

Full Rate Broadband
ADSL
 USB Modem **Quick Installation Guide**



7435-0B06-00

This guide provides a comprehensive installation manual for the USB ADSL modems. It has been organized in such a way to make it easy to follow by users worldwide. In order to ensure optimal comprehension, the following list provides brief descriptions of the formatting styles used throughout this manual.

- ▶ **Commands:** using the word “click” before them always refers to Commands. These commands are always shown as bold-faced words. For example, click Next, click OK, or click Cancel.
- ▶ **Names of Windows (Dialog Boxes):** The names of the windows (also referred to as dialog boxes) that appear on the PC screen are always referred to in quotes. For example, the “Setup Complete” window.
- ▶ **Names of Options in Windows:** The names of options to choose from inside the windows that appear on the PC screen are always referred to in italics. For example, choose the “Yes, I want to restart my computer now option from the window.”
- ▶ **Notes:** In some cases, preparatory or cautionary information is needed before proceeding onto the next step in an installation process. This kind of information is provided in the form of notes, which are always referred to in bold-faced and italicized letters.

Preface

The USB ADSL Modem User Guide

This manual contains information regarding the installation, operation, and configuration of the Conexant USB ADSL Modem. Additionally, it outlines the use of the Control Panel Application.

The following chapters are included in this manual:

- ▶ **Chapter 1:** “Overview” offers a brief description of ADSL, protocol and device driver selection, and the features of the USB ADSL Modem.
- ▶ **Chapter 2:** “USB ADSL Modem Installation” offers a brief description of ADSL and hardware installation.
- ▶ **Chapter 3:** “USB ADSL Modem Software Setup” describes the steps for installing the USB ADSL Modem. The software installation procedure is detailed.

Chapter 1: Overview

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About ADSL

Asymmetric Digital Subscriber Line (ADSL) technology provides high-speed data access across regular phone lines (copper wires) by making use of previously unused frequency bandwidth above the voice band. By placing the ADSL signal above the frequency of the voice signal, ADSL service is able to

coexist on the same line with your telephone service. ADSL is asymmetric in the sense that it provides a higher data rate in the downstream (receive) direction than in the upstream (transmit) direction. Asymmetric operation is ideal for typical home and small office use where files and information are downloaded more frequently than uploaded.

Protocol and Device Driver Selection

The USB ADSL Modem can be easily connected to a USB port on the PC via a standard USB cable. The USB ADSL Modem is fully software upgradeable so that new features and updates may be added by simply loading a new version of the device driver onto your PC.

ADSL modems employ ATM (Asynchronous Transfer Mode) framing. ATM is a protocol that divides packets into small fixed sized cells for rapid transmission over high-speed networks. The ATM protocol allows various types of traffic (e.g. data, voice, and video) to be securely and efficiently carried over the same network. ATM is being widely deployed by telecommunications carriers in their backbone networks. Two type of ATM connections are possible, PVC (Permanent Virtual Circuit) and SVC (Switched Virtual Circuit).

Several different protocols are used on top of ATM. The protocol required in your configuration depends on the equipment deployed by your DSL service provider. There are several possibilities:

Point-to-Point Protocol (PPP) Over Ethernet (PPPoE, RFC 2516) and PPP Over ATM (PPPoA, RFC 2364) – PPP provides session setup, user authentication (login), and encapsulation for upper layer protocols such as IP (Internet Protocol). The use of PPP makes the modem appear as a dial modem to the operating system. Dial-Up Networking is used to establish a connection. PPP is supported by either the WAN (Wide Area Network) driver, or the ATM driver.

Bridged/Routed Ethernet/IP over ATM (RFC 1483) – this protocol makes the modem appear as a local area network (LAN) device to the operating system.

Features

The USB ADSL Modem provides the following features:

- Compliant with Universal Serial Bus Specification Revision 1.1
- USB bus-powered; an external power supply is not required
- Supports three device drivers: Microsoft NDIS 4.0 WAN Miniport, NDIS 4.0 LAN Miniport or NDIS 5.0 ATM Miniport
- Compatible with all T1.413, G.DMT, and G.lite compliant CO DSLAM equipment.
- Software upgradeable
- Supports up to sixteen simultaneous ATM virtual connections
- Includes a Microsoft Windows control panel monitoring program for configuring the adapter and checking the status of the connection
- Provides an RJ-11 connector for connection to the telephone line
- Supports DSL downstream data rates up to 8 Mbps (142 times faster than standard 56K modems)
- Supports DSL upstream data rates up to 1024 Kbps

Parameters from Service Provider

Before you install this USB ADSL driver, please request your Internet Service Provider (ISP) provide you with the appropriate parameter setting for your device or inform you that the parameters will be configured automatically. Below are the parameters that your USB ADSL Modem will require from your ISP.

Example shown as below:

- | | |
|-------------------------------|--|
| ▶ IP Address | 10. 10. 12. 102 |
| ▶ Protocol Mode | 1483 Bridged or
1483 Routed or
PPPoA (RFC 2364) or
PPPoE (RFC 2516) |
| ▶ VCI Value (default: vci=35) | 35 |
| ▶ VPI Value (default: vpi=0) | 0 |
| ▶ Service Name | Hinet |
| ▶ User Name | David |
| ▶ Password | ***** |
| ▶ Subnet Mask Address | 255.255.255. 0 |
| ▶ Gateway Address | 10. 10. 12. 1 |

Work Sheet

Please have this information from your Internet Service Provider (ISP) before you precede the driver installation:

- | | |
|-------------------------------|-----------------------|
| ▶ IP Address | ___ . ___ . ___ . ___ |
| ▶ Protocol Mode | ___ |
| ▶ VCI Value (default: vci=35) | ___ |
| ▶ VPI Value (default: vpi=0) | ___ |

- ▶ Service Name _____
- ▶ User Name _____
- ▶ Password _____
- ▶ Subnet Mask Address _____ . _____ . _____ . _____
- ▶ Gateway Address _____ . _____ . _____ . _____

Chapter 2: USB ADSL Modem Installation

This User Manual documents is for USB ADSL modem. The following sections detail the software requirements and the installation of the modem types.

Supported Operating Systems

The supported Windows operating systems (OS) versions are listed below. You must have one of these installed.

The USB ADSL modem supports Windows versions:

- Windows 98 2nd edition (SE)
- Windows 2000
- Windows ME
- Windows XP, Home and Professional

Hardware Installation

To attach the **USB ADSL Modem** to a computer:

- Step 1.** You can connect this modem without powering down your PC.
- Step 2.** Connect the USB connector on the modem to one of the USB ports.
- Step 3.** Connect the phone line to the phone jack on your modem.
- Step 4.** You are ready to start software installation.

You have successfully installed the USB ADSL Modem hardware. Please proceed to the following "Software Setup"

Chapter 3: USB ADSL Modem Software Setup

WAN, LAN and ATM software drivers are supported. WAN and LAN applications support the Microsoft Windows 98 Second Edition, Windows 2000, Windows ME, and Windows XP operating systems. ATM applications support the Microsoft Windows 98 Second Edition, Windows 2000, Windows ME, and Windows XP operating system.

Be sure to follow the instructions provided for your PC's operating system.

The following information may be required for software installation. Contact your DSL service provider before proceeding with software installation.

Type of Driver to be installed – WAN, LAN and ATM software drivers are supported. The choice depends upon your DSL service provider.

IP Address Settings – the software installation process allows the server to dynamically assign IP Address settings. If your application requires static setting of specific address information you will need to know:

IP Address

- Subnet Mask (for Bridged Ethernet applications only)
- Default Gateway (for Bridged Ethernet applications only)
- Name Server Information – the software installation process allows the server to dynamically assign Name Server Address settings. If your application requires static setting of specific address information you will need to know:
 - Primary DNS Address
 - Secondary DNS Address
 - Primary WINS Address
 - Secondary WINS Address
 - ATM Virtual Path ID (VPI)
- Note: Required if not using default values for driver type**
- ATM Virtual Circuit ID (VCI)
- Note: Required if not using default values for driver type**
- Encapsulation type
- Note: Required if not using default values for driver type**
- Modulation type
- Note: Required if not using default values for driver type**
- User Name (for PPP applications only)
- Password (for PPP applications only).

Software Setup

Before starting the software setup process, close all Windows programs previously running on your PC. And, please make sure that you have got all above information of Work Sheet from your Internet Service Provider (ISP).

Installation Procedures Under Windows 98/2000/ME/XP

1. Please insert the USB ADSL Modem communication CD into your CD-ROM drive.
2. The CD is with Auto Run function. So you won't need to place any command. (Note : If you can not start Auto Run automatically, please refer to command "RUN" to start the "Auto Run.exe".)
3. Please select the correct menu bars to install in your USB ADSL Modem
4. Now you can print out your selected menu bars and precede your installation.

Important Notice!
For Software Installation, please refer to the instructions inside your CD.