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USER's MANUAL

CardBus 10/100 Ethernet PC Card Adapter

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FCC Part 15 ,Class B Certification Statement

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The United States Federal Communication Commission (FCC) and the Canadian Department of Communications have established certain rules governing the use of electronic equipment.

This device complies with Part 15 of FCC rules. Operation is subject to the following two conditions:

- 1) This device may not cause harmful interface, and
- 2) This device must accept any interface received, including interface that may cause undesired operation.

Warning: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to art 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy, and if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- ▲ Reorient or relocate the receiving antenna.
- ▲ Increase the distance between the equipment and receiver.
- ▲ Connect the equipment into an outlet on a circuit different from that to which the receiver is connected to.
- ▲ Consult the dealer or an experienced radio/TV technician for help.

To assure continued compliance, use only shielded interface cables when connecting computer to peripheral devices. Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

CONTENTS

CONTENTS.....	1
INTRODUCTION TO CARDBUS.....	4
HARDWARE INSTALLATION.....	6
SOFTWARE INSTALLATION.....	9
<i>Windows 95 Installation.....</i>	<i>10</i>
<i>Windows NT 4.0 Installation.....</i>	<i>17</i>
<i>Windows NT 3.5x Installation.....</i>	<i>18</i>
<i>DOS Mode Installation.....</i>	<i>19</i>
Novell Netware.....	20
MS LAN Manager.....	24
Packet Driver.....	26
Windows for Workgroups 3.11.....	27
Artisoft Lantastic 6.0 Installation.....	28
QUESTIONS & ANSWERS.....	30
SPECIFICATIONS.....	33

About This Manual

This manual will explain how to install and use your 10/100Mbps dual speeds Fast Ethernet PC Card. The following guideline will help you through the installation process.

Chapter 1 presents you the basic information about the CardBus technology. It also provide some methods to ensure your notebook are CardBus equipped and correctly configured.

After you already make sure your mobile computer is ready to run CardBus 10/100M Ethernet PC Card. You can go on the **Chapter 2** to know how to install the PC Card and Connect it to network.

The CardBus 10/100M Ethernet PC Card provides wide range of drivers software to meet your need. You can pick up the section within **Chapter 3** to install and configure the network driver.

The Questions and Answers listed in the **Chapter 4** give you some solutions when you encounter problem during installation the network drivers.

Finally you can find the detail specification of this innovative product in the **Appendix A**.

System Requirement

- An IBM compatible notebook computer with 486 or faster processor with CardBus supported socket.
 - Drivers and utilities provided with this product
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- PCMCIA PC Card compliant Card Services and Socket Services
 - 100Base-TX Fast Ethernet or 10BaseT Ethernet connectivity to your local area network.

Operating Environments

- Windows 95, Windows 95 OSR2, Windows 98
- Novell Netware 3.x, 4.x
- Microsoft Windows NT 3.51, NT 4.0
- Microsoft LAN Manager
- Packet Driver Applications
- Microsoft Windows for Workgroups 3.11
- Microsoft Windows 3.1
- Lantastic 6.0

Contents in the Package

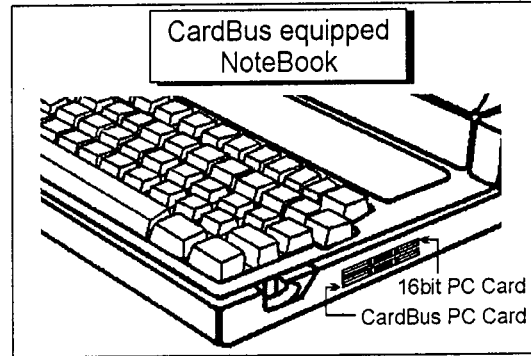
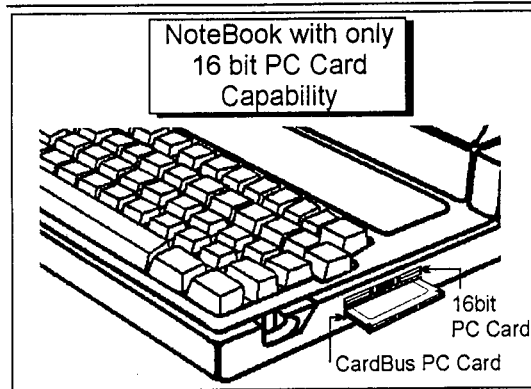
- CardBus 10/100 Ethernet PC Card Adapter
- Media coupler with single RJ-45 connector for 10BASE-T and 100BASE-TX network.
- 3.5" driver diskette
- User's Manual
- Plastic protection case for base PC Card

INTRODUCTION TO CARDBUS

Cardbus is the next generation 32-bit version issued by PCMCIA PC Card standard. In addition to support a wider bus (32 bits instead of 16 bits), CardBus also supports bus mastering and operation speeds up to 33 MHz. The 132MBytes bus transfer rate (compares with legacy 16-bit I/O PC Card, 20MByte) provides the mobile user to enjoy the high-bandwidth network connection.

A mobile computer which is equipped with CardBus and properly configured is the fundamental requirement to use the CardBus 10/100M PC Card. To make sure about this point, please follow the guideline listed below:

- ◆ Cardbus is designed to support both 16-bit and Cardbus Card. But the legacy 16-bit PC Card slot couldn't accept the CardBus PC Card. In order to prevent the wrong operation, CardBus is developed with particular mechanical consideration to prevent it fit into the legacy 16-bit PC Card Slot. If you can't insert the CardBus 10/100 PC Card into the slot firmly reaching the bottom, your notebook probably hasn't the capability to support CardBus technology. Please check your notebook manual for detail information.



- ◆ Due to variant design of notebook computers , some models implement a setting in the Computer 's BIOS to switch between Cardbus and 16-bit PC Card modes. You could consult the User's Guide of your notebook and properly set on the **CardBus** or **Auto_Detect** mode.

HARDWARE INSTALLATION

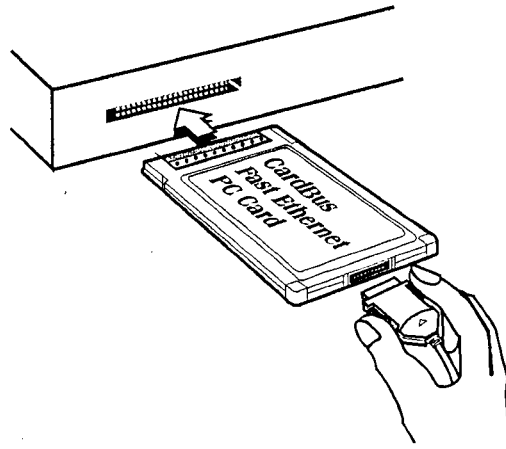
This chapter describes how to install the CardBus 10/100M dual-speed PC Card in your notebook computer and connect it to network. It's referred to "the PC Card" in this manual.

The PC Card could be connected to either 100Mbps Fast Ethernet or 10Mbps Ethernet over unshielded twisted pair (UTP) cable. The PC Card have the ability of automatic sensing and operating on either speed without manual reconfiguration.

After finishing the installation of PC Card into your Notebook, please refer to **Chapter.3 Software Installation** on how to install network drivers using menu driven installation utility.

Inserting the CardBus Dual-Speed PC Card

1. Hold the CardBus PC Card with wide connector toward the slot and the brand label facing upward.
2. Insert the CardBus PC Card and push it firmly into the bottom.
(Please see the figure on the next page for reference)



Removing the CardBus Dual-Speed PC Card

It's quite different for various computer mechanical design. Please refer to the PC Card removal instruction in the document for your notebook computer.

Connecting and Removing the Cable of Media Coupler to the CardBus PC Card

Grasp the PC Card 15-pins connector at the end of the media coupler with the pointing triangle facing upward. Gently insert it into the mating connector on the PC Card until it clicks in place at both sides.

Attention should be paid when removing the 15-pins connector. Please press the both sides of the

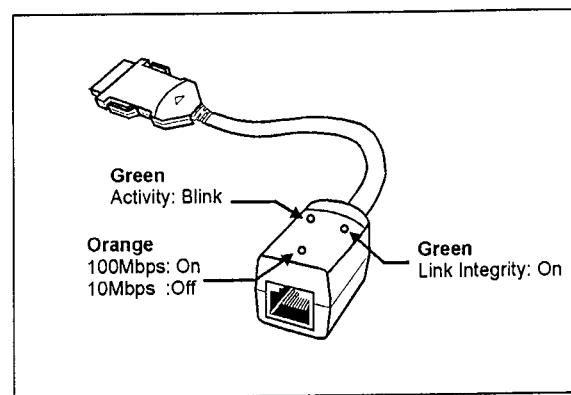
connectors before dragging it out of the PC Card.

Connecting to the Network

Connect unshielded twisted pair (UTP) cable to the RJ-45 connector of media coupler before loading any network driver.

- For operation in the 100Mbps (100Base-TX) Ethernet network, a Category 5 unshielded twisted pair (UTP) cable should be used to connect between media coupler and 100Mbps hub or switch.
- For operation in the 10Mbps (10Base-T) Ethernet network, Category 3, 4 or 5 unshielded twisted pair (UTP) cable could be used to connect between the media coupler and a 10Mbps hub or switch.

LED Indicators



A SPECIFICATIONS**Network Interface Specifications**

- ◆10Mbps Ethernet: IEEE 802.3 standard 10BaseT baseband CSMA/CD local area network.
- ◆100Mbps Ethernet; IEEE 802.3u standard 100Base-TX baseband CSMA/CD local area network.
- ◆20/200Mbps full duplex support
- ◆Autonegotiation between all four operation modes.

Host Interface and Physical Specifications

- ◆Cardbus PC Card Standard compliant.
- ◆Type II PC Card form factor
- ◆3.37" x 2.128" x 0.197" (86mm x 54mm x 5.0mm)
- ◆40gw in weight

Operating Environments

Novell Netware 3.x, 4.x
Microsoft LAN Manager
Packet Driver Applications
Microsoft Windows for Workgroups 3.11, Windows 3.1
Microsoft Windows NT 3.5x, NT 4.0
Windows 95, 95 OSR2, 98
Lantastic 6.0

Specifications

Power Requirements:

◆10BaseT : 3.3V DC, 250mA Typical, 260mA Max
100BaseT: 3.3V DC, 280mA Typical, 300mA Max

General Specification

LEDs: Link , Activity, 10/100Mbps

Enviroments Ranges:

Operating: 32°F to 149°F (0°C to 65°C)

Storage: -4°F to 158°F (-10°C to 70°C)

Humidity: 10% - 90% , noncondensing

Certifications: FCC, Part 15, Class B

CE Mark (EN55022,ClassB, EN50082-1)

VCCI Class B