

D-Link DP-101P+

**Ethernet Pocket Size
Print Server**

Manual

Rev. 101104

D-Link

Building Networks for People

Contents

- 1. Package Contents 3
- 2. Introduction 4
- 3. Setting up the DP-101P+ 7
- 4. Getting Started 9
- 5. TCP/IP Printing for Windows 98/Me 10
- 6. TCP/IP Printing for Windows 2000 19
- 7. TCP/IP Printing for Windows XP 24
- 8. Using the Web Configuration 29
- 9. Mac OS and Unix/Linux Printing 30
- 10. Port Pinouts 36
- 11. Networking Basics 37
- 12. Technical Specifications 51
- 13. Contacting Technical Support 52
- 14. Warranty..... 53

1. Package Contents



Contents of Package

- **D-Link DP-101P+** Ethernet Pocket Size Print Server
- 7.5v 1A Power Adapter
- CD-ROM (containing Manual and Software)
- Quick Installation Guide

Note: Using a power supply with a different voltage rating than the one included with the DP-101P+ will cause damage and void the warranty for this product.

If any of the above items are missing, please contact your reseller.

System Requirements:

- Computer with a Windows, Macintosh, or Linux based operating system with an installed Ethernet adapter
- Internet Explorer version 5.x, or Netscape Navigator version 4.0 or above, with JavaScript enabled

2. Introduction

The D-Link DP-101P+ is a “Pocket Size” Ethernet Print Server with a Centronics port (Parallel Printer connection) and a single RJ-45 (Ethernet) port. The DP-101P+ provides a solution for sharing a single printer among several users in a local network. Its IEEE 802.3 Ethernet port and IEEE 1284 parallel interface allows it to connect most Parallel printers directly to an Ethernet based LAN. The DP-101P+ provides all Ethernet network users the necessary advanced features, wide protocol support, and ease of use to fit well into networks ranging from small home networks to the enterprise level networks.

The DP-101P+ includes easy to use software to install to most PC or Macintosh networks. Protocol support for TCP/IP, NetBEUI, and AppleTalk are provided to ensure seamless connection to Windows Operating Systems, Mac OS, Unix, Novell and other major networking Operating Systems.

The DP-101P+ has a built in Web-based management feature that allows users to easily configure and manage multiple print queues through TCP/IP. Additionally, the DP-101P+'s integrated support for Telnet provides an alternative method to configure the unit.

The DP-101P+ print servers improve network printing services in the following ways:

- The DP-101P+ picks up the workload of managing print file traffic to its connected printers. This provides workload relief to your file servers, and allows the file servers' full capacity to be used for file access or other direct services to network users. On peer-to-peer networks, workstations can print directly to the DP-101P+ without increasing the load of another workstation or server.
- The DP-101P+'s IEEE 1284 compliant high-speed bi-directional parallel printer port can transmit to high-speed laser printers much faster than a PC's parallel printer port. A high-speed laser printer can be driven at its full capacity.
- Because the DP-101P+ is very portable (pocket-sized) and inexpensive compared to a PC-based print server, and because the DP-101P+ connects to your file servers through the network, the printer can be stationed at the location of maximum convenience to users.

The DP-101P+ offers extraordinary flexibility, operating with all major network operating systems and protocols:

TCP/IP

UNIX lpr/lpd (HP-UX, SunOS, Solaris, SCO, UnixWare, IBM AIX)
Windows NT/2000, Windows XP, Windows 98/Me
NetWare 5.x NDPS LPR remote printing

NetBEUI

Windows XP, Windows NT/2000, Windows 98/Me, Windows for Workgroups, Microsoft LAN Manager,
IBM LAN Server

AppleTalk

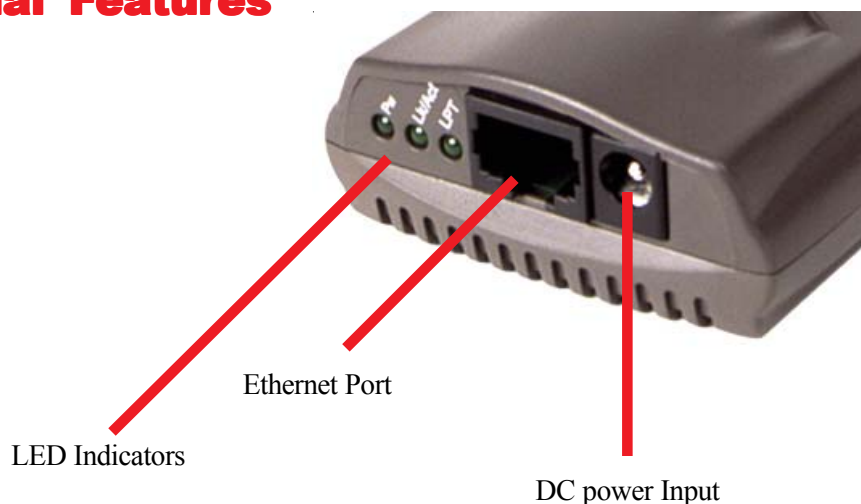
MacOS AppleTalk

The D-Link DP-101+ has an embedded web-server which allows it to be configured anywhere on your network through a web-browser. Managing the print server through the web-browser makes it Operating System independent.

Your D-Link DP-101P+ package also includes *PS Admin*, a Windows-based setup and administration program, which makes configuration and management of your D-Link print servers quick and easy in a Windows environment. The DP-101P+ also has a Telnet interface for management communications. If Windows is not available on the station you choose for print server administration, then all configuration and management commands may be issued to the DP-101P+, and all console messages and management report information will be returned, via Telnet.

External Features

Front View



Network Port

The network port (RJ-45 receptacle) provides for connection to the network through 10Base-T Ethernet cabling.

DC Power Input

The DC power input socket uses a 7.5V power supply.

The power supply included in your DP-101P+ package is correct for the DP-101P+. Substitution of other equipment may void warranty.

LED Indicators

The front of the DP-101P+ includes three LED indicators. See “Power-up and Self-Test,” for LED indications upon starting up the DP-101P+. During operations following a normal startup, the LED indicators provide the following status signals:

Pw

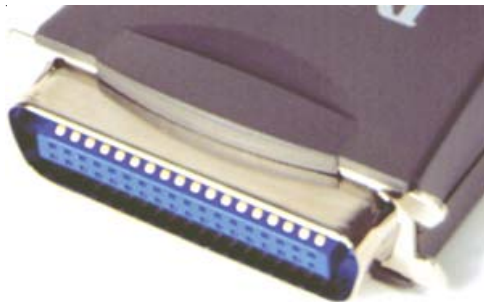
Steady or flashing green confirms power on.

Lk/Act

Steady or flashing green confirms that the DP-101P+ has a good connection to the Ethernet network. This indicator blinks (briefly dark) when the DP-101P+ is receiving or transmitting from the network.

LPT

This indicator shows steady green while the DP-101P+ is transferring print data through its printer port.

Rear View

The DP-101P+ printer port is located at the rear.

Printer Port

The printer port, is configurable by commands in the PS Admin program, or by commands issued to the DP-101P+ via Telnet. See the PS Admin User's Guide for configuration procedures.

The print server also supports web configuration permitting users to configure settings through the web browser. DP-101P+ default IP address as follows:

- Default IP address – 192.168.0.10
- Subnet Mask – 255.255.255.0

Note: The PC's IP address must be in the same network with the print server's IP address for the two devices to communicate.

3. Setting up the DP-101P+

Note: *the network connection should be made before supplying power to the DP-101P+.*

1. Confirm proper operation of the printer to be connected to the DP-101P+.
2. When you have confirmed proper operation of the printer, switch its power off.
3. Confirm that your network is operating normally.
4. Connect the DP-101P+ to the network (through the RJ-45 receptacle on the print server's rear end).

WARNING: *Configuration problems may result if the DP-101P+ is powered up without first establishing its network connection. Follow this procedure to avoid complications at the configuration stage.*

5. While the printer is powered off, connect the DP-101P+ print server directly to the printer parallel port.
6. Switch printer power on.
7. Plug the AC Power adapter's output plug into the DC power input socket on the rear end of the DP-101P+.
8. Plug the AC Power adapter into an electric service outlet. This will supply power to the DP-101P+. (The DP-101P+ has no power switch.) The DP-101P+'s self-test routines will proceed automatically.

Power-up and Self-Test

Whenever the DP-101P+ is powered up, two kinds of testing procedures follow automatically. The first procedure is just a programmed series of LED flashes, to confirm proper operation of the three LED indicators. The second procedure comprises programmed tests of each of the DP-101P+'s major components. If any fault is found during the component test series, testing is halted and a continuous pattern of LED flashes signals the nature of the fault.

LED Test Series

Immediately upon power-up, all three of the LED indicators will show steady green for several seconds. Then the LPT indicator will flash three times while Pw and Lk/Act remain steady. Irregularity of any of the LEDs during this LED test series indicates that there is a problem with the LEDs themselves. Contact your dealer for correction of any LED problems before proceeding.

Component Test Series

The actual component tests immediately follow the LED tests. A normal (no fault) result is signaled by three flashes of the LPT indicator and the start of normal print server operation.

If any error condition is found during the component test series, then the test will halt with the LPT LED continuously signaling the particular error according to the following table:

LPT Flash Pattern	Error Type
Steady long flashes	Firmware Reload Required
Continuous on	DRAM Error
One long, two short flashes	Timer INT Error
One long, three short flashes	Flash Protected
One long, four short flashes	Flash ID Error
One long, five short flashes	Flash Erase / Program Error
One long, six short flashes	LAN Controller Error
One long, seven short flashes	LAN Memory Error
One long, eight short flashes	Parallel Controller Error
One long, nine short flashes	LPT Error
Steady short flashes	EEPROM Error
One long, eleven short flashes	LAN I/O Base error

Component Test Series *(continued)*

In the event of a Firmware Reload Required error at startup, proceed according to instructions given in the PS Admin User's Guide ("PS Admin Administration" section, under the heading "Upgrading the Print Server's Internal Firmware").

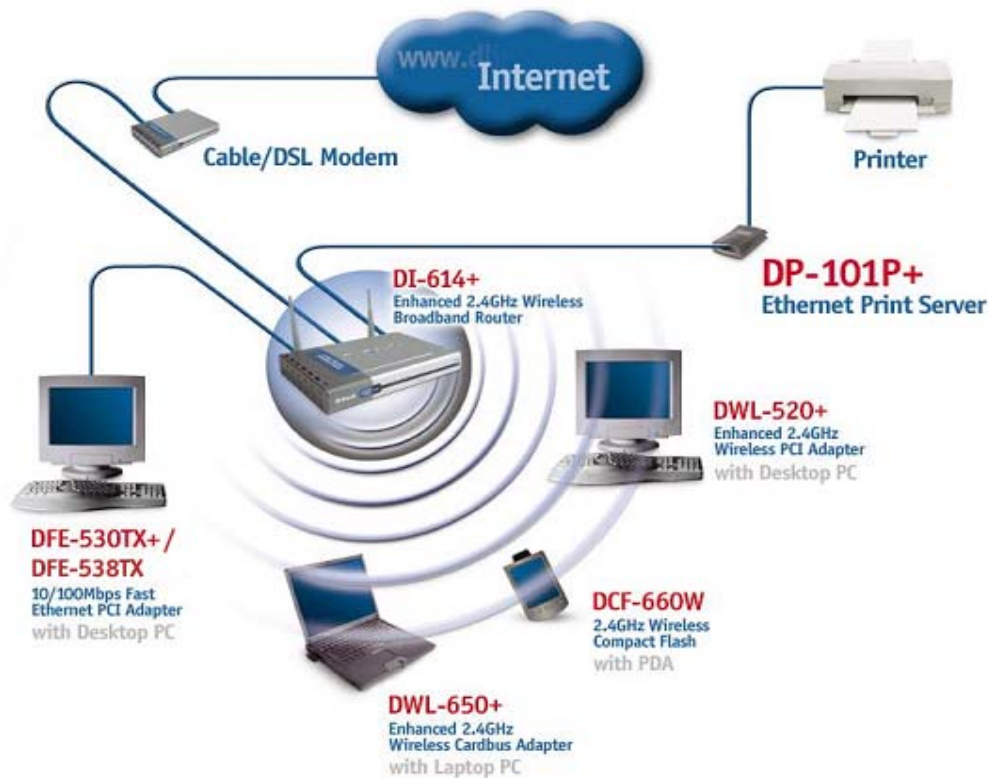
In the event that any of the other listed error conditions is encountered on startup, contact your dealer for correction of the fault.

Operational Test

The PS Admin software includes a Print Test function for confirmation of connections and functions. That operational test can be performed after you have completed installation of the PS Admin software, and the PS Admin procedures for configuring the DP-101P+. See instructions given in the PS Admin User's Guide ("Getting Started Setting up Your Print Server" section, under the heading "Testing your Print Server").

4. Getting Started

Below is a sample network using the DP-101P+. The DP-101P+ has a built-in Web-based management feature that allows users to easily configure and manage multiple print queues through TCP/IP.



5. TCP/IP Printing for Windows 98/Me

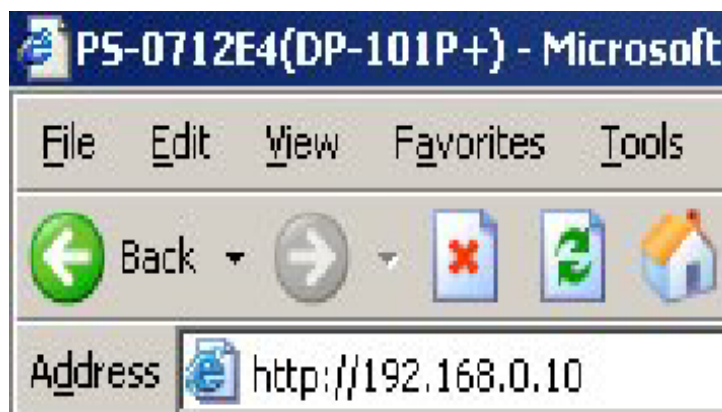
Open the web browser, and type in the IP Address of the DP-101P+.

For example, type <http://192.168.0.10> into the **Location** or **Address** field.

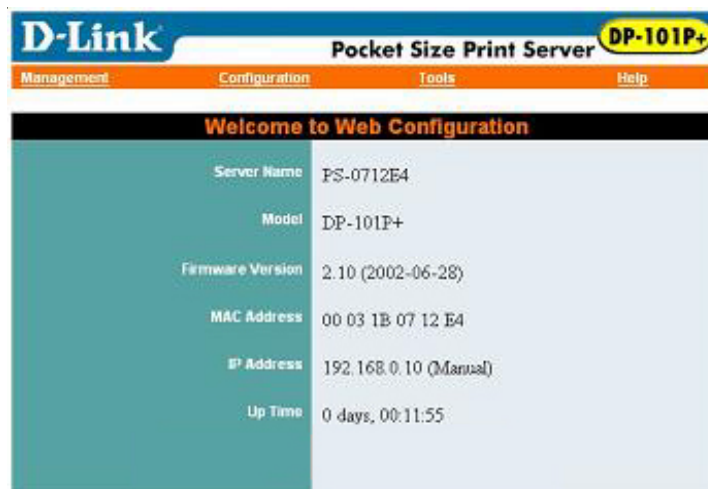
Press the **Enter** or **(Return)** Key

Note:

The PC's IP address must be in the same network with the print server's IP address for the two devices to communicate.



At the **Welcome** screen, select **Configuration**.



TCP/IP Printing for Windows 98/Me (continued)

At the **Server Device** window, make a note of the **Port Name**. You will need this information later in the configuration process.

The screenshot shows the D-Link Pocket Size Print Server DP-101P+ configuration interface. The top navigation bar includes 'Management', 'Configuration', 'Tools', and 'Help'. The left sidebar lists 'Configuration' with sub-items: 'Server Device', 'TCP/IP Protocol', 'NetBEUI Protocol', and 'AppleTalk Protocol'. The main area is titled 'Server Device' and contains the following fields:

Server Device	
Server Name	<input type="text" value="PS-0712E4"/>
Location	<input type="text"/>
Admin Contact	<input type="text"/>
Password	New Password : <input type="text"/> Confirm Again : <input type="text"/>
LPT	Port Name : <input type="text" value="PS-0712E4-P1"/> Description : <input type="text"/>
	Speed : <input type="text" value="High"/>
	PJL Printer : <input type="text" value="No"/>
<input type="button" value="Save"/> <input type="button" value="Cancel"/>	

TCP/IP Printing for Windows 98/Me (continued)

When you select **TCP/IP Protocol** at the **Configuration** window, the screen below appears. (We recommend that you keep the default settings as shown.) If you need to make changes, make sure to click **Save** after you have made the changes.

The screenshot shows the D-Link Pocket Size Print Server DP-101P+ Configuration window. The window has a blue header with the D-Link logo and the product name. Below the header is a navigation bar with tabs: Management, Configuration, Tools, and Help. The Configuration tab is selected. On the left side, there is a sidebar with a 'Configuration' section containing links for Server Device, TCP/IP Protocol (which is highlighted), NetBEUI Protocol, and AppleTalk Protocol. The main area of the window is titled 'TCP/IP Protocol' and contains the following settings:

- IP Address:** 192.168.0.10
- Subnet Mask:** 255.255.255.0
- Default Gateway:** 0.0.0.0
- IP Assignment:** A group box containing three options:
 - ☒ Manually Assign
 - ☐ Assign Automatically Using
 - ☐ RARP
 - ☐ BOOTP
 - ☐ DHCP
- SNMP Community 1:** Name: public, Access Right: Read/Write (dropdown)
- Community 2:** Name: (empty), Access Right: Read Only (dropdown)
- Community 3:** Name: (empty), Access Right: Read Only (dropdown)

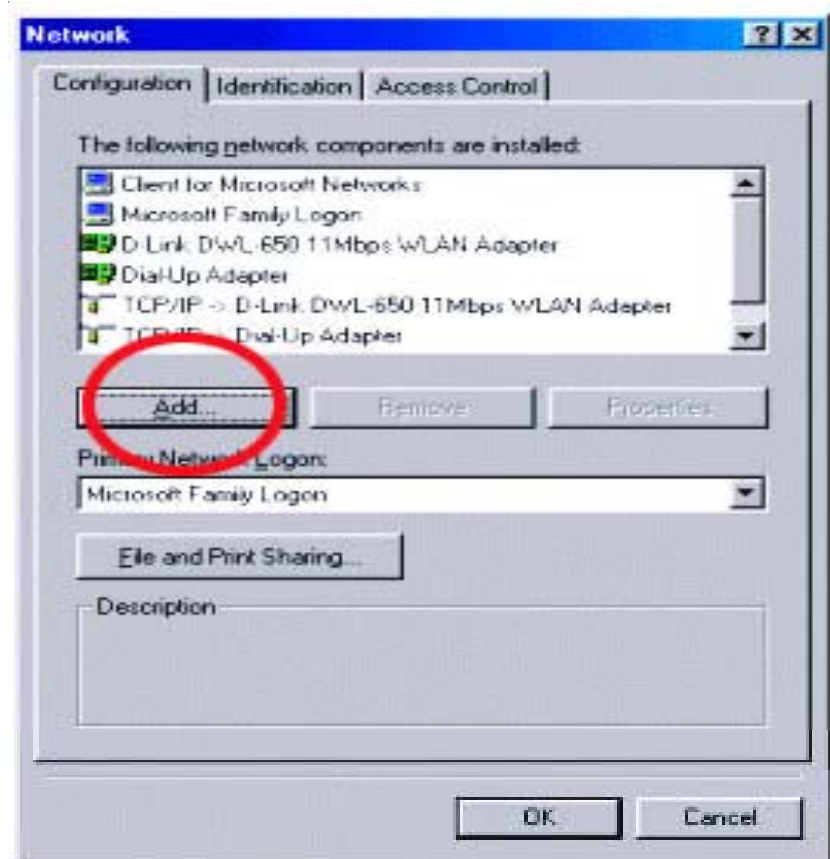
At the bottom of the window are two buttons: Save and Cancel.

TCP/IP Printing for Windows 98/Me (continued)

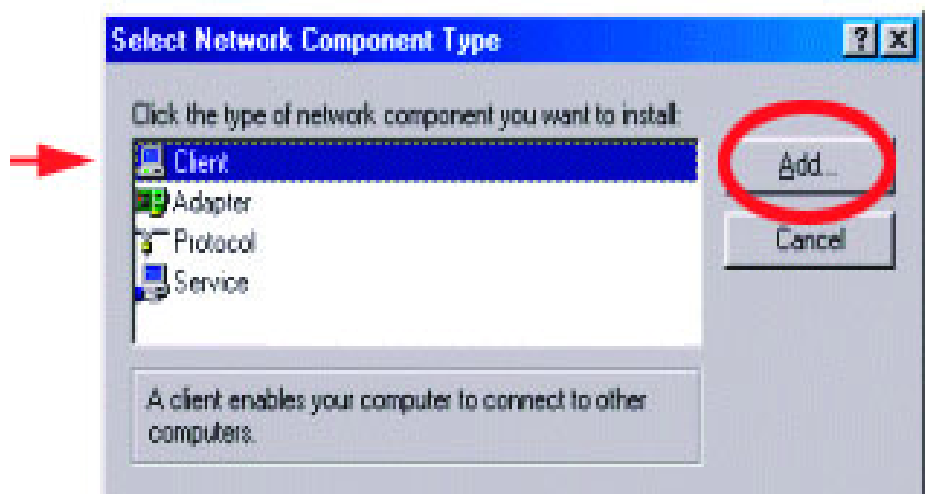
Go to **Start>Settings>Control Panel**.

Double-click on **Network**.

Click **Add**

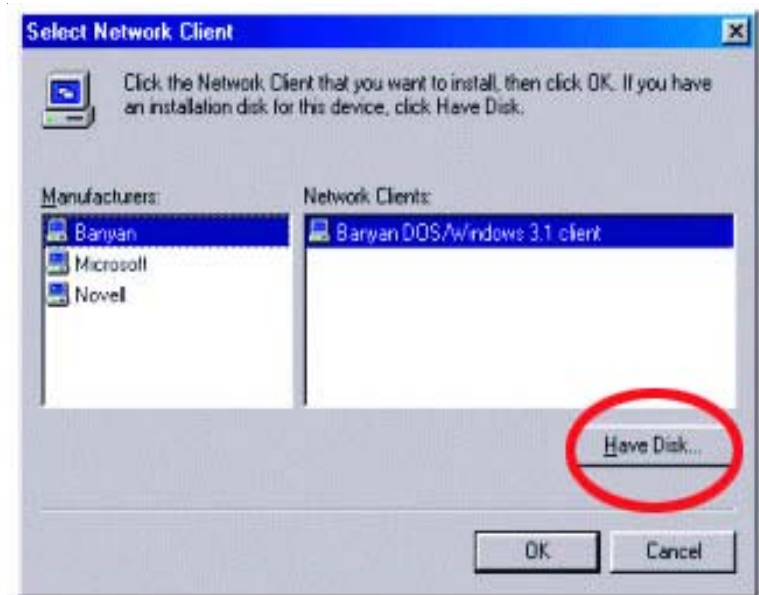


Highlight **Client**
Click **Add**



TCP/IP Printing for Windows 98/Me (continued)

At this window, click **Have Disk**

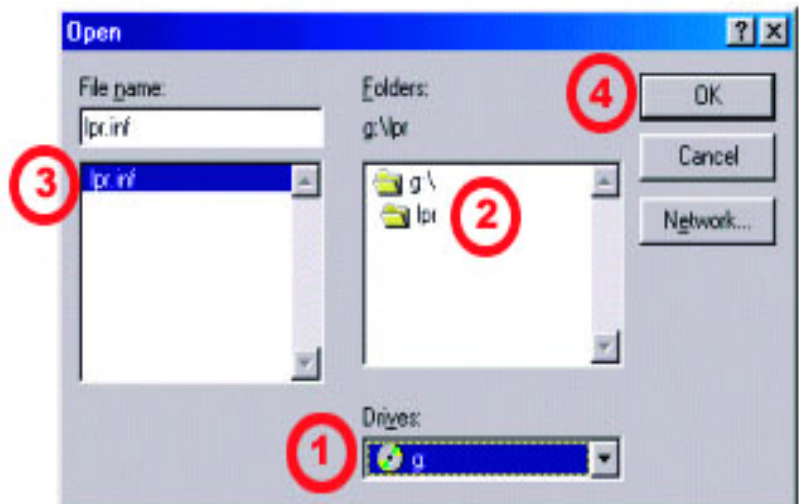


1. Insert the DP-101P+ CD-ROM into your CD-ROM drive. **Select the letter representing the CD-ROM drive** on your computer from the pull-down menu

2. Double-click on the folder **lpr**

3. Highlight **lpr.inf**

4. Click **OK**

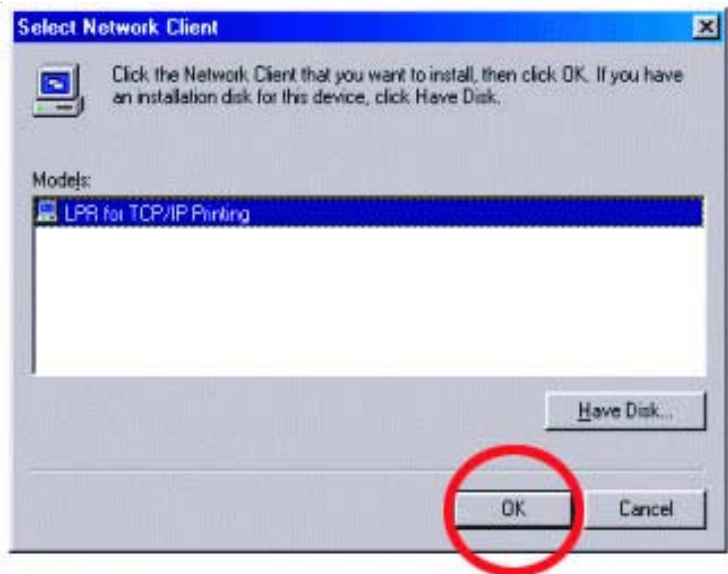


Click **OK** to accept the location of the file



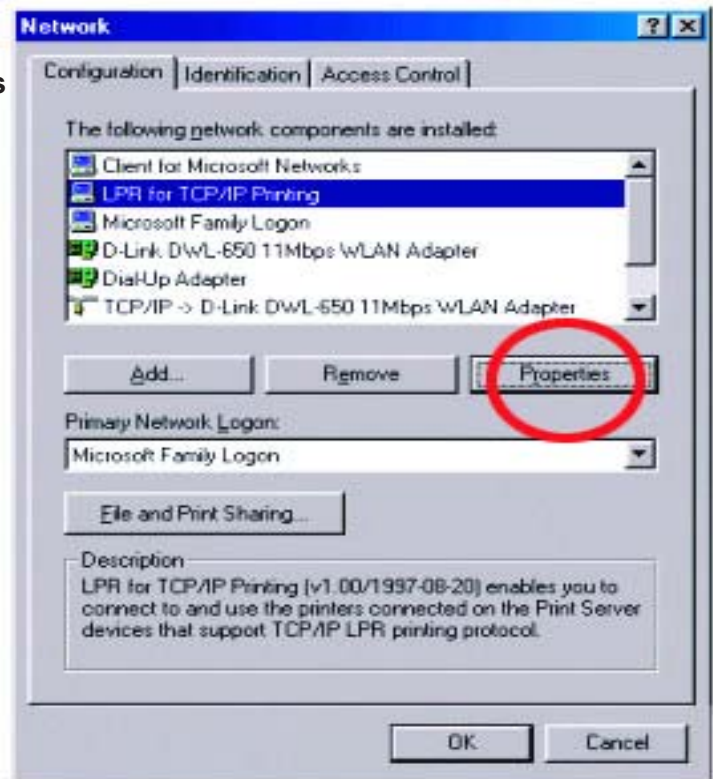
TCP/IP Printing for Windows 98/Me (continued)

Click **OK**



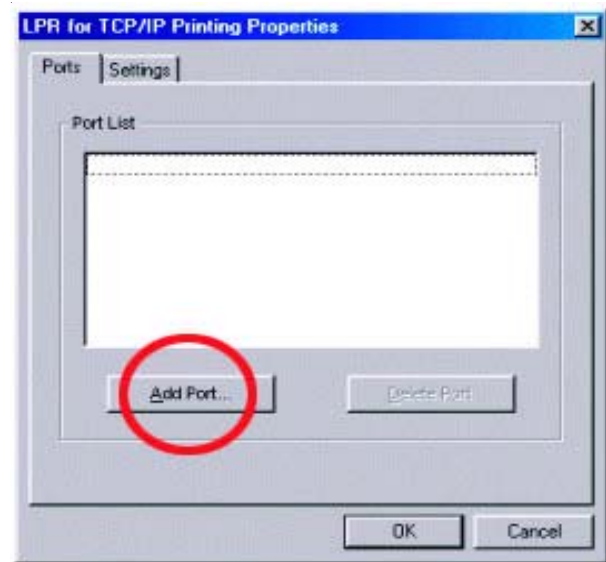
You should now be back to the **Network Properties** Page
Highlight **LPR for TCP/IP Printing**

Click **Properties**

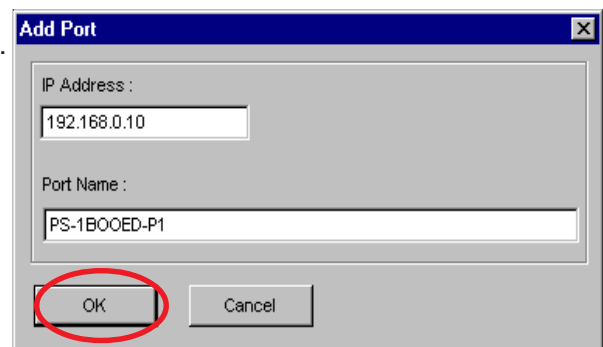


TCP/IP Printing for Windows 98/Me (continued)

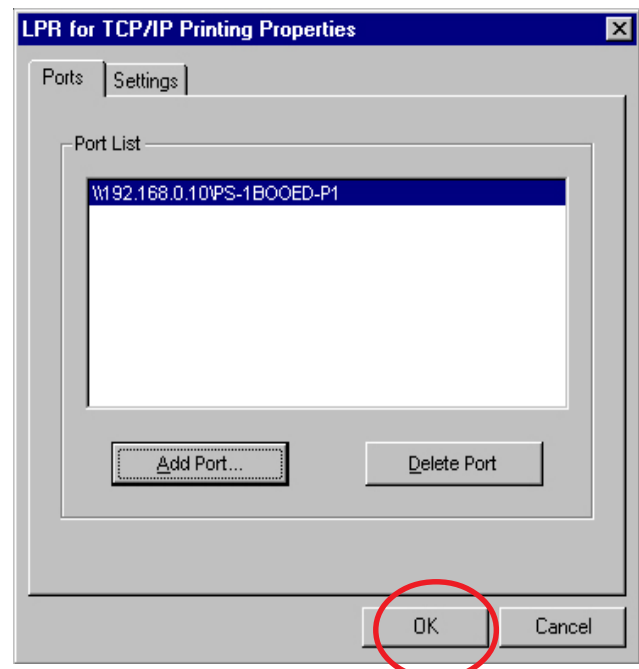
Click **Add Port**



Type in the IP address of the DP-101P+. Make sure the **Port Name** is accurate. The **Port Name** at right is just an example.
(Please refer to page 13 in this manual to find the **Port Name** in the **Server Device** window.)
Click **OK**

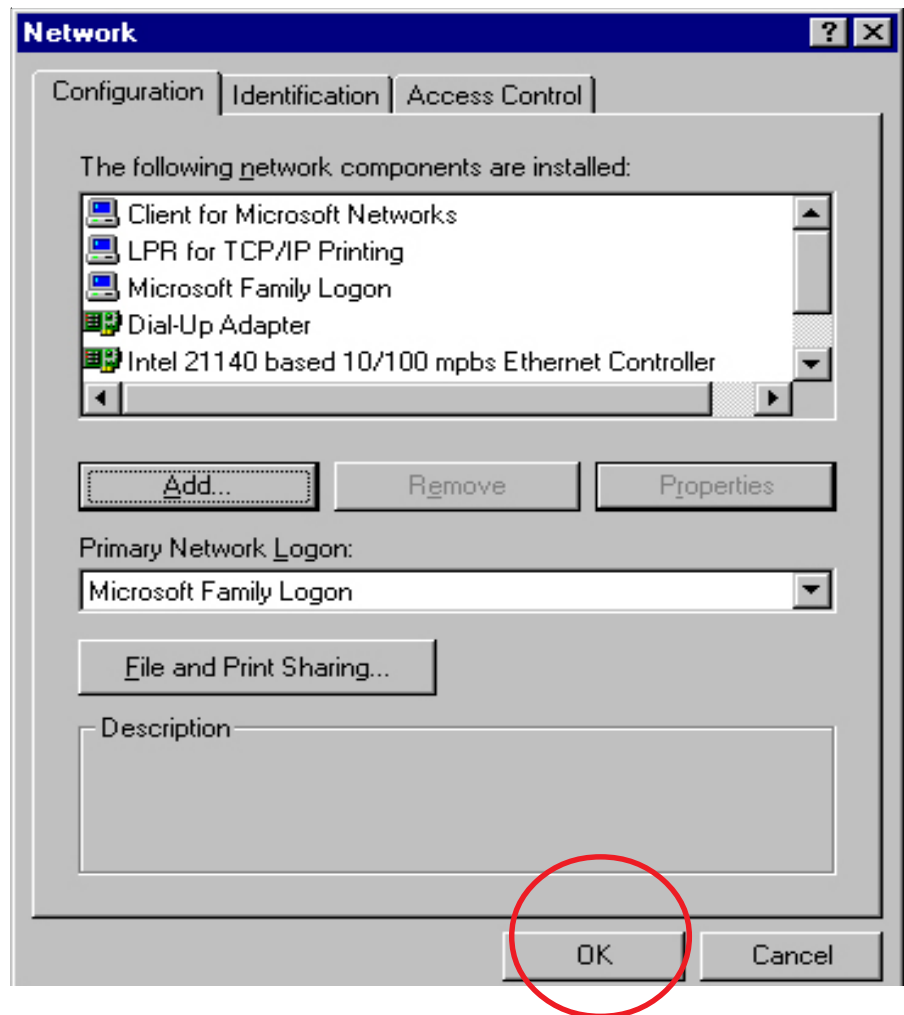


Port name and IP address will be displayed



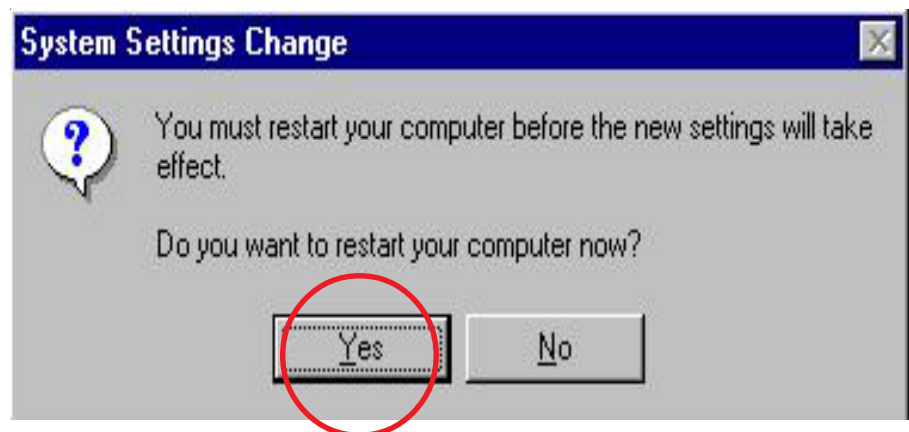
Click **OK**

Click **OK**



Windows will ask for a restart.

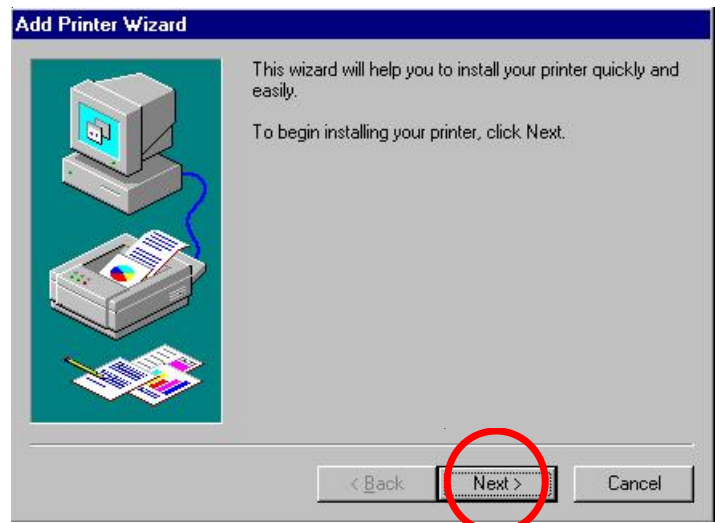
Click **Yes**



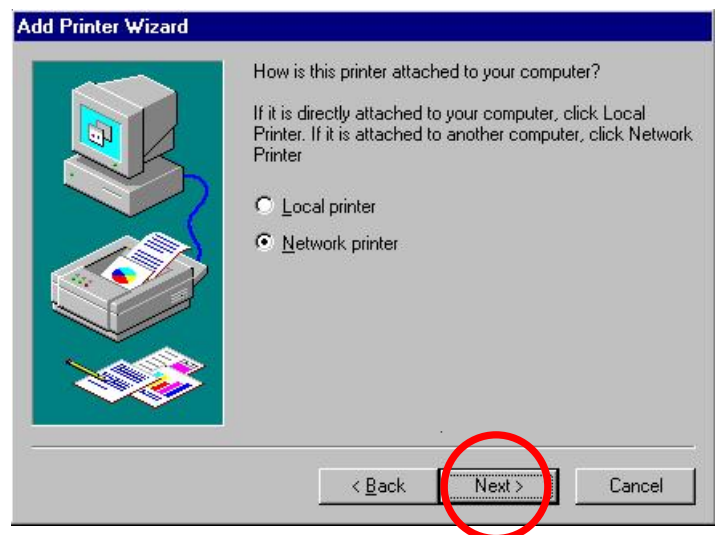
Once your computer has rebooted, click on Start>Settings>Printers>Add Printer



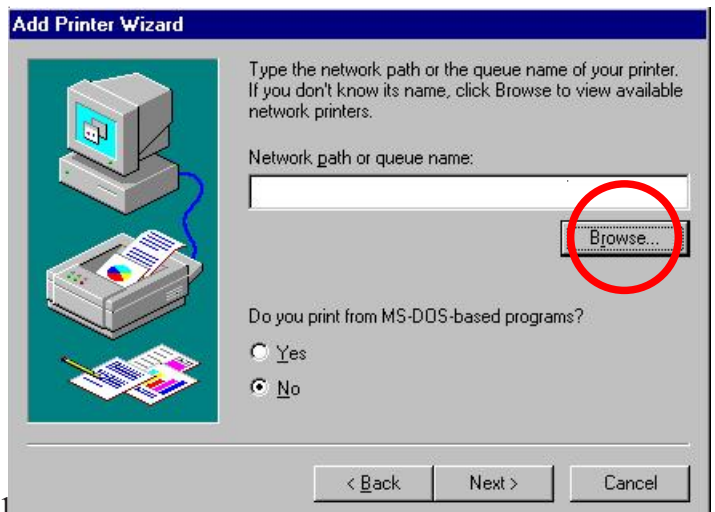
When the Add Printer Wizard screen appears click on **Next**



Select Network Printer and click on **Next**



Type in the path if you know it or click on **Browse**



TCP/IP Printing for Windows 98/Me (continued)

At the next screen, browse for the printer port
Highlight the port as shown.
(The **Port Name** in this window is just an example.)

Click **OK**

If the network path is not specified, type in the IP Address of the DP-101P+ and the **Port Name**.
(The path shown at right is just an example.)

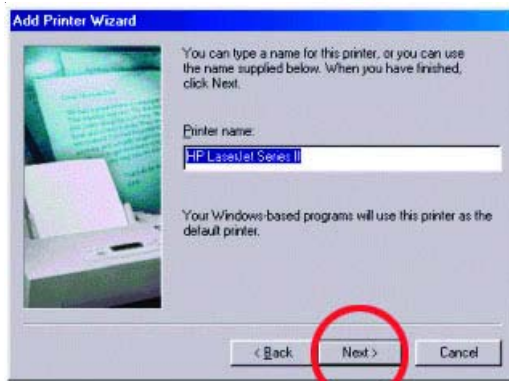
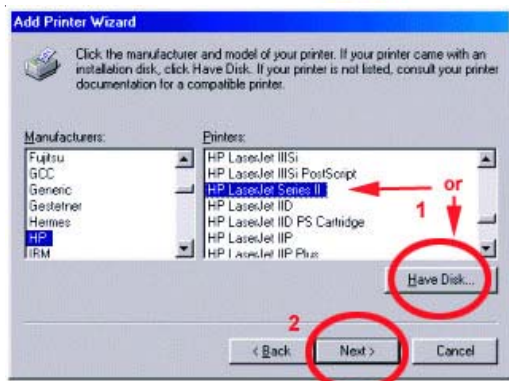
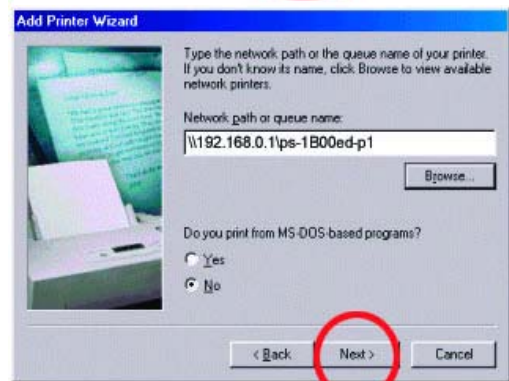
Select **Yes** or **No**

Click **Next**

Highlight the printer, as shown. If the desired printer is not on the list, click **Have Disk** and insert the printer driver disk that came with your printer

Click **Next**

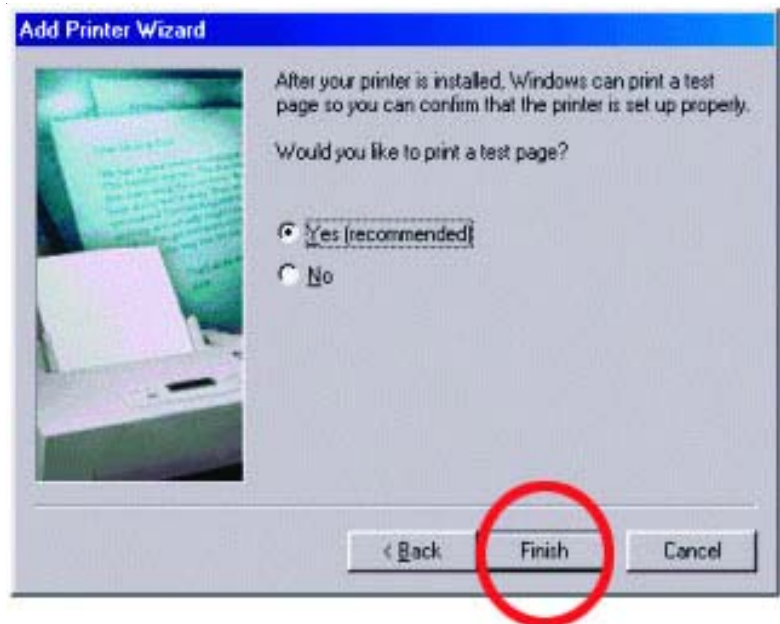
Click **Next** at this screen



TCP/IP Printing for Windows 98/Me (continued)

Select **Yes** to print a test page

Click **Finish**



Go to **Start>Settings>Printers**
Check to see that your printer is installed

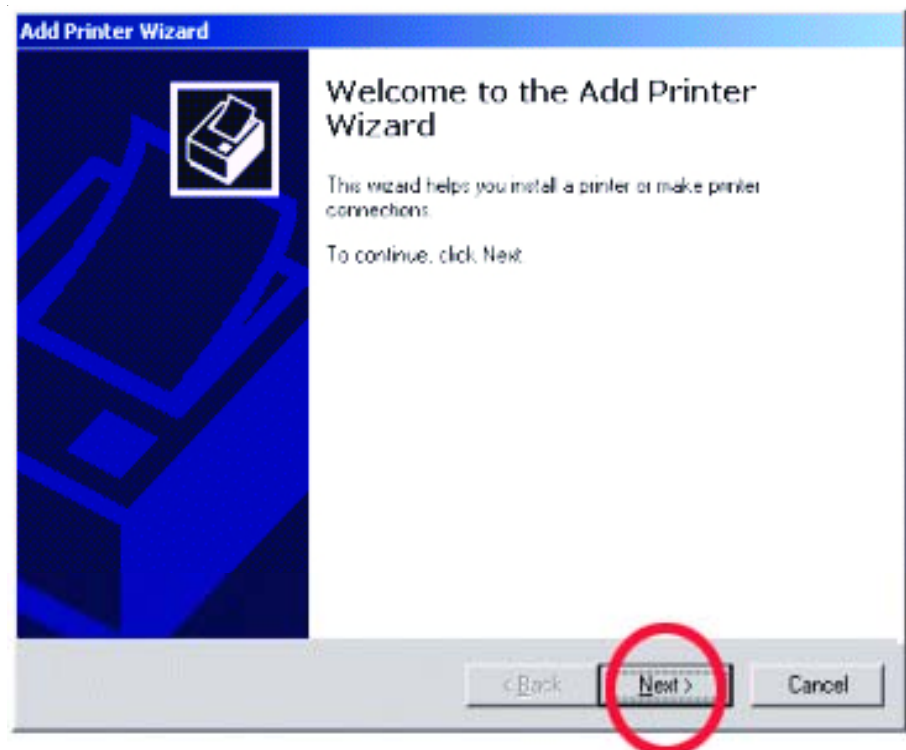


6. TCP/IP Printing for Windows 2000

Go to **Start>Settings>Printers**



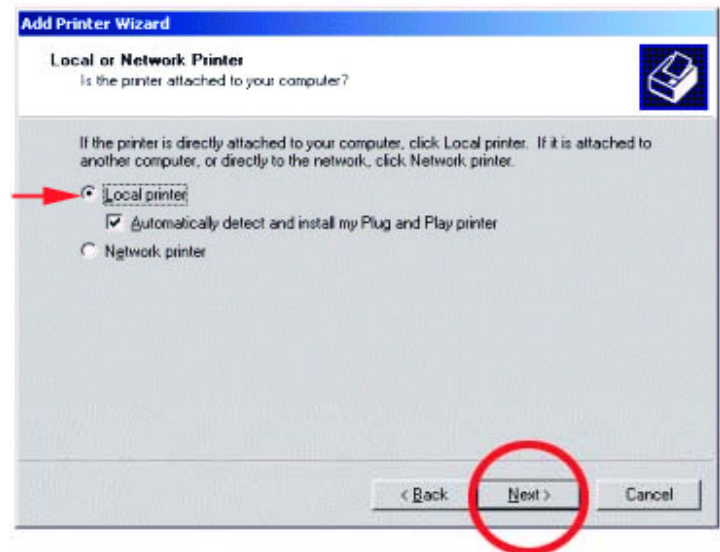
Double-click on the **Add Printer** icon



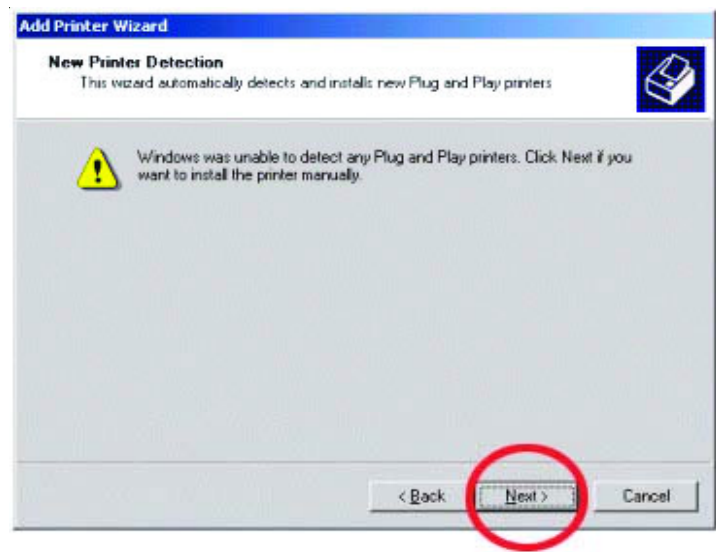
Click **Next**

TCP/IP Printing for Windows 2000 (continued)

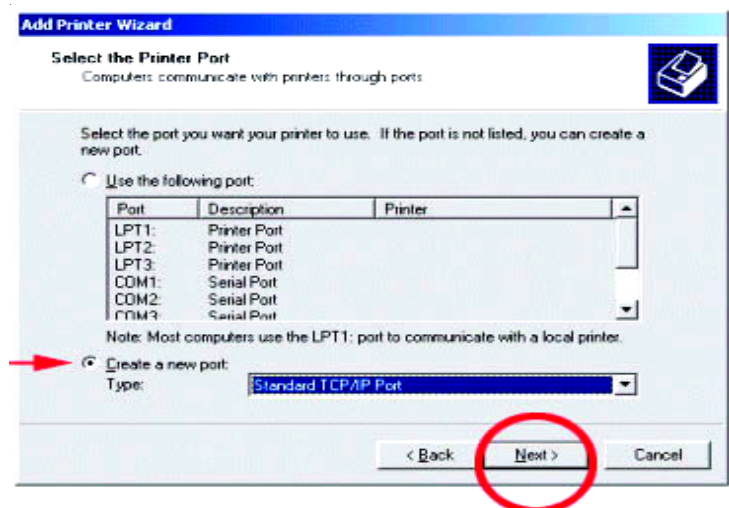
Select **Local Printer**



Click **Next**



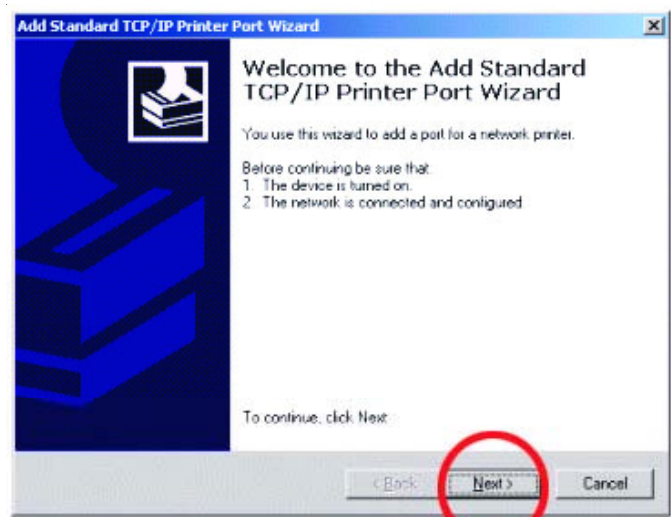
Select **Creat a new port** at the pull-down menu,
highlight **Standard TCP/IP Port**



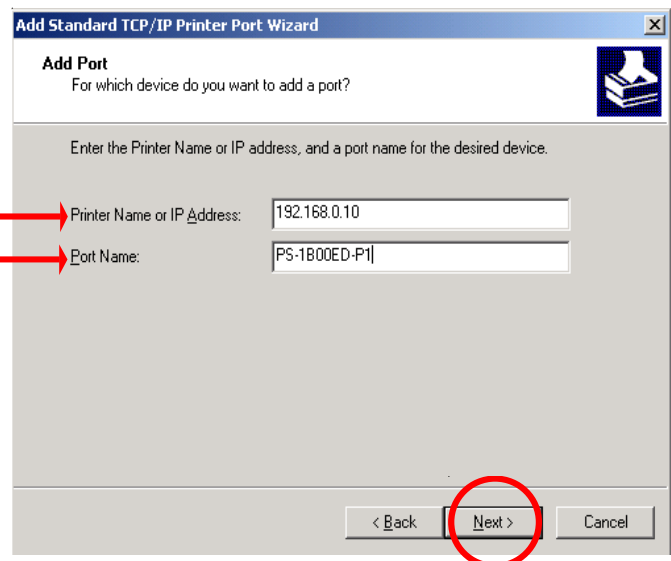
Click **Next**

TCP/IP Printing for Windows 2000 (continued)

Click **Next**

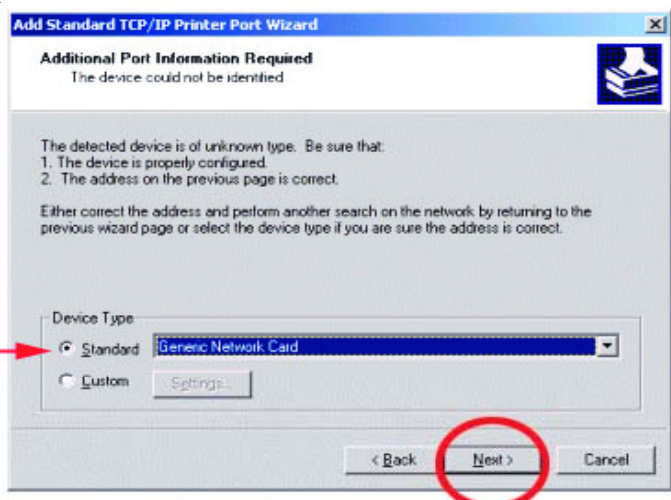


Type in the IP address of the print server in **Printer Name or IP Address** field. The **Port Name** field will automatically be filled in



Click **Next**

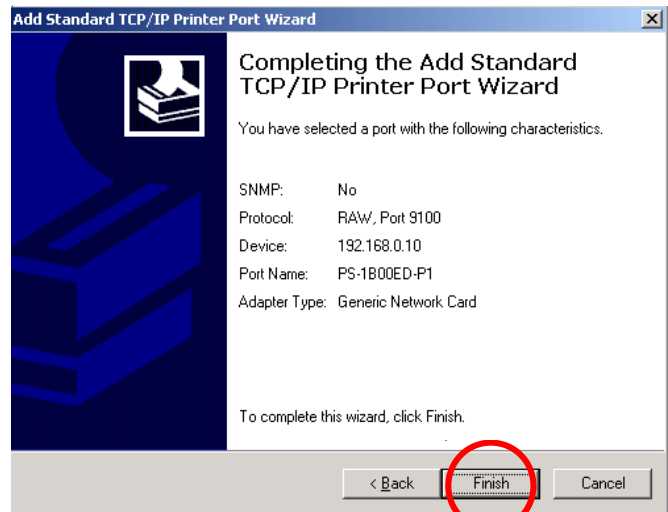
Select **Standard**. Make sure that **Generic Network card** is highlighted



Click **Next**

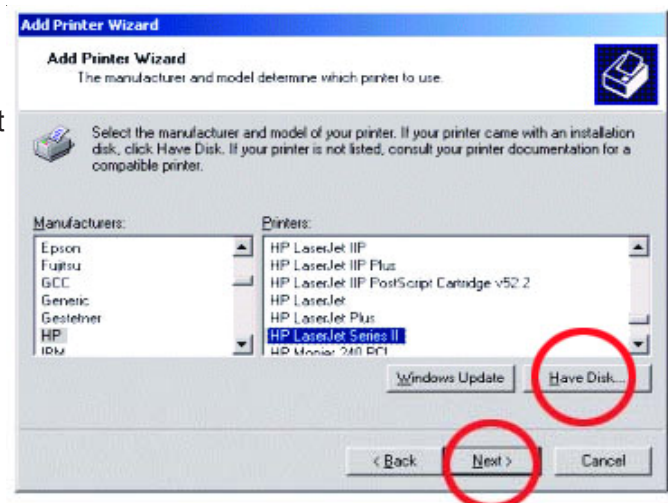
TCP/IP Printing for Windows 2000 (continued)

Click **Finish**



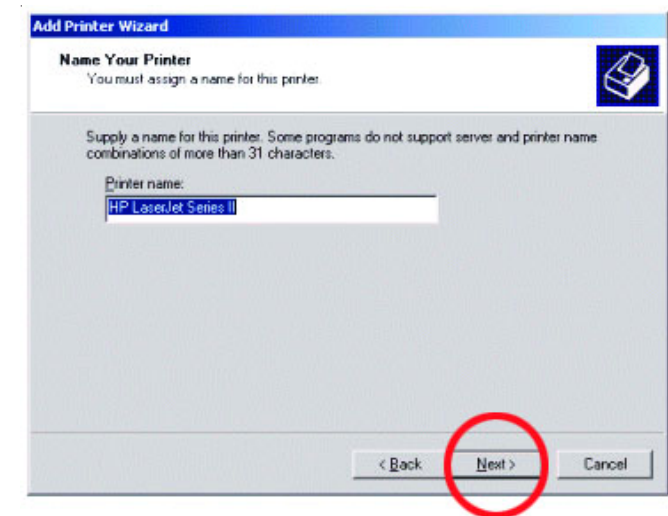
In this window, scroll down to find your printer, (If it is not listed, insert the driver CD or diskette that came with your printer and click on **Have Disk** to install the printer drivers

Click **Next**



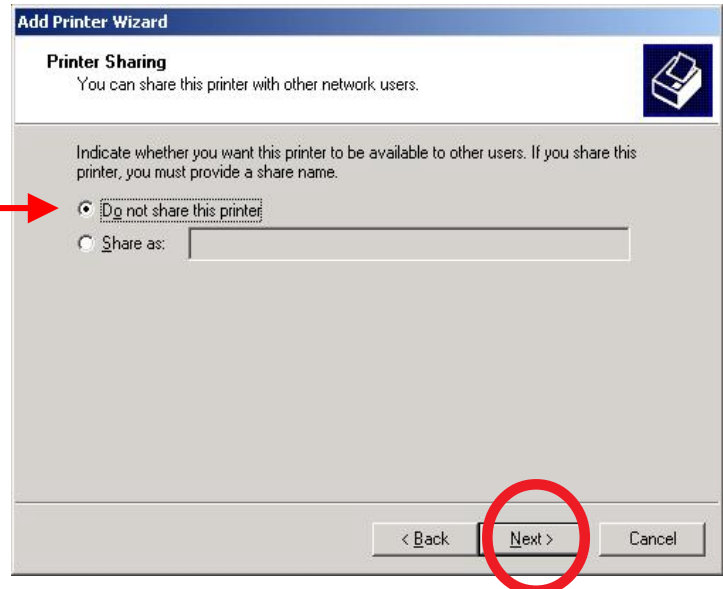
At this screen, you can input a name for the printer

Click **Next**



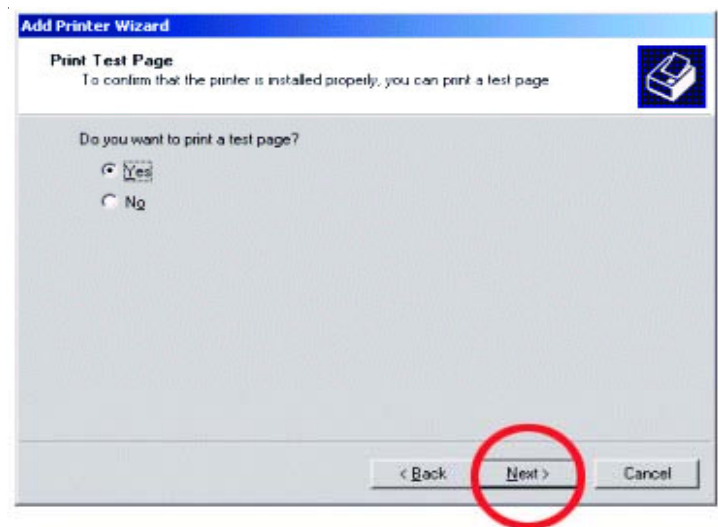
TCP/IP Printing for Windows 2000 (continued)

Select **Do not share this printer**



Click **Next**

Select **Yes** to print a test page



Click **Next**

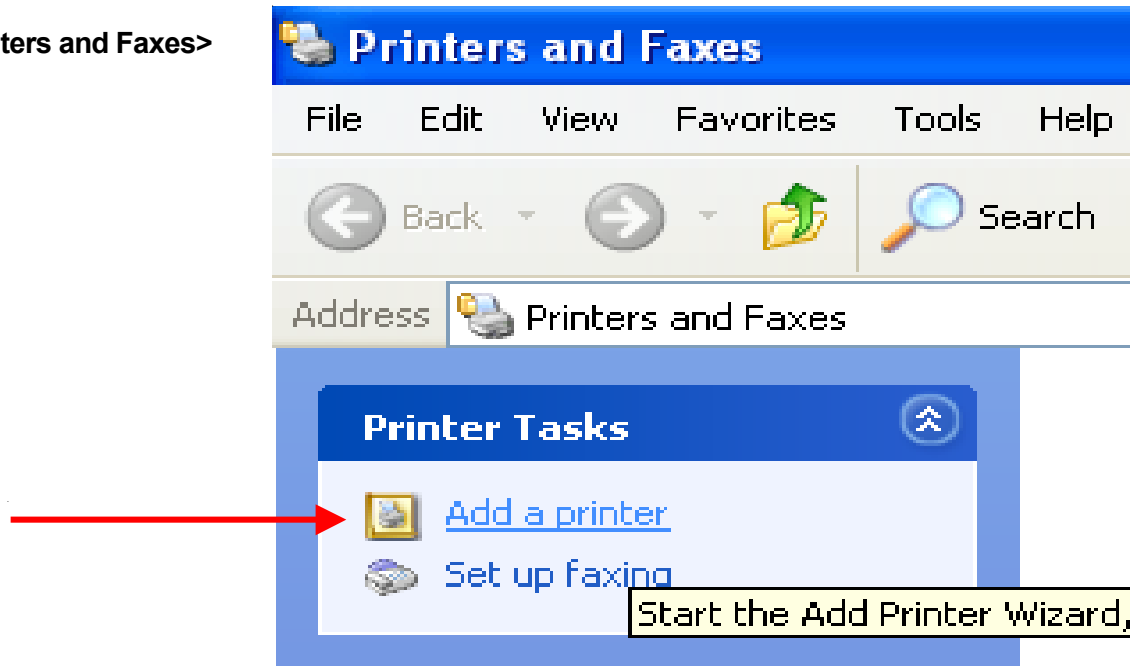
Click **Finish**



The printer is now ready for printing with Windows 2000/XP on your network

7. TCP/IP Printing for Windows XP

Go to **Start>Printers and Faxes>Add a Printer**



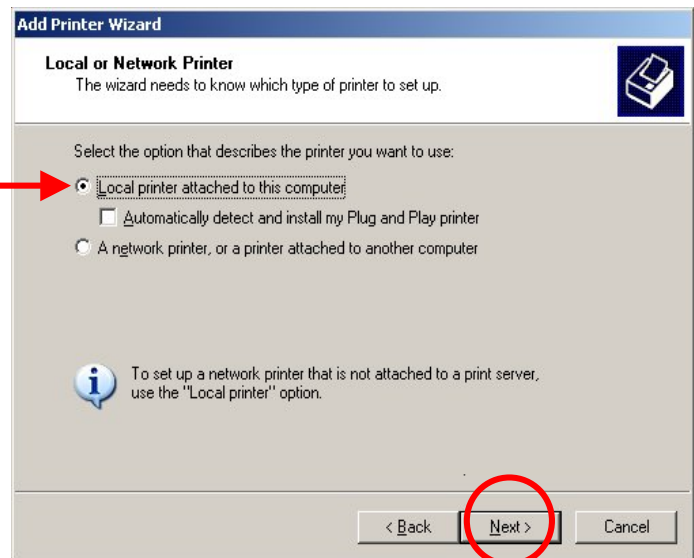
Click **Next**



TCP/IP Printing for Windows XP (continued)

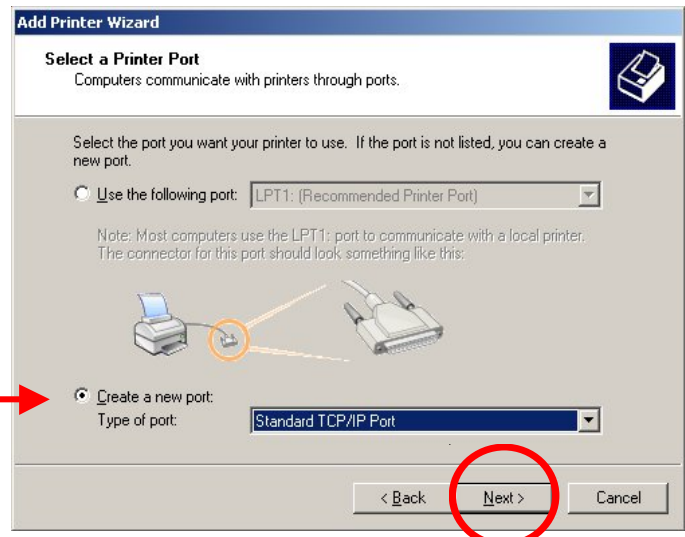
Select **Local Printer**

Click **Next**

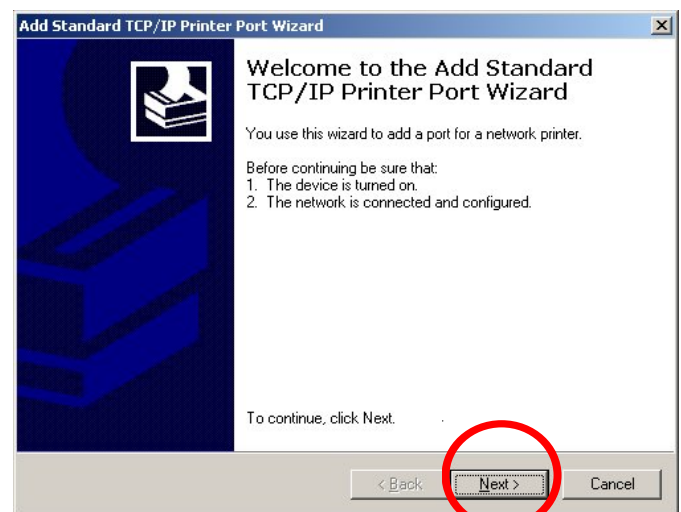


Select **Creat a new port**.At the pull-down menu, highlight **Standard TCP/IP Port**

Click **Next**



Click **Next**



TCP/IP Printing for Windows XP (continued)

Type in the IP address of the print server.
(i.e. 192.168.0.10). The port name will
automatically be filled in

The screenshot shows the 'Add Port' step of the wizard. The title bar reads 'Add Standard TCP/IP Printer Port Wizard'. The main heading is 'Add Port' with the subtext 'For which device do you want to add a port?'. Below this, it says 'Enter the Printer Name or IP address, and a port name for the desired device.' There are two text input fields: 'Printer Name or IP Address:' containing '192.168.0.10' and 'Port Name:' containing 'IP_192.168.0.10'. At the bottom, there are three buttons: '< Back', 'Next >', and 'Cancel'. The 'Next >' button is circled in red.

Select **Standard**. Make sure that **Generic
Network Card** is highlighted

Click **Next**

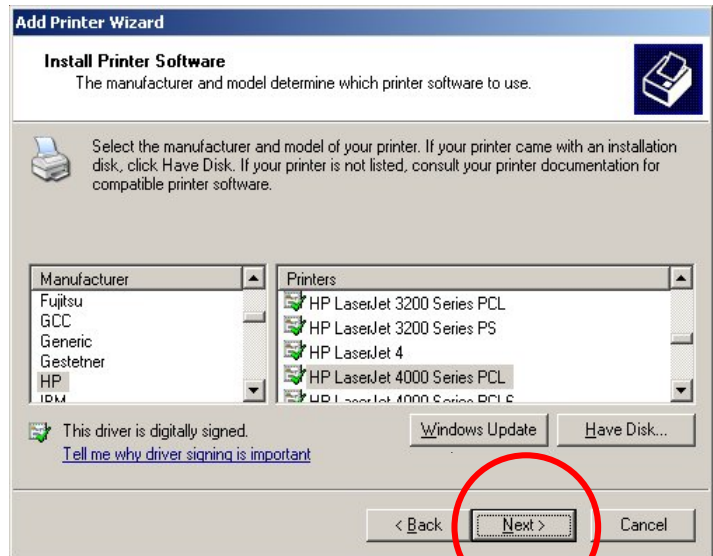
The screenshot shows the 'Additional Port Information Required' step. The title bar reads 'Add Standard TCP/IP Printer Port Wizard'. The main heading is 'Additional Port Information Required' with the subtext 'The device could not be identified.' Below this, it says 'The device is not found on the network. Be sure that:' followed by a list of four items: 1. The device is turned on. 2. The network is connected. 3. The device is properly configured. 4. The address on the previous page is correct. It then says 'If you think the address is not correct, click Back to return to the previous page. Then correct the address and perform another search on the network. If you are sure the address is correct, select the device type below.' There is a 'Device Type' section with two radio buttons: 'Standard' (selected) and 'Custom'. Next to 'Standard' is a dropdown menu showing 'Generic Network Card'. There is also a 'Settings...' button. At the bottom, there are three buttons: '< Back', 'Next >', and 'Cancel'. The 'Next >' button is circled in red.

Click **Finish**

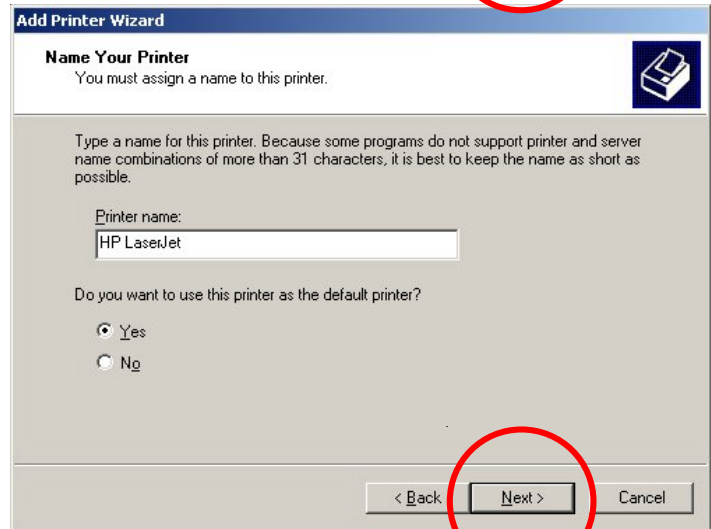
The screenshot shows the 'Completing the Add Standard TCP/IP Printer Port Wizard' step. The title bar reads 'Add Standard TCP/IP Printer Port Wizard'. The main heading is 'Completing the Add Standard TCP/IP Printer Port Wizard'. Below this, it says 'You have selected a port with the following characteristics.' There is a list of characteristics: SNMP: No, Protocol: RAW, Port 9100, Device: 192.168.0.10, Port Name: IP_192.168.0.10, Adapter Type: Generic Network Card. At the bottom, it says 'To complete this wizard, click Finish.' There are three buttons: '< Back', 'Finish', and 'Cancel'. The 'Finish' button is circled in red.

TCP/IP Printing for Windows XP (continued)

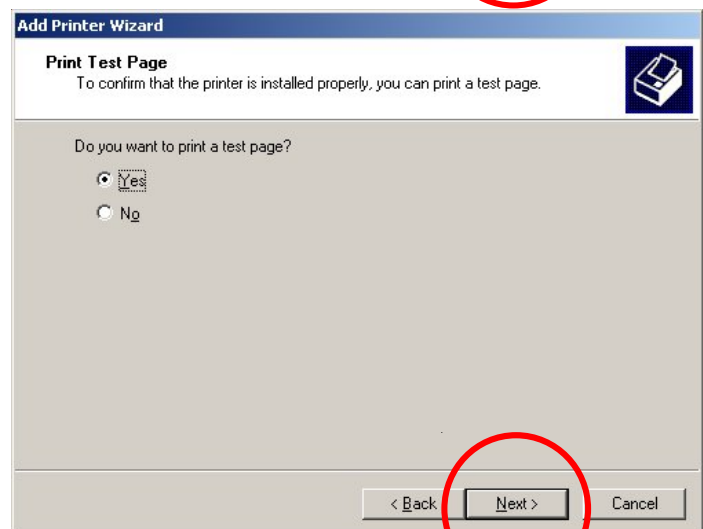
In this window, scroll down to find your printer, (If it is not listed, insert the driver CD or diskette that came with your printer and click on **Have Disk** to install the printer drivers



At this screen, you can input a name for the printer



Click **Next**

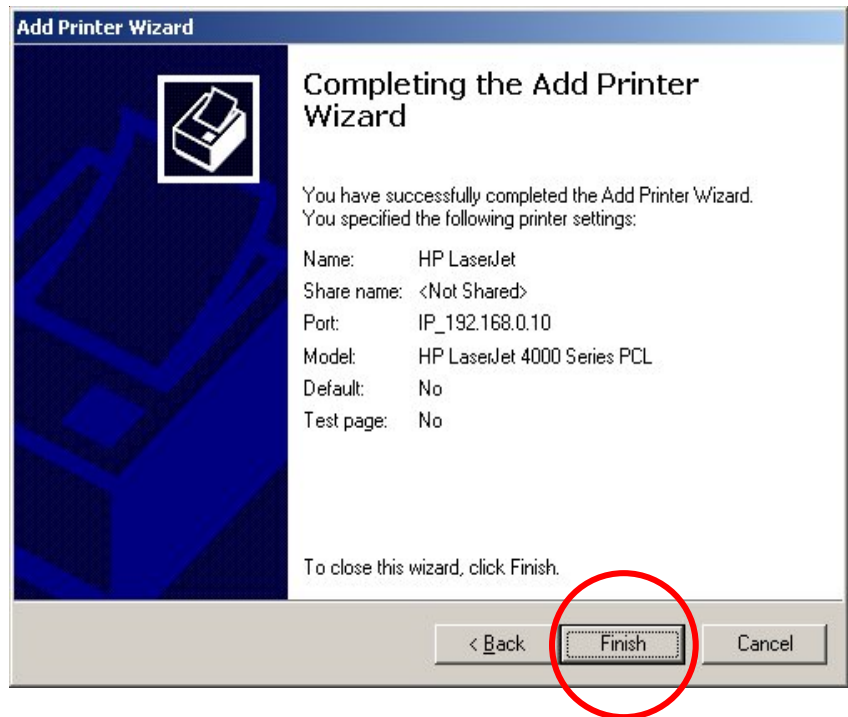


Click **Next**

TCP/IP Printing for Windows XP *(continued)*

Click **Finish**

The printer is now ready for printing with Windows XP on your network



8. Mac OS and Unix/Linux Printing

Please refer to the PS Admin manual for setting up the print server in Mac OS and Unix/Linux.

Note: Mac OS printing is supported for Postscript printers only!

9. Using the Web Configuration

You can use the Web Configuration to control and configure the DP-101P+.

Configuring the Print Server

Open the web browser and type <http://192.168.0.10> in the address box. The number is the default IP address of your print server. Press **Enter**

Note: The PC's IP address must correspond with the print server's IP address in the same segment for the two devices to communicate.



The print server's **welcome screen** will appear. There will be four options on the systems tool bar to choose from to set your print server and they are as follows:

- Management
- Configuration
- Tools
- Help



Management

Click on “**Management**” in the systems tool bar and in the Management Table. It provides information on the print server’s *Systems Status* and *Printer Status*.

Management > System Status

Click on “**System Status**” in the Management Table. The page will appear as below providing general information regarding the print server. For the most updated information, click on the “**Refresh**” button.



- Server Name: The name assigned to the print server.
- Model: The model of the print server.
- Firmware: The version and date of the firmware on the print server.
- MAC Address: The MAC address of of the Ethernet port.
- IP Address: The IP address of the print server.
- Up Time: The lenght of time the print server has been up.

Management > Printer Status

Click on “**Printer Status**” in the Management Table. The page will appear as below providing general information regarding the printer status. For most updated information click on the “**Refresh**” button. Once the print server is connected to a printer the Printer Status will show Online



Configuration

Click on “**Configuration**” in the systems tool bar to show the Configuration Table. It provides settings to configure the print server to print using *TCP/IP Protocol*, *NetBEUI Protocol* and *AppleTalk Protocol*.

Configuration > Server Device

Click on “**Server Device**” in the Configuration Table. The page will appear as below providing the settings required to configure the print server. Click the “Save” button to ensure the settings are updated and saved.

The screenshot shows the D-Link Pocket Size Print Server DP-101P+ configuration interface. The top navigation bar includes 'Management', 'Configuration', 'Tools', and 'Help'. The 'Configuration' section is active, and the 'Server Device' sub-section is selected. The form contains the following fields:

- Server Name:** PS-0712E4
- Location:** (empty text box)
- Admin Contact:** (empty text box)
- Password:** New Password : (empty text box), Confirm Again : (empty text box)
- LPT:** Port Name : PS-0712E4-P1, Description : (empty text box), Speed : High (dropdown), P.J.L Printer : No (dropdown)

At the bottom right are 'Save' and 'Cancel' buttons.

- Server Name: The name assigned to the print server.
- Location: (optional) Input a comment where the print server is located.
- Admin Contact: (Optional) Administrator name for the print server.
- Password: By default the DP-101P+ does not have a password. This is a security risk. it is recommended that you enter in a password for the print server.
- Port Name: This is the assigned name for the LPT port.
- Description: A brief description for the LPT port.
- Speed: Printer port speed, High or Low.
- PJL Printer: This feature is used to support Hewlett-Packard PJL (Printer Job Language) standard for bi-directional printing.

Configuration > TCP/IP Protocol

Click on “**TCP/IP Protocol**” in the Configuration Table. The page will appear as below providing the settings required to configure the print server. Click the “**Save**” button to ensure the settings are saved and updated.

The screenshot shows the D-Link Pocket Size Print Server DP-101P+ Configuration page. The top navigation bar includes Management, Configuration, Tools, and Help. The left sidebar lists Configuration options: Server Device, TCP/IP Protocol (selected), NetBEUI Protocol, and AppleTalk Protocol. The main content area is titled TCP/IP Protocol and contains the following settings:

- IP Address:** 192.168.0.10
- Subnet Mask:** 255.255.255.0
- Default Gateway:** 0.0.0.0
- IP Assignment:**
 - ☒ Manually Assign
 - ☐ Assign Automatically Using
 - ☐ RARP
 - ☐ BOOTP
 - ☐ DHCP
- SNMP Community 1:**
 - Name: public
 - Access Right: Read/Write
- Community 2:**
 - Name:
 - Access Right: Read Only
- Community 3:**
 - Name:
 - Access Right: Read Only

At the bottom of the form are Save and Cancel buttons.

IP Address Assignment:

Manually assign: Select this option to enter a specific IP Address to the print server. Enter the IP Address in the above fields.

Assign Automatically Using: Select one of the three protocols to be used to receive an IP Address Automatically.

SNMP: The print server supports Simple Network Management Protocol (SNMP) using MIB II.

Configuration > NetBEUI Protocol

Click on “**NetBEUI Protocol**” in the Configuration Table. The page will appear as below providing the settings required to configure the print server. Click the “**Save**” button to ensure that the settings are saved and updated.

The screenshot shows the D-Link Pocket Size Print Server configuration interface. The top navigation bar includes 'Management', 'Configuration', 'Tools', and 'Help'. The 'Configuration' tab is active. On the left, a sidebar lists configuration options: 'Server Device', 'TCP/IP Protocol', 'NetBEUI Protocol' (highlighted), and 'AppleTalk Protocol'. The main content area is titled 'NetBEUI Protocol'. It contains a 'Workgroup' field with the value 'WORKGROUP'. Below this, under 'Maximum Limitation', there are two fields: 'Maximum Connected Stations' and 'Maximum Number of Sessions', both set to '32'. At the bottom right of the configuration area are 'Save' and 'Cancel' buttons.

Configuration > AppleTalk Protocol

Click on “**AppleTalk Protocol**” in the Configuration Table. The page will appear as below providing the settings required to configure the print server. Click the “**Save**” button to ensure the settings are saved and updated.

The screenshot shows the D-Link Pocket Size Print Server configuration interface for the AppleTalk Protocol. The top navigation bar includes 'Management', 'Configuration', 'Tools', and 'Help'. The 'Configuration' tab is active. On the left, a sidebar lists configuration options: 'Server Device', 'TCP/IP Protocol', 'NetBEUI Protocol', and 'AppleTalk Protocol' (highlighted). The main content area is titled 'AppleTalk Protocol'. It contains an 'AppleTalk Zone' field with an asterisk '*'. Below this, under 'LPT', there are four fields: 'Chooser Name' (PS-0712E4-P1), 'Printer Type' (LaserWriter), 'PostScript Level' (Level 2), and 'Font Group' (Standard 35). At the bottom right of the configuration area are 'Save' and 'Cancel' buttons.

Tools

Click on **Tools** in the systems tool bar and in the *Tools* menu. In the *Tools* menu you will find **Print Test**, **Reset**, and **Factory Reset**.

Tools > Print Test

Click on **Print Test** in the *Tools* menu. The page below will appear. Click **Test** to print a test page.



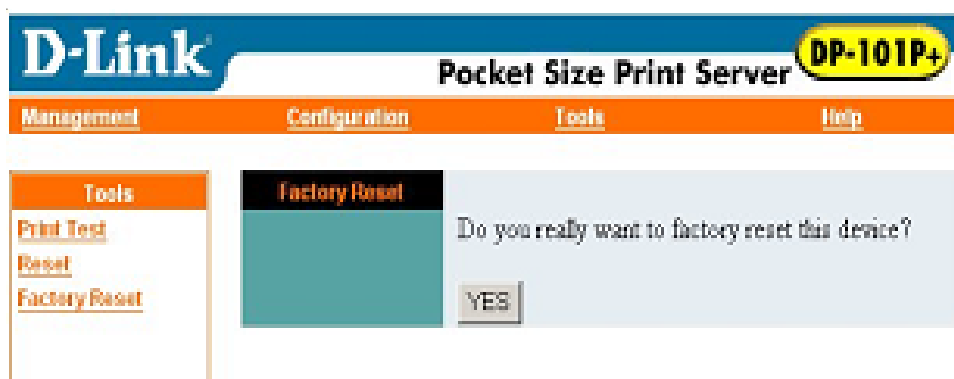
Tools > Reset

Click on **Reset** in the *Tools* menu. The screen below will appear. Click **Yes** to activate the reset procedure which will restart the print server.



Tools > Factory Reset

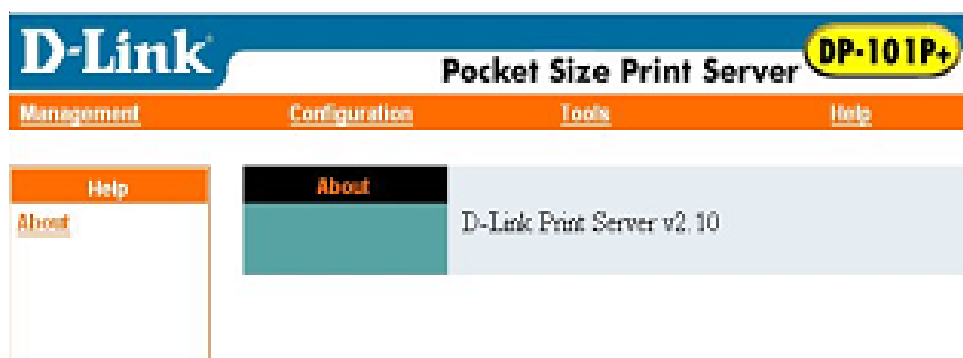
Click on **Factory Reset** in the *Tools* menu. The screen below will appear. Click **Yes** to activate the factory reset procedure which will reset the print server to factory settings.



Help

Click on **Help** in the systems Tool bar to obtain general information on the DP-101P+.

Help > About



9. Port Pinouts

The following table lists the pinouts of the DP-101P+'s 36-pin parallel port connector (identical to the parallel port connector used on most printers.)

Signal names beginning with n are active-low signals.

Pin #	Signal	Source
1	nStrobe	H
2	Data 1 ■	Bi-Di *
3	Data 2	Bi-Di *
4	Data 3	Bi-Di *
5	Data 4	Bi-Di *
6	Data 5	Bi-Di *
7	Data 6	Bi-Di *
8	Data 7	Bi-Di *
9	Data 8 ●	Bi-Di *
10	nAck	P
11	Busy	P
12	PError	P
13	Select	P
14	nAutoFd	H
15	Not Defined	
16	Logic Gnd	
17	Chassis Gnd	
18	Peripheral Logic High	P
19	Signal Ground (nStrobe)	
20	Signal Ground (Data 1)	
21	Signal Ground (Data 2)	
22	Signal Ground (Data 3)	
23	Signal Ground (Data 4)	
24	Signal Ground (Data 5)	
25	Signal Ground (Data 6)	
26	Signal Ground (Data 7)	
27	Signal Ground (Data 8)	
28	Signal Ground (PError, Select, nAck)	
29	Signal Ground (Busy, nFault)	
30	Signal Ground (nAutoFd, nSelectIn, nInit)	
31	nInit	H
32	nFault	P
33	Not Defined	
34	Not Defined	
35	Not Defined	
36	nSelectIn	H

- Least Significant Bit
- Data signals will be driven by some, but not all peripheral devices
- Most Significant Bit

10. Networking Basics

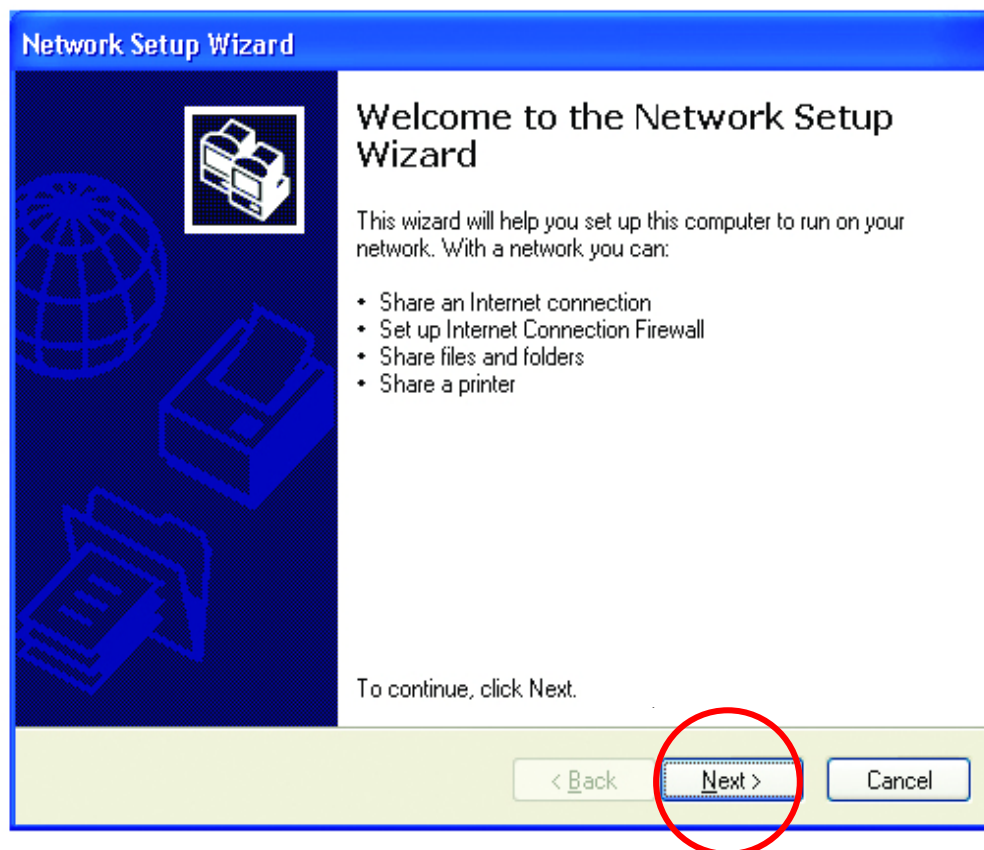
Using the Network Setup Wizard in Windows XP

In this section you will learn how to establish a network at home or work, using **Microsoft Windows XP**.

Note: Please refer to websites such as <http://www.homenethelp.com> and <http://www.microsoft.com/windows2000> for information about networking computers using Windows 2000, ME or 98.

Go to **Start>Control Panel>Network Connections**

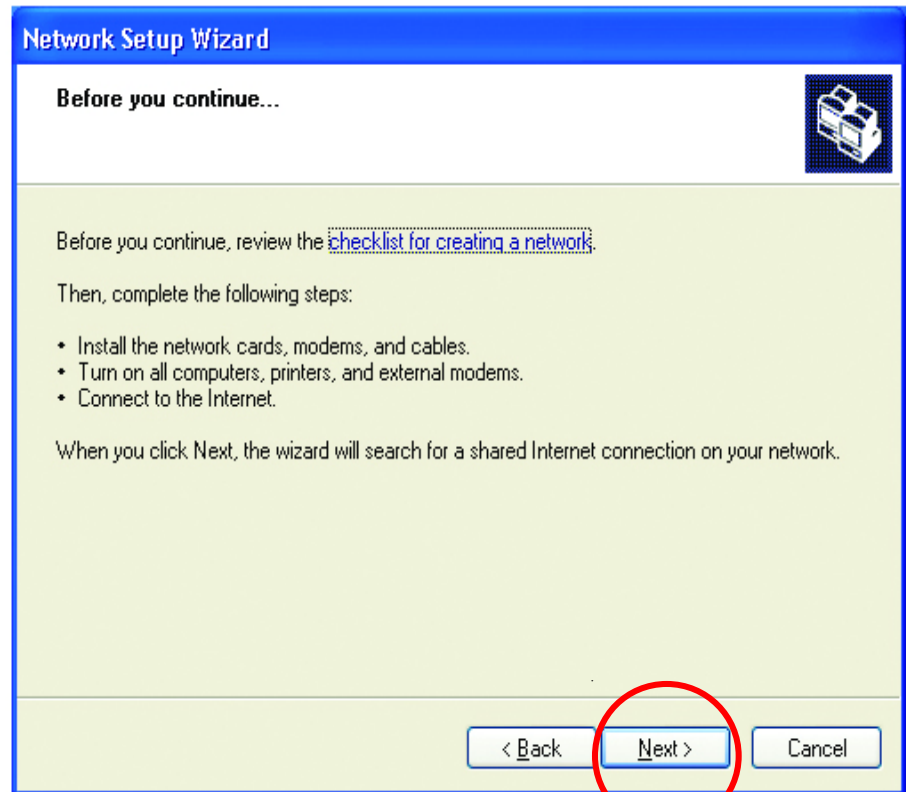
Select **Set up a home or small office network**



When this screen appears, **Click Next**

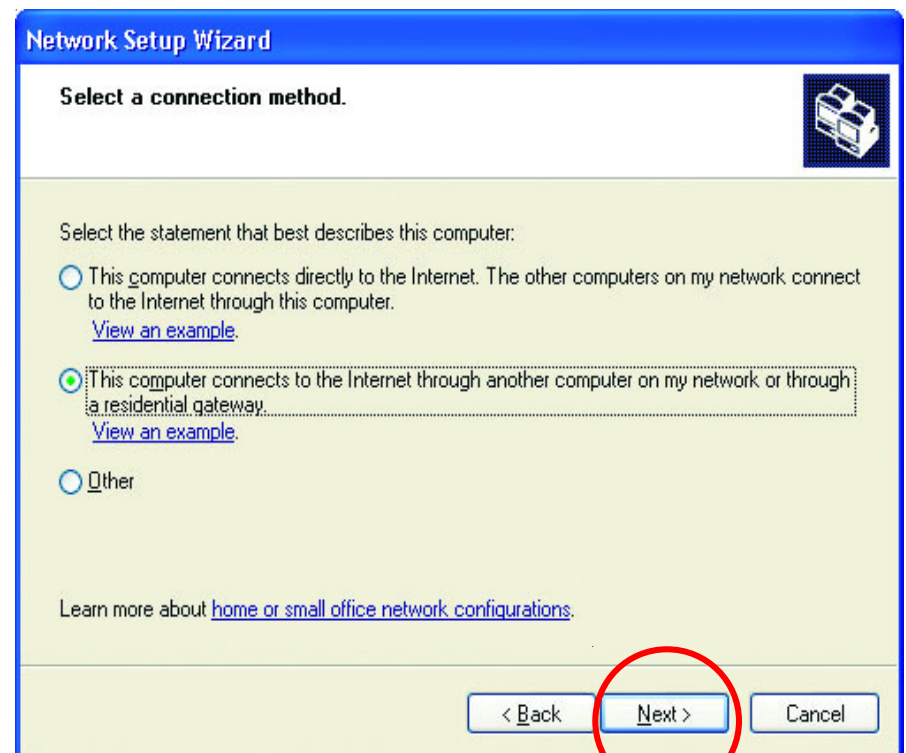
Networking Basics

Please follow all the instructions in this window:



Click **Next**

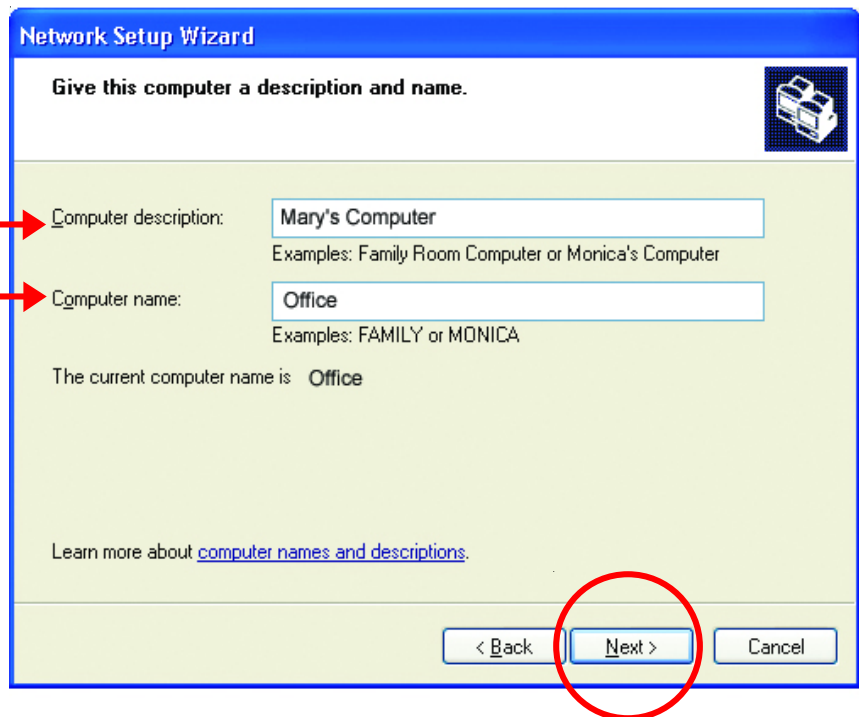
In the following window, select the best description of your computer. If your computer connects to the internet through a gateway/router, select the second option as shown.



Click **Next**

Networking Basics

Enter a **Computer description** and a **Computer name** (optional.)



The screenshot shows the 'Network Setup Wizard' window with the title 'Give this computer a description and name.' It features two text input fields: 'Computer description' containing 'Mary's Computer' and 'Computer name' containing 'Office'. Below these fields, it states 'The current computer name is Office'. At the bottom right, the '< Back' button is disabled, the 'Next >' button is highlighted with a red circle, and the 'Cancel' button is also present. A red arrow points to the 'Computer description' field, and another red arrow points to the 'Computer name' field.

Network Setup Wizard

Give this computer a description and name.

Computer description: Mary's Computer
Examples: Family Room Computer or Monica's Computer

Computer name: Office
Examples: FAMILY or MONICA

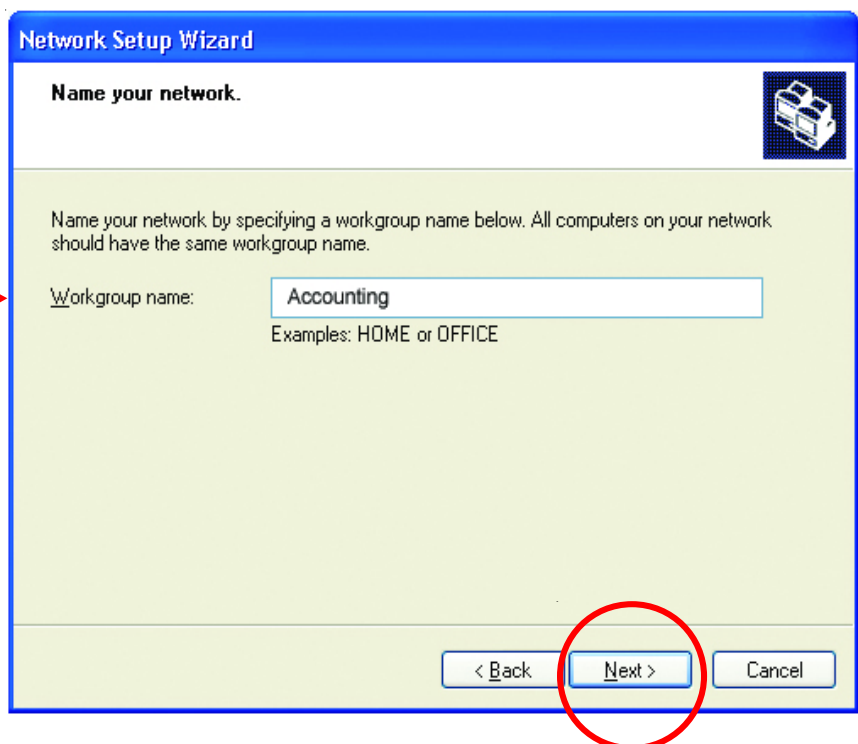
The current computer name is Office

Learn more about [computer names and descriptions](#).

< Back Next > Cancel

Click **Next**

Enter a **Workgroup** name.
All computers on your network should have the same **Workgroup name**.



The screenshot shows the 'Network Setup Wizard' window with the title 'Name your network.' It contains a text input field for 'Workgroup name' with the value 'Accounting'. Below the field, it says 'Examples: HOME or OFFICE'. At the bottom right, the '< Back' button is disabled, the 'Next >' button is highlighted with a red circle, and the 'Cancel' button is also present. A red arrow points to the 'Workgroup name' field.

Network Setup Wizard

Name your network.

Name your network by specifying a workgroup name below. All computers on your network should have the same workgroup name.

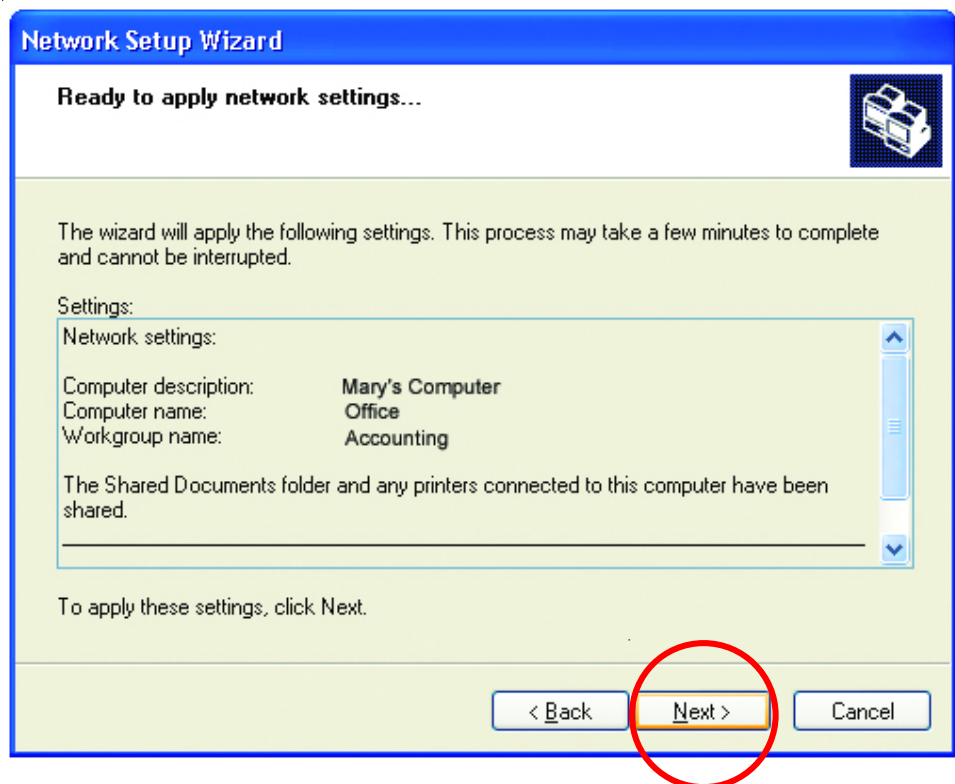
Workgroup name: Accounting
Examples: HOME or OFFICE

< Back Next > Cancel

Click **Next**

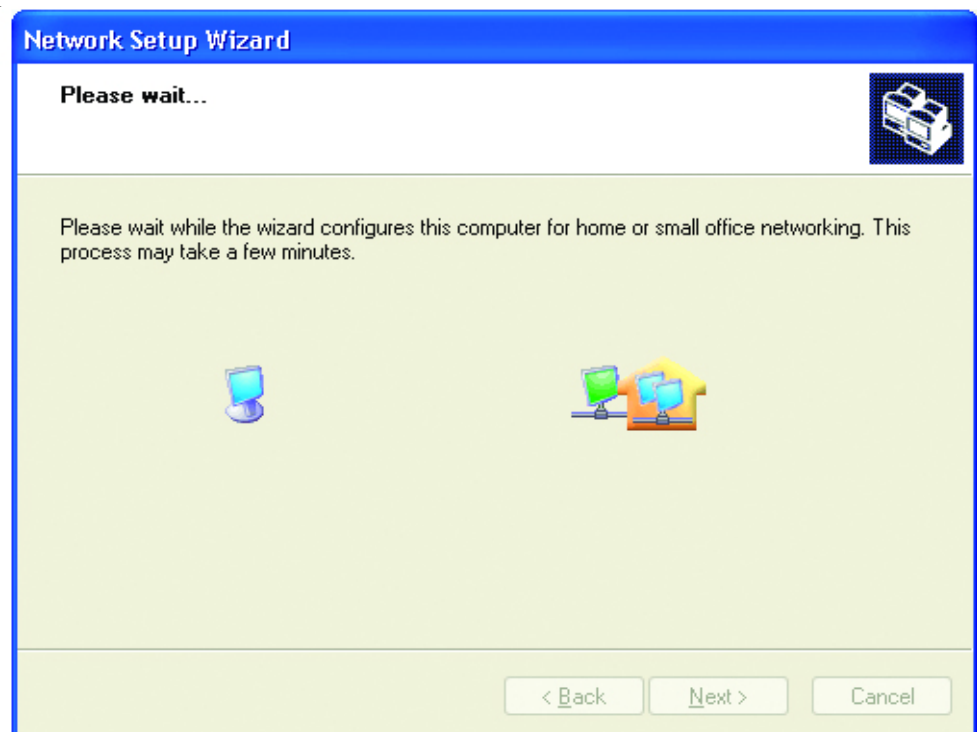
Networking Basics

Please wait while the **Network Setup Wizard** applies the changes.



When the changes are complete, click **Next**

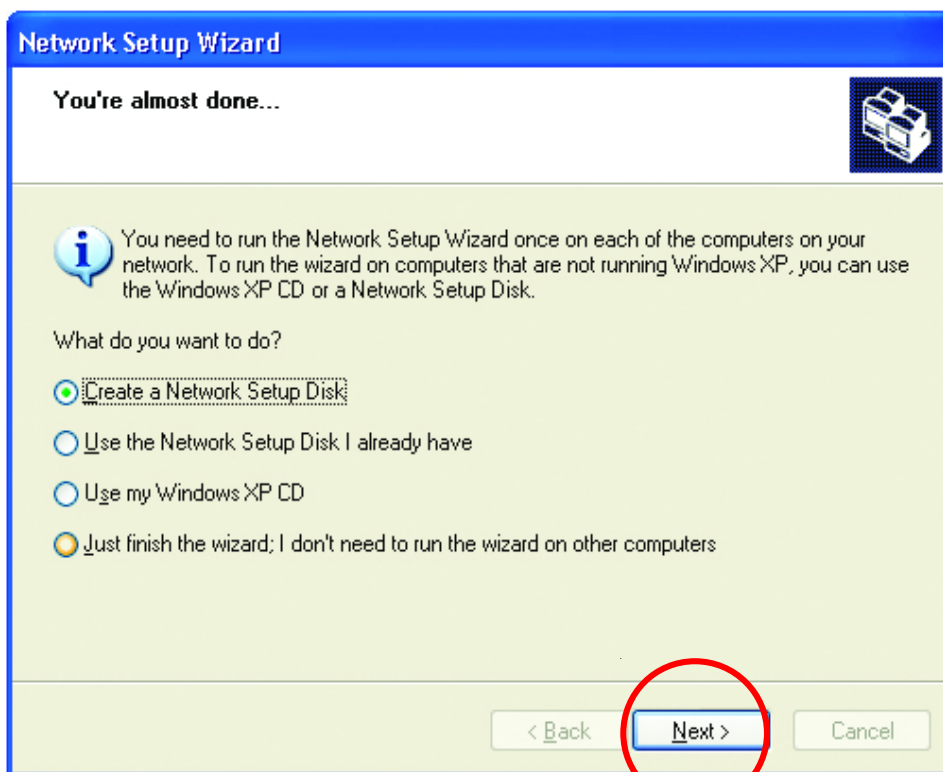
Please wait while the **Network Setup Wizard** configures the computer. This may take a few minutes.



Networking Basics

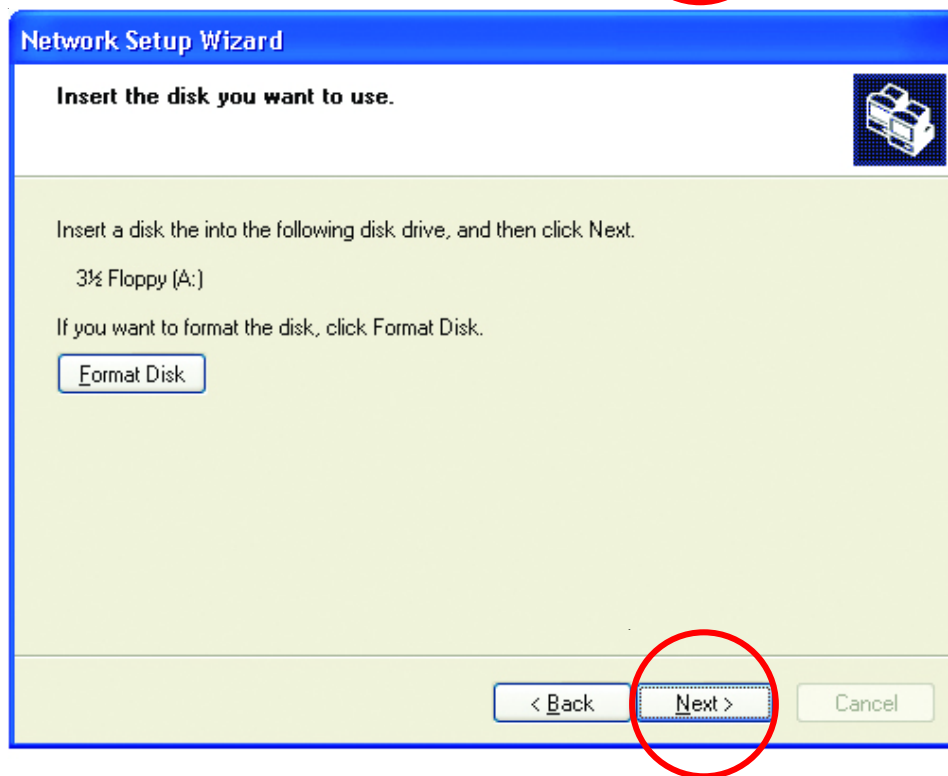
In the window below, select the best option. In this example, **Create a Network Setup Disk** has been selected. You will run this disk on each of the computers on your network.

Click **Next**



Insert a disk into the Floppy Disk Drive, in this case drive **A**.

Click **Next**



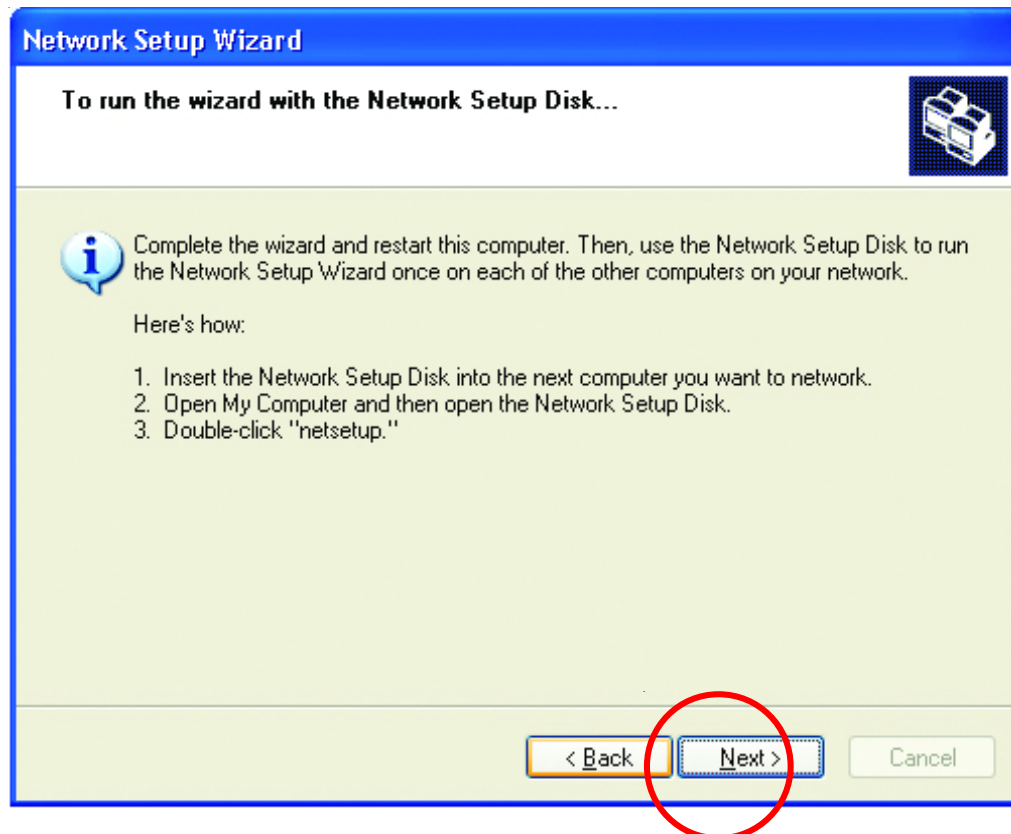
Format the disk if you wish, and click **Next**

Networking Basics

Please wait while the **Network Setup Wizard** copies the files.



Please read the information under **Here's how** in the screen below. After you complete the **Network Setup Wizard** you will use the **Network Setup Disk** to run the **Network Setup Wizard** once on each of the computers on your network. To continue click **Next**.

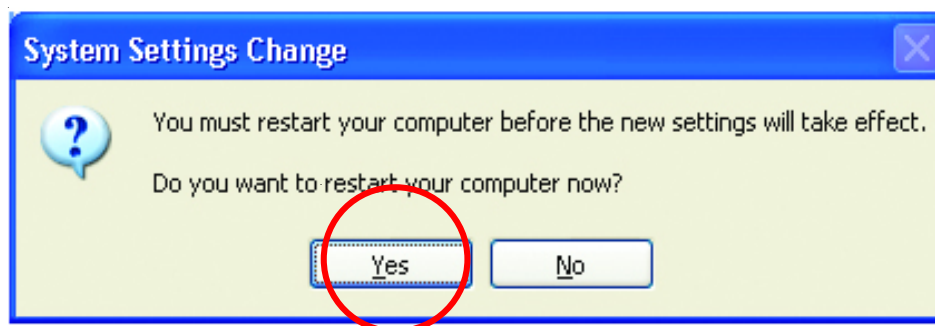


Networking Basics

Please read the information on this screen, then click **Finish** to complete the **Network Setup Wizard**.



The new settings will take effect when you restart the computer. Click **Yes** to restart the computer.



You have completed configuring this computer. Next, you will need to run the **Network Setup Disk** on all the other computers on your network. After running the **Network Setup Disk** on all your computers, your new wireless network will be ready to use.

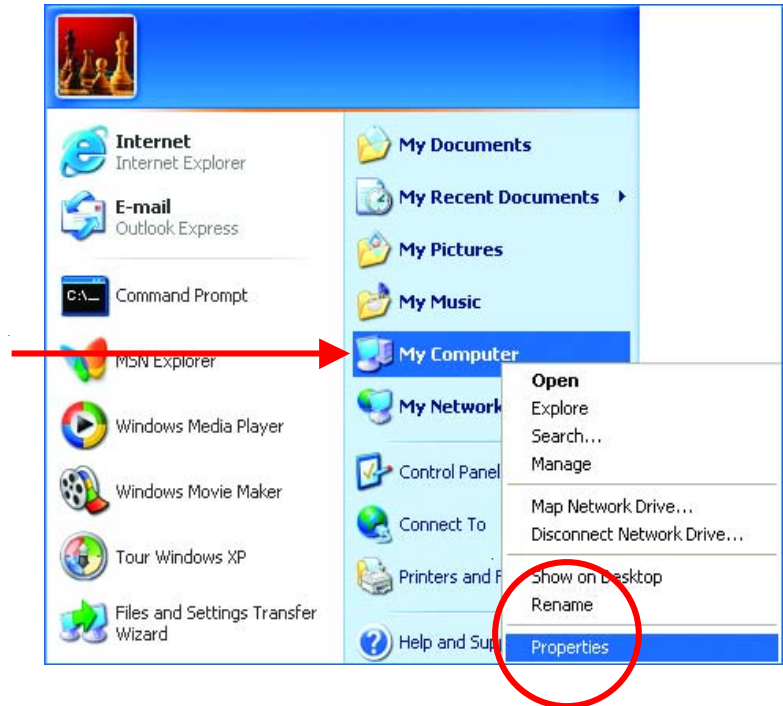
Networking Basics

Naming your Computer

To name your computer, please follow these directions:

In Windows XP:

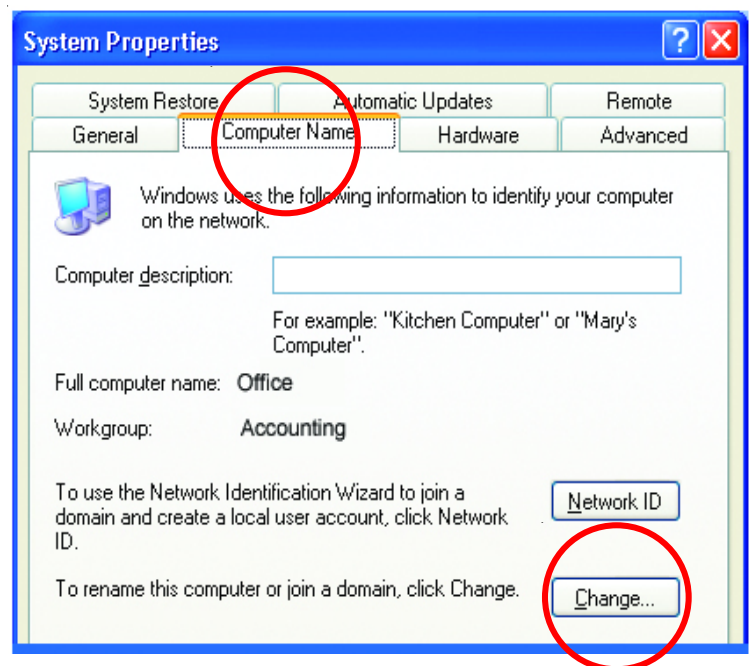
- Click Start (in the lower left corner of the screen)
- Right-click on My Computer
- Select Properties and click



- Select the Computer Name Tab in the System Properties window.
- You may enter Computer Description if you wish, this field is optional.

To rename the computer and join the domain,

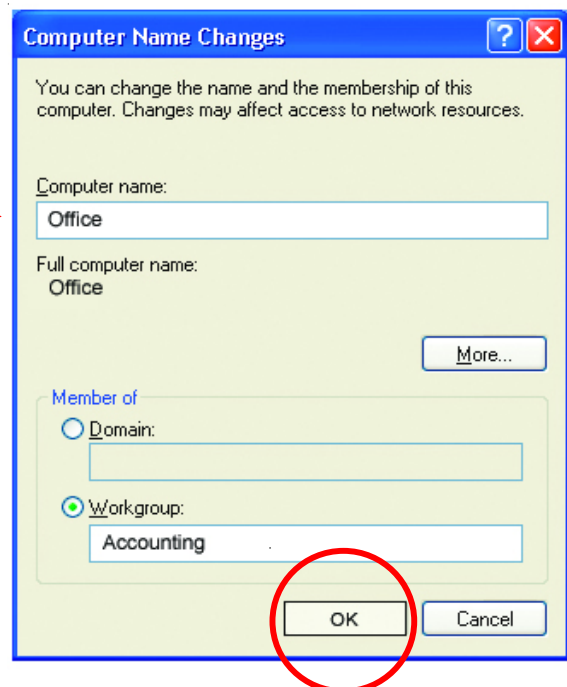
- Click Change



Networking Basics

Naming your Computer

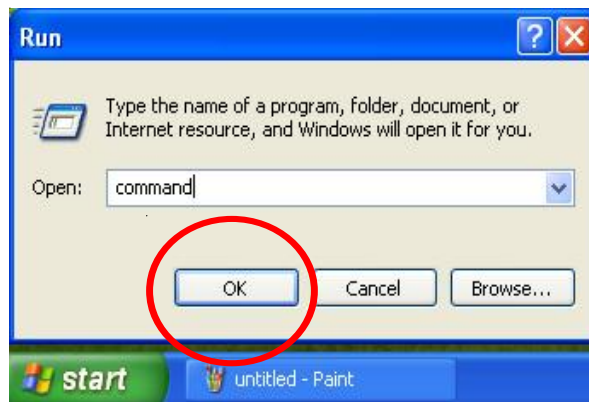
- In this window, enter the computer name.
- Select Workgroup and enter the name of the Workgroup.
- All computers on your network must have the same Workgroup name.
- Click OK



Checking the IP Address in Windows XP/2000
Go to Start>Run



Type in Command



Type **ipconfig /all** at the prompt. Click **Enter**. All the configuration settings are displayed as shown below.

```

C:\> Command Prompt

F:\Documents and Settings\lab4>ipconfig /all

Windows IP Configuration

    Host Name . . . . . : iqc4
    Primary Dns Suffix . . . . . :
    Node Type . . . . . : Unknown
    IP Routing Enabled. . . . . : No
    WINS Proxy Enabled. . . . . : No

Ethernet adapter Wireless Network Connection:

    Connection-specific DNS Suffix . :
    Description . . . . . : D-Link Adapter
    Adapter
    Physical Address. . . . . : 00-06-25-53-85-31
    Dhcp Enabled. . . . . : No
    IP Address. . . . . : 192.168.0.23
    Subnet Mask . . . . . : 255.255.255.0
    Default Gateway . . . . . : 192.168.0.1
    DNS Servers . . . . . : 10.10.10.40
                           192.152.81.1

F:\Documents and Settings\lab4>

```

Networking Basics

Checking the IP Address in Windows XP/2000

Type **ipconfig /renew** at the prompt to get a new IP Address. Click **Enter**. The new IP Address is shown below

```

C:\> Command Prompt

Microsoft Windows XP [Version 5.1.2600]
(C) Copyright 1985-2001 Microsoft Corp.

F:\Documents and Settings\lab4>ipconfig /renew_

Adapter

    Physical Address. . . . . : 00-06-25-53-85-31
    Dhcp Enabled. . . . . : No
    IP Address. . . . . : 192.168.0.23
    Subnet Mask . . . . . : 255.255.255.0
    Default Gateway . . . . . : 192.168.0.1
    DNS Servers . . . . . : 10.10.10.40
                           192.152.81.1

```

The new IP Address is shown above.

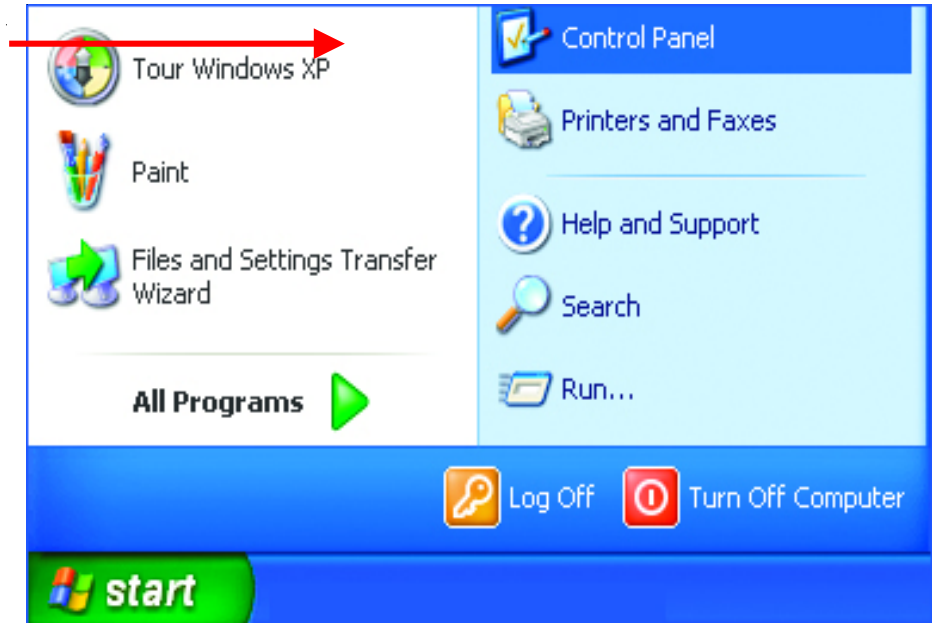
(Windows 98/ME users: go to **Start** > **Run**. Type **Command**. Type **winipcfg** at the prompt. Click **Release and Renew** to obtain a new IP Address.)

Assigning a Static IP Address

Note: Residential Gateways/Broadband Routers will automatically assign IP Addresses to the computers on the network, using DHCP (Dynamic Host Configuration Protocol) technology. If you are using a DHCP-capable Gateway/Router you will not need to assign Static IP Addresses.

If you are not using a DHCP capable Gateway/Router, or you need to assign a Static IP Address, please follow these instructions:

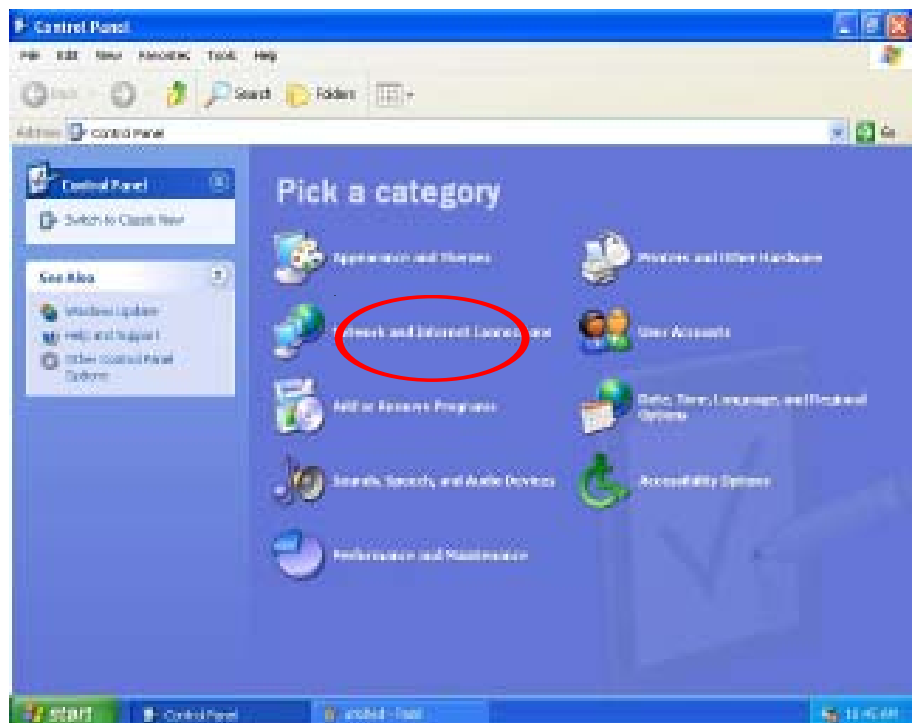
- Go to Start
- Click on Control Pane



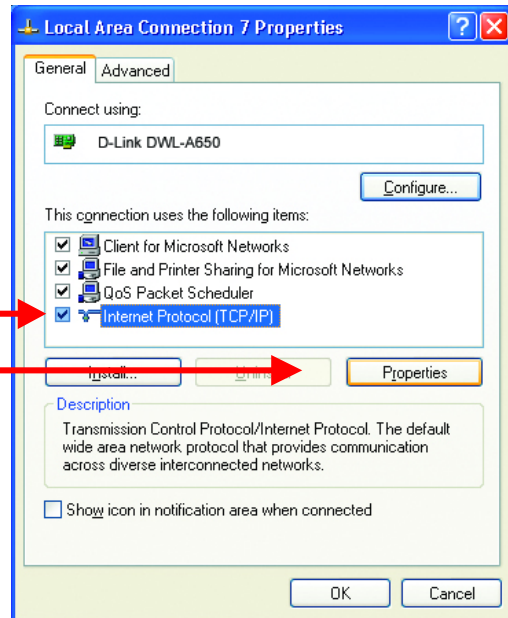
Networking Basics

Assigning a Static IP Address

- Click on Network Connections

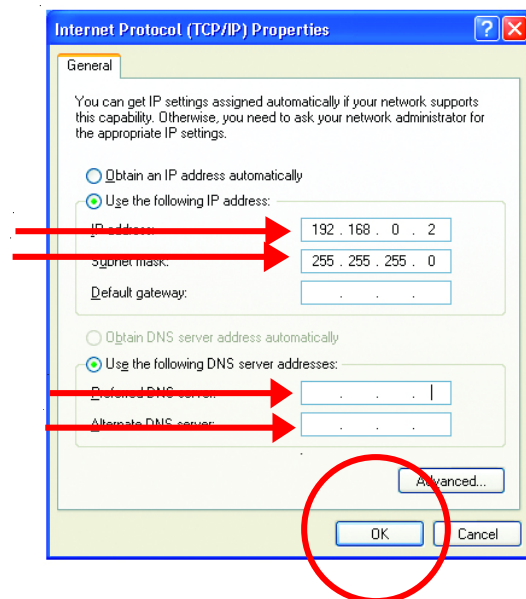


- Highlight **Internet Protocol (TCP/IP)**
- Click **Properties**



- Select **Use the following IP address** in the **Internet Protocol (TCP/IP) Properties** window
- Input your **IP address and subnet mask**. (The IP Addresses on your network must be within the same range. For example, if one computer has an IP Address of 192.168.0.2, the other computers should have IP Addresses that are sequential, like 192.168.0.3 and 192.168.0.4. The subnet mask must be the same for all the computers on the network.)
- Input your **DNS server addresses**. (Note: If you are entering a DNS server, you must enter the IP Address of the Default Gateway.)

The DNS server information will be provided by your ISP (Internet Service Provider)



- Click **OK**
- You have completed the assignment of a Static IP Address. (You do not need to assign a Static IP Address if you have a DHCP-capable Gateway/Router.)

Networking Basics

Other Tasks

For help with other tasks in home or small office networking, see **Using the Shared Documents** folder and **Sharing files and folders** in the **Help and Support Center** in Microsoft Windows XP.

11. Technical Specifications

Printer Connection

Printer Port: IEEE 1284 standard bidirectional parallel interface with 36-pin connector.

Bidirectional Communication: Hewlett-Packard PJI (Printer Job Language) standard for bidirectional communication.

Network Connection

Network Standards: IEEE 802.3 10Base-T Ethernet

Network Data Transfer Rate: 10Mbps (megabits per second)

Network Connector: RJ-45 connector for 10Base-T twisted pair connection

Network Protocols

Ethernet Frame Types: 802.2, 802.3, Ethernet II, SNAP (auto-switching)

Transport Protocols: TCP/IP, NetBEUI, AppleTalk/EtherTalk

TCP/IP Protocols Supported: BOOTP, SNMP, Telnet, TFTP, FTP, LPD, RARP, DHCP

Management and Diagnostics

Standard: SNMP

MIBs: MIB-II (RFC 1213)

Diagnostic LED Indicators: Pw, Lk/Act, LPT

Environmental and Physical

Power Supply: External power supply providing 7.5VDC/ 1A

Dimensions: 3.65" x 2.3" x 1" (92.8mm x 58mm x 25.3mm)

Weight: approx. 2.3 oz. (65g)

Operating Temperature: 32 to 122°F (0 to 50°C)

Storage Temperature: -13 to 131°F (-25 to 55°C)

Humidity: 5% to 95% non-condensing

Emissions: FCC Class A, CISPR 22 Class A, VCCI Class 1, AS/NZS 3548:1995 Class A

Safety: UL (UL 1950), CSA (CSA950), TUV/GS (EN60950)

12. Contacting Technical Support

You can find the most recent software and user documentation on the D-Link website.

D-Link provides free technical support for customers within the United States for the duration of the warranty period on this product.

U.S. customers can contact D-Link technical support through our web site, or by phone.

D-Link Technical Support over the Telephone:

(877) 453-5465

24 hours a day, seven days a week.

D-Link Technical Support over the Internet:

<http://support.dlink.com>

When contacting technical support, please provide the following information:

- *Serial number of the unit*
- *Model number or product name*
- *Software type and version number*

13. Warranty

Subject to the terms and conditions set forth herein, D-Link Systems, Inc. ("D-Link") provides this Limited warranty for its product only to the person or entity that originally purchased the product from:

- D-Link or its authorized reseller or distributor and
- Products purchased and delivered within the fifty states of the United States, the District of Columbia, U.S. Possessions or Protectorates, U.S. Military Installations, addresses with an APO or FPO.

Limited Warranty: D-Link warrants that the hardware portion of the D-Link products described below will be free from material defects in workmanship and materials from the date of original retail purchase of the product, for the period set forth below applicable to the product type ("Warranty Period"), except as otherwise stated herein.

1-Year Limited Warranty for the Product(s) is defined as follows:

- Hardware (excluding power supplies and fans) One (1) Year
- Power Supplies and Fans One (1) Year
- Spare parts and spare kits Ninety (90) days

D-Link's sole obligation shall be to repair or replace the defective Hardware during the Warranty Period at no charge to the original owner or to refund at D-Link's sole discretion. Such repair or replacement will be rendered by D-Link at an Authorized D-Link Service Office. The replacement Hardware need not be new or have an identical make, model or part. D-Link may in its sole discretion replace the defective Hardware (or any part thereof) with any reconditioned product that D-Link reasonably determines is substantially equivalent (or superior) in all material respects to the defective Hardware. Repaired or replacement Hardware will be warranted for the remainder of the original Warranty Period from the date of original retail purchase. If a material defect is incapable of correction, or if D-Link determines in its sole discretion that it is not practical to repair or replace the defective Hardware, the price paid by the original purchaser for the defective Hardware will be refunded by D-Link upon return to D-Link of the defective Hardware. All Hardware (or part thereof) that is replaced by D-Link, or for which the purchase price is refunded, shall become the property of D-Link upon replacement or refund.

Limited Software Warranty: D-Link warrants that the software portion of the product ("Software") will substantially conform to D-Link's then current functional specifications for the Software, as set forth in the applicable documentation, from the date of original retail purchase of the Software for a period of ninety (90) days ("Warranty Period"), provided that the Software is properly installed on approved hardware and operated as contemplated in its documentation. D-Link further warrants that, during the Warranty Period, the magnetic media on which D-Link delivers the Software will be free of physical defects. D-Link's sole obligation shall be to replace the non-conforming Software (or defective media) with software that substantially conforms to D-Link's functional specifications for the Software or to refund at D-Link's sole discretion. Except as otherwise agreed by D-Link in writing, the replacement Software is provided only to the original licensee, and is subject to the terms and conditions of the license granted by D-Link for the Software. Software will be warranted for the remainder of the original Warranty Period from the date of original retail purchase. If a material non-conformance is incapable of correction, or if D-Link determines in its sole discretion that it is not practical to replace the non-conforming Software, the price paid by the original licensee for the non-conforming Software will be refunded by D-Link; provided that the non-conforming Software (and all copies thereof) is first returned to D-Link. The license granted respecting any Software for which a refund is given automatically terminates.

Non-Applicability of Warranty: The Limited Warranty provided hereunder for hardware and software of D-Link's products, will not be applied to and does not cover any product purchased through the inventory clearance or liquidation sale or other sales in which D-Link, the sellers, or the liquidators expressly disclaim their warranty obligation pertaining to the product and in that case, the product is being sold "As-Is" without any warranty whatsoever including, without limitation, the Limited Warranty as described herein, notwithstanding anything stated herein to the contrary.

Submitting A Claim: Any claim under this limited warranty must be submitted in writing before the end of the Warranty Period to an Authorized D-Link Service Office.

- The customer must submit as part of the claim a written description of the Hardware defect or Software nonconformance in sufficient detail to allow D-Link to confirm the same.
- The original product owner must obtain a Return Material Authorization ("RMA") number from the Authorized D-Link Service Office and, if requested, provide written proof of purchase of the product (such as a copy of the dated purchase invoice for the product) before the warranty service is provided.
- After an RMA number is issued, the defective product must be packaged securely in the original or other suitable shipping package to ensure that it will not be damaged in transit, and the RMA number must be prominently marked on the outside of the package. Do not include any manuals or accessories in the shipping package. D-Link will only replace the defective portion of the Product and will not ship back any accessories.
- The customer is responsible for all shipping charges to D-Link. No Charge on Delivery ("COD") is allowed. Products sent COD will either be rejected by D-Link or become the property of D-Link. Products should be fully insured by the customer and shipped to **D-Link Systems, Inc., 53 Discovery Drive, Irvine, CA 92618**. D-Link will not be held responsible for any packages that are lost in transit to D-Link. The repaired or replaced packages will be shipped via UPS Ground or any common carrier selected by D-Link, with shipping charges prepaid. Expedited shipping is available if shipping charges are prepaid by the customer.

D-Link may reject or return any product that is not packaged and shipped in strict compliance with the foregoing requirements, or for which an RMA number is not visible from the outside of the package. The product owner agrees to pay D-Link's reasonable handling and return shipping charges for any product that is not packaged and shipped in accordance with the foregoing requirements, or that is determined by D-Link not to be defective or non-conforming.

What Is Not Covered: This limited warranty provided by D-Link does not cover: Products, if in D-Link's judgment, have been subjected to abuse, accident, alteration, modification, tampering, negligence, misuse, faulty installation, lack of reasonable care, repair or service in any way that is not contemplated in the documentation for the product, or if the model or serial number has been altered, tampered with, defaced or removed; Initial installation, installation and removal of the product for repair, and shipping costs; Operational adjustments covered in the operating manual for the product, and normal maintenance; Damage that occurs in shipment, due to act of God, failures due to power surge, and cosmetic damage; Any hardware, software, firmware or other products or services provided by anyone other than D-Link; Products that have been purchased from inventory clearance or liquidation sales or other sales in which D-Link, the sellers, or the liquidators expressly disclaim their warranty obligation pertaining to the product. Repair by anyone other than D-Link or an Authorized D-Link Service Office will void this Warranty.

Disclaimer of Other Warranties: EXCEPT FOR THE LIMITED WARRANTY SPECIFIED HEREIN, THE PRODUCT IS PROVIDED "AS-IS" WITHOUT ANY WARRANTY OF ANY KIND WHATSOEVER INCLUDING, WITHOUT LIMITATION, ANY WARRANTY OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NON-INFRINGEMENT. IF ANY IMPLIED WARRANTY CANNOT BE DISCLAIMED IN ANY TERRITORY WHERE A PRODUCT IS SOLD, THE DURATION OF SUCH IMPLIED WARRANTY SHALL BE LIMITED TO NINETY (90) DAYS. EXCEPT AS EXPRESSLY COVERED UNDER THE LIMITED WARRANTY PROVIDED HEREIN, THE ENTIRE RISK AS TO THE QUALITY, SELECTION AND PERFORMANCE OF THE PRODUCT IS WITH THE PURCHASER OF THE PRODUCT.

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CE Mark Warning: This is a Class A product. In a domestic environment, this product may cause radio interference, in which case the user may be required to take adequate measures.

FCC Statement: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with this user's guide, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.