

# **ADSL USB Modem**

## User's Manual

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July 2002, Revision 01

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# Safety Instructions

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Please read the following instructions carefully to prevent potential hazards.

1. Do not expose the product to rain, water, moisture or direct sunshine.
2. Do not spill liquid into the product.
3. Do not place near sources of heat such as heaters or radiators.
4. Do not attempt to disassemble or open covers of this unit yourself; otherwise it may expose you to dangerous voltage or other hazards and void the warranty.
5. Before cleaning, unplug the USB cable. Use a damp cloth for cleaning.
6. Proper ventilation is necessary to prevent the product from overheating.
7. For better performance, put away from television and PC's monitor (e.g. do not put the ADSL modem on the monitor).

### 1.1 Introduction

The ADSL (Asymmetric Digital Subscriber Line) USB Modem uses existing twisted-pair phone lines through POTS (Plain Old Telephone System) to deliver high-speed access to the Internet. ADSL technology is quickly solving the bandwidth problem, allowing lightning-fast transmission of data, voice and image. At the same time, the POTS splitterless design saves your money on hardware and installation costs.

### 1.2 Features

- Easy installation and configuration
- Compliant with ANSI T1.413 issue 2 , G.dmt and G.lite
- Up to 8 Mbps downstream and at least 640 Kbps upstream for full-rate operation.

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**Note:** The actual rate depends on the copper category of your telephone wire, distance from the central office and the type of ADSL service subscribed to. Also, if other USB devices are attached to your computer sharing the fixed bandwidth of USB controller, the performance of the USB modem will be slightly influenced and thus effects the actual speed.

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- Hot plug-in and hot plug-off
- Supports POTS and ADSL simultaneously
- USB bus powered, no external power adapter required.
- Includes a Microsoft Windows control panel monitoring program for configuring the adapter and checking the status of the connection.

### 1.3 Item Checklist

Before installation, please check the items of your package. The package should include the following items:

- ADSL USB Modem
- One Phone Cord
- One USB Cable
- Quick Installation Guide
- Installation CD
- Splitter/Micro Filter (optional depending on your ISP)

If any of the above items is missing, please contact your supplier.

## 1.4 System Requirements

Before installation, please check the following requirements with your equipment:

- Pentium II 233 or above
- At least 32 MB RAM (64 MB recommended)
- Windows 98<sup>®</sup>/Me<sup>®</sup>/2000<sup>®</sup>/XP<sup>®</sup>
- Available USB port
- CD-ROM drive
- 20 Mbytes available hard disk or more
- Subscription to an ADSL service provider
- Windows 98 Installation CD, which will be prompted for during installation.

## 1.5 Collect Related Information

Prior to installing the driver, consult with your ISP or system administrator about the connection type and collect related information. You will be prompted for these information during installation.

Connection Type	Encapsulation and Multiplexing method	Network Information
LAN	RFC 1577 Classical IPoATM RFC 1483 IPoATM Bridged LLC Encapsulation RFC 1483 IPoATM Bridged VC Encapsulation RFC 1483 IPoATM Routed LLC Encapsulation RFC 1483 IPoATM Routed VC Encapsulation	TCP/IP information: <ul style="list-style-type: none"><li>● IP address</li><li>● Subnet mask</li><li>● DNS (if required)</li><li>● Gateway</li></ul>
WAN	RFC 2364 PPPoATM LLC Encapsulation RFC 2364 PPPoATM NULL Encapsulation RFC 2516 PPPoE Encapsulation	Internet Account information: <ul style="list-style-type: none"><li>● User name</li><li>● Password</li></ul>

In addition, you need the following information:

- Modulation (Transmission Standards):
  - T1.413
  - Multimode
  - G.Lite
  - G.DMT
- The values of VPI and VCI

# Chapter 2

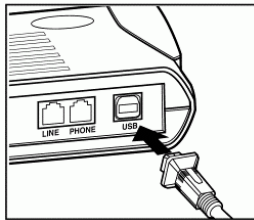
## Hardware Installation

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For safety, before installing and uninstalling your ADSL USB Modem, please make sure the telephone line is unplugged from your modem.

### 2.1 Connecting Your Modem

- Step 1 Plug the USB cable connected to your PC into the USB port of the ADSL modem .



#### Important Notes on Attaching Other USB Devices

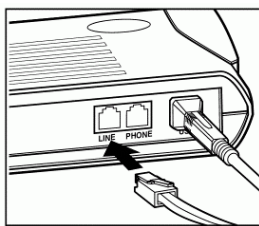
If you are going to attach other USB devices, such as USB mouse, keyboard or hub, please plug them to your PC first before connecting the USB modem. Otherwise, the pre-attached USB modem will consume a fixed bandwidth and the remaining bandwidth will be not enough for other USB devices.

If this is the case, you will see an error message warning you that the USB controller bandwidth is exceeded. The additional USB device may not function properly.

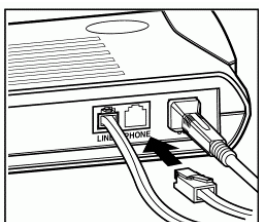
For example, your USB modem is attached already and you need to add an USB mouse to your PC. In this case:

1. Unplug the USB modem to release the bandwidth.
2. Plug the USB mouse to your PC and then re-plug the USB modem. The USB modem will adjust to use the remaining bandwidth.

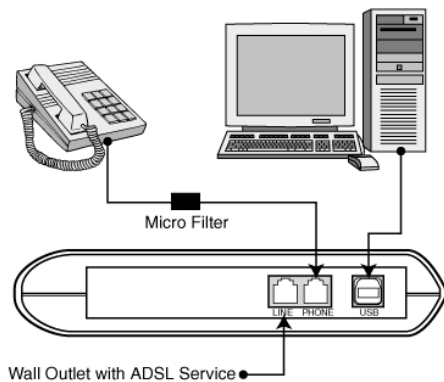
- Step 2 Plug one end of the phone cord into the **LINE** port on the modem, and plug the other end into the wall outlet with ADSL service.



- Step 3 Connect the **PHONE** port of the modem to the telephone with a phone cord.



The diagram below illustrates the typical ADSL USB modem connection:



# Chapter 3

## Installation/Configuration for Windows 98/Me

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After hardware installation, follow the instructions below to install the drivers for the modem. If you prefer to manually install the driver rather than following the Plug and Play installation, refer to

### 3.1 Driver Installation

#### 3.1.1 For Windows 98

- Step 1 Windows system will automatically detect the USB modem installed in your computer. When **Add New Hardware Wizard** window announces detecting of the **USB Device**, click **Next**.

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**Note:** If the wizard window below is not displayed, make sure your PC is connected with your USB modem.

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- Step 2 Select **Search for the best driver for your device**, then click **Next**.



- Step 3 Insert the Installation CD into your CD-ROM drive. Check **Specify a location** box and click **Browse** to locate the driver: **x:\Driver\Win98** (where x: represents the CD-ROM drive letter) and click **Next**.



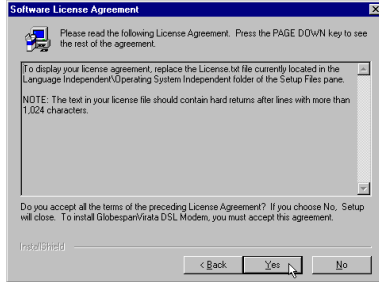
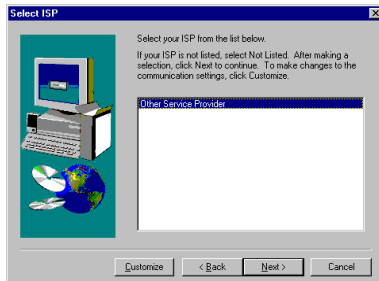
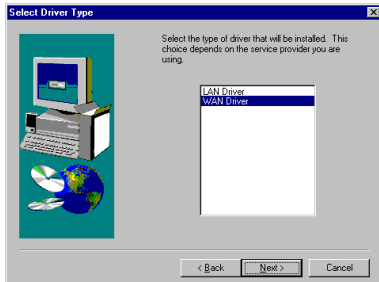
- Step 4 When the **Add New Hardware Wizard** finds the driver, click **Next**.

- Step 5 When Windows has finished installing the software required, click **Finish**.



- Step 6 When prompted with **Welcome** window, click **Next**.



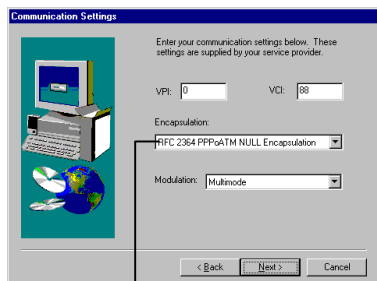
**Step 7 Click Yes to accept the Software License Agreement.****Step 8 With Other Service Provider selected, click Next to continue.****Step 9 Highlight the type of driver specified by your ISP and click Next.**

Step 10 Enter the communication settings specified by your ISP:

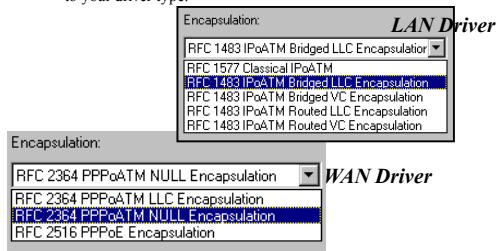
- Enter the **VPI** and **VCI** values.
- Select a required **Encapsulation** type. The options will vary according to the driver type you selected on preceding step.
- Select a **Modulation** type from *T1.413*, *Multimode*, *G.Lite* or *G.DMT*.

When done with the necessary settings, click **Next** to continue.

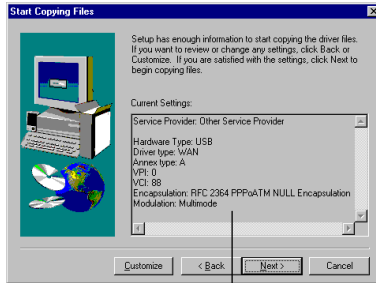
**Note:** If you are unsure about the communication settings, contact your ISP to obtain required information.



The options for **Encapsulation** will vary according to your driver type.

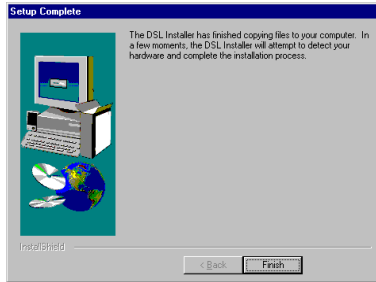


- Step 11 You will be prompted to confirm the settings prior to copying files. If the current settings on the list below are correct, click **Next**. Otherwise, click **Back** to reset.



The current settings vary according to your settings previously.

- Step 12 Wait for the system copying files to your computer. When completed, click **Finish**.



- Step 13 When prompted with the screen below, click **OK**. Then click **Browse** to locate the driver and then click **OK**.

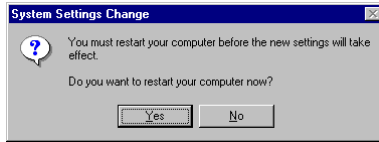


- Step 14 When prompted with Windows 98 CD, click **OK**. Then type in the path to Windows 98 installation files and click **OK**.

**Note:** If Windows 98 files are not in your hard disk, you will need to remove the installation CD from your CD-ROM drive and then insert Windows 98 CD.



Step 15 When prompted, click **Yes** to restart your computer.



Now, you are done with the driver installation. Please proceed to next section for configuration.

For LAN users, go to “3.2.1 LAN – Configuring TCP/IP Settings” on page 15.

For WAN users, go to “3.2.2 WAN – Configuring Dial-Up Connection” on page 18.

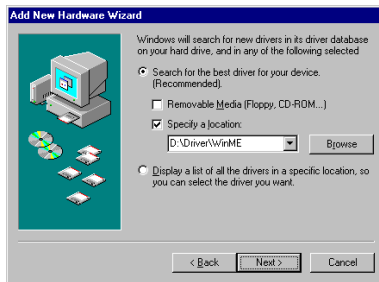
### 3.1.2 For Windows Me

- Step 1 Windows system will automatically detect the new hardware **USB Device** in your computer. Select **Specify the location of the driver (Advanced)**, then click **Next**.

**Note:** If the wizard window below is not displayed, make sure your PC is connected with your USB modem.



- Step 2 Insert the Installation CD into your CD-ROM drive. Select the **Search for the best drive for your device** option and then check **ONLY** the **Specify a location** box. Click **Browse** to locate the driver: **x:\Driver\WinME** (where x: represents the CD-ROM letter) and click **Next**.



- Step 3 The **Add New Hardware Wizard** will appear and indicate that your system is ready to install the drive. Click **Next**.

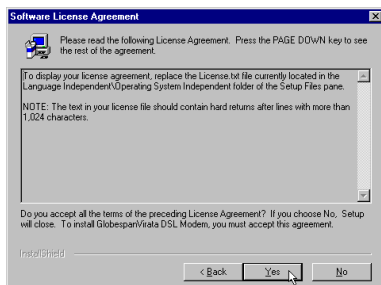
Step 4 When Windows has finished installing the new device, click **Finish**.



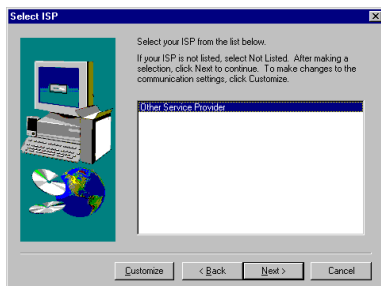
Step 5 When **Welcome** window appears, click **Next**.



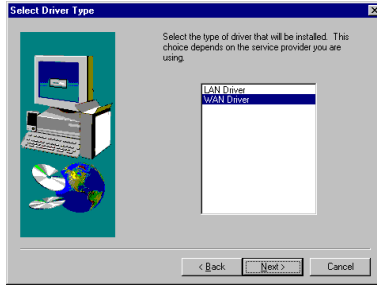
Step 6 Click **Yes** to accept **Software License Agreement**.



Step 7 With **Other Service Provider** selected, click **Next** to continue.



Step 8 Highlight the type of driver specified by your ISP and click **Next**.

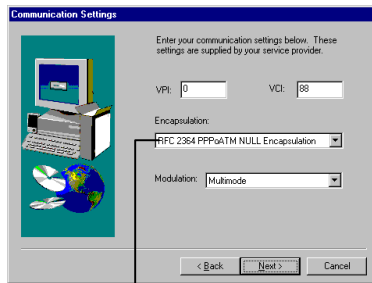


Step 9 Enter the communication settings specified by your ISP:

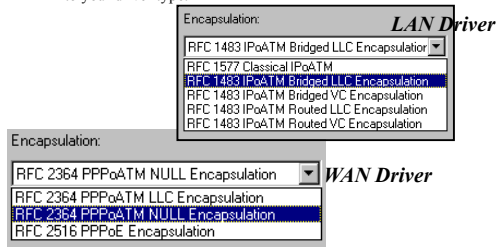
- Enter the **VPI** and **VCI** values.
- Select a required **Encapsulation** type. The options will vary according to the driver type you selected on preceding step.
- Select a **Modulation** type from *T1.413*, *Multimode*, *G.Lite* or *G.DMT*.

When done with the necessary settings, click **Next** to continue.

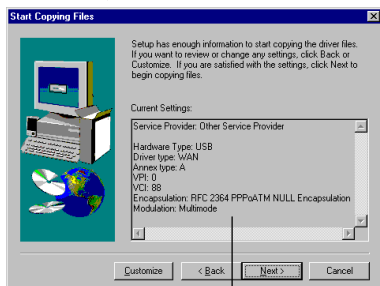
**Note:** If you are unsure about the communication settings, contact your ISP to obtain required information.



The options for **Encapsulation** will vary according to your driver type.



Step 10 You will be prompted to confirm the settings prior to copying files. If the current settings on the list below are correct, click **Next**. Otherwise, click **Back** to reset.

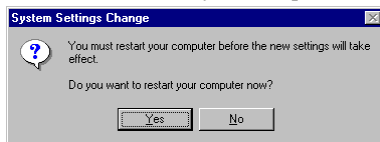


The current settings vary according to your settings previously.

Step 11 Wait for the system copying files to your computer. When completed, click **Finish**.



Step 12 Click **Yes** to restart your computer.



Now, you are done with the driver installation. Please proceed to next section for configuration.

For LAN users, go to “3.2.1 LAN – Configuring TCP/IP Settings” on page 15.

For WAN users, go to “3.2.2 WAN – Configuring Dial-Up Connection” on page 18.

## 3.2 Configuration for Internet Access

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**Note:** The configuration steps are the same in Windows 98 and Windows Me. The graphics here assume a Windows 98 environment.

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### 3.2.1 LAN – Configuring TCP/IP Settings

For LAN driver type, you should configure the ADSL USB Modem's TCP/IP settings. Before setup, you need to consult with your ISP to obtain the following information:

- IP Address
- Subnet Mask
- Default Gateway
- DNS Server (if required by your ISP)

Follow the steps below to configure your TCP/IP setting:

Step 1 Click on the **Start** menu, point to **Settings** and click on **Control Panel**.

Step 2 Double-click the **Network** icon.

Step 3 Click the **Configuration** tab.

**Option 1:** If you already have TCP/IP installed, proceed to Step 7 for configuration.

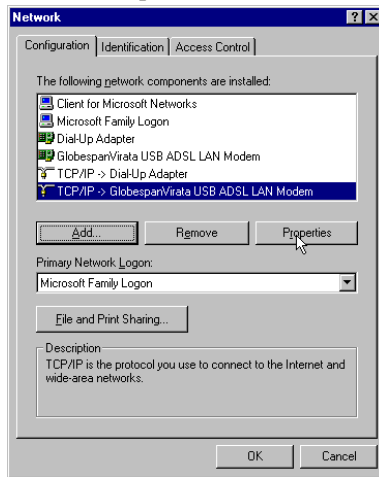
**Option 2:** If you do not have TCP/IP installed, proceed to Step 4 to install TCP/IP.

Step 4 From the **Configuration** tab in the **Network** window, click **Add**.

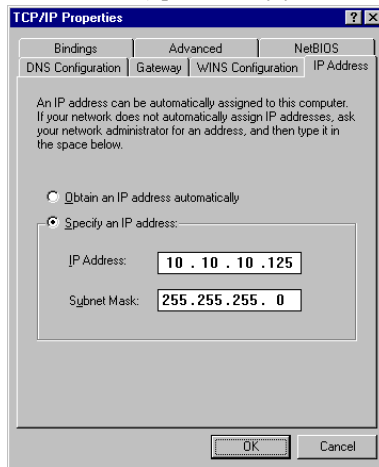
Step 5 Highlight **Protocol** and click **Add**.

Step 6 On the left side of the windows, highlight **Microsoft** and then select **TCP/IP** on the right side. Then click **OK**.

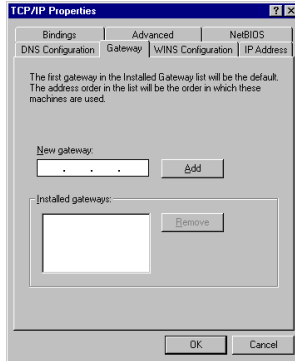
Step 7 Highlight **TCP/IP -> GlobespanVirata USB ADSL LAN Modem** and click **Properties**.



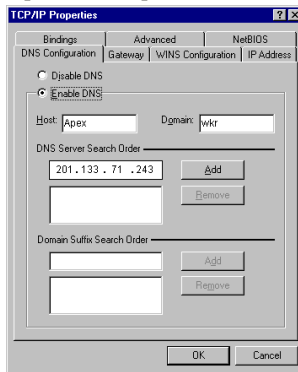
Step 8 On the **IP Address** tab, enable **Specify an IP address** option. Enter the **IP Address** (e.g. 10.10.10.125) and **Subnet Mask** (e.g. 255.255.255.0) provided by your ISP.



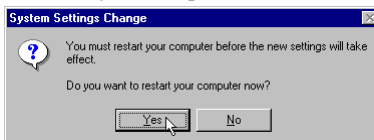
- Step 9 Select **Gateway** tab. Enter your gateway information into **New gateway** box and click **Add**. If you have more than one gateway address, repeat this step.



- Step 10 If DNS is required, select the **DNS Configuration** tab. Check the **Enable DNS** option and enter your DNS information into provided box and click **Add**. If you have more than one DNS IP address, repeat this step.



- Step 11 After completing filling all necessary information for TCP/IP properties, click **OK** twice to exit the network window.
- Step 12 If you have made changes to TCP/IP properties, you will be asked to restart your computer, click **Yes**.



After restarting your computer, you are ready to access the Internet. You may start your application, e.g., a Web browser or E-mail application for the Internet access.

## 3.2.2 WAN – Configuring Dial-Up Connection

For connection type of WAN, you should create a Dial-Up Connection to connect to your ISP. For your convenience, a shortcut to the Dial-Up Connection, GlobespanVirata Dial-Up PPP Connection, is created on your desktop. However, before you create the dial-up connection for the first time, you may need to verify your TCP/IP Settings.

### Verifying Your TCP/IP Settings

- Step 1 From your desktop, double-click **My Computer** and then **Dial-Up Networking**. Right-click **GlobespanVirata Dial-Up PPP Connection** icon and click **Properties**.

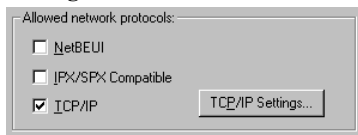



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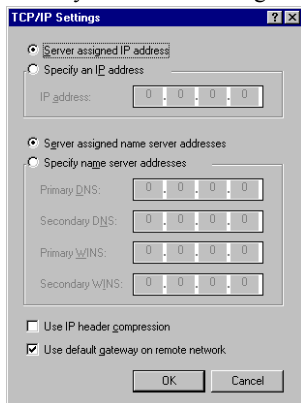
**Note:** If you are prompted with **Location Information** screen, enter your area code and then exit the screen.

---

- Step 2 Click **Server Types** (for Windows 98) / **Networking** (for Windows Me) tab; ensure that **TCP/IP** box is checked. Then click **TCP/IP Settings**.



- Step 3 Check your TCP/IP settings as below and click **OK**.



## Making Dial-Up Connection

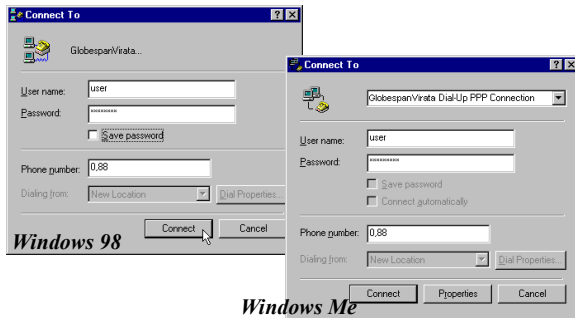
- Step 1 Double-click the **GlobespanVirata Dial-Up PPP Connection** icon on your desktop.



If the shortcut is not found on your desktop, you can also access the icon via **My Computer > Dial-Up Networking**.

- Step 2 Enter the **User name** and **Password** provided by your ISP. Click **Connect**.

**Note:** Although the dialing process is similar to dialing up with an analog modem, however, no actual dial-up is performed and you will not use a standard phone number. **DO NOT** change the **Phone number** value which indicates the VPI/VCI values for establishing ADSL Connection.



Once the connection is established, you are ready to access the Internet. You may start your application, e.g., a Web browser or E-mail application for Internet access.

# Chapter 4

## Installation/Configuration for Windows 2000

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After hardware installation, follow the instructions below to install the drivers for the modem.

### 4.1 Driver Installation

Step 1 Start Windows 2000. When **Found New Hardware Wizard** windows appear, click **Next**.

---

**Note:** If the wizard window below is not displayed, make sure your PC is connected with your USB modem.

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Step 2 The system detects the new hardware **USB Device**. Select **Search for a suitable device...** and click **Next**.



- Step 3 When prompted where to search the driver files, select **Specify a location** and click **Next**.

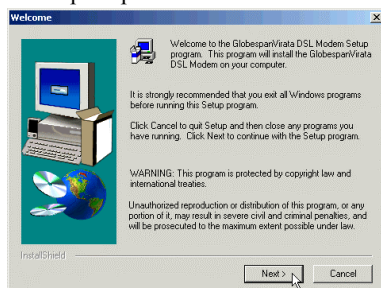


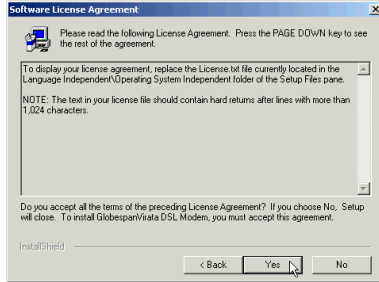
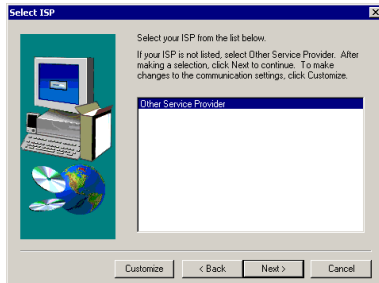
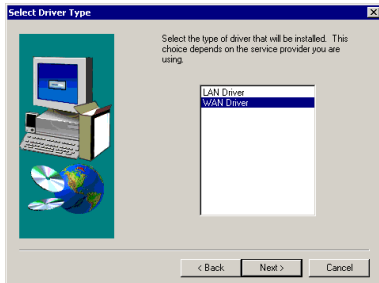
- Step 4 Insert the Installation CD into your CD-ROM drive. Click **Browse** to locate the driver: **x:\Driver\W2K** (where x: represents the CD-ROM drive letter) and click **OK**.



- Step 5 When the **Found New Hardware Wizard** finds the driver, click **Next**.

- Step 6 When prompted with **Welcome** window, click **Next**.



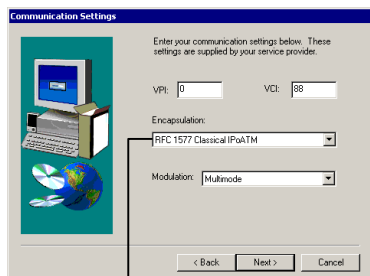
**Step 7 Click Yes to accept the Software License Agreement.****Step 8 With Other Service Provider selected, click Next to continue.****Step 9 Highlight the type of driver specified by your ISP and click Next.**

Step 10 Enter the communication settings specified by your ISP:

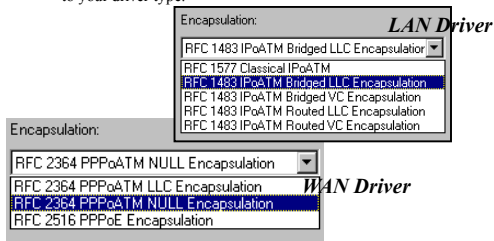
- Enter the **VPI** and **VCI** values.
- Select a required **Encapsulation** type. The options will vary according to the driver type you selected on preceding step.
- Select a **Modulation** type from *T1.413*, *Multimode*, *G.Lite* or *G.DMT*.

When done with the necessary settings, click **Next** to continue.

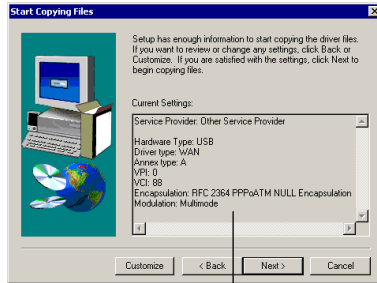
**Note:** If you are unsure about the communication settings, contact your ISP to obtain required information.



The options for **Encapsulation** will vary according to your driver type.

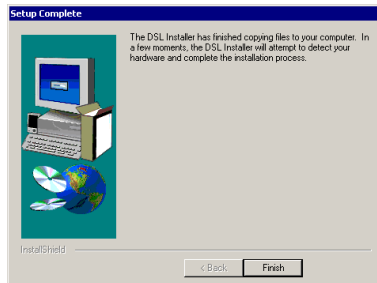


- Step 11 You will be prompted to confirm the settings prior to copying files. If the current settings on the list below are correct, click **Next**. Otherwise, click **Back** to reset.



The current settings vary according to your settings previously.

- Step 12 Click **Finish** and wait for the system to complete the installation. When prompted to restart your computer, click **Yes**.



Now, you are done with the driver installation. Please proceed to next section for configuration.

For LAN users, go to “4.2.1 LAN – Configuring TCP/IP Settings” on page 26.

For WAN users, go to “4.2.2 WAN – Configuring Dial-Up Connection” on page 28.

## 4.2 Configuration for Internet Access

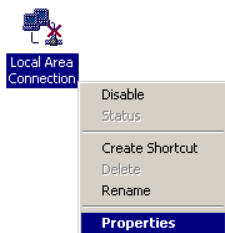
### 4.2.1 LAN – Configuring TCP/IP Settings

For LAN driver type, you should configure the ADSL USB Modem's TCP/IP settings. Before setup, you need to consult with your ISP to obtain the following information:

- IP Address
- Subnet Mask
- Default Gateway
- DNS Server (if required by your ISP)

Follow the steps below to configure your TCP/IP setting:

- Step 1 From your desktop, double-click **My Computer > Control Panel > Network and Dial-up Connections**. Right-click **Local Area Connection** icon, and select **Properties** on its menu.

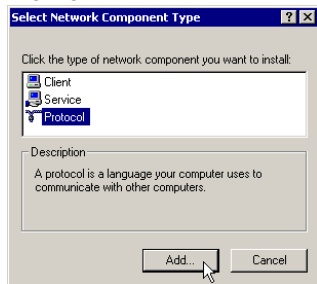


- Step 2 On the **General** tab, check out the list of installed network components.

**Option 1:** If you have **no** TCP/IP Protocol, click **Install**.

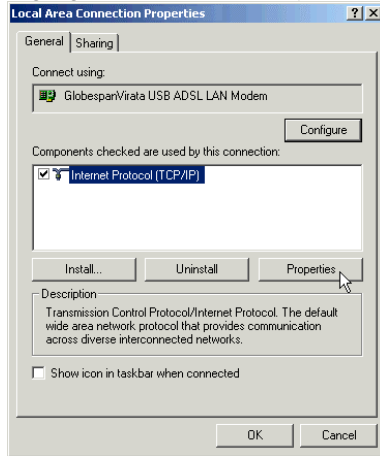
**Option 2:** If you have TCP/IP Protocol, go to Step 5.

- Step 3 Highlight **Protocol** and then click **Add**.



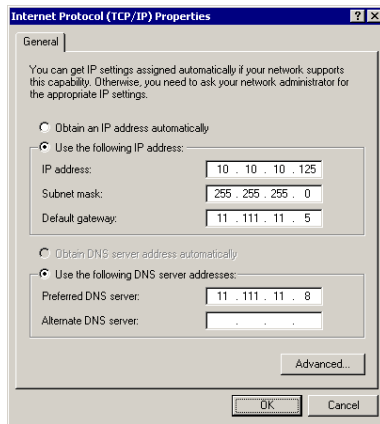
- Step 4 Select **Internet Protocol(TCP/IP)** from the list and then click **OK**.

Step 5 Highlight **Internet Protocol (TCP/IP)** and then click **Properties**.



Step 6 Under the **General** tab, enable **Use the following IP Address**. Enter the **IP address** (e.g. 10.10.10.125), **Subnet Mask** (e.g. 255.255.255.0) and **Default gateway** (e.g. 11.111.11.5). If necessary, enter the DNS server address given by your ISP. Then click **OK**.

**Note:** If you are unsure about the TCP/IP settings, contact your ISP to obtain required information.



Step 7 Close the **Local Area Connection Properties** window. If prompted to restart your computer, click **Yes**.

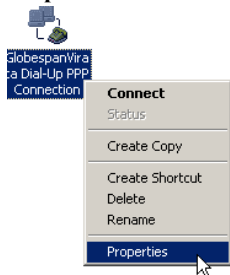
After restarting your computer, you are ready to access the Internet. You may start your application, e.g., a Web browser or E-mail application for the Internet access.

## 4.2.2 WAN – Configuring Dial-Up Connection

For WAN connection type, you should create a Dial-Up Connection to connect to your ISP. For your convenience, a shortcut to the Dial-Up Connection, GlobespanVirata Dial-Up PPP Connection, is created on your desktop. However, before you create the dial-up connection for the first time, you may need to verify your TCP/IP Settings.

### Verifying Your TCP/IP Settings

- Step 1 From your desktop, double-click **My Computer > Control Panel > Network and Dial-up Connections**. Right-click **GlobespanVirata Dial-Up PPP Connection** icon and click **Properties**.

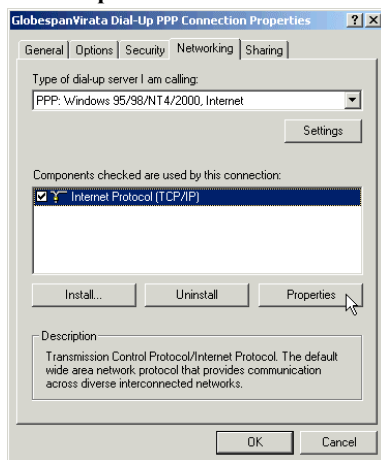


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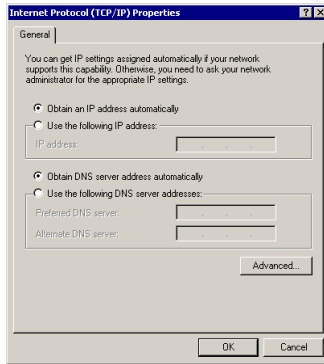
**Note:** If you are prompted with **Location Information** screen, enter your area code and then exit the screen.

---

- Step 2 On **Networking** tab, highlight **Internet Protocol (TCP/IP)** and click **Properties**.



- Step 3 Check your TCP/IP settings as below and click **OK**. Return to **Network and Dial-up Connections** window.



## Making Dial-Up Connection

- Step 1 Double-click the **GlobespanVirata Dial-Up PPP Connection** icon on your desktop.



If the shortcut is not found on your desktop, you can also access the icon via **My Computer > Control Panel > Network and Dial-up Connections**.

- Step 2 Enter the **User name** and **Password** provided by your ISP. Click **Dial**.



When the connection is established, you are ready to access the Internet. You may start your application, e.g., a Web browser or E-mail application for the Internet access.

# Chapter 5

## Installation/Configuration for Windows XP

---

After hardware installation, follow the instructions below to install the drivers for the modem.

### 5.1 Driver Installation

- Step 1 Start Windows XP. When **Found New Hardware Wizard** windows appear, select **Install from a list or specific location (Advanced)** and click **Next**.

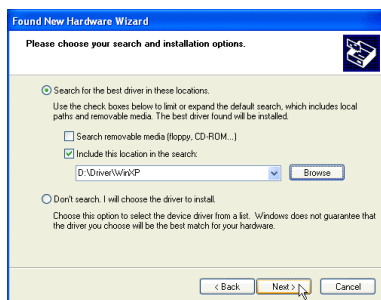
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**Note:** If the wizard window below is not displayed, make sure your PC is connected with your USB modem.

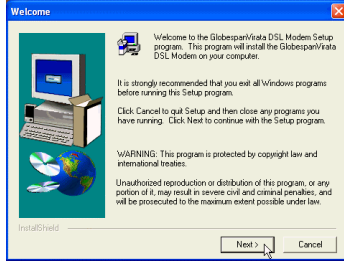
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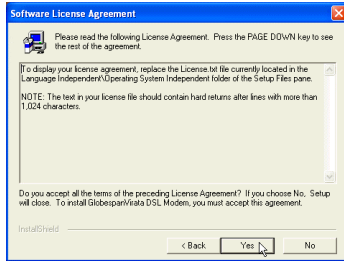
- Step 2 Insert the Installation CD into your CD-ROM drive. With **Search for the best driver...** selected, check **ONLY Include this location in the search**. Click **Browse** to locate the driver: **x:\Driver\WinXP** (where x: represents the CD-ROM drive letter) and click **Next**.



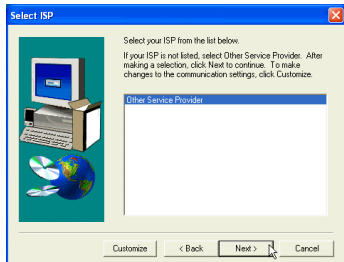
Step 3 When prompted with **Welcome** window, click **Next**.



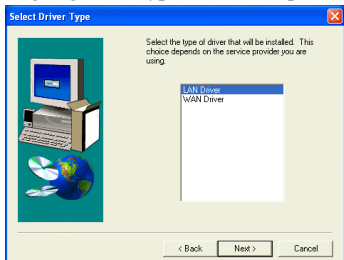
Step 4 Click **Yes** to accept the **Software License Agreement**.



Step 5 With **Other Service Provider** selected, click **Next** to continue.



Step 6 Highlight the type of driver specified by your ISP and click **Next**.

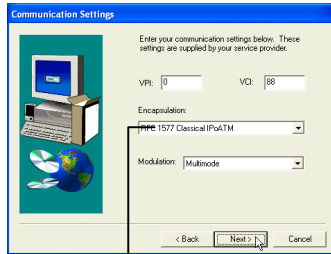


Step 7 Enter the communication settings specified by your ISP:

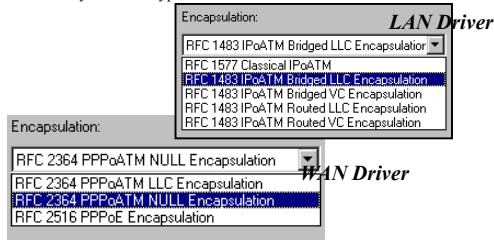
- Enter the **VPI** and **VCI** values.
- Select a required **Encapsulation** type. The options will vary according to the driver type you selected on preceding step.
- Select a **Modulation** type from *T1.413*, *Multimode*, *G.Lite* or *G.DMT*.

When done with the necessary settings, click **Next** to continue.

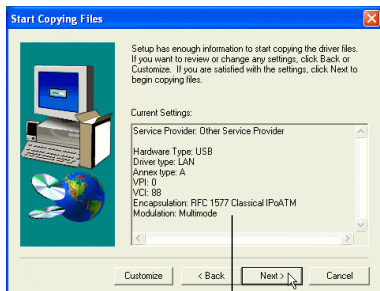
**Note:** If you are unsure about the communication settings, contact your ISP to obtain required information.



The options for **Encapsulation** will vary according to your driver type.

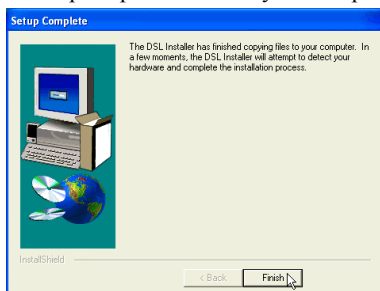


- Step 8 You will be prompted to confirm the settings prior to copying files. If the current settings on the list below are correct, click **Next**. Otherwise, click **Back** to reset.



The current settings vary according to your settings previously.

- Step 9 Click **Finish** and wait for the system to complete the installation. When prompted to restart your computer, click **Yes**.



Now, you are done with the driver installation. Please proceed to next section for configuration.

For LAN users, go to “5.2.1 LAN – Configuring TCP/IP Settings” on page 35.

For WAN users, go to “5.2.2 WAN – Configuring Dial-Up Connection” on page 37.

## 5.2 Configuration for Internet Access

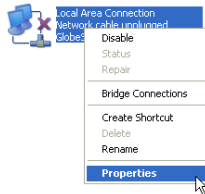
### 5.2.1 LAN – Configuring TCP/IP Settings

For LAN driver type, you should configure the ADSL USB Modem's TCP/IP settings. Before setup, you need to consult with your ISP to obtain the following information:

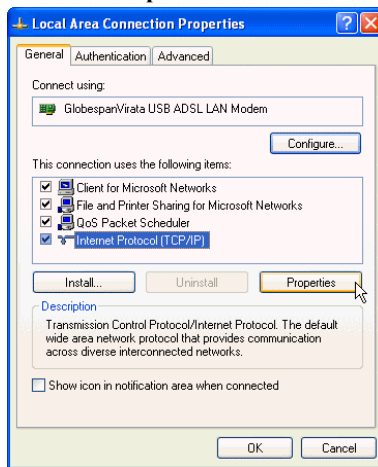
- IP Address
- Subnet Mask
- Default Gateway
- DNS Server (if required by your ISP)

Follow the steps below to configure your TCP/IP settings:

- Step 1 From your desktop, double-click **My Computer** > **Control Panel** > **Network Connections**. Right-click **Local Area Connection** icon, and select **Properties** on its menu.



- Step 2 On the **General** tab, highlight **Internet Protocol (TCP/IP)** and then click **Properties**.

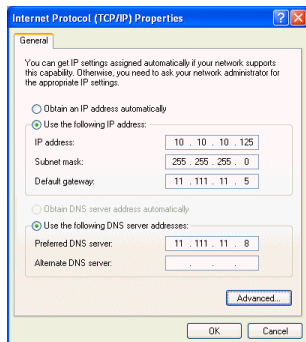


- Step 3 Under the **General** tab, enable **Use the following IP Address**. Enter the **IP address** (e.g. 10.10.10.125), **Subnet Mask** (e.g. 255.255.255.0) and **Default gateway** (e.g. 11.111.11.5). If necessary, enter the DNS server address given by your ISP. Then click **OK**.

---

**Note:** If you are unsure about the TCP/IP settings, contact your ISP to obtain required information.

---



- Step 4 Close the **Local Area Connection Properties** window.

When the connection is established, you are ready to access the Internet. You may start your application, e.g., a Web browser or E-mail application for the Internet access.

## 5.2.2 WAN – Configuring Dial-Up Connection

For WAN connection type, you should create a Dial-Up Connection to connect to your ISP. For your convenience, a shortcut to the Dial-Up Connection, GlobespanVirata Dial-Up PPP Connection, is created on your desktop. However, before you create the dial-up connection for the first time, you may need to verify your TCP/IP Settings.

### Verifying Your TCP/IP Settings

Step 1 From your desktop, double-click **My Computer > Control Panel > Network Connections**. Right-click **GlobespanVirata Dial-Up PPP Connection** icon and click **Properties**.

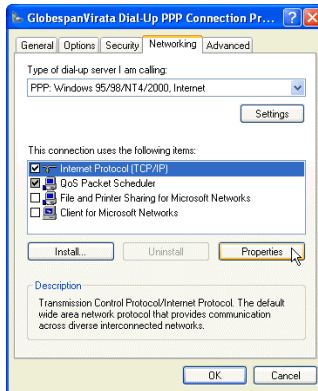



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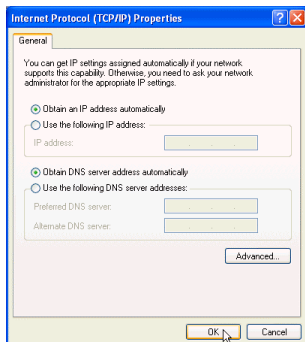
**Note:** If you are prompted with **Location Information** screen, enter your area code and then exit the screen.

---

Step 2 On **Networking** tab, highlight **Internet Protocol (TCP/IP)** and click **Properties**.



Step 3 Check your TCP/IP settings as below and click **OK**. Return to **Network Connections** window.

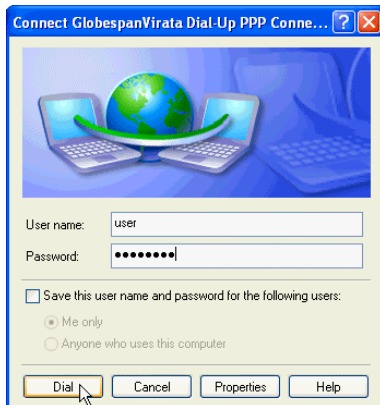


### Making Dial-Up Connection

Step 1 Double-click the **GlobespanVirata Dial-Up PPP Connection** icon on your desktop.



Step 2 Enter the **User name** and **Password** provided by your ISP. Click **Dial**.



When the connection is established, you are ready to access the Internet. You may start your application, e.g., a Web browser or E-mail application for the Internet access.

# Chapter 6

## Customize Settings

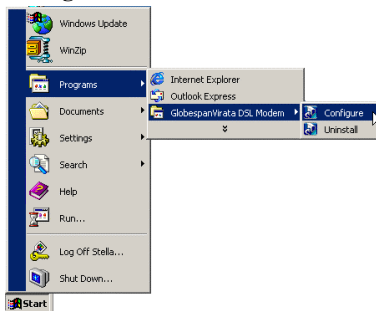
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If you need to re-configure the ADSL modem settings, e.g., VPI/VCI values, encapsulation or modulation type, following the steps described in this chapter. Note that do not modify the ADSL modem settings unless instructed by your ISP. Make sure to contact your ISP prior to making any changes.

**Note:** If your connection type is changed from LAN to WAN (or vice versa), you should remove the driver first and then re-install the required driver.

---

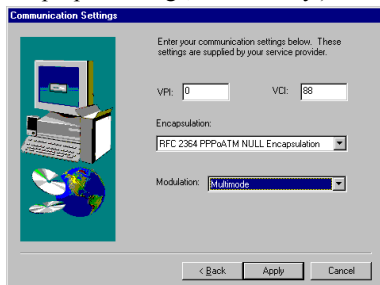
Step 1 Click **Start > Programs > GlobespanVirata DSL Modem > Configure.**



Step 2 Click **Settings.**



- Step 3 Set the proper value of **VPI** and **VCI**, the **Encapsulation**, and **Modulation** type. Click **Apply** to continue. (Consult your ISP on the proper settings, if necessary.)

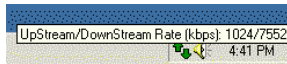


- Step 4 Select **Yes, I want to restart my computer now** and click **Finish** to have new settings take effect.



### 7.1 Link Status

During driver installation, a DSL Modem monitoring program is also installed on your system. Whenever you start Windows, the utility is launched automatically with its icon loaded in your system tray to indicate whether the physical connection between your USB modem and the ISP is up or down.



If the DSL Modem icon does not appear in your system tray, you can manually start the utility by double-clicking the **GlobespanVirata DSL Modem** icon in the **Control Panel**. This opens the **GlobespanVirata DSL Modem Control Panel** and launches the utility icon at the same time.

The DSL Modem icon consists of two arrows. The upward arrow indicates data is being transmitted whereas the downward arrow indicates data is being received. The link status can be determined as follows:

Icon	Status
	The arrows are flashing yellow alternatively to indicate training is in progress. The ADSL USB modem is trying to connect to the ISP.
	Connection is established but no data traffic or ADSL connection is no established. To identify the connection status, you can move the cursor over the icon to see pop-up text. If the connection is down, <b>DSL Modem: No signal</b> is shown; otherwise upstream/downstream rate is shown.
	The ADSL USB modem is transmitting/receiving data.
	The ADSL USB modem is transmitting and receiving data.
	The ADSL USB modem is disconnected or an error occurs.

The physical link over ADSL line is essential before you make connection to ISP or corporate networks. If your ADSL connection fails, connect your ISP or system administrator for troubleshooting.

## 7.2 DSL Modem Control Panel

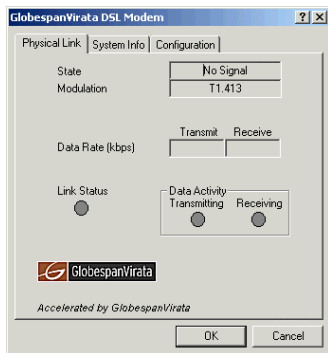
When your ADSL session is active, you can view specific information over your ADSL link. Right-click the DSL Modem icon and click **Open Control Panel**. This pops up the **GlobespanVirata DSL Modem Control Panel** with three tabs available :



### Physical Link

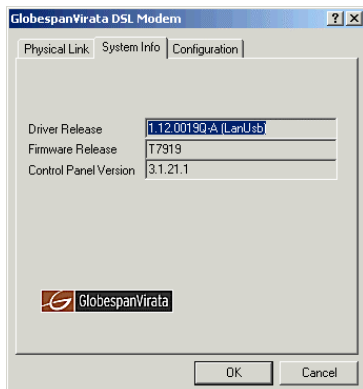
This tab displays your ADSL connection state and the modulation type. Data rates indicates the maximum transmit and receive rates in kbps on the ADSL line.

The circle of Link Status flashes when an ADSL link is attempted. The transmitting/receiving circle flashes when transmitting/receiving data.



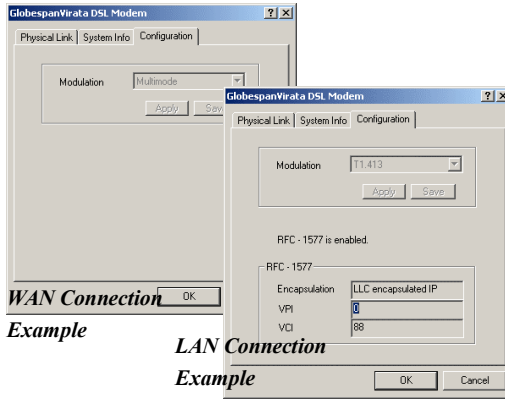
### System Info

This tab provides information on the driver, firmware and Control Panel.



## Configuration

This tab is grayed out. To customize your configuration, refer to “Chapter 6 Customize Settings” for more information.



# Chapter 8

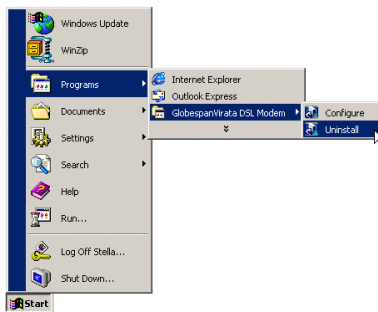
## Removing and Upgrading Driver

---

### 8.1 Removing Driver

The ADSL USB Modem is a hot swappable USB device. You may plug it in and out without powering down your computer. However, this does not mean that both driver and software are removed when plugging out the USB device. Should you need to remove the ADSL USB modem, follow the steps below.

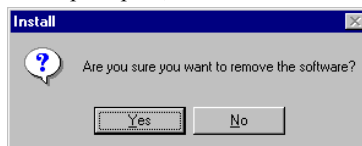
Step 1 Click the **Start** menu, point to **Programs**, **GlobespanVirata DSL Modem**, and then click **Uninstall**.



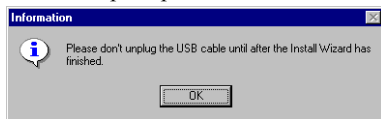
Step 2 Click **Remove**.



Step 3 When prompted, click **Yes** to remove the software.



- Step 4 When **Information** message appears, **do not** unplug the USB modem as prompted. Click **OK**.

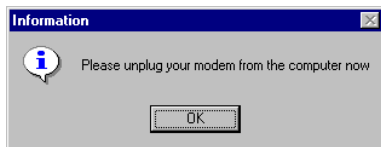


- Step 5 When prompted, unplug the USB modem from your computer now, and then click **OK**.

---

**Note:** Make sure you unplug the USB modem in this step; otherwise, the USB modem can not be removed completely.

---



- Step 6 Select **Yes, I want to restart my computer now** and click **Finish**.



---

**Note:** If you need to reinstall the USB modem, make sure to reconnect your USB modem **after** restarting and entering the system; otherwise, the system will not be able to detect the USB modem. After the system detects the device, you can follow the installation instructions in this manual to complete the driver installing.

---

## 8.2 Upgrading Driver

Periodically, you may need to upgrade the USB modem's driver when a newer version is available. Check our Web site for information about the latest driver upgrades. To perform driver upgrade, you should follow the procedures outlined as below:

1. Download the required version of the driver from the Web site and save the file to your local PC environment.
2. Uninstall your current version of driver as describe above in this chapter. During which you will be prompted to unplug the USB modem and restart the computer.

---

**Note:** Before you uninstall the driver, view the current configuration via **Start > Programs > GlobespanVirata DSL Modem > Configure > Settings**. Write down your ADSL modem settings, e.g., VPI/VCI values, encapsulation, etc. You will need to provide these information when installing the new driver.

---

3. After restarting, reconnect the USB modem and install the new driver you have downloaded. For detailed procedures, refer to driver installation chapters relevant to your operation system in this manual.

## 9.1 Hardware Specifications

- Local Interface: USB Interface
- Automatic-rate adaptation or programmable in step of 32Kbps
- Line code: DMT
- Chipset: GlobeSpan
- ADSL Standard Compliance:
  - ANSI T1.413 Issue 2
  - ITU-T G.992.1 (G.DMT)
  - ITU-T G.992.2 (G.Lite) .
- Connector: RJ-11

## 9.2 Software Specifications

- RFC 1483 : Multiprotocol Encapsulation over ATM (Ethernet over ATM)
- RFC 1577 : Classical IP over ATM (IP over ATM)
- RFC 2364 : PPP over ATM (PPP over ATM)
- RFC 2516 : PPP over Ethernet (PPP over Ethernet)

## Federal Communications Commission (FCC)

### FCC Part 15 Declaration of Conformity (DoC)

This device complies with the requirements of FCC Part 15 rules. The 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.

### FCC Rules and Regulations - Part 15

**Warning:** This device has been tested and found to comply with the limits for a Class B digital device pursuant to Part 15 of the Federal Communications Commissions Rules and Regulation. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, 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 and 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.

**FCC Caution:** To assure continued compliance, any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment (example, user only shielded interface cables when connecting to computer or peripheral device).

### **FCC Rules and Regulations – Part 68**

This equipment complies with Part 68 of the FCC Rules. On the back side of this equipment is a label that contains, among other information, the FCC registration number and Ringer Equivalence Number (REN) for this equipment. You must provide this information to the telephone company if requested.

The REN is used to determine the number of devices you may legally connect to your telephone line. In most areas, the sum of the REN of all devices connected to one line must not exceed five (5.0). You should contact your telephone company to determine the maximum REN for your calling area.

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

An FCC compliant telephone cord and modular plug are provided with this equipment, which is designed to connect to the telephone network or premises wiring using a Part 68 compliant compatible jack. See installation instructions for details.

## IC (Industry Canada) Notice

This digital apparatus does not exceed the Class B limits for radio noise emissions from digital apparatus set out in the radio interference regulations of Industry Canada (formerly Canadian Department of Communications).

**Notice:** The Industry Canada (formerly Canadian Department of Communications) label identifies certified equipment. This certification means that the equipment meets certain telecommunications network protective, operational and safety requirements. 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. In some cases, the company's inside wiring associated with a single line individual service may be extended by means of a certified connector assembly (telephone extension cord). 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 made by an authorized Canadian maintenance facility 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.