

SEPTEMBER 2003 IC136C

# **USB** Card



#### CUSTOMER SUPPORT INFORMATION

Order toll-free in the U.S.: Call 877-877-BBOX (outside U.S. call 724-746-5500) FREE technical support 24 hours a day, 7 days a week: Call 724-746-5500 or fax 724-746-0746 Mailing address: Black Box Corporation, 1000 Park Drive, Lawrence, PA 15055-1018 Web site: www.blackbox.com • E-mail: info@blackbox.com

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This equipment generates, uses, and can radiate radio-frequency energy, and if not installed and used properly, that is, in strict accordance with the manufacturer's instructions, may cause interference to radio communication. It has been tested and found to comply with the limits for a Class A computing device in accordance with the specifications in Subpart B of Part 15 of FCC rules, which are designed to provide reasonable protection against such interference when the equipment is operated in a commercial environment. Operation of this equipment in a residential area is likely to cause interference, in which case the user at his own expense will be required to take whatever measures may be necessary to correct the interference.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This digital apparatus does not exceed the Class A limits for radio noise emission from digital apparatus set out in the Radio Interference Regulation of Industry Canada.

Le présent appareil numérique n'émet pas de bruits radioélectriques dépassant les limites applicables aux appareils numériques de classe A prescrites dans le Règlement sur le brouillage radioélectrique publié par Industrie Canada.

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# 1. Specifications

System Requirements: Hardware: IBM® PC or compatible, PCI slot; Software: Microsoft® Windows® 98/ 2000/XP

Interface: PCI

Connectors: (2) USB "A" type

Power: From the PCI bus

Size: 1"H x 4"W x 4"D (2.5 x 10.2 x 10.2 cm)

Weight: 0.5 lb. (0.2 kg)

## 2. Introduction

#### 2.1 Overview

The USB Card upgrades your PC to Universal Serial Bus (USB). It's plug-and-play and provides a user-friendly interface.

USB technology supports up to 127 physical devices (including keyboards, mice, monitors, scanners, printers, telephones, joysticks, gamepads) in a tiered-star configuration. Each device has a maximum of 16 endpoints. Devices can be either low-speed (1.5 Mbps) or full-speed (12 Mbps).

#### 2.2 Features

- Fully compatible with USB OHCI (Open Host Controller Interface) Rev. 1.0.
- Complies with PCI Local Bus 2.1 specification.
- Supports PCI based Pentium<sup>®</sup> II or above motherboards

### 2.3 System Requirements

- IBM PC compatible
- PCI slot.
- A supported operating system: Windows 98, 2000, or XP.

### 2.4 What the Package Includes

- USB Card.
- USB driver diskette for Windows 98/2000/XP.
- This users' manual.

## 3. Installation

Follow these steps to install the card and software:

- 1. Add the USB driver to a system that is running Windows 98, 2000, or XP.
- 2. Install the card in your computer.
- 3. Install the software for either Windows 98, 2000, or XP.

#### 3.1 Installing the USB Driver

Make sure that your system has no other programs running.

Install the driver. Insert the USB Card driver diskette into your A: drive. Plug the USB connection into the serial converter using a standard USB cable (not supplied). You will see the **Add New Hardware Wizard** dialog box. Press **Next**. Select **Search for the best driver** and click **Next**. Select **Specify a location**, type A: and press **Next**. Verify the correct driver (.inf file extension) and press **Next**. Click **Finish**. Two dialog boxes will appear and install a USB Serial port. When they

disappear, the installation is complete. Remove the diskette from your A: drive.

#### 3.2 Hardware Installation

- 1. Turn off the power to your computer and disconnect the power cable.
- 2. Open the computer case.
- 3. Select an open PCI slot. Remove the cover plate for that slot.
- 4. Push the USB Card into the slot.
- 5. Attach the card's bracket to the back of the computer with the screw to fix it in place.
- 6. Close the computer case.
- 7. Connect the power cable and turn the power on to your computer.

#### 3.3 Installing the USB Card in Windows 98

NOTE

You must already have Windows 98 installed on your computer and running properly before installing the USB Card.

1. After you install your card in your computer's PCI slot, the Windows 98 Plug-and-Play will start detecting the USB Card and will load the driver automatically. The **Add New Hardware Wizard** screen will appear. See Figure 3-1.



Figure 3-1. Add New Hardware Wizard screen.

2. Click **Next** to continue. The Wizard will prompt, **What do you want Windows to do?** See Figure 3-2.



Figure 3-2. "What do you want Windows to do?" prompt.

3. Click **Next** to continue. The Wizard will prompt with **Specify a Location**. See Figure 3-3.

Add New Hardware W	izard
	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>Back</u> Next> Cancel

Figure 3-3. "Specify a Location" prompt.

4. Choose path A:\if your diskette is at A. Click Next to continue. See Figure 3-4.



Figure 3-4. Selecting the updated driver.

#### **CHAPTER 3: Installation**

#### 5. Click Next to continue. See Figure 3-5.



Figure 3-5. Windows driver file search for the device.

6. Click **Next** to continue. The **Install Completed** screen appears. See Figure 3-6.



Figure 3-6. "Install Completed" screen.

- 7. Click **Finish** to continue.
- 8. Attach the USB peripheral on the USB connector. Reboot the system after installation is complete.

#### 3.4 Installing the USB Card in Windows 2000

Right click on **My Computer**, select **Properties**, and **Hardware**, then **Device Manager** to verify that the installation is complete. See Figure 3-7.

System Properties	<
General Device Manager Hardware Profiles Performance	
	1
View device by type View device by connection	L
CDROM	L
Disk drives	L
🖽 🛄 Display adapters	L
Floppy disk controllers	L
Hard disk controllers	I
E Keyboard	L
🕀 🖳 💭 Monitor	L
Mouse	L
Network adapters	L
Ports (COM & LPT)	L
🕀 📲 System devices	L
🛨 🛶 Universal serial bus controller	L
Intel 82371AB/EB PCI to USB Universal Host Controller	L
USB Root Hub	L
USB Root Hub	L
Properties Befresh Bemove Print	I
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OK Cancel	

Figure 3-7. Device Manager tab.

### 3.5 Installing the USB Card in Windows XP

1. Select **Install the software automatically** (Recommended) and click Next. See Figure 3-8.



Figure 3-8. Install the software automatically.

#### **CHAPTER 3: Installation**

2. Click Continue Anyway. See Figure 3-9.

Hardware	Installation
	The software you are installing for this hardware: USB 1.0 PCI Host Card 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 STOP Installation

#### Figure 3-9. Hardware Installation screen.

3. The wizard has finished installing the software. Click **Finish**. See Figure 3-10.



Figure 3-10. Completing the Found New Hardware Wizard screen.

- 4. Repeat steps 1 to 3 if needed.
- Right-click My Computer, select Properties, and Hardware, then Device Manager to verify that the driver installation is complete. See Figure 3-11.

### **CHAPTER 3: Installation**

System Properties	×
General Device Manager Hardware Profiles Performance	
• View device by type O View device by connection	
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🕀 🖳 Display adapters	
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Dim Mouse	
Detwork adapters	
申····· ₽ Ports (COM & LPT)	
庄 🧝 System devices	
🛨 🛶 Universal serial bus controller	
Intel 82371AB/EB PCI to USB Universal Host Controller	
OPTI 82C861 PCI to USB Open Host Controller	
	- 1
Properties Refresh Remove Print	
OK Cance	1

Figure 3-11. Device Manager tab.

# Appendix: Troubleshooting

## A.1 Problem/Solution

*Problem*: A device in your computer does not work, or does not work properly, after the USB Card is installed.

*Solution:* There might be a hardware conflict between the USB Card and another device. Try removing other hardware cards in your system to isolate the source of conflict. Once found, try changing the settings on the other device.

## A.2 Calling Black Box

If you determine that your USB Card is malfunctioning, do not attempt to alter or repair the unit. It contains no user-serviceable parts. Contact Black Box at 724-746-5500.

Before you do, make a record of the history of the problem. We will be able to provide more efficient and accurate assistance if you have a complete description, including:

- the nature and duration of the problem.
- when the problem occurs.
- the components involved in the problem.
- any particular application that, when used, appears to create the problem or make it worse.

#### A.3 Shipping and Packaging

If you need to transport or ship your USB Card:

- Package it carefully. We recommend that you use the original container.
- If you are shipping the USB Card for repair, make sure you include everything that came in the original package. Before you ship, contact Black Box to get a Return Authorization (RA) number.



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