User Manual ATU-R303 ADSL USB Modem

Table of Contents

ABOUT THIS MANUAL	1
PREFACE	2
ATU-R303 ADSL USB MODEM MANUAL	2
CHAPTER 1: OVERVIEW	3
ABOUT ADSL PROTOCOL AND DEVICE DRIVER SELECTION FEATURES	3 3 5
CHAPTER 2: ADSL USB MODEM INSTALLATION AND SOFTWARE SETUP	6
SYSTEM REQUIREMENTS. Windows. MODEM HARDWARE INSTALLATION . SOFTWARE SETUP FOR WINDOWS XP SOFTWARE SETUP FOR WINDOWS 2000 SOFTWARE SETUP FOR WINDOWS 98 AND 98 SECOND EDITION SOFTWARE SETUP FOR WINDOWS ME	
CHAPTER 3: CUSTOMIZING COMMUNICATION SETTINGS	75
CHAPTER 4: CONTROL PANEL APPLICATION FOR WINDOWS	77
CHAPTER 5: SOFTWARE UNINSTALL	79
APPENDIX A: MODIFYING TCP/IP NETWORKING OPTIONS	81
WAN USB DRIVER	81
Windows 98 and Windows 98 Second Edition	
Windows XP & 2000 Microsoft Windows ME	
LAN USB DRIVER	
Microsoft Windows 98, First and Second Editions	
Microsoft Windows XP & 2000	
Microsoft Windows ME	
AIM USB DRIVER FOR MICROSOFT WINDOWS 98 SECOND EDITION	
ATM USB Driver for Microsoft Windows MF	
APPENDIX B: POINT-TO-POINT PROTOCOL OVER ETHERNET	101
APPENDIX C: SPECIFICATIONS	103
ATU-R303 ADSL USB MODEM CONNECTOR	103
DATA TRANSFER RATES	103
SOFTWARE KEQUIREMENTS	
Operating System	
Processor	
APPENDIX D: FCC/INDUSTRY CANADA REQUIRED INFORMATION	108

	FCC REQUIRED INFORMATION:INDUSTRY CANADA REQUIRED INFORMATION	108 109
APPENDIX E:	ABBREVIATIONS	110
APPENDIX F:	PRODUCT SPECIFICATION	111

About This Manual

This manual provides a comprehensive user's guide and installation manual for ATU-R303 ADSL USB Modem. 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 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. For example, *Note: To access the Control Panel, the driver must be running. Also, make sure the USB cable is plugged into the modem.*

Preface

Xentrix X7005 ADSL USB Modem Manual

This manual contains information regarding the installation, operation, and configuration of the ATU-R303 ADSL USB 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 ADSL USB Modem.
- **Chapter 2:** "ADSL USB Modem Installation and Software Setup" describes the steps for installing the ADSL USB Modem and details the software installation procedure.
- Chapter 3: "Customizing Communication Settings" provides detailed steps for altering the ATM Virtual Path ID (VPI), ATM Virtual Circuit ID (VCI), Encapsulation type and/or Modulation type values previously defined.
- **Chapter 4:** "Control Panel Application" describes how to configure and check the performance of the ADSL USB Modem and the ADSL connection.
- **Chapter 5:** "Software Uninstall" provides detailed steps for removing the ADSL USB Modem software from the PC.

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 MultiTone (DMT) and Carrierless Amplitude and Phase (CAP). The ADSL USB DSL Modem is capable of supporting the following DSL standards: ANSI T1.413 Issue 2, ITU G.992.1 (G.DMT), ITU G.992.2 (G.lite), CAP (T1 TR-59), and ITU G.992 Annexes A, B, and C as applicable.

Protocol and Device Driver Selection

The ATU-R303 ADSL USB Modem can be easily connected to a USB port on the PC via a standard USB cable. The ATU-R303 ADSL 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:

 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.
- RFC 1577 this is another local area network like protocol for IP address and ATM address mapping.
- PPP Over Ethernet (RFC 2516) This protocol makes the modem appear as a LAN device to the operating system. It allows multiple computer users on an Ethernet to share a common DSL connection to the Internet.

Three types of device drivers are provided for the ATU-R303 ADSL USB Modem, WAN, LAN, and ATM. Note that all three drivers support ATM protocol. In addition, the ATM driver works with ATM services that are available in recent Windows operating systems. The proper choice of driver depends on the combination of Windows operating system and protocol.

- WAN driver this driver causes the modem to resemble a dial-up modem. Call establishment is performed through Dial-Up Networking. This driver supports RFC 2364 with PVC connections and PPPoE. It can be used with Windows 98, Windows 98 SE, Windows 2000, Windows XP and Windows ME.
- LAN (RFC 1483) driver this driver makes the modem appear as a LAN or Ethernet device. Connection establishment is automatic. This driver supports RFC 1483 with PVC connections. Additionally, RFC 1577 is supported. It can be used with Windows 98, Windows 98 SE, Windows 2000, Windows XP and Windows ME.
- ATM driver this driver works in conjunction with ATM services provided by Windows. RFC 2364 is supported. The ATM driver uses Dial-Up Networking to create a PVC or SVC connection to establish a PPP (RFC 2364) connection. This driver can be used with Windows 98 SE, Windows 2000, Windows XP and Windows ME.

Driver Type	Protocol	Windows OS
LAN	RFC 1483	Windows XP, ME, 2000, 98,
	RFC 1577	98 SE
WAN	RFC 2364	Windows XP, ME, 2000, 98,
	PPPoE	98 SE
ATM	RFC 2364	Windows XP, ME, 2000,98 SE

The device driver choices are summarized in the table below:

Features

The ATU-R303 ADSL 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 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 as well as the vast majority of deployed CAP RADSL CO equipment
- Software upgradeable
- ATM driver 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 (125 times faster than standard 56K modems)
- Supports DSL upstream data rates up to 1024 Kbps

Chapter 2: ATU-R303 ADSL USB Modem Installation and Software Setup

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

- 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)
- Domain Name Server Information the software installation process allows the server to dynamically assign Domain 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
- Type of Driver to be Installed WAN, LAN and ATM software drivers are supported. *Note: Required if not using default value*
- ATM Virtual Path ID (VPI)

Note: Required if not using default value

• ATM Virtual Circuit ID (VCI)

Note: Required if not using default value

• Encapsulation type

Note: Required if not using default value

- Modulation type
 - Note: Required if not using default value
- User Name (for PPP applications only)
- Password (for PPP applications only).

System Requirements

Windows

The following specifications are the minimum required for optimum performance of this ADSL modem:

- PC with Pentium, Celeron, Xeon or compatible processor
- USB V1.0 or V1.1-compliant bus
- At least 32 MB RAM
- 10 MB of free hard drive space
- TCP/IP protocol stack installed
- Microsoft Windows 98/98SE, Windows Millennium (ME), Windows 2000, Windows XP CD-ROM, or the appropriate CAB files.
- Internet Explorer 4.x (or later) or Netscape Navigator 4.x (or later) installed

Modem Hardware Installation

IMPORTANT! Do NOT connect the USB modem to the computer until instructed to do so in the software driver installation procedure for your operating system.

WITH SPLITER FOR G.DMT



WITH MICROFILTER FOR G.LITE



Install the Xentrix X7005 ADSL USB Modem by following steps with the PC running:

- 1. Locate a telephone wall outlet.
- 2. Unplug any telephone cable that is connected to the outlet.
- 3. Plug one end of the telephone/ADSL cable into the wall outlet.
- 4. Plug the other end into the ADSL jack of the modem.

- Insert the Installation CD into your CD-ROM drive. If the installation doesn't automatically start, go to *Windows Explorer -> CD-ROM Drive -> SETUP.EXE* to run the setup program.
- 6. Insert the square end of the USB cable into the USB port of the ADSL USB Modem, when prompted.
- 7. Insert the rectangular end of a USB cable into the USB port of your PC.

Macintosh Users: The USB modem must be plugged into a USB port on the computer itself or a powered hub, not into keyboard port.

Software Setup for Windows XP

IMPORTANT! Do NOT connect the USB modem to the computer until instructed to do so in the software driver installation procedure for your operating system.

Note: In order to properly setup software, please strictly follow the procedure:

1) After Windows is running, first insert the installation CD,

2) Run the ADSL USB Modem installation driver. If the installation doesn't automatically start, go to **Windows Explorer -> CD-ROM Drive -> SETUP.EXE** to run the setup program.

3) Plug the USB modem into the PC to when install the basic USB driver.

 When the Installation CD is inserted, a "Configuration "window allows you to select different configurations. A list of pre-configured alternatives and Manual Configuration is displayed. Highlights the one you would like to choose and click Next.

Configuration		×
	Select your Setting from the list If your Setting is not listed, select Other Service Provider. After making a selection, click Next to continue. To make changes to the communication settings, click Customize. Other Service Provider America Online (Example) Bell Atlantic (Example) PPPoA/RFC2364 VC-mux VP/VC=8/35 (WAN-driver) PPPoA/RFC2364 LLC VP/VC=8/35 (WAN-driver) Bridge/RFC1483 LLC VP/VC=8/35 (LAN-driver) Routed/RFC1483 LLC VP/VC=8/35 (LAN-driver) PPPoA/RFC2516 LLC VP/VC=8/35 (WAN-driver) PPPoA/RFC2364 · VC (ATM-driver)(win98se/me/2K) PPPoA/RFC2364 · LLC (ATM-driver)(win98se/me/2K)	
Q	ustomize < <u>B</u> ack <u>Next</u> > Cancel	

2. Select the driver type you want to install, you should get this information from your service provider. Highlights the driver type and click **Next**.

Select Driver Type		×
	Select the type of driver that will be installed. This choice depends on the service provider you are using.	
	< Back Next > Cancel	

Chapter 2: ADSL USB Modem Installation and Software Setup

3. The "**Configuration**" window allows you to select different configurations. A list of preconfigured alternatives and Manual Configuration is displayed. Highlights the one you would like to choose and click **Next.**

Configuration			×
	Select your Setting from the If your Setting is not listed, After making a selection, of changes to the communication IPoA/RFC1577 Bridge/RFC1483 LLC Routed/RFC1483 LLC PPPoA/RFC2364 VC PPPoA/RFC2364 LLC PPPoA/RFC2364 - VC PPPoA/RFC2364 - LLC	ne list , select Other Service Provider. click Next to continue. To make ation settings, click Customize. VP/VC=8/35 (LAN-driver) VP/VC=8/35 (LAN-driver) VP/VC=8/35 (LAN-driver) VP/VC=8/35 (WAN-driver) VP/VC=8/35 (WAN-driver) VP/VC=8/35 (WAN-driver) (ATM-driver)(win98 not support) (ATM-driver)(win98 not support)	
<u></u>	<u>D</u> ustomize < <u>B</u> ack	<u>Next</u> Cancel	

4. Select the driver type you want to install, you should get this information from your service provider. Highlights the driver type and click **Next**.

Select Driver Type		×
	Select the type of driver you want to installe. This choice depends on the service provider you are using.	
	< Back Next > Cancel	

 On the "Communication Settings" window, ATM VPI, ATM VCI, Encapsulation type and Modulation type are displayed. Check them and correct them if you use different values. Click Next.

Communication Settings		×
	Enter your communication settings below. These settings are supplied by your service provider.	
-	VPI: 0 VO: 33	
	Encapsulation	
	RFC 2364 PPPoATM VC-mux Encapsulation 💌	
N	Modulation: Multinode	
~~~	Auto-Modulation	
		-
	< Back Next> Cancel	

6. The "**Start Copying Files**" window will be displayed. You may review the current settings and click **Customize** or **Back** to change the settings, or click **Next** to accept it. A message will be displayed indicating that files are being copied.

Start Copying Files		×
-	Setup has enough information to start copying the driver files. If you want to review or change any settings, click Back or Customize. If you are satisfied with the settings, click Next to begin copying files.	
	Service Provide: Manual Configuration Hardware Type: USB Driver type: WAN Annex type: A VPE: 0 VCE: 33 Layer 3 Protocol: RFC 2354 PPPoATM VC-inux Encapsulat Modulation: Multimode Auto-modulation: Yes	
	Eustomize < Back Next> Cancel	

7. The "**Start Copying Files**" window may appear warning that the installation software is not passed Windows Logo testing. It is not necessary; The ADSL USB Modem has been tested the software with Windows XP. Click **Continue Anyway** to allow the installation to continue.

Software	Installation
	The software you are installing has not passed Windows Logo testing to verify its compatibility with Windows XP. ( <u>Tell me why</u> this testing is important.) Continuing your installation of this software may impair or destabilize the correct operation of your system either immediately or in the future. Microsoft strongly recommends that you stop this installation now and contact the software vendor for software that has passed Windows Logo testing.
	Continue Anyway STOP Installation

8. The "Setup Complete" window indicates that files have been copied. Click Finish to complete the installation.

Setup Complete	
	The ADSL Installer has timished copying files to your computer. In a few moments, the DSL Installer will attempt to detect your hardware and complete the installation process.
InstallShield	< Back Finish

9. Installation program searches the USB modem now, and "**ADSL Installer**" window prompts you to plug in the USB modem. Plug it in now.



10. The "Found New Hardware Wizard" Windows XP found Xentrix USB ADSL Loader. Chose "Install the software automatically and Click Next to allow the installation to continue.



11. The "Found New Hardware Wizard" window may appear warning that the installation software is not passed Windows Logo testing. It is not necessary; The ATU-R303 ADSL USB Modem has been tested the software with Windows XP. Click Continue Anyway to allow the installation to continue.

Found New Hardware Wizard			
Please wait while the wizard installs the	ne software		£
Xentrix USB ADSL Loader			
Ď	đ	D	
	< Back	Next>	Cancel

Hardware	e Installation	
<u>.</u>	The software you are installing for this hardware: Xentrix USB ADSL Loader	
	has not passed Windows Logo testing to verify its compatibility with Windows XP. ( <u>Tell me why this testing is important.</u> )	
	Continuing your installation of this software may impair or destabilize the correct operation of your system either immediately or in the future. Microsoft strongly recommends that you stop this installation now and contact the hardware vendor for software that has passed Windows Logo testing.	
	<u>Continue Anyway</u>	

12. A message will confirm that the device driver software has been installed; click Finish.

Found New Hardware Wizard	
	Completing the Found New Hardware Wizard The wizard has finished installing the software for: Xentrix USB ADSL Loader
	Click Finish to close the wizard.
	< Back Finish Cancel

13. The "Found New Hardware Wizard" Windows XP found Xentrix USB ADSL Modem. Chose "Install the software automatically and Click Next to allow the installation to continue.

Found New Hardware Wizar	d
	Welcome to the Found New Hardware Wizard This wizard helps you instal software for:
	Xentrix USB ADSL WAN Modem
	What do you want the wizard to do?
-	<ul> <li>Install the software automatically (Recommended)</li> <li>Install from a list or specific location (Advanced)</li> <li>Click Next to continue.</li> </ul>
	Back Next > Cancel

#### Chapter 2: ADSL USB Modem Installation and Software Setup

14. The "Found New Hardware Wizard" window may appear warning that the installation software is not passed Windows Logo testing. It is not necessary; The ATU-R303 ADSL USB Modem has been tested the software with Windows XP. Click Continue Anyway to allow the installation to continue.



Hardware	Installation
1	The software you are installing for this hardware: Xentrix USB ADSL WAN Modem has not passed Windows Logo testing to verify its compatibility with Windows XP. (Tell me why this testing is important.) Continuing your installation of this software may impair or destabilize the correct operation of your system either immediately or in the future. Microsoft strongly recommends that you stop this installation now and contact the hardware vendor for software that has passed Windows Logo testing.
	Continue Anyway STOP Installation

15. A message will confirm that the device driver software has been installed; click Finish.



16. Now you have successfully installed the modem software!

## **Software Setup for Windows 2000**

**IMPORTANT!** Do NOT connect the USB modem to the computer until instructed to do so in the software driver installation procedure for your operating system.

Note: In order to properly setup software, please strictly follow the procedure:

1) After Windows is running, first insert the installation CD,

2) Run the ATU-R303 ADSL USB Modem installation driver. If the installation doesn't automatically start, go to **Windows Explorer -> CD-ROM Drive -> SETUP.EXE** to run the setup program.

3) Plug the USB modem into the PC to when install the basic USB driver.

17. When the Installation CD is inserted, a "Welcome" message will appear. Click Next.



18. A "Software License Agreement" message will be displayed; click Yes.

Software	License Agreement	×
漫	Please read the following License Agreement. Press the PAGE DOWN key to se the rest of the agreement.	e
To displ Languag	ay your licence agreement, replace the Licence bit file currently located in the ge independent/Operating System Independent folder of the Setup Files pane.	-
NOTE: 1 1,024 cł	The text in your license file should contain hard returns after lines with more than haracters.	
	<u>ز</u>	-
Do you a will close	accept all the terms of the preceding License Agreement? If you choose No, Setup 5. To install XAVIX7005 DSL Modern, you must accept this agreement.	
InstallShi	ield	
	< <u>B</u> ack <u>Y</u> es <u>N</u> o	

 The "Configuration" window allows you to select different configurations. A list of preconfigured alternatives and Manual Configuration is displayed. Highlights the one you would like to choose and click Next.



20. Select the driver type you want to install, you should get this information from your service provider. Highlights the driver type and click **Next**.

Select Driver Type		×
	Select the type of driver you want to installe. This choice depends on the service provider you are using.	
	<back next=""> Cancel</back>	

21. On the "**Communication Settings**" window, ATM VPI, ATM VCI, Encapsulation type and Modulation type are displayed. Check them and correct them if you use different values. Click **Next**.

Communication Settings		×
	Enter your communication settings below. These settings are supplied by your service provider.           VPI:         0         VCI:         33           Encapsulation:         RFC 2364 PPPoATM VCmux Encapsulation	
239	Modulation  Auto-Modulation  Cancel	

22. The "**Start Copying Files**" window will be displayed. You may review the current settings and click **Customize** or **Back** to change the settings, or click **Next** to accept it. A message will be displayed indicating that files are being copied.

Start Copying Files	×
	Setup has enough information to start copying the driver files. If you want to review or change any settings, click Back or Customize. If you are satisfied with the settings, click Next to begin copying files.
	Service Provider: Manual Configuration Hardware Type: USB Driver type: WAN Armen: type: A VPI: 0 VDI: 33 Layer 3 Protocol: RFC 2364 PPPoATM VC-inux Encapsulat Modulation: Multimode Auto-modulation: Yes
	Eustomize < Back Next> Cancel

23. The "**Digital Signature Not Found**" window may appear warning that the installation software is not a digitally signed version. A digital signature is not necessary; The ADSL USB Modem has been tested the software with Windows 2000. Click **Yes** to allow the installation to continue.

Digital Signature Not Found	
	The Microsoft digital signature affirms that software has been tested with Windows and that the software has not been altered since it was tested. The software you are about to install does not contain a Microsoft digital signature. Therefore, there is no guarantee that this software works correctly with Windows. Unknown software package If you want to search for Microsoft digitally signed software, visit the Windows Update Web site at http://windowsupdate.microsoft.com to see if one is available. Do you want to continue the installation?
	Yes No Mare Info

24. The "Setup Complete" window indicates that files have been copied. Click Finish to complete the installation.



25. Installation program searches the USB modem now, and "**ADSL Installer**" window prompts you to plug in the USB modem. Plug it in now.



26. The "**Digital Signature Not Found**" window may appear warning that the installation software is not a digitally signed version. A digital signature is not necessary; The ADSL USB Modem has tested the software with Windows 2000. Click **Yes** to allow the installation to continue.

<b>Digital Signature Not Fo</b>	und 🔀
	The Microsoft digital signature affirms that software has been tested with Windows and that the software has not been altered since it was tested. The software you are about to install does not contain a Microsoft digital signature. Therefore, there is no guarantee that this software works correctly with Windows. ADSL USB LAN Modem If you want to search for Microsoft digitally signed software, visit the Windows Update Web site at http://windowsupdate.microsoft.com to see if one is available. Do you want to continue the installation?
	Yes <u>No</u> More Info

27. A message will confirm that the device driver software has been installed; click Finish.



28. After informational messages are displayed, the "**System Settings Change**" window will give you the opportunity to reboot the system. Remove all disks from their drives; click **Yes**, and the PC will be automatically restarted.



29. WAN and ATM applications may ask you to provide location information when the PC has rebooted. Enter the information and click **OK**.

Location Information	<u>? x</u>
	Before you can make any phone or modern connections. Windows needs the following information about your current location. What country/region are you in now? United States of America What area gode (or city code) are you in now? What area gode (or city code) are you in now? If you dial a number to access an gutside line, what is it? The phone system at this location uses: If jone dialing C Bulse dialing OK Cancel

30. Now you have successfully installed the modem software!

# Software Setup for Windows 98 and 98 Second Edition

**IMPORTANT!** Do NOT connect the USB modem to the computer until instructed to do so in the software driver installation procedure for your operating system.

Note: In order to properly setup software, please strictly follow the procedure:

1) After Windows is running, first insert the installation CD,

2) Run the ADSL USB Modem installation driver. If the installation doesn't automatically start, go to **Windows Explorer -> CD-ROM Drive -> SETUP.EXE** to run the setup program.

3) Plug the USB modem into the PC to install the basic USB driver.

1. When the Installation CD is inserted, a "Welcome" message will appear. Click Next.



2. A "Software License Agreement" message will be displayed. Click Yes.



 The "Configuration" window allows you to select different configurations. A list of preconfigured alternatives and Manual Configuration is displayed. Highlight the one you would like to choose and click Next.



4. Select the driver type you want to install, you should get this information from your service provider. Highlights the driver type and click **Next**.

Select Driver Type		×
	Select the type of driver you want to installe. This choice depends on the service provider you are using.	
	<back cancel<="" td=""><td></td></back>	

 On the "Communication Settings" window, ATM VPI, ATM VCI, Encapsulation type and Modulation type are displayed. Check them and correct them if you use different values. Click Next.

Communication Settings		×
	Enter your communication settings below. These settings are supplied by your service provider.	
	VPI: 0 VD: 33	
	Encapsulation:	
	RFC 2364 PPPoATM VC-mux Encapsulation	
	Modulation: Multimode	
	Auto-Modulation	
		_
	<back next=""> Cancel</back>	

6. The "Start Copying Files" window will be displayed. You may review the current settings and click Customize or Back to change the settings, or click Next to accept it. A message will be displayed indicating that files are being copied.

Start Copying Files		×
	Setup has enough information to start copying the driver files. If you want to review or change any settings, click Back or Customize. If you are satisfied with the settings, click Next to begin copying files.	
	Service Provider: Manual Configuration Hardware Type: USB Driver type: WAN Annex type: A VPI: 0 VCI: 33 Layer 3 Protocol: RFC 2364 PPPoATM VC:mux Encapsulat Modulation: Mutimode Auto-modulation: Yes	
	Qustomize < Back Next> Cancel	

7. The "**Setup Complete**" window indicates that files have been copied. Click **Finish** to complete the installation.

Setup Complete	
	The ADSL Installer has finished copying files to your computer. In a few moments, the DSL Installer will attempt to detect your hardware and complete the installation process.
Instal Shield	and programmed
	C BOCK

8. Installation program searches the USB modem now, and "ADSL Installer" window prompts you to plug in the USB modem. Plug it in now.



Note: You may need the Windows CD to complete the installation
After informational messages are displayed, the "System Settings Change" window will give you the opportunity to reboot the system. Remove all disks from their drives; click Yes, and the PC will be automatically restarted.



10. WAN and ATM applications may ask you to provide location information when the PC has rebooted. Enter the information and click **Close**.

Location Information	
	Please provide information about your current location so that your calls can be dialed correctly. What country/region are you in now? United States of America What area (or city) gode are you in now? If you dial a number to access an gutside line, what is it? The phone system at this location uses: (* one dialing Pulse dialing
	Close

11. Now you have successfully installed the modem software.

### **Software Setup for Windows ME**

**IMPORTANT!** Do NOT connect the USB modem to the computer until instructed to do so in the software driver installation procedure for your operating system.

Note: In order to properly setup software, please strictly follow the procedure:

1) After Windows is running, first insert the installation CD,

2) Run the ADSL USB Modem installation driver. If the installation doesn't automatically start, go to **Windows Explorer -> CD-ROM Drive -> SETUP.EXE** to run the setup program.

3) Plug the USB modem into the PC to install the basic USB driver.

1. When the Installation CD is inserted, a "Welcome" message will appear. Click Next.



2. A "Software License Agreement" message will be displayed; click Yes.



#### Chapter 2: ADSL USB Modem Installation and Software Setup

 The "Configuration" window allows you to select different configurations. A list of preconfigured alternatives and Manual Configuration is displayed. Highlights the one you would like to choose and click Next.

Configuration		×
	Select your Setting from the list If your Setting is not listed, select Other Service Provider. After making a selection, click Next to continue. To make changes to the communication settings, click Customize. Configuration IPoA/RFC1577 VP/VC=8/35 (LAN-driver) Bridge/RFC1483 LLC VP/VC=8/35 (LAN-driver) Routed/RFC1483 LLC VP/VC=8/35 (LAN-driver) PPPoA/RFC2364 VC VP/VC=8/35 (WAN-driver) PPPoA/RFC2364 LLC VP/VC=8/35 (WAN-driver) PPPoA/RFC2364 LLC VP/VC=8/35 (WAN-driver) PPPoA/RFC2364 - UC (ATM-driver)(win98 not support) PPPoA/RFC2364 - LLC (ATM-driver)(win98 not support)	
<u>[</u>	Customize < <u>B</u> ack <u>Next</u> Cancel	_

4. Select the driver type you want to install, you should get this information from your service provider. Highlights the driver type and click **Next**.

Select Driver Type		×
	Select the type of driver you want to installe. This choice depends on the service provider you are using.	
	< <u>Back</u> <u>Next&gt;</u> Cancel	

 On the "Communication Settings" window, ATM VPI, ATM VCI, Encapsulation type and Modulation type are displayed. Check them and correct them if you use different values. Click Next.

Communication Settings		×
	Enter your communication settings below. These settings are supplied by your service provides.	
	Modulation: Multimode	
	< Back Dext> Cancel	

6. The "**Start Copying Files**" window will be displayed. You may review the current settings and click **Customize** or **Back** to change the settings, or click **Next** to accept it. A message will be displayed indicating that files are being copied.

Start Copying Files		×
	Setup has enough information to start copying the driver files. If you want to review or change any settings, click Back or Customize. If you are satisfied with the settings, click Next to begin copying files.	
	Service Provider: Manual Configuration Hardware Type: USB Driver type: WAN Annex type: A VPI: 0 VCI: 33 Layer 3 Protocol: RFC 2364 PPPoATM VC mux Encapsulat Modulation: Multimode Auto-modulation: Yes	
	Customize <back next=""> Cancel</back>	

7. The "**Setup Complete**" window indicates that files have been copied. Click **Finish** to complete the installation.

Setup Complete	
Interest lines	The ADSL Installer has finished copying files to your computer. In a few moments, the DSL Installer will attempt to detect your hardware and complete the installation process.
The second s	K Back

8. Installation program searches the USB modem now, and "**ADSL Installer**" window prompts you to plug in the USB modem. Plug it in now.



9. After informational messages are displayed, the "**System Settings Change**" window will give you the opportunity to reboot the system. Remove all disks from their drives; click **Yes**, and the PC will be automatically restarted.

System S	Settings Change
٩	You must restart your computer before the new settings will take effect. Do you want to restart your computer now?
	<u>Ye</u> : <u>N</u> o

10. WAN and ATM applications may ask you to provide location information when the PC has rebooted. Enter the information and click **Close**.

Location Information	
	Please provide information about your current location so that your calls can be dialed correctly. What country/region are you in now? United States of America What area (or city) gode are you in now? What area (or city) gode are you in now? If you dial a number to access an gutside line, what is it? The phone system at this location uses: (* Ione dialing Pulse dialing
	Close

11. Now you have successfully installed the modem software.

# If USB Modem is plugged in first

*Important:* We strongly recommend that you plug in the USB modern **AFTER** the software installation.

**Note:** If you plug USB modem into the PC prior to insert the installation CD, you may follow the installation procedure below.

### Windows XP

 After USB modem is plugged into the PC, a "Found New Hardware Wizard" window will be displayed indicating that new drivers are required; Choose the Install form a list or specific location (Advanced) option by clicking the check box; click Next.



2. You will be required to specify a location or the new driver software. Click the *CD-ROM drives* check box. Insert the ADSL USB Modem Installation CD into the CD drive and click **Next**.

arch for the best driver in these locations.
the check boxes below to limit or expand the default search, which includes local hs and removable media. The best driver found will be installed.
Search removable media (lioppy, CD-ROM)
Include this location in the search:
C/Documents and Settings/Jabpo11/Desktop/2006 u - Bitreter
n't search. I will choose the driver to install.
use this option to select the device driver from a list. Windows does not guarantee t driver you choose will be the best match for your hardware.

3. Found ADSL Modem and click Finish.

Found New Hardware Wizard	
	Cannot Start this Hardware
	There was a problem installing this hardware:
	ADSL Modem
	This device is not configured correctly. (Code 1)
	Click. Finish to start a troubleshooter that can help you resolve the problem.
	6 Bads Finish Dancel

 The "Configuration "window allows you to select different configurations. A list of preconfigured alternatives and Manual Configuration is displayed. Highlights the one you would like to choose and click Next.

Configuration		×
	Select your Setting from the list If your Setting is not listed, select Other Service Provider. After making a selection, click Next to continue. To make changes to the communication settings, click Customize.	
<u>(</u>	Customize < Back Next > Cancel	

5. Select the driver type you want to install, you should get this information from your service provider. Highlights the driver type and click **Next**.

Select Driver Type		×
	Select the type of driver that will be installed. This choice depends on the service provider you are using.	
	< Back Next > Cancel	

 On the "Communication Settings" window, ATM VPI, ATM VCI, Encapsulation type and Modulation type are displayed. Check them and correct them if you use different values. Click Next.

Communication Settings		×
	Enter your communication settings below. These settings are supplied by your service provider.	
	VPI: 0 VCI: 33	
	Encapsulation	
	RFC 2364 PPPoATM VC-mux Encapsulation	
<b>S</b>	Modulation: Multimode	
	Auto-Modulation	
	< Back Next> Cancel	

7. The "Start Copying Files" window will be displayed. You may review the current settings and click Customize or Back to change the settings, or click Next to accept it. A message will be displayed indicating that files are being copied.

Start Copying Files		×
	Setup has enough information to start copying the driver files. If you want to review or change any settings, click Back or Customize. If you are satisfied with the settings, click Next to begin copying files.	
	Service Provider: Manual Configuration Hardmare Type: USB Driver type: WAN Annex type: A VPE: 0 VEI: 33 Layer 3 Protocol: RFC 2354 PPPoATM VC-mux Encapsulat Modulation: Multimode Auto-modulation: Yes	
	Gustomize < Back Next > Cancel	

8. The "Start Copying Files" window may appear warning that the installation software is not passed Windows Logo testing. It is not necessary; The ADSL USB Modem has been tested the software with Windows XP. Click Continue Anyway to allow the installation to continue.

Software	Installation
<u>Software</u>	The software you are installing has not passed Windows Logo testing to verify its compatibility with Windows XP. (Tell me why this testing is important.) Continuing your installation of this software may impair or destabilize the correct operation of your system either immediately or in the future. Microsoft strongly recommends that you stop this installation now and contact the software vendor for software that has passed Windows Logo testing.
	Continue Anyway STOP Installation

9. The "Setup Complete" window indicates that files have been copied. Click Finish to complete the installation.

Setup Complete	
	The ADSL Installer has finished copying files to your computer. In a few moments, the DSL Installer will attempt to detect your hardware and complete the installation process.
InstallShiefd	< <u>B</u> ack Finish

10. Installation program searches the USB modem now, and "**ADSL Installer**" window prompts you to plug in the USB modem. Plug it in now.



11. The "Found New Hardware Wizard" Windows XP found USB ADSL Loader. Chose "Install the software automatically and Click Next to allow the installation to continue.



12. The "Found New Hardware Wizard" window may appear warning that the installation software is not passed Windows Logo testing. It is not necessary; The ADSL USB Modem has been tested the software with Windows XP. Click Continue Anyway to allow the installation to continue.

Found New Hardware Wizard			
Please wait while the wizard installs the	ne software		
Xentrix USB ADSL Loader			
Ď	đ	D	
	< Back	Next >	Cancel

Hardware	Installation
<u>.</u>	The software you are installing for this hardware: Xentrix USB ADSL Loader has not passed Windows Logo testing to verify its compatibility with Windows XP. (Tell me why this testing is important.) Continuing your installation of this software may impair or destabilize the correct operation of your system either immediately or in the future. Microsoft strongly recommends that you stop this installation now and contact the hardware vendor for software that has passed Windows Logo testing.
	Continue Anyway STOP Installation

13. A message will confirm that the device driver software has been installed; click Finish.

Found New Hardware Wizard	
	Completing the Found New Hardware Wizard The wizard has finished installing the software for: Xentrix USB ADSL Loader
	Click Finish to close the wizard.
	< Back Finish Cancel

14. The "Found New Hardware Wizard" Windows XP found USB ADSL Modem. Chose "Install the software automatically and Click Next to allow the installation to continue.

Found New Hardware Wistan	d and a second se
	Welcome to the Found New Hardware Wizard This wizard helps you instal software for: Xentix USB ADSL WAN Modem
7 12	If your hardware came with an installation CD or floppy disk, insert it now.
	What do you want the wizard to do?  Install the software automatically (Recommended)  Install from a list or specific location (Advanced)  Dick Next to continue
	Back Nexts Cancel

#### Chapter 2: ADSL USB Modem Installation and Software Setup

15. The "Found New Hardware Wizard" window may appear warning that the installation software is not passed Windows Logo testing. It is not necessary; The ADSL USB Modem has been tested the software with Windows XP. Click Continue Anyway to allow the installation to continue.

Please wait while the wizard installs	the software
Xentiax USB ADSL WAN Mo	xdem
6	D
	CEack Next > Dence

Hardware	Installation
1	The software you are installing for this hardware: Xentrix USB ADSL WAN Modem has not passed Windows Logo testing to verify its compatibility with Windows XP. (Tell me why this testing is important.) Continuing your installation of this software may impair or destabilize the correct operation of your system either immediately or in the future. Microsoft strongly recommends that you stop this installation now and contact the hardware vendor for software that has passed Windows Logo testing.
	Continue Anyway STOP Installation

16. A message will confirm that the device driver software has been installed; click Finish.



17. Now you have successfully installed the modem software!

**Note:** For WAN and ATM applications, will connect to the Internet. Go to **Desktop and click ADSL Dial-Up ppp Connection** to enter your user name & password and click Dial.

### Windows 2000

1. After USB modem is plugged into the PC, a "Found New Hardware Wizard" window will be displayed indicating that new drivers are required; click Next.

Found New Hardware Wizard	
	Welcome to the Found New Hardware Wizard This wizard helps you install a device driver for a hardware device.
	<∄eck Newt> Cancel

 A window will be displayed which allows you to specify the location of the driver software to be installed. Choose the Search for a suitable driver for my device (recommended) option by clicking the check box; click Next.

und New H	Hardware Wizard
Install H A de an op	lardware Device Drivers vice driver is a software program that enables a hardware device to work with perating system.
This	vizard will complete the installation for this device:
2	USB Device
A der need instal	rice driver is a software program that makes a hardware device work. Windows a driver files for your new device. To locate driver files and complete the lation click Next.
What	t do you want the wizard to do?
6	Search for a suitable driver for my device (recommended)
C	Display a list of the known drivers for this device so that I can choose a specific driver
	< Back Next > Cancel

3. You will be required to specify a location or the new driver software. Click the *CD-ROM* drives check box. Insert the ADSL USB Modem Installation CD into the CD drive and click **Next**.

Found New Hardware Wizard		
Locate Driver Files Where do you want Windows to search for driver files?		
Search for driver files for the following hardware device:		
USB Device		
The wizerd searches for suitable drivers in its driver database on your computer and in any of the following optional search locations that you specify.		
To start the search, click Next. If you are searching on a floppy disk or CD-RDM drive, insert the floppy disk or CD before clicking Next.		
Optional search locations:		
CD-ROM drives		
Specify a location		
Microsoft Windows Opcare		
<back next=""> Cancel</back>		

4. A message will indicate that the system finds the installation file and is ready to install the device driver; click **Next.** 



5. A message will confirm that the device driver software has been installed; click Finish.

Found New Hardware Wizard		
	Completing the Found New Hardware Wizard ADSL USB Modem The software for this device is now installed, but may not work correctly. This device is not contigured correctly. (Code 1) To close this wizard, click Finish.	
	KBack Finish Dencel	

 Then the PC will automatically run the SETUP.EXE in the root directory of installation CD. If the installation doesn't automatically start, go to *Windows Explorer -> CD-ROM Drive ->* SETUP.EXE to run the setup program. A "Welcome" message will be displayed; click Next.

Welcome	x
	Welcome to the ADSL USB Modem Setup program. This program will install the ADSL USB Modem on your computer.
	It is strongly recommended that you exit all Windows programs before running this Setup program.
	Click Cancel to quit Setup and then close any programs you have running. Click Next to continue with the Setup program.
	WARNING: This program is protected by copyright law and international treaties.
<i>~</i>	Unauthorized reproduction or distribution of this program, or any portion of it, may result in severe civil and criminal penalties, and will be prosecuted to the maximum extent possible under law.
InstallShield	
	Cancel

7. A "Software License Agreement" message will be displayed; click Yes.

oftware l	License Agreement
Z	Please read the following License Agreement. Press the PAGE DOWN key to see the rest of the agreement.
To displa Languag	ay your license agreement, replace the License tot file currently located in the as Independent/Operating System Independent folder of the Setup Files pane.
NOTE: T 1,024 ch	The text in your license file should contain hard returns after lines with more than haracters.
Doyoua	ccept all the terms of the preceding License Agreement? If you choose No. Setup
WIII CIOCE.	To instal ADSL USB Modem, you must accept this agreement.
inda Shi	< <u>₿</u> ack <u>Y</u> es <u>N</u> o

 The "Configuration" window allows you to select different configurations. A list of preconfigured alternatives and Manual Configuration is displayed. Highlights the one you would like to choose and click Next.

Configuration		×
	Select your Setting from the list If your Setting is not listed, select Other Service Provider. After making a selection, click Next to continue. To make changes to the communication settings, click Customize. Configuration IPoA/RFC1577 VP/VC=8/35 (LAN-driver) Bridge/RFC1483 LLC VP/VC=8/35 (LAN-driver) Routed/RFC1483 LLC VP/VC=8/35 (LAN-driver) PPPoA/RFC2364 VC VP/VC=8/35 (WAN-driver) PPPoA/RFC2364 LLC VP/VC=8/35 (WAN-driver) PPPoA/RFC2364 LLC VP/VC=8/35 (WAN-driver) PPPoA/RFC2364 - LLC (ATM-driver)(win38 not support) PPPoA/RFC2364 - LLC (ATM-driver)(win38 not support)	
	<u>C</u> ustomize < <u>B</u> ack <u>Next</u> > Cancel	

9. Select the driver type you want to install, you should get this information from your service provider. Highlights the driver type and click **Next**.

Select Driver Type		×
	Select the type of driver you want to installe. This choice depends on the service provider you are using.	
	< Back Next> Cancel	

10. On the "**Communication Settings**" window, ATM VPI, ATM VCI, Encapsulation type and Modulation type are displayed. Check them and correct them if you use different values. Click **Next**.

Communication Settings		X
	Enter your communication settings below. These settings are supplied by your service provider.	
	VPI: 0 VD: 33	
	Encapsulation:	
	RFC 2364 PPPoATM VC-mux Encapsulation	
<b>3</b>	Modulation: Multimode	
	Auto-Modulation	
	<back next=""> Cancel</back>	

11. The "Start Copying Files" window will be displayed. You may review the current settings and click Customize or Back to change the settings. Click Next to accept the current settings; a message will be displayed indicating that files are being copied.

Start Copying Files		×
	Setup has enough information to start copying the driver files. If you want to review or change any settings, click Back or Customice. If you are satisfied with the settings, click Next to begin copying files.	
	Service Provider: Manual Configuration Hardware Type: USB Driver type: WAN Annex type: A VPI: 0 VPI: 0 VCI: 33 Layer 3 Protocol: RFC 2364 PPPoATM VC-mux Encepsulat Modulation: Multimode Auto-modulation: Yes 4	
	Qustomize < Back Next> Cancel	

12. The "**Digital Signature Not Found**" window may appear warning that the installation software is not a digitally signed version. A digital signature is not necessary; The ADSL USB Modem has tested the software with Windows 2000. Click **Yes** to allow the installation to continue.

Digital Signature Not Fou	nd 🔀
	The Microsoft digital signature altims that software has been tested with Windows and that the software has not been altered since it was tested. The software you are about to install does not contain a Microsoft digital signature. Therefore, there is no guarantee that this software works correctly with Windows. Unknown software package If you want to search for Microsoft digitally signed software, visit the Windows Update Web site at http://windowsupdate.microsoft.com to see if one is available. Do you want to continue the installation?
	Ye= No More Info

13. The "**Setup Complete**" window indicates that files have been copied. Click **Finish** to complete the installation.

Setup Complete	
	The ADSL Installer has finished copying files to your computer. In a few moments, the DSL Installer will attempt to detect your hardware and complete the installation process.
InstallShield	< Back Finish

14. Installation program searches the USB modem now, and "ADSL Installer" window automatically installs USB driver.

ADSL Installer		×
Ĭ	The ADSL Installer is searching for installed hardware. This may take a few minutes. If your modem is not yet plugged into your computer, please plug it in now.	

15. The "**Digital Signature Not Found**" window may appear warning that the installation software is not a digitally signed version. Click **Yes** to allow the installation to continue.



16. A message will indicate that the system must be rebooted for the new settings to take effect. Click **Finish**.

Found New Hardware Wizard		
	Completing the Found New Hardware Wizard	
	ADSL USB WAN Modern	
	Windows has finished installing the software for this device.	
	The hardware you installed will not work until you restart your computer.	
	To show this selected which Fields	
	TO CRODE THIS MIZERIQ, CRCK, FIRIERI,	
	< Back Finish Cancel	

17. After informational messages are displayed, the "**System Settings Change**" window will give you the opportunity to reboot the system. Remove all disks from their drives; click **Yes**.

System Settings Change		
?	You must restart your computer before the new settings will take effect.	
	Do you want to restart your computer now?	
	<u>Ves</u> <u>N</u> o	

18. WAN and ATM applications may ask you to provide location information when the PC has rebooted. Enter the information and click **OK**.

Location Information	<u>१</u> ×
	Before you can make any phone or modem connections, Windows needs the following information about your current location. What country/region are you in now? United States of America What area gode (or city code) are you in now? If you dial a number to access an gutside line, what is it? The phone system at this location uses: (If ione dialing I Duise dialing
	OK. Cancel

**Note:** For WAN and ATM applications, will connect to the Internet. Go to **Desktop and click ADSL Dial-Up ppp Connection** to enter your user name & password and click Dial.

# If USB Modem is plugged in first...

*Important:* We strongly recommend that you plug in the USB modem **AFTER** software installation.

**Note:** If you plug USB modem into the PC prior to insert the installation CD, you may follow the installation procedure below.

### Windows 98 and Windows 98 Second Edition (SE)

1. After USB modem is plugged into the PC, an "Add New Hardware Wizard" window will be displayed indicating that new drivers are required, click Next.



2. A window will be displayed which allows you to specify the location of the driver software to be installed. Choose the *Search for the best driver for your device. (Recommended)* option by clicking the check box; click **Next**.

Add New Hardware Wizard		
	What do you want Windows to do? Search for the best driver for your device. [Recommended]. Display a list of all the drivers in a specific location, so you can select the driver you want.	
	<back next=""> Cancel</back>	

3. You will be required to specify a location or the new driver software. Click the *CD-ROM* drives check box. Insert the ADSL USB Modem Installation CD into the CD drive and click **Next**.

Add New Hardware Wiz	ard
	Windows will search for new drivers in its driver database on your hard drive, and in any of the following selected locations. Click Next to start the search. Eloppy disk drives CD-ROM drive Microsoft Windows Update Specify a location: CNDisplay-Oriver
	< Back Next > Cancel

4. A message will indicate that the system finds the installation file and is ready to install the device driver; click **Next**.

Add New Hardware Wizard		
	Windows driver file search for the device:	
	ADSL USB Modem	
	Windows is now ready to install the best driver for this device. Click Back to select a different driver, or click Next to continue.	
🛛 🥸 🌧 🗌	Location of driver:	
< <u>B</u> ack Next> Cancel		

5. A message will confirm that the device driver software has been installed; click Finish.



 Then the PC will automatically run the SETUP.EXE in the root directory of installation CD. If the installation doesn't automatically start, go to Windows Explorer -> CD-ROM Drive -> SETUP.EXE to run the setup program. A "Welcome" message will be displayed; click Next.



7. A "Software License Agreement" message will be displayed; click Yes.

Software License Agreement	×	
Please read the following License Agreement. Press the PAGE DO the rest of the agreement.	IWN key to see	
I o display your license agreement, replace the License.txt file currently locate Language Independent\Operating System Independent folder of the Setup Fi	ed in the – ïles pane.	
NOTE: The text in your license file should contain hard returns after lines with 1,024 characters.	nmore than	
Do you accept all the terms of the preceding License Agreement? If you choose No, Setup will close. To install ADSL USB Modem, you must accept this agreement.		
InstallShield		
< <u>B</u> ack <u>Y</u> es	<u>N</u> o	

8. The "**Configuration**" window allows you to select different configurations. A list of preconfigured alternatives and Manual Configuration is displayed. Highlight the one you would like to choose and click **Next**.

Configuration		×
	Select your Setting from the list If your Setting is not listed, select Other Service Provider. After making a selection, click Next to continue. To make changes to the communication settings, click Customize. Configuration IPoA/RFC1577 VP/VC=8/35 (LAN-driver) Bridge/RFC1483 LLC VP/VC=8/35 (LAN-driver) Routed/RFC1483 LLC VP/VC=8/35 (LAN-driver) PPPoA/RFC2364 VC VP/VC=8/35 (WAN-driver) PPPoA/RFC2364 LLC VP/VC=8/35 (WAN-driver) PPPoA/RFC2364 LLC VP/VC=8/35 (WAN-driver) PPPoA/RFC2364 - LLC VP/VC=8/35 (WAN-driver) PPPoA/RFC2364 - LLC (ATM-driver)(win98 not support) PPPoA/RFC2364 - LLC (ATM-driver)(win98 not support)	
	Qustomize < <u>B</u> ack <u>Next</u> Cancel	

9. To select the driver type you want to install, you should get this information from your service provider. Highlights the driver type and click **Next**.

Select Driver Type		×
	Select the type of driver you want to installe. This choice depends on the service provider you are using	
	<back next=""> Cancel</back>	

 On the "Communication Settings" window, ATM VPI, ATM VCI, Encapsulation type and Modulation type are displayed. Check them and correct them if you use different values. Click Next.

Communication Settings		×
	Enter your communication settings below. These settings are supplied by your service provider.	
-	VPI: 0 VCI: 33	
	Encapsulation:	
	RFC 2364 PPPoATM VC-mux Encapsulation	
~	Modulation: Multimode	
a <b>s (</b> )	Auto-Modulation	
	< <u>R</u> ack <u>Newt&gt;</u> Cancel	

11. The "Start Copying Files" window will be displayed. You may review the current settings and click Customize or Back to change the settings. Click Next to accept the current settings; a message will be displayed indicating that files are being copied.

Start Copying Files		×
	Setup has enough information to start copying the driver files. If you want to review or change any settings, click Back or Customize. If you are satisfied with the settings, click Next to begin copying files.	
	Current Settings: Service Provide: Manual Configuration	1
	Driver type: WAN Arresctype: A VPI: 0 VCI: 33	
	Lajer 3 Protocol: RFC 2364 PPPoATM VC-mux Encapsulat Noduktion: Nullimode Auto-modulation: Yes	
	Quatomize <back next=""> Cancel</back>	

12. The "Setup Complete" window indicates that files have been copied. Click Finish to complete the installation.



13. Installation program searches the USB modem now, and "ADSL Installer" window automatically installs USB driver.



Note: You may need the Windows CD to complete the installation

14. After informational messages are displayed, the "**System Settings Change**" window will give you the opportunity to reboot the system. Remove all disks from their drives; click **Yes**.

System Settings Change		
?	You must restart your computer before the new settings will take effect.	
~	Do you want to restart your computer now?	
	<u>Yes</u> <u>N</u> o	

15. WAN and ATM applications may ask you to provide location information when the PC has rebooted. Enter the information and click **Close**.

**Note:** For WAN and ATM applications, dial-up is connect to the Internet. Go to **My Computer -> Network and Dial-up Connections -> Dial-Up PPP Connection** to enter your user name & password and click Connect. Please keep the default value in "Phone number" box.

# If USB Modem is plugged in first...

*Important:* We strongly recommend that you plug in the USB modem **AFTER** the software installation.

**Note:** If you plug USB modem into the PC prior to insert the installation CD, you may follow the installation procedure below.

#### Windows ME

 After USB modem is plugged into the PC, an "Add New Hardware Wizard" window will be displayed indicating that new drivers are required. Choose the *Automatic search for a better driver (Recommended)* option by clicking the check box and insert the Xentrix X7005 ADSL USB Modem Installation CD into the CD drive; click Next.

Add New Hardware Wizard		
	Windows has found the following new hardware: USB Device Windows can automatically search for and install software that supports your hardware. If your hardware came with installation media, insert it now and click Next. What would you like to do? Automatic search for a better driver [Recommended] Specify the location of the driver [Advanced]	
	< gask Next > Cancel	
2. The "Select Other Driver" window may ask you to select the driver from a list of drivers. If asked, highlight the root directory *GROOTUSB.INF* in the "Location" column, and click **OK**.

elect Other Driver		2
Windows has found more the matches your language and	han one driver that may work for your hardw d device.	vare. Please select the driver that
Driver Description	Location	Driver Date 🔺
ADSL USB Modem ADSL USB Modem Loa ADSL USB Modem Loa ADSL USB Modem Loa	E:\GROOTUSB.INF E:\US8\ANNEX:*5\GAPwLOAD.INF E:\US8\ANNEX:*7\GAPwLOAD.INF E:\US8\ANNEX:*9\GAFwLOAD.INF	5- 4-2001 8- 1-2000 8- 1-2000 8- 1-2000
•[		
		OK Cancel

3. A message will confirm that the device driver software has been installed; click Finish.



 Then the PC will automatically run the SETUP.EXE in the root directory of installation CD. If the installation doesn't automatically start, go to *Windows Explorer -> CD-ROM Drive -> SETUP.EXE* to run the setup program. A "Welcome" message will be displayed; click Next.



5. A "Software License Agreement" message will be displayed; click Yes.



6. The "**Configuration**" window allows you to select different configurations. A list of preconfigured alternatives and Manual Configuration is displayed. Highlight the one you would like to choose and click **Next**.

Configuration		×
	Select your Setting from the list If your Setting is not listed, select Other Service Provider. After making a selection, click Next to continue. To make changes to the communication settings, click Customize.	ſ
	IPoA/RFC1577VP/VC=8/35 (LAN-driver)Bridge/RFC1483LLCVP/VC=8/35 (LAN-driver)Routed/RFC1483LLCVP/VC=8/35 (LAN-driver)PPPoA/RFC2364VCVP/VC=8/35 (WAN-driver)PPPoA/RFC2364LLCVP/VC=8/35 (WAN-driver)PPPoE/RFC2516LLCVP/VC=8/35 (WAN-driver)PPPoA/RFC2364 · VC(ATM-driver)(win98 not support)PPPoA/RFC2364 · LLC(ATM-driver)(win98 not support)	ľ
	Customize < Back Next > Cancel	

7. Select the driver type you want to install, you should get this information from your service provider. Highlights the driver type and click **Next**.

Select Driver Type		×
	Select the type of driver you want to installe. This choice depends on the service provider you are using.	
	< <u>Back</u> Cancel	

 On the "Communication Settings" window, ATM VPI, ATM VCI, Encapsulation type and Modulation type are displayed. Check them and correct them if you use different values. Click Next.

Communication Settings		×
	Enter your communication settings below. These settings are supplied by your service provides.	
	<back next=""> Cancel</back>	

9. The "Start Copying Files" window will be displayed. You may review the current settings and click Customize or Back to change the settings. Click Next to accept the current settings; a message will be displayed indicating that files are being copied.

Start Copying Files		×
	Setup has enough information to start copying the driver files. If you want to review or change any settings, click Back or Customize. If you are satisfied with the settings, click Next to begin copying files.	
	Service Provider: Manual Configuration Hardware Type: USB Driver type: WAN Annex type: A VPI: 0 VCI: 33 Layer 3 Pitotocol: RFC 2364 PPPoATM VC-mux Encapsulat Modulation: Multimode Auto-modulation: Yes	
	Customize < Back Next> Cancel	

10. The "**Setup Complete**" window indicates that files have been copied. Click **Finish** to complete the installation.

Setup Complete	
	The ADSL Installer has finished copying files to your computer. In a few moments, the DSL Installer will attempt to detect your hardware and complete the installation process.
InstalShield	< Back

11. Installation program searches the USB modem now, and "**ADSL Installer**" window automatically installs USB driver.

ADSL Installer		×
	The ADSL Installer is searching for installed hardware. This may take a few minutes.	
I.	If your modem is not yet plugged into your computer, please plug it in now.	

12. After informational messages are displayed, the "**System Settings Change**" window will give you the opportunity to reboot the system. Remove all disks from their drives; click **Yes**.



13. WAN and ATM applications may ask you to provide location information when the PC has rebooted. Enter the information and click **Close**.

**Note:** For WAN and ATM applications, dial-up is required to connect to the Internet. Go to **My Computer -> Network and Dial-up Connections -> Dial-Up PPP Connection** to enter your user name & password and click Connect. Please keep the default value in "Phone number" box.

# Chapter 3:Customizing Communication Settings

Once the ATU-R303 ADSL USB Modem and software have been installed, the communication settings may be easily updated by performing the following steps:

- From your PC desktop click Start -> Programs -> Xentrix ADSL Modem -> Configure. A
  notification message will appear indicating that the setup process has begun.
- 2. Click Settings from the "ADSL Modem Configuration Panel" window.

ADSL Modem Installer	Xent	rix
	Remove	Remove software from computer
	Settings	Customize communication settings
	Support	Customer Support Information
	Help	Get additional help
		Exit

3. The "**Communication Settings**" window will be displayed. Make the necessary changes to the VPI, VCI, Encapsulation type and/or Modulation type and click **Apply**.

Communication Settings		×
	Enter your communication settings below. These settings are supplied by your service provider.	
	VPt: 0 VO: 35	
	Encapsulation:	
And the second s	RFC 1483 IPoATM Bridged LLC Enceptulation	
<b>N</b>	Modulation: Multimode	
~~~~	Auto-Modulation	
		-
	< <u>B</u> ack Apply Cancel	

 The "Setup Complete" window indicates successful completion of the customization process. Select the Yes, I want to restart my computer now option, remove any disks from their drives, and click Finish. Your PC will reboot.

Setup Complete	
	The Setup Wicard requires the computer to be restarted. Would you like to restart the computer now? Yes, I want to restart my computer now. No. I will restart my computer later. Remove any disks from their drives, and then click Finish to complete setup.
InstallShield	< Back Finish

Chapter 4: Control Panel Application For Windows

The ATU-R303 ADSL USB Modem control panel program provides a quick and easy way to configure and check the performance of the modem and the ADSL connection. When open, the monitor window updates the performance every 2 seconds.

Note: The following screen shots of the ATU-R303 ADSL USB Modem Control Panel are preliminary as the Control Panel functionality is continually being upgraded and improved.

- 1. There are two methods to access the ATU-R303 ADSL USB Modem control panel:
 - From the "Control Panel" window (Start -> Settings -> Control Panel), double click the Xentrix ADSL USB Modem icon.
 - From the PC Toolbar, double click the ATU-R303 ADSL USB Modem icon in the system tray.



Note: To access the Xentrix X7005 ADSL USB Modem Control Panel, the driver must be running. Also, make sure the USB cable is plugged into the modem.

2. The "Physical Link" tab of the "Xentrix X7005 ADSL USB Modem" window (Control Panel) allows you to review the current state of the ATU-R303 ADSL USB Modem and connection. The green indicator in the *Link Status* field signifies that a connection has been made. This indicator blinks while a connection is being established. Individual flashing yellow indicators show the *Transmitting* and *Receiving* data activity separately.

entrie ADEL Modem	TIN
Photod Left Spatem Into	Configuration
Skan Martalatan	No ligent C DMT
Data Para Diterti	I the second
Con States	Data Activity Toprosting
Xentrix	[
Accelerated by Globello	e1.
3	UK Cwod

3. The "**System Info**" tab displays the release number of the ATU-R303 ADSL USB Modem driver, the firmware release number, and the control panel version that you are currently using.

Xentrix ADSL Moder	n.	? ×
Physical Link System	Info Configuration	
Driver Release Firmware Release Control Panel Version	1.11.0007Q-A (WanUsb) Q43 3.1.10	
Xentr	eix	ancel

4. The "**Configuration**" tab offers driver appropriate Modulation, Encapsulation, and VPI and VCI values. If you are using a WAN or ATM driver, only the Modulation type will be displayed and may be modified. LAN driver applications will be able to view and modify the Modulation type, Encapsulation type, and VPI and VCI values.



Chapter 5: Software Uninstall

Software Uninstall for Windows

Note: The USB cable should not be unplugged until after the uninstall process has been completed. For Windows 98 applications, the cable must be unplugged immediately following Step 6 as below.

 From your PC desktop click Start -> Programs -> Xentrix ADSL Modem -> Uninstall. A notification message will appear indicating that the setup process has begun.

	Aent	RIX
	Remove	Remove software from computer
	Settings	Customize communication settings
80	Support	Customer Support Information
20	Help	Get additional help

- 2. Click Remove from the "ADSL Modem Configuration Panel" window.
- 3. A message will be displayed asking you to confirm the removal of the USB ADSL modem software, click **Yes**.



4. The "**Information**" window will be displayed reminding you **not** to unplug the USB cable until the uninstall process has been completed. Click **OK**.



- 5. A message will be displayed indicating the software is being removed.
- The "Setup Complete" window indicates successful completion of the uninstall process. Remove any disks from the drives, select the Yes, I want to restart my computer now option by clicking in the circle to the left, and click Finish.

Setup Complete	
-	The Setup Wized requires the computer to be restarted. Would you like to restart the computer now?
	 (*) [Yes, I want to restart my computer now. C No, I will restart my computer lates.
29	Remove any disks from their drives, and then click Finish to complete setup.
lostališkield	< gask Finish

Note: The screen for Windows 2000 applications will not ask the user to reboot the system. Click *Finish* to complete the Uninstall process.

7. Unplug the USB cable from the PC. The uninstall process is complete.

Note: The USB cable must be unplugged before the system is rebooted. For Windows 98 applications the cable must be unplugged immediately as the reboot process was begun in Step

Appendix A: Modifying TCP/IP Networking Options

WAN USB Driver

Windows 98 and Windows 98 Second Edition

TCP/IP settings are automatically set up during the software installation process. The following procedure may be used to change TCP/IP settings, if necessary.

- 1. From your PC desktop, double click the **My Computer** icon.
- 2. From the "My Computer" window, double click the Dial-Up Networking icon.
- 3. From the "**Dial-Up Networking**" window, right click on the **Dial-Up PPP Connection** icon and click **Properties**.

Back Up 1	2 2	to can		Note Pagetter Verm	
-	Entertaine Mid-lifer Co	metika	Phote Larket	Severane Ind	
Dial-Up Networking	5-ANELISED	6 6 9	genet nen jintut	250Ve0trUm0	
ADGL Dial-Up PPP Connection		- 10	1.00 ¹⁰		
Pale # w Hutt 1,31					
Device hartes: DSLW januido-ulter0					
to establish a dial-up connection to the national spec, dick Cambriet,					

4. From the "Server Types" tab of the "Dial-Up PPP Connection" window, select TCP/IP (marked with a check in the box to the left) and click TCP/IP Settings.

ADSL Dial-Up PPP Connection
General Server Types Scripting Multilink
Type of Dial-Up Server:
PPP: Internet, Windows NT Server, Windows 98
Advanced options.
Eastle activities commencies
Require encrypted password
Require data encryption
Becord a log file for this connection
Allowed network protocols
□ NetBEUI
IPX/SPX Compatible
TCP/IP Settings
OK. Cancel

5. The "**TCP/IP Settings**" window is used to modify the IP address, Domain Name Server addresses and/or default gateway as follows:

TCP/IP Settings	<u> 7 X</u>							
 Server assigned IP Specify an IP addle 	address							
IP gddress:	192,168,0,77							
C Server assigned na Specify name perve	Server assigned name server addresses Specify name server addresses							
Primary DNS:	168 . 95 . 1 . 1							
Secondary DNS:	0.0.0.0							
Primery WINS:	0.0.0.0							
Secondary WINS:	0.0.0.0							
Use IP header gong	Use IP header compression Use default gateway on remote network.							
	OK Cencel							

- Change the IP address to a user defined address by selecting **Specify an IP address** (click inside the circle to the left of it) and typing the address in the space provided
- Change the Domain Name Server addresses to user defined addresses by selecting Specify domain name server addresses (click inside the circle to the left of it) and typing the addresses in the spaces provided
- Change the default gateway by leaving the box blank to the left of **Use default gateway** on remote network.

Click OK.

6. The "**ADSL Dial-Up PPP Connection**" window will be redisplayed. Click **OK** to end the modifying TCP/IP options session.

Windows XP & 2000

TCP/IP settings are automatically set up during the software installation process. The following procedure may be used to change TCP/IP settings, if necessary.

1. From your PC desktop, right click the My Network Places icon and select Properties.



2. From the "Networking" tab of the " ADSL Dial-Up PPP Connection Properties" window, select Internet Protocol (TCP/IP) and click Properties.

CARGE CARGE	of second commence have	
Type of dial-up	rerver I am calling	
PPP. Windows	95/98/NT4/2000, Internet	
		Settings
<u>Components</u> ch	ected are used by this connection	n:
North Lines	E Brotherson	
- ABOLO	t Pigeocol	
ET Interiet	Protocol (TCP/IP)	and the second second
File and	Protocol (TCP/IP) Printer Sharing for Microsoft Net a Microsoft Networks	works
File and Client to	Proceed (CPAP) Printer Sheing for Microsoft Neh « Microsoft Nelworks	wofks
File and	Protocol (TCP/IP) Pinter Shaing for Microsoft Neh (Microsoft Nehvold 3	ecés Pjopeties
Iteration	Protocol (TCP/IP) Pinter Shaing for Microsoft Neh (Microsoft Nehvolt 2	чой з Рузрелие
Print	Protocol (TCP/IP) Pinter Shaing for Microsoft Neh Microsoft Nehvold s	nofis Pjopeties
Perception Transmission	Protocol (TCP/IP) Pinter Shaing for Microsoft Nen Microsoft Networks Unimital Control Protocol/Internet Protocol	Pjopeties
Descaption Transmission Website	Protocol (TCP/IP) Pinter Shaing for Microsoft Networks Microsoft Networks Universit Control Protocol/Internet Protocol work protocol/Internet Protocol work protocol/Internet Protocol	Pjopeties Di The detault nurrication

3. The "Internet Protocol (TCP/IP) Properties" window is used to modify the IP address and DNS Server addresses:

desiractivalize for this appropriate (P settings
C Obtain an IP address autor	natically
Paddeur	112 168 8 77
Alternate DHS serves	
	Adjunced.

- Change the IP address to a user defined address by selecting Use the following IP address (click inside the circle to the left of it) and typing the address in the space provided
- Change the DNS Server addresses to user defined addresses by selecting **Use the** following DNS server addresses (click inside the circle to the left of it) and typing the addresses in the spaces provided.

Note: The "Advanced" button of the "Internet Protocol (TCP/IP) Properties" window may be used to alter DNS addresses, WINS addresses and IP security settings.

- 7. Click OK from the "Internet Protocol (TCP/IP) Properties" window.
- 8. The "**ADSL Dial-Up PPP Connection Properties**" window will reappear. Click **OK** to end the modifying TCP/IP options session.

Microsoft Windows ME

TCP/IP settings are automatically set up during the software installation process. The following procedure may be used to change TCP/IP settings, if necessary.

- From your PC desktop, open the Dial-Up Networking window (Start -> Settings -> Dial-Up Networking).
- 2. From the "**Dial-Up Networking**" window, right click on the **ADSL Dial-Up PPP Connection** icon and click **Properties**.



3. From the "**Networking**" tab of the "**ADSL Dial-Up PPP Connection**" window, select **TCP/IP** (marked with a check in the box to the left) and click **TCP/IP Settings**.

Action	and referre
-	rushie anthevase gorgeneration
E 1	ecod a log file for this connection
Akne	d rationality protocols
E 1	#BELK
CY	N/SPN Compatible
FI	CP/IP TOENP Settings

4. The "**TCP/IP Settings**" window is used to modify the IP address, Domain Name Server addresses and/or default gateway as follows:

IP gddiens	192		168		0	•	77
Server assigned no	ome se	: TV	er ad	kar			
 Specify name serv 	er add	ies	000			_	
Pamay DNS:	168		95	+	1	1÷	1
Secondary DNS:	0		0	•	U	.+	0
Psinary WINS:	0	-	0		0		0
Secondary WINS:	0		0	•	ŋ	14	0

- Change the IP address to a user defined address by selecting **Specify an IP address** (click inside the circle to the left of it) and typing the address in the space provided
- Change the Domain Name Server addresses to user defined addresses by selecting
 Specify name server addresses (click inside the circle to the left of it) and typing the addresses in the spaces provided
- Change the default gateway by leaving the box blank to the left of **Use default gateway** on remote network.

Click OK.

5. The " **Dial-Up PPP Connection**" window will be redisplayed. Click **OK** to end the modifying TCP/IP options session.

LAN USB Driver

Microsoft Windows 98, First and Second Editions

TCP/IP settings are automatically set up during the software installation process. The following procedure may be used to change TCP/IP settings, if necessary.

- From the "Control Panel" window (Start -> Settings -> Control Panel) double click on the Network icon.
- Select TCP/IP -> ADSL USB LAN Modem from the "Configuration" tab of the "Network" window. Click Properties.

Network ? ×
Configuration Identification Access Control
The following getwork components are installed:
The NetBEUL -> Dial-Up Adapter
a Net8EUI -> Realtek RTL8139(A/8/C/8130) PCI Fast Ethe Version and Apple USE Landa data
TCP/IP © ADSL USB LAN MODEIN
TCP/IP -> Realtek RTL8139(A/8/C/8130) PCI Fast Ether -
Add Remove Properties
Primary Network Logon:
Client for Microsoft Networks
Elle and Print Sharing
Description
TCP/IP is the protocol you use to connect to the Internet and wide-area networks.
OK Cancel

3. From the "IP Address" tab of the "TCP/IP Properties" window, select either the Obtain an IP address Automatically or Specify an IP Address option, depending on your network setup. If you select Specify an IP address, type the IP Address and Subnet Mask in the spaces provided. Consult with your network administrator to determine which option best suits your

individual needs.

TCP	/IP Properties		<u>?</u> ×
D	Bindings NS Configuration	Advanced] Gateway WINS Conlig	NetBIOS Juration IP Address
	An IP address can If your network doe your network admir the space below.	be automatically assigned is not automatically assign istrator for an address, an	I to this computer. IP addresses, ask d then type it in
	C Obtain an IP	address automatically	
	Specify an IP	address:	
	P Address	192.168. 0	. 77
	Sybnet Mad	255.255.255	. 0
		OK	Cancel

4. The "Gateway" tab allows you to add or remove gateways. Consult with your network

TCP/IP Properties	? ×
Bindings Advanced NetBIOS DNS Configuration Gateway WINS Configuration IP Addr	
The first gateway in the Installed Gateway list will be the default The address order in the list will be the order in which these machines are used.	L
New gateway: 192.168.0.254	
Installed gateways: 192.168.0.254 Bemove	
OK. Cance	4

administrator to determine the appropriate addresses for your individual needs.

- To add a new gateway, type the address in the *New gateway* field and click **Add**. The new gateway will appear in the **Installed gateways** list.
- To remove a previously installed gateway, highlights the entry to be removed in the **Installed gateways** list and click **Remove**. The gateway will no longer appear in the **Installed gateways** list.
- 5. Click **OK** from the "**TCP/IP Properties**" window.
- 6. The "Network" window will reappear. Click OK to end the modifying TCP/IP options session.
- If you have made changes to TCP/IP properties, you will be asked to restart/reboot your PC. Click Yes, and your PC will restart.

Microsoft Windows XP & 2000

TCP/IP settings are automatically set up during the software installation process. The following procedure may be used to change TCP/IP settings, if necessary.

- 1. From the PC desktop, right click the My Network Places icon and select Properties.
- Double click the Local Area Connection icon from the "Network and Dial-Up Connections" window.
- 3. Select Internet Protocol (TCP/IP) from the "General" tab of the "Local Area Connection Properties" window. Click Properties.

Local Area Connection 12 Properties 2 2
General Sharing
Connect using:
ADSL USB LAN Modem #6
<u>C</u> onfig.re
Components checked are used by this connection:
Apprese and Francel Sharing for Microsoft Networks Sector 2
Instal Uninstall Properties
Description Transmission Control Protocol/Internet Protocol. The default wide area network protocol that provides communication across diverse interconnected networks. Show icon in taskbar when connected
DK Cancel

4. The "Internet Protocol (TCP/IP) Properties" window is used to modify the IP addresses and DNS Server addresses:

Internet Protocol (TCP/IP) Proper	ties !				
General					
You can get IP settings assigned automatically if your network supports this capability. Otherwise, you need to ask your network administrator for the appropriate IP settings.					
C Obtain an IP address automatic	ally				
Use the following IP address:					
JP address:	192.168.0.46				
Sybnet mask:	255.255.255.0				
Default gateway:	192.168.0.254				
C Obtain DNS server address automatically					
. Use the following DNS server a	addresses:				
Preferred DNS perver.	168 . 95 . 1 . 1				
Alternate DNS server:	203 . 79 . 224 . 30				
	Adganced				
	OK. Cancel				

- Change the IP address to a user defined address by selecting Use the following IP address option (click inside the circle to the left of it) and typing the addresses in the spaces provided
- Change the DNS Server addresses to user defined addresses by selecting Use the following DNS server addresses (click inside the circle to the left of it) and typing the addresses in the spaces provided.

Note: The Advanced button of the "**Internet Protocol (TCP/IP) Properties**" window may be used to alter IP settings, DNS server addresses, WINS addresses, IP security options, and TCP/IP filtering options.

- 5. Click OK from the "Internet Protocol (TCP/IP) Properties" window.
- 6. The "Local Area Connection Properties" window will reappear. Click OK to end the modifying TCP/IP options session.

Microsoft Windows ME

TCP/IP settings are automatically set up during the software installation process. The following procedure may be used to change TCP/IP settings, if necessary.

- 1. From the PC desktop, right click the My Network Places icon and select Properties.
- Select TCP/IP -> ADSL USB LAN Modem from the "Configuration" tab of the "Network" window. Click Properties.



3. From the "IP Address" tab of the "TCP/IP Properties" window, select either the Obtain an IP address Automatically or Specify an IP Address option, depending on your network setup. If you select Specify an IP address, type the IP Address and Subnet Mask in the spaces provided. Consult with your network administrator to determine which option best suits your individual needs.

TCP/IP Properties	? ×
Bindings Advanced DNS Configuration Gateway WINS Configuration	NetBIOS 1 IP Address
An IP address can be automatically assigned to this If your network does not automatically assign IP add your network administrator for an address, and then the space below.	computer. dresses, ask type it in
C Obtain an IP address automatically P Specify an IP address:	
P Address: 192.168.0.77	
Sybnet Maik: 255.255.255.0	
OK.	Cancel

4. The "**Gateway**" tab allows you to add or remove gateways. Consult with your network administrator to determine the appropriate addresses for your individual needs.

TCP/IP Properties	<u>? ×</u>
Bindings Advance DNS Configuration Geteway W	ed NetBIOS NS Configuration IP Address
The first gateway in the Installed G The address order in the list will be machines are used.	aleway list will be the default. the order in which these
New gateway: 192.168.0.254	édd
Installed gateways	Bemove
	OK Decel

- To add a new gateway, type the address in the *new gateway* field and click **Add**. The new gateway will appear in the **Installed gateways** list.
- To remove a previously installed gateway, highlight the entry to be removed in the **Installed gateways** list and click **Remove**. The gateway will no longer appear in the **Installed gateways** list.
- 5. Click **OK** from the "TCP/IP Properties" window.
- 6. The "Network" window will reappear. Click OK to end the modifying TCP/IP options session.
- If you have made changes to TCP/IP properties, you will be asked to restart/reboot your PC. Click Yes, and your PC will restart.

ATM USB Driver for Microsoft Windows 98 Second Edition

TCP/IP settings are automatically set up during the software installation process. The following procedure may be used to change TCP/IP settings, if necessary.

- 1. From your PC desktop, double click the **My Computer** icon.
- 2. From the "My Computer" window, double click the Dial-Up Networking icon.
- 3. From the "**Dial-Up Networking**" window, right click on the **ADSL Dial-Up PPP Connection** icon and click **Properties**.
- 4. From the "Server Types" tab of the "ADSL Dial-Up PPP Connection" window, select TCP/IP (marked with a check in the box to the left) and click TCP/IP Settings.

ADSL Dial-Up PPP Connection ?>	<
General Server Types Scripting Multilink	1
Type of Dial-Up <u>S</u> erver:	l
PPP: Internet, Windows NT Server, Windows 98	l
Advanced options:	L
Log on to network	l
Enable software <u>c</u> ompression	l
Require encrypted password	l
Require data encryption	L
<u>Record a log file for this connection</u>	l
Allowed network protocols:	l
□ <u>N</u> etBEUI	l
IPX/SPX Compatible	L
<u>I</u> CP/IP <u>I</u> CP/IP Settings	L
OK Cancel	

5. The "**TCP/IP Settings**" window is used to modify the IP address, Domain Name Server addresses and/or default gateway as follows:

TCP/IP Settings		? ×					
Server assigned IP address Specify an IP address							
IP gddress:	192,168,0,77]					
Server assigned name server addresses Seech page server addresses							
Primary DNS:	168.95.1.1]					
Secondary D <u>N</u> S:	0.0.0.0]					
Primary WINS:	0.0.0.0]					
Secondary W]NS:	0.0.0.0]					
Use IP header gompression Use default gateway on remote network							
DK Cancel							

- Change the IP address to a user defined address by selecting **Specify an IP address** (click inside the circle to the left of it) and typing the address in the space provided
- Change the Name Server addresses to user defined addresses by selecting **Specify name server addresses** (click inside the circle to the left of it) and typing the addresses in the spaces provided
- Change the default gateway by leaving the box blank to the left of **Use default gateway** on remote network.

Click OK.

 The "ADSL Dial-Up PPP Connection" window will be redisplayed. Click OK to end the modifying TCP/IP options session.

ATM USB Driver for Microsoft Windows XP & 2000

TCP/IP settings are automatically set up during the software installation process. The following procedure may be used to change TCP/IP settings, if necessary.

- 1. From your PC desktop, right click the My Network Places icon and select Properties.
- 2. From the "Network and Dial-Up Connections" window, right click on the ADSL Dial-Up PPP Connection icon and click Properties.
- 3. From the "Networking" tab of the "ADSL Dial-Up PPP Connection Properties" window, select Internet Protocol (TCP/IP) and click Properties.

ADSL Dial-Up PPP Connection Properties
General Options Security Networking Sharing
Type of dial-up server I am calling:
PPP: Windows 95/98/NT4/2000, Internet
<u>Settings</u>
Components checked are used by this connection:
WetBEUI Protocol
Internet Protocol (TCP/IP)
File and Printer Sharing for Microsoft Networks
Cherk for Microsoft Networks
Install
Description
Transmission Control Protocol/Internet Protocol. The default wide area network protocol that provides communication across diverse interconnected networks.
OK Cancel

4. The "Internet Protocol (TCP/IP) Properties" window is used to modify the IP address and DNS Server addresses as follows:

Internet Protocol (TCP/IP) Propertie	* <u>? X</u>
General	
You can get IP settings assigned auton supports this capability. Otherwise, you administrator for the appropriate IP setti	natically if your network need to ask your network ngs.
C Obtain an IP address automatical	v
- 🕫 Uge the following IP address:	
JP address:	192.168.0.77
Ojstein DNS server address outor Use the following DNS server address Preferred DNS server: Alternate DNS server:	natical / decose: 168 . 95 . 1 . 1
	Adganced

- Change the IP address to a user defined address by selecting Use the following IP address (click inside the circle to the left of it) and typing the address in the space provided
- Change the DNS Server addresses to user defined addresses by selecting **Use the following DNS server addresses** (click inside the circle to the left of it) and typing the addresses in the spaces provided.

Note: The "Advanced" button of the "Internet Protocol (TCP/IP) Properties" window may be used to alter DNS address, WINS address and IP security settings.

- 5. Click OK from the "Internet Protocol (TCP/IP) Properties" window.
- 6. The "**ADSL Dial-Up PPP Connection Properties**" window will reappear. Click **OK** to end the modifying TCP/IP options session.

ATM USB Driver for Microsoft Windows ME

TCP/IP settings are automatically set up during the software installation process. The following procedure may be used to change TCP/IP settings, if necessary.

- From your PC desktop, open the Dial-Up Networking window (*Start -> Settings -> Dial-Up Networking*).
- 2. From the "**Dial-Up Networking**" window, right click on the **ADSL Dial-Up PPP Connection** icon and click **Properties**.
- 3. From the "Networking" tab of the "ADSL Dial-Up PPP Connection" window, select TCP/IP (marked with a check in the box to the left) and click TCP/IP Settings.

ADSL Dial-Up PPP Connection
General Networking Security Scripting Multilinik Dialing
Type of Diał-Up Server:
PPP: Internet, Windows 2000/NT, Windows ME
Advanced options:
Enable software compression
Becord a log file for this connection
Allowed network protocols:
□ NetBEUI
IPX/SPX Compatible
TCP/IP TCP/IP Settings
OK. Cancel

- 4. The "**TCP/IP Settings**" window is used to modify the IP address, Domain Name Server addresses and/or default gateway as follows:
 - Change the IP address to a user defined address by selecting **Specify an IP address** (click inside the circle to the left of it) and typing the address in the space provided

- Change the Name Server addresses to user defined addresses by selecting **Specify name server addresses** (click inside the circle to the left of it) and typing the addresses in the spaces provided
- Change the default gateway by leaving the box blank to the left of **Use default gateway** on remote network.

Click OK.

7. The " **ADSL Dial-Up PPP Connection**" window will be redisplayed. Click **OK** to end the modifying TCP/IP options session.

Appendix B: Point-to-Point Protocol over Ethernet

PPPoE is a specification for connecting multiple computer users on an Ethernet to a remote site through common customer premises equipment. PPPoE can be used to have an office or building-full of users share a common DSL (Digital Subscriber Line) connection to the Internet. PPPoE combines the Point-to-Point Protocol commonly used in dialup connections, with the Ethernet protocol, which supports multiple users in a LAN. The PPP Protocol information is encapsulated within an Ethernet frame.

Connect ADSL	Dial-Up PPP Connection	? ×
User name:		
Password:		
🔲 Save this u	ser name and password for the f	ollowing users:
💿 Me only		
C Anyone	who uses this computer	
Dial	Cancel Properties	Help

1. From your PC desktop, double click the **ADSL Dial-Up PPP Connection** icon.

2. Enter your user name & password and click Dial

Connect ADSI	, Dial-Up PPP Connection	<u>?</u> ×
User name:	xentrix	
Password:	•••••	
🔲 Save this	user name and password for the following	g users:
Me on C Anyon	y e who uses this computer	
Dial	Cancel Properties	Help

Appendix C: Specifications

ATU-R303 ADSL USB Modem Connector

The ATU-R303 ADSL USB Modem is connected to your PC via a USB cable. The rectangular end of the USB cable inserts into the USB port of your PC while the square end of the cable inserts into the USB port of the ATU-R303 ADSL USB Modem. An RJ-11 connector is provided for connection to the telephone line.

Data Transfer Rates

CAP Data Rates

The following CAP bit rates are supported as shown in Table 1 and Table 2:

Bit Rate per Constellation Size (kb/s)							
Symbo I Rate (kbaud s)	256 uncod ed	256	128	64	32	16	8
136 w/o RS	1088	952	816	680	544	408	272
136 with RS	1024	896	768	640	512	384	256
340 with RS	2560	2240	1920	1600	1280	960	640
680 with RS	5120	4480	F/A	3200	F/A	1920	F/A
952 with RS	7168	6272	F/A	4480	F/A	2688	F/A

Table 1:	Downstream	Channel	Bit Rate p	per Constellation	ı Size	(kb/s)
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F/A = Future Availability

Bit Rate per Constellation Size (kb/s)											
Symbo I Rate (kbaud s)	256 uncod ed	256	128	64	32	16	8	8ER			
136	1088	952	816*	68 0	544*	40 8	27 2*	90.6*			
68	544*	476*	408*	34 0*	272*	20 4*	13 6*	45.3*			
17	136**	119* *	102* *	85* *	68**	51* *	34* *	11.3* *			
Note: ER = Extended Reach (upstream only)											

Table 2: Upstream Channel Bit Rate Per Constellation Size (kb/s)

* Future availability with 680 and 952 kbauds downstream symbol rates

** Only available for 136 kbauds downstream
ANSI T1.413 / ITU G.992.1 Data Rates

Data rates for DMT mode are partitioned at 32 kb/s increments for both the upstream and downstream data rates adhering to the DMT Standards. The downstream data rates extend from 32 kb/s to 8.064 Mb/s. The upstream data rates extend from 32 kb/s to 1024 kb/s.

Table 3:	ANSI	T1.413	Payload	Bit Rates	

Bit Rate (kb/s)		
	Min	Max
Downstream		
	32	8064
Upstream		
	32	1024

ITU G.992.2 Data Rates

Data rates for G.992.2 (G.lite) mode are likewise partitioned at 32kb/s increments. The downstream data rates extend from 64 kb/s to 4 Mb/s. The upstream data rates extend from 32 kb/s to 1024 kb/s.

Table 4: G.992.2 Payload Bit Rates

Bit Rate (kb/s)		
	Min	Max
Downstream	64	4000
Upstream	32	1024

Power Requirements

Table 5: CP USB Modem Power Consumption

CP USB Modem Power	
Consump	otion
Power Supply	Data Mode
+5V Digital	0.100 W

+5V Analog	0.250 W
+3.3V	0.995 W
+12V	0.896 W
Total:	2.241 W

Software Requirements

Operating System

- Microsoft Windows 98
- Microsoft Windows 98 SE
- Microsoft Windows 2000
- Microsoft Windows ME
- Microsoft Windows XP

Hardware Requirements

The ATU-R303 ADSL USB Modem is a complete reference design. Substitution of components specified by CTC Union with unspecified components may cause degradation in performance. CTC Union cannot guarantee performance when components have been substituted, thus altering the reference design.

Processor

Intel-compatible 80486 or higher, including Pentium and Pentium Pro.

Appendix D: FCC/Industry Canada Required Information

FCC Required Information:

- This equipment complies with Part 68 of the FCC rules. This unit bears a label, which contains the FCC registration number and ringer equivalence number (REN). If requested, this information must be provided to the telephone company.
- This equipment uses the following standard jack types for network connection: RJ11-6
- 3. This equipment contains an FCC compliant modular jack. It is designed to be connected to the telephone network or premises wiring using compatible modular plugs and cabling which comply with the requirements of FCC Part 68 rules.
- 4. In the unlikely event that this equipment causes harm to the telephone network, the telephone company can temporarily disconnect your service. The telephone company will try to warn you in advance of any such disconnection, but if advance notice isn't practical, it may disconnect the service first and notify you as soon as possible afterwards. In the event such a disconnection is deemed necessary, you will be advised of your right to file a complaint with the FCC.
- 5. From time to time, the telephone company may make changes in its facilities, equipment, or operations, which could affect the operation of this equipment. If this occurs, the telephone company is required to provide you with advance notice so you can make the modifications necessary to maintain uninterrupted service.
- 6. If a user experience difficulties, check your connection and software configurations. There are no user repairs that can be done on the unit.

Industry Canada Required Information

EQUIPMENT ATTACHMENTS LIMITATIONS

To ensure that certified equipment is attached correctly and only to the networks of participating carriers, the following statement shall accompany each unit of certified equipment offered for sale. This statement must be included conspicuously in written or electronic format, at or near the front of each copy of the operating manual, or accompany other technical information, or be included as a separate sheet. The required statement is:

"NOTICE: The Industry Canada label identifies certified equipment. This certification means that the equipment meets telecommunications network protective, operational and safety requirements as prescribed in the appropriate Terminal Equipment Technical Requirements documents(s). The department does not guarantee the equipment will operate to the user's satisfaction.

Before installing this equipment, users should ensure that it is permissible to be connected to the facilities of the local telecommunications company. The equipment must also be installed using an acceptable method of connection. The customer should be aware that compliance with the above conditions might not prevent degradation of service in some situations.

Repairs to certified equipment should be coordinated by a representative designated by the supplier. Any repairs or alterations made by the user to this equipment, or equipment malfunctions, may give the telecommunications company cause to request the user to disconnect the equipment.

Users should ensure for their own protection that the electrical ground connections of the power utility, telephone lines and internal metallic water pipe system, if present, are connected together. This precaution may be particularly important in rural areas. **Caution:** Users should not attempt to make such connections themselves, but should contact the appropriate electric inspection authority, or electrician, as appropriate."

An explanatory note on Ringer Equivalence Numbers (see Section 10.0) and their use must be provided for the terminal equipment user in the information accompanying the terminal equipment. A notice similar to the following would be suitable:

"NOTICE: The Ringer Equivalence Number (REN) assigned to each terminal device provides an indication of the maximum number of terminals allowed to be connected to a telephone interface. The termination on an interface may consist of any combination of devices subject only to the requirement that the sum of the ringer equivalence Numbers of all the devices does not exceed 5."

Appendix E: Abbreviations

ADSL	Asymmetric Digital Subscriber Line
ATM	Asynchronous Transfer Mode
CAP	Carrier-less Amplitude and Phase
DMT	Discrete Multi-tone
DSL	Digital Subscriber Line
G.DMT	ITU G.992.1
G.lite	ITU G.992.2
IP	Internet Protocol
LAN	Local Area Network
PPP	Point-to-Point Protocol
PPPoE	Point-to-Point Protocol over Ethernet
PVC	Permanent Virtual Circuit
SVC	Switched Virtual Circuit
VCI	ATM Virtual Circuit ID
VPI	ATM Virtual Path ID

Rev. 2.01

Appendix F: Product Specification

DIMENSIONS

Height: 1.6 in (4.06 cm), Width: 7.5 in (19.05 cm), Depth: 6.25 in (15.88 cm)

WEIGHT

Approx. 2.20 lbs (1.02 kg)

ENVIRONMENTAL

Ambient Operating Temperature – +32 to +131°F (0 to +45°C Relative Humidity – 5 to 95%, non-condensing

POWER REQUIREMENTS

5 VDC Source from PC USB port, Less than 3 watts typical from 5 VDC

CONNECTORS

ADSL LINE – 6-pin modular jack RJ-11 USB – USB Connector

DSL

ADSL Line Code – Discrete MultiTone (DMT)

ADSL TRANSMISSION RATES

Downstream DMT: 32 kbps to 8.0 Mbps Upstream DMT: 32 kbps to 800 Kbps

TRANSPORT AND APPLICATION PROTOCOL SUPPORT

RFC 1483 Bridge Protocol

ATM SUPPORT

Supports ATM traffic shaping where soft SAR supports individual PCR control for each VC Full 16-bit address range for both VPI and VCI supported. Supports PVC connections.

DEVICE DRIVER AND SOFTWARE SPECIFICATIONS

Driver is LAN type network driver and is Network Driver Interface Specification (NDIS) 4.0 compliant.

Windows™ 98, Windows™ 98 Second Edition, Windows 2000

EMC

FCC, Part 15, Class B; EN50081-1, Class B; EN50082-1

SAFETY

UL 1950, cUL, EN60950

REGULATORY APPROVAL

UL, CSA, CE