![Found New Hardware Wizard](image)

Step 4
In this dialogue screen, select the options **Search for the best driver in these locations** and **Include this location in the search**.
Open another Windows dialogue box with **Browse**

**Step 5**
From the **Browse for Folder** box, select the subdirectory `\Drivers`, which is located in the installation directory of your **CamControl LITE** software.

Confirm your selection with **OK**.

**Step 6**
The previously-selected subdirectory is now entered as the location.
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Confirm your selection with **Next >**.

**Step 7**
If you receive a message regarding the Windows logo test, you can skip this test by selecting **Continue Anyway**.

**Step 8**
This dialogue box provides information about the status of the driver installation.

**Step 9**
After the driver has been successfully installed, you will see this final dialogue box.
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Complete the driver installation by selecting **Finish**.
Installation of the USB device driver for use of the USB direct connection

4. Installation of the USB driver for SVRs series

The USB direct connection requires the installation of a driver for the respective USB interface. After installing this driver, the configured interface corresponds to a network interface with a maximum transmission rate of 12 MBit/s. If you use the USB direct connection with a CamDisc HNVR, you can obtain a maximum nominal transfer rate of 480 MBit/s.

Please note that only devices are supported that are equipped with a modified front board (starting Nov. 2011). This function can be used with the following devices if their firmware is of version 1.72 or later:

- CamDisc HNVR 10 device (serial number: NV9xxxxx)
- CamDisc SVR 4s and CamDisc SVR 10s device (serial number: WS1xxxxx und WV1xxxxx)
- CamServer 1, CamServer 2c and CamServer 2 device (serial number: WBxxxxxx, WCxxxxxx und WD1xxxxx)

The USB drivers for these devices can be found in the \Drivers subdirectory of CamControl LITE software as of version 3.80:

- PL2502NW_v20044.exe: Driver file for Windows 2000 and Windows XP
- pl2502vista.exe: Driver file for Windows Vista

Starting from firmware 2.04 or higher and CamControl PRO/LITE software v. 4.07 the driver VideoGatewayPL2502.inf for Windows XP (32/64 Bit), Windows Vista (32/64 Bit), Windows 7 (32/64 Bit) and Windows 8 (only 32 Bit) was added. The USB direct connection can be used with the following devices that comply with the following serial numbers:

- CamDisc HNVR 10 device (serial number: NV206xxx or higher)
- CamDisc SVR 4s and CamDisc SVR 10s device (serial number: WS206xxx and WV206xxx or higher)
- CamServer 2c and CamServer 2 device (serial number: WC211xxx and WD206xxx or higher)

4.1. Driver installation in Windows 8 and Windows 8.1

The USB driver for SVRs devices is essentially installed in Windows 8 and Windows 8.1 in the same way as the installation described in chapter of VG series (page 11).

4.2. Driver installation in Windows 7

The USB driver for SVRs devices is essentially installed in Windows 7 in the same way as the installation described in chapter of VG series (page 11).
4.3. **Driver installation in Windows Vista**

Depended from firmware and software version you are requested to install an USB driver after having plugged in the USB cable. Follow the instructions in the same way as the installation described in chapter of SVR series (page 4).

Starting from firmware version 2.04 or higher please open the \Drivers subdirectory in the program directory of your CamControl LITE/PRO software. Run the file **pl2502vista.exe** to install the USB driver. Follow the instructions. A reconnection of the USB cable might be necessary after having run the driver installation manually.

4.4. **Driver installation in Windows XP**

Depended from firmware and software version you are requested to install an USB driver after having plugged in the USB cable. Follow the instructions in the same way as the installation described in chapter of SVR series (page 4).

Starting from firmware version 2.04 or higher please open the \Drivers subdirectory in the program directory of your CamControl LITE/PRO software. Run the file **PL2502NW_v20044.exe** to install the USB driver. Follow the instructions.
Installation of the USB device driver for use of the USB direct connection

5. Installation of the USB driver for VG series

The USB direct connection requires the installation of a driver for the respective USB interface. After installing this driver, the configured interface corresponds to a network interface with a maximum transmission rate of 12 MBit/s. The USB direct connection rate with a CamDisc VG HNVR, offers a maximum nominal transfer rate of 480 MBit/s.

This function can be used with the following devices of VG series with firmware version 4.02 or higher.

- CamDisc VG HNVR (serial number: VNxxxxx)
- CamDisc VG 2s, CamDisc VG 4s and CamDisc VG 10s (serial number: STxxxxxx, STxxxxxx and SXxxxxxx)
- CamDisc VG 4 and CamDisc VG 10 (serial number: VFxxxxxx und VXxxxxxx)
- CamServer VG 2c/4c and CamDisc VG 2c/4c (serial number: CCxxxxxx und DCxxxxxx)
- CamTel VG 4 and CamTel VG 10 (serial number: CFxxxxxx und CXxxxxxx)
- Cam4mobile VG 2c/4c, Cam4mobile VG 4 and Cam4mobile VG 10s (serial number: MCxxxxxx, MFxxxxxx and MXxxxxxx)

5.1. Driver installation in Windows 8 and Windows 8.1

Step 1
Turn on the (VG) device (also applies to SVR/SVRs/HNVR devices) and plug the USB cable in the front connector of the device. Plug the other side of the USB cable into the USB port of the computer.

Step 2
Got to the “Device Manager” (you can find it in the “Control Panel” → “System” → “Device Manager”) and select in section “Other devices” the node “RNDIS/Ethernet Gadget” or “Ethernet/USB RNDIS (depends on the connected HeiTel device).
Installation of the USB device driver for use of the USB direct connection

Step 3
Click with the right mouse button on the selected device and select **Update Driver Software**… from the popup menu
Installation of the USB device driver for use of the USB direct connection

Step 4
A new dialogue appears. Select “Browse my computer for driver software”

Step 5
Select “Let me pick from a list of device drivers on my computer” on the next dialogue.

Step 6
Select “Network adapters” in the device list of the next dialogue.
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Step 7
Select “Microsoft” in the Manufacturer list and as Network Adapter “Remote NDIS Compatible Device”.

Step 8
Press “Yes” on the following dialogue.
After successful installation of the driver one can now build up a connection via USB to the HeiTel device.

5.2. Driver installation in Windows 7

Step 1
Before you connect one of the appropriate HeiTel devices with a USB interface of your receiver PC, please install CamControl LITE/PRO software version 4.07 or higher.

Step 2
Switch on your (VG) device (also applies to SVR/SVRs/HNVR devices) and wait until the device is started completely. Plug the USB cable in the front connector of the device and the other side into the USB port of the computer (only after you have switched the PC on). Windows 7 tries to install the driver for **Ethernet/USB RNDIS** automatically. If there was no previous driver installation done or the driver was uninstalled a corresponding driver error message appears.

Step 3
Got to the “Device Manager” (you can find it in the “Control Panel” → “System” → “Device Manager”) and select in section “Other devices” the node “RNDIS/Ethernet Gadget” or “Ethernet/USB RNDIS” (depends on the connected HeiTel device).

Click with the right mouse button on the selected device and select **Update Driver Software**... from the popup menu
Installation of the USB device driver for use of the USB direct connection

Step 4
A new dialogue appears. Select “Browse my computer for driver software”

Step 5
Select “Browse….” and select the subdirectory \Drivers, which is located in the installation directory of your CamControl LITE software.
The previously-selected subdirectory is now entered as the location. Confirm your selection with Next >.

**Step 6**
This dialogue box provides information about the status of the driver installation.

If you receive a message regarding the Windows logo test, you can skip this by selecting Continue Anyway.
Installation of the USB device driver for use of the USB direct connection

5.3. Driver installation in Windows Vista

Depended from firmware and software version you are requested to install an USB driver after having plugged in the USB cable. Follow the instructions in the same way as the installation described in chapter of SVR series (page 4).

Starting from firmware version 2.04 or higher please open the \Drivers subdirectory in the program directory of your CamControl LITE/PRO software. Run the file pl2502vista.exe to install the USB driver. Follow the instructions.
A reconnection of the USB cable might be necessary after having run the driver installation manually.
5.4. **Driver installation in Windows XP**

The USB driver for VG devices is essentially installed in Windows XP in the same way as the installation described in chapter of SVR series (page 4).
Installation of the USB device driver for use of the USB direct connection

6. Trouble shooting

It may happen that no USB connection can be established. This can have several causes. Therefore, check your CamControl LITE/PRO software and firmware version to ensure that your device meets the requirements of the USB connection.

Due to the fact that there is a network adapter installed in the USB connection, it happens that your PC has problems to initialize a network adapter properly. In these cases it is recommended checking the Device Manager to see if the "RNDIS / Ethernet Gadget" or "Ethernet / USB RNDIS" device is installed correctly. If your device can be found under "Other devices" a new driver installation should be done. Follow the instructions depending on your operating system which is described in this document and update the driver by manual allocation of the USB driver in \Drivers subdirectory of CamControl LITE/PRO or by the included drivers of your operating system.

If necessary run the installation of the USB driver manually (again). The drivers can be found in \Drivers subdirectory of your CamControl LITE/PRO software.

Note the order of the connection setup. It is recommended turning off the device and disconnecting the USB cable. Turn the unit back on. After successful device startup (about 2 minutes) plug in the USB cable first to the USB jack on the HeiTel device (printer interface). Then connect the other end to the USB port of your PC and follow the installation instructions. If necessary a new manual driver installation is needed.

If necessary use another USB port of your computer. Note that a new USB driver installation may be required.

In some cases, it is recommended rebooting the PC. During the restart make sure that the USB cable is not plugged in. Only after a complete restart the USB cable should be reconnected again.

If you are still experiencing problems with the USB connection is recommended using the network interface (default IP address 192.168.31.95) to establish a connection to the device. Consult also the CamControl LITE / PRO manual to get more information.