

D-Link DP-311U

Wireless Print Server

Manual

D-Link

Building Networks for People

Contents

Package Contents	3
Introduction	4
Wireless Basics	8
Setting up the DP-311U	10
Getting Started	12
Using the Web Configuration	13
TCP/IP Printing for Windows XP	21
TCP/IP Printing for Windows 2000	29
TCP/IP Printing for Windows 98SE/Me	38
Unix/Linux Printing (See PS Admin Manual on CD-ROM)	49
Setting up AppleTalk or LPR Printing in MAC OSX	50
Setting up AppleTalk Printing in MAC OS9	55
Networking Basics	58
Technical Specifications	70
Contacting Technical Support	71
Warranty and Registration	72
Appendix: DP-311U Printer Compatibility List	75

Package Contents

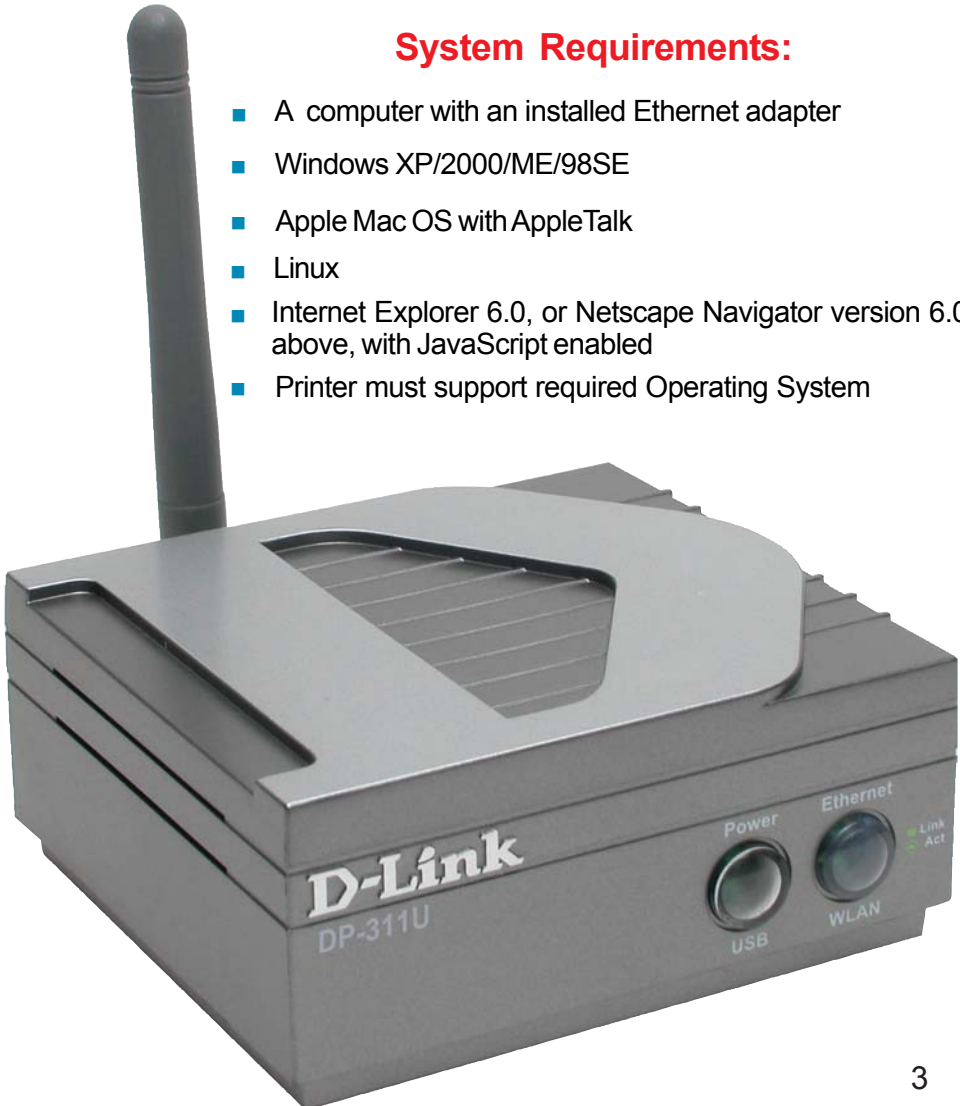
Contents of Package:

- **D-Link DP-311U**
Fast Ethernet Print Server
- Manual and Warranty on CD
- Printed *Quick Installation Guide*

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

System Requirements:

- A computer with an installed Ethernet adapter
- Windows XP/2000/ME/98SE
- Apple Mac OS with AppleTalk
- Linux
- Internet Explorer 6.0, or Netscape Navigator version 6.0 or above, with JavaScript enabled
- Printer must support required Operating System



Introduction

The D-Link DP-311U Print Server is an 802.11b wireless print server that also connects to your Ethernet/Fast Ethernet network. Now you can locate USB printer services virtually anywhere in your home or office. The DP-311U manages the flow of print files from workstations or file servers to connected printers, delivering print jobs to printers much faster than a file server on a PC acting as a print server can. With one USB (v1.1) port, the DP-311U can connect to almost any printer with a USB port.

The DP-311U includes easy-to-use software to install on most Windows-based networks. Protocol support for TCP/IP, NetBEUI, and AppleTalk are provided to ensure seamless connection to major networking Operating Systems.

The DP-311U has a built in Web-Based management feature that allows users to easily configure and manage print queues through TCP/IP. The DP-311U also supports Telnet as an alternative method to configure the unit.

The DP-311U improves network printing services in the following ways:

- The DP-311U delegates print jobs to the connect USB printer. 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 Print Server without increasing the load of another workstation or server.
- The DP-311U's USB port, version 1.1, can transmit to high-speed laser printers much faster than a PC's parallel printer port.
- Because the DP-311U is very portable and inexpensive compared to a PC-based print server, and the Print Server connects to your file servers through the network, printers can be deployed to locations of maximum convenience to users.

The DP-311U offers extraordinary flexibility, operating with all major network operating systems and protocols:

- **TCP/IP**
UNIX lpr/lpd
Windows NT/2000, Windows 95/98SE/ME, Windows XP
NetWare 5.x NDPS LPR Remote Printing
- **NetBEUI**
Windows 2000/XP, Windows 95/98SE/ME, Microsoft LAN Manager, IBM LAN Server
- **AppleTalk**
MacOS EtherTalk

Windows-based setup and administration software, *PS Admin*, is supplied with the Print Server, making configuration and management quick and easy. The Print Server also supports configuration and management via the Telnet protocol for networks without Windows-compatible systems.

External Features

Port Connectors

The DP-311U's USB port is located on its rear panel. The USB can be configured using the *PS Admin* program or the print server's Telnet interface. (See the *PS Admin User's Guide*, available on the CD that came with the DP-311U, for information about configuring the print server's ports.) The Print Server also supports web configuration permitting users to configure settings through the web browser. The default IP Address is 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 subnet as the Print Server's IP Address for the two devices to communicate. (For example, if your Print Server's IP Address is 192.168.0.10, with a subnet mask of 255.255.255.0, then your computer's IP Address should be 192.168.0.x, where x is a value between 1-254, excluding 10.)

Front Panel LED Indicators

■ Power / USB

Steady or flashing green light confirms that the Print Server is powered **ON**. The LED indicator lights up to show that the Print Server is transferring print data through the USB port.

■ Ethernet/WLAN

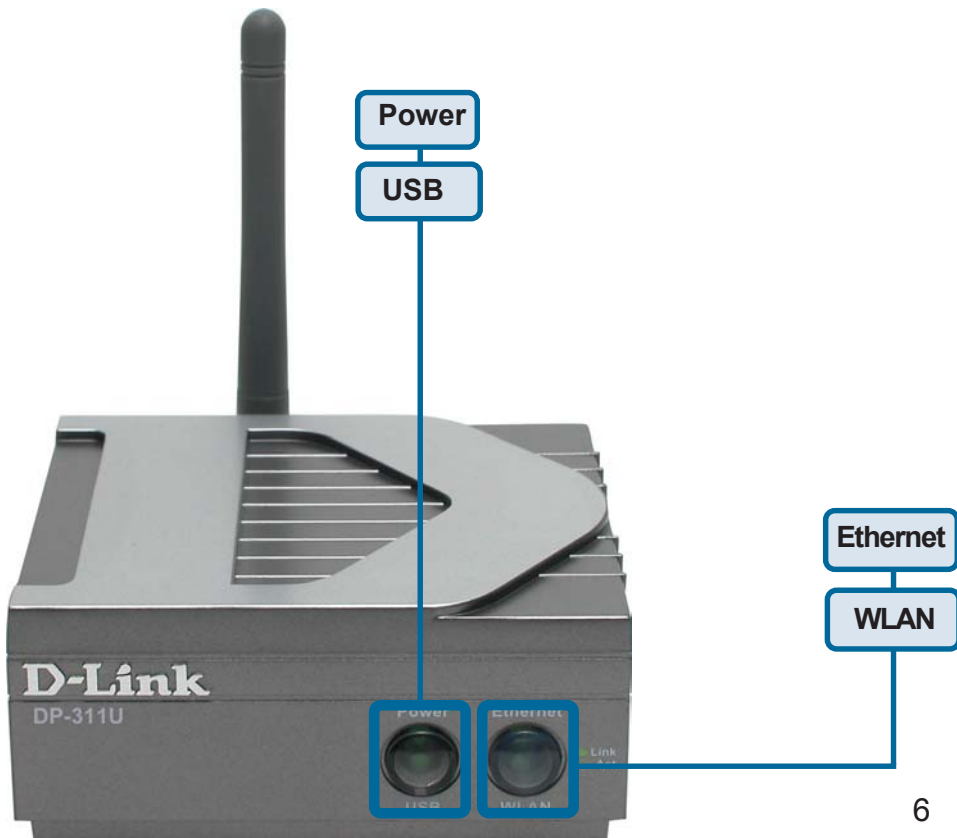
Steady or flashing green light confirms that the Print Server has a good connection to the Ethernet or Fast Ethernet network.

The indicator blinks off briefly to indicate that the Print Server is receiving or transmitting from the network.

■ LED Indicators

The front panel of the Print Server features four LED indicators:

These four indicators are also used by the Print Server's Power-**ON** Self Test (POST) to indicate any hardware failures.



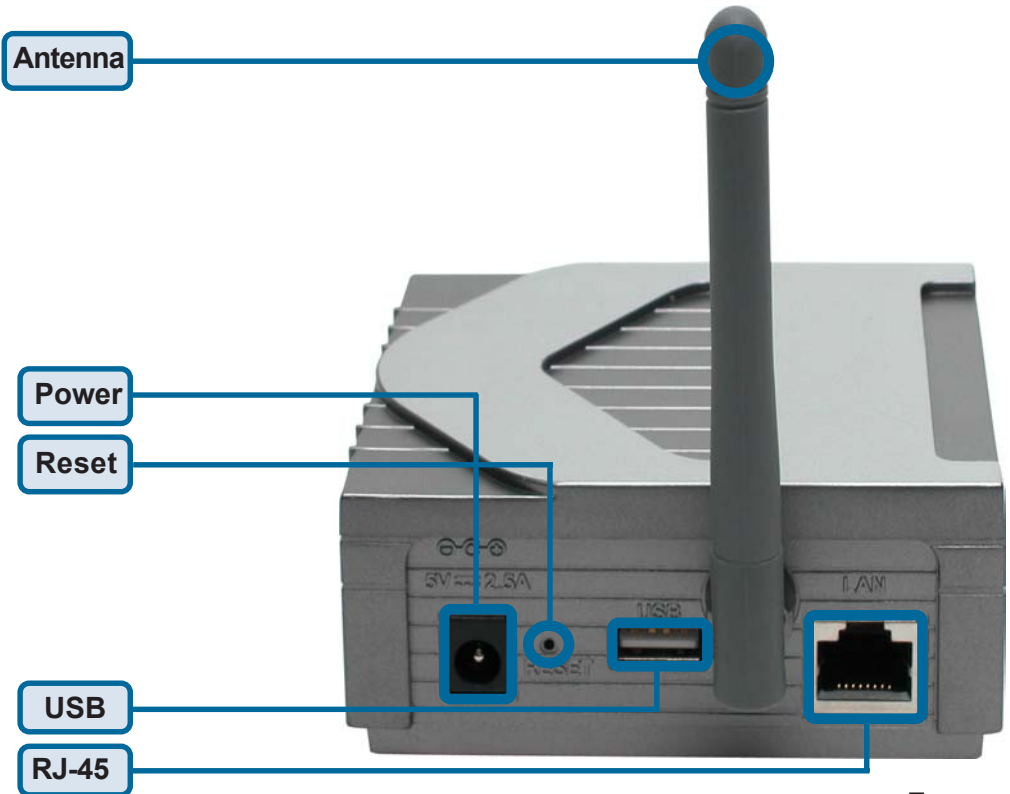
Rear Panel Connectors

■ Network Cable Connector

The Print Server's rear panel features an RJ-45 connector for connection to 10Base-T Ethernet cabling or 100Base-TX Fast Ethernet cabling (which should be Category 5 twisted-pair cable). The port supports the NWay protocol, allowing the Print Server to automatically detect or negotiate the transmission speed of the network.

■ DC Power Connector

The DC power input connector is located on the Print Server's rear panel and is labeled DC 5V.



Wireless Basics

D-Link wireless products are based on industry standards to provide easy-to-use and compatible high-speed wireless connectivity within your home, business or public access wireless networks. D-Link wireless products will allow you access to the data you want, when and where you want it. You will be able to enjoy the freedom that wireless networking brings.

A WLAN is a cellular computer network that transmits and receives data with radio signals instead of wires. WLANs are used increasingly in both home and office environments, and public areas such as airports, coffee shops and universities. Innovative ways to utilize WLAN technology are helping people to work and communicate more efficiently. Increased mobility and the absence of cabling and other fixed infrastructure have proven to be beneficial for many users.

Wireless users can use the same applications they use on a wired network. Wireless adapter cards used on laptop and desktop systems support the same protocols as Ethernet adapter cards.

People use wireless LAN technology for many different purposes:

Mobility - Productivity increases when people have access to data in any location within the operating range of the WLAN. Management decisions based on real-time information can significantly improve worker efficiency.

Low Implementation Costs – WLANs are easy to set up, manage, change and relocate. Networks that frequently change can benefit from WLANs ease of implementation. WLANs can operate in locations where installation of wiring may be impractical.

Installation and Network Expansion - Installing a WLAN system can be fast and easy and can eliminate the need to pull cable through walls and ceilings. Wireless technology allows the network to go where wires cannot go - even outside the home or office.

Scalability – WLANs can be configured in a variety of topologies to meet the needs of specific applications and installations. Configurations are easily changed and range from peer-to-peer networks suitable for a small number of users to larger infrastructure networks to accommodate hundreds or thousands of users, depending on the number of wireless devices deployed.

Inexpensive Solution - Wireless network devices are as competitively priced as conventional Ethernet network devices.

Wireless Basics (cont.)

Standards-Based Technology

Based on the IEEE **802.11b** standard, the DP-311U is interoperable with existing compatible 2.4GHz wireless technology with data transfer speeds of up to 11Mbps when used with other D-Link *Air* devices.

Installation Considerations

The D-Link *Air* DP-311U lets you print through your network, using a wireless connection, from virtually anywhere within its operating range. Keep in mind, however, that the number, thickness and location of walls, ceilings, or other objects that the wireless signals must pass through, may limit the range. Typical ranges vary depending on the types of materials and background RF (radio frequency) noise in your home or business. The key to maximizing wireless range is to follow these basic guidelines:

1. Keep the antenna of the DP-311U in an upright position
2. Keep the number of walls and ceilings between the DP-311U and other network devices to a minimum - each wall or ceiling can reduce your D-Link wireless product's range from 3-90 feet (1-30 meters.) Position your devices so that the number of walls or ceilings is minimized.
3. Be aware of the direct line between network devices. A wall that is 1.5 feet thick (.5 meters), at a 45-degree angle appears to be almost 3 feet (1 meter) thick. At a 2-degree angle it looks over 42 feet (14 meters). Position devices so that the signal will travel straight through a wall or ceiling (instead of at an angle) for better reception.
4. Building Materials can impede the wireless signal - a solid metal door or aluminum studs may have a negative effect on range. Try to position wireless devices and computers with wireless adapters so that the signal passes through drywall or open doorways and not other materials.
5. Keep your product away (at least 3-6 feet or 1-2 meters) from electrical devices or appliances that generate extreme RF noise.

Setting up the DP-311U

Installing the Print Server

WARNING: Configuration problems may result if the Print Server is powered up without first establishing its network connection. Follow this procedure to avoid complications at the configuration stage.

1. Confirm proper operation of the printer to be connected to the DP-311U,
2. When you have confirmed proper operation of the USB printer, switch it the power **OFF**.
3. Confirm that your network is operating normally.
4. Connect the DP-311U RJ-45 Connector to the network, using a straight through CAT5 cable..
5. While the printer is powered **OFF**, install the USB printer cable to connect the printer's USB port to the USB port of the Print Server.
6. Switch on the connected printer.
7. Plug the AC power adapter's DC output plug into the DC 5V power socket on the rear panel of the Print Server.
8. Plug the power adapter into a power outlet. This will supply power to the Print Server, as it has no external power switch. The green Power LED on the Print Server's front panel should illuminate steadily, and the Print Server's Self-Test will proceed.

Power ON Self-Test

Every DP-311U has been factory-tested to operate properly.

When the DP-311U is powered **ON**, it also automatically performs a Self-Test on each of its major components. The final result of the Self-Test is signaled by the state of the USB LED indicator following the Self-Test. Preliminary to the actual component tests, the LED indicators are tested to confirm their steady and flashing operation.

Immediately after power-up, all three of the green LEDs should illuminate steadily for several seconds. Then the USB LED should flash **ON** three times. Irregularity of the LED during this LED test may mean there is a problem with the LED itself.

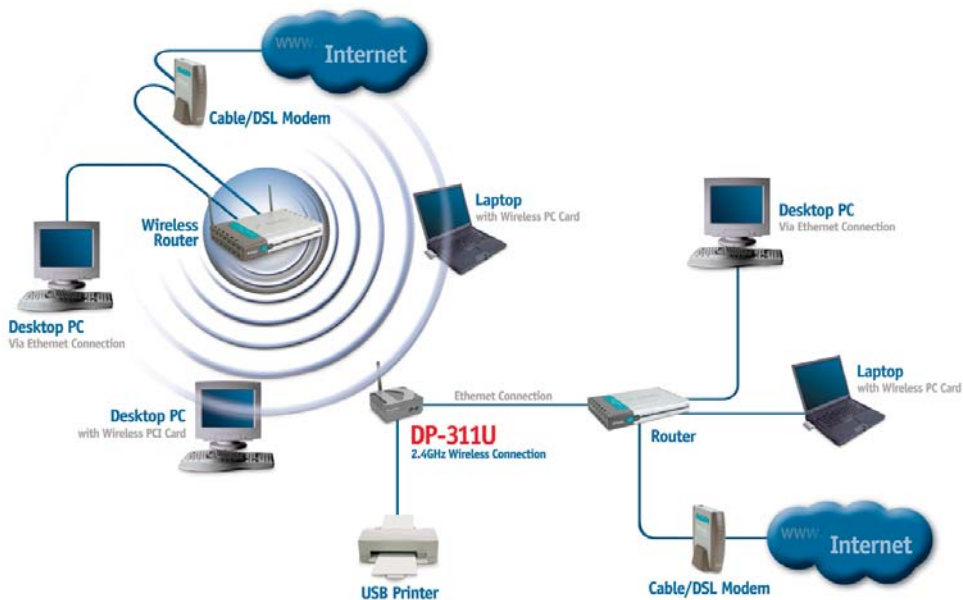
The actual component tests immediately follow the LED tests. A normal (no fault) result is signaled by a flashing of the USB LED, followed by a darkened LED.

If the Self-Test routine detects any component error, then following the LED tests the Self-Test will halt and the LEDs will continuously signal the error according to the following table. In the event of any such error signal, contact your dealer for correction of the faulty unit.

USB LED	Faulty Component
low speed flashing	Need to reload firmware
steady ON	DRAM error
1 long 2 short	Timer INT error
1 long 3 short	Flash Protected
1 long 5 short	Flash Erase/Program error
1 long 6 short	LAN Controller error
1 long 7 short	LAN memory error
1 long 11 short	LAN I/O base error
1 long 15 short	Wireless LAN card detect error
1 long 16 short	Wireless LAN card CIS error
1 long 17short	Wireless LAN card I/O error
1 long 18 short	USB error

Getting Started

Below is a sample network using the DP-311U. The DP-311U has a built-in Web-based management feature that allows users to easily configure and manage their print queue through TCP/IP.



Warning!

Only a USB printer may be connected to the USB port of the DP-311U. Do not connect any other USB devices to the USB port of the DP-311U; to do so, may damage the unit and will void the warranty for this product.

*For a list of printers that are compatible with the DP-311U, please see the **Appendix** in this manual. The compatibility list is not comprehensive. Even if it is not included in the list, your printer may be compatible with the DP-311U.*

Using the Web Configuration

Open your web browser and type **http://192.168.0.10** in the address box, and press <Enter>. This set of numbers is the default IP Address of your Print Server. **Please note that the PC's IP Address must correspond with the Print Server's IP Address in the same segment for the two devices to communicate.**



When you entered the default IP address, the main screen of the Print Server's configuration will appear (see below). In addition to the product information, you can access and control the Print Server's configuration through four links on the top of this main screen: **Home**, **Configuration**, **Network**, **Tools**, and **Help**.

A screenshot of the D-Link DP-311U Wireless USB Print Server web configuration page. The page has a blue header with the D-Link logo and the product name "DP-311U Wireless USB Print Server". Below the header is a navigation bar with five tabs: "Home", "Configuration", "Network", "Tools", and "Help". The "Home" tab is selected. The main content area is divided into two sections: "System Status" and "Printer Status".
System Status
Server Name : PS-116688
Model : DP-311U
Hardware Version : A1
Firmware Version : 1.10d (2003-02-25)
MAC Address : 00 FF 27 ED 55 25
IP Address : 192.168.0.10 (Manual)
Up Time : 0 days, 00:09:57
Printer Status
USB
Printer Name : PS-116688-U1
Printer Status : Off line
There is a "Refresh" button below the printer status information.

Home

Click on **Home** tab from the tools bar of the main screen to display information of the DP-311U's **System Status** and **Printer Status**.

System Status and Printer Status

When you choose and enter the **Home** tab, it will show you the system information (see below), providing general information regarding the Print Server. Click on the <Refresh> button to acquire the most updated information. Once a printer is connected to the Print Server, the Printer Status will show [Online].



Server Name: The name assigned to the Print Server.

Model: The model of the Print Server.

Hardware Version: The version of the hardware on the Print Server.

Firmware Version: The version of the firmware and release date on the Print Server.

MAC Address: The MAC address of the Ethernet port.

IP Address: The IP Address of the Print Server.

Up Time: The length of time the Print Server has been up.

Configuration

Click on **Configuration** tab from the tools bar of the main screen to enter the Configuration Page; it provides the configuration options that include **System Device and Port Setting**

System Device and Port Setting

This option will show you settings required to configure the DP-311U Print Server. Consult your printers owner manual for the PJL(Printer Job Language) and print speed supported on your printer. Click the <Save> button on the bottom of the configuration page to ensure the settings are updated and saved.

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DP-311U
Wireless USB Print Server

Home Configuration Network Tools Help

System Device

Server Name : PS-116688

Location :

Admin Contact :

Password : New Password :

Confirm Again :

Port Setting

USB : Port Name : PS-116688-U1

Description :

P.J.L Printer : No

Wireless Interface

Connection Mode : Infrastructure Ad-Hoc

ESS-ID : D-Link Wireless

Wireless Channel : 11

Transmission Rate : Fully Automatic

WEP Key Encryption : Disable 64 bits 128 bits

WEP Key : ASCII HEX

Confirm WEP Key :

Save

Server Name: The name assigned to the Print Server.

Location: (optional) Input a comment indicating where the Print Server is located.

Admin Contact: (Optional) Administrator name for the Print Server.

Password: By default the DP-311U does not have a password. This is a security risk; it is recommended that you enter a password for the Print Server.

Port Name: This is the assigned name for the USB port.

Description: (Optional) A brief description for the USB 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.

Connection Mode: Ad-Hoc refers to two or more 802.11b wireless devices that communicate directly with one another without using an access point or any connection to a wired network. Infrastructure refers to an 802.11 network in which wireless devices communicate with each other by first going through an Access Point (AP) or wireless router.

ESS-ID: The workgroup name of your Wireless Network. All wireless devices must all have the same SSID to communicate on the Wireless Network. All D-Link Wireless devices have the default SSID of **default**, all lower case.

Wireless Channel: Displays the channel information. Make sure your the setting here matches the setting on your access point.

Transmission Rate: You can adjust the transmission rate to get the best signal possible depending on your usage and environment.

WEP Key Encryption: 64 bit WEP encryption uses a 10 hexadecimal character key. 128 bit WEP uses a 26 hexadecimal character key. The WEP encryption key must match the WEP settings on your AP or wireless router to connect properly.

WEP Encryption: Enter the WEP key that you wish to use in this field.

Confirm WEP Key: After typing in your WEP key, confirm the WEP Key in this field.

Network

Click on the **Network** tab from the tools bar of the main screen to enter the Network Page; it provides network protocol configuration options that include **TCP/IP**, **NetBEUI** and **AppleTalk**

TCP/IP Protocol

The TCP/IP Protocol section will show you the settings required to configure the DP-311U Print Server for TCP/IP printing. If you forget your IP Address, you can use the *PS Admin* program to configure the DP-311U Print Server. The default IP Address is 192.168.0.10. Click the **<Save>** button to ensure the settings are updated and saved. NOTE: If you change and save the IP Address of the DP-311U, you would have to make similar changes on your web browser to access the web configuration again.

NetBEUI Protocol

The NetBEUI Protocol section will show you the settings required to configure the DP-311U Print Server for NetBEUI printing. Click the **<Save>** button to ensure the settings are updated and saved.

AppleTalk Protocol

The AppleTalk Protocol section will show you the settings required to configure the DP-311U Print Server for AppleTalk printing. Click the **<Save>** button to ensure the settings are updated and saved.



Home

Configuration

Network

Tools

Help

TCP/IP Protocol

IP Address :

Subnet Mask :

Default Gateway :

IP Assignment : Manually Assign
 Assign Automatically Using
 RARP
 BOOTP
 DHCP

SNMP Community 1 : Name :
Access Right :

SNMP Community 2 : Name :
Access Right :

SNMP Community 3 : Name :
Access Right :

NetBEUI Protocol

Workgroup :

Maximum Limitation : Maximum Connected Stations :
Maximum Number of Sessions :

AppleTalk Protocol

AppleTalk Zone :

USB : Chooser Name :
Printer Type :
PostScript Level :
Font Group :

Save

Tools

Click on **the Tools** link from the tools bar of the main screen to enter the Tools Page; it provides the control options that include **Print Test** and **Reset**.

Print Test

Print Test section will allow you to send an ASCII text page from the print server to your printer. Your USB printer will have to support native DOS mode for the test page to print.

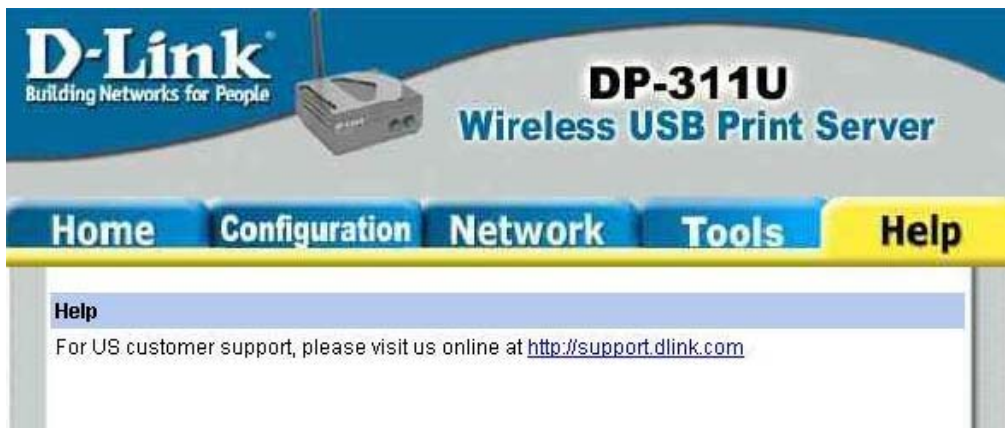
Reset

Reset section will allow you to reset your print server. Click the **<Yes>** button to activate the reset process. Reset will restart the print server. Factory reset will reset all settings to factory default and restart the print server. Default IP address of the print server will be 192.168.0.10 after factory reset.



Help

Click on the **Help** link from the tools bar of the main screen to enter the Help Page, it provides a link to D-Link's support website. D-Link's support website will provide the most up to date information on your DP-311U Print Server. Please check the website regularly for product and firmware updates.

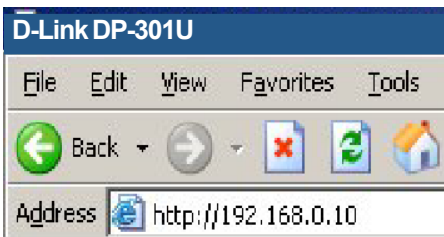


TCP/IP Printing for Windows XP

Open the web browser, and type in the IP Address of the DP-311U.
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 subnet as the Print Server's IP Address for the two devices to communicate. (For example, if your Print Server's IP Address is 192.168.0.10, with a subnet mask of 255.255.255.0, then your computer's IP Address should be 192.168.0.x, where x is a value between 1-254, excluding 10.) See *Networking Basics: Assigning a Static IP Address* in this manual to find out how to change an IP Address.



TCP/IP Printing for Windows XP (continued)

At the **Configuration** window, write down the **Port Name** for future reference. You will need this information later in the configuration process.



The screenshot shows the configuration interface for a D-Link DP-311U Wireless USB Print Server. The page has a navigation bar with tabs for Home, Configuration, Network, Tools, and Help. The 'Configuration' tab is active. The 'System Device' section contains fields for Server Name (PS-116688), Location, Admin Contact, Password (New Password and Confirm Again). The 'Port Setting' section is highlighted with a red box and contains a field for 'USB : Port Name' with the value 'PS-116688-U1'. Below this is a 'Description' field and a 'P.L Printer' dropdown set to 'No'. The 'Wireless Interface' section includes 'Connection Mode' (Infrastructure selected), 'ESS-ID' (D-Link Wireless), 'Wireless Channel' (11), 'Transmission Rate' (Fully Automatic), and 'WEP Key Encryption' (Disable selected). There are also fields for WEP Key and Confirm WEP Key, and a 'Save' button at the bottom.

Select your **Connection Mode**

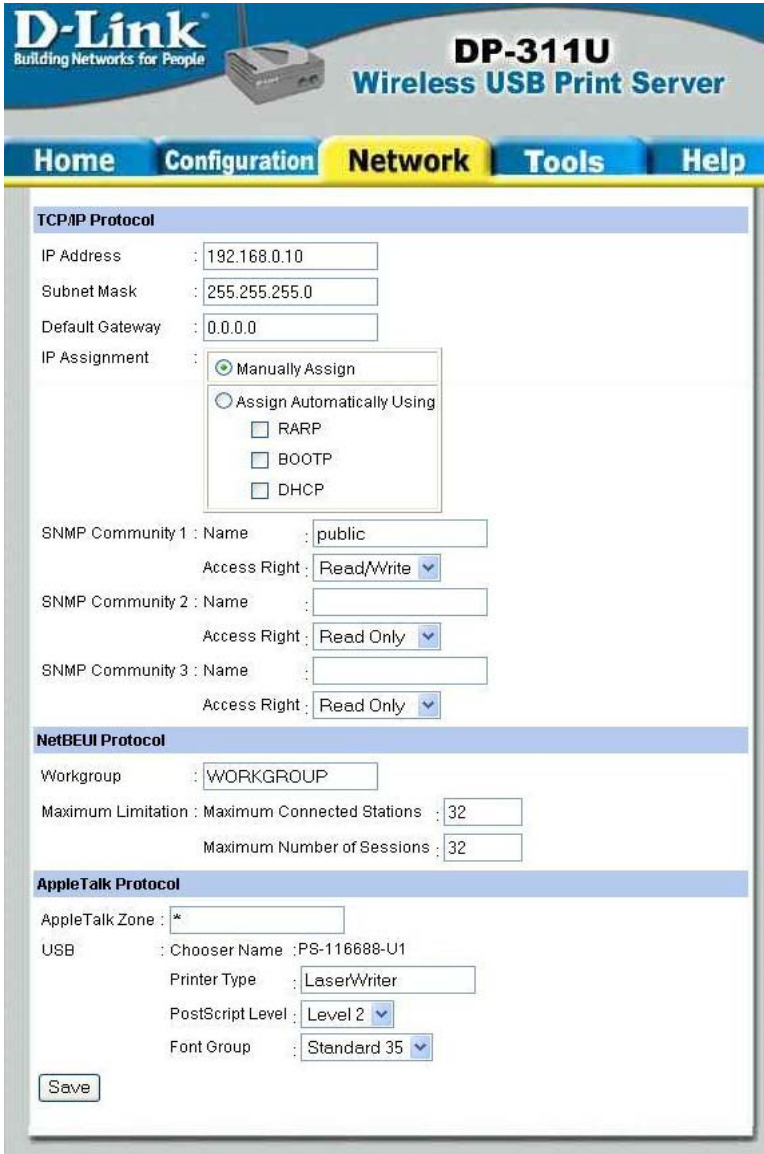
Enter the **ESS-ID** of the remote access point or wireless router you wish to connect to.

If you would like to set **WEP Encryption**, select the encryption level and the key here.

Click **Save**

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

When you select **TCP/IP Protocol** at the **Network** 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. (You may wish to make a note of the IP Address.)



The screenshot shows the configuration page for the D-Link DP-311U Wireless USB Print Server. The page has a navigation bar with tabs for Home, Configuration, Network (selected), Tools, and Help. The main content area is titled "TCP/IP Protocol" and contains several sections for configuring network protocols.

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DP-311U Wireless USB Print Server

Home Configuration **Network** Tools Help

TCP/IP Protocol

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
SNMP Community 2 : Name :
Access Right : Read Only
SNMP Community 3 : Name :
Access Right : Read Only

NetBEUI Protocol

Workgroup : WORKGROUP
Maximum Limitation : Maximum Connected Stations : 32
Maximum Number of Sessions : 32

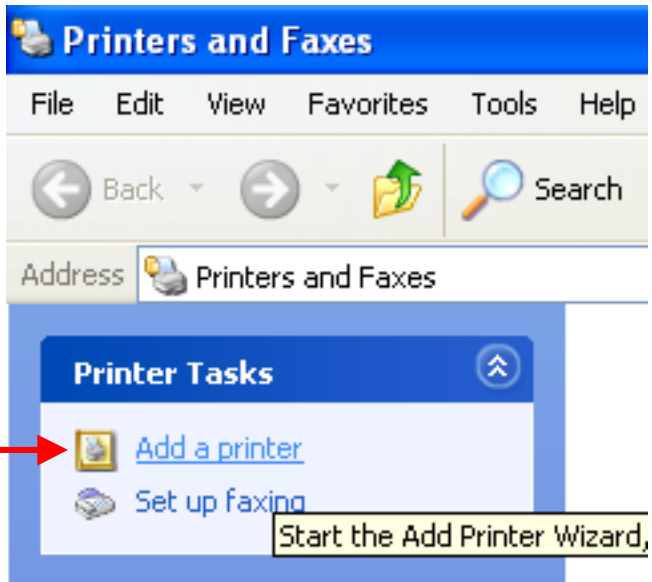
AppleTalk Protocol

AppleTalk Zone : *
USB : Chooser Name : PS-116688-U1
Printer Type : LaserWriter
PostScript Level : Level 2
Font Group : Standard 35

Save

TCP/IP Printing for Windows XP (continued)

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



Click **Next**

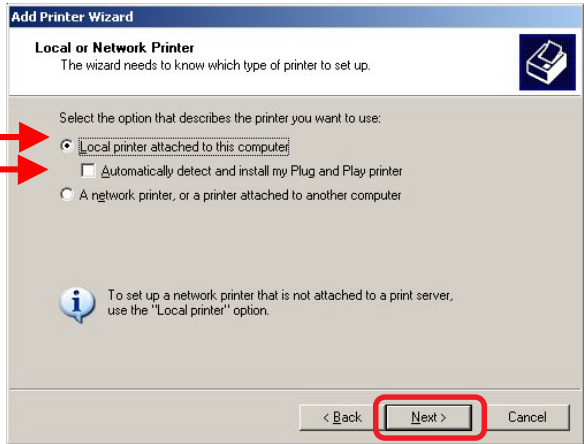
TCP/IP Printing for Windows XP (continued)

Select **Local Printer**



Deselect **Automatically detect and install my Plug and Play printer.**

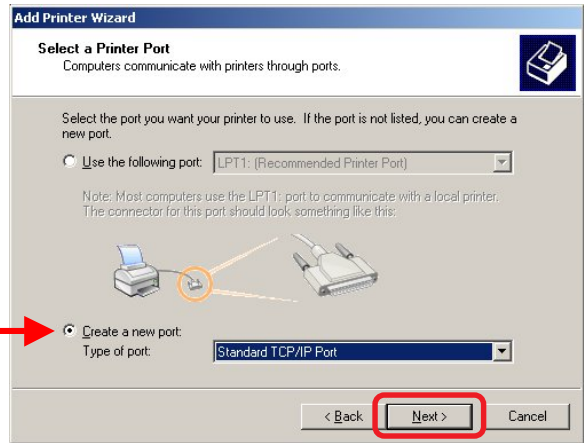
Click **Next**



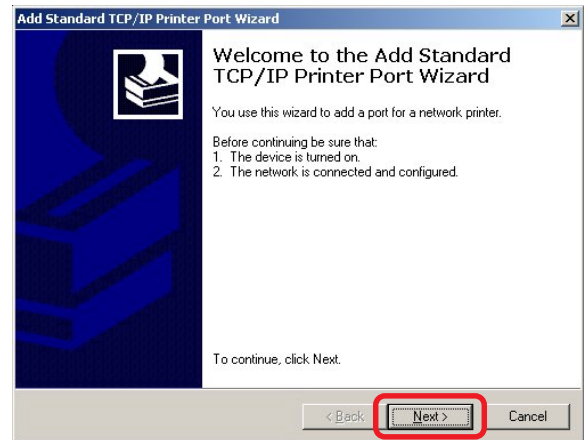
Select **Create a new port.** At the pull-down menu, highlight **Standard TCP/IP Port.**



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.



Add Port
For which device do you want to add a port?

Enter the Printer Name or IP address, and a port name for the desired device.

Printer Name or IP Address: 192.168.0.10
Port Name: IP_192.168.0.10

< Back Next > Cancel

Select **“Custom”**
Then click on **Settings**.



Additional Port Information Required
The device could not be identified.

The detected device is of unknown type. Be sure that:
1. The device is properly configured.
2. The address on the previous page is correct.

Either correct the address and perform another search on the network by returning to the previous wizard page or select the device type if you are sure the address is correct.

Device Type: Generic Network Card

Standard
 Custom

Settings...

< Back Next > Cancel

Select **“LPR”**

Input the port name of the port being used by the printer



Configure Standard TCP/IP Port Monitor

Port Settings

Port Name: IP_192.168.0.10
Printer Name or IP Address: 192.168.0.10

Protocol:
 Raw
 LPR

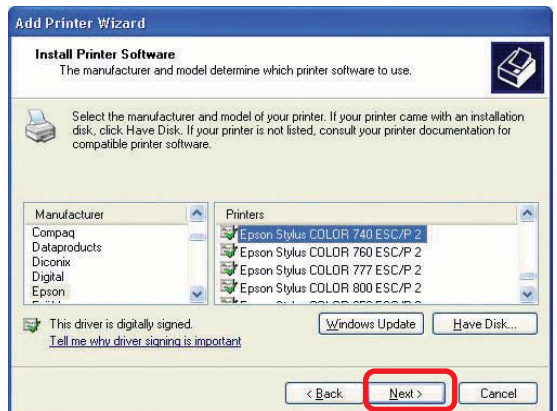
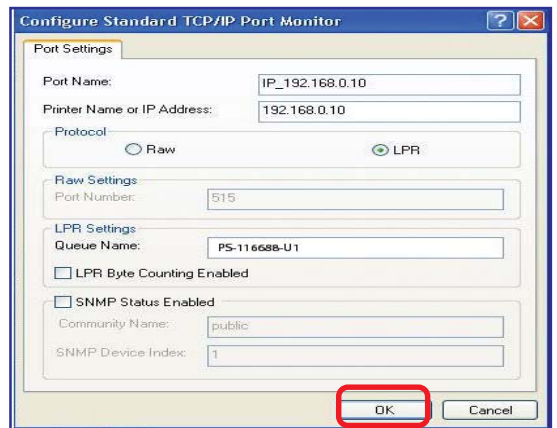
Raw Settings:
Port Number: 515

LPR Settings:
Queue Name: PS-116688-U1
 LPR Byte Counting Enabled
 SNMP Status Enabled
Community Name: public
SNMP Device Index: 1

OK Cancel

Click **OK**

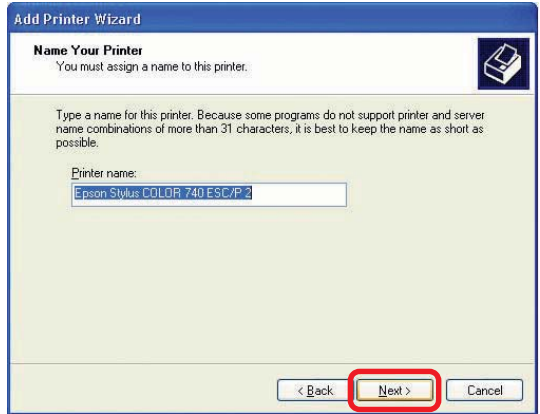
TCP/IP Printing for Windows XP (continued)



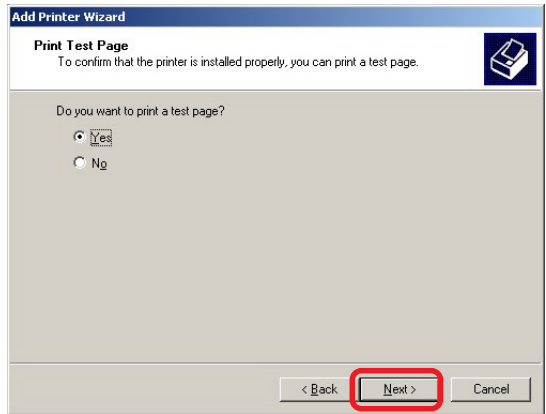
TCP/IP Printing for Windows XP (continued)

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

Click **Next**



Click **Next**



Click **Finish**

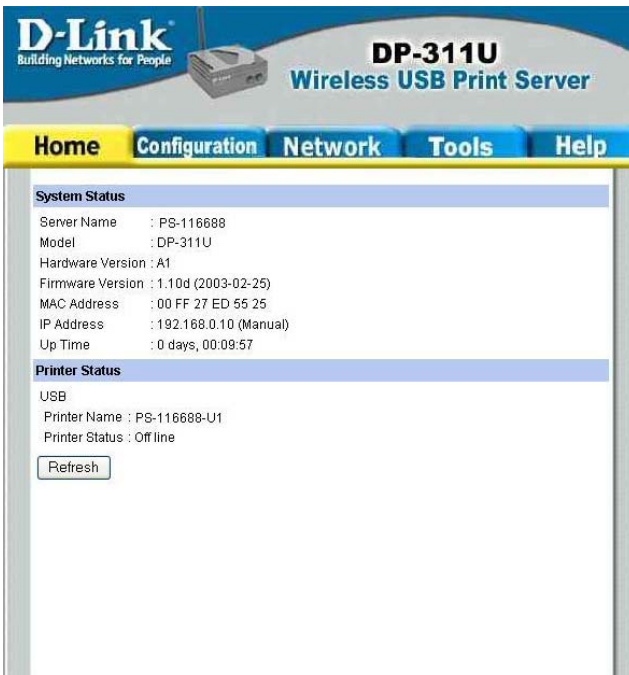
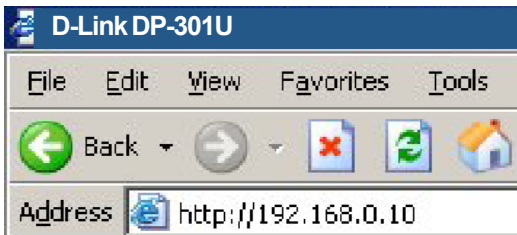


TCP/IP Printing for Windows 2000

Open the web browser, and type in the IP Address of the DP-311U.
For example, type <http://192.168.0.10> into the **Location** or **Address** field. Press the **Enter** or (**Return**) Key.

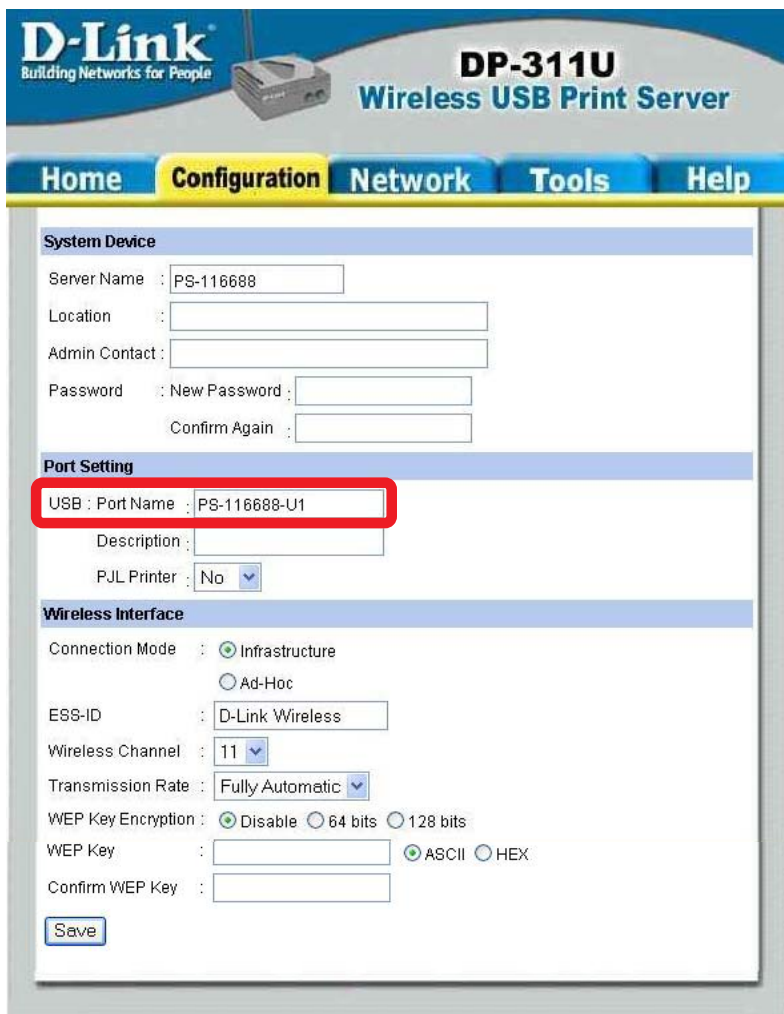
Note:

The PC's IP Address must be in the same subnet as the Print Server's IP Address for the two devices to communicate. (For example, if your Print Server's IP Address is 192.168.0.10, with a subnet mask of 255.255.255.0, then your computer's IP Address should be 192.168.0.x, where x is a value between 1-254, excluding 10.)



TCP/IP Printing for Windows 2000 *(continued)*

At the **Configuration** window, write down the **Port Names** for future reference. You will need this information later in the configuration process.



D-Link
Building Networks for People

DP-311U
Wireless USB Print Server

Home Configuration Network Tools Help

System Device

Server Name : PS-116688

Location :

Admin Contact :

Password : New Password :

Confirm Again :

Port Setting

USB : Port Name : PS-116688-U1

Description :

PJL Printer : No

Wireless Interface

Connection Mode : Infrastructure Ad-Hoc

ESS-ID : D-Link Wireless

Wireless Channel : 11

Transmission Rate : Fully Automatic

WEP Key Encryption : Disable 64 bits 128 bits

WEP Key : ASCII HEX

Confirm WEP Key :

Select your **Connection Mode**

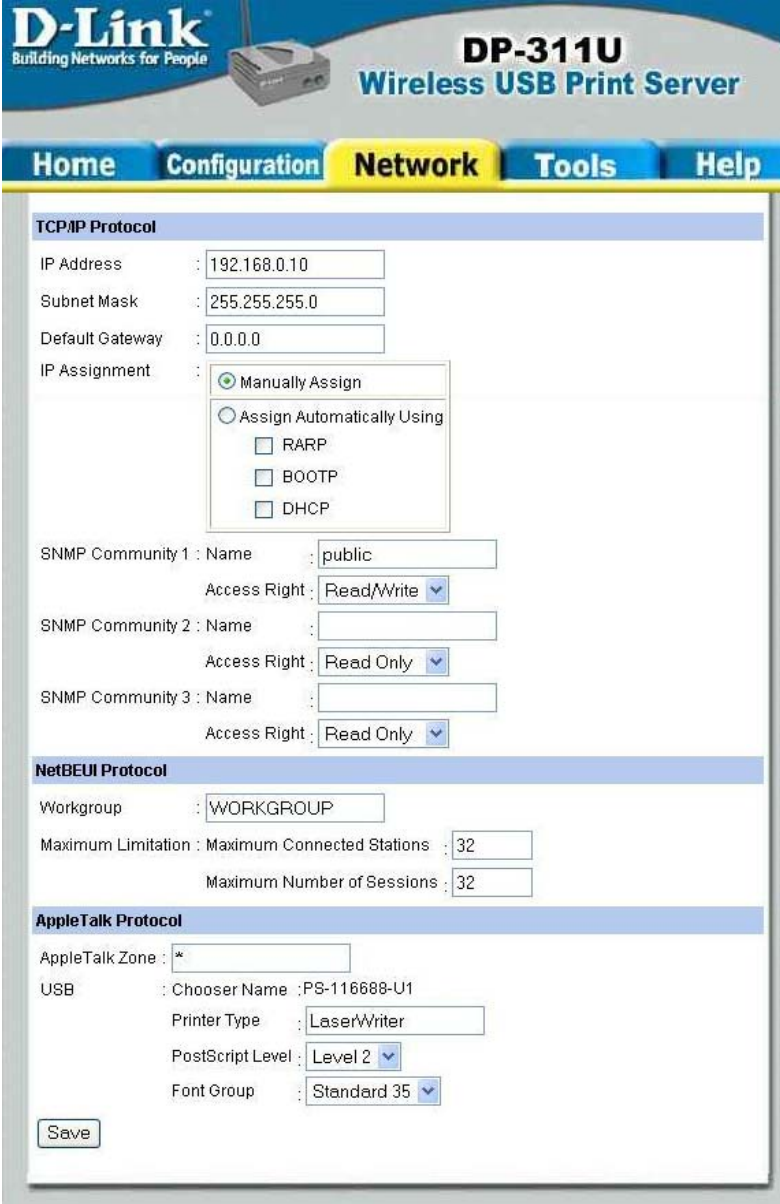
Enter the **ESS-ID** of the remote access point or wireless router you wish to connect to.

If you would like to set **WEP Encryption**, select the encryption level and the key here.

Click **Save**

TCP/IP Printing for Windows 2000 *(continued)*

When you select **TCP/IP Protocol** at the **Network** 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. (You may wish to make a note of the IP Address.)



The screenshot shows the configuration interface for the D-Link DP-311U Wireless USB Print Server. The interface has a blue header with the D-Link logo and the product name. Below the header is a navigation bar with tabs for Home, Configuration, Network (selected), Tools, and Help. The main content area is divided into three sections: TCP/IP Protocol, NetBEUI Protocol, and AppleTalk Protocol. Each section contains various configuration fields and options.

D-Link
Building Networks for People

DP-311U
Wireless USB Print Server

Home Configuration **Network** Tools Help

TCP/IP Protocol

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

SNMP Community 2 : Name :
Access Right : Read Only

SNMP Community 3 : Name :
Access Right : Read Only

NetBEUI Protocol

Workgroup : WORKGROUP

Maximum Limitation : Maximum Connected Stations : 32
Maximum Number of Sessions : 32

AppleTalk Protocol

AppleTalk Zone : *

USB : Chooser Name : PS-116688-U1
Printer Type : LaserWriter
PostScript Level : Level 2
Font Group : Standard 35

Save

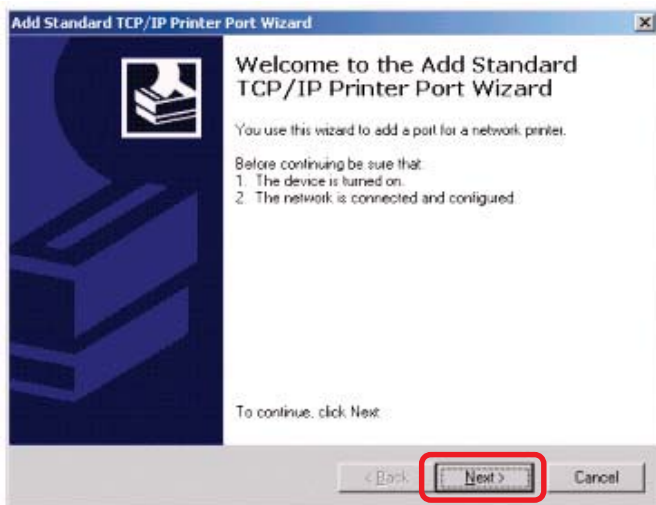
TCP/IP Printing for Windows 2000 (continued)

Go to **Start > Settings > Printers**

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

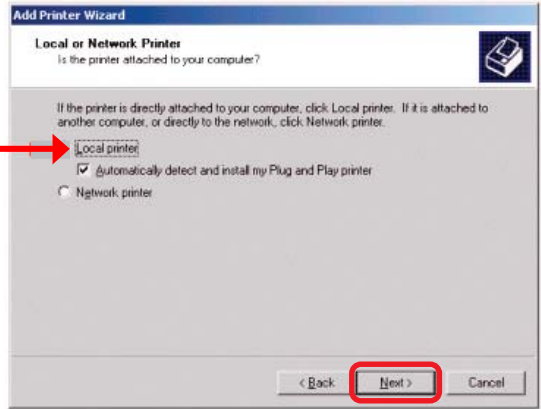


Click **Next**

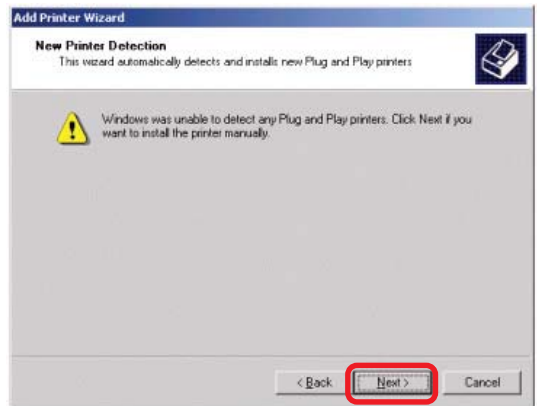


TCP/IP Printing for Windows 2000 (continued)

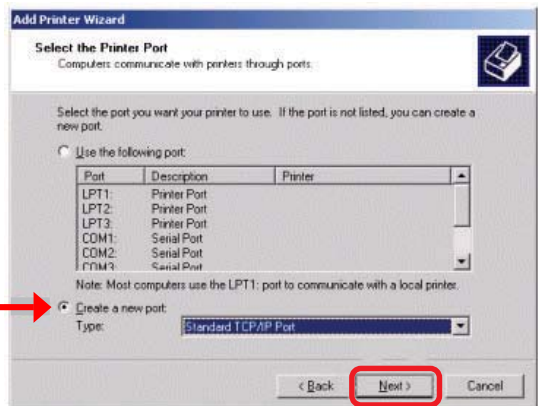
Select **Local Printer**



Click **Next**

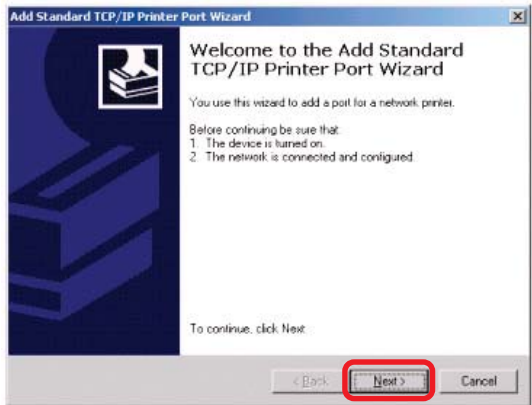


Select **Create a new port** at the pull-down menu, highlight **Standard TCP/IP Port**.



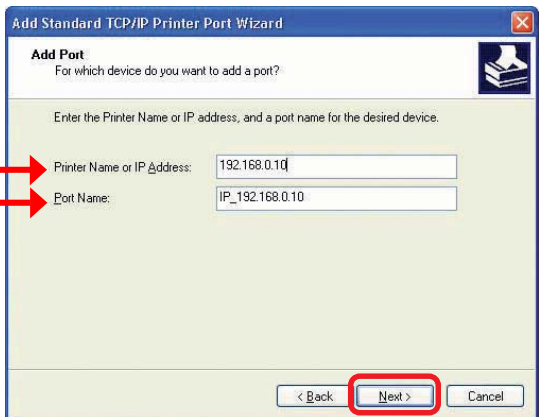
Click **Next**

TCP/IP Printing for Windows 2000 (continued)



Click **Next**

Type in the IP Address of the Print Server in the **Printer Name or IP Address** field. The **Port Name** field will automatically be filled in.



Click **Next**

Select **“Custom”**
Then click on **Settings**.



TCP/IP Printing for Windows 2000 (continued)

Select "LPR"

Input the port name of the port being used by the printer

Click OK

Configure Standard TCP/IP Port Monitor

Port Settings

Port Name: IP_192.168.0.10

Printer Name or IP Address: 192.168.0.10

Protocol: Raw LPR

Raw Settings

Port Number: 515

LPR Settings

Queue Name: PS-116688-U1

LPR Byte Counting Enabled

SNMP Status Enabled

Community Name: public

SNMP Device Index: 1

OK Cancel

Click Next

Add Standard TCP/IP Printer Port Wizard

Additional Port Information Required

The device could not be identified.

The detected device is of unknown type. Be sure that:

1. The device is properly configured.
2. The address on the previous page is correct.

Either correct the address and perform another search on the network, by returning to the previous wizard page or select the device type if you are sure the address is correct.

Device Type

Standard Generic Network Card

Custom Settings...

< Back Next > Cancel

Click Finish

Add Standard TCP/IP Printer Port Wizard

Completing the Add Standard TCP/IP Printer Port Wizard

You have selected a port with the following characteristics:

SNMP: No

Protocol: LPR, PS-116633-U1

Device: 192.168.0.10

Port Name: IP_192.168.0.10

Adapter Type:

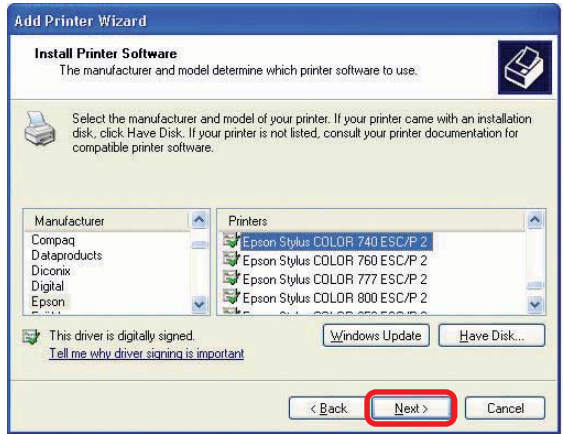
To complete this wizard, click Finish.

< Back Finish Cancel

TCP/IP Printing for Windows 2000 (continued)

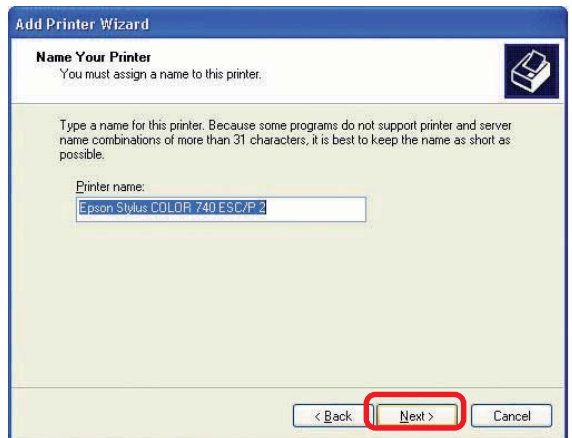
Highlight the printer, as shown. If the desired printer is not on the list, click **Have Disk** and insert the printer driver disk that came with your printer to install the printer drivers.

Click **Next**



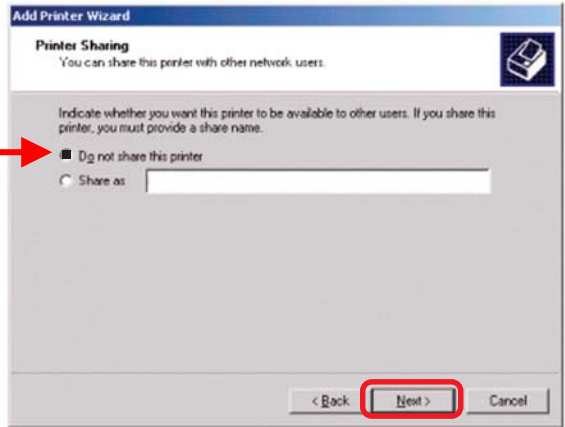
At this screen, you can input a name for the printer.

Click **Next**



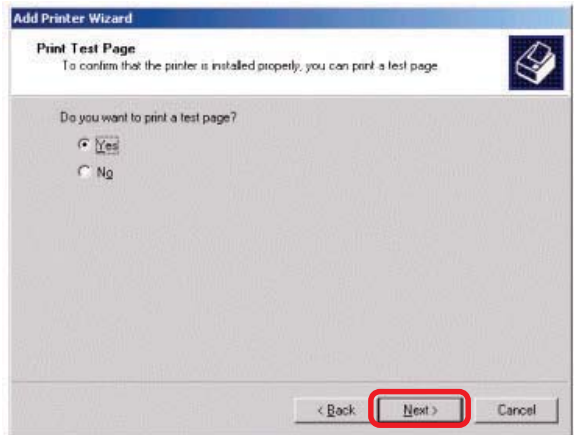
TCP/IP Printing for Windows 2000 (continued)

Select **Do not share this printer**

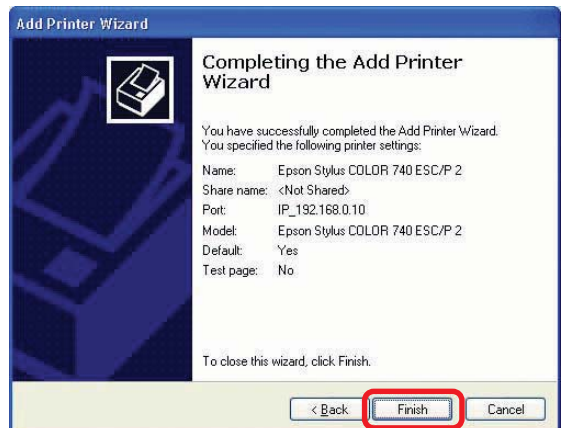


Click **Next**

Select **Yes** to print a test page



Click **Next**



Click **Finish**

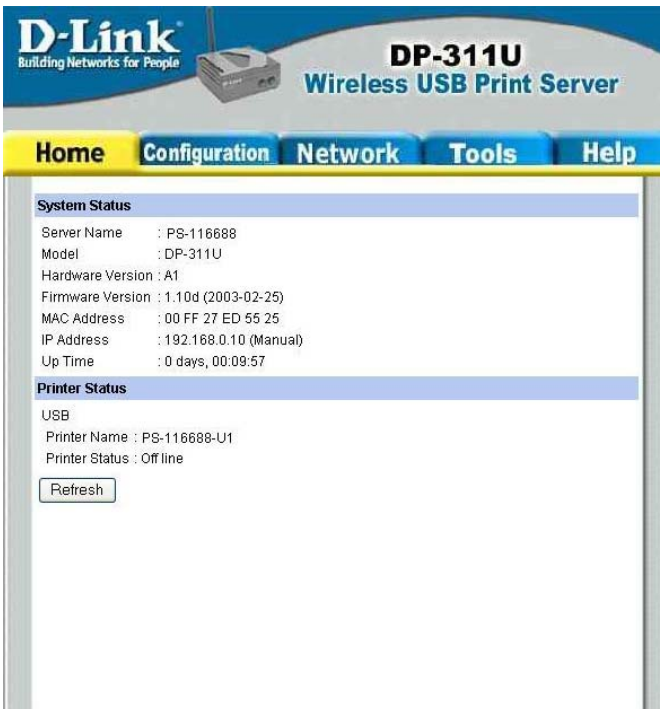
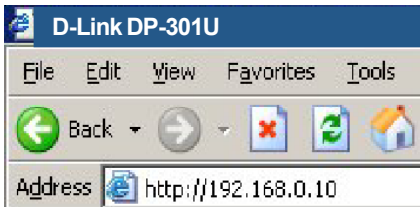
The printer is now ready for printing with Windows 2000 on your network.

TCP/IP Printing for Windows 98SE/Me

Open the web browser, and type in the IP Address of the DP-311U.
For example, type <http://192.168.0.10> into the **Location** or **Address** field. Press the **Enter** or **(Return)** Key.

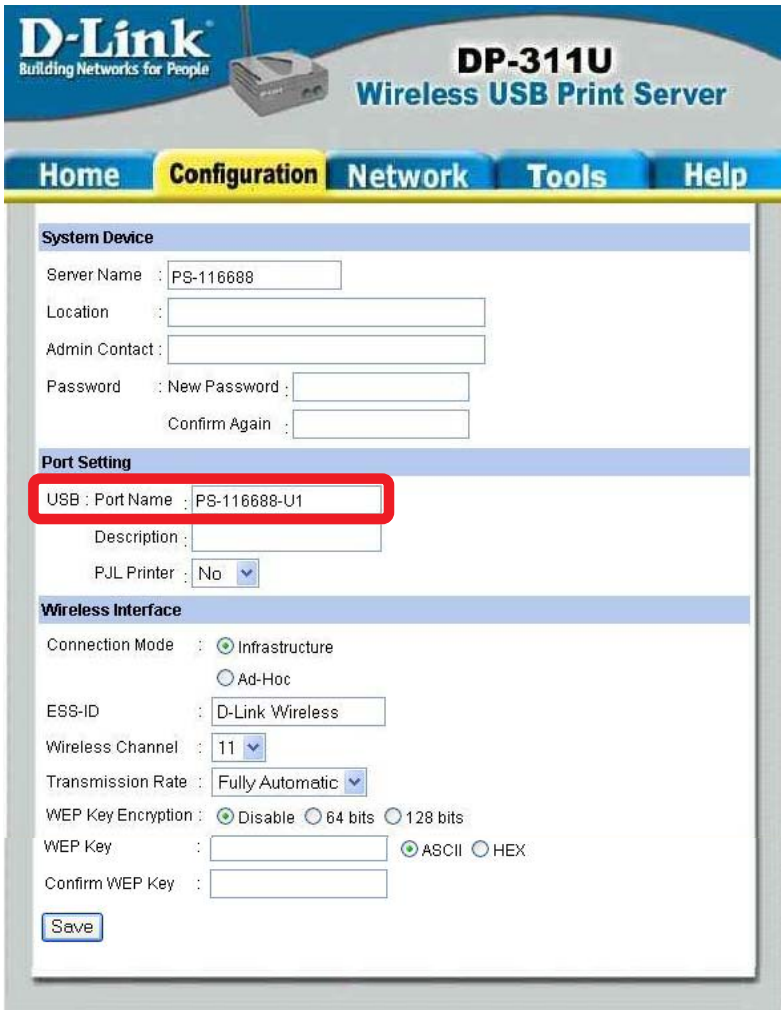
Note:

The PC's IP Address must be in the same subnet as the Print Server's IP Address for the two devices to communicate. (For example, if your Print Server's IP Address is 192.168.0.10, with a subnet mask of 255.255.255.0, then your computer's IP Address should be 192.168.0.x, where x is a value between 1-254, excluding 10.)



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

At the **Configuration** window, write down the **Port Name** for future reference. You will need this information later in the configuration process. The **Port Name** shown here is only an example.



The screenshot shows the configuration interface for a D-Link DP-311U Wireless USB Print Server. The interface has a blue header with the D-Link logo and the product name. Below the header is a navigation bar with tabs for Home, Configuration, Network, Tools, and Help. The main content area is divided into sections: System Device, Port Setting, and Wireless Interface. The Port Setting section is highlighted with a red box, showing the USB Port Name as PS-116688-U1. The System Device section includes fields for Server Name, Location, Admin Contact, Password, and Confirm Again. The Wireless Interface section includes options for Connection Mode, ESS-ID, Wireless Channel, Transmission Rate, WEP Key Encryption, WEP Key, and Confirm WEP Key. A Save button is located at the bottom left of the configuration area.

Select your **Connection Mode**

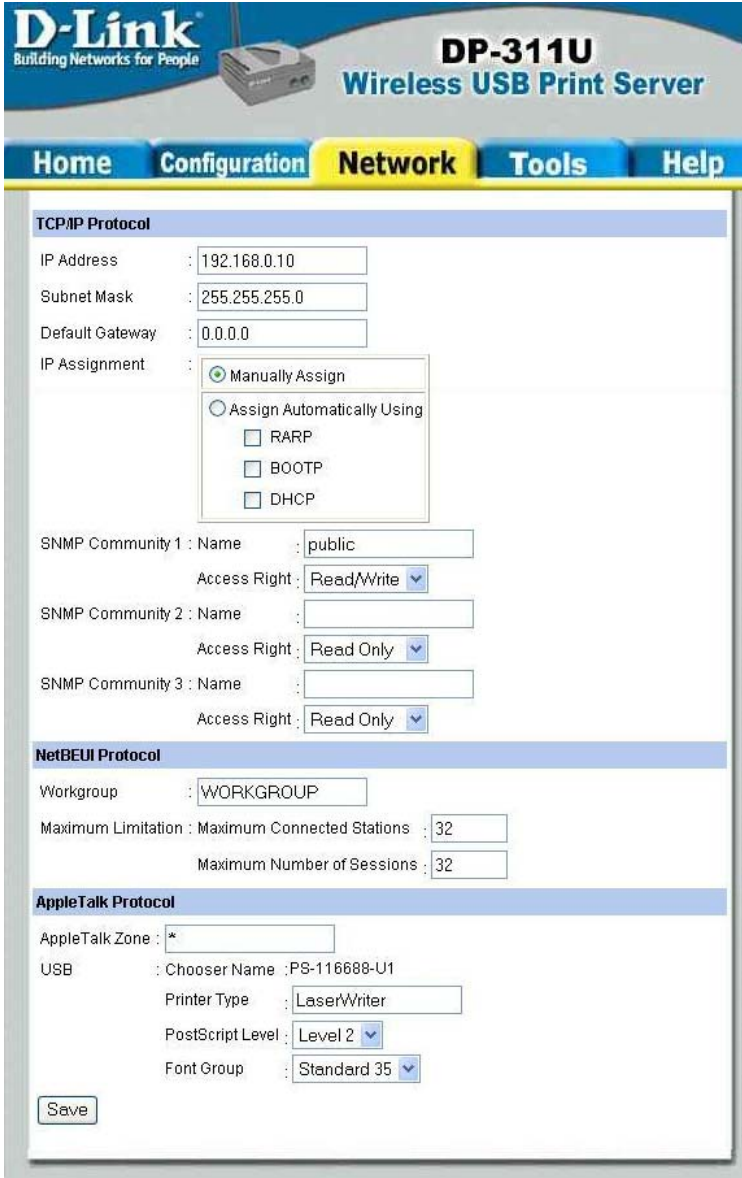
Enter the **ESS-ID** of the remote access point or wireless router you wish to connect to.

If you would like to set **WEP Encryption**, select the encryption level and the key here.

Click **Save**

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

When you select **TCP/IP Protocol** at the **Network** 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. (You may wish to make a note of the IP Address.)



D-Link
Building Networks for People

DP-311U
Wireless USB Print Server

Home Configuration **Network** Tools Help

TCP/IP Protocol

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

SNMP Community 2 : Name :
Access Right : Read Only

SNMP Community 3 : Name :
Access Right : Read Only

NetBEUI Protocol

Workgroup : WORKGROUP

Maximum Limitation : Maximum Connected Stations : 32
Maximum Number of Sessions : 32

AppleTalk Protocol

AppleTalk Zone : *

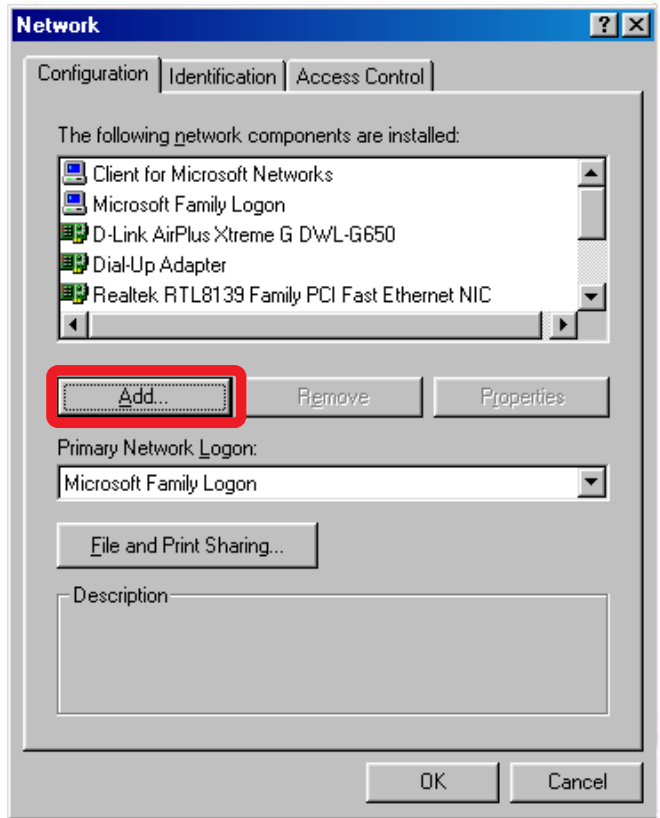
USB : Chooser Name : PS-116688-U1
Printer Type : LaserWriter
PostScript Level : Level 2
Font Group : Standard 35

Save

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

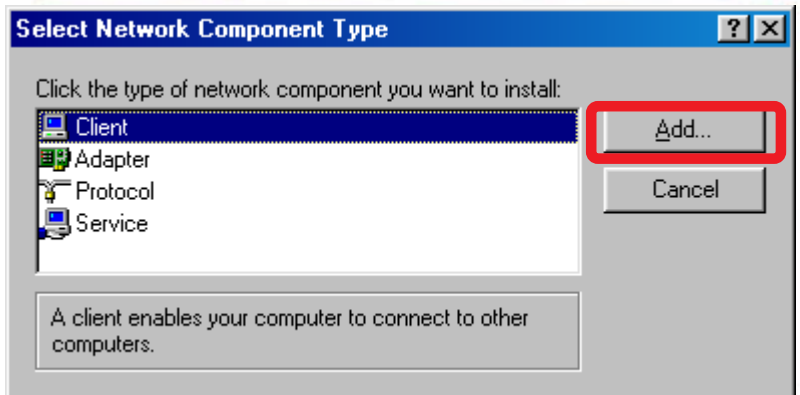
Go to **Start > Settings > Control Panel**
Double-click on **Network**

Click **Add**



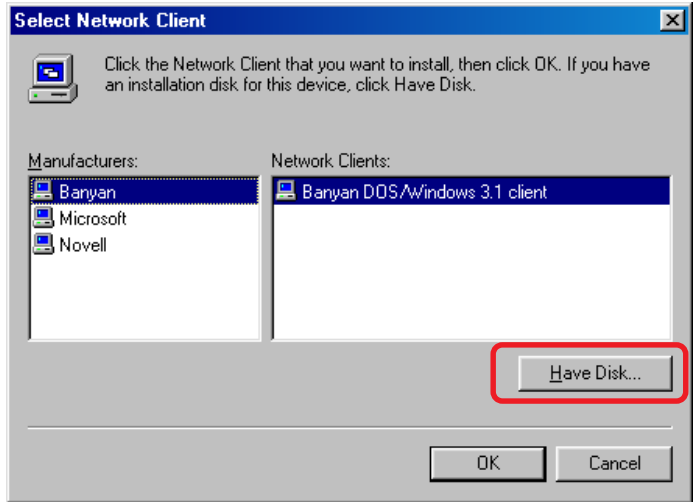
Highlight **Client**

Click **Add**



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

At this window, click **Have Disk**.

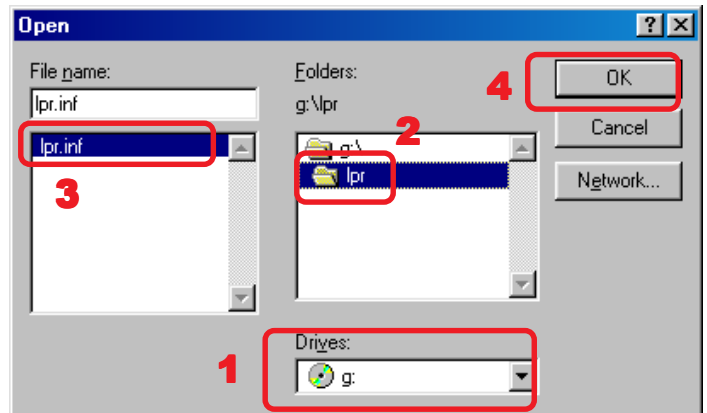


1. Insert the DP-311U CD-ROM into your CD-ROM drive.
Select the letter representing the CD-ROM drive on your computer from the pull-down menu.

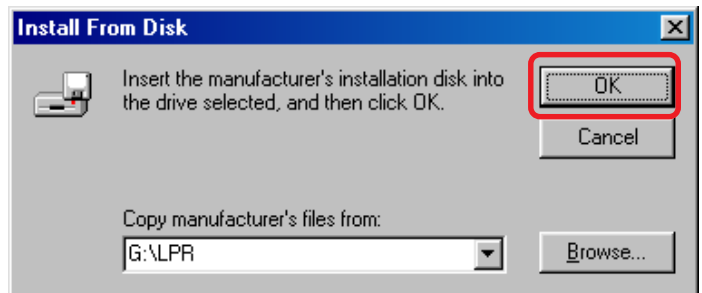
2. Double-click on the folder **lpr**.

3. Highlight **lpr.inf**

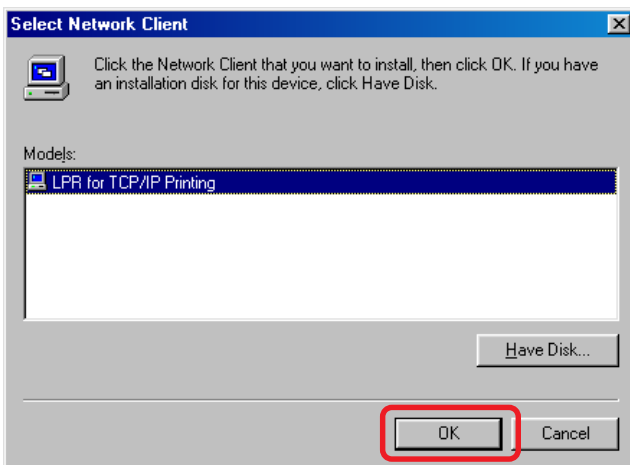
4. Click **OK**



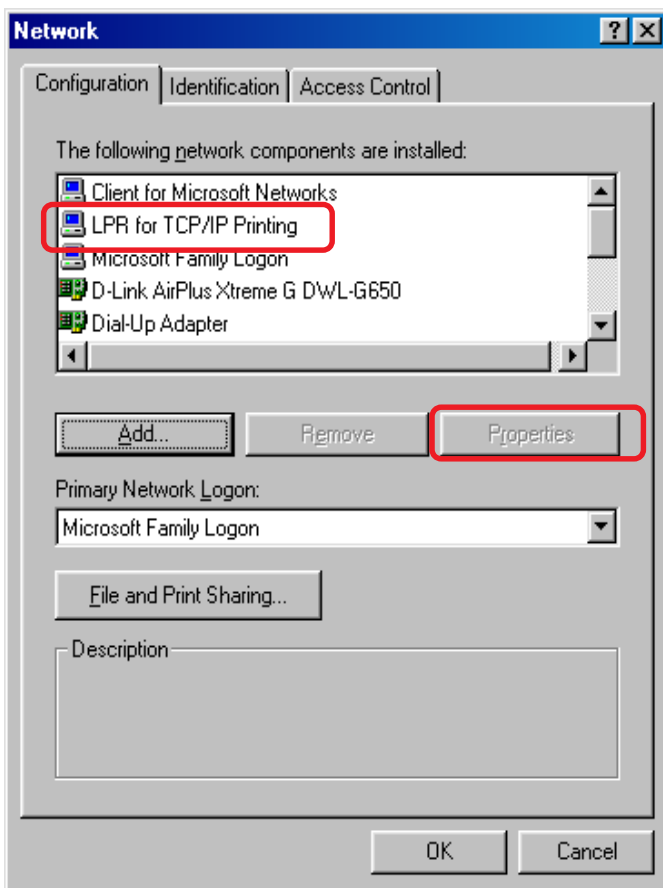
Click **OK** to accept the location of the file.



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



Click **OK**

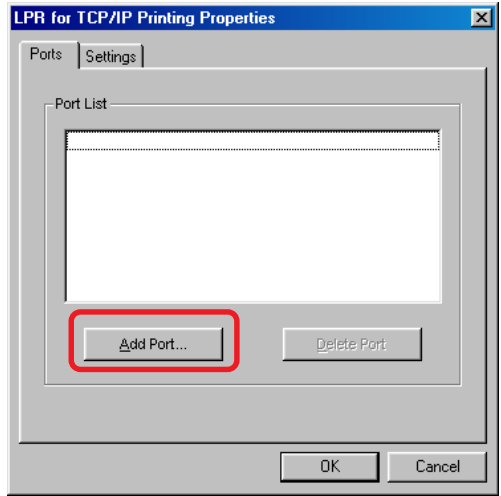


You should now be back to the **Network Properties** Page. Highlight **LPR for TCP/IP Printing**.

Click **Properties**

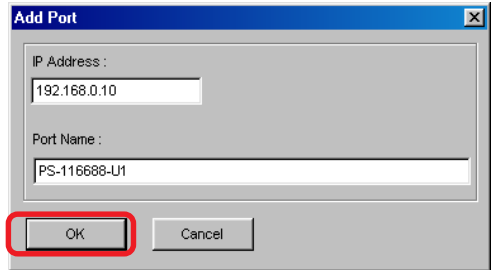
TCP/IP Printing for Windows 98SE/Me (continued)

Click **Add Port**



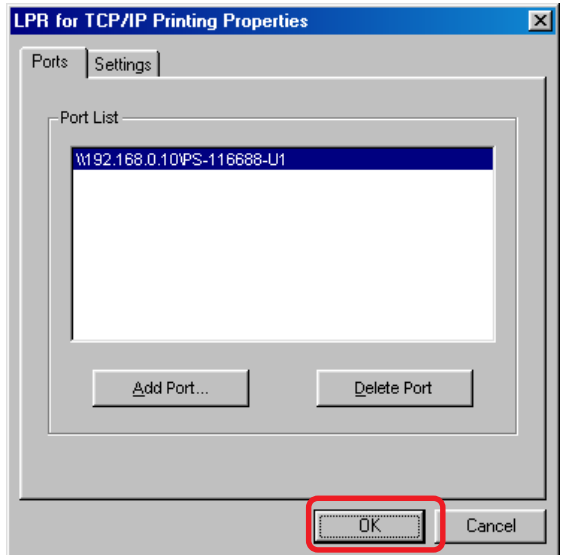
Type in the IP Address of the DP-301U. Make sure the **Port Name** is accurate. (The **Port Name** at right is just an example.)

Click **OK**

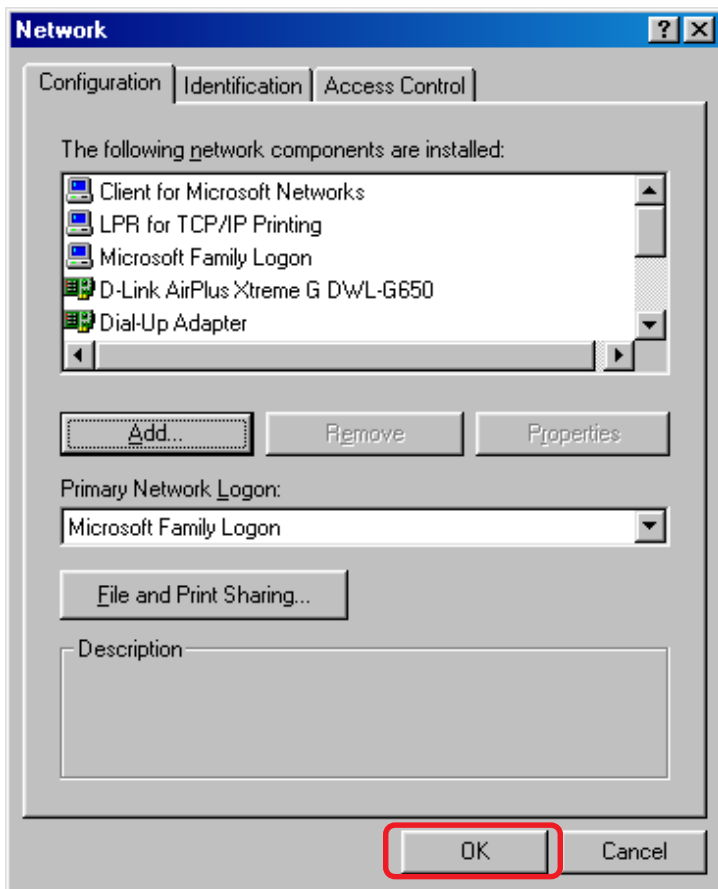


The **Port name** and IP Address will be displayed. (The **Port Name** at right is just an example.)

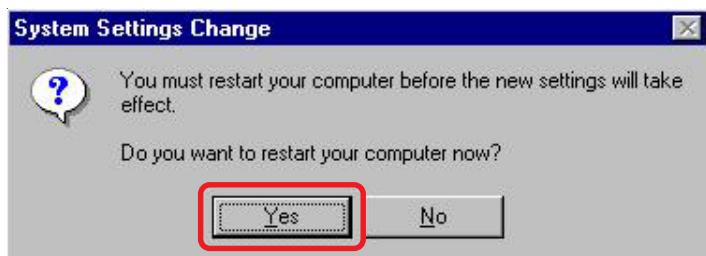
Click **OK**



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



Click **OK**



Windows will ask for a restart.

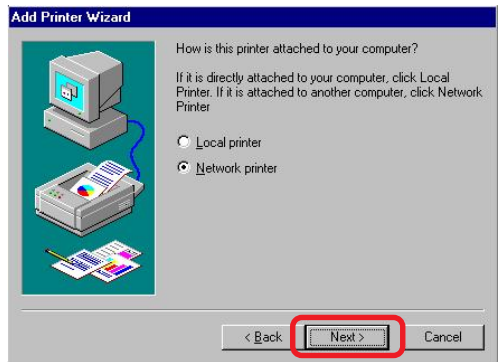
Click **Yes**

TCP/IP Printing for Windows 98SE/Me *continued*)

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

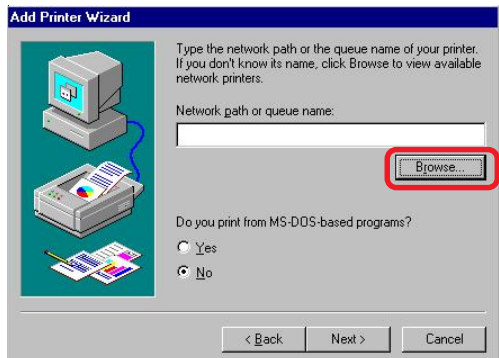


When the *Add Printer Wizard* screen appears, Click **Next**.



Select *Network Printer*.

Click **Next**



Type in the path if you know it,
or Click **Browse**.

TCP/IP Printing for Windows 98SE/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-311U and the **Port Name**. (The **Port Name** shown at right is just an example.)

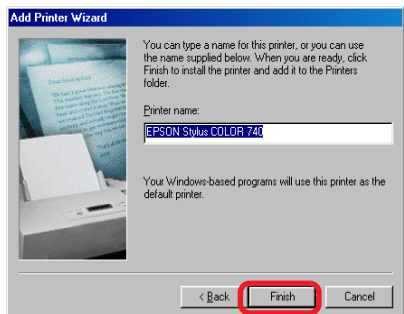
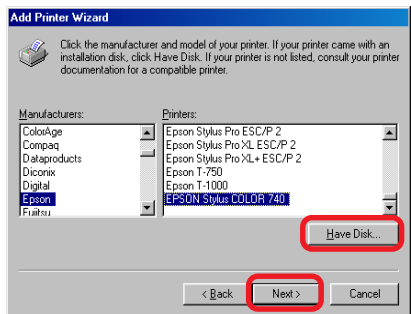
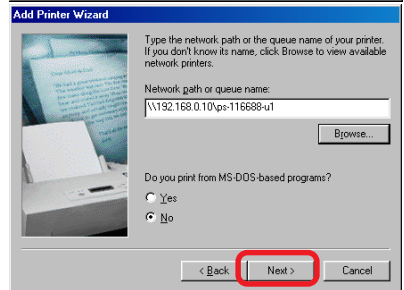
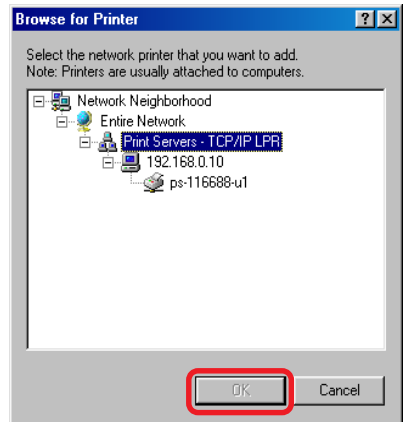
Select **Yes** or **No**, to answer the question: *Do you print from MS-DOS based programs?*

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 to install the printer drivers.

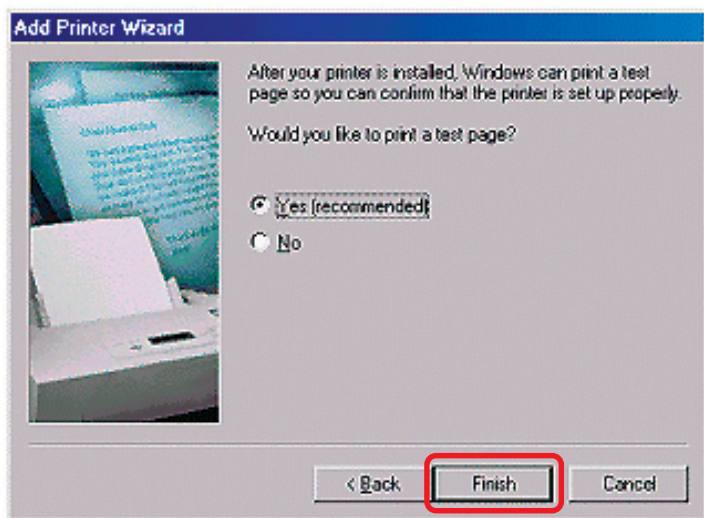
Click **Next**

Click **Next**



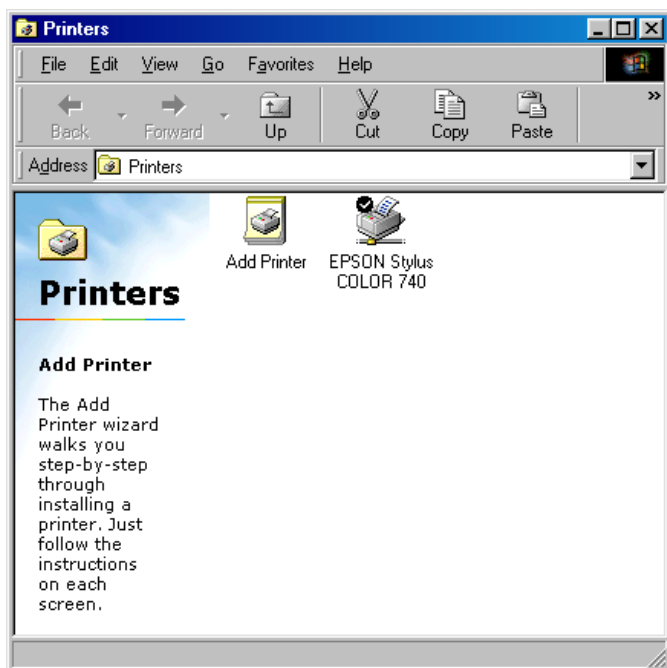
TCP/IP Printing for Windows 98SE/Me (continued)

Select **Yes** to print a test page.



Click **Finish**

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



Unix/Linux Printing

Please refer to the *PS Admin Manual* on the CD included with your purchase for information on setting up the Print Server in Unix/Linux.

Setting up Apple Talk or LPR Printing in Mac OS X

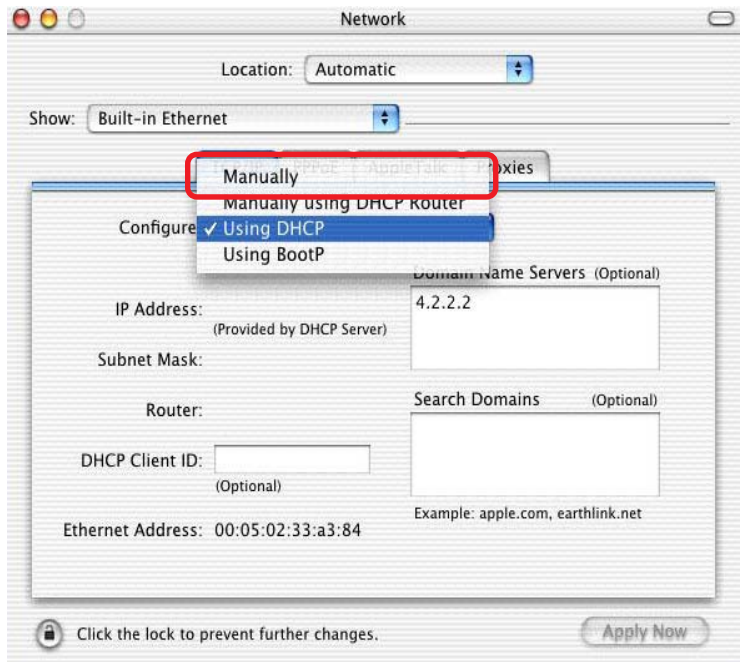
Note: Mac OS printing with this print server is supported by Postscript printers only!

With Mac OS X you can use AppleTalk or LPR printers using IP protocols for printing through Print Servers. Follow the instructions below for setting up the Print Server. After attaching the Print Server to your network using the directions provided in the *Quick Installation Guide*, change the IP Address of your Macintosh to access the Print Server's web configuration.

Open your **System Preferences** window and Click **Network**.

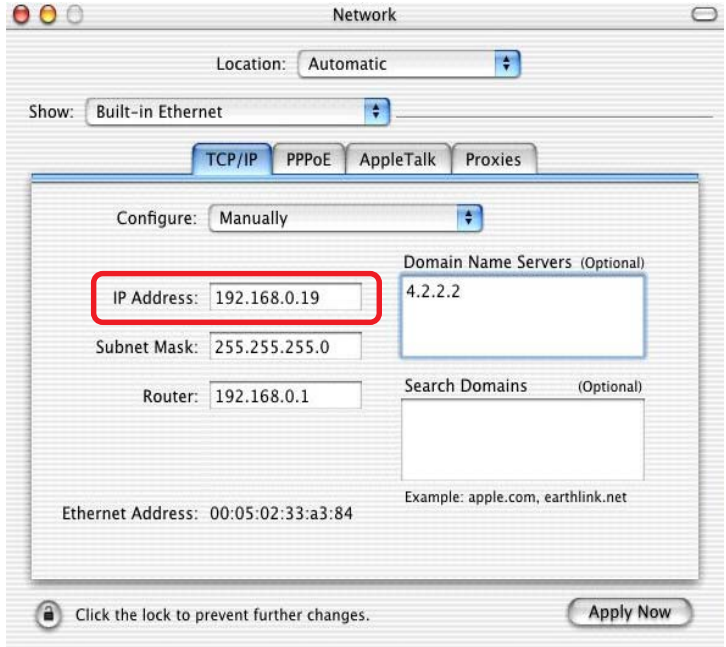


At the **Configure** pull-down menu, select **Manually**

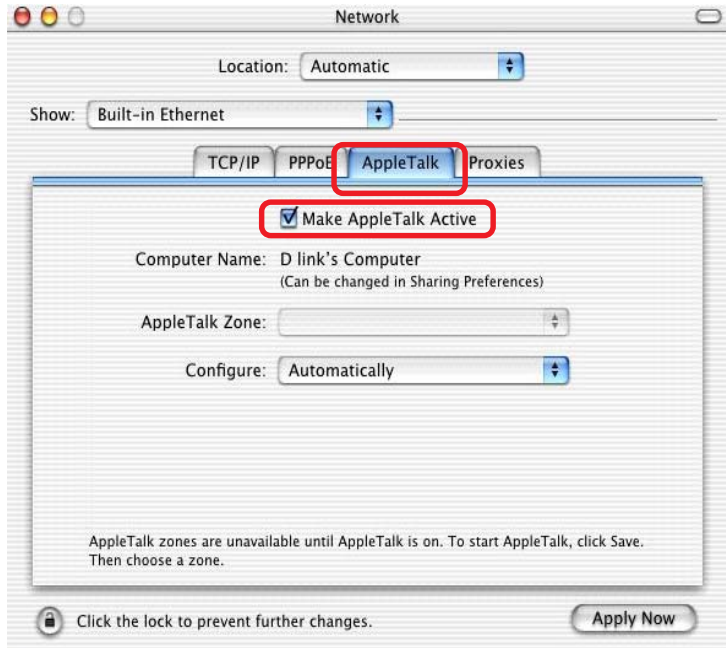


Setting up Apple Talk or LPR Printing in Mac OS X (continued)

The default IP Address of the Print Server is 192.168.0.10. Manually change your IP Address to 102.168.0.x, where x is any number between 1 and 254 (except 10 which is the IP Address of the Print Server.) The IP Addresses and Subnet Mask shown here are examples only.

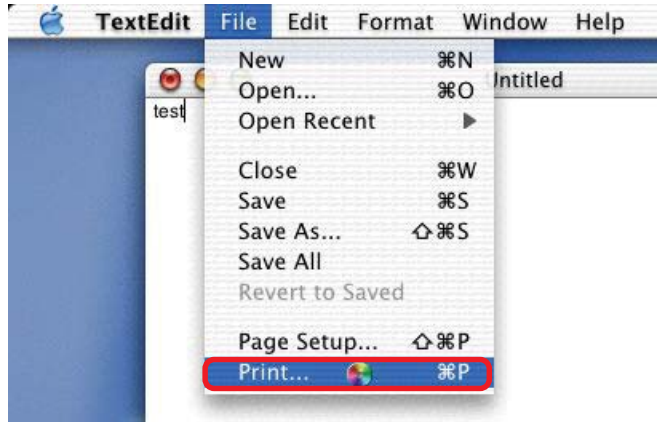


Select the **AppleTalk** tab in this window and check **Make AppleTalk Active**.

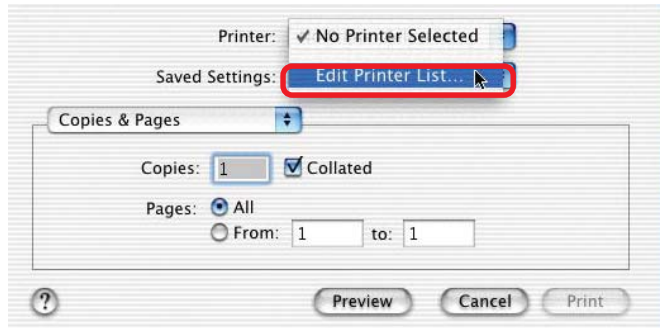


Setting up Apple Talk or LPR Printing in Mac OS X (continued)

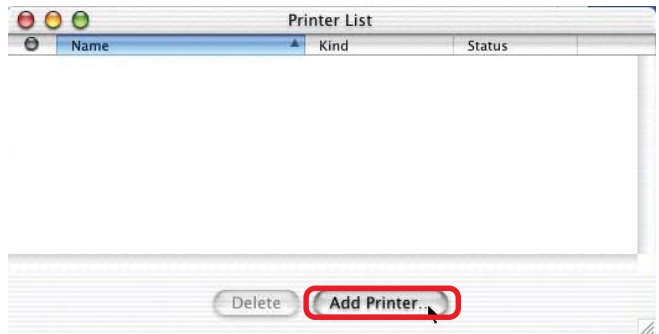
To print, open a document and select **File > Print** from the menu.



Select **Edit Printer List** from the **Printer** dialog box.

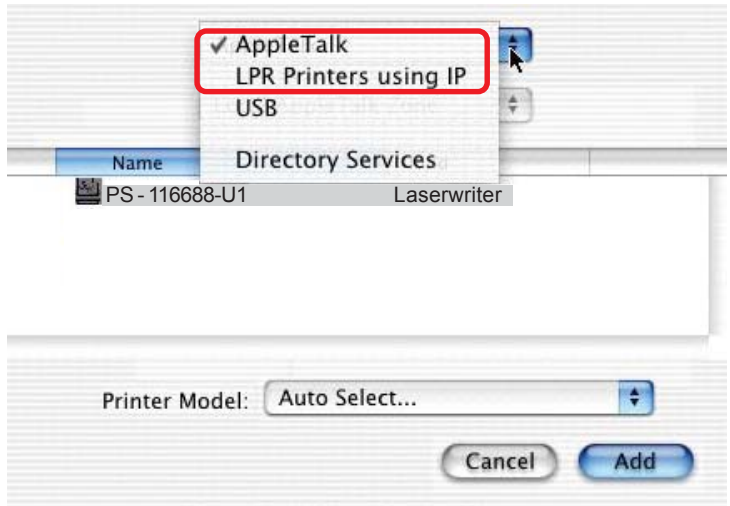


Click **Add Printer**



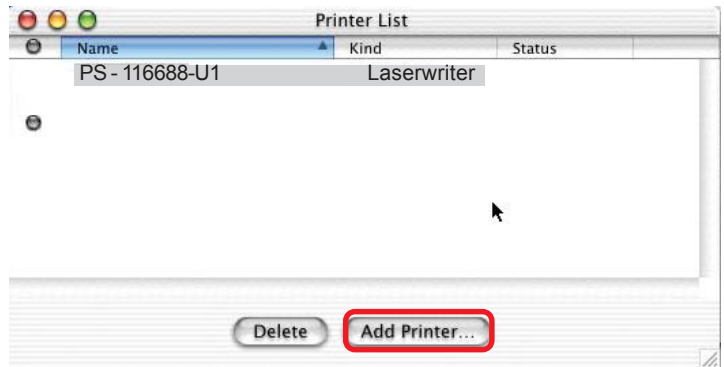
Setting up Apple Talk or LPR Printing in Mac OS X (continued)

Select the printing protocol preferred, **AppleTalk** or **LPR Printers using IP**. In this example, **AppleTalk** has been selected.



AppleTalk protocol:
After selecting **AppleTalk** the **Port Name** of the Print Server will be displayed. The **Port Name** shown here is an example only.

Click on the Port to which the post-script printer is connected.



Then select the printer model from the dialog box displayed here. Click **Add Printer** and the Printer Port configuration is complete. Select the Printer Port just configured in the Print window. Click **Print** to print your document.

Setting up Apple Talk or LPR Printing in Mac OS X (continued)

LPR Printers using IP protocol:

When you select **LPR Printers using IP Protocol**, this window will appear.

Type the IP Address of the Print Server into the **LPR Printer's Address** field.

The screenshot shows the 'LPR Printers using IP' dialog box. The title bar is 'LPR Printers using IP'. The main area contains the following fields and controls:

- LPR Printer's Address:** 192.168.0.10 (Internet address or DNS name)
- Use Default Queue on Server
- Queue Name:** PS-116688 - U1
- Printer Model:** Generic
- Buttons:** Cancel, Add

In the **Queue Name** field, type in the **Port Name** of the post-script printer that is connected to the Print Server. The **Port Name** illustrated here is only an example. Select the printer model from the dialog box.

In the **Queue Name** field, type in the **Port Name** of the post-script printer that is connected to the Print Server. The **Port Name** illustrated here is only an example.

Select the printer model from the dialog box.

Click **Add** and the process is complete.

Close all Print Center windows, select the Printer Port that was just selected.

Click **Print** to print the document. Click **Add** and the process is complete.

Setting up Apple Talk Printing in Mac OS 9

Note: Mac OS printing with this print server supports Postscript printers only!

The AppleTalk network protocol is used with computers using the MacOS operating system. It can be used for network communications over standard Ethernet or Fast Ethernet using the EtherTalk transport, or over a proprietary low-speed LocalTalk transport.

Your Print Server can be used for network printing to PostScript printers. You can print from any MacOS computer connected to your Ethernet network, either directly using an EtherTalk connection, or indirectly through a LocalTalk-to-EtherTalk router.

NOTE: *The Chooser name of a printer connected to one of the Print Server's ports is the same as its **Port Name**. If you are using AppleTalk printing, you will need to make sure that every **Port Name** is unique among all of the network printers in your AppleTalk zone. The **Port Names** shown in this manual are examples only.*

Setting up the Print Server for AppleTalk Printing

To set up your Print Server so that it can be used for AppleTalk printing:

- Make sure the AppleTalk protocol is enabled in your Macintosh.
- Change the IP Address on one of the computers on your network to 192.168.0.x, where **x** is any number between 11-254.
- Type 192.168.0.10 into the address field of your web browser. 192.168.0.10 is the default IP Address of the DP-311U.
- Select the Network tab and scroll to the bottom to the AppleTalk protocol section
- If your AppleTalk network is divided into AppleTalk *zones*, you will have to specify which zone the Print Server should be in. You should locate the Print Server in the same zone as most of the users who will be using it. If your network is not divided into zones, the AppleTalk Zone field should contain a single asterisk “*”.

Printing from MacOS Client Workstations

The exact procedure for selecting a PostScript printer connected to your Print Server may vary slightly, depending on what printer driver version you are using. The procedure described below assumes you are using the LaserWriter 8.

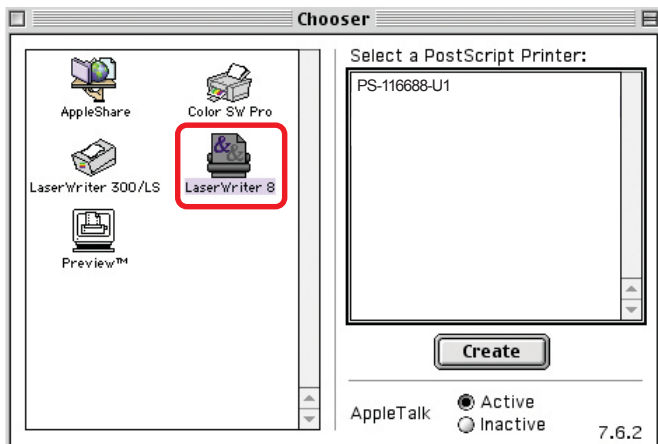
To choose a printer connected to your Print Server as your MacOS workstation's default printer,

Open the Chooser by selecting **Chooser** from the Apple menu.

Select the **LaserWriter 8** icon on the left. Make sure that AppleTalk is set to **Active**.

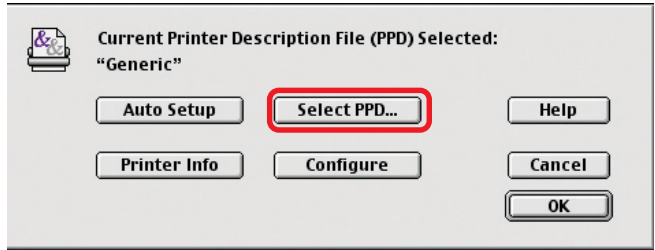
A list of all networked PostScript printers will be displayed:

Double-click the name of the **Printer Port** you wish to use. The **Printer Ports** shown are examples only.



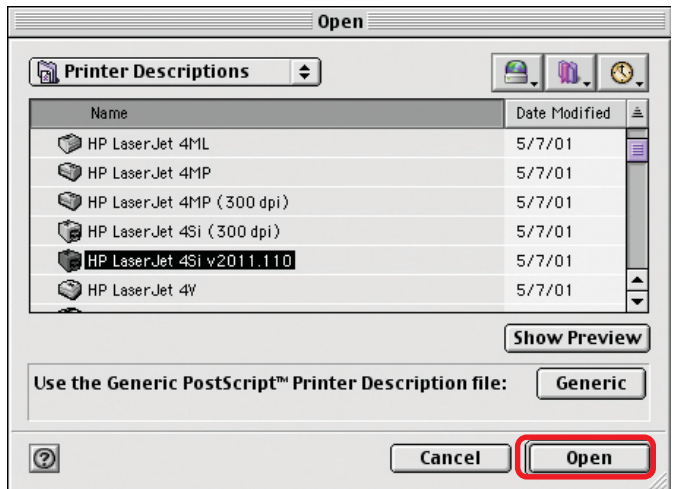
Printing from MacOS Client Workstations (continued)

If you have not previously set this printer as the default, your computer will prompt you for a PostScript Printer Description file. Choose **Select PPD**.



Select the appropriate printer description file for your printer.

Click **Open**.
(If your printer is not listed, click **Generic** to use a generic printer description.)



If you wish to access this setting in the future, you can use the **Setup** button in the Chooser window.

The selected printer will become your computer's default printer. You may need to choose **Page Setup** in any applications you have open.

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 98SE.

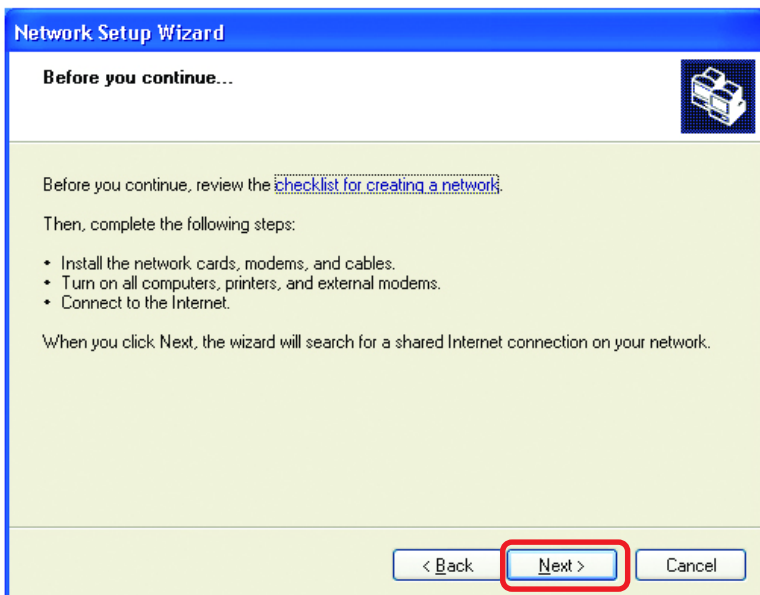
Go to **Start>Control Panel>Network Connections**



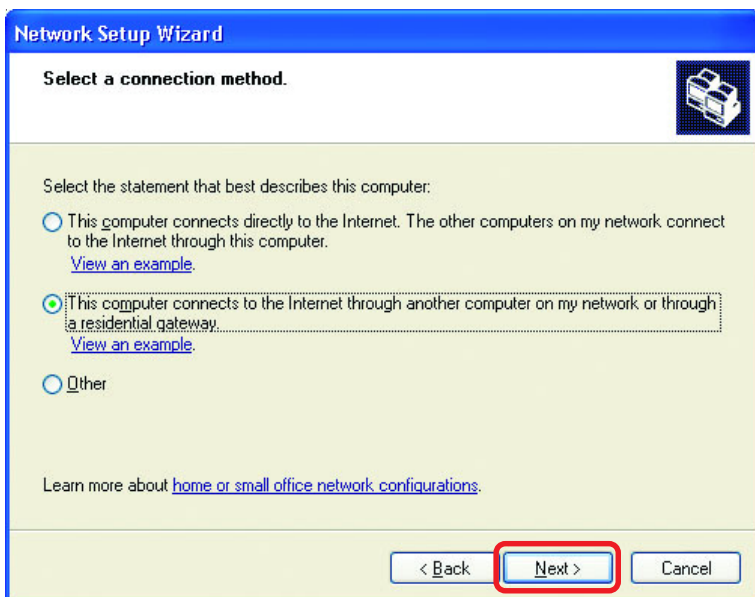
When this screen appears, Click **Next**

Networking Basics (continued)

Please follow all the instructions in this window:



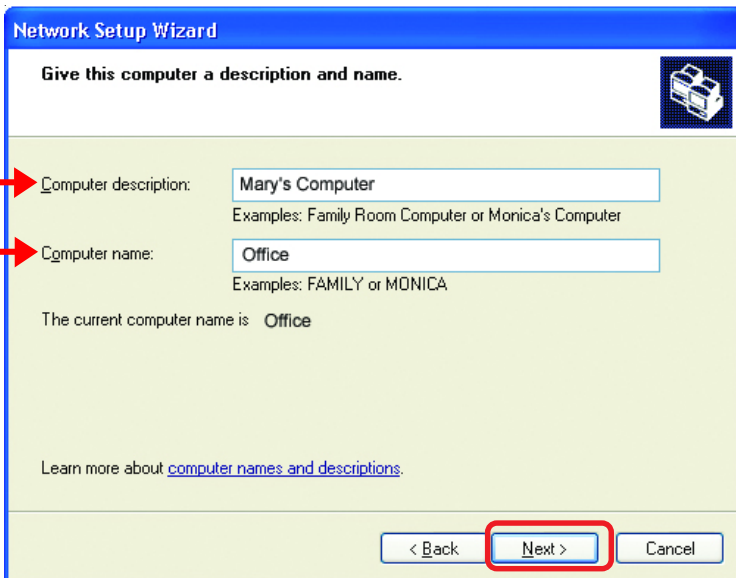
In this window, select the best description of your computer. If your computer connects to the internet through a gateway/router, select the second option as shown.



Click **Next**

Networking Basics (continued)

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.' The window contains two text input fields. The first field is labeled 'Computer description:' and contains the text 'Mary's Computer'. Below it are the examples 'Examples: Family Room Computer or Monica's Computer'. The second field is labeled 'Computer name:' and contains the text 'Office'. Below it are the examples 'Examples: FAMILY or MONICA'. Below the fields, it says 'The current computer name is Office'. At the bottom right, there are three buttons: '< Back', 'Next >', and 'Cancel'. The 'Next >' button is highlighted with a red rectangle. A red arrow points from the text 'Enter a Computer description and a Computer name (optional.)' to the 'Computer description:' field. Another red arrow points from the text 'Click Next' to the 'Next >' button.

Give this computer a description and name.

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

Computer name:
Examples: FAMILY or MONICA

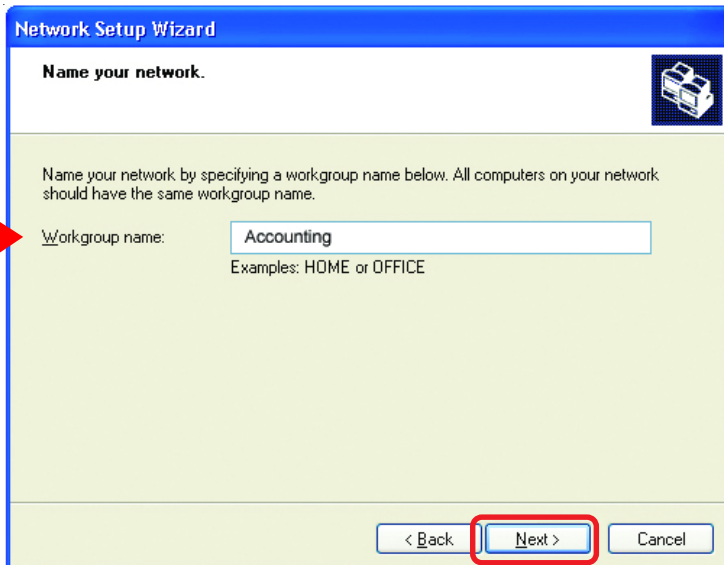
The current computer name is Office

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.' The window contains a text input field labeled 'Workgroup name:' with the text 'Accounting'. Below it are the examples 'Examples: HOME or OFFICE'. At the bottom right, there are three buttons: '< Back', 'Next >', and 'Cancel'. The 'Next >' button is highlighted with a red rectangle. A red arrow points from the text 'Enter a Workgroup name. All computers on your network should have the same Workgroup name.' to the 'Workgroup name:' field. Another red arrow points from the text 'Click Next' to the 'Next >' button.

Name your network.

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

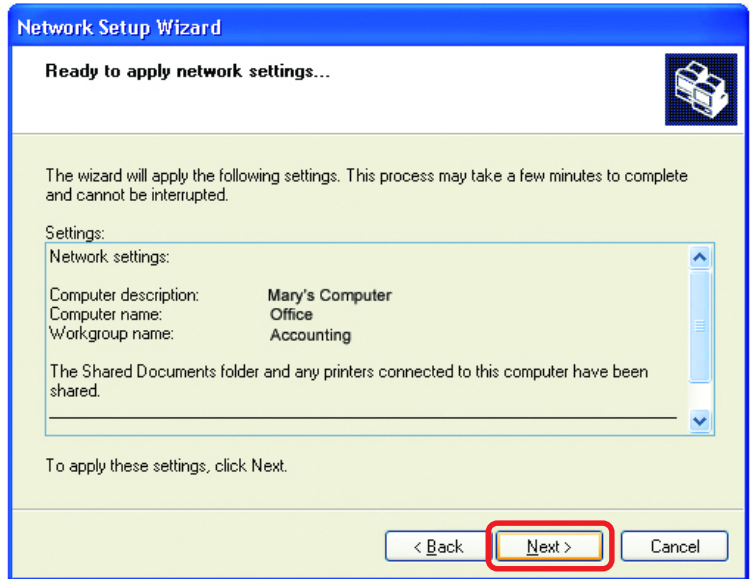
Workgroup name:
Examples: HOME or OFFICE

< Back **Next >** Cancel

Click **Next**

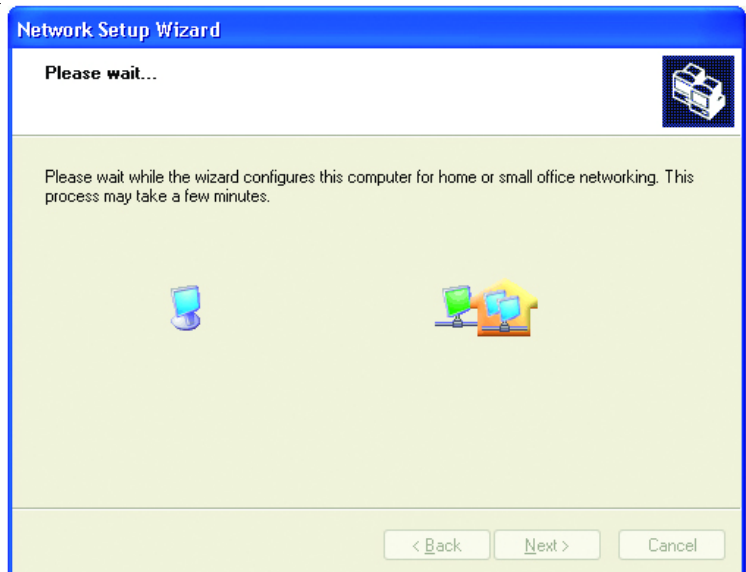
Networking Basics (continued)

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.

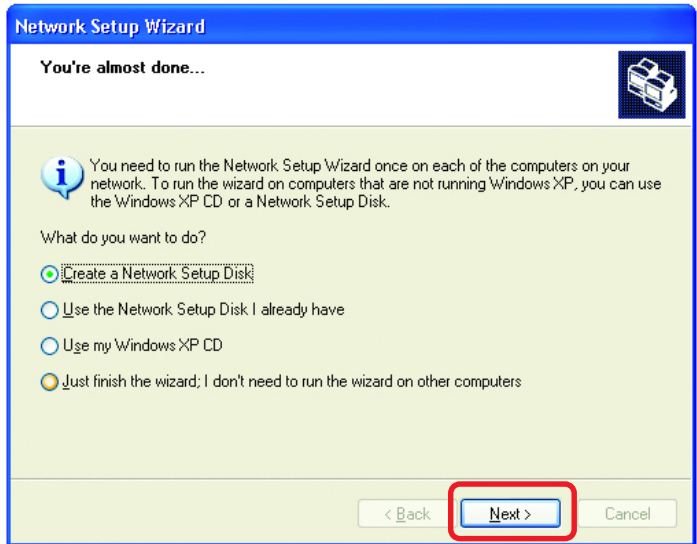


Networking Basics (continued)

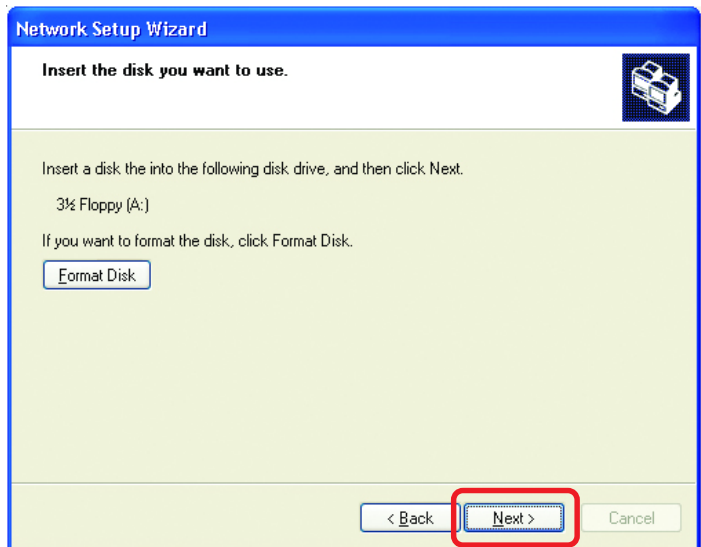
In this window, select the best option. In this example, **Create a Network Setup Disk** has been selected.

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**.



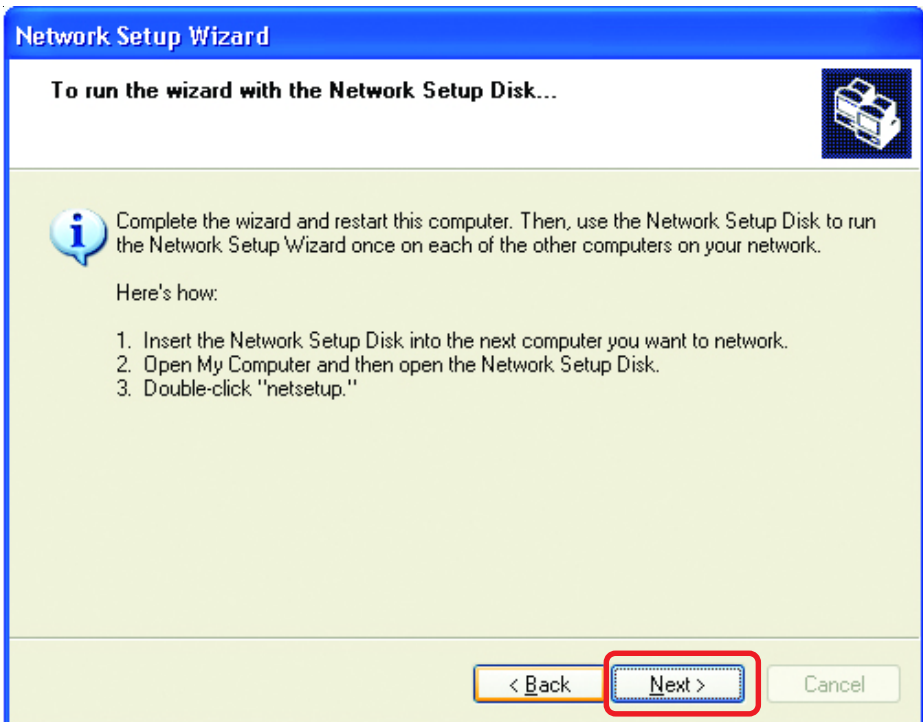
Format the disk if you wish, and Click **Next**

Networking Basics (continued)

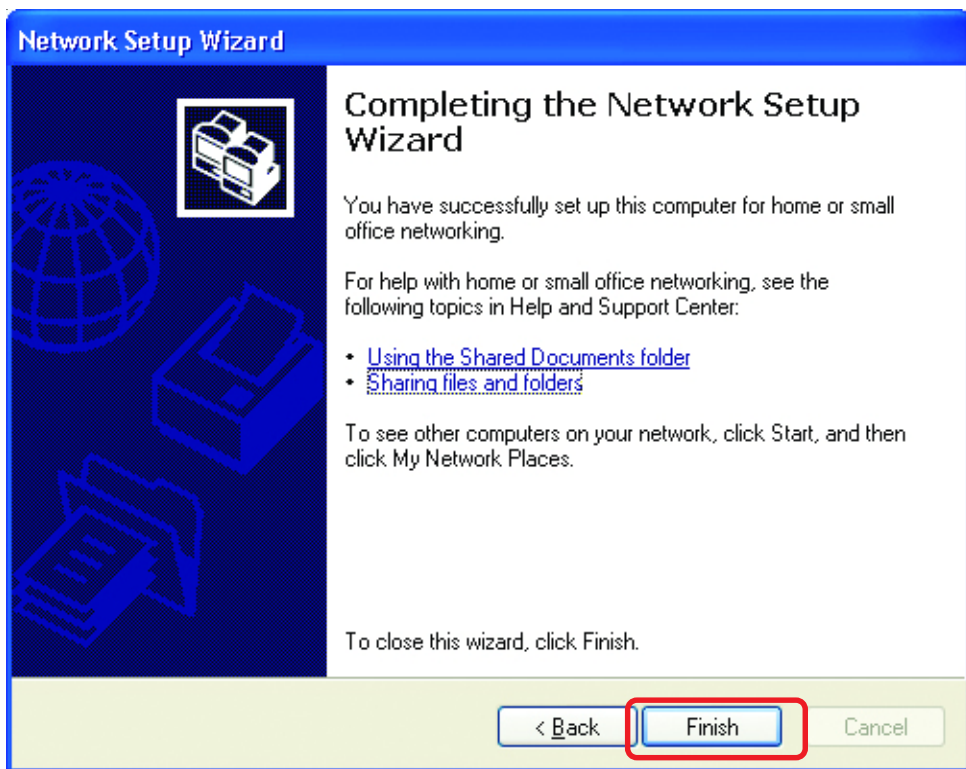
Please wait while the **Network Setup Wizard** copies the files.



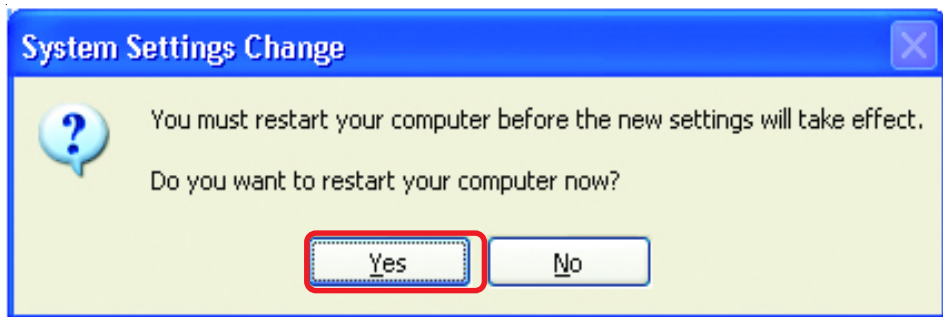
Please read the information under **Here's how** in the screen below. After you complete the **Network Setup Wizard** you will use the **Network Setup Disk** to run the **Network Setup Wizard** once on each of the computers on your network. To continue, Click **Next**.



Networking Basics (continued)



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



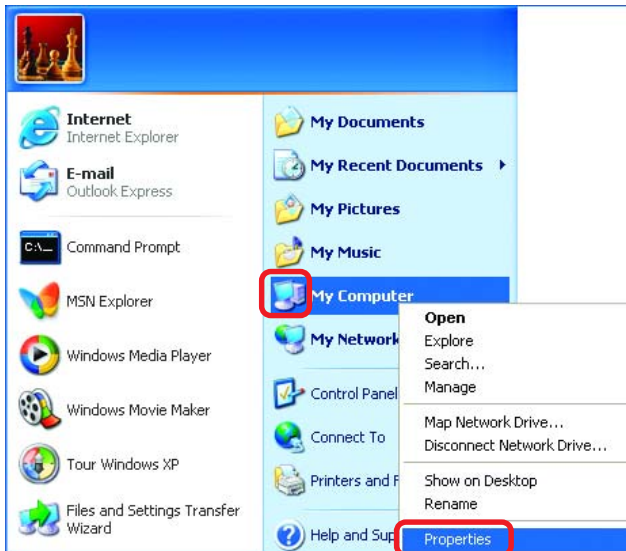
You have completed configuring this computer. Next, you will need to run the **Network Setup Disk** on all the other computers on your network. After running the **Network Setup Disk** on all your computers, your new wireless network will be ready to use.

Networking Basics (continued)

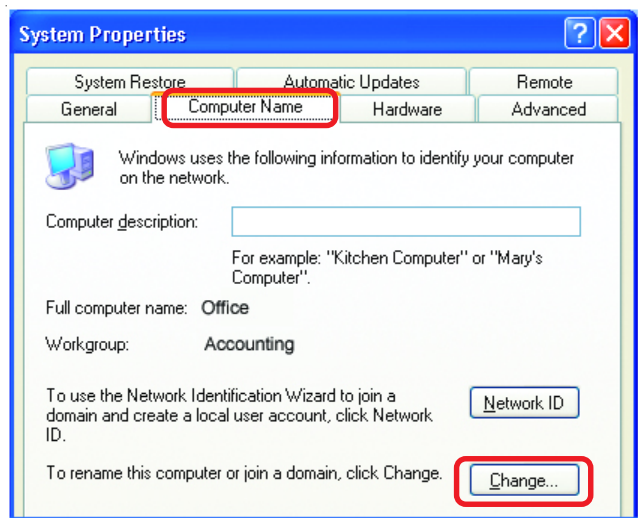
How to assign a Name to your computer

To name your computer, please follow these directions in **Windows XP**:

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



- Select the **Computer Name** tab in the System Properties window.

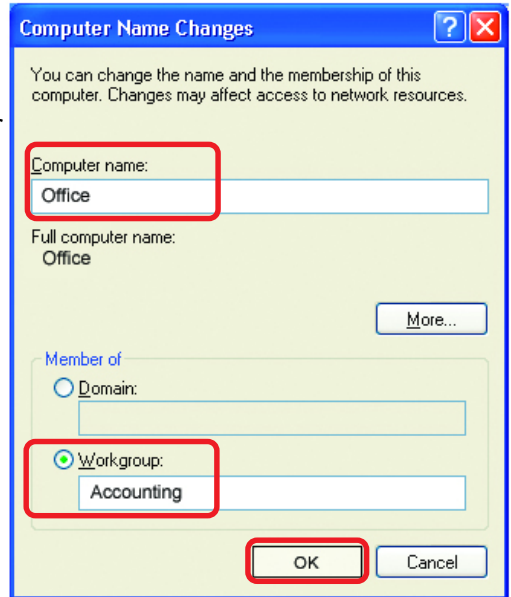


- You may enter a **Computer Description** (optional).
- To rename the computer and join a domain, Click **Change**.

Networking Basics (continued)

How to assign a Name to 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**



How to find your IP Address in Windows XP

The adapter-equipped computers in your network must be in the same IP Address range. To verify the IP Address of the adapter, please do the following:

- Right-click on the **Local Area Connection icon** in the task bar
- Click on **Status**



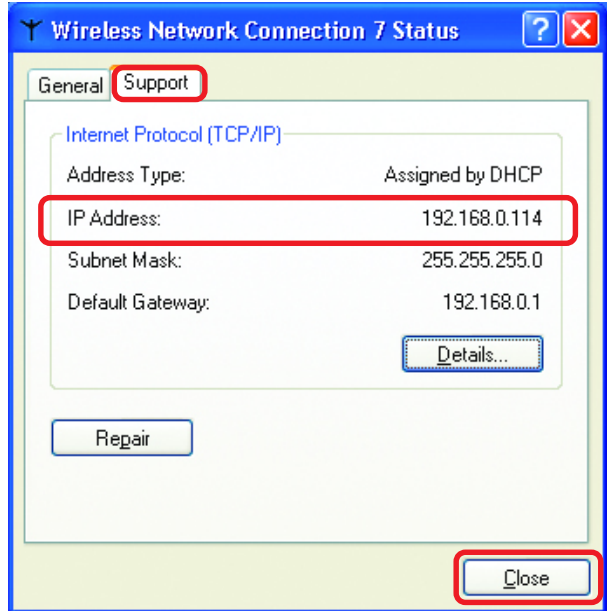
Networking Basics (continued)

How to find your IP Address in Windows XP

This window will appear.

- Click the **Support** tab

- Click **Close**

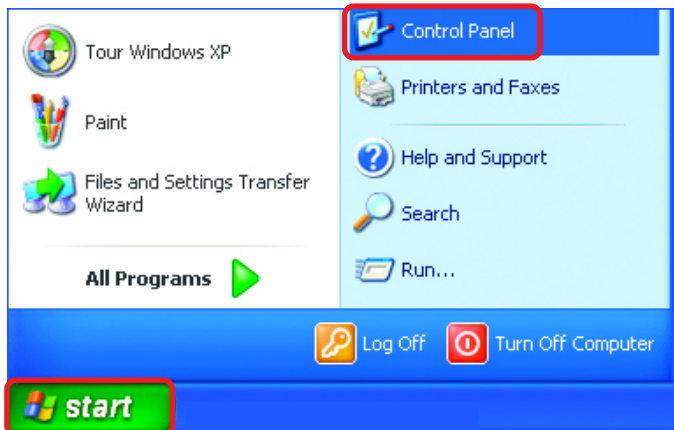


Assigning a Static IP Address in Windows XP/2000

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/Broadband Router you will not need to assign Static IP Addresses.

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

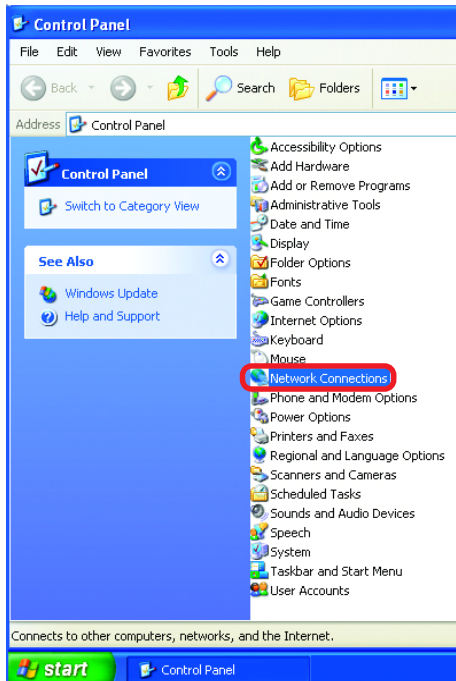
- Go to **Start**
- Double-click **Control Panel**



Networking Basics (continued)

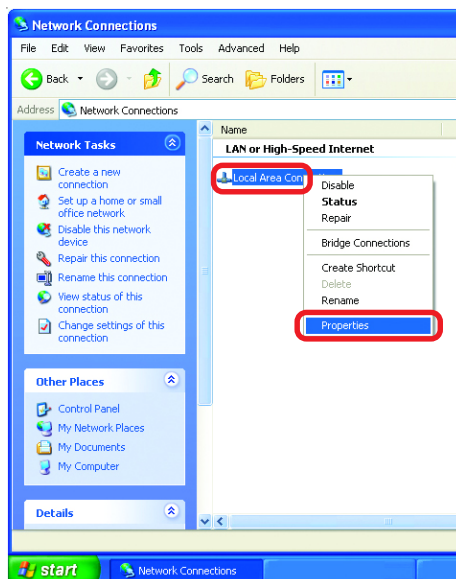
Assigning a Static IP Address in Windows XP/2000

- Double-click **Network Connections**



- Right-click **Local Area Connections**

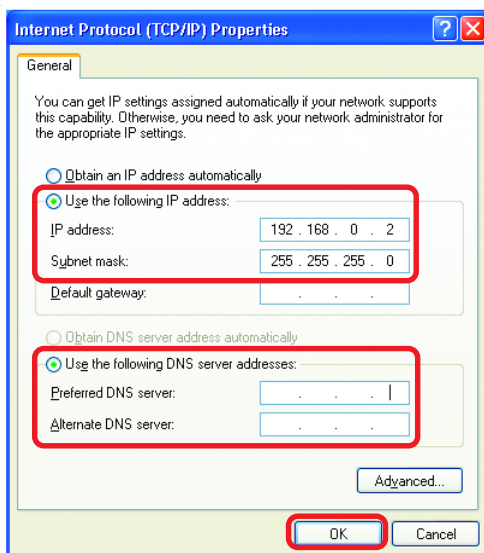
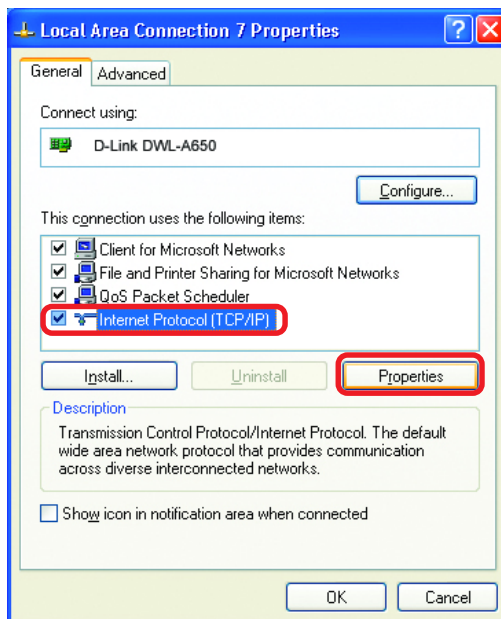
- Double-click **Properties**



Networking Basics (continued)

Assigning a Static IP Address in Windows XP/2000

- Click **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 supplied by your ISP (Internet Service Provider.)

- Click **OK**

Technical Specifications

Printer Connection

Printer Port: USB port (ver 1.1)

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

Network Connection

Network Standards: IEEE 802.3 10Base-T Ethernet, IEEE 802.11b Wireless Standard

Network Data Transfer Rate: 10/100 Mbps (megabits per second)

Network Connector: RJ-45 connector for 10Base-T Category 5 twisted-pair connection

Network Protocols

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

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

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, USB

Environmental and Physical

Power Supply: External power supply providing 5V/ 2.5A

Dimensions: 3.54" x 3.19" x 1.57" (90mm x 81mm x 40mm)

Weight: approx. 5.19 oz. (147g)

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 B, CE Class B, VCCI Class B

Technical Support

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

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

U.S. and Canadian customers can contact D-Link technical support through our website, or by phone.

Tech Support for customers within the United States:

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>

email:support@dlink.com

Tech Support for customers within Canada:

D-Link Technical Support over the Telephone:

(800) 361-5265

Monday to Friday 8:30am to 9:00pm EST

D-Link Technical Support over the Internet:

<http://support.dlink.ca>

email:support@dlink.ca

When contacting technical support, please provide the following information:

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

Warranty and Registration

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 refurbished product and 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: The customer shall return the product to the original purchase point based on its return policy. In case the return policy period has expired and the product is within warranty, the customer shall submit a claim to D-Link as outlined below:

- The customer must submit with the product 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 in-bound shipping charges to D-Link. No Cash on Delivery (“COD”) is allowed. Products sent COD will either be rejected by D-Link or become the property of D-Link. Products shall 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 to the customer 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 and upon request.

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.

Limitation of Liability: TO THE MAXIMUM EXTENT PERMITTED BY LAW, D-LINK IS NOT LIABLE UNDER ANY CONTRACT, NEGLIGENCE, STRICT LIABILITY OR OTHER LEGAL OR EQUITABLE THEORY FOR ANY LOSS OF USE OF THE PRODUCT, INCONVENIENCE OR DAMAGES OF ANY CHARACTER, WHETHER DIRECT, SPECIAL, INCIDENTAL OR CONSEQUENTIAL (INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF GOODWILL, LOSS OF REVENUE OR PROFIT, WORK STOPPAGE, COMPUTER FAILURE OR MALFUNCTION, FAILURE OF OTHER EQUIPMENT OR COMPUTER PROGRAMS TO WHICH D-LINK’S PRODUCT IS CONNECTED WITH, LOSS OF INFORMATION OR DATA CONTAINED IN, STORED ON, OR INTEGRATED WITH ANY PRODUCT RETURNED TO D-LINK FOR WARRANTY SERVICE) RESULTING FROM THE USE OF THE PRODUCT, RELATING TO WARRANTY SERVICE, OR ARISING OUT OF ANY BREACH OF THIS LIMITED WARRANTY, EVEN IF D-LINK HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. THE SOLE REMEDY FOR A BREACH OF THE FOREGOING LIMITED WARRANTY IS REPAIR, REPLACEMENT OR REFUND OF THE DEFECTIVE OR NON-CONFORMING PRODUCT. THE MAXIMUM LIABILITY OF D-LINK UNDER THIS WARRANTY IS LIMITED TO THE PURCHASE PRICE OF THE PRODUCT COVERED BY THE WARRANTY. THE FOREGOING EXPRESS WRITTEN WARRANTIES AND REMEDIES ARE EXCLUSIVE AND ARE IN LIEU OF ANY OTHER WARRANTIES OR REMEDIES, EXPRESS, IMPLIED OR STATUTORY.

Governing Law: This Limited Warranty shall be governed by the laws of the State of California. Some states do not allow exclusion or limitation of incidental or consequential damages, or limitations on how long an implied warranty lasts, so the foregoing limitations and exclusions may not apply. This limited warranty provides specific legal rights and the product owner may also have other rights which vary from state to state.

Trademarks: D-Link is a registered trademark of D-Link Systems, Inc. Other trademarks or registered trademarks are the property of their respective manufacturers or owners.

Copyright Statement: No part of this publication or documentation accompanying this Product may be reproduced in any form or by any means or used to make any derivative such as translation, transformation, or adaptation without permission from D-Link Corporation/D-Link Systems, Inc., as stipulated by the United States Copyright Act of 1976. Contents are subject to change without prior notice. Copyright® 2002 by D-Link Corporation/D-Link Systems, Inc. All rights reserved.

CE Mark Warning: This is a Class B 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 B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communication. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

FCC Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

IMPORTANT NOTE:

FCC Radiation Exposure Statement:

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of about 8 inches (20cm) between the radiator and your body.

This transmitter must not be co-located or operated in conjunction with any other antenna or transmitter.

Register your D-Link product online at <http://support.dlink.com/register/>

Appendix:

DP-311U Printer Compatibility List For Windows

The Canon Printer

Canon BJC-55, 85
Canon S100SP
Canon S200SP
Canon S300
Canon S330
Canon S400SP
Canon S450
Canon S520
Canon S600
Canon S750
Canon S4500
Canon S6300
Canon S9000

The Epson Printer

Epson Stylus Color 900
Epson Stylus Color 1160
Epson Stylus Color 2200
Epson Stylus Photo 720
Epson Stylus Photo 810, 820, 830, 890
Epson Stylus Photo 900
Epson Stylus Photo 1280, 1290
Epson Stylus C41UX, C405, C42UX
Epson Stylus C60, C61, C62
Epson Stylus C80, C82

The Lexmark Printer

Lexmark Z13
Lexmark Z25
Lexmark Z33
Lexmark Z35
Lexmark Z43
Lexmark Z45
Lexmark Z45
Lexmark Z53

The HP Printer

HP DeskJet 640C, 656C
HP DeskJet 845C
HP DeskJet 920C
HP DeskJet 948C
HP DeskJet 960C
HP DeskJet 990Cxi, 995C
HP DeskJet 1125C, 1180C
HP DeskJet 1220C
HP DeskJet 3320
HP DeskJet 3420, 3425
HP Color Inkjet CP1700
HP LaserJet 1200
HP LaserJet 2200, 2200d

Appendix: DP-311U Printer Compatibility List for Windows (continued)

The Lexmark Printer

Lexmark 4039 10R

Lexmark 5700

Lexmark Optra Color 45

Lexmark Optra C710

Lexmark Optra E, E+, E310

Lexmark Optra K1220

Lexmark Optra M410, M412

Lexmark Optra N

Lexmark Optra R+

Lexmark Optra S1250, S1855

Lexmark Optra SC-1275

Lexmark Optra SE-3455

Lexmark Optra T614

Lexmark Optra W810

Lexmark Z53

Other printers from the brands listed above may also be supported.

For an updated compatibility list please visit: <http://www.support.dlink.com>