VisionNet

ADSL 101U Modem

Owner Installation Manual

www.dqusa.com

V099040-E2-DQT

Contents

I. Preparing to Install Your New ADSL Modem

1. Introduction

The VisionNet ADSL 101U modem enables high-speed, instant-on network access using Asymmetric Digital Subscriber Line (ADSL) technology, while providing easy setup and installation through a Universal Serial Bus (USB) port.

Simply plug the modem into the USB port of any standard Windows-based PC and load the provided software drivers.

This manual provides detailed instructions for installing your VisionNet ADSL 101U modem software and setting up your ADSL connection.

2. System Requirements

Does your PC have an acceptable configuration?

Your PC must meet the following minimum requirements:

- 32 Mbytes of RAM or greater (right click My Computer, select Properties to verify)
- 166 MHz (or greater) Pentium I central processing unit (CPU)
- Windows 98, SE, ME, 2000 or Windows XP version operating system must be installed. You may be required to use a driver among the Windows 98, SE, ME, 2000 or Windows XP CD or PC Recovery Disk supplied by your PC manufacturer. If you do not have either, contact the vendor who configured your computer to find out where the Windows operating system files are located on your machine.
- One available Universal Serial Bus (USB) port.

Did you review the ISP's installation documentation?

Be sure to refer to the installation guides provided by your ISP for further instructions on setting up your DSL connection.

3. The Front Panel

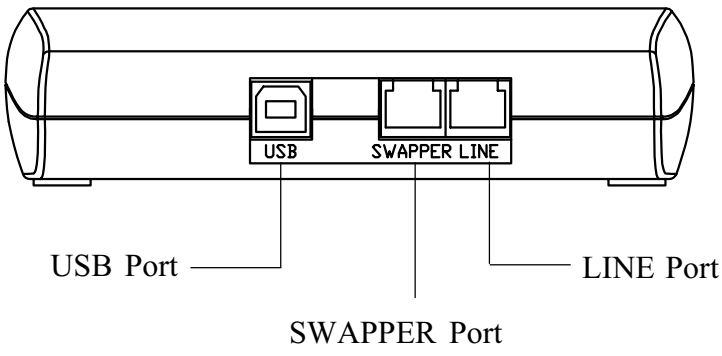
< Front Panel of the ADSL 101U modem >

4. LEDs

The following table explains the functions of the LEDs on the Front Panel:

Indicator			
Name	**Color**	**Status**	**Meaning**
Power	Red	On	Power on
		Off	Power off
Link	Yellow	Flashing	Attempting to activate line
		On	ADSL connection established
TX	Green	Flashing	Data is transmitted to the ADSL line
		Off	Data is not transmitted to the ADSL line
RX	Green	Flashing	Data is received from the ADSL line
		Off	Data is not received from the ADSL line

5. Rear Panel

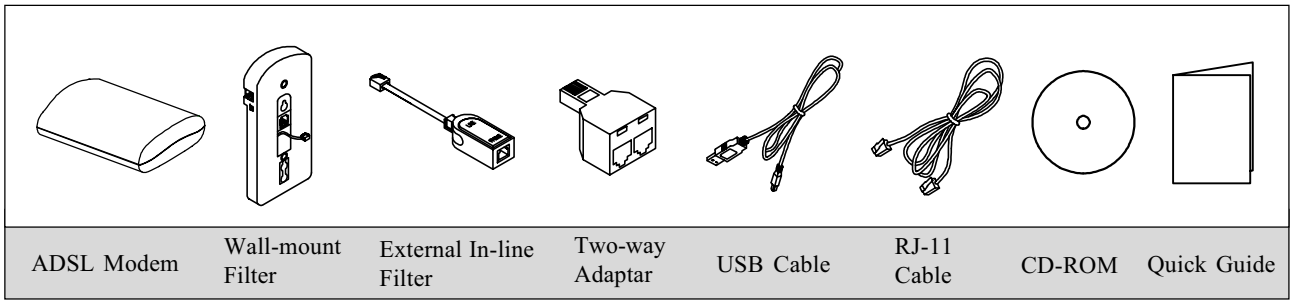


< Rear Panel of the ADSL 101U modem >

II. Installation

1. Checking the contents of the package

Check to see that the following components are included in the package:



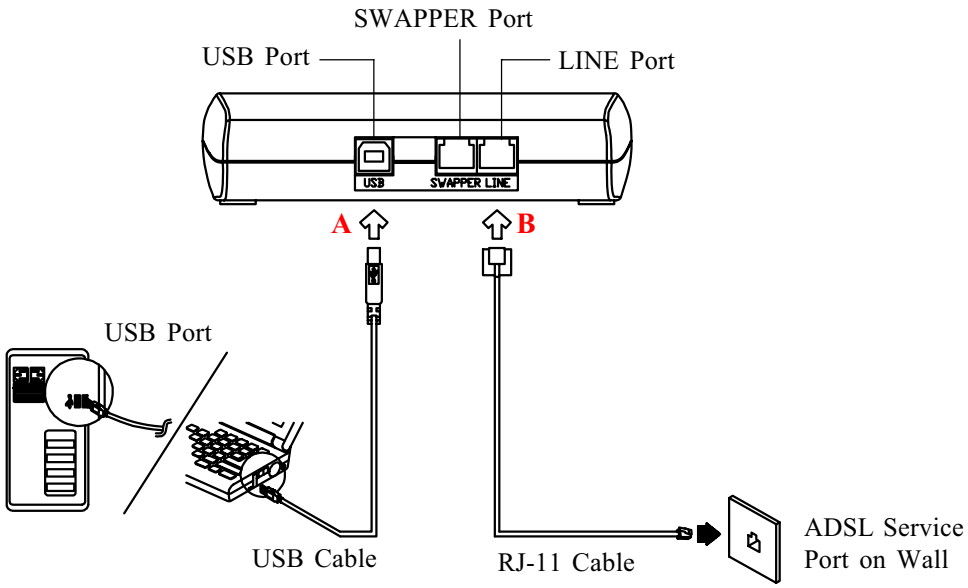
ADSL Modem	Wall-mount Filter	External In-line Filter	Two-way Adaptar	USB Cable	RJ-11 Cable	CD-ROM	Quick Guide

If you are missing any of the above items, please contact the sales office where you purchased your unit or your ADSL service provider.

Note: External in-line and wall mount filters and two-way adapter are sold separately. If you did not order a kit, your package will not contain filters.

2. Connecting the Hardware

USB Modem Configuration



A. Connect the USB cable to your modem's USB port and the other end to the PC's USB port.

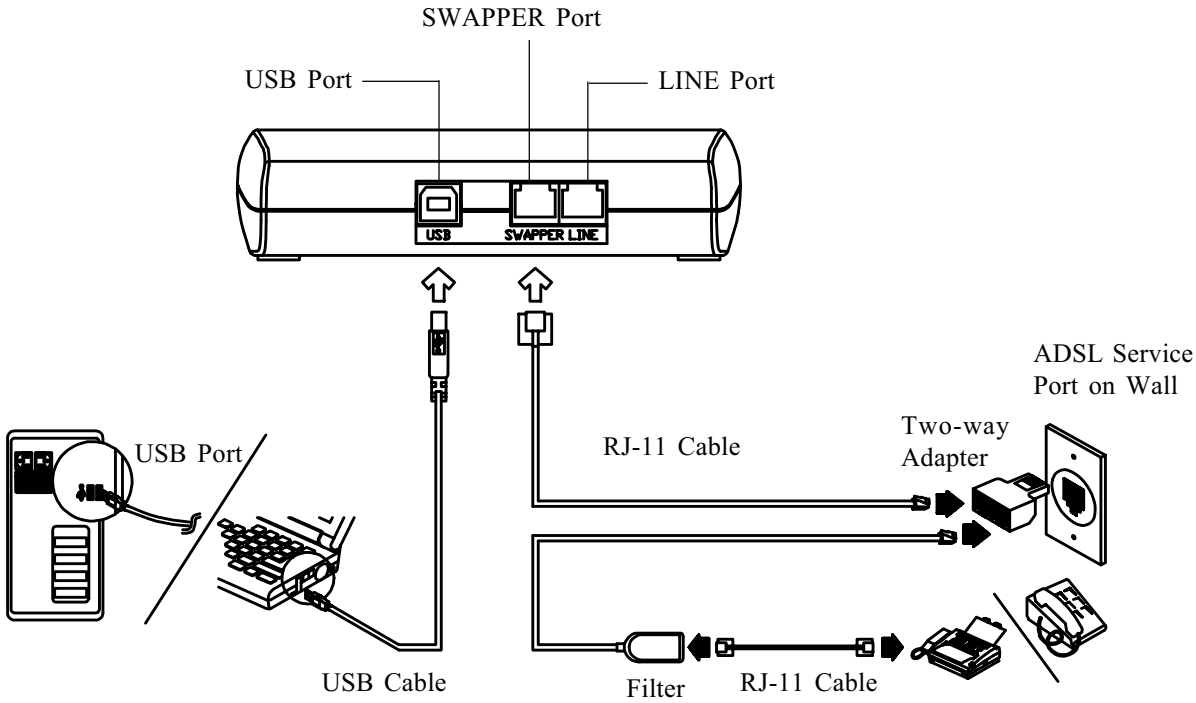
B. Connect the end of the RJ11 cable to the Modem's LINE Port. Then connect the opposite end of the RJ11 cable to the ADSL service Wall Jack.

How to use the Two-way Adapter?

If your 101U shares a jack with another telephone, you will need to install a two-way adapter. A two-way adapter is not a filter; it merely allows two lines to connect into one jack. Plug the two-way adapter into the wall jack, plug a in-line filter into one of the two jacks on the two-way adaptor, then connect your telephone to the filter. The remaining jack on the two-way adaptor is used to connect the 101U to your ADSL service (a filter should not be used when connecting to your modem).

When do I need to use the SWAPPER port?

The **LINE** port and **SWAPPER** port cannot be used at the same time. If the **ADSL** LED does not become solid in 2 minutes and you have verified a secure RJ-11 connection on the **LINE** port and wall jack, unplug the RJ-11 from the **LINE** port and reconnect it to the **SWAPPER** port. In most cases, the **LINE** jack is utilized in typical ADSL connections. In some areas, this may not be the case, so DQ Technology provides an alternative pin configuration (the **SWAPPER** port) in case the standard was changed at some point in your wall jack.



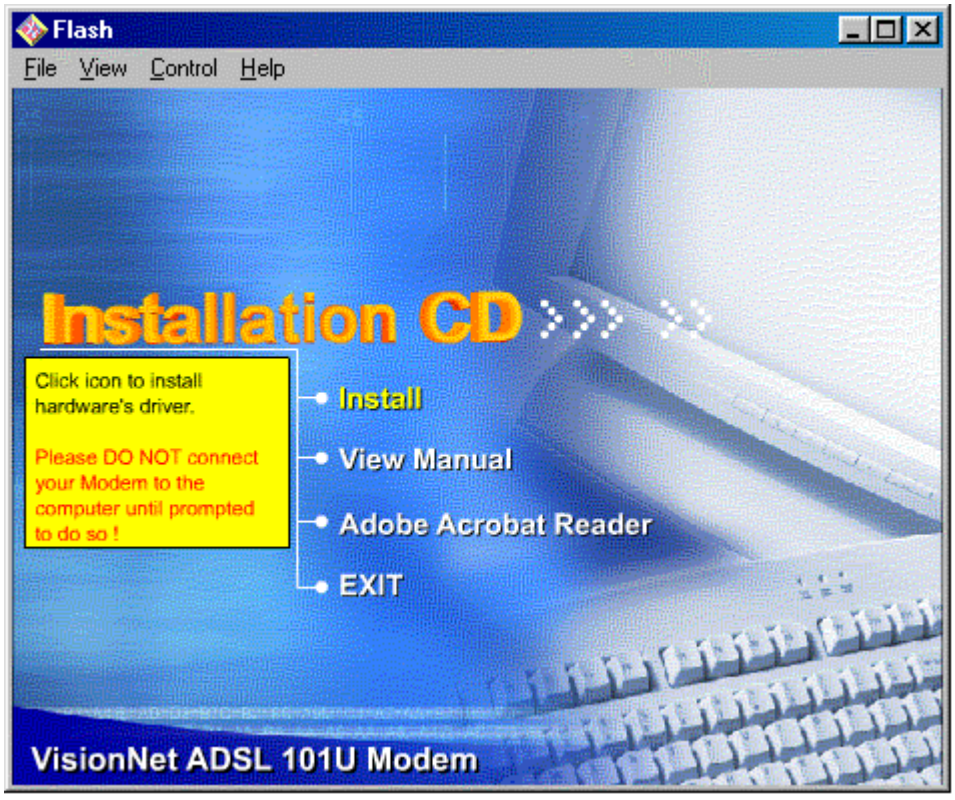
** Proceed with the software installation described in the next section. **

3. Installing the Software

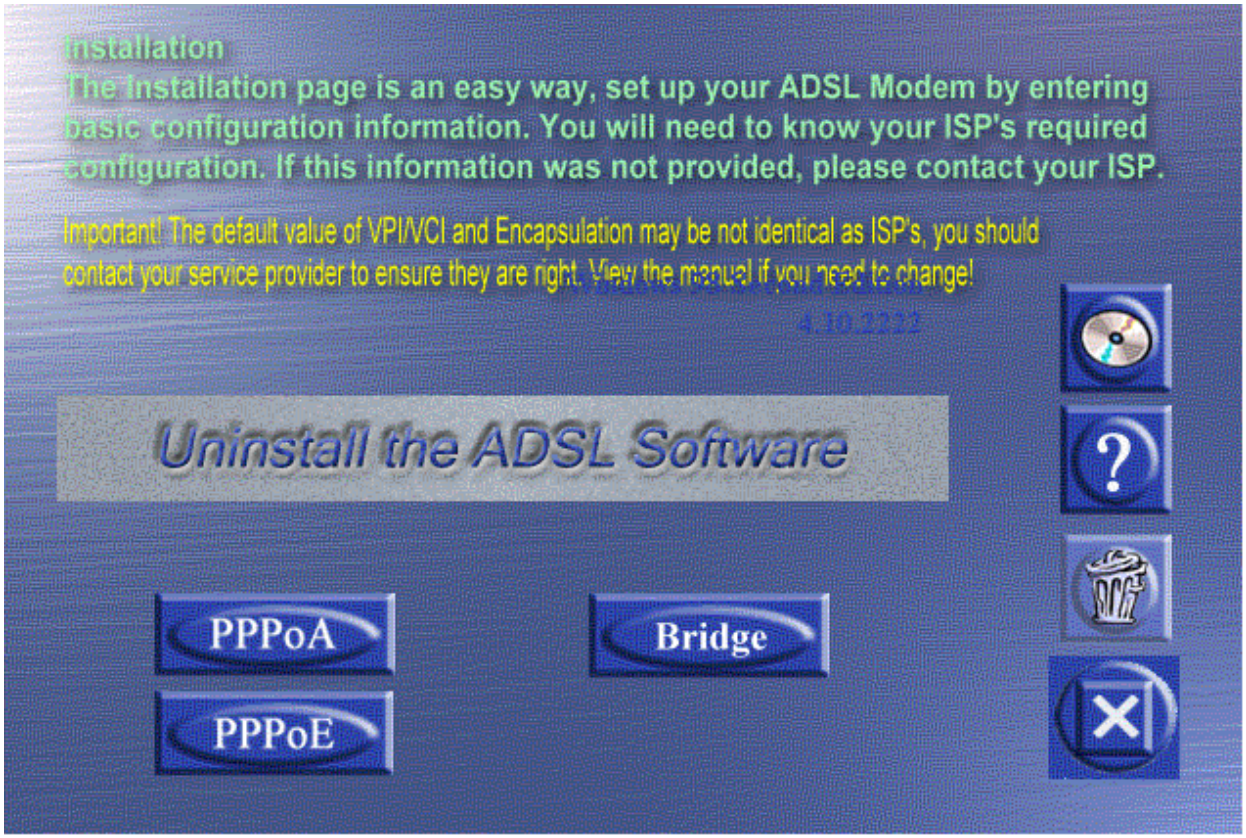
After you have properly installed the ADSL modem, the next step is to install the software for it. You can install the driver on a PC running either the Windows 98, Windows 98 Second Edition, Windows Me, Windows 2000 or Windows XP.

**** Unplug the USB cable from the PC and 101U before starting to install the driver. ****

1. Insert the VisionNet ADSL 101U modem installation CD-ROM drive. The installation CD will start up automatically and the following window will pop up, please click **Install**.



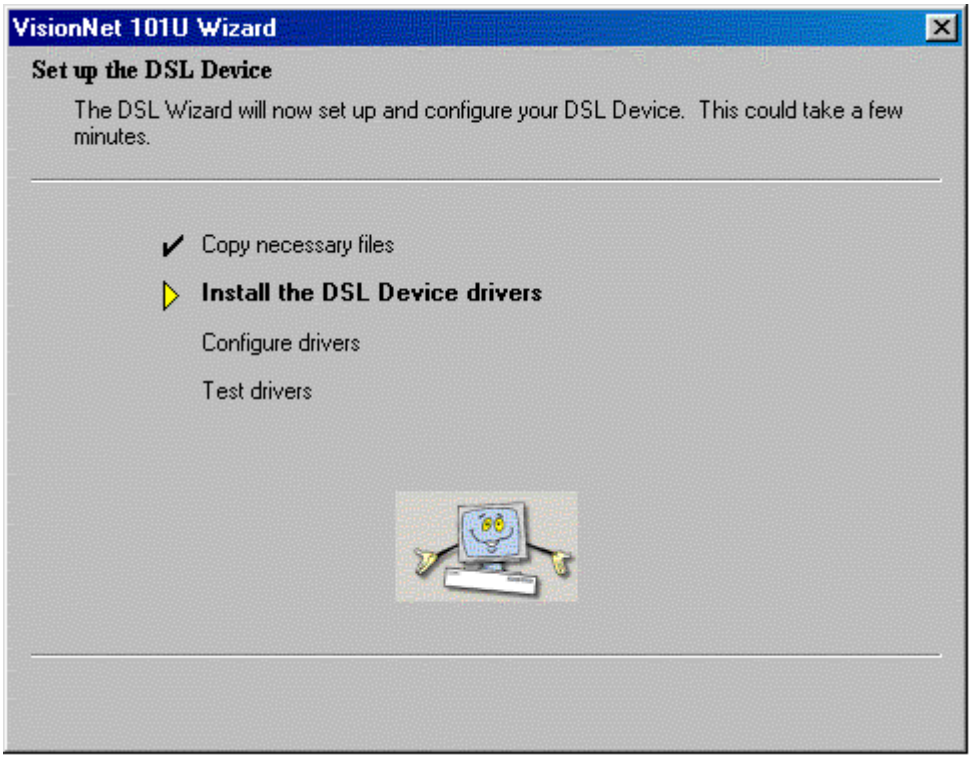
2. The next window provides user three connection type options, choose the connection type that supplied by your ADSL service provider.



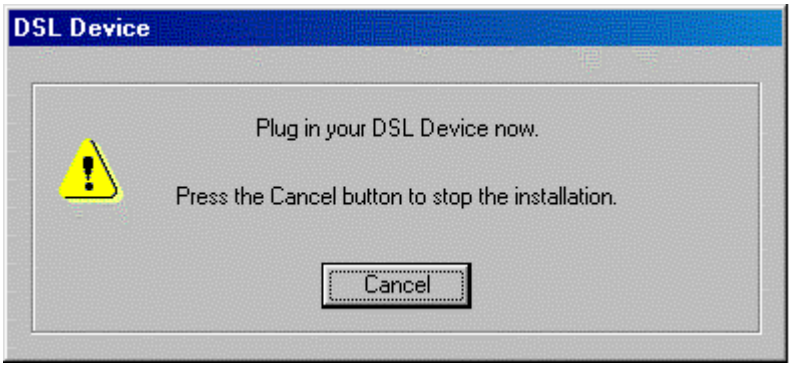
Note:

- **PPPoA driver :** this driver causes the modem to resemble a dial-up modem. Call establishment is performed through Dial-Up Networking. This driver supports RFC 2364 with PVC connections.
- **PPPoE driver :** this driver causes the modem to resemble a dial-up modem. Call establishment is performed through Dial-Up Networking. This driver supports RFC 2516 with PVC connections.
- **Bridge driver :** this driver makes the modem appear as a LAN or Ethernet device. Connection establishment is automatic. This driver supports RFC 1483 and RFC 1577 with PVC connections.

3. The next dialog box states that windows will now install the drivers for the modem.



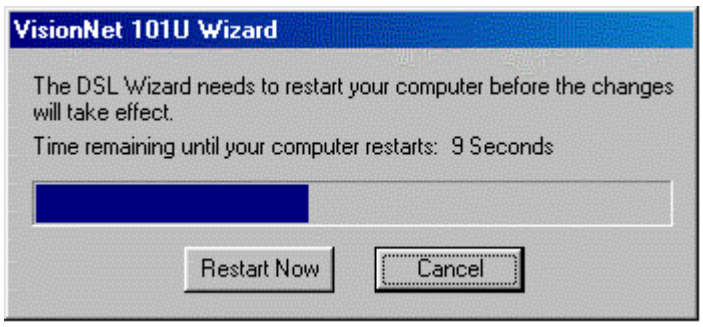
4. If the dialog box is shown as below, please connect the USB cable from the PC's USB port to the USB port of the 101U.



5. When the computer detects an USB device is attached, the window will automatically appear and show that software is installed.

6. The **VisionNet 101U Wizard** window appears, click **Finish**.

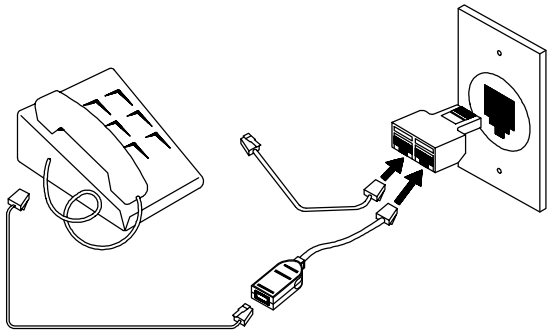
7. You will be asked to restart your computer to complete the installation, click **Restart Now** or let the DSL Wizard in a specified period time to restart the computer automatically.



4. Questions and Answers (Q & A)

Q1: If I want to use the telephone through the two-way adapter, how do I connect the filter?

A1: Please only place the filter in the jack that share the same telephone number with the activated DSL. Connect the external filter cable to the two-way adapter, then connect the telephone cable into the external filter connector.



Q2: Why do I need a filter on every telephone line attached to the ADSL service?

A2: Converting your regular phone into a Digital Subscriber Line (DSL) can cause audible noises (high pitched tones and static) when you try to talk on the phone without a filter. You will need to install a filter on each telephone or device that shares the DSL line to eliminate this noise; phones or devices that share the same telephone number as your ADSL service. Other devices where a filter should be placed include answering machines and fax machines. The filters will enable both Internet access and normal phone use at the same time.

Q3: Can I un-plug the USB cable that is connected to the ADSL 101U modem?

A3: While the system is on, do not un-plug the USB cable while using the ADSL 101U modem. If this does occur, a "Blue Screen" might appear on your monitor. In this case, your system will require a REBOOT after plugging the USB Cable back into the Modem.

Q4: How do I remove the driver of VisionNet ADSL 101U modem?

A4: Double-click **VisionNet 101U Wizard** icon on the desktop and the window will pop up, please click trash icon to uninstall the ADSL software. The **VisionNet 101U Wizard** window appears, click **Yes** to remove the driver.

III. Getting Started

After you have properly installed the software for ADSL 101U modem, you must now make an Internet connection. Please make sure which driver (i.e. PPPoE, PPPoA or Bridge) you installed, and proceed to that section to make the Internet connection.

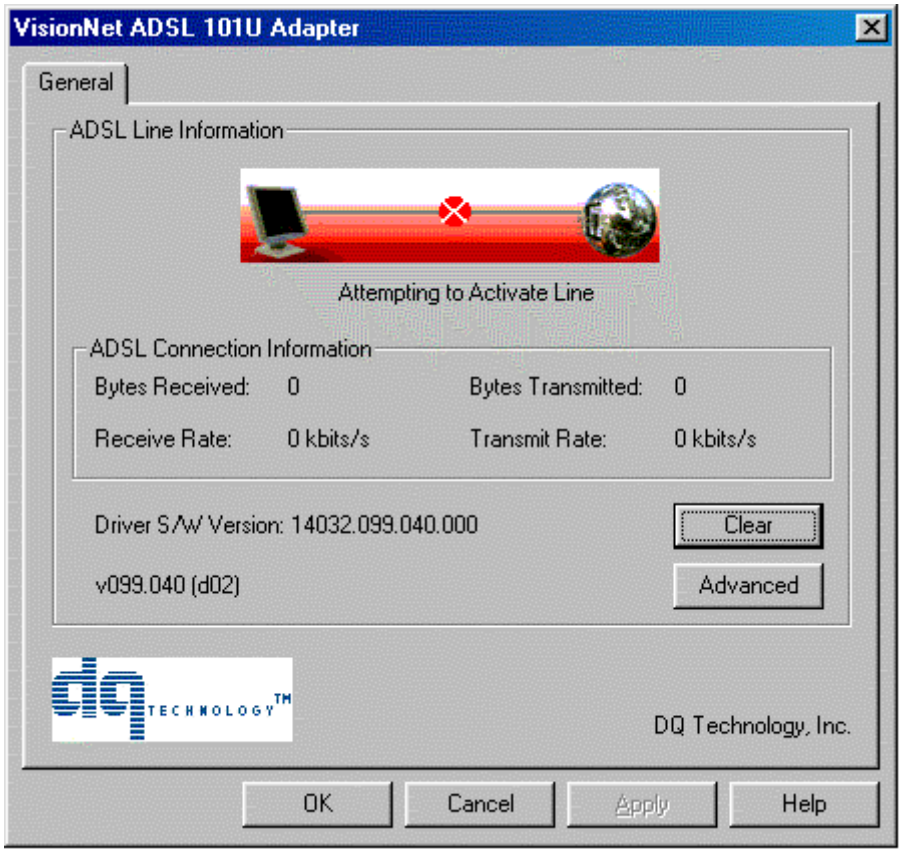
1. Protocol Setup

Before you make the Internet connection, please setup the protocol mode to your ADSL Service Provider supplied.

Your modem may have been preconfigured with VPI/VCI numbers. If not, you will have to obtain these numbers from your Network Service Provider and then configure them.

If you installed Bridge driver:

1. Double-click **VisionNet 101U Control Panel** icon on the desktop.
2. The **VisionNet ADSL 101U Adapter** window appears and you will view connection status and information. If you need help or want to have details, please click **Help** button.

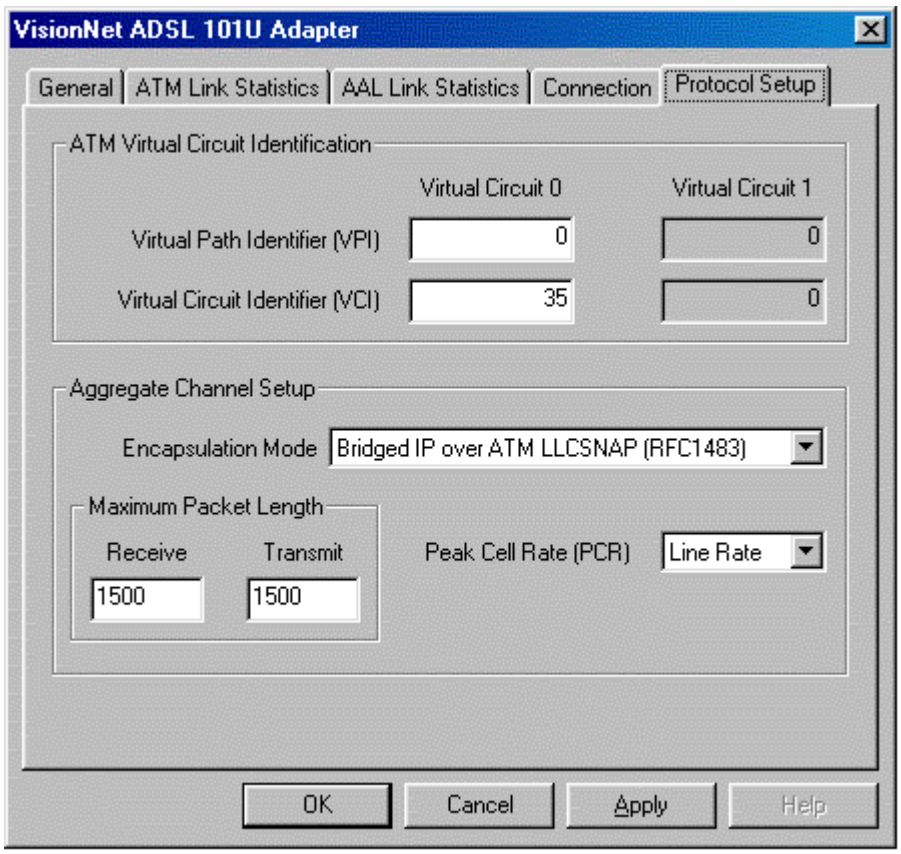


3. Click **Advanced** button to enter advanced **VisionNet ADSL 101U Adapter** window. Click the **Protocol Setup** tab to configure **VPI**, **VCI** and **Encapsulation Mode**.

   a. Enter the **VPI** and **VCI** supplied by your ADSL Service Provider. The default for VPI is 0 and VCI is 35.

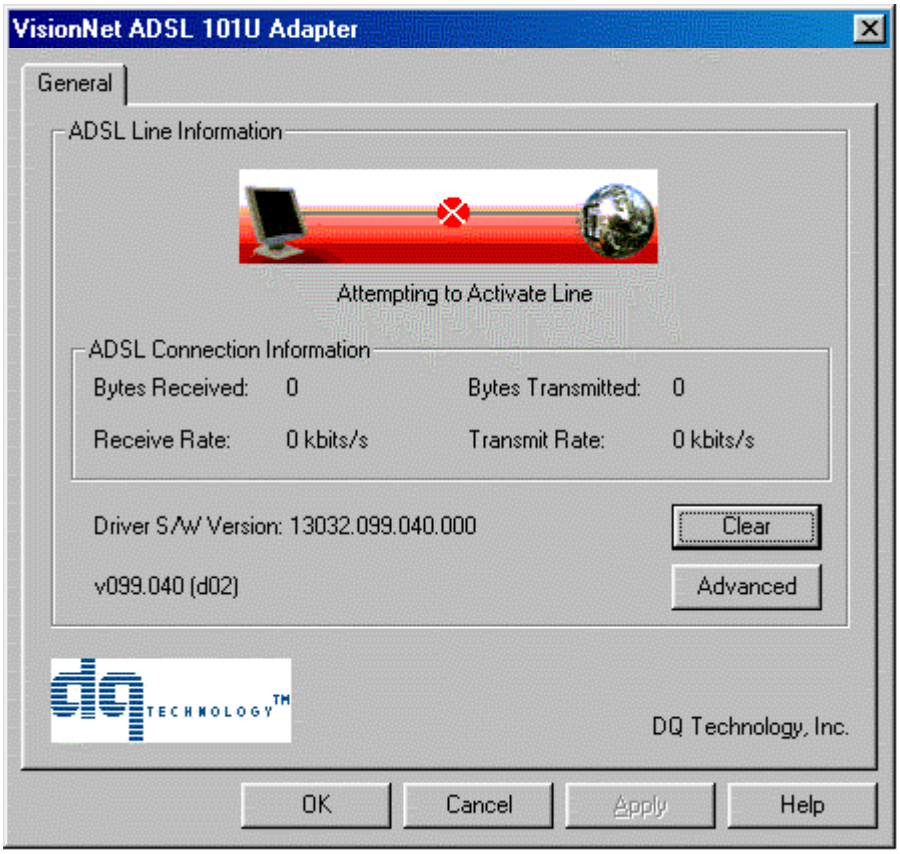
   b. In the **Encapsulation Mode** bar, use the dropdown menu to select the mode supplied by your ADSL Service Provider.

   c. In the **Maximum Packet Length** box, you will see the default of **Receive** and **Transmit** is 1500. This indicates the maximum packet length of transmit/receive. To avoid influencing transmission quality, please don't change the default values of **Receive** and **Transmit** in Maximum Packet Length field. Contact your ADSL Service Provider if necessary.

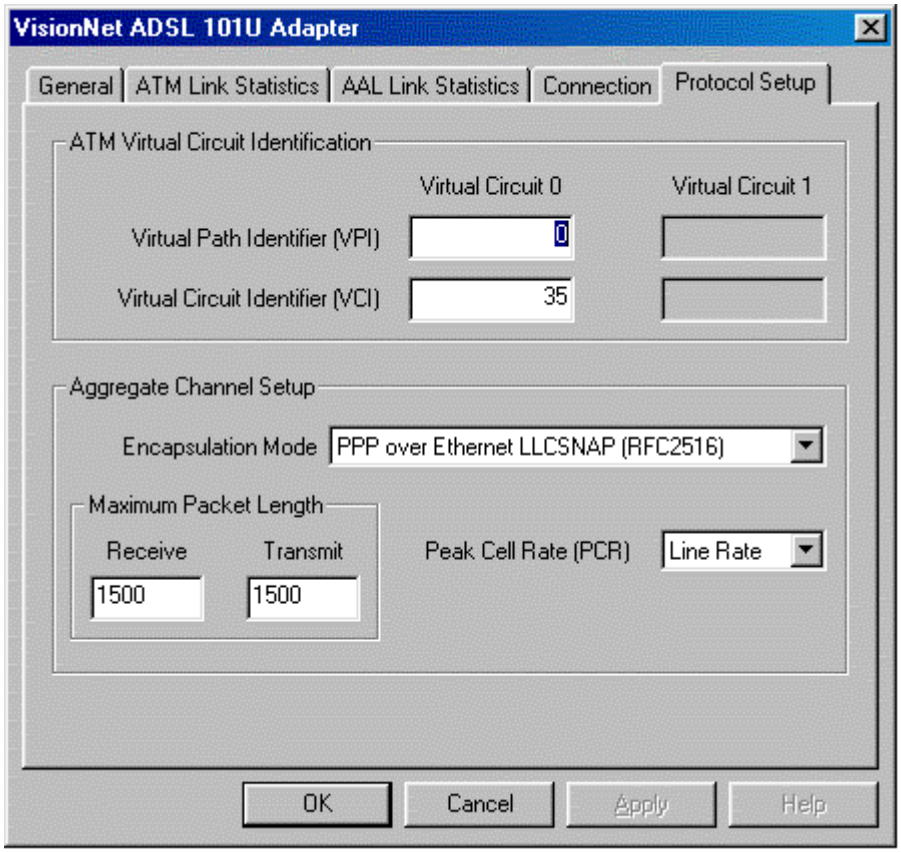


If you installed PPPoA or PPPoE driver:

1. Double-click **VisionNet 101U Control Panel** icon on the desktop.
2. The **VisionNet ADSL 101U Adapter** window appears and you will view connection status and information. If you need help or want to have details, please click **Help** button.



3. Click **Advanced** button to enter advanced **VisionNet ADSL 101U Adapter** window. Click the **Protocol Setup** tab to configure **VPI**, **VCI** and **Encapsulation Mode**.



a. Enter the **VPI** and **VCI** supplied by your ADSL Service Provider. The default for VPI is 0 and VCI is 35.

b. In the **Encapsulation Mode** bar, use the dropdown menu to select the mode supplied by your ADSL Service Provider.

c. In the **Maximum Packet Length** box, you will see the default of **Receive** and **Transmit** is 1500. This indicates the maximum packet length of transmit/receive.

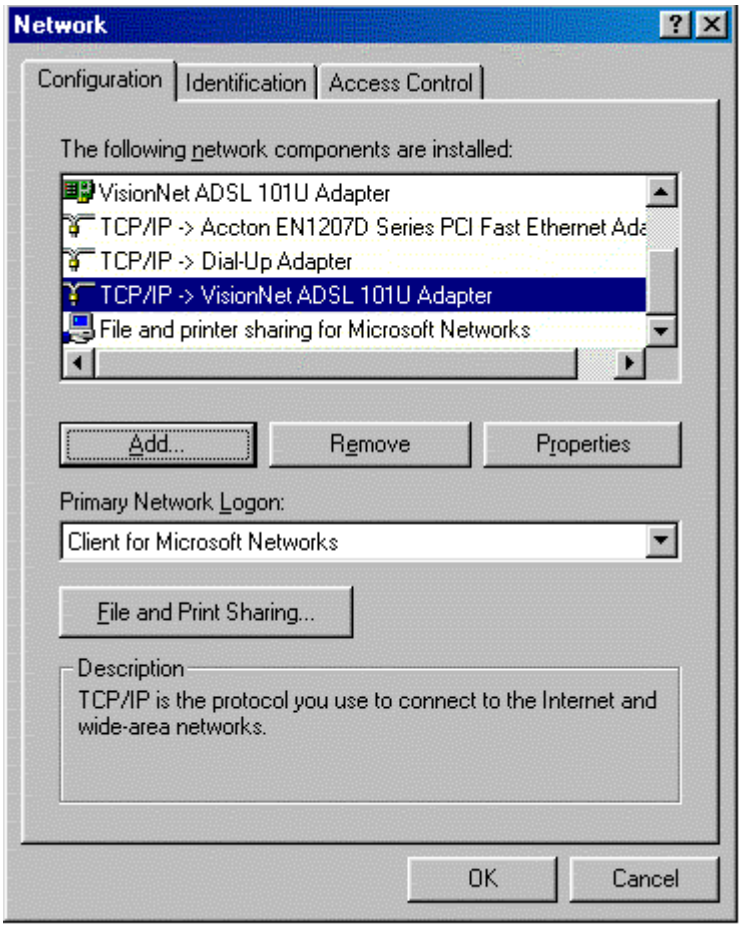
   * Verify that **Receive** and **Transmit** is set to **1500**, when the **Encapsulation Mode** is set to PPP over ATM VCMUX (RFC2364) or PPP over ATM LLC (RFC2364).
   * Verify that **Receive** and **Transmit** is set to **1492**, when the **Encapsulation Mode** is set to PPP over Ethernet VCMUX (RFC2516) or PPP over Ethernet LLCSNAP (RFC2516).

   To avoid influencing transmission quality, please don't change the default values of **Receive** and **Transmit** in Maximum Packet Length field. Contact your ADSL Service Provider if necessary.

2. Making an Internet Connection for Bridge driver

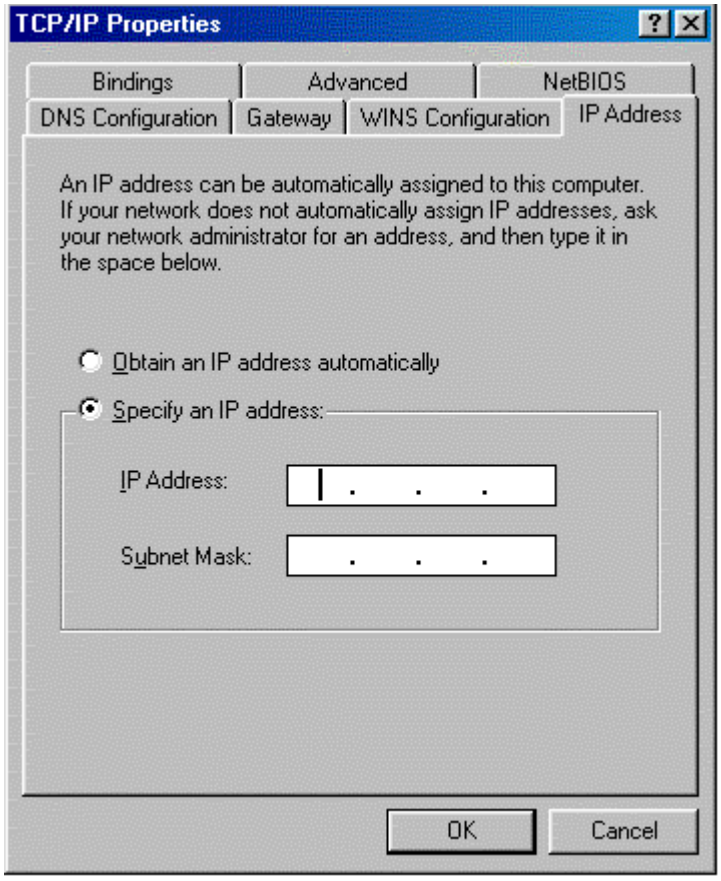
Windows 98 & Windows 98 SE & Windows Me

1. From the **Start** menu on the tool bar and select **Settings**, **Control Panel**, then double-click on the **Network** icon.
2. The **Network** window appears. Select the **Configuration** tab, scroll the installed network components window and find **TCP/IP→VisionNet ADSL 101U Adapter**. Click the **Properties** button.

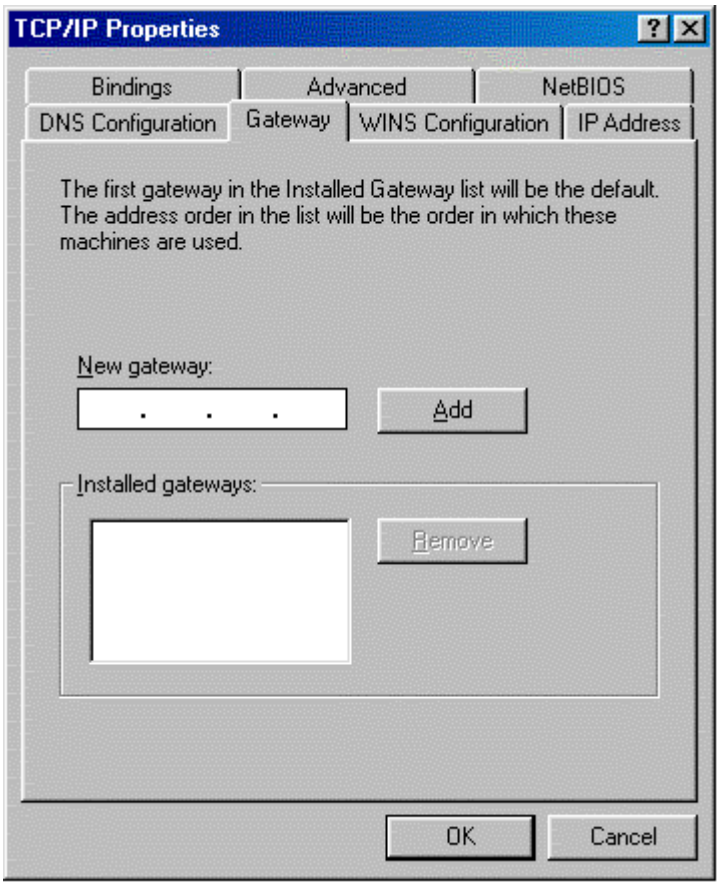


3. The **TCP/IP Properties** window appears.

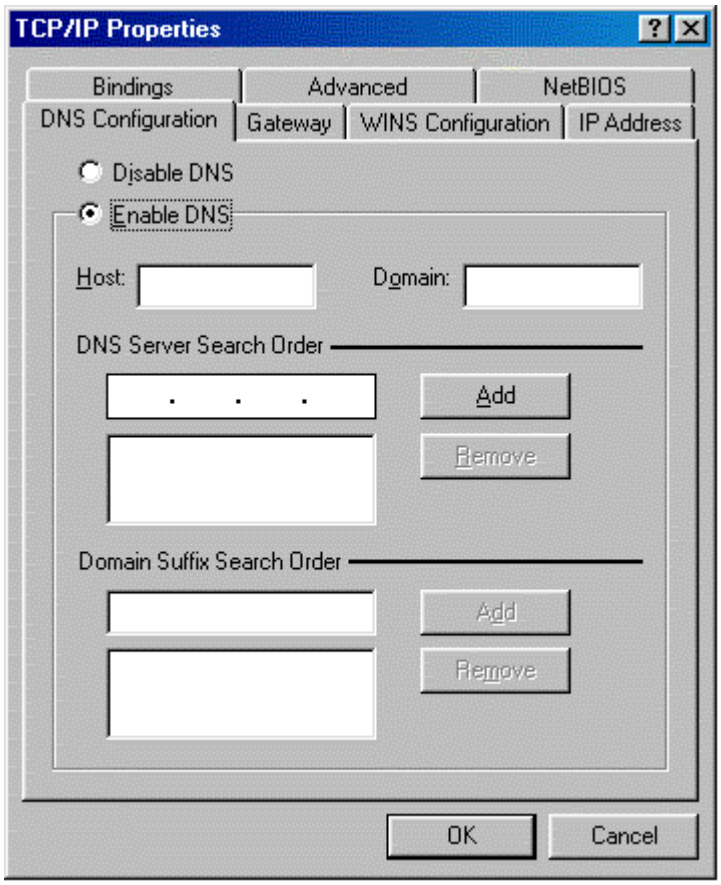
   a. Select the **IP Address** tab and then select the **Specify and IP Address** option. Enter the **IP Address** and **Subnet Mask** settings supplied by your ADSL provider.



b. Select the **Gateway** tab to setup a new gateway, and then enter the setting (supplied by your ADSL service provider) in the **New Gateway** section. Click **Add**.



c. Select the **DNS Configuration** tab and choose the **Enable DNS** option. You need to have available the **Host**, **Domain** and **DNS** settings supplied by your ADSL service provider.



d. Enter your host name into **Host**.

e. Enter your domain name into **Domain**.

f. Enter DNS number into **DNS Server Search Order** box and click **Add**. If you have more than one DNS numbers, repeat this step.

g. After setting all the necessary TCP/IP Properties, click **OK**.

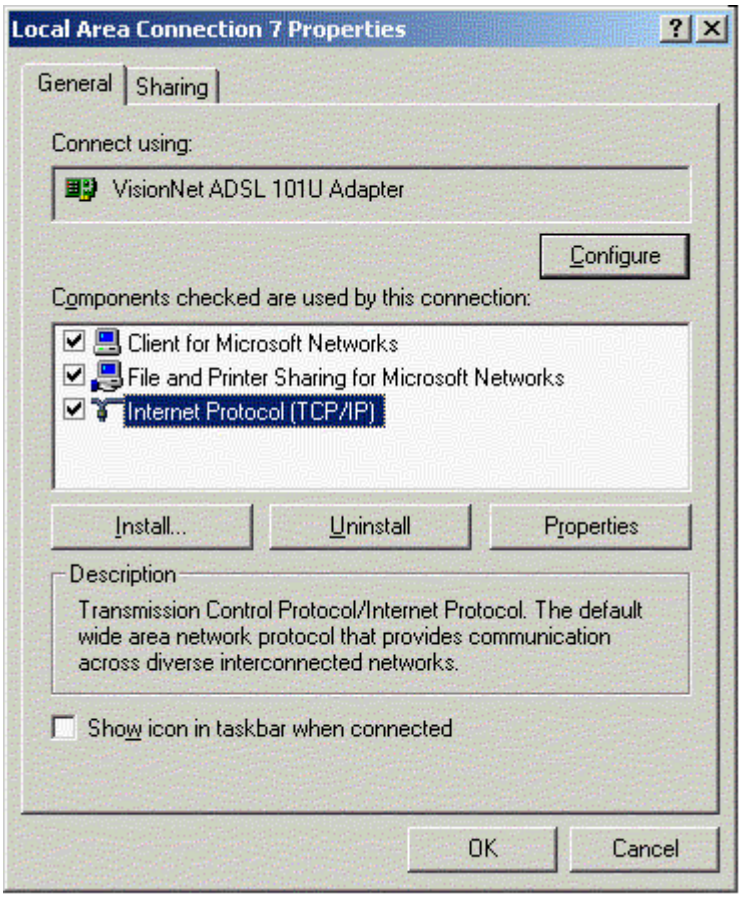
4. The **Network** window appears. Click **OK**.

5. The **System Setting Change** window appears. You will be asked if you want to restart your computer. Click **Yes**.

Congratulations, you are done. Your ADSL Internet connection is established!

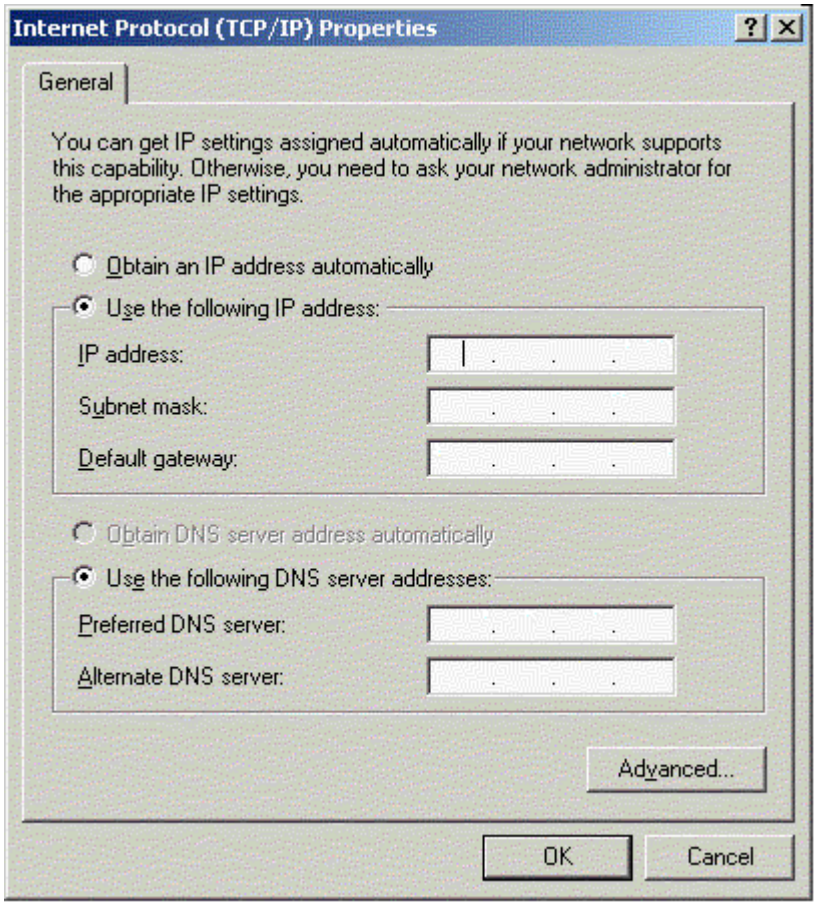
In Windows 2000

1. Double-click **My Computer**, **Control Panel**, and then **Network and Dial-up Connections**.
2. The **Network and Dial-up Connections** window appears. Right-click on the **Local Area Connection** for your **VisionNet ADSL 101U Adapter** and select **Properties**.
3. The **Local Area Connection Properties** window appears. Click on **Internet Protocol (TCP/IP)**, then click on **Properties**.



4. The **Internet Protocol (TCP/IP) Properties** window appears. Under the **General** tab, enable **Use the following IP address** and the default settings for IP configurations will turn from gray to clear. Enter the **IP address**, **Subnet mask** and **Default gateway** supplied by your ADSL Service Provider.

   If your ISP provided the DNS number, please enter it into the **Preferred DNS server** box. Click **OK**.

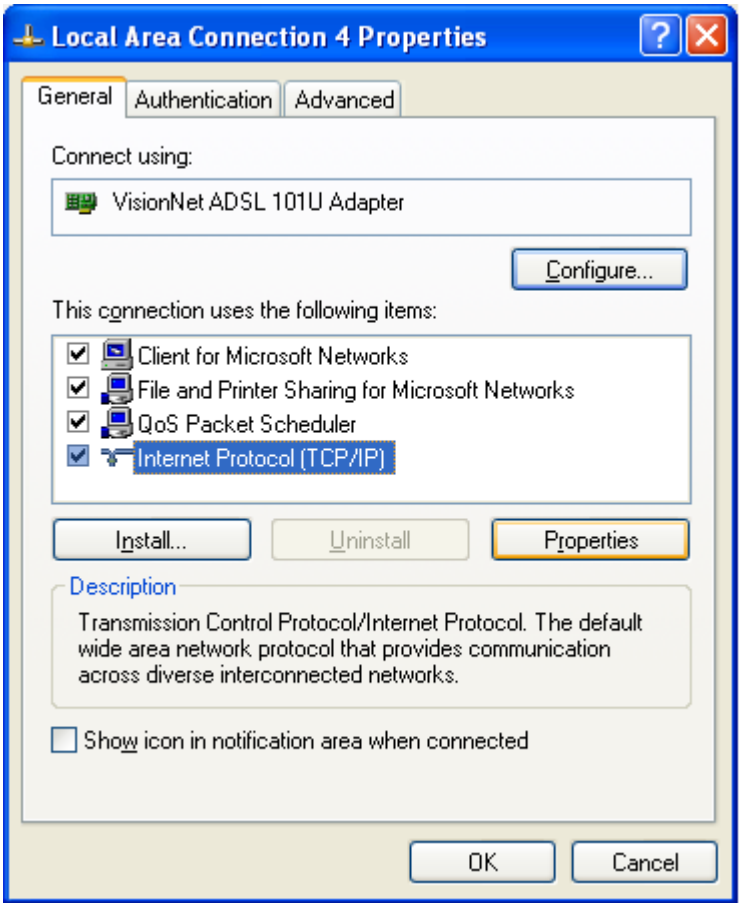


5. The previous **General** tab window appears. Click **OK**.
6. The **Network and Dial-up Connection** window appears. Close this window and complete your connection.

Congratulations, you are done. Your ADSL Internet connection is established!

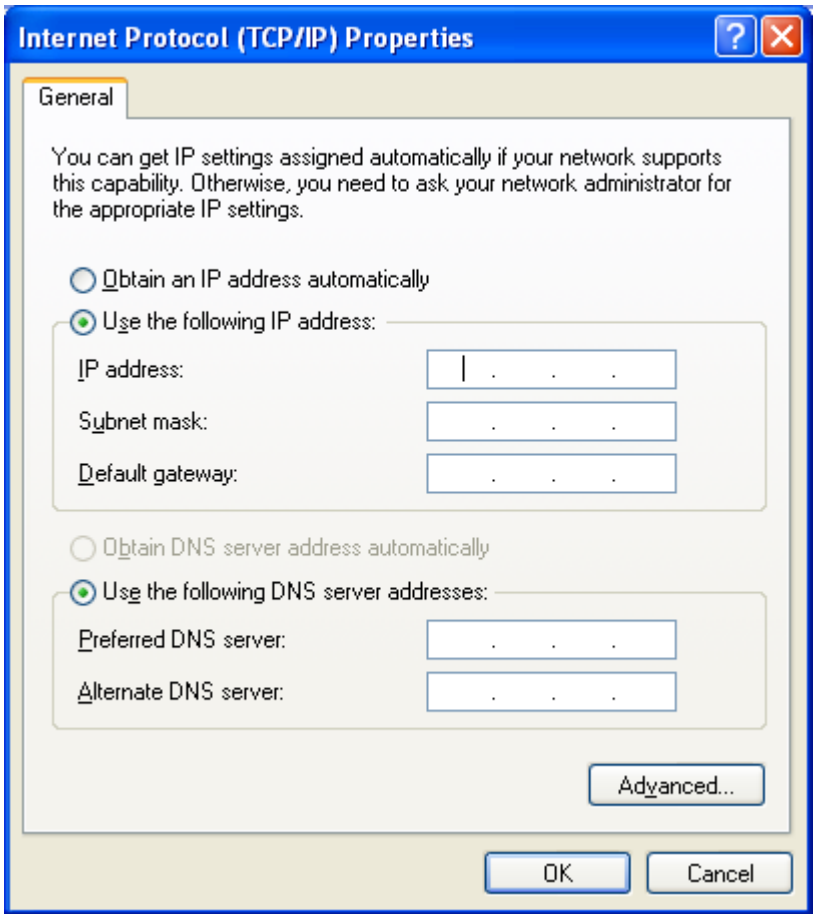
Windows XP

1. From the **Start** menu on the tool bar and select **Control Panel**, then double-click on the **Network Connections** icon.
2. The **Network Connections** window appears. Right-click on the **Local Area Connection** for your **VisionNet ADSL 101U Adapter** and select **Properties**.
3. The **Local Area Connection Properties** window appears. Click on **Internet Protocol (TCP/IP)**, then click on **Properties**.



4. The **Internet Protocol (TCP/IP) Properties** window appears. Under the **General** tab, enable **Use the following IP address** and the default settings for IP configurations will turn from gray to clear. Enter the **IP address**, **Subnet mask** and **Default gateway** supplied by your ADSL Service Provider.

   If your ISP provided the DNS number, please enter it into the **Preferred DNS server** box. Click **OK**.



5. The previous **General** tab window appears. Click **OK**.
6. The **Network Connections** window appears. Close this window and complete your connection.

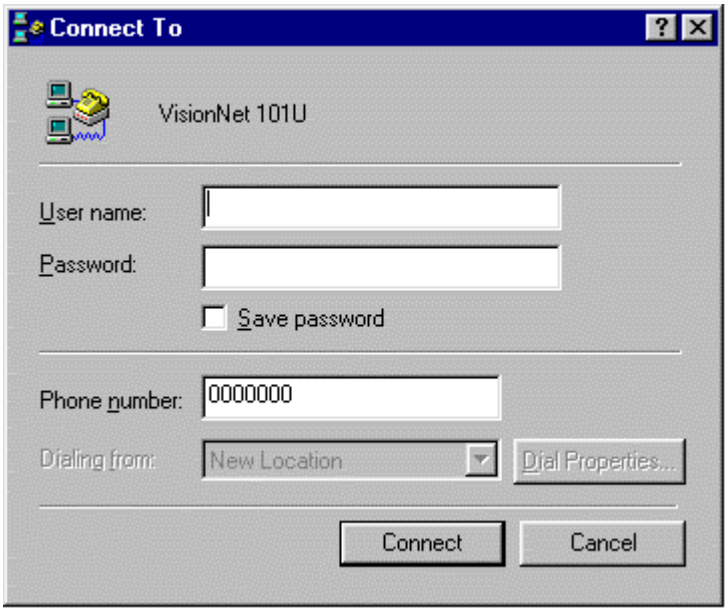
Congratulations, you are done. Your ADSL Internet connection is established!

3. Making an Internet Connection for PPPoA or PPPoE driver

Windows 98 & Windows 98 SE

1. Double-click the **VisionNet 101U Modem** icon on the desktop.

2. The **Connect To** window appears. Enter the **User Name** and **Password** supplied by your Internet Service Provider (ISP). Then click **Connect**.



3. The **Connection Established** window appears. Internet service is now established, then click **Close**.

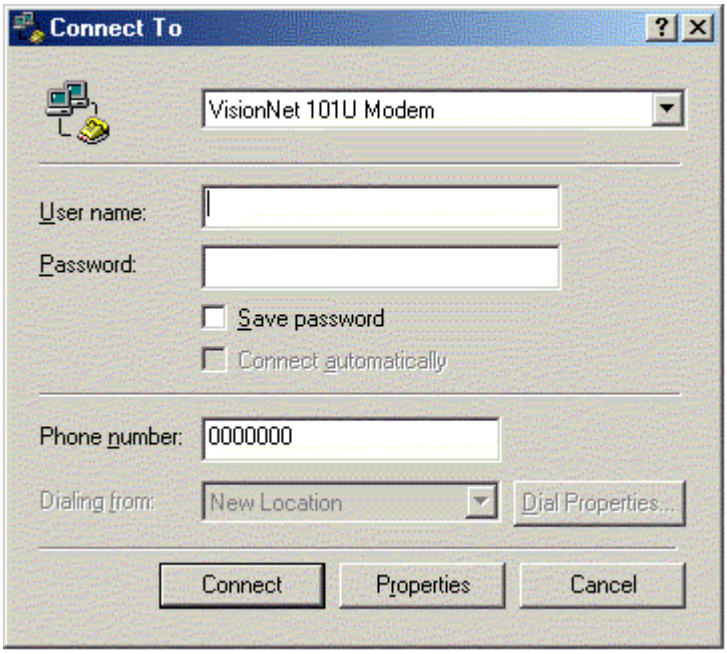
Note: If you cannot connect to Internet and get disconnected message, please verify the **Dial-Up Adapter** was installed in your computer and contact Microsoft for assistance.

Congratulations, you are done. Your ADSL Internet connection is established!

Windows Me

1. Double-click the **VisionNet 101U Modem** icon on the desktop.

2. The **Connect To** window appears. Enter the **User Name** and **Password** supplied by your Internet Service Provider (ISP). Then click **Connect**.



3. The **Connection Established** window appears. Internet service is now established, then click **Close**.

Note: If you cannot connect to Internet and get disconnected message, please verify the **Dial-Up Adapter** was installed in your computer and contact Microsoft for assistance.

Congratulations, you are done. Your ADSL Internet connection is established!

Windows 2000

1. Double-click the **VisionNet 101U Modem** icon on the desktop.

2. The **Connect VisionNet 101U Modem** window appears. Enter the **User Name** and **Password** supplied by your Internet Service Provider (ISP). Then click **Dial**.

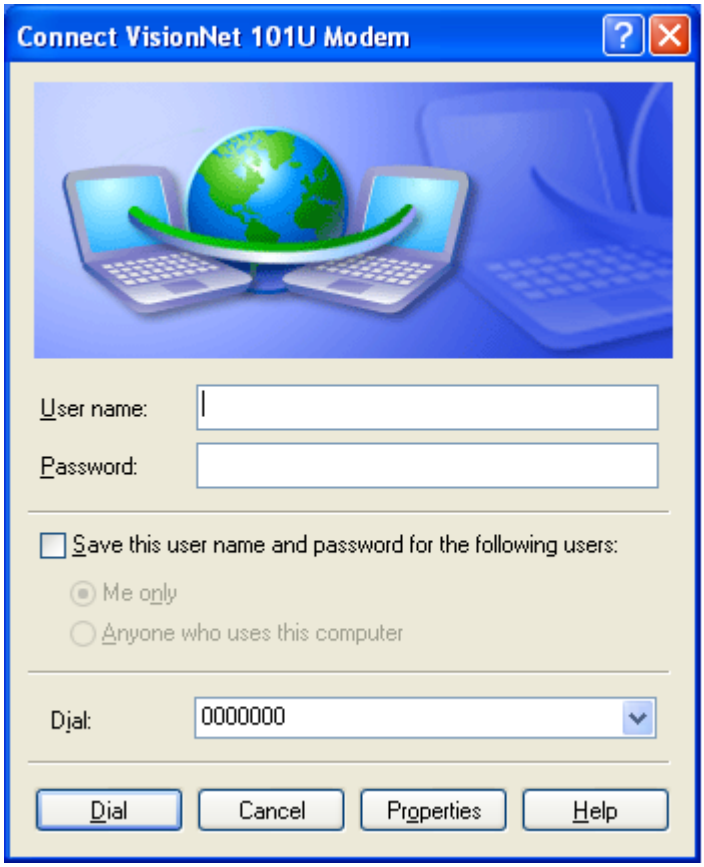
3. The **Connection Complete** window appears. Internet service is now established, then click **Ok**.

Congratulations, you are done. Your ADSL Internet connection is established!

Windows XP

1. Double-click the **VisionNet 101U Modem** icon on the desktop.

2. The **Connect VisionNet 101U Modem** window appears. Enter the **User Name** and **Password** supplied by your Internet Service Provider (ISP). Then click **Dial**.



3. The **Connecting VisionNet 101U Modem** window will automatically appear and show the message of username and password are being verified.

Congratulations, you are done. Your ADSL Internet connection is established!

IV. Software Upgrades

1. Introduction

The VisionNet ADSL 101U modem supports two software upgrade possibilities:

- A new version of the software can be downloaded from the ADSL network to your VisionNet ADSL 101U modem, or
- You can upload new VisionNet ADSL 101U modem software packages from a PC on your local LAN.

Both features are simultaneously supported. However the final result will depend on the ADSL Service Provider's policy.

2. Software Download from the Network

The ADSL operator controls this feature. At some point in the near future, your ADSL service provider may decide to upgrade the software in your VisionNet ADSL 101U modem. This download will not cause any disruption in your ADSL service.

3. Future Software Uploads from your PC

The procedure to upload software from a PC is as follows:

A. A current version of the VisionNet ADSL 101U modem software package must reside either on your hard disk or on a floppy disk, and should be loaded on your PC.

B. Start your Web Browser and surf to the VisionNet ADSL 101U modem web pages at www.dqusa.com.

C. From the VisionNet ADSL 101U modem Welcome page, click the "Upgrade" button and the Software Upgrade page appears. This page should show at least the VisionNet ADSL 101U modem package that is actually running. It is labeled "Upgrade software version".

D. Click the "Browse" button next to "passive software version" and locate the new VisionNet ADSL 101U modem software package on either your hard disk or floppy.

E. If the correct package is selected click the "Upload" button. At this point, the software package will be transferred from your PC to the VisionNet ADSL 101U modem.

F. After a successful transfer, two software versions are stored on the VisionNet ADSL 101U modem.

Your VisionNet ADSL 101U modem will reboot and come online again with the new version. Surfing to the Upgrade page shows that active and passive versions (prior to the upgrade) have traded places.

Note: For new software upgrade requirements, please contact your ADSL Service Provider or ISP.

V. Warranty Information

DQ Technology warrants that all products are free from defective material and workmanship and, subject to the conditions set forth below, agrees to repair or replace any part of a product that proves defective by reason of improper workmanship or materials without charge for parts and labor.

The VisionNet 101U is warranted for five years on data drives and on all other parts from the date of original purchase.

If a product does not perform as warranted herein, owner's sole remedy shall be repair or replacement as provided below.

In no event will DQ Technology be liable for damages, lost revenue, lost wages, lost saving or any other incidental or consequential damages arising from purchase, use, or inability to use this product, even if DQ Technology has been advised of the possibility of such damages.

Any defective product should be returned to your local DQ Technology dealer or distributor, along with a copy of your sales slip, the product serial number (if applicable) and a detailed description of the problem you are experiencing.

No express or implied warranty is made for DQ Technology products damaged by accident, abuse, misuse, natural or personal disaster, or any unauthorized disassembly, repair or modification.

If you experience any difficulty during the installation process or subsequent use of a DQ Technology product, please contact DQ Technology's technical support department at 1-866-286-XDSL (9375) or e-mail techctr@dqusa.com.

VI. FCC Information

Radio Frequency Interference Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates 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.

Notice: Any change or modification not expressly approved by the Guarantee of the equipment authorization could void the user's authority to operate the equipment.

This device complies with part 15 of the 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.

The class B digital apparatus meets all requirements of the Canadian Interference - Causing Equipment Regulation.

Cet appareil numerique de la class B respecte toutes les exigences du reglement sur le materiel brouilleur du Canada.

Protection of the telephone network statement

This equipment complies with Part 68 of the FCC Rules. On the solder side (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, upon request, provide this information to your telephone company.

This equipment uses RJ11 jacks.

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

The REN is useful to determine the quality of devices you may connect to your telephone line and still have all those devices ring when your telephone number is called. In most, but not all areas, the sum of all the REN's 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 would 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.

If you experience trouble with this equipment, please contact the site on the back of this guide for information on obtaining service or repairs. The Telephone Company may ask that you disconnect this equipment from the network until the problem has been corrected or until you are sure that the equipment is not malfunctioning.

No user serviceable parts contain in this equipment.

This equipment may not be used in 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, including fax machines, to send any message 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 other individual sending the message and the telephone number of the sending machine or such business, other entity, or individual. (The telephone number provided may not be a 900 number or any other number for which charges exceeds local or long-distance transmission charges).

In order to program this information into your fax modem, you should follow the instructions in the software setup and installation manual.

VII. IC Regulation

INDUSTRY CANADA (IC) NOTICE

NOTICE: The industry Canada (IC) label identifies certified equipment. This certification means that the equipment meets telecommunications network protective, operational and safety requirements as prescribed in the appropriate Terminal Equipment Technical Requirements document(s). The department does not guarantee the equipment will operate to the user's satisfaction.

Before installing this equipment, users should ensure that it is permissible to be connected to the facilities of the local telecommunications company. The equipment must also be installed using ac acceptable method of connection. The customer should be aware that compliance with the above conditions might not prevent degradation of service in some situations.

A representative designated by the supplier should coordinate repairs to certified equipment. Any repairs or alterations made by a user to this equipment, or equipment malfunctions, may give the telephone communications company cause to request the user to disconnect the equipment.

User 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 the devices does not exceed 5.

REN:_0.6B

VIII. Technical Support and Modem Returns

To Our Valued Customer:

In our continuing effort to provide excellent customer and technical support and ensure your quick connection to the Internet, we ask that you do the following if you experience connection problems:

1. Call your Internet service provider (ISP) to verify activation of your DSL service.

   You may want to ask your provider if there are issues with your DSL line provider (typically your phone company) that you should be aware.

2. After verifying from your ISP and/or DSL line provider that there are no issues with your DSL service, call DQ Technology's technical support staff at 1-866-286-XDSL (9375).

These basic steps are necessary to get you connected quickly and inexpensively.

If after troubleshooting your modem, DQ Technology's technical support staff determines the modem is defective and cannot be made to work properly, a Return Merchandise Authorization number (RMA) will be issued for the return of the modem.

AN RMA NUMBER IS REQUIRED PRIOR TO RETURNING ANY PRODUCT.

Unfortunately, if you return a modem without a valid RMA, you may be charged a restocking fee and handling fee.

As all our products are backed by an industry leading 5 year limited warranty (see manual), DQ Technology will promptly ship a new modem to you once we receive the defective modem. Credit is not given for returned modems.

Thank you for choosing DQ Technology!