

Wireless USB Print Server

Quick Installation Guide

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FCC Warning

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.

CAUTION:

Any Changes or modifications not expressly approved by the party responsible for compliance could void the authority to operate equipment.

This equipment must be installed and operated in accordance with provided instructions and the antenna(s) used for this transmitter must be installed to provide a separation distance of at least 20 cm from all persons and must not be co-located or operating in conjunction with any other antenna or transmitter. End-users and installers must be provide with antenna installation instructions and transmitter operating conditions for satisfying RF exposure compliance.

FCC Warning

This equipment has been tested and found to comply with the regulations 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 when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with this user's guide, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference, in which case the user will be required to correct the interference at his own expense.

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.

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Quick Installation Guide

Introduction

This Quick Installation Guide gives step-by-step instructions for setting up the print servers. The model you have purchased may appear slightly different from those shown in the illustrations. Examples in this manual are based on print servers. For more detailed information about the print server, its components, making network connections and technical specifications, please refer to the *User's Guide* included with your print server.

Unpacking

Carefully remove all items from the package. In addition to this *Quick Installation Guide*, be certain that you have:

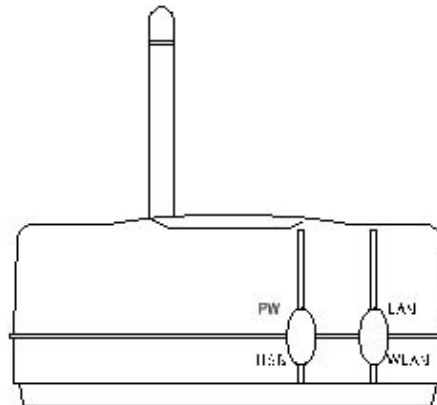
- ◆ One Wireless USB Print Server
- ◆ One AC Power adapter suitable for your country's electric power service
- ◆ One Wireless USB Print Server Installation CD-ROM
- ◆ This Quick Installation Guide

If any item is missing, or if you find any damage or mismatch, promptly contact your dealer for assistance.

Port and LED Descriptions

This section describes the visible parts of the print server.

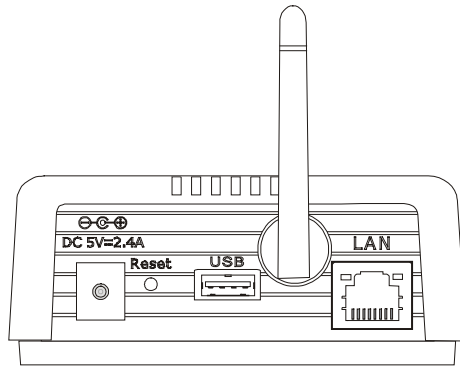
Front Panel



There are three green LED indicators on the front panel:

LEDs	Description
PW	Steady light confirms that the Print Server is powered on.
USB	Steady blinking (briefly dark) is initiated when the printer is printing, otherwise, it remains dark.
LAN	Steady light confirms that the print server has a good connection to your network. When it blinks (briefly dark), the print server is receiving/ transmitting data from/to the network.
WLAN	Steady light confirms that the print server has a good connection to your wireless network. When it blinks (briefly dark), the print server is receiving/ transmitting data from/to the network.

Back Panel



Component	Description
DC Power Input	The DC power input connector is located on the Print Server's rear panel and is labeled DC 5V. Please note that the power supply included in the package is correct for this Wireless USB Print Server; substitution of other equipment may void warranty.
Reset Button	<ol style="list-style-type: none">1.) Press and release this button to reset the print server.2.) Press and hold this button for three seconds (the USB LED on the front panel lights up) and then release it, the print server will resume the factory default settings.
USB Port	The USB port allows you connecting the print server to a printer with USB connector.
Antenna	To accept/transmit the data from/to your wireless network.
LAN Connector	This LAN connector (RJ-45) provides the printer server with connection to the network through 10/100 TX Ethernet cabling.

The print server also supports web configuration permitting the users to configure settings through the web browser. Print Server's default IP address as follows:

- ◆ Default IP address – 192.168.0.1
- ◆ Subnet Mask – 255.255.255.0

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

Installing the Print Server

Follow these steps for a trouble-free start of print server operations with your Wireless USB Print Server. Please take particular notice that the network connection should be made before supplying power to the print server.

***WARNING:** Configuration problems may result if the print server is powered up without first establishing its network connection. Please follow this procedure to avoid complications at the configuration stage.*

1. Confirm proper operation of each of the printers to be connected to the print server.
2. When you have confirmed proper operation of the printer, switch its power off.
3. Confirm that your network is operating normally.
4. Connect the print server to the network through the RJ-45 connector of the print server.
5. While the printer is powered off, connect the print server through the cable to the printer's USB port.
6. Turn on the printer's power.

7. Connect the DC end of the AC Power adapter to the DC power input socket of the print server and the AC end to the wall outlet. This will supply power to the print server, and the POST routines will proceed automatically.

Note: This print server is built with a default IP setting. To prevent from any conflict in your network, it is recommended to use the PS Admin program to change the IP setting when there is some other device's IP address is the same as the print server's default IP.

If it is necessary to set up the wireless networking:

8. Confirm that your wireless network is operating normally.
9. Use the Web browser to configure the settings of your wireless network. For the detail operation, please refer to the Web Configuration manual. The default settings of wireless mode are:

- ◆ **Connection Mode** : Infrastructure
- ◆ **ESS-ID** : default
- ◆ **Wireless Channel** : 11



Installing and starting the PS Admin program

PS Admin program can be conveniently used to configure and manage your print server from any personal computer running the Windows operating systems. Once the print server is configured, you can use it for printing from any network environment.

If you use only the TCP/IP (UNIX) and/or AppleTalk protocols and don't have a Windows system, you can use the `telnet` interface to configure your print server (the default IP of print server is 192.168.0.1, the subnet mask is 255.255.255.0). For further information about using `telnet` interface, see **APPENDIX : TELNET INTERFACE ADMINISTRATION** in **PS Admin program User's Guide** in your Print Server Installation CD .

The print server also supports web configuration permitting users to configure settings through the web browser. Default IP address as follows:

- ◆ Default IP address – 192.168.0.1
- ◆ Subnet Mask – 255.255.255.0

Note:

The PC's IP address must correspond with the print server's IP address in the same segment for the two devices to communicate. Please refer to the Web Configuration of the Print Server section for further details.

Installing PS Admin Program

Follow the procedure outlined below to install *PS Admin*:

1. Insert the Print Server installation CD
2. Click **Install PS Admin Program**

3. An instruction menu will appear and follow it step by step to complete the installation process

Once the installation is complete, you can begin using *PS Admin*.

Starting PS Admin Program

If you are using Windows 95/98/Me/2000/XP or Windows NT 4.0 (or a later version of Windows) to start the *PS Admin* program:

1. Press the **Start** button in the taskbar.
2. Within the Programs menu, select PS Admin.
3. Select the PS Admin program.

For Windows NT 3.51,

1. In the Program Manager, double-click on the PS Admin program group icon to open it.
2. Double-click the *PS Admin* program icon.

The *PS Admin* program will then be ready for use.



Configure Your Print Server

Before you can print over the network using your print server, you may need to perform some basic setup tasks. These include:

- ◆ Choosing a name for your print server.
- ◆ Setting a password to protect your print server's settings from unauthorized modifications.
- ◆ Choosing names for the print server's individual printer ports, and changing the port settings.

Choosing a Name for Your Print Server

Each network Print Server has a server name. When the Print Server is shipped from the factory, it has a default name of the form *PS-xxxxxx*, where *xxxxxx* represents the last six digits of the Ethernet address found on the Print Server's underside sticker.

It is recommended that you limit your Print Server name to 15 characters, chosen from the letters A to Z, the digits 0 to 9, and the hyphen ("-") character. Names that violate this recommendation may not be usable with some networks.

To change your Print Server's name,

1. Select the Print Server in the *PS Admin* main window's server name display.
2. Choose **Server Device...** from the **Configuration** menu. *PS Admin* will display the Server Device Configuration window.
3. In the **Server Name** field, enter the name you have chosen for the server, and press **OK**.

4. Choose **Save Configuration** from the **Configuration** menu. This will store the new settings into the print server and restart it.

Your Print Server will now be accessible under the new name.

Setting a Password for Your Print Server

Unless you set a password, anyone on your network will be able to change your Print Server's settings. To protect your Print Server's integrity, you should set a password for your Print Server, and record it in a safe place.

To set the Print Server's password,

1. Select the Print Server in the *PS Admin* main window's server name display.
2. Choose **Server Device...** from the **Configuration** menu. *PS Admin* will display the Server Device Configuration window.
3. In the **Password** field, enter the password you have chosen for the server, and press **OK**.
4. *PS Admin* will ask you to confirm your new password. Enter the password a second time and press **OK**.
5. Choose **Save Configuration** from the **Configuration** menu. This will store the new settings into the print server and restart it.

WARNING: *Do not forget or lose your print server password. If you forget it, you will have to contact your service representative to change the password.*

Changing Print Server Port Settings

Your network Print Server may provides a number printer ports. For each port, you can determine:

- ◆ The name of the port
- ◆ A comment describing the port

To set the parameters for a printer port,

1. Select the Print Server in the *PS Admin* main window's server name display
2. Choose **Server Device...** from the **Configuration** menu. *PS Admin* will display the Server Device Configuration window.
3. Press the button corresponding to the port you wish to change.

The fields that can be changed on the Port Configuration window are:

- ◇ **Port Name** The name by which the port is known on various network systems. The port name should be at most 32 characters long and may consist of letters, numbers, and hyphens. Spaces are not allowed.
- ◇ **Description** A comment describing the port.
- ◇ **Speed** Determines whether or not the print server can send data to the printer at high speed. Most newer printers can accept high-speed data transmission; if your printer loses characters then you may need to choose the low-speed mode.
- ◇ **PJL Printer** Determines whether or not the printer accepts Hewlett Packard's PJI printer job control language commands. PJI allows users to get feedback on the printer's status. If the printer connected to the port supports PJI, set this field to Yes.

4. Press the **OK**.
5. Press the **OK**.
6. Choose **Save Configuration** from the **Configuration** menu. This will store the new settings into the print server and restart it.



Setting up Workstation Printing

This section tells how to make it possible for your Microsoft Networking client workstations to access printers connected to your print server. Microsoft Networking services, based on the NetBEUI protocol, provide network users with peer-to-peer network services. Please make sure the NetBEUI protocol has been enabled before setting up workstation printing. If not, please follow the same procedure for enabling IPX protocol to enable NetBEUI protocol first. As for information on setting up **AppleTalk Printing** and **UNIX TCP/IP Printing**, see the **PS Admin program User's Guide** in your Print Server CD.

Windows 95/98/Me Client Workstation printing

To allow your Windows 95 / 98 / Me workstation to print over the network directly through your network print server,

1. From the **Start** menu, choose the **Settings** submenu, then the **Printers** item within it. Windows will display the Printers folder.
2. Double-click on the **Add Printer** icon in the Printers folder. Windows will start the Add Printer Wizard.
3. Press the **Next >** button to continue to the next screen.
4. Choose the **Network printer** selection and click the **Next >** button to continue.
5. Enter the network path for your network print server, specifying which port you want to connect to. For example, the printer connected to the port named DJ-660C on server PS-142634 would be referred to by the path:

`\\PS-142634\DJ-660C`

6. At this point Windows will ask you to choose the correct printer driver for the printer. Choose your printer's maker and model from the list, or use the driver disk included with the printer. When you have chosen the correct printer, click **Next** > to continue.
7. Windows will ask for a name for the printer. Enter a name, or accept the default. Press **Finish** to complete the installation.

Windows 2000/XP Client Workstation printing

To allow your Windows 2000/XP workstation to print over the network directly through your network print server,

1. From the **Start** menu, choose the "**Setting**" submenu, then the **Printers** item within it. Windows will display the Printers folder.
2. Double-click on the "**Add Printer**" icon in the Printers folder and click "**Next**" to proceed further.
3. Choose "**Local Printer**" selection and click the "**Next**" button to continue.
4. Choose "**Create a new Standard TCP/IP Port**" and click "next".
5. Input the IP Address of the Print Server, and the Port name of the Port that will be printed to, then click "**Next**".
6. A prompt message will appear and Select "**Custom**", and click "**Settings**".
7. Select "**LPR**", and put the Port name in the field labeled "**Queue Name**". Then Click "**OK**".
8. Click "**Next**" and click "**Finish**". At this point Windows will ask you to choose the correct printer driver for the printer. Choose your printer's manufacturer and model from the list or click "**Have Disk**" to provide the Manufacturer's Driver Disk. When you have chosen the correct printer, click **OK** to continue.
9. Click "**Next**" to keep existing driver and then you can key in the printer name.
10. After click "**Next**", you can choose to share this printer or not. Also, a Test Page can be printed to confirm proper configuration.

11. When the Test Page has printed, click “Finish” to complete the installation.

Windows NT 4.0 Client Workstations Printing

To allow your Windows NT 4.0 workstation to print over the network directly through your network print server,

1. From the **Start** menu, choose the **Settings** submenu, then the **Printers** item within it. Windows will display the Printers folder.
2. Double-click on the **Add Printer** icon in the Printers folder.
Windows will start the Add Printer Wizard.
3. Choose the **Network printer server** selection and click the **Next >** button to continue.
4. Enter the network path for your network print server, specifying which port you want to connect to. For instance, the printer connected to the port named DJ-660C on server PS-142634 would be referred to by the path:

`\\PS-142634\DJ-660C`
5. Windows will display the **Connect to Printer** window . Press **OK** to continue.
6. At this point Windows will ask you to choose the correct printer driver for the printer. Choose your printer’s make and model from the list, or use the driver disk included with the printer. When you have chosen the correct printer, click **OK** to continue.
7. If you already have a default printer, Windows will ask if you wish to use the newly installed printer as the new default.
8. When installation is complete, press the **Finish** button to complete installation.

Windows NT 3.51 Client Workstation Printing

To allow your Windows NT 3.51 workstation to print over the network directly through your network print server,

1. Double-click on the Print Manager icon found in the Main program group.
2. In the Print Manager, choose **Connect to Printer...** from the **Printer** menu.
3. Enter the network path for the print server, specifying which printer port you want to connect to. For instance, the printer connected to the port named DJ-660C on server PS-142634 would be referred to by the path:

`\\PS-142634\DJ-660C`

4. Windows will display the **Connect to Printer** window. Press **OK** to continue.
5. Windows will ask you to choose the correct printer driver for the printer. Select a driver and press **OK**.
6. The printer should now be available for use.

Configuration of the Print Server

Open your web browser and type **http://192.168.0.1** in the address box, and press <Enter>. This set of number 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.



The print server's welcome screen will appear. You can access and control the print server's configuration through four links on the top of this main screen:

- ◆ Management
- ◆ Configuration
- ◆ Tools
- ◆ Help

Management	Configuration	Tools	Help
Welcome to Web Configuration			
Server Name	PS-B6C5B9		
Model	Wireless USB Print Server		
Hardware Version	A1		
Firmware Version	2.10 (2002-06-28)		
MAC Address	00 03 1B B6 C5 B9		
IP Address	192.168.0.169 (Manual)		
Up Time	0 days, 00:04:36		

A Product Specification

Printer Connection

Printer Interface: One USB port, compliant with USB 1.1 standard

Network Connection

Wireless Network

Network Standards: Wireless LAN standard IEEE 802.11b

Network Data Transfer Rate: 11Mbps with fallback to 5.5Mbps, 2Mbps and 1Mbps

Network Mode: Through ad-hoc or infrastructure mode

Wired Network

Network Interface: RJ-45 connector for 10Base-T or 100BASE-TX shielded.
(RJ-45 connector)

Network Standards: IEEE 802.3 10Base-T Ethernet, IEEE 802.3u 100BASE-TX Fast Ethernet

Network Data Transfer Rate: 10/100Mbps

Network Protocols

Transport Protocols: TCP/IP, NetBEUI, AppleTalk

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, USB, LAN, WLAN

Environmental and Physical

Power Supply: External power supply providing 5VDC input

Operating Temperature: 0°C to 50°C

Storage Temperature: -25°C to 55°C

Humidity: 5% to 95%, non-condensing at 30°C

Emissions: FCC Class B, CE Class B