

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

 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):





 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**.

- 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:

Measurement Option	5 %
evices Measureme	ent
<u> </u>	Devices In Use
Detector Array:	OCTAVIUS Detector 729 🔹
Calibration File:	OCTAVIUS Detector 729 OCTAVIUS Detector 729XDR OCTAVIUS Detector 1000 SRS 2D:ARRAY seven29
Accessories:	2D-ARRAY seven29 XDR Device Demo
	Connections
Search	
Device	Connection
Interface	DetectorInterface4000-372; LAN; HostName=D140005 Edit
	Ok Cancel



7. Click the ... button next to the *Calibration file* panel and select the calibration file corresponding to your detector.

easurement Optio	ns		
evices Measurem	ient		
	Devices In Use		
Detector Array: OCTAVIUS Detector 729			
Calibration File:	C:\Dokumente und Einstellungen\All Users\Dokumente\PT		
Accessories:	None		
	Connections		
Search			
Device	Connection		
Interface	DetectorInterface4000-372; RS232; COM=1 Edit		
Reduce RS2	32 Baudrate		
	Ok Cancel		

8. Select *Rotation Unit* in the *Accessories* panel:

evices (Measurem	ent		
	Devices In Use		
Detector Array:	OCTAVIUS Detector 729		
Calibration File:	C:\Dokumente und Einstellungen\All Users\Dokumente\PT		
Accessories:	None		
Search	Hotelion Unit Inclinometer None Rotation Unit Demo Inclinometer Demo		
Device	Connection		
Interface	DetectorInterface4000-372; RS232; COM=1 Edit		
Reduce RS2	32 Baudrate		
	Ok Cancel		



9. Click the Search... button.

	Devices In Use			
Detector Array: OCTAVIUS Detector 729				
Calibration File:	C:\Dokumente und Einstellungen\All Users\Dokumente\PT			
Accessories:	Rotation Unit	-		
	Connections			
Search				
Device	Connection			
Interface	DetectorInterface4000-372; RS232; COM=1	E dit		
Rotation Unit	OCTAVIUSControlUnit-15; LAN; HostName=4DCUNIT	Edit		
Reduce RS23	32 Baudrate	_		

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*.

Device	Serial	Туре	IP-Address	Hostname
DetectorInterface4000	000372	LAN	172.16.10.114	DI4000-000372
DetectorInterface4000	000015	LAN	172.16.10.29	D14000-000015
DetectorInterface4000	000003	LAN	172.16.10.27	DI4100-000003
	Serial	Туре	IP-Address	Hostname
OCTAVIUSControlUnit	000015	LAN	172.16.10.80	4DCUNIT_A-000015
OCTAVIUSControlUnit	000048	LAN	172.16.10.25	4DCUNIT_A-000048
OCTAVILISControlLinit	000038	LAN	172.16.10.4	4DCUNIT_A-000038

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.

Devices In Use Detector Array: DCTAVIUS Detector 729. Calibration File: C:\Dokumente und Einstellungen\All Users\Dokumente\F Accessories: Rotation Unit Connections Search	• T
Detector Array: OCTAVIUS Detector 729 Calibration File: C:\Dokumente und Einstellungen\All Users\Dokumente\F Accessories: Rotation Unit Search	• •T •
Calibration File: C:\Dokumente und Einstellungen\All Users\Dokumente\F Accessories: Rotation Unit Connections Search	νT
Accessories: Rotation Unit Connections Search	-
Connections Search	
Search	
Device Connection	
Interface DetectorInterface4000-372; LAN; HostName=DI4000	Edit
Rotation Unit OCTAVIUSControlUnit-15; LAN; HostName=4DCUNIT	Edit
-	_

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.

easurement Option	16%			
vices (Measurem	ent			
	Devices InUse			
Detector Array: OCTAVIUS Detector 729				
Calibration File: C:\Dokumente und Einstellungen\All Users\Dokumente\PT				
Accessories:	Rotation Unit			
	Connections			
Search	The second se			
Device	Connection			
Interface	DetectorInterface4000-372; LAN; HostName=D14000 Edit			
Rotation Unit OCTAVIUSControlUnit-15; LAN; HostName=4DCUNIT				
	Ok Cancel			



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

Туре	LAN (TCP)		
Property	Value		
Name	DetectorInterface4000-372		
IP_Address/HostName	DI4000-000372		
Enter the name of conne	ection.		

14.Click on the *Check* button.

Туре	LAN (TCP)	
Property	Value	
Name	DetectorInterface4000-372	
IP_Address/HostName	DI4000-000372	
Enter the name of conn	ection.	

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

Edit Connection	J
Connection to <di4000-000372> successful. PTW;DetectorInterface4000;1.01;SER=000372</di4000-000372>	
ОК	

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.

 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).



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





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).

Connect	using:		-73
	Mware Acceler	ated AMD PCNet /	Ad Configure
This con	nection uses th	ne following items:	
	File and Printe QoS Packet S Internet Protoc	r Sharing for Micro cheduler col (TCP/IP)	soft Networks
In	stall	Uninstall	Properties
Descrip Transi wide a across	otion mission Control area network pi s diverse interc	Protocol/Internet rotocol that provide onnected network	Protocol. The default es communication s.
Show	vicon in notifica vme when this	ation area when co connection has lirr	onnected nited or no connectivity

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.

reral Atemate Configuration 'ou can get IP settings assigne his capability. Otherwise, you n he appropriate IP settings.	d automatically if your network supports eed to ask your network administrator for
Obtain an IP address autor	matically
Uge the following IP addre	\$5:
IP address:	and the second second
Sybnet mask:	
Default gateway:	
 Ogtain DNS server addres 	s automatically
OUse the following DNS ser	ver addresses:
Preferred DNS server:	and the second second
Alternate DNS server:	
	Advanced



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) Proper	ties		? 🛛
General Alternate Configuration			
If this computer is used on more than one network, enter the alternate IP settings below.			
Automatic private IP address			
O User configured			
IP address:			
Subnet mask:			
Default gateway:			
Preferred DNS server:]
Alternate DNS server:			
Preferred WINS server:			
Alternate WINS server:		i a c	
		к 🗌	Cancel

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*"

PTW-Freiburg Lörracher Straße 7 • 79115 Freiburg • Germany Phone +49 761 49055-0 • Fax +49 761 49055-70 info@ptw.de • www.ptw.de