# **Quick**

# 1-Port Parallel 10/100M Internet Print Server





HPS1P



# 10/100M Parallel Print Server

Congratulations on purchasing Hawking's HPS1P 1-Port Parallel 10/100M Print Server. The HPS1P is a powerful and convenient network printing solution that will connect your printer to your network. The HPS1P has a 10/100Mbps auto-sensing port, allowing you to attach it to a 10Base-T or 100Base-TX network without the need for a dedicated PC print server. The HPS1P also supports multiple servers and multiple protocols, providing you with the capability to print from anywhere, from any computer and from any application.





# Check the Requirements for Installation

# HPS1P

10/100M High-Performance Parallel Print Server

This QIG Will Guide you Through the Initial Setup of your Product

# What You Will Neet To Get Started:

- One Parallel Printer
- A Computer Client attached to your network
- One Ethernet cable attached to your main network or wireless router/access point

# **Check Your Package Contents:**



10/100M Parallel Print Server



Quick Installation Guide



CD-Rom Contains: Users Manual and Installation Software



Power Adapter



# **Hardware Installation**

- 1. Connect the HPS1P Print Server to your printer.
- 2. Connect the HPS1P to your network through an Ethernet (Wired) connection.
- 3. Plug the AC power adapter into the power slot on the

side of the Print Server.

Check the LED's marked as LAN, READY, and **STATUS** on the front of the Print Server. They should start to flash while doing a routine diagnostic test and printer check. If not, please contact your local dealer for repair or replacement.

You must use the power adapter shipped along with the print server. Do NOT use any other power adapter from other sources.

Please note that your HPS1P hardware is automatically set to a factory default IP address of **192.168.1.250** 

### **LED Indicators**

The HPS1P is equipped with LED lights to assist in diagnosing print server or network errors.



## READY

This light will illuminate when the HPS1P has sufficient power and the power adapter is plugged into the HPS1P. When the print server unit is powered on, the **Status** LED, along with either the **LAN** LED or the **READY** LED, will flash as part of the unit's **Power On Self Test (POST)**. This indicates that the print server hardware is properly configured. The HPS1P may take up to 1 minute to perform its internal diagnostic tests.

### LAN

This light will illuminate and flash when the HPS1P detects 10M or 100M data transmissions over the network.

### STATUS

This light will illuminate and flash when the HPS1P detects printer data transmissions over the network.

Please note that the Reset button is located on the back of the HPS1P. Hold this button down for more then 5 seconds to reset the print server into factory default mode.



# **Install Your PC Software**

### WINDOWS 95/98/ME/NT/2000/XP

- POWER ON: After you have correctly connected your print server to your PC, router, and printer, please power on all units.
- 2) Before the installation, please verify that your network protocols (TCP/IP, IPX and/or NetBEUI) and printer drivers are installed on your PC. If they are not installed, please consult your operating system's and/or printer's manual(s) for instructions on how to do so.
- 3) Make sure your Windows firewall is disabled if you are using Windows XP Service Pack 2. Please check the Windows help menu for more information on disabling this feature.
- 4) Run The Installation Wizard
  - Insert the Windows 95/98/ME/NT/2000/XP Setup CD into your CD-ROM drive.

(Windows should execute the **Autorun.exe** program automatically. If not, run **Autorun.exe** manually from your CD-ROM drive's root directory.) 2. The Hawking Installation Windows manager will pop up on your screen as follows:



3. Click on "Setup Wizard" and the Setup program will

proceed to install the Print Server Utility program package.



4. Click "*Next*" to start the installation of the Print Server Utilities software and Easy Installation Wizard.



4. Click "*Next*," to specify the destination folder where the *HPS1P* utility files will be installed.

| Choose Destination I | ocation   |  |   |
|----------------------|---|--|---|
|                      | Setup will install Hawking Print<br>folder.<br>To install to this folder, click Ne<br>To install to a different folder, c<br>You can choose not to install th<br>Cancel to exit the installation pr | Server Utilities to<br>ext.<br>Ilick Browse.<br>he Print Server L<br>rogram. | o the following<br>Utilities by selecting |
| ~~ <b>"</b>          | Destination Folder<br>C:\\Hawking PrintServer UI  | tilities   | Browse                                    |
|                      | < Back  | Next>  | Cancel                                    |

5. Click "Next," and select the components you wish to install.

It is highly recommended to install all provided software utilities and drivers.

| Select Components |   |
|-------------------|---|
|                   | Select the components you wish to install. Please uncheck the<br>components you do not wish to install.<br>Components     Components     Utilities   1984 K     Driver   8896 K |
| 2                 | Description<br>This selection will install the Hawking Technologies Windows<br>Print Server Administration Utility.   |
|                   | Space Required: 12960 K Available: 974356 K   |
|                   | Kext Next Cancel  |

6. Click "*Next*," to specify the program folder where the program icons will be added.



7. Click "*Next*" to start the utility file installation.

| PrintServer Utilities Setup |   | _ 🗆 × |
|-----------------------------|---|-------|
| PrintServer l               | Utilities   |       |
|                             | :\program files\printserver utilities\uninstall.exe<br>44 2<br>Cancel |       |
|                             |   |       |

 The "Print Server Utilities" program will finish installing. After this installation is complete, please click on "Finish" to bring up the Easy Setup Wizard.



9. Once the Setup Wizard is activated, it will make sure you have the necessary components to proceed with installation. Please make sure you have connected your print server to your network via an Ethernet connection, powered up your printer and print server, and have connected the print server to your printer.



Once the Setup Wizard has verified your settings, please click on the "Next" button to continue. If there is a problem with your setup, the Print Server Wizard will inform you of it and provide you with a diagnostic solution. You may choose to skip this initial network and print server diagnostic screen by clicking on the "Skip" button if the Wizard determines that you do not have the necessary components to proceed. 10. The "Print Server List" screen will list all available Hawking Technology print servers that the Wizard finds on your Network. Please choose the print server you wish to configure and press "Next." You may always hit the "Refresh" button to refresh the print server list.

| int Serve                     | r Setup       | Wizard                 | Prin  | t Serve | er List       |
|-------------------------------|---------------|------------------------|-------|---------|---------------|
| Select one Pr<br>Print Server | rint Server t | o configure :<br>Model | Port1 | Port2   | Port3         |
| PS016BA1                      | 10.1.1.144    | HWPS12UG               |       |         | W HEWLETT-PAC |
|                               | Je Miller     | II / SE                |       |         |               |
|                               |               |                        |       |         |               |

(Please note that "un-configured" print servers will appear in **Bold**)

11. Once a Print Server is selected from the list, the login username/password screen will appear. Please type in your login and password and then press "OK". The standard default Login/Password for Hawking print Servers is:

Login: admin

Password: 1234

| LOGIN              | _/            | PS016BA1  |
|--------------------|---------------|-----------|
| Please log into yo | ur print serv | /er       |
| Login              |               |           |
| Password           |               | Î         |
| Default Login/Pa   | ssword : a    | dmin/1234 |
| _                  | ок            | Cancel    |

12. Once you have entered your login and password for the selected print server, the "General Settings" page will appear.

|   | X    |
|---|------|
| Print Server Setup Wizard General Settings  |      |
| Print Server Name: PS200413<br>An alternative name for easy management.<br>SMB Group Name: WORKGROUP<br>P1 V Hewlett-Packard DeskJet 3820<br>P2 Rotresh |      |
| Back  | Next |

The General settings windows will allow you to edit the

following:

**Print Server Name**: Name you wish to give to your print server to make it recognizable.

**SMB Group Name:** The Windows group name you wish to associate your print server with. Please click in the SMB Group Name box for more information.

**Printer Port and Printer List:** Each available printer port and the attached printer to that port will be displayed on this page. (You may refresh the printer name at any time if the attached printer is not displaying.)

### Please click "Next" when you are ready to proceed.

13. The intelligent Wizard will try to determine your network settings.

| <b>HAWKING</b>   | X   |
|--|---|
| Print Server Setup Wizard  | Settings  |
| C DHCP<br>IP<br>NetMask<br>Gateway<br>C MANUAL IP<br>IP<br>Subnet<br>Gateway | 10 1 1 120   255 255 255 0   10 1 1 1   10 1 1 .145   255 255 255 0   10 1 .1 .145   255 255 .55 .0   10 .1 .1 .145 |
|  | BackNext  |

If a DHCP server is present on your network and you would like to use its automatic settings, please select the DHCP option. If there is no DHCP server present, or you are unsure of your DHCP configuration settings, please select the MANUAL IP option. Selecting this option allows the Wizard to poll your computer's internal network settings and suggest an appropriate static IP address to assign to the print server. If you do not wish to use the suggested IP address, you may change your IP settings in the static IP address box only. Typically your IP Gateway is the IP address of your computer's router or Internet gateway. The Wizard will try and automatically fill in this address for you based on your computer has found the appropriate IP settings.

### 14. Summary of Settings Changes

| <b>HAWKING</b>      |               |                     | X              |
|---------------------|---------------|---------------------|----------------|
| Print Server Se     | tup Wizard    | Settings            | Overview       |
| Original Settings   |               | New Settings        |                |
| Print Server Name : | PS019D2E      | Print Server Name : | PS019D2E       |
| SMB Group Name :    | WORKGROUP     | SMB Group Name :    | WORKGROUP      |
| IP :                | 10.1.1.145    | IP :                | 10.1.1.145     |
| NetMask :           | 255.255.255.0 | NetMask :           | 255.255.255.0  |
| Gateway :           | 10.1.1.1      | Gateway :           | 10.1.1.1       |
| Network Type :      |               | Network Type :      | Infrastructure |
| SSID :              |               | SSID :              | ErictestingAP  |
| Wireless Security : |               | Wireless Security : | WEP            |
|                     |               |                     | Back Save      |

This page displays a summary of configuration changes that are going to be saved to the print server. Please press "Save" to reboot the print server and save all modified settings. 15. The next screen allows you to attach your printer to your print server. The "Printer Port Setup" page displays each port's printer model if detected. If no printers are displayed, please make sure your printer is turned on and connected to the print server. You may hit the "refresh" button at any time to search for your connected printers.

| <b>Hawking</b>  | X   |
|---|---|
| Print Server Setup Wizard   | Printer Port Setup  |
| This page will allow you to bind your printer and print s<br>you wish to install on your PC. You may return to this :<br>Refresh<br>PS200413<br>P1(LPT): Hewlett-Packard DeskJet 3820 | erver to your PC. Please select the printer and port<br>coreen to setup additional ports if needed. |
| ~   | Finish  |

Please select the appropriate printer you wish to connect to the print server and press the "**Install Printer**" button.

16. The "Install Printer" pop up window will guide you in installing your printer driver and binding it to your print server. This window gives you two selection options. You may install a new printer driver to your system or you may select your printer driver from the existing list of printer drivers currently on your system.

|                               | 2 (USB): HEWLETT-PACKARD   | DESKJET 3820          |
|-------------------------------|--|-----------------------|
| Install a ne                  | w printer driver to your system                                      |                       |
| Install your<br>(Please selec | print server to a current pre-installed p<br>at from the list below) | rinter on your system |
| Printers                      |  | ~                     |
| Microsoft                     | Office Document Image Writer   |                       |
| l exmark >                    | ×215   |                       |
| Contrainer                    |  |                       |
| a hp deskje                   | et 3820 series   |                       |
| hp deskje                     | et 3820 series<br>LaserJet 4500                                      | ~                     |

Please select which option to choose and highlight the appropriate printer driver if it is present on the scrollable list of printer drivers.

Press "Install" to complete the binding process.

Once your printer is properly bound to the print server, you will see a **RED** checkmark by the installed printer indicating a successful installation.

| Hawking  |   |   |   | ×      |
|--|---|---|---|--------|
|  |   |   |   |        |
| Print Server Setup W   | /izard  | Printer   | Port Set  | up     |
| This page will allow you to bind y<br>you wish to install on your PC. Yo | our printer and print se<br>ou may return to this s | rver to your PC. Please<br>creen to setup additiona | e select the printer and po<br>I ports if needed. | đ      |
| PS016BA1   |   |   |   |        |
| PILETT:  | ACKARD DESKJET 3                                    | 320 (Installed)                                     |   |        |
| P3(USB):   |   |   | <b>37</b>   |        |
|  |   |   |   | Finish |

Once you have bound your printer to the print server, you may press the "Finish" button to proceed. 17. The final configuration screen will allow you to print a test page using the newly installed print server.

| <b>Hawking</b>  | ×       |
|---|---------|
| Print Server Setup Wizard Printer Port Setup  |         |
| This page will allow you to bind your printer and print server to your PC. Please select the printer and port<br>you wish to install on your PC. You may return to this screen to setup additional ports if needed.<br><b>Refresh</b><br>PS200413<br>PS200413<br>PS200413<br>PS200413<br>PS200413<br>MS20[Installed]<br>Install Printer |         |
| F   | ïnish ∫ |

Please highlight the appropriate printer and press the **'Print Test'** button to verify that your print server is properly configured. There may be a short delay the first time you print to the print server. If there is a problem printing the test page, please remove and replace your printer's power and make sure your Windows printer driver is "online" and the "Use Printer Offline" selection is <u>not</u> checked.



19

# Mac OS X Installation

If you happen to have a Windows OS computer on your network, please use that to set up your print server with the provided Windows compatible software. Give your print server a recognizable IP address that corresponds to your network. For this example, we will use **192.168.1.250** which is the default IP address for the Hawking print server line.

### Mac Only Environment

If you are installing your print server in a "Mac only" environment and you have not previously configured the print server, please make sure you press down the "reset button" for 10 seconds continuously to reset the print server to the factory default settings with an IP address of 192.168.1.250.

Plug the print server via an Ethernet cable directly to your Mac OS X+ computer. Change your computer's network IP settings temporarily to 192.168.1.100.

### Mac or Mac + PC Environment

1) Open the "Applications:Utilities:Print Center" on your Mac computer

2) Click 'Add' (to add a new printer)

3) Select 'IP Printing' from the upper pop-down (If you have Mac os 10.3, make sure select LPD/LPR).

4) Enter your print server's IP address: 192.168.1.250 (or whatever your print server is set to) in the 'Printer Address' field.

5) De-select 'Use default queue on server'

6) Enter 'lpt1' as 'Queue Name' if your print server is using the first port.

(For HPS12U, and the HWPS12UG - lpt1 is p1, lpt2 is u2, lpt3 is u3)

7) Select 'printer' from the 'Printer Model' field.

8) Select your printer series, from the 'Model list'

9) Click the 'Add' button to complete your setup.

Now you have set up your print server to work on your network. The name of your printer will be 'lpt1 on 192.168.1.250' if you used that IP address to set up your print server.

# **IPP** Printing

The IPP (Internet Printing Protocol) provides you with a convenient method for remote printing jobs via the TCP/IP protocol. The HPS1P 10/100M Parallel Print Server can support IPP printing capabilities. It is not necessary to modify any of the print server's internal settings to use the IPP printing features. Windows 2000 and Windows XP computers can use IPP printing functions through the operating system's internal IPP functionality. IPP printing will let you share your network printer with any PC that can access the HPS1P print server by IP. You can even share your printer with users over the Internet who know your printer model, printer port, and the IP address of your HPS1P.

# **IPP Setup**

### **Print Server Side**

It is not necessary to modify your IPP settings on the print server side. Make sure you know your print server's IPP settings and make sure they are correctly set to your network's IP settings. Contact your system administrator if you are unfamiliar with your network's routed IP settings. If you would like to share your printer with Internet users outside of your internal network structure, you will have to set an outside IP address that can access the print server. You also have to make sure that any gateway, router or firewall does not block the IPP protocol if you have those devices installed. Please contact your system administrator or consult your router's manual for DMZ or port mapping configuration settings.

### Client Side

You will need to perform Window's standard *Add New Printer* procedure. To do this, select the "*Network Printer*" setting as shown in the screen below and click "Next."

| Add Printer Wizard  |
|---|
| Local or Network Printer<br>The wizard needs to know which type of printer to set up.               |
| Select the option that describes the printer you want to use.                                       |
| O Local printer attached to this computer   |
| Automatically detect and install my Flug and Flay printer   |
| A network printer, or a printer attached to another computer  |
| To set up a network printer that is not attached to a print server, use the "Local printer" option. |
| <back next=""> Cancel</back>  |

Select "*Connect to a printer on the Internet or on a home or office network*" and enter the URL of your HPS1P print server. The URL format will be "<u>http://IP:631/LPT\_PORT</u>". The **IP** portion of the URL will be the print server's IP address. You will need to write down **631** after the IP address. This number, 631, is the IPP standard port number for IPP printing requests. **LPT\_PORT** is the port name of the print server that your printer is connected to. For one-port print servers, the port name will be "**lpt1**". For Hawking's three-port print servers, the port names are – **lpt1, lpt2 or lpt3** depending on which printer port your printers are connected to.

(Please write down the printer port and corresponding printer model for configuring our line of multiple port print servers.) An example IP address will be modeled as follows: The URL will be http://192.168.2.1:631/lpt1 for a print server located on the first printer port (lpt1) of the IP address 192.168.2.1. After entering the URL of the print server, click "Next" and complete the remaining configuration settings to access the shared network printer.

| Specify a Pri<br>If you don'<br>that meets | nter<br>t know the name or address of the printer, you can search for a printer<br>your needs. |
|--|--|
| Av <b>a</b>                                |  |
| what print                                 | er do you want to connect to r   |
| O Browse                                   | for a printer  |
| O Connec                                   | t to this printer (or to browse for a printer, select this option and click Next):             |
| Name:                                      |  |
|  | Example: \\server\printer  |
| 💿 Connec                                   | t to a printer on the Internet or on a home or office network:                                 |
| LIDIA                                      | http://192.168.2.1.631./jpt1   |
| UNL:                                       |  |
|  | Example: http://server/printers/myprinter/.printer   |
|  |  |
|  |  |
|  | K Back Next > Cancel   |

For advanced configuration options, please refer to your HPS1P manual which is located on the HPS1P Installation CD-ROM.