

# **1** Parallel Port + 2 USB Ports **10/100M Internet Print Server**



HPS12U



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Congratulations on purchasing Hawking's HPS12U 1-Port Parallel + 2 USB Ports 10/100M Internet Print Server. The Hawking HPS12U is a powerful and convenient network printing solution that will connect your USB and parallel printers to your network. The HPS12U 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 HPS12U also supports multiple servers and multiple protocols, providing you with the capability to print from anywhere, from any computer and from any application.

Please take the time now to check the contents of your package:

# **Package Contents**





One CD-ROM





HPS12U Print Server

Quick Installation Guide

One power adapter

(Manual and Drivers)

one power ada

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# What you will need to get started

- One Parallel and/or up to 2 USB Printers
- USB and/or Parallel Printer Cable(s)
- One Ethernet cable attached to your main network
- A computer client attached to your network

# **Planning Your Print Server Network**



### **LED Indicators**



The HPS12U is equipped with LED lights to assist in diagnosing print server or network errors.

#### Status

When the print server unit is powered on, the *Status* 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 HPS12U may take up to 1 minute to perform its internal diagnostic tests.

# LAN

This set of lights will illuminate and flash when the HPS12U detects 10M or 100M data transmissions over the network.

## Printer Port 1, 2, or 3

This set of lights will illuminate and flash when the HPS12U detects a printer attached to any of the 3 printer ports. Please note port number from the back panel of the HPS12U.

#### Power

This light will illuminate when the HPS12U has sufficient power and the power adapter is plugged into the HPS12U.





# **Hardware Installation**

- 1. Connect the HPS12U Print Server to a network.
- 2. Connect the HPS12U Print Server to your printer(s).
- 3. Plug the AC power adapter into the power slot on the side of the Print Server.

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

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



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

- 1) **POWER ON:** After you have correctly connected your print server to your PC and router, please power on all units.
- 2) Before the installation, please verify that your network protocols are installed on your PC (TCP/IP, IPX and/or NetBEUI). If they are not installed, please consult your operating system's manual for instructions on how to do so.
- 3) INSTALL the Administrator Installation Program: To install your Print Server administration software, please follow the directions listed below.
- Insert the Windows 95/98/ME/NT/2000/XP Setup CD into your CD-ROM.

(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:

	E
HPS12U	
2 Partalier Port + 2 USB Ports 20/100M Print Server	Admin Installation     Client Installation     User Manual     Quick Install Guide     Hawking Website
1 Port Parallel + 2 USB Ports 10/100M Internet Print Server	CAREFREE NETWORKING
1 Port Parallel + 2 USB Ports 10/100M Internet Print Server	CAREFREE NETWORKING

3. Click on *"Admin Installation"* and the *"Utilities Setup"* window will be displayed.



4. Click "*Next*," and specify the destination folder where the *HPS12U* utility files will be installed.

🛃 PrintServer Utilities Setup	
PrintServer Utilities	
Choose Destination Location	×
Setup will install PlintServer Utilities in the following folder. To instal to this folder, click Next. To instal to a different folder, click Browne and setect anothe folder. You can choose not to install PlintServer Utilities by clicking Cancel to ext Setup.	
Destination Folder C.VPiogram File/Piir/Server Utilities	
< Back Next > Cancel	

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

It is highly recommended to install all provided components.



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

Select Program Folder     X       Setup will add program icons to the Program Folder kited below.     You may tope a new folder mane, or select one from the existing Folders list. Click Next to continue.       Program Folder:     Program Folder:       Progr	Select Program Folder     X       Select Program Folder     Setup will add program icom to the Program Folder inited below, volume to the secting Folder init. Click Next to continue.       Program Folders:     Program Folders:       Program Folders:     Program Folders:	Server Util	illes
	( Paula   Marks   Canaal	Select Program Folder	Setup will add program icons to the Program Folder sized below. You may type a new folder name, or select one from the existing Folders: PortSarwer Ublies Egining Folders: Egining Folders: Accessories HyperFolderSap.DX Uprime Service: StartUp

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



8. The "Print Server Utilities" program will finish installing. After this installation is complete, the next step will involve configuring your HPS12U. Click "*Next*," and the "*Choose Print Server*" dialog box will be displayed as follows.

Print server list:	X	
Choose print server Ext and P3 13001B P5 13001B P5 180028 P5	If you install the print server at first time, the "Print Server Name" is the "Device Name" printed at the rear side of the print server. Refresh	
	<back next=""> Cancel</back>	

 Click "Next" and a dialog box will prompt you to name your print server. (Please make sure to write down the name you assign to your print server for future use.)



10. Click "Next" to configure your print server's network communication protocol.

twork protocol configuration			2
-IPX/NetBEUI			
This print server doesn't suppor	t IPX/NetBEUI pri	nting	
TCP/IP			
C Assign print server IP addre	\$\$		
IP Address: 0.0.0.0			
Don't change			
You can configure later by t	the Configuration L	Jtility	
	/ Back	Next	Cancel

As a system default setting, IPX and NetBEUI protocols are

enabled and do not need to be configured.

With the TCP/IP protocol, you can either (1) assign a dedicated IP address for your print server or (2) configure it later through the configuration utility software. (If you choose "Do not change IP – configure later," there is no effect on your network settings. This is suitable for both Non-IP and IP-enabled networks).

11. Click "*Next*" and the configuration summary will be displayed in the setup window. You have completed the "Print Server Setup" process and are ready to set up your print server to work with your printer. Please click "Next" and your system will add the HPS12U's network port to your PC.

s Name: P5306D49 Click (Finish), the program	Device Name: P5306D49
s Name: P5306D49 will add the Network Port	Alias Name: P5306D49
of this print server to your	IPX Support: Disable
pc	NetBEUI Support: Disable
Support: Enable	TCP/IP Support: Enable
grument: Auto	IP Assignment: Auto
ddfress: (0.0.0.	IP Address: (0.0.0)

12. The "Installation complete" window will be displayed to indicate that the Administrator Installation procedure is completed.



(Please restart your computer for your setup to complete its installation.)

Now that you have completed the administrator's setup, you can perform the "Client Installation" procedure on all client computers in your network.

To set up printing from this administrator's PC to the print server, please follow the standard "Add Printer" procedure as described in the steps below. Please choose your appropriate operating system and follow the directions to add your printer through your OS. (Repeat the add printer steps for each printer installed on the HPS12U).

### WINDOWS 98/NT/ME/2000

**Step1.** Click the *Start* button, choose *Setting* →

# **Printers**

Step2. Double click on Add Printer









Step4. Select your printer manufacturer and model,

and then click Next.



Step5. Choose the *Print Server's Network Port*, which was created by the administrator or client

installation process, and click Next.

Add Printer Wizard		
	Click the port you want to use click Next.	with this printer, and then
Desilier with	Available ports:	
	COM1: Communication COM2: Communication FILE: Creates a file o LPT1: ECP Printer Po MIS-1-P1 PrintServer Net PS306D49-P1	is Port is Port n disk tt twork Port PrintServer Network Port
		<u>C</u> onfigure Port
	< <u>B</u> ack	Next > Cancel

**Step6.** Complete the rest of the questions to finish the network printer setup.

(Repeat the add printer steps for each printer installed on the HPS12U).

# WINDOWS XP Setup

Step1. Click the Start button; choose Control Panel

→ Printers and Faxes

Step2. Click on Add a Printer



**Step3.** The *Add Printer* Wizard will appear → Press *Next.* 



**Step4.** Select "Local printer attached to this computer" → Press *Next*.



**Step5.** In the "Select a Printer Port" window select "Use the following port" and drag the selection bar

down to your newly created print server entry  $\rightarrow$  Press

Next.



Step6. Select a suitable printer manufacturer and

model, and then click Next.

The manufacturer	and model	determine which printer software to use.
Select the manu disk, click Have compatible print	facturer an Disk. If yo er software	d model of your printer. If your printer came with an installation a printer is not listed, consult your printer documentation for
Manufacturer Bull Canon Crizen	•	Pinters CokuAge ColorQ
C-Hoh Coloniage This driver is dicitally	vice d	Windows Undvie Have Disk
Tel me why driver a	anina is inc	ofart

Step7. Please continue through the next couple of

installation steps by pressing *Next* until your new printer is added to your computer. Press the finish button to finalize your configuration. (Repeat the add printer steps for each printer installed on the HPS12U).

# **Client Installation**

1. Insert the CD shipped along with the HPS12U into your CD-ROM drive. The Autorun.exe program will execute automatically. If it does not start automatically, run Autorun.exe manually from your CD-ROM drive's root directory.

2. The *"Installation Manager"* will be displayed on the screen as follows.



3. Click "*Client Installation*" and the "*Utilities Setup*" window will be displayed.



4. Click "*Next*" and specify the destination folder where the utilities will be installed.



5. Click "*Next*" and specify the program folder where the program icons will be added.

Select Program Folde	Setue will add program score to the Program Folder listed below.
	You may type a new folder name, or select one from the existing Folders list. Click Next to continue.
-	Program Folders:
	Print Server Utilities
in the second se	Egoting Folders Accessores
S 10	HyperSnap-DX Online Services
	StartUp
	<gack next=""> Cancel</gack>

6. Click "*Next*" to start the installation.



7. You have completed the software installation process. Click "*Continue*" and the HPS12U's network port will be detected on the network and will be added to your PC.



8. The "Installation complete" window will be displayed to indicate that the Client Installation procedure is finished.



You must then perform the Windows standard "Add **Printer**" procedure, as described below, to add a network printer to your PC.

- Step1. Click the *Start* button, choose *Setting* → *Printers*
- Step2. Double click the Add New Printer → select Local printer → click Next.
- Step3. Select a suitable printer manufacturer and

model, and then click Next.

- Step4. Choose the *HPS12U's Network Port* that was created in the client installation process and click *Next*.
- Step5. Complete the rest of the questions by hitting *Next* to finish the network printer setup.

(Repeat the add printer steps for each printer installed on the HPS12U).

# **IP** Configuration

If you wish to configure your IP address at any time, you may access the HPS12U's print server controls through any Windows environment by using the provided network utilities.



The *TCP/IP* tab of the installed print server utility program brings up the IP configuration page that will allow you to configure the IP address of your print server. The HPS12U will obtain its IP address automatically if you select the *Auto* button under *TCP/IP Configuration*.

TCP/IP - Internet Br	oad band Router	×
	TCP/1P	
TCP/IP Setting -	C Auto IP	
2 8	IP Address :         192         168         12         144           Sunnet Mask :         255         255         240         0	
	Gateway : 132 168 12 252	
	OK Cancel	

To manually issue your network's IP address, gateway, and subnet information, select *Specify IP* and type in your network's IP settings.

Click the **OK** button to save the configuration to the 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 HPS12U 10/100M 2 USB Ports + 1-port 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 HPS12U print server by IP. You can even share your printer with users over the Internet who know your printer model, printer port, and IP address of your HPS12U.

# **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."



Select "*Connect to a printer on the Internet or on a home or office network*" and enter the URL of your HPS12U print server. The URL format will be "<u>http://IP/LPT\_PORT:631</u>". The **IP** portion of the URL will be the print server's IP address. **LPT\_PORT** is the port name of your print server that your printer is connected to. For one port print servers, the port name will be "**lpt1**". For Hawking's HPS12U three-port print server, 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.) The last number you will need to write down after the port name and colon will be **631**. 631 is the IPP standard port number for IPP printing requests. An example IP address will be modeled as follows: The URL will be <u>http://192.168.12.13/lpt1:631</u> for a print server located on the first printer port (lpt1) of the IP address 192.168.12.13. After entering the URL of print server, click "Next" and complete the remaining configuration settings to access the shared network printer.

Add Printer Wi	zard
Specify a Prin If you don't that meets	nter know the name or address of the printer, you can search for a printer your needs.
What printe	r do you want to connect to?
O Diowse	ror a printer
Connec	t to this printer (or to browse for a printer, select this option and click inext):
Name:	
	Example: \\server\printer
💿 Connec	t to a printer on the Internet or on a home or office network:
URL:	http://192.168.12.13/lpt1:631
	Example: http://server/printers/myprinter/.printer
	<pre> Back Next &gt; Cancel</pre>

For advanced configuration options, please refer to your HPS12U manual which is located on the HPS12U Installation CD-ROM.



# Ethernet

A networking standard using cables (Category 5) to create a network.

### IPP

*Internet Printing Protocol.* IPP allows you to print your documents over an Internet connection to another printer over the net.

### **Network Adapter**

Also known as a NIC (Network Interface Card). Used to provide PC's or laptops with an Ethernet port or wireless access to the network.

### **Broadband Modem**

A device that allows broadband connection to the Internet. Broadband connections include speeds faster than 56k (dial up modem speed). The two most common types of Broadband connections are DSL and Cable. Cable modems rely on the bandwidth of cable television lines, while DSL modems rely on the telephone lines operating at DSL speeds.

# Router

A device used to share Internet access from one user to multiple users.