
Acer ADSL Surf USB Modem

Installation Guide

Acer European Support: <http://support.acer-euro.com>

Table of Contents

1. About The Manual

2. Specification

3. Preface

Chapter 1 : ADSL Overview

Chapter 2 : NDISLAN (RFC 1483) Driver for Windows 98 (Original Edition), 98SE, ME, XP and 2000

1. About This Manual

This manual provides a comprehensive user's guide and installation manual for Acer ADSL Surf USB Modem. It has been organized in such a way to make it easy to be followed by users worldwide. In order to ensure optimal comprehension, the following list provides brief descriptions of the formatting styles used throughout this manual.

- **Commands** : Commands are always referred to by using the word “ **Click** ” before them. 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* ” option from the window.
- **Notes** : In some cases, preparatory or cautionary information is needed before proceeding to 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.

2. Specifications

ADSL Modem:

- DMT Data Rates :
 - ◆ Up to 8Mb downstream
 - ◆ Up to 1024Kbps upstream
- Compliant Standards :
 - ◆ ITU G.992.1 (Annex A , Annex B)
 - ◆ G.992.2
 - ◆ ANSI T1.413 Issue 2
 - ◆ ETSI TR328
- RFC Protocols :
 - ◆ RFC 1483 (Multi-Protocol Encapsulation Over ATM (ALL5))
 - ◆ RFC 2364 (Point-To-Point Protocol Over ATM (ALL5))
 - ◆ RFC 2516 (Point-To-Point Protocol Over Ethernet)

Bus Type

Type B USB

Cables & Connectors

1 RJ-45/11 cable & 1 Type A/B USB cable

Graphical User Interface

DSL GUI is a tool that enables users to monitor USB Modem and ADSL line status, and to change the Modem configuration.

Operating System Support

Windows 98 (Original Edition), 98SE, Windows ME, Windows 2000 and Windows XP

Physical Description

Dimension : 14.6cm (L) x 9.55cm (W) x 3.0cm (H)

Operating Environment

Operating + 0? ~ + 50?
Non-operating - 20? ~ + 70?

Humidity

Operating 20%~80% RH
Non-operating 10%~80% RH

Standard Approval

CE CLASS B
FCC PART 15 CLASS B
FCC PART 68
EN60950
K.21

Status LED

1 LED indicates ADSL Detect/Connect
1 LED indicates Power/Ready

Features

The Acer ADSL Surf USB 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 device drivers: NDISLAN
- Compatible with G.992.1(Annex A ,B) ,G.992.2 , T1.413 Issue 2 ,ETSI TR328
- Software upgradeable
- Includes a DSL GUI 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 8Mbps (125 times faster than standard 56K modems)
- Supports DSL upstream data rates up to 1024 Kbps
- Supports 3rd party PPP Over Ethernet (PPPoE) clients

Ship Kit Contents

You can get the following items:

- 1 Acer ADSL Surf USB Modem
- 1 RJ-45/11 cable
- 1 USB A/B cable
- 1 System CD (with Manuals, Drivers)

3. Preface

The Acer ADSL Surf USB Modem Manual

This manual contains information regarding the installation, operation, and configuration of the Acer ADSL Surf USB Modem.

The following chapters are included in this manual :

- **Chapter 1** : “ Overview ” offers a brief description of ADSL, protocol and device driver selection.
- **Chapter 2** : NDISLAN (RFC1483) Driver for Windows 98(Original Edition), 98SE, ME, XP and 2000

Chapter 1 : Overview

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.

There are several standard types of ADSL modulation techniques including Discrete Multi-tone (DMT) and Carrier-less Amplitude and Phase (CAP). The Acer ADSL Surf USB modem is capable of supporting the following DSL standards: ITU G.992.1 (G.DMT) (Annex A ,Annex B), ITU G.992.2 (G.LITE), ANSI T1.413 Issue 2 and ETSI TR328 .

Protocol and Device Driver

The Acer ADSL Surf USB Modem can be easily connected to a USB port on the PC via a standard USB cable. The Acer ADSL Surf USB 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:

1. Point to Point Protocol (PPP) over ATM (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.
2. 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.

-
3. Point to Point Protocol (PPP) over Ethernet (RFC 2516) – This protocol makes the modem appear as a local area network (LAN) device to the operating system. It allows multiple computer users on an Ethernet to share a common DSL connection to the Internet.

LAN type of device drivers is provided for the Acer ADSL Surf USB modem.

Chapter 2 : NDISLAN (RFC1483) Driver for Windows 98, 98SE, ME, XP and 2000

Description

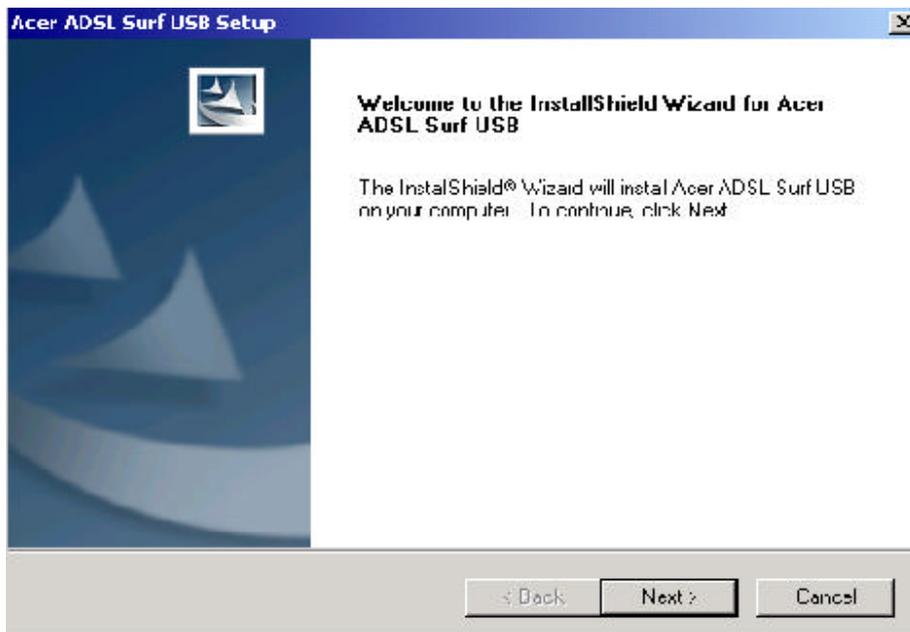
The NDISLAN driver exports a standard Ethernet interface to the Windows operating system and binds with Microsoft protocols that communicate with NDIS 3 or with third-party PPPoE client software (provided by your ADSL service provider) running under Microsoft Windows such as WinPoet and NTS. Consult your service provider for the appropriate client software and related documentation. VPI, VCI, and other specifications, can be configured via DSLMON GUI or during installation of software drivers.

DO NOT plug the USB cable from the PC into the USB connector of the Acer ADSL Surf USB Modem until driver is installed.

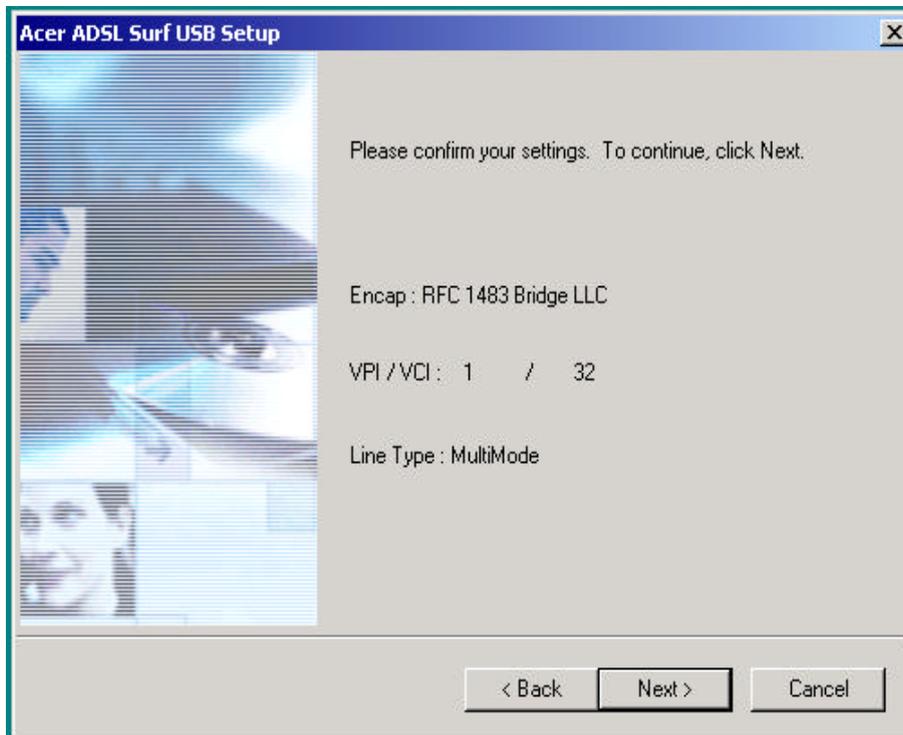
The following instructions apply for Windows 98,98SE,ME, XP and 2000. Some of the screens may slightly differ from those shown due to different Operating System.

Installation for Windows 98, 98se, ME, 2k and XP

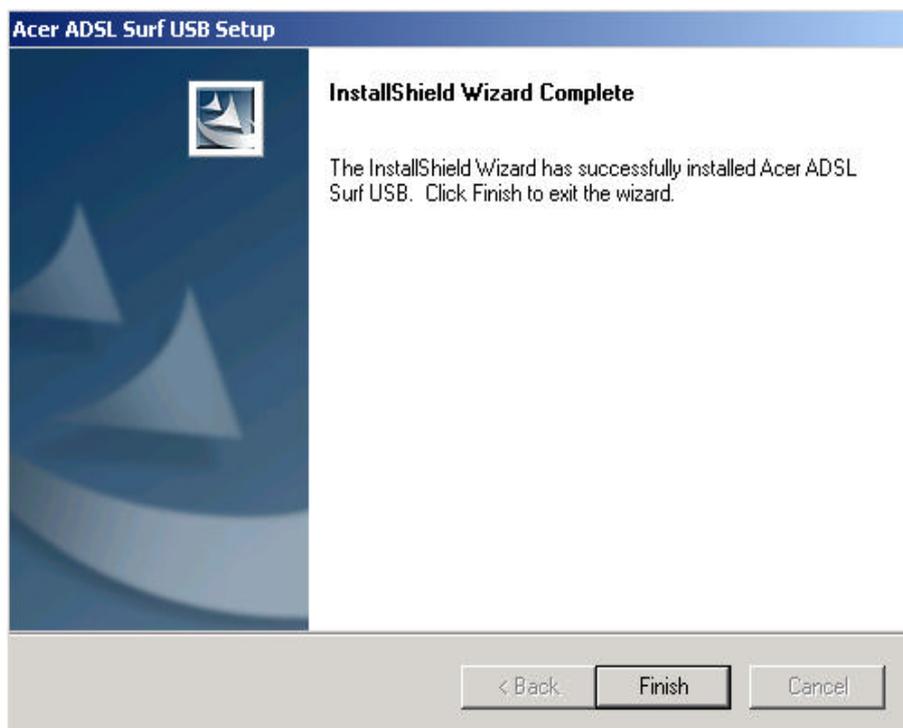
1. Insert the device driver software (CD-Title as provided) into the appropriate drive of your computer and run “**SETUP.EXE** “ (Ex: **E:\DRIVER\SETUP.EXE**). Click “**NEXT**” when the following window pops up.



-
2. Click **“NEXT”** to confirm setting.



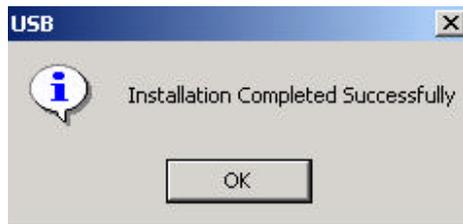
3. Click **“Finish”** to continue.



-
- Windows will display a “**USB Warning**“ message. Insert the rectangular end of a USB cable into the USB port of your PC and insert the square end of the USB cable into the USB port of the Acer ADSL Surf USB Modem and Click “**OK**”



- The device driver will be automatically installed into your system.
- Click “**OK**” to complete the installation procedures.



NOTE : You will need to reboot your system after the above installation procedures if your operating system is Windows 98 (Original Edition), Windows 98SE or Windows ME.

Configuring Networking for Windows 98, 98SE, ME, XP, and 2000

The NDISLAN driver that you have just installed exports a standard Ethernet interface to the Windows operating system and binds with Microsoft protocols that communicate with NDIS 3 or with third-party PPPoE client software provided by your ADSL service provider such as WinPoet and NTS. Consult the documentation provided with the appropriate third-party PPPoE client software or your service provider for installation and configuration procedures. VPI, VCI, and other specifications, can be configured via DSLMON GUI.

1. After the “**USB ADSL Driver**” is successfully installed, the Status Task Bar will appear in the System Tray. Double click the Task Bar and the following Dialog Box will be shown.



2. Press “**ALT+D**” to get into the Configuration Dialog Box.



-
3. You can see your configuration in the following dialog box. Whenever you need to change the settings, please also refer to this dialog box and make appropriate change.

The image shows a software dialog box titled "Administrative" with a close button (X) in the top right corner. The dialog has a tabbed interface with the following tabs: "ATM/DSL", "CONFIG" (which is the active tab), "CMV", "TEST", "Advanced", and "Graph".

Under the "CONFIG" tab, there are three main sections:

- ATM Channel:** Contains two input fields: "VPI" with the value "1" and "VCI" with the value "32".
- Encapsulation Type:** Contains a dropdown menu currently set to "Bridged LLC SNAP".
- ADSL Standard:** Contains four radio button options: "ANSI - T1.413", "G.LITE", "G.DMT", and "Multi-Standard". The "Multi-Standard" option is selected.

At the bottom of the dialog, there are three buttons: "OK", "Cancel", and "Apply".