# DIGITUS®

## USB - SERIAL CONVERTER



User Manual DA-70156 Rev.5

### Windows 7/8/8.1 Installation Guide

Step 1: Insert CD Driver of this product to the CD-ROM. Connect the device to a spare USB port on your PC.

Step 2: If there is an available Internet connection, Windows 7/8/8.1 will silently connect to the Windows Update website and install any suitable driver it finds for the device. If the automatic installation takes place there is no need to continue with the procedure outlined below. If no suitable driver is automatically found then the following procedure should be followed.

Press the Windows start button to bring up the start menu and select "Control Panel".







Step 4: At the next screen select Device Manager:



Step 5: In the Device Manager window there will be a device under Other Devices with a yellow warning symbol to indicate a problem ie no driver installed. The text next to this device will depend on the device attached. In this example the devices was "USB Serial Cable" devices.

실 Device Manager	
ile Action View Help	
4 🚔 1-PC	
▶ 1. Computer	
Disk drives	
Display adapters	
🛛 🖓 Human Interface Devices	
Gamma IDE ATA/ATAPI controllers	
IEEE 1394 Bus host controllers	
Keyboards	
Mice and other pointing devices	
Monitors	
Network adapters	
Other devices	
USB Serial Converter	
Ports (COM & LPT)	
Processors	
Sound, video and game controllers	
⊳ d∰ System devices	
universal Serial Bus controllers	
🟺 Standard Enhanced PCI to USB Host Controller	
🚽 Standard Enhanced PCI to USB Host Controller	
Standard OpenHCD USB Host Controller	
USB Mass Storage Device	
USB Root Hub	
USB Root Hub	

Step 6: Right click on the other device to bring up a menu as shown below. From the displayed menu select "Update Driver Software..." This then displays the option for an automatic search or a manual search.

🚔 Device Manager		- 0
File Action View Help		
(= -) II   I   I   (Q	🖻 👰 15	
I-PC     Disk drives     Disk drives     Disk drives     Disk drives     Display adapters     Display adapters     Dis ATA/ATAPI controlle     IEEE 1394 Bus host control     Keyboards     Mice and other pointing     Mice and other pointing     Monitors     Network adapters     Other devices     Other devices     Other devices     Sound, video and c     System devices     Universal Serial Bus     Standard Enhar	evices Update Driver Software Disable Jninstall Scan for hardware changes Properties I to USB Host Controller 18 Host Controller 18 Host Controller 18 Host Controller 19 Host Controller	E

Step 7: Select the second option to browse manually.

+	Search automatically for updated driver software
	Windows will search your computer and the Internet for the latest driver software for your device, unless you've disabled this feature in your device installation settings.
•	Browse my computer for driver software Locate and install driver software manually.

Step 8: click "Browse" and choose the corresponding OS driver in CD. Click "Next" to continue

	your computer	
Search for driver software in this locatio	n:	
E:\driver\windows 7.0	-	Browse
Include subfolders		
➔ Let me pick from a list of		
This list will show installed driver		evice, and an unver
This list will show installed driver software in the same category as		

Step 9: When the installation has finished a completion screen is displayed.





Step 10: Press Close to close this window and go back to the Device Manager Window.

Update Driver Software - USB Serial Converter	×
Windows has successfully updated your driver software	
Windows has finished installing the driver software for this device:	
USB Serial Converter	
	Close

🚔 Device Manager	
File Action View Help	
🔉 🕮 Human Interface Devices	
IDE ATA/ATAPI controllers	
IEEE 1394 Bus host controllers	
Keyboards	
Mice and other pointing devices	
Monitors	
Network adapters	
USB Serial Port	
Ports (COM & LPT)	
Communications Port (COM1)	
Processors	
Sound, video and game controllers	
System devices	
🖌 🚽 Universal Serial Bus controllers	
🛶 💗 Standard Enhanced PCI to USB Host Controller	
🛶 🖣 Standard OpenHCD USB Host Controller	
🛶 💗 Standard OpenHCD USB Host Controller	
🛶 💗 USB Mass Storage Device	
USB Root Hub	
🟺 USB Root Hub	
USB Root Hub	
USB Root Hub	
USB Serial Converter	

The Device Manager will still show a device under Other Devices but in addition to this there is a new entry under Universal Serial Bus Controllers indicated in the screenshot above as the USB Serial Converter. This indicates the bus layer of the driver is installed. Installing the Virtual Com Port layer of the driver is almost a repeat of the last few steps.

Step 11: Right click on the other device to bring up a menu as shown below. From the displayed menu select "Update Driver Software..." This then displays the option for an automatic search or a manual search.

Action View Help		
*   m   🗊   🖬 🖬	限 🕅 🕅 🔞	
🖟 🖓 Human Interface De	vices	
D Ca IDE ATA/ATAPI con		
🛛 - 🟺 IEEE 1394 Bus host o	ontrollers	
Keyboards		
Mice and other point	nting devices	
Monitors		
Network adapters		
Other devices		
USB Serial Port	Update Driver Software	
Ports (COM & LI		
Processors	Disable	
Sound, video and	Uninstall	
System devices	Scan for hardware changes	
Juniversal Serial E		
Standard Enh	Properties	
	ced PCI to USB Host Controller	
Standard Open	ICD USB Host Controller	
🖗 Standard OpenH	ICD USB Host Controller	
🖗 USB Mass Storag	ge Device	
🖗 USB Root Hub		
USB Root Hub		
🖣 USB Root Hub		
💗 USB Root Hub		
USB Serial Conv	erter	

Step 12: Select the second option to browse manually.



Step 13: click "Browse" and choose the corresponding OS driver in CD. Click "Next" to continue

Browse for driver software	on your computer	
earch for driver software in this loc	ation:	
E:\driver\windows 7.0		▼ Browse
Include subfolders		
<ul> <li>Let me pick from a list</li> </ul>	of device drivers on my	computer
	iver software compatible with t	
2000 Contractor C		

Step 14: When the installation has finished a completion screen is displayed.

🔵 📱 Update Driver Software - USB Serial Po	rt	
Installing driver software		

Step 15: Press Close to close this window and go back to the Device Manager Window.



ile Action View Help	
• 🔿   🖬   📴 📷   💐 😫 🖏 🐻	
🕟 📲 Display adapters	
Human Interface Devices	
IDE ATA/ATAPI controllers	
🔈 - 🟺 IEEE 1394 Bus host controllers	
b Keyboards	
Mice and other pointing devices	
Monitors	
Network adapters	
Ports (COM & LPT)	
Communications Port (COM1)	
USB Serial Port (COM3)	
Processors	
Sound, video and game controllers	
b Image System devices	
a - 🏺 Universal Serial Bus controllers	
🟺 Standard Enhanced PCI to USB Host Controller	
🖶 Standard Enhanced PCI to USB Host Controller	
🖶 Standard OpenHCD USB Host Controller	
Standard OpenHCD USB Host Controller	
🖶 USB Mass Storage Device	
USB Root Hub	
🖶 USB Root Hub	
🖶 USB Root Hub	
USB Root Hub	
USB Serial Converter	

This time the Device Manager does not have a USB <->Serial Cable entry under Other Devices but does show entries under Universal Serial Bus Controllers and Ports (COM & LPT). The above screen shot displays a correct installation. The device is now ready to use on COM3.

NOTE: Not all devices will install to COM3. The COM port allocation is determined by the installation wizard on the basis of the next free com port as designated in the PC registry.

#### **Remarks:**

After installation if you can see "USB Serial Converter" from the "Device Manager", but can't see "USB Serial Port (COM3)", please continue next steps.



Step A: Right click "USB Serial Converter", then click "Properties".



Step B: Select "Load VCP" in the "Advanced", click "OK"

General	Advanced	Power Management	Driver	
aerielai	Advanced	rower management	Dilver	
÷	USB Serial	Converter		
-				
Con	figuration			
Use	these setting	is to override normal de	vice configuration	
2	Load VCP			
-				
		OK	Cancel	

eneral	Advanced	Power Management Driver	
onotar			
÷	USB Serial	Converter	
- Con	figuration		
1.00		s to override normal device configuration	
USE	r mose security		
2	Load VCP		

Step C: Move out USB 2.0 TO RS232 on your computer. Connect the device to an old USB port on your PC again, now it's ok , please refer to the following chart:



#### **Uninstalling FTDI Devices**

With the release of Microsoft Windows 7/8/8.1, the FTDI uninstaller has been rendered unusable due to Windows Resource Protection preventing the executable from deleting driver files and associated registry values. Windows 7/8/8.1 will only allow the system itself to modify files and registry values in these locations.

Devices can be removed using the Device Manager by simply right-clicking on the mouse and selecting "Uninstall". This will delete the associated registry entries for that device only. Windows 7/8/8.1 provides an automatic method to delete driver files via a check box to "Delete the driver software for this device" on the uninstall dialog box.



### Windows XP Installation Guide

Step 1: Insert CD Driver of this product to the CD-ROM

Step 2: Connect the device to a free USB port on your PC, and find new hardware wizard, please refer to the following chart:



Found New Hardware Wizard	
	his wizard helps you install software for: usb serial converter If your hardware came with an installation CD or floppy disk, insert it now. /hat do you want the wizard to do? Install the software automatically (Recommended) Install from a list or specific location (Advanced) ick Next to continue.
	< Back Next > Cancel

Step 3: Select "No, not this time", click "Next" to continue.

Step 4: Select "Install from a list or specific location (Advanced)", click "Next" to continue.

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:				
O Don't search. I will choose the driver to install.				
Choose this option to select the device driver from a list. Windows does not guarantee that the driver you choose will be the best match for your hardware.				
< Back Next > Cancel				

Step 5: Select "Search removable media (floppy, CD-ROM...)", click "Next" to continue.

Found New Hardware Wizard	
Please wait while the wizard searches	
usb serial converter	
	<back next=""> Cancel</back>

Step 6: Auto search for the corresponding driver in the CD.

Found New Hardware Wizard					
Please select the best match for your hardware from the list below.					
USB Serial Converter					
Description	Version	Manufacturer	Location		
😅 USB Serial Converter	2.2.4.0	FTDI	i:\usb 2.0 to rs232 converter\w		
💱 USB Serial Converter	2.2.4.0	FTDI	i:\usb 2.0 to rs232 cable\win20		
<					
This driver is digitally signed. <u>Tell me why driver signing is important</u>					
		< Bac	ck Next > Cancel		

Step 7: You will find two types of hardware wizard, one is for USB 2.0 - RS232 Converter, another one is for USB 2.0 TO RS232 cable. Please choose the corresponding driver according to your product, click "Next" to continue.

Found New Hardware Wizard				
Please wait while the wizard installs the	e software			
USB Serial Converter				
ftd2xx.dll To C:\WINDOWS\syswow6	ک بز			
	< Back Next > Cancel			

Step 8: The wizard has started installation and copy file to your system

Found New Hardware Wizard				
Found New Hardware Wize	Aard Completing the Found New Hardware Wizard The wizard has finished installing the software for: USB Serial Converter			
	Click Finish to close the wizard.			

Step 9: Click "Finish" to close the wizard.



Step 10: Find new com port.

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).         Online privacy information         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			

Found New Hardware Wizard
Image: Note of the second state of
Click Next to continue.
< Back Next > Cancel

Step 12: Select "Install from a list or specific location (Advanced), click "Next" to continue.

Found New Hardware Wizard
Please choose your search and installation options.
<ul> <li>Search for the best driver in these locations.</li> <li>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.</li> <li>Search removable media (floppy, CD-ROM)</li> <li>Include this location in the search:</li> <li>Browse</li> </ul>
O Don't search. I will choose the driver to install. Choose this option to select the device driver from a list. Windows does not guarantee that the driver you choose will be the best match for your hardware.
< Back Next > Cancel

Step 11: Select "No, not this time", click "Next" to continue.

Step 13: Select "Search removable media (floppy,CD-ROM...)",click "Next" to continue.

Found New Hardware Wizard	
Please wait while the wizard searches.	
USB Serial Port	Q
	<back next=""> Cancel</back>

Step 14: Auto search for the corresponding driver in the CD.

Found	Found New Hardware Wizard				
Please select the best match for your hardware from the list below.					
ſ	JUSB Serial	Port			
	Description	Version Manufacturer	Location		
	😽 USB Serial Port		i:\usb 2.0 to rs232 converter\win20	0	
	💱 USB Serial Port	2.2.4.0 FTDI	i:\usb 2.0 to rs232 cable\win2000_	xt	
	<	IIII			
This driver is digitally signed. <u>Tell me why driver signing is important</u>					
			< Back Next > Ca	ancel	

Step 15: Choose one type of the driver for your product, click "Next" to continue.

Found New Hardware Wizard				
Please wait w	while the wizard installs the	e software		E)
<b>j</b> u:	SB Serial Port			
	FTLang.dll To C:\WINDOWS\system32			
		< Back	Next >	Cancel

Step 16: The wizard has started installation and copy file to your system .

Found New Hardware Wiz	ard
	Completing the Found New Hardware Wizard The wizard has finished installing the software for: USB Serial Port
	< Back Finish Cancel

Step 17: Installation completed, click "Finish" to close the wizard.



Step 18: Your new hardware is installed and ready to use.



Step 19: If you want to see it, right click "my computer", and then click "Properties".

Systen	n Restore	Automatic	Updates	Remote
General	Computer	Name	Hardware	Advanced
Device N	TORE OF BOUNDARY	222 322	or 10 10.00	
S	The Device Mana on your computer.			
~	properties of any o			
		(	Device M	anager
		1		
Drivers-				
1	Driving Signing let	s vou make s	ure that installed	drivers are
	compatible with W	/indows. Wind	dows Update lets	you set up
	how Windows cor	nnects to Win	dows Update for	drivers.
	Driver Sign	ing	Windows	Update
Hardwar	e Profiles			
-	Hardware profiles	provide a way	y for you to set up	o and store
~	different hardware	configuration	IS.	
			Hardware	Deefler
			Hardware	Fromes

Step 20: Select "Device Manager" in the "Hardware" of the interface "System Properties", click it, you can see the hardware devices installed on your computer, please refer to the following chart:



Step 21: Installation finished.

#### Remarks:

After installation, if you can see "USB Serial Converter" from the "Device Manager", but can't see "USB Serial Port (COM3)", please continue next steps.



主 🌆 Human Interface D	evices
🗄 🗃 IDE ATA/ATAPI cor	ntrollers
🛨 🦢 Keyboards	
🗄 🐌 Mice and other poir	nting devices
🗄 🕵 Other devices	
🖻 🝠 Ports (COM & LPT)	
Communication	
🥏 🖉 Communication	s Port (COM2)
🚽 🖉 Printer Port (LP	PT1)
🛨 📾 Processors	
🗄 🎱 Sound, video and ç	game controllers
🗄 😼 System devices	
🖻 🥰 Universal Serial Bus	
2	ersal PCI to USB Host Controller
2	ersal PCI to USB Host Controller
🛛 😴 Standard Unive	ersal PCI to USB Host Controller
2 No. 1	ersal PCI to USB Host Controller
🥰 USB Root Hub	
🥰 USB Root Hub	
😋 USB Root Hub	
😴 USB Root Hub	
🛶 🥰 USB Serial Con	
	Update Driver
	Disable
	Uninstall
	Scan for hardware changes
	Properties

Step A: Right click "USB Serial Converter", and then click "Properties".

SB Ser	ial Convert	er Properties		? 🛛
General	Advanced	Power Management D	river	
Use	USB Serial nfiguration e these setting Load VCP	Converter Is to override normal devic	e configuration	

Step B: Select "Load VCP" in the "Advanced", click "OK".

Step C: Move out the USB - RS232 converter on your computer. Connect the device to an old USB port on your PC again, now it is ok, please refers to the following chart:



Congratulations, installation is successful.

### **Remove Driver**

1, Open the drivers of this product, please refer to the below chart :



2, Double click "FTClen.exe", it appears the following interface

🎢 FTDI Clean Utility V1.0	- ×
<b>FTDI</b> Chip	
VID (Hex)	
PID (Hex)	Clean System Exit
Status: Ready	

3, click "Clean System", it appears the following interface :

Write Wite Pitte	🗊 FTDI Clean Utility V1.0	_ ×
Information	sconnect all FTDI devices from the PC	
	FTDI -	Clean System
	Windows XP Status: Ready	Exit

4, Disconnect USB 2.0 To rs232 device from the pc <sup>,</sup> click "ok" it appears the following interface, then click "Yes"

<b>^</b>		FTDI Clean Utility V1.0	- ×
	1		
Confirm		×	
?	You are about to u Do you want to co	uninstall all FTDI drivers for VID 0x0403 and all PIDs. ntinue?	
	Verent	Yes No	
		FTDI •	Clean System
		PID (Hex)	Exit
		Windows XP	
		Status: Ready	

5, please click "No" to uninstall driver

	🗊 FTDI Clean Utility V1.0	-	×
Confirm	you want to cancel driver uninstallation?		
	FTDI		ĺ
	PID (Hex)	Exit	1
	Windows XP Status: Ready		

6, When Uninstall is completed, please click "Exit" to terminate the uninstall application.

🌾 FTDI Clean Utility V1.0	- ×
<b>FTDI</b> Chip	
VID (Hex)	Clean System
PID (Hex)	Exit
Windows XP Status: System clean completed	

### Mac OS X Installation Guide

### 1 Welcome to the Mac OS X Installation Guide

This document describes the procedure for installing the Mac OS X FTDIUSBSerial driver for FTDI's FT2232C, FT232BM, FT245BM, FT8U232AM and FT8U245AM devices. The driver is available for free download from the Drivers section of the FTDI web site.

#### 2 Installing FTDIUSBSerialDriver

Download the driver from the Drivers section of the FTDI web site and save it to the hard disk. The driver is now available in disk image (.dmg) format. Run the installer by double clicking on the FTDIUSBSerialDriver.dmg icon.



Click Continue to proceed with the installation and follow the instructions on screen. When the installation is complete, reboot the computer.



When the computer has rebooted, plug in the device. If the device is installed properly, you will see entries in the /dev directory:

/dev/cu.usbserial-xxxxxxxx

/dev/tty.usbserial-xxxxxxx

where xxxxxxx is either the device's serial number or, for unserialized devices, a location string that depends on which USB port your device is connected to. Note that for FT2232C devices port A is denoted by the serial number appended with "A" and port B is designated by the serial number appended with "B"./dev can be accessed through the Terminal application. The Terminal application can be launched by selecting Go > Applications > Utilities > Terminal. Type the following lines in the Terminal window to produce the file list:

cd /dev

ls-l

If you run the application System Preferences and select Network (Go > Applications > System Preferences > Network), you should see the text "New Port Detected".

	New Port Detected
8	A new network port has been detected:
* 4	usbserial-1B22
	Please verify that it is configured correctly, then press Apply Now to activate it.

Click OK and select Network Port Configurations from the Show list. The new port can be enabled from this screen by checking the On box and clicking Apply Now.

0 0	Network	0
Show All D	Displays Sound Network Startup Disk	
	Location: Automatic Show: Network Port Configurations Check a configuration to make it active. Drag configurations into the order you want to try them when connecting to a network.	
	On       Port Configurations         usbserial-1B22       ✓         ✓       Internal Modem         ✓       Built-in Ethernet         Edit       Delete         Duplicate	
		?
[ Click tl	he lock to prevent further changes. Assist me	pply Now

At this point, it is possible to exit Network and use the device as a COM port. If you wish to set the device up a modem for an Internet connection, select the new port from the Show list to display the window below. Please note that the FT2232C device has two ports available and these must be configured separately.

00	Network	C
how All Displays Sou	nd Network Startup Disk	
L	ocation: Automatic	*
	Show: usbserial-1B22	*
_	PPP TCP/IP Proxies	Modem
Service	Provider:	(Optional)
Accou	nt Name:	
P	assword:	
Telephone	Number:	
Alternate	Number:	(Optional)
		ows all users of this computer to ccount without entering a password. Dial Now
		(?)

Entries for this screen are specific to the Internet account for each user. If you do not know the required details, contact your Internet service provider.

### 3 Uninstalling FTDIUSBSerialDriver

To remove the drivers from Mac OS X, the user must be logged on as root. Root is a reserved username that has the privileges required to access all files.

Start a Terminal session (Go > Applications > Utilities > Terminal) and enter the following commands at the command prompt:

cd /System/Library/Extensions

rm -r FTDIUSBSerialDriver.kext

The driver will then be removed from the system.

To remove the port from the system, run the application SystemPreferences and select Network. Selecting Network Port Configurations from the Show menu will display the port as greyed out.

Select the uninstalled port and click Delete. Confirm the deletion to remove the port.

00	Network	$\bigcirc$
Show All	Displays Sound Network Startup Disk	
	Location: Automatic Show: Network Port Configurations Check a configuration to make it active. Drag configurations into the order you want to try them when connecting to a network.	
	On       Port Configurations         usbserial-1B22       Internal Modem         Internal Modem       Edit         Built-in Ethernet       Edit         Delete       Duplicate	
		?
Click the lock to prevent further changes. Assist me Apply Now		

#### 4 How do I know what my deviceID is?

Launch the System Profiler utility, or Apple System Profiler for earlier versions of OS X. This can be accessed by going to the Finder and selecting Applications from the Go menu, then open the Utilities folder.

Select USB under Hardware in the pane to the left and then select the appropriate device from the USB Device Tree. In the screen shot below (from OS 10.3), the device has a deviceID given by:

Vendor Name: FTDI

Prioduct ID: 24577 (\$6001)

A Vendor Name of FTDI is equivalent to a Vendor ID of 1027 (\$0403).



If the device does not work after installing the driver, it is likely to be because the PID is not supported by the driver. If this is the case, contact FTDI Support with the PID that needs to be added to the driver. If the VID is not 0x0403, it is likely that the device is not an FTDI device and we cannot support it.

### Windows CE Installation Guide

### 1 Welcome to the Windows CE Installation Guide

The purpose of this MANUAL is to provide users of USB 2.0 To RS232 with a simple procedure for installing drivers for their devices on PDAs and targets running Windows CE 4.2 and later.

### 2 Installing Devices

The VCP drivers emulate a standard COM port. These can be communicated with in the same manner as any other COM port on the PC.

- \_ ftdi\_ser.dll the VCP driver file
- \_ FTDIPORT.inf user changeable file to allow devices with custom VID and PID combinations to be installed
- \_ Copy all of the unzipped files to the \\Windows directory on the PDA.
- \_ If the PDA requires a host adaptor (e.g. USB host cable, presentation pack or Compact

Flash host card), make sure that it is connected and installed **before** proceeding.

\_ Connect the RS232 device to a host USB port on the PDA. This will provide a dialog box to direct Windows CE to the driver files.

\_ Type the full name of the VCP driver file into the dialog box as shown below. If the file name is incorrect, the driver will not be found and the device will not function.

\_ The device installation is now complete.

🎊 Unidentified USB D 🗱 🐟 12:04
Gunday, June 01, 2003
Unidentified USB Device
Enter the name of the device driver for this device. For information, see the device manufacturer's documentation.
ftdi_ser.dll       OK
123       1       2       3       4       5       6       7       8       9       0       -       = $\bullet$ Tab       q       w       e       r       t       y       u       i       0       p       []         CAP       a       s       d       f       g       h       j       k       l       ;       '         Shift       z       x       c       v       b       n       m       ,       / $\leftarrow$ Ctl       áü       `       \       · <td< th=""></td<>

The device installation is now complete.

www.assmann.com ASSMANN Electronic GmbH Auf dem Schüffel 3 58513 Lüdenscheid Germany