

2/9/01



WIRESPEED™ BUS-POWERED USB ADSL MODEM

INSTALLATION AND USER GUIDE



B90-36R305 PN 030-300118 Rev. D February, 2001



CONTENTS

INSTALLATION AND USER GUIDE	1
Introduction	1
PRODUCT DESCRIPTION	
Key Features	
SYSTEM REQUIREMENTS	
UNPACKING	
SAFETY	3
SOFTWARE INSTALLATION	
WINDOWS 98/WINDOWS ME INSTALLATION	
Windows 98/Windows ME Software Installation Procedure	5
Creating a Dial-Up Connection for Windows 98	9
Creating a Dial-Up Connection for Windows ME	14
Uninstalling the USB Driver for Microsoft Windows 98/Windows ME	
WINDOWS 2000 INSTALLATION	21
Windows 2000 Software Installation Procedure	21
Creating a Dial-Up Connection for Windows 2000	26
Uninstalling the USB Driver for Microsoft Windows 2000	33
MACINTOSH INSTALLATION	
Macintosh Software Installation Procedure	36
Creating a Dial-Up Connection for Macintosh	38
Uninstalling the USB Driver for Macintosh	44
MONITORING WINDOWS PERFORMANCE	46
MONITORING MACINTOSH PERFORMANCE	49
PRODUCT ASSISTANCE AND GENERAL INQUIRIES	52
PRODUCT SPECIFICATIONS	53
REGULATORY INFORMATION	54



INSTALLATION AND USER GUIDE

INTRODUCTION

This guide is written for end users and installation personnel. It contains information about the hardware and software installation setup and modem status. This document also contains reference information about the features and interfaces of this product.

PRODUCT DESCRIPTION

The Westell WireSpeed™ Bus-Powered USB ADSL Modem (36R305) can be easily connected to a USB port on the PC by a standard USB cable. The PC must be running one of the following operating systems:

- Microsoft[®] Windows 98 or Windows 98 Second Edition (Windows 98SE)
- Microsoft® Windows Millennium Edition (Windows ME)
- Microsoft[®] Windows 2000
- Macintosh OS 8.6 or OS 9.0.

The modem is powered by the PC and does not need to be plugged into a wall socket.

ADSL signals must be blocked from reaching each telephone, answering machine, fax machine, conventional computer modem or any similar devices. Failure to do so may degrade telephone voice quality and ADSL performance. Contact your DSL provider to obtain a POTS splitter or inline microfilters.

Key Features

The USB ADSL Modem provides the following features:

- USB BUS Power Operation No external power supply is required.
- DMT transmission technology supports full-rate ADSL with speeds up to 8.0 Mbps downstream and 800 kbps upstream.
- Permanent Virtual Circuits (PVCs).
- Upgradeable protocol software.
- Configuration and management interface based on Windows Control Panel and Macintosh operating systems.
- RJ-11 telephone line connector.
- Compliant with Universal Serial Bus Specification Revision 1.1.



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 CD-ROM, or the appropriate CAB files.
- Internet Explorer 4.x (or later) or Netscape Navigator 4.x (or later) installed

Macintosh

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

- G3 or G4 Macintosh computer
- 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
- Macintosh operating system OS 8.6 or OS 9.
- Internet Explorer 4.x (or later) or Netscape Navigator 4.x (or later) installed

UNPACKING

Your Westell modem box should contain the following items.

- One ADSL modem
- One phone cord
- One USB cable
- One Westell USB Installation CD-ROM
- One Installation And User Guide (this document)

Verify that these items are present. Thoroughly inspect the components for damage. If any part has been damaged during transit, report the damage immediately to your service provider.



SAFETY

Follow these safety precautions when installing any electronic/telephone equipment:



WARNING



Risk of electric shock. Voltages up to 140 Vdc (Volts direct current with reference to ground) may be present on telecommunications circuits.

- 1. Never install any telephone wiring during a lightning storm.
- 2. Never install telephone jacks in wet locations unless the jack is specifically designed for wet locations.
- 3. Never touch non-insulated telephone wires or terminals unless the telephone line has been disconnected at the network interface.
- 4. Use caution when installing or modifying telephone lines.
- 5. This equipment is to be installed and used with approved telco terminal sockets that provide primary lightning protection.



SOFTWARE INSTALLATION

Before you start...

ADSL Connection: Your ADSL line must be installed and activated by your service provider before you can connect and install your ADSL modem.

Windows CD-ROM/CAB Files: Windows users should have their Windows operating system CD-ROM on hand when starting the installation process. Installing Westell modem software on Windows operating systems may require the user to insert their Windows operating system CD-ROM or to have the CAB files installed on their system.

USB Connection: Do NOT attach the USB cable to your computer until specifically instructed to do so during the software installation process. The USB modem should be connected to a USB port on your computer or a powered hub, not into a keyboard port. See the Hardware Installation section for details on connecting the hardware.

Internet Browser: Browser software must be installed in order to set up your modem dial-up connection and connect to the Internet.



WINDOWS 98/WINDOWS ME INSTALLATION



NOTE: The modem software drivers must be installed in the PC before the USB modem is connected to the PC. Because the PC will automatically restart as part of this process, it is important to save and close all open applications before starting the installation. Modem installation is not complete and the DSL line will NOT synchronize with the Central Office equipment until the USB software drivers have been installed.

Windows 98/Windows ME Software Installation Procedure

Note: For Windows ME, screen text may vary slightly from the examples shown.

- 1. Verify that the modem is NOT connected to the PC.
- 2. Insert the Westell USB Installation CD-ROM into the CD-ROM drive. The program will automatically start and display the **Welcome** screen. (If the program does not start automatically, choose the CD-ROM drive and click the Setup.exe file to start the program.)

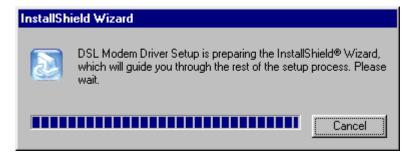


Figure 1

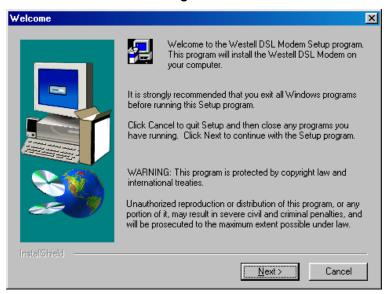


Figure 2

3. Click Next.



4. The system will search for existing drivers and install them.

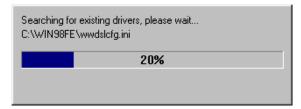


Figure 3

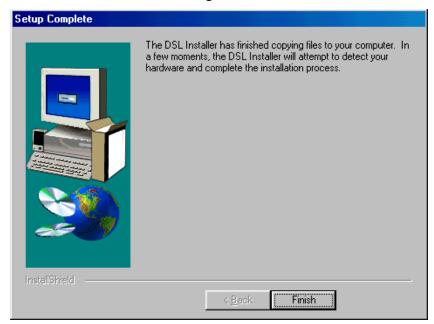


Figure 4

5. After the drivers have finished loading, the **Setup Complete** screen appears. Click **Finish.**





Figure 5

6. When the **DSL Installer** screen tells you to plug in your modem, use the instructions in the following Hardware Installation section.

Hardware Installation (Windows 98/Windows ME)



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

1. Insert the flat rectangular end of the USB cable into the USB port on your computer. The figure below shows the basic cable connections.

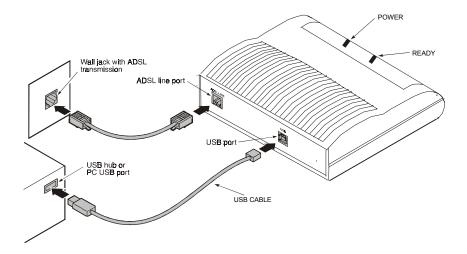


Figure 6. ADSL Modem Cable Connections

- 2. Insert the square end of the USB cable into the USB port of the ADSL modem. The green POWER LED indicates that it has been plugged in correctly and that the power is ON.
- 3. Plug a telephone cable into the ADSL/Line connector and into a standard RJ-11 telephone jack.



4. When the modem is physically connected, the Plug and Play program will recognize the USB modem and install the hardware drivers.



Figure 7



Figure 8

5. Click **Yes** to restart your computer.

This completes your installation for Windows 98 or Windows ME. Proceed to the section on creating a dial-up connection for your operating system.



Creating a Dial-Up Connection for Windows 98

NOTE

WINDOWS ME USERS: Instructions for creating a Windows ME dial-up connection differ from Windows 98 and are located in a separate section beginning on page 14.

Use the following procedure to create your DSL dial-up connection on computers using Windows 98 operating system.

1. From your PC desktop, double click the My Computer icon.

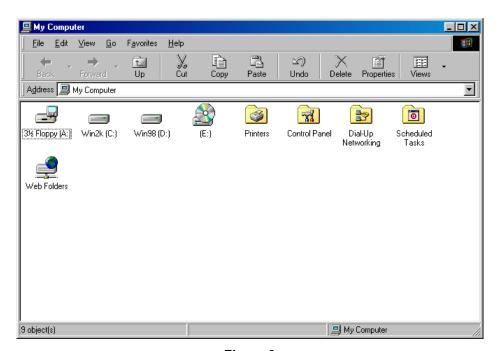


Figure 9

2. From the My Computer window, double-click the Dial-Up Networking icon.



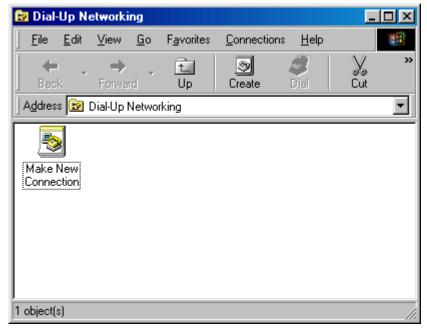


Figure 10

3. Double-click **Make New Connection.** On the **Make New Connection** screen type a name for your connection. Tab to the **Select a device:** field and select the **DSLWanUsb-Line0** device from the drop-down menu.

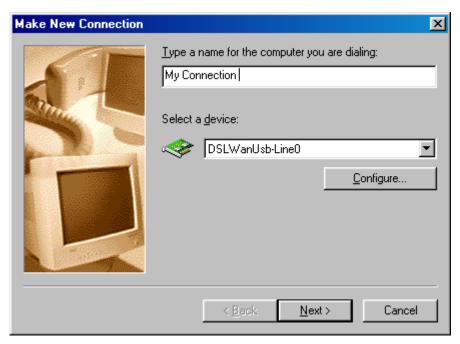


Figure 11

4. Click Next.



5. On the **Make a New Connection** screen, tab to the **Telephone number**: field and type in **0,38**. (Unless directed otherwise by your DSL service provider.)

Note: the Country or region code field is not required and can remain at the default setting.



Figure 12

6. Click **Next**. A message informs you that a new Dial-Up Networking has been successfully created and displays the name of the connection.

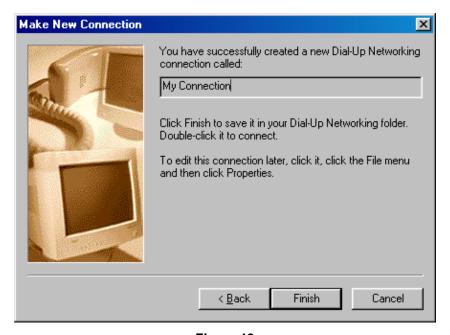


Figure 13

7. Click Finish to return to the Dial Up Networking screen.



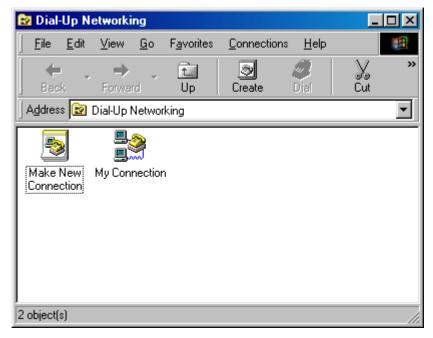


Figure 14

8. Double-click the **My Connection** icon.

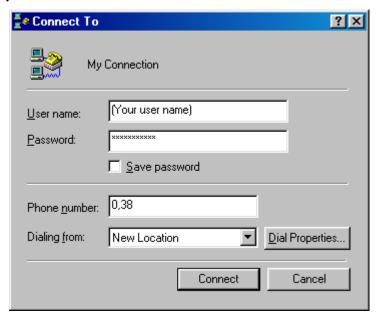


Figure 15

- 9. Enter the user name and password provided by your service provider.
- 10. Click Connect.



11. A dialogue box appears briefly indicating user name and password verification.



Figure 16

The icon that appears in this dialogue box now appears in the lower right-hand corner of your Task Bar. Clicking this icon displays a dialogue box that shows connection details as illustrated in the following figure.

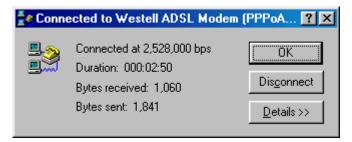


Figure 17

A DSL icon (double arrows) also appears in the lower right-hand corner of your Task Bar at the bottom of your screen.



Figure 18

The color of the arrows indicates the state of the DSL connection:

Color	Status
Solid yellow	Idle
Flashing yellow	Training (DSL)
Solid green	Modem synchronized
Flashing green	Transmitting/receiving traffic.
	(Upstream/downstream data rates appear.)
Red	DSL Modem not responding

Figure 19

If you pass your cursor over the DSL icon a yellow text box displays a message indicating the state of the connection.

You have successfully installed the Westell DSL modem hardware and software drivers.



Creating a Dial-Up Connection for Windows ME

Use the following procedure to create your DSL dial-up connection on computers using Windows ME operating system.

1. From your PC desktop, click **Start > Settings > Control Panel**.



Figure 20

2. From the **Control Panel** window, double-click the **Dial-Up Networking** icon. The **Dial-Up Networking** window opens.

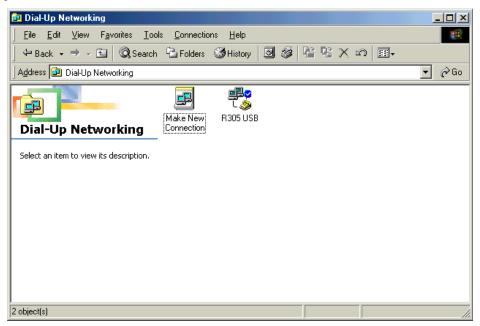


Figure 21



3. Double-click **Make New Connection.** On the **Make New Connection** screen type a name to identify your connection. (For example, My Connection, My DSL, R305USB, etc.) Tab to the **Select a device:** field and select the **DSLWanUsb-Line0** device from the drop-down menu.

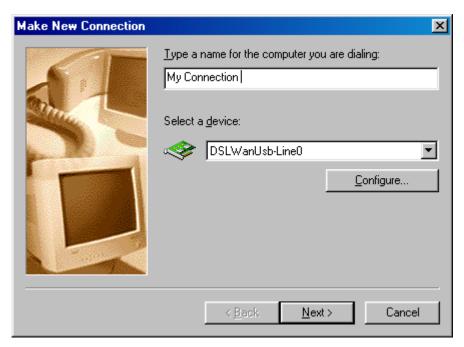


Figure 22

- 4. Click Next.
- 5. On the **Make a New Connection** screen, tab to the **Telephone number**: field and type in **0,38**. (Unless directed otherwise by your DSL service provider.) Note: the **Country or region code** field is not required and can remain at the default setting.

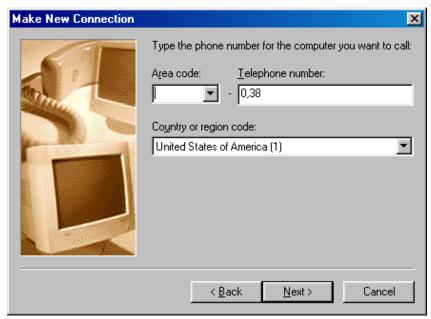


Figure 23



6. Click **Next**. A message informs you that a new Dial-Up Networking has been successfully created and displays the name of the connection.

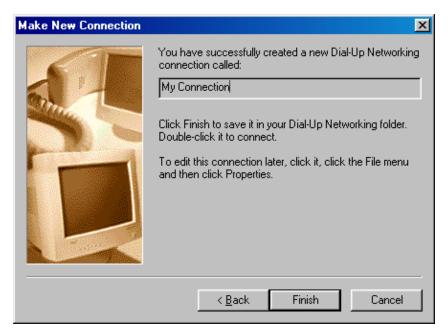


Figure 24

7. Click **Finish** to return to the **Dial Up Networking** screen.

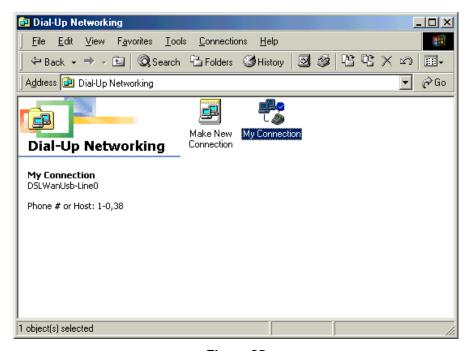


Figure 25

8. Double-click the My Connection icon.





Figure 26

- 9. Enter the user name and password provided by your service provider.
- 10. Click Connect.



Figure 27

You have successfully created a dial-up connection for Windows ME.



Uninstalling the USB Driver for Microsoft Windows 98/Windows ME



The Westell USB driver and its components must be completely removed from the Windows operating system before attempting to reinstall the software. Use the following procedure for Windows 98 or Windows ME.

Procedure:

1. From the desktop, click Start > Programs > Westell DSL Modem Driver > Uninstall. The DSL Modem Installer screen appears.

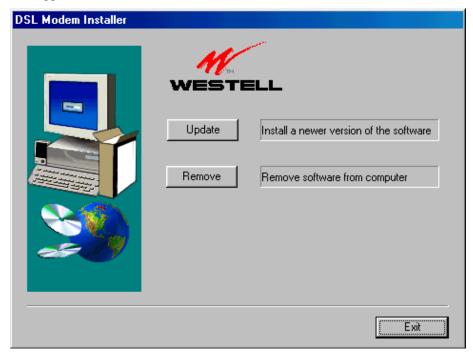


Figure 28

2. Click Remove.



Figure 29

3. Click **Yes** to uninstall the software.



4. An information screen cautions you not to unplug the USB cable until the Install Wizard has finished. Click **OK**



Figure 30

5. The **InstallShield Wizard** appears.

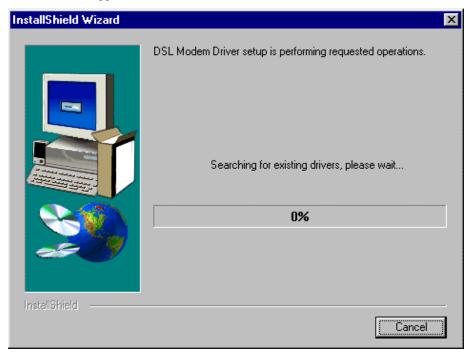


Figure 31

6. Wait for the **Setup Complete** window to appear.



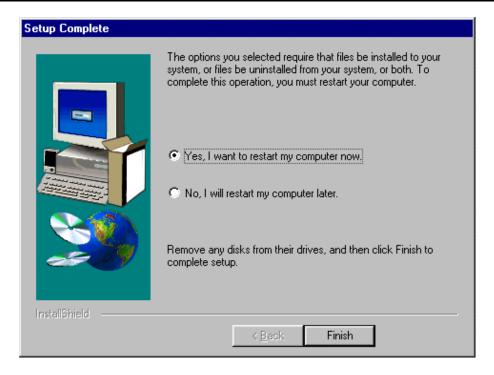


Figure 32

7. Select Yes, I want to restart my computer now and click Finish.



Figure 33

8. Click **Yes** to restart the PC. This completes the uninstall process for Windows 98 and Windows ME.



WINDOWS 2000 INSTALLATION

Windows 2000 Software Installation Procedure

- 1. Verify that the modem is NOT connected to the PC.
- 2. Insert the Westell USB Installation CD-ROM into the CD-ROM drive. The program will automatically start and display the **Welcome** screen. (If the program does not start automatically, choose the CD-ROM drive and click the Setup.exe file to start the program.)

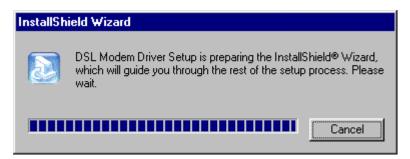


Figure 34

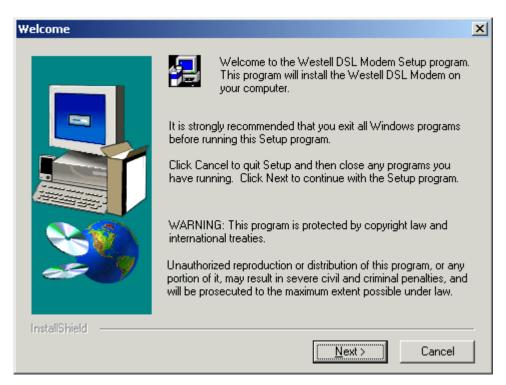


Figure 35

3. Click Next.





Figure 36



Figure 37

- 4. The **Digital Signature** screen appears. The Windows 2000 drivers do not have a digital signature. Click **Yes** to continue.
- 5. After the software drivers have been installed, the **Setup Complete** screen indicates that the software drivers have been installed.



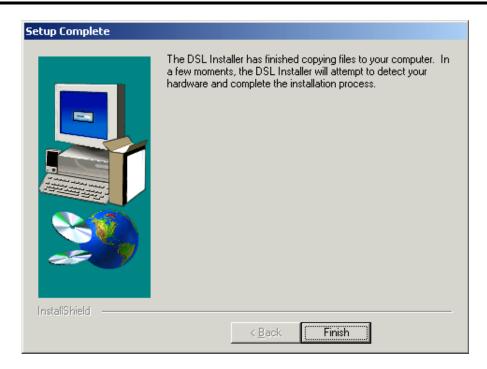


Figure 38

6. Click Finish.



Figure 39

7. When the **DSL Installer** screen tells you to plug in your modem, use the instructions in the following Hardware Installation section.



Hardware Installation (Windows 2000)



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

1. Insert the flat rectangular end of the USB cable into the USB port on your computer. The figure below shows the basic cable connections.

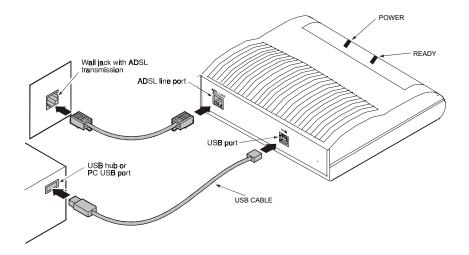


Figure 40. ADSL Modem Cable Connections

- 2. Insert the square end of the USB cable into the USB port of the ADSL modem. The green POWER LED indicates that it has been plugged in correctly and that the power is ON.
- 3. Plug a telephone cable into the ADSL/Line connector and into a standard RJ-11 telephone jack.
- 4. When the modem is physically connected, the Plug and Play program will recognize the USB modem and install the hardware drivers.



Figure 41





Figure 42

- 5. Click Finish.
- 6. The **Found New Hardware Wizard** screen informs you when the drivers have finished loading. The **System Settings Change** screen informs you that you must restart your computer for the new settings to take effect.

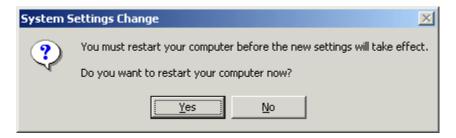


Figure 43

7. Click **Yes** to restart the computer.

After the computer restarts, you are ready to create a DSL dial-up connection.



Creating a Dial-Up Connection for Windows 2000

Use the following procedure to create your DSL dial-up connection on computers using the Windows 2000 operating system.

1. From your PC desktop, click Start > Settings > Control Panel.



Figure 44

2. On the Control Panel window, double-click the Network and Dial-Up Connections icon.

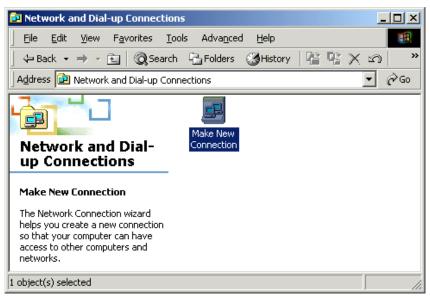


Figure 45



3. Double-click Make New Connection. The Network Connection Wizard opens.



Figure 46

4. Click Next.



5. The **Network Connection Type** screen appears. Click the option button for **Dial-up to private network** and click **Next**.

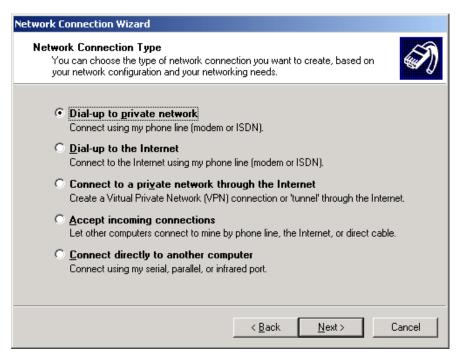


Figure 47

6. The **Phone Number to Dial** screen appears. In the **Phone number** field, type **0,38**. (Unless directed otherwise by your DSL provider). The **Country or region code** field is not required and can remain at the default setting. Click **Next**.

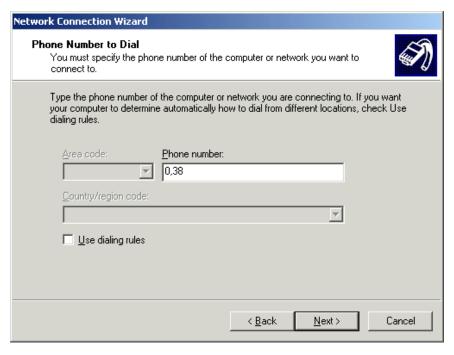


Figure 48



7. The Connection Availability screen appears.



Figure 49

8. Click the option button For all users. Click Next. The Completing the Network Connection Wizard opens.

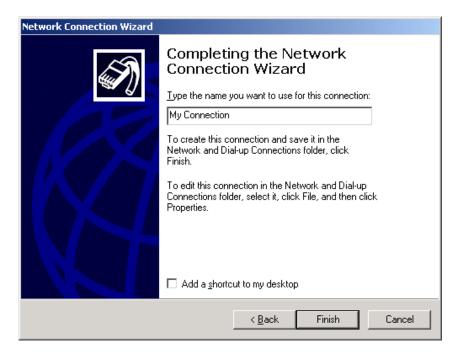


Figure 50

9. Type the name you want to use for this connection in the field provided. (Example, My Connection, My DSL, R305USB, etc.) Click **Finish**. (*Optional*. If you would like a connection icon placed on your desktop, check the box: **Add a shortcut to my desktop**.)



 A message informs you that a new Dial-Up Networking has been successfully created and displays the name of the connection.

You have successfully installed the Westell DSL modem hardware and software drivers.

Using Your Dial-Up Connection (Windows 2000)

To connect to the Internet with your new DSL dial-up connection, follow these steps:

If you created a desktop shortcut, you may double-click on it to start your DSL connection. Otherwise double-click My Computer icon from your desktop. Click Control Panel and then Network and Dial-Up Connections.

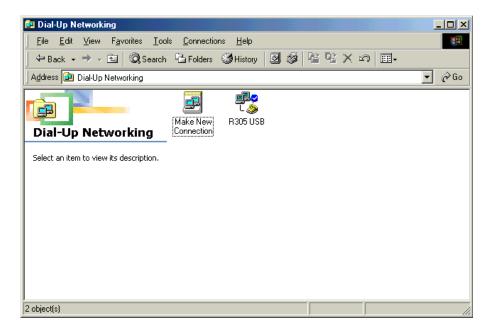


Figure 51



2. From the **Network and Dial-Up Connections** window, double-click the icon for the new connection you created. The **Connect Dial-up Connection** screen appears.

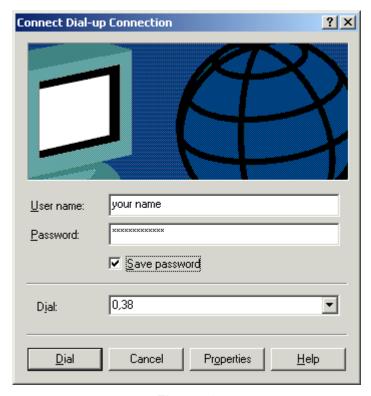


Figure 52

- 3. Type the **User name** and **Password** given to you by your service provider.
- 4. Click Dial.
- 5. The first time you use a new connection, the following screen may appear. Click **OK**.



Figure 53



6. A message box appears briefly indicating that user name and password verification are in progress.



Figure 54

7. A "connection" icon appears in the lower right-hand corner of your Task Bar at the bottom of your screen. Clicking on this icon opens a **Dial-up Connection Status** window.

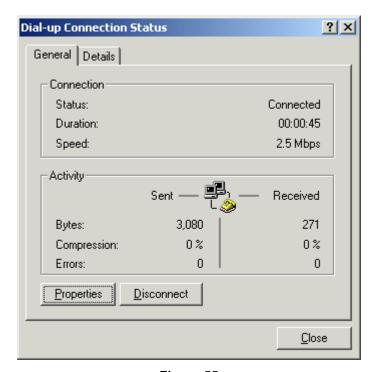


Figure 55

- 8. Click **Details** to view connection details.
- 9. Click **OK** to close this window or click **Disconnect** to end your DSL connection.



Uninstalling the USB Driver for Microsoft Windows 2000



The Westell USB driver and its components must be completely removed from the Windows operating system before attempting to reinstall the software. Use the following procedure for Windows 98.

Procedure:

1. From the desktop, click Start > Programs > Westell DSL Modem Driver > Uninstall. The DSL Modem Installer screen appears.



Figure 56

2. Click Remove.

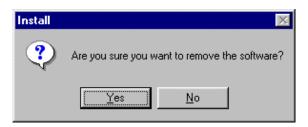


Figure 57

3. Click Yes to uninstall the software. The InstallShield Wizard appears.



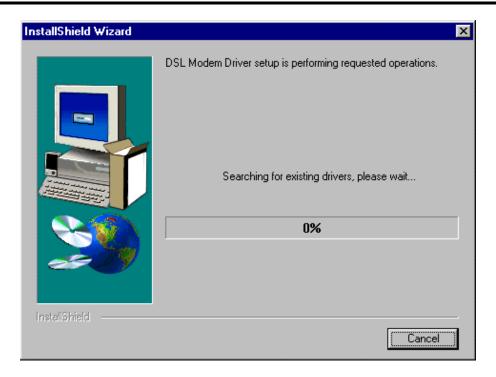


Figure 58

4. Wait for the **Setup Complete** screen to appear.

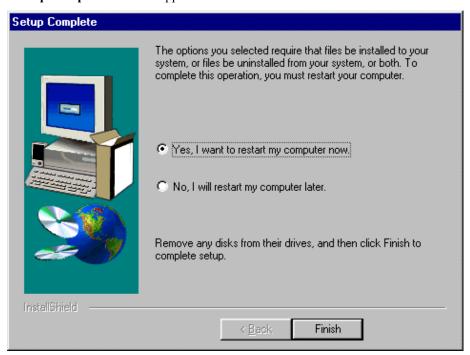


Figure 59

5. Select Yes, I want to restart my computer now and click Finish.





Figure 60

6. Click **Yes** to restart the PC. This completes the uninstall process for Windows 2000.



MACINTOSH INSTALLATION

Macintosh Software Installation Procedure



NOTE: For optimum performance of this product with all Internet applications, we recommend that your Macintosh computer be upgraded to OS9. This upgrade can be obtained through your local Macintosh reseller.

- 1. Verify that the modem is NOT connected to the PC.
- 2. Insert the Westell USB Installation CD-ROM into the CD-ROM drive. Click the Westell ADSL Installer icon.

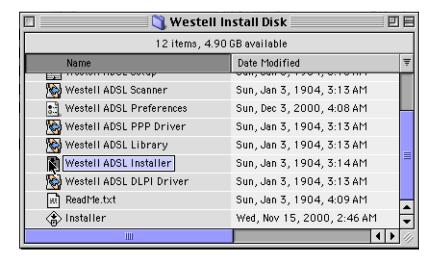


Figure 61

3. The welcome screen appears. Click **Continue**.

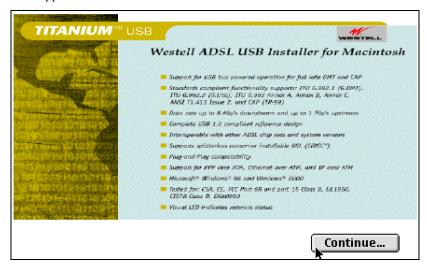


Figure 62. Welcome Screen



4. The following screen appears:

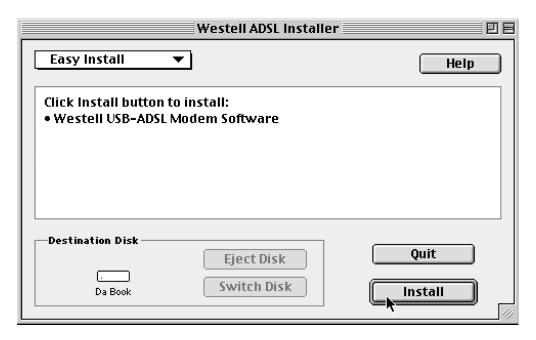


Figure 63

- 5. Choose **Easy Install** from the drop-down menu.
- 6. Click the **Install** button to begin installation. When finished, the **Install Successful** message appears.



Figure 64

7. Click **Quit**. Macintosh software driver installation is complete.



Creating a Dial-Up Connection for Macintosh

Use the following procedure to create your DSL dial-up connection on Macintosh computers.

Dial-Up Configuration (Macintosh)

- 1. The USB cable should NOT be connected to the computer.
- From your desktop, click the Apple menu icon, select the Control Panels folder, scroll down and open the Westell ADSL Setup folder.

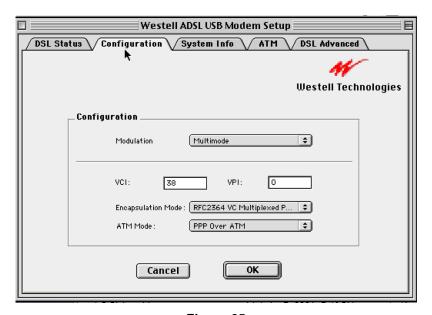


Figure 65

3. Verify that the Configuration tab shows the VPI/VCI default values below. Do not change these unless instructed to do so by your service provider.

Modulation: Multimode

VPI: **0** VCI: **38**

Encapsulation Mode: RFC-2364 Vcmultiplexed PPP

ATM Mode: **PPPoA**

- 4. Click **OK** and exit the Modem Setup window.
- 5. Connect your modem as instructed in the following section.



Macintosh Hardware Installation Cable Connections



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.

1. Insert the flat rectangular end of the USB cable into the USB port on your computer. The figure below shows the basic cable connections.

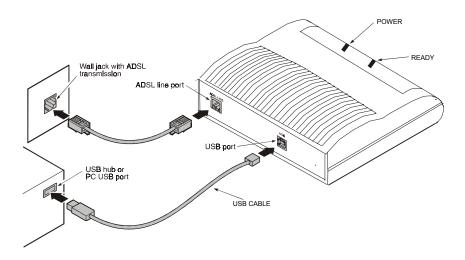


Figure 66. ADSL Modem Cable Connections

- 2. When instructed to do so by the installation process, insert the square end of the USB cable into the USB port of the ADSL modem. The green POWER LED indicates that it has been plugged in correctly and that the power is
- 3. Plug a telephone cable into the ADSL/Line connector and into a standard RJ-11 telephone jack.
- 4. When the modem is physically connected, the Plug and Play program will recognize the USB modem and install the hardware drivers.



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



Connecting to a Remote Network (Macintosh)

Follow these steps to set up your Macintosh to connect to a remote network using the USB modem:

1. From Control Panels, open the TCP/IP folder and select **PPP** from the **Connect via:** drop-down menu.

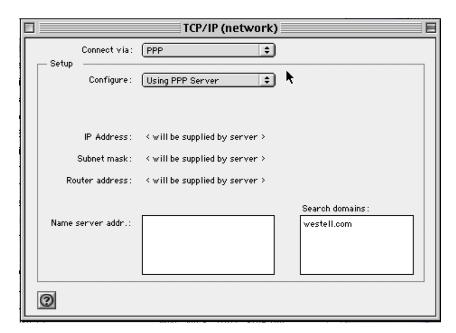


Figure 67

- 2. In the **Setup** section, users with dynamic IP assignments should select **Using PPP Server** from the **Configure:** drop-down menu. Users requiring static IP assignment setup should contact their service providers.
- 3. Close this window and Save.



4. From **Control Panel**, open the **Modem** folder and select **Westell ADSL USB Modem** from the **Connect via:** drop-down menu.

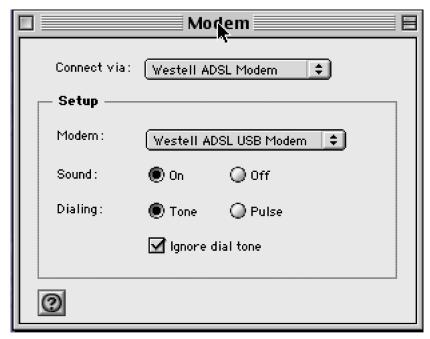


Figure 68

- 5. In the **Setup** section, select **Westell ADSL USB Modem** from the drop-down under **Modem:**.
- 6. Check the **Ignore dial tone** option button.
- 7. Close this window and Save.



Establishing a PPP Connection (Macintosh)

1. From **Control Panels**, open the **Remote Access** folder and enter the appropriate name and password given to you by your service provider.

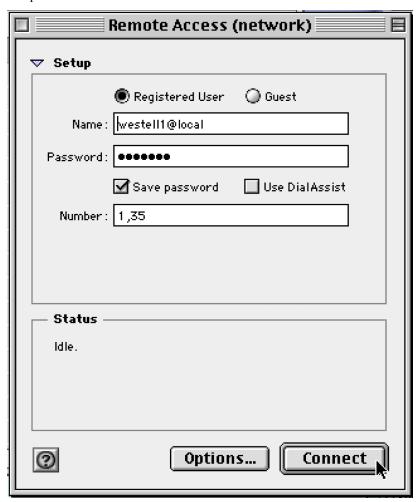


Figure 69

- 2. Leave the Number field blank on this screen.
- 3. Before connecting, click **Options...** to verify your protocol setup. The **Options** window opens.



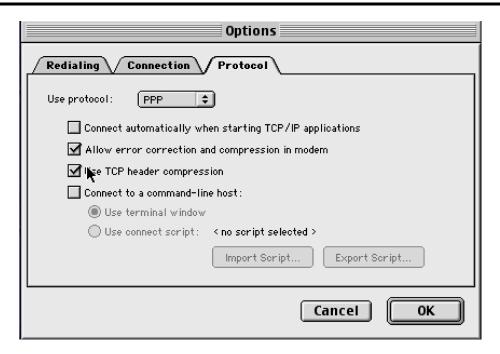


Figure 70

- 4. On the **Protocol** tab, make sure the **Use protocol:** drop-down box is set to **PPP**. Click **OK** to close the Options window and return to the **Remote Access** screen.
- 5. On the **Remote Access** screen, click **Connect** to start the connection process.
- 6. Start your web browser to verify the connection.



Uninstalling the USB Driver for Macintosh



The Westell USB driver and its components must be completely removed from the operating system before attempting to reinstall the software. Use the following procedure for Macintosh.

Procedure:

- 1. Verify that the modem is NOT connected to the computer.
- 2. Insert the Westell USB Installation CD-ROM into the CD-ROM drive. The program will start automatically and display the Westell Install Disk screen. Click the **Westell ADSL Installer** icon.

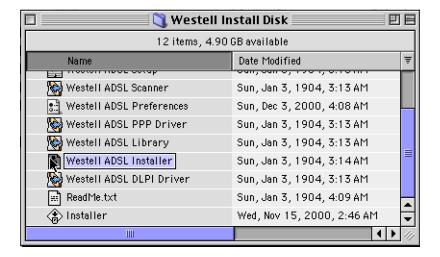


Figure 71

3. The welcome screen appears. Click **Continue**.

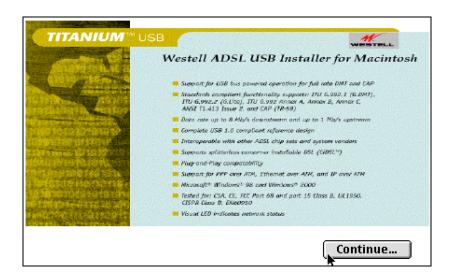


Figure 72



4. The following screen appears:



Figure 73

- 5. Choose **Custom Remove** from the drop-down menu.
- 6. Click the **Install** button to begin uninstallation.
- 7. The **Removal Successful** screen appears.

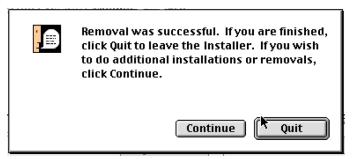


Figure 74

8. Click **Quit**. The removal process for Macintosh is complete.



MONITORING WINDOWS PERFORMANCE

For Windows operating systems, the Westell WireSpeed™ USB Modem control panel program provides an easy way to view modem performance and ADSL connection status for technical support personnel. To access the control panel, an ADSL connection must be established with your service provider.



NOTE: This control panel provides reference information is used for troubleshooting and advanced service provider information. Unless otherwise specified by your service provider, do not alter the values in these control panels. Changes to this information could disrupt your service.

Procedure

Use the following procedure to view this information:

- 1. Click on the small DSL "globe" icon in the status bar. (Lower right corner of the screen.)
- 2. The Westell DSL Modem window, Physical Link Status tab appears.

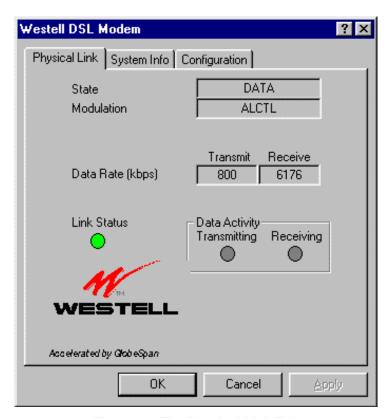


Figure 75. The Physical Link Tab

- 3. The **Physical Link Status** tab displays the current state and connection of the modem. When the green **Link Status** indicator light flashes, it indicates that a connection is being established. When this indicator is ON, it indicates that a connection has been made.
- 4. In the Data Activity box, the two yellow indicators flash when data is being transmitted or received.



5. Click the **Configuration** tab.

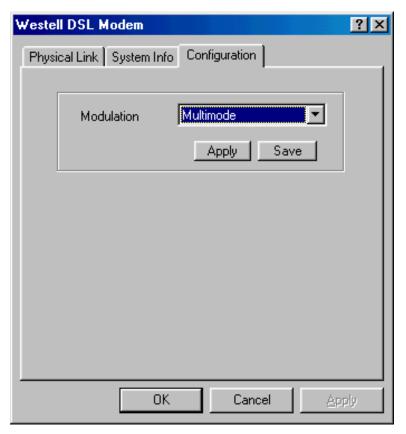


Figure 76. The Configuration Tab

6. Make sure the Modulation drop-down box is set to **Multimode**.



- 7. Click the **System Information** tab to display the following information:
 - Driver Release Number
 - Firmware Release Number
 - Control Panel Version

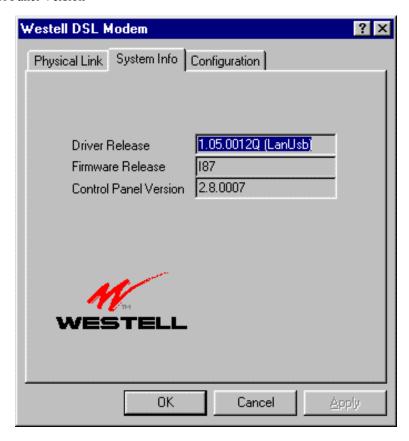


Figure 77. The System Info Tab



MONITORING MACINTOSH PERFORMANCE

For Macintosh operating systems, the Westell ADSL Setup program provides an easy way to view modem performance and ADSL connection status for technical support personnel. To access the control panel, an ADSL connection must be established with your service provider.



NOTE: These screens provide reference information is used for troubleshooting and advanced service provider information. Unless otherwise specified by your service provider, do not alter the values in these control panels. Changes to this information could disrupt your service.

Procedure

Use the following procedure to view this information:

- From your desktop, click the Apple menu icon. Select the Control Panels folder, scroll down and open the Westell ADSL Setup folder.
- 2. The Westell DSL Modem Setup window opens.
- 3. The DSL operational state can be verified on the **DSL Status** tab. **Note:** If synchronization takes too long, click **Disconnect**, then click **Retrain**.

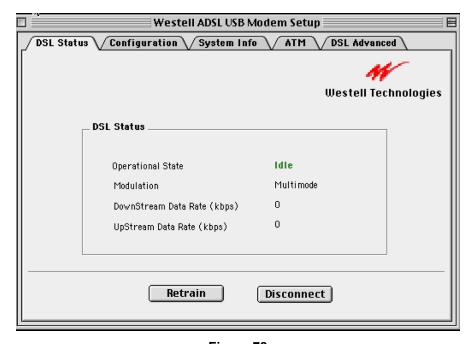


Figure 78

Additional diagnostic information is available on the System Info, ATM, and DSL Advanced tabs.



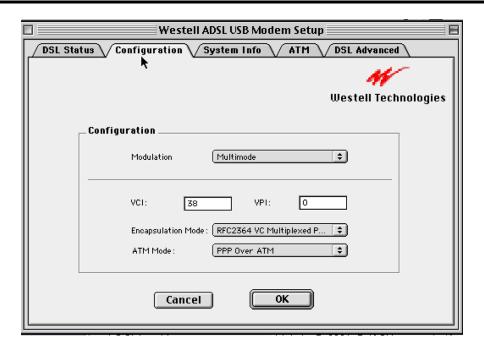


Figure 79. The Configuration Tab

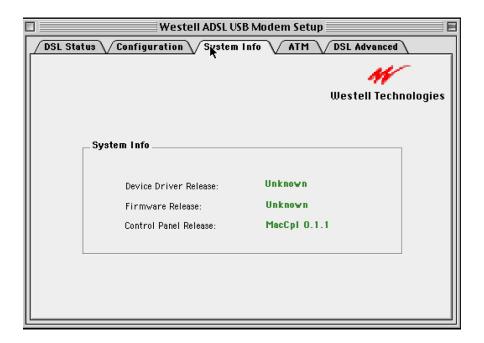


Figure 80. The System Info Tab



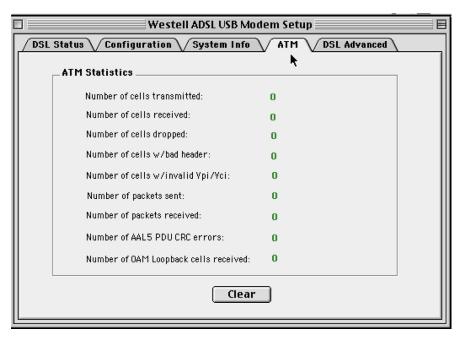


Figure 81. The ATM Tab

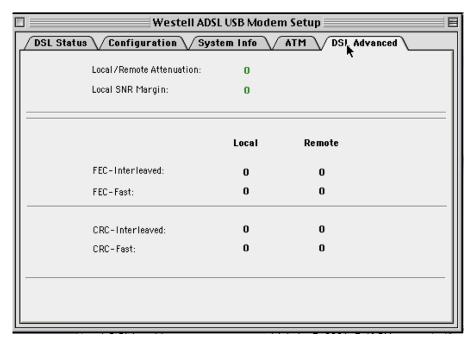


Figure 82. DSL Advanced Tab



PRODUCT ASSISTANCE AND GENERAL INQUIRIES

Product Return

Please contact your service provider for product assistance and general inquiries regarding the setup and operation of the modem.



PRODUCT SPECIFICATIONS

DIMENSIONS

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

WEIGHT

Approx. 2.30 lbs (1.04 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



REGULATORY INFORMATION

FCC COMPLIANCE NOTE

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Power the equipment from an outlet on a circuit other than circuit powering the receiver
- Consult the dealer or an experienced radio/TV technician for help.

PART 68 – EQUIPMENT REGISTRATION

This equipment (ADSL modem) also complies with Part 68 of the FCC rules. A label on the bottom of this equipment contains, among other information, the FCC registration number and ringer equivalence number (REN) for this equipment. If requested, this information must be provided to the telephone company.

This equipment is designated to be connected to the telephone network or premises wiring using a compatible modular jack which is Part 68 compliant. An FCC compliant telephone cord and modular plug is provided with the equipment. See the installation instructions for details.

If this terminal equipment (ADSL modem) causes harm to the telephone network, the telephone company may request that you disconnect the equipment until the problem is resolved. The telephone company will notify you in advance if temporary discontinuance of service is required. If advance notification is not practical, the telephone company will notify the customer as soon as possible. You will be advised of your right to file a complaint with the FCC, if you believe such action is necessary.

The telephone company may make changes to their facilities, equipment, operations, or procedures that could affect the operation of this equipment. If this happens, the telephone company will provide advance notice in order for you to make the modifications necessary to maintain uninterrupted service.

If you experience trouble with this equipment (ADSL modem), do not try to repair the equipment yourself. The equipment cannot be repaired in the field and must be returned to the manufacturer. For instructions on product return contact your service provider.

This equipment cannot be used on public coin phone service provided by the telephone company. Connection of this equipment to party line service is subject to state tariffs.

CANADA CERTIFICATION NOTICE

The Industry Canada label identifies certified equipment. This certification means that the equipment meets certain telecommunications network protective, operational and safety requirements as prescribed in the appropriate Terminal Equipment Technical Requirements document(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 may 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.



A CAUTION

Users should not attempt to make such connections themselves, but should contact the appropriate electrical inspection authority, or electrician, as appropriate.

Publication



Westell Bus-Powered USB ADSL Modem Installation and User Guide Part 030-300118 Rev. D **Bus Powered USB ADSL Modem** Model B90-36R305 Revised February, 2001

© 2001, Westell, Inc.

All rights reserved. Printed in USA.

Westell, Inc.

750 North Commons Drive Aurora, Illinois 60504 USA

Web site: www.westell.com

Trademarks

WireSpeed™ is a trademark of Westell, Inc. All other trademarks are owned by the respective companies