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HP JetDirect 70X

**Home Print Server
(J4155A)**

User's Guide

HP JetDirect 70X Home Print Server

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Applicable Products

J4155A

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Do not proceed beyond a WARNING or CAUTION notice until you have understood the hazard and have taken appropriate steps.

Hewlett-Packard Company
8000 Foothills Boulevard
Roseville, California USA 95747-6588

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1 Introduction

Thank you for purchasing the HP JetDirect 70X Home Print Server! You will find it to be an easy and flexible way to share a printer among all the PCs in your home.

This guide provides information about installing and operating the HP JetDirect 70X.

While using this manual, if you encounter some new or unfamiliar terms, see the Terms section at the end of this chapter.

What's a Home Print Server?
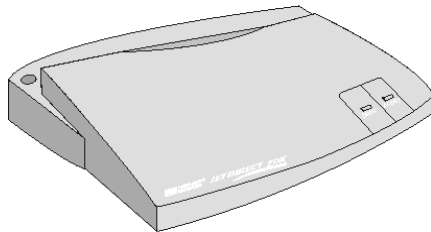
A home print server is an accessory that allows every PC in your home to share the same printer, using your existing home phoneline network.

A home phoneline network allows telephone and network activity to take place at the same time. With one phone line, you can make telephone calls or connect to the Internet, even while you are printing.

The Need for Home Networking

Networks in businesses allow PCs to share printers and other devices. However, for the home, a network has usually been too costly and inconvenient to install.

In a non-networked home with multiple PCs, each PC usually has a printer connected directly to it.

Sometimes there is only one quality laser or color inkjet printer. Sometimes there is both a laser printer and a color inkjet printer. In either case, there is no easy way for family members to use all the printers.

Printer Sharing with an HP JetDirect 70X

When you use an HP JetDirect 70X Home Print Server, there are several advantages:

- You can connect the HP JetDirect 70X to any phone jack, regardless of its location in your home. The phone jack must be on the same phone line as the PCs in the network.
- Only the PC that has the file to be printed, the home print server, and the printer, need to be turned on.
- Scanning and faxing functions of HP All-in-One products are available to networked PCs.

The following illustrates how you might use a home print server to share a printer in your home.
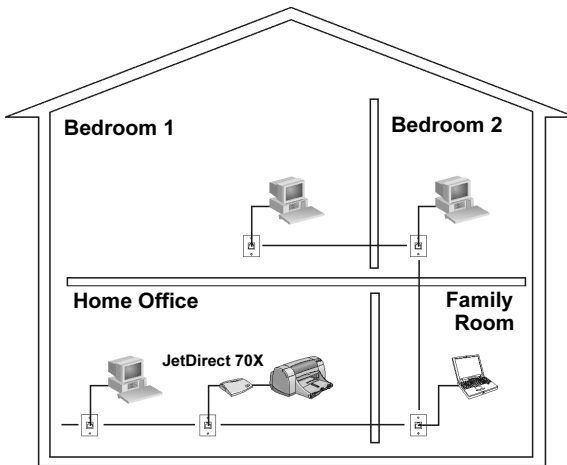
All of the PCs connected to the phone line in this home can now share the printer in the home office.

Different Setups are Possible

If your home has only one telephone line, the same line is used for voice phone calls, connecting to the Internet, and networking PCs over the home phoneline network.

If your home has two telephone lines, you must connect the HP JetDirect 70X to the same telephone line used by the home phoneline network.

It is also possible to connect your PCs and HP JetDirect 70X together independent of your home telephone wiring, using standard telephone cables. This is useful in small offices, where each desk might have multiple independent telephone lines and might not have a suitable arrangement for connection over one telephone line.

Terms

Daisy chaining: a method of connecting multiple devices.

Driver: software that enables your PC to communicate with a particular piece of hardware, such as a printer, modem, or network card.

Home phoneline network: connects the PCs and printers in a home, using existing phone lines.

HomePNA (Home Phoneline Networking Alliance): an association of companies working together to promote widespread deployment of compatible, low-cost solutions for in-home, phoneline-based networking.

LED (Light-emitting diode): a light on the top and back of the HP JetDirect 70X.

PCI (Peripheral Component Interconnect): a standard PC interface used to connect devices to PCs.

Phoneline splitter: a small telephone accessory that allows two or more telephone devices (answering machines, faxes, phones) to share one phone jack. You can buy a phoneline splitter at your local electronics shop. Some splitters can divide a line into two, three, or more jacks. Make sure you buy a splitter that divides a wall jack for a single phone number into two or more jacks for the same number.

POTS (Plain old telephone services): the regular phone services, such as voice calls and fax transmissions.

RJ-11: the most common telephone jack used in household or office phones.

2 Setup

Setting up your HP JetDirect 70X Home Print Server is also described on the large Quick Start guide included in the shipping container.

To set up the JetDirect 70X Home Print Server, complete the following tasks:

1. Before You Begin
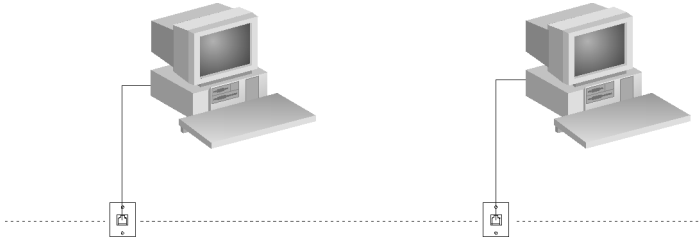
- You must have a working home phoneline network installed. It includes:

  - PCs equipped with internal or external home phoneline PC network interface (PNA) devices (these are not modems).

  - PCs connected to the same phone line.

- Verify the home phoneline network is functioning by using the procedures described in the documentation that came with your home phoneline network interface devices.

- You should have your printer and Windows® operating system CDs available. They may be required during setup.

2. Unpack Your HP JetDirect 70X

HP JetDirect 70X **Quick Start Guide** **HP JetDirect 70X
Setup CD**
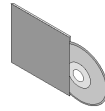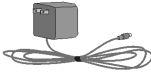
Power Supply **Telephone Cable** **User's Guide**

3. Connect Your HP JetDirect 70X
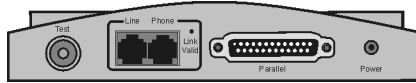
"Line" Jack **Parallel Printer Port**

- Make sure the printer is turned off.
- Attach your printer cable to the HP JetDirect 70X's parallel printer port.
- Attach the phone cable (included) to the HP JetDirect 70X's "Line" jack.

**Home Phoneline
Networking Device** **Modem**
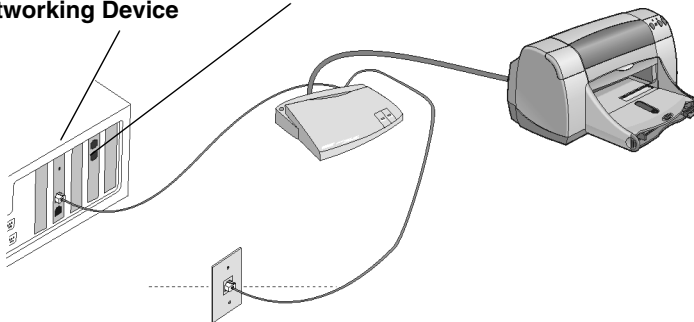
- **Option A**: Locate your printer near your PC. Attach the other end of the phone cable to a wall jack. Connect the phone cable

from your PC's home phoneline networking device to the HP JetDirect 70X.
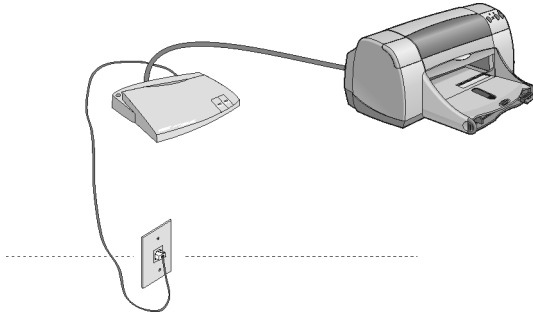
- **Option B**: Locate your printer anywhere – even in a room without a PC. Attach the other end of the phone cable directly to a telephone wall outlet.

Note: If your home has two telephone lines, you must connect the HP JetDirect 70X to the same telephone line used by the home phoneline network.

4. Plug in the HP JetDirect 70X

Power cable

Test button
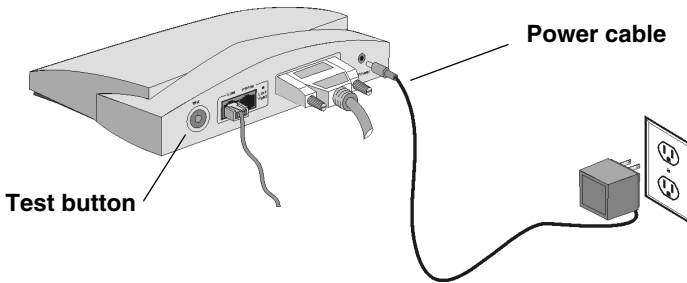
- Connect the power supply (included) to the HP JetDirect 70X. Connect the other end to a wall outlet.
- Turn on your printer.
- The green Status light on the top of the HP JetDirect 70X will blink for about five seconds and then stay on solid.
- Press the Test button on the HP JetDirect 70X. A test page should print on your printer. This verifies the connection to the printer and may be required in Step 5.

- If a test page does not print, refer to the Troubleshooting chapter of this User's Guide.

- If the IP address on the test page is 0.0.0.0, the HP JetDirect 70X has not initialized. Wait one minute and press the Test button again.

5. Set Up Your PC to Print to Your HP JetDirect 70X-Connected Printer

Note: If you are using Internet sharing, perform the setup first on the PC which provides Internet sharing.

The installation method varies with the printer you are installing. Determine which option is appropriate for your printer and environment; then follow the instructions below.

Option A: For HP DeskJet 970, 950, 930, 895C, 880C, 810, 2000 Professional Series, LaserJet 5L, 6P, 2100, or 4000 Series printers.

Option B: For HP OfficeJet G, HP LaserJet 3150, or LaserJet 1100A All-in-Ones.

Option C: For printers *not* listed above that were previously installed and working on your PC.

Option D: For printers *not* listed above that have *not* been installed on your PC.

Note: It is necessary to repeat the installation option for each PC in your network from which you want to print.

Option A: For HP DeskJet 970, 950, 930, 895C, 880C, 810, 2000 Professional Series, LaserJet 5L, 6P, 2100, or 4000 Series printers.

- If you are running Windows 95 or 98, insert the HP JetDirect 70X Setup CD and run the Setup Wizard.

- If you are running Windows NT® 4.0 and your printer was previously installed, insert the HP JetDirect 70X Setup CD and run the Setup Wizard. If your printer was not previously installed, you must first install the printer (use Option D below).

Option B: For HP OfficeJet G, HP LaserJet 3150, or HP LaserJet 1100A All-in-Ones.

- You *must* use the Setup CD that shipped with your All-in-One. During the installation, choose the network installation option. This option will guide you through the setup.

Option C: For printers *not* listed above that were previously installed and working on your PC.

- Insert the HP JetDirect 70X Setup CD and run the Setup Wizard.

Option D: For printers *not* listed above that have *not* been installed on your PC.

- **Part 1**. Install the printer. Use the printer Setup CD that came with your printer. During the setup you may be prompted to choose a port. If this happens, choose LPT1. If you get a message saying that no printer is attached to LPT1, simply continue with the printer installation (you may have to click **Skip**).

- **Part 2**. Insert the HP JetDirect 70X Setup CD and run the Setup Wizard.

Note: For supported All-in-Ones not listed above, in order to use the HP JetDirect WebScan feature, you must choose the TCIP/IP printing protocol. (You will be prompted for this selection during the Setup Wizard.) See the Network Scanning section in Chapter 3 for more information.

3 Operations

Printing

Once your HP JetDirect 70X Home Print Server and PCs are configured, you can print from any PC connected to your home phoneline network.

You can select the printer attached to the HP JetDirect 70X from any application, just as you do now with directly-attached printers.

If another PC in your home is using the printer connected to the HP JetDirect 70X, your print job will print after the first print job finishes.

Sending Faxes

You can send faxes from any PC on your home phoneline network if you have one of the following HP All-in-Ones installed:

• HP OfficeJet G

• HP LaserJet 3150

Refer to the documentation that came with your All-in-One device.

Network Scanning

There are two methods of scanning over a home phoneline network.

All-in-One Software CD

The HP OfficeJet G and HP LaserJet 3150 All-in-Ones have networking software included on the setup CD that came with them. To enable full scanning support over the network, run the All-in-One setup CD and select the network installation option.

Refer to the documentation that came with your All-in-One device.

WebScan

If you have a supported All-in-One (see the Supported Printers list in Chapter 6 of this User's Guide), you can use the HP JetDirect WebScan feature. WebScan allows you to scan and save scanned images over the network. If you have a flatbed All-in-One, you have

the ability to preview scanned images. In order to use the WebScan feature, you must set up the HP JetDirect 70X to use the TCP/IP communication protocol. You will be prompted to select this protocol when you run the HP JetDirect 70X Setup CD.

Note: Since WebScan is included in your HP JetDirect 70X, the All-in-One software does not need to be installed.

To use the WebScan feature, you will need to have one of the following supported web browsers installed:

- Netscape Navigator™ version 4.01-4.7, excluding 4.04.
- Microsoft Internet Explorer version 4.01-5.0.

Using WebScan

Starting WebScan

1. Open your web browser.
2. Netscape users: enter the IP address of the HP JetDirect 70X in the "Go To:" or "Location" field.

   Internet Explorer users: enter the IP address of the HP JetDirect 70X in the "Address:" field.

   For example: http://123.123.123.123 (The IP address of the HP JetDirect 70X represents its URL).

   The IP address of the HP JetDirect 70X can be found on its Test page. Press the button on the back of your HP JetDirect 70X and the Test page will print on the printer.

   The web interface for the HP JetDirect WebScan will display. Click the **Scan** button on the left side of the window.

   If there is no **Scan** button, but the **Home** and **Administration** buttons appear, make sure your All-in-One is a supported device (See the Supported Printer list in Chapter 6 of this User's Guide). Make sure the All-in-One is correctly connected to the HP JetDirect 70X.

   If the page does not load on your web browser, check the WebScan section of the Troubleshooting chapter in this User's Guide.
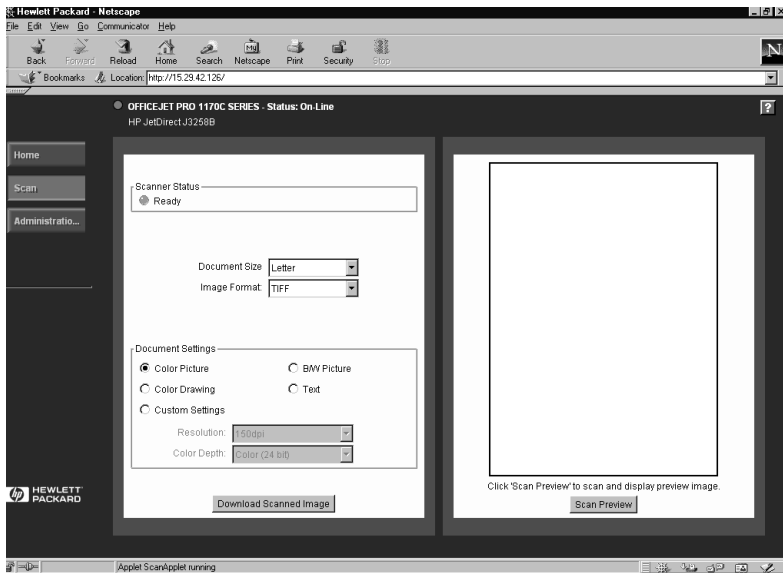
Preview Image

If you have a flatbed All-in-One, you may preview an image by clicking the **Scan Preview** button. Use your mouse to select the desired portion of the preview image by clicking and dragging a rectangle on the preview window.

Scan Image

Follow these steps to scan an image:

1. Select your paper size using the "Document Size" list box. If you have selected a region of your preview image, this box will display "Selected Region."

2. Select an image format. Available formats are PDF and TIFF. JPEG is also supported on the OfficeJet G.

3. Select the type of document you are scanning using the "Document Settings" buttons. You may select a custom scan resolution and color depth using the "Custom Settings" button.

4. Click the **Download Scanned Image** button to scan the document and download it to your PC. You may save the scanned image to your disk drive or run an application to view the scanned image from your browser.

Scanner Status

The following table shows the status messages for the scanner and what they mean.

Status Message	Meaning
Ready	The scanner is ready for use
Scanning	You are currently scanning
Resetting	The scanner is resetting. If this persists, turn your HP JetDirect 70X off and back on.
In use by... or Busy	Someone else is using the scanner
Offline	The scanner is not available (the device may be turned off)
Unable to contact device	A network error occurred while contacting the device

Document Settings

The document settings are dependent on the particular All-in-One attached. Document settings can include:

- Color Picture: 150 DPI, 24-bit color
- Color Drawing: 300 DPI, 24-bit color
- B/W Picture: 150 DPI, gray-scale
- Text: 300 DPI, black and white
- Custom (manual) Settings:
  - Resolution (100, 150, 200, or 300 DPI)
  - Color depth (24-bit color, gray-scale, or black and white)

Document Size

The document size is dependent on the particular All-in-One attached. Document sizes can include:

- Letter (8.5" x 11")
- Legal (8.5" x 14")
- A4 (8.3" x 11.7")
- Executive (7.25" x 10.5")
- 4" x 6"
- 5" x 7"
- 3" x 5"
- 3" x 3"

4 Frequently-Asked Questions

1 What if another computer is printing a job?

Your print job will print as soon as the first job finishes.

2 Can I make phone calls while printing?

Yes.

3 Can I connect to my Internet Service Provider while printing?

Yes.

4 I have an HP All-in-One. Can I still scan with it?

Yes. See the Network Scanning section in Chapter 3 of this User's Guide.

5 I have an HP All-in-One. Can I still send faxes?

Yes. The HP JetDirect 70X supports faxing on the HP OfficeJet G and the LaserJet 3150 All-in-Ones. All-in-Ones can continue to fax independent of the HP JetDirect 70X and your network.

6 I have a printer that isn't listed as supported on the HP JetDirect 70X carton. Can I still use it?

The HP JetDirect 70X should work with most HP or non-HP printers with a parallel port (refer to Option D in Chapter 2 of this User's Guide for installation steps).

7 Can I use the home print server with Macintosh computers?

No. The HP JetDirect 70X works with PCs running Windows 95, Windows 98, or Windows NT 4.0.

8 Can I print from DOS?

No. The HP JetDirect 70X does not support DOS printing.

9 What happens if there's a power outage or I unplug the HP JetDirect 70X while I'm printing?

The result is the same as when printing from a directly-connected printer. There may be a loss of print data, and you will have to print again.

10 My HP JetDirect 70X is connected to the network interface device in my home office PC. What happens if I turn off the home office PC?

You will still be able to print. The HP Jet Direct 70X works whether or not the PC it is attached to is turned on.

11 How far from the PCs can the HP JetDirect 70X be?

The HP JetDirect 70X can be located up to 100 feet from the PC. This means you can locate the HP JetDirect 70X and the printer wherever you need them, even in a room with no PC.

12 Can I use two home print servers to share two printers?

Yes. You can install as many HP JetDirect 70X Home Print Servers as you want.

5 Troubleshooting

If you encounter any problems while installing or operating the HP JetDirect 70X, here are some suggestions for solving them.

Hardware Installation Problems

Condition	Possible Cause/Solution
When I press the Test button on the back of the home print server, no test page or an unreadable test page prints.	Try the following. After each item retry the test. • Be sure the HP JetDirect 70X is powered up. The green Status light on the top of the HP JetDirect 70X should be ON. The power supply must be firmly connected to the HP JetDirect 70X. The other end of the power supply should be firmly inserted into a power source. Make sure the wall outlet or power strip is receiving power. • Be sure your printer is turned on, is online, has paper, and ink or toner. • Be sure the parallel printer cable connecting the HP JetDirect 70X to the printer is an IEEE-1284 compliant cable. Be sure it is firmly seated and working properly (substitute a known working cable if available). • Turn off printer and HP JetDirect 70X; then turn on the devices in this order: HP JetDirect 70X, then the printer.
I can't connect the home print server to my computer's home phoneline network. All of the jacks are being used.	• Provide additional connections using a phoneline splitter (see the Terms section in Chapter 1). CAUTION: some home phoneline network devices wil not pass network traffic through the device's "phone" jack.
The Status LED (light) is off.	See the Indicator Lights section of this chapter.
The light on the back of my HP JetDirect 70X is off.	This is the Link Valid LED. See the Indicator Lights section of this chapter.

HP JetDirect 70X Setup Wizard Problems

Condition	Possible Cause/Solution
I put the setup CD in my CD-ROM drive, but nothing happens.	• Try to manually run the setup CD. Click **Start**. Click **Run**. Type in **D:\setup.exe**, where D is the drive letter of your CD-ROM drive. Click **OK**. The setup program should run. • If the setup CD doesn't run, verify your CD-ROM drive is working properly by trying to run another CD. • If another CD works, the HP JetDirect 70X setup CD could be defective. Contact HP.
After I start the setup CD, I'm getting a dialogue box, saying that the system does not have the appropriate networking configuration.	The setup CD could not find your home phoneline network interface device. Verify that the network is working, as described in the documentation for your home phoneline network interface device. Then try to run the HP JetDirect 70X setup CD again.
During setup, the computer begins dialing up my Internet Service Provider.	Click **Cancel** when you see the "Dialing..." dialogue box. The Setup Wizard will continue.
When I ran the setup CD, I got the following error message: "Hard Disk Full".	You will need to delete some files to create more space on your hard disk. Then try to run the HP JetDirect 70X setup CD again.
When I ran the setup CD, I got the following error message: "Insufficient Memory".	Close any open programs. Then try to run the HP JetDirect 70X setup CD again.

Condition	Possible Cause/Solution
When I run the setup wizard and choose from the list of available printers, I get a message saying, "No printers found on network." When I click **OK**, I don't see my printer on the Identify Printer screen. OR When I try to specify my printer by address, I get the same message, "No printers found on network."	Try the following: • Be sure the printer and the HP JetDirect 70X have been powered on for at least one minute, and the phone cable is properly seated (in either the wall jack of your home or the "wall" jack of your home phoneline network interface device). Verify that the Link Valid light on the back of the HP JetDirect 70X is ON. If the HP JetDirect 70X is not connected directly to the computer's home phoneline networking device's "wall" jack, try connecting it directly. If the Link Valid light goes on, there could be a problem with your phone wiring or a device on your network. The Status light on the top of the HP JetDirect 70X should be ON (see the Indicator Lights section of this chapter). Click **Refresh** on the Identify Printer screen. The printer should show up. • If your printer still does not show up on the Identify Printer screen, print a test page by pressing the Test button on the back of the HP JetDirect 70X. Use either the IP or hardware address found on the test page of the HP JetDirect 70X to do a "specific device" discovery. To perform a specific device discovery, click **Back** to go to the Welcome screen. Select "Specify printer by address" and follow the instructions in the setup wizard. • If your printer still does not show up, exit the setup CD. If the HP JetDirect 70X is not connected directly to the computer's home phoneline networking device "wall" jack, try connecting it directly. Rerun the setup CD. Use the "Select from a list of discovered printers (recommended)" option. • If your printer still does not show up, verify that the network is working, as described in the documentation for your home phoneline network interface device. Then, run the HP JetDirect 70X setup CD again. • If the above procedures are not successful, contact HP.

Condition	Possible Cause/Solution
The Setup Wizard found my printer, but it identifies the printer as "Unknown."	Be sure the printer is powered on.
	Be sure you are using an IEEE-1284 compatible parallel printer cable. See the Specifications section of Chapter 6 for a list of the HP IEEE-1284 compatible cables.
	Click **Refresh** on the Identify Printer screen. In some cases, printers do not supply printer identification information to the setup wizard. This does not affect printer operation.
On the Networking Mode screen, I don't know which printing protocol (TCP/IP or IPX) to select.	Take the "Recommended" mode, OR
	If you are using an HP All-in-One and want to scan across the network, select TCP/IP. See the Network Scanning section in Chapter 3 of this User's Guide.
	You may also want to review the online help for more information about the different network printing protocols.
I have two printers of the same type on my home network. Each one is connected to an HP Jet Direct 70X. At the Identify Printer screen, how do I know which one is connected to which HP JetDirect 70X?	Use the Test button on the back of the HP JetDirect 70X to print a test page. The third line of the test page contains the hardware address.
	On the Identify Printer screen, scroll to the right. Match the hardware address on your screen to the one on the test page. Highlight the appropriate printer and click **Next**.
On the Printer Driver screen, I can't find my printer. OR When the Setup Wizard was copying files, I got a message saying run the printer setup.exe.	Cancel the home print server Setup Wizard.
	You will need to install the printer and rerun the setup CD.
	To install your printer, use the printer setup CD that came with your printer. During the setup, you may be prompted to choose a port. If this happens, choose LPT1. If you get a message saying that no printer is attached to LPT1, simply continue with the printer installation (You may have to click **Skip**.).
	In many cases, a driver for your printer can be downloaded from the Internet. When you are downloading your driver, if you see a network or corporate driver for your printer, download that one.
	Insert the HP JetDirect 70X setup CD and run the Setup Wizard.

Condition	Possible Cause/Solution
My printer shows up in both of the lists.	Select your printer from the "Show available drivers" list.
When I ran the Setup Wizard, it didn't complete. I saw one of the following messages: "Corrupt file," "Printer installation error," or "Driver installation interrupted."	If the Setup Wizard cannot successfully copy a driver from the CD supplied with the HP JetDirect 70X or the operating system, the Setup Wizard will halt.
	Be sure the CD is free of grease, fingerprints, or scratches. Try running the setup CD again.
	If the driver still fails to copy, you may have to contact the printer manufacturer for a new driver.
	In many cases, a driver for your printer can be downloaded from the Internet. When you are downloading the driver, if you see a network or corporate driver for your printer, download that one.
On the Finish screen, I selected "Print a test page," but no test page printed.	Be sure everything is powered up and that all connections are in place.
	Be sure the printer has paper and a working inkjet/toner cartridge.
	Verity that the printer is working by printing a printer self-test page (consult your printer manual).
	Check the printer setup window.

Printing Problems

Condition	Possible Cause/Solution
I connected the HP JetDirect 70X to the home phoneline network interface device. I can print from it, but I can't print from other PCs in the house.	Each of the other PCs in the house must be connected to the same phone line. Verify the network as described in the documentation that came with your home phoneline network interface devices.
	You must run the HP JetDirect 70X setup CD on the PCs in the house you want to print from.
The printer does not report its status about paper, toner, or ink remaining.	Some printer drivers do not support this feature over the network.
Printing comes out looking different than what I expected.	This is a printer problem. Refer to the User's Guide that came with your printer.

WebScan Problems

Condition	Possible Cause/Solution
When I see the WebScan screen, I see other non-scan options. What should I do with these?	Nothing. These are the settings of your HP JetDirect 70X. If you change them, you may be unable to print.
After I click the **Download Scanned Image** button, Adobe Acrobat Reader is launched. I am unable to select the "Save" or "Save As" option.	This is a known issue with various versions of Microsoft Internet Explorer and Windows 95, 98, and NT 4.0. A recommended workaround is to download the latest version of Adobe Acrobat Reader (4.0 or higher).
After I click the **Download Scanned Image** button, I am not prompted to "Save File As" or "Open File." Instead, an application or plug-in is loaded and the scanned image is displayed.	There are many different plug-ins available for both TIFF and PDF image formats. If you do not want the plug-in to automatically load your scanned image, you should uninstall the plug-in associated with the image format you are using. If you are unable to uninstall the plug-in application, use the "Save" or "Save As" command located within the plug-in.
After I click the "Download Scanned Image" button, a plug-in is launched and tries to open my TIFF or PDF image. Instead of the image displaying on the screen, I get an icon. Examples of icons include: a page with the left corner folded, a small image with a question mark in the center, or a message stating that the browser could not load the image.	Since a variety of plug-ins exist, each plug-in exhibits a different behavior. If an uninstall option is available for the plug-in, try uninstalling the plug-in. Another workaround is to change the association of the TIFF or PDF file types to a different application.
I want to preview an image before saving it, but the Scan Preview button is grayed out.	Sheet-feed multi-function peripherals do not support scan previews. To preview the image before saving it, use the "Open it" option or allow the plug-in to open the scanned image. Once the scanned image is displayed, use the "Save" or "Save As" command in the application.

Condition	Possible Cause/Solution
I am using PDF as my image type. I clicked the **Scan Preview** button and the image appeared in the Scan Preview window. I selected a small region and then clicked the **Download Scanned Image** button. When I opened the file, the image was blank.	Use TIFF as the image format instead of PDF or select a larger area.
When I start WebScan, the page does not completely load.	You may need to add the IP address of the HP JetDirect 70X to the proxy exceptions list in your browser. In most browsers, you will find an advanced option in the proxy settings area. The IP address should be added in the exceptions area.

Indicator Lights

There are two indicator lights (LEDs) on the top of the JetDirect 70X Home Print Server. They are the Status and Activity LEDs.

If the Status LED is...	And the Activity LED is...	Then the HP JetDirect 70X is...
Off	Off	Not receiving power. The power supply must be firmly connected to the HP JetDirect 70X. The other end of the power supply should be firmly inserted into a power source. Make sure the wall outlet or power strip is receiving power.
Constant blinking	Off	The HP JetDirect 70X is unable to attach to the network. Verify that the phone cable connection is seated properly; try a new phone cable. Next, turn off printer and HP JetDirect 70X; then turn on the devices in this order: HP JetDirect 70X, then the printer. If this fails to solve the problem, contact HP.
On	Off	On; no network activity detected (normal).
On	Blinking	On; network activity detected (normal).
On	On	On; heavy print activity detected (normal).
Off	On (Solid)	A problem occurred during self-test or operation. Turn off printer and HP JetDirect 70X; then turn on the devices in this order: HP JetDirect 70X, then the printer. If this fails to solve the problem, contact HP.

There is one indicator light (LED) on the back of the JetDirect 70X Home Print Server. It is the Link Valid LED.

If the Link Valid LED is...	Then the HP JetDirect 70X is...
On	The HP JetDirect 70X has detected the presence of at least one home phoneline network device.
Off	The HP JetDirect 70X is not connected to the network. Try the following: • Turn off printer and HP JetDirect 70X; then turn on the devices in this order: HP JetDirect 70X, then the printer. • Verify that the HP JetDirect 70X is plugged into the same phoneline as the other home phoneline products. • Verify that the network is working, as described in the documentation for the home phoneline networking device. • Verify that your home phone wiring is working properly. To do this, connect your HP JetDirect 70X directly to a powered-up home phoneline network interface device. If the Link Valid LED illuminates, the HP JetDirect 70X is working properly and there could be a problem with the home wiring. • If you have verified your network is working properly and is on the same phoneline as the HP JetDirect 70X and the Link Valid LED is still off, contact HP.

Getting Help

If the solutions described in this chapter don't work, contact HP:

• On the World Wide Web, point your browser to

    http://www.hp.com/support/net_printing.

• Via phone, call HP Customer Care at (208) 323-2551, M-F 6:00 am – 6:00 pm MST.

6 Specifications and Service

Physical Specifications

Dimensions	180 mm (7.09 in) W 115 mm (4.53 in) D 33 mm (1.3 in) H
Weight	224 g (0.49 lbs)
LEDs	Front: Status, Activity Rear: Link Valid
Test button	Initiate test page print
Power	13 VDC, 0.4 W
Power Supply	Input: 110-127VAC 60 Hz, Output: 13 VDC @ 300 ma HP part number 0950-3169
Telephone Connection	Two RJ-11 telephone jacks
Printer Connection	DB-25 parallel port

Supported Printers

To find the latest information on supported printers, visit the HP Customer Care Online website at:

http://www.hp.com/support/net_printing

The HP JetDirect 70X Home Print Server works best with the following devices:

Hewlett-Packard DeskJet and Professional Series Printers

DeskJet 1120	DeskJet 880
DeskJet 970	DeskJet 840
DeskJet 950	DeskJet 810
DeskJet 930	2000 Professional
DeskJet 895	

Hewlett-Packard LaserJet Printers

LaserJet 1100A	LaserJet 4000 series
LaserJet 1100	LaserJet 2100 series
LaserJet 6L	LaserJet 5L
LaserJet 6P	

Hewlett-Packard All-in-One Devices

OfficeJet G	OfficeJet 1175
OfficeJet R	OfficeJet 1170
LaserJet 3150	OfficeJet 1150

Accessories

HP parallel cables (IEEE 1284 compatible)	2.0 meter parallel cable (36-pin Centronics male to DB25 male)	C2950A
	3.0 meter parallel cable (36-pin Centronics male to DB25 male)	C2951A

Warranty Service

Warranty Period

The Hewlett-Packard JetDirect 70X Home Print Server is warranted against defects in materials and workmanship from the date of receipt by the end user for a period of one year.

During the warranty period, HP will replace the unit at no charge provided the defective unit is returned. You may return the unit to your HP Authorized Dealer or your local HP Sales and Service Office representative. *Be sure to include a copy of your purchase receipt.*

This warranty does not apply if the JetDirect 70X Home Print Server has been damaged by accident or misuse, or as a result of service or modification by other than an authorized Hewlett-Packard Service Facility. No other express warranty is given by Hewlett-Packard. Hewlett-Packard shall not be responsible for consequential damages.

For warranty service in the USA, call HP at (208) 323-2551 (M-F 6:00 am – 6:00 pm MST) with the following information:

- HP product number (J4155A)
- HP model number (JetDirect 70X Home Print Server)
- Serial number
- Description of the problem

Ask for information and instructions on returning the defective product.

Service Outside the USA

Customers outside the USA should contact their HP Authorized Dealer or HP Sales and Service Office to obtain information about prices, exchange unit availability and instructions.

HP Customer Care Online

Click your way to a quick solution! The HP website

    http://www.hp.com/support/net_printing

is a great place to start for answers to questions about your HP JetDirect 70x home print server – 24 hours a day, 7 days a week.

HP Customer Care Forum

Go online, anytime, and you'll also find helpful user forums – a great source of ideas and suggestions for using your HP Home Print Server. You can access the user forum directly from

    http://www.hp.com/go/forums

Select the **Network Printing Support** forum. Then select **HP JetDirect Home Print Servers**.

HP Customer Care by Phone

Call (208) 323-2551 (M-F 6am-6pm MST) when you want to talk to HP directly. Highly trained technicians at our HP Customer Care Center are ready to take your call. In an industry that's known to keep customers waiting, we're proud of our quick response time. Most calls are connected in three minutes.

Regulatory Statements

FCC PART 68 STATEMENT (USA)

This equipment complies with Part 68 of the FCC Rules. On the bottom of this equipment is a label that contains, among other information, the FCC registration Number and Ringer Equivalence (REN) for this equipment. You must, upon request, provide this information to your telephone company**. (NOTE: REN is not required for some types of analog or digital facilities.)**

This equipment uses an RJ 11 jack.

An FCC compliant telephone cord and modular plug are provided with this equipment This equipment is designed to be connected to the network or premises wiring using a compatible modular connector which is part 68 compliant. See installation instructions for details.

The REN is useful to determine the quantity of devices you may connect to your telephone line and still have all of those devices ring when your telephone number is called. In most, but not all areas, the sum of the REN's of all devices connected to one line shall not exceed five (5.0). To be certain of the number of devices you may connect to your line, as determined by the REN, you should contact your local telephone company to determine the maximum REN for your calling area. (NOTE: REN are associated with loop-start and ground-start ports. Do not use for E&M or digital ports).

If your telephone equipment causes harm to the telephone network, the telephone Company may discontinue your service temporarily. If possible, they will notify you in advance. But if advance notice is not practical, you will be notified as soon as possible.

You will be informed of your right to file a complaint with the FCC.

Your telephone company may make changes in its facilities, equipment, operations or procedures that could affect the proper functioning of your equipment. If they do, you will be notified in advance to give you an opportunity to maintain uninterrupted telephone service.

If you experience trouble with this telephone equipment, please contact your local Hewlett-Packard Service Center for information on obtaining service or repairs. The telephone company may ask that you disconnect this equipment from the network until the problem has been corrected or until you are sure that the equipment is not malfunctioning.

FCC PART 15 STATEMENT (USA)

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

Pursuant to Part 15.21 of the FCC Rules, any changes or modifications to this equipment not expressly approved by the Hewlett-Packard Company may cause interference and void the FCC authorization to operate this equipment.

The Federal Communications Commission has prepared a booklet titled *Interference Handbook* (1986), which may be helpful to you. This booklet (stock number 004-000-004505-7) may be purchased from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402.

FCC Class B for HP J4155A. 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 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 interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause 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:

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

INDUSTRY CANADA (IC) NOTICE

NOTICE: The Industry Canada (IC) label identifies certified equipment. This certification means that the equipment meets telecommunications network protective, operational and safety requirements as prescribed in the appropriate Terminal Equipment Technical Requirements document(s). The department does not guarantee the equipment will operate to the user's satisfaction.

Before installing this equipment, users should ensure that it is permissible to be connected to the facilities of the local telecommunications company. The equipment must also be installed using an acceptable method of connection. The customer should be aware that compliance with the above conditions may not prevent degradation of service in some situations.

Repairs to certified equipment should be coordinated by a representative designated by the supplier. Any repairs or alterations made by a user to this equipment, or equipment malfunctions, may give the telephone communications company cause to request the user to disconnect the equipment.

Users should ensure for their own protection, that the electrical ground connections of the power utility, telephone lines and internal metallic water pipe system, if present, are connected together. This precaution may be particularly important in rural areas.

CAUTION: Users should not attempt to make such connections themselves, but should contact the appropriate electric inspection authority, or electrician as appropriate.

"**NOTICE**: The Ringer Equivalence Number (REN) assigned to each terminal device provides an indication of the maximum number of terminals allowed to be connected to a telephone interface. The termination on an interface may consist of any combination of devices subject only to the requirement that the sum of the Ringer Equivalence Numbers of all the devices does not exceed 5."

REN: 0.0

SAFETY STATEMENTS

Product complies with:

UL 1950

CSA 950

CANADA

Product complies with Canadian EMC Class B requirements.