USB to 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.

Company has an on-going policy of upgrading its products and it may be possible that information in this document is not up-to-date. Please check with your local distributors for the latest information. No part of this document can be copied or reproduced in any form without written consent from the company.

Trademarks:

All trade names and trademarks are the properties of their respective companies.

Table of Contents

1. Unpacking Information

Thank you for purchasing the USB to Gigabit Ethernet adapter. Before you start, please verify that your package contains the following items:

1. One USB to Gigabit Ethernet Adapter.
2. One driver & manual CD
3. One USB cable (optional)

2. Overview

2.1 Introduction

The USB to Gigabit Ethernet Adapter provides users to launch Internet via the USB interface up to 1000Mbps transferring and receiving rate.

The device is compatible to USB 2.0, 1.0 and 1.1. Along with complying 802.3, 802.3u and 802.3ab standards, users are allowed to get connection to network in any environment that encountered. What's more is, you would not have to endure the effort opening PC cases anymore.

To laptop users, it would be even more profitable with the low power consumption feature. Together with the high compatibility, laptop users are allowed to connect to network easily with lower power consumption and hence strengthen the power efficiency. Along with Plug & Play, hot inserting/swapping supported, the device makes your PC and peripherals being connected in much an easier way.

2.2 Key Features

- Complies with IEEE 802.3 10BASE-T standard

- Complies with IEEE 802.3u 100BASE-TX standard

- Complies with IEEE 802.3ab 1000BASE-T standard

- Complies with IEEE 802.3x Flow Control

- Compliant to USB 1.0, 1.1 and 2.0 standard

- Powered over USB bus with low power consumption

- Support full/half Duplex operation

- Support drivers for Windows 98/ME/2000/XP

- Active LED indicators

- Plug and Play Installation

- Support hot inserting and swapping

- Automatically negotiates 10/100/1000 Mbps connection rate

- CE FCC, VCCI class B

2.3 LED Definition

2.3.1 USB Link

    Green: Valid link on this port
    Off: No Valid Link on the this port   '

2.3.2 10/100M Link/ACT

    Green: Valid link on this port
    Blinking: Data transferring/ receiving on this port
    Off: No Valid Link on the this port

2.3.3 1000M Link/ACT

    Green: Valid link on this port
    Blinking: Data transferring/ receiving on this port
   Off: No Valid Link on the this port

3. Installing the USB to Gigabit Ethernet Adapter

3.1 System Requirements

- A Pentium 166 MMX or above processor-based PC.
- One available USB port
- Microsoft Windows 98/ME/2000 or XP based computer.
- A CD-ROM Drive

3.2 Hardware Installation

Before installation, please check if there is an available USB ports being enabled. To check this, you may click **My Computer** → **Control Panel** → **System**, then click the **Device Manager** tab to check if the **Universal Serial Bus controller** to be shown on the following list.
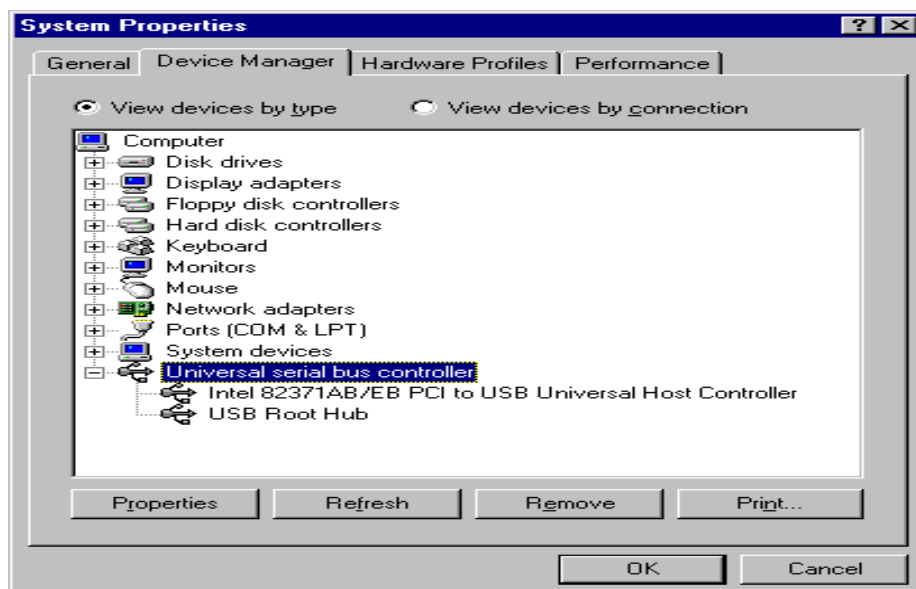
3.2.1 Connect the Adapter to your PC

1. Plug the USB adapter to your PC
2. Windows will detect new hardware automatically and prompt you for driver. For driver installation, please refer to the chapter "Software Installation"

3.2.2 Networking cable installation

1. Connect the UTP Ethernet cable to the network port of the USB Adapter.
2. Plug the other end of the cable into a 10/100/1000 Switch or Hub.

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 Software Installation

After attaching the USB to Gigabit Ethernet adapter to your PC or laptop, the auto-detection for new hardware will be activated automatically. The procedures to perform driver installation differ slightly from each operation system. Please refer to the following paragraphs for instruction:

Windows 98

1. After attaching the adapter to your PC or laptop, the "Add New Hardware Wizard" pops up. Click Next to proceed.

2. Select "Search for the best driver for your device.
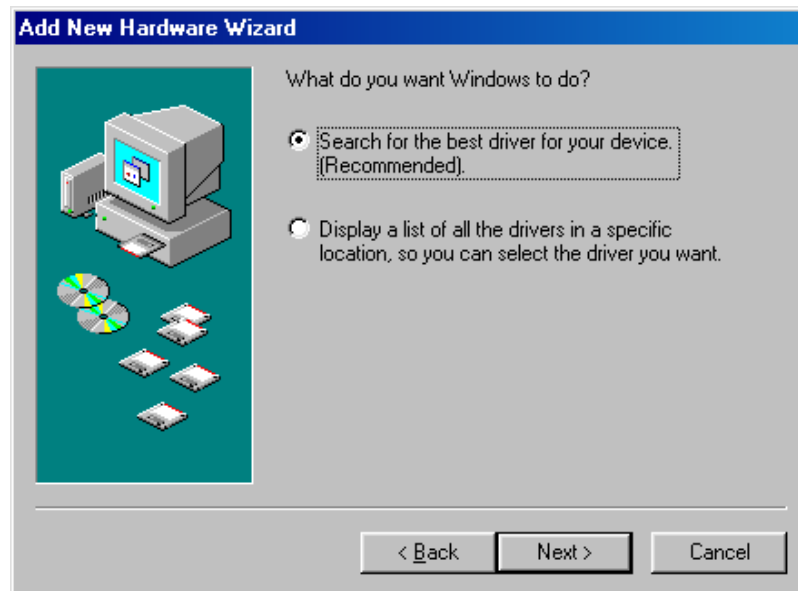
3. Insert the provided CD and Click "Browse". Select your CD-ROM and choose Win_98. Click "OK" then press Next to proceed.

4. Click "Finish" to complete driver installation.

5. When finished, Windows asks for restart. Click "Yes" to restart and activate the adapter.

Windows ME

1. After attaching the adapter to your PC or laptop, the "Add New Hardware Wizard" pops up. Click Next to proceed.

2. Select " Specify a location" and insert the provided CD then Click "Browse". Select your CD-ROM and choose Win_ME. Click OK then press Next to proceed.
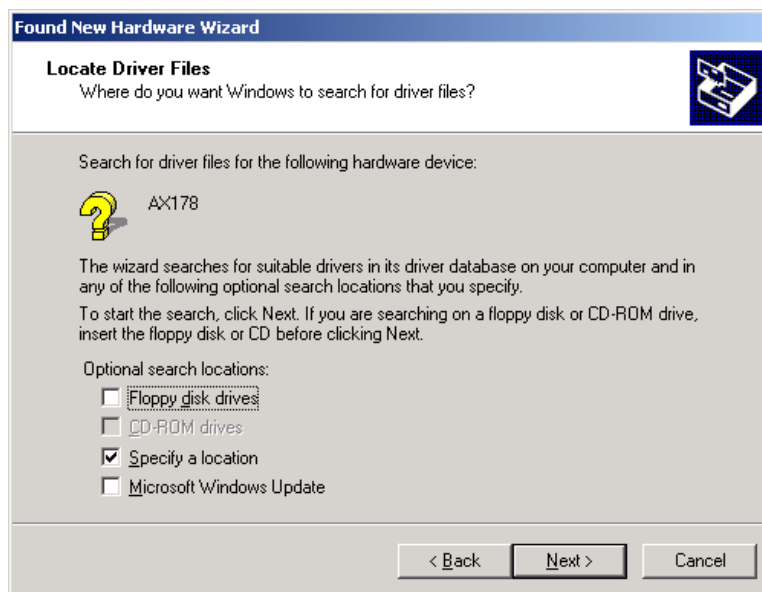
3. Click "Finish" to complete the driver installation.

4. When finished, Windows asks for restart. Click "Yes" to restart and activate the adapter.
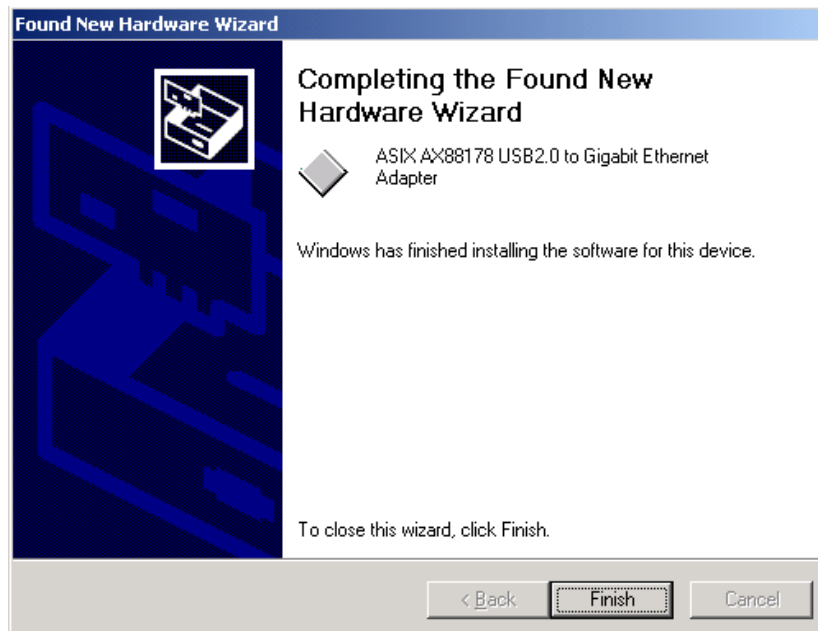
Windows 2000 Setup

1. Select "Search for the best driver for your device"
    When "Found New Hardware Wizard" pops up. After selecting
    the "Specify a location" check box, click Next to proceed.

2. Insert the provided driver CD then click "Browse".
    Specify the location of your CD-ROM and choose the Win_2K
    then click "OK" to proceed.

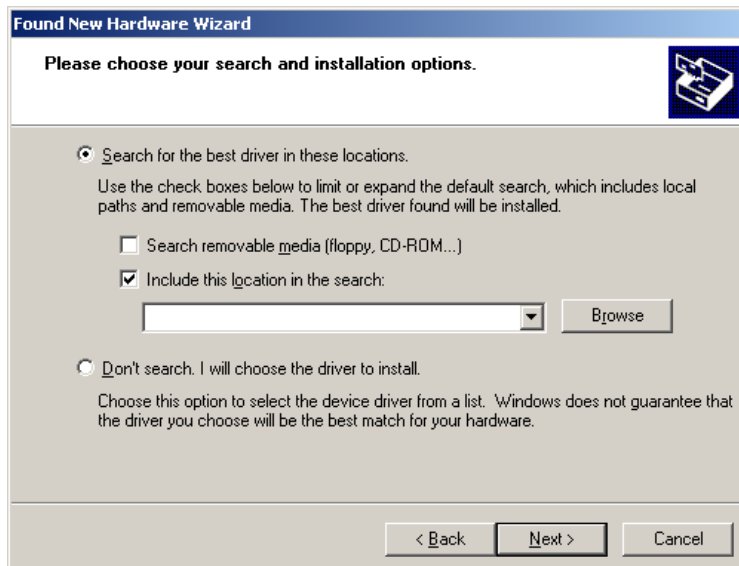3. Click finish to complete the driver installation.
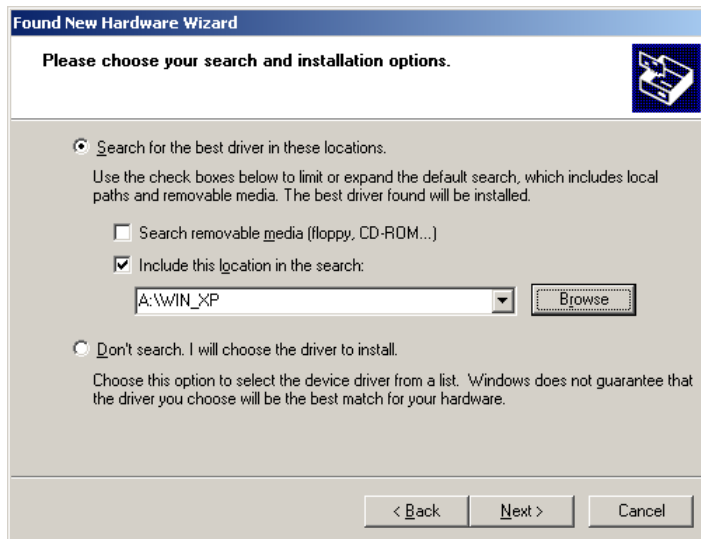
Windows XP Setup

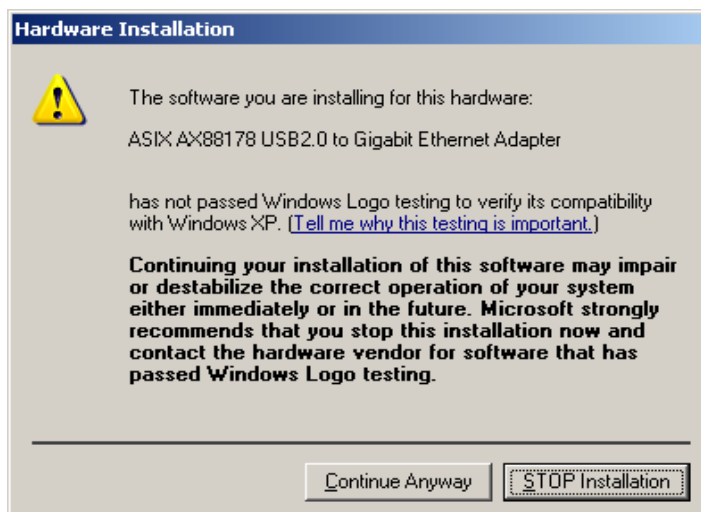1. Select "Install from a list or specific location" then click next.

2. Insert the provided driver CD. Select the "Include this location in the research" then click Browse.
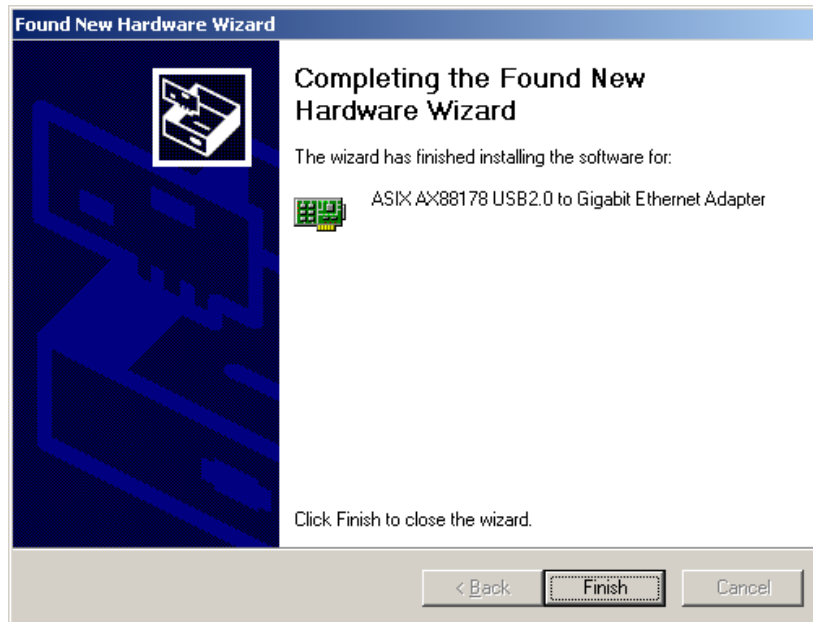
3. Choose the location of your CD-ROM. Specify the folder "WIN_XP" then click "Next" to proceed the installation.

4. A caution window may pop-up to alarm that the software has not passed Windows logo testing. Please click "Continue Anyway" to ignore the window. There will not be any influence on the performance of the adapter.

5. Click Finish to complete the installation and activate the adapter.

Found New Hardware Wizard

Completing the Found New Hardware Wizard

The wizard has finished installing the software for:

ASIX AX88178 USB2.0 to Gigabit Ethernet Adapter

Click Finish to close the wizard.

< Back   Finish   Cancel

4. Product Specifications

Standard   IEEE802.3, 10BASE-T
                          IEEE802.3u, 100BASE-TX
                          IEEE802.3ab, 1000BASE-T
                          IEEE802.3x Flow control
                          USB v1.0/ 1.1/ 2.0

Interface   1* USB port
                          1* 10/100/1000Mbps
                          Gigabit Ethernet Port

Cable Connections   UTP Category 3,4,5,5e

Network Data Rate   1000Mbps, 100Mbps, 10Mbps

LED indications   1* 1000M Link/ACT
                          1* 10/100M Link/ACT
                          1* USB Link

Power consumption   5V 350mA

Operating $0^0 \sim 40^0$C ($32^0 \sim 104^0$F)
Temperature

Operating Humidity   10% - 90% non-condensing

Operation System   Windows 98/ME/2000/XP

Emission   CE, FCC, VCCI Class B

61NB-N3600-200C