

User's Manual

Plug & Play , Full Duplex , Jumper+Jumperless Turbo NE2000 Adapters

Thank you for purchasing our Plug&Play+Jumper+Jumperless Turbo Ethernet Adapter (The Product). This guide is to provide the installation and usage of The Product for network installers or users. The Product uses Advanced Parallel teXnology (APX) and complies to Plug and Plug specification. Three types of Ethernet cabling - AUI, RJ45, and BNC connectors are provided for maximum flexibility. Extensive driver supports for commonly used network operating systems including NetWare, Windows 95, Windows NT, and TCP/IP are available.

This manual is divided into two chapters and two appendices. The following summarizes the contents of the chapters and appendices.

Chapter 1 Introduction

Gives an overview of the hardware characteristics and benefits.

Chapter 2 Installation

Card Installation
Card Configuration (if in Jumperless mode)
Driver Installation

Appendix A Jumper Configuration(if in Jumper mode)

Appendix B Technical Specification

FCC Warning

This equipment complies with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used properly, may cause harmful interference to radio communications. Operation of the equipment in a residential area is likely to cause harmful interference.

Trademarks

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Chapter 1 Introduction

Hardware Overview

The Product series are Plug&Play + jumper+jumperless Turbo Ethernet cards feature the most advanced NE2000 compatible LAN adapter design ever:

With the Advanced Parallel teXnology (APX), data transfer is pipelined simultaneously, the result is greatly reduced packet turnaround time and much higher throughput. Further more, with the full duplex design which makes your 10Mbps local area network to become 20Mbps and double the performance right away.

Real hassle free installation is achieved by conforming to "Plug and Play ISA Specification" from Intel and MicroSoft Corporations. Just plug in the card and all the setup is done automatically. No jumper to set or software to run anymore! For compatibility with older systems without plug and play function, The Product offers a setup software that automatically configure the card. It makes the installation and troubleshooting a snap. To ensure customer satisfaction, for those PCs without plug & play capability, The Product incorporates intelligent Auto-Setup function avoiding the worry of deciding settings or fiddling with jumpers. However, for complete flexibility, jumper settings are retained for people who prefer to use them.

The Product series permit 8 IRQ and 16 I/O addresses and supply with drivers including Novell Netware 3.x, 4.x, NDIS for Microsoft LAN Manager and Windows 95, Windows NT, and a Packet Driver for TCP/IP. Whatever your requirements are ease of installation, superior performance, or responsive support backed up by unlimited technical support, **The Product is the superior choice.**

Features & Benefits :

- Conform to Plug and Play specification
- APX Turbo mode to achieve best performance
- Full duplex design to double the performance to 20Mbps
- STP connector for RJ45 connection
- Auto-setup IRQ and I/O address even in non Plug&Play system
- Media type auto detection
- Supports 8 IRQ and 16 I/O address
- supports for 8-bit and 16-bit expansion slots
- On-board 16KB RAM buffer to speed data transmission or reception
- Compliance with IEEE 802.3 CSMA/CD, 10Base-5, 10Base-2 and 10Base-T standard
- Supports Netware ODI & IPX, NDIS Driver for LAN Manager, Microsoft windows 95 , Windows NT and Packet Driver for TCP/IP
- Provides diagnostic software and two LEDs to indicate network activity
- Supports smart remote boot ROM

Chapter 2 Installation

Card Installation

To insert a card into your computer, do the following:

1. Turn off the computer and remove its cover.
2. Insert the card into an ISA slot.
3. Secure the card to the rear of the computer chassis and put back the computer cover.
4. Connect The Product to the network using thin, thick or twisted-pair cables, depending on the connector you are using.

Note : If the card is set to Full-Duplex , the hub should be a Full-Duplex switching hub, For more information please contact your dealer for buying such a product.

Card Configuration

If the card is in Plug and Play mode(default mode), you don't have to do any configuration, just make sure the system is a Plug and Play compatible system when using the card in Play and Play mode.

If the card is set in Jumperless mode through the provided software program setup.exe, you can configure The Product with the same setup.exe program. Please refer to readme.exe provided in the diskette for detail description in running the software.

If the card is set in Jumper mode through Jumper setting JP1 and JP2, you can configure the card with jumpers, please see appendix A for detail description of jumper settings.

Driver Installation

(1) You can use the NE2000 drivers provided by the Network operating system. or

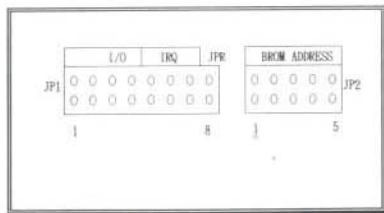
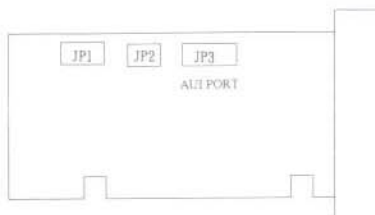
(2) Use the drivers supplied by the diskette included in The Product. For detail description, please refer to release.doc or readme.exe in the diskette provided by The Product.

Appendix A Jumper Configuration

note: You only need to set the Jumper when the Card is in Jumper mode.

The Product can be configured by either jumper settings or software. Please refer to the table below for detail description of the jumper usage.

■ Hardware Jumper Setting



JP1 : 8 OPEN : Jumperless/PnP mode
CLOSE : Jumper mode

Note : Default is Jumperless/PnP Mode.

JP 1 : 1-4 (I/O BASE)

1	2	3	4	I/O BASE
0	0	0	0	300H
0	0	0	1	320H
0	0	1	0	340H
0	0	1	1	360H
1	0	0	0	380H
1	0	0	1	3A0H
1	0	1	0	3C0H
1	0	1	1	3E0H
0	1	0	0	200H
0	1	0	1	220H
0	1	1	0	240H
0	1	1	1	260H
1	1	0	0	280H
1	1	0	1	2A0H
1	1	1	0	2C0H
1	1	1	1	2E0H

JP1 : 5-7 (IRQ)

5	6	7	IRQ
0	0	0	2(9)
0	0	1	3
0	1	0	4
0	1	1	5
1	0	0	10
1	0	1	11
1	1	0	12
1	1	1	15

JP 2 : BROM ADDRESS

1	2	3	4	5	BROM BASE SIZE
0	0	0	0	0	DISABLE NONE
0	1	0	0	0	C0000H,32K
0	1	0	0	1	C8000H,32K
0	1	0	1	0	D0000H,32K
0	1	0	1	1	D8000H,32K
0	1	1	0	0	C0000H,64K
0	1	1	0	1	D0000H,64K
1	0	0	0	0	C0000H,16K
1	0	0	0	1	C4000H,16K
1	0	0	1	0	C8000H,16K
1	0	0	1	1	CC000H,16K
1	0	1	0	0	D0000H,16K
1	0	1	0	1	D4000H,16K
1	0	1	1	0	D8000H,16K
1	0	1	1	1	DC000H,16K

JP3: AUI Connector

This connector is used to attach a cable to another bracket for AUI connection.

Installation:

1. Hook up the cable to the connector pins marked "AUI". Make sure the red line on the cable is positioned in the "pin 1" location.

2. Secure the bracket to the PC.

Appendix B Technical Specification

Topology	: Star/Bus
Connector Supported:	: RJ45, BNC and AUI
Standard	: IEEE 802.3 10Base-T, 10Base-2, and 10Base-5
Transmission Rate	: 10Mbps or 20Mbps
Hardware	: IBM PC/XT/AT and compatibles
IRQ Line	: 2(9),3, 4, 5,10, 11, 12, 15
I/O Address	: 200H,220H,240H,260H, 280H,2A0H,2C0H,2E0H, 300H,320H,340H,360H, 380H,3A0H,3C0H,3E0H
Boot ROM Address	: C0000H, C4000H, C8000H, CC000H, D0000H, D4000H, D8000H, DC000H
Software	: Novell NetWare 3.x, 4.x, NDIS driver for Microsoft LAN manager and Windows 95, Windows NT, Packet driver for TCP/IP
Temperature	: 0°C to 55°C (Operating)
Humidity	: 10% to 90% (Non-condensing)
Certification	: FCC Part 15 Class A