

## 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:

easurement Option	ns	
evices (Measurem	ient	
	Devices InUse	_
Detector Array:	OCTAVIUS Detector 729	<b>P</b>
Calibration File:	2D-ARRAY seven29	
Accessories:	2D-ARRAY seven29 XDR Device Demo	
	Connections	_
Search		
Device	Connection	
Interface	DetectorInterface4000-372; LAN; HostName=D14000 Ed	it
	Ok Ca	incel



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

easurement Optio	
evices (Measuren	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	Rotation 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	Edit
Rotation Unit	OCTAVIUSControlUnit-15; LAN; HostName=4DCUNIT	E dit
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	D14100-000003	
Select Rotation Unit Device	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	
OCTAVIUSControlUnit	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.

vices (Measurem	sur [			
	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; LAN; HostName=D14000 E				
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				
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=DI4000 Ed				
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			

#### 14.Click on the *Check* button.

nterface4000-372 00372			
Of a descendences of the state of the second se			
00372			
	DI4000-000372		
ı.	n.		

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

Edit Connection X	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 u	sing:		-75	
W VM	ware Accelera	ted AMD PCNe	tAd (	Configure
This conn	ection uses th	e following item:	:	
	lient for Micro ile and Printer loS Packet So iternet Protoco	Sharing for Mic cheduler	rosoft Net	works
Inst	all	Uninstall		Properties
wide an	ission Control I ea network pro	Protocol/Interne stocol that provi innected netwo	des comm	
	CEDA STOCION COMPLETE	tion area when connection has		ie.

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.

	d automatically if your network supports eed to ask your network administrator for
Obtain an IP address auto	matically
Uge the following IP addre	55.
LP address:	and the second second
Sybnet mask:	
Default gateway:	
<ul> <li>Obtain DNS server addres</li> </ul>	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		
OUser configured		
IP address:		· · · ·
Subnet mask:		-
Default gateway:		
Preferred DNS server:		
Alternate DNS server:		
Preferred WINS server:		
Alternate WINS server:	1	
	OK	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*"

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