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## 1 Introduction

This instruction manual is for users of the TRUST 5 PORT USB 2.0 PCI CARD. The TRUST 5 PORT USB 2.0 PCI CARD supports a higher bandwidth (up to 480 Mbps data transfer) for USB 2.0 devices. This makes the card up to 20 times faster than the USB 1.1 standard. The TRUST 5 PORT USB 2.0 PCI CARD also supports the current USB 1.1 devices for both PC and MAC computer systems.

## 2 Safety

Carefully read the following instructions before use:

1. Computer components may contain static electricity. You may receive an electric shock if you touch the computer casing.
2. Turn the computer off and remove the plug from the plug socket before opening the computer.
3. Make sure the components you wish to add are compatible with your computer system.
4. Always hold the USB 2.0 card on the edges to prevent damage caused by static electricity.

## 3 Installation

### 3.1 Connections

Follow the instructions below and refer to table 1 and figure 1.

Connection	Function
<b>A</b>	Connection for internal USB devices, such as a hard disk, CD-ROM drive, etc.
<b>B</b>	Connection for external USB devices, such as scanners, modems, cameras, etc.

Table 1: TRUST 5 PORT USB 2.0 PCI CARD connections

### 3.2 Uninstalling old drivers and devices

The most common cause of faults during installation is the presence of a driver for a similar, old product. The best solution is to first remove all drivers related to old devices before installing the new driver.

## TRUST 5 PORT USB 2.0 PCI CARD

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1. Enter the Windows 'Safe Mode' (press F8 when starting Windows and then select 'Safe Mode' from the menu which is displayed).
2. Go to 'Start – Settings – Control Panel' and double-click on the 'Add/Remove Programs' icon.
3. Find all the programs for similar, old devices and remove these by clicking on the 'Add/Remove' button. When in the 'Safe Mode', it is possible for some programs to appear twice. In that case, remove all the programs which appear twice.
4. Restart the computer.

### 3.3 Installing the USB card

1. Close your Windows or MAC operating system and turn the computer off.
2. Remove the power cable from the mains supply.
3. Open the computer casing as described in the instruction manual provided with your computer.
4. Find a free PCI slot (white).
5. Remove the plate from the slot.
6. Remove the TRUST 5 PORT USB 2.0 PCI CARD from the antistatic packaging.
7. Insert the TRUST 5 PORT USB 2.0 PCI CARD into the PCI slot. Press the card firmly into the slot so that it makes a good contact. Screw the card firmly into place (see figure 2).
8. If present, connect your internal USB devices (for example, an internal USB 2.0 hard disk or CD-ROM drive) to the internal connection on your TRUST 5 PORT USB 2.0 PCI CARD. See the instruction manual provided with the devices for instructions concerning the installation procedure.
9. Close the computer casing and connect the power cable to the computer.
10. Connect the power cable to the wall socket.
11. Turn the computer on and install the TRUST 5 PORT USB 2.0 PCI CARD driver. See chapter 3.4 for instructions concerning the installation procedure.

### 3.4 Installing the driver

**Note:** First remove the drivers for your old USB 2.0 card (if present).

**Note:** The latest drivers can be downloaded from [www.trust.com/12863](http://www.trust.com/12863). Check whether a new driver is available and use this for the installation.

**Note:** Make sure all other programs are closed during the installation.

**Note:** During installation in Windows XP, you may receive a message saying that the driver has not been signed. This does not cause a problem for the functionality.



### 3.5 Installation in Windows 98 / Windows 98 SE

1. Start Windows.
2. Windows will detect new hardware (NEC USB Open Host Controller).
3. Insert the diskette containing the drivers into your floppy disk drive. Click on 'Next' to continue.
4. Select "Search for the best driver (Recommended)" and click on 'Next' to continue.
5. Specify the location as [A:\Win98].
6. Click on 'Next' to continue with the installation. Follow the on-screen instructions.

Continue to chapter 4 after completing the installation.

### 3.6 Installation in Windows ME

1. Start Windows.
2. Windows will detect new hardware (NEC USB Open Host Controller).
3. Insert the diskette containing the drivers into your floppy disk drive. Select "Specify the location of the driver (Advanced)" and click on 'Next' to continue.
4. Specify the location as [A:\WinMe].
5. Click on 'Next' to continue with the installation. Follow the on-screen instructions.

Continue to chapter 4 after completing the installation.

### 3.7 Installation in Windows 2000

1. Start Windows 2000.
2. Windows will detect new hardware (Universal Serial Bus (USB) Controller).
3. Insert the diskette containing the drivers into your floppy disk drive and click on 'Next' to continue.
4. Select "Search for a suitable driver..." and click on 'Next' to continue.
5. Select "Specify a location" and click on 'Next' to continue.
6. Give the location as [A:\Win2000] and click on 'OK'.
7. Click on 'Next' to install the driver. Follow the on-screen instructions.

### 3.8 Installation in Windows XP

1. Start Windows XP and log in.
2. Windows XP will detect new hardware (Universal Serial Bus (USB) Controller).
3. Insert the diskette containing the drivers into your floppy disk drive.
4. Select "Install from a list or specific location (advanced)". Click on 'Next' to continue.
5. Select "Search for the best driver in these locations". Only select the option "Include this location in the search".
6. Give the location as [A:\WinXP] and click on 'Next' to continue.

7. A window displaying the message "Software has not passed Windows Logo testing" will appear. Click on "Continue Anyway" to install the driver.
8. Click on 'Finish' to complete the installation.

### 3.9 Installation on a MAC system

**Note:** *The TRUST 5 PORT USB 2.0 PCI CARD only works as a USB 1.1 controller on MAC OS 8.6 to MAC OS 9.X systems. It also works as a USB 2.0 controller on systems operating MAC OS 10.1 or higher.*

1. Start the computer after you have installed the TRUST 5 PORT USB 2.0 PCI CARD in your MAC system.
2. MAC OS will detect new hardware (Universal Serial Bus (USB) Controller).
3. Insert the diskette containing the drivers into your floppy disk drive.
4. Copy (drag) the 'USB2EHCI\_v104.img.bin' file from the location a:\MAC to your desktop (see figure 4).
5. Double-click on the 'USB2EHCI\_v104.img.bin' file. A new icon ('USB2EHCI\_v104.img') will appear on your desktop (see figure 5).
6. Double-click on the 'USB2EHCI\_v104.img' icon. A new window will be opened (see figure 6).
7. Double-click on the icon in the new window and follow the on-screen instructions.
8. A window will appear at the end of the installation with a message stating that the software has been successfully installed. Click on 'Finish' to complete the installation.

## 4 Checking after the installation (only for Windows)

After installing the device and the driver, the following are installed on your computer and can be checked (see figure 3):

'Start – Settings – Control Panel'. Double-click on the 'System' icon and select the 'Device Manager' tab.

- Universal Serial Bus controllers

The following devices have been installed:

NEC PCI to USB Enhanced Host Controller  
NEC PCI to USB Open Host Controller  
NEC PCI to USB Open Host Controller  
USB Root Hub  
USB Root Hub

**Note:** *Deviations may also occur as a result of using new drivers available on the Internet.*

**Note:** *The location or name in the 'Control Panel' may vary for different operating systems.*

## 5 Frequently asked questions

Question	Answer
Is it possible to connect current USB 1.1 devices to the TRUST 5 Port USB 2.0 PCI CARD?	Yes. The device will not, however, obtain the USB 2.0 speed (480 Mbits/sec) but the USB 1.1 speed (12 Mbits/sec).
Is it possible to connect a USB 2.0 hub to the TRUST 5 Port USB 2.0 PCI CARD?	Yes. You will then be able to connect a number of devices (max. 127) to one USB port.
Is it possible to install more than one USB 2.0 card in my system to create more USB 2.0 connections?	That is possible, but you could also connect a USB hub, such as the TRUST 4 PORT USB 2.0 HUB, to keep as many PCI slots as possible free for other devices.



Table 2: Frequently asked questions

## 6 Specifications

Connection	PCI
No. of USB ports	5 USB 2.0 (1 internal and 4 external)
Speeds	480 Mbits / 12 Mbits / 1.5 Mbits per second
480 Mbits application	Hard disk, CD-ROM drive, cameras (photo + video)
12 Mbits application	Audio, compressed video
1.5 Mbits application	Keyboard, mouse, joystick, gamepad
Output voltage	5 Volt DC per port
Output current	500 mA per port
Operating system	Windows 98 / Windows 98 SE / Windows 2000 / Windows ME / Windows XP and MAC OS 10.1

Table 3: Technical specifications

## 7 Troubleshooting

<b>Method</b>	
1.	Read the solutions given below.
2.	Check for up-to-date FAQ's, drivers and instruction manuals on the Internet ( <a href="http://www.trust.com/12863">www.trust.com/12863</a> ).



<b>Problem</b>	<b>Cause</b>	<b>Possible solution</b>
<b>After the card has been installed, it is not detected when starting the computer.</b>	The card has not been inserted into the PCI slot correctly.	Insert the card firmly into the PCI slot.
<b>The USB cable has been extended and the device no longer works.</b>	The length of the USB cable must not exceed 3.5 metres. A USB repeater must be used if the cable is longer than 3.5 metres.	Do not extend the cable.
<b>A device connected to the USB 2.0 card does not work or does not work correctly.</b>	The device has not been installed or has not been installed correctly.	Remove the device from the USB 2.0 card and uninstall the drivers. Install the device as described in the instruction manual provided with the device.
<b>My games do not always work with my joystick or gamepad.</b>	Some games only work if only one game controller has been installed.	See the instruction manual provided with the game and, if necessary, remove the game controllers which you do not use.
<b>A message is displayed stating that not enough power can be given to the connected devices.</b>	Too many devices are connected and are using too much power.	Remove one or more devices until you have enough power.

**Table 4: Troubleshooting**

If you still have problems after trying these solutions, please contact one of the Trust Customer Care Centers. You can find more information at the back of this instruction manual. Please have the following information available:

- The article number. This is 12863.
- A good description of what does not work.
- A good description of when the problem occurs.