D-Link **DGE-660TD**
Gigabit CardBus Notebook Adapter

Manual

Rev. 4.00

Contents

Introduction

Thank you for choosing the D-Link DGE-660TD, the value leader among Fast Ethernet/Gigabit Ethernet adapters for notebook PCs. This chapter provides a general description of DGE-660TD features, with a summary of features at the end of the chapter. Installation instructions are provided in Chapters 2 and 3.

General Description

The D-Link DGE-660TD Gigabit Cardbus PC Card for notebook PCs is a credit-card sized Gigabit adapter for connecting a notebook PC to an Ethernet, Fast Ethernet, or Gigabit network. The notebook PC must be equipped with a Type II Cardbus compliant slot.

NOTE: *The terms "PC Card" is used throughout this manual to refer to those objects as defined in the PCMCIA / PC Card standards published by Personal Computer Memory Card Industry Association (PCMCIA). The term "slot," as used in this manual, is synonymous with "socket" where the standards use the latter term in reference to the physical receptacles of a host notebook computer, for insertion/connection of PC Cards. More information on the standards is available from PCMCIA's www server at* http://www.pc-card.com.

The D-Link DGE-660TD automatically detects the parameters of its Ethernet environment, and automatically negotiates and determines its own speed and duplex settings as required for maximum performance within the environment. (The auto-negotiation function is effective only when the DGE-660TD is connected to the network by a device (switch or hub) that also has auto-negotiation functionality.)

Inside its compact case, the D-Link DGE-660TD holds an Ethernet controller, network processing interface, a 68-pin PC Card Standard front-end plug, which connects to the notebook PC, and a direct port for connecting a RJ-45 network

cable. The DGE-660TD requires no pre-installation setup -- simply insert its front end into the notebook PC's PC-Card slot.

The DGE-660TD is supplied with an RJ-45 receptacle, which receives the network cable. The direct port features full LED display for linkage and activity states, speed, transmitting and receiving data, and carrier detection.

About Gigabit Ethernet

Gigabit Ethernet is a network technology specified by IEEE Standard 802.3ab. It extends the traditional 100Mbps (100 megabit/sec) Fast Ethernet technology to achieve 1000Mbps (1000 megabit/sec) transmission and reception. Because Gigabit Ethernet retains the traditional Ethernet CSMA/CD (Carrier Sense, Multiple Access, and Collision Detect) protocol, it remains wholly compatible with 100Mbps Ethernet while providing a tenfold increase in network capacity.

The DGE-660TD provides full-duplex 1000Base-T operation (in Category 5 twisted-pair cable environments utilizing all 4 pair). To provide for traditional 10 or 100Mbps Ethernet operation in twisted-pair cable environments, the DGE-660TD also offers 10 or 100Mbps Ethernet operation, in full-duplex and half-duplex modes. The DGE-660TD's auto-negotiation capability provides for automatic selection of the best operation mode.

About Auto-negotiation

The basic idea of auto-negotiation can be understood by reflecting for a moment on the familiar process of making a dialup connection between two modems. You have probably heard some exchanges between your local modem and a modem at the other end of a telephone line. (These exchanges are ordinarily played out through a speaker in your local modem). As irritating as those few seconds of noise may be, they do let you know that your modem and the remote modem are on the job, preparing for your intended communication with the remote computer.

The preparatory work of the two modems during those few seconds before you see the "connect" message is to *negotiate* the best data communication scheme that is supported by both modems, and to decide which is suitable for the quality of the telephone-line connection between them. The parameters to be settled between the two modems include best baud rate, compression method, and error correction method. When the two modems have tested the phone-line quality and have switched to the combination of parameters, which will provide the best data communication, then you are given the "connect" message which signals the end of the inter-modem negotiation and the beginning of your intended communication with the remote computer.

Auto-negotiation between devices within an Ethernet LAN is similar in concept, but much briefer. The two devices involved in the auto-negotiation will be your DGE-660TD and the switch or hub through which it is connected into the LAN. (Switches ordinarily provide for auto-negotiation; traditional hubs do not.) The parameters to be negotiated between the DGE-660TD and its supporting switch or hub include speed (1000Mbps = Gigabit Ethernet, or 100Mbps = Fast Ethernet) and duplex mode (half-duplex or full-duplex).

Startup communication between the two devices occurs when both devices are operating, the cable connection between them is good, and the connected notebook PC's network software is loaded. As soon as those conditions are satisfied, the preparatory process of auto-negotiation between the DGE-660TD and its supporting device begins and proceeds automatically.

If the supporting switch or hub has auto-negotiation functionality, then it and the DGE-660TD exchange a series of messages in which each device signals its capabilities and listens for corresponding information about the other. The auto-negotiation process requires only a few milliseconds, and the two devices select the best communication parameters supported by both devices.

If the supporting device does not have auto-negotiation functionality, then its monotone (single capability) message will be recognized by the DGE-660TD's auto-negotiation facility, and the DGE-660TD will simply switch to the one of its own capabilities that matches that of the supporting device.

Once the auto-negotiation is completed, the line is ready, and it will provide an optimal data channel between the DGE-660TD and the supporting device. The line will remain ready without further auto-negotiation action until the link is broken. Auto-negotiation then reoccurs at any time that the link is restored, again making the line ready for optimal data communications.

Minimum System Requirement:

Your computer notebook must support:

> Pentium 150MHz or Faster
> 64MB RAM
> 32MB Free Hard Drive Space
> One Available CardBus Slot
> CD-ROM Drive

LED Indicators

The DGE-660TD features 2 LED indicators:

1. Link/Activity (Link/ACT)

   This indicator lights green when the RJ-45 port is connected to an Ethernet network, if the indicator is blinking green it is transmitting/receiving data to/from the Ethernet network.

2. Speed Indicator (100Mbps/Amber; 100Mbps/Green; 10Mbps / Off)

   The indicator lights green when the port is connected to a 1000Mbps Gigabit Ethernet Network and the indicator lights amber when the port is connected to a 100Mbps Fast Ethernet Network. Otherwise, this indicator remains off when the port is connected to a 10Mbps Ethernet Network.

Summary of Features

Features of Model DGE-660TD Gigabit Cardbus PC Card:

   Complies with IEEE 802.3 10BASE-T Ethernet standard

   Complies with IEEE 802.3u 100BASE-TX Fast Ethernet standard

   Complies with IEEE 802.3ab 1000BASE-T Gigabit Ethernet standard

   Complies with ANSI / IEEE 802.3 Auto-Negitiation standard

   Complies with 32-bit CardBus Standard

   Supports Crossover Detection & Auto-Correction

   Built-in Transmit/Receive FIFO data buffer (8K/64K)

   No manual setup switches -- automatically configured by software

   Low power consumption

   Supported driver list:

      Microsoft Windows 7
      Microsoft Windows 2008
      Microsoft Windows Vista
      Microsoft Windows XP
      Microsoft Windows 2000
      Microsoft Windows 98SE/ME

Troubleshooting

Confirming the Connection (LED Indicator)

When the notebook computer is powered "ON," and the DGE-660TD is inserted into an open slot connector, please check the following items if your LED light is not "ON." When all items are working, your DGE-660TD's direct port LED light should light up green ("linkage" state.)

1. Make sure that your Ethernet Cat5 cable is in good working order.
2. Make sure that your hub or switch is powered "ON" and is functioning properly.
3. If the LED remains dark without any apparent cause, check the "Device Manager." If there is an exclamation point next to the DGE-660TD, then double-click to open. A message indicating the error will appear.
4. After verifying that the DGE-660TD has been installed correctly, check steps 1 and 2 again. If you continue to encounter a problem, please call D-Link Technical Support for assistance.

Troubleshooting the Hardware Installation

If you experience any problems with the hardware installation, first ascertain that all network cable connections are firm, that the proper grade of cable is used for the network connection, and that the cable makeup is correct (straight without un-needed crossovers in the connector wiring). Check that the supporting hub is powered-on and operating normally, and that the hub is properly qualified (under 100Base-TX and/or 1000Base-T standards).

Verify Each Computers Identification

If more than one computer on your network has the same "Computer name," communications may be negatively affected. Also, each computer must have the same "Workgroup" name to communicate properly.

Verify Network Adapter Installation

If your Network Adapter is not installed, including the Network System Software or Device drivers, your network will not function properly. Use these steps to verify that your Network Adapter is properly installed.

1. Double-Click the "System" icon in the Control Panel.
2. Click the "Device Manager" tab on top of the "System Properties" dialog box.
3. Double-Click "Network Adapters" if you do not see any items branching out. You should see "D-Link DGE-660TD Cardbus PC Card" branching out after double-clicking "Network Adapters."

If you do not see any items branching out after double-clicking "Network Adapters," your Network Adapter has not been properly installed. Start at the beginning of the "Quick Install Guide."

If you see symbols such as yellow exclamation point or red "X" over the icon adjacent to "D-Link DGE-660TD Cardbus PC Card," your card is not installed properly or may have a problem. Double-click the "D-Link DGE-660TD Cardbus PC Card" and read the explanation of the problem. This information will be helpful if you require technical support from D-Link.

Verify Cable Connections

Check to see that the computer you are troubleshooting is properly connected. Each computer must be connected from its DGE-660TD with Category 5 cables. Examine the network cables and ensure that none have been walked-on, rolled over by chairs, caught in doors, or damaged. Additionally, make note of and alleviate any possible electromagnetic interference that may be affecting your network.
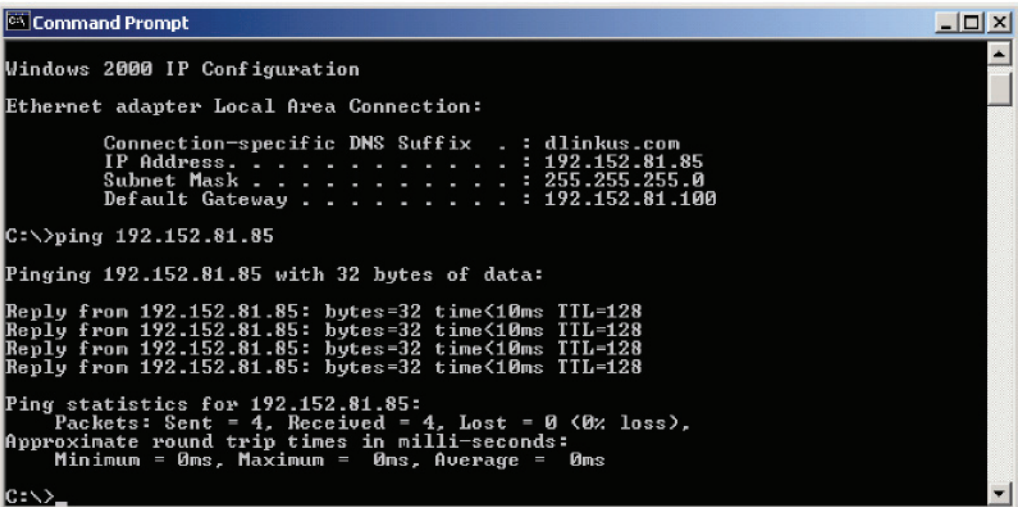
Your network cables can be plugged into any port on your hub except the Uplink" port. The "Uplink" port is only used when connecting your hub to another hub or switch.

Pinging your DGE-660TD Card

Follow these steps to Ping a device:

Ping is the acronym for Packet Internet Groper (PING), a utility to determine if a specific IP address is accessible. It works by sending a packet to the specified address and waiting for a reply. Ping is primarily used to troubleshoot Internet connections. By sending out a ping, you are verifying that a specific computer is available. Since all computers on the network must have a unique IP address, getting a reply means that a computer is on the network and it can communicate. If you cannot ping another computer, then there is probably a problem with the hardware. Check the cabling and adapter installation. If you are unable to network, even when you receive a reply to your ping, it is probably a software configuration issue. Verify that all the settings are correct.

Start MS-DOS Prompt.

Type in following: ping:xxx.xxx.xx.xx, where xxx.xxx.xx.xx is the IP address to be pinged (i.e. 192.152.81.85). In this case, computer A is pinging its own IP address.

A successful ping will show four replies.

Windows 98SE/Me Network Component Configuration

Once the driver has been installed, you must make some changes to your network settings. Click **Start > Settings > Control Panel > Network** and make sure that you have all the following components installed.

> Client for Microsoft Networks
> D-Link DGE-660TD
> NetBEUI
> TCP/IP

If any components are missing, click the **Add** button to add them. Microsoft includes all of these protocols in Windows. After you click **Add,** highlight the component you need, click **Add,** highlight Microsoft, and then double-click on the item you want to add.

If you are using Windows 98SE, enable the File and Printer Sharing to make your computer visible on the network.

Click the **Identification** tab. Type the name of your computer in the **computer name** box. Make up a name that is unique among the computer names on your network.

Type the name of your workgroup in the **workgroup** box. The name you type should be the same workgroup name in use by all of the other PCs on the network. If one computer on your network has a different workgroup name than the others, that computer will not be shown in the same workgroup view.

Click the **Access Control** tab. Make sure that **Shared-level access control** is selected. If connecting to a NetWare server, share level can be set to **User-level access control.**
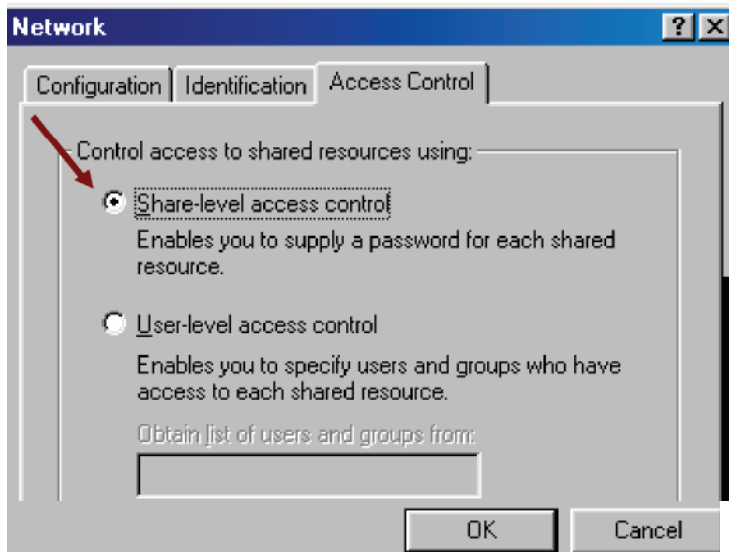
When finished, remove all disks from your computer and restart your computer to activate the new device and new changes to network configuration.
Once the computer has restarted and Windows has booted up, a **Logon** window will appear requiring you to enter a **username** and **password**. Make up a username and password, enter them, and click **OK**. Do not click the **Cancel** button, or you will not be able to log onto the network.

When you are at the Windows 98SE desktop, double-click the **Network Neighborhood** icon. You should see the names of the other PCs on the network that have enabled file and printer sharing.

Using File And Printer Sharing

Click **Start > Settings> Control Panel**. Double-click **Network**.
Click the **Configuration** tab, followed by the **File and Printer Sharing** button.
The File and Printer Sharing window will appear.
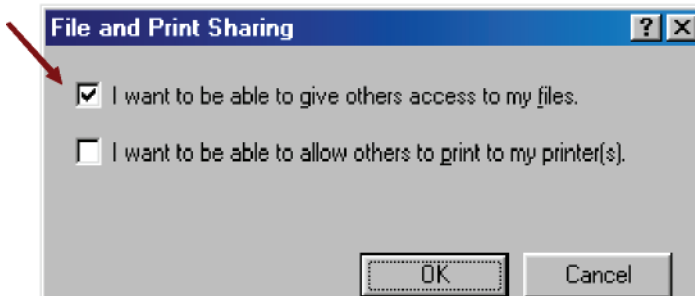
If you would like others to be able to access the files on your computer's hard drive, **select I want to be able to give others access to my files**.
If you would like to share your printer with other users on the network, select **I want to be able to allow others to print to my printer**.
Click **OK**. File and Printer Sharing for Microsoft Networks should now appear on the list of installed components. Click **OK**. When asked to restart your computer, choose to do so.

Enabling File Sharing

Double-click **My Computer**. A window of available disk drives will appear.
Right-click once the drive or folder that you want to make available to other users.

Click **Sharing**, and then click **Share As**. In the Share Name box, enter a name for the drive or folder you are sharing, (eg: C-Drive, CD-ROM, John, etc.).
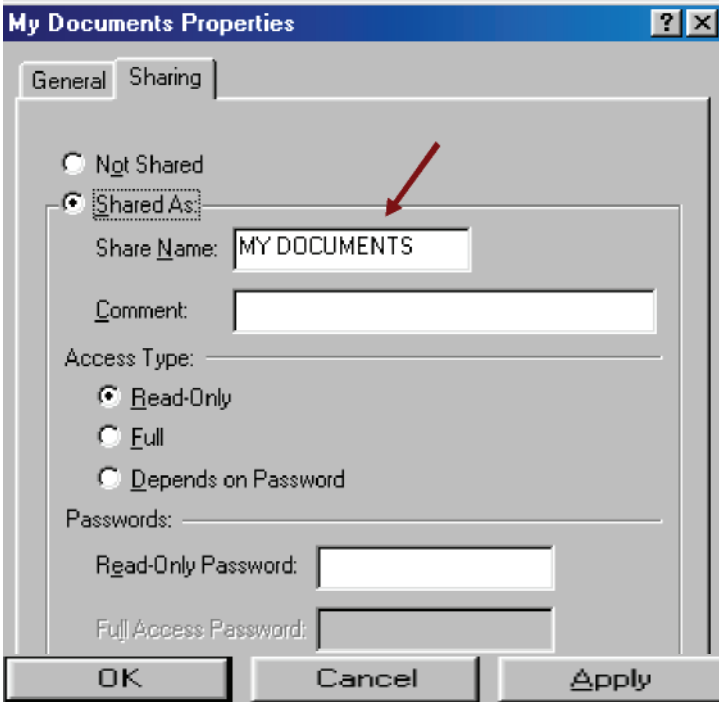
Next, decide on the access type that you want to give other users. **Read-Only** access lets other users view the files on your PC. **Full** access lets users create, change, or delete files on your PC. **Depends on Password** lets users have Read-Only and/or Full access, depending on the password that you decide to give them.

Use your mouse to select the access type that you want other users to have. If you want to assign an access password(s), type them into the Password box(es). If you are sharing a cable modem or DSL broadband connection that you will be using to access the Internet, you should protect all of your shared drives and printers with private passwords. When finished, click **Apply**, followed by **OK**.

Enabling Printer Sharing

Click **Start > Settings> Printers**. A window of available printers will appear.

Right-click the printer that you want to share with other users. Click **Sharing,** and then click **Share As**. In the Share Name box, give a name to the printer you are about to share (Jack's HP4, for example). If you want to assign a password to the printer so only certain users can access it, type a password in the Password box. When you are done, click **Apply**, followed by **OK**. Your printer(s) are now shared.
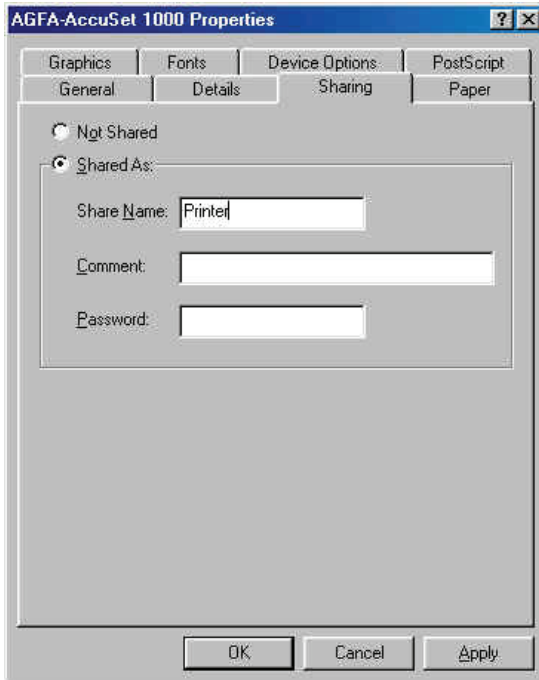
Windows 2000/XP/Vista/Windows 7 Network Component

Configuration

This section includes instructions specific to the Windows 2000 operating system. However, Windows XP and Windows Vista, Windows 7 instructions are very similar. For additional information regarding this section, please consult your Windows documentation provided my Microsoft.

Go to **Start >Settings >Control Panel >Network** and Dial-up Connections. Double-click the **Local Area Connection** icon; the following figure will appear.
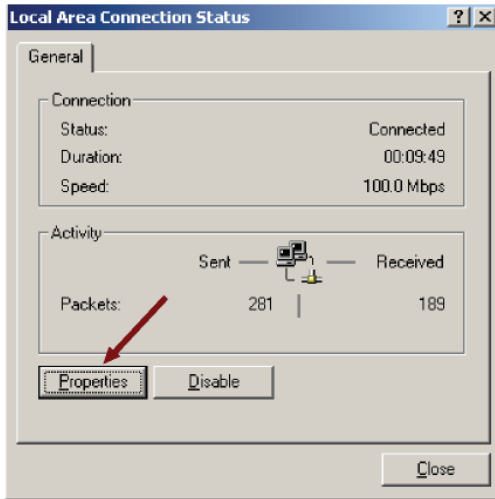
Click the **Properties** button. Make sure the following components are installed.

    Client for Microsoft Networks
    File and Printer Sharing for Microsoft Networks
    NetBEUI Protocol
    Internet Protocol (TCP/IP)

If any components listed above are missing, click the **Install** button to add them manually. Click **Close** to exit.

Go to **Start > Settings> Control Panel > System**.

Open the **Network Identification** tab and click the **Properties** button.
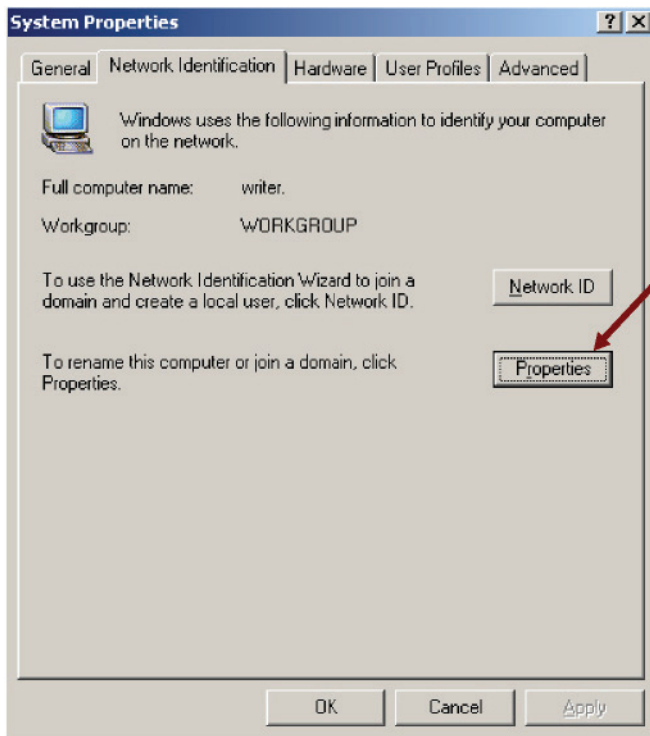
Type the name of your computer in the **computer name** box. Make up a name that is unique among the computers names on your network.

Type the name of your workgroup in the **workgroup** box. The name you type
should be the same workgroup name in use by all of the other PCs on the
network.
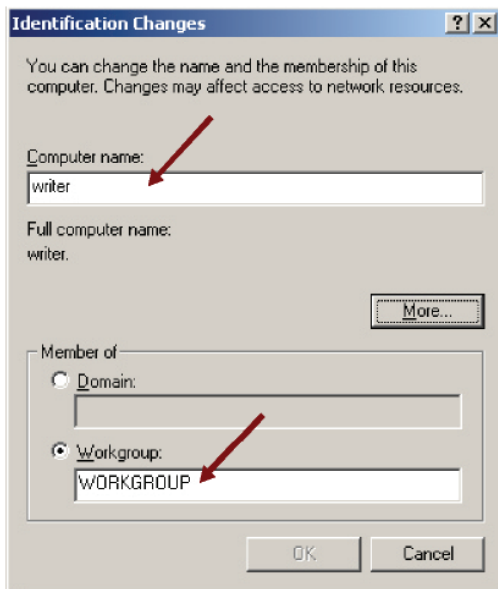
When finished, remove all disks from your computer and restart your computer to
activate the new device and with new configuration changes.

Once the computer has restarted and Windows 2000 has booted up, a **Logon**
window will appear requiring you to enter a username and password. Make up a
username and password, enter them, and click **OK**. Do not click the **Cancel**
button, or you will not be able to log onto the network.

When you are at the Windows 2000 desktop, double-click **My Network Places or
Computers Near Me**. You should see the names of the other PCs on the network
that have enabled file and printer sharing. Refer to the Windows 98SE/Me
Network Component Configuration section for instructions on setting up File and
Print sharing.

Networking Basics

You may have had some ideas about how to use your new network prior to installing this product - sharing files, printing from a computer on the network, or accessing the Internet on multiple computers with one connection. This section will help you get started on those ideas or even give you some new ones.

However, this section is not intended to be a comprehensive guide to networking, it is just an outline of a few networking basics.

If you are interested in learning more about networking please visit our website:

http://www.dlink.com

D-Link is one of the largest manufacturers of Ethernet products in the world. D-Link's technological expertise and dedication to providing quality products at a low price makes D-Link a good place to watch for the newest in networking innovations. Or, you may want to get the newest drivers available for your Network Adapters.

Computer Identification

If you had previously given your Windows 98SE computers names or if you are using Windows 98SE, you may need to verify that each computer has a unique name and common workgroup name.

A. On your Desktop, right-click the icon "Network Places" and select "Properties" from the context menu.

B. Click the "Identification" tab on the top of the dialog box.

C. Type a unique, identifying name for this particular computer

in the "Computer name:" box. This will be the name that other computers on your network will use to communicate with this computer. Each computer's name must be unique on a particular network or confusion will result. (The computer's name should be 15 or fewer characters with no spaces.)

D. Type the workgroup name this computer will be a part of in

the "Workgroup:" box. All of the computers on your network should have an identical Workgroup name.

E. The "Computer Description:" box is optional. You may enter

a description that will help you identify this computer on your network. Then click "Close."

F. Repeat this process for each computer on your network to

ensure that they all have a unique "Computer Name" and identical "workgroup."

Sharing Files

With your computers connected together on a network, you may now open and save files on another computer. You will be able to specify particular folders or disk drives to "share" and even password protect them. The steps below will enable you to share specific files and folders with other computers on your network.

A. On your Desktop, right-click the icon "Network Places" and select "Properties" from the context menu.
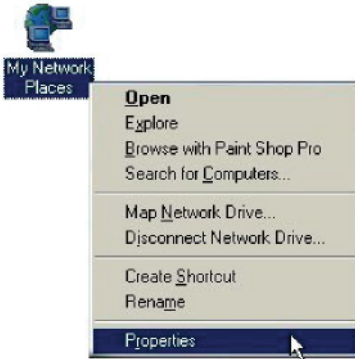
B. This dialog box is what you will use to configure most of your computer network settings. It is also available through the "Network" icon in the Control Panel.
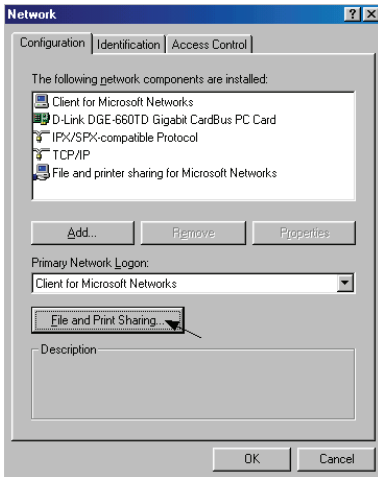
C. Click the "File and Print Sharing" button.

D. Click to place a check mark next to "I want to be able to give others access to my files."

E. Click "OK" on the "File and Print Sharing" dialog box.
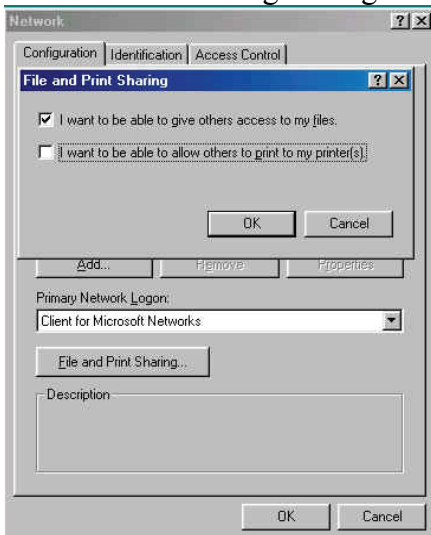
F. Click "OK" on the "Network" dialog box.

G. Provide the Windows 98SE installation CD or diskette(s) if prompted or direct Windows to the proper location of the installation files. Reboot if prompted.

H. You will now be able to identify a particular folder or disk drive to share. You may want to share a folder that both you and a colleague/family member need to access occasionally. Or, maybe you want to share a CD-ROM drive so your other computer that does not have one can read CD's. Both processes are the same. Only the disk drives and folders that you specifically identify as shared will be accessible to other computers on your network.

I. Find the disk drive or folder you want to share using Windows Explorer or the "My Computer" icon on your desktop.

J. Right-click on the disk drive or folder icon and select "Sharing."
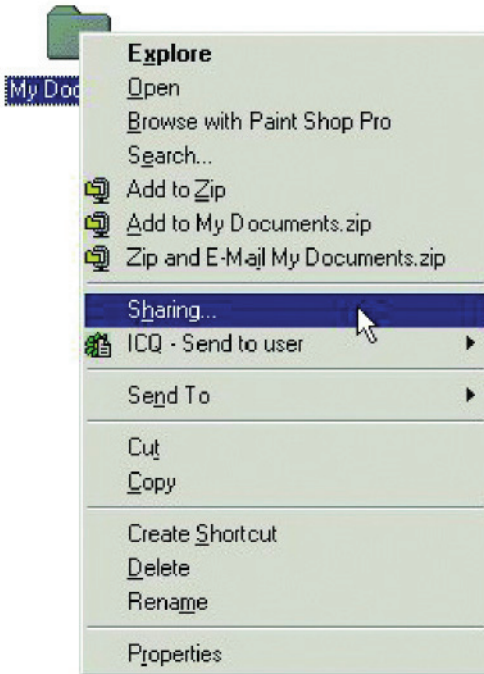
K. Select "Share As:" to set the parameters for sharing this particular disk drive or folder.
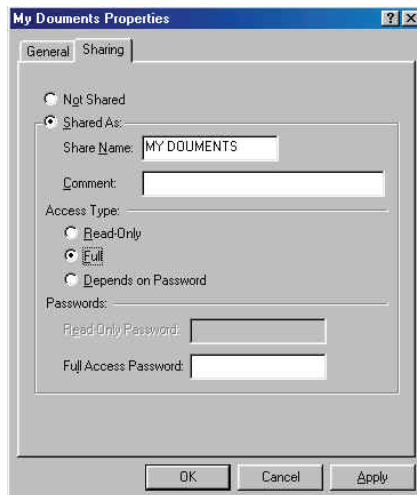
L. The "Share Name:" box is used to identify the disk drive or folder you are sharing to other computers on the network. You can give it any name you

wish. However, a specific identification may help as more resources on your network are shared.

M. The "Comment:" box is optional. You can use this box to further describe the disk drive or folder for others on the network.

N. "Access Type:" allows you to designate how much others on the network can do with this disk drive or folder. "Read-Only" allows others only to look at or open the files on the disk drive or in the folder. "Full" allows others to read, write, open, save, copy, move, and delete files on the disk or in the folder. "Depends on Password" gives other computers access conditional upon the password they provide.

O. "Passwords:" allow you to apply a level of security to your shared disk drives and folders. Another computer (user) will be required to enter the password you designate here before accessing the disk drive or folder. Two passwords are used to give two levels of security (or access) to others on the network using the "Depends on Password" setting. Leaving the "Password" boxes empty gives everyone on the network access to the disk drive or folder.

P. Click "OK" to continue. You will be prompted to enter the password(s) you provided for verification. Retype the password(s) just as you entered them the first time.

Q. You may now access this disk drive or folder from another computer on your network. Do so by double-clicking the "My Network Places" icon on your desktop or inside Windows Explorer.

R. Navigate to the computer with the shared disk drive or folder (recognized by the "Computer Name" you provided), and double-click. You should now see the disk drive or folder; double-click on the drive or folder. If you specified a password when sharing this disk drive or folder, you will be prompted for the password.

S. You can access a disk drive or folder shared over the network from most Windows applications. To make this process easier, Windows allows you

to map these disk drives and folders to a drive letter on another computer. For example, on a computer where you are accessing a shared folder from another computer, inside Windows Explorer right-click and select "Map Network Drive." You will then be able to assign an available drive letter. Checking "Reconnect at logon" allows Windows to map this network drive each time you start your computer.
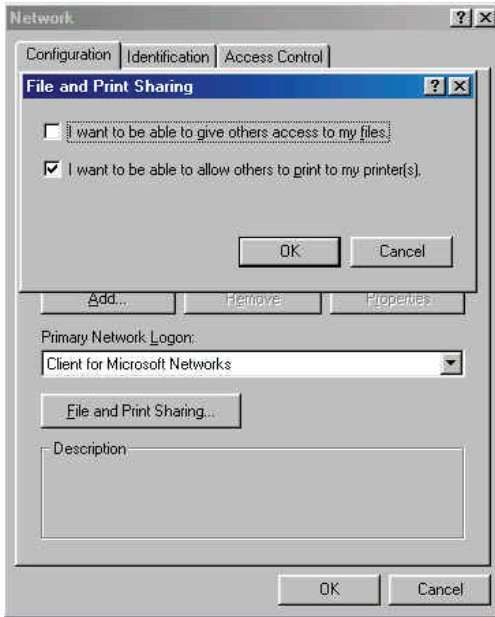
Sharing Printers

"Sharing" a printer connected to one computer with other computers on your network can be very convenient, allowing you to print from any computer on the network. The steps below will enable you to print with other computers on your network.

A. On your Desktop, right-click the icon "Network Places" and select "Properties" from the context menu.
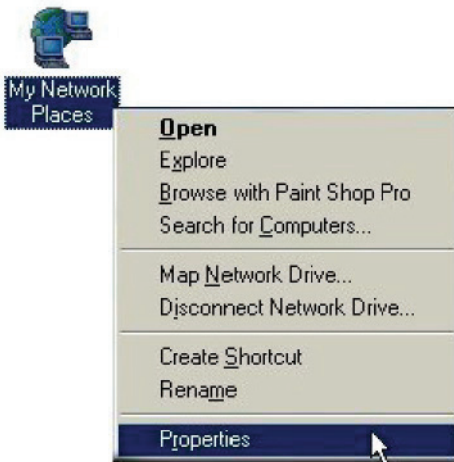
B. Click the "File and Print Sharing" button.

C. Click to place a check mark next to "I want to be able to allow others to print to my printer(s)."

D. Click "OK" on the "File and Print Sharing" dialog box.

E. Click "OK" on the "Network" dialog box.

F. You may now share any installed printers connected to this computer with other computers on your network.

Go to **START>SETTINGS>PRINTERS**

Right click on the printer you want to share with others on the network and select "Sharing."
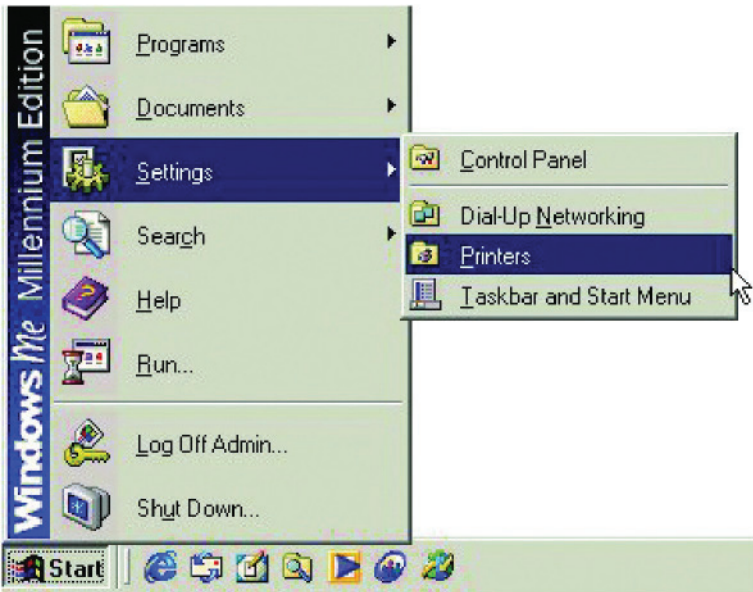
G. Click "Share As:" and provide a "Share Name:" to identify the printer to other computers on the network. "Comment:" and "Password:" are optional. Then click "OK." For a computer to access a Network Printer, the device driver or software for that printer must be installed and pointed to the proper location of the printer. This is done much the same way you installed the printer on the computer it is connected to.

H. Go to a computer that does not have the printer connected to it. From the "Start" button on the Task Bar select "Settings" and then "Printers."

I. Double click the "Add Printer" icon.

J. The "Add Printer Wizard" will appear. Click "Next."

K. Choose "Network printer" and click "Next."

L. Now you will identify the location of the Network Printer. If you know the name of the computer and the share name of the printer, you can type it into

the "Network path or queue name:" box. However, it is easier to click the "Browse" button and navigate to the location of the printer. Click "OK" when you have selected the desired printer. Finish the installation by continuing the "Add Printer Wizard" normally.
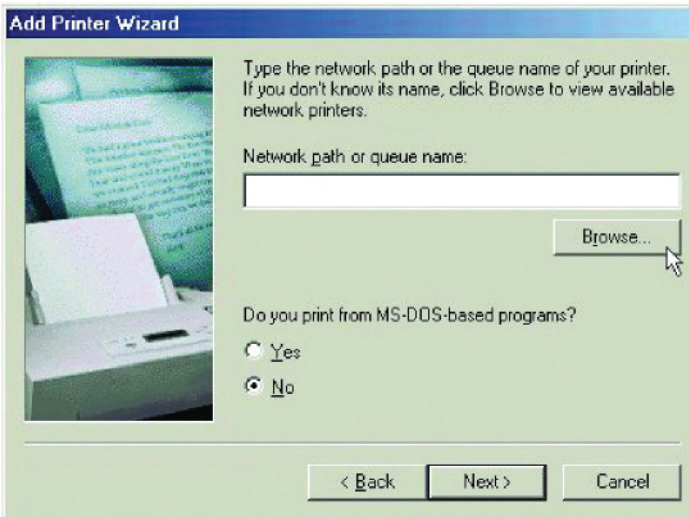
M. You may now use the Network Printer as if it was connected directly. Note: the computer that the printer is connected to must be "on" to use the printer. If you find this inconvenient, devices known as Network Print Servers are available from D-Link including the DP-301 and DP-101P. A Network Print Server would allow you to directly connect your printer to your network without worrying about which computer is "on."

Go to **START > SETTINGS > CONTROL PANEL**
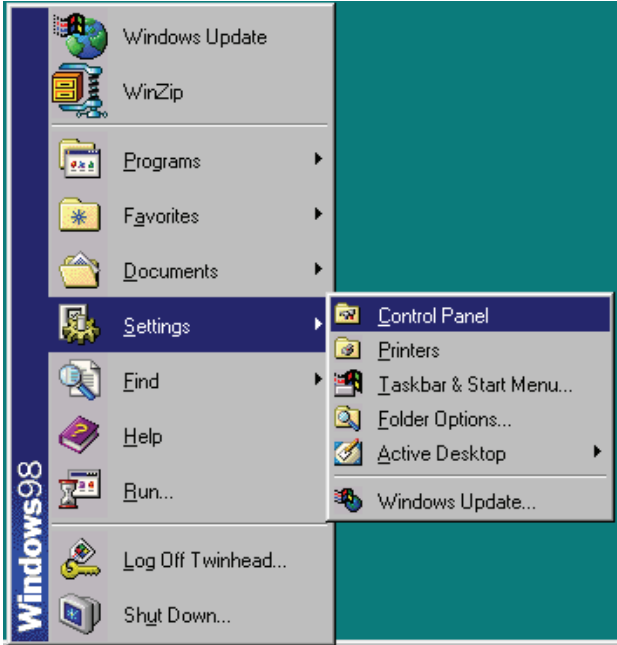
Double Click on **"Network"**
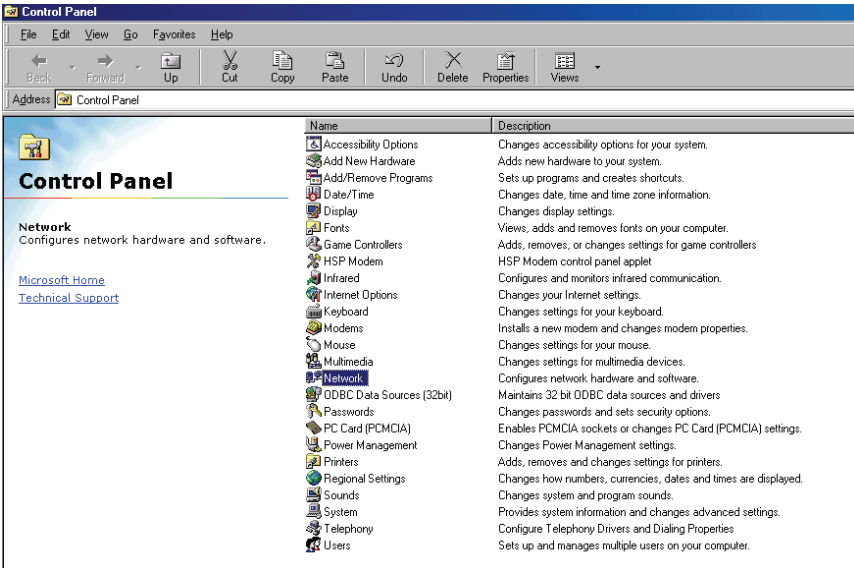
How to Install TCP/IP
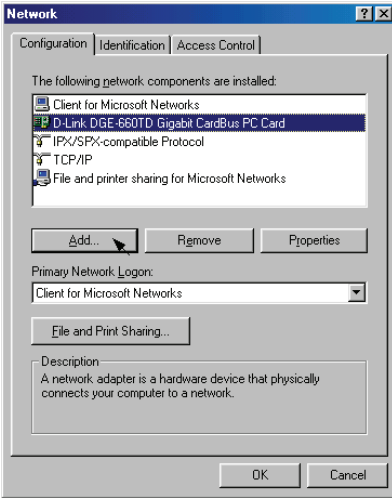
Select "D-Link DGE-660TD Cardbus PC Card."
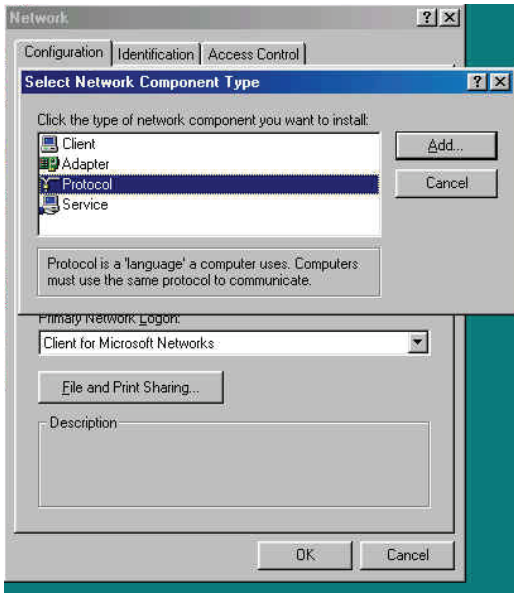
Click on **"Add**.**"** Select **"Protocol**.**"**
Click **"Add**.**"**
Select **"Microsoft**.**"**
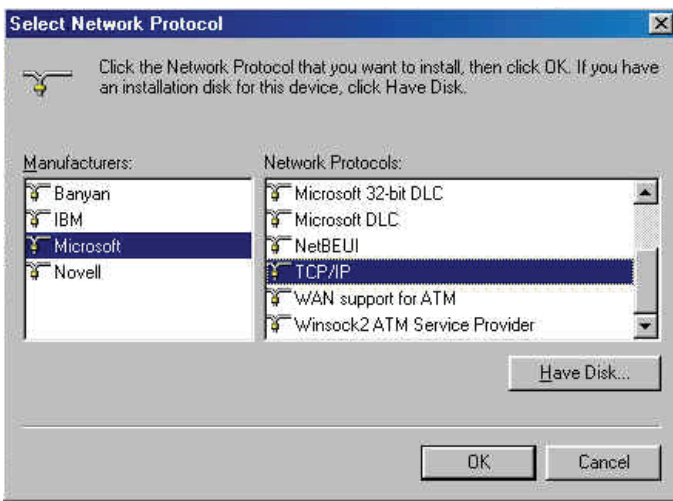
Click "**OK**."

Now the "TCP/IP for D-Link DGE-660TD Cardbus PC Card" is available. The TCP/IP Installation is complete.

Configuring a Dynamic IP Address

When the drivers are installed, the default setting is set to obtain an IP dynamically through a DHCP server.
If you need to check or change the settings, then do the following: Go to **START** > **SETTINGS** > **CONTROL PANEL**

- 30 -
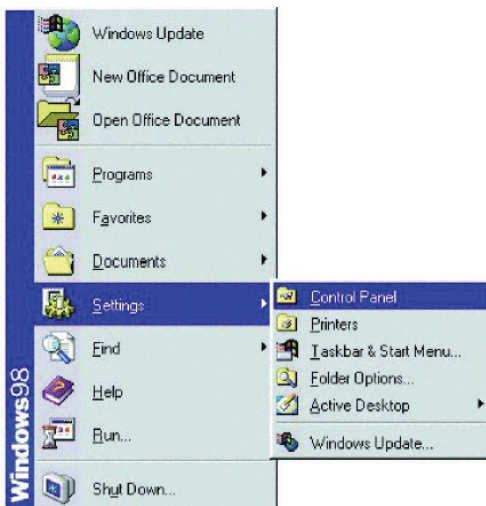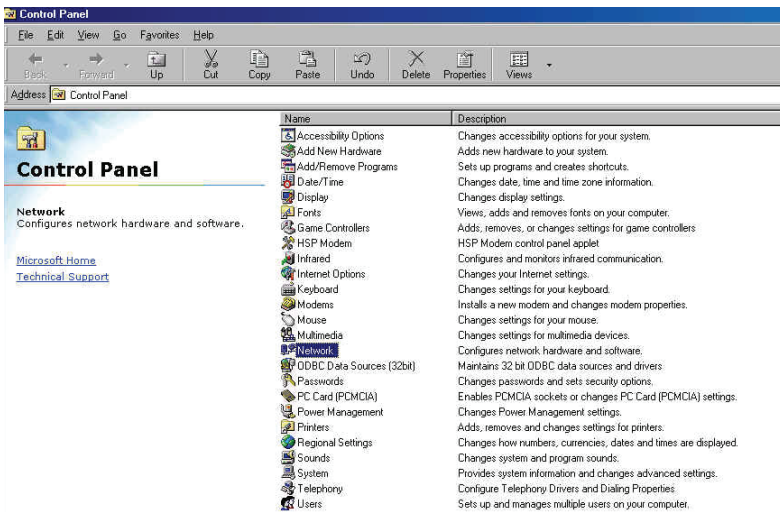
Double Click on "Network" Highlight
"TCP/IP." Click on "Properties."
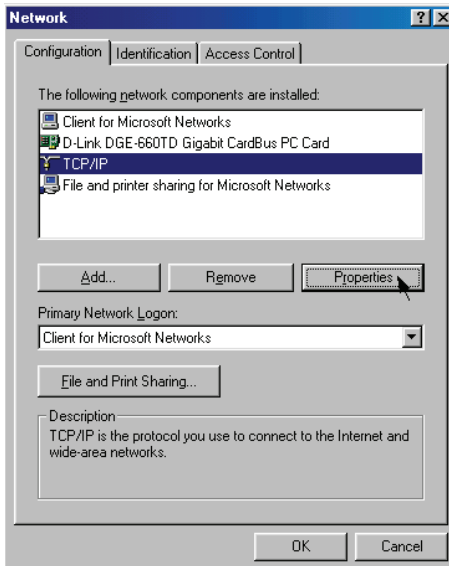
NOTE: If TCP/IP is not present, see the previous section: "How to Install TCP/IP."

When the TCP/IP window opens, choose the "IP Address" tab. Select "Obtain an IP Address Automatically."
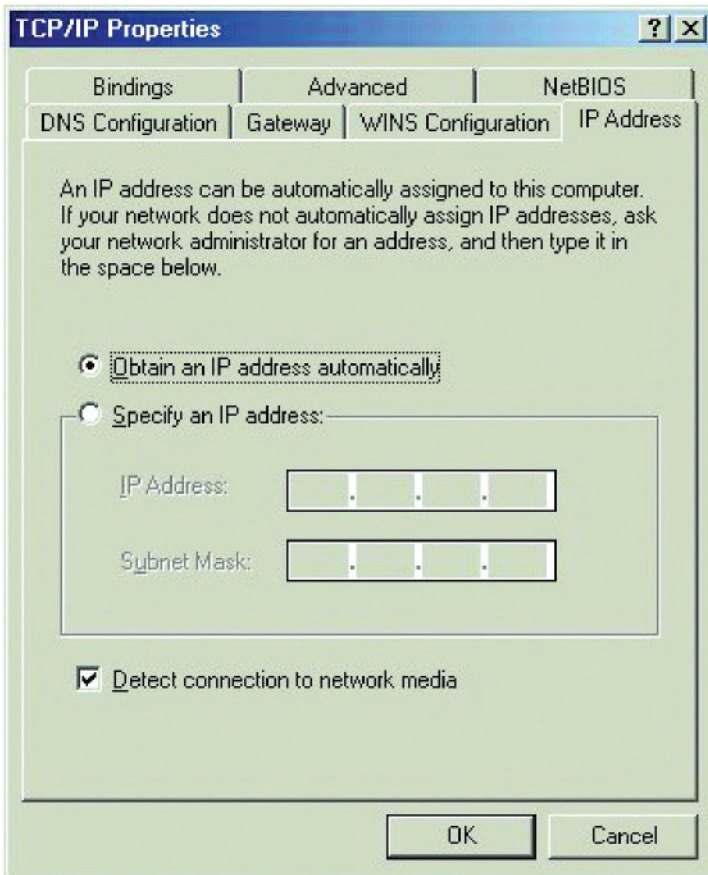
Click "OK."

When the network properties window comes back up, click "OK." Windows will ask you to reboot. Click "Yes."

You have completed the configuration of the Dynamic IP Address.

Configuring a Static IP Address

Go to **START > SETTINGS > CONTROL PANEL**
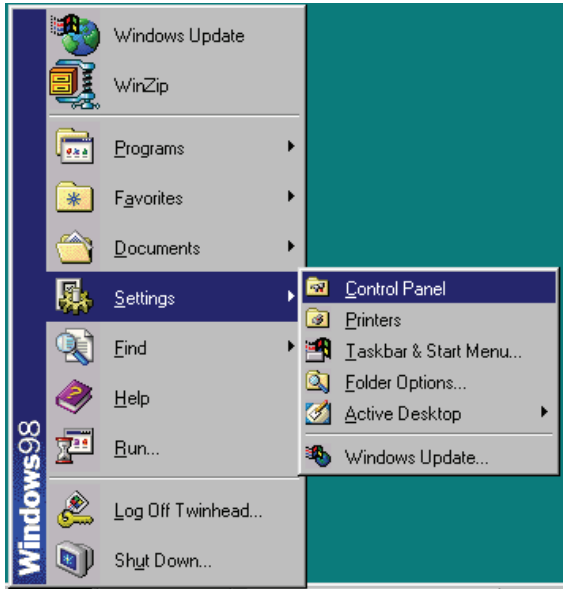
Double Click on **"Network"**
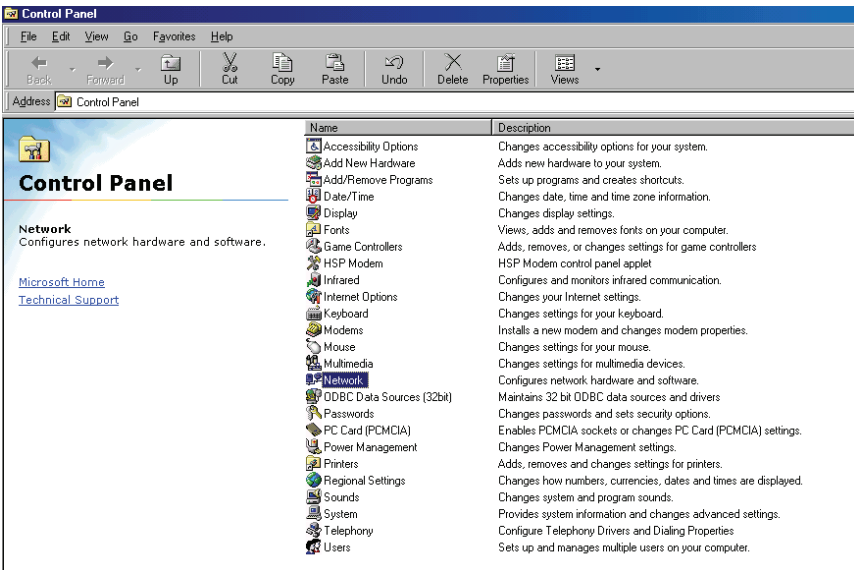
Highlight "TCP/IP." Scroll down if you cannot see it.
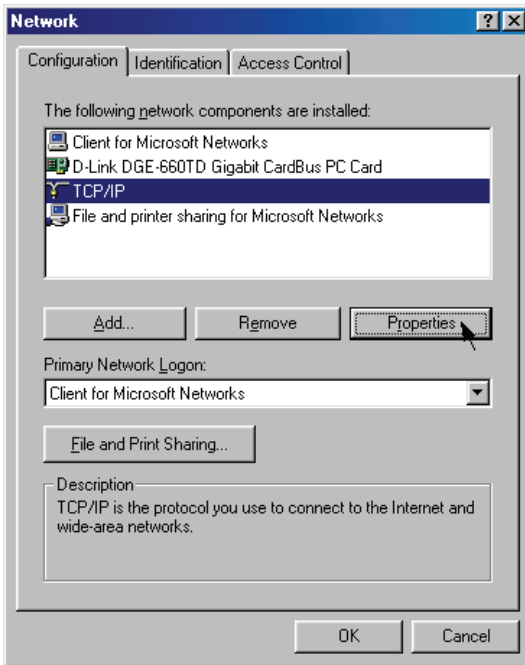
Click on "Properties."

NOTE: If TCP/IP is not present, please see: "How to Install TCP/IP."
When the "TCP/IP Properties" window opens, choose the "IP Address" tab.
Select "Specify an IP address."
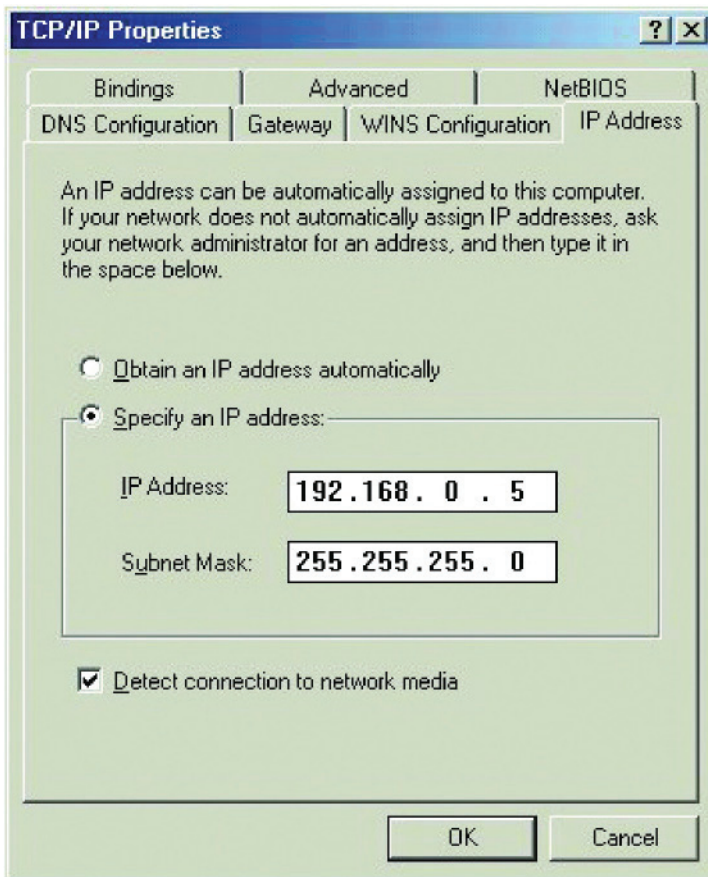
Enter an IP address into the empty field.

Suggested IP Range is 192.168.0.2 to 192.168.0.254.

NOTE: IP Addresses must be signed sequentially to each computer. Suggested
Subnet Mask of 255.255.255.0.

Click "OK."

When the "Network Properties" window comes back up click "OK." Insert
Windows CD if prompted.

Windows will ask you to reboot. Click "Yes."
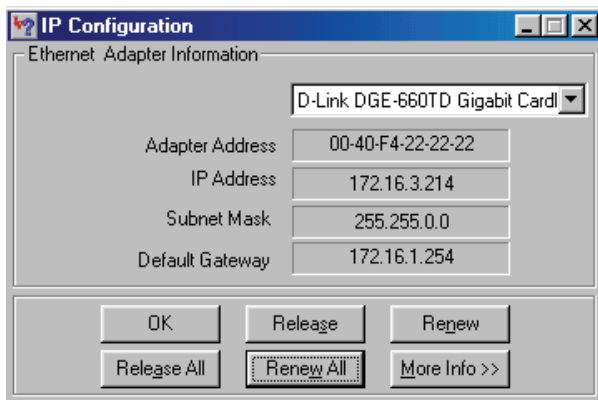
Checking the TCP/IP Address

Go to Start >
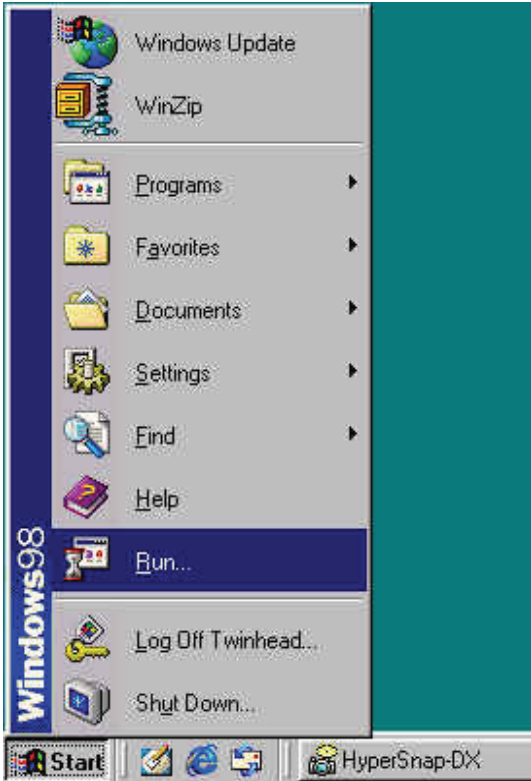
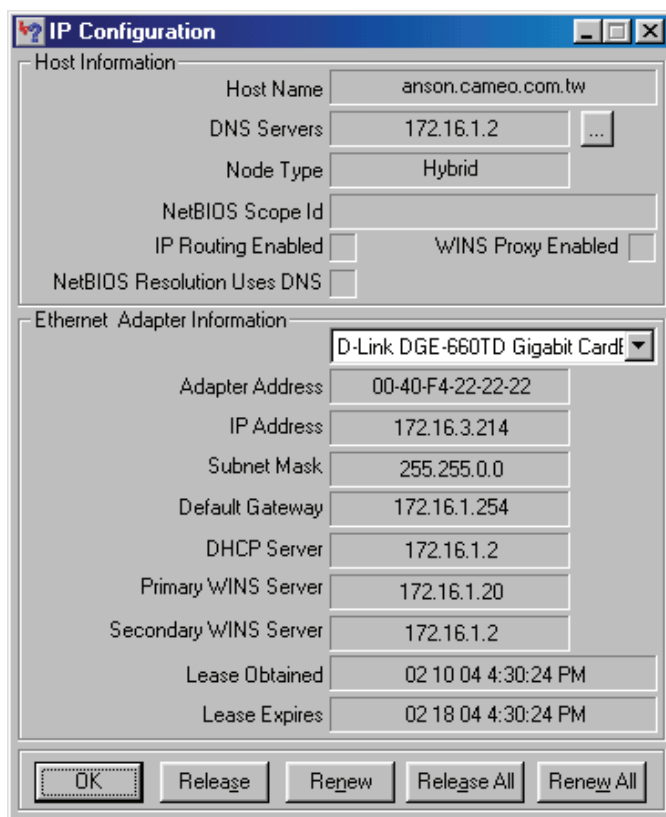**Type "winipcfg" in the "OPEN" box.**
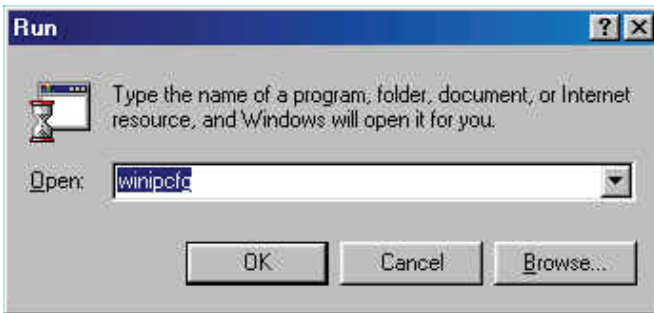
Click "OK."

Click "OK." The IP Configuration screen will be displayed. The IP address will be displayed in the IP Address box.
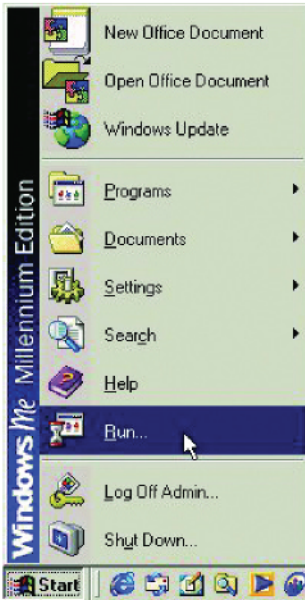
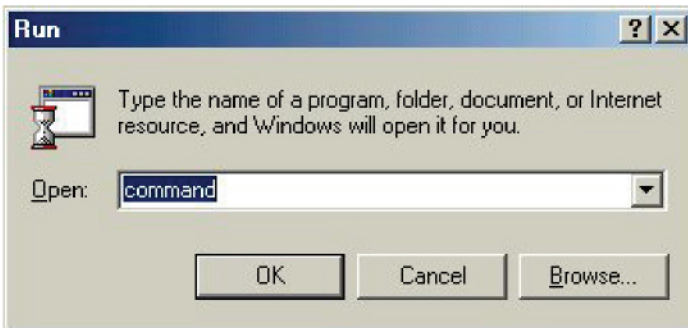Click on "More Info" to display additional IP information.

Checking the Connection by Pinging

Go to START > RUN

Type "command" in the "Open" box.

Click "OK" to get to a DOS prompt.

Type "ping 192.168.0.1," which is the IP address of the Gateway in this case, and hit the "Enter" key.

A successful ping will show four replies.

Specifications

Standards:

    IEEE 802.3 10Base-T Ethernet
    IEEE 802.3u 100Base-TX Fast Ethernet
    IEEE 802.3ab 1000Base-T Gigabit Ethernet
    ANSI/IEEE 802.3 NWay Auto-Negotiation
    PCMCIA 2.x
    32-bit Cardbus

Network Media:

    Ethernet: UTP Cat3, 4, 5 EIA/TIA-568 100-ohm
    Fast Ethernet: UTP Cat5, EIA/TIA-568 100-ohm

Protocol:

    CSMA/CD

Host Interface:

    32-bit Cardbus

Diagnostic LEDs:

    Link/Activity
    Speed (Green: 1000M; Amber : 100M; Off : 10M)

Network Data Transfer Rate:
Ethernet: 10Mbps (Half-duplex)
Ethernet: 20 Mbps (Full-duplex)
Fast Ethernet: 100Mbps (Half-duplex)
Fast Ethernet: 200Mbps (Full-duplex)
Gigabit Ethernet: 2000Mbps (Full-duplex)

Temperature:
Operating: -10~50 °C (14~122°F)
Storage: -10~70 °C (14~158°F)

Humidity:
Operating: 10%~90% RH
Storage: 5%~90% RG

Driver Support:
Microsoft Windows 7
Microsoft Windows 2008
Microsoft Windows Vista
Microsoft Windows XP
Microsoft Windows 2000
Microsoft Windows 98SE/ME

Emission:
FCC Class B
CE mark Class B
VCCI-B

*Check *http://www.dlink.com* for newest releases of drivers.