

DSL800U

ADSL USB MODEM

User's Manual

Version 1.0

Product warranty does not apply to damage caused by lightning, power surges or wrong voltage usage.

Contents

- 1... **Introduction** 5
 - 1.1 Features 6
- 2... **Before You Begin** 7
 - 2.1 Package 7
 - 2.2 Minimum System Requirements 8
 - 2.2.1 *Hardware* 8
 - 2.2.2 *Software - Operating System* 8
 - 2.3 Safety Precaution 8
 - 2.4 View of DSL800U 9
- 3... **Connecting Your ADSL USB Modem** 10
- 4... **Installing Your ADSL USB Modem Driver & Modem Browser** 12
 - 4.1 Installing Your ADSL USB Modem Driver & Modem Browser
 - For Windows® 98/ 98 Second Edition 13
 - 4.2 Installing Your ADSL USB Modem Driver & Modem Browser
 - For Windows® Me 17
 - 4.3 Installing Your ADSL USB Modem Driver & Modem Browser
 - For Windows® 2000 19
- 5... **Verifying Your ADSL USB Modem** 23
- 6... **Configuring the VCI / VPI Values for Internet Connection** 25
- 7... **Establishing Your Internet Connection** 28
 - 7.1 Establishing Your Internet Connection
 - For Windows® 98 / 98 Second Edition / Me 28
 - 7.2 Establishing Your Internet Connection - For Windows® 2000 30
- 8... **Running Your Modem Browser** 33

9...	Uninstalling Your ADSL USB Modem Driver & Modem Browser	35
9.1	Uninstalling Your ADSL USB Modem Driver & Modem Browser - For Windows® 98 / 98 Second Edition / Me users	35
9.2	Uninstalling Your ADSL USB Modem Driver & Modem Browser - For Windows® 2000 users	36
A...	Technical Specifications	37
A-1	Drivers Support	37
A-2	Key Features	37
	<i>A-2-1 ADSL Chipset</i>	38
A-3	Interfaces	38
	<i>A-3-1 External connectors</i>	38
	<i>A-3-2 Mechanical Box</i>	38
A-4	LED Indicators	38
A-5	Environmental	38
	<i>A-5-1 Operating Temperature</i>	38
B...	Frequently Asked Questions	39
C...	Troubleshooting Guide	41

Chapter 1...

Introduction

Congratulations on your purchase of DSL800U ADSL USB Modem !

ADSL, which stands for **Asymmetric Digital Subscriber Line**, is the latest communication technology that offers faster and uninterrupted Internet access.

The ADSL modem makes use of your existing phone line for Internet surfing and at the same time, allows you to talk on the phone ! As your phone line is dedicated to your home, your connection to the Internet will also be highly secured and reliable !

DSL800U promises unrivalled high performance broadband Internet access of up to **1.5 Mbps downstream (26 times faster than 56K modem), 512 Kbps upstream.**

Designed based on the latest USB technology, the DSL800U is bus-powered, that is it does not require any external power supply with messy cords. With its hot swappable capability, you can now plug in and out the modem without the need to shut down or restart your computer.

DSL800U definitely meets more than comfortably, the demands of today's bandwidth intensive applications!

1.1 Features

- Up to 26x faster connection than 56Kpbs modems. Ideal for high bandwidth intensive applications such as video conferencing.
- Simultaneous voice and data on one phone line (concurrent use of phone / fax while surfing).
- USB hot swappable plug & play installation.
- Bus powered, does not require external power supply.
- Compact design for all notebooks and desktops.

Chapter 2...

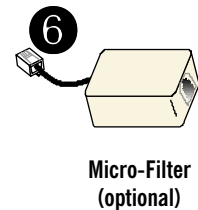
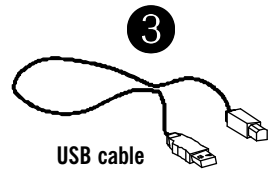
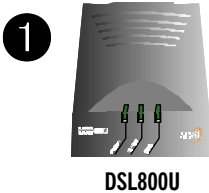
Before You Begin

This chapter contains information that you need to know before installing your modem. It is important that you go through them.

2.1 Package

Please check that you have the following items in your package. If you found any missing items, please contact your dealer immediately.

(The actual cables that come with your package may differ in appearance from country to country.)



2.2 Minimum System Requirements

2.2.1 Hardware

- IBM PC-based computer with Pentium® MMX 233 processor
- 32MB RAM
- 20MB of free hard disk space (system files and modem driver only)
- A free USB Port
- A CD-ROM drive

2.2.2 Software - Operating System

- Windows® 98 / 98 Second Edition
Windows® Me
Windows® 2000



Depending on your system configuration, you may be prompted for your Windows CD-ROM during the driver installation. Have it ready by your side.

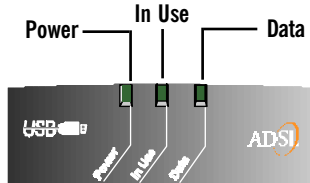
2.3 Safety Precaution

Adhere to the following safety guidelines when using your unit to reduce the risk of fire, electric shock and injury.

- Understand all instructions in the manual. Follow all instruction labels found on the unit.
- Never spill liquid of any kind on the unit.
- Do not place the unit on an unstable stand or table. The unit may drop and become damaged.
- Do not expose the unit to direct sunlight.
- Do not put any hot devices close to the unit as it may degrade or cause damage to it.
- Do not put any heavy object on top of the unit
- Do not use liquid cleaners or aerosol cleaners. Use a soft, dry cloth for cleaning.

2.4 View of DSL800U

The LED indicators show the status of the following:



Power : **Lights up** when power is supplied via the USB port from your PC

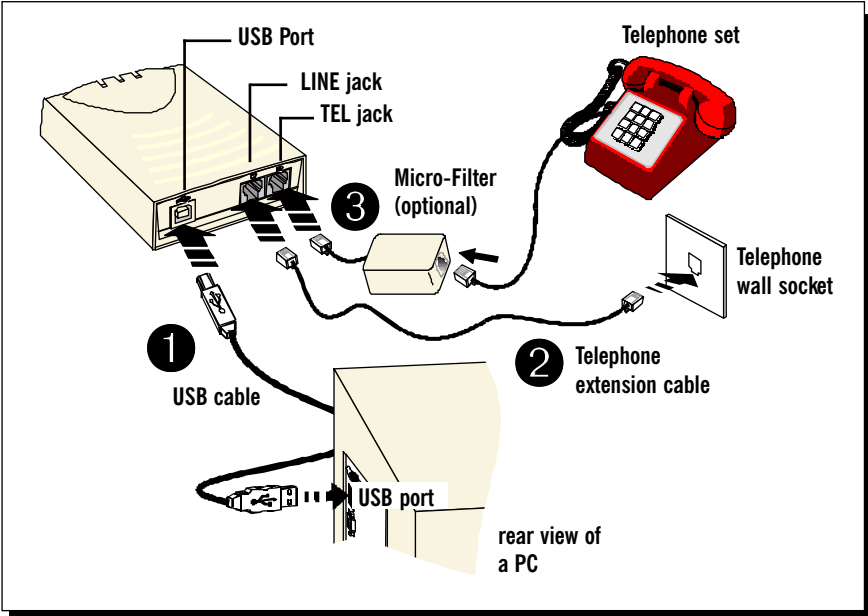
In Use : **Lights up** when the ADSL line is established



Data : **Lights up** when DSL800U is transmitting/receiving data

Chapter 3...

Connecting Your ADSL USB Modem

This chapter guides you on the modem connections to your computer as well as the connection to your phone line for Internet access.



- ❶ Connect one end of the **USB cable** () to the **USB Port** on the **modem** and the other end () to the **USB port of your computer**.
- ❷ Connect one end of the **telephone extension cable** to the **Line Jack** on the **modem** and the other end to a **telephone wall socket**.
- ❸ Connect a Micro-Filter to the **Tel Jack** on the modem. Then connect your **telephone set** to the Micro-Filter.

(The optional connection to the telephone set provides easy access to the phone while working near DSL800U. The connection of the Micro-Filter is not required if you are not connecting to a telephone set.)

This completes your modem connections. Please proceed to **Chapter 4** to install your driver and Modem Browser.

Installing Your ADSL USB Modem Driver & Modem Browser

This chapter contains information on how to install the modem driver and Modem Browser for the RFC 2364 (PPPoA) protocol in Windows® 98, 98 Second Edition, Me and Windows® 2000.

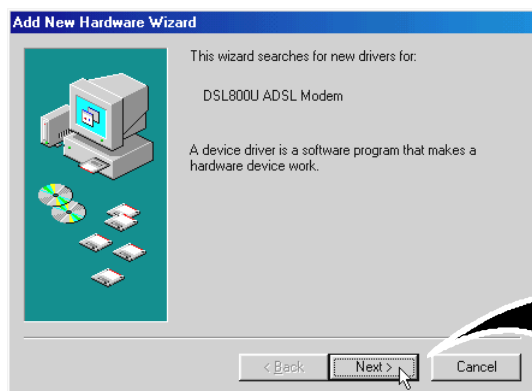


1. The screens shots in this section assume that your **CD-ROM Drive** is 'D'. Please change the letter according to the letter of your CD-ROM drive.
2. Depending on your system configurations, **Windows CD-ROM** may be prompted during the drivers installation. Have it ready by your side.
3. **The screen shots and screens information illustrated in this manual serve only as a guide. The exact information you see on your system may vary, depending on your system configurations. For any dissimilarities, follow closely to the instructions as prompted on your PC screen.**

4.1 Installing Your ADSL USB Modem Driver & Modem Browser - For Windows® 98/ 98 Second Edition



The driver installation for Windows® 98 and Windows® 98 Second Edition are similar. The following screen shots are based on Windows® 98 Second Edition. For any dissimilarities, follow closely to the instructions as prompted on your PC screen.



- i) Once you have connected your modem correctly, you will be prompted for the modem driver.

Place the **Installation CD** into your CD-ROM Drive and click **Next**.

- ii) Click the option **'Search for the best driver for your device. (Recommended).'** and click **Next**.



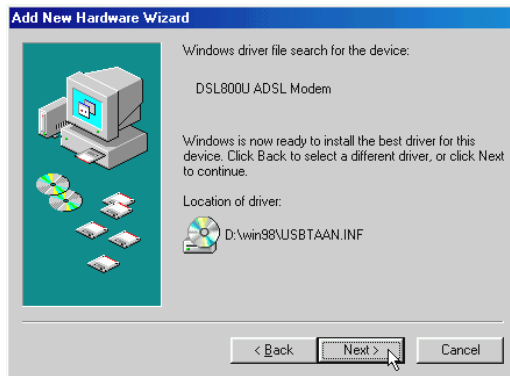
iii) Select **'Specify a location'**, then click **Browse**.

Browse to the **win98** folder on your CD-ROM.



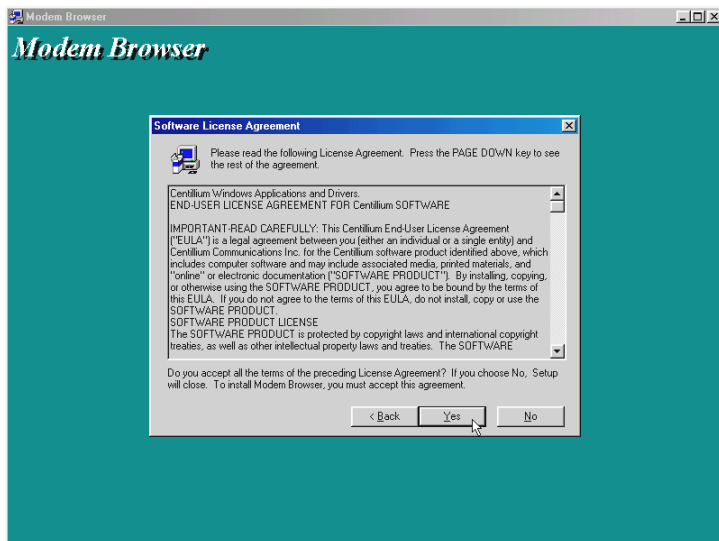
Click **Next**.

iv) Windows will prompt that it has located the driver. Click **Next** to proceed.

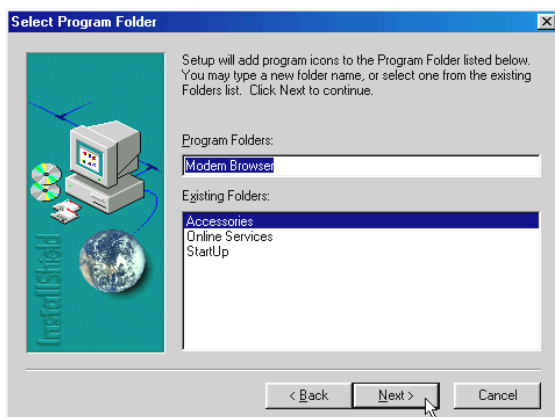


- v) You will be prompted for the **Modem Browser** installation. (Modem Browser allows you to monitor the activities of your modem. You may refer to [Chapter 8 - Running Your Modem Browser](#) for details.)

At the [Software License Agreement](#), click **Yes**.

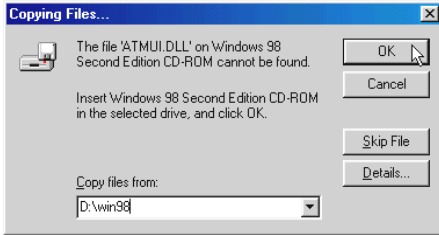



- vi) Click **Next** to accept the default program folder name.



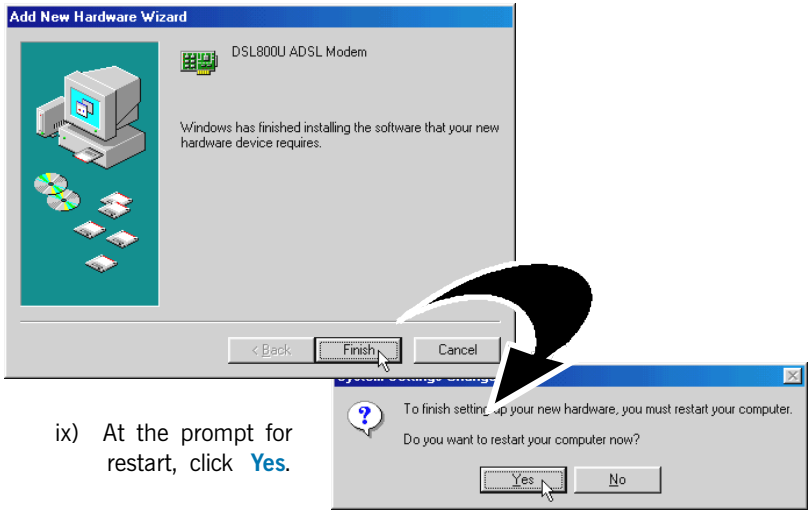
- vii) Depending on your system's setup, Windows may prompt for the Windows 98 / 98 Second Edition CD-ROM.

Replace the **DSL800U Installation CD** in the CD-ROM drive with your **Windows CD-ROM**. Enter the path of your Windows CD-ROM and click **OK**.



 If your system is installed with NetBEUI or IPX-compatible network protocols, you would be prompted that NetBEUI cannot be installed with this modem. Click **OK** to continue.

- viii) Click **Finish** to complete the installation.



- ix) At the prompt for restart, click **Yes**.

This completes the installation process for your ADSL USB Modem in Windows® 98 / 98 Second Edition. Please proceed to **Chapter 5 - Verifying Your ADSL USB Modem**.

4.2 Installing Your ADSL USB Modem Driver & Modem Browser - For Windows® Me

- i) Once you have connected your modem correctly, you will be prompted for the modem driver.

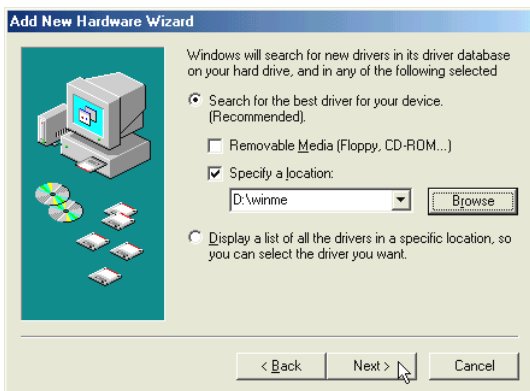


Place the **Installation CD** into your CD-ROM Drive.

Select the option '**Specify the location of the driver (Advanced)**' and click **Next**.

- ii) Click the option '**Specify a location**'. Click **Browse...** .


Browse to the **winme** folder on your CD-ROM.



Click **Next** to proceed.

iii) Windows will prompt that it has located the driver. Click **Next** to proceed.



 If your system is installed with NetBEUI or IPX-compatible network protocols, you would be prompted that NetBEUI cannot be installed with this modem. Click **OK** to continue.

iv) Click **Finish** to complete the installation.



v) At the prompt for restart, click **Yes**.

This completes the installation process for your ADSL USB Modem in Windows® Me. Please proceed to **Chapter 5 - Verifying Your ADSL USB Modem**.

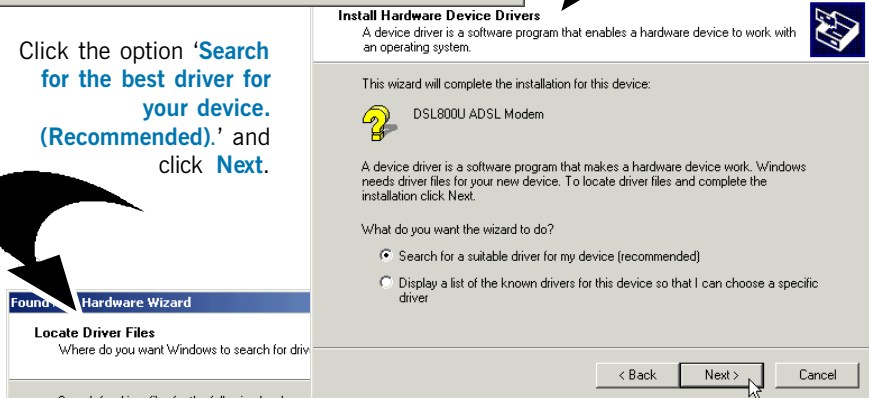
4.3 Installing Your ADSL USB Modem Driver & Modem Browser - For Windows® 2000



- i) Once you have connected your modem correctly, you will be prompted for the modem driver.

Place the **DSL800U Installation CD** into your CD-ROM Drive and click **Next**.

- ii) Click the option 'Search for the best driver for your device. (Recommended).' and click **Next**.

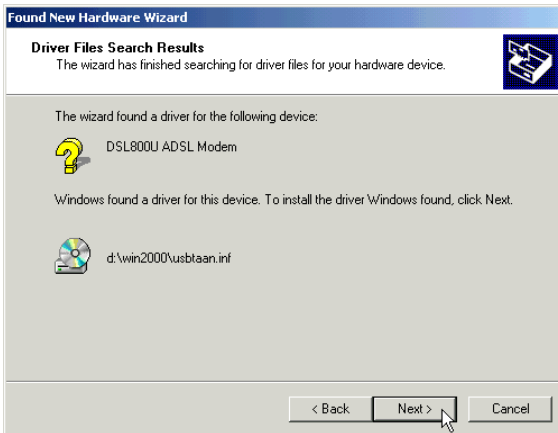


- iii) Select the option 'Specify a location' and click **Next**.

- iv) Click **Browse...** .
Browse to the **win2000** folder on your CD-ROM.
Click **OK**.



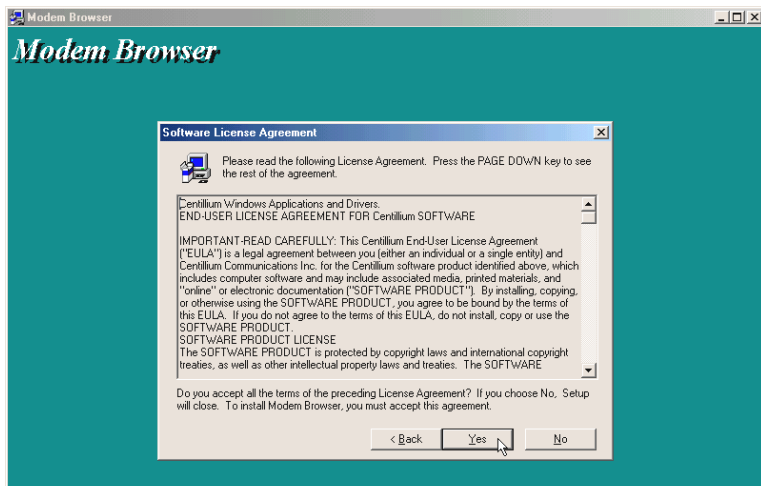
- v) Click **Next** to proceed installation with the specified driver.
Allow some time for your system to install the driver.



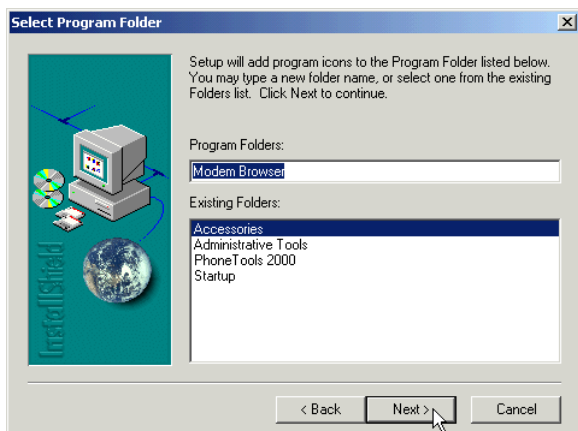
- vi) You may be prompted with **New Signature Not Found** dialog box. This occurs when Windows detected a newer version of your driver.
Click **Yes** to proceed.

- vii) You will be prompted for the **Modem Browser** installation. (Modem Browser allows you to monitor the activities of your modem. You may refer to [Chapter 8 - Running Your Modem Browser](#) for details.)

At the [Software License Agreement](#), click **Yes**.



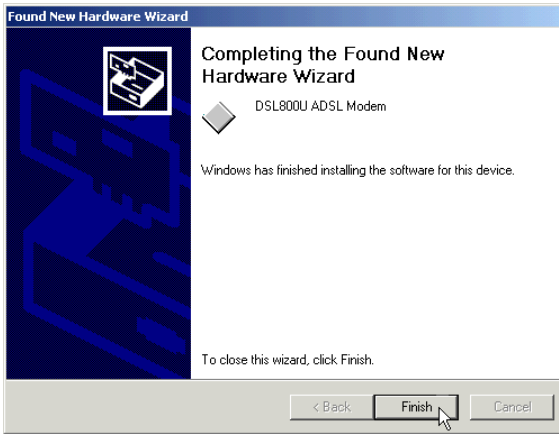
- viii) Click **Next** to accept the default program folder name.





If your system is installed with NetBEUI or IPX-compatible network protocols, you would be prompted that NetBEUI cannot be installed with this modem. Click **OK** to continue.

ix) Click **Finish** to complete the installation.



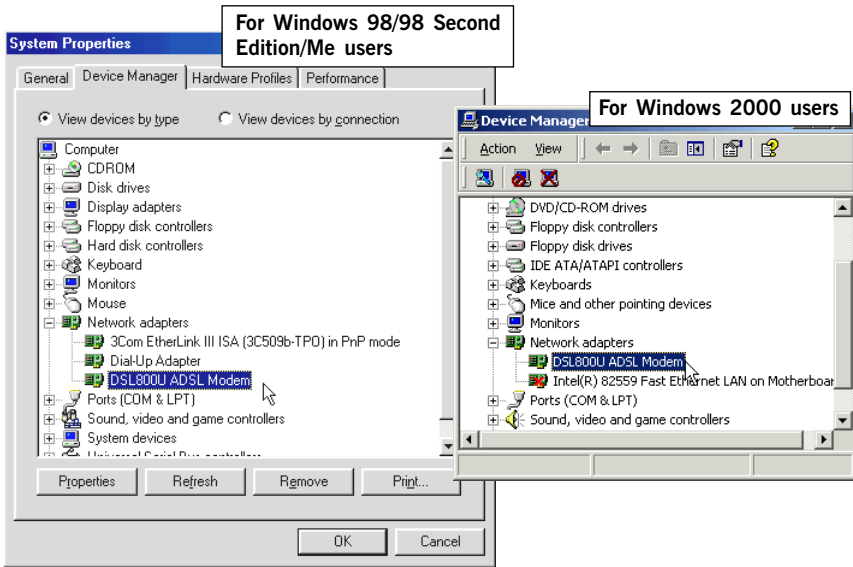
This completes the installation process for your ADSL USB Modem in Windows® 2000. Please proceed to [Chapter 5 - Verifying Your ADSL USB Modem](#).

Chapter 5...

Verifying Your ADSL USB Modem

This chapter contains instructions to help you check if the driver for your modem has been installed properly.

- i) From your Windows desktop, right-click on **My Computer**. Select **Properties**.
- ii) **For Windows® 98 / 98 Second Edition / Me**
Select **Device Manager** tab. Double-click on **Network adapters**.
For Windows® 2000
Click **Hardware** tab. Select **Device Manager** button. Double-click on **Network adapters**.
- iii) You should see **DSL800U ADSL Modem** listed.



If the modem is not listed, you should re-install the modem driver as described in [Chapter 4 - Installing Your ADSL USB Modem Driver and Modem Browser](#).

If the modem is listed, but have an exclamation mark on it, you need to remove the modem (right-click on it and select [Remove](#)) first before re-installing the driver.

Please proceed to [Chapter 6 - Configuring the VCI / VPI Values for Internet Connection](#).

Configuring the VCI / VPI Values for Internet Connection

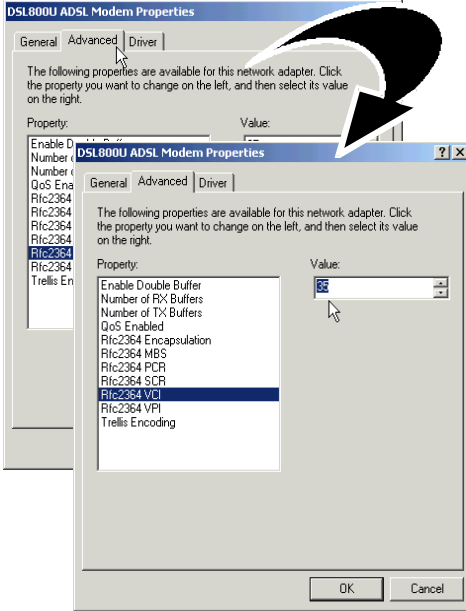
This chapter guides you on how to configure your PVC values required for your Internet Connection.

- i) From your Windows desktop, right-click on the **Network Neighborhood** icon, and select **Properties**.
- ii) **For Windows® 98 / 98 Second Edition / Me**
From the **Configuration** tab, select **DSL800U ADSL Modem** and click the **Properties** button.

For Windows® 2000

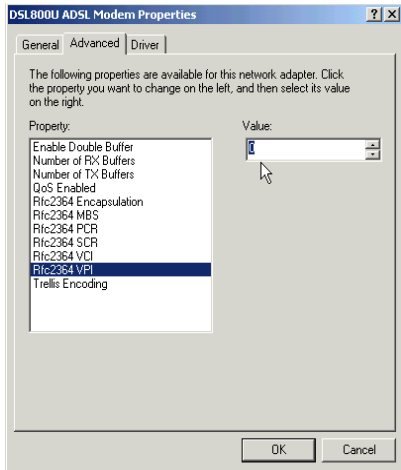
Select the **Hardware** tab and click on the **Device Manager** button. Double-click on the **Network Adapter**. Right-click on **DSL800U ADSL Modem** listing and select **Properties**.

iii) Click the **Advanced** tab.



iv) From the **Property** field, select the VCI field that is tied to your protocol.

At the **Value** field, overwrite the existing value with the VCI assigned by your ADSL Service Provider.



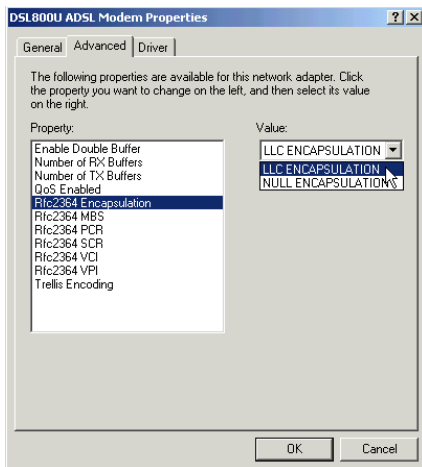
Similarly, for VPI, select the VPI field that is tied to your protocol.

At the **Value** field, overwrite the existing value with the VPI assigned by your ADSL Service Provider.

Click **OK**.

Please proceed with the following **step (v)** to configure your encapsulation mode.

- v) At the **Property** field, select the encapsulation option. At the **Value** field, select the method of encapsulation as determined by your ADSL Service Provider and click **OK**.




This completes your configuration.

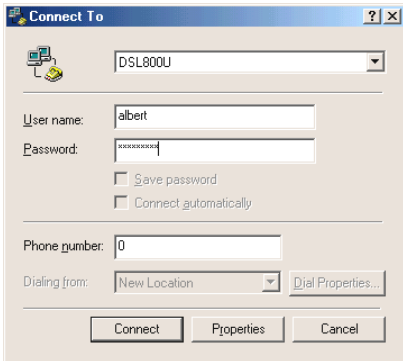
Please proceed to **Chapter 7 - Establishing Your Internet Connection**.

Chapter 7...

Establishing Your Internet Connection


7.1 Establishing Your Internet Connection - For Windows® 98 / 98 Second Edition / Me

- i) From your Windows desktop, you will see a **Dsl800u** dial-up icon  generated. Double-click on it.
- ii) A dialog box similar to the one shown below will be prompted.

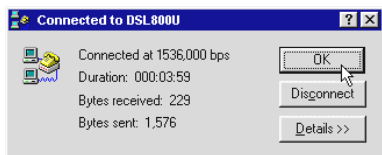


(The illustrated screen shot is based on Windows® Me. Different operating software may have their screen shot differ slightly.)

Enter the required information and click **Connect** to dial up to the Internet.

- iii) Upon successful dial-up, you should be able to see an icon  displayed at the corner of your taskbar.

Double-click on the icon. You will be able to see the following information.



(The connection speed indicates the speed that the ADSL modem can achieved. Your actual connection speed will depend on the subscription plan that you have signed-up with your Internet Service Provider.)

Check your connection time by looking at the **Duration**. Click **Disconnect** to end the session.

You may now proceed to [Chapter 8 - Running Your Modem Browser](#).

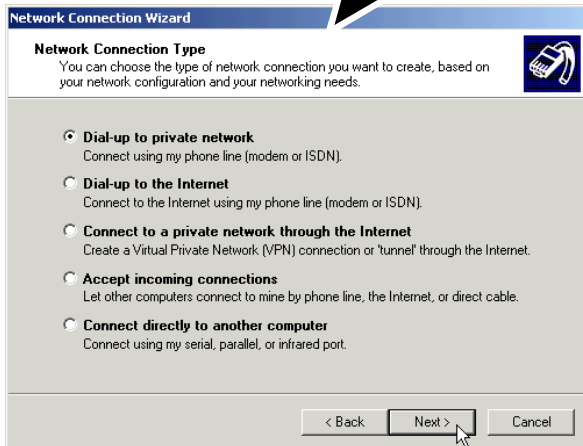
7.2 Establishing Your Internet Connection - For Windows® 2000

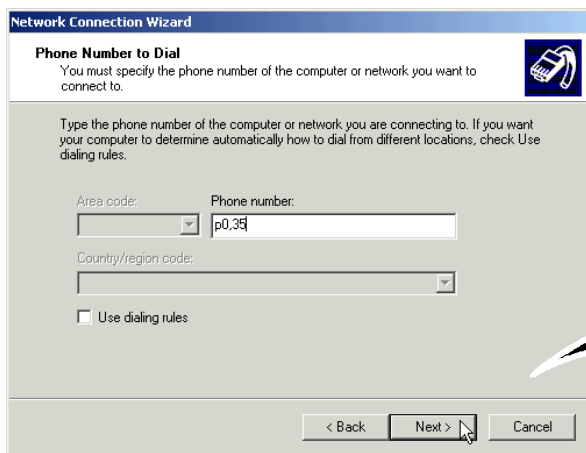
To establish an Internet connection, a dial-up icon has to be first created.

- i) From your Windows taskbar, click **Start** > **Settings** > **Network & Dial-up Connections**.
- ii) Double-click on the **Make New Connection** icon.
- iii) At the prompt, enter your local information and click **Close**.
- iv) Click **Next** to proceed with the connection wizard.



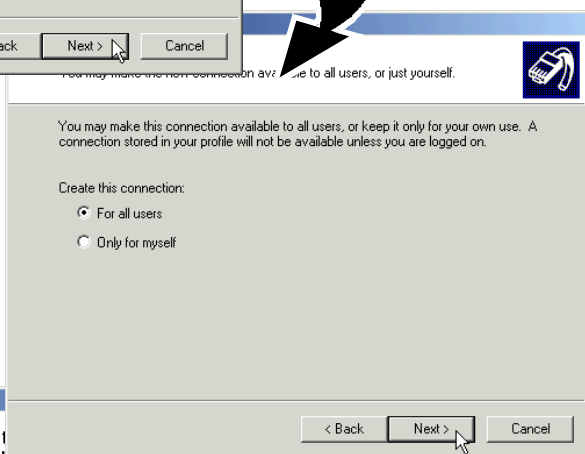
- v) Select your type of network connection and click **Next**.



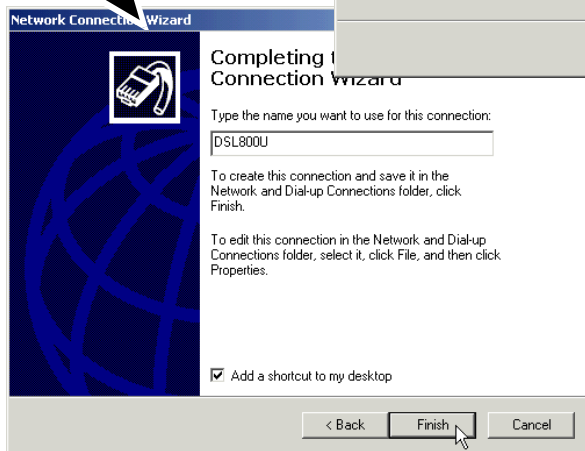


vi) At the **Phone number** field, enter your **VPI** and **VCI** values in the format as indicated.

Click **Next**.



vii) Make your selection and click **Next**.




viii) Type **DSL800U** as the connection name.

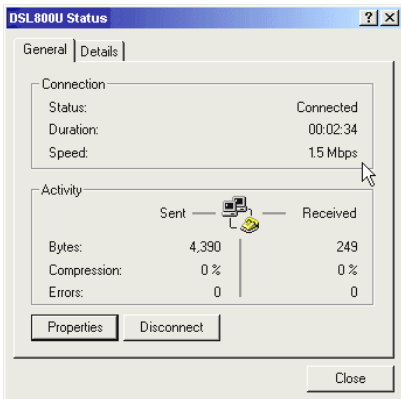
Select the option '**Add a shortcut to my desktop**' and click **Finish**.

- ix) At the following prompt, enter your password as given by your ADSL Service Provider and click **Dial**.



- x) Upon successful dial-up, you should be able to see an icon  displayed at the corner of your taskbar.

Double-click on the icon. You will be able to see the following information.



(The connection speed indicates the speed that the ADSL modem can achieved. Your actual connection speed will depend on the subscription plan that you have signed-up with your Internet Service Provider.)


Check your connection time by looking at the **Duration**. Click **Disconnect** to end the session.

You may now proceed to **Chapter 8 - Running Your Modem Browser**.

Chapter 8...

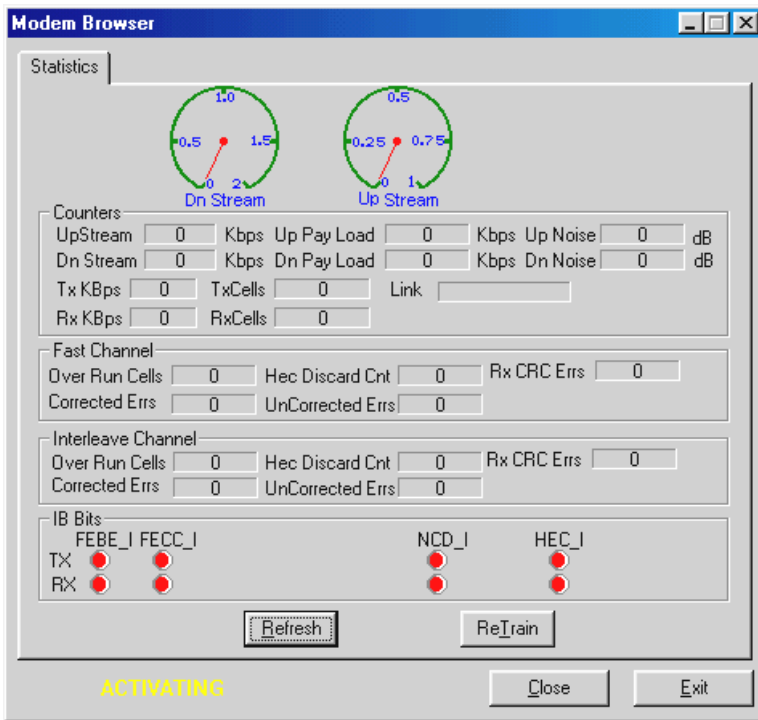
Running Your Modem Browser

This chapter contains information on how to run the Modem Browser to monitor the activities of DSL800U.

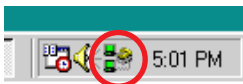
- i) A **Modem Browser** shortcut  icon would be created on your desktop. Double-click on it to activate the **Modem Browser**.
- ii) The following window will be displayed.



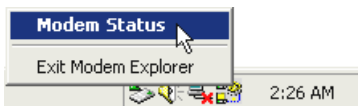
Modem Browser is currently not supported in Windows Me.



- iii) Click **Refresh** to manually update the modem monitoring information. The information will be updated immediately.
- iv) Click **ReTrain** to re-established the ADSL connection.
- v) Click **Close** to minimise the Modem Browser to the system tray at the corner of your taskbar as shown.



- vi) To *restore* the Modem Browser from the system tray, double-click on the icon. Alternatively, you can right-click on the minimised icon and select **Modem Status**.



- vi) Click **Exit** to end the monitoring process.

Uninstalling Your ADSL USB Modem Driver & Modem Browser

This chapter contains information on how to remove the modem driver and Modem Browser from your system in Windows® 98, 98 Second Edition, Me and Windows® 2000.

9.1 Uninstalling Your ADSL USB Modem Driver & Modem Browser - For Windows® 98 / 98 Second Edition / Me users

- i) From your Windows taskbar, click **Start > Programs > Modem Browser > Uninstall**. Follow the instructions prompted on your PC to complete the uninstallation process for the Modem Browser.
- ii) Click **Start > Programs > DSL800U Tools > DSL800U Uninstallation**. Follow the instructions as prompted on your PC to complete the uninstallation process for your modem.

Restart your system.

9.2 Uninstalling Your ADSL USB Modem Driver & Modem Browser - For Windows® 2000 users

- i) From your Windows desktop, right-click on **My Computer**. Select **Properties**.
- ii) Click **Hardware** tab. Select **Device Manager** button. Double-click on **Network adapters**. Right click on **DSL800U ADSL Modem** and select **Uninstall**.
- iii) Upon system restarts, you will be prompted to uninstall your Modem Browser. Click **Yes** to proceed. Follow any instructions prompted on your PC.

Technical Specifications

This chapter contains the technical specifications of your card. The information may be more useful for technically inclined users.

A-1 Drivers Support

- Windows® 98 / 98 Second Edition / Me / 2000

A-2 Key Features

- Controllerless ADSL USB Modem
- G.Lite (ITU-T G.992.2) compliant
- G.lite transmission at up to 1.5 Mbps downstream and 512 Kbps upstream
- Connects to standard USB 1.1 PC-interface
- Runs off the standard USB-connection, no external power supply needed
- Supports MPoA (RFC 1483) and PPPoA (RFC2364) protocol stack
- Software upgradable for future feature enhancement
- Effective distance – 14 kft (Simulated)
- Maximum Distance – 18 kft (Simulated)

A-2-1 ADSL Chipset

Using Centillium CT-L22SU30 Optimizer Chipset:

- CT-L22DU30 Digital Chip
- CT-L21AT01 Analog Chip

A-3 Interfaces

A-3-1 External connectors

- 1 x RJ11 Telephone socket for telephone line
- 1 x RJ11 Telephone socket for handset
- 1 x Series “B” USB receptacle

A-3-2 Mechanical Box

- Dimension : 120mm X 85mm X 30mm

A-4 LED Indicators

- POWER to indicate the unit is powered.
- IN USE to indicate the DSL link is established.
- DATA to indicate dataflow.

A-5 Environmental

A-5-1 Operating Temperature

- 0 to 40 degrees Celsius



Specifications herein are subject to change without prior notice.

Frequently Asked Questions

This chapter provides the answers to the commonly asked questions on ADSL modem.



What is ADSL ?



ADSL, Asymmetric Digital Subscriber Line, is a broadband communication technology designed for use on regular phone lines. It has the ability to move data over the phone lines at speeds up to 140 times faster than the analog modem available today.



Why is it called Asymmetric ?



It is called asymmetric because more bandwidth is reserved for receiving data than for sending data. This is useful because many users of the Internet receive much more data than they send.



How fast is ADSL ?



Depending on the level of service provided by your ADSL provider, your ADSL modem has the potential to deliver data at speeds up to 8 Megabits per second (Full Rate) or up to 1.5 Megabits per second (G.Lite) during download. 1.5Mbps is more than 25 times faster than a 56.6Kbps modem!



What are the benefits of ADSL over analog modems ?



Besides the high-speed advantage, ADSL connection is always on. There is no longer a need to log on and off, no more busy signals and no more waiting for the connection to established - it is always there. On top of these, you can use the phone even when the data connection is on. You do not need to switch between surfing the Net and talking over the phone.



What is USB?



USB stands for Universal Serial Bus. It is a new peripheral bus standard developed by PC and Telecom leaders. It allows connection for low to medium speed computer peripherals. USB features high throughput I/O transfer rate of 12Mbit/sec and support up to 127 devices.



How do I know which protocol to install?



Refer to your ADSL or ISP Service Provider.



Will my modem constantly connect near the maximum speed?



At ADSL speeds, the limitations are much more of the performance of the Internet server you are trying to reach and the amount of traffic on the Internet.



Do I need to use Micro-Filter when using ADSL?



Yes, if you are sharing your DSL line with your telephone. The Micro-Filter would eliminate noise on the telephone line to ensure the best possible networked phone performance. If the DSL uses a different line and not sharing with your telephone, then a Micro-Filter wouldn't be necessary.



What is the function of the Modem Browser?



The Modem Browser is an application that will monitor the line connectivity to the ISP. It will show the transferring data rate as well as the CRC error rate during the data transfer.

Troubleshooting Guide

This chapter provides a step-by-step guide to problems that you may encounter when using your ADSL modem.



My system does not detect the network modem when I boot up for the first time.



Make sure that you are connected your modem as illustrated in [Chapter 3 - Connecting Your ADSL USB Modem](#).

If it doesn't work, try to plug-in your USB cable to another USB port of your computer.



I received error message, 'Dial-up Networking could not complete the connection to the server' while connecting to my ADSL Service Provider.



Please make sure that:

- i) You have entered the correct user ID and password as given by your ADSL Service Provider.
- ii) The **In Use** LED of the modem lights up before you do a dial-up.
- iii) The correct protocol is used (check with your ADSL Service Provider) and your modem driver is properly installed.
- iv) The VCI / VPI settings are set correctly (check with your ADSL Service Provider).



The phone line connecting to the modem caused interference .



Ensure all communication devices such as telephone and fax machine sharing the same phone line as the modem are connected to the telephone jack via a Micro-Filter.



The modem disconnects when an incoming call is received.



Ensure that you have connected a Micro-Filter to your telephone set as illustrated on [Chapter 3 - Connecting Your ADSL USB Modem](#).



File transfer through FTP is slow/not working.



From the desktop, right-click on **Network Neighborhood** and select **Properties**. From the **Configuration** tab, select **Dial-Up Adapter** and click the **Properties** button. From the **Dial-Up Adapter Properties** window, select the **Advanced** tab. Select the **IP Packet Size** from the **Property** field. Set the **Value** to **Medium**. Click **OK**.