hp

invent

hp business inkjet
2200/2250

user's
guide

8/2000

contents

The HP Business Inkjet 2200/2250 provides for quick, professional printing when connected directly to your PC or in a network environment. Its high quality output and vibrant colors on paper up to 8.5" x 14" (216 x 356 mm) will help bring creativity and professionalism to any document you print.

Using this Guide

This guide includes the following sections:

- Getting Started—Shows how to set up your printer.
- Software Installation—Explains how to install your printer software on different operating system.
- Network Printing—Contains an introduction to network printing and lists currently available web links to online setup and configuration information you can use with various network environments.
- Paper Handling—Explains how to load paper, use the envelope feed, and how to use the tray lock feature.
- LCD Messages—Lists the LCD messages and their meanings.
- Troubleshooting—Helps you solve printer problems and explains how to access customer care.
- Specifications—Lists information about cartridge part numbers, supported media, tray capacity, and system requirements.
- Media—Lists supported media types and sizes for the different trays.
- Postscript Printing—Describes the features of the optional postscript printer driver.

For More Information

Web Site	http://www.hp.com/go/businessinkjet http://www.hp.com/cposupport, or http://www.hp.com. The HP web site has the latest printer software, product information, and support information.
Starter CD	Includes printer software, a diskette download utility for the printer software, electronic copies of this User's Guide and the HP JetDirect Print Server Administrator's Guide, release notes, and ordering information.
Toolbox	A taskbar icon appears after you install the software. It contains "how-to" and troubleshooting instructions, and allows access to HP information.

Note: You can also go to www.hp.com for online technical support, which includes searchable technical notes databases. Or, ask for assistance from the HP Customer Care Center (see page 7-11).

System Requirements

Check that your computer meets the following requirements:

Windows 3.1x	486DX processor, 66 MHz, 8 MB RAM
Windows 95/98	486DX processor, 100 MHz, 32 MB RAM (Recommended: Pentium® 266 MHz processor, 32 MB RAM)
Windows NT 4.0	Pentium® 100 MHz processor, 32 MB RAM (Recommended: Pentium® 266 MHz processor, 64 MB RAM)
Windows 2000	Pentium® 166 MHz processor, 32 MB RAM (Recommended: Pentium® 266 MHz processor, 64 MB RAM)
Macintosh Systems	OS 8.1, 68040, 16 MB RAM (Recommended:OS 8.6 or later, iMac, 32 MB RAM)

Understanding the Printer's Parts and Functions
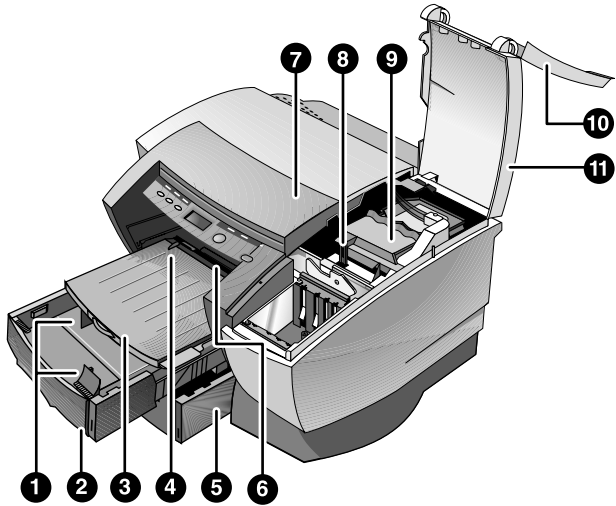
Note: All purple-colored parts of the printer are movable.

1.	Paper guides–Guides the paper into the printer.
2.	Tray 1–Holds the standard paper.
3.	Output tray–Collects the printed pages.
4.	Envelope guide–Slides to fit the width of an envelope.
5.	Tray 2–Optional paper tray (standard with the HP Business Inkjet 2250TN).
6.	Envelope feed–Holds a single envelope to feed into the printer.
7.	Top cover–Allows you to view the interior of the printer.
8.	Carriage latch–Locks the printhead cover.
9.	Printhead cover–Lifts for removing each printhead from its color-coded socket. Includes a hook that must be engaged with the carriage latch for the printer to operate.
10.	Ink cartridge door–Gives access to the ink cartridges.
11.	Printhead access cover–Gives access to the printheads. The access cover must be closed to print.
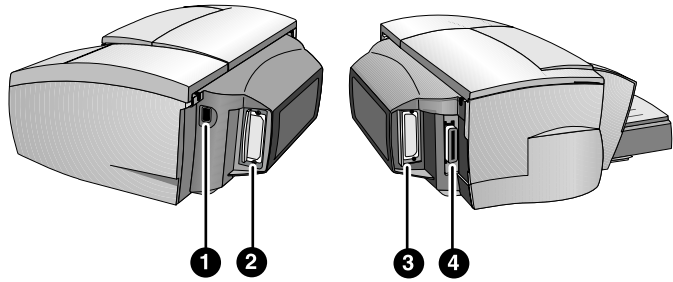
1.	Power input–Attach power cord here.
2.	EIO Slot–Install an HP JetDirect EIO printer server or the HP PS/PCL5 Kit upgrade card.
3.	EIO Slot–Install an HP JetDirect EIO printer server or the HP PS/PCL5 Kit upgrade card.
4.	Parallel port–Attach parallel cable here.

Note: Do not install two HP JetDirect EIO print server cards. Cards can be installed in either slot. You can install two cards at the same time, but one must be an HP PS/PCL5 Kit upgrade card and the other an HP JetDirect EIO print server card.

Understanding the Control Panel Buttons and LED
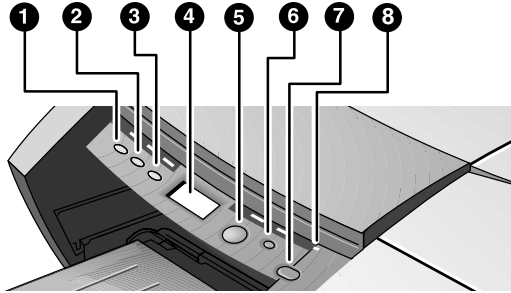
1.	Menu–Cycles through the Control Panel menus.
2.	Item–Cycles through the selected menu's items.
3.	Value–Cycles through the selected menu item's values.
4.	LCD Panel–Displays printer messages.
5.	Resume–Continues a print job that is waiting and selects values from item menus.
6.	Cancel–Cancels the current print job. The time it takes to cancel depends on the size of the print job. Press this button once only to cancel a queued print job.
7.	Power–Turns the printer OFF and ON.
8.	LED–Lights up when the printer is online (green). Blinks when the printer is printing (green) and when the printer is in an error state (amber).

Understanding the LCD Display

The LCD display shows status messages and the remaining ink levels in the ink cartridges.
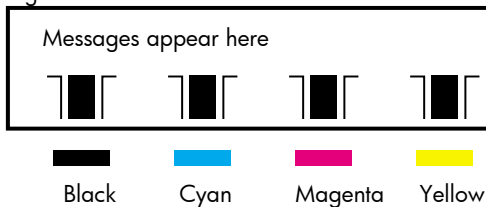
Setting Up

1

Unpack the printer and remove the packing tape and any shipping foam inside the paper trays.
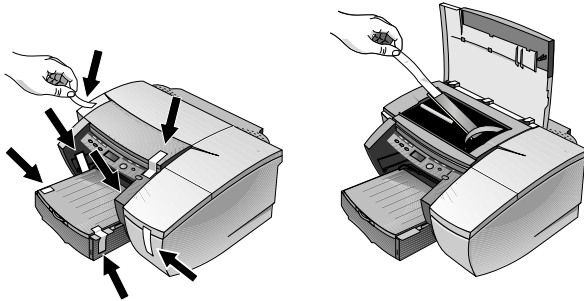
2

Install Tray 2 (optional).
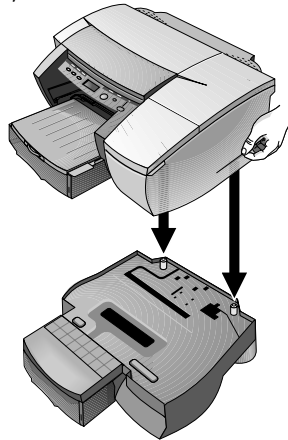
Note: Tray 2 (C3398A/C3398C) is a standard feature of the HP Business Inkjet 2250TN. It can be ordered separately for other HP Business Inkjet 2200/2250 printers.
1. Position Tray 2 in the location where you want to place the printer. The printer is designed to rest directly on top of the tray.
2. Lift the printer and align the printer's base with the paper tray.
3. Set the printer on top of the paper tray. There is a small gap between the base of the printer and Tray 2.

3

Connect the power cord.
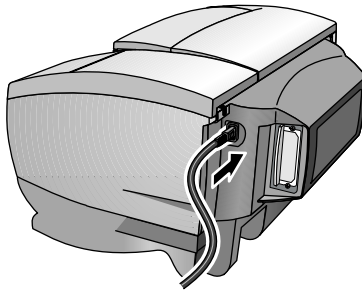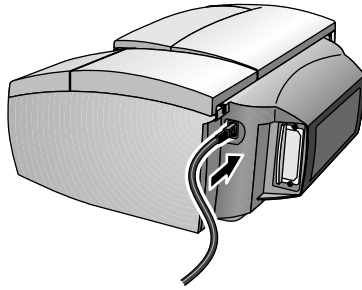
4

Turn on the printer and install the four ink cartridges. The printheads and the ink cartridges are not installed in the same sequence. Follow the colored arrows to properly install the ink cartridges.
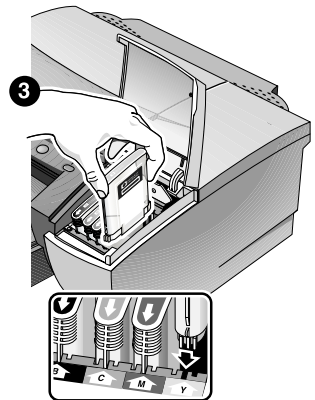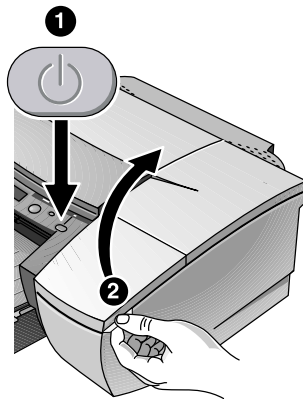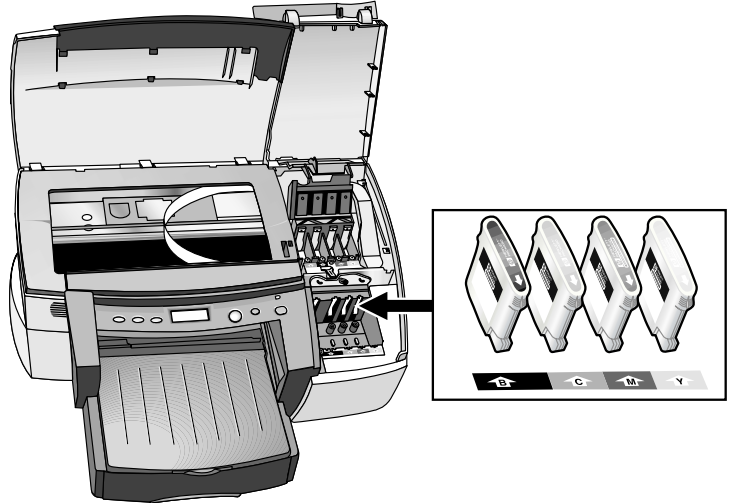
Press firmly on the cartridge to ensure proper contact after installation.

5

Install the printheads. The printheads are not installed in the same order as the ink cartridges. Follow the colored arrows to properly install the printheads.
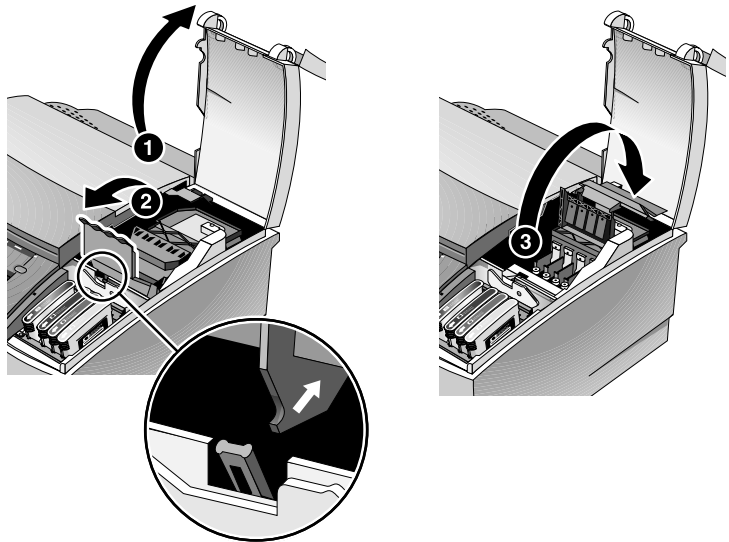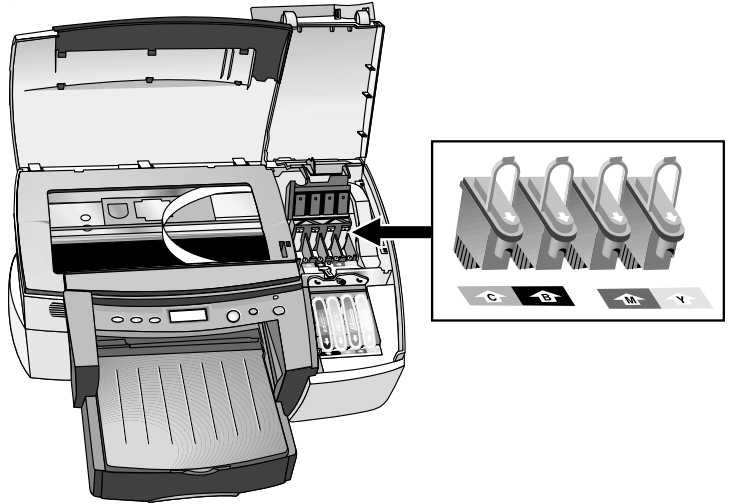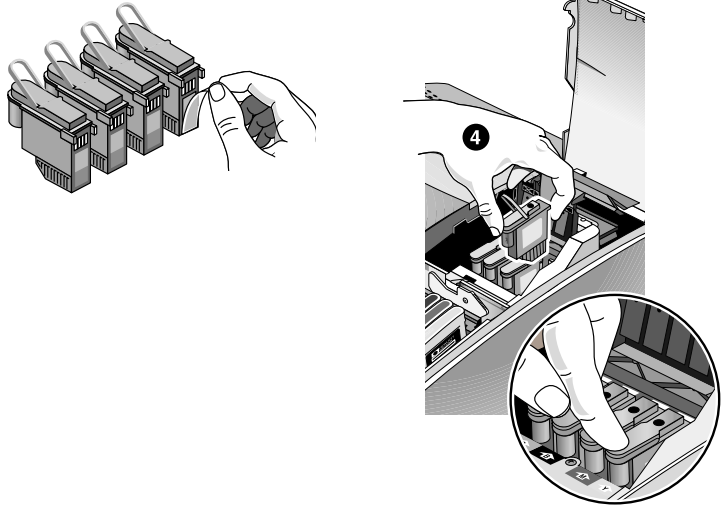
Press firmly on the printhead to ensure proper contact after installation.
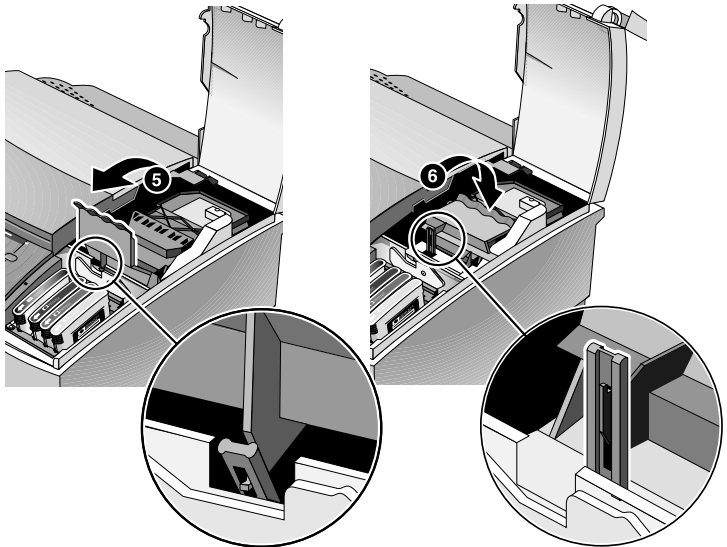
Press firmly to close the printhead cover.
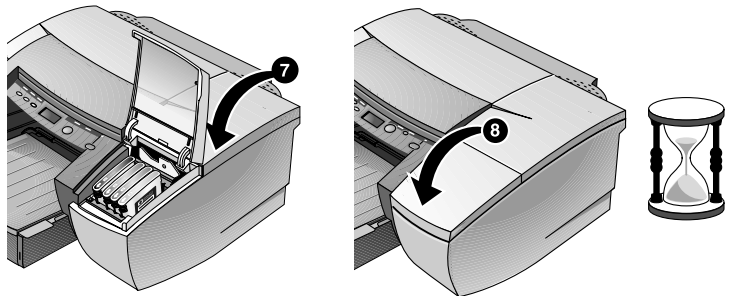
Wait while the printer initializes the printheads. This may take up to 8 minutes. The LCD panel will ask you to load paper and an alignment page will print.

6

Load paper in Tray 1.

print side
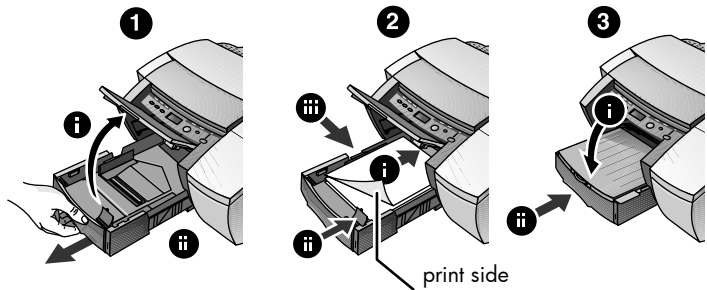
If you wish to remove Tray 1 to load the paper, first lift up the output tray (do not remove the output tray). Before reinserting Tray 1, make sure the printer is plugged in and powered ON.
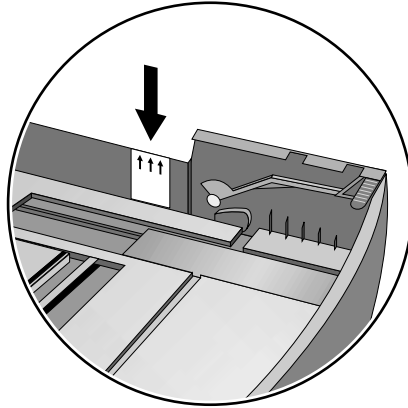
Do not load paper above the horizontal mark on the yellow sticker attached to the side of the tray.

3.875" (96 mm)

5.75" (146 mm)

8.5" (216 mm)

14" (356 mm)
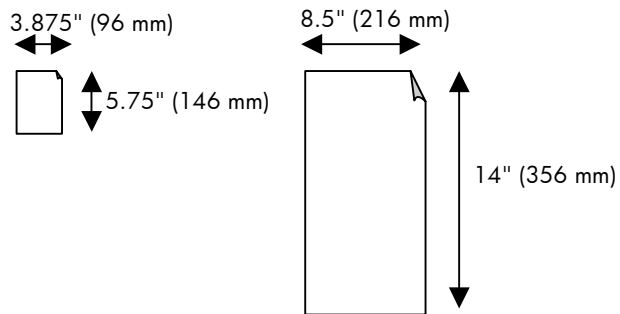
To print on paper greater than 11" (279 mm) in length, see Printing on Legal Paper in Tray 1.

7

Set the LCD language preference.
1. Ensure that the printer is turned OFF.
2. Press and hold the Value button and turn ON the printer.
3. Press the Value button to scroll through the language list.
4. Press the Resume button to confirm the language selection.

8

Connect the parallel cable or network cable.
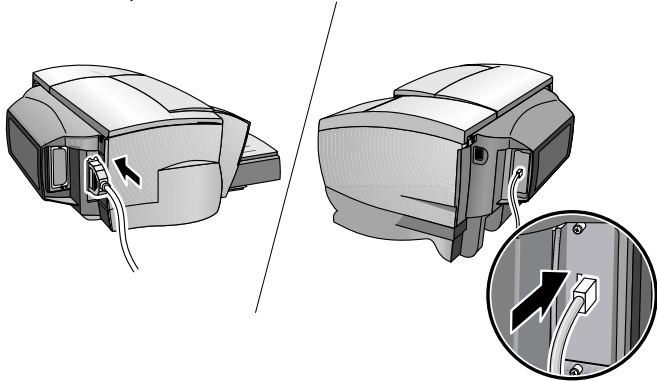
Note: To connect the printer to a network, plug the network cable into the network port on the HP JetDirect print server. For an overview of printing in a network environment, see page 4-1.

9

Install the Printer Software from the Starter CD (Recommended)
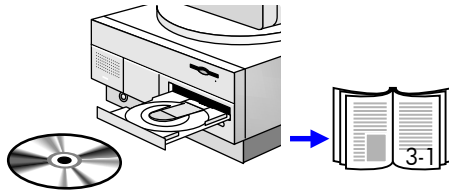
Installing Additional Memory
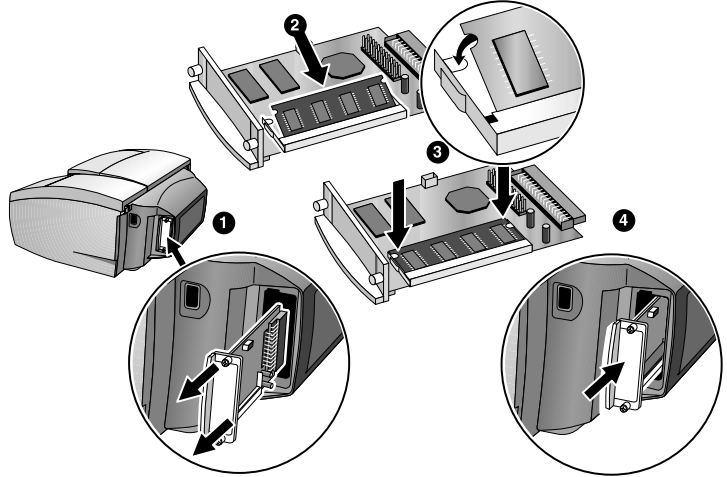
If your printer has the HP PS/PCL5 Kit upgrade installed, you may install up to 64 MB of additional memory which is available for purchase as an accessory (part number F1457B).

Note: The HP PS/PCL5 Kit upgrade comes with the HP Business Inkjet 2250 printer. It can also be purchased as an accessory (part number C5935A/C5935C). The module can be installed in the EIO slot on either side of the printer.

1. Put on an anti-static wrist strap and clip the other end to a grounded metal piece.
2. Switch OFF your printer and remove all cables from the printer.
3. Loosen the two screws on either side of the printer to remove the HP PS/PCL5 Kit upgrade (the module can be installed in either side of the printer).
4. Insert the SIMM into the slot.
5. Replace the module and fasten the screws.
6. Reconnect all cables to the printer and power ON the printer.

For information on ordering memory, see *HP Supplies and Accessories*.

	software installation

Printer Drivers Features

	HPA	PCL 5C	PS
ColorSmart	✔	✔	✔
Concept Preview	✔	✔	✘
Emulate LaserJet Margins	✔	✔	✘
Handout (N-up printing)	✔	✘	✘
Pages per Sheet	✘	✘	✔
Image Enhancement	✔	✘	✘
Manual Duplex	✔	✘	✘
Optimized for Fax	✔	✘	✘
Print in Grayscale	✔	✔	✔
Print Preview	✔	✘	✘
Quick Sets	✔	✔	✘
Symmetrical Margins	✔	✔	✘
Tiling	✔	✘	✘
Watermark	✔	✔	✔
ZoomSmart	✔	✔	✘
Scaling	✘	✘	✔

Making Copies of the Printer Software

The Starter CD contains a utility that lets you copy the printer software onto floppy disks. The utility is called the Make Disk Software. You can also use Make Disk to copy the printer software to your hard drive, or a network drive. After the files are copied to another location, you can install the printer software from that location. See the Make Disk Software online help for more information.

Installing the Printer Software for Local Printing
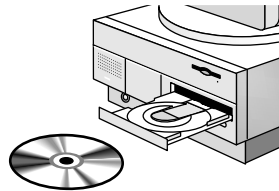
During installation you can choose Typical or Custom installation. Custom installation lets you choose the components you want to install. The

following table shows which components are installed for each installation type.

Component	Description		2200	2250
HP Business Inkjet 2200/2250 Printer Driver	Installs the printer driver for your printer.	HPA	✔	Custom
		PCL5	✘	✔
		PS	✘	✔
HP Business Inkjet 2200/2250 Toolbox	Installs the Toolbox. The Toolbox provides additional printer controls, status windows, and troubleshooting information.		✔	✔
Program Group	Adds an HP Business Inkjet program group to the start menu.		✔	✔
Printer Matching Fonts	Installs fonts on your computer that match the fonts in the printer.		✔	✔

Installing under Windows 95, Windows 98, Windows NT 4.0, and Windows 2000

For Windows NT 4.0/Windows 2000 users

- You must have administrator privileges to install a printer driver.

To Install the Printer Driver

1. Start Microsoft Windows and make sure no other Windows applications are running.
2. Insert the Starter CD into your CD-ROM drive. The installation program runs automatically.
   If the installation program does not run automatically, click Start, select Run, and at the command line box, type the letter of your computer's CD-ROM drive followed by: \SETUP (for example, type D:\SETUP).
3. Click Install Printer Driver from the Starter CD menu.
4. Select the language of the printer software that you want to install and click OK.
5. Click Next and then click Accept to accept the terms of the license agreement.
6. Select Connected directly to this computer. Follow the instructions that appear on the screen to complete the printer driver installation.

Installing under Windows 3.1

To install the printer software under Windows 3.1, your must have an:

- HP Business Inkjet 2250 printer, or
- HP Business Inkjet 2200 printer with the HP Postscript/PCL5 Kit upgrade (C5935A/C5935C).

1. Start Microsoft Windows and make sure no other Windows applications are running.
2. Insert the Starter CD into the CD-ROM drive.
3. From the **Program Manager** select **Main**, followed by **Print Manager**.
4. Under **Options**, select **Printer Setup**.
5. If you do not have any printer software installed on your system, click **Install** to install the new printer software.
   If there are pre-installed printer software on your system, click **Add** and then click **Install**.
6. At the command line box, type the letter of your CD-ROM drive followed by: \WIN31\X\<language>\ where X is the driver you wish to install (PS or PCL5) and <language> is your language preference. For example, type D:\WIN31\PS\ENU\ to install the Postscript driver in English. For a list of languages and their abbreviations, see page 4-5.
7. Follow the instructions that appear on the screen to complete the driver installation.

Installing the Printer Software for Network Printing

Before installing the printer software, make sure the HP JetDirect EIO print server card is installed in your printer and connected to the network.

Note: The HP Business Inkjet 2250TN comes with an HP JetDirect EIO print server card preinstalled.

To Install the Printer Driver

1. Start Microsoft Windows and make sure no other Windows applications are running.
2. Insert the Starter CD into your CD-ROM drive. The installation program runs automatically.
   If the installation program does not run automatically, click **Start**, select **Run**, and at the command line box, type the letter of your computer's CD-ROM drive followed by: \SETUP (for example, type D:\SETUP).
3. Click **Install Printer Driver** from the Starter CD menu.
4. Select the language of the printer software that you want to install and click **OK**.
5. Click **Next** and then click **Accept** to accept the terms of the license agreement.
6. Select **Connected via the network**.

7. Select Client Setup if the printer is connected to a server or someone's machine. Select Server or Peer-to-Peer Setup if you are setting up a print server for the first time, or if you will print directly to HP JetDirect EIO print server installed in your printer. If you are not sure how to connect your network printer, ask your network administrator, or see the next section, *Network Printing* for more information.

Setting Up Your Printer on a Macintosh Computer

Connect your printer to a Macintosh computer via an HP JetDirect print server.
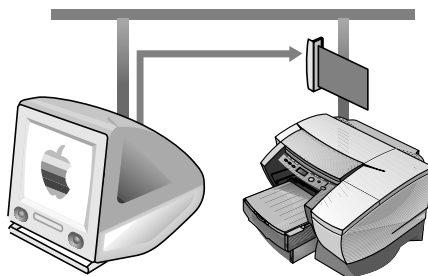
Before connecting your printer to the JetDirect server, make sure your printer is an:

- HP Business Inkjet 2250 printer with an HP JetDirect card, or
- HP Business Inkjet 2200 printer with the HP Postscript/PCL5 Kit upgrade and an HP JetDirect card.

  These cards can be purchased as accessories (see *HP Supplies and Accessories* for more information).

1. Connect the Ethernet cable to the printer and the JetDirect server.
2. Print the configuration page to determine the AppleTalk printer name. For instructions of printing a configuration page, see page 7-1.
3. Insert the Starter CD into the CD-ROM drive. Double-click the Installer icon located in the INSTALLER\<language> folder of the Starter CD, where <language> is your language preference. For example, the INSTALLER\ENU folder contains the Installer icon for the English driver. For a list of languages and their abbreviations, see the page 4-5.
4. Follow the instructions on the screen to complete the installation.
5. Double-click the Desktop Printer Utility icon in the APPLE EXTRAS\APPLE LASERWRITER SOFTWARE folder of the hard drive.
6. Select LaserWriter8, followed by Printer (AppleTalk) and click OK.

7. Change the PPD to HP Business Inkjet 2250.
8. Change the AppleTalk Printer by selecting the AppleTalk Zone and then selecting your printer (refer to the configuration page you printed).
9. Click Create and the printer icon appears on your desktop.

Setting Up Your Printer in a Unix Environment

To print in Unix, you must have an:

- HP Business Inkjet 2250 printer, or
- HP Business Inkjet 2200 printer with the HP Postscript/PCL5 Kit upgrade.

For more information refer to the readme in the UNIX/PS folder on the Starter CD.

	network printing

The HP Business Inkjet 2200/2250 can be shared on a network. It can be connected directly to a network using an HP JetDirect print server or attached to a computer that is connected to a network.

Network Basics

Networks consist of computers connected together to share information and resources, such as printers. On a "client-server" network, client computers send print jobs to dedicated server computers that control the use of each printer. On a "peer-to-peer" network, dedicated servers are not used to control printers. Instead, each computer is configured to send print jobs directly to the printer.

Network Printing Configurations

There are two basic types of network printing configurations: client-server and peer-to-peer.

HP JetDirect EIO card

Peer-to-Peer printing. Individual computers manage their print jobs.
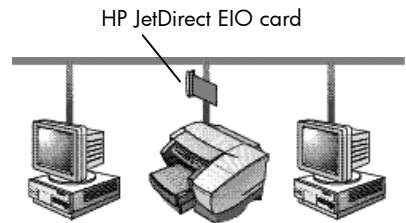
Client-server printing. Server manages print jobs.
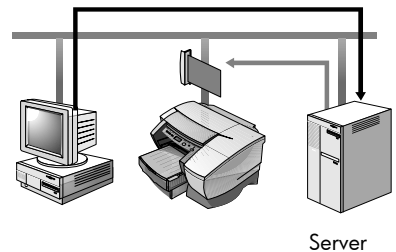
Server

Client-Server Configuration

Client-server printing is typically used in medium to large networks where dedicated computer servers manage the printing needs of many users. Client-server networks use network operating systems (NOS) such as Novell NetWare and Windows NT Server 4.0, or Windows 2000.

Supported Network Configurations for Client-Server Printing

Server	Client Configurations		
	Windows NT 4.0/2000	Windows 95/98	Windows for Workgroups 3.11
Windows NT 4.0/2000	✔	✔	✔
Windows 95/98	Not recommended	✔	✔
Novell NetWare 4.11 (Bindery and NDS)	✔	✔	✔
Novell NetWare 5.0 (Bindery, NDS, NDPS)	✔	✔	✔

Peer-to-Peer Configuration

Peer-to-peer printing is more suitable for smaller networks. With peer-to-peer printing, you configure your Windows 95, Windows 98, or Windows NT 4.0/2000 systems to print directly to the printer.

Supported Network Configurations for Peer-to-Peer Printing

- Windows 95
- Windows 98
- Windows NT 4.0/2000

Installing the Printer on a Network with an HP JetDirect Print Server (Recommended)
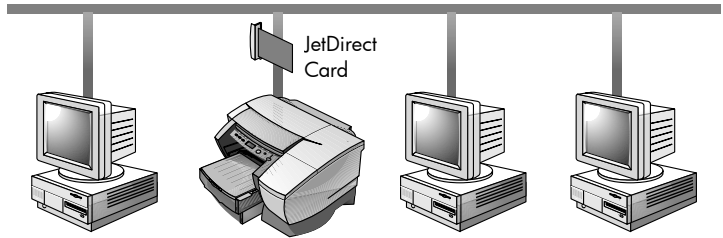
Your printer can be shared in a network environment by connecting it directly to the network via an HP JetDirect external or internal print server. This configuration provides better performance than printing through a computer, as well as flexibility in preparing a location for the printer.

The HP JetDirect print server can be used in both client-server and peer-to-peer network configurations.

Installing the HP JetDirect Internal Print Server Card

Note: The HP Business Inkjet 2250TN comes with an internal EIO JetDirect print server card preinstalled. It is recommended that the printer be shared on a network through the print server. If you own the HP Business Inkjet 2250TN, skip this section.

If you own an HP Business Inkjet 2200/2250 printer other than the HP Business Inkjet 2250TN, you can purchase an internal JetDirect print server for it. For the list of HP JetDirect EIO print servers, see page 8-5.

Step 1 - Install the HP JetDirect EIO Print Server Card

Caution: The HP JetDirect card contains electronic components that can be damaged by static electricity. To prevent buildup of static electricity, maintain frequent contact with any bare sheet metal surface on the printer. If possible, wear a grounding wrist strap (or similar device). Handle the card carefully at all times.
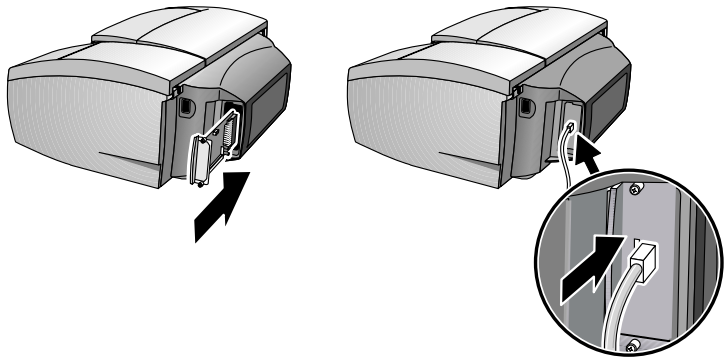
Avoid touching electronic components or circuit paths.

1. Turn OFF the printer and unplug the power cord.
2. Unscrew and remove the metal plate on either side of the printer.
3. Insert the card. Align the card with the guide rails in the printer.
4. Press the card into the slot until the card is firmly seated.
5. Tighten each thumbscrew a little at a time, alternating between each side until both screws are secure.
6. Connect the network cable to the card.

Note: The JetDirect card can be installed on either side of the printer.

Step 2 - Verify that the Printer Works

1. Connect the power cord and turn ON the printer.
2. Press the Menu button repeatedly until INFORMATION appears.

3. Press the Item button repeatedly until PRINT CONFIGURATION PAGE appears.

4. Press the Resume button to print the configuration page.

Note: Because you have installed an HP JetDirect card, two configuration pages will print. The JetDirect Configuration Page contains setup information (for example, LAN HW ADDRESS) that may be needed for the next step.

Step 3 – Install the Printer Software

1. Install the PCL5 and PS printer driver from the Starter CD. For more information on using the Starter CD to install printer drivers, see page 3-1.

Sharing the Printer on a Network

Note: This procedure is for enabling a PC to use a shared printer. It assumes that the printer driver is already installed on the PC and that the printer is currently being shared on a network.

In this configuration, the printer is connected directly to the parallel port of a selected computer (or server) on the network and is shared by the other computers (or clients). The server could be a computer running Windows for Workgroups 3.11, Windows 95, Windows 98, or Windows NT 4.0/2000. Sharing the printer in this configuration is easy.

Use this configuration only in small groups or when usage is low. The shared computer is slowed down when many users print to its shared printer.
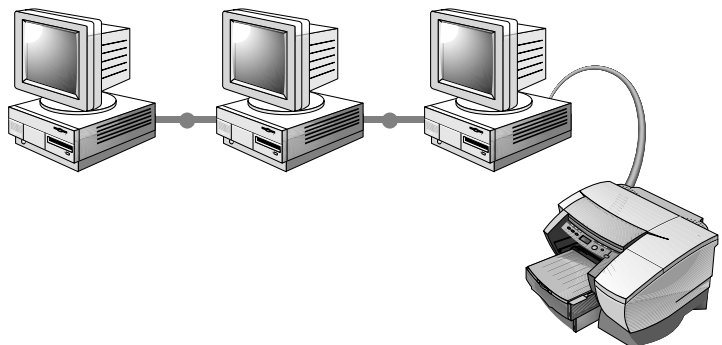
Clients can connect to the printer in three different ways:

- Install the printer software from the Starter CD and connect as a client using the network installation.
- Browse to the printer on the network and drag the printer to your Printers folder. The printer software is not installed on your computer; the shared computer controls the printer driver software.
- Add the printer and install the software from the INF file located on your network. Ask your network administrator where the INF is located.

  On the Starter CD the INF files are stored in folders using the following format <CD>:\Windows\<driver>\<OS>\<lang>. For example, if your CD drive letter is D:, D:\Windows\PCL5\Win2k\ENU contains the English Windows 2000 PCL5 INF file.

  Refer to the following table for a list of language abbreviations.

Language	Abbreviation
Czech	CZE
Danish	DAN
Dutch	DUT
English	ENU
Finnish	FIN
French	FRE
German	GER
Italian	ITA
Japanese	JAP
Norwegian	NOR
Polish	POL
Portuguese (Brazilian)	POB
Russian	RUS
Spanish	SPA
Swedish	SWE

Network Support Materials

If you encounter any problems or difficulty printing over a network, see the following documentation:

Document	Document Contents
HP JetDirect Print Server Administrator's Guide	Included on the Starter CD. It provides detailed information on setting up and using your HP JetDirect EIO Print Server.
	It also provides information on:
	• HP Software Solutions for HP JetDirect print servers: · HP Web JetAdmin, a Web-based tool for managing network peripherals · HP IP/IPX Printer Gateway for NDPS · HP LaserJet Utility to set up printers on AppleTalk networks • TCP/IP Configurations • Using LPD (Line Printer Daemon) services on the HP JetDirect print server • FTP Printing • Troubleshooting and configuration page messages • Embedded Web Server to access configuration and management pages for the print server and device • Printing on Windows NT DLC/LLC Networks
HP JetDirect hardware manual	Included with the purchase of an HP JetDirect print server. It describes setup and configuration of your HP JetDirect print server. Note that the HP JetDirect hardware manual does not come with the printer.
The NOS (network operating system) and OS Manual.	These came with your computer or your NOS. They describe basic network printing common to all network printers.

For more information or HP Web JetAdmin and other HP network printing software, visit the web site www.hp.com/support/net_printing.

paper

Selecting and Loading Paper

The printer prints on plain paper and most other types of paper. Most plain paper used for photocopying yields good results.

- Always use paper that conforms to the printer specifications. For a list of supported media, see page 9-1.
- Do not use media that is damaged, curled, or wrinkled. Do not use paper with cutouts or perforations or paper that is heavily textured or embossed.
- Do not use multiple-part forms.
- Load only one paper type at a time into any of the trays.
- Always load paper print-side down with the right edge of the paper aligned against the right edge of the tray.
- Do not load more than 250 sheets of paper or a stack of paper more than 0.98" (25 mm) thick (whichever is lower) into either of the paper trays.

Printing on Legal Paper in Tray 1 or Tray 2
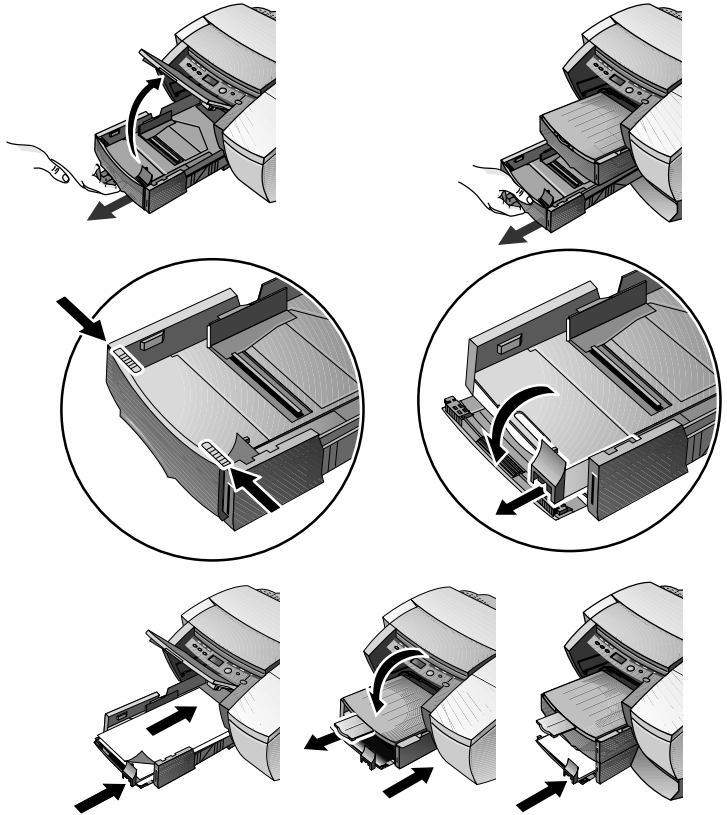
1. Lift up the output tray.

2. To print on paper from 11" (279 mm) in length up to 14" (356 mm) unlatch the front of the tray and open it.

3. Insert the paper and adjust the paper width and length guides to fit snug against the stack.

4. Lower the output tray and pull out the legal paper extension.

5. Select the appropriate media in the printer driver or your application.

Printing Envelopes or Cards through the Envelope Feed
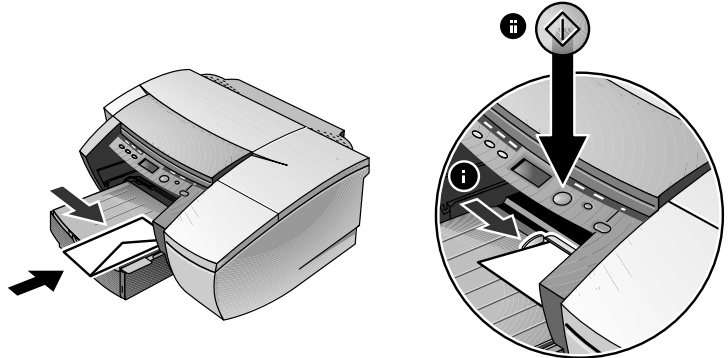
Note: Use the envelope feed to print a single envelope or card. If you need to print more than one, you can use Tray 1. If you have two trays, remember to select Tray 1 in the printer driver.

1. In the print settings dialog box, click Setup and select Manual feed in the Paper Source box. Change other print settings, if necessary, and click OK.

2. When the LED blinks, insert one envelope with the flap facing upwards (or one card) into the envelope feed. Ease the envelope or card to the right edge. Move the envelope guide until it is flush against the envelope or card.

3. Press the Resume button to continue printing.

Printing Paper in Tray 2 (Optional Tray)

Tray 2 is an optional paper tray designed to print only on plain paper.

print side
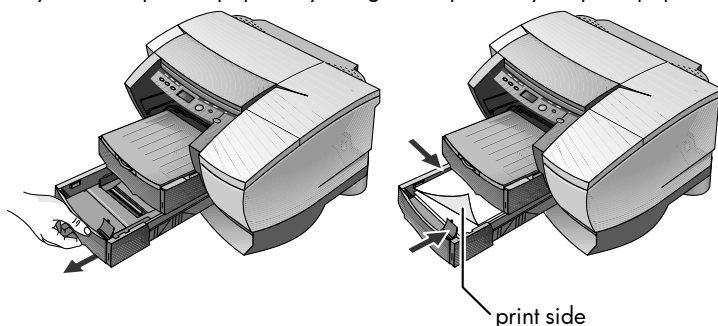
1. Open Tray 2 by grasping the handle under the front of the tray and pulling the tray toward you. (The tray can be completely removed.)

2. Slide the paper width and length adjusters to their outermost positions and insert up to 250 sheets of paper or up to a 0.98" (25 mm) (whichever is lower) stack of paper into the tray. Readjust the paper size adjusters to fit snugly against the stack of paper.

3. Align the tray with the opening and slide it back in to place.

By default, the printer draws paper from Tray 2. If Tray 2 is empty, the printer draws paper from Tray 1.

Using the Tray Lock

Use the tray lock to protect special media such as letterhead or transparencies from accidental use. If the printer runs out of paper while printing a document, it will not use paper from a locked tray to complete the print job.

Note: This feature is only available if Tray 2 is installed in your printer.

1. Turn on the printer.

2. Press the Menu button repeatedly until PAPER HANDLING MENU appears.

3. Press the Item button repeatedly until LOCK TRAY = appears.

4. Press the Value button until the tray you want to lock appears.

5. Press the Resume button to make your selection.

Manual Duplexing

This feature is only available in the HPA printer driver. Follow the steps below, only if you have previously deselected this option.

To print on both sides of the paper:

1. Place the media in the selected tray.
2. From the Effects tab, click Manual Duplex.
3. Click OK and print the document.

The printer will notify you when to reinsert the printed pages (printed side up) into the tray.

Supported HP Media for Manual Duplexing

Tray 1	Tray 2
HP Plain Paper, HP Heavyweight Paper, HP Brochure (Glossy and Matte)	HP Plain Paper

Minimum Printing Margins

The following are the minimum printer margins based on portrait orientation.

Paper Size	Left and Right	Top	Bottom
Letter, Legal, Executive, Custom Size Paper	0.25" (6.35 mm)	0.04" (1 mm)	0.46" (11.77 mm)
A4, Cards, Envelopes, Other Paper Sizes	0.133" (3.38 mm)	0.04" (1 mm)	0.46" (11.77 mm)

LCD
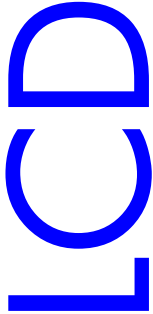
The most convenient way to change settings on the printer is from your computer through the printer driver.

You can also change the printer settings from the printer's Control Panel. The following tables list the menu items and possible values for the printer. Additional menu items can appear in the Control Panel, depending on the hardware modules installed in the printer.

To print a complete menu map from the Control Panel:

1. Press the Menu button until INFORMATION MENU appears.
2. Press the Item button until PRINT MENU MAP appears.
3. Press the Resume button to print the menu map.

Information Menu

Message	Value	Description
PRINT DEMO	N.A.	Prints a sample page.
PRINT MENU MAP	N.A.	Prints a single page map of the menu structure of the printer.
PRINT CONFIGURATION	N.A.	Prints a single reference page describing current configuration settings (firmware version, model, accessories installed, fonts installed, I/O support, cartridge and printhead information).
PRINT PCL FONT LIST (PS/PCL5 only)	N.A.	Prints the number with corresponding PCL5 fonts.
PRINT PS FONT LIST (PS/PCL5 only)	N.A.	Prints the number with corresponding PS fonts (only available if postscript card is present).
PRINT DIAGNOSTIC PAGE	N.A.	Prints a page that contains information for basic troubleshooting.
PRINT DIAGNOSTIC+ PAGE	N.A.	Prints a page that contains information for advanced troubleshooting.
SHOW PRINTHEAD HEALTH	N.A.	Displays the health of the printhead on the LCD.
TEST PAPER PATH1	1-10, 20, 30, 40, 50	Tests the Tray 1 paper feed mechanism
TEST PAPER PATH2	1-10, 20, 30, 40, 50	Tests the Tray 2 paper feed mechanism.

Paper Handling Menu

Message	Value	Description
LOCK TRAY = (See page 5-4)	NONE 1 2	Locks a paper tray. The LOCK TRAY option is only available if Tray 2 is installed. Default = None.

Maintenance Menu

Message	Value	Description
CALIBRATE COLOR	N.A.	Calibrate printer's color intensity against the black intensity by selecting the closest matching calibration pair.
CLEAN PRINTHEADS	N.A.	Initiates the printhead cleaning process.
ALIGN PRINTHEADS	N.A.	Initiates the alignment process.

Printing Menu

Message	Value	Description
QUALITY LEVEL	FAST NORMAL BEST	Sets the default print quality level.
PAPER TYPE	Set of options.	Select media type. Default = Plain.
PAPER SIZE	Set of options.	Select media size. Default = Letter.
NUMBER OF COPIES	1-999	Sets the number of copies to print. Default = 1.
ORIENTATION	PORTRAIT LANDSCAPE	Page orientation. Default = Portrait
PAGE LENGTH	5-128	Set the page length in terms of numbers of lines. Default = 60.
PCL FONT NUMBER	0-89	Set the PCL font for printing from DOS or UNIX without defining the personality. Default = 0.
APPEND CR TO LF	NO YES	Configure whether or not a carriage return (CR) is appended to each line feed (LF) encountered in a backward compatible PCL job (pure text, no job control). Default = No.
PCL FONT PITCH	0.44 - 99.99	Set the font pitch. Default = 10.
PCL FONT POINT SIZE	4.00 - 99.00	Set the font point size. Default = 12.
PCL SYMBOL SET	Set of options	Select the PCL symbol set.

Configuration Menu

Message	Value	Description
PERSONALITY	AUTO PCL5 ONLY PS ONLY	Sets the personality used to process the job. The PCL5 and PS option is only available if the personality card is inserted. Default = Auto.
CLEARABLE WARNINGS	AUTO ON	When ON is selected, clearable warnings are displayed until RESUME is pressed.
	JOB	When JOB is selected, clearable warnings are displayed until end of job. Default = Auto.
INK LOW WARNINGS	ON	When ON is selected, ink low condition is displayed.
	OFF	When OFF is selected, ink low condition is not displayed.

Reset Menu

Message	Value	Description
RESTORE FACTORY SETTINGS	N.A.	Restores all values to the printer's predetermined factory values.

Postscript Menu

Note: This menu is only available with HP Business Inkjet 2250 printers or HP Business Inkjet 2200 printers with the Postscript/PCL5 Upgrade.

Message	Value	Description
PRINT PS ERRORS = OFF	OFF ON	Select ON to print the PS error page when PS errors occur.

EIO Menu

Note: This menu is only available on HP Business Inkjet 2200/2250 printers with an HP JetDirect EIO print server card installed.

Message	Value	Description
CFG NETWORK	NO YES	Selects whether or not you want to access the JetDirect menu items. You must change this option to YES each time you want to access the JetDirect EIO menu.

Message	Value	Description
IPX/SPX DLC/LLC TCP/IP ETALK	ON OFF	Selects whether or not a protocol is enabled or disabled. Change it to OFF to disable a protocol.
CFG IPX/SPX	NO YES	Selects whether you want to access the IPX/SPX menu and set the IPX/SPX protocol parameters. In the IPX/SPX menu, you can specify the Frame Type parameter used on your network. • The default is AUTO, which automatically sets and limits the Frame type to the one detected. • For Ethernet cards, frame type selections include EN_8023, EN_II, EN_8022, EN_SNAP. • For Token Ring cards, frame type selections include TR_8022, TR_SNAP. In the IPX/SPX menu for Token Ring cards, you can also specify *NetWare Source Routing* parameters, which include SRC RT=AUTO (default), OFF, SINGLE R or ALL RT.
CFG TCP/IP	NO YES	Selects whether you want to access the TCP/IP menu and set the TCP/IP protocol parameters. In the TCP/IP menu, you can specify BOOTP=YES for TCP/IP parameters to be automatically configured by a BootP or DHCP server when the printer is turned on. If you specify BOOTP=NO, you can manually set the following TCP/IP parameters from the control panel: Each byte of the IP address (IP) • Subnet Mask (SM) • Syslog Server (LG) • Default Gateway (GW) • Idle Timeout period (default is 90 seconds, 0 disables the timeout) When setting IP numbers, press the Value button to increase the number by 1. Hold down the Value button to increase the number by 10. 2. Press the Resume button to make your selection.

Message	Value	Description
CFG ETALK	NO YES	Selects whether you want to access the EtherTalk menu and set the AppleTalk phase parameter (ETALK PHASE=1 or 2) for your network.

Resetting the EIO Card
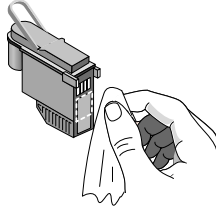
To restore the factory default values to HP JetDirect EIO print server card:

1. Turn off the printer.

2. While holding down the Item and Resume buttons on the printer's control panel, turn on the printer.

(!) All previously stored EIO settings will be lost.

Understanding Printer Messages

Message	Explanation	Solution
CANCELLING JOB	The printer is canceling the current print job.	
PAPER JAM, OPEN COVER AND CLEAR PAPER	Paper is jammed in the printer.	Clear the jammed paper. For more information, see page 7-4.
[COLOR] INK CARTRIDGE EMPTY	The cartridge is out of ink and the printer will not print until the cartridge is replaced.	Remove the ink cartridge. Reinstall the cartridge and try to print. If the error persists, replace the empty cartridge.
REPLACE [COLOR] INK CARTRIDGE	The printer detects a faulty ink cartridge.	Reinstall the faulty ink cartridge and try to print. If the error persists, replace the cartridge.
[COLOR] INK CARTRIDGE MISSING	The printer cannot detect the ink cartridge because it is missing, improperly installed, or defective.	Open the ink cartridge door and check if the cartridge is missing, improperly installed, or the wrong cartridge. If none of these solutions work, replace the cartridge.

Message	Explanation	Solution
REPLACE [COLOR] PRINTHEAD	The printer detects a faulty ink printhead.	Reinstall the faulty ink printhead and try to print. Make sure the shipping tape has been removed. If the error persists, remove the printhead and use a dry, lint-free, soft cloth to gently clean any ink off the contact pads. Reinstall the printhead and try to print. If the error persists, replace the printhead.
[COLOR] PRINTHEAD MISSING	The printer cannot detect the ink printhead because it is missing, improperly installed, or defective.	Open the ink printhead door and check if the printhead is missing, improperly installed, or the wrong printhead. If none of these solutions work, replace the printhead. If the error persists, call HP.
BAD INK CARTRIDGE OR PRINTHEAD	The printer detects a faulty ink cartridge or printhead.	Follow the instructions in the printer message.
LOAD [TRAY] WITH [MEDIA TYPE] [MEDIA SIZE]	Printer requires media of a specific type and size to be loaded in specified paper tray.	Follow the instructions in the printer message.
PRINTED PAGE IS DRYING... PRESS RESUME TO CONTINUE	Printer is letting the current page dry.	Remove the wet page and press the Resume button to continue printing.
PERSONALITY CARD NOT RECOGNIZED	The printer cannot detect the card because it is missing, improperly installed, or defective.	Reinstall the personality card or replace it. If the error message persists, call HP.
RESET JETDIRECT CARD	Prompts user to reset the internal parameters of the JetDirect card.	From the RESET Menu, press the Value Button to select EIO RESET.
CLOSE ALL COVERS	The printer will not print until all access covers are properly closed.	Follow the instructions in the printer message.
OUT OF MEMORY	The printer is out of memory and cannot print the current job.	Cancel the current print job, and add additional memory, or reduce the complexity of the document you are trying to print.

General Troubleshooting Tips

1. Check the printer LCD panel. If the printer LCD panel displays a recoverable error message, see Understanding Printer Messages on page 6-5 for instructions on how to resolve the problem.

Example	Solution
BAD INK CARTRIDGE OR PRINTHEAD, CLOSE ALL COVERS, etc.	See Understanding Printer Messages on page 6-5 for information on how to resolve such errors.
E: XXXX E: XXXX-X-Y-Z E: XX	Your printer may have a hardware problem. Turn OFF the printer, wait for a few seconds and then turn it ON again. If the message persists, your printer may need servicing, write down the error code and contact HP.

2. If the LED is flashing and the printer does not print, lift up the printhead access cover and make sure the hook on the printhead cover is properly secured by the carriage latch.

Printing a Configuration Page

Note: If an HP JetDirect EIO print server card is installed, two pages will print. To print a Configuration page:

1. Press the Menu button until INFORMATION MENU appears.
2. Press the Item button until PRINT CONFIGURATION appears.
3. Press the Resume button to print the configuration page.

The Configuration page will looks similar to one of the following pages. If the PS/PCL5 upgrade Kit is installed (included with the 2250), the Configuration Page looks like the page on the right:
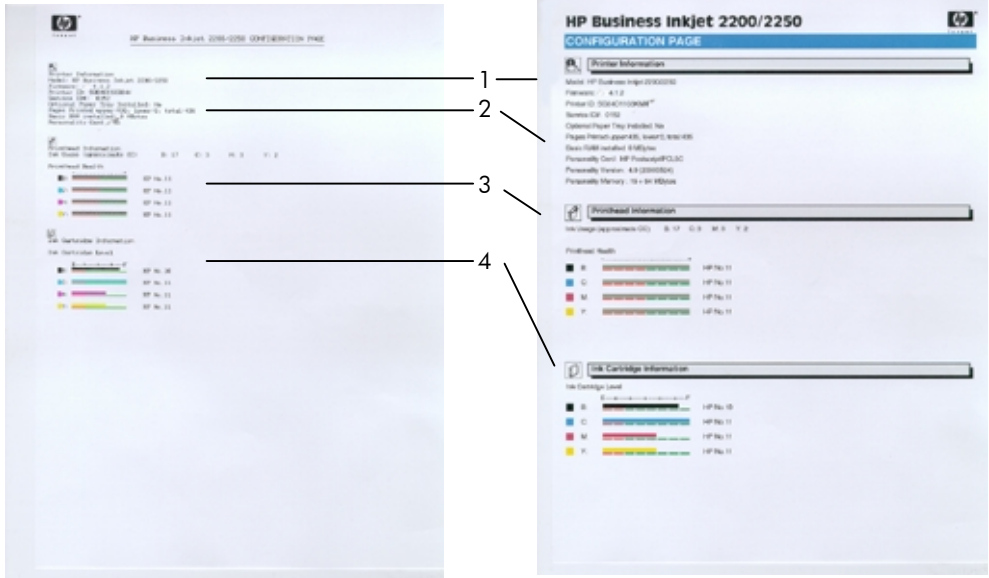
The Configuration page is divided into the following sections:

Item	Description
1	Printer Information shows general printer information such as Firmware version number, Model and Service ID.
2	Personality card Information such as version number and memory installed.
3	Printhead Information displays the amount of ink left in each ink cartridge.
4	Ink Cartridge Information displays the amount of ink left in each ink cartridge.

Printing a Diagnostic Page

Note: The information on the diagnostic page is useful to our Customer Care Center in helping you to troubleshoot any printer problem.

To print a Diagnostic Test page:

1. Press the Menu button until INFORMATION MENU appears.

2. Press the Item button until PRINT DIAGNOSTIC PAGE appears.

3. Press the Resume button to print the diagnostic page.

The Diagnostic Page looks similar to this:
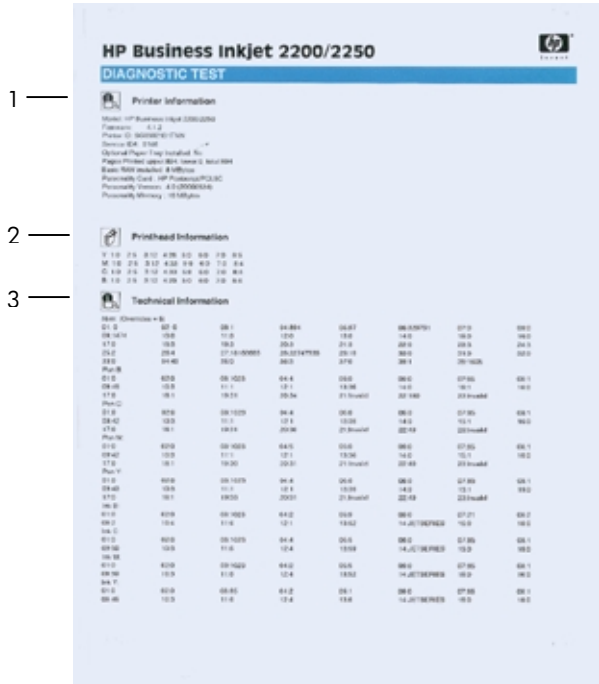
The Diagnostic page is divided into the following sections:

Item	Description
1	Printer Information. Shows general printer information such as Firmware version number, Model and Service ID.
2	Printhead Information. Shows technical information on the printhead performance.
3	Technical Information. Displays detailed technical information on the printheads and ink cartridges.

Cleaning the Printheads

Clean the printheads when lines or dots are missing from printed text or graphics.

1. Press the Menu button until MAINTENANCE MENU appears.

2. Press the Item button until CLEAN PRINTHEADS appears.

3. Press the Resume button.

4. Press Yes or No when prompted. There are 3 levels of cleaning.

Aligning the Printheads

The printheads are automatically aligned upon installation. If your printouts look like the printheads are misaligned, you can align them through the control panel.

1. Press the Menu button until MAINTENANCE MENU appears.
2. Press the Item button until ALIGN PRINTHEADS appears.
3. Press the Resume button.
4. The printer prints a page with alignment patterns.

Printing a Sample Page

Print a sample page without being connected to a computer. This allows you to see that your printer is set up correctly.

1. Press the Menu button until INFORMATION MENU appears.
2. Press the Item button until PRINT DEMO appears.
3. Press the Resume button to print the sample page.

Paper is Jammed in the Printer

If paper is jammed in the printer, follow these instructions to clear the jam.

Note: Information on Tray 2 is only applicable if your printer comes with Tray 2 or if you have purchased Tray 2 as an accessory.

1. Remove all paper from the Output Tray.
2. Open the top access door to locate the paper jam.
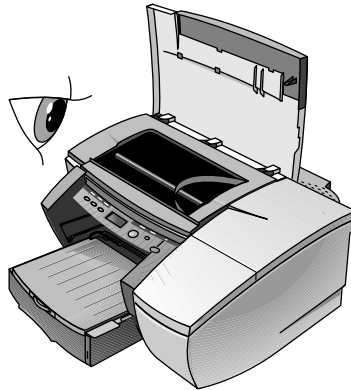
3. If the Printhead Cradle is blocking the paper path, gently push it to the side.

4. Free any wrinkled paper and pull the sheet of paper towards you through the front of the printer.

Note: Do not remove jammed paper through the Top Cover. If you cannot access the jammed paper, proceed to Step 6.
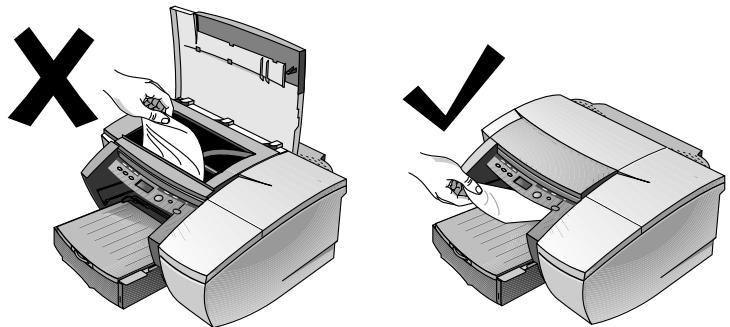
5. If bulk of the paper is jammed in Tray 1 or Tray 2:

    a   Lift the Output Tray and check for paper jam.

    b   If the paper is jammed in Tray 1, pull out Tray 1. If not, check Tray 2 for paper jam.

    c   If the paper is jammed in Tray 2, pull out Tray 2. If not, proceed to Step 6.

d Pull the paper towards you as shown in the diagram.
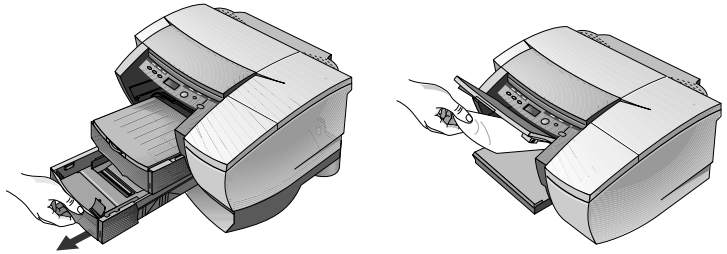
    e Close the Top Cover and press the Resume button on the printer to continue.

    f Replace the tray.

    g If this does not work, turn off the printer and then turn on again.

6. If you cannot locate the jammed paper in any of the trays:

    a Turn off the printer and remove the power cord.

    b Lift the printer off Tray 2.
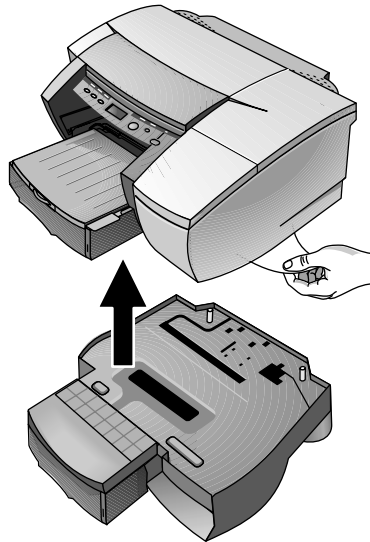
    c Remove the jammed paper from the bottom of the printer or from Tray 2.

    d Replace the printer on top of the paper tray.

Tips for Avoiding Paper Jams

- Make sure nothing is blocking the paper path.

- Do not overload the paper trays. Both paper trays hold up to 250 sheets of plain paper or other print material measuring 0.98" (25 mm) in thickness (whichever is less).
- Load paper properly.
- Do not use paper that is curled or crumpled.
- Always use paper that conforms with those listed in the Printer Specifications section.
- Always stack paper neatly when printing on both sides of the page (manual duplex).

Unexpected Printer Shutdown

- Check the power
  Make sure the power cord is connected firmly to the printer and to a working outlet, and that the printer is turned on. The LED on the front panel of the printer should be green. Try turning the printer OFF, then ON again.
- Check the printer's vents
  If the printer's vents are covered, and the printer overheats, it automatically turns off. Make sure the vents are not covered and the printer is in a cool, dry location.

Nothing is Printed

- Be patient
  Complex documents containing many fonts, graphics, and/or color photos take longer to begin printing. The LED blinks green when the printer is processing information.
- Check the power
  Make sure the power cord is connected firmly to the printer and to a working outlet, and that the printer is turned on. The LED on the front panel of the printer should be green. Try turning the printer OFF, then ON again.
- Check the paper
  Make sure paper is loaded correctly in the tray and that the paper is not jammed in the printer.
- Check the ink cartridges and printheads
  Make sure the ink cartridges and printheads are properly installed. Properly close the printhead cover and printhead access cover. Make sure the shipping tape has been removed from the printheads.
- Try printing a "sample page"
  1. Press the Menu button until INFORMATION MENU appears.
  2. Press the Item button until PRINT DEMO appears.

3. Press the Resume button to print the demo page.

- Check the printer setup
  Make sure your HP Business Inkjet printer is selected as the current or default printer and that Pause Printing is not checked.
- Check the network setup
  Make sure that your printer is properly setup in the network environment.

A Blank Page is Printed

- Check the printheads for tape
  Make sure you have removed the printhead shipping tape that covers the ink nozzles.
- Check the printer setup
  Make sure your printer is selected as the current or default printer.
- Check the parallel port on your computer
  Make sure your printer is connected directly to the parallel port. Do not share the port with other devices such as a Zip drive.

Placement of the Text or Graphics is Wrong

- The paper size or orientation settings may be incorrect
  Make sure the paper size and page orientation selected in the software program match the settings in the HP print settings dialog box.
- The paper may not be loaded correctly
  If everything on the page is slanted or skewed, make sure the paper width and length adjusters fit snugly against the left and bottom edges of the paper stack, and that there are no more than 250 sheets of paper or a stack of paper 0.98" (25 mm) thick loaded in either of the paper trays.
- The margin settings may be wrong
  If the text or graphics are cut off at the edges of the page, make sure the margin settings for the document do not exceed the printable area of your printer.
- Printable area is not set correctly for a LaserJet document
  When printing documents formatted for a LaserJet, pages in your document may get cropped, truncated or the content of one page may overflow to the next. Set the Emulate LaserJet Margins option in the printer driver.

Something on the Page is Missing or Incorrect

- The margin settings may be wrong
  Make sure the margin settings for the document do not exceed the printable area of your printer.
- Color print settings may be wrong
  Grayscale is probably selected in the HP print settings dialog box.
- The wrong printer may be selected
  Make sure the correct printer is selected as the current or default printer.
- The Symmetrical Margins option makes the left and right margins equal and top and bottom margins equal. If the page appears incorrect, make sure this setting is not selected in the printer driver.

Printer Takes a Long Time to Print a Job

- Check your system configuration
  The minimum system configuration for your printer is 486-66 MHz with 8 MB RAM. However, the printer performance is optimized for Pentium machines.
- There may be insufficient hard disk space in your system
  If you are printing graphics-intensive files, make sure you have enough (more than 50 MB) hard disk space.
- The port setting configuration in your system is not set to ECP (Windows 3.1x/95/98 only)
  See the manual that comes with your computer for information on how to change your port setting or contact your computer manufacturer.

Printing Takes a Long Time Over the Network

- Set the print queue to accept only RAW data
  In a Windows NT 4.0 client-server environment, the print server can be configured to accept only RAW data. In this configuration the client computer creates the RAW data instead of the print server. To enable this option:
  1. Click Start and select Settings, followed by Printers.
  2. Right-click the printer icon and select Properties.
  3. Click the General tab.
  4. Click Print Processor.
  5. Check Always Spool RAW Datatype and click OK.

- Set the port monitor
  Use the port software that comes with HP Web JetAdmin, instead
  of Microsoft LPR port software. Also, for optimal printing and
  spooling of 8.5" x 14" (216 x 356 mm) size jobs, the TCP/IP
  Idle time out value of the EIO card should be set to at least 360
  seconds. To enable this option:

  1. Click Start and select Settings, followed by Printers.

  2. Right-click the printer icon and select Modify.

  3. Click Next.

  4. Set the TCP/IP Idle time out to at least 360.

  5. Click Next and then Finish.

- Reduce the complexity of the file
  Reduce the complexity of the file by reducing the number of
  colors used to create it.

- Print the file from a different application
  Some applications handle complex print files more efficiently
  than others. Try printing your file from another application.

Customer Support

The information in this section suggests solutions to common problems. If
your printer is not operating properly and these suggestions do not solve
your problem, try using one of the following support services to obtain
assistance.

Note: There are no user-serviceable parts inside the printer.

For more information consult one of the following:

Document	Document Contents
This guide	This document contains a list of common LCD messages, their cause, and their remedy. For more information, see page 6-1.
HP Business Inkjet 2200/2250 Reference Guide	Included with your printer. It provides setup and configuration information for your HP color printer.
Readme	Included on the Starter CD. It provides last-minute important information about your HP color printer.
HP JetDirect Print Server Administrator's Guide	Included on the Starter CD. It provides detailed information on setting up and using your HP JetDirect EIO Print Server.

Document	Document Contents
HP JetDirect hardware manual	Included with the purchase of an HP JetDirect print server. It describes setup and configuration of your HP JetDirect print server. Note that the HP JetDirect hardware manual does not come with the printer.
The NOS (network operating system) documentation	These manuals came with your computer or your NOS. They describe basic network printing common to all network printers.

Internet

Visit our World Wide Web for the latest printer software, product and support information.

http://www.hp.com/go/businessinkjet or
http://www.hp.com/cposupport.

HP Telephone Support

During the warranty period, you may obtain assistance from the HP Customer Care Center.

Before calling, print a configuration page and fill in the following information to be ready to help your Customer Care Center representative:

What model printer do you have?	
What is the serial number of your printer? (Check the back of your printer.)	
What is the brand and model of your computer?	
What is the version of printer software you are using? (Open the printer driver Properties, click the Preference tab, and then click About.)	
What driver did you select?	
Have you printed a configuration page?	

Have this information ready when you call HP Customer Support at any of the following numbers:

For customers in North America:

During Warranty:	US: 208 323 2551 Monday through Friday 6 am to 6 pm (MST)
	Canada: 905 206 4663 Monday through Friday 8 am to 8 pm (EST)
Post Warranty:	US: 900 555 1500 ($2.50 per minute, maximum of $25.00) or 800 999 1148 ($25.00 per call

will be charged to your Visa or MasterCard) Monday through Friday 6 am to 6 pm (MST)

Canada: Toll free 877 621 4722 (Visa, MasterCard, or American Express) Monday through Friday 8 am to 8 pm (EST)

For customers outside of North America:

Africa/Middle East +41 22/780 71 11	Argentina 541 781 4061/69
Australia 613 8877 8000	Austria 0660 6386
Belgium (Dutch) 02 6268806 (French) 02 6268807	Brazil 55 11 709 1444
	Canada 905 206 4663
Chile 800 360999	China 010 6564 5959
Czech Republic 42 (2) 471 7327	Denmark 3929 4099
Finland 0203 47 288	France 01 43 62 34 34
Germany 0180 52 58 143	Greece 01 68 96 4 11
Hong Kong 800 96 7729	Hungary 36 (1) 252 4505
India 9111 682 6035	Indonesia 21 350 3408
Ireland 01 662 5525	Italy 02 264 10350
Korea 822 3270 0700	Malaysia 03 295 2566
Mexico D.F. 01 800 2214700, 01 800 9052900	New Zealand 09 356 6640
Norway 22 11 6299	Philippines 2 867 3551
Poland 022 37 5065, 48 22 37 5065	Portugal 01 441 7 199
Russia 7095 923 50 01	Singapore 272 5300
Spain 902 321 123	Sweden 08 619 2170
Switzerland 0848 80 11 11	Taiwan 886 2 27170055
Thailand 02 661 4011	The Netherlands 020 606 8751
Turkey 90 1 224 59 25	United Kingdom 0171 512 5202
Vietnam 8 823 4530	Venezuela 582 239 5664 Caracas 207 8488

specifications

specifications

Printer Specifications

Print Method	Plain paper drop on-demand thermal inkjet printing

Print Speed: (Letter/A4)		Fast	Normal	Best
	Black text	15 ppm	11 ppm	6.5 ppm
	Mixed text with color graphics	14 ppm	7.5 ppm	1.5 ppm
	Full page color	6.0 ppm	2.5 ppm	0.5 ppm
	Glossy color photo 4" x 6" (101 x 152 mm)	N/A	1.0 ppm	0.5 ppm
	Approximate figures. Exact speed dependent on the system configuration, software program, and document complexity.			

Black Resolution	Up to 1200x600 dpi
Color Resolution	HP's enhanced Color Layering Technology with PhotoREt III for photo quality. Up to 1200x600 dpi
Printer Languages	HP Business Inkjet 2200 family: HP High Performance Architecture (HPA) GUI HP Business Inkjet 2250 family: HP HPA, PCL 5C, HP Postscript 2 emulation, Automatic language switching
Software Compatibility	Microsoft Windows® 3.1x, 95, 98, NT 4.0, 2000, Macintosh System 8.1 and above
Fonts	45 TrueType and 35 Postscript fonts built-in; all Postscript emulation and HP PCL 5C-accessible Intellifont and TrueType rasterizer built into PCL 5C. Built-in support for Arabic, Cyrillic, Greek and Hebrew symbol sets.
Smart Software Features	Built-in printer driver features: Enhanced Windows Drivers with Configurable, Remote and Unattended setup options. HP ZoomSmart Scaling technology, Handout (N-up printing), Manual Duplex, Watermark, Concept Preview, Quick Sets, Emulate LaserJet Margins, Symmetrical Margins, Optimized for Fax, Tiling. Note: Not all features available with each printer driver.

Media Size/Type	Paper	U.S. Legal 8.5" x 14" (216 x 356 mm), U.S. Letter 8.5" x 11" (216 x 279 mm), U.S. Executive 7.25" x 10.5" (184 x 267 mm), A4 210 x 297 mm, B5 182 x 257 mm

Media Size/Type	Transparencies	U.S. Letter 8.5" x 11" (216 x 279 mm), European A4 210 x 297 mm
	Envelopes (Tray 1 and Envelope Feed only)	U.S. No. 10 4.12" x 9.5" (105 x 241 mm), Monarch 3.87" x 7.5" (98 x 191 mm), European DL 200 x 110 mm, A2 Baronial 111.1 x 146 mm, C5 162 x 229 mm, C6 114 x 162 mm, Japan #3 Envelope 120 x 235 mm
	Cards (Tray 1 and Envelope Feed only)	Index card 4" x 6" (102 x 152 mm), Index card 5" x 8" (127 x 203 mm), European A6 card 105 x 149 mm, A5 148 x 210 mm,
	Labels	U.S. Legal 8.5" x 11" European A4 210 x 297 mm
Media Handling	Tray 1/ Tray 2	Sheets: up to 250 or 0.98" (25 mm) thick, Cards (Tray 1 only): up to 60 (or 15mm stacked), Envelopes (Tray 1 only): up to 15 (or 15mm stacked)
	Envelope feed	Single envelope or card feed only
	Output tray capacity	Sheets: up to 150 (text printing)
Recommended Media Weight	Tray 1/ Tray 2	Paper: 60 to 105 g/m^2 (16 to 28 lb. Bond) Cards (Tray 1 only): 110 to 200 g/m^2 (110 lb. Index)
HP Media Supported (Maximum number of pages supported)	Tray 1	Plain paper (250 sheets), HP Premium InkJet Paper (200 sheets), HP Premium InkJet Heavyweight Paper (100 sheets), HP Premium Transparency (50 sheets), HP Premium Photo Paper (15 sheets), HP Photo Paper (20 sheets), HP Professional Brochure (Glossy and Matte) (100 sheets)
	Tray 2	Plain paper (250 sheets)
I/O Interface	Centronics parallel, IEEE 1284 compliant	
Printer Memory	HP Business Inkjet 2200 family: 8 MB of built-in RAM	
	HP Business Inkjet 2250 family: 24 MB of built-in RAM, up to 88 MB with optional 64 MB (SDRAM,100MHz) DIMM	
Control Panel	Intuitive operation and easy-to-understand messages. Messages can be displayed in 15 languages: English, French, Italian, German, Spanish, Portuguese, Dutch, Norwegian, Finnish, Swedish, Danish, Polish, Czech, Russian, and Japanese	

Dimensions	20.2" (513 mm) W x 8.2" (208 mm) H x 20.4" (517 mm) D without Tray 2 installed.
Weight	10 kg (22 lb.) without Tray 2, printheads, or ink cartridges
Duty Cycle	10,000 pages/month
Power Supply	Built-in Universal Power Supply
Power Requirements	Input Voltage 100 - 240 AC (±10%), 50/60 Hz (±3 Hz)
Power Consumption	Less than 2 watts when off, 8 watts maximum non-printing, 68 watts maximum printing, 65 watts average printing
Operating Environment	Operating temperature: 5° to 40°C (41° to 104°F) Recommended operating conditions: 15° to 35°C (59° to 95°F) Storage temperature: -40° to 60°C (-40° to 140°F) Relative Humidity: 20 to 80% RH non-condensing Noise Levels: **HP Business Inkjet 2200/2250:** Sound Power: LWAm 59 dB(A) per ISO 9614-1 Sound Pressure: LpAm 49 dB(A) (by-stander position) **HP Business Inkjet 2250TN:** Sound Power: LWAm 61 dB(A) per ISO 9614-1 Sound Pressure: LpAm 50 dB(A) (by-stander position)
System Requirements	Minimum Windows 3.1x: 486DX-66, 8 MB RAM Windows 95/98: 486DX-100, 16 MB RAM Windows NT 4.0: Pentium 100, 32 MB RAM Windows NT 2000: Pentium 166, 32 MB RAM Mac: OS 8.1 or later, Power Mac 601, 60 MHz,16 MB RAM Recommended Windows 95/98: Pentium 266, 32 MB RAM Windows NT 4.0/2000: Pentium 266, 64 MB RAM Mac: OS 8.6 or later, iMac, 32 MB RAM Graphics intensive files may require more disk space.
Warranty	1 year limited warranty
Product Certifications	Safety Certifications: CCIB (China), CSA (Canada), PSB (Singapore), UL (USA), NOM-1-NYCE (Mexico), TUV-GS (Germany), JUN (Korea). EMI/EMC Certifications: FCC Title 47 CFR Part 15 Class B computing device (USA) (Class A when connected to Local Area Network devices), CTICK (Australia & New Zealand), VCCI (Japan), CE (European Union), B mark (Poland), GOST (Russia), BCIQ (Taiwan), RRL (Korea). Pantone Calibrated.

Ordering Information

Number	Description
C2688A	HP Business Inkjet 2200
C2689A	HP Business Inkjet 2200se
C2690A	HP Business Inkjet 2200xi
C2691A	HP Business Inkjet 2250
C2699A	HP Business Inkjet 2250TN

HP Supplies and Accessories

You can order HP supplies and accessories from HP World Wide Web. Visit HP Outlet Center (http://www.hpshopping.com) for more information.

HP Premium Transparency Film

US Letter, 50 sheets: 8.5" x 11" (216 x 279 mm) C3834A

US Letter, 20 sheets: 8.5" x 11" (216 x 279 mm) C3828A

A4, 50 sheets: 210 x 297 mm C3835A

A4, 20 sheets: 210 x 297 mm C3832A

HP Premium Inkjet Paper

US Letter, 200 sheets: 8.5" x 11" (216 x 279 mm) 51634Y

A4, 200 sheets: 210 x 297 mm 51634Z

HP Premium Inkjet Heavyweight Paper

US Letter, 100 sheets: 8.5" x 11" (216 x 279 mm) C1852A

A4, 100 sheets: 210 x 297 mm C1853A

HP Premium Photo Paper

US Letter, 15 sheets: 8.5" x 11" (216 x 279 mm) C6039A

A4 (European), 15 sheets: 210 x 297 mm C6040A

A4 (Asian), 15 sheets: 210 x 297 mm C6043A

HP Photo Paper

US Letter, 20 sheets: 8.5" x 11" (216 x 279 mm) C1846A

A4 (European), 20 sheets: 210 x 297 mm C1847A

HP Professional Brochure and Flyer Paper

Glossy, US Letter, 50 sheets: 8.5" x 11" (216 x 279 mm) C6817A

Glossy, A4, 50 sheets: 210 x 297 mm C6818A

Matte, US Letter, 50 sheets: 8.5" x 11" (216 x 279 mm) C6955A

Ink Cartridges

HP No. **10** Black C4840A (26.5 ml) / C4844A (69 ml)

HP No. **11** Cyan C4836A (28 ml)

HP No. **11** Magenta C4837A (28 ml)

HP No. **11** Yellow C4838A (28 ml)

HP No. 11 Printheads

Black C4810A

Cyan C4811A

Magenta C4812A

Yellow C4813A

Accessories

HP IEEE-1284 Compliant A-B Parallel Cable (2 m) C2950A

HP IEEE-1284 Compliant A-B Parallel Cable (3 m) C2951A

250 Sheet Input Tray (Tray 2) C3398A/C3398C

HP 64 MB SDRAM PC-100 Module F1457B

HP Postscript/PCL5 Kit C5935A/C5935C

Networking Accessories

HP JetDirect 600N (EIO) Internal Print Servers

Ethernet/802.3 RJ-45 (10Base-T) J3110A

Ethernet/802.3 BNC (10Base2), RJ-45 (10Base-T),
Local talk System 7 J3111A

Token Ring/802.5,DB9,RJ-45 J3112A

Fast Ethernet/802/802.3, RJ-45 (10/100Base-TX) J3113A

HP JetDirect 500X External Print Servers
Token Ring 802.5, DB9, RJ-45 J3264A
Fast Ethernet/802.3, BNC (10Base2), RJ-45 (10/100Base-TX) J3265A

HP JetDirect 300X External Print Servers
Ethernet/802.3 RJ-45 (10/100Base-TX) J3263A

Visit http://www.hp.com/go/networkprinting for more information.

Regulatory Notice

Power Cord Statement

The power cord cannot be repaired. If it is defective, it should be
discarded or returned to the supplier.

LEDs Classification

```
           CLASS 1 LED PRODUCT
               LED KLASSE 1
          APPARECCHIO LED DI CLASSE 1
   PRODUCT KLASY 1 Z DIODAMI ŒWHCYCYMI LED
    Appareil à Diode Electrluminescente de Classe 1
              ZARIZENI LED TRIY 1
             KLASS 1 LED APPARAT
               LUOKAN 1 LED
```

Energy Consumption

Energy Star is a US registered service mark of United States
Environmental Protection Agency

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 この装置は、情報処理装置等電波障害自主規制協議会（ＶＣＣＩ）の基準
に基づくクラスＢ情報技術装置です。この装置は、家庭環境で使用すること
を目的としていますが、この装置がラジオやテレビジョン受信機に近接して
使用されると受信障害を引き起こすことがあります。
 取り扱い説明書に従って正しい取り扱いをして下さい。
```

Safety Information

Always follow basic safety precautions when using this product to reduce
risk of injury from fire or electric shock.

1. Read and understand all instructions in the User's Guide.
2. Observe all warnings and instructions marked on the product.
3. Unplug this product from wall outlets before cleaning.
4. Do not install or use this product near water, or when you are wet.
5. Install the product securely on a stable surface.
6. Install the product in a protected location where no one can step on or trip over the line cord, and the line cord cannot be damaged.
7. If the product does not operate normally, see troubleshooting on page 7-1.
8. There are no user-serviceable parts inside. Refer servicing to qualified service personnel.

Hewlett-Packard Limited Warranty Statement

HP Product	Duration of Limited Warranty
Software	90 days
Accessories	90 days
Ink Cartridges	90 days
Printer Peripheral Hardware - see below for details	1 Year

Extent of Limited Warranty

1. Hewlett-Packard warrants to the end-user customer that the HP products specified above will be free from defects in materials and workmanship for the duration specified above, which duration begins on the date of purchase by the customer.
2. For software products, HP's limited warranty applies only to a failure to execute programming instructions. HP does not warrant that the operation of any product will be uninterrupted or error free.
3. HP's limited warranty covers only those defects that arise as a result of normal use of the product, and does not cover any other problems, including those that arise as a result of:
    a. Improper maintenance or modification;
    b. Software, media, parts, or supplies not provided or supported by HP; or
    c. Operation outside the product's specifications.

4. For HP printer products, the use of a non-HP ink cartridge or a refilled ink cartridge does not affect either the warranty to the customer or any HP support contract with the customer. However, if printer failure or damage is attributable to the use of a non-HP or refilled ink cartridge, HP will charge its standard time and materials charges to service the printer for the particular failure or damage.

5. If HP receives, during the applicable warranty period, notice of a defect in any product which is covered by HP's warranty, HP shall either repair or replace the product, at HP's option.

6. If HP is unable to repair or replace, as applicable, a defective product which is covered by HP's warranty, HP shall, within a reasonable time after being notified of the defect, refund the purchase price for the product.

7. HP shall have no obligation to repair, replace, or refund until the customer returns the defective product to HP.

8. Any replacement product may be either new or like new, provided that it has functionality at least equal to that of the product being replaced.

9. HP products may contain remanufactured parts, components, or materials equivalent to new in performance.

10. HP's Limited Warranty Statement is valid in any country where the covered HP product is distributed by HP. Contracts for additional warranty services, such as on-site service, are available from any authorized HP service facility in countries where the product is distributed by HP or by an authorized importer.

Limitations of Warranty

1. TO THE EXTENT ALLOWED BY LOCAL LAW, NEITHER HP NOR ITS THIRD PARTY SUPPLIERS MAKES ANY OTHER WARRANTY OR CONDITION OF ANY KIND, WHETHER EXPRESS OR IMPLIED WARRANTIES OR CONDITIONS OF MERCHANTABILITY, SATISFACTORY QUALITY, AND FITNESS FOR A PARTICULAR PURPOSE.

Limitations of Liability

1. To the extent allowed by local law, the remedies provided in this Warranty Statement are the customer's sole and exclusive remedies.

2. TO THE EXTENT ALLOWED BY LOCAL LAW, EXCEPT FOR THE OBLIGATIONS SPECIFICALLY SET FORTH IN THIS WARRANTY STATEMENT, IN NO EVENT SHALL HP OR ITS THIRD PARTY SUPPLIERS BE LIABLE FOR DIRECT, INDIRECT, SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES, WHETHER

BASED ON CONTRACT, TORT, OR ANY OTHER LEGAL THEORY AND WHETHER ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

Local Law

1. This Warranty Statement gives the customer specific legal rights. The customer may also have other rights which vary from state to state in the United States, from province to province in Canada, and from country to country elsewhere in the world.

2. To the extent that this Warranty Statement is inconsistent with local law, this Warranty Statement shall be deemed modified to be consistent with such local law. Under such local law, certain disclaimers and limitations of this Warranty Statement may not apply to the customer. For example, some states in the United States, as well as some governments outside the United States (including provinces in Canada), may:

   a. Preclude the disclaimers and limitations in this Warranty Statement from limiting the statutory rights of a customer (e.g. the United Kingdom);

   b. Otherwise restrict the ability of a manufacturer to enforce such disclaimers or limitations; or

   c. Grant the customer additional warranty rights, specify the duration of implied warranties which the manufacturer cannot disclaim, or allow limitations on the duration of implied warranties.

3. FOR CONSUMER TRANSACTIONS IN AUSTRALIA AND NEW ZEALAND, THE TERMS IN THIS WARRANTY STATEMENT, EXCEPT TO THE EXTENT LAWFULLY PERMITTED, DO NOT EXCLUDE, RESTRICT, OR MODIFY, AND ARE IN ADDITION TO, THE MANDATORY STATUTORY RIGHTS APPLICABLE TO THE SALE OF THE HP PRODUCTS TO SUCH CUSTOMERS.

media

Supported Media

HP Media	Tray 1	Tray 2
Plain Paper	✔	✔
HP Premium Inkjet Paper	✔	✘
HP Premium Inkjet Heavyweight Paper	✔	✘
HP Premium Transparency	✔	✘
HP Premium Photo Paper	✔	✘
HP Photo Paper	✔	✘
HP Professional Brochure	✔	✘

Paper Size	Tray 1	Tray 2	Envelope Feed
U.S. Letter 8.5" x 11" (216 x 279 mm)	✔	✔	✘
U.S. Legal 8.5" x 14" (216 x 356 mm)	✔	✔	✘
U.S. Executive 7.25" x 10.5" (184 x 266 mm)	✔	✔	✘
A4 210 x 297 mm	✔	✔	✘
A5 148 x 210 mm	✔	✔	✘
B5 182 x 257 mm	✔	✔	✘
Envelope no. 10 4.12" x 9.5" (105 x 241 mm)	✔	✘	✔
Envelope DL 200 x 110 mm	✔	✘	✔
Envelope C5 162 x 229 mm	✔	✘	✔
Envelope C6 114 x 162 mm	✔	✘	✔
Envelope Monarch 3.87" x 7.5" (98 x 191 mm)	✔	✘	✔
Envelope A2 111.1 x 146 mm	✔	✘	✔
Japan #3 Envelope 120 x 235 mm	✔	✘	✔
Index card 4" x 6" (102 x 152 mm)	✔	✘	✔
Index card 5" x 8" (127 x 203 mm)	✔	✘	✔
A6 card 105 x 149 mm	✔	✘	✔
Custom Size: 3.875" x 5.75" (98 x 146 mm)	✔	✘	✔

postscript

Postscript Printing

Operating System	Version Number
Windows 3.1x	Microsoft PScript Driver Version 3.58 and HP Business Inkjet 2200/2250 PPD
Windows 9x	Microsoft PScript Driver Version 4.00 and HP Business Inkjet 2200/2250 PPD
Windows NT 4.0	Microsoft PScript Driver Version 4.01 and HP Business Inkjet 2200/2250 PPD
Windows 2000	HP Business Inkjet 2200/2250 PPD

Installation Notes

When you are operating in a Windows environment, the setup software will detect the version of the operating system that you are running. The software will be installed in the language that you have selected in your Windows Control Panel. This means that you can be running an English version of Windows and have the language preference set to Spanish, and the installation utility will install the Spanish version of the printing software.

Upgrading from an older version of Windows

After completing the upgrade to a new version of Windows, you must reinstall the printer driver. For Example, if you upgrade from Window NT 4.0 to Windows 2000, you must reinstall the printer driver.

Identifying different printer drivers in Windows NT 4.0

If you have already installed a printer driver that was supplied with your Windows operating system for the printer, and you have also installed the printing software supplied with the printer, multiple printer drivers might exist on your computer system. Use these steps to find out which drivers are installed.

1. From the Start menu, click Settings and then click Printers.
2. Right-click on the printer name and then click Properties.
3. At the Properties window, click the General tab and then click the Print Test Page button.

If you are using the printer driver that is provided for the printer, the Printer Test Page will include the following information (shown with sample data).

Printer Name:	<user definable>
Printer Model:	HP Business Inkjet 2200/2250
Driver Name:	PSCRIPT.DRV
Driver Version:	4.00

Installing the Printer Driver Only

If you obtained only a printer driver and its associated files (for example, through HP's web page), install them using the following steps.

1. Close all applications, terminate-and-stay-resident (TSR) programs, and virus checkers.
2. If you are in Windows 3.1x, click Run from the File menu in Program Manager. If you are in Windows 9x or above, from the Start menu, click Settings, then Printers, and then double-click Add Printer.
3. When prompted to select a printer, click Have Disk. Use Browse to enter the appropriate path to where the driver files are located.
4. Follow the instructions on your screen to complete the installation.

Current HP Business Inkjet users

If you currently have an HP Business Inkjet printer driver installed on your computer system, this printing software can be safely installed. It can coexist with drivers for different printers. It will replace and update only previous versions of the printing software for this printer. The new printer driver will have property pages similar to your older printer driver, but it will reflect the features and capabilities of the current driver.

Specific Printer Features/Issues

The printer driver provides default properties for most applications. You need to change these properties only if you are installing a new printer option, such as the optional Tray 2, or more memory; or if you are changing a specific feature.

To complete the request for property changes, use either the Apply button or the OK button. The Apply button activates the changes without closing the Properties dialog box. The OK button activates the changes and closes the Properties dialog box.

The following table shows which features are available for each Windows OS.

	Windows 3.1x	Windows 9x	Windows NT 4.0	Windows 2000
Paper Type	✕	✔	✔	✔
Print Quality	✕	✔	✔	✔
Print in Grayscale	✔	✔	✔	✔
ColorSmart	✕	✔	✔	✔
CMYK Inks	✔	✔	✔	✔
Manual Color Options	✕	✔	✔	✔
Handout (N-up printing)	✕	✔	✔	✔
Watermark	✕	✕	✔	✔

Paper Type (Windows 9x) or Media Type (Windows NT 4.0)

Operating System	Location in Printer Driver
Windows 3.1x	Not available
Windows 9x	Paper tab, More Options…
Windows NT 4.0	Advanced tab, Printer Features
Windows 2000	Advanced tab, Printing Defaults, Paper/Quality tab

Options: HP Plain Paper, HP Premium Inkjet Paper, HP Premium Inkjet Heavy Paper, HP Photo Paper, HP Premium Photo Paper, HP Premium Transparencies, HP Brochure Paper, Glossy, HP Brochure Paper, Matte

The Paper Type feature allows you to specify the type of paper on which you will be printing, such as plain paper or transparencies. Do not click HP Premium Transparencies when printing on regular paper.

Note: HP does not recommend using stiff media, such as card stock.

Print Quality

Operating System	Location in Printer Driver
Windows 3.1x	Not available
Windows 9x	Paper tab, More Options…
Windows NT 4.0	Advanced tab, Printer Features
Windows 2000	Advanced tab, Printing Defaults, Advanced, Printer Features

Options: Best, Normal, Fast

Best prints the best quality possible. Normal is the recommended mode for everyday printing. Fast uses less ink, but the quality is not as high as normal.

Print Color as Gray

Operating System	Location in Printer Driver
Windows 3.1x	Device Options, Color check box
Windows 9x	Device Options tab, printer features
Windows NT 4.0	Advanced tab, Printer Features
Windows 2000	Advanced tab, Printing Defaults, Advanced, Printer Features

Options: On and Off

To activate grayscale printing, change the Print Color as Gray setting to on. This overrides your color settings and prints your documents in black and white (monochrome, grayscale). Grayscale means shades of gray, starting with white and ending with black. When a color document is printed in grayscale, colors are converted to their grayscale equivalents, which means that different colors are represented as different shades of gray. This printer can produce up to 256 shades of gray. Color images that are printed as monochrome print faster and are easier to reproduce on monochrome devices such as copiers and fax machines. When Print Color as Gray is on, ALL of your documents will print as grayscale until the setting is changed to off.

HP ColorSmart

Operating System	Location in Printer Driver
Windows 3.1x	Not available
Windows 9x	Device Options tab, printer features
Windows NT 4.0	Advanced tab, Printer Features
Windows 2000	Advanced tab, Printing Defaults, Advanced, Printer Features

Options: Automatic and Manual

HP ColorSmart technology is a set of defaults that automatically tune your color printer output. The HP ColorSmart defaults provide high-quality output when colored objects (text, graphics, or images) are printed.

Choose from the following HP ColorSmart options:

Automatic lets the printer driver optimize the color settings for text, graphics, and images (photos). Color is optimized based on the type of data being sent to the printer. This option automatically selects the appropriate color settings for the document you are printing. This provides you with screen-matched or WYSIWYG color output without any changes to the printer driver. The automatic setting is best for most applications.

Manual lets you adjust the color control independently for printed text, graphics, and images. The color options are vivid or screen match.

Click the Restore Defaults button at any time to return HP ColorSmart to its default setting of Automatic color selection.

CMYK Inks

Operating System	Location in Printer Driver
Windows 3.1x	Device Options tab, printer features
Windows 9x	Device Options tab, printer features
Windows NT 4.0	Advanced tab, Printer Features
Windows 2000	Advanced tab, Printing Defaults, Advanced, Printer Features

Options: FAST, EURO, SWOP, TOYO

CMYK Inks is the type of color treatment used during printing.

FAST uses sRGB. There is no special color treatment. This is the fastest way to send data.

EURO (Eurostandard) is a color treatment used to match the equivalent 3M matchprint.

SWOP color treatment is used primarily for Web offset publications.

TOYO is a color ink standard used in Japan.

Manual Color Options for Text, Graphics, and Image

Operating System	Location in Printer Driver
Windows 3.1x	Not available
Windows 9x	Device Options tab
Windows NT 4.0	Advanced tab, Printer Features
Windows 2000	Advanced tab, Printing Defaults, Advanced, Printer Features

Options: Screen Match (sRGB), Vivid

The Text, Graphics, and Images options allow you to specify settings for the type of job you are printing. The color control setting is vivid and screen match.

Color Control (Vivid and Screen Match)

Color control is a Manual Color Option that controls the type of color produced by the printer.

The Vivid color option produces colors that are very bright and vivid. When you use Vivid color, your color output is brighter than the colors that appear on your screen.

The Screen Match color option provides the best match between screen and printer. It produces colors that are close to the colors you see on your screen. Screen Match can be useful when you are retouching photographs or when you have created colors that you wish to reproduce in your printed output. Note that factors such as the type of

monitor you use and the room's lighting can affect the appearance of colors on your screen.

Text

In some applications, colored, filled, or rotated text is treated as a graphic or as a photo.

Graphics

Graphics include items such as bar graphs, pie charts, or tables.

Image

Images (photos) can be in the form of raster images, bitmaps, and device-independent bitmaps (DIBs). Some examples of photos are pictures from a CD-ROM, pictures taken by a digital camera, and images that were scanned by a desktop scanner.

Pages per Sheet

Operating System	Location in Printer Driver
Windows 3.1x	Not available
Windows 9x	Paper tab, layout
Windows NT 4.0	Advanced tab, Printer Features
Windows 2000	Advanced tab, Printing Defaults, Layout tab

Options: 1, 2, and 4 pages per sheet; Windows NT 4.0/2000 also offers 6, 9, and 16 pages per sheet, with all NT 4.0/2000 settings in both portrait and landscape and rotated landscape orientation.

The Pages per Sheet option, sometimes called layout or n-up, specifies the number of pages to print on a single sheet of paper. The multiple pages appear decreased in size and arranged based on the number of pages printed on the sheet. The Pages per Sheet option does not work effectively with all page setup options. Some applications request a different resolution, page size, or paper source, or orientations for different pages of a document. Combining page setup options while using the Pages per Sheet option might produce unexpected print results.

Watermark Printing

Operating System	Location in Printer Driver
Windows 3.1x	Not available
Windows 9x	Not available
Windows NT 4.0	Advanced tab, Printer Features
Windows 2000	Advanced tab, Printing Defaults, Advanced, Printer Features

The Watermark options allow you to specify that text be placed underneath (in the background) of an existing document. For example, you may want to have large gray letters reading Draft or Confidential

placed diagonally across the first page or all pages of a document. You can also specify the font, size, angle, and style of the watermark.

Watermark

Options: None, Company Confidential, Company Proprietary, Company Private, Confidential, Copy, Copyright, Draft, File Copy, Final, For Internal Use Only, Preliminary, Proof, Review Copy, Sample, Top Secret, Urgent.

The options listed are the available words that can be printed as a watermark. To turn watermark printing off, click None. If watermark printing is turned off, then the following watermark features are ignored.

Watermark Font

Options: Courier Bold, Times Bold, Helvetica Bold

If you are printing a watermark, click on one of the three font types.

Watermark Size

Options: 24, 30, 36, 42, 48, 54, 60, 66, 72, 78, 84, 90

All option values are in points. The watermark size represents the point size of the watermark word printed.

Watermark Angle

Options: 90, 75, 60, 45, 30, 15, 0, -15, -30, -45, -60, -75, -90

All option values are in degrees. The watermark can be positioned on the page at an angle in 15 degree increments. With zero (0) as normal readable text, the positive angles will rotate the text counter clockwise up to 90 degrees (vertical). The negative angles will rotate the text clockwise up to 90 degrees (vertical).

Watermark Style

Options: Narrow Outline, Medium Outline, Wide Outline, Wide Halo Outline

The style of the watermark defines the line thickness of the watermark word.

Print Watermark

Options: All Pages, First Page Only

The First Page Only option prints only on the first page of the current document.

DECLARATION OF CONFORMITY
according to ISO/IEC Guide 22 and EN 45001

Manufacturer's Name:	Hewlett-Packard Singapore (Pte) Ltd
Manufacturer's Address:	InkJet and Imaging Solutions–Asia Operation 20 Gul Way, Singapore 629196

declares that the product

Product Name:	HP Business Inkjet 2200/2250
Model Number:	C2688A, C2689A, C2690A, C2691A, C2699A
Product Options:	All

conforms to the following product specifications:

Safety:	IEC 60950: 1991 + A1 + A2 + A3 + A4 / EN 60950: 1992 + A1 + A2 + A3 + A4 IEC 60825-1: 1993 / EN 60825-1:1994 class I for LEDs
EMC:	CISPR 22: 1997 Class B / EN 55022: 1998 Class B FCC Title 47 CFR, Part 15 Class B / VCCI-2 AS / NZS 3548: 1995 / ICES-003, Issue 2 IEC 61000-3-2:1995 / EN 61000-3-2: 1995 IEC 61000-3-3:1994 / EN 61000-3-3: 1995 CISPR 24:1997 / EN 55024:1998

Supplementary Information:

(1) The product herewith complies with the requirements of the Low Voltage Directive 73/23/EEC and the EMC Directive 89/336/EEC, and carries the CE Marking accordingly.

(2) The product was tested in a typical configuration with Hewlett-Packard personal computer systems.

(3) 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.

Singapore, December 1999   Chan Kum Yew, Quality Manager

Australia Contact: Product Regulations Manager, Hewlett-Packard Australia Ltd, 31-41 Joseph Street, Blackburn, Victoria 3130, Australia

European Contact: Your Local Hewlett-Packard Sales and Service Office or Hewlett-Packard Gmbh, Department HQ-TRE / Standards Europe, Herrenberger Strasse 130, D-71034 Böblingen (FAX: +49-7031-14-3143)

USA Contact: Corporate Product Regulations Manager, Hewlett-Packard Company, 3000 Hanover Street, Palo Alto, CA 94304 (Phone: 415-857-1501)