

TEW-226PC/TEW-228PI Quick Installation Guide

V1.10 08182003

This Installation Guide will lead you through the installation of CardBus/PCI Wireless Adapter and the configuration utility. To establish your wireless network connection, the following steps should be executed.

1. Install the software using the installation CD.
2. Install the Adapter card in the computer.
3. Configure the Wireless Configuration Utility.

The product is designed to operate in Windows 98, Windows ME, Windows 2000, and Windows XP. And, the installation procedure for each operating system is very similar.

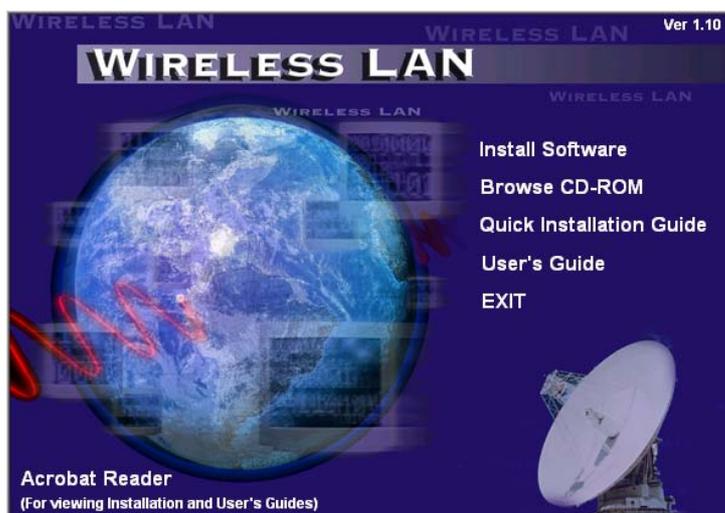
Minimum Hardware Requirements

- Computer with an available 32-bit CardBus or PCI slot
- 300 MHz processor and 32 MB of memory (*Recommended*)
- CardBus Controller properly installed and working in the computer
- An 802.11b Access Point (for Infrastructure Mode) or another 802.11b wireless adapter (for Ad-Hoc <Peer-to-Peer> networking mode).
(*Not required for driver and configuration utility installation*)

<Important> DO NOT install the adapter in the computer. Please follow the instructions below to install the driver and utility before installing the adapter in the computer.

Installing the Driver and Wireless Utility for Windows 98/ME/2000/XP

1. Insert the Driver & Utility CD-ROM into computer's CD-ROM Drive and it will automatically start a setup menu. Simply follow the instructions on the screen to install the driver and the utility. If your computer does not start the setup menu automatically, you can to run the software manually by clicking on "Start", choose "Run", type **D:\autorun.exe** in the dialog box (assuming **D:** drive is your CD-ROM drive) and click "OK".
2. Click "Install Software" button, the InstallShield Wizard screen appears, and then click "Next".



- At the Country Domain Selection screen, select the country domain (please see the Regulatory Domain table on the next page). If you are not sure which domain to select, click on the domain to see a list of the included countries for that domain. Click “Next”.

Warning: please note that selecting the incorrect “domain” may result in a violation of applicable law in your country. After completing the installation, if you need to change the domain, please re-insert the attached CD-Rom, repeat step 1 and 2 to **remove** the driver/wireless utility, restart the computer, reinstall the driver/wireless utility from Step 1, and select the desired domain.

Regulatory Domains

Channel Number	802.11b Frequency (GHz)	Regulatory Domains				
		FCC (North America)	ETSI (Europe)	France	Israel	MKK (Japan)
1	2.412	X	X			X
2	2.417	X	X			X
3	2.422	X	X		X	X
4	2.427	X	X		X	X
5	2.432	X	X		X	X
6	2.437	X	X		X	X
7	2.442	X	X		X	X
8	2.447	X	X		X	X
9	2.452	X	X		X	X
10	2.457	X	X	X		X
11	2.462	X	X	X		X
12	2.467		X	X		X
13	2.472		X	X		X
14	2.484					X

Maximum Radio Output Power for Each Domain

Regulatory Domain	Antenna Gain (dBi)	Maximum Power Level (mW)
Americas (FCC)	0	100
	2	100
Europe (ETSI)	0	100
	2	50
Israel	0	100
	2	50
Japan (MKK)	0	100
	2	50

Note: some countries may have domain that is different from the domains in the above table. It is users' responsibility to ensure that the wireless channel configuration is compliant with the regulatory standards of these countries.

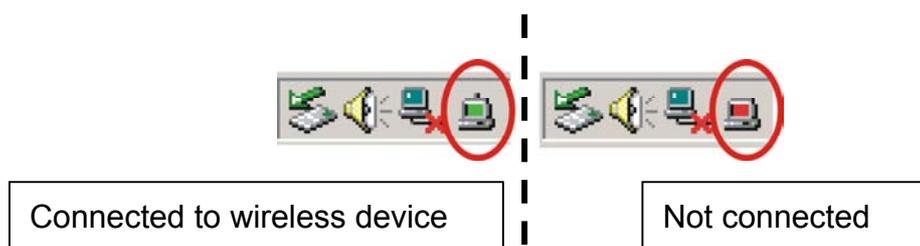
4. Click "Ok" to accept the domain selection.
 5. Click "Next" to install the software at the default location (C:\program files\802.11b Wireless CardBus & PCI Adapter HW.11V1.10) or click on "Browse" and select a desired destination folder.
 6. Click "Next" to accept the default program folder (802.11 Wireless LAN).
 7. Click "Finish".
- Note: For Win 98/ME, windows may prompt you to restart the computer, click on "No".*
8. Click "Exit" on the menu screen and remove the CD-ROM.
 9. Shut down the computer (power off), install the CardBus/PCI Adapter to the computer, and boot up the computer.
 10. After the computer boots to Windows, Windows automatically loads the driver and starts the Wireless Utility.

Note: for Win 98/ME, the "found new hardware wizard" window appears. Select "automatic search the driver...", click "Next", click "Finish", and click "Yes" to restart the computer.

You can find the Wireless Configuration Utility icon on the Windows task

bar at the lower right hand corner of the screen. If the icon is not on the screen, please go to “Start”, “Programs”, “802.11Wireless LAN”, “802.11b Wireless CardBus & PCI Adapter HW.11...”, and select “Wireless Configuration Utility”.

11. In default, the wireless adapter is configured to connect to the nearest Access Point (the one with the highest signal strength and without the encryption). The Utility icon turns green after making the wireless connection. The icon turns red when it is not connected (no connection).



Wireless Modes

Ad-Hoc (peer-to-peer or computer-to-computer) **mode**: the Channel, SSID, and WEP (encryption) must be the same among all wireless devices.

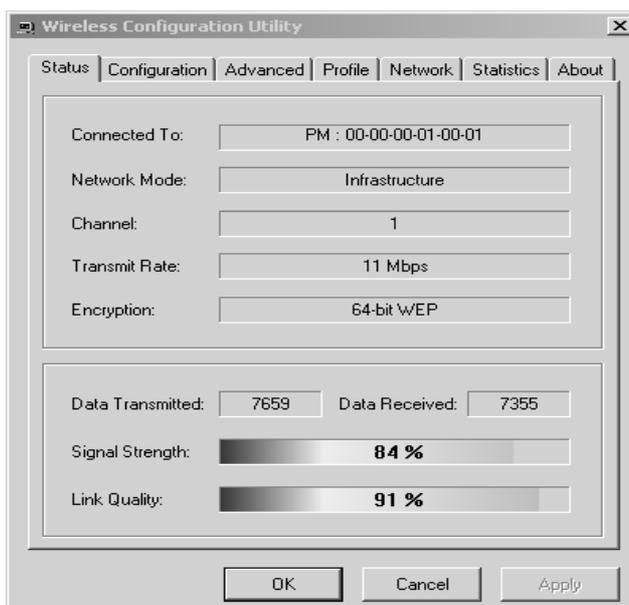
Infrastructure (Access Point) **mode**: requires a wireless Access Point (AP) or Access Point Router to allow wireless clients to communicate with wired Ethernet network. The wireless adapter’s SSID and WEP must match the AP’s settings.

Moreover, all connected wireless devices should have the IP address under same range and same subnet (e.g. IP address: 192.168.1.5, subnet mask: 255.255.255.0), you can follow the procedures in **APPENDIX** on **page 8** to check and configure the network adapter’s IP address.

Wireless Utility

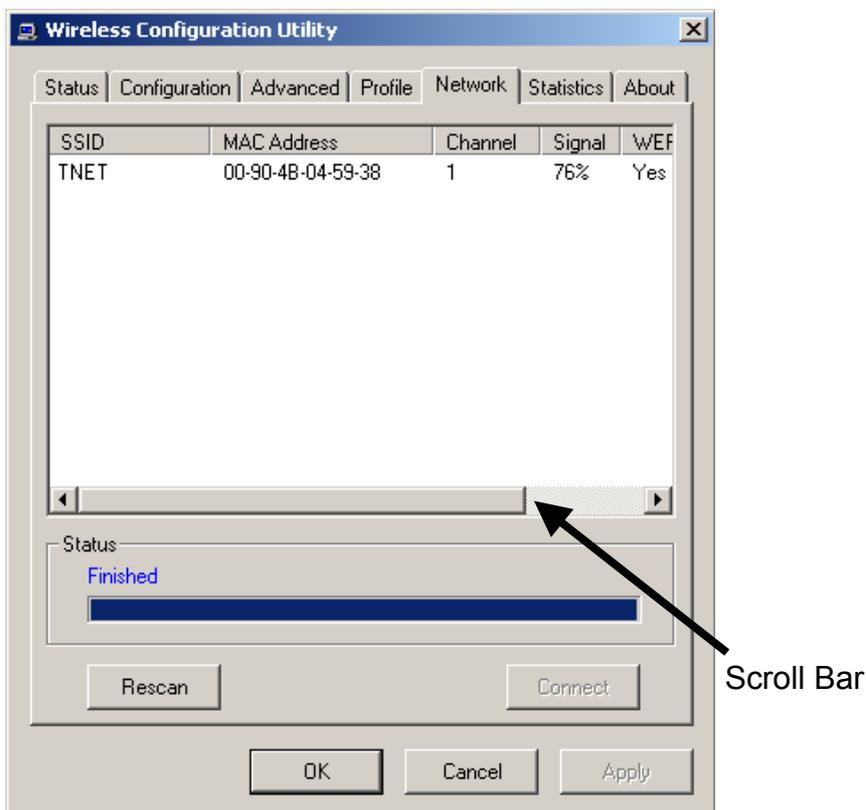
With the Wireless Utility, users can configure all the functions provided by the Wireless Utility. Double-click the Configuration Utility icon that appears in the taskbar to open the utility.

The Utility includes seven tabs: Status, Configuration, Advanced, Profile, Network, Statistics and About.



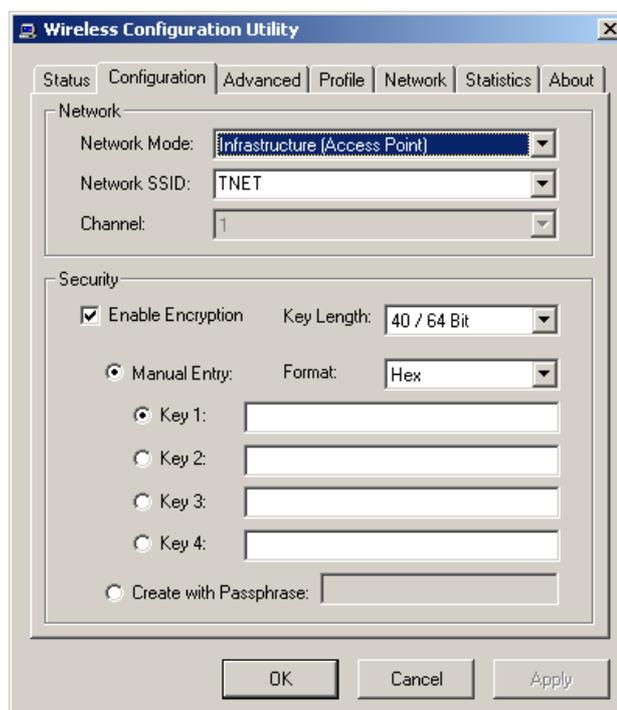
Making a Connection

Using Network Survey Tool: from the “Wireless Configuration Utility”, click on “Network”, the Utility scans and displays available wireless network connections in the surrounding area. The connections’ configurations, including SSID, MAC Address, Channel, Signal, WEP (encryption), and Mode are displayed on the screen (you may need to scroll to the right to see the configurations on the right).



If the available network's WEP is "No" (no encryption), click on its **SSID** and click "Connect" to connect to this network.

If the network's WEP is "Yes", after clicking "Connect", manually enter the "Security" information, and click "Apply".



- Network Mode: select "Infrastructure" when connecting to an "Access Point" or "Wireless Router". Select "802.11 Ad-Hoc for peer-to-peer (computer-to-computer) connection.
- Network SSID: this is the wireless network's name. To make the connection, the wireless devices in the same network need to have the same SSID.
- Channel: Available in "802.11 Ad-Hoc" mode only. Wireless devices in the same network need to use the same channel number.
- Enable Encryption: check this box to enable the encryption.
- Format: select the encryption format in "ASCII" or "HEX" (hexadecimal).
- Key Length: select the encryption key length.
 - 40/64-bit: ASCII: 5 alphanumeric characters, any combination of numbers 0 ~ 9 and letters a ~ z (upper and/or lower case). Hex: 10 characters, with any combination of numbers 0 ~ 9 and letters a ~ f (upper or lower case).
 - 128-bit: ASCII: 13 alphanumeric characters, any combination of numbers 0 ~ 9 and letters a ~ z (upper and/or lower case).

Hex: 26 characters, with any combination of numbers 0 ~ 9 and letters a ~ f (upper or lower case).

- Manual Entry: input the keys manually.
- Key 1 ~ 4: to increase the security level, you can input up to 4 Keys for the wireless connection, and then activate different key on different time/date. Only one Key is activated at one time.
- Create with Passphrase: type in any easy to remember phrase (name and/or numbers), click “Apply”, and the utility generates the 4 keys automatically. The same passphrase generates the same set of keys.

After making the connection, the Utility’s “Status” page displays the “Signal Strength” and “Link Quality” for this connection.

Note: the Signal Quality and Link Quality meters are for your reference only. It does not reflect the connection’s actual speed (bandwidth).

<Important>

To save the current settings, click on “Profile” tab, enter a desired profile, name, click on “Save”, and then click on “Activate”. You can save multiple profiles for different wireless connections (e.g. home, office, coffee shop, and hotel). To activate a saved profile, click on “Profile” tab, select the desired “Profile Name” from the drop-down menu, and click “Activate”.

To delete a profile, select the “profile name” and click “Delete”.

If you do not save the settings into a profile, you will lose these settings after turning off the computer.

Please refer to the User’s Guide for more information on other configuration settings.

Checking Your Wireless Connection

1. Check the LED indicators of the CardBus/PCI Adapter. A solid/blinking green LED indicates the link is successful.
2. Check the Wireless Utility Icon that appears in the Windows taskbar. If the icon is green, the connection is successful.
3. Check if the SSID is the same between the linking devices/stations.
4. Check if the security key is the same between the linking devices/stations.
5. Make sure all the wireless devices’ IP addresses are in the same range/class.

APPENDIX

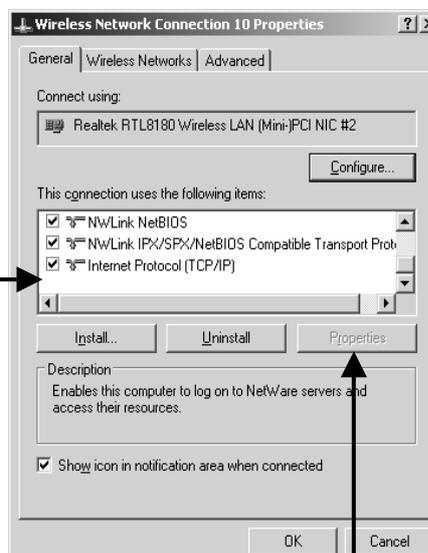
How to Check/Configure Network Adapter's IP Address in Windows 98/ME/2000/XP

To connect to a network, make sure the proper **network settings** are configured for the wireless adapter.

For Microsoft Windows XP:

From the desktop, **right click** on **My Network Places** > select **Properties** > **Double-click** on the **Realtek Wireless Network Connection**.

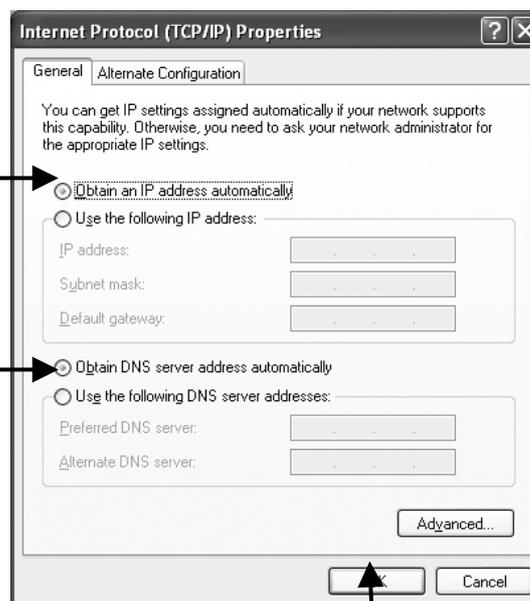
Click **Internet Protocol (TCP/IP)**



Click **Properties**

Select **Obtain an IP address automatically** (if the Wireless Router or Access Point has DHCP server feature enabled)

Select **Obtain DNS server address automatically**



Click **OK**

<Important>

If your network's "Wireless Access Point" or "Wireless Router" has DHCP Server feature, for ease of configuration, please enable the feature, and set the wireless adapter to "Obtain IP Automatically". After the wireless adapter connects to the Access Point or Router, it will receive the IP addresses automatically.

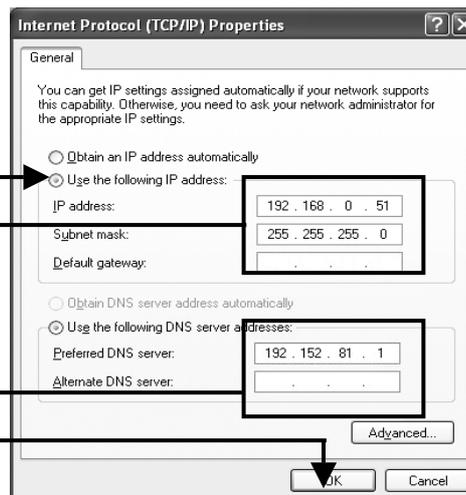
Static IP address Setup

Select **Use the following IP address** (if you don't have a DHCP server in the network)

Input IP address, Subnet mask, and Default gateway

Input DNS

Click **OK**

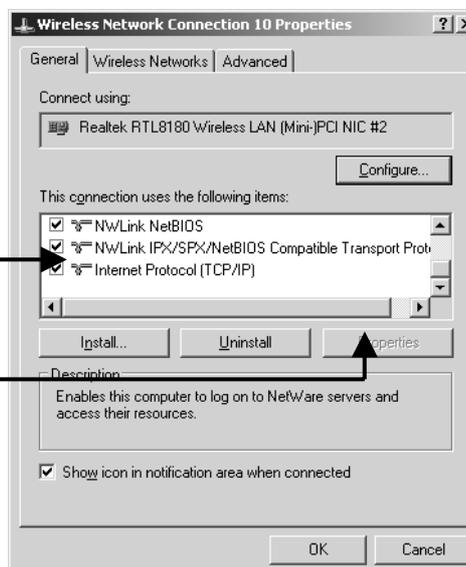


For Windows 2000 users:

From the **desktop**, right click on **my network places** and select **Properties** > Double-click on the **Local Area Connection** associated with the **Realtek wireless adapter** > select **Properties**.

Click **Internet Protocol (TCP/IP)**

Click **Properties**

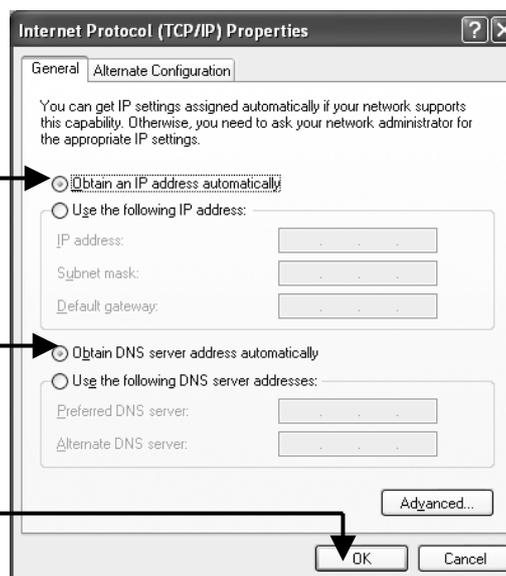


DHCP IP address Setup

Select **Obtain an IP address automatically** (if the Wireless Router or Access Point has

Select **Obtain DNS server address automatically**

Click **OK**



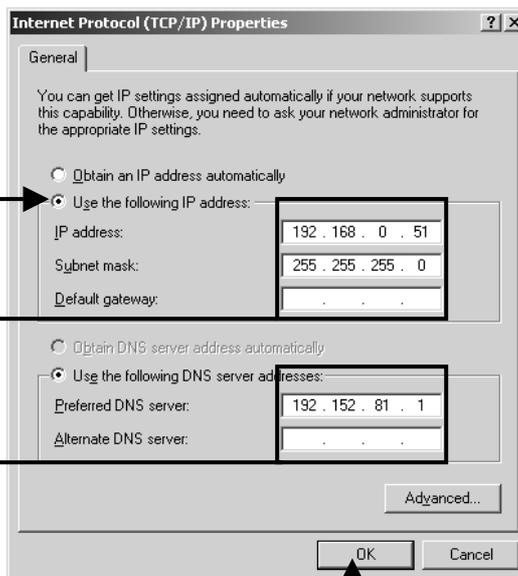
Static IP address Setup

Select **Use the following IP address** (if you don't have a DHCP server in the network)

Input **IP address, Subnet mask, and Default gateway**

Input **DNS Addresses**

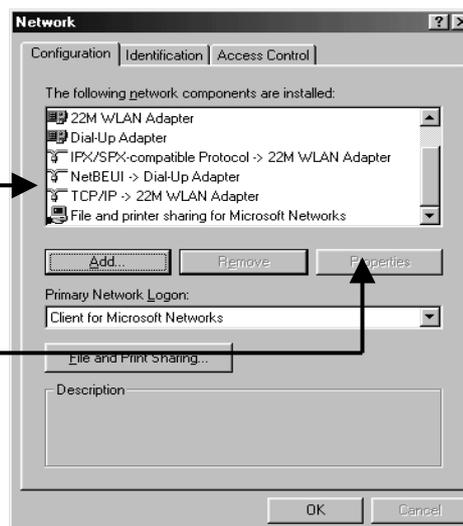
Click **OK**



For Windows Me and 98 users:
From the **Desktop**, right click on **Network Neighborhood** > select **Properties**.

Click **TCP/IP** → **Realtek Wireless Adapter**

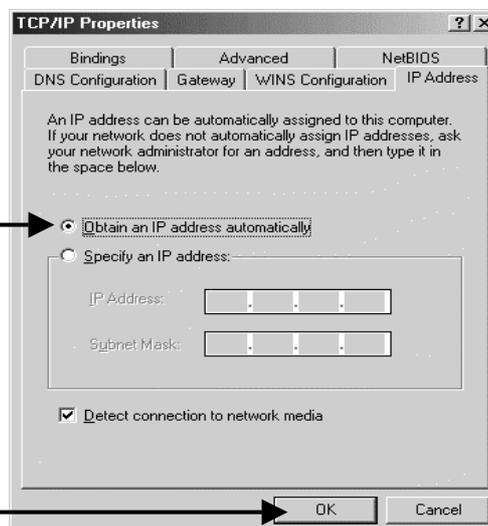
Click **Properties**



DHCP IP address Setup

Select **Obtain an IP address automatically** (if the Wireless Router or Access Point has DHCP server enabled)

Click **OK**



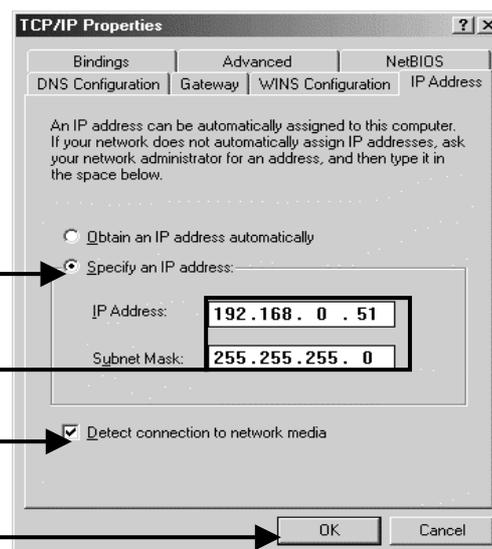
Static IP address Setup

Select **Specify an IP Address** (if you don't have a DHCP server in the network)

Input **IP address** and **Subnet mask**

Check **Detect connection to network media**

Click **OK**



Checking the Adapter's IP Address

Windows 2000/XP: go to "start", select "run", type in **cmd** and click ok. At the command prompt (C:\), type in **ipconfig/all** and hit "Enter".

Windows 98/ME: go to "Start", select "Run", type in **winipcfg** and click "OK". From the drop-down menu, select the name of the network adapter (not the PPP Adapter).

Ping Command: If you know a networked device's IP address, in the command prompt (c:\), type in **ping xxx.xxx.xxx.xxx** (where xxx.xxx.xxx.xxx is the device's IP address) and hit "Enter". If you see replies from this IP address, your computer should be able to communicate with this device.

Technical Support

You can find the most recent driver/firmware/software and user documentations on the **TRENDware website**. **TRENDware** provides **free technical support** for all customers for the duration of the warranty period on this product.

TRENDware Technical Support

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**Monday ~ Friday, 7:30AM ~ 6:00PM Pacific Standard Time
(except holidays)**