

GE-1000

# Gigabit Ethernet Adapter User's Manual



Networking the future

*Xsense*<sup>™</sup>  
[www.xsense.com](http://www.xsense.com)

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## FCC Notice

This equipment has been tested and found to be FCC Rules certified. These restrictions are designed to provide protection against harmful interference from residential installations. This equipment generates radio frequencies that may cause interference with radio communications if not used in accordance with the instructions. Interference may even occur during proper installation. If this equipment causes interference, the user is suggested to correct the it by one or more of the following:

1. Reorient or relocate the receiving antenna.
2. Increase the separation between the equipment and receiver.
3. Connect the equipment into an outlet on a circuit that is separate from the one to which the receiver is connected.
4. Consult the dealer or an experienced radio/television technician for help.

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## Safety Precautions

1. Follow all warnings and instructions marked on the product.
2. Slots and openings on the device are provided for ventilation. To protect it from overheating, these openings must not be blocked or covered.
3. Do not use or store this product in the environment that exceeds temperature and humidity specifications. Do not place this product near a radiator or heat register, or in a built-in installation unless adequate ventilation is provided.
4. Before cleaning, unplug this product from wall outlet. Do not use liquid cleansers or aerosol cleansers. Use a damp cloth for cleaning.
5. Do not place cords or cables where they may be walked on or tripped over.
6. Be sure to comply with any applicable local safety standards or regulations.
7. General purpose cables are provided with this product. The use of any other cables or requirements mandated by local authority is user's responsibility.
8. Cables attached to devices in different locations with different power sources and grounding may cause hazardous voltage. Consult a qualified electronic consultant before installing the product to check if this phenomenon exists and, if necessary, take corrective action.
9. Never touch uninsulated telephone wires or terminals unless the line has been disconnected.
10. Avoid using telephone equipment or installing the product during an electrical storm.
11. Never install this product, or any kind of telephone jacks, lines, network cables, and power connections in wet locations.
12. Never spill liquid of any kind on the product.

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## 1.0 Introduction

Thanks for your purchase of this Gigabit Ethernet LAN adapter. It is fully compliant with the IEEE802.3 standard. With the features like 10/100/1000 Mbps Gigabit Ethernet, full/half duplex mode transmission, it offers users a high performance network.

### 1.1 Features

- IEEE802.3, IEEE802.3u, IEEE802.3z/ab and IEEE 802.3x Standard Compliant.
- 10/100/1000Mbps Gigabit data rate and full/half duplex transmission mode.
- 32-bit PCI local bus specification 2.2 Compliant.
- Comprehensive software driver support for popular networking system.
- RJ-45 TP connector.

### 1.2 Drivers Support

- Novell NetWare Server 4.1 or later.
- Microsoft Windows 95 OSR2/98/ME.
- Microsoft Windows NT4.0/2000.
- Linux Kernel 2.0 or later.

### 1.3 System Requirements

This Gigabit Ethernet adapter has the following system requirements:

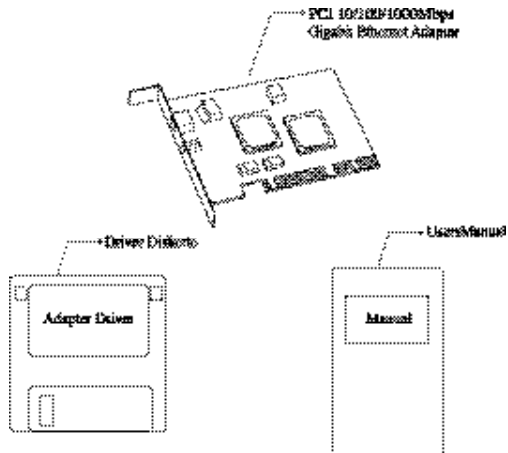
- At least 32MB of system memory and latest BIOS.
- Microsoft Windows 95 OSR2/98/ME.
- Microsoft Windows NT4.0/2000.
- Novell NetWare 4.1 or later.
- Linux Kernel 2.0 or later.
- RJ-45 Cat. 5 or latter TP cable.

# Chapter 1 - INTRODUCTION

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## 1.4 Package Contents

- PCI 10/100/1000Mbps Gigabit Ethernet PCI Adapter.
- Driver Diskette.
- User's Manual.



### 2.0 Before You Start

Follow the instructions in this section for installing the Gigabit Ethernet adapter in your system.

1. Make sure your system meets the system requirements.
2. Shut down and power off your system.
3. Plug this Gigabit Ethernet adapter into your system's PCI slot
4. Connecting the network cables.
5. Turn on your system power.

**Note:** *In the driver diskette provided with this package is a file named "install.txt". Read this file carefully, as it may contain other last minute updated information.*

### 2.1 Windows 98 Installation Procedure

1. The Windows 98 hardware wizard will show up. Follow the instruction to install driver and click on the "Next".



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2. Click on the first item and click on “Next”.



3. Click on the “Floppy disk drives”. Or “Specify a location” and type the correct path (such as A:\WIN98). Click on “Next”.



4. Then the Windows 98 will start to install driver for the driver diskette provided by. Click on “Next”.





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5. Click "Ok".



6. Click "Ok".



7. The Windows 98 will start installing the driver components needed for the OS.



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8. Click "Finish" button to finish the driver installation.



9. Click the "Yes" button to reboot computer after installation is completed.



10. After rebooting the system, click on the **Network** icon in the **Control Panel** menu and start setting up the network configuration.

## 2.2 Windows Millennium Installation Procedure

1. The Windows ME hardware wizard will show up. Follow the instructions to install driver. Click on first item and click on "Next".



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2. Insert the driver diskette provided. The Windows ME hardware wizard will auto detect driver from diskette and install it.
3. When the driver was installed, the Windows ME hardware wizard will show the default value in adapter properties advanced setting. Click "Ok".



4. After you are done with the installation, click on "Finish" to reboot system.



5. After rebooting the system, click on the **Network** icon in the **Control Panel** menu and start to setup the network configuration.

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### 2.3 Windows NT4.0 installation procedure

1. The WindowsNT4.0 hardware wizard will show up. Follow the instruction to install driver.
2. Log in as Administrator.
3. Click on the **Network** icon on the **Control Panel** menu and start to install the adapter driver.



4. Click "Yes"



5. Select "Wired to the network" and click "Next"



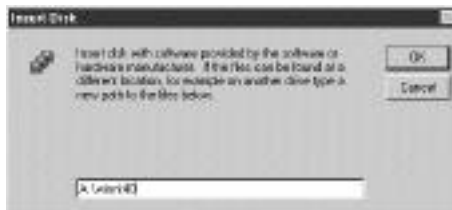
6. Click “Select from list”.



7. Insert the driver diskette provided and click on “Have Disk”.



8. Type the correct path to install the driver (such as “ A:\Winnt40”). And click “OK”.



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9. Click "OK".



10. Click on "Next"



11. Select which protocol to use and click "Next".



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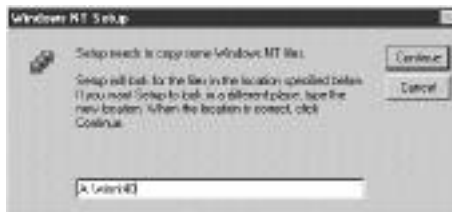
12. Select which Network Service to use, and then click "Next".



13. Clicks "Next".

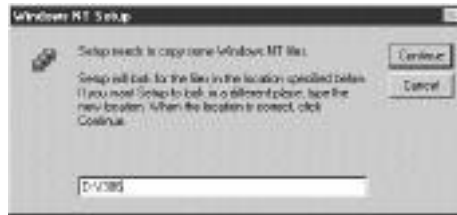


14. Insert the driver diskette provided and type the correct path (such as A:\WINNT40). Clicks on "Continue".

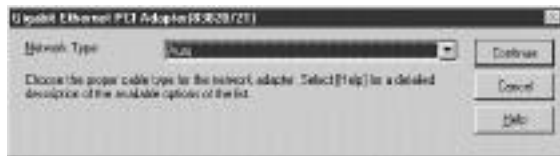


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15. Insert the Windows NT4 CD in and type the correct path (such as D:\1386). Clicks on “Continue”.



16. Set in default value and click “Continue”. This parameter is to configure the communication speed and duplex mode of this adapter. Auto means auto-negotiation.



17. Please ask your Administrator for this issue service.



18. Then the Windows NT 4.0 will start to installing system files.



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19. While the system files are being copied, the system will ask you to configure the protocol you choose in the step 11. Configure the environment as you need.

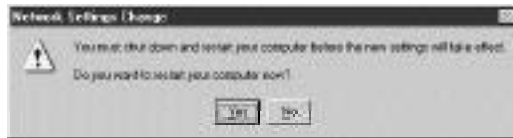


20. After you finished the configuration of these protocols and network service. Click "Next"



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21. Click on “Yes” to restart your system. And start to use the network.



### 2.4 Windows 2000 installation procedure

1. Then login as an Administrator. The Windows 2000 hardware wizard will show up. Follow the instruction to install driver.



2. Click on the “Next”.



3. Select the "Search for a suitable driver for my device (recommended)", and then click "Next".



4. Insert the driver diskette; select "Floppy disk drives" and "Specify a location" then click "Next".



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5. Then the hardware wizard will find the correct inf file for installation. Click “Next”



6. This is a “Digital Signature “ warning message, click “Yes” for further installation procedure.



7. Click "Finish".

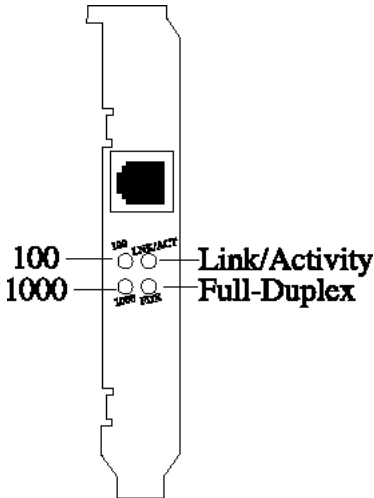


8. To configure network environment, double-click on "Network and Dial-up Connection" icon in the "Control Panel" menu.



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## 2.5 LED Indicators



- 100:On  
Off  
Link is established at 100Mbps.  
Power off or link at another speed.
- 1000:On  
Off  
Link is established at 1000Mbps.  
Power off or link at another speed.
- LNK/ACT:On  
Blink  
Off  
Link is established  
Data being received the light will be blinking.  
Without link partner.
- FDX:On  
Off  
Link in full-duplex mode will light on green.  
Link in half-duplex mode.

### Specifications

- Bus Interface: PCI-bus specifications Rev 2.2
- Transmission Speeds: 10Mbps (half-duplex)  
20Mbps (full-duplex)  
100Mbps (half-duplex)  
200Mbps (full-duplex)  
1000Mbps (half-duplex)  
2000Mbps (full-duplex)
- Network Media: UTP-3,4,5/STP-1 for IEEE802.3 10BASE-T  
UTP-5/STP-1 for 802.3u 100BASE-TX  
UTP-5/STP-1 for 802.3ab 1000BASE-T
- Cable/Connector: Cat.5 RJ-45 cable.
- Data Rate: 10/100/1000Mbps.
- Driver supports: Windows 95 OSR2 / 98 / ME.  
Windows NT 4.0 / 2000  
Novell ODI server / Linux
- Power: 5W
- Temperature Environment: Operating 0 °C to 40 °C  
Storage: 20 °C to +70 °C
- Humidity Environment: Operating: 10% to 80% RH  
Storage: 5% to 90% RH
- Emissions: FCC Class B, CE Class B, BSMI

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