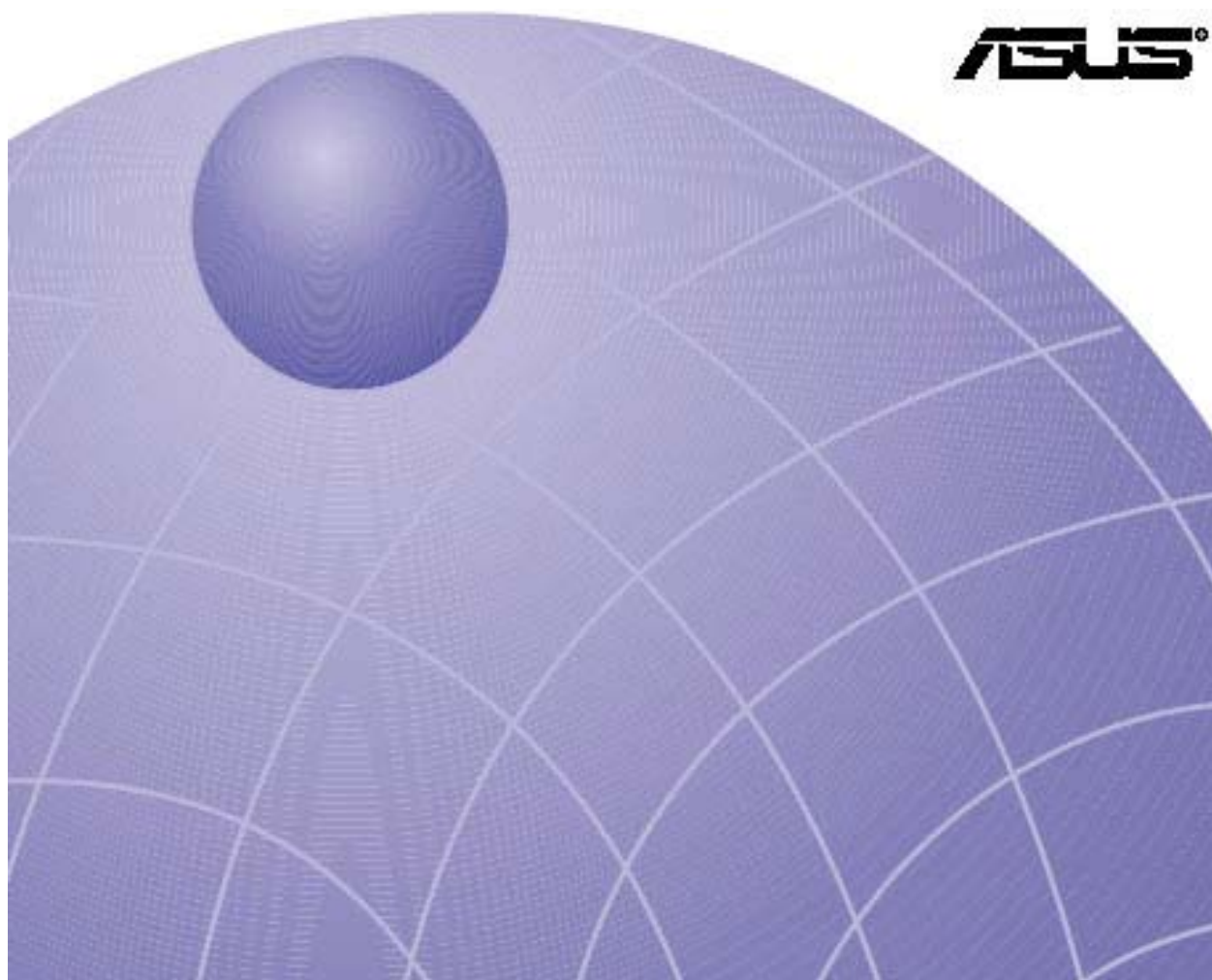


**ASUS**

**AAM6000UG USB ADSL Modem User Guide**

**Version 2.1**

**For Software Version 9.5**



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*ASUS AAM6000UG A1 User Guide*

Text Part Number: 6000-0001

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# 1 Preface

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This preface guide you how the document is organized, the purpose of this document and it conventions. It includes the following topic:

- Purpose
- Organization
- Conventions

## Purpose

The purpose of this guide is to provide detailed information and description about how to configure the AAM6000UG USB ADSL Modem and contains comprehensive configuration examples.

## Organization

This guide contains the following information:

- Preface
- Introduction
- Hardware Installation
- Modem Setup and Driver Installation
- Advanced Control Menu
- Remove and Upgrade

## Conventions

This section describes the conventions used in this guide.

- ✓ – **Indicate the attention or any notices caution relay on the topical subjects.**

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## 2 Introduction

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This chapter provides a general overview of AAM6000UG USB Modem. It covers the key features and main applications of your Modem.

- Overview
- Feature
- System Requirements

### Overview

Thanks you for purchasing this ADSL Modem. This ADSL Modem delivers the highest performance in Asymmetric Digital Subscriber Line technology, allowing you to simultaneously enjoy telephone and Internet service using existing copper phone lines. Ideal for home and small business users, this existing copper phone lines, Ideal for home and small business users, this easy-to-use ADSL Modem offers reliable connectivity and remarkable data transfer rates. Once the ADSL Modem is online, you can enjoy real-time 3D animation, video conferencing, or perform other data intensive operations.

### Features

#### Software Feature

- Supports RFC 2346 protocol (PPP over ATM), RFC 2516 (PPP over Ethernet), RFC 1483 encapsulation (multiple protocol over ATM AAL5), and TFC 1577 protocol (classical IP over ATM)
- Software upgrade
- User Maintenance

### System Requirements

The AAM6000UG ADSL Modem requires that your computer has a USB (Universal Series Bus) 1.1 or 2.0 compatible port.

- ✓ **You must have your USB port free and capable to use before connect to AAM6000UG ADSL Modem, USB Hub or other extend USB device are not recommend to connect with AAM6000UG ADSL Modem.**

#### Operating System Support

- Windows 98SE
- Windows ME
- Windows 2000
- Windows XP
- Windows 2003 Server

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## 3 Hardware Installation

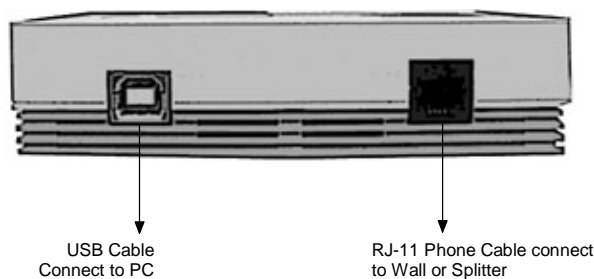
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This chapter introduces the ports and LED indicators.

- Hardware Overview
- USB Connectors
- Splitter Installation
- Front Panel LEDs

### Hardware Overview

Have your system operating disk or CD handy during the installation, in case a specific file can not be found on your computer due to installation.



The back panel has two interfaces:

- **USB – Connecting to PC USB port**
- **LINE – Connecting RJ-11 Phone cable to Phone Jack or Splitter**

### Parts List



**AAM6000UG USB Modem**



**Splitter**



**RJ-11 Phone Cable**



**USB Cable**



**Quick Installation Guide  
(Optional)**



**Installation CD**

## USB Connectors

See the following figure for an explanation of USB connectors.



This cable end will plug into your Modem's USB port



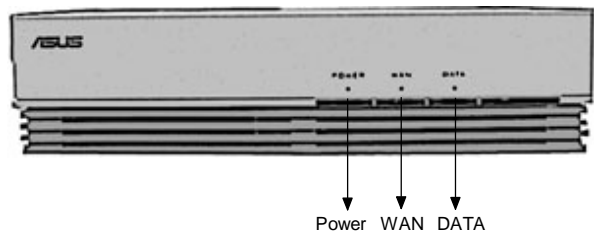
This cable end will plug into your computer's USB port

## Splitter Installation

Use a Splitter in order to plug a phone into the same telephone line.

- Modem port – connect to USB Modem
- Phone port – connect to Phone Set
- Line port – connect to telephone wall jack or out line

Front Panel LEDs



LED	Color	Status	Description
POWER	Yellow	On	USB is connected and receives power.
		Off	Modem's USB port is not connected or not receiving power.
WAN	Yellow	On	DSL link is up.
		Blinking	DSL in Handshaking training status.
		Off	No DSL connection.
DATA	Yellow	Blinking	Data transfer over DSL line.

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## 4 Modem Setup and Driver Installation

---

This chapter shows you how to set up your Modem for ADSL Internet access.

- Prepare to Install the DSLMON Software and USB Driver
- MPoA Bridge or Routed Setting
- PPPoA or PPPoE Setting
- Connection Status Monitoring

### Prepare to Install the DSLMON Software and USB Driver

Before install the AAM6000UG USB ADSL Modem, you should have information below from your Internet Service Provide (ISP) or Telephone Company. Once the information has confirmed, you may now choose one of the installation type, “**MPoA Bridge/Routed**” or “**PPPoA/PPPoE**”, follow by the sections below to complete driver installation.

#### MPoA Bridge/Routed Needed Information

Required Information	Default Value	Fill in the Blanks
<b>VPI:</b> The Virtual Path Identifier number identifies a bundle of virtual channels.	8	
<b>VCI:</b> The Virtual Path Identifier number identifies a logical connection between end stations.	35	
<b>Framing Type &amp; Encapsulation:</b> Bridge LLC/VC MUX or Route LLC/VC MUX	Bridge LLC	
<b>Connection Standard:</b> ANSI T1.413, G.lite, G.dmt, Multi-Standard	Multi-Standard	
<b>IP address: (When using Static IP)</b> The IP address given from your ISP.	Automatically	
<b>Subnet Mask: (When using Static IP)</b> The subnet Mask given from your ISP.	Automatically	
<b>Default Gateway: (When using Static IP)</b> The default gateway given from your ISP.	Automatically	
<b>Preferred DNS Server: (When using Static IP)</b> Primary DNS server IP given from your ISP.	Automatically	
<b>Alternate DNS Server: (When using Static IP)</b> Secondary DNS server IP given from your ISP.	Automatically	

### PPPoA/PPPoE Needed Information

Required Information	Default Value	Fill in the Blanks
<b>VPI:</b> The Virtual Path Identifier number identifies a bundle of virtual channels.	8	
<b>VCI:</b> The Virtual Path Identifier number identifies a logical connection between end stations.	35	
<b>Framing Type &amp; Encapsulation:</b> Bridge LLC/VC MUX or Route LLC/VC MUX	Bridge LLC	
<b>Connection Standard:</b> ANSI T1.413, G.lite, G.dmt, Multi-Standard	Multi-Standard	
<b>User Name and Password:</b> Let your ISP know which account you are login into and protects your account from unauthorized users.	N/A	

### MPoA Bridge or Routed Setting

- ✓ **DO NOT connect the modem to your computer at this time.**

**Step 1** Close all Windows programs and applications.

**Step 2** Insert the CD that came with your Modem into your computer. It should automatically run the driver setup program. If the setup is not automatically run, you can open the CD on your computer and double click the **Setup.exe** icon

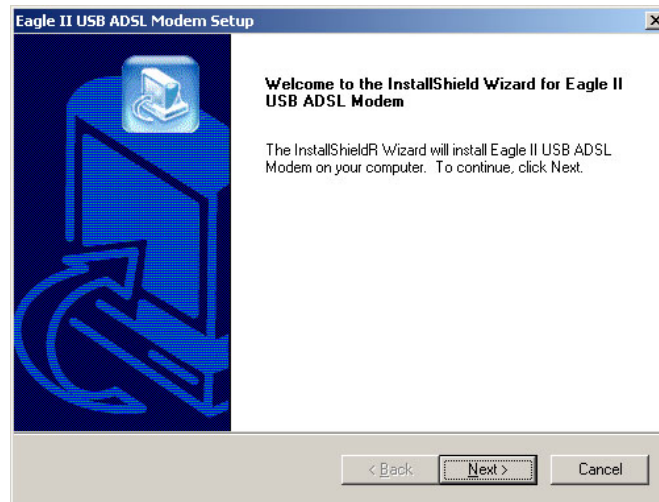


Setup.exe

**Step 3** When the following window appears, click **OK**.



**Step 4** When “Eagle II USB ADSL Modem Setup window” appears, click **Next**.



**Step 5** Next, select the “MPoA Bridge/Routed” as driver type and click **Next**.



- Step 6** Screens pop up to report the progress of the installation. You do not need to click anything until installation complete, selected “Yes, I want to restart my computer now”, and click **Finish** to have your computer restart.



- Step 7** After system restarted, you can now connect USB Modem to your PC, several screens pop up to inform USB driver installation progress, when the following window appear, click **OK**.



## Setting Up USB Network IP Address

This section is relevant when you select **MPoA Bridge/Routed** driver type using a given IP address on.

- ✓ **Please have your AAM6000UG USB ADSL Modem connecting to PC.**

Follow the steps to set up your USB computer to use a static IP address given by your ISP. Window XP screen shots are shown. Steps and screen shots may very depend on the version of Windows.

- Step 1** Click Start → Control Panel → Network and Internet Connection → Network Connections.

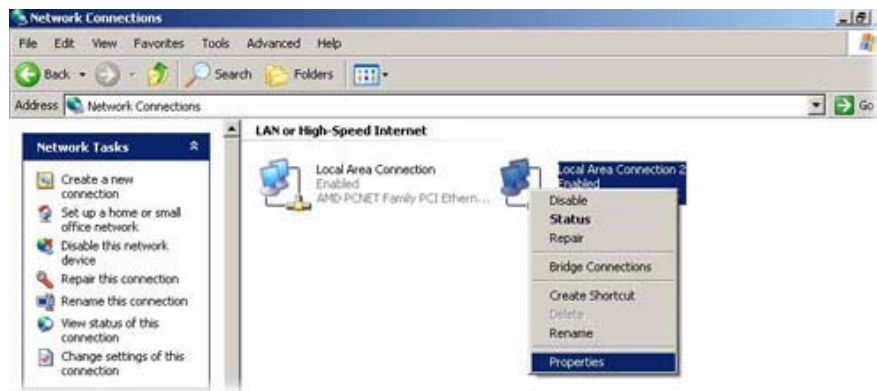
- Step 2** Double click on the Network Connection icon to open the window screen.



- ✓ **The follow screen may very from this user guide depending on your MS Windows version.**



- Step 3** Right-click on the icon that corresponds to your new USB connection “USB ADSL LAN Adapter” (not the one that corresponds to your Ethernet NIC) and select **Properties**.

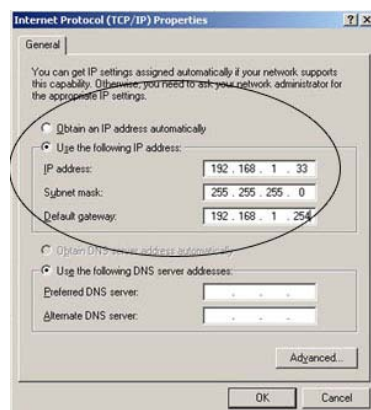


- Step 4** In the Properties screen, make sure the **Connect Using** field displays “USB ADSL LAN Adapter”.



- Step 5** Select **Internet Protocol (TCP/IP)** and click **Properties**.

- Step 6** Click **Use the following IP address** and fill in the IP address (given by your ISP), Subnet mask, and Default gateway fields; as same as DNS server address (given by your ISP).



- ✓ If USB ADSL LAN Adapter icon shown as below “Network Cable unplugged”, please check your AAM6000UG USB ADSL Modem properly connected for ADSL Line. Make sure the “WAN” LED is steady on in order to operation.



## PPPoA or PPPoE Setting

- ✓ **DO NOT connect the modem to your computer at this time.**

- Step 1** Close all Windows programs and applications.
- Step 2** Insert the CD that came with your Modem into your computer. It should automatically run the driver setup program. If the setup is not automatically run, you can open the CD on your computer and double click the **Setup.exe** icon

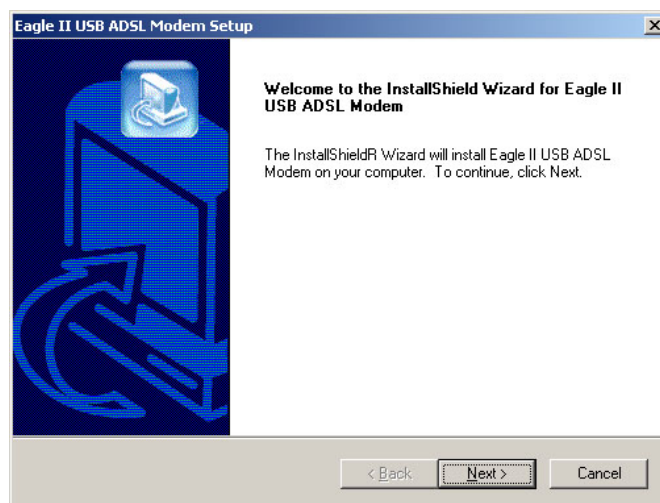


Setup.exe

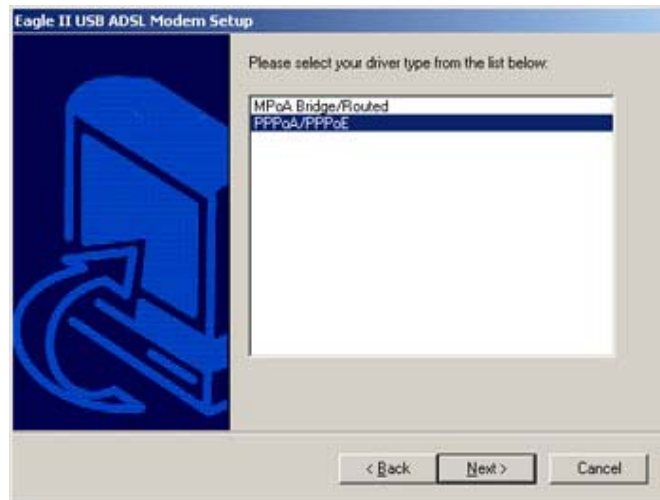
- Step 3** When the following window appears, click **OK**.



- Step 4** When "Eagle II USB ADSL Modem Setup window" appears, click **Next**.



**Step 5** Next, select the “PPPoA/PPPoE” as driver type and click **Next**.



**Step 6** Screens pop up to report the progress of the installation. You do not need to click anything until installation complete, selected “Yes, I want to restart my computer now”, and click **Finish** to have your computer restart.



**Step 7** After system restarted, you can now connect USB Modem to your PC, several screens pop up to inform USB driver installation progress, when the following window appear, click **OK**.



## Internet Access PPP Setting

This section is relevant when you select **PPPoA/PPPoE** driver type using a PPP authentication.

Follow the steps to set up your USB computer to use a static IP address given by your ISP. Window XP screen shots are shown. Steps and screen shots may very depend on the version of Windows.

**Step 1** Click Start → Control Panel → Network and Internet Connection → Network Connections.

**Step 2** Double click on the Network Connection icon to open the window screen.



✓ The follow screen may very from this user guide depending on your MS Windows version.

**Step 3** Double click on the icon labeled “USB\_ADSL” to configure the dialup settings for your Modem.

✓ The “USB\_ADSL” icon will also appear on your desktop if you selected PPPoA/PPPoE driver type.



**Step 4** Enter the “User name” and “Password” given from your ISP and click **Dial**.



# Connection Status Monitoring




Task bar will appear a DSLMON icon as shown below if your USB Modem is connecting to PC.



Double click the DSLMON icon will give the USB connection window display as below.



Click **Reset** button if you wish to reconnect your USB ADSL Modem, the icon coloring the operating status as table shown below.

		
Red – Disconnect / Idle	Yellow - Initializing	Green - Operational

## 5 Advanced Control Menu

---

This chapter shows you how to view advanced modem information.

- General Configuration
- Viewing General Statistics
- Advanced Debugging

### General Configuration

**Step 1** Double click on the DSLMON icon.



**Step 2** Press the **ALT** and **D** keys simultaneously to bring up the following window. This is **CONFIG** tab for the ATM VPI/VCI and encapsulation setting.



The following table describes the labels in this **CONFIG** window.

LABEL	Description
<b>ATM Channel</b>	These are the Virtual Path and Virtual Channel identifiers.
<b>Encapsulation Type</b>	This shows the mode of encapsulation chosen during Modem installation.
<b>ADSL Standard</b>	ADSL connection modulation type used to establish physical communications with the DSL provider.

## Viewing General Statistic

### ATM and DSL Status

Click the **ATM/DSL** tab to view ATM-related statistics as seen in this window. These statistics refer to data collected on the active virtual channels.

The screenshot shows a window titled "Administrative" with a tabbed interface. The "ATM/DSL" tab is selected. The window is divided into three sections: DSL, ATM, and Packet. Each section contains several status fields with numerical values.

DSL			
ADSL Standard			
Transmit Rate	0 Kbps	Receive Rate	0 Kbps
CRC	0	FEC	0
Margin	0 dB	Attenuation	0 dB
VID - CPE	0	VID - CO	0

ATM			
Transmitted Cells	0 Cells	Received Cells	0 Cells
VPI	0	VCI	32
Delineation	LOST	HEC	0

Packet			
Transmitted	0 Pkts	Received	0 Pkts

At the bottom right of the window is a "Reset" button. At the very bottom are "OK", "Cancel", and "Apply" buttons.

The following table describes the labels in this window.

LABEL	Description
<b>DSL</b>	This is the information of ADSL physical status.
<b>ATM</b>	This is the information of ATM cell layer status.
<b>Packet</b>	This is the information of Ethernet layer packet status.



## Advanced of AAL Link Status

Click **Advanced** tab to view AAL (ATM Adapt Layer) related statistics as seen in this window.

The screenshot shows a window titled 'Administrative' with a tabbed interface. The 'Advanced' tab is selected. The window contains several sections of statistics, each with two columns of data and a '0' value in the input field.

Section	Field	Value
Packet Statistics	Transferred	0 Pkts
	Total Loss	0
	Bad Length	0
	Received	0 Pkts
OAM	F4 Segment	0
	F4 End to End	0
	F5 Segment	0
	F5 End to End	0
ATM Statistics	Transmitted Cells	0 Cells
	Bad HEC	0 Cells
	Received Cells	0 Cells
	Bad VCC	0 Cells
DSL Frame Counts	Upstream OK	0
	Upstream Error	0
	Upstream Total	0
	Downstream OK	0
Margin	Upstream	0
	Downstream	0

At the bottom of the window, there are buttons for 'Refresh', 'Reset', 'OK', 'Cancel', and 'Apply'.

The following table describes the labels in this window.

LABEL	Description
Packet Statistics	This is the total number of AAL 5 layer packet statistics.
OAM	This is the total number of ATM OAM cell statistics.
ATM Statistics	This is the total number of ATM cell statistics.
DSL Frame Counts	This is the total number of ADSL Frame counters.
Margin	This is upstream and downstream margin values.

## Advanced Debugging

CMV, TEST, and Graph tabs are for engineering debugging only, you may not needs to viewing or configuring in advice.

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## 6 Remove and Upgrade

---

This chapter tells how to uninstall and reinstall your Modem's software driver.

- Remove versus Upgrade the Modem Driver
- Remove Procedure
- Upgrade Procedure
- Rollback Procedure

### Remove versus Upgrade the Modem Driver

Remove the Modem driver if you are no longer to using the AAM6000UG USB Modem, Upgrade and Rollback the Modem driver if you are having trouble with current version.

### Remove Procedure

Follow these steps to completely remove your Modem's software driver.

- Step 1** Close all windows programs and application.
- Step 2** Make sure the Installation CD is in your computer, Double click the **Setup.exe** icon as you did when you first set up the Modem. The "Eagle II USB ADSL Modem Setup" window appears. Select **Remove all install components** and click **Next**.



- Step 3** Click **OK** to confirm the remove process.



- Step 4** You may need to restart your computer to accomplish the remove process, select “Yes, I want to restart my Computer now”, and click **Finish**.



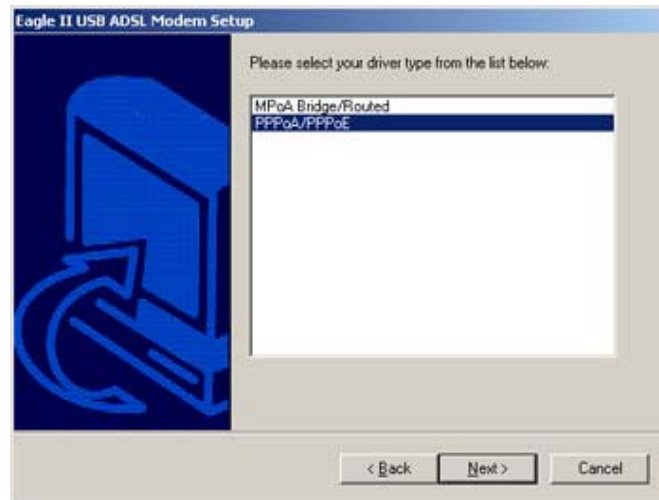
## Upgrade Procedure

Follow these steps to completely upgrade your Modem's software driver.

- Step 1** Close all windows programs and application.
- Step 2** Make sure the Installation CD is in your computer, Double click the **Setup.exe** icon as you did when you first set up the Modem. The “Eagle II USB ADSL Modem Setup” window appears. Select **Upgrade to the new driver** and click **Next**.



**Step 3** Select the “PPPoA/PPPoE” as driver type and click **Next**.



**Step 4** You may need to restart your computer to accomplish the remove process, select “Yes, I want to restart my Computer now”, and click **Finish**.



## Rollback Procedure

Follow these steps to completely Rollback to old driver of your Modem's software driver.

**Step 1** Close all windows programs and application.

**Step 2** Make sure the Installation CD is in your computer, Double click the **Setup.exe** icon as you did when you first set up the Modem. The "Eagle II USB ADSL Modem Setup" window appears. Select **Rollback to the old driver** and click **Next**.



**Step 3** You may need to restart your computer to accomplish the remove process, select "Yes, I want to restart my Computer now", and click **Finish**.



# Appendix A

---

## ADSL-Related Acronyms

<b>ADSL</b>	Asymmetric High bit rate Digital Subscriber Line
<b>ANSI</b>	American National Standards Institute
<b>ARP</b>	Address Resolution Protocol
<b>ATM</b>	Asynchronous Transfer Protocol
<b>BootP</b>	Bootstrap Protocol
<b>CHAP</b>	Challenge-Handshake Authentication Protocol
<b>DHCP</b>	Dynamic Host Configuration Protocol
<b>DMT</b>	Discrete Multi-Tone
<b>DSLAM</b>	Digital Subscriber Line Access Multiplexer
<b>IETF RFC</b>	Internet Engineering Task Force Request for Comments
<b>IPCP</b>	Internet Protocol Control Protocol
<b>IPoA</b>	IP over ATM
<b>ITU</b>	International Telecommunication Union
<b>ITU-T</b>	ITU Telecommunication Standardization Sector
<b>MAC (address)</b>	Media Access Control (address)
<b>MPoA</b>	Multi Protocol Encapsulation over ATM Adaptation Layer 5
<b>NAT</b>	Network Address Translation
<b>PAP</b>	Password Authentication Protocol
<b>POTS</b>	Plain Old Telephone Service
<b>POP</b>	Point-to-Point Protocol
<b>PPPoA</b>	PPP over ATM Adaptation Layer 5
<b>PPPoE</b>	PPP over Ethernet
<b>PSTN</b>	Public Switched Telephone Network
<b>PVC</b>	Permanent Virtual Connection
<b>Telco</b>	Telephone Company
<b>TCP/IP</b>	Transmission Control Protocol / Internet Protocol
<b>TFTP</b>	Trivial File Transfer Protocol
<b>VCI</b>	Virtual Circuit Identifier
<b>VPI</b>	Virtual Path Identifier
<b>WAN</b>	Wide Area Network

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