Virtual COM (VCOM) driver Installation Guide

for Xeta Server XS1000

(VCOM IC Plus Corp ver. 3.31 and 3.6)

Please carefully follow this guide to successfully install the virtual COM software for Windows 98, 2000, 2003, XP, Vista, 7, 8 32/64-bit.

This installation guide is based on Windows 7 32-bit but same installation procedure is used for other versions of Windows.



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Connecting the Xeta Server

1. Connect the Xeta Server to your computer using a standard cross over cable (EIA/TIA T568B) LAN cable.

2. Connect the Xeta Sever to the power supply and turn on the power.

Assigning a static IP

The IP address of the Xeta Server is **192.168.2.1**. For your computer to be able to find the Xeta Server you need to assign a static IP address in the **192.168.2.2 to 192.168.2.254** range to the network connection to where you connect the Xeta Server:

1. Click Start and go to: Control Panel\All Control Panel Items\Network and Sharing Center.

2. Click on 'Local Area Connection' (this is the connection where the Xeta Server is connected). If you have not connected the Xeta Server to your computer, or if the cable is incorrectly connected you might not be able to see this 'Local Area Connection', so make sure the Xeta Server is properly connected to your computer:



Seneral	
Connection	
IBv4 Connectivity	No potwork accord
IPv4 Connectivity:	No network access
IPv6 Connectivity:	No network access
Media State:	Enabled
Duration:	01:32:11
Speed:	100.0 Mbps
Details	
Activity	
Activity ———	Sent — Received
Activity Bytes:	Sent — Received 253,565 299,727
Activity Bytes:	Sent — Received 253,565 299,727 ©Disable Diagnose

3. Click on 'Properties'.

Local Area Connection Properties
Networking Sharing
Connect using:
Intel(R) 82577LM Gigabit Network Connection
Configure
This connection uses the following items:
COMODO Internet Security Firewall Driver Comparison of the compa
Install Uninstall Properties
Description Transmission Control Protocol/Internet Protocol. The default wide area network protocol that provides communication across diverse interconnected networks.
OK Cancel

4. Highlight the 'Internet Protocol' and click 'Properties'.

Internet Protocol Version 4 (TCP/IPv4)	Properties ? X
General	
You can get IP settings assigned autom this capability. Otherwise, you need to for the appropriate IP settings.	natically if your network supports ask your network administrator
Obtain an IP address automatical	у
Use the following IP address:	
IP address:	192.168.2.2
S <u>u</u> bnet mask:	255.255.255.0
Default gateway:	
Obtain DNS server address autom	natically
• Use the following DNS server add	resses:
Preferred DNS server:	
Alternate DNS server:	• • •
Validate settings upon exit	Ad <u>v</u> anced
	OK Cancel

5. Enter a static IP address in the **192.168.2.2 to 192.168.2.254** range and a Subnet mask of 255.255.255.0 and click OK. Click OK at the Local Area Connection Properties window and close the Local Area Connection Status window.

You have now assigned a static IP address to the network connection where to the Xeta Server is connected.

Setting up the Virtual COM software (VCOM)

To be able to create a serial COM port on your computer which the Xeta Server can connect through, you need to use a Virtual COM software.

Download the most recent version of VCOM from <u>www.Nordfield.com</u>. Unzip the downloaded folder, find and run the installation setup called VCOMSetup

During installation the program WinPcap will be installed.



Click Next.

🕞 WinPcap 4.1.2 Setup	
Win Pcap	Installation options Please review the following options before installing WinPcap 4.1.2
Automatically start th	e WinPcap driver at boot time
Nullsoft Install System v2.46 -	
	< <u>B</u> ack Install Cancel

Chose to 'Automatically start the WinPcap driver at boot time' and click 'Install'.

Reboot your computer after the installation has finished!!

Creating a COM port with VCOM

1. Start VCOM.exe.

If you are getting a Windows Security Alert, allow VCOM to communicate with Private networks:

Windows Secu	rity Alert	×
💮 Windo	ows Firewa	l has blocked some features of this program
Windows Firewall h	as blocked som	e features of VCOM on all public and private networks.
	Name:	VCOM
	Publisher:	Unknown
	Pat <u>h</u> :	C:\Program Files\IC Plus Corp\VCOM
Allow VCOM to com	nmunicate on th	ese networks:
Private netv	vorks, such as n	ny home or work network
Public netwo because the	orks, such as the se networks of	ose in airports and coffee shops (not recommended ten have little or no security)
What are the risks	of allowing a pr	ogram through a firewall?
		Allow access Cancel

2. With the Xeta Server successfully connected to your computer with a static IP address in the 192.168.2.2 to 192.168.2.254 range and connected to the power supply, click the 'Search' button.

VCOM should now search for and find the connected Xeta Server and list it on line one in the Device Info window.

Device Info Device Info MAC Address IP ADDress VICIM Im Device 3D Device Name Project Name MAC Address IP ADDress VICIM Im Device 3D Device Name Project Name MAC Address IP ADDress COM Mapping Im Device 3D Device Name Project Name MAC Address IP ADDress Sector Device Info Im Device 100 Im	in					
Utilities Device Info MAC Address IP Robes Device Info E 0001 HertUART Instrukt 00.11.22.40.10.20 192.146.2 COM Mapping E 0001 HertUART Instrukt 00.11.22.40.10.20 192.146.2	at Seech Contigue Web					
A MCOM Device Info Device Info COM Mapping COM Mapping COM Mapping *	Utilities		Device In	fo- 1 Device(s)		
Device Info 1 0001 NetLMYT NetLMYT Gol 11-22.40-3C-20 192.188-2 COM Mapping	VCOM	Device 10	Device Name	Project Name	MAC Address	P Address
In the state of th	Device Info	0001	NetLIART	NetUART	60.11.22.60.10.20	192.168-2.1
A25 AM 1 device(s) searched.	COM Mapping					
Age Log- Device Info Message Log- VCOM Info Hessage Log- VCOM Info H						
age Log- Device Info Message Log- VCOM Info 4:25 AM 1 device(s) searched.						
age Log- Device Info Message Log- VCOM Info Hessage Log- VCOM Info H						
AL25 AM 1 device(s) searched.						
age Log- Device Info Message Log- VCCM Info Hessage Log- VCCM Info H						
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age Log- Device Info Message Log- VCOM Info 4:25 AM 1 device(s) searched.						
age Log- Device Info Message Log- VCOM Info 4:25 AM 1 device(s) searched.						
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age Log- Device Info Message Log- VCOM Info 4:25 AM 1 device(s) searched.						
age Log- Device Info Message Log- VCOM Info +:25 AM 1 device(s) searched.						
age Log- Device Info Message Log- VCOM Info J						
age Log- Device Info Message Log- VCOM Info H-25 AM 1 device(s) searched.						
age Log- Device Info Message Log- VCOM Info						
age Log- Device Info Message Log- VCOM Info	ar	1.1				
age Log- Device Info Message Log- VCDM Info	1.					
H-25 AM 1 device(s) searched.	age Log- Device Info Message Log- VCOM	4 Info				
H:25 AM 1 device(s) searched.	1			215		
	4:26 AM 1 device(s) sea	ched.				

3. To create a COM port click 'COM Mapping' under the 'Utilities' pane and click the 'Add' button. A new window opens which lists the connected Xeta Server(s). Click on the server listed, this will bring up the information of the server in the text fields, and click 'OK'.

dd VCOM				×
				Rescan
No	Douice Name	MAC Address	IR Address	Current Mede
1	NetUART	00.11.22.60.1C.20	192.168.2.1	Server
•				•
TCP/UDP	⊙ TCP C	UDP		
Server/Client	○ Server ●	Client		
IP Address	192.168.2.1	Local Por	t 📃	
СОМ	СОМ 4	Remote F	Port 23	
			🔶 ок	💢 Cancel

ain						
Est O Add Parrow						
Utilities		100	COM Mapping - 1 C	OM(s)		
VCOM	COM Port	TOPAOP	Server/Client	IP Address	Remote Port	10
COM Mapping		102	Dent	192,168,2,1	23	15
	5 B					
isage Log- Device Info Message Lo	xp- VCOM Info					
			1			
04:25 AM 1 devic	e(s) searched.					

The COM port will now be listed under the 'COM Mapping' window:

To further check if the COM port was successfully installed go to Windows Device Manager where the COM port should be listed under 'Ports (COM & LPT):

A Device Manager	_ D _ X
🔺 🛁 dml-THINK	
Batteries	
Biometric Devices	
🔈 🚛 Computer	
Disk drives	
Display adapters	
👂 🦛 Human Interface Devices	
De ATA/ATAPI controllers	
🔉 📲 IEEE 1394 Bus host controllers	
Imaging devices	
⊳ — Keyboards	
Mice and other pointing devices	
De Modems	
Notural adapter	
Porte (COM 8) LDT)	
FITIMA Victual Serial Port (COMI)	
SD host adapters	
Security Devices	
M Driver	
Sound, video and game controllers	
System devices	
🔈 🕌 Universal Serial Bus controllers	

You have now successfully created a serial RS232 COM port!

Configuring the parameters

1. To configure the parameters of the Xeta server you can click on the 'Configure' button. A prompt will open for you to enter the Device account and Password information. Default Device account name is '**admin**' and password is '**system**':

Input Attributes	
Please Give Account:	
admin	
Please Give Password:	
ок	Cancel

Click OK

Configure Dialog	
Administrator IP Address	192.168.2.1
Subnet Mask	255.255.255.0
Gateway	192.168.2.1
DNS	192.168.2.1
IP Configure	 G Static ○ DHCP
•	

You can now configure your desired parameters

An alternative way of configuring the Xeta Server is to use a web browser. Simply open a web browser and enter the IP address of the Xeta Server in the address field:

Attp://192.168.2.1/ - Windows Internet Explorer	T. # # N 1 1	me une AaH une	
C ⊂ ℓ http://192.168.2.1/			ب م
<u>Eile Edit V</u> iew F <u>a</u> vorites <u>T</u> ools <u>H</u> elp			
☆ Favorites		🛐 🔻 🖾 👻 🖃 🖶 👻 Page 🕶 Safety 🕶	T <u>o</u> ols ▼ 🕢 ▼
	USER LOG IN		
	Site: 192.168.2.1		
	ID: admin		_
	Password: •••••		
	ОК		
Done	•	Internet Protected Mode: Off	• 🔍 100% 🔹 🔤

Making a loop-back test

To test if the XS1000 is working correctly and the drivers and cabling has been successfully setup you can make a loop-back test. This will verify if you can send and receive data both ways, from LAN to serial and serial to LAN.

Download and start AccessPort from <u>www.Nordfield.com</u>. When you start AccessPort the first time you will be welcomed with the window shown below. The upper window is the 'receive' window where you receive data, and the lower window is the 'send' window where you can enter a text string to send.

🚚 AccessPort - COM1(9600,N,8,1) Closed
<u>File Edit View Monitor Tools Operation Help</u>
崎 🕘 🛃 🍃 🥥
Terminal Monitor
Hex ab 🖾 🤮
Upper window Send> Char Plain Text Real Time Send DTF Lower window
Tx 2188 Rx 401 COM1(9600, N, 8, 1) Clos

Click Tools -> Configuration in the menu bar, this will open the configuration window. Enter the correct information. In this case we have created COM port 1 so we select COM 1:

🍓 Options	×						
General 	Custom Baud Rate Enable 19200 Serial Port Settings Port: Image:						
<u>D</u> K <u>C</u> ancel	 Prompt for saving when application exit Remind me when update is available 						

Click OK, this will automatically open the selected COM port if it has been correctly created by the Virtual COM software, and if the XS1000 is properly connected to your computer.

	🚰 AccessPort -	COM1(9600,N,8,1)	Opened			
	<u>Eile E</u> dit <u>V</u> iew	<u>Monitor T</u> ools <u>Op</u>	eration <u>H</u> elp			
	۲	🔁 📃 💲	0			
	Terminal	Monitor				
	Hex ab	🖄 🔛				
		G Char			end Class	
(• Unar	Plain Lext	Heal I Heal I me 5	end Liea	ar Autosend DIF
N	test					
	Comm Status	CTS DSR		RLSD (CD) 🔲 CTS H	old 🔲 DSR H	
	Ready			Tx 2188	Rx 401	COM1(9600,N,8,1) Ope

Enter a text string in the lower window and click the AutoSend button:

AccessPort will now start sending the text string to the COM port, the 'Link' and 'TX/RX' LED lights on the XS1000 should now start flashing.

To confirm that the XS1000 can send and receive data you now need to connect the TX pin to the RX pin (pin 3 to pin 2) at the DB9 connector on the XS1000. The easiest and safest way to do this is by making a loop-back plug from a female DB9 connector or terminal header such as pictured below:



If you do not have any of these available you can manually make a connection from pin 2 to pin 3 at the DB9 connector by carefully using a piece of wire or even a paper clip to short the pins, as shown in the image below. Be careful not to short any other pins since this might damage the adapter.



<u>5</u> 1 A	ccess	Port - (:OM1(9	600,N,	8,1) Op	ened									I	- 🗆 🗵
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	B	9	•		\$	2)									
Т	ermin	al	Mor	nitor												
	₩ł H	ex ab	🕑 🕵	<mark>}</mark>												
test	; tes	t test	; test	test	test	test	test	test	test	test	test	test	test	test	test	test
test	; tes : tes	t test t test	; test : test	test test	test test	test test	test test	test test	test test	test test	test test	test test	test test	test test	test test	test test
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<u> </u>												_		_		
Send-	> 0	Hex	6	🖲 Char		Plain T	ext	T		eal Time	Send		Clear	Sto	pSend	🗆 DTF
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Deadu	i statu	5			an I	milit		ו שנשחו		2000		715		M1/060		
Ready									ΠX	3000	JRX	. 715	jee	MAT(AD)	,0,N,0,	T) Ope //

With the TX and RX pins looped you will now receive the text string in the receive window:

You have now successfully performed a loop-back test and verified that the converter can transmit and send data and that it is correctly connected and setup.