



WESTELL

WIRE SPEED

DUAL CONNECT MODEM (MODEL 2110)

USER GUIDE

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1. PRODUCT DESCRIPTION

Westell's WireSpeed™ Dual Connect Modem adds reliable, high-speed, Internet access to your existing home or office phone line. Your ADSL connection is "always-on" ending the hassles of dial-up modems and busy signals. Installation is easy ... no tools ... no headaches. Simply plug the modem into the 10/100 Base-T or USB port of your PC, apply power, perform the simple software configuration, and connect your ADSL phone line to the modem.

This modem is capable of data rates hundreds of times faster than a traditional analog modem. But unlike analog modems, Westell's WireSpeed Dual Connect Modem allows you to use the same phone line for simultaneous voice/fax communications and high-speed Internet access, eliminating the need for dedicated phone lines for voice and data needs. The Plug and Play feature means that no user configuration is required.

2. SAFETY INSTRUCTIONS

Never install any telephone wiring during a lightning storm.

Never install telephone jacks in wet locations unless the jack is specifically designed for wet locations.

Never touch non-insulated telephone wires or terminals unless the telephone line has been disconnected at the network interface.

Use caution when installing or modifying telephone lines.



WARNING



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

3. REGULATORY INFORMATION

3.1 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 the receiver.
- Connect the equipment to a different circuit from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

PART 68 - COMPLIANCE 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 connect to the telephone network or premises wiring using a compatible modular jack that 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 (Dual Connect modem), do not try to repair the equipment yourself. The equipment cannot be repaired in the field and must be returned to the manufacturer. Contact Westell Technical Support at telephone no. (630) 375-4500 for instructions on product return.

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.

3.2 Canada Certification Notice

The Industry Canada label identifies certified equipment. This certification means that the equipment meets certain telecommunications network protective, operations 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 Telecommunication 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, and 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.



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

4. SYSTEM REQUIREMENTS

4.1 Minimum System Requirements for USB Installation

The following system specifications are required for optimum performance of the WireSpeed Dual Connect modem via USB installation:

- Pentium or equivalent and above class machines
- Microsoft Windows 98SE, ME, 98FE, 2000, or XP installed
- Computer Operating System CD-ROM on hand
- Internet Explorer 4.x or Netscape Navigator 4.x or higher
- 32 MB RAM
- 10 MB of free hard drive space
- USB Version 1.0 or 1.1 compliant bus

4.2 Minimum System Requirements for 10/100 Base-T/Ethernet Installation

The following system specifications are required for optimum performance of the WireSpeed Dual Connect modem via 10/100 Base-T installation:

- Pentium or equivalent and above class machines
- Microsoft Windows 95, 98, NT 4.0, 2000, or XP installed
- Computer Operating System CD-ROM on hand
- 32 MB RAM
- Ethernet 10/100 Base-T interface
- 10 MB of free hard drive space
- TCP/IP Protocol stack installed

5. INSTALLATION INFORMATION

5.1 Installation Requirements

To install the Westell Dual Connect modem, you will need the following:

1. An Ethernet adapter installed in your PC or a USB adapter installed in your PC.
2. A DSL-ready line (provided by your Service Provider).

5.2 Package Contents

- WireSpeed Dual Connect Modem
- Power Supply
- RJ-45 Ethernet cable (straight-through)
- USB cable
- RJ-11 DSL Phone cable
- Westell CD-ROM containing USB software drivers and User Guide in .PDF format
- Quick Start Guide

5.3 Microfilters

ADSL signals must be blocked from reaching each telephone, answering machine, fax machine, computer modem or any similar conventional device. Failure to do so may degrade telephone voice quality and ADSL performance. Install a microfilter if you desire to use the DSL-equipped line jack for telephone, answering machine, fax machine or other telephone device connections. Microfilter installation requires no tools or telephone rewiring. Just unplug the telephone device from the baseboard or wall mount and snap in a microfilter, next snap in the telephone device. Contact Westell to obtain a microfilter kit, which contains multiple microfilters for your installation.

5.4 LED Indicators

The LED indicators are used to verify the unit's operation and status. LED states are described in Table 1.

Table 1. LED States and Descriptions

LED	State	Description
POWER	Solid Green	Power ON
	No Light	No Power
READY	Slow Flashing Green	Power ON and passed power-up diagnostics (1 flash/sec)
	Moderate Flashing Green	Power ON and attempting synchronization (2 flashes/sec)
	Steady Green	Power ON and synchronized with ADSL line card
	Steady Red (less than 20 sec.)	Hardware power-up in process
	Blinking Red	Unit failed power-up diagnostic
	Alternating Red/Green	Modem diagnostic failed
	No Light	No Power
ETHERNET	Solid Green	Ethernet link established
	Flashing Green	Transmit or Receive Activity
	No Light	No link established
USB	Solid Green	USB link established
	Flashing Green	Transmit or Receive Activity
	No Light	No USB Activity

5.5 Cable Connectors and Pinouts

The following items are located on the rear panel of the modem. See Figure 1. Tables 2 through 5 list the connector types and pinout designations.

- DSL (LINE) Connector (RJ-11)
- USB Connector
- Power Connector (Barrel)
- Ethernet Connector (RJ-45)

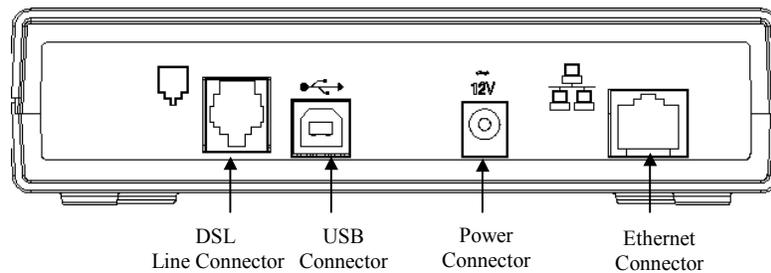


Figure 1. Dual Connect Modem Rear Panel

Table 2. Connectors

SYMBOL	NAME	TYPE	FUNCTION
	DSL	6-pin RJ-11 dual modular jack	Connects to an ADSL-equipped telephone jack or DSL connection of a POTS splitter.
	USB	4-pin USB Series B connector	Connects the USB device to the PC.
	Power	Barrel connector	Power source.
	Ethernet	8-pin (RJ-45) modular jack	Connects the Ethernet device to the PC.

Table 3. DSL Pinouts

Pinout	Description
1, 2, 5, 6	Not Used
3	DSL Tip
4	DSL Ring

Table 4. USB Series B Connector Pinouts

Pin	Name	Description	Cable Color
1	VBUS/Vcc	5 Vdc	Red
2	D –	Data –	White
3	D +	Data +	Green
4	GND	Ground	Black

Table 5. Ethernet Pinouts

Pinout	Description
1	Rx+
2	Rx-
3	Tx+
4,5,7,8	Not Used
6	Tx-

5.6 Modem Installations

This section explains the procedures for installing Westell’s WireSpeed Dual Connect modem via USB connections or via 10/100 Base-T/Ethernet connections.



Note: This product supports simultaneous use of Ethernet and USB ports. They may be connected simultaneously if you are using two distinct IP addresses. Please wait until you have received notification from your Service Provider that your DSL line has been activated before installing your modem.

Note: If you are using a Westell ADSL modem in conjunction with a router, refer to the router manufacturer’s instructions for proper installation and configuration.

5.6.1 Modem Installation via USB

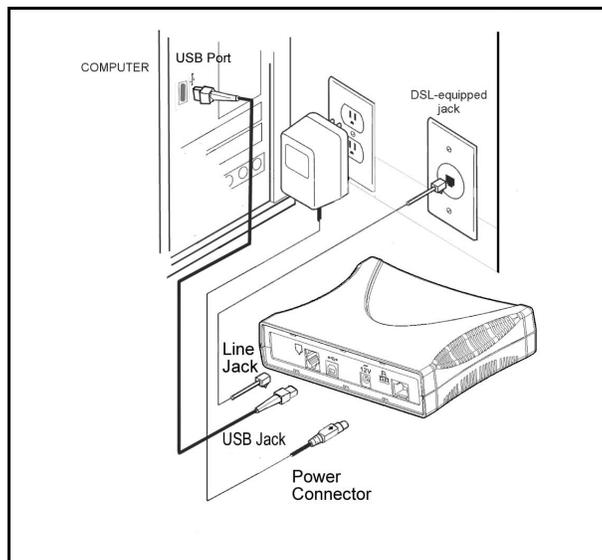


Figure 2. Modem Connection via USB

Refer to Figure 2.

1. Place the modem on a flat surface that is near the PC.
2. Connect the power supply cord to the power connector marked **12V** on the rear panel of the modem. Plug the other end of the power supply cord into an AC wall socket.

3. Connect the DSL phone cable from the connector marked  on the rear panel of the modem marked to the DSL-equipped telephone line jack on the wall. **IMPORTANT:** Do not use a DSL filter on this connection. You must use the phone cord that was provided with the modem kit.
4. Connect the USB cable from the USB connector marked  on the rear panel of the modem to the USB port on the PC.



Note: When changing the modem between multiple computers with different operating systems or when upgrading the computer attached to the modem, the power must be cycled on the modem.

5.6.2 Modem Installation via 10/100 Base-T/Ethernet



Note: Before you connect the modem via 10/100 Base-T, you must have an available Ethernet card installed in your computer. If your Ethernet card does not auto-negotiate, you must set it to half duplex. Refer to the Ethernet card manufacturer's instructions for installing and configuring your Ethernet card.

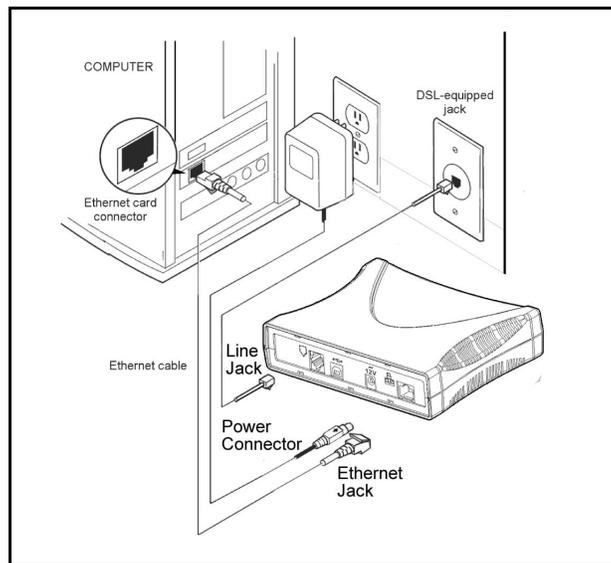


Figure 3. Modem Connection via 10/100 -Base-T/Ethernet

Refer to Figure 3.

1. Verify that you have an available Ethernet card. **Note:** See the above caution box.
2. Connect the power supply cord to the power connector marked  **12V** on the rear panel of the modem. Plug the other end of the power supply cord into an AC wall socket.
3. Connect the DSL phone cable from the jack on the rear panel of the modem marked  to the DSL-equipped telephone line jack on the wall. **IMPORTANT:** Do not use a DSL filter on this connection. You must use the phone cord that was provided with the modem kit.
4. Connect the Ethernet cable from the Ethernet jack marked  on the rear panel of the modem to the Ethernet port on your computer.

6. INSTALLING USB DRIVERS

The Microsoft Plug & Play auto-detect feature recognizes when new hardware has been installed. After you connect the Westell WireSpeed Dual Connect Modem to the PC, it will be detected automatically.

6.1 Westell CD-ROM Installation:

1. Place the Westell CD-ROM that you received in the modem kit into the appropriate drive.
2. Verify the connection to the computer by observing the state of the Link LED. The LED will not light until all drivers have been installed. (**Note:** This applies to all operating systems.) The Link LED should report solid green indicating a USB connection has been established. (**Note:** LED states are explained in Table 1.)

6.2 Installing the USB Drivers for Windows 98SE

1. After you have connected the Westell Dual Connect Modem to your PC, the **Found New Hardware** window appears (Figure 4). In a few moments, the **Add New Hardware Wizard** window will open (Figure 5). Click **Next**.

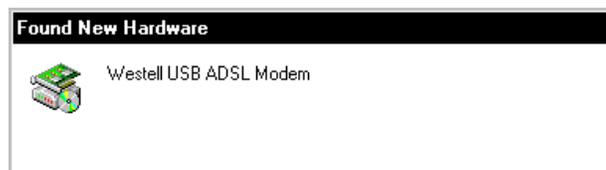


Figure 4. Windows 98SE

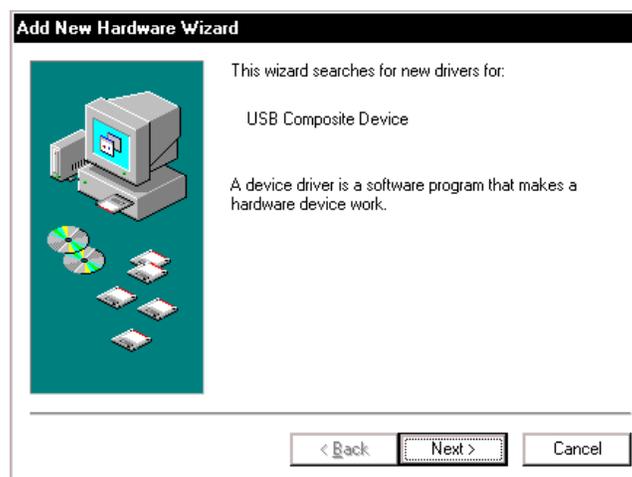


Figure 5. Add New Hardware

2. **Windows 98SE:** Click the option button for **Search for the best driver for your device. (Recommended)**. See Figure 6. Click **Next**.

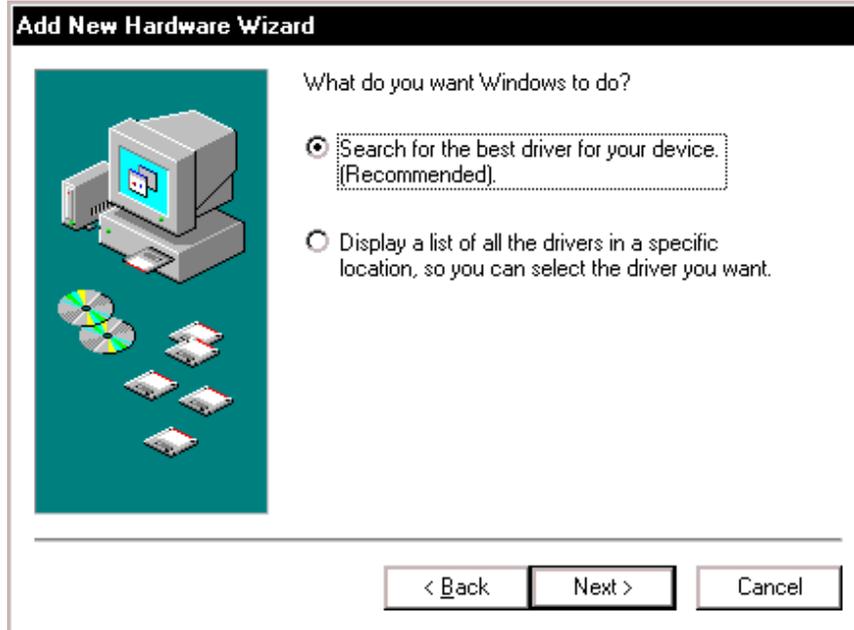


Figure 6. Windows 98SE

3. **Windows 98SE:** Select **CD-ROM drive** option. See Figure 7. Click **Next**. Windows will search for the driver.

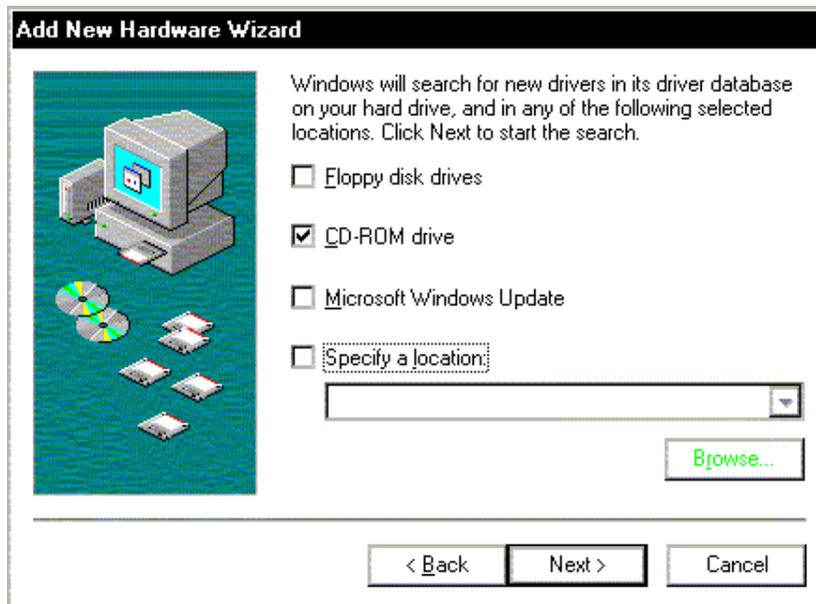


Figure 7. Windows 98

4. **Windows 98SE:** Select option button **The updated driver (Recommended) Westell T1AR5 ADSL USB Modem**. See Figure 8. Click **Next**.

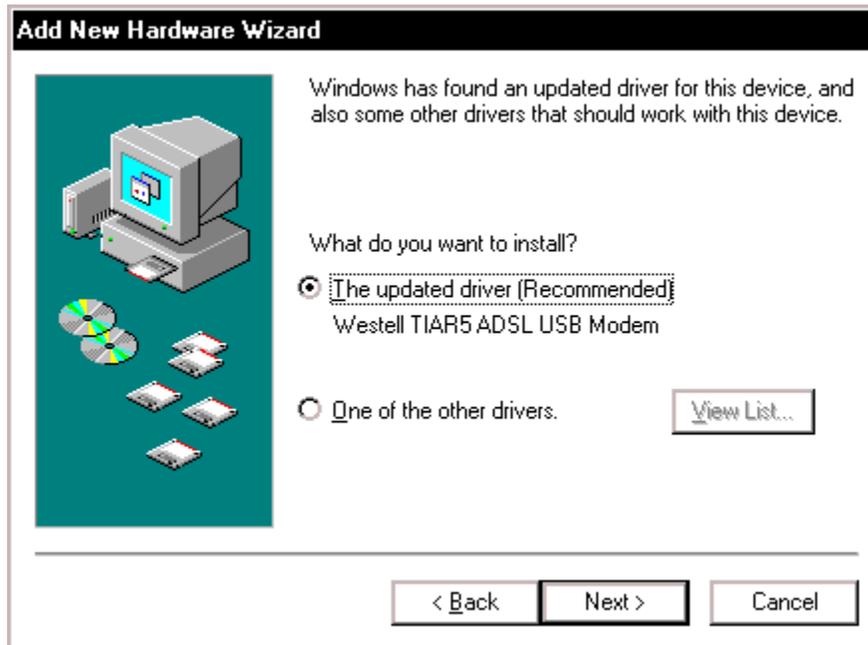


Figure 8. Location of Hardware Device Driver

5. **Windows 98SE:** Windows will display the location of the driver. See Figure 9. Click **Next**.
Note: The drive “letter” may vary.

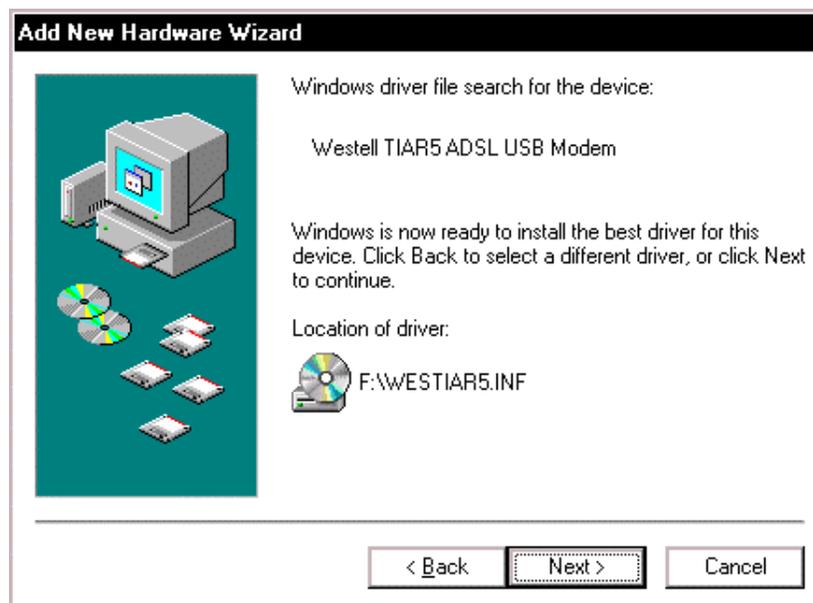


Figure 9. Loading Device Driver

6. **Windows 98SE:** Remove the Westell CD from the CD-ROM Drive. Next, insert the Windows operating system CD into the CD-ROM Drive. See Figure 10. Click **OK**.



Figure 10. Insert Windows Operating System CD

- 7. **Windows 98SE:** The system will begin copying files (Figure 11).

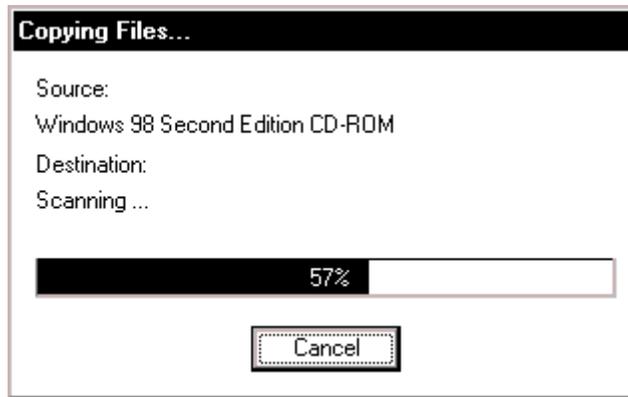


Figure 11. Copying Files

- 8. **Windows 98SE:** This window may or may not appear as some 'CAB' files are stored on hard disk (Figure 12).

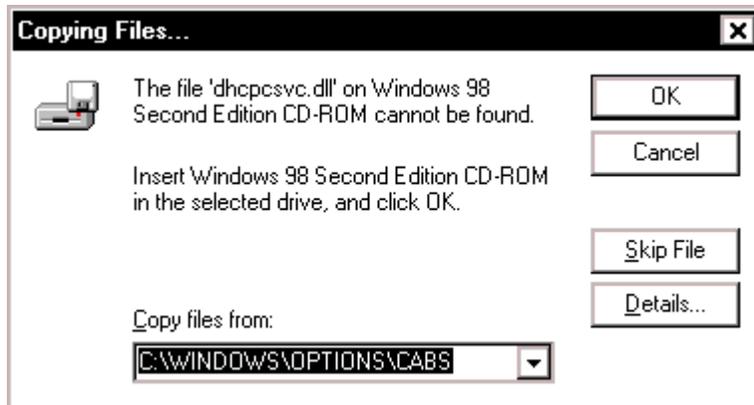


Figure 12. Windows 98SE

- 9. **Windows 98SE:** The window below confirms that the PC has finished loading the drivers (Figure 13). Click **Finish**.

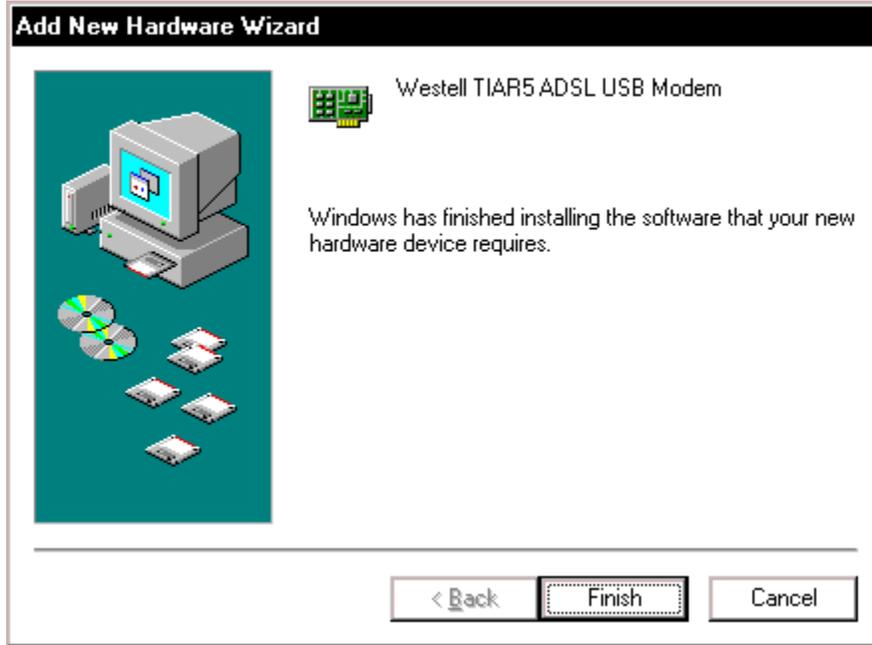


Figure 13. Windows 98SE

10. **Windows 98SE:** Click **Yes** to restart your computer. See Figure 14.

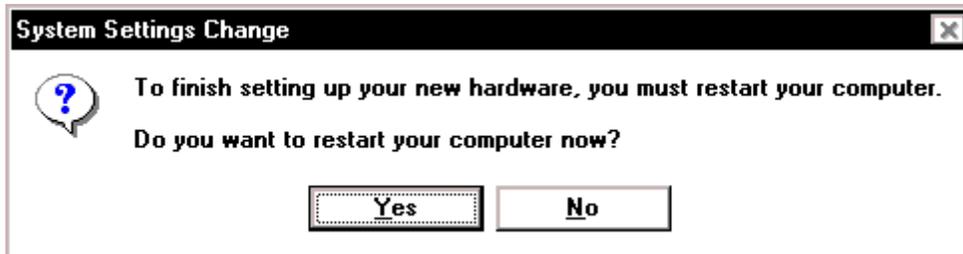


Figure 14. Restart the Computer

After the computer has restarted, the modem is ready for use. Refer to the Internet Service Provider (ISP) installation manual to install the software required for your Internet connection.

6.3 Installing the USB Drivers for Windows 98ME

1. **Windows 98ME:** After you have connected the Dual Connect Modem to your PC, the **Found New Hardware** window appears (Figure 15). In a few moments, the **Add New Hardware Wizard** window appears (Figure 16). Click the option button for **Automatic search for a better driver (Recommended)**. Click **Next**.

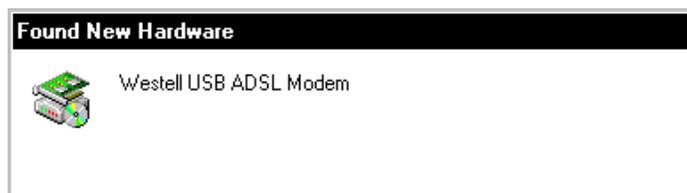


Figure 15. Windows 98ME

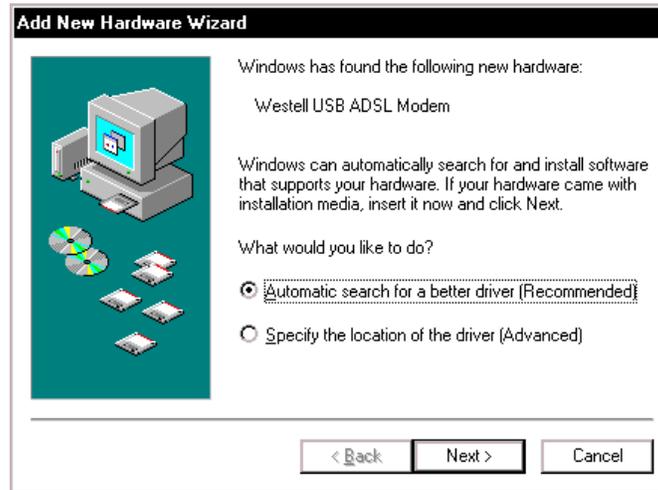


Figure 16. Windows 98ME

2. **Windows 98ME:** Windows will display the location of the driver. See Figure 17. Click **Next**.



Figure 17. Location of Hardware Device Driver

3. **Windows 98ME:** The window below confirms that the PC has finished loading the drivers. See Figure 18. Click **Finish**.



Figure 18. Found New Hardware

4. **Windows 98ME:** When the **System Settings Change** screen appears, the USB drivers are installed properly. See Figure 19. Click **Yes**.

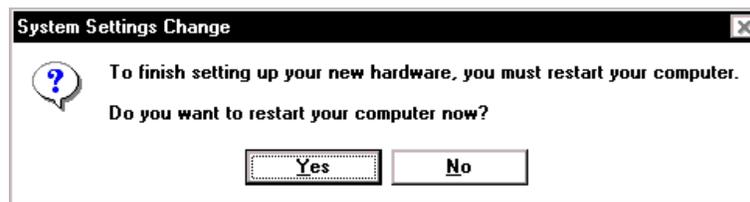


Figure 19. Restart the Computer

After the computer has restarted, the modem is ready for use. Refer to the Internet Service Provider (ISP) installation manual to install the software required for your Internet connection.

6.4 Installing the USB Driver for Windows 2000

1. After you have connected the Westell Dual Connect Modem to your PC, the **Found New Hardware** window appears (Figure 20). In a few moments, the **Found New Hardware Wizard** window appears (Figure 21). Click **Next**.

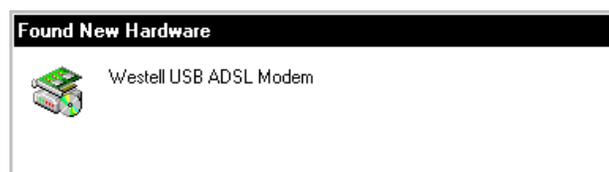


Figure 20. Found New Hardware



Figure 21. Welcome to Install Device Driver

2. **Windows 2000:** The **Install Hardware Device Drivers** window appears. Select **Search for a suitable driver for my device (recommended)** See Figure 22. Click **Next**.



Figure 22. Search for Device Driver

3. **Windows 2000:** The **Locate Driver Files** window appears. Select the **CD-ROM drives** option (Figure 23). Click **Next**.

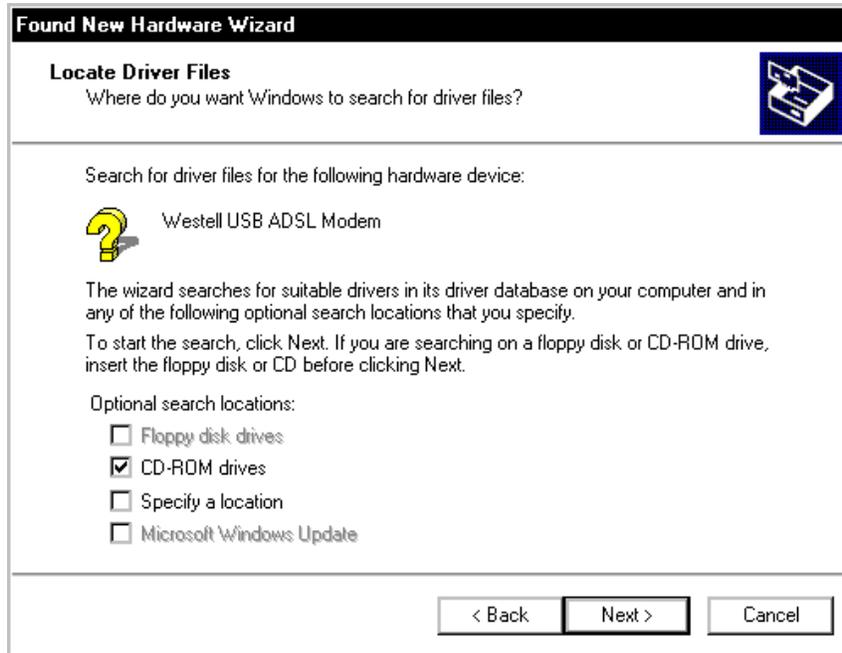


Figure 23. Locate Driver Files

4. **Windows 2000:** The **Driver Files Search Results** window appears (Figure 24). Click **Next**.
Note: The drive "letter" may vary.

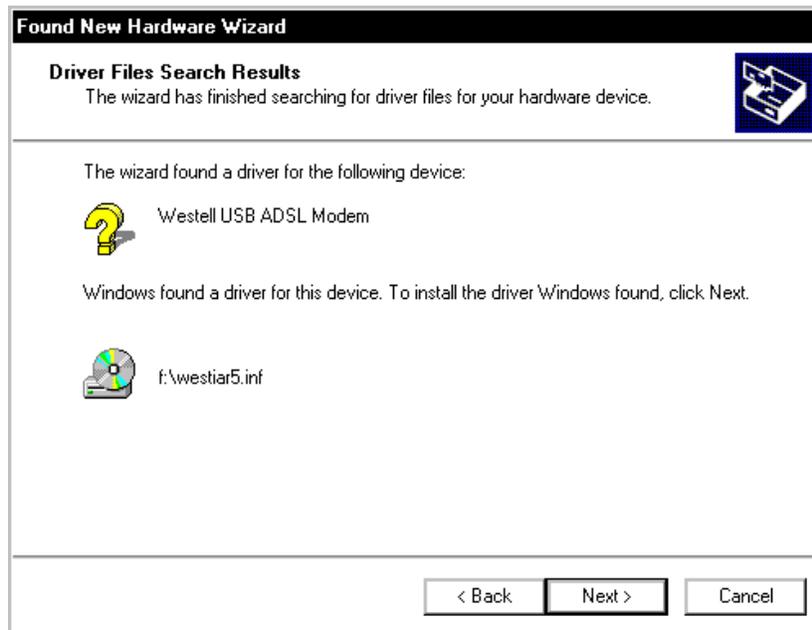


Figure 24. Driver Files Search Results

5. **Windows 2000:** The modem software does not have a digital signature (Figure 25). Click **Yes**.

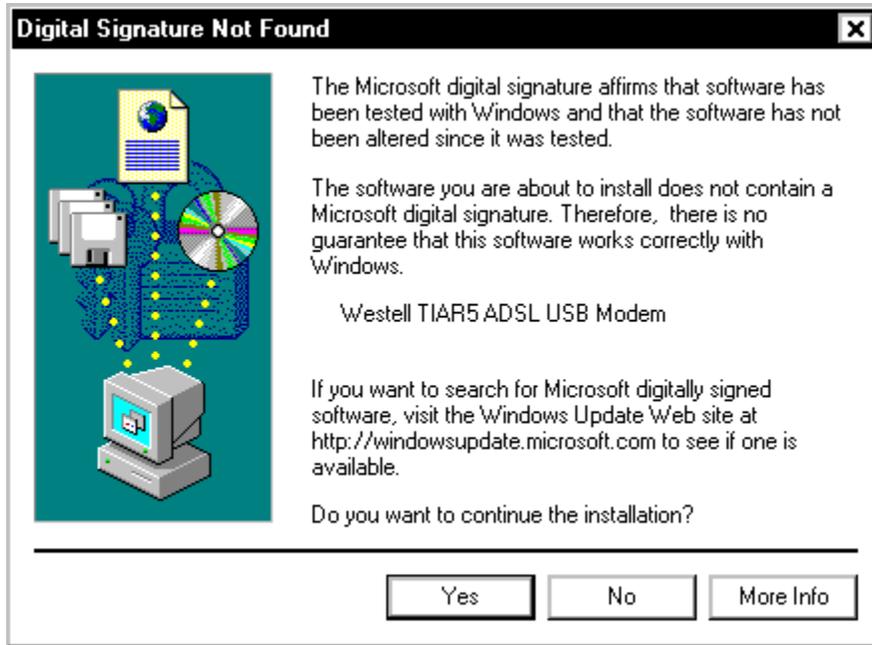


Figure 25. Search for Digital Signature

6. **Windows 2000:** The window below confirms that the PC has finished loading the drivers (Figure 26). Click **Finish**.



Figure 26. Drivers Loaded

7. **Windows 2000:** When the **System Settings Change** screen appears, the USB drivers are installed properly. See Figure 27. Click **Yes**.

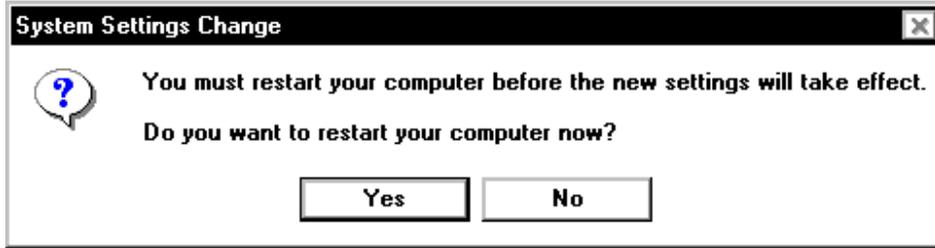


Figure 27. Restart Your Computer

After your computer has restarted, the modem is ready for use. Refer to the Internet Service Provider (ISP) installation manual to install the software required for your Internet connection.

6.5 Installing the USB Driver for Windows 98FE

1. After you have connected the Westell Dual Connect Modem to your PC, the **Found New Hardware** window appears (Figure 28). In a few moments, the **Add New Hardware Wizard** window will open (Figure 29). Click **Next**.

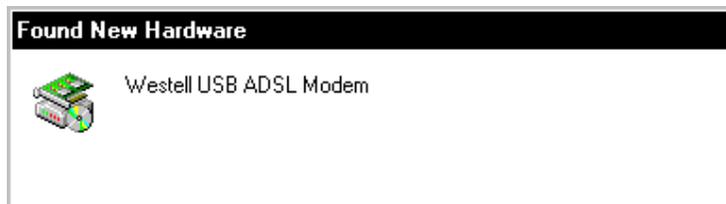


Figure 28. Windows 98FE

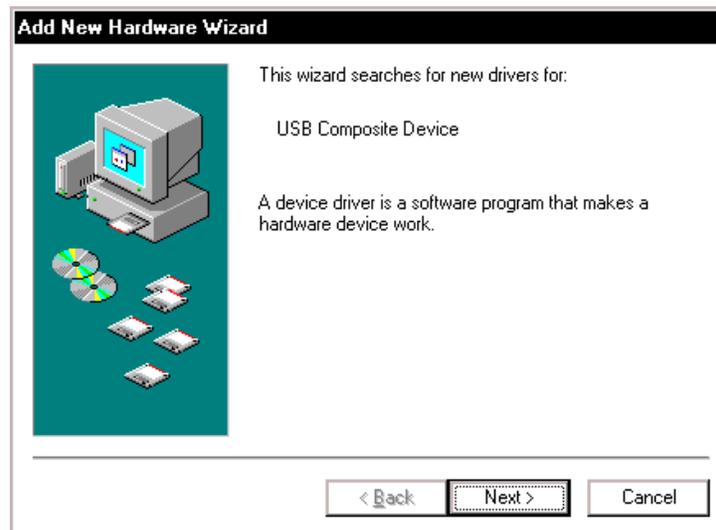


Figure 29. Windows 98FE

2. **Windows 98FE**: Select **Search for a suitable driver for my device (recommended)**. See Figure 30. Click **Next**.

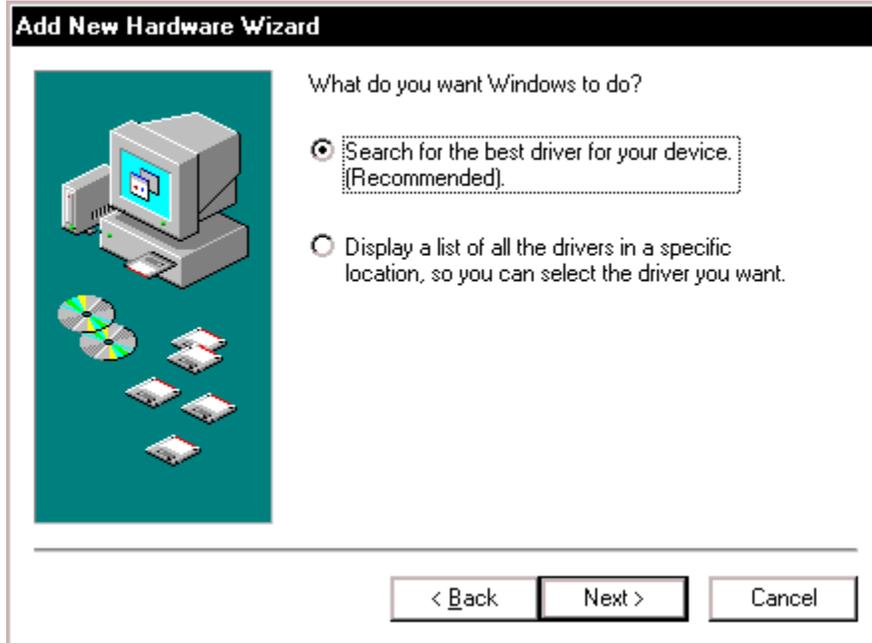


Figure 30. Search for Device Driver

3. **Windows 98FE:** Select the **CD-ROM drive** option button (Figure 31). Click **Next**.



Figure 31. Select CD-ROM drive

4. **Windows 98FE:** Select **The updated driver (Recommended) Westell TIAR5 ADSL USB Modem**. See Figure 32. Click **Next**.

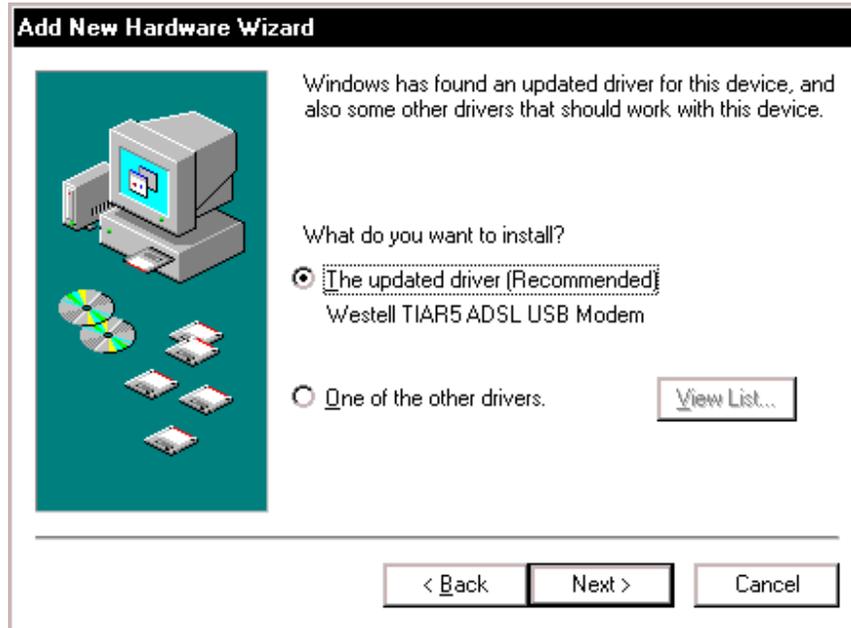


Figure 32. Select the Updated Driver

5. **Windows 98FE:** Windows will display the location of the driver (Figure 33). Click **Next**.
Note: The drive “letter” may vary.

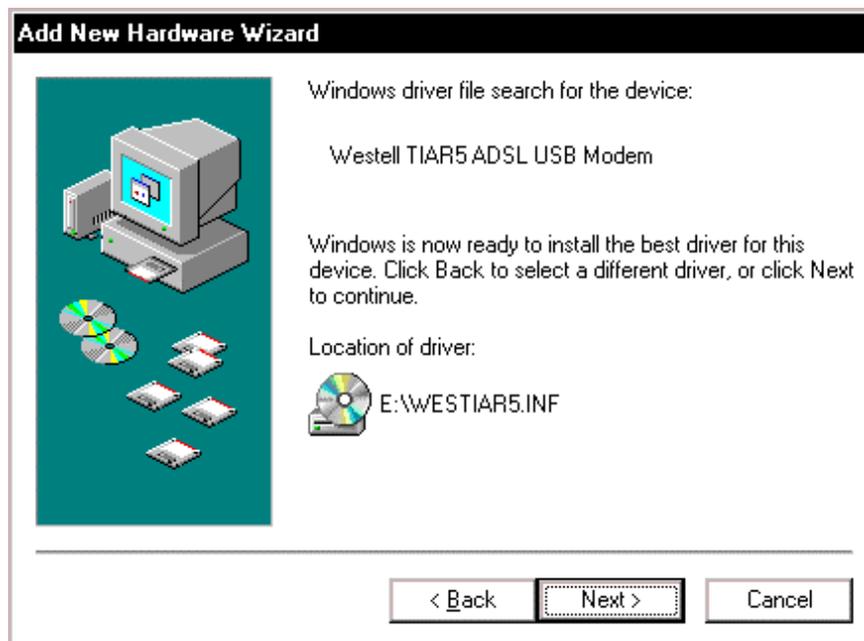


Figure 33. Location of Hardware Device Driver

6. **Windows 98FE:** Remove the Westell CD from the CD-ROM Drive. Next, insert the Windows operating system CD into the CD-ROM Drive. See Figure 34. Click **OK**.



Figure 34. Insert Disk

7. **Windows 98FE:** The system will begin copying files (Figure 35).

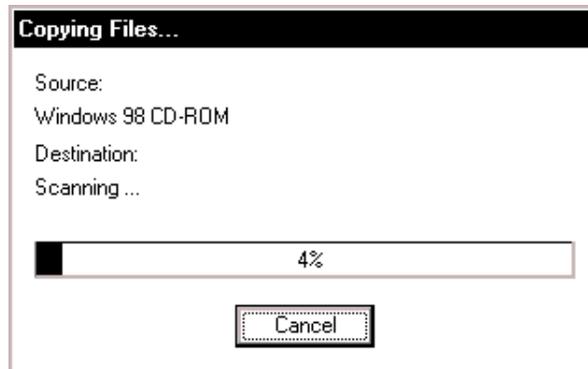


Figure 35. Copying Files

8. **Windows 98FE:** The window below confirms that the PC has finished loading the drivers (Figure 36). Click **Finish**.



Figure 36. Windows 98FE

9. **Windows 98FE:** Click **Yes** to restart your computer (Figure 37).

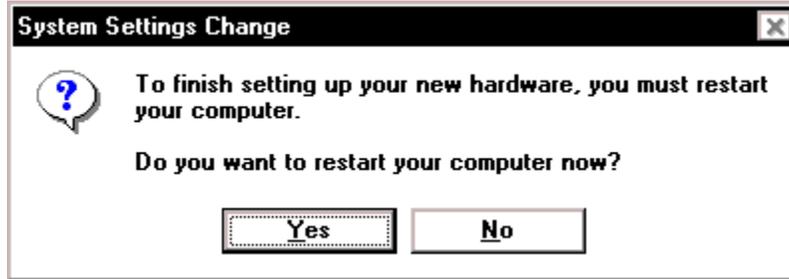


Figure 37. Restart Your Computer

After the computer has restarted, the modem is ready for use. Refer to the Internet Service Provider (ISP) installation manual to install the software required for your Internet connection.

6.6 Installing the USB Driver for Windows XP

1. After you have connected the Westell Dual Connect Modem to your PC, the **Found New Hardware** window appears (Figure 38). In a few moments, the **Found New Hardware Wizard** window will open. Select option button **Install from a list or specific location (Advanced)**. See Figure 39. Click **Next**.



Figure 38. Windows XP



Figure 39. Windows XP

2. **Windows XP:** Click the option button for **Search for the best driver in these locations**. Select **Search removable media (floppy, CD-ROM...)**. See Figure 9. Click **Next**.

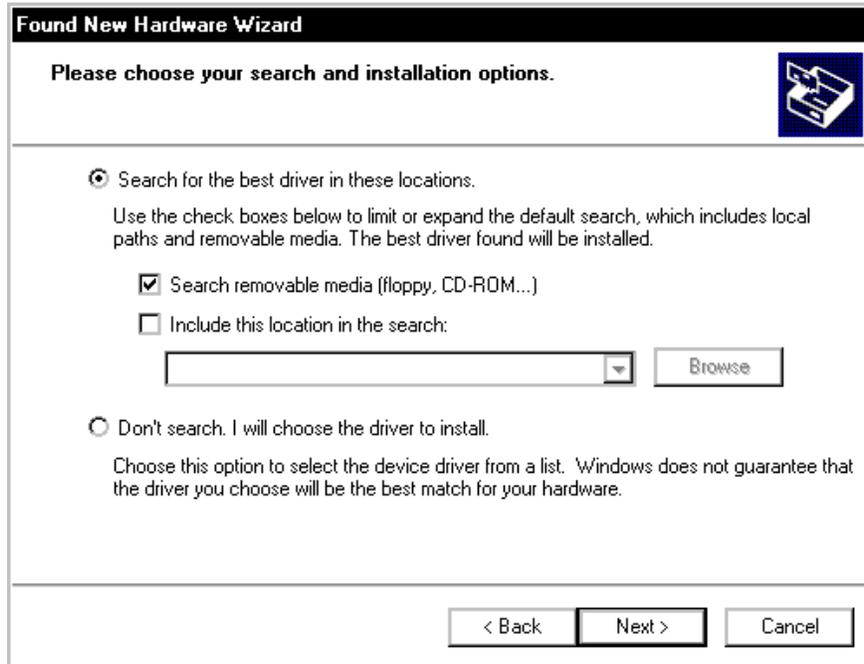


Figure 40. Search for Driver

3. **Windows XP:** The **Hardware Installation** window appears (Figure 41). Click **Continue Anyway**.

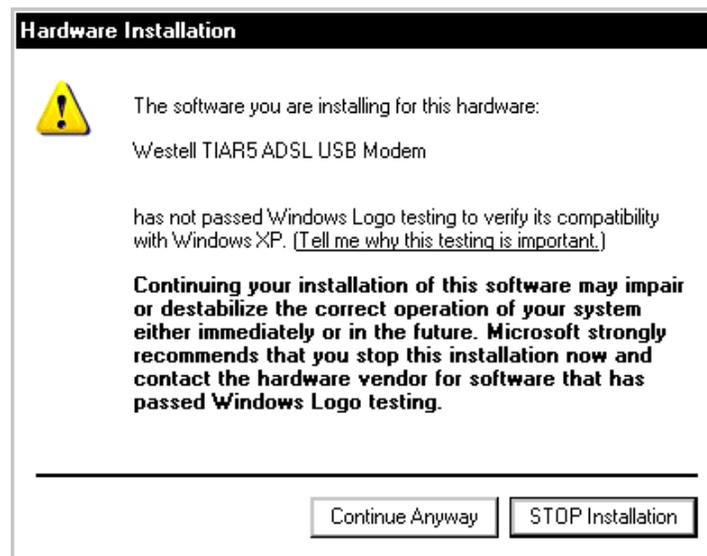


Figure 41. Hardware Installation

4. **Windows XP:** The window below confirms that the PC has finished loading the drivers (Figure 42). Click **Finish**.

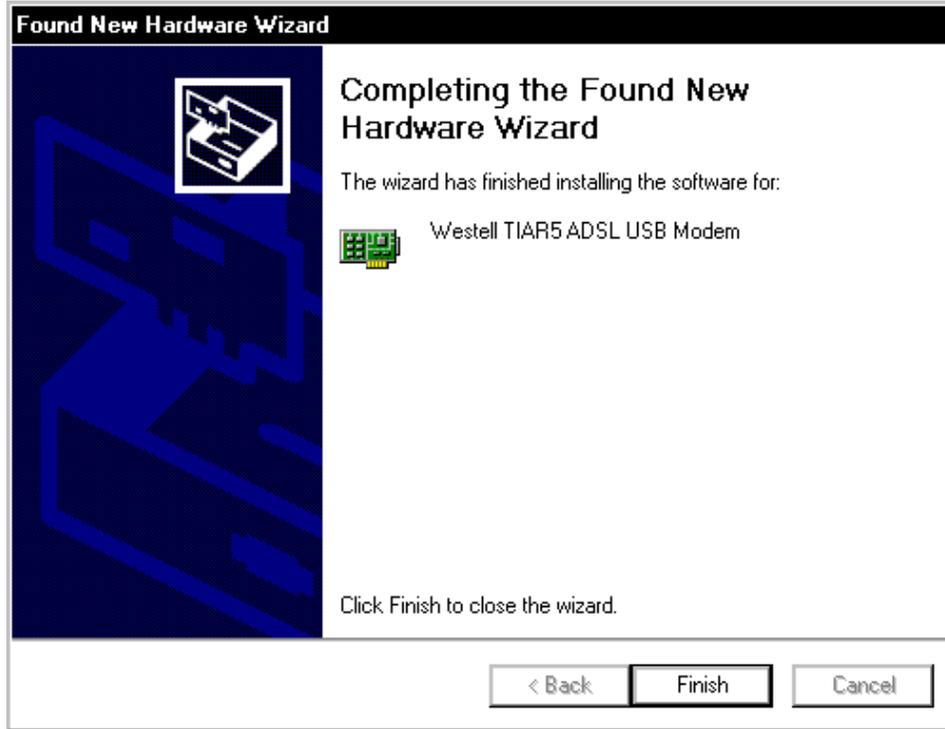


Figure 42. Device Drivers

Refer to the Internet Service Provider (ISP) installation manual to install the software required for your Internet connection.

7. INSTALLING DIAGNOSTIC SOFTWARE for WINDOWS 98/ME/2000



Note: Your Service Provider may require that you install the diagnostic software for technical support. However, the software is not required to operate your modem. Diagnostic software installation is optional.

The diagnostic software should be used as directed by your service provider to troubleshoot problems with your DSL service.

1. Begin the diagnostic software installation. On the installation CD run:

D:\Diagnostic Icon\Setup.exe

Where "D:" is the drive letter of your CD-ROM.

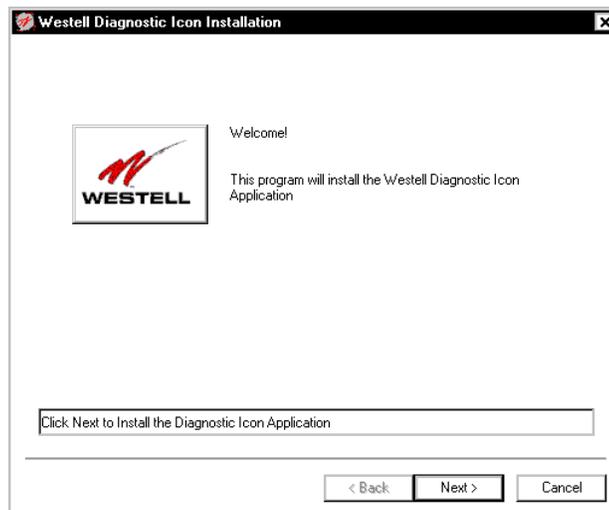


Figure 43. Welcome to Diagnostic Software Installation

2. Choose a directory to install the application (Figure 44). Click **Next** to accept the default directory or to browse to another location.

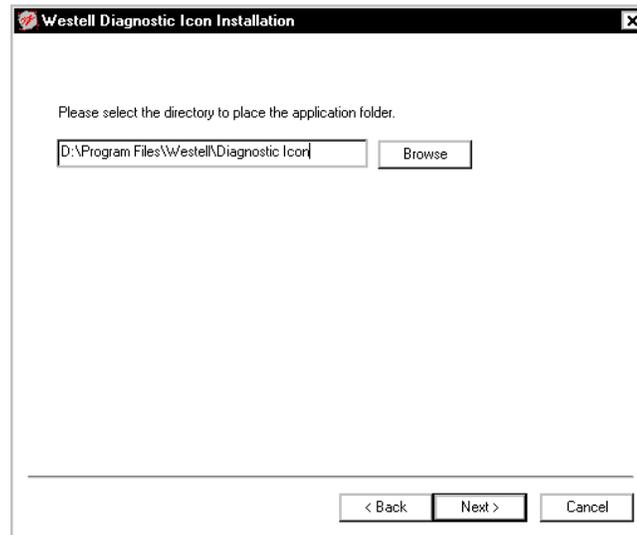


Figure 44. Select Directory for a Diagnostic Software Installation

3. The **Modem Detect** screen appears. Click **Next**. See Figure 45.

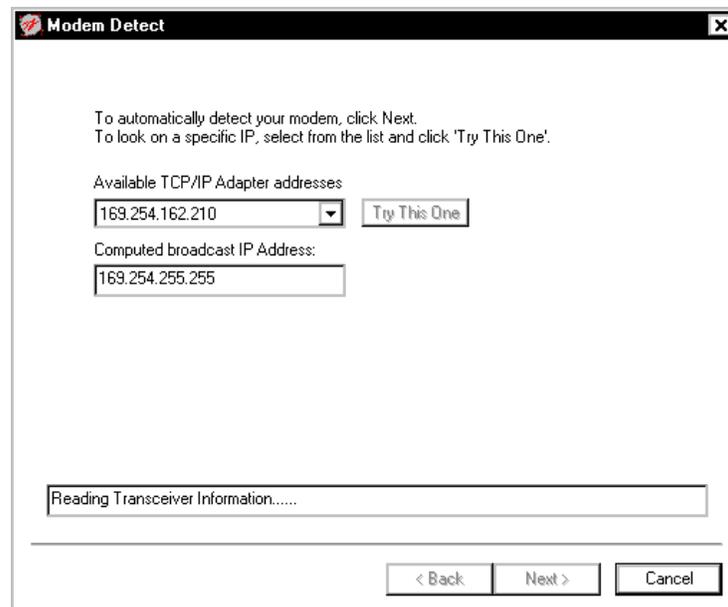


Figure 45. Modem Detect

4. When the diagnostic software has finished loading, the **Setup Complete** screen appears. Select **Run application now**. Click **Done** (Figure 46). An icon for the diagnostic features will be placed in your taskbar.

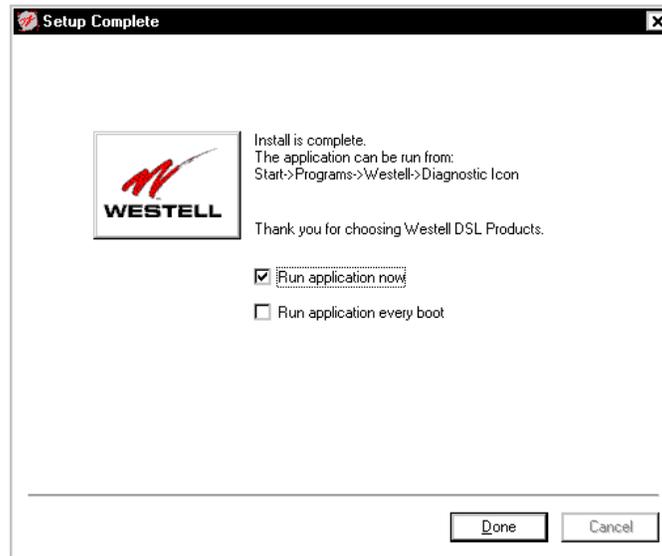


Figure 46. Setup Complete

The diagnostic software can affect key settings of your communications software, and should only be run when instructed by your service provider. For additional details on the diagnostic functions, see the Diagnostic Icon Information Panels.

Your modem software installation is complete. Follow the instructions provided by your service provider to configure your Westell Modem and browser settings.



If your computer already has an Ethernet adapter or NIC installed, you may have to disable the adapter or set a static IP address in the PC for the modem. Contact your service provider for more details.

7.1 Diagnostic Icon Information Panels

From the **Start Menu**, select **Programs > Westell > Diagnostic Icon**. The **Administration Diagnostic Panel** opens. See Figure 47.



Figure 47. Start Menu

Note: When the diagnostic application begins, the system places the following icon in the taskbar. See Figure 48.

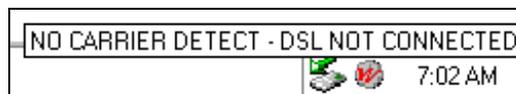


Figure 48. DSL Not Connected

7.2 The Administration Panel

The Administration panel displays information on the modem hardware model and software versions. See Figure 49.

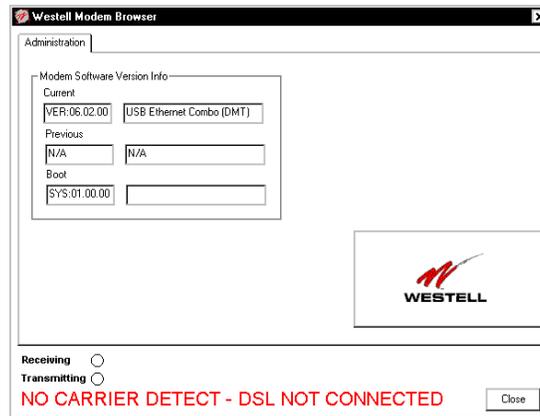


Figure 49. Administration Diagnostic Panel

To display the **Menu** screen, right click on the **Administration Diagnostic Panel**. The **Menu** screen appears (Figure 50). Choose one of the following options from the **Menu** screen.



Figure 50. Menu screen

Modem Browser-This option brings up the **Administration Diagnostic Panel** if it has not already been accessed.
About-This option displays a screen containing the software version and the copyright date. See Figure 51.



Figure 51. USB Diagnostic Icon Version

Stop Modem-This option instructs the modem to stop transmitting diagnostic data.
Exit-This option terminates the application.

8. UNINSTALLING DIAGNOSTIC SOFTWARE FOR WINDOWS 98/ME/2000

1. From the **Start Menu**, select **Programs > Westell > Uninstall Diagnostic Icon**. The **Uninstall Westell Diagnostic Icon** appears (Figure 52). Click **Next**.

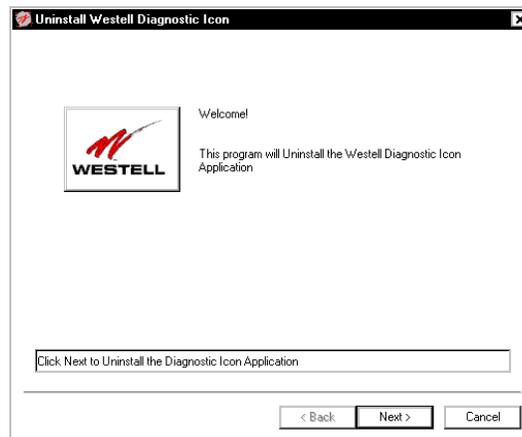


Figure 52. Welcome to Uninstall Diagnostic Application

2. The **Confirmation** window appears (Figure 53). Click **Yes** to confirm that you want to uninstall the diagnostic icon application.

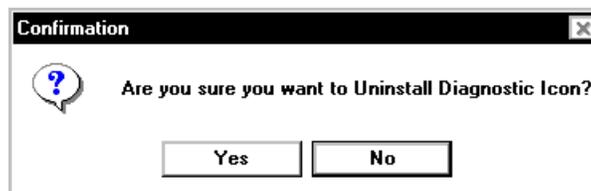


Figure 53. Confirm Uninstall

3. When the system is finished uninstalling the diagnostic icon application, the **Uninstall Complete** window appears (Figure 54). Click **Done**.



Figure 54. Uninstall Complete

9. TECHNICAL SUPPORT INFORMATION

9.1 Westell Technical Support

If technical assistance is required, contact Westell by using one of the following options:

Phone: 1-630-375-4500
email: global_support@westell.com

Visit Westell at www.westell.com to obtain additional information, view frequently asked questions, and enter on-line service requests.

10. WARRANTY AND REPAIRS

Warranty

Westell warrants this product to be free from defects at the time of shipment. Westell also warrants this product to be fully functional for the time period specified by the terms of the warranty. Any attempt to repair or modify the equipment by anyone other than an authorized Westell representative will void the warranty.

Repairs

Westell will repair any defective Westell equipment without cost during the warranty period if the unit is defective for any reason other than abuse, improper use, or improper installation, or acts of nature. Before returning the defective equipment, request a **Return Material Authorization (RMA)** number from Westell. Once an RMA number is obtained, return the defective unit, freight prepaid, along with a brief description of the problem to:

Westell, Inc.
ATTN: R.G.M Department
750 N. Commons Drive
Aurora, IL 60504-7940

Westell will continue to repair faulty equipment beyond the warranty period for a nominal charge. Contact a Westell Technical Support Representative for details.

11. PRODUCT SPECIFICATIONS

ADSL

- DSL Line Code: Discrete Multi-Tone (DMT)
- DSL Rates: 32 kbps to 8 Mbps downstream and 32 kbps to 800 Kbps upstream
- Power spectral density: -40 dBm/Hz
- DSL Impedance: 100 Ohms
- DSL Performance: Performance: per G.992.1, ANSI T1.413.

Protocol Features

- Bridge Encapsulation per RFC1483
- Logical Link Control/ Subnetwork Access Protocol (LLC/SNAP)
- Software Upgradeable
- PPPoE Support
- ATM SAR: Internal to Modem

System Requirements for USB

- Pentium Class PC or above
- Microsoft Windows 98, 2000, ME, or XP installed
- Operating system CD
- Internet Explorer 4.x or Netscape Navigator 4.x or higher
- 32 MB RAM
- 10 MB of free hard drive space
- USB Version 1.0 or 1.1 compliant bus

System Requirements for 10/100 Base-T/Ethernet

- Pentium Class PC or above
- Microsoft Windows 95, 98, 2000, ME, NT 4.0, or XP installed
- Operating system CD
- 32 MB RAM
- Ethernet 10/100 Base-T interface
- 10 MB of free hard drive space
- TCP/IP Protocol installed

Dimensions

- Width: 6.3 in. (16.0 cm)
- Depth: 5.07 in. (12.8 cm)
- Height: 1.6 in. (4.0 cm)

Weight

- Approx. 2.0 lbs. (.90 kg)

Environmental

- Ambient Operating Temperature: +32 to +104°F (0 to +40°C)
- Relative Humidity: 5 to 95%, non-condensing

Power Supply

- 120 VAC to 12 VAC wall-mount power supply

Power Consumption

- Less than 8 watts typical, from 120 VAC

Connectors

- Power connector
- DSL/LINE: 6-pin modular jack
- PC: USB Series B connector
- Ethernet: 8-pin RJ-45 connector

EMC Compliance

- FCC, Part 15 Class B

Safety

- UL 1950, 3rd Edition
- cUL, CAN/CSA-22.2 950-93

Regulatory Approval

- UL
- CSA
- FCC, Part 68
- Industry Canada CS03

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13. PUBLICATION INFORMATION

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