

ZyXEL

TOTAL INTERNET ACCESS SOLUTION

omni.net LCD series

ISDN Terminal Adapter

With LCD Display

(with omni.net USB-based TA Driver)

Quick Start Guide

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1. Introduction

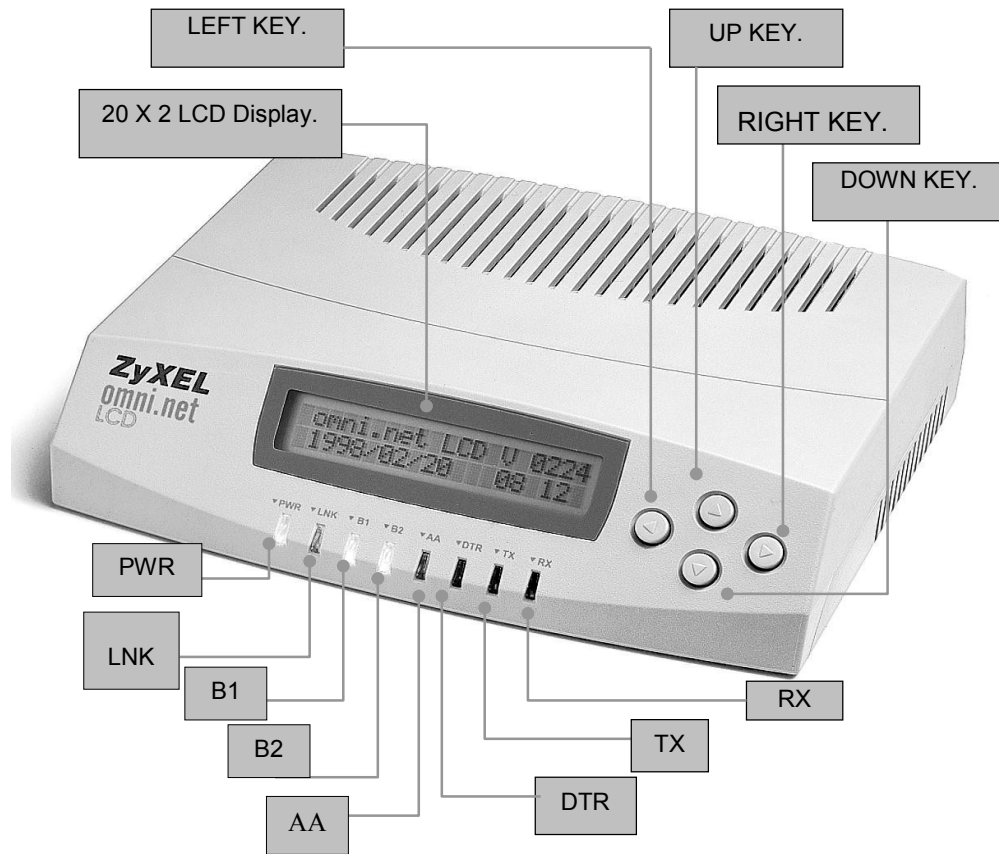
Thank you for choosing the ZyXEL ISDN Terminal Adapter (ISDN TA). This section is designed to guide you through a quick and easy installation of the ZyXEL omni.net LCD series devices.

This series consists of:

1. The **omni.net LCD**.
2. The **omni.net LCD+M**.
3. The **omni.net LCD PLUS**.

The **omni.net LCD** is a TA (Terminal Adapter) device with a serial port interface. The **omni.net LCD+M** is TA or Modem (hence “+M”) device with a serial port interface. The **omni.net LCD PLUS** is a TA device with a USB (Universal Serial Bus) and a serial port interface. The following diagram shows the front panel of the **omni.net LCD**.

Front Panel Description



Front Panel LEDs

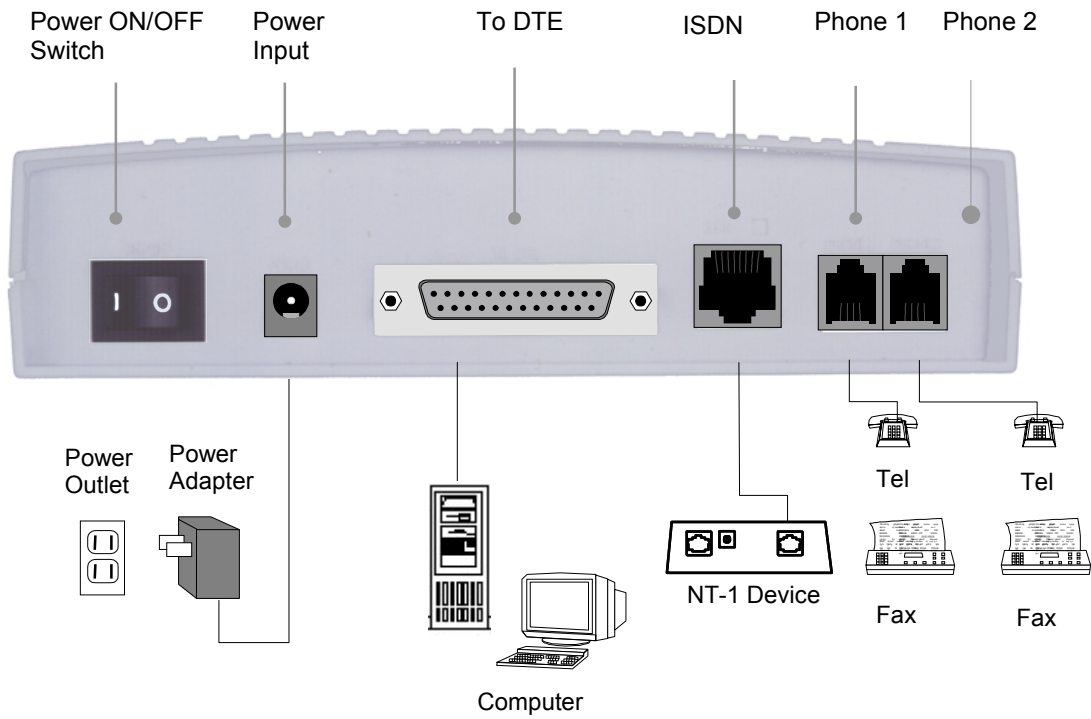
LED	Function	Active	Description
PWR	Power	On	The PWR LED lights up when the power is turned ON.
LNK	Link	On Blinking	The LNK LED lights up when a link with the local ISDN switch is active. This LED blinks when attempting to make a connection.
B1	B1 Channel	On	The B1 Channel connection LED lights up when the B1 Channel is established.
B2	B2 Channel	On	The B2 Channel connection LED lights up when the B2 Channel is established.
AA	Auto-Answer	On Blinking	The AA LED lights up when your TA is ready to automatically answer your calls. This LED blinks when your ISDN TA rings.
DTR	Data Terminal Ready	On	The DTR LED is on when the device connected to the TA/Modem has established a link and is ready for communication.
TX	Transmit Data	On	When the TX LED is on your DTE/Computer transmits data to the DTE port.
RX	Receive Data	On	When the RX LED is on your DTE/Computer receives data from the DTE port.

DTE (Data Terminal Equipment) is the source or destination of data in a communication connection that is connected to your TA or modem.

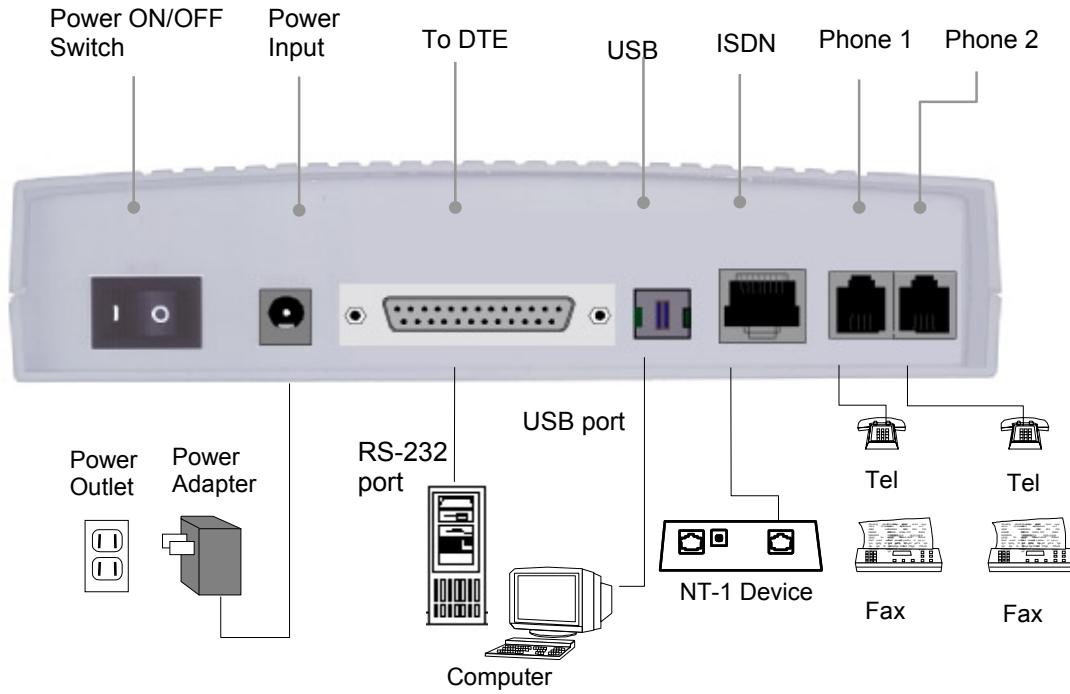
Control Panel

The four arrow keys allow intuitive menu-tree operation and the LCD panel displays the status of your omni.net LCD PLUS/LCD+M/LCD ISDN terminal adapter.

Back Panel Connections for omni.net LCD+M/LCD



Back Panel Connections for omni.net LCD Plus

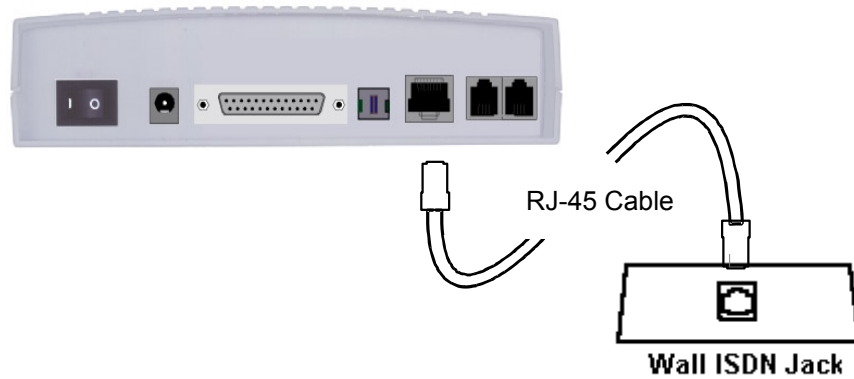


Back Panel Switch and Connectors Description

ON/OFF	This is the ON/OFF switch.
POWER	This is the 16V-AC power input socket. Plug your AC power adapter into this socket.
To DTE	This is your serial port RS-232 cable interface. Connect your serial port cable to this interface.
USB	This is a USB (Universal Serial Bus) interface. Connect your USB cable to this interface.
ISDN	This is an ISDN RJ-45 terminal interface. Connect your ISDN cable to this interface.
PHONE 1	This is an analog port #1 RJ-11 terminal jack interface. Connect your telephone, fax, answering machine or analog line to this interface.
PHONE 2	This is an analog port #2 RJ-11 terminal jack interface. Connect your telephone, fax, answering machine or analog line to this interface.

Use ISDN U Interface to Connect your omni.net LCD Plus (North America only)

In North America, we provide an "ISDN U" jack for you to connect your omni.net LCD PLUS with your computer. Simply connect one end of a RJ-45 connector to your device, and the other end to the wall jack, as shown in the illustration below.



2. Install Drivers for Your omni.net LCD PLUS (USB-TA)

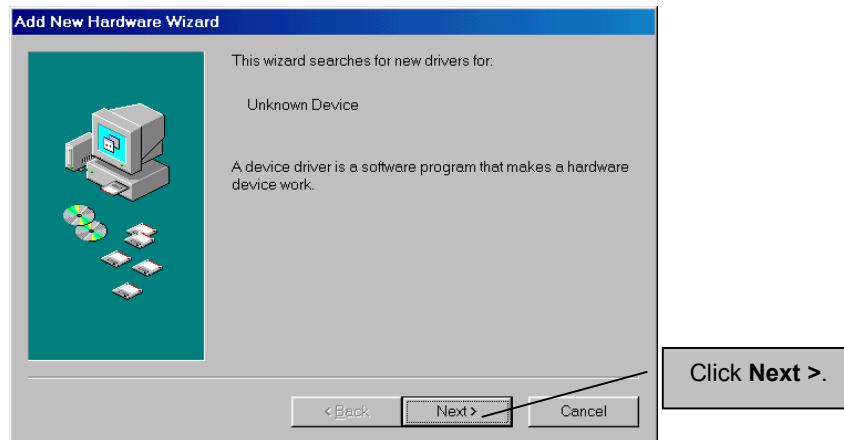
This section provides step by step instructions on how to install drivers needed for the omni.net USB-TA on your Windows 98 or 2000 operating system. If you have MacOS then please proceed to **Section 6** for installation instructions.

Install Drivers for Windows 98

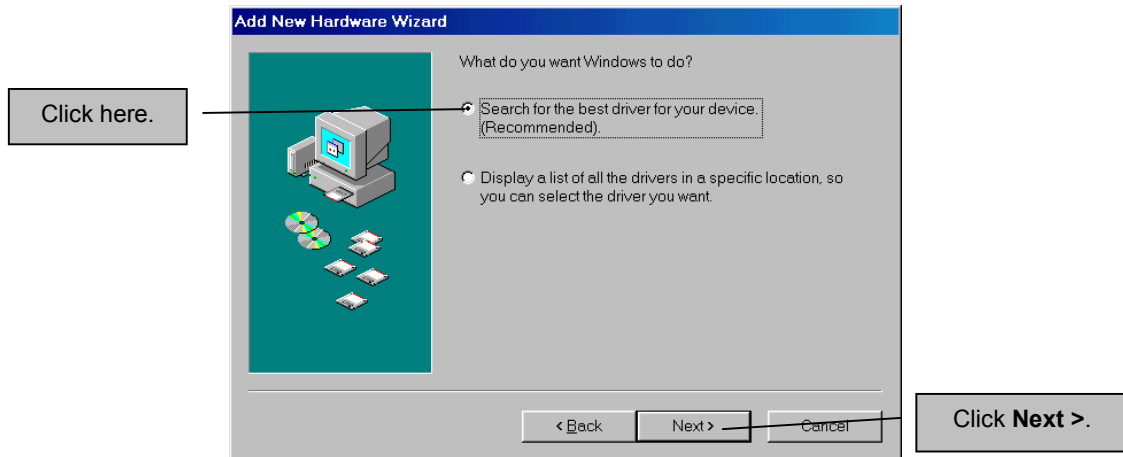
Step 1. Be sure your omni.net LCD PLUS is on.

Step 2. Plug your USB cable from your TA into your computer. If your TA has not already been installed then Windows will detect it.

Step 3. Click **Next >** to search for new drivers.

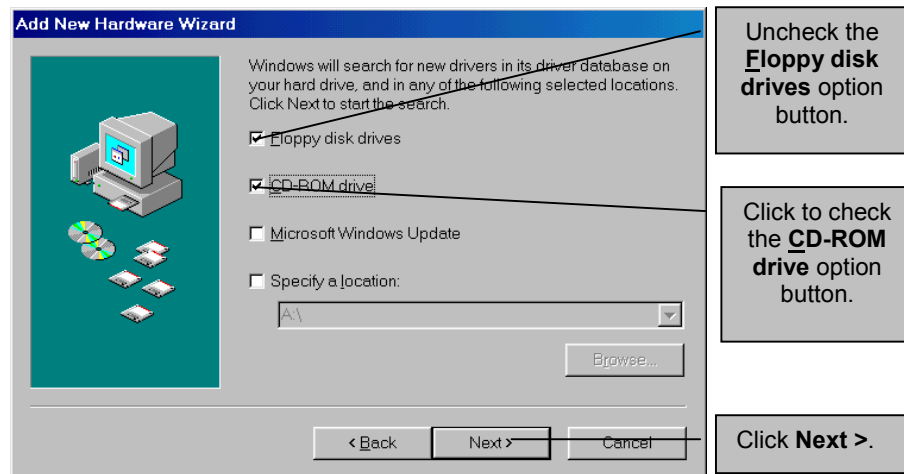


Step 4. This window gives the choice of displaying all drivers or searching for the best drivers. Click **Search for the best driver for your device** option button and then click **Next >**.

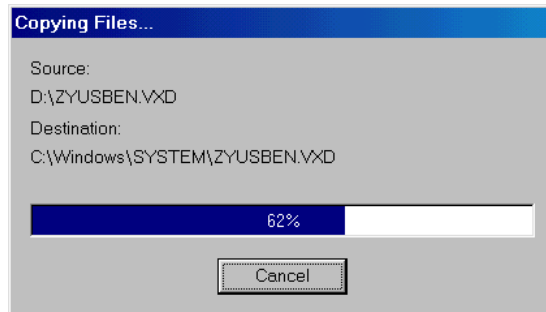
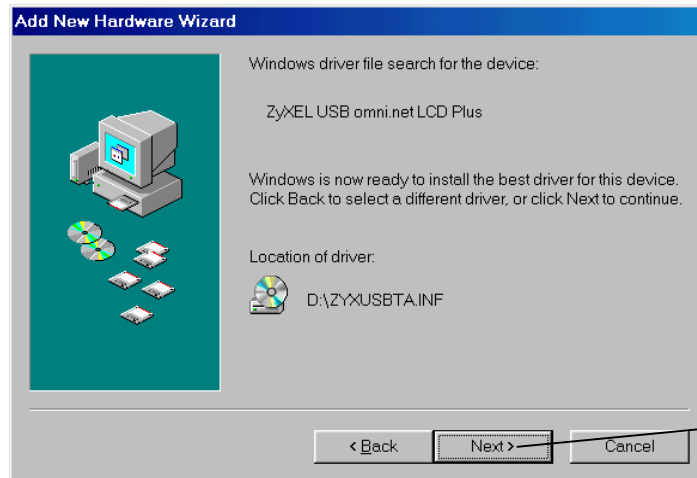


Step 5. Your system will show the screen below. Insert the **BONUS CD** that comes with your TA device into your CD-ROM.

Uncheck the **Floppy disk drive** option button, check the **CD-ROM drive** option button and then click **Next >** to install.

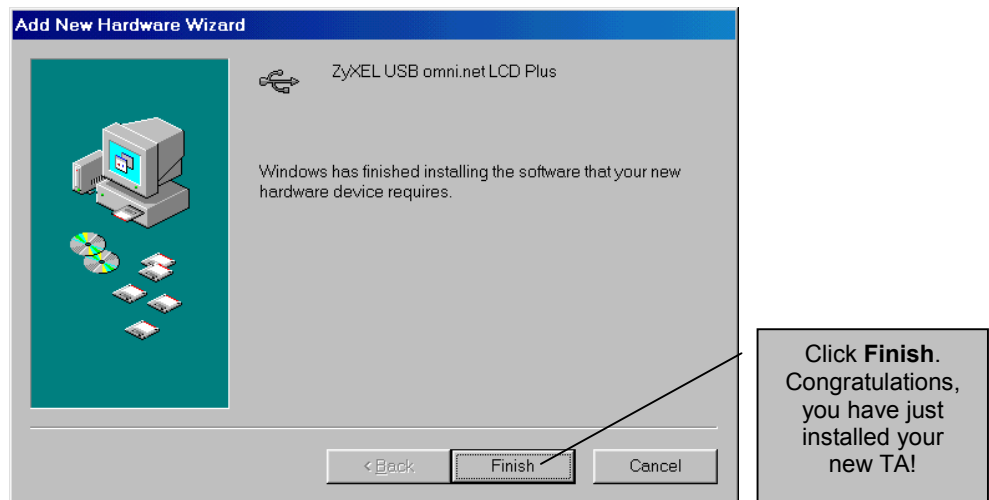


Step 6. Windows has found the **INF** folder associated with USB device driver from your **BONUS CD**. Click **Next >** to install the best driver for this device.



Step 7. The USB driver installation is complete. Click **Finish**.

After installation is complete, please go to **Section 4** to install the **ZyXEL ISDN Configuration Manager** on your computer.



Install Drivers for Windows 2000

This section provides step by step procedures to install drivers needed for the omni.net USB Terminal Adapter (TA) in Windows 2000. Install your TA via a USB interface or a serial port (RS-232) interface.

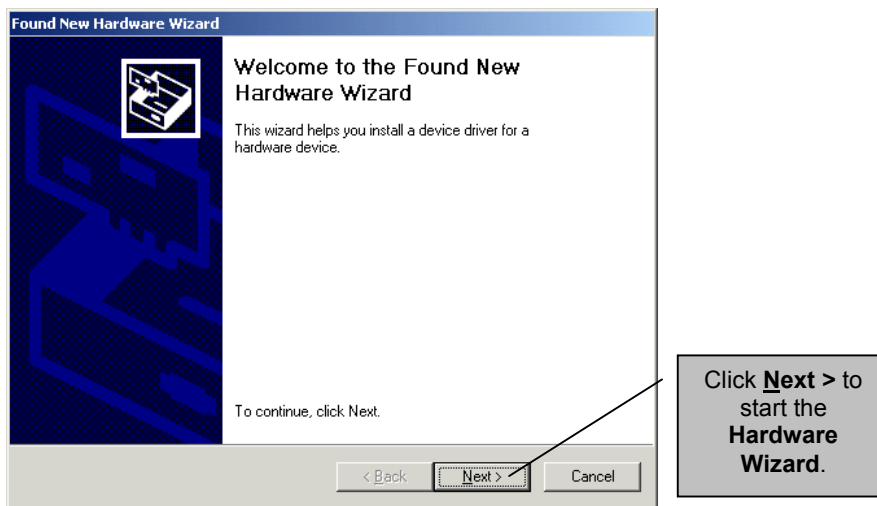
1. **Install your TA via a USB Interface.**
This is the most typical installation.
2. **Install your TA via a Serial Port (RS-232) Interface.**
This installation requires you to restart your computer.

1. Install your TA via a USB Interface.

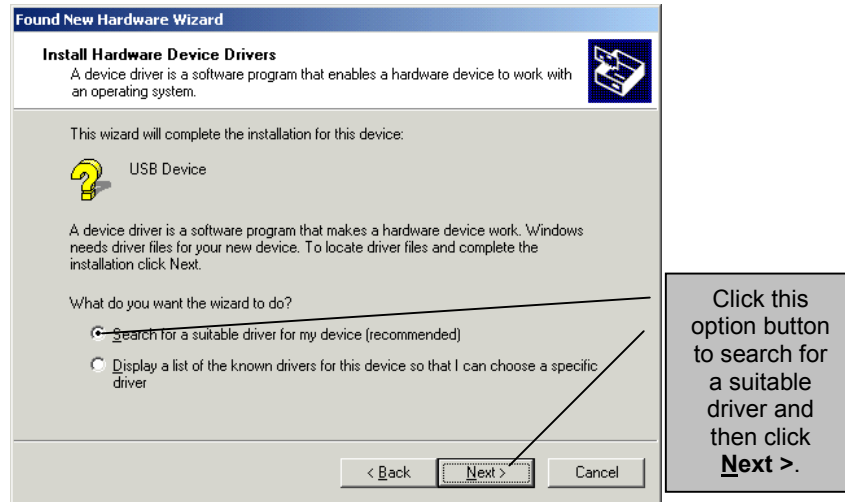
Step 1. Connect your USB cable to your omni.net LCD PLUS and computer. Make sure your TA is on. Windows should automatically detect that you have a new device and will give you the following Wizard window.

Step 2. If you see the **Found New Hardware Wizard** window shown below then please continue by following the instructions in **Step 3**. If you do not see the **Found New Hardware Wizard** window below then click **Start, Settings, Control Panel**, double click the **Add New Hardware** icon and follow your computers' prompts until your TA is detected by your computer.

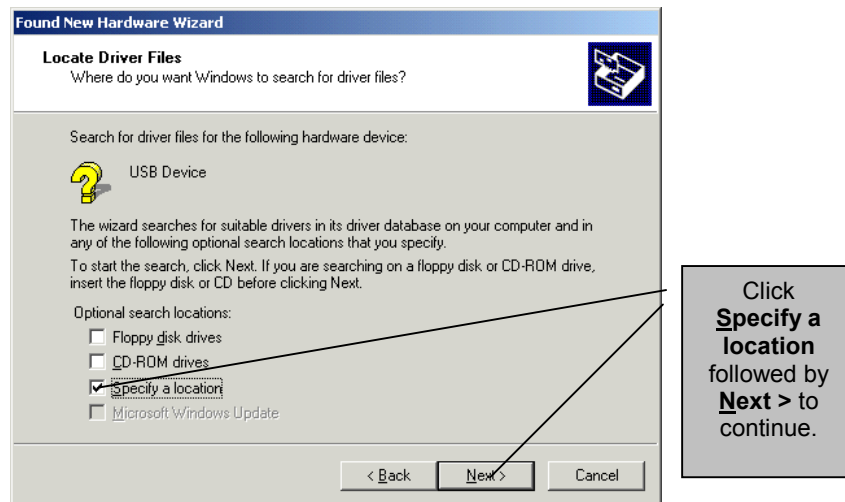
Step 3. Follow the instructions below.



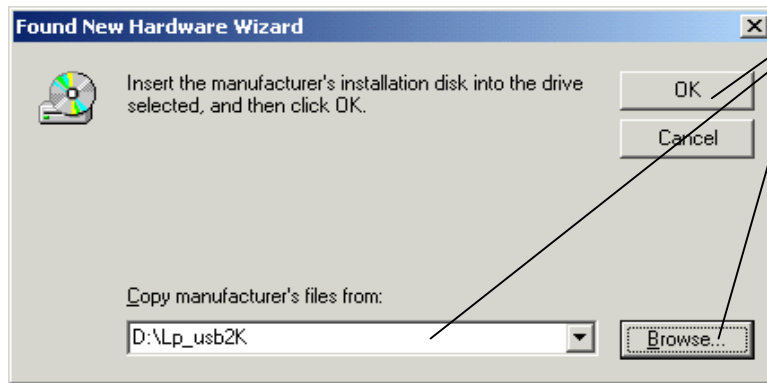
Step 4. This window gives you the choice to either search for a suitable driver or display a list of know drivers for your TA.



Step 5. This screen asks you where the driver located.



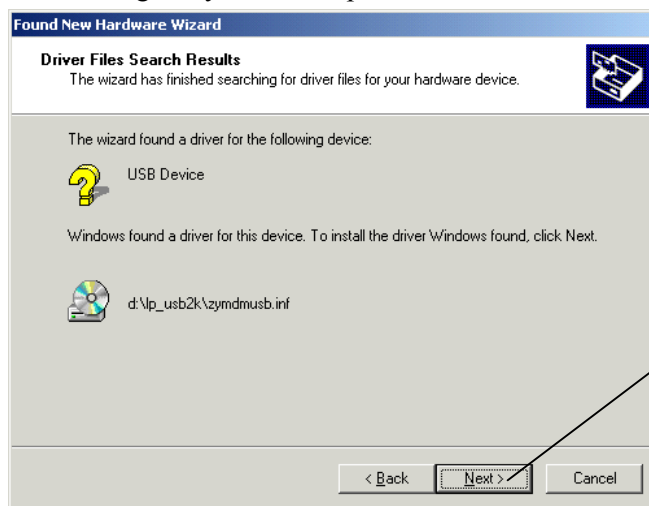
Step 6. Insert your installation CD and follow the instructions below.



Click the **B**rowse button and, from your CD-ROM, find the **LP_usb2k** folder (for installation via USB Interface) or the **Inf** folder (for installation via Serial Port RS-232 Interface). Afterwards, click **OK**.

"D:" refers to your CD-ROM drive.

Step 7. This screen gives you a description of the driver and driver files that were found.



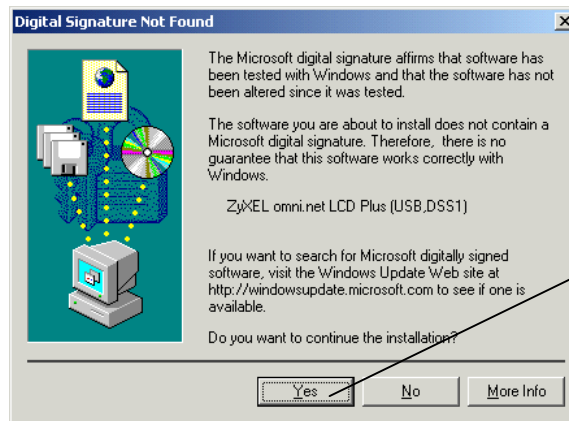
Click **N**ext > to continue with this installation.

Step 8. This is the end of the installation wizard.



Click **Finish** to complete your installation. Congratulations, you have successfully installed your new Terminal Adapter via a USB Interface!

Step 9. This software does not have a Microsoft digital signature but it has been tested with Windows in ZyXEL laboratories.



Click **Yes** to return to your computer desktop.

A digital signature is not required.

Step 10. You can now access the Internet using your new TA! To test your connection and find out more about ZyXEL's exciting products visit www.zyxel.com.

2. Install your TA via a Serial Port (RS-232) Interface

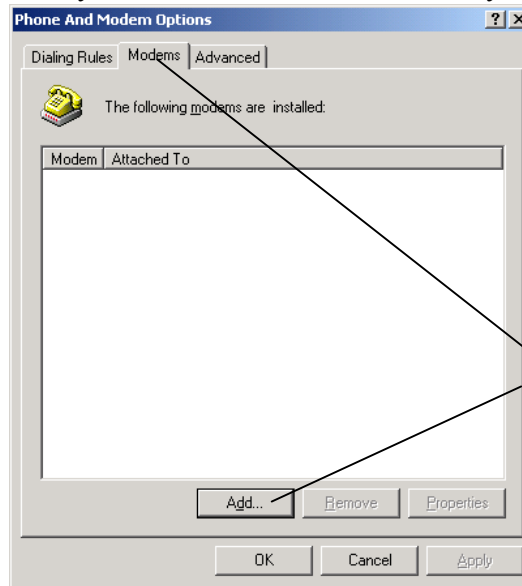
This section instructs you to install the TA using the serial port (RS-232) interface with auto-detect or manual installation.

Step 1. Connect the serial port (RS-232) interface to your computer. Make sure your TA is on.

Step 2. Did Windows detect your TA automatically? If yes, then go back to **Step 3** under the heading **1. Install your TA via USB Port** and follow the instructions. If Windows did not detect your TA automatically then you must install your TA manually. For manual installation, follow the instructions below.

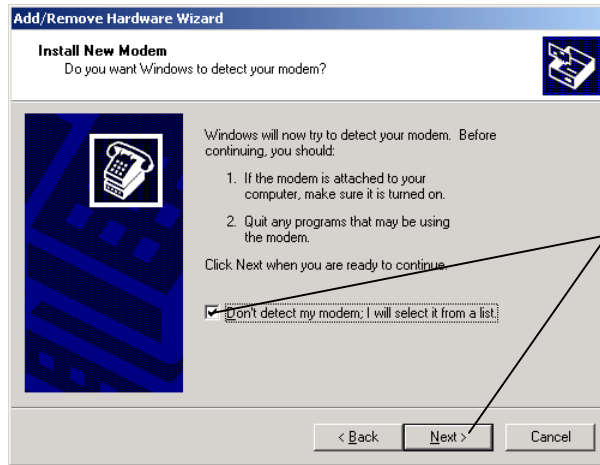
Step 3. Double-click on the **My Computer** icon, double-click on the **Control Panel** icon and then double-click on the **Phone and Modem** icon. Proceed to the next step.

Step 4. This screen shows you what modems are installed on your computer.



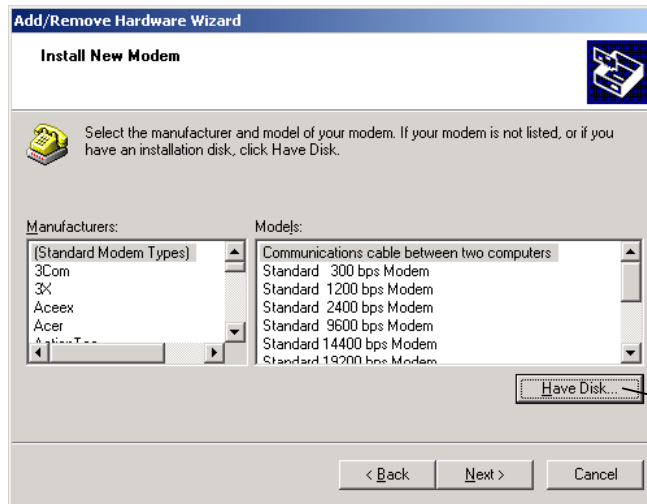
Click the **Modems** tab and then click "**Add...**" to select from a list of devices.

Step 5. This screen asks if you want Windows to detect your modem.



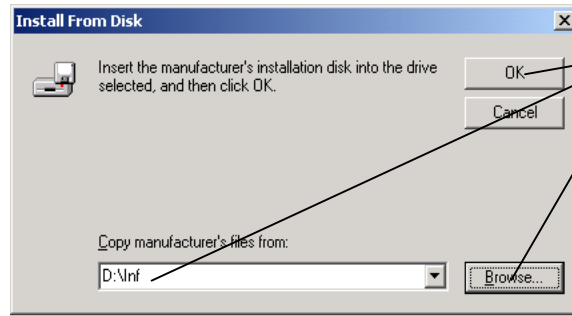
Check this option box and then click **Next >**.

Step 6. This screen shows you common drivers and manufacturers of common kinds of drivers. Click "**Have Disk...**" to find a specific driver required for your TA.



Click "**Have Disk...**" to continue.

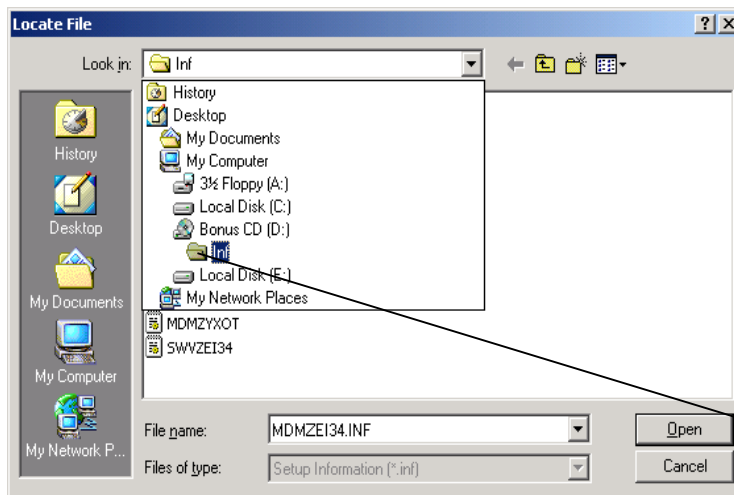
Step 7. Insert the installation disk into your CD-ROM Drive.



Click **B**rowse, find the file **I**nf in your CD-ROM drive and then click **O**K.

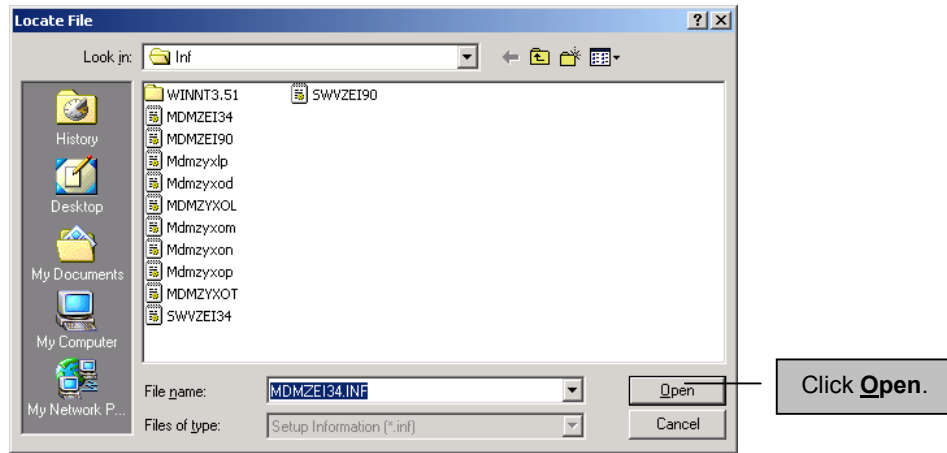
"D:" in the "Copy manufacturer's files from:" field refers to your CD-ROM drive.

Step 8. This screen shows you where to find the folder the contains your driver.

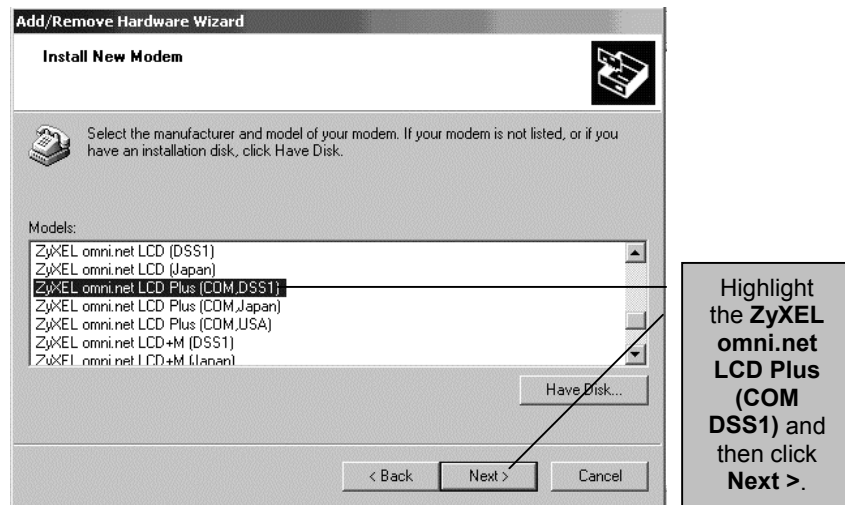


Highlight the **I**nf folder.

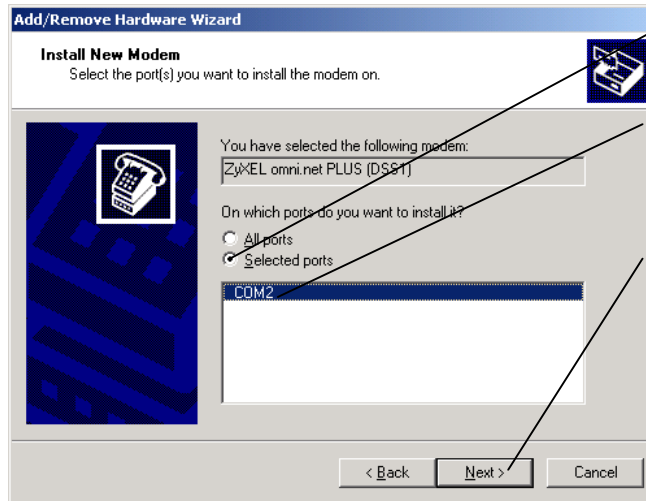
Step 9. These are the files in the **INF** folder.



Step 10. Select the manufacturer and model of your TA or modem.



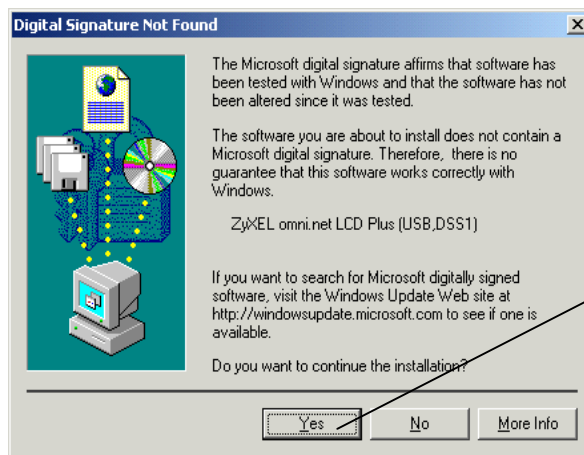
Step 11. Select the port(s) that you want to install your TA or modem on.



Click the **Selected ports** option button, highlight the port(s) connected to your TA and then click **Next >** to install.

"COM2" refers to the port connected to your terminal adapter.

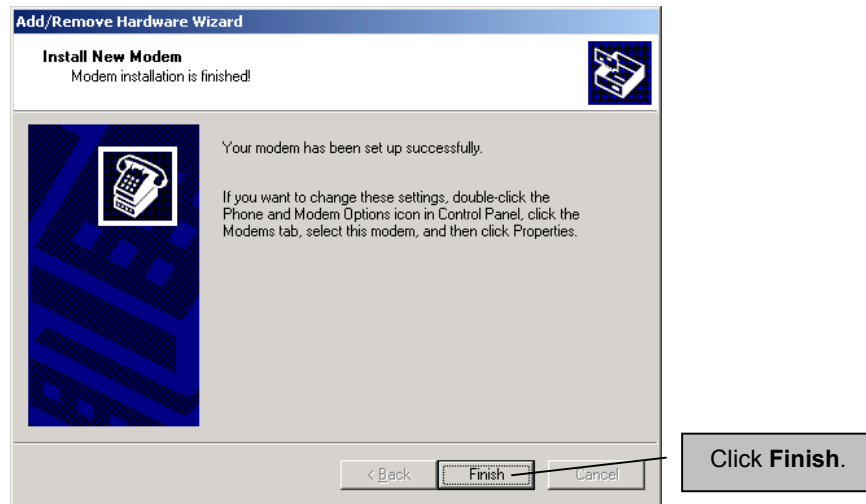
Step 12. This software does not have a Microsoft digital signature but it has been tested with Windows in ZyXEL laboratories.



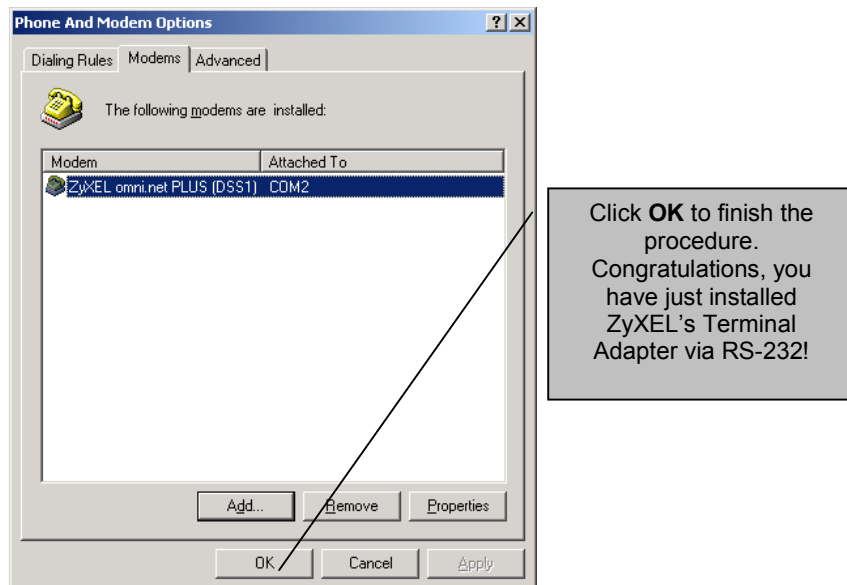
Click **Yes** to return to your computer desktop.

A digital signature is not required.

Step 13. This is the end of the installation wizard.



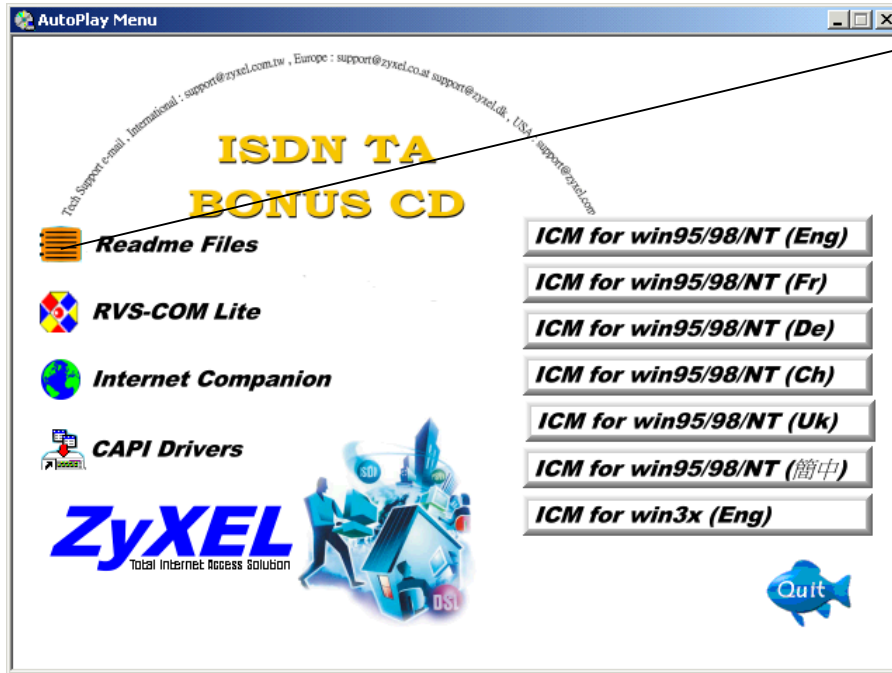
Step 14. This screen shows you what modems are installed.



Step 15. You can now access the Internet using your new TA! To test your connection and find out more about ZyXEL's exciting products visit www.zyxel.com.

3. Install INF file for your omni.net LCD+M/LCD

This section provides step by step procedures to install INF drivers that are needed for your omni.net LCD+M/LCD devices in your Windows 95/98/NT operating system(s).



Click here for a complete installation and setup guide.

Before installation

Insert the **BONUS CD** that comes with your TA device package into your CD-ROM drive. Click on **Readme files**, to view the complete installation and setup guide.

Note: The RVS-COM Lite software provided varies from country to country. For further information, please contact your local distributor.

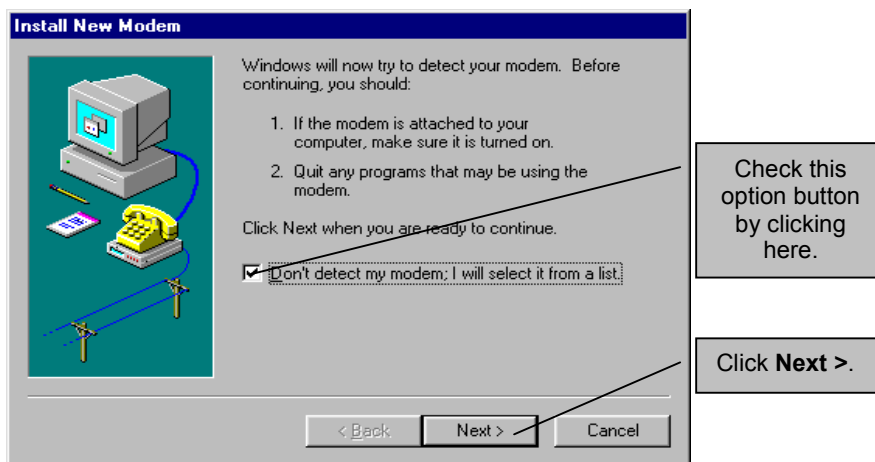
Install INF File

Please note that the omni.net LCD and omni.net M/LCD both lack a USB interface. Please be aware that these products must be installed via a serial port (RS-232) interface. The procedure for this installation is listed in the previous section.

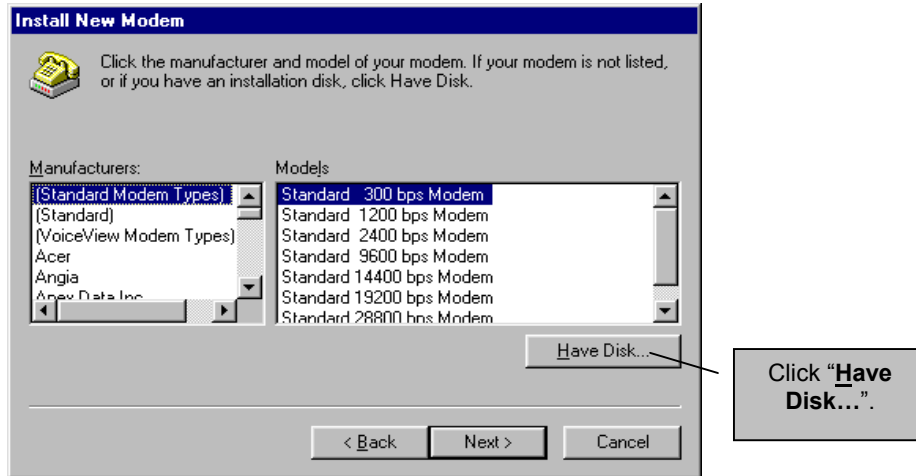
If your computer supports Plug & Play, be sure your omni.net LCD+M/LCD is on before starting your computer. If you are using a non-PnP protocol, then follow the steps below to perform the installation:

Step 1. Click **Start, Settings, Control Panel** and then double-click on the **Modems** icon. Click on the **“Add...”** button.

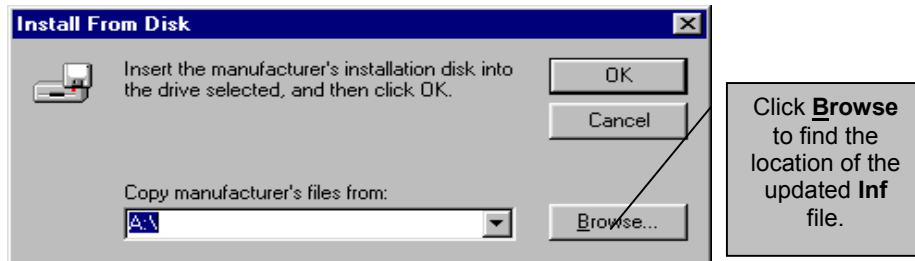
Step 2. In the screen below click the **Don't detect my modem; I will select it from a list** option box. Click **Next >** to continue.

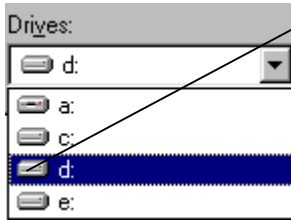


Step 3. Click “Have Disk...” and then follow the instructions below.



Make sure this BONUS CD is in your CD-ROM drive.

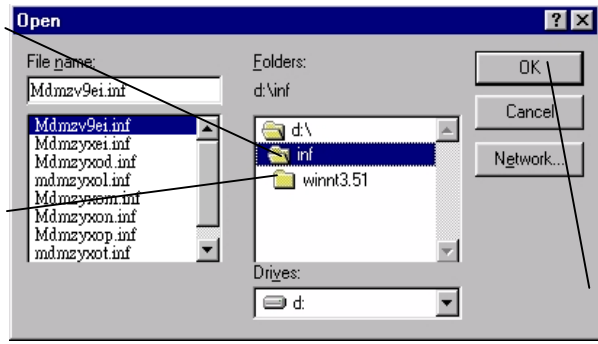




Click on the letter that represents your CD-Rom drive.

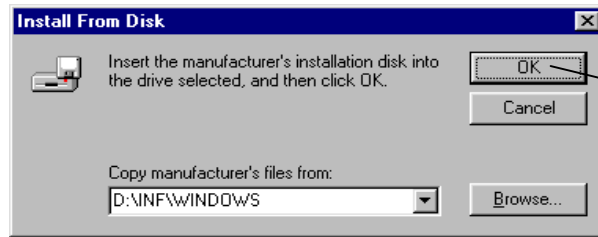
If you do not have Windows NT3.51 then click here.

If you have Windows NT 3.51 then click here.



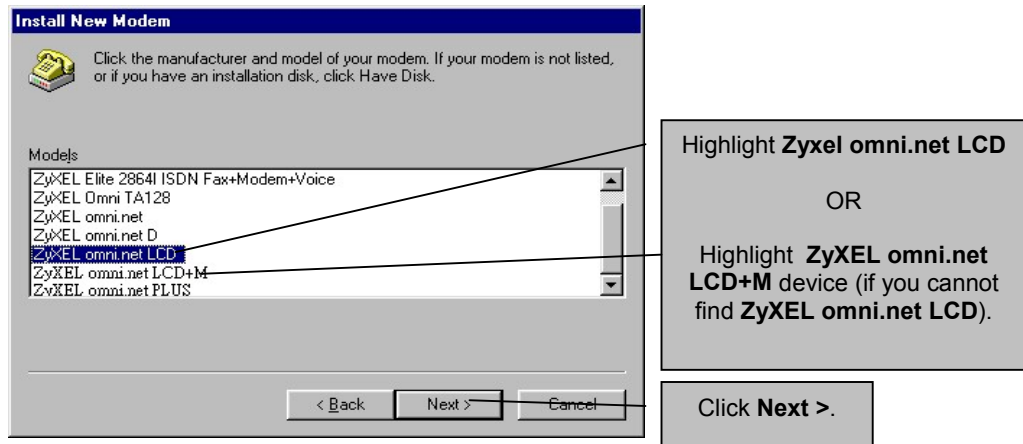
Lastly, click **OK**.

Step 4. Click **OK** to install either the **INF** file or the **winnt.3.31** file from your **BONUS CD**.

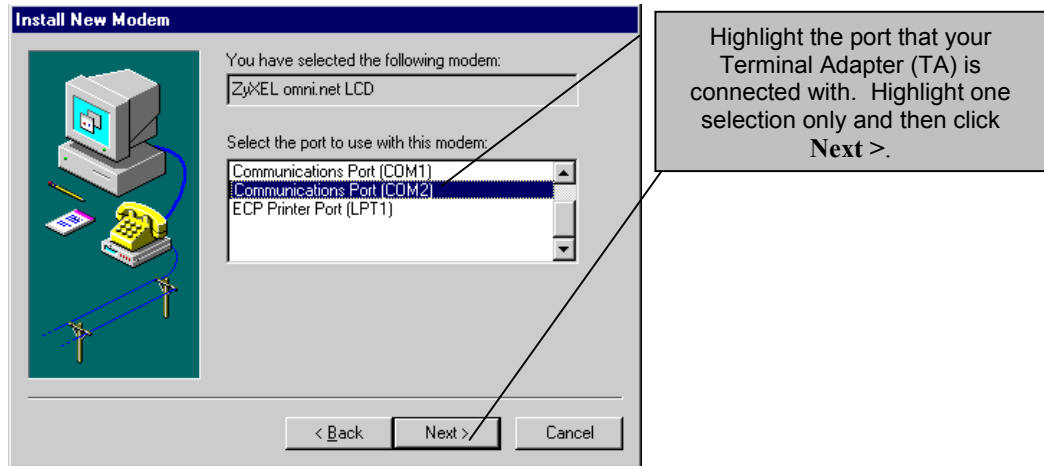


Click **OK**.

Step 5. This screen asks you to choose the manufacturer and model of your TA or modem.



Step 6. This screen displays the TA or modem selected above and asks you to select the (COM) port that you are using.

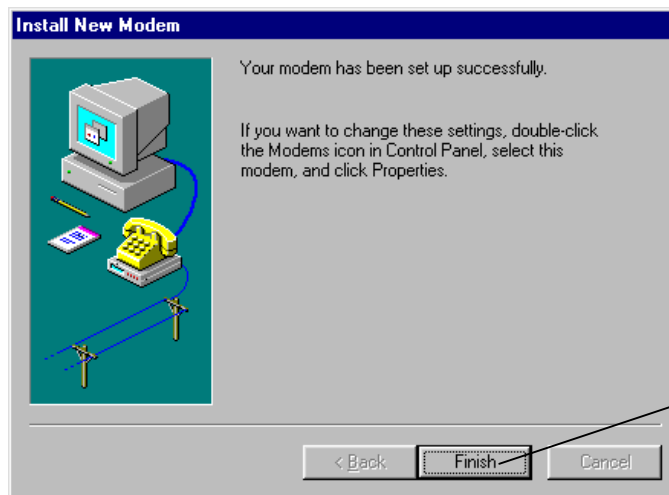


Step 7. Please wait...



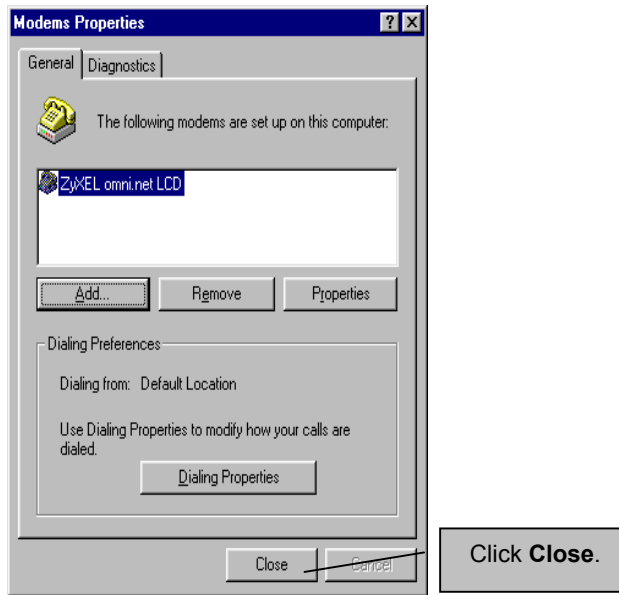
Follow the prompts of your computer.

Step 8. Click **Finish** to complete INF files installation.



Click **Finish**.
Congratulations, you have set up your TA successfully!

Step 9. Click **Close** to exit the INF files installation.



4. Install ZyXEL ISDN Configuration Manager for Windows

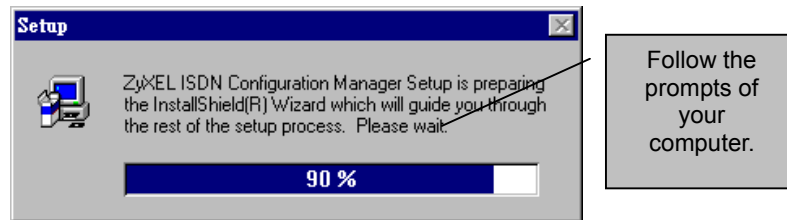
This section shows you how to install the ZyXEL ISDN Configuration Manager (ZyICM) using Windows.

Install ZyXEL ISDN Configuration Manager for Windows

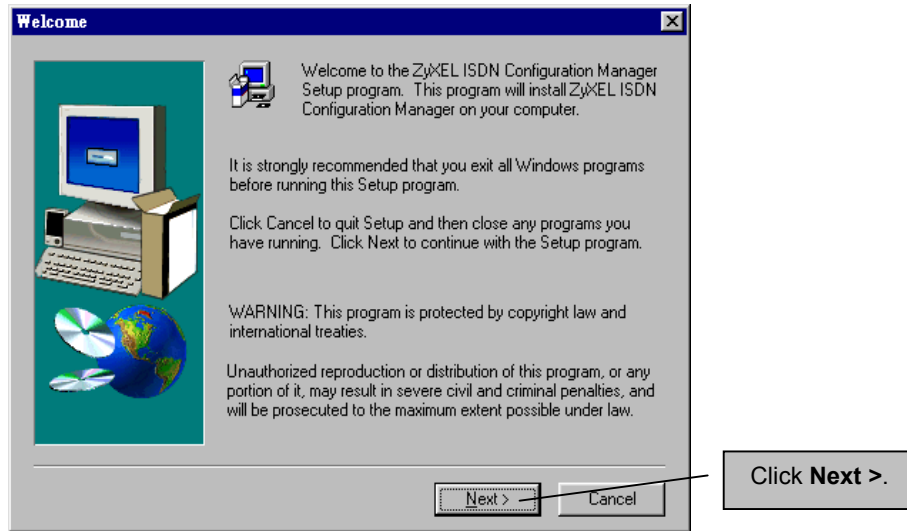
ZyXEL ISDN Configuration Manager helps you set up a PPP connection. Configuration of PPP is mandatory because it assists your TA in accessing the Internet. Before you can configure PPP you must first install the ZyXEL ISDN Configuration Manager. Complete this installation by following the instructions below.

Step 1. Be sure **BONUS CD** is in your **CD-ROM** device and the **Setup** display is active. If not, double-click the **startup.exe** to activate the **Setup** window.

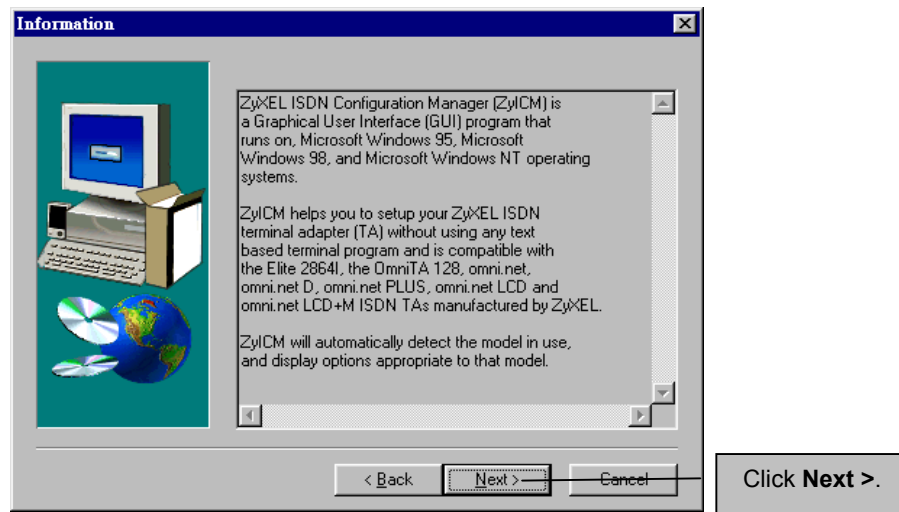
Step 2. From the **Setup** window choose the ISDN Configuration Manager matched for your Windows system. As setup is starting, you will see the following display:



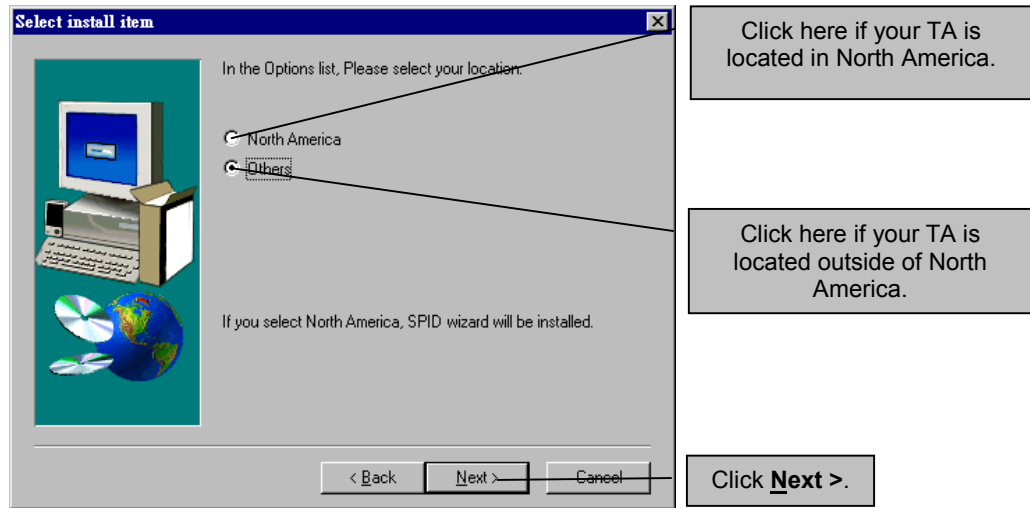
Step 3. Information about ZyXEL ISDN Configuration Manager Setup program.



Step 4. Information about ZyXEL ISDN Configuration Manager (ZylCM).

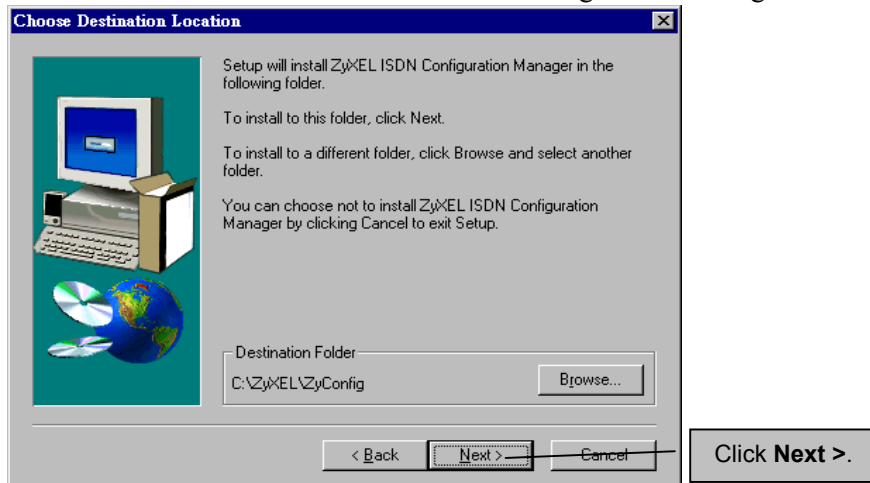


Step 5. Determine the general location of your TA.



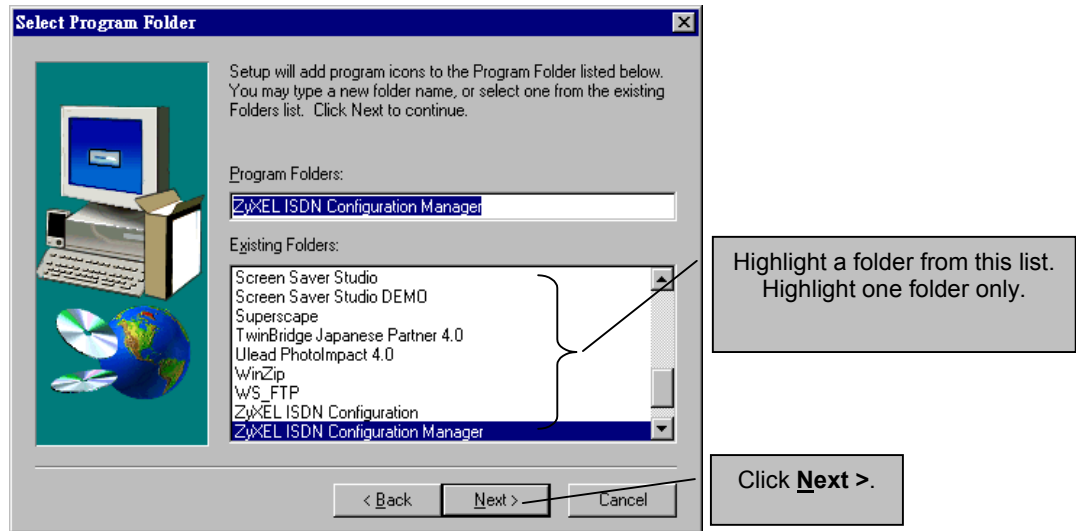
The screenshot shows a dialog box titled "Select install item" with a close button (X) in the top right corner. On the left is an illustration of a computer monitor, keyboard, mouse, and CD-ROMs. The main text reads: "In the Options list, Please select your location." Below this are two radio button options: "North America" and "Others". A callout line points from the "Others" option to a grey box on the right that says "Click here if your TA is located outside of North America." Another callout line points from the "North America" option to a grey box on the right that says "Click here if your TA is located in North America." Below the options, it says: "If you select North America, SPID wizard will be installed." At the bottom are three buttons: "< Back", "Next >", and "Cancel". A callout line points from the "Next >" button to a grey box on the right that says "Click **Next** >."

Step 6. Choose a destination folder in which to save the Configuration Manager.

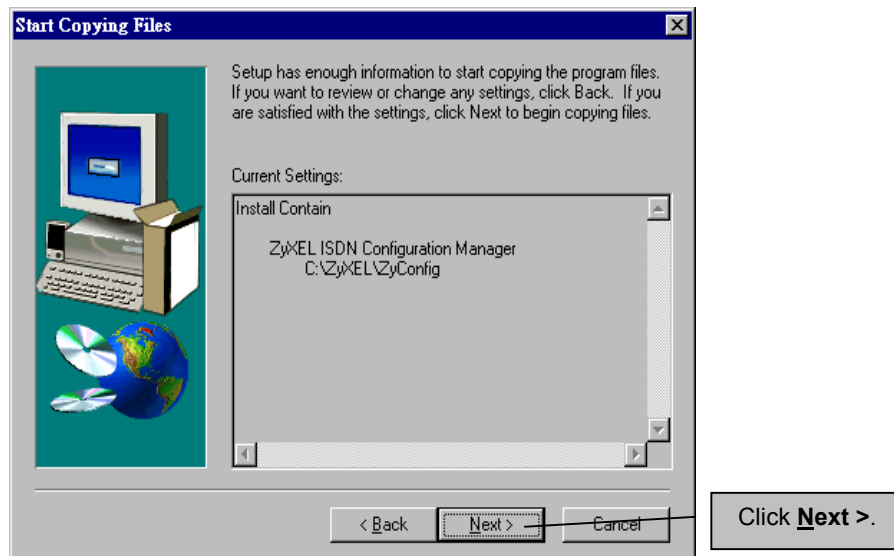


The screenshot shows a dialog box titled "Choose Destination Location" with a close button (X) in the top right corner. On the left is an illustration of a computer monitor, keyboard, mouse, and CD-ROMs. The main text reads: "Setup will install ZyXEL ISDN Configuration Manager in the following folder." Below this are three lines of text: "To install to this folder, click Next.", "To install to a different folder, click Browse and select another folder.", and "You can choose not to install ZyXEL ISDN Configuration Manager by clicking Cancel to exit Setup." Below the text is a text field labeled "Destination Folder" containing the path "C:\ZyXEL\ZyConfig" and a "Browse..." button. At the bottom are three buttons: "< Back", "Next >", and "Cancel". A callout line points from the "Next >" button to a grey box on the right that says "Click **Next** >."

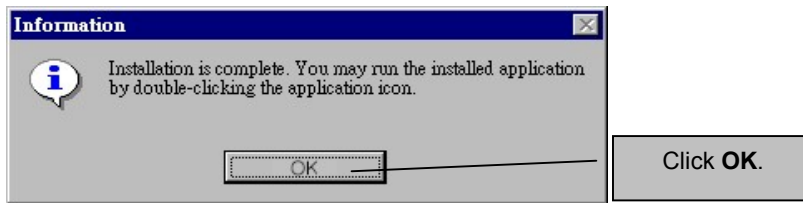
Step 7. Choose a destination Program Folder in which to save the Configuration Manager.
Follow the prompts of your computer.



Step 8. Start copying files by clicking **Next >**.



Step 9. Click **OK** to finish the installation of ZyXEL ISDN Configuration Manager.



Step 10. Once the installation is complete, your computer will create the program group called **ZyXEL ISDN Configuration Manager** on your **Start Menu** and a **ZyICM** icon will appear on your **desktop**. You can now go to **Section 5** and learn how to use the **ZyXEL ISDN Configuration Manager** to set up a PPP connection for Internet access.

5. PPP Setup for Windows

This chapter shows you how to set up a PPP connection by using ZyXEL's ISDN Configuration Manager with the Windows operating system.

To access the Internet, you must first install TCP/IP on your computer and then configure TCP/IP. After TCP/IP configuration, you may set up PPP by using ZyXEL's ISDN Configuration Manager and create a PPP connection to access the Internet.

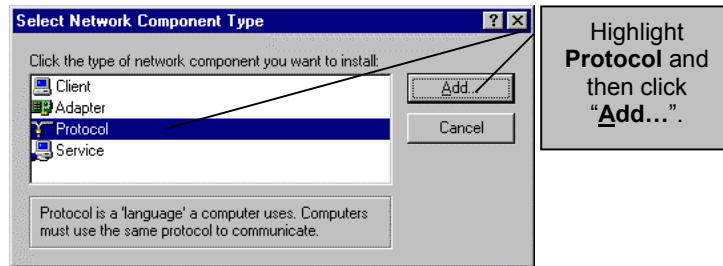
Install TCP/IP

If TCP/IP is already installed in your computer then you may go to the next section entitled **Configure TCP/IP**. If not, follow the steps below:

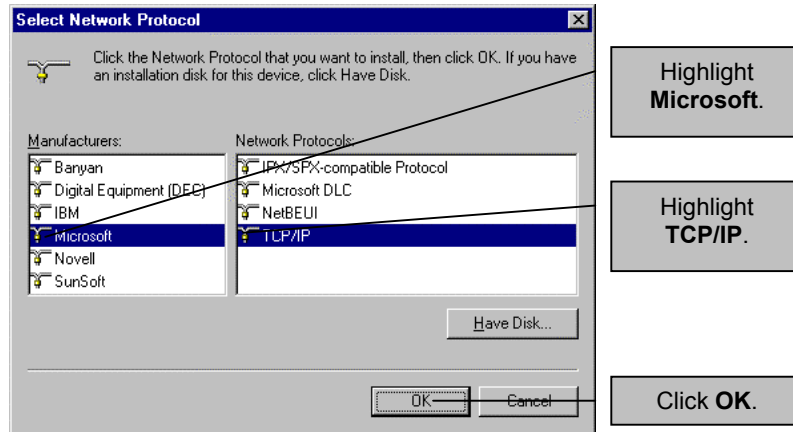
Step 1. Click **Start, Settings, Control Panel** and then double-click on the **Network** icon.

Step 2. Click **Add**.

Step 3. Highlight **Protocol** and then click on "**Add...**".



Step 4. Highlight **Microsoft**, **TCP/IP** and then click **OK**.



Configure TCP/IP

If TCP/IP is already installed in your computer then you may go to the next section entitled **PPP Setup by ZyXel ISDN Configuration Manager**. If not, follow the steps below:

Step 1. Click **Start**, **Settings**, **Control Panel** and then double-click on **Network** icon.

Step 2. Select **TCP/IP** and then click **Properties**.

Step 3. Press on **IP Address** tab. In most cases, you have to select **Obtain an IP address automatically**. If you have an assigned IP address from your ISP, select **Specify an IP address** then enter your IP address and subnet mask.

Step 4. Click the **DNS Configuration** tab, click the **Enable DNS** option button, enter your **Domain** name, **Host** name and then click **OK**.

Click **DNS Configuration** file.

Enable DNS by clicking here.

Enter your **Domain** name.

Enter your **Host** name.

Finally, click **OK**.

PPP Setup by ZyXEL ISDN Configuration Manager

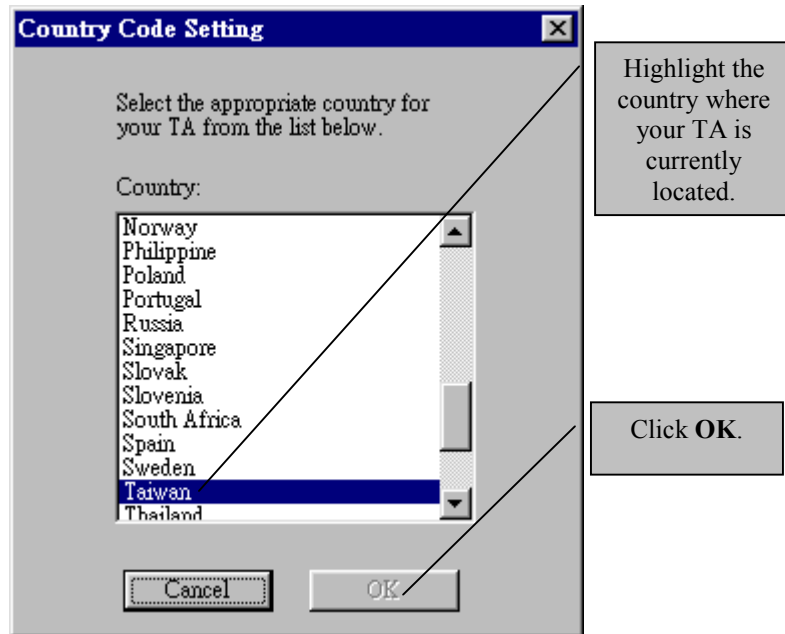
If you have not yet installed the **ZyXEL Configuration Manager** then please go back to **Section 4** and follow the instructions. Follow the instructions below only if you have the **ZyXEL Configuration Manager** currently installed.

Step 1. From the **Start** menu select **Programs** to choose **ZyXEL ISDN Configuration Manager**. Or, you may click on **ZyICM** icon from your desktop, as shown below:

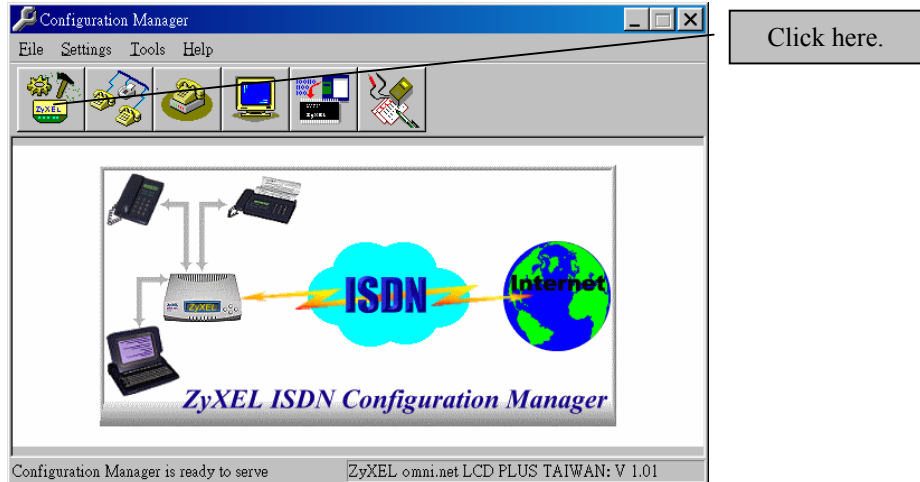


The Configuration Manager then searches for your TA. Look for the **Country Code Setting** window as shown next:

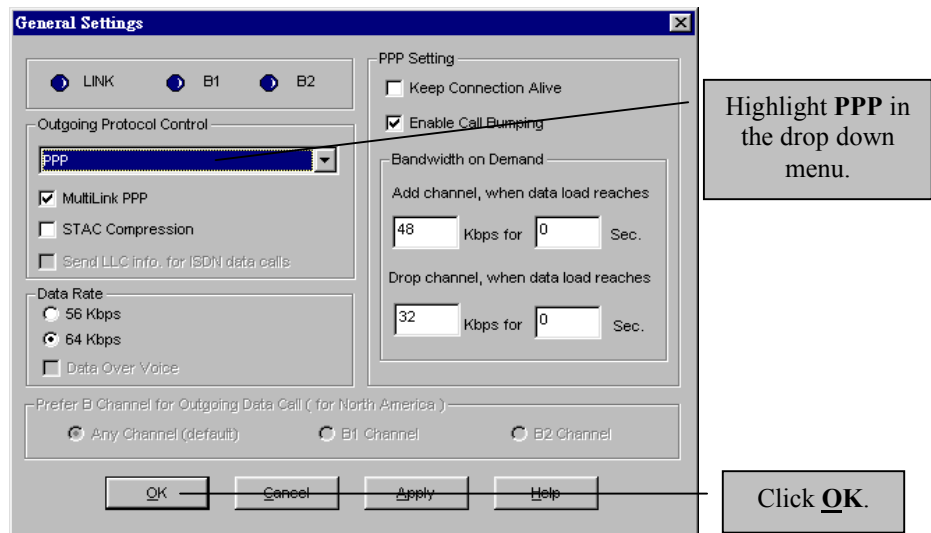
Step 2. Select the country where your TA is located and then click **OK**. If you can not find your country location on this list then please select **Others** which is located at the end of this list.

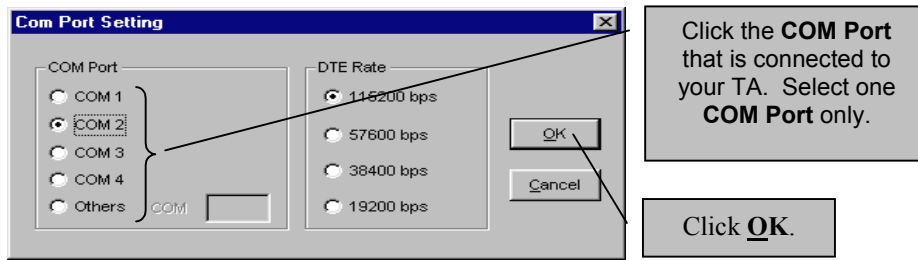


Step 3. Click on configuration icon as shown below.



Step 4. Use the drop-down list to select **PPP** and then click **OK**.





Create a PPP Connection

At this point, you are very close to accessing the Internet. Follow the instructions below to create a new **Dial-up Connection**.

Step 1. Double-click on the **My Computer** icon, double-click on the **Dial-up Network** icon and then double-click on **Add New Dial-up Connection**.

Step 2. Give a name to this Dial-up Connection, for example, “omni.net LCD TA” for identification purposes. Double-click on your new TA icon as the device to connect to the Internet and then click **Next**.

Step 3. Enter your ISP's phone number and then click **Next**.

Step 4. Click **Finish**. Click on your recently created icon to connect to the Internet.

Step 5. Congratulations, you have completed PPP setup and can now access the Internet using your new TA! To test your connection and find out more about ZyXEL's exciting products visit www.zyxel.com.

6. Install Driver and PPP Setup for MacOS

This section provides step by step procedures to install the USB driver and set up PPP on MacOS.

Install Driver for MacOS

ZyXEL_USB_Installer, a MindVision VISE Installer, is used to install ZyXEL USB omni.net LCD Plus SUB driver on your Macintosh computer. Follow the instructions below.

Step 1. Be sure your omni.net LCD Plus is on.

Step 2. Insert the **BONUS CD** attached with your TA device into your **CD-ROM** drive. You will see the icon as shown below.

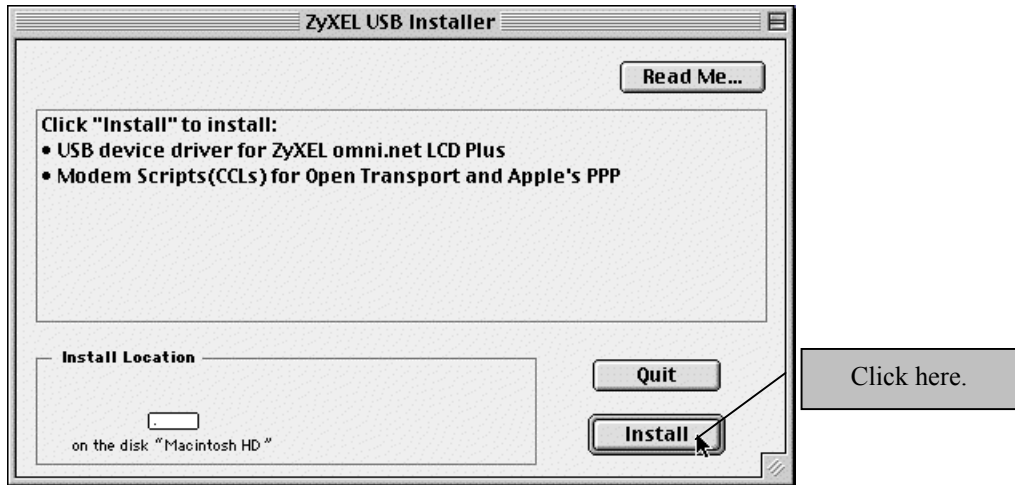


Step 3. Plug the USB connector that is attached to your USB-TA into any one of your computer devices with USB port, (such as your monitor, keyboard, etc).

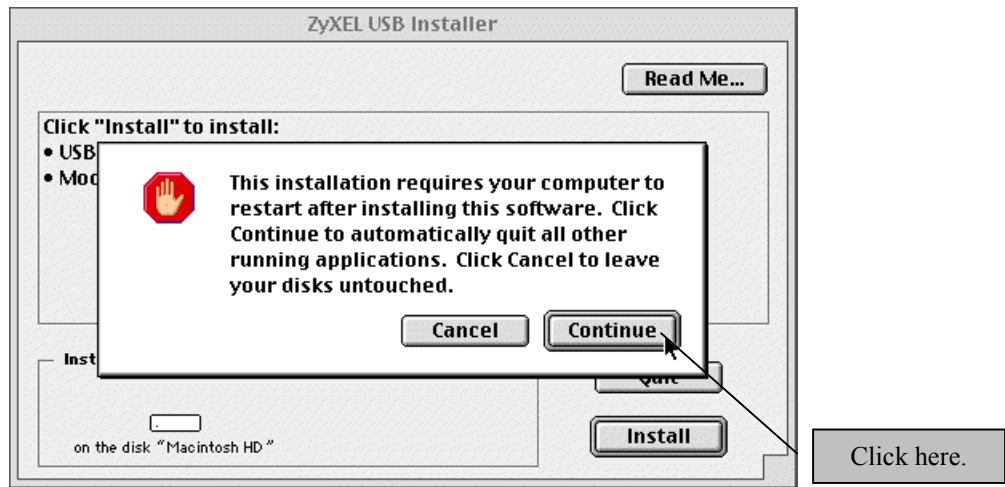
Note: If you have used the USB connector to connect your USB-TA with another USB device before you have inserted the BONUS CD into your CD-ROM drive, then your computer will show an error message.

Step 4. Double click on the **ZyXEL_USB_Installer** icon and then click **Continue**.

Step 5. Click on **Install** button. The ZyXEL USB device driver will be installed in the extension folder of the system folder.



Step 6. Installation is almost complete. You must restart your Macintosh to activate the USB device driver. Click **Continue**.



Step 7. Click on **Restart** to reboot your Macintosh.



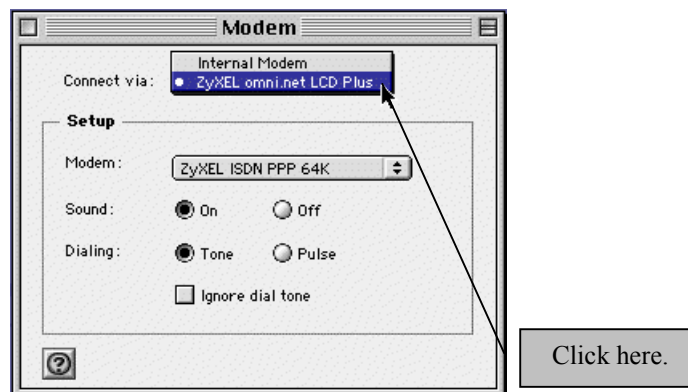
Step 8. Congratulations, you have finished the USB driver installation for your MacOS. Please follow the information, in the following section, and set up a PPP connection for Internet access.

OT/PPP Setup for MacOS

Before using OT/PPP, you must first use **Control Panels** to set up a TCP/IP, Modem and Remote Access (or PPP).

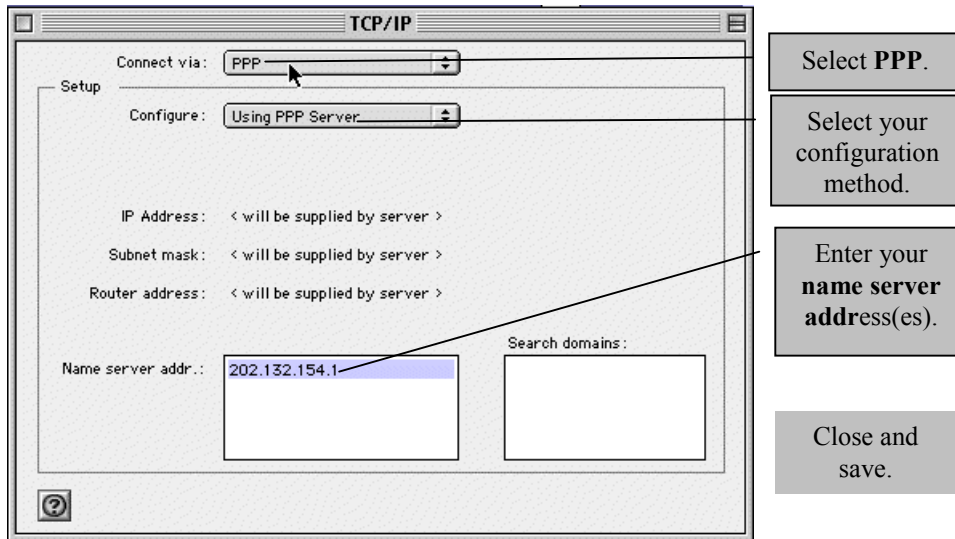
Set up the Modem Control Panel

- Step 1.** Choose **Control Panels** from **Apple Menu** and open the **Modem control panel**. You should see the **Modem** window shown below:
- Step 2.** Choose the port connected to the ZyXEL USB omni.net LCD PLUS from the “Connect via” pop-up menu.
- Step 3.** Choose **ZyXEL ISDN PPP 64K** or **ZyXEL ISDN MP/PPP 128K** from the “Modem” pop-up menu.
- Step 4.** Close and save.



Set up TCP/IP for PPP

Step 1. Choose Control Panels from **Apple Menu** and open the TCP/IP control panel. You should see the **TCP/IP** window shown below:



Step 2. Choose **PPP** from the “**Connect via**” pop-up menu.

Step 3. Choose your configuration method from the “**Configure**” pop-up menu. For example, **Using PPP Server**.

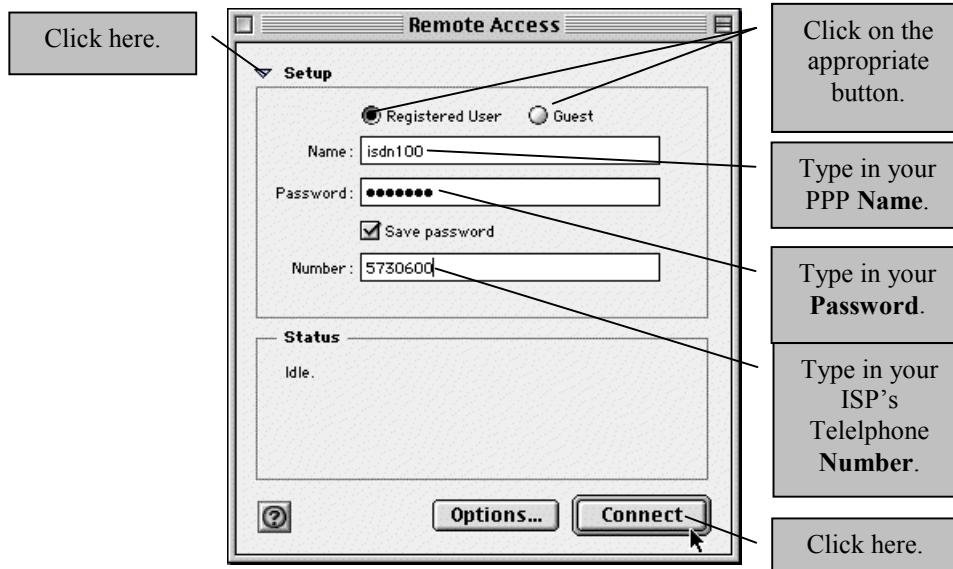
Step 4. The most common selection is **Using PPP Server** which causes OT/PPP to request IP address from the server when it connects.

Step 5. Enter name server addresses.

Step 6. Close and save.

Set up Remote Access (or PPP)

Step 1. Choose **Control Panels** from **Apple Menu** and then open the **Remote Access(or PPP)** control panel. You should see the **Remote Access** window shown below:



Step 2. Click **Setup** to show this panel's screen.

Step 3. Click **Guest** or **Registered User**.

Step 4. Enter your PPP user **Name** and **Password** in the required fields.

Step 5. Enter your ISP's telephone number in the **Number** field.

Step 6. Click **Connect**. This will start to dial up and make an OT/PPP connection.

Step 7. Congratulations, you have successfully set up OT/PPP for MacOS. Be sure to visit www.zyxel.com to test your connection and find out more about ZyXEL's exciting products.

7. Customer Support

ZyXEL ISDN Terminal Adapter

If you have any questions about your ZyXEL product or desire customer assistance, contact ZyXEL in one of the following ways.

Method \ Region	EMAIL – Support	Telephone	Web Site	Regular Mail
	EMAIL – Sales	Fax	FTP Site	
Worldwide	support@zyxel.com.tw support@europe.zyxel.com	+886-3-578-3942	www.zyxel.com www.europe.zyxel.com	ZyXEL Communications Corp., 6 Innovation Road II, Science-Based Industrial Park, HsinChu, Taiwan.
	sales@zyxel.com.tw	+886-3-578-2439	ftp.europe.zyxel.com	
North America	support@zyxel.com	+1-714-632-0882 800-255-4101	www.zyxel.com	ZyXEL Communications Inc., 1650 Miraloma Avenue, Placentia, CA 92870, U.S.A.
	sales@zyxel.com	+1-714-632-0858	ftp.zyxel.com	
Scandinavia	support@zyxel.dk	+45-3955-0700	www.zyxel.dk	ZyXEL Communications A/S, Columbusvej 5, 2860 Soeborg, Denmark.
	sales@zyxel.dk	+45-3955-0707	ftp.zyxel.dk	
Austria	support@zyxel.at	+43-1-4948677-0 0810-1-ZyXEL 0810-1-99935	www.zyxel.at	ZyXEL Communications Services GmbH., Thaliastrasse 125a/2/2/4, A-1160 Vienna, Austria
	sales@zyxel.at	+43-1-4948678	ftp.zyxel.at Note: for Austrian users with *.at domain only!	
Germany	support@zyxel.de	+49-2405-6909-0 0180-5213247 Tech Support hotline 0180-5099935 RMA/Repair hotline	www.zyxel.de	ZyXEL Deutschland GmbH., Adenauerstr. 20/A4, D-52146 Wuersele, Germany.
	sales@zyxel.de	+49-2405-6909-99	ftp.europe.zyxel.com	

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