How to Set up a Network Connection for OCTAVIUS 4D

VeriSoft 5.1 or higher

Detector Interface 4000 (T16039)

NOTE

This technical note describes how to set up a network connection between the OCTAVIUS 4D system and a DHCP network via Detector Interface 4000. It also describes how to set up a direct connection between a PC that is not part of a network and OCTAVIUS 4D, using Auto IP.

If you want to learn how to set up a network connection for OCTAVIUS 4D in a network without DHCP, please refer to technical note D913.200.05.

Setting up the OCTAVIUS 4D for Network Connection

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. If you want to set up a connection to a DHCP network, connect the OCTAVIUS Control Unit to your DHCP network via LAN cable. If you want to establish a direct connection between your PC and the OCTAVIUS 4D system, use 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). The PC needs to be set up for Auto IP. Most PCs are set up for Auto IP by default. If you are not sure if your PC is set up for Auto IP, refer to Appendix A.

3. Turn on the Detector Interface 4000 and the OCTAVIUS Control Unit. If you are connected to a DHCP network, the Detector Interface 4000 and the OCTAVIUS Control Unit will automatically receive IP addresses from the DHCP server. If you have set up a direct connection to a PC that is not part of a network, IP addresses will be assigned via Auto IP. This process may take several minutes.

4. Install the VeriSoft software on your PC and start it.

5. In the VeriSoft software, select **Tools → Measurement Options** in the menu bar.

6. The Measurement Options window opens. Choose the correct detector array from the drop down menu:
7. Click the ... button next to the Calibration file panel and select the calibration file corresponding to your detector.

![Image of Calibration file panel]

8. Select Rotation Unit in the Accessories panel:
9. Click the **Search**... button.

Please note: It is possible that this search will be blocked by your firewall. If you are not able to unblock the calling program (VeriSoft software), contact your system administrator.

10. The **Devices** window is displayed, 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, check again if they are properly connected and turned on. If you have not already done so, 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.
11. The established connections are now displayed in the **Measurement Options** window.

12. 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.
13. The *Edit Connection* window is displayed, showing the details of the respective connection.

14. Click on the *Check* button.

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

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

Configuring your PC for Auto IP

The devices of the OCTAVIUS 4D system are set up for Auto IP by default. If you want to establish a direct connection between the OCTAVIUS 4D system and your PC, the network settings of your PC need to be set to *Obtain an IP address automatically / Automatic private IP address*. Usually this is the default setting. To check if your PC is set up for Auto IP, proceed as follows.

1. In Windows XP, right-click on *My Network Places* and select *Properties* (In Windows 7, type *Network and Sharing Center* in the Windows search bar, press *Enter* and click on *Change adapter settings* in the window that is displayed).

![My Network Places with Properties selected](image)

2. In the window that opens, right-click on the *Local Area Connection* item and select *Properties*.

![Local Area Connection with Properties selected](image)
3. In the window that comes up, highlight *Internet Protocol (TCP/IP)* and click the Properties button (In Windows 7 you need to highlight *Internet Protocol Version 4(TCP/IPv4)* instead).

![Image of Local Area Connection 2 Properties window with Internet Protocol (TCP/IP) highlighted](image1)

4. In the *Internet Protocol (TCP/IP) Properties* window, make sure the radio button *Obtain an IP address automatically* is selected. Then click on the *Alternate Configuration* tab.

![Image of Internet Protocol (TCP/IP) Properties window with Obtain an IP address automatically selected](image2)
5. In the *Alternate Configuration tab*, make sure the radio button Automatic private IP address is selected. Confirm the settings by clicking **OK**.

![Internet Protocol (TCP/IP) Properties](image)

Your PC is now set up for Auto IP. You can establish a direct connection between your PC and the OCTAVIUS 4D system by following the steps in the chapter “*Setting up the OCTAVIUS 4D for network connection*”