

# **PCI Express Gigabit Ethernet Adapter**

**User's Guide**

## **FCC Certifications**



This Equipment has been tested and found to comply with the limits for a Class B 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 in accordance with the instruction manual, may cause harmful interference to radio communications.

Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received; including interference that may cause undesired operation.

## **CE Mark Warning**



This equipment complies with the requirements relating to electromagnetic compatibility, EN 55022 class B for ITE, the essential protection requirement of Council Directive 89/336/EEC on the approximation of the laws of the Member States relating to electromagnetic compatibility.

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## **1. Unpacking Information**

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Thank you for purchasing this PCI Express Gigabit Ethernet Adapter. Before you start, please verify that your package contains the following items:

1. One PCI Express Gigabit Ethernet Adapter.
2. One Driver/ Manual CD-ROM

## **2. Overview**

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### **2.1 Introduction**

This PCI Express Gigabit Ethernet Adapter is a high performance Gigabit Ethernet adapter designed for PCI Express Bus, which has better performance than the current PCI interface.

With supporting connection speed up to 1000 Mbps, it boosts your networking throughput easily. It allows users to transfer high-bandwidth needed files faster and hence get a real efficiency improvement.

This adapter also supports NWay auto-negotiation that detects the networking speed (10/100/1000 Mbps) and the duplex modes (full/half) automatically. Auto-MDI/MDI-X is also supported to alleviate the effort choosing crossover cables.

## 2.2 Key Features

- Compliant with PCI Express 1.0a - x1 PCI Express standard
- Compliant with CSMA/CD protocol
- Supports with 10/100/1000 Mbps and Full/Half-Duplex auto negotiation.
- Fully compliant with IEEE 802.3, IEEE 802.3u, IEEE 802.3ab
- Support Full Duplex flow control (IEEE 802.3x)
- Support Auto-MDI/ MDI-X auto crossover.
- Support Wake-On-LAN
- ACPI Power Management, compliant to ACPI 2.0
- Integrated 128KB Frame Buffer Memory
- Supports Windows 2000/X64/XP
- CE FCC, VCCI class B

## 2.3 LED Definition

<b>10M</b>	Green	This adapter is connected at 10 Mbps
	Blinking Green	Data transmitting/ receiving at 10 Mbps
<b>100M</b>	Green	This adapter is connected at 100 Mbps
	Blinking Green	Data transmitting/ receiving at 100 Mbps
<b>1000M</b>	Green	This adapter is connected at 1000 Mbps
	Blinking Green	Data transmitting/ receiving at 1000 Mbps

## 3. Installing the PCI Express Gigabit Ethernet Adapter

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### 3.1 System Requirements

- One available PCI Express slot
- Microsoft Windows 2000/X64 or XP based computer.
- A CD-ROM Drive

### 3.2 Hardware Installation

**Caution:**

Before installing this adapter, please touch the metal case of your computer to discharge static electricity from your body. We recommend users to install this adapter wearing a wrist strap attaching to your PC chassis.

1. Turn off the computer.
2. Remove the computer's cover in accordance to its manual.
3. Insert the contact edge of the adapter card into the connector of an available PCI Express slot. Press the card firmly into the connector. Please make sure that the card's contacts are fully seated in the PCI slot.
4. Install the bracket screw that secures the card to the Computer chassis.
5. Replace the computer's cover.
6. Connect the network cable to the RJ-45 network connector.
7. Turn on the computer.

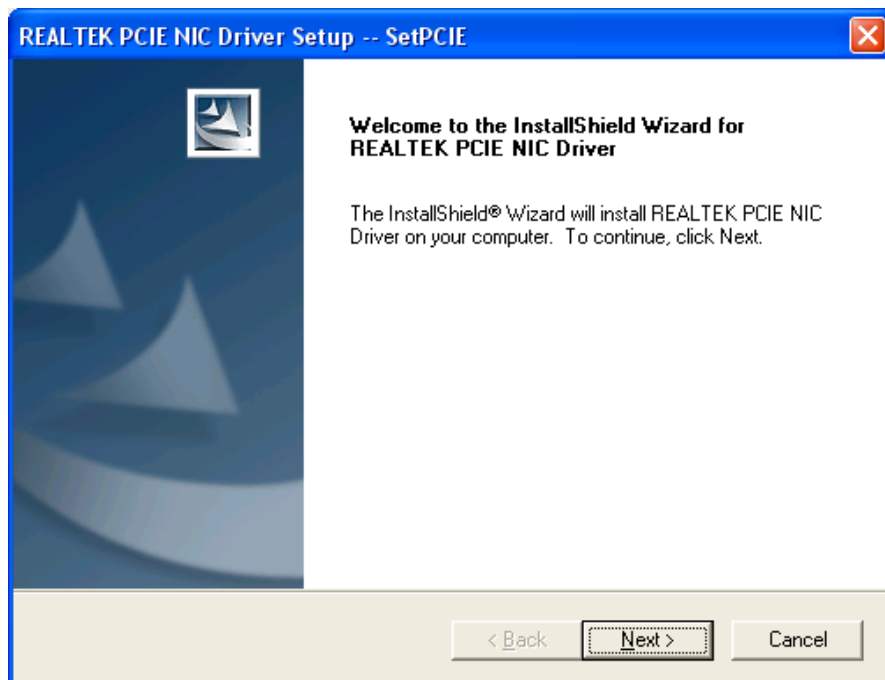
**Note:** You may select the networking cable according to the following information:

10 BASE-T:	Category 3,4 or 5 UTP/STP
100 BASE-TX:	Category 5 UTP/STP
1000 BASE-T:	Category 5, 5e UTP/STP

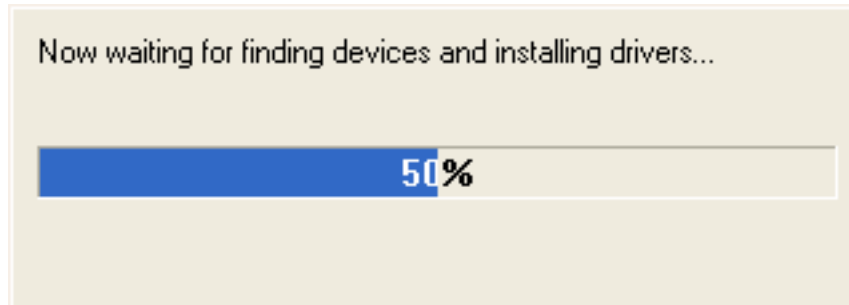
## 3.3 Driver Installation

After attaching this adapter to your computer, you have to install a driver to activate this adapter. The following instruction uses Windows XP as the presumed operation system. The screens upon installing differ slightly from each operation system but the procedures are familiar. Please refer to the following paragraphs for instruction:

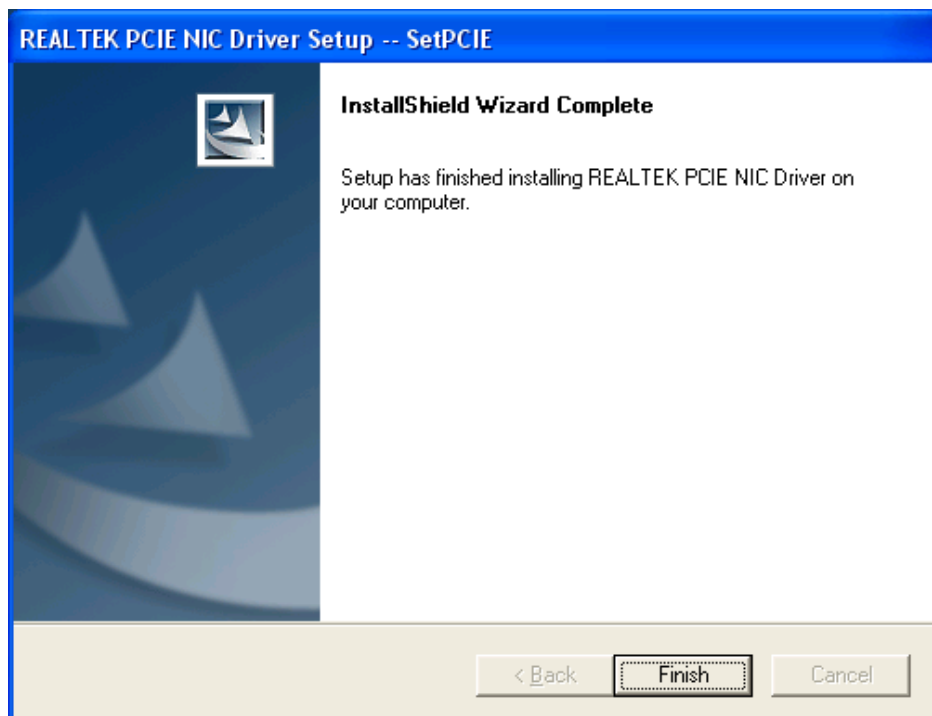
1. Turn your computer on after plugging this adapter to PCI-E slot. The "Found New Hardware Wizard" may pop up. Click the cancel button to close this window.
2. Insert the included CD to your CD Rom drive. Double click on your CD Rom drive and double click the "Setup" icon.
3. The Welcome window pops up. Click the "Next" button to start driver installation.



4. Please wait while installing the driver.

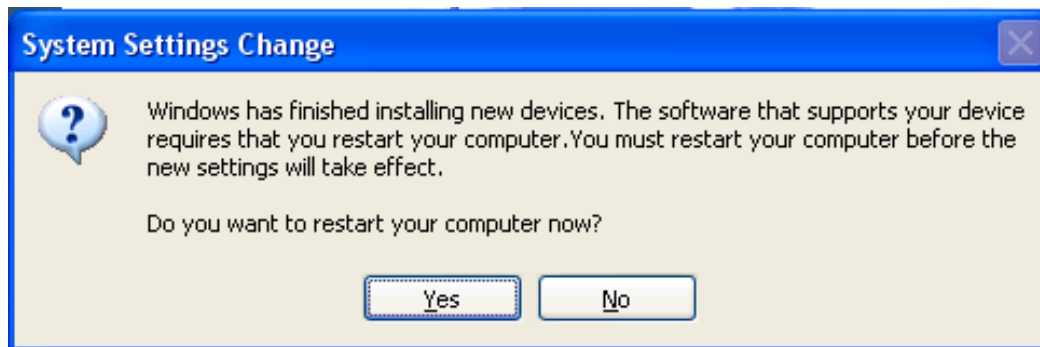


5. Click the "Finish" button to complete driver installation.





6. The system asks for restarting this computer. Click the "Yes" button to complete driver installation.



## 4. Product Specifications

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<b>Standard</b>	IEEE802.3, 10BASE-T IEEE802.3u, 100BASE-TX IEEE802.3ab, 1000BASE-T IEEE802.3x Flow control
<b>Interface</b>	1* PCI Express serial link 1* 10/100/1000Mbps Gigabit Ethernet Port
<b>Cable Connections</b>	UTP Category 3,4,5,5e
<b>Network Data Rate</b>	1000Mbps, 100Mbps, 10Mbps
<b>LED indications</b>	1* 10M (Link/ACT) 1* 100M (Link/ACT) 1* 1000M (Link/ACT)
<b>Operating Temperature</b>	0 <sup>0</sup> ~ 40 <sup>0</sup> C (32 <sup>0</sup> ~ 104 <sup>0</sup> F)
<b>Operating Humidity</b>	10% - 90% non-condensing
<b>Operation System Emission</b>	Windows 2000/X64/XP CE, FCC, VCCI Class B