DSL100U

DSL Turbo 100 USB ADSL Modem

Easy Start

Read Me First

Version 1.3

Contents...

Part 15 FCC Compliance Statement

This device complies with Part 15 of FCC Rules. Operation is subject to the following two conditions:

1. This device may not cause harmful interference, and
2. This device must accept any interference received, including interference that may cause undesired operation.

Operating Environment

For Home or Office Use

Notice

This equipment has been tested and found to comply with the limits of 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.
• Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
• Consult the dealer or an experienced radio/TV technician for help.

Caution

To comply with the limits for the Class B digital device according to Part 15 of FCC Rules, this device must be installed in computer equipment certified to comply with the Class B limits. All cables used to connect the computers and peripherals must be shielded and grounded. Operation with non-certified/shielded cables may result in radio/TV interference.

Modification

Any modification not expressly approved by the manufacturer of this device could void the user's authority to operate the device.

Party Responsible for Product Compliance:

Aztech Labs, Inc.
45645 Northport Loop East
Fremont, CA 94538, U.S.A.

Part 68 FCC Compliance Statement
(FCC ID : 4J2SNG-47095-DL-N)

This equipment complies with Part 68 of the FCC Rules. On the equipment is a label that contains, among other information, the FCC registration number and ringer equivalence number (REN) for this equipment. If requested, this information must be provided to your telephone company.

Connection to the telephone network should be made by using standard modular telephone jack type RJ11.

The REN is useful to determine the quantity of devices you may connect to your telephone line and still have all of those devices ring when your telephone number is called. In most, but not all areas, the sum of the RENs of all devices connected to one line should not exceed five (5.0). To be certain of the number of devices you may connect to your line, as determined by the REN, you should contact your local telephone company to determine the maximum REN for your calling area.

If your telephone equipment causes harm to the telephone network, the telephone company may discontinue your service temporarily. If possible, they will notify you in advance. But if advance notice is not practical, you will be notified as soon as possible. You will be informed of your right to file a complaint with the FCC.

Your telephone company may make changes in its facilities, equipment, operations or procedures that could affect the proper functioning of your equipment. If they do, you will be notified in advance to give you an opportunity to maintain uninterrupted telephone service.

In the event this equipment should fail to operate properly, disconnect the unit from the telephone line. Try using another FCC approved telephone in the same telephone jack. If the trouble persists, call the telephone company repair service bureau. If the trouble does not persist and appears to be with this unit, disconnect the unit from the telephone line and discontinue use of the unit until it is repaired. Please note that the telephone company may ask that you disconnect this equipment from the telephone network until the problem has been corrected or until you're sure that the equipment is not malfunctioning.

This equipment may not be used on coin service provided by the telephone company. Connection to party lines is subject to state tariffs.

The Telephone Consumer Protection Act of 1991 makes it unlawful for any person to use a computer or other electronic device to send any message via a telephone fax machine unless such message clearly contains in a margin at the top or bottom of each transmitted page or on the first page of the transmission, the date and time it is sent and an identification of the business or other entity, or individual sending message and the telephone number of the sending machine or such business, or entity, or individual.

This user information can be programmed in the communication software you are using with your equipment.

Repair or Service Information

In the event of the need for service or repair, carefully package the unit along with a note of the problem and send it to the address below or the authorized service center nearest you. Be sure to include your address (not a P.O Box), telephone number and best time to call.

Attn: *Aztech Labs, Inc.*
           45645 Northport Loop East
           Fremont, CA 94538, U.S.A.

Industry Canada Information

NOTICE: The Industry Canada label identifies certified equipment. This certification means the equipment meets telecommunications network protective, operational and safety requirements as described 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.

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

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

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

Safety Guidelines

- Keep the modem away from fluid, direct sunlight and excessive heat

- During times of lightning strike/thunderstorm, do not use the modem

- This product is for use only in UL Listed computers

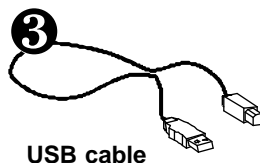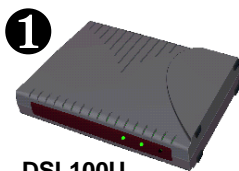- To reduce the risk of fire, use only No. 26 AWG or larger telecommunication line cord

About this Easy Start

This booklet contains information on setting up your ADSL modem **DSL100U.** It touches on the key installation procedures to help you setup your modem in a breeze!

Package Contents

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 are included with your package may differ in appearance from country to country)

❶ **DSL100U**

❷ **Installation CD**

❸ **USB cable**

❹ **this Easy Start**

❺ **Telephone extension cable**

❻ **Microfilter (optional)** [1]
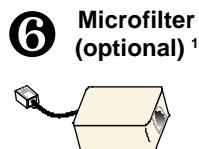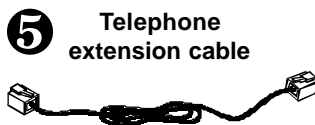
[1] The microfilter is only required for DSL100U(M). Depending on the country of purchase, it may or may not be bundled

Rear Panel Connections

With the "Hot Swap" feature in this modem, you can connect your modem to your computer anytime, without having to power off your system!

The following illustration shows the connections for the modem.

❶ One end of the **USB cable** ( ) is to be connected to the **USB Port** on the **modem** and the other end ( ) to the **USB port** of **your computer**.
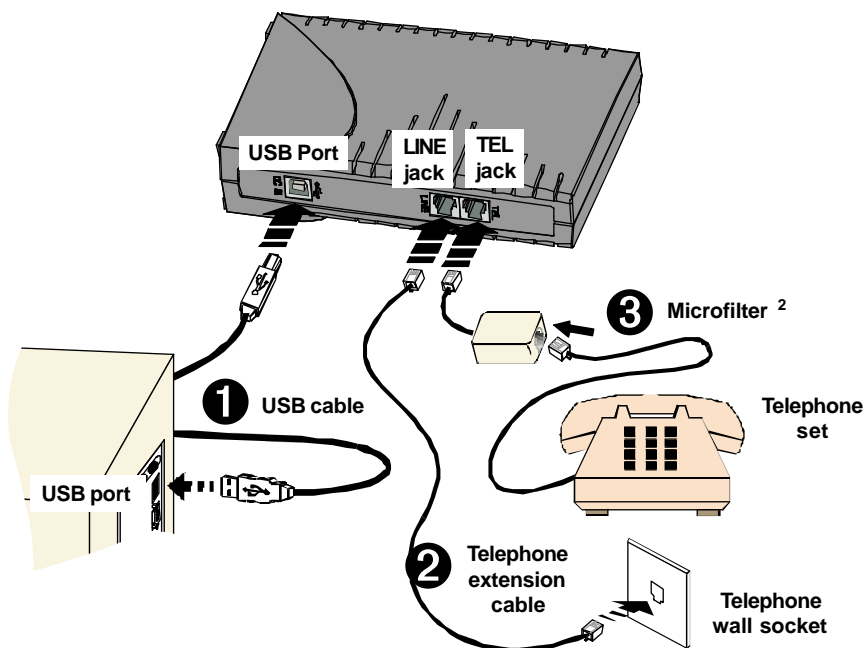
❷ One end of the **telephone extension cable** is to be connected to the **Line Jack** on the **modem** and the other end to a **telephone wall socket**.

❸ A **telephone set** can be connected to the **Tel Jack** on the modem. *(This optional connection enables you to use your telephone and your modem concurrently.)*

   [2] *For DSL100U:* You **do not need** to connect a **micro-filter** in-between as it is built-in.

   For DSL100U(M): You **need to** connect a **micro-filter** in-between the **Tel Jack** and **telephone set** as illustrated above.

Front Panel LED Indicators

The LED indicators show the following status:
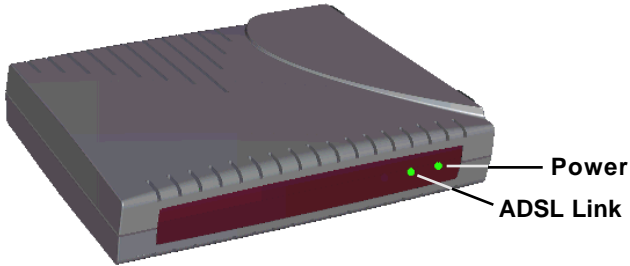
Power: *Lights up* when power is supplied via the USB port

ADSL Link: *Flashes* during training. *Lights up* when ADSL connection is established

Installing the USB ADSL Modem Drivers

Drivers are available for 2 protocols: **RFC 1483 (LAN)** and **RFC 2364 (WAN)**. Your Internet Service Provider will inform you which one to install. You only need to install one of them.

Start Windows. Connect the USB cable between the USB port of your computer and the USB port of your modem as illustrated in **Rear Panel Connections**. Your would be prompted to install the drivers.

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

Continue with the following steps depending on the Operating System that you are running.

Windows® Me

Add New Hardware Wizard

Windows has found the following new hardware:

USB Device

Windows can automatically search for and install software that supports your hardware. If your hardware came with installation media, insert it now and click Next.

What would you like to do?

○ Automatic search for a better driver (Recommended)

● Specify the location of the driver (Advanced)

< Back   Next >   Cancel

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

Add New Hardware Wizard

Windows will search for new drivers in its driver database on your hard drive, and in any of the following selected

● Search for the best driver for your device. (Recommended).

☐ Removable Media (Floppy, CD-ROM...)

☑ Specify a location:

D:\wan   ▼   Browse

○ Display a list of all the drivers in a specific location, you can select the driver you want.

< Back   Next >   Cancel

3 Click **Specify a location** and then browse to your CD-ROM drive. Select the **Lan** or **Wan** folder. **Lan** contains **RFC 1483** and **Wan** contains **RFC 2364** drivers.

Click **Next**.

driver file search for the device:

DSL100U USB ADSL Modem

Windows is now ready to install the best driver for this device. Click Back to select a different driver, or click Next to continue.

Location of driver:

D:\WAN\GROOTUSB.INF

< Back   Next >   Cancel

4 Windows will prompt that the driver is found. Click **Next**.

5

Click **Finish.** Installation of the setup program will commence. Refer to **Running the Modem Setup Program** section.

Add New Hardware Wizard

DSL100U USB ADSL Modem

Windows has finished installing the new hardware device.

< Back   Finish   Cancel

Windows® 98SE/98

Add New Hardware Wizard

This wizard searches for new drivers for:

USB Device

A device driver is a software program that makes a hardware device work.

2

Click **Next** to start the search for drivers.

Add New Hardware Wizard

What do you want Windows to do?

○ Search for the best driver for your device.
  (Recommended).

○ Display a list of all the drivers in a specific
  location, so you can select the driver you want.

< Back   Next >   Cancel

< Back   Next >   Cancel

3

Select **Search for the best driver for your device (Recommended)** and click **Next**.

4

Select **Specify a location**, and then browse to your CD-ROM drive. Select the **Lan** or **Wan** folder. **Lan** contains **RFC 1483** and **Wan** contains **RFC 2364** drivers. Click **Next**.

5

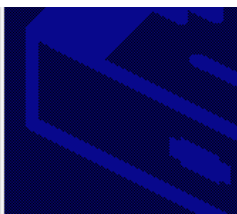Windows will prompt that the driver is found. Click **Next**.

6

Click **Finish.** Installation of the setup program will commence. Refer to **Running the Modem Setup Program** section.

Windows® 2000

2

Click **Next** to start the search for drivers.

To continue, click Next.

< Back | Next > | Cancel

Found New Hardware Wizard

Install Hardware Device Drivers
A device driver is a software program that enables a hardware device to work with an operating system.

This wizard will complete the installation for this device:

USB Device

A device driver is a software program that makes a hardware device work. Windows needs driver files for your new device. To locate driver files and complete the installation click Next.

What do you want the wizard to do?

◉ Search for a suitable driver for my device (recommended)

○ Display a list of the known drivers for this device so that I can choose a specific driver

< Back | Next > | Cancel
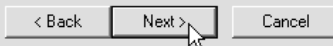
3

Select the **Search for a suitable driver for my device (recommended)** option and then click **Next**.

4

Select **Specify a location** and click **Next**.

The wizard searches for suitable drivers in its driver database on your computer and in any of the following optional search locations that you specify.

To start the search, click Next. If you are searching on a floppy disk or CD-ROM drive, insert the floppy disk or CD before clicking Next.
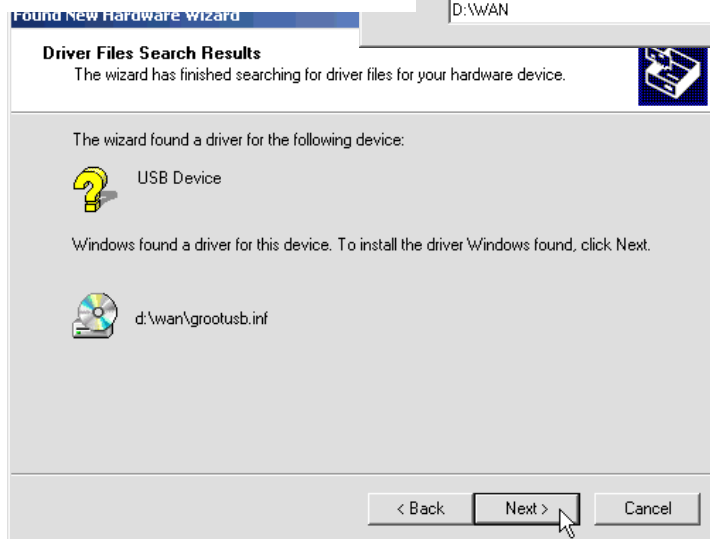
Optional search locations:
☐ Floppy disk drives
☐ CD-ROM drives
☑ Specify a location
☐ Microsoft Windows Update

< Back | Next > | Cancel

5

Browse to the CD-ROM drive. Select the **Lan** or **Wan** folder. **Lan** contains **RFC 1483** and **Wan** contains **RFC 2364** drivers. Click **OK**.
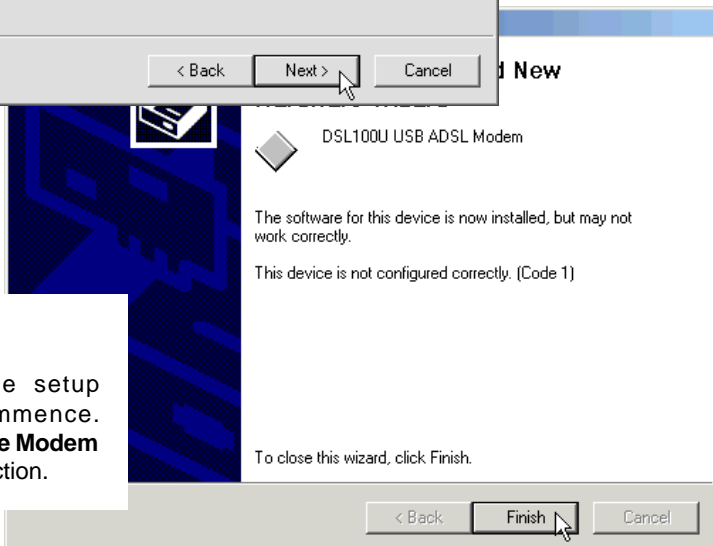
Found New Hardware Wizard

Insert the manufacturer's installation disk into the drive selected, and then click OK.

OK   Cancel

Copy manufacturer's files from:

D:\WAN   Browse...

Found New Hardware Wizard

Driver Files Search Results
The wizard has finished searching for driver files for your hardware device.

The wizard found a driver for the following device:

USB Device

Windows found a driver for this device. To install the driver Windows found, click Next.

d:\wan\grootusb.inf

6

Windows will prompt that the driver is found. Click **Next**.

< Back   Next >   Cancel

d New

DSL100U USB ADSL Modem

The software for this device is now installed, but may not work correctly.

This device is not configured correctly. (Code 1)

7

Click **Finish.**

Installation of the setup program will commence. Refer to **Running the Modem Setup Program** section.

To close this wizard, click Finish.

< Back   Finish   Cancel

Running the Modem Setup Program

Windows® Me/98SE/98/2000

1

Click **Next** upon the Welcome prompt.

The driver files would be installed.

2

If you are running Windows® 2000, you may be prompted with a **Digital Signature Not Found** window. Click **Yes** to continue.
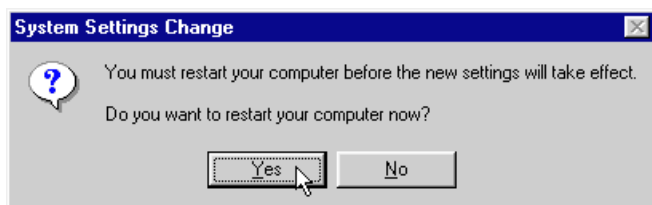
3

Windows® 98SE/98/Me

Detection of the hardware will begin.

If you are running Windows 98SE/98, you may be prompted for the Windows CD. If so, insert the Windows CD and then click **OK**.

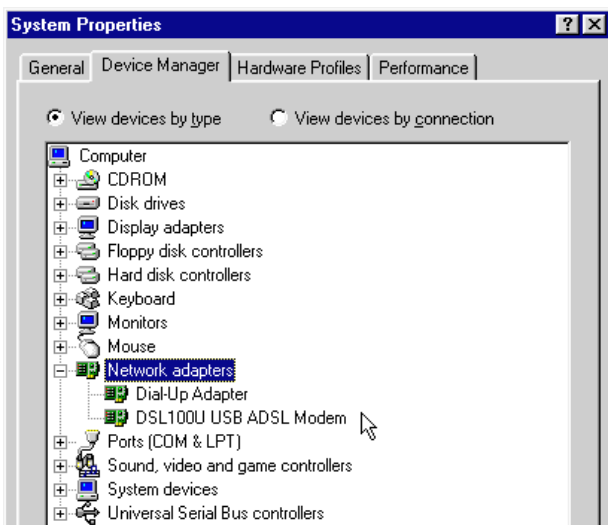Direct Windows to the Win98 directory on the Windows CD, then click **OK**.

4

Restart when prompted.

System Settings Change

> ? You must restart your computer before the new settings will take effect.
>
> Do you want to restart your computer now?
>
> [Yes]   [No]

5

After restarting, you may be prompted to enter the country setting information if you have not set it before. Enter the current country and codes.

Check from the **Device Manager** that the drivers have been properly installed (Right-click **My Computer** > select **Properties** > **Device Manager** tab). If it is not there or an exclamation mark is displayed beside it, you should uninstall and then reinstall the drivers.
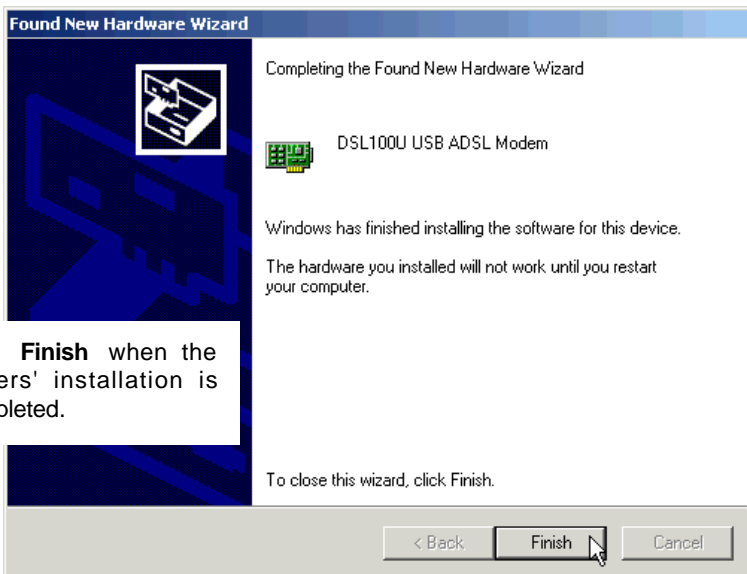
System Properties   ? ×

General | Device Manager | Hardware Profiles | Performance |

  ⊙ View devices by type   ○ View devices by connection

💻 Computer
  ⊞ 💿 CDROM
  ⊞ 💾 Disk drives
  ⊞ 🖥 Display adapters
  ⊞ 🗇 Floppy disk controllers
  ⊞ 🗇 Hard disk controllers
  ⊞ ⌨ Keyboard
  ⊞ 🖥 Monitors
  ⊞ 🖰 Mouse
  ⊟ 🖳 Network adapters
      🖳 Dial-Up Adapter
      🖳 DSL100U USB ADSL Modem
  ⊞ 🖉 Ports (COM & LPT)
  ⊞ 🕮 Sound, video and game controllers
  ⊞ 🖥 System devices
  ⊞ 🖧 Universal Serial Bus controllers

After your system has restarted, a program group **DSL100U USB ADSL Modem** would be created.

Windows® 2000

3

Detection of the hardware will begin.

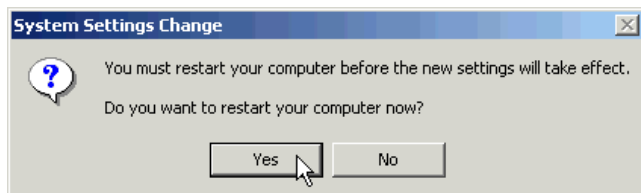You may be prompted by a **Digital Sugnature Not Found** window. Click **Yes** to continue.

Found New Hardware Wizard

Completing the Found New Hardware Wizard

DSL100U USB ADSL Modem

Windows has finished installing the software for this device.

The hardware you installed will not work until you restart your computer.

4

Click **Finish** when the drivers' installation is completed.

To close this wizard, click Finish.

< Back   Finish   Cancel

5

Restart when prompted.

System Settings Change

You must restart your computer before the new settings will take effect.

Do you want to restart your computer now?

Yes   No

6

After restarting, you may be prompted to enter the country setting information if you have not set it before. Enter the current country and codes.

Check that the drivers have been properly installed from the **Device Manager** (Right-click **My Computer** > select **Properties** > **Hardware** tab **> Device Manager** button). If the modem is not shown there or an exclamation mark is displayed beside it, you should reinstall the drivers.
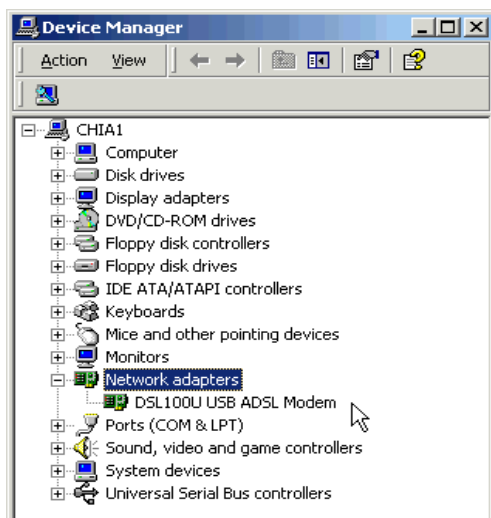
After your system has restarted, a program group **DSL100U USB ADSL Modem** would be created.

Establishing the ADSL Connection

> To connect to the ADSL line, connect the modem's **Line Jack** with a **Telephone Extension Cable** to the **Telephone Wall Socket** as illustrated in the section **Rear Panel Connections**.

For WAN (RFC 2364):

To connect to your ISP service, from the desktop, double-click on the short-cut **"DSL100U Dial-up"**. Enter your user name and password, then click **Connect**.

[You can also connect to your ISP from **Control Panel** > **Dial-up Networking** (Win Me & 2000) or **My Computer** > **Dial-up Networking** (Win 98)]

For LAN (RFC 1483)

To connect to your ISP service, you need to install a third-party PPPoE client such as WinPoET.

Once the drivers have been properly installed, you will see a new icon in the system tray (bottom right-hand corner).
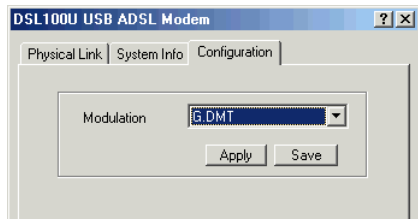

Double-click it to open.
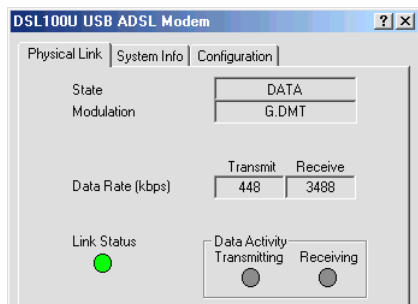
You can monitor the ADSL connection status under the **Physical Link** tab.

If you removed the icon from the system tray, you can open it from the **Control Panel** by double-clicking on the

DSL100U USB ADSL Modem icon.

Under the **Configuration** tab, you can change the modulation.

After changing, click the **Apply** button for it to take effect. You will be prompted to restart connection. Click **Yes**.

Click **Save** if you want the changes to be saved permanently.

If you want to change the encapsulation, VPI or VCI values, refer to the **Changing the Configuration Values** section.

DSL Test

On the desktop, click on the **DSL Test** short-cut to access the test. (You can also find it by clicking on **Start** > **Programs** > **DSL100U USB ADSL Modem** > **DSL Test.**) When connected to the ADSL line, click on the **Test** button to perform the various tests. WAN users should get a **pass** for the Interface and Modem tests. LAN users should get a **pass** for the Interface test.
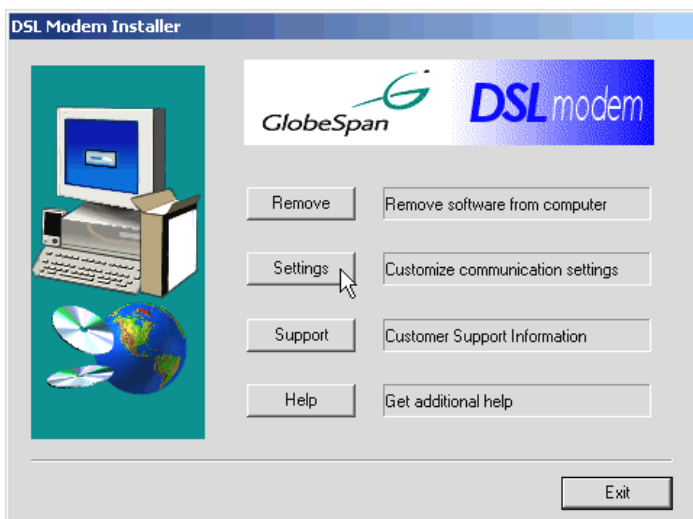
If you get a **fail** for the **Interface** or **Modem Test**, reinstall your modem drivers.
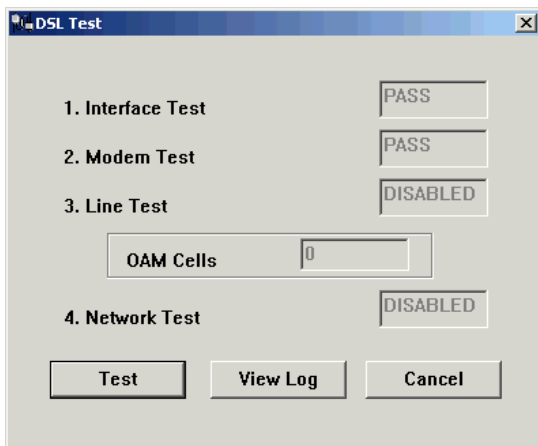
Changing the Configuration Values

Click on **Start** > **Programs** > **DSL100U USB ADSL Modem** > **Configure** to access the **Settings** button.
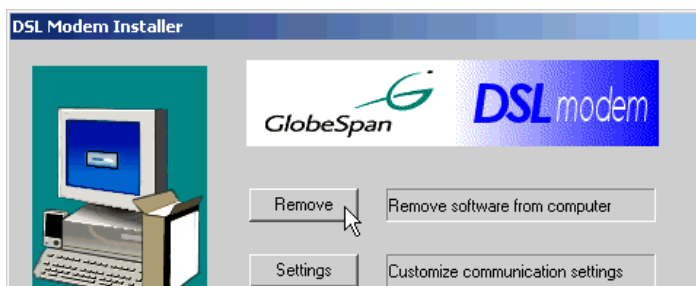
Click the **Settings** button to change communication settings such as the VPI, VCI and encapsulation.

Uninstalling the Modem Drivers

Ensure that you do not unplug the USB cable from the modem.

Click on **Start** > **Programs** > **DSL100U USB ADSL Modem** > **Uninstall** to access the **Remove** button. Follow the instructions to uninstall the drivers.

Unplug the USB cable from the modem when uninstallation is done. Restart your system when prompted.

Alternatively,
from the **Control Panel**, double-click on the **Add/Remove Programs** icon.

Windows® Me/98SE/98

Under the **Install/Uninstall** tab, select **DSL100U USB ADSL Modem** and then click the **Add/Remove...** button.

Click the **Remove** button to uninstall the drivers.

Restart your system when prompted.

Windows® 2000

Select **DSL100U USB ADSL Modem** and then click the **Change/Remove** button.

Click the **Remove** button to uninstall the drivers.

Restart your system if prompted.

Troubleshooting

Q: I am not getting any connection. The modem Power LED lights up and the ADSL Link LED keeps blinking (The ADSL Link LED does not remain light up).

A: Check that the Telephone cable (RJ-11) is connected to the **LINE** jack on your modem and not to the **TEL** jack. If this problem persists, please check with your ADSL Service Provider.

Q: I am getting poor ADSL speed performance from my modem.

A: i) Place your modem away from devices or appliances such as monitors, exposed computer systems (with chassis covers removed) or another modem which exhibit magnetic fields that may cause interferences to your modem line.

ii) Ensure that Micro-Filters are used for phone sockets at different telephone points that are sharing the same phone line.

If your modem speed or performance is still unsatisfactory, please contact your ADSL Service Provider.

Q: Do I need to use microfilters when using ADSL ?

A: For DSL100U(M):

A microfilter is required if you are sharing your ADSL line with your telephone. The microfilter will eliminate noise on the telephone line to achieve the best possible networked phone performance. If the ADSL line uses a different line from your telephone, then a microfilter will not be necessary.

For DSL100U:

There is already a built-in microfilter at the **TEL** jack of your modem. Thus, no microfilter is required between your Telephone set and your modem. However, if you are sharing the ADSL line with other telephone line extensions, you will need to have a microfilter connected between the other telephone set and the telephone wall socket connecting to it.