

# How to Set up a Network Connection for OCTAVIUS 4D without DHCP

*Verisoft 5.1 or higher*

*Detector Interface 4000 (T16039)*

*or*

*PTW Array Interface (T16026)*

## NOTE

This technical note describes how to set up a network connection between the OCTAVIUS 4D system and a network without DHCP / with static IP addresses via Detector Interface 4000 or PTW Array Interface.

If you want to learn how to set up a network connection for OCTAVIUS 4D in a network with DHCP, please refer to technical note D913.200.04.

## 1 Prerequisites

In order to establish a network connection to a network without DHCP, you first need to assign static IP addresses to the Detector Interface 4000 and the OCTAVIUS Control Unit. For this process, you require...

1. The information from your network administrator which network addresses you should assign to the PTW devices:

In order to integrate the OCTAVIUS 4D system into your network you need to ask your network administrator for two IP addresses (one for your Detector Interface 4000 / PTW Array Interface and one for the OCTAVIUS Control Unit), plus your network's subnet mask and gateway addresses. Note down this information:

IP1 (for Detector Interface 4000 / for PTW Array Interface):

IP2 (for OCTAVIUS Control Unit):

Subnet mask:

Gateway:

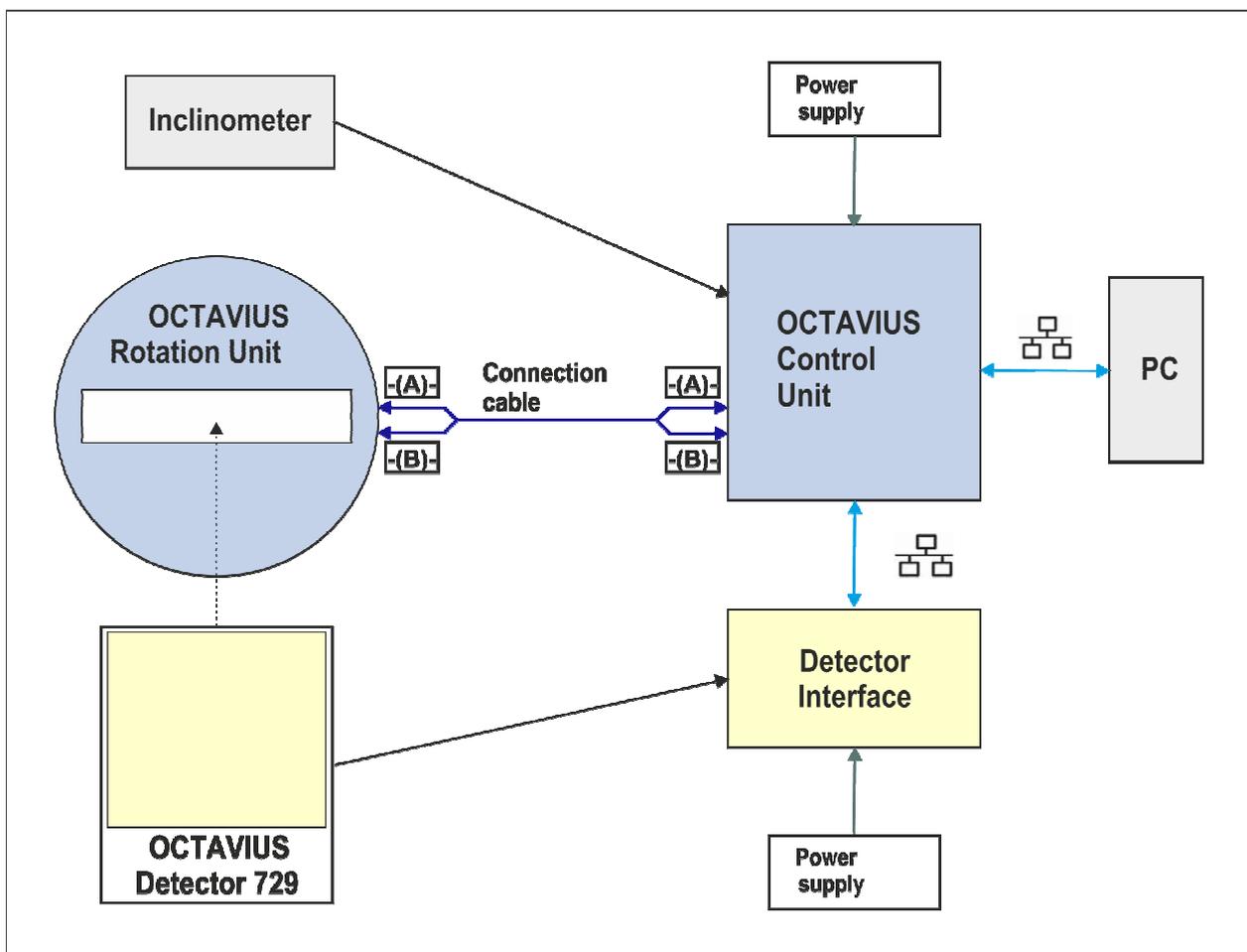
2. A PC that is not part of a network. The internal firewall of your PC needs to be switched off while you are setting up the static IP addresses (see **Appendix A** to learn how to switch off the standard Windows firewall).
3. The PTW-SetIP program. You can find it in the **Tools** folder on your PTW Software installation disc (e.g. the VeriSoft installation disc).

## 2 Assigning Static Network Addresses to Detector Interface 4000 and OCTAVIUS Control UNIT

### NOTE

Once you have set a static IP address for the Detector Interface 4000 and the OCTAVIUS Control Unit, the devices are no longer configured for Auto IP. Therefore, it is recommended to note down the network information you assign to the devices in case you need to set up communication with a different PC or network.

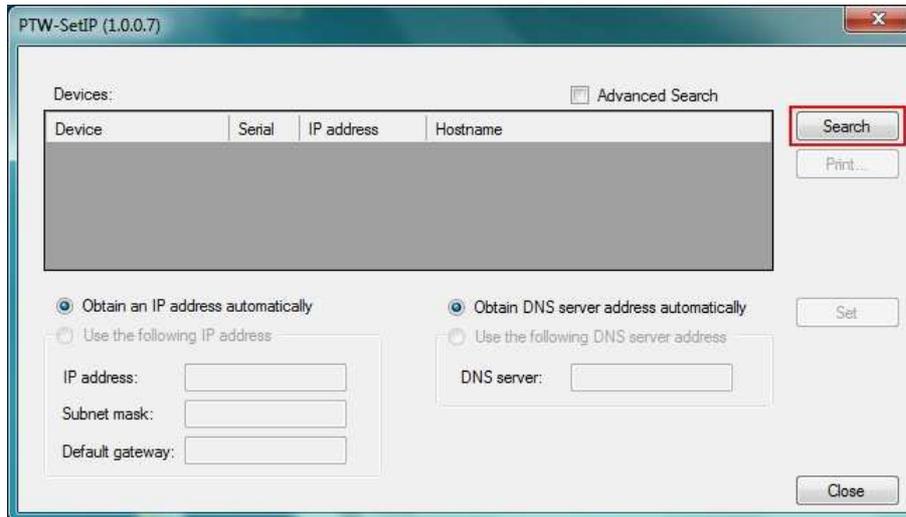
1. Connect the hardware of the OCTAVIUS 4D system according to the manual. Do not turn on the Detector Interface 4000 / the PTW Array Interface and the OCTAVIUS Control Unit (the graphic below shows the setup with the combination Detector Interface 4000 / OCTAVIUS Detector 729 as an example. If you are using a 2D-Array seven29, you need to combine it with the PTW Array Interface and connect the Array Interface to the OCTAVIUS Control Unit via RS 232):



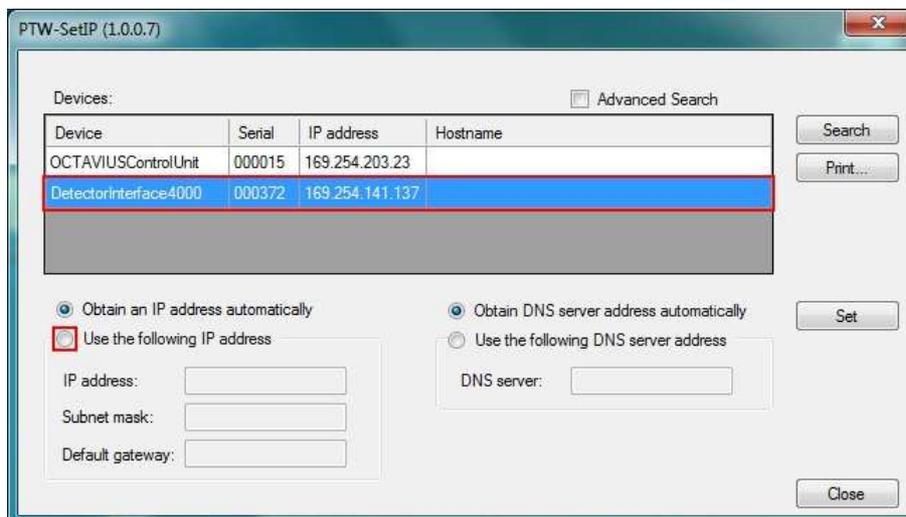
2. Establish a direct connection between your PC and the OCTAVIUS Control Unit by using a LAN cable in combination with the crossover adapter L178090 that was part of the Detector Interface 4000 delivery (or use a crossover cable without the adapter).
3. Turn on the Detector Interface 4000 / the PTW Array Interface and the OCTAVIUS Control Unit. If your PC is set to Auto IP, the Detector Interface 4000 / the PTW Array Interface and the

OCTAVIUS Control Unit will automatically receive IP addresses via Auto IP. This process may take several minutes.

4. Start the PTW-SetIP program on your PC (**Note:** if your PC runs Windows 7 as operating system, you need to start the program as administrator).
5. The PTW-SetIP dialog opens. Click on the **Search** button to find connected devices.



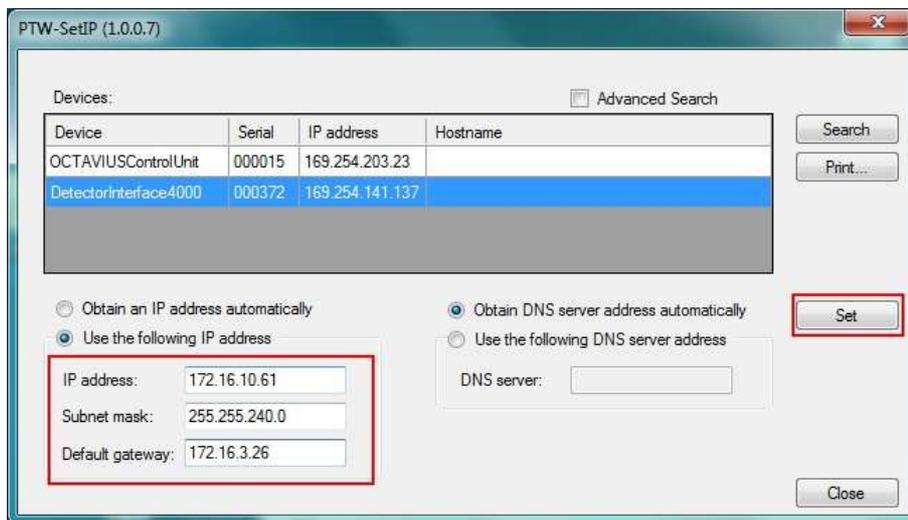
6. After a couple of seconds, the connected OCTAVIUS 4D devices will be displayed. Highlight the entry of one of the OCTAVIUS 4D components for which you want to set a static IP address (e.g. Detector Interface 4000), and click the radio button next to **Use the following IP address**.



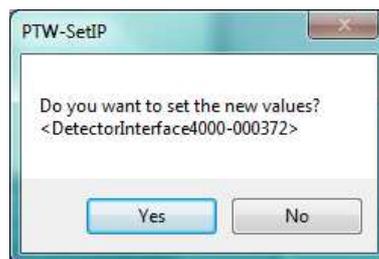
If not all of your connected OCTAVIUS 4D devices were found, make sure they are properly connected and turned on. Check if the internal firewall of your PC is disabled (you can find a guide on how to disable the standard Windows firewall in **Appendix A**). If you are not able to turn off the firewall, contact your system administrator.

If you have connected a device to the OCTAVIUS Control Unit via RS232, but the OCTAVIUSControlUnit RS232 entry is not displayed, check the **Advanced Search** box and click on **Search** again.

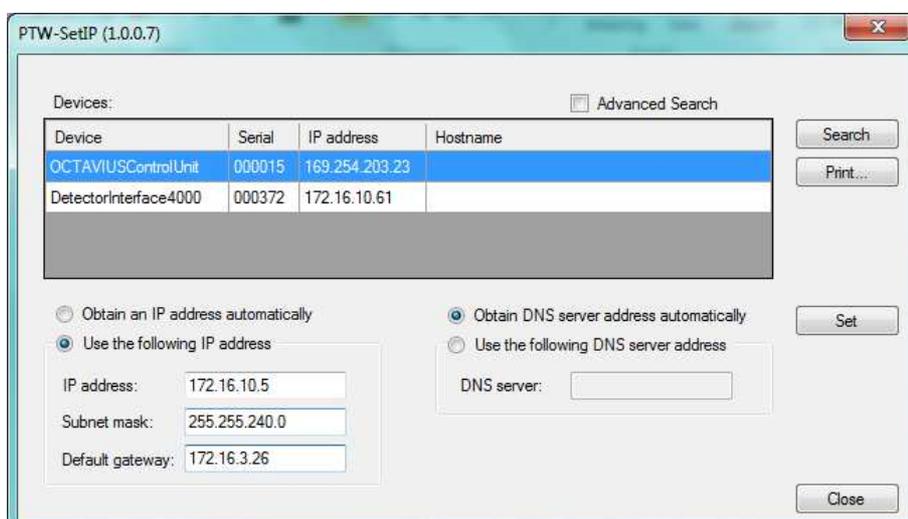
- You are now able to enter the first IP address and the network information you got from your system administrator. Fill in the **IP address**, **Subnet mask** and **Default gateway** address. Make sure you have entered the information correctly and click on **Set**.



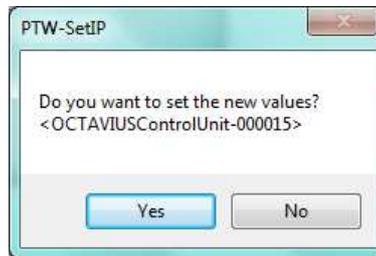
- A window appears, asking you if you really want to set the new values. Confirm by clicking **Yes**.



- After some seconds, the new IP will be displayed next to the entry of the device for which you have set the static IP.
- Now highlight the entry of the other OCTAVIUS 4D device (e.g. OCTAVIUS Control Unit). Click the radio button next to **Use the following IP address** and enter the second IP address you got from your system administrator. Fill in Subnet mask and Default gateway. Make sure that you have entered the correct information and click on **Set**.



11. Confirm that you really want to set the new values for this device.



12. After some seconds, the new IP will be displayed next to the entry of the OCTAVIUS 4D device for which you have set the static IP.

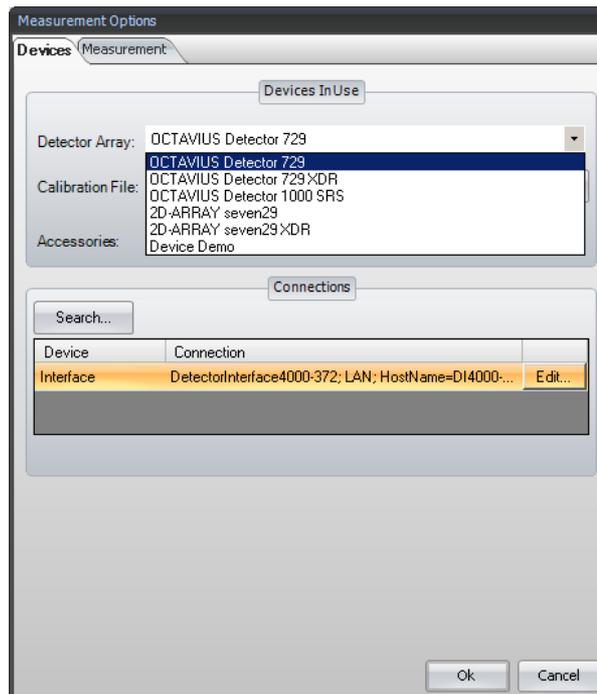
13. Now that you have assigned static IP addresses to all connected OCTAVIUS 4D devices, you can integrate the OCTAVIUS 4D system into your network. Follow the steps in chapter 3 in order to set up the connection in the VeriSoft software.

### 3 Establishing a Network Connection to OCTAVIUS 4D

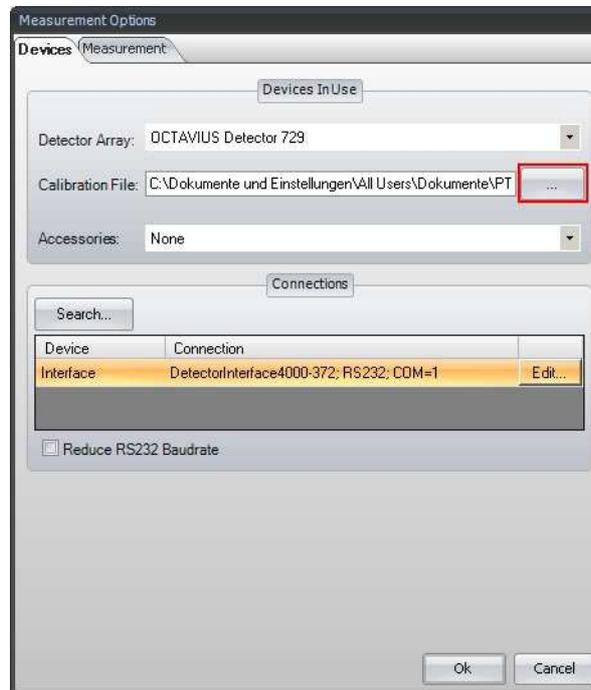
1. Once the OCTAVIUS 4D hardware is connected according to the manual and the static network addresses are assigned, you can integrate the OCTAVIUS 4D system into your network.
2. Connect the OCTAVIUS Control Unit to your network via LAN cable. Make sure to turn on the Detector Interface 4000 and the OCTAVIUS Control Unit.
3. Install the VeriSoft software on your PC and start it.
4. In the VeriSoft software, select **Tools** → **Measurement Options** in the menu bar.



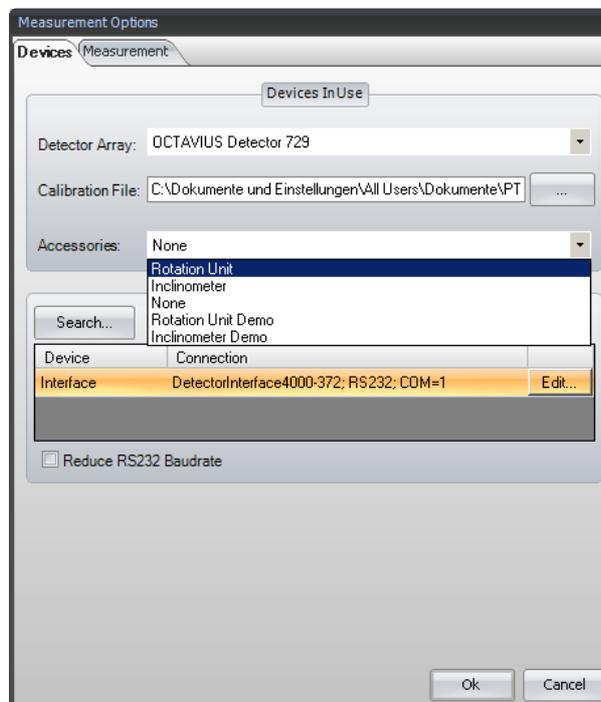
5. The **Measurement Options** window opens. Choose the correct detector array from the drop down menu:



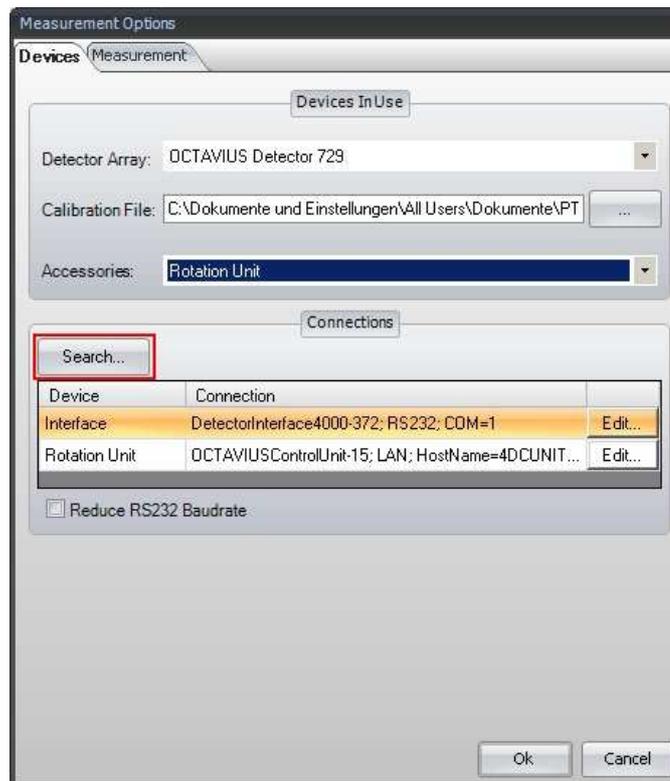
- Click the [...] button next to the Calibration file panel and select the calibration file corresponding to your detector.



- Select **Rotation Unit** in the **Accessories** panel:

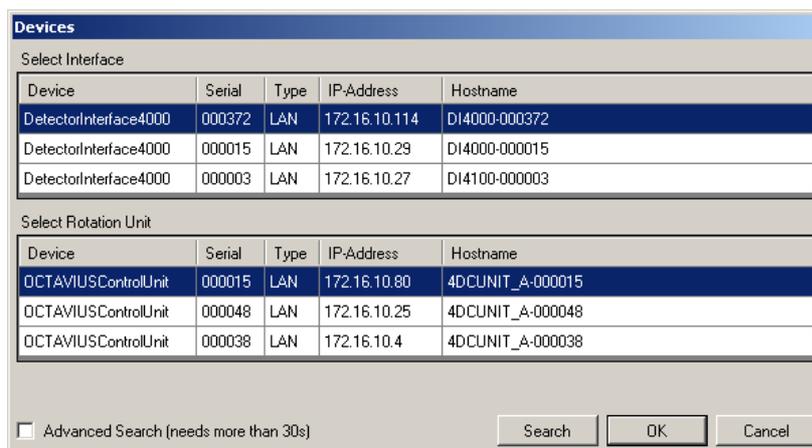


- Click the **Search...** button.



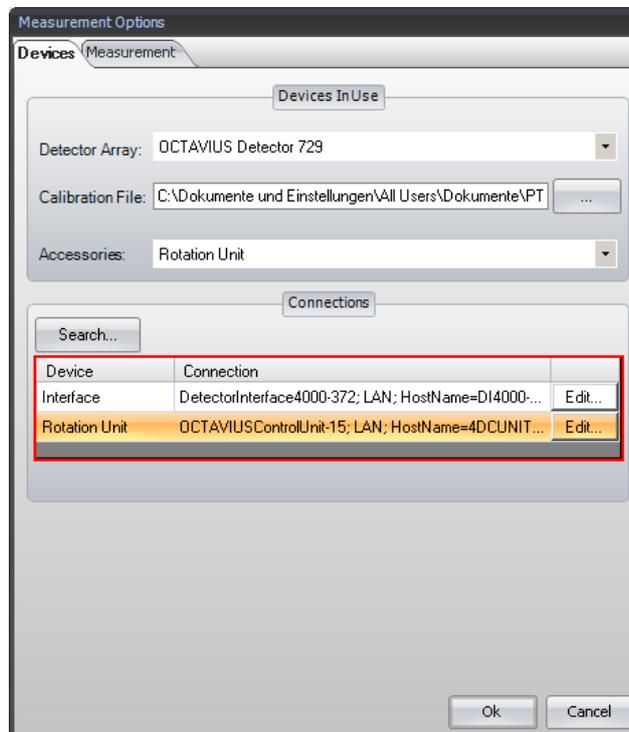
**Please note:** It is possible that this search will be blocked by your firewall (you can find a guide on how to turn off the standard Windows firewall in **Appendix A**). If you are not able to unblock the calling program (VeriSoft software), contact your system administrator.

- The **Devices** window appears, listing all Interfaces and Rotation Units that could be found in the network. Select the devices for which you want to set up the connection (you can identify them by their serial number) and click **OK**.

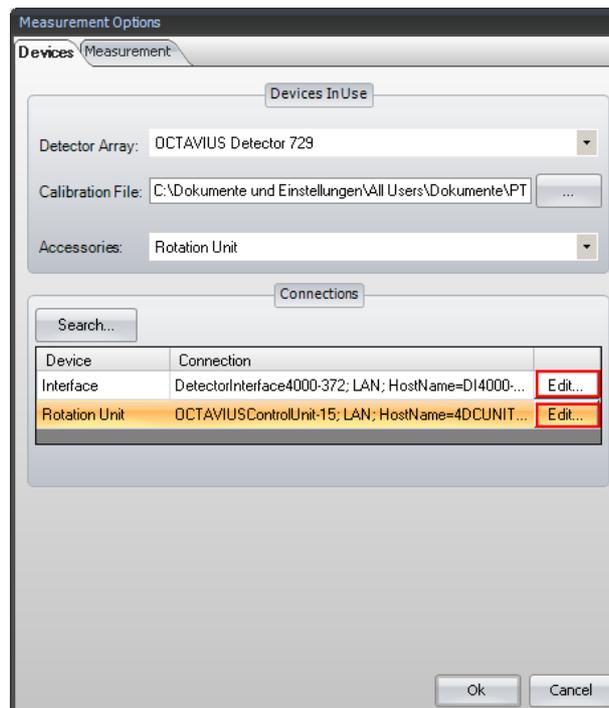


If your devices do not appear in the list, make sure that the devices are properly connected and turned on. Disable the firewall. Repeat the search. If you have used an RS232 connection to connect your Array Interface/Detector Interface 4000 to the OCTAVIUS Control Unit, check the box at the bottom left corner of the **Devices** window to enable the **Advanced search** and click the **Search** button.

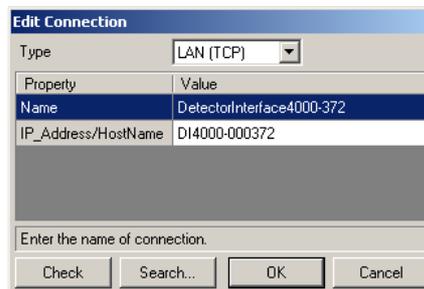
10. The established connections are now displayed in the **Measurement Options** window.



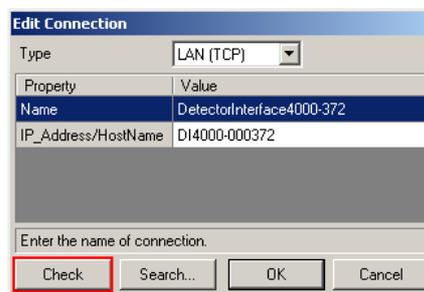
11. To check the connection of a device, click on the **Edit...** button next to its entry. You need to check the connection for the Detector Interface 4000 and the OCTAVIUS Control Unit separately.



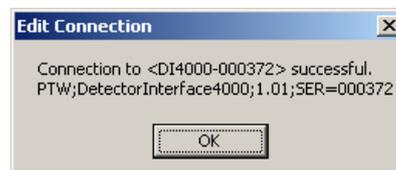
12. The **Edit Connection** window appears, showing the details of the respective connection.



13. Click on the **Check** button.



14. A message that the connection was successful should appear. Confirm with the **OK** button.



15. Leave the **Measurement Options** window by clicking **OK**. The network connection to OCTAVIUS 4D is now established.

## Appendix A

### Disabling the Firewall

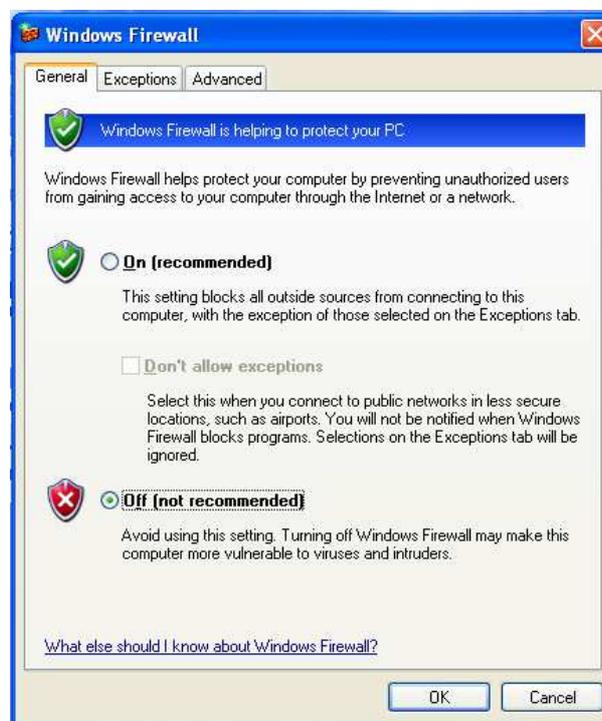
It is possible that the Search function of the PTW programs is blocked by your firewall. In this case, you have to disable your firewall while setting up the connection. Disabling the firewall is only recommended if you have established a direct connection between PC and PTW device, and the PC is not part of a network. Once you have set up the connection, make sure to turn on the firewall again.

This appendix shows how to turn off the standard Windows firewall in Windows XP and Windows 7. You need administrator rights to do so.

If you are using a different firewall or do not have administrator rights, contact your system administrator.

### Disabling the Firewall in Windows XP

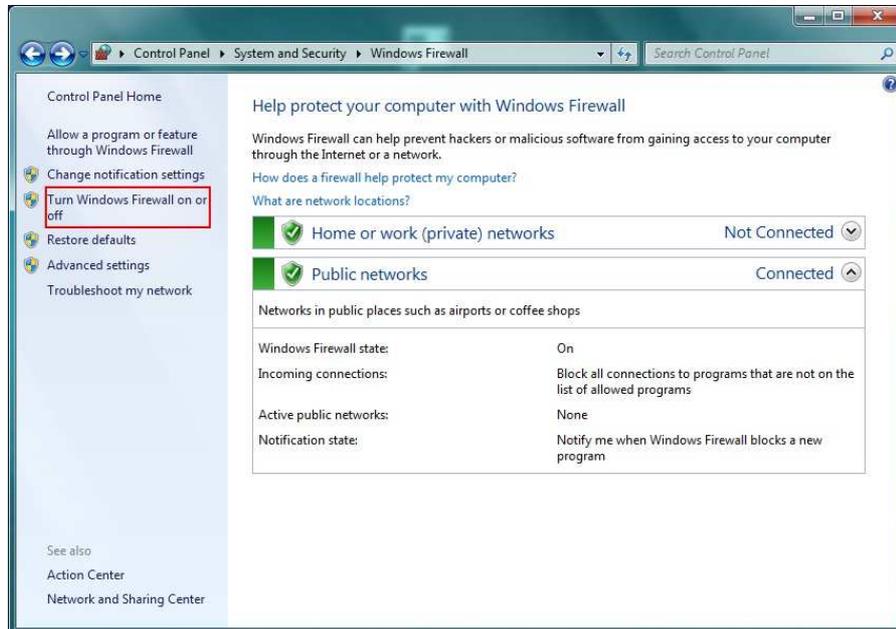
The firewall can be disabled via **Control Panel** → **Windows Firewall** → **General tab**.



Click the radio button **Off (not recommended)** and confirm your choice by clicking OK. The Search function of the PTW programs should no longer be blocked. Do not forget to turn the firewall on again, once you have set up the connection.

### Disabling the Firewall in Windows 7

The firewall can be disabled via **Control Panel → System and Security**. Click on the **Windows Firewall** entry. Choose **Turn Windows Firewall on or off** on the left side:



Click both radio buttons **Off (not recommended)** and confirm your choice by clicking OK. The Search function of the PTW programs should no longer be blocked. Do not forget to turn the firewall on again, once you have set up the connection.

