

# User's Manual

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## Jumper&Jumperless<sup>®</sup> NE2000 Compatible Ethernet Adapter

Thank you for purchasing our Jumper&Jumperless NE2000 compatible Ethernet Adapter (The Product). This guide is to provide the basic information and usage of The Product for network installers or users .

This installation guide is divided into three chapters and one appendix. The following summarizes the contents of the chapters and appendix.

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|-------------------|--|
| <b>Chapter 1</b>  | <b>Introduction, 2</b><br>This chapter gives descriptions of The Product.  |
| <b>Chapter 2</b>  | <b>Hardware Setup, 4</b><br>Adapter Installation, 4<br>Jumperless Mode Configuration, 5<br>Jumper Mode Configuration, 7<br>Adapter Diagnostic, 9 |
| <b>Chapter 3</b>  | <b>Driver Installation, 10</b><br>This chapter tells you how to use the driver programs on the adapter's diskette.                               |
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## Chapter 1 Introduction

The Product is a 16-bit Novell NE2000 compatible Ethernet adapter designed for users connecting IBM PCs and compatibles to an Ethernet network.

Conforms to the IEEE 802.3 Ethernet standards, three models are available:

- 2-in-1 Jumper & Jumperless NE2000 Compatible adapter
- 10BASE-T Jumper & Jumperless NE2000 Compatible adapter
- 10BASE-2 Jumper & Jumperless NE2000 Compatible adapter

The Product allows users to configure the hardware by using either jumper or software. The auto-setup feature makes the card to be truly "plug & play". 8 interrupts and 8 I/O addresses are supported to increase the flexibility of the hardware installation. It is also equipped with 16 KB SRAM on-board data buffer, socket for optional 8 KB remote boot ROM. In addition, it provides driver supports for Novell NetWare, Microsoft LAN Manager, and TCP/IP. Diagnostic software is also provided for detecting hardware configuration /failure.

## Features & Benefits

- Fully Novell NE2000 compatible
- Up to 35% performance improvement
- Configuration by jumpers or by software
- Auto-setup hardware configuration through software program
- Auto-detect media type
- Auto-detect for 8-bit or 16-bit bus interface
- Uses Surface Mount Technology
- Complies with IEEE 802.3 CSMA/CD standard
- 10 Mbps transmission rate
- Uses VLSI single chip technology
- Supports 8 interrupts, and 8 I/O Addresses
- Optional 8 KB remote boot ROM
- Provides Diagnostic software for detecting hardware configuration / failure
- Provides IPX & ODI drivers for NetWare, NDIS driver for LAN Manager and Windows for Workgroups, and Packet driver for TCP/IP
- Optional expansion of AUI connector

## Chapter 2 Hardware Setup

### Adapter Installation

1. Turn off the power of your computer and unplug its AC power cord.
2. Open or remove the cover of your computer's chassis.
3. Insert adapter in an I/O expansion slot.
4. Secure the adapter in the slot by tightening the screw on metal mount to the back of the computer's chassis.
5. Close or replace the cover of your computer's chassis.
6. Connect the adapter to the network using thin, thick, or twisted-pair cabling, depending on the adapter type.

### Adapter Configuration

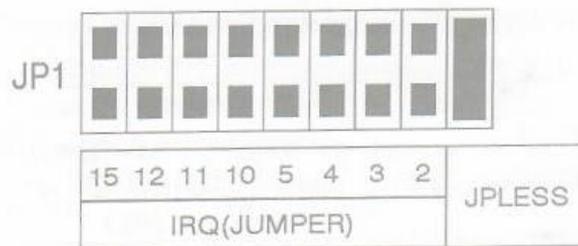
The Product provides both software configuration (**Jumperless Mode**), and the jumper settings (**Jumper Mode**). The default is set at **Jumperless Mode**. (IRQ=3, I/O Address: 300H)

### Jumper Description

<i>Jumper</i>	<i>Description</i>
IRQ (JP1)	Selects Jumper Mode and IRQ channels
I/O Address (JP2)	Selects I/O Address
JPLESS	Selects Jumperless Mode

## Jumperless Mode Configuration

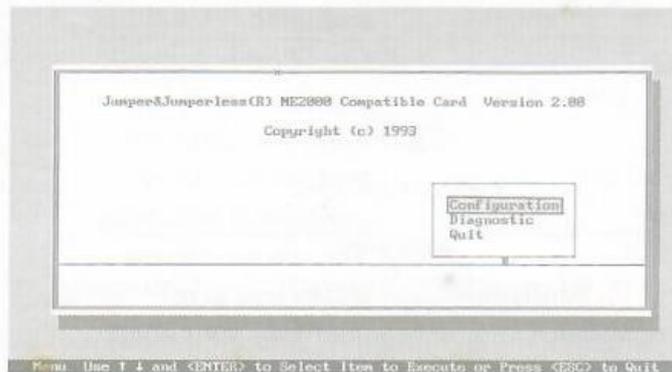
You can configure the hardware by using the software (**Jumperless mode**). First you must make sure the jumper is set at **JPLESS** (Default setting)



Then you can run **SETUP** program to setup the hardware configuration . In the DOS prompt, type

**A:> SETUP <Enter>**

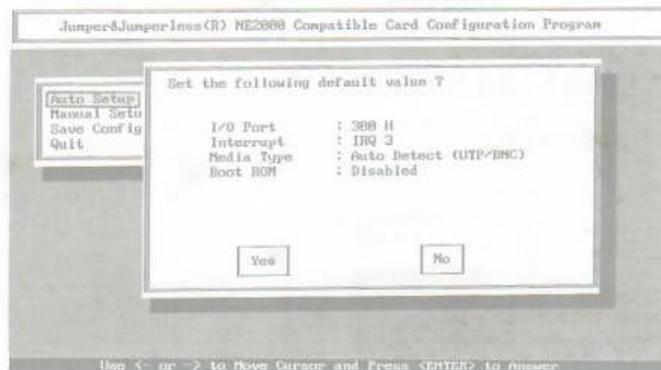
On the screen, the following screen will appear, the setup program is started.



To configure the hardware, select **Configuration** and press **<Enter>** and you may begin the program.

## Auto Setup

The adapter provides auto-configuration . In this selection, the program will automatically detect the available IRQ and I/O, and avoid the potential conflicts in the systems.



## Manual Setup

This program is to set up the adapter configuration with the selection of your choices. The '\*' mark shown in the menu means that a potential conflict, and you can not use that address.



## Save Configuration

After you have finished the setup program, you must select **Save Configuration** to complete your selection.

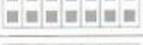
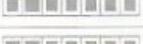
## Jumper Mode Configuration

If users are to use jumper setting, they are required to move the jumper from JP1 LESS to any interrupt selection. i.e. IRQ (Jumper)

### IRQ Setting

IRQ Line	JP1(IRQ)	
IRQ2		Default
IRQ3		
IRQ4		
IRQ5		
IRQ10		
IRQ11		
IRQ12		
IRQ15		

### I/O Address Setting

I/O Address	JP2(I/O)	
200		Default
220		
240		
260		
300		
320		
340		
360		

### Boot ROM Usage

BOOT ROM Usage	JP2(EN)
Disable	
Enable	

Default

### Boot ROM Address

BOOT ROM Address	JP2(MEM)
C0000H	
C4000H	
C8000H	
CC000H	
D0000H	
D4000H	
D8000H	
DC000H	

Default

## Adapter Diagnostic

In the main menu screen of the setup program, you could move cursor to the Diagnostic, and press Enter to execute adapter diagnostic program.

You have the following selections:

Hardware Configuration	To show hardware configuration such as adapter ID, I/O address, and IRQ
Ethernet Card Test	To test the card's function such as NIC test, RAM test, remote DMA test, loop back test and interrupt test
Transmit / Receive Test	When The Product transmit or receive a packet in the network, the transmit or receive counter will be increased
Cable Test	Check cable status. If you disconnect the cable, the diagnostic program will show cable Fault on screen
Reconfiguration	The setup program allows you to re-configure your adapter if you need to.

## Chapter 3 Driver Installation

Your adapter comes with driver programs that allow it to be used with most popular networking software. These programs files are on the diskette that accompanies the adapter.

Instruction on how to use these programs are given on the diskette (driver.doc). You may use the DOS command TYPE or PRINT to print out these instructions.

### **Install Driver Programs**

Before you begin to install the driver programs:

- Make sure The Product is configured properly either by software or by jumper setting.
- Check also that all network cables are well connected, and that you use the right cable.

Then, begin installing the desired driver programs according to the instruction on the adapter's diskette and/or in your networking software manual.

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