Phocos MX-I Installation Guide



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1. Introduction

The purpose of this document is to provide users of the Phocos MXI with a simple procedure for installing the driver for their Phocos MXI on USB-capable Windows based PC systems. Please note that Windows NT is not a USB-capable operating system, thus, Windows NT installation is not covered in this document.

In order for Windows 98 Gold Edition to be USB-capable, all relevant patches must be obtained and installed from the Microsoft website.

Download the latest available Phocos MXI driver from the Phocos web site or from your Phocos MXI driver USB stick and unzip them to a location on your PC. Use the Subdirectory "Windows_98" if your PC is based on Windows 98 Use the Subdirectory "Windows_Me" if your PC is based on Windows Me Use the Subdirectory "Windows_2000" if your PC is based on Windows 2000 Use the Subdirectory "Windows_XP" if your PC is based on Windows XP

Please be sure that older installations of the drivers have been removed from the PC before the new drivers are installed. If older driver installations are not removed, the new drivers will be corrupted.

2. Installing the Phocos MXI

The driver type is the virtual COM port (VCP) driver. The VCP drivers emulate a standard PC COM port. These can be communicated in the same manner as any other COM port on the PC.

2.1. Windows 98 and Windows ME

Under Windows 98, the 'Found New Hardware Wizard' should be used to install the device when it is connected to the PC for the first time. Attempting other methods may corrupt the driver installation and result in the device becoming unusable with the installation PC. Please note that if Windows 98 Gold Edition is being used, you must have all the latest patches from the Microsoft website installed for the system to be USB compatible.

- If a device of the same type has been previously installed on your machine and the drivers that are about to be installed are different from those already installed, the original drivers need to be uninstalled. Please refer to the <u>Uninstalling Phocos MXI</u> section of this document for further details of this procedure.
- Download the latest available "Windows 98" / "Windows ME" Phocos MXI driver from the Phocos web site or from your Phocos MXI driver USB stick and unzip them to a location on your PC. (e.g. C:/Phocos MXI)

• Connect the device to any open USB port on your PC. This will launch the Windows Add New Hardware Wizard. Windows may display a message reading "Building driver database" at this point. This message may take a few minutes to pass. Click "Next" to proceed with the installation.

Add New Hardware Wiz	ard
	Windows driver file search for the device:
	Phocos CX-I V1.0
	Windows is now ready to install the best driver for this device. Click Back to select a different driver, or click Next to continue.
🕉 🍣	Location of driver:
	C:\PhocosDriver\FTDIBUS.INF
	< <u>B</u> ack Next > Cancel



• Select "Search for the best driver for your device. (Recommended)." as shown below and then click "Next".

Add New Hardware Wizard		
	 What do you want Windows to do? Search for the best driver for your device. Recommended). Display a list of all the drivers in a specific location, so you can select the driver you want. 	
	< <u>B</u> ack Next > Cancel	

• Check the box next to "Specify a location" and uncheck all others as shown below. Click "Browse" and locate the driver files. Once the files have been located, click "Next" to proceed with the installation.

Add New Hardware Wiz	ard
	Windows will search for new drivers in its driver database on your hard drive, and in any of the following selected locations. Click Next to start the search.
	< <u>B</u> ack Next> Cancel



• Windows may display a message reading "Building driver database" at this point. This message may take a few minutes to pass. Once Windows has found the required files, click "Next" to install the device.

Add New Hardware Wiz	ard
	Windows driver file search for the device:
	Phocos CX-I V1.0
	Windows is now ready to install the best driver for this device. Click Back to select a different driver, or click Next to continue.
🕉 🍣	Location of driver:
	C:\PhocosDriver\FTDIBUS.INF
	< Back Next > Cancel

• If the driver being installed does not have Microsoft WHQL signature files (.CAT files), the wizard will request a driver disk to attempt to find them. Click "OK" on the "Insert Disk" message box.





• The following window will appear to assist in locating the file. To proceed with the installation without the .CAT file, click "Skip File".

Insert Di	sk	×
4	The file 'ftdibus.cat' on FTDI USB Drivers Disk cannot be found. Insert FTDI USB Drivers Disk in the selected drive, and click OK.	OK Cancel
	Copy files from:	<u>S</u> kip File <u>D</u> etails
		Browse

- If the driver being installed is Microsoft WHQL certified, then the .CAT files will be located with the other driver files and should be installed automatically.
- Windows should then display a message indicating that the installation of the serial converter driver was successful. The COM port emulation driver must now be installed. Click "Finish" to complete the installation of the serial converter and proceed to the COM port emulation driver.





 Under Windows 98, the COM port emulation driver will be automatically installed from the same location as the serial converter driver. However, if the driver is not WHQL certified as explained above for the serial converter driver, the wizard will ask for the location of .CAT files. Click "OK" on the "Insert Disk" message box.



• The following window will appear to assist in locating the file. To proceed with the installation without the .CAT file, click "Skip File".

Insert Di	sk	×
_	The file 'ftdiport.cat' on FTDI USB Drivers Disk cannot be found.	ПК
	Insert FTDI USB Drivers Disk in the selected drive, and click OK.	Cancel
		<u>S</u> kip File
	Copy files from:	<u>D</u> etails
	C:WCP Drivers	<u>B</u> rowse

• If the driver being installed is Microsoft WHQL certified, then the .CAT files will be located with the other driver files and should be installed automatically.



• By examining the Device Manager (located in "Start" — "Control Panel"—"System" then select the "Device Manger" tab), the device appears as an additional COM port with the label "Phocos CXI port".

System Properties	?×
General Device Manager Hardware Profiles Performance	
• View devices by type • View devices by connection	
Ceyboard Ceyboard	
Wetwork adapters Ports (COM & LPT)	
Communications Port (CDM1) PCI ECP/EPP Port (LPT1) PCI Serial Port (CDM2) PCI Serial Port (CDM3) Phocos CX-I Port (COM4)	
Sound, video and game controllers System devices Universal Serial Bus controllers Phocos CX-I V1.0	
Properties Refresh Remove Prin	
ОК	Cancel



2.2. Windows 2000

If you are using Windows 2000, the Found New Hardware Wizard should be used to install devices when they are connected to the PC for the first time.

Attempting other methods for installing VCP drivers may corrupt driver installation and result in the device becoming unusable with the installation PC.

- If a device of the same type has been installed on your machine before and the drivers that are about to be installed are different from those installed already, the original drivers need to be uninstalled. Please refer to the **Uninstalling Phocos MXI** section of this document for further details of this procedure.
- Download the latest available "Windows 2000" Phocos MXI driver from the Phocos web site or from your Phocos MXI driver USB stick and unzip them to a location on your PC.

(e.g. C:\Phocos MXI)

• Connect the device to any open USB port on your PC. This will launch the Windows Found New Hardware Wizard. Click "Next" to proceed with the installation.

Found New Hardware Wizard			
	Welcome to the Found New Hardware Wizard This wizard helps you install a device driver for a hardware device.		
	< Back Next > Cancel		



• Select "Search for a suitable driver for my device (recommended)" as shown below and then click "Next"

Found New Hardware Wizard
Install Hardware Device Drivers A device driver is a software program that enables a hardware device to work with an operating system.
This wizard will complete the installation for this device:
Phocos CX-I V1.0
A device driver is a software program that makes a hardware device work. Windows needs driver files for your new device. To locate driver files and complete the installation click Next.
What do you want the wizard to do?
Search for a suitable driver for my device (recommended)
O Display a list of the known drivers for this device so that I can choose a specific driver
< Back Next > Cancel



• Check the box next to "Specify a location" and uncheck all others as shown below.

Found New Hardware Wizard
Locate Driver Files Where do you want Windows to search for driver files?
Search for driver files for the following hardware device:
USB <-> Serial Cable
The wizard searches for suitable drivers in its driver database on your computer and in any of the following optional search locations that you specify.
To start the search, click Next. If you are searching on a floppy disk or CD-ROM drive, insert the floppy disk or CD before clicking Next.
Optional search locations:
Floppy disk drives
CD-ROM drives
Specify a location
Microsoft Windows Update
< Back Next > Cancel

Click "Next" displays a dialog box for you to enter to the location of the drivers.

Found Nev	w Hardware Wizard		×
	Insert :he manufacturer's installation disk into the drive selected, and then click OK.	OK Cancel	
	Copy manufacturer's files from:	Browse	



• Once Windows has found the required driver .INF file, click "Next" to proceed.

Found New Hardware Wizard
Driver Files Search Results The wizard has finished searching for driver files for your hardware device.
The wizard found a driver for the following device: Phocos CX-I V1.0
Windows found a driver for this device. To install the driver Windows found, click Next.
C:\PhocosDriver\FTDIBUS.INF
< Back Next > Cancel



• Windows should then display a message indicating that the installation was successful. Click "Finish" to complete the installation. This has installed the serial converter. The COM port emulation driver must be installed after this has completed.



• After clicking "Finish", the Found New Hardware Wizard will continue by installing the COM port emulation driver. The procedure is the same as that above for installing the serial converter driver.



• By examining the Device Manager (located in "Start"--"Control Panel" --"System" then select the "Hardware" tab and click "Device Manger..."), the device appears as an additional COM port with the label "Phocos MXI Port".





2.3. Windows XP

If you are using Windows XP, the "Found New Hardware Wizard" should be used to install devices when they are connected to the PC for the first time.

Attempting other methods for installing VCP drivers may corrupt driver installation and result in the device becoming unusable with the installation PC.

- If a device of the same type has been installed on your machine before and the drivers that are about to be installed are different from those installed already, the original drivers need to be uninstalled. Please refer to the Uninstalling Phocos CXI section of this document for further details of this procedure.
- Download the latest available "Windows XP" Phocos MXI driver from the Phocos web site or from your Phocos MXI Driver USB stick and unzip them to a location on your PC.

(e.g. C:\Phocos MXI)

 Disconnect your PC from the Internet. This can be done by either removing the network cable from your PC or by disabling your network card by going to the "Start"--"Control Panel"--"Network and Dial-Up Connections", right-click the appropriate connection and selecting "Disable" from the menu. The connection can be re-enabled after the installation is complete.



Connect the device to a spare USB port on your PC. This will launch the Windows
Found New Hardware Wizard. If there is no available Internet connection, the screen
below is shown. Select "No, not this time" from the options available and then click
"Next" to proceed with the installation. If there is an available Internet connection,
Windows XP will silently connect to the Windows Update website and install any
suitable driver it finds for the device in preference to the driver manually selected.

Found New Hardware Wizard			
	Welcome to the Found New Hardware Wizard Windows will search for current and updated software by looking on your computer, on the hardware installation CD, or on the Windows Update Web site (with your permission). Read our privacy policy Can Windows connect to Windows Update to search for software? Yes, this time only Yes, now and every time I connect a device No, not this time		
	< Back Next > Cancel		



 Select "Install from a list or specific location (Advanced)" as shown below and then click "Next".





• Select "Search for the best driver in these locations" and enter the file path in the combo-box ("C:\Phocos MXI driver" in the example below) or browse to it by clicking the browse button. Once the file path has been entered in the box, click "Next" to proceed.

Found New Hardware Wizard
Please choose your search and installation options.
 Search for the best driver in these locations. Use the check boxes below to limit or expand the default search, which includes local paths and removable media. The best driver found will be installed. Search removable media (floppy, CD-ROM) Include this location in the search: C:PhocosDriver Browse Don't search. I will choose the driver to install. Choose this option to select the devce driver from a list. Windows does not quarantee that the driver you choose will be the best match for your hardware.
< Back Next > Cancel



• If Windows XP is configured to warn when unsigned (non-WHQL certified) drivers are about to be installed, the following screen will be displayed. Click on "Continue Anyway" to continue with the installation. If Windows XP is configured to ignore file signature warnings, no message will appear.

Hardwar	e Installation
<u>.</u>	The software you are installing for :his hardware: USB High Speed Serial Converter has not passed Windows Logo testing to verify its compatibility with Windows XP. (Tell me why this testing is important.) Continuing your installation of this software may impair or destabilize the correct operation of your system either immediately or in the future. Microsoft strongly recommends that you stop this installation now and contact the hardware vendor for software that has passed Windows Logo testing.
	Continue Anyway



• The following screen will be displayed as Windows XP copies the required driver files.





• Windows should then display a message indicating that the installation was successful. Click "Finish" to complete the installation. This has installed the serial converter. The COM port emulation driver must be installed after this has completed.



• After clicking "Finish", the Found New Hardware Wizard will continue by installing the COM port emulation driver. The procedure is the same as that above for installing the serial converter driver.



• By examining the Device Manager (located in "Start" — "Control Panel" — "System", then select the "Hardware" tab and click "Device Manger"), the device appears as an additional COM port with the label "Phocos MXI port"



3. Uninstalling Phocos CXI

3.1. Windows 98 and Windows ME

Uninstalling Phocos MXI drivers from Windows 98 or Windows ME should always be done through the Add/Remove Programs utility. This uses the Phocos MXI driver uninstaller program to remove files and registry entries to leave a clean system. Other methods may leave fragments of the driver that may interfere with future installations.

- Disconnect any Phocos MXI that is attached to the PC.
- Open the Add/Remove Programs utility located in "Start" "Control Panel"—"Add/Remove Programs". Select "Phocos MXI V1.0 Driver" from the list of installed programs.

Add/Remov	ve Programs Properties	? X
Install/Unit	nstall Windows Setup Startup Disk	
2	To install a new program from a floppy disk or CD-R0 drive, click Install.	м
	Install	
3	The following software can be automatically remove Windows. To remove a program or to modify its insta components, select it from the list and click Add/Remove.	d by illed
Chinese Phocos GetR gh InstantC Interret Japanes KernelD Key Driv Korean I	(Traditional) Language Support CX-I V1.0 Driver t D/DVD Explorer Q828750 se Language Support river re 1.0 Language Support	
	Add/ <u>R</u> emove	a
	OK Cancel Ar	ply

• Click the "Add/Remove" button. This will run the Phocos MXI driver uninstaller program.



• Click "Continue" to run the uninstaller or "Cancel" to exit.

FTDI U	Ininstaller Version 2.1	×
	If your USB device is connected, please unplug it now Press Continue to uninstall the drivers, or Cancel to quit.	
	Continue	

• When the uninstaller has finished removing the device from the system, the caption on the "Cancel" button will change to "Finish". Click "Finish" to complete the process.

FTDI U	ninstaller v3.0	×
	Uninstalling VID_0403&PID_D360 Deleting registry entries Deleting files Uninstall complete, press Finish to exit.	
	Continue	



4. Windows 2000

When uninstalling devices from Windows 2000, this should always be done through the Add/ Remove Programs utility. This uses the Phocos MXI driver uninstaller program to remove files and registry entries to leave a clean system. Other methods may leave fragments of the driver that may interfere with future installations.

- Disconnect any FTDI devices that are attached to the PC.
- Open the Add/Remove Programs utility located in "Start" "Control Panel" —"Add/Remove Programs". Select "Phocos MXI" from the list of installed programs.

🐱 Add or Remove Programs 📃 🗖 🔀				
5	Currently installed programs:	Show up <u>d</u> ates	Sort by: Name	~
C <u>h</u> ange or Remove	🙌 Mikogo		Size	4.02MB 🔼
Programs	🔂 Modular Power Management		Size	4.98MB
	TopenOffice.org 3.0		Size	349.00MB
Add New	🚰 OpenOffice.org 3.0 Language Pack (Chinese (simplified)))	Size	38.17MB
Programs	💏 OpenProj		Size	7.39MB
1	🚯 Opera 9.01		Size	12.89MB
	🔀 Phocos CXCOM		Size	5.38MB
<u>W</u> indows	Phocos MXI/CXI Flash-Driver			
	To change this program or remove it from your computer	, click Change/Remove.	Chang	e/Remove
	PhotoFiltre		Size	4.19MB
Set Pr <u>o</u> gram Access and	թl-2303 USB-to-Serial		Size	1.08MB
Defaults	🕞 PLCOM v2.10.6 Build 187		Size	2.47MB
	🐣 QQ2007 Beta4		Size	83.14MB —
	🕞 safeInput2.3			
	Skype(TM) 3.8		Size	28.48MB
	SoundMAX		Size	3.00MB
	i SPSTalk v3.0.3			~



- Click the "Change/Remove" button. This will run the Phocos MXI uninstaller program.
- Click "Continue" to run the uninstaller or "Cancel" to exit.

FTDI Ur	ninstaller Version 2.1	×
	If your USB device is connected, please unplug it now	
	Press Continue to uninstall the drivers, or Cancel to quit.	
	Continue	

• When the uninstaller has finished removing the device from the system, the caption on the "Cancel" button will change to "Finish". Click "Finish" to complete the process.

FTDI U	ninstaller v3.0	×
	Uninstalling VID_0403&PID_D360 Deleting registry entries Deleting files Uninstall complete, press Finish to exit.	
	Continue	



4.1. Windows XP

Uninstalling FTDI device drivers from Windows XP should always be done through the Add/Remove Programs utility as this uses the Phocos MXI driver uninstaller program to remove files and registry entries to leave a clean system. Other methods may leave fragments of the driver that may interfere with future installations

- Disconnect any FTDI devices that are attached to the PC.
- Open the Add/Remove Programs utility located in "Start" "Control Panel" —"Add/Remove Programs". Select "Phocos MXI" from the list of installed programs.

🐻 Add or Re	move Programs			
5	Currently installed programs:	Show up <u>d</u> ates	Sort by: Name	~
C <u>h</u> ange or Remove	🕅 Mikogo		Size	4.02MB 🔼
Programs	🕞 Modular Power Management		Size	4.98MB
	PpenOffice.org 3.0		Size	349.00MB
Add New	🚰 OpenOffice.org 3.0 Language Pack (Chinese (simplified))	Size	38.17MB
Programs	💏 OpenProj		Size	7.39MB
	🚯 Opera 9.01		Size	12.89MB
Add/Remove	侵 Phocos CXCOM		Size	5.38MB
<u>Windows</u>	😰 Phocos MXI/CXI Flash-Driver			
	To change this program or remove it from your compute	r, click Change/Remove.	Chang	e/Remove
	PhotoFiltre		Size	4.19MB
Set Pr <u>o</u> gram Access and	🕞 PL-2303 USB-to-Serial		Size	1.08MB
Defaults	侵 PLCOM v2.10.6 Build 187		Size	2.47MB
	🐣 QQ2007 Beta4		Size	83.14MB 💻
	🕞 safeInput2.3			
	Skype(TM) 3.8		Size	28.48MB
	SoundMAX		Size	3.00MB
	BPSTalk v3.0.3			~

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- Click the "Change/Remove" button. This will run the Phocos MXI uninstaller program.
- Click "Continue" to run the uninstaller or "Cancel" to exit.



• When the uninstaller has finished removing the device from the system, the caption on the "Cancel" button will change to "Finish". Click "Finish" to complete the process.

FTDI Uninstaller v3.0	
Uninstalling VID_0403&PID_ID360 Deleting registry entries Deleting files Uninstall complete, press Finish to exit.	
Continue	



5. Utilities

5.1. FT_Clean Utility

A program has been written to remove registry entries and files relating to Phocos MXI drivers. The FT_Clean program generates INI files for the uninstaller appropriate to the version of Windows installed and runs the uninstaller for each INI file generated. No user input is required for the uninstaller to run.

The program can be used to remove a single device, a consecutive range of devices or all devices with the same VID. A message box will appear to confirm which VID and PIDs combinations are going to be removed. A second message box will provide a final chance to cancel the uninstallation. The mouse and keyboard will be disabled for a few seconds while the uninstaller is running.

The example below shows the FT_Clean program configured to remove all devices with a FTDI VID and PIDs beginning with 60 i.e. all PIDs from 6000 to 60FF inclusive. A four digit PID will remove a single specific device while leaving the PID box blank will remove all devices with the same VID.

The PID of Phocos CXI is D361.

Ấr FTDI Clean Utility ¥1.0	
FTDI Chip	
VIC (Hex)	Clean System
PIC (Hex) 60	Exit
Status: Ready	

Should you experience problems with installing the Phocos MXI driver twice, run this program and do not enter a PID. The Program cleans your PC and then start again with the chapter "Installing the Phocos MXI driver".



6. Troubleshooting

6.1. General Troubleshooting

This chapter includes information on common difficulties experienced when trying to install the driver. If problems occur with your driver installation, please consult this section before contacting Phocos support. If the information here fails to remedy the problem, contact Phocos support who will attempt to rectify the situation as quickly as possible.

• Windows forces a reboot after installing a device

This problem can occur if an application is accessing a file while the New Hardware Wizard is trying to copy it. If installing a device, selecting not to restart the computer then unplugging and re-plugging the device may allow the device to function properly without restarting. Restarting the machine will allow the device to work correctly.

• Windows cannot find drivers for my device

This error can occur if the VID and PID programmed into the device EEPROM do not match those listed in the driver files, or when an old driver is already installed. When this happens, a screen similar to that shown below is displayed (screen shown from Windows 2000):



Found New Hardware Wizard
Driver Files Search Results The wizard has finished searching for driver files for your hardware device.
USB <-> Dual Serial Windows was unable to locate a driver for this device. To search another location click Back, or select an option and click Finish. © Disable the device. The Add/Remove Hardware Wizard in the control Panel can be used to complete the driver installation.
Skip driver installation of this device. Windows will prompt again to perform the driver installation.
< <u>B</u> ack Finish Cancel

In this case remove the old driver by as described in the Chapter"<u>Uninstalling Phocos MXI</u>"

If the problem still exists after the uninstall program then run the FT_Clean program and remove all old drivers. After a reboot you will be able to install the Phocos MXI driver as described in <u>Chapter 2</u>.



6.2. Windows 98 and Windows ME

• Windows complains about missing .cat files

Files with the .cat extension are signature files issued by Microsoft that indicate a device driver is WHQL certified. If a driver is not certified, there will be no .cat files available. When installing drivers in Windows 98 or Windows ME, the user is prompted to locate the .cat files if the operating system cannot find them. If the driver is not certified but you wish to install it anyway, the files may be skipped by clicking the "Skip" button.

• Windows complains about missing ftccomms.vxd file

This can occur when the USB Composite driver has been installed if the user has not browsed to the location of the driver files. If this message appears, do not skip it but browse to the driver file location. The wizard will then be able to correctly install the device.



6.3. Windows XP

• Windows XP displays an error and then terminates installation

If the following screen is displayed with this message, Windows XP has been configured to block the installation of any drivers that are not WHQL certified.

Hardware Installation	
8	The software you are installing for this hardware: USB High Speed Serial Converter has not passed Windows Logo testing to verify its compatibility with Windows XP. (<u>Tell me why this testing is important.</u>) This hardware will not be installed. Contact your system administrator.
	ОК

Two options are available to successfully install the device. Either a certified version of the driver can be installed (if available) or the driver signing options can be changed to either warn or ignore to allow the installation to complete.

To change the current driver signing setting, go to "Start"--"Control Panel"--"System", click on the "Hardware" tab and then click "Driver Signing". The desired signing option may then be selected.



7. Contact Information

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 FHW1U16RISER
 20

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 AX61221TM
 VM-105
 1000-PM
 76000958
 XPC100A002-01-B
 690-1002
 96HD500G-ST-WD7KE
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