

OCULUS



SOFTWARE INSTALLATION

 OCULUS®

Notes on this instruction manual

To ensure safe operation, it is essential that you use the device correctly. For this reason you should familiarize yourself thoroughly with the contents of this instruction manual before operating the device. In particular, pay attention to the safety instructions.

Read the instructions and user manual of the OCULUS. There you will find all the information for using the device.

Due to ongoing development, the diagrams shown may depict minor changes to the actual device delivered.

Depending on your operating system, the images shown below may differ from what you see on your PC.

If you have any queries or would like additional information about your device, do not hesitate to call or send us a mail or a fax. Our service team will gladly assist.

OCULUS Optikgeräte GmbH



OCULUS is certified according to DIN EN ISO 13485, setting high standards of quality for the development, manufacture, quality assurance and service of the entire range of products.

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1 Software Installation

This guide will help you install the OCULUS device software.

Procedures are described for the following topics:

- In general, when installing the OCULUS software, the drivers are automatically installed.
- Depending on your PC settings, you may have to perform the driver installation step-by-step.
- In order to avoid communication problems with your PC, you may need to change some settings.

Depending on your operating system, the images shown below may differ from what you see on your PC.

The software installation is valid for the following devices:

Device	
Binoptometer®3	Keratograph 4
Binoptometer®4P	Keratograph 5M
Centerfield® 2	Mesotest II Mesotest II konkav
Corvis® ST	PARK 1®
C-Quant	PARK 1® Basic
Easyfield®	Pentacam® Pentacam® HR Pentacam® HR Premium Pentacam® AXL
Easygraph	Smartfield
HMC-Anomaloskop (MR) HMC-Anomaloskop (R)	Twinfield®
ImageCam® 2/ImageCam® 3	

2 Safety instructions

This chapter contains a summary of the most important safety-related information.

- Read these instructions carefully.
- Read the instructions for the equipment employed.

2.1 Graphic symbols used



Note

Identifies situations which can result in erroneous results, or denotes application information as well as useful or important information.



Provides more thorough information on the product or its handling which require more careful attention.

2.2 Note for software installation



Note

OCULUS is not liable for damage caused by a faulty installation.

- Follow these instructions to install the software.
-



Microsoft ended the support for Windows® XP on 8 April 2014. Security or operational updates for the XP operating system will no longer be developed or delivered. This also applies for the Windows® XP mode on computers running Windows 7. If you continue to use Windows® XP without XP support, your data will be more vulnerable to security risks and viruses. Therefore, we recommend

- that you disconnect your computer from the internet and use it as a stand-alone computer
- or
- that you update your operational system to the latest version of Microsoft Windows®.
-

3 Install OCULUS Software

Before first use, you must install the software on your laptop or PC. If a netbook or a control unit is supplied with the device, it comes pre-installed.



The software installation is illustrated with screen shots of the different OCULUS devices. Afterwards, your OCULUS device will be visible.

If you need to make device-specific adjustments, we will point it out to you.

If you want to link OCULUS Corvis® ST software and OCULUS Pentacam®/ Pentacam® HR/Pentacam® AXL software, proceed as described in [sec. 3.1, page 6](#).

- ➔ Check the minimum requirements of your PC/laptop, further information in the Instruction Manual of the OCULUS device.

The OCULUS software is located on the included CD or the USB flash drive (Binoptometer 4P).



ImageCam® 2:

- ➔ Install the ImageCam® 2 software before connecting the ImageCam® 2 to the computer.

- ➔ Switch on the Laptop/PC.
- ➔ Insert the CD and insert the USB flash drive into the appropriate USB port.
- ➔ Open the drive of the device software or USB flash drive in Windows Explorer.
- ➔ Double click „Setup.exe“ to start the installation.

The following screen appears:



Fig. 3-1: Language settings

- ➔ Select a language and confirm with [OK].

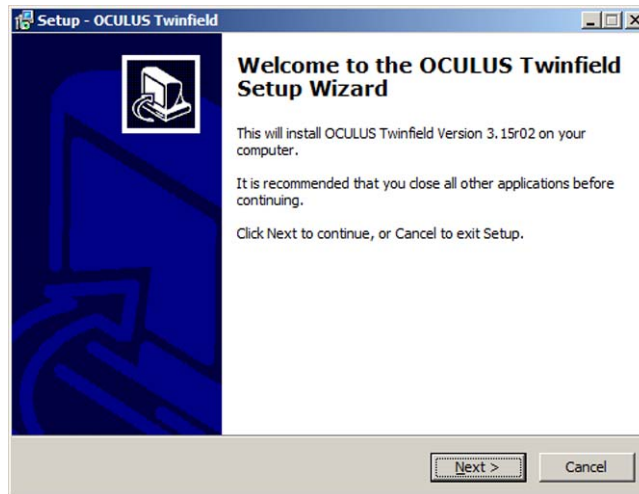


Fig. 3-2: Install setup wizard

- ➔ Press the [Next] button to continue the installation.

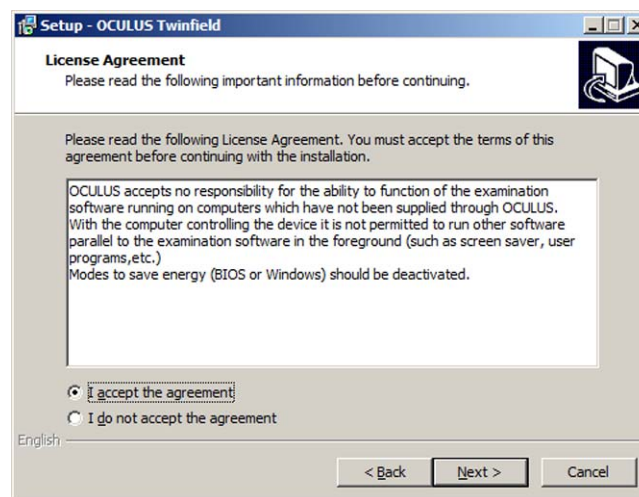


Fig. 3-3: Accept the license agreement

- ➔ Read the license agreement carefully.
- ➔ Click the radio button "I accept the agreement" and press the [Next] button.

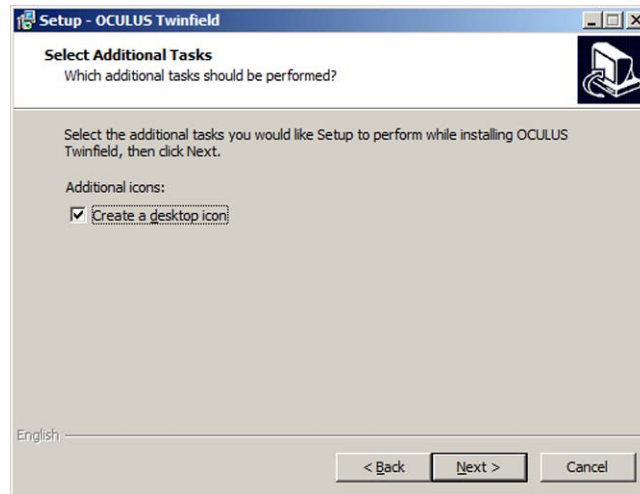


Fig. 3-4: Create a desktop icon

- ➔ Click "Create a desktop icon" checkbox if necessary.
- ➔ Press the [Next] button to continue the installation.

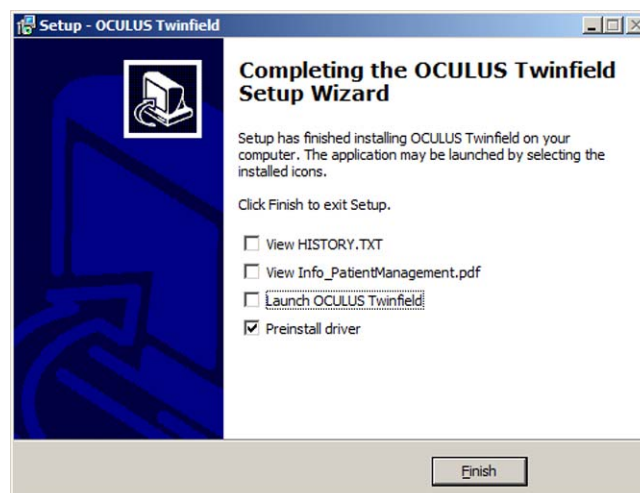


Fig. 3-5: Complete installation

- ➔ Press the [Finish] button to complete the installation.
The OCULUS program is now installed on your PC / laptop.



ImageCam® 2: This query appears: Do you want to import the demo examinations?

- ➔ If you want to import the demo examinations, press [Import].
- ➔ If you do not need the demo examinations, press [Cancel].

At the end of the installation the following dialog appears:

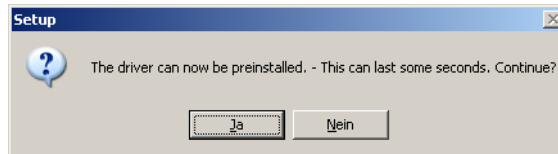


Fig. 3-6: Dialog "Driver settings"

- ➔ Press the [Yes] button. The installation of the driver software will now start automatically, see [sec. 4, page 9](#).

3.1 How to link Corvis® ST Software and Pentacam® Software

This section will help you to link the OCULUS Corvis® ST software and OCULUS Pentacam®/Pentacam® HR/Pentacam® AXL software (Pentacam® software). With this link you can share the database and you can use the Pentacam® features in the Tomographic/Biomechanical assessment software within the Corvis® ST software.

Depending on your operating system, the images shown below may differ from what you see on your PC.

The software installation is valid for the following software versions:

Corvis® ST	V1.3r1469
Pentacam®/Pentacam® HR/Pentacam® AXL	V1.20r98

The Corvis® ST computer software requires firmware version 1.04.1466 on the Corvis®. If an older version is installed, also update the firmware.

Pentacam®: Requirement for the sharing of calculation of the Tomographic Biomechanical Assessment software:

- Belin/Ambrosio license
- Pentacam® floating license key



- ➔ Install the Pentacam® software first.

Preparing the installation

OCULUS Corvis® ST software and OCULUS Pentacam® software are located on the USB flash drive.

In this example we show the installation of the Corvis® ST software.

- ➔ Switch on the Laptop/PC.
- ➔ Insert the USB flash drive into the USB port.
- ➔ Open the Windows Explorer.

Installation of OCULUS Corvis® ST software

- ➔ Double click "Corvis_ST_Setup.exe" (or "Pentacam_Setup.exe") to start the installation.

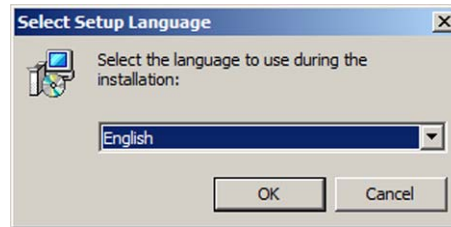


Fig. 3-7: Language settings

- ➔ Select the language and confirm with [OK].
- ➔ Click [Next].

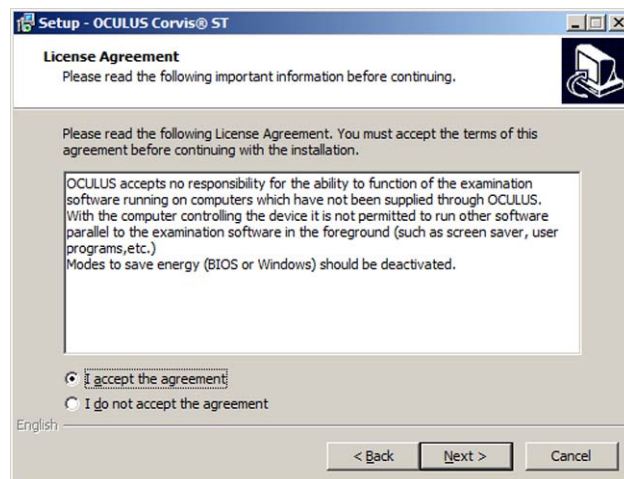


Fig. 3-8: Accept the license agreement

- ➔ Read the license agreement carefully and click the [Next] buttons.

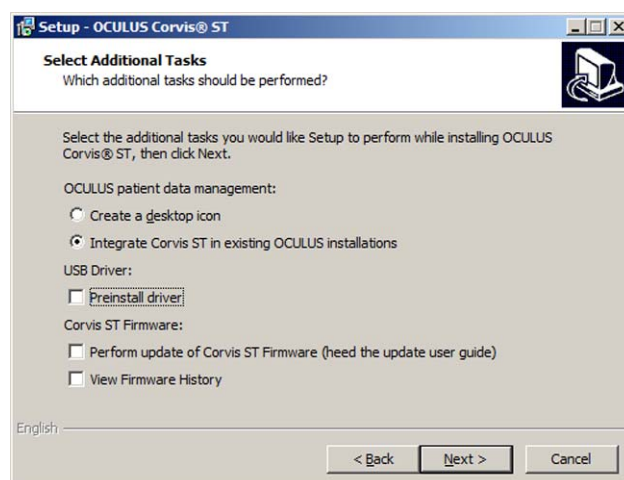


Fig. 3-9: Integrate Corvis® ST in existing OCULUS installations

- ➔ Enable the checkbox [Integrate Corvis ST in existing OCULUS installations].
- ➔ Click [Next] and click [Install].
- ➔ Disable all checkboxes.

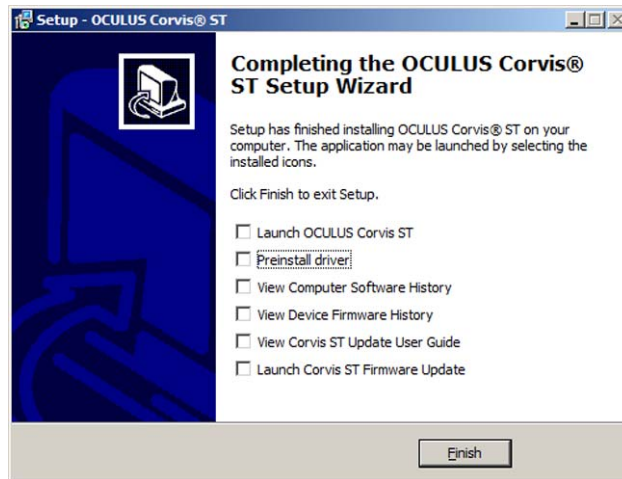


Fig. 3-10: Complete installation



The driver installation is required if the Corvis ST is connected with the PC for the first time.

- ➔ Click [Finish].

4 Install Driver Software



The software installation is illustrated with screen shots of the Binoptomter 4P. Afterwards, your OCULUS device will be visible. If you need to make device-specific adjustments, we will point it out to you. The following screen shots were created with Windows 7. Depending on the operating system, the screens may vary.

Make sure you have administrator rights.

➔ Navigate to the folder for the OCULUS:

Device	Drive	Device	Drive
Binoptometer® 3 ^{a1}		Keratograph 4	C:\Topo\Driver
Binoptometer®4P	C:\BINO4\DRIVER	Keratograph 5M	
Centerfield® 2	C:\CENTER\DRIVER	Mesotest II ¹	
		Mesotest II konkav ¹	
Corvis® ST	C:\Corvis\DRIVER	PARK 1®	C:\Park\Driver
C-Quant		PARK 1® Basic	C:\Park\Driver
Easyfield®	C:\EASY\DRIVER	Pentacam®	
		Pentacam® HR	C:\Pentacam\Driver
		Pentacam® HR Premium	
		Pentacam® AXL	
Easygraph	C:\Easygraph\DRIVER	Smartfield	C:\SMARTFIELD\DRIVER
HMC-Anomaloskop (MR) ¹		Twinfield®	C:\TWIN\DRIVER
HMC-Anomaloskop (R) ¹			
ImageCam® 2/ImageCam® 3	C:\Imagecam\Driver		

1. You can use the provided USB serial converter if there is no serial interface at the computer. You will find the appropriate driver at the data medium in this folder: .../Driver/usb2serial

4.1 Start installing the driver software

- ➔ Double click "Setup.exe" to start the installation.



Fig. 4-1: Start installation wizard

- ➔ Press the [Next] button to continue the installation.
If no OCULUS driver software is installed on your computer for the device, follow the instructions described in [sec. 4.3, page 11](#).
If driver software was already installed, you must first uninstall that driver software before you can continue installing the driver software, [sec. 4.2, page 10](#).

4.2 Uninstall Driver Software

If driver software is already installed, the following screen is displayed.

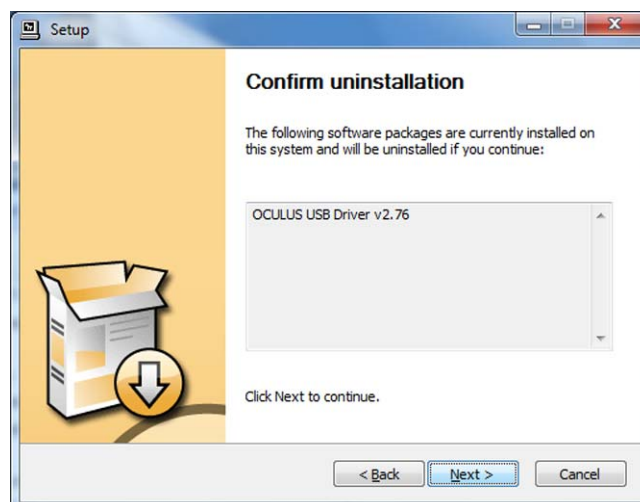


Fig. 4-2: Uninstall any existing driver software

- ➔ If necessary, press the [Next] button to uninstall existing driver installations.
- ➔ Proceed as described in [sec. 4.3, page 11](#).

4.3 Continue installing the driver software

The following screen appears:

- during the initial installation of the driver software
- after uninstalling the driver software

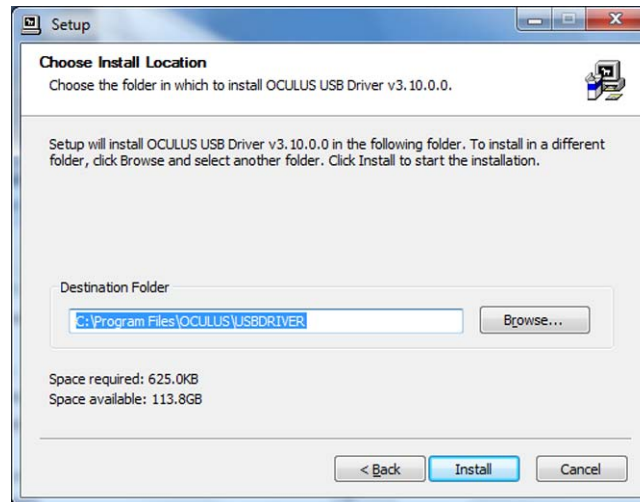


Fig. 4-3: Select destination folder

- ➔ Select a destination folder.
- ➔ Press the [Install] button to install the driver software.

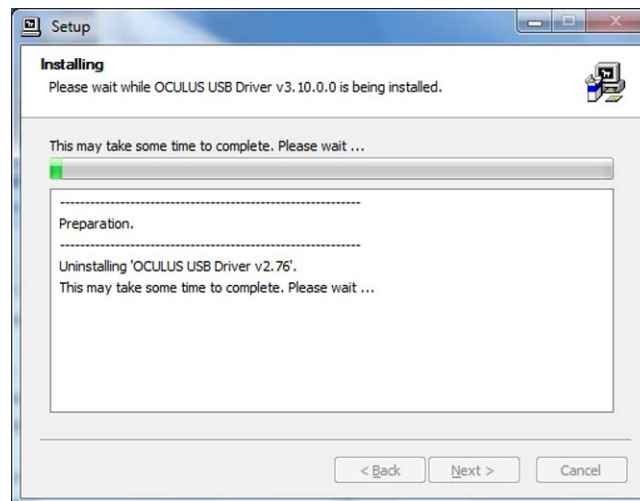


Fig. 4-4: Display while installing

The driver software is preinstalled.

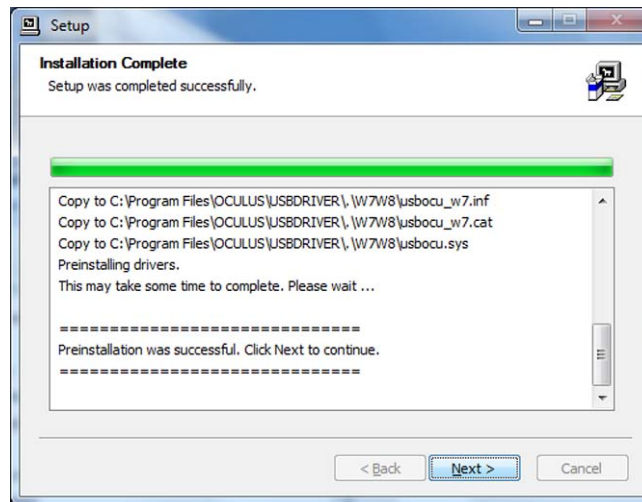


Fig. 4-5: Complete the installation 1

➔ Press the [Next] button.

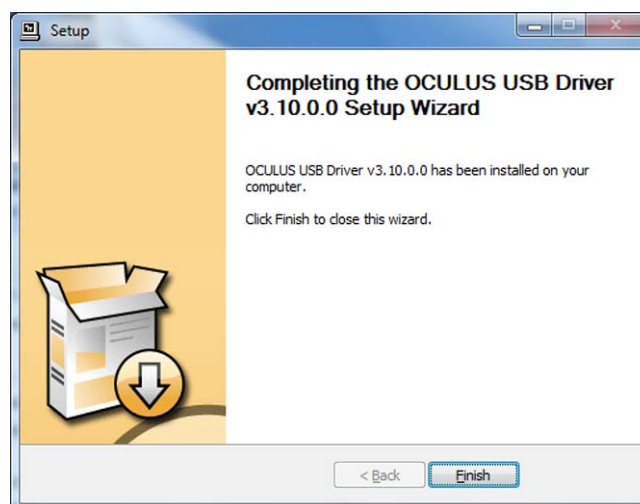


Fig. 4-6: Complete the installation 2

➔ Press the [Finish] button.

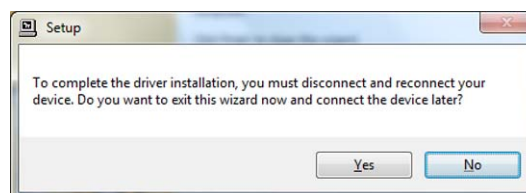


Fig. 4-7: Complete the installation 1

➔ Confirm with the [Yes] button.
 ➔ Connect the PC/laptop to the OCULUS and turn the OCULUS on.

ImageCam® 2:

Connect the ImageCam® 2 with the computer via USB cable.



If you can not install the drivers automatically, you may need to update them, see [sec. 5, page 13](#)

5 Update Driver Software

If your computer does not recognize the OCULUS device and reports it as "Unknown Device" hardware, you need to update the driver software. Then it will be listed in the Device Manager.



The software installation is illustrated with screen shots of the Binoptomter 4P. Afterwards, your OCULUS device will be visible. If you need to make device-specific adjustments, we will point it out to you.

Follow these steps to update the driver software:

- ➔ Open the Device Manager.
- ➔ Select "Unknown device".

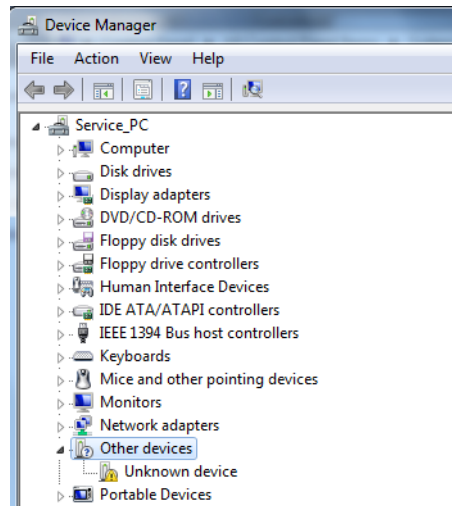


Fig. 5-1: Select "Unknown Device"

- ➔ Press the right mouse button.

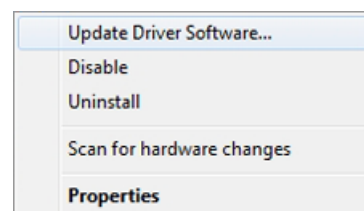


Fig. 5-2: Choose an Option

➔ Select the "Update Driver Software" option.

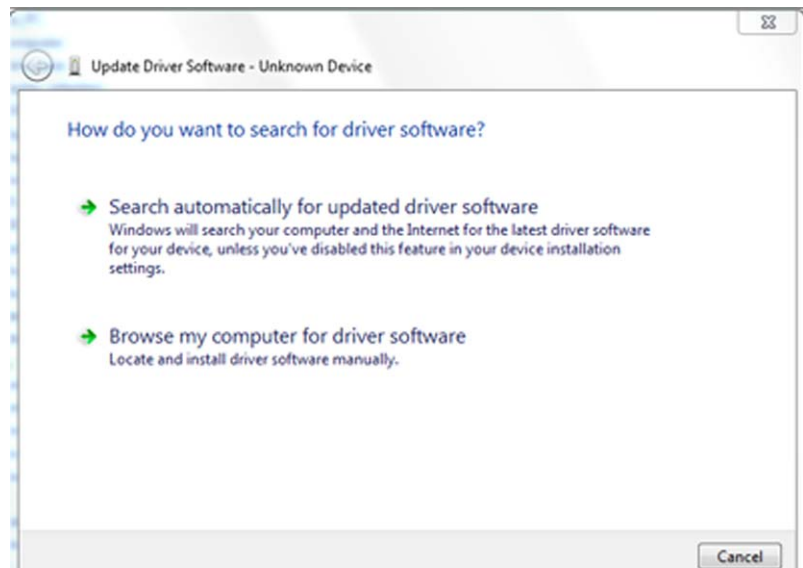


Fig. 5-3: Choose an Option

➔ Select "Browse my computer for driver software" option.

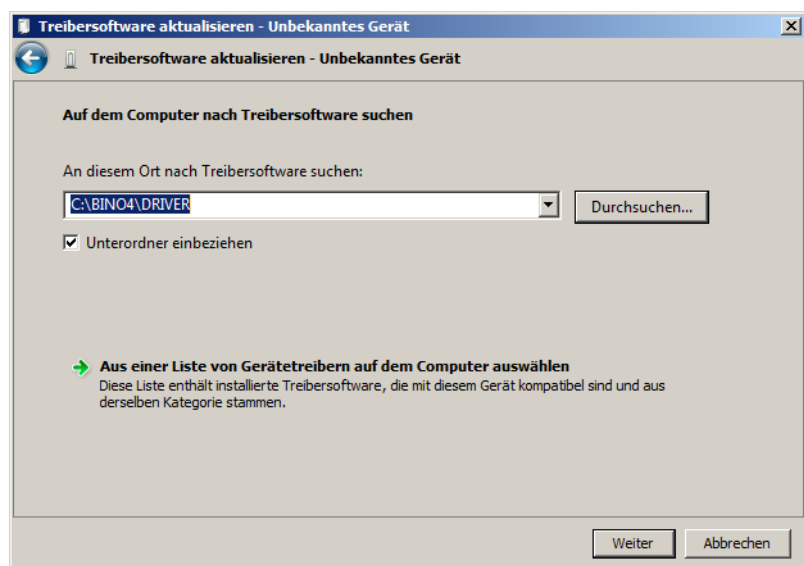


Fig. 5-4: Browse for Folder

➔ Press the [Search] button.

➔ Select the folder for your device from the following table or C:\WINDOWS\OCULUS\driver.

Device	Drive	Device	Drive
Binoptometer® 3 ^{a1} Binoptometer®4P	C:\BINO4\DRIVER	Keratograph 4 Keratograph 5M	C:\Topo\Driver
Centerfield® 2	C:\CENTER\DRIVER	Mesotest II ¹ Mesotest II konkav ¹	
Corvis® ST	C:\Corvis\DRIVER	PARK 1®	C:\Park\Driver
C-Quant		PARK 1® Basic	C:\Park\Driver
Easyfield®	C:\EASY\DRIVER	Pentacam® Pentacam® HR Pentacam® HR Premium Pentacam® AXL	C:\Pentacam\Driver
Easygraph	C:\Easygraph\DRIVER	Smartfield	C:\SMARTFIELD\DRIVER
HMC-Anomaloskop (MR) ¹ HMC-Anomaloskop (R) ¹		Twinfield®	C:\TWIN\DRIVER
ImageCam® 2/ImageCam® 3	C:\Imagecam\Driver		

1. You can use the provided USB serial converter if there is no serial interface at the computer. You will find the appropriate driver at the data medium in this folder: .../Driver/usb2serial

➔ Press the [Next] button..

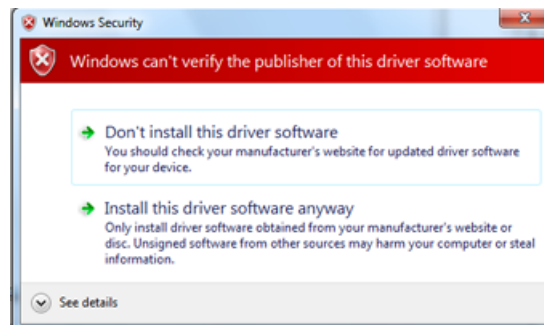


Fig. 5-5: Install device software

➔ Install the software.

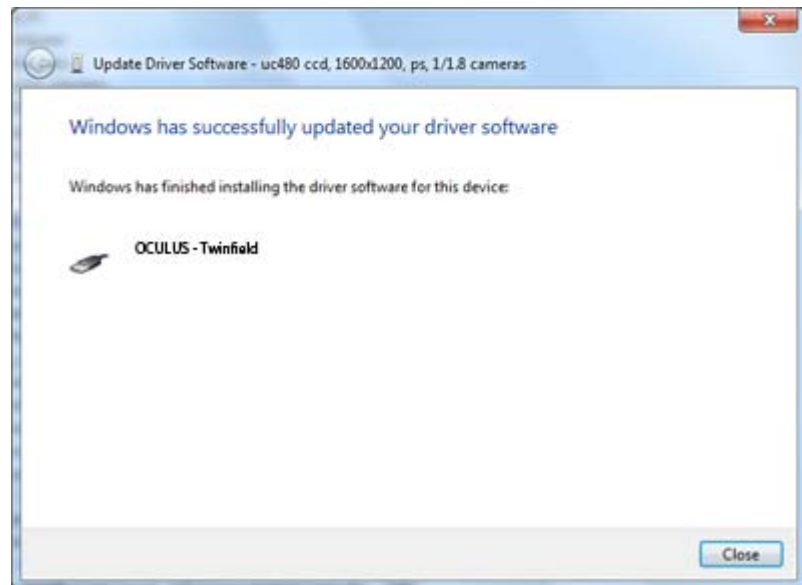
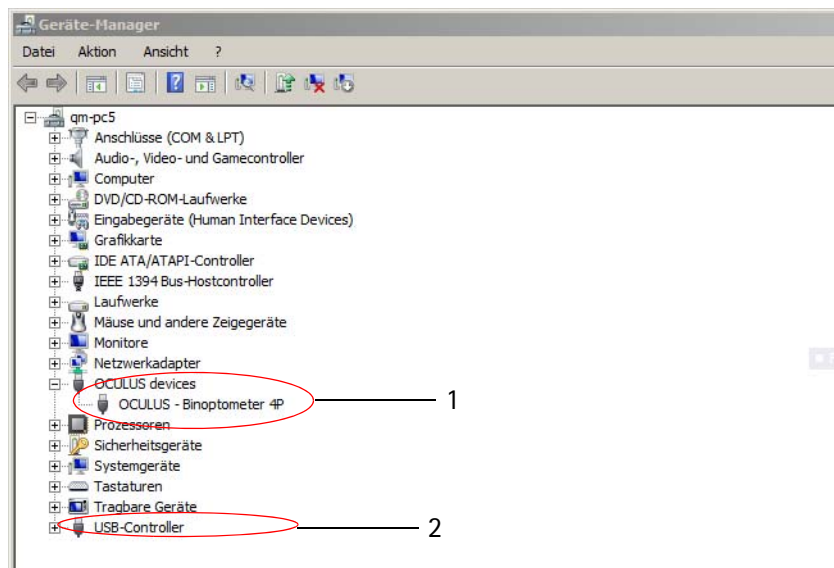


Fig. 5-6: Finish installation

➔ Press the [Close] button.

In the Device Manager your OCULUS is displayed as shown here Binoptometer 4P.



1 For devices except ImageCam® 2

2 For ImageCam® 2

Fig. 5-7: Example Binoptometer 4P

6 Adjust settings

You must manually adjust some settings of the driver software so that the OCULUS software on your PC or laptop works properly.

- Set USB root hubs, see [sec. 6.1, page 17](#)
- Change settings for the power plan, see [sec. 6.2, page 19](#)

You will need administrator rights.



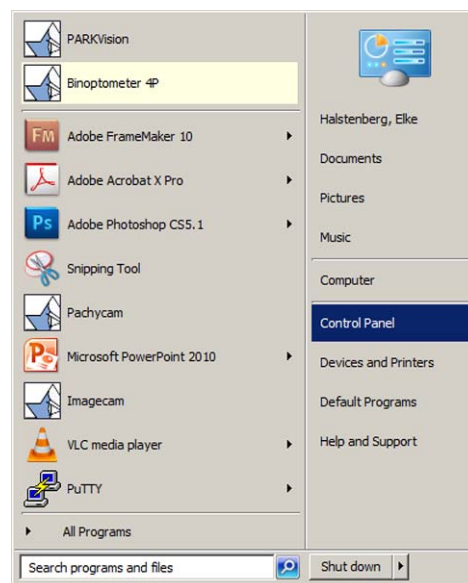
The following screen shots were created with Windows 7. Depending on the operating system, the screens may vary.

6.1 Set USB root hubs

By default, USB devices can be switched off by the operating system to save energy. However, this can lead to communication problems with the OCULUS.

How to do this is shown on the basis of Windows 7.

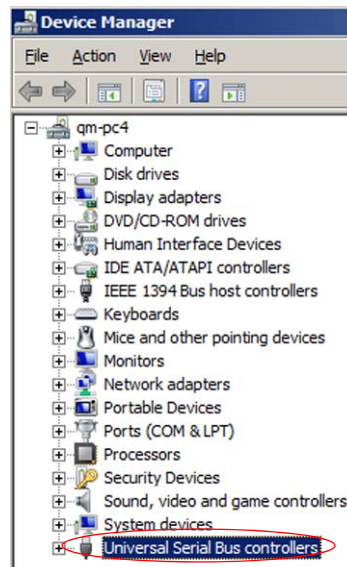
- ➔ Open the Windows Start menu and click "Control Panel".



➔ Click "System and Security" > "Device Manager".



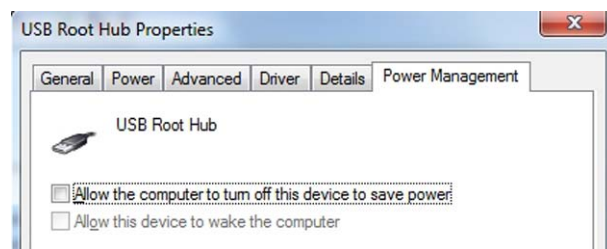
➔ Click "Universal Serial Bus controller"



→ Select a USB root hub



→ Select the "Power Management" tab panel and deactivate the checkbox "Allow the computer to turn off this device to save power".



→ Confirm with [OK].



Note

If more than one USB Root Hub is listed in the Device Manager, you have to change the power management settings for each hub.

6.2 Change settings for the power plan

By default, USB devices can be switched off by the operating system to save energy. However, this can lead to communication problems with the OCULUS. That is why you need to change the settings for the active power plan.



The following screen shots were created with Windows 7. Depending on the operating system, the screens may vary.

Change the settings as follows:

➔ Click "Control Panel" > "All Control Panel Items" > "Power Options".

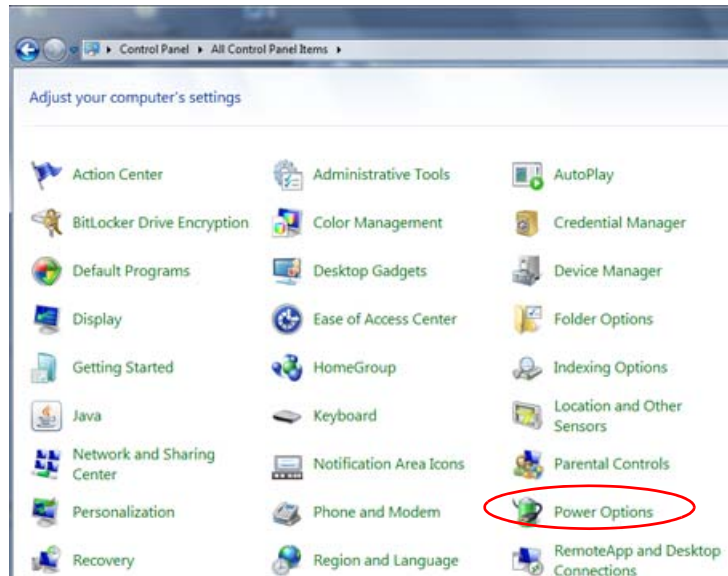


Fig. 6-1: Select power options

➔ Click "Change plan settings" for the active power plan, in this case "Balanced".

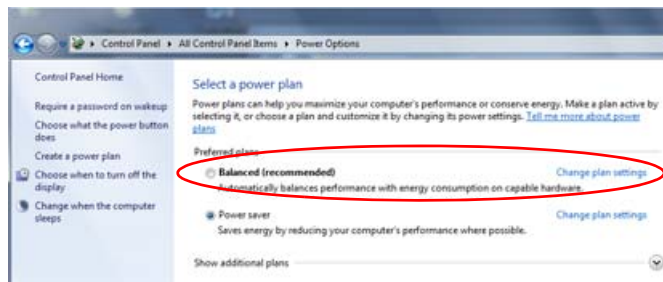


Fig. 6-2: Change settings for the active power plan

➔ Click "Change plan settings".

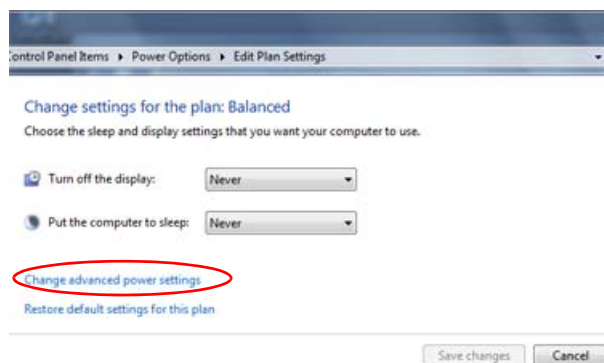


Fig. 6-3: Change power settings

- ➔ Click "Change advanced power settings".

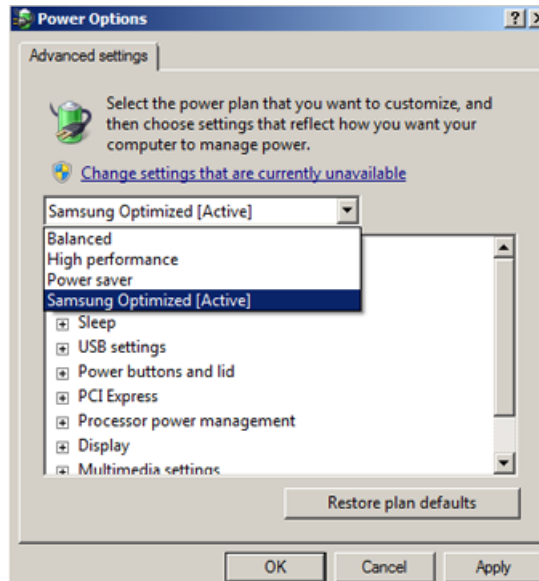


Fig. 6-4: Advanced settings

- ➔ Select "Balanced [Active]" from the drop-down list
- ➔ Open the folder "USB Settings" > "USB selective suspend setting".

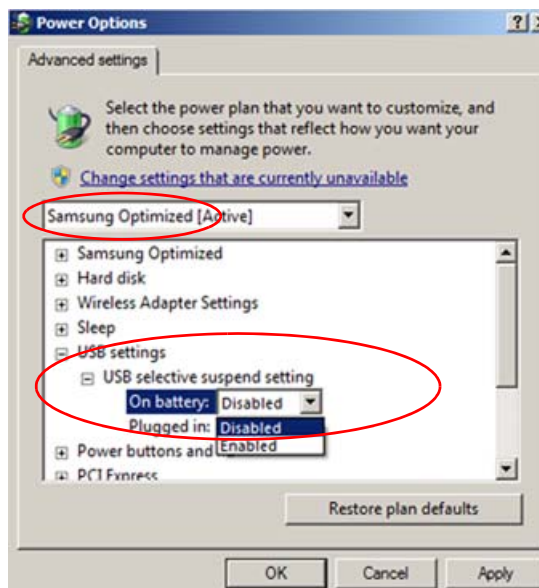


Fig. 6-5: Setting to deactivate USB power saver plan

- ➔ Select "Setting: Disabled" and confirm with [OK].
- ➔ Select "Power Saver" from the drop-down list.
- ➔ Open the folder "USB Settings" > "USB selective suspend setting".
- ➔ Select "Setting: Disabled" and confirm with [OK].
- ➔ Select "High performance" from the drop-down list.
- ➔ Open the folder "USB Settings" > "USB selective suspend setting".
- ➔ Select "Setting: Disabled" and confirm with [OK].

That concludes the settings.

6.3 Windows® 10: Solving problems at the start

Problem at the start: If you start Windows® 10 and you use an OCULUS device connected with the computer, the device was not recognised when the PC started up.

You can solve this problem by enabling the quick start function..

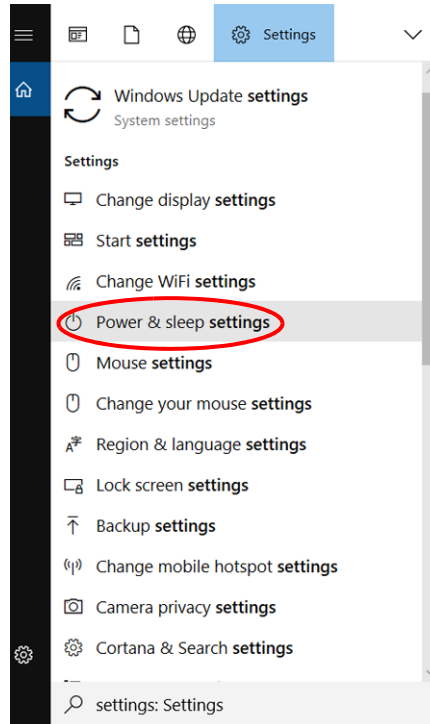


Abb. 6-6: Windows® start menu

➔ Click "Control Panel" > „Power & sleep settings“.

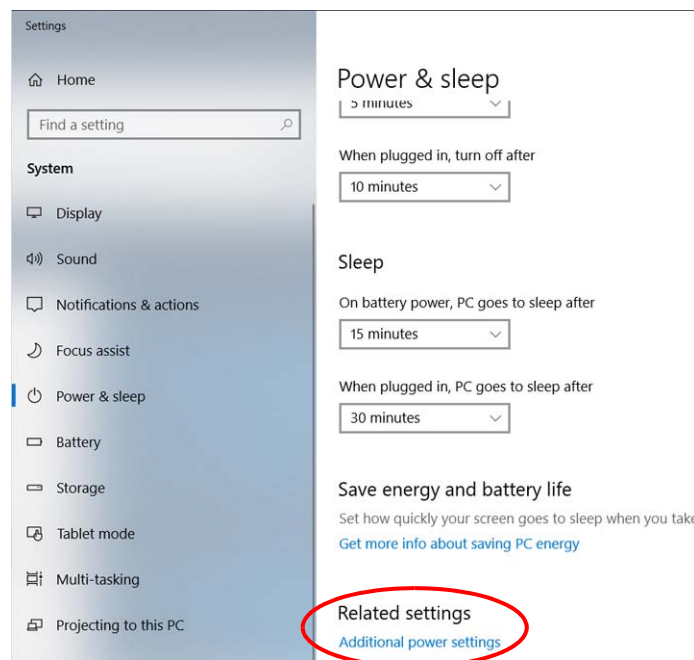


Abb. 6-7: Select "Related settings"

➔ Select "Related settings".

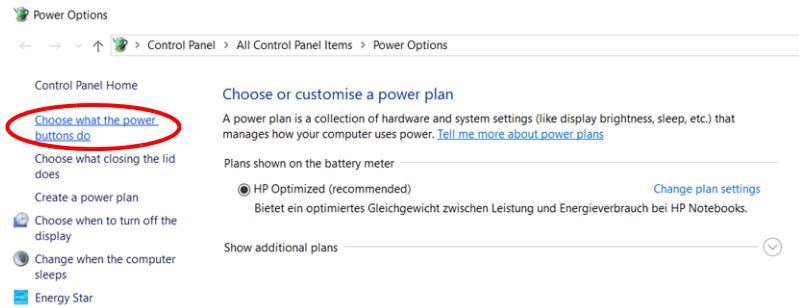


Abb. 6-8: Windows® "Power Options"

➔ Click "Choose what the power buttons do".

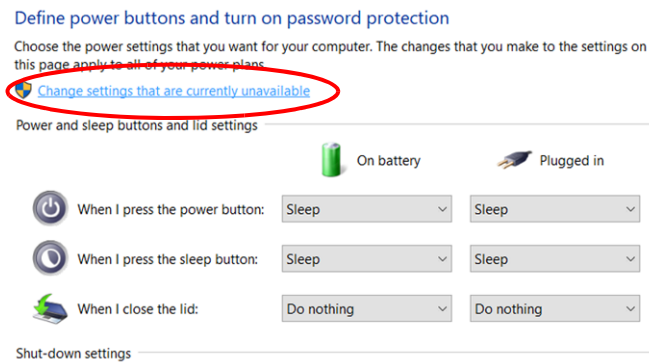


Abb. 6-9: Select "Change settings that are currently unavailable"

➔ Click "Change settings that are currently unavailable".

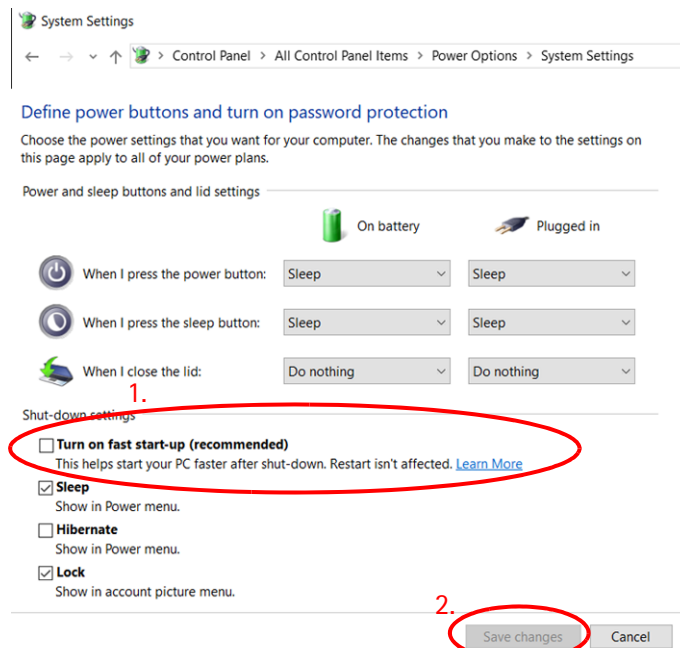


Abb. 6-10: Disable "Turn on fast start-up (recommended)"

- ➔ Disable the "Turn on fast start-up (recommended)" checkbox (1).
- ➔ Save your changes (2).

7 Finish the software installation

- ➔ After successful installation turn off the PC/laptop.
- ➔ Connect your OCULUS as described in the respective instruction manual.

8 Special features of Perimeters

You will find special features of Twinfield® 2, Centerfield® 2, Easyfield® C and Easyfield® S-Installation in [sec. 8.1, page 25](#), of Smartfield in [sec. 8.2, page 25](#).

8.1 install the TNT Software later

For the OCULUS Perimeter you can install the TNT Software later.

Device
Easyfield®
Twinfield® 2
Centerfield® 2

Prerequisites for the Perimeter software: Version 3.15 or higher



Install the TNT software separately. It will not be installed automatically when you open the Perimeter setup file.

Proceed as follows (example Twinfield):

- ➔ Open the directory `C:\TWIN\TNT_Setup`
- ➔ Double click "TNT_Setup" to start the installation.

8.2 Connecting Smartfield with computer

You can connect the Smartfield with the computer in different ways.

- directly via network cable (patch cable), [page 26](#)
- network (DHCP server is required), [page 29](#)
- directly via network cable (patch cable) and USB-RJ 45 adapter, [page 32](#)

8.2.1 Connecting via network cable (patch cable) directly

Connect the Smartfield via network cable (patch cable) directly with the computer.



Abb. 8-1: Smartfield-computer-connection with network cable (patch cable)

Needed material:

- Network cable (patch cable)

How to proceed:

- ➔ Connect the Smartfield via network cable (patch cable) with the computer.
- ➔ Turn on the computer.
- ➔ Install the Smartfield software.
- ➔ Switch on the Smartfield.
- ➔ Watch the initialize procedure.
- ➔ Look into the viewer.

You will see a dark and afterwards a bright display where the OCULUS logo and a bar will appear.

After bar is on the end position an IP address will be shown for a few seconds: 10.23.19.73.

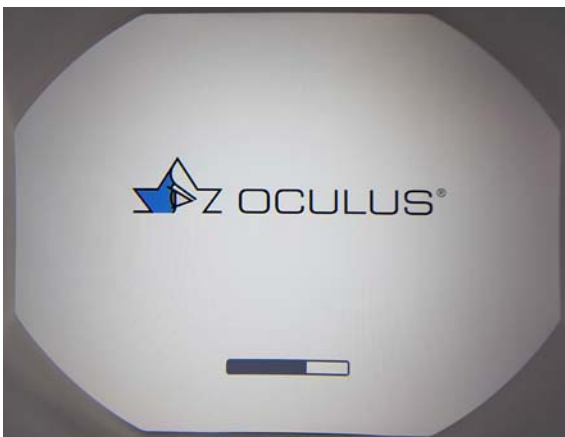


Fig. 8-2: Display of bar and IP address

- ➔ Enter an IP address in the settings of the computer network. The IP address must be in the same rang e[10.23.19. ..].

➔ Click the Network button in the Windows task line.

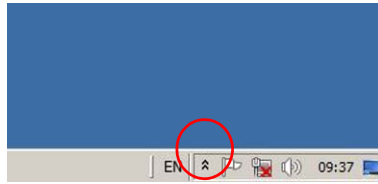


Abb. 8-3: Windows task line

➔ Click "Open Network and Sharing Center".

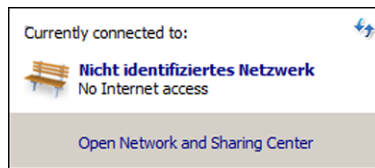


Fig. 8-4: Open Network and Sharing Center

➔ Click "Properties".

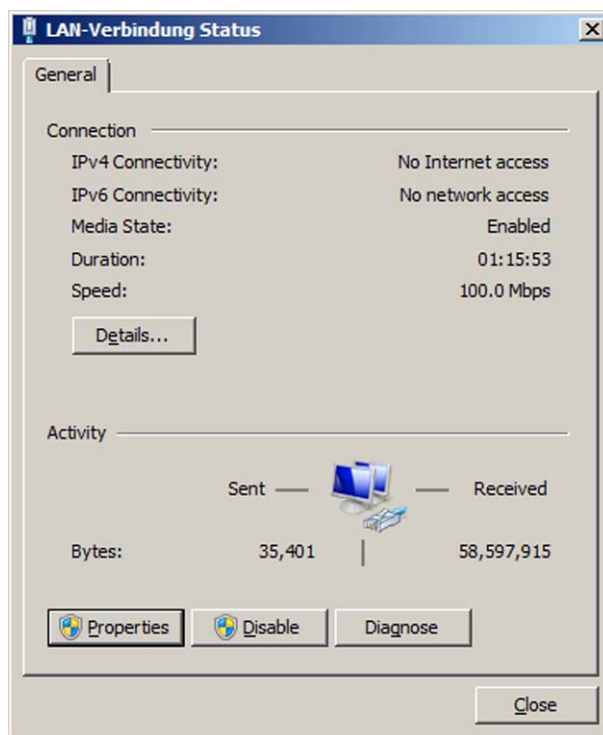


Fig. 8-5: Selecting "Properties"

- ➔ Mark "Internet Protocol Version 4 (TCP/IPv4)".

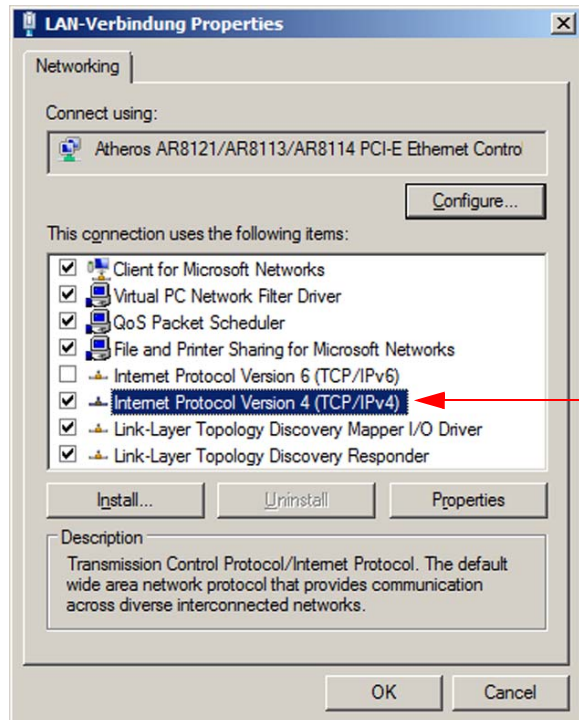


Fig. 8-6: Selecting internet protocol

- ➔ Click "Properties".
- ➔ Enter the IP address and the subnet mask.
The IP address must be in the same range as specified by the device, for example [10.23.19.74]. Do not you use the IP address which is displayed in the device.

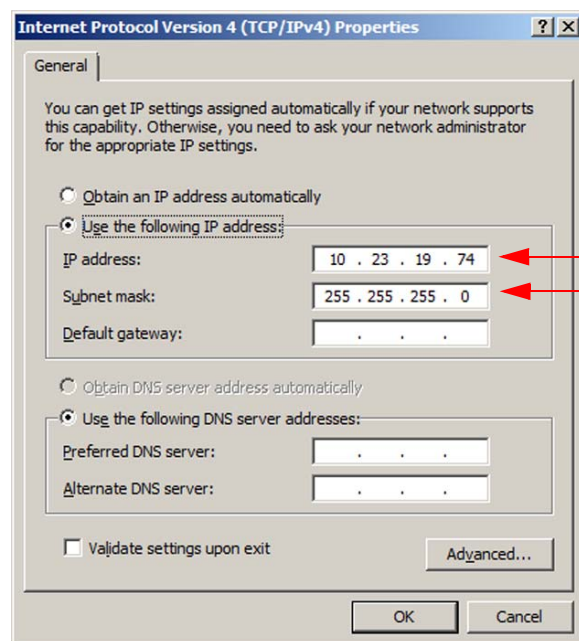


Abb. 8-7: Entering the IP address

- ➔ Click in "OK" and close all windows.

8.2.2 Integrating the Smartfield into the network (DHCP server is required)

If you work in a network system, you will need a DHCP server to connect the Smartfield with the computer.

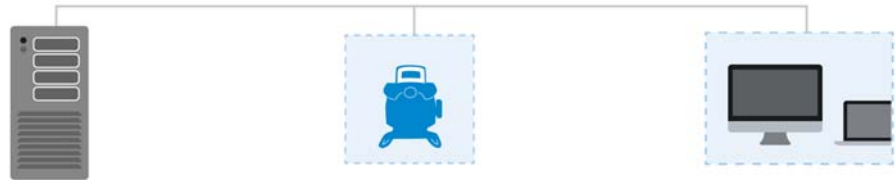


Abb. 8-8: Smartfield-computer-connection in a network system with a DHCP- server



You cannot connect the Smartfield with the network via a static IP address.

Needed material:

- Network cable (patch cable)

How to proceed:

- ➔ Connect the Smartfield with the network via network cable (patch cable).
- ➔ Connect the computer with the network via network cable (patch cable).
- ➔ Turn on the Smartfield and the computer.
- ➔ Open the system settings:
Smartfield program > System > System settings

➔ Press the [Search] button.

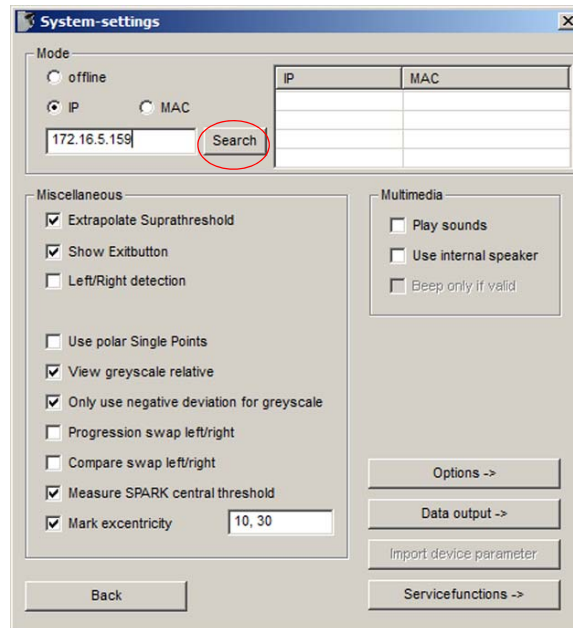


Abb. 8-9: Window "System settings"

The possible IP addresses appear.

➔ Double click the desired IP address.

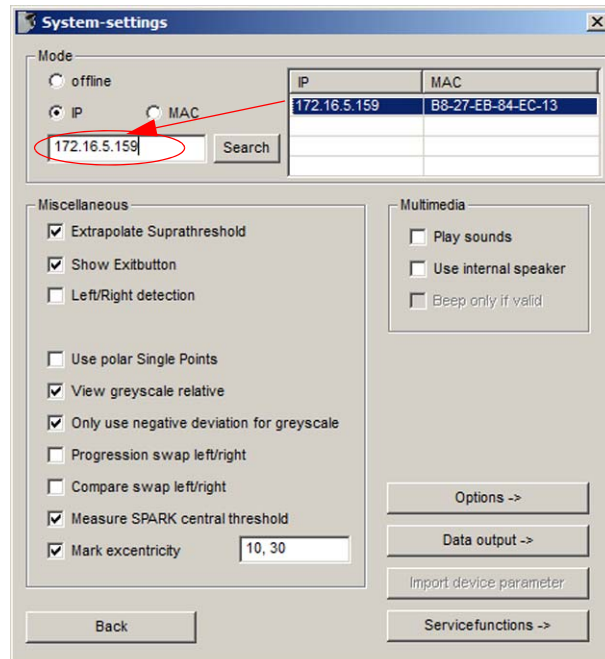


Abb. 8-10: Selection of available IP addresses

IP address is adopted.

For a permanent connection: use the MAC address.

➔ Enable the "MAC" radiobutton.

➔ Double click the desired MAC address.

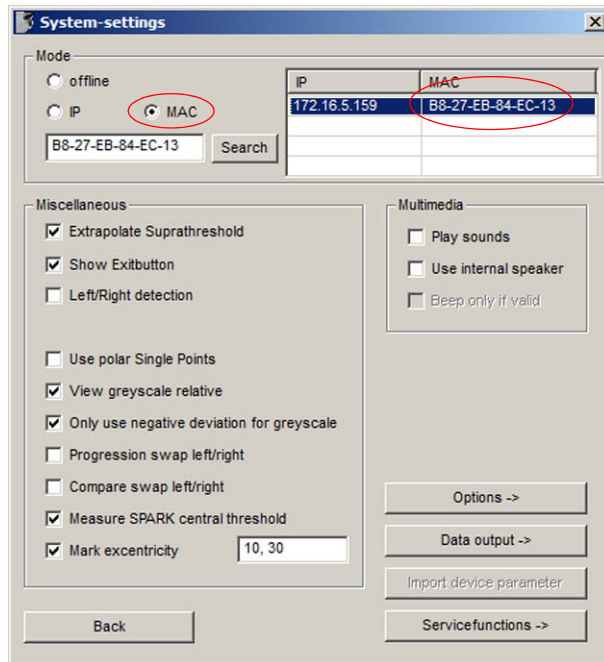


Abb. 8-11: Selection of available MAC addresses

➔ Click "Back" and "Save" to save your settings. Start the Smartfield software again.

8.2.3 Connecting via network cable (patch cable) and USB-RJ 45 adapter

If it is not possible to connect the Smartfield and the computer with the previously described sections, it may be for one of the following reasons

- RJ-45 connector of the computer is wired
- the Windows Firewall has switched off the port 8554

Proceed as follows:

RJ-45 connector of the computer is wired

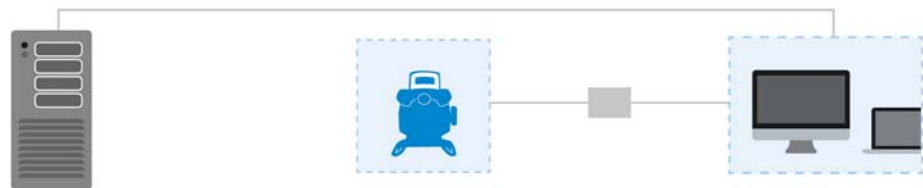


Abb. 8-12: Smartfield-computer-connection in a network with a USB-RJ 45 adapter

Needed material/knowledge:

- USB-RJ 45 adapter
- Network cable (patch cable)

How to proceed:

- ➔ Plug the USB-RJ 45 adapter in the USB socket of the computer.
- ➔ Connect the Smartfield with the computer via USB-RJ 45 adapter.
- ➔ Set the IP address of the device in the Smartfield programm and set the IP address of the network.

Proceed as described in [sec. 8.2.1, page 26](#).

Windows-Firewall hat den Port 8554 abgeschaltet

Needed material/knowledge:

- Network cable (patch cable)

How to proceed:

- ➔ Open Windows System Control > Windows-Firewall
- ➔ Select "Advanced settings".

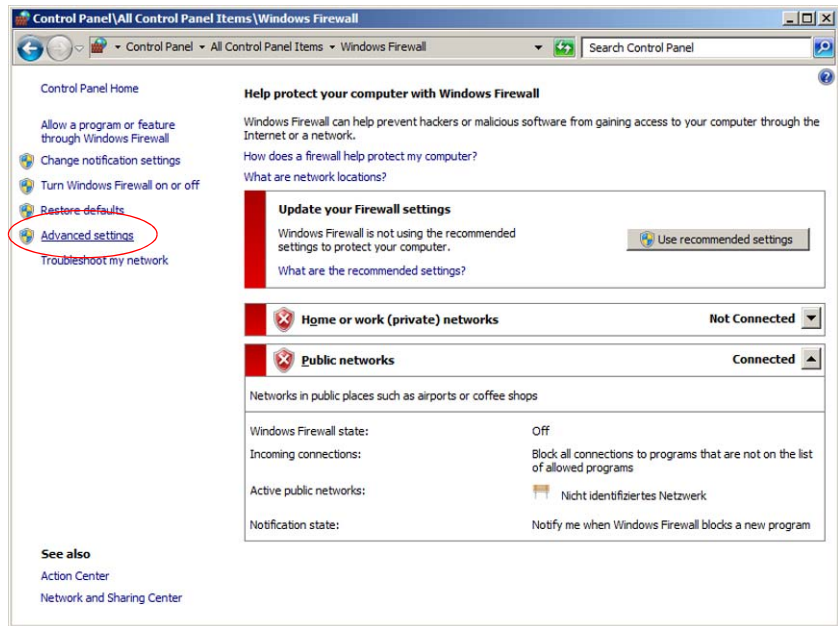


Abb. 8-13: Select "Advanced settings"

- ➔ Select "Inbound Rules" > "New Rule"

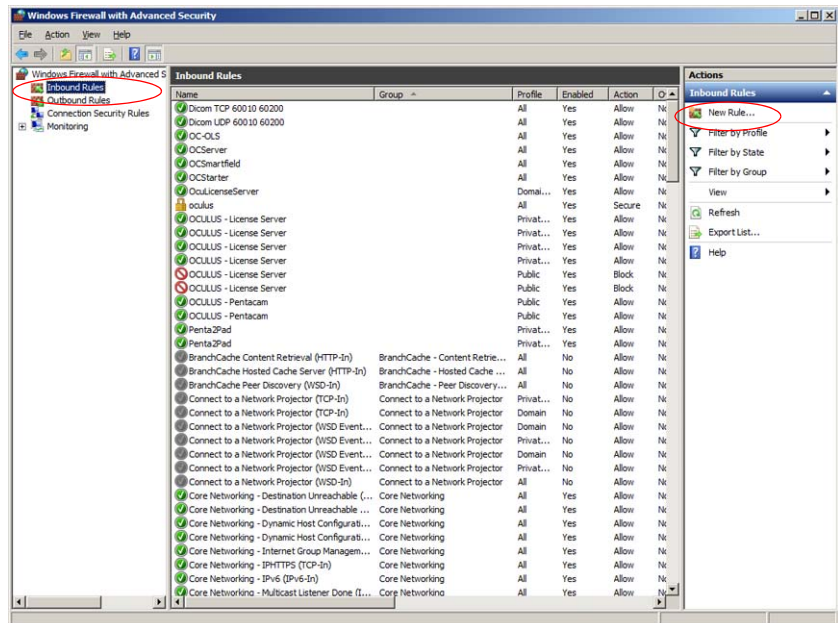


Abb. 8-14: „Pre-select "New Rule"“

The "New Inbound Rule Wizard" opens.

Enter the following:

- ➔ Enable the "Port" radiobutton.

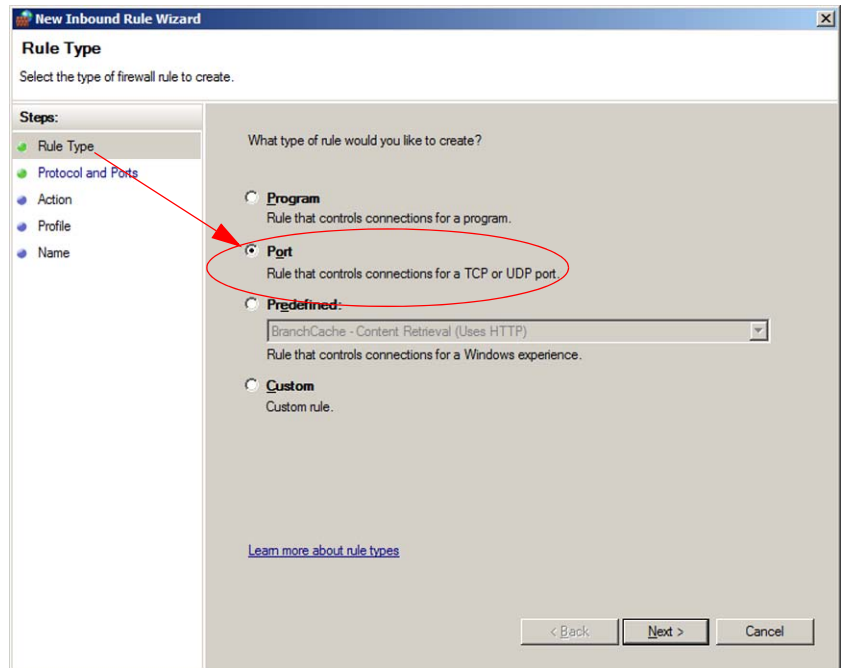


Abb. 8-15: Enable "Port"

- ➔ Enable the "TCP" radiobutton.

- ➔ Enable the "Specific local ports" radiobutton and enter "8554".

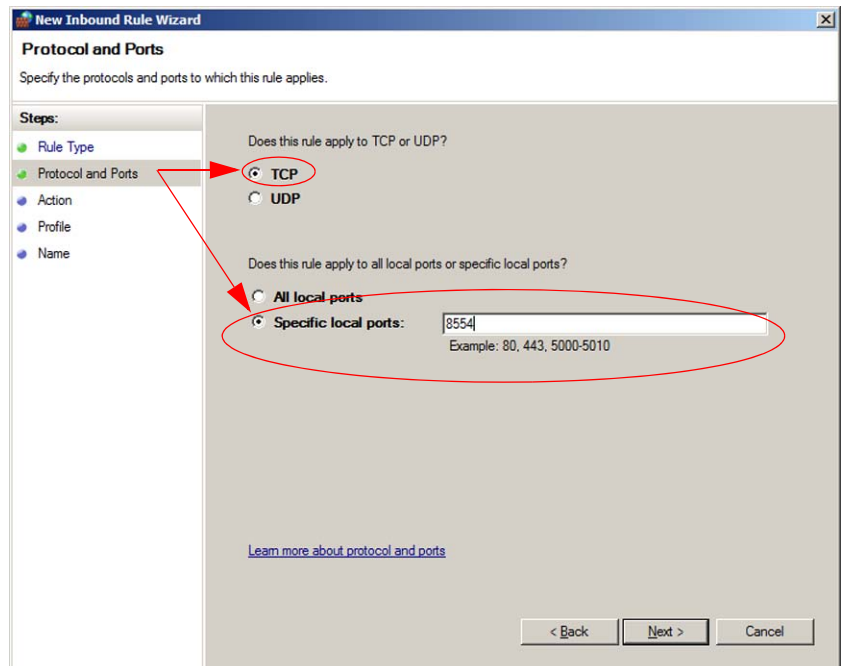


Abb. 8-16: Enable "TCP" and enter local port „8554“

➔ Enable the "Allow the connection" radiobutton.

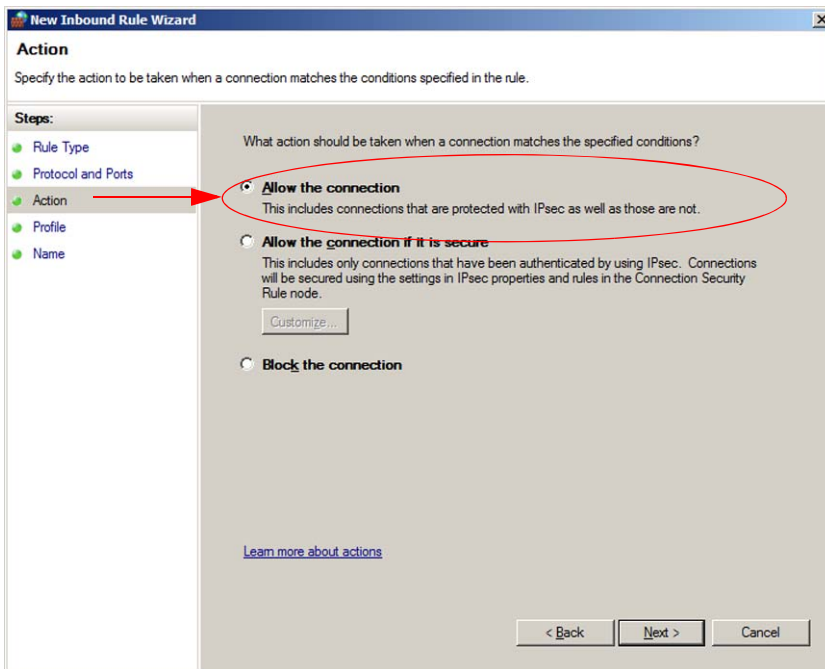


Abb. 8-17: Enable „Allow the connection“

➔ Enable the "Domain", "Private" and "Public" checkboxes.

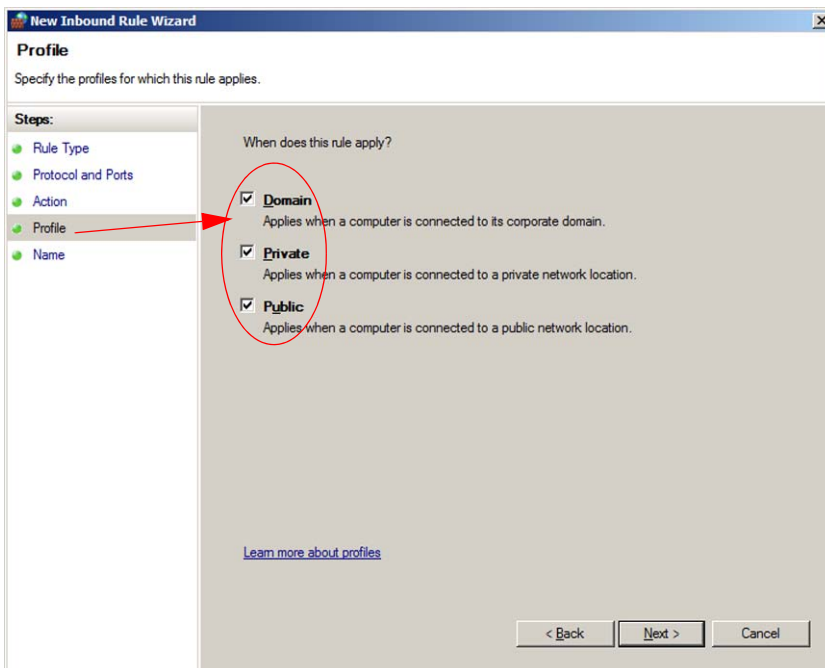


Abb. 8-18: Apply rules

- Enter the name of the device and optionally a description.

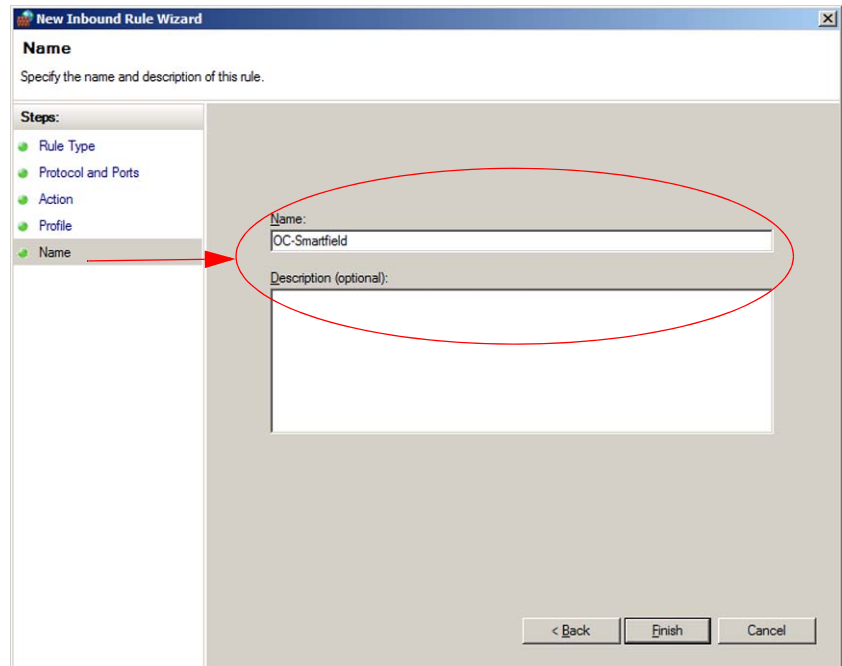


Abb. 8-19: „Apply rules

- Click the [Finish] button.
The 8554 is enabled again.

9 Software-Update Keratograph 5M

9.1 Special features JENVIS Pro Report

To ensure that the latest changes for the JENVIS Pro Report are activated you have to delete all customized settings.



In the case there exist customized worklists and treatment recommendations make screenshots to be able to recreate these settings later.

- ➔ Open the Keratograph 5M software.
- ➔ Select Settings > JENVIS Pro > Customization Editor.
The Dry Eye Report Customization Editor appears.

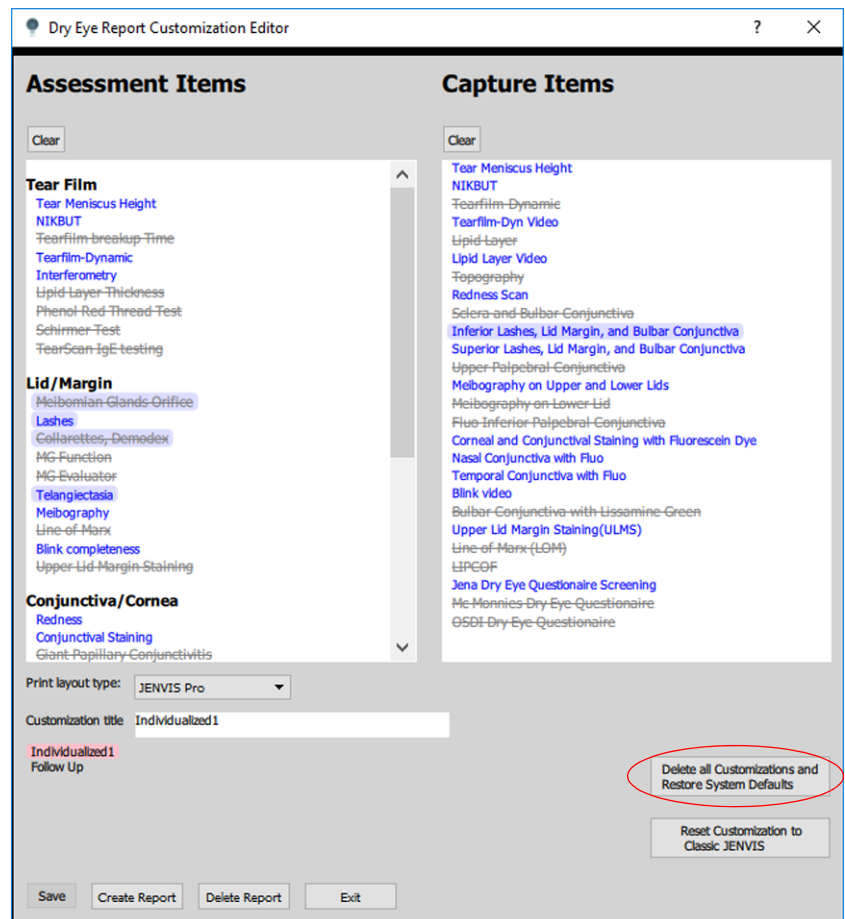


Abb. 9-1: „Dry Eye Report Customization Editor

- ➔ Press the [Delete all Customizations and Restore System Defaults] button.
Now the latest changes of the JENVIS Pro Dry Eye report are activated.
- ➔ Press the [Exit] button to close the menu.

9.2 Special features Crystal TEAR Report

To ensure that the latest changes for the Crystal TEAR Report are activated you have to delete all customized settings.



In the case there exist customized worklists and treatment recommendations make screenshots to be able to recreate these settings later.

- ➔ Open the Keratograph 5M software.
- ➔ Select Settings > Crystal TEAR Report > Customization Editor.
The Dry Eye Report Customization Editor appears.

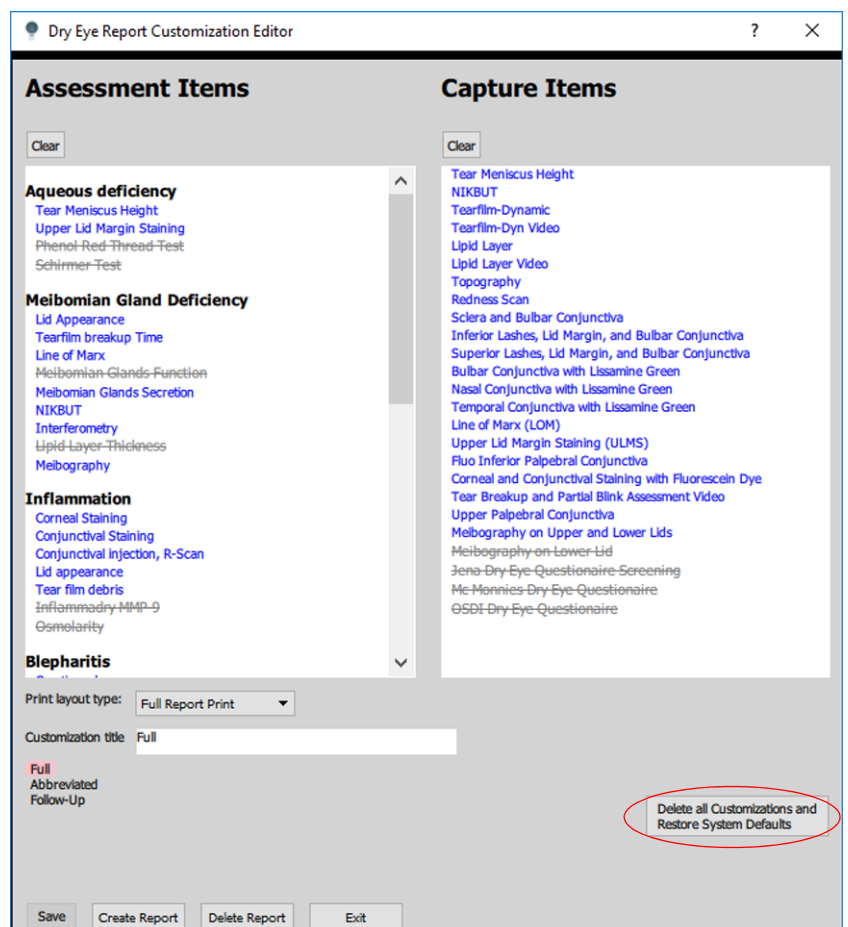


Abb. 9-2: „Dry Eye Report Customization Editor

- ➔ Press the [Delete all Customizations and Restore System Defaults] button.
Now the latest changes of the Crystal TEAR Report are activated.
- ➔ Press the [Exit] button to close the menu.

10 Updating the Firmware

For devices listed below, firmware updates can be carried out using an updater program:

10.1 Corvis® ST

Device	Drive
Corvis® ST	C:\Corvis\Firmware

This folder contains the "CorvisSTUpdate_UserGuide.pdf" file.

➔ Proceed as described in this file.

10.2 PARK 1® and PARK 1® Basic

Device	Drive
PARK 1®	C:\Park\PARK1Update
PARK 1® Basic	C:\Park\PARK1Update

The steps are shown on the basis of a PARK® 1 update.

The name of the installation program

(PARK1Update_X.XX_Y.YYy_Setup.Exe) includes the version names of the measuring head firmware (X.XX) and the operating unit firmware Y.YYy).

The firmware is supplied together with this program and can be installed on the device using the updater program. You can also update the contact lens database.

Install the updater program

Run the installation program and follow the installation instructions on the screen.

As a result, the program directory "C:\PARK1Update" is created, including all required files – the firmware files and the updater program "PARK1Update.Exe".



During installation, you can disable the pre-installation of the USB drivers if they are already installed. This accelerates the installation procedure.

If you are not sure about the correct setting, leave the check box enabled

If the device has not been operated together with the computer:

Before connecting the device to the computer, install the updater program.

This ensures that the drivers are already copied to the computer before connection.

When connecting the device to the computer, the Windows driver installation procedure starts and can be completed by confirming with OK.

If the USB driver has to be installed manually, please refer to the directory "C:\PARK1Update\Driver".

You may need administrator rights to be able to install the driver.

Firmware update using the updater program:

- ➔ Restart PARK 1®.



Note

If you switch off the device during the update procedure, it is no longer ready for operation.

- ➔ Leave the device switched on during the update procedure.
- ➔ Leave the measuring mode on PARK® 1. Switch to the patient data management.
- ➔ Connect the device to the computer via a "Mini USB to USB" cable.
- ➔ Start the updater program „C:\PARK1Update\PARK1Update.Exe“.

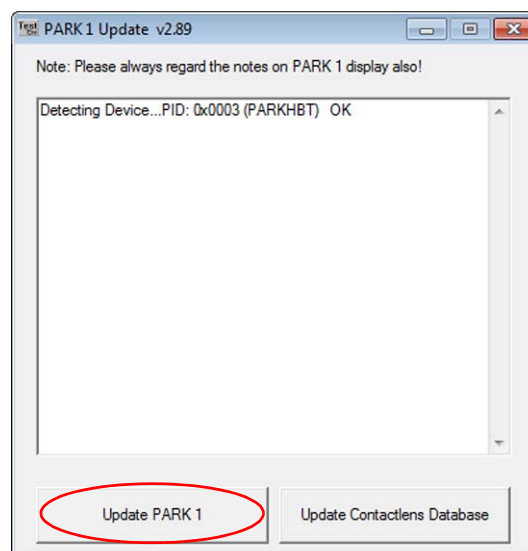


Abb. 10-1: Select update

- ➔ Press the [Update PARK 1] button and follow the instructions of the updater program.

- ➔ Leave the device switched on during the update procedure.
Once the device is connected and you leave the measuring mode, it will be automatically recognized



If the update has not been successful:

- ➔ Repeat all the steps as described above
- ➔ Contact the OCULUS Service team or an authorised dealer, if necessary

Update the contact lens database

- ➔ Start the updater program „C:\PARK1Update\PARK1Update.Exe“.

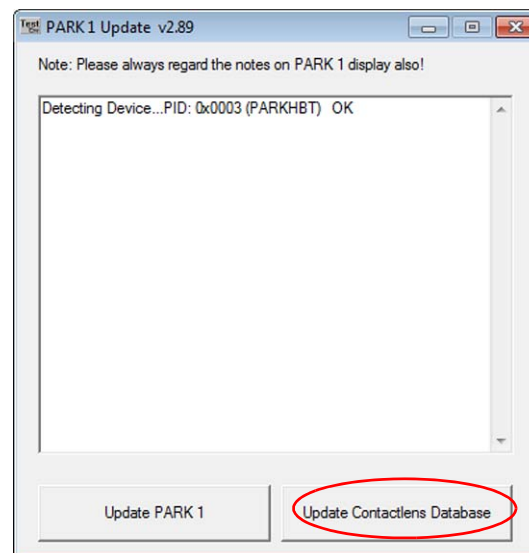


Fig. 10-2: Select an update for the contact lens database

- ➔ Press the [Update Contactlens Database] button.
The following window will be shown:

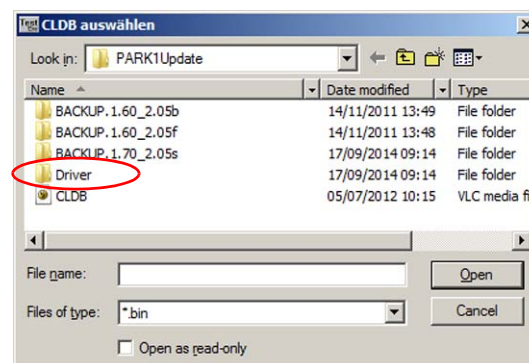


Fig. 10-3: Start updater program

- ➔ Select the „CLDB.bin“ file for the contact lens database.
- ➔ Follow the instructions of the updater program.
Leave the device switched on during the update procedure.



If the update has not been successful:

- ➔ Repeat all the steps as described above.
 - ➔ Contact the OCULUS Service team or an authorised dealer, if necessary.
-

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