# D-Link DP-311P Wireless Print Server

## **Manual**



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## **Package Contents**



## **Contents of Package:**

- D-Link DP-311P Wireless Print Server
- Manual, PS Admin User's Guide and Warranty on CD
- Printed Quick Installation Guide

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

## **System Requirements:**

- Windows XP/2000/Me/98SE
- Apple Mac OS with AppleTalk
- NetWare 5.x (Native NDS)
- 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-311P Print Server is a wireless print server with one parallel port. With its high-speed IEEE 1283 parallel port, the DP-311P allows those on your network to access and share a printer wirelessly, no matter where they reside on the network.

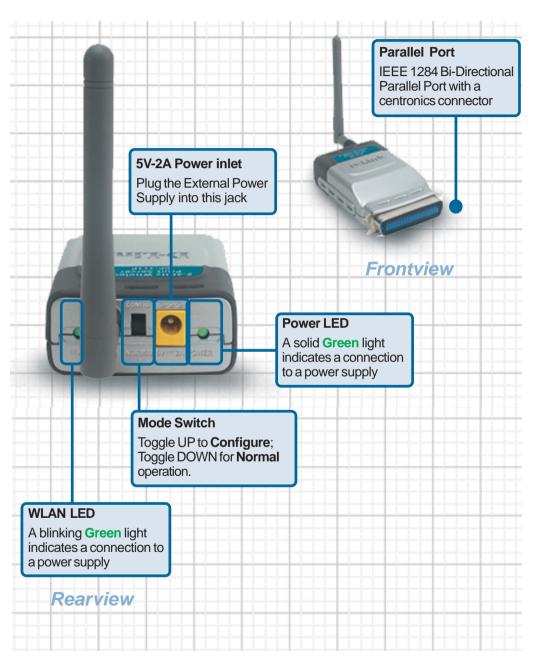
The DP-311P is equipped with one bi-directional parallel port with a centronics connector for direct connection to most printers available on the market today. No additional printer cable will be required. The DP-311P also supports all major network operating systems and protocols.

The DP-311P is an 802.11b-compliant wireless Print Server that supports both Infrastructure or Ad-Hoc wireless modes. With the DP-311P you have the ability and convenience of sharing a printer beyond the wired network.

The DP-311P is also easily configurable using a Web Browser or Windows based setup wizard. Using a web browser on a PC connected to the network, configuration is simple and straightforward with the familiar D-Link interface. PS Admin, a Windows-based configuration program can also be used to configure the DP-311P. (The PS Admin manual is available on the CD included with your purchase).

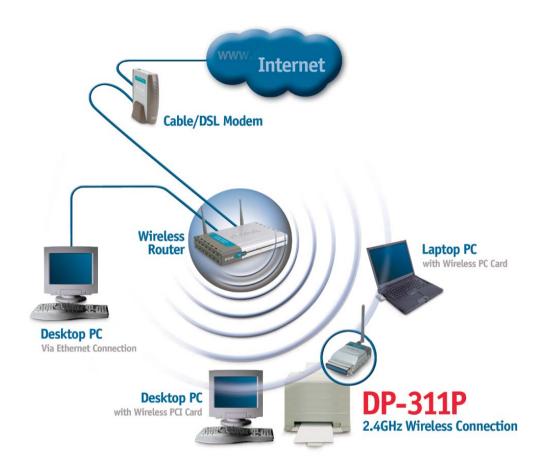
The DP-311P Wireless Print Server is the ideal network printing solution for small offices, home offices, schools and other businesses that require printer sharing.

# **Getting to know the DP-311P**



# **Getting Started**

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



For a list of printers that are compatible with the DP-311P, 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-311P.

# Using the Web Configuration



## Before you begin configuring the DP-311P:



Set the switch to **Config** mode on the rear panel of the DP-311P.

- Change your wireless adapter setting to **Ad-Hoc** or Peer-to-Peer mode. (Open the Configuration utility for your network adapter and make sure that your network adapter is set to Ad-Hoc mode in your configuration settings.) (For D-Link network adapters, you can open the web-based configuration utility and go to the Site Survey function and select the SSID named **WLAN-PS**. The Channel is **1** and WEP is set to **Disable**. The network adapter will now be in Ad-Hoc mode.)
- Change the wireless adapter IPAddress so that it is in the same IPAddress range as the DP-311P (192.168.0.x). For instructions on changing the IP Address, please refer to the Networking Basics section in this manual. The subnet mask is 255.255.255.0.
- Restart the computer.
- Open your web browser and input the IP Address of your wireless print server. The default IP Address is 192.168.0.10.





## After you have completed the configuration:



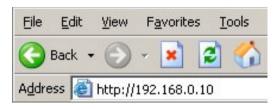
After you have finished configuring the DP-311P, in order for the changes to take effect, you must toggle the mode switch on the rear panel of the print server back to "Normal" mode.



Re-power the DP-311P by pulling the power adapter plug out and re-inserting it.

On the following pages you will find a description of each of the screens that are available to you for the web configuration of the DP-311P.

After you have entered the default IP Address of the Print Server into your web browser address field, the configuration utility will be available, as shown here.



You can access and control the Print Server's configuration through the tabs on the top of this main screen: **Home, Configuration, Network, Tools**, and **Help**.

This screen displays some basic information about the DP-311P and the printer attached to the DP-311P, if available.

#### Home > Status



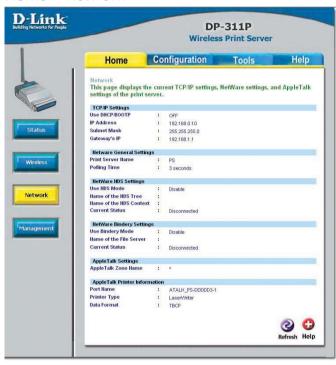
This screen displays the wireless settings and information about the print server.

#### Home > Wireless



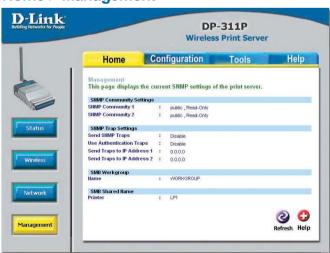
#### Home > Network

This screen displays the current TCP/IP settings; Netware settings and AppleTalk settings of the print server.



This screen displays the current SNMP settings of the print server.

## Home > Management



#### Configuration > Status



**Device Name:** The name assigned to the Print Server

System Contact: (optional) Input a System Contact name

System Location: (optional) Input a location for the Print Server

Password: Enter an Administrator password (3-8 characters)

Re-type Password: Re-type the password (when accessing the DP-311P with

password protection, the user name is admin, and the password

will be whatever you define here)

**Printer Port:** Select one of the following Printer Bi-directional settings:

Auto-detect for bi-directional port

Disable bi-directional port

#### Mode:

Ad-Hoc: Connect to compatibly configured wireless clients that have the same chipset in peer to peer mode

#### 802.11b Ad-Hoc

Connect to all compatibly configured 802.11b wireless clients in peer to peer mode

#### Infrastructure:

Connects to compatibly configured wireless AP or router in a WLAN

Select SSID or **Manually Enter** SSID Below:

Select the SSID from the pull-down menu, or enter it manually in the field provided. You can use the Site Survey tool provided to obtain SSID information

Channel:

Select the channel from the pull-down menu. (This is only used in Ad-Hoc mode)

**Data Transmit** 

Rates: Choose the data transmit rate; Auto is the default setting

From the pull-down menu choose 64 bit; 128 bit or Disable WEP; Use WEP:

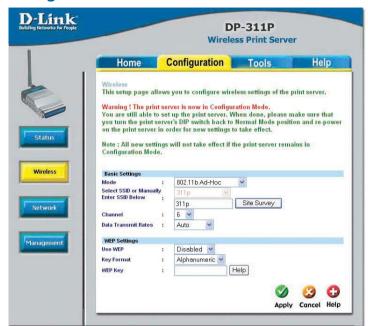
Disabled is the default setting

**Key Format:** Choose Alphanumeric or Hexadecimal

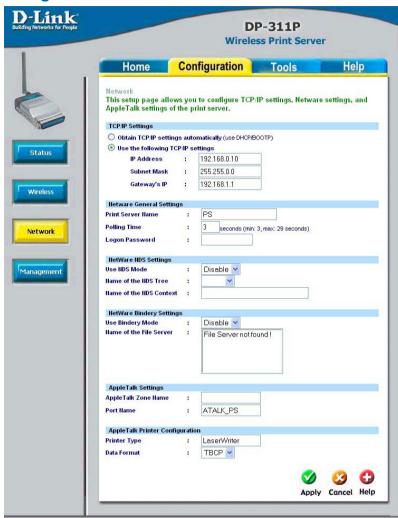
**WEP Key:** Enter the WEP key in the chosen format

> 64-bit, Alphanumeric = a combination of 5 digits and letters 128-bit, Alphanumeric = a combination of 13 digits and letters 64-bit, Hexadecimal = a combination of 10 digits and letters 128-bit. Hexadecimal = a combination of 26 digits and letters

#### **Configuration > Wireless**



#### **Configuration > Network**



#### **TCP/IP Settings**

Obtain TCP/IP settings automatically (use DHCP/BOOTP):

Select this option to obtain settings automatically from your DHCP server

Use the following TCP/IP settings:

Select this option to enter a Static IP Address, Subnet Mask and Gateway IP Address manually

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#### Configuration > Network (continued)

**Netware General Settings** 

**Print Server Name:** Input a name for the print server

**Polling Time:** Enter the number of polling seconds (the minimum is 3; the

maximum is 29 seconds)

**Logon Password:** Enter the logon password

**NDS** (Novell Directory Services) is a Directory Service for Novell netware networks that interoperates with other types of networks and provides a logical "tree structure" view of all resources on the network, no matter where they are located.

**Netware NDS Settings** 

**Use NDS Mode:** Enable or Disable NDS mode; Disable is the default setting

Name of the NDS Tree: Select from the pull-down menu, if available

Name of the NDS

Context: Enter a name for the NDS context

**Netware Bindery Settings** 

**Use Bindery Mode:** Select Enable or Disable

Name of the File Server: Select the name of the File Server

**Apple Talk Settings** 

AppleTalk Zone Name: Enter AppleTalk Zone Name

**Port Name:** Enter the Port Name

**Apple Talk Printer Configuration** 

**Printer Type:** Enter the Printer Type

**Data Format:** Enter the Data Format

### **Configuration > Management**





#### **SNMP Community Settings**

Support HP WebJet Admin: Select Enable or Disable

**SNMP Community Name 1:** Enter a name

Access Right: Select from the pull-down menu

Read-Only or Read-Write

**SNMP Community Name 2:** Enter a name

Access Right: Select from the pull-down menu

Read-Only or Read-Write

**SNMP Trap Settings** 

Send SNMP Traps: Select Enable or Disable
Use Authentication Traps: Select Enable or Disable

Send Traps to IP Address 1: Input an IP Address for receiving Traps

Send Traps to IP Address 2: Input an IP Address for receiving Traps

#### **Configuration > Management (continued)**

#### SMB

(Server Message Block) is a message format to share files, directories and devices.

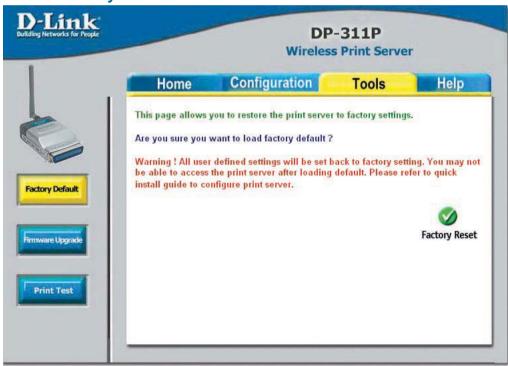
**SMB Workgroup** 

Name: Enter a name

**SMB Shared Name** 

**Printer:** Enter the printer name

#### **Tools > Factory Default**





If you click **Factory Reset** you will lose all user-defined settings and you will have to re-configure the DP-311P!

Visit http://support.dlink.com for the latest upgrades. Download the upgrade to your hard drive and then click **Browse** in this screen to locate the upgrade. When you have found the firmware file on your hard drive, click **Upgrade**, in this screen, to complete the process.

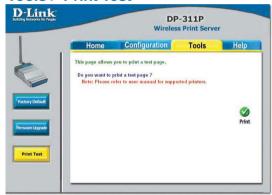
Click **Print** in this window to print a test page. Please refer to the **Appendix** in this manual for a list of supported printers.

For more information, click on any of the Help topics listed in this screen.

#### **Tools > Firmware Upgrade**



#### **Tools > Print Test**



#### Help

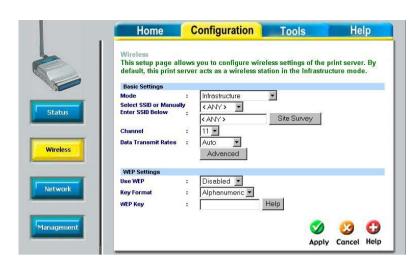


# Printing with Windows XP/2000

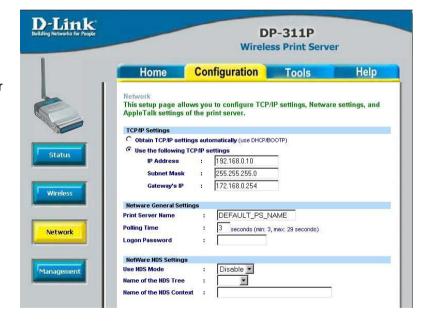
- Set the switch to **Config** mode on the rear panel of the DP-311P.
- Change your wireless adapter setting to **Ad-Hoc** or Peer-to-Peer mode. (Open the Configuration utility for your network adapter and make sure that your network adapter is set to Ad-Hoc mode in your configuration settings.) (For D-Link network adapters, you can open the web-based configuration utility and go to the Site Survey function and select the SSID named **WLAN-PS**. The Channel is **1** and WEP is set to **Disable**. The network adapter will now be in Ad-Hoc mode.)
- Change the wireless adapter IP Address so that it is in the same IP Address range as the DP-311P (192.168.0.x). For instructions on changing the IP Address, please refer to the Networking Basics section in this manual. The subnet mask is 255.255.255.0.
- Restart the computer.
- Open your web browser and input the IP Address of your wireless print server. The default IP Address is 192.168.0.10.



Change the mode to Infrastructure. Input or select the SSID of your wireless router or AP. Input WEP settings if applicable.



Change the IP Address and change the other settings of the DP-311P to conform to your network.

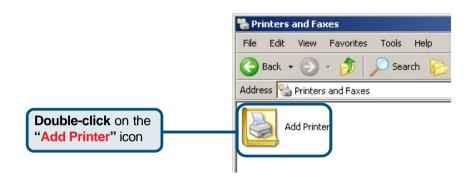




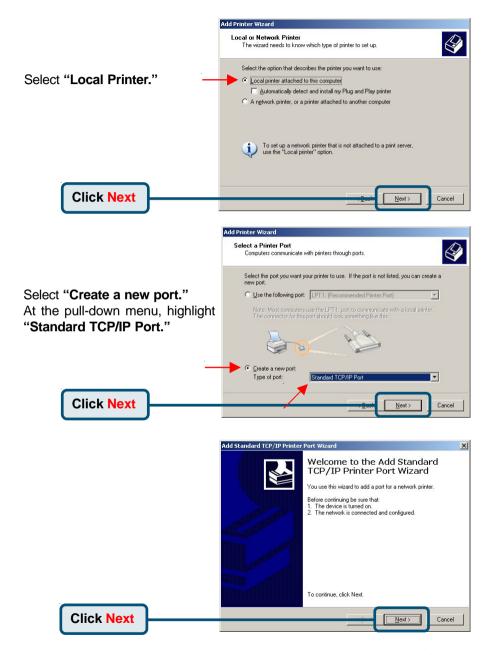
- 1 After you have configured the DP-311P, set the rear panel switch back to **Normal** mode.
- Change your wireless network adapter settings (IP Address, Infrastructure mode) so that they match your network.

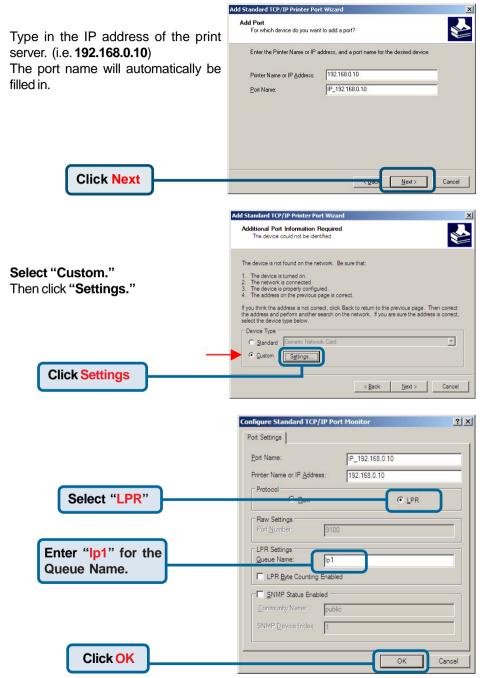
#### For Windows XP:

Go to Start > Printers and Faxes > Add a Printer



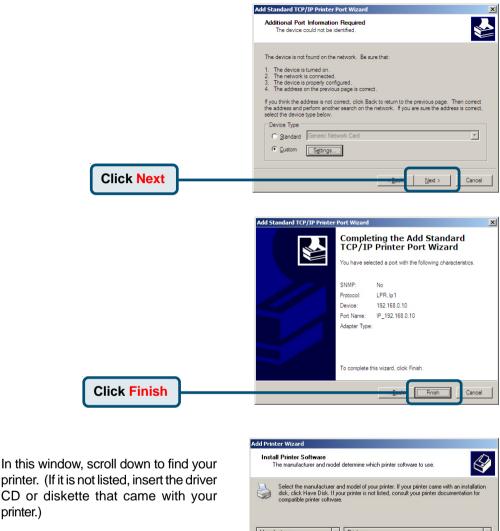




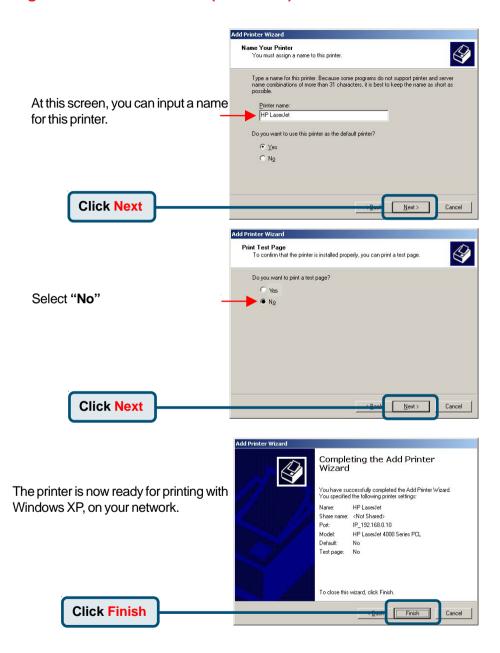


printer.)

printer.



Manufacturer \_ HP LasesJet 3200 Series PCL Click on "Have Disk." GCC. HP LaserJet 3200 Series PS Generic Then, scroll down and highlight the HP LaserJet 4 Gestetner HP LaserJet 4000 Series PCL HP T UDI ~ and anno carios DCI o Windows Update This driver is digitally signed. Have Disk. Tell me why driver signing is important **Click Next** 



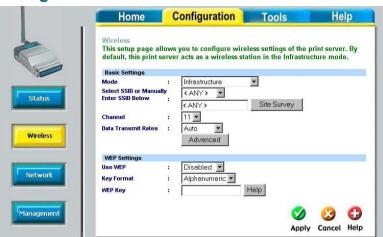
# Printing with Windows 98SE/Me

- Set the switch to **Config** mode on the rear panel of the DP-311P.
- Change your wireless adapter setting to **Ad-Hoc** or Peer-to-Peer mode. (Open the Configuration utility for your network adapter and make sure that your network adapter is set to Ad-Hoc mode in your configuration settings.) (For D-Link network adapters, you can open the web-based configuration utility and go to the Site Survey function and select the SSID named **WLAN-PS**. The Channel is **1** and WEP is set to **Disable**. The network adapter will now be in Ad-Hoc mode.)
- Change the wireless adapter IP Address so that it is in the same IP Address range as the DP-311P (192.168.0.x). For instructions on changing the IP Address, please refer to the Networking Basics section in this manual. The subnet mask is 255.255.255.0.
- Restart the computer.
- Open your web browser and input the IP Address of your wireless print server. The default IP Address is 192.168.0.10.



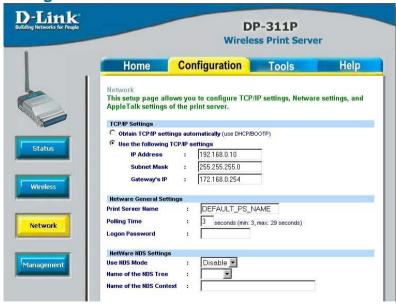
#### **Configuration > Wireless**

Change the mode to Infrastructure. Input or select the SSID of your wireless router or AP. Input WEP settings if applicable.



**Configuration > Network** 

Change the IP Address and change the other settings of the DP-311P to conform to your network





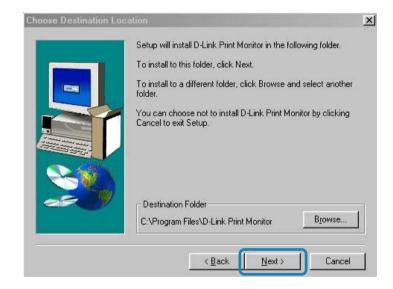
- After you have configured the DP-311P, set the rear panel switch back to Normal mode
- Change your wireless network adapter settings (IP Address, Infrastructure mode) so that they match your network

Please insert the DP-311P CD into your CD-ROM drive and click Install PS Admin

This picture will appear.

Click Next





Click Next

Select the program you want to install

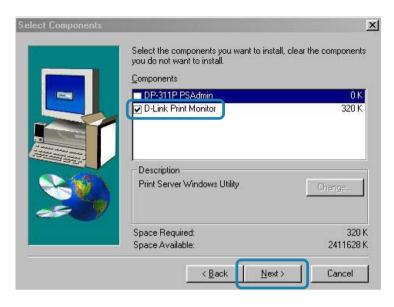
#### **DP-311P PSAdmin is**

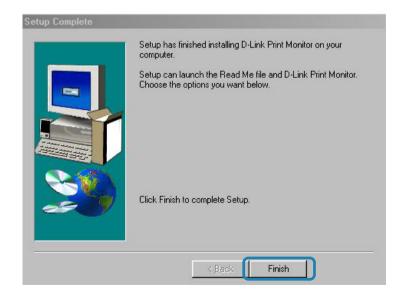
a windows based management utility, only Administrators need to install this program

#### **D-Link Print Monitor**

is the driver for print servers in Windows 95/98/Me. You will need to install this program

Click Next





Click Finish

Go to Start > Settings > Printer > Add printer or Go to Start > Control Panel > Printers

Double click the **Add Printer** icon

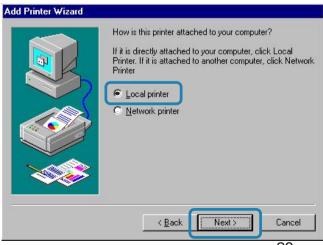






#### Select Local printer

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

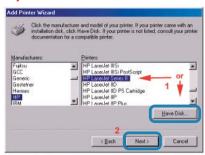
Click Next

Click Next

Select No

Click Finish

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



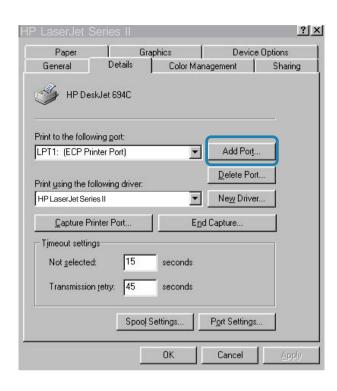




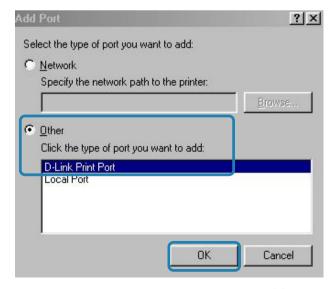


After the printer installation is completed, right-click on the Printer icon.

Select Properties > Details > Click Add Port



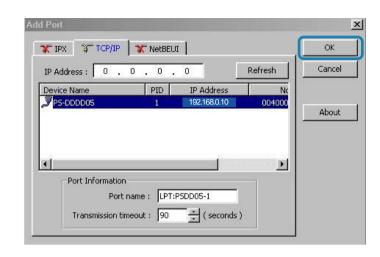
#### Select Other > D-link Print Port



Click OK

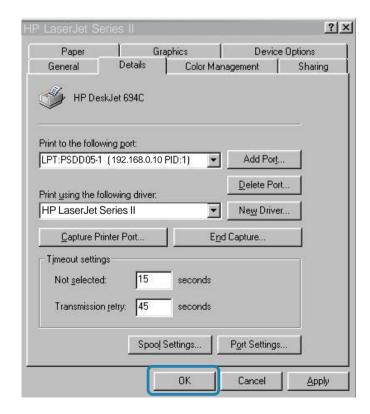
Select your **DP-311P** wireless print server

Click OK



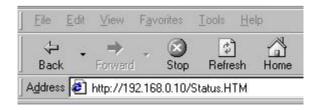
#### Click Apply > OK

You have completed setting up your printer in Win 98SE/Me!



# Setting up Apple Talk or LPR Printing in Mac OS X

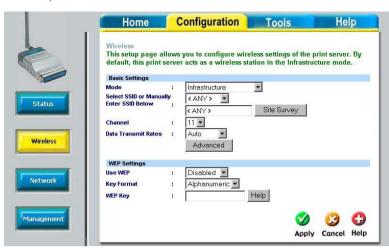
- 1
- Set the switch to Config mode on the rear panel of the DP-311P.
- Change your wireless adapter setting to **Ad-Hoc** or Peer-to-Peer mode. (Open the Configuration utility for your network adapter and make sure that your network adapter is set to Ad-Hoc mode in your configuration settings.) (For D-Link network adapters, you can open the web-based configuration utility and go to the Site Survey function and select the SSID named **WLAN-PS**. The Channel is **1** and WEP is set to **Disable**. The network adapter will now be in Ad-Hoc mode.)
- Change the wireless adapter IPAddress so that it is in the same IPAddress range as the DP-311P (192.168.0.x). For instructions on changing the IP Address, please refer to the Networking Basics section in this manual. The subnet mask is 255.255.255.0.
- Restart the computer.
- Open your web browser and input the IP Address of your wireless print server. The default IP Address is 192.168.0.10.



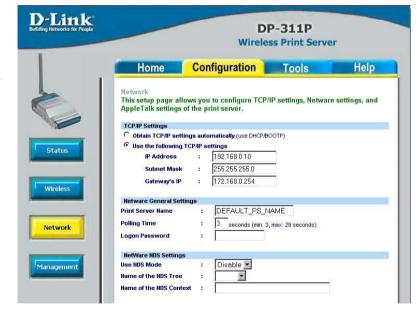
### **Setting up Apple Talk or LPR Printing**

in Mac OS X (continued)

Change the mode to Infrastructure. Input or select the SSID of your wireless router or AP. Input WEP settings if applicable.



Change the IP Address and change the other settings of the DP-311P to conform to your network.





- 1 After you have configured the DP-311P, set the rear panel switch back to **Normal** mode.
- Change your wireless network adapter settings (IP Address, Infrastructure mode) so that they match your network.

### **Setting up Apple Talk or LPR Printing**

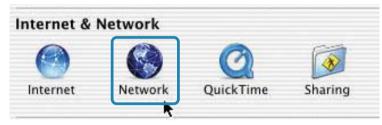
in Mac OS X (continued)

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

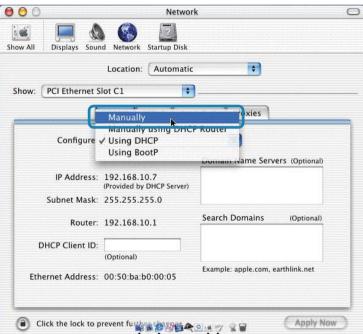
With Mac OSX you can use AppleTalk or LPR printers using IP protocols for printing through Print Servers. Follow the instructions below for setting up the Print Server.

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** pulldown 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



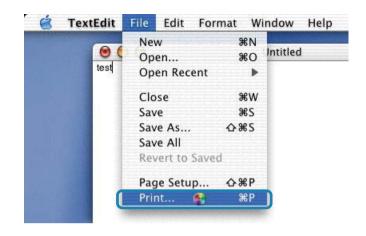
Select the **AppleTalk** tab in this window and check **Make AppleTalk Active** 



### **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

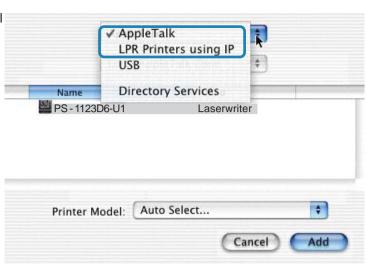


#### **Setting up Apple Talk or LPR Printing**

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

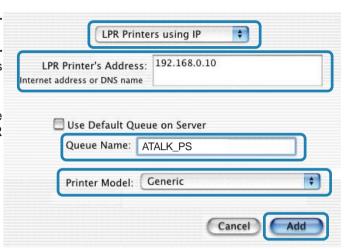
### **Setting up Apple Talk or LPR Printing**

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



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 is supported for 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-301U
- 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.

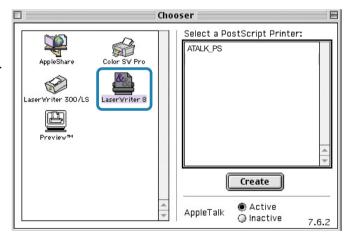
To choose a printer connected to your Print Server as your MacOS workstation's default printer,

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** 

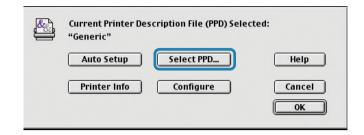
A list of all networked PostScript printers will be displayed:

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



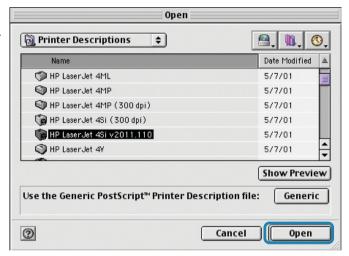
#### **Printing from MacOS Client Workstations (continued)**

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

#### 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.** 

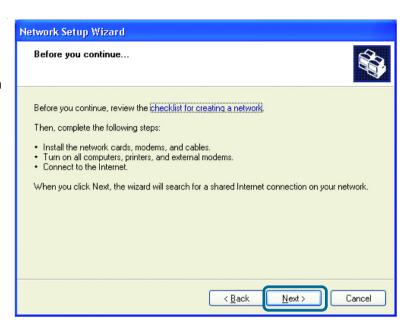
Note: Please refer to websites such as <a href="http://www.homenethelp.com">http://www.homenethelp.com</a> and <a href="http://www.microsoft.com/windows2000">http://www.microsoft.com/windows2000</a> for information about networking computers using Windows 2000, ME or 98SE.

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



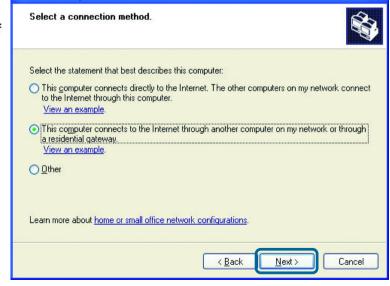
When this screen appears, Click Next

Please follow all the instructions in this window:

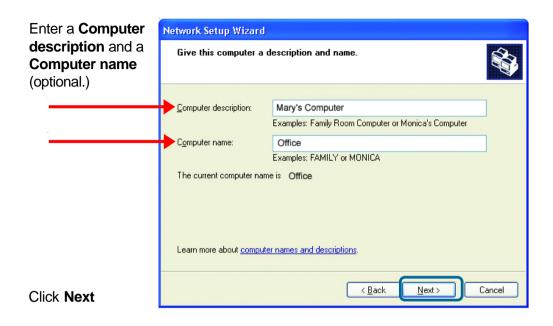


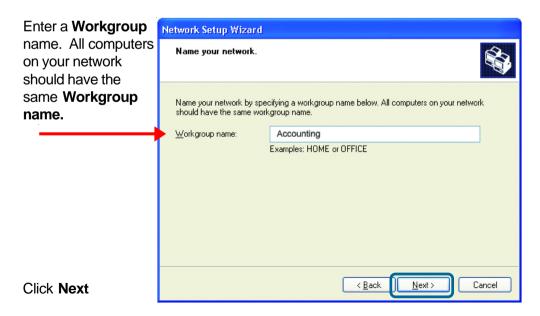
In this window, select the best description of your computer. If your computer connects to the internet through a gateway/router, select the second option as shown.

Network Setup Wizard

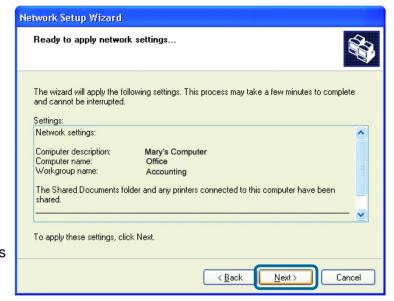


Click Next



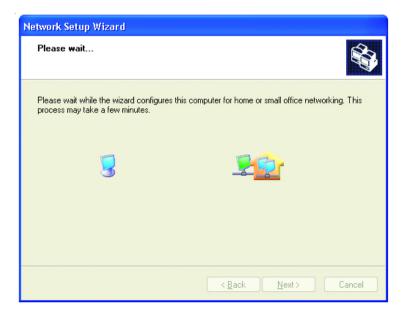


Please wait while the **Network Setup Wizard** applies the changes.



When the changes are complete,
Click **Next**.

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



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**.

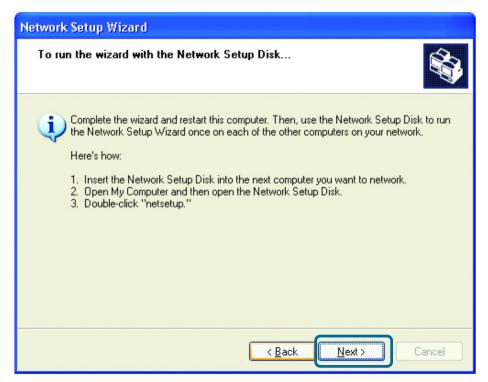


Format the disk if you wish, and Click **Next** 

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.** 





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.

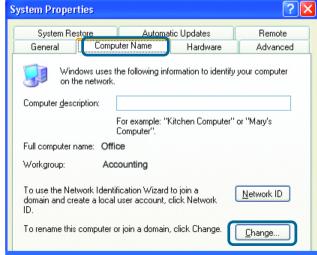
#### How to assign a Name to your computer (continued)

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

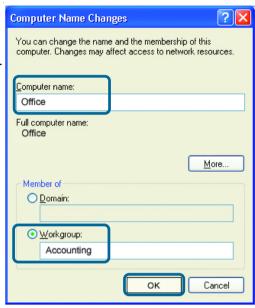


- Select the Computer Name tab in the System Properties window.
- You may enter a Computer Description (optional).
- To rename the computer and join a domain, Click Change.



#### How to assign a Name to your Computer (continued)

- 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



#### How to find your IP Address in Windows XP (continued)

This window will appear.

Click theSupport tab

Click Close



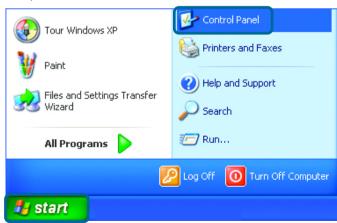
#### Assigning a Static IP Address in Windows XP/2000

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



## Assigning a Static IP Address in Windows XP/2000 (continued)

Double-clickNetworkConnections

- Right-click Local Area
  Connections
- Double-click Properties

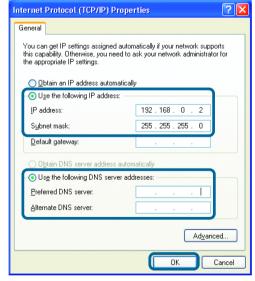




Assigning a Static IP Address in Windows XP/2000 (continued)

- 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.)

Local Area Connection 7 Properties General Advanced Connect using: D-Link DWL-A650 Configure. This connection uses the following items: Client for Microsoft Networks File and Printer Sharing for Microsoft Networks 🗹 🚚 QoS Packet Scheduler ☑ Internet Protocol (TCP/IP) Install. Uninstall Properties 2 Description Transmission Control Protocol/Internet Protocol. The default wide area network protocol that provides communication across diverse interconnected networks. Show icon in notification area when connected OΚ Cancel



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

Click **OK** 53

#### Sharing an LPR Printer (continued)

To share an **LPR printer** (using a print server,) you will need a Print Server such as the **DP-311P**. Please make sure that you have run the **Network Setup Wizard** on all the computers on your network. To share an **LPR printer**, please follow these directions:

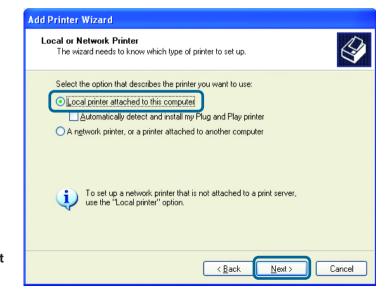
- Go to Start > Printers and Faxes
- Click on Add

The screen to the right will appear





Select
Local
Printer...



Click Next

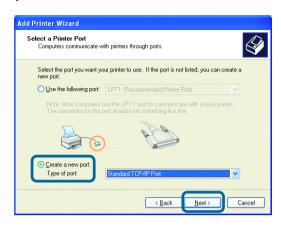
#### Sharing an LPR Printer (continued)

- Select Create a new port
- From the pull-down menu, select Standard TCP/IP Port, as shown.
- Click Next

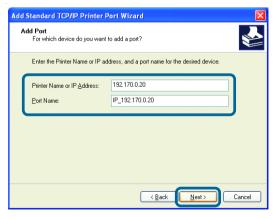
 Please read the instructions on this screen

- Click Next
- Enter the Printer IP Address and the Port Name, as shown.

Click Next



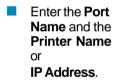




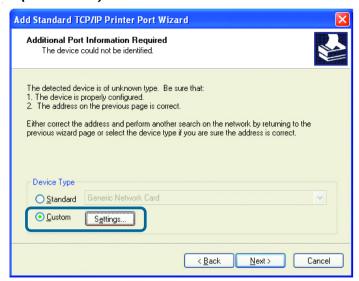
#### Sharing an LPR printer (continued)

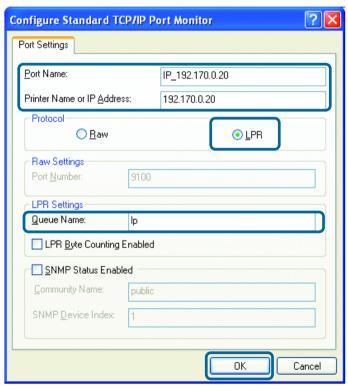
In this screen, select **Custom**.

ClickSettings.



- Select LPR.
- Enter a Queue Name (if your Print-Server/ Gateway has more than one port, you will need a Queue name.)
- Click OK.





#### Sharing an LPR printer (continued)

 This screen will show you information about your printer.



- Click Finish.
- Select the printer you are adding from the list of Printers.
- Insert the printer driver disk that came with your printer.
- Click Have Disk.



If the printer driver is already installed, do the following:

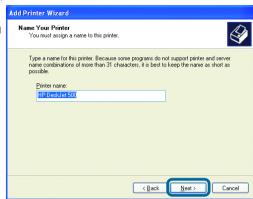
Select Keep existing driver.

Click Next.

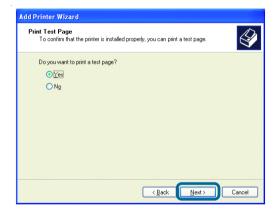


#### Sharing an LPR printer (continued)

- You can rename your printer if you choose. It is optional.
- Please remember the name of your printer. You will need this information when you use the **Add Printer Wizard** on the other computers on your network.
- Click Next.



Select Yes, to print a test page.



Click Next.

This screen will display information about your printer.

- Click Finish to complete the addition of the printer.
- Please run the Add Printer Wizard on all the computers on your network in order to share the printer.



Note: You must run the **Network Setup Wizard** on all the computers on your network before you run the **Add Printer Wizard**.

# **Technical Specifications**

**Standard-** Complies with IEEE 802.11b Direct Sequence Spread

Spectrum (DSSS) standard

Parallel- 1 DB-36-pin male Centronics port, supporting bi-

directional communication

Radio Frequency- 2.4GHz Band

**Media Access Control** 

Method-

Carrier Sense Multiple Access / Collision Avoidance

(CSMA/CA), with ACK

Modulation Types- CCK (11 & 5.5Mbps), DQPSK (2Mbps),

DBPSK (1Mbps)

Operating Channels- 11 Channels (U. S. & Canada)

13 Channels (Pan Europe)

14 Channels (Japan)

Modes- Ad-Hoc and Infrastructure (User-definable via Web

management interface)

Data Transmission Rate- Up to 11Mbps, with auto-fallback feature to 5.5Mbps,

2Mbps, 1Mbps

Output Power- +13 ~ +17dBm (typical +15dBm)

Radio Sensitivity (BER < 8%)- Min. -82 dBm for 11Mbps

Min. -86 dBm for 5.5Mbps Min. -88 dBm for 1/2Mbps

Type of Antenna- Internal, PIFA Type (Peak Gain: 2)

WEP (Wired Equivalent

Privacy) Encryption- Supports 64- and 128-bit (alphanumeric & hexadecimal)

Network Protocol Support TCP/IP, IPX, NetBEUI, AppleTalk, LPR,

SMB (over IP)

## **Technical Specifications (continued)**

CPU- ARM7-based RISC microprocessor, operating at 50MHz

Flash- 1Mbytes

System Memory- 2Mbytes SDRAM

Parallel Port- 1 DB-36-pin male Centronics port, supporting bi-directional

communication

Size- 53 x 64mm (tolerance: 1mm)

Power Supply- 5V, 2.0A

EMI Certifications- CE / FCC Class B

Temperature- Operating:  $0 \sim 50^{\circ}$ ; Storage  $-5 \sim 65^{\circ}$ 

Humidity- Operating:  $0 \sim 70\%$ ; Storage  $0 \sim 80\%$ 

# **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

(USA only)

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 or 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 nonconforming 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. 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.
- Return Merchandise Ship-To Address
   USA: 53 Discovery Drive, Irvine, CA 92618

Canada: 2180 Winston Park Drive, Oakville, ON, L6H 5W1 (Visit <a href="http://www.dlink.ca">http://www.dlink.ca</a> for detailed warranty information within Canada)

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. EXCEPTAS EXPRESSLY COVERED UNDER THE LIMITED WARRANTY PROVIDED HEREIN, THE ENTIRE RISKASTOTHE 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

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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.

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**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.

#### For detailed warranty outside the United States, please contact corresponding local D-Link office.

#### FCC Caution:

The manufacturer is not responsible for any radio or TV interference caused by unauthorized modifications to this equipment; such modifications could void the user's authority to operate the 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. The antenna(s) used for this equipment must be installed to provide a separation distance of at least eight inches (20 cm) from all persons.

This equipment must not be operated in conjunction with any other antenna.

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

(07/31/2003) 64

# Appendix 1:

# **DP-311P Printer Compatibility List**

Brand	Printer's Name
Brother	HL 1260
CANON	S520
CANON	BJC-4300
CANON	BJ-330
CANON	BJ F9000
CITIZEN	GSX-230
EPSON	STYLUS—color670
EPSON	STYLUS C60
EPSON	PM 700C
EPSON	LQ-680
EPSON	LQ-2170C
EPSON	LQ-100 ESC/P2
EPSON	EPL 5800
FUJITSU	DL700
FUJITSU	DL6400 Pro
FUJITSU	DL3400
HP	LaserJet 6P
HP	LaserJet 1200 series
HP	DeskJet 810C
HP	DeskJet 500
HP	DeskJet 400
HP	DeskJet 1220C
HP	DeskJet 1125C
Panasonic	KX-P1121
STAR	NX-2420
Kyocera	FS-1010
LEXMARK	Z43
NEC	PINWRITER P8000C
NEC	PINWRITER P5300
NEC	PINWRITER P2200
OKI	Microline 391 turbo
Panasonic Panasonic	KX-P1624 KX-P1121
Panasonic STAR	NX-2420
SIAK	1NA-242U

## Appendix 2:

# **DP-311P Incompatible Printer List**

No.	Printer Model
1.	ALPS AlpsLSX-1600
2.	Canon BJC 610, 620
3.	Canon BJC 5100, 5000
4.	Canon FAX L350
5.	Canon LBP 660
6.	Canon LBP 800
7.	Canon LBP 430W
8.	Citizen NoteBOOKII/PN48
9.	Epson Stylus Scan 2000
10.	Epson Stylus Scan 2500
11.	Lexmark ColorJet Print 2050
12.	Olivetti PG304
13.	OKI Page 8W
14.	HP Leaser Jet 1000
15.	EPSON 5900L
16.	Canon LBP 810
17.	Samsung ML-1210
18.	Epson 6100L
19.	Epson AcuLaser C900
20.	Epson AcuLaser C1000

#### Please note that the DP-311P:

- Cannot support all GDI printers
- Supports only Postscript printers with Mac OS
- May not work with MFP (Multi Function Printers)

## Appendix 3:

# Alternate Ways of Upgrading the Firmware in Netware / Windows / Unix

If you do not choose to use the Firmware upgrade feature in the DP-311P web browser based configuration utility, you can use one of the following Operating System specific procedures:

- 1 Before you proceed to upgrade the print server, check http://support.dlink.com for the latest firmware upgrades, and download the latest firmware onto your hard drive.
- 2 Please ensure that the print server is not printing jobs. You must wait till all print jobs are finished before you can proceed.

## Upgrading the print server from PSAdmin

- 1. Log into your NetWare file server as a Supervisor (Admin.) or equivalent.
- 2. Ensure binary file is located in the PSAdmin directory.
- 3. Run **PSAdmin** from your Windows PC.
- 4. Click the **Upgrade** icon in tool bar.

## Upgrading the print server from Windows 2000/XP

- 1. Ensure that the binary file is located in your current working directory.
- 2. At 2000/XP's DOS prompt type "tftp <pri>tftp <pri>tftp <print server's IP address > get upgrade".
- 3. Type "tftp –i <print server's IP address> put mps23.bin".
- 4. Wait for the "transfer is successful" message.
- 5. The upgrade is complete!

## Appendix 3:

# Alternate Ways of Upgrading the Firmware in Netware / Windows / Unix (continued)

# Upgrading the print server from UNIX (Through TCP/IP)

- 1. Log in as root.
- 2. Ensure that the binary file is located in your current working directory.
- 3. Type "tftp <print server's IP address>".
- 4. At tftp prompt, type "get upgrade".
- 5. Change to binary mode.
- 6. At tftp prompt, type "put mps23.bin".
- 7. Wait for the file transfer to complete.
- 8. Quit from tftp.
- 9. The upgrade is complete!.