



HP DeskJet 890C Printer

Professional Series

User's Guide

*User Guide Number
C5876-90025*

Acknowledgments

Adobe™ and Adobe Type Manager™ are trademarks of Adobe Systems Incorporated.

Arial®, Gills Sans®, Monotype®, and Times®, are U.S. registered trademarks of The Monotype Corporation.

CG Times is a product of Agfa Corporation based on Times New Roman under license from The Monotype Corporation plc. and scalable outlines are licensed from Agfa Division of Miles, Inc. Graphite™ is a trademark of David Siegel.

ITC Bookman® is under license from and a registered trademark of International Typeface Corporation.

Lucida® is a U.S. registered trademark of Bigelow & Holmes, Inc.

Microsoft® is a U.S. registered trademark of Microsoft Corporation.

Milestones™ is a trademark of The Monotype Corporation.

PL™ is a trademark of Photolettering Inc.

Scalable type outlines are licensed from Agfa Division of Miles, Inc.

TrueType™ is a U.S. trademark of Apple Computer, Inc.

Windows® is a registered trademark of Microsoft Corporation in the U.S. and other countries.

IBM® and OS/2® are registered trademarks of International Business Machines Corporation.

UNIX® is a registered trademark of the U.S. and other countries, licensed exclusively through X/Open Company Limited.

Notice

The information contained in this document is subject to change without notice.

Hewlett-Packard makes no warranty of any kind with regard to this material, including, but not limited to, the implied warranties of merchantability and fitness for a particular purpose.

Hewlett-Packard shall not be liable for errors contained herein or for incidental or consequential damages in connection with the furnishing, performance, or use of this material.

No part of this document may be photocopied, reproduced, or translated to another language without the prior written consent of Hewlett-Packard Company.

Printing History

Edition 1, June 1997

© Copyright 1997 by Hewlett-Packard Company

Table of Contents

Section 1 – Printing Basics

- Understanding the Printer’s Parts and Functions 2
- Selecting and Using Paper 4
- Replacing and Maintaining Print Cartridges 6
- Using Your Printer Software 8
- Sharing Your Printer on a Network 10
- Printing from DOS Software Programs 14

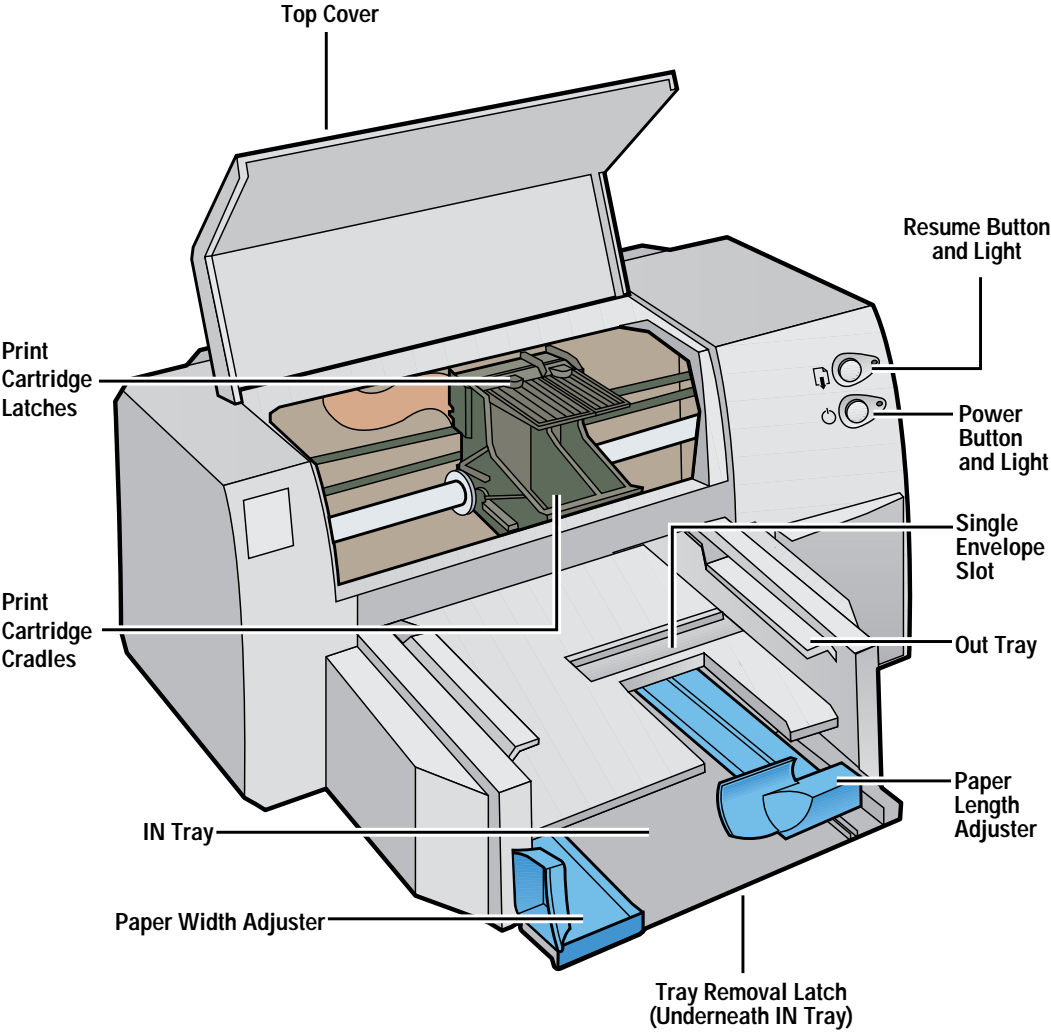
Section 2 – Support



- Troubleshooting 16
- Customer Support 20
- Ordering Parts and Accessories 23

Section 3 – Specifications

- Specifications 25
- Additional Symbol Sets and Fonts 28
- Regulatory Notice 29
- Declaration of Conformity 30











Understanding the Printer's Parts and Functions



Printer Parts	Functions
Resume  Button and Light	Clears miscellaneous printer problems. The light indicates a printer problem has occurred. Also see “Printer Lights,” below.
Power  Button and Light	Turns the printer on and off. Also see “Printer Lights,” below.
OUT Tray	Receives paper as it comes out of the printer.
Paper Length Adjuster	Slides out and in to fit the length of the paper in the IN tray.
Tray Removal Latch	Releases the IN and OUT trays for cleaning, or clearing paper jams.
IN Tray	Holds the stack of paper used for normal printing.
Paper Width Adjuster	Slides to fit the width of the paper in the IN tray.
Single Envelope Slot	Holds a single envelope for feeding into the printer.
Print Cartridge Cradles	Hold the black and color print cartridges.
Print Cartridge Latches	Lock the print cartridges securely in place.
Top Cover	Protects the inner workings of the printer from dust and debris. The top cover must be closed for the printer to operate.

Printer Lights

The lights on the front of the printer indicate if the printer is off or on, in the process of receiving data or printing, or in an error state. The following table describes how the lights appear during normal printing.

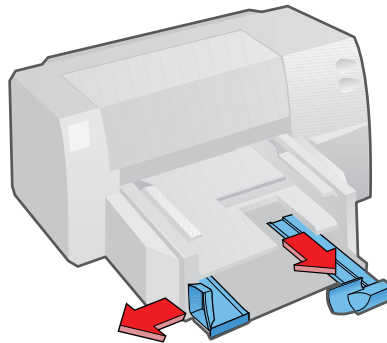
If the lights are...	Then...
 Off  Off	The printer is off. Press the power button to turn on the printer.
 Off  On	The printer is ready to print. You can send a document to the printer.
 Off  Blinking	The printer is receiving data from the computer or is printing. Wait for the document to print.
 Blinking Alternately 	The printer is in an error state. See the “Troubleshooting” tab in the HP DeskJet 890C Toolbox.
 Blinking  On	This indicates one or more of the following: The top cover is open; the printer is out of paper; a print cartridge is missing or not functioning properly.

Selecting and Using Paper

The HP DeskJet 890C printer works well with most plain photocopy paper, postcards, index cards, transparencies, envelopes and labels, and will print on 100% recycled papers that comply with DIN 19 309. For best results, use HP Premium Inkjet Paper, HP Premium or HP Deluxe Photo Paper, and HP Premium Transparency Film.

Basic Steps for Loading All Types of Media

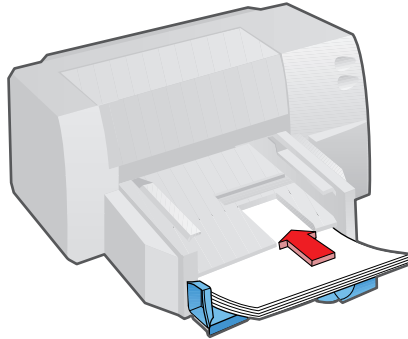
- 1 Adjust the print settings in your software program and the HP DeskJet 890C printer driver to match the paper type, size, and orientation of the paper you are using. (See the topic “Change Print Settings” on the “How Do I?” tab in the HP DeskJet 890C Toolbox).
- 2 Slide the paper width adjuster to the left and slide the paper length adjuster out to make room for the stack of paper..



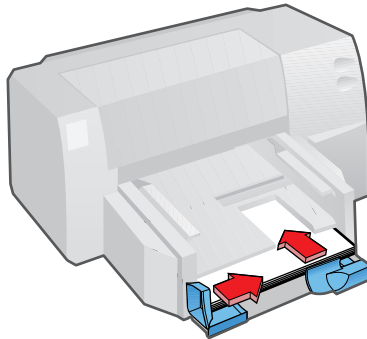
TIPS *for Selecting Paper*

- ◆ Always use paper that conforms with those listed under “Recommended Media Weight and Sizes”, in the Printer Specifications section of this user’s guide.
- ◆ Test a sample of a particular paper to ensure that it is compatible with the printer and produces acceptable print quality, before purchasing large quantities.
- ◆ 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.

- 3 Place a stack of paper print side down in the IN tray with the right side of the stack against the right side of the tray and push it in until it stops.



- 4 Readjust the paper width and length adjusters to fit snugly against the papers' edges.



NOTE For more information on printing on paper or other types of media, see the topic “Print on a Variety of Paper Types, . . .” on the “How Do I?” tab in the HP DeskJet 890C Toolbox.


TIPS *for Using Paper*

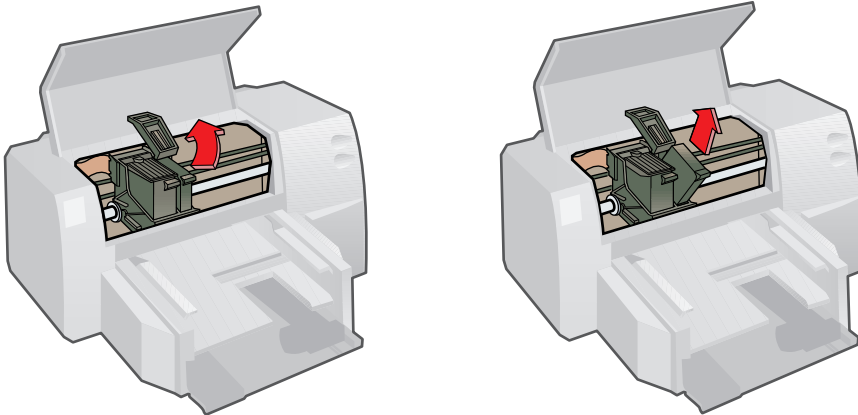
- ◆ Load only one paper type at a time into the IN tray.
- ◆ Before inserting a stack of paper into the IN tray, tap the edges on a flat surface to even it out.
- ◆ Always insert paper print side down, with the right edge of the paper aligned against the right edge of the IN tray.
- ◆ Do not load more than about a 5/8” (16mm) stack of paper into the IN tray at one time.

Replacing and Maintaining Print Cartridges

Replacing A Print Cartridge

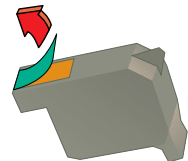
NOTE Do not remove an empty print cartridge until you are ready to replace it. If one print cartridge is empty, the other cartridge will still print. However, the printer will not print unless both cartridges are in place. See “Ordering Parts and Accessories” in this User’s Guide for print cartridge part numbers and ordering information.

- 1 Turn on the printer, and then open the top cover. The print cartridge cradles move to the center of the printer, and the resume  light flashes.
- 2 Lift up the print cartridge latch, grasp the top of the print cartridge, and pull it up and out of its cradle.




Caution Keep new and used print cartridges out of the reach of children.

- 3 Remove the new print cartridge from its package and gently remove any tape covering the ink nozzles, being careful not to touch the ink nozzles or the gold-colored contacts.



NOTE To get the best print quality, make sure the print cartridges are at room temperature before you install them.

- 4 Push the new cartridge down firmly into its cradle slot and close the print cartridge latch.
- 5 Close the printer’s top cover.

The cartridges return to their “home” position on the right side of the printer, and the resume  light stops flashing.

Maintaining Print Cartridges

Aligning the print cartridges

Your HP DeskJet 890C printer will provide the best possible print quality when the cartridges are aligned. You should align the print cartridges whenever a cartridge is installed. This insures that black and color inks will align when printed together on the same text, line, or graphic.

- 1 Turn on the computer and printer.
- 2 Run the HP DeskJet 890C Toolbox by double-clicking its icon.
- 3 Click the **Printer Services** tab.
- 4 Select **Align Print Cartridges**, and then follow the instructions on your computer screen.


Cleaning Print Cartridges

Clean the print cartridges when you notice lines or dots missing from printed text or graphics.

NOTE *Do not clean the print cartridge unnecessarily, as this wastes ink and shortens the life of the print cartridge.*

- 1 Run the HP DeskJet 890C Toolbox by double-clicking its icon
- 2 Click the **Printer Services** tab.
- 3 Select **Clean Print Cartridges**, and then follow the instructions on your computer screen.

TIPS for Maintaining Good Print Quality

- ◆ Keep the print cartridges in their sealed packages, at room temperature (60°–78°F or 15.6°–26.6°C), until you are ready to use them. Do not use print cartridges that were recently stored in a very hot or very cold environment until they return to room temperature.
- ◆ When turning off your printer, use the power  button on the printer rather than unplugging it or switching off a power strip. Turning off the power at the printer lets the print cartridges return to their “home” position on the right side of the printer and prevents them from drying out.

Using Your Printer Software

The printer software that came with your HP DeskJet 890C printer makes printing from Windows-based programs faster and easier than ever. This section is an overview of the components and functions of your printer software.

Printer Software Components

- The HP DeskJet 890C printer driver with exclusive HP ColorSmart II technology, featuring:
 - *Enhanced Internet and multimedia printing*
 - *sRGB color matching for consistent color output*
 - *MMX compatibility for faster color processing*
- The HP DeskJet 890C Toolbox software program which includes:
 - *Tutorials for basic printer usage*
 - *Step-by-step troubleshooting*
 - *Printer status information*
 - *Access to printer services*

Selecting Your Printer

To use your HP DeskJet 890C printer, make sure it is selected as the default printer.

To select your printer as the default printer—Windows 95 and Windows NT 4.0

- 1 Click **Start**, and then select **Printers** from the Settings menu.
- 2 Click the icon for your HP DeskJet 890C printer to select it.
- 3 From the **File** menu, select **Set As Default**, then close the window.

To select your printer as the default printer—Windows 3.1

- 1 In the Program Manager, open the **Main** program group.
- 2 Double-click **Control Panel** to open it, then double-click **Printers**.
- 3 Select your HP DeskJet 890C printer from the **Installed Printers** list, and then click **Set As Default Printer**.
- 4 Click **Close** and exit the Control Panel.

Using The HP DeskJet 890C Toolbox

The HP DeskJet 890C Toolbox is a software program that provides access to all the information you'll need when using your printer. Information is divided into three main categories:

- **How Do I?** – Tutorials of common printing tasks.
- **Troubleshooting** – Step-by-step printing problem solutions.
- **Printer Services** – Provides printer status and easy service steps.

To run the HP DeskJet 890C Toolbox – Windows 95 and Windows NT 4.0



- ◆ Double-click the HP DeskJet 890C Toolbox icon on your Windows desktop.

To run the HP DeskJet 890C Toolbox – Windows 3.1

- ◆ Double-click the HP DeskJet 890C Toolbox icon in the HP DeskJet Utilities program group.

Changing Print Settings

The basic print settings you will need are usually selected within your software program. These settings include the number of copies, paper size, and paper orientation.

Selecting Custom HP Print Settings

HP's print settings dialog box allows you to select settings that are not provided by the software program. These settings include:

- **Paper Type** – HP provides special settings for HP Premium sheets such as Glossy Paper, Premium Inkjet Paper, and Transparencies.
- **Print Quality** – Use to select the level of print quality.
- **Grayscale Printing** – Use this setting when you want to print color documents in shades of gray for better photocopying results.
- **ColorSmart II** – Use the manual ColorSmart II setting when you want to manually adjust color intensity and halftoning methods instead of letting HP's ColorSmart II technology do it automatically.
- **Flip Horizontal** – Use to reverse or flip the printed image. (Not available with Windows NT.)
- **Ordered Printing** – Use to reverse the print order of your document. (Not available with Windows NT.)
- **Two-Sided Printing** – Use to print on both sides of your paper. (Not available with Windows NT.)



NOTE

To get to HP's print settings dialog box, see the topic "Change Print Settings" on the "How Do I?" tab in the HP DeskJet 890C Toolbox.

Sharing Your Printer on a Network

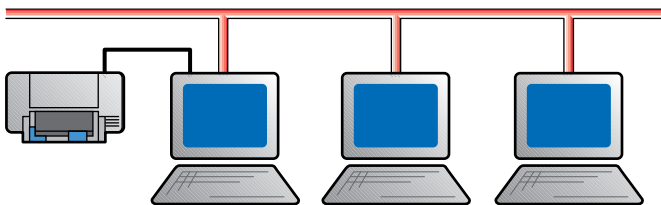
If you work in a networked environment, you can connect the HP DeskJet 890C printer to your network. The networked printer can be connected either to a personal computer (locally shared) or attached directly to the network via an external print server (network-connect).

Locally Shared

In the locally shared configuration, the printer is connected directly to the parallel port of a selected computer on the network. The printer can then be shared by other users on the network through a Windows network printer connection.

The advantages of a locally shared printer are relatively easy installation and low cost since no additional hardware or software is required.

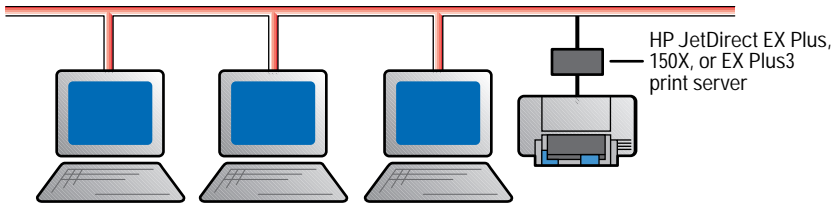
The disadvantages of a locally shared printer involve performance, printer status information and location. Depending on priority settings and number of users on the network, the host computer may slow down while handling print jobs and print jobs may be delayed for other users. Additionally, only the user of the host computer, can receive paper and print cartridge-related status messages. Locally shared printers must also be situated near the host computer which may not be convenient for all users on the network. Finally, if the host computer is turned off or rebooted, print jobs may be lost or not printed.



Network-Connect

In this configuration, the printer connects to the network via direct attachment to an external print server such as an HP JetDirect EX Plus, 150X, or EX Plus3. This configuration provides increased performance, location-flexibility and better printer status information.

As shown in the table below, newer versions of HP JetDirect EX Plus, 150X, and EX Plus3 print servers provide optimum printer-related status messages. If you have an older print server, you may want to upgrade the firmware (flash memory). To determine the firmware version and upgrade information for your HP JetDirect EX Plus and EX Plus3 print server, refer to your HP JetDirect Software Installation guide. The HP JetDirect 150X was not designed to provide this upgrade capability.



	JetDirect EX Plus J2591A	JetDirect 150X J2592A	JetDirect EX Plus3 J2593A, J2594A
Limited Status Information	Yes Firmware prior to E.05.00	–	Yes Firmware prior to D.05.00
Complete Status Information	Yes Firmware E.05.00 or later	Yes All Firmware versions	Yes Firmware D.05.00 or later

NOTE For additional information about installation and set-up of HP JetDirect print servers, see your HP JetDirect hardware and software Installation Guides.

Setting up your Printer on a Network

Whatever configuration you are using to connect your printer to a network, you will need to install the HP DeskJet 890C Toolbox and Driver software on each computer that will be printing to the HP DeskJet 890C printer.

Windows 3.1 - Locally Shared

Not supported in Windows 3.1 by the Operating System

Windows 3.1 - Network Connect

Setup the printer and make the cable connections to your print server and network.

- 1 Begin installing the driver by executing **setup.exe**, either on the "Printer Software CD," "Installation Disk 1," or where your network administrator has installed it.
- 2 When prompted for the printer name and port, choose **"HP DeskJet 890C Printer"** and either **"None"** or the Port (LPT1:) for the port that you wish to redirect to the printer. Click **OK**.
- 3 Continue installation until complete, then restart Windows.
- 4 Select **Printers** from the Windows Control Panel, click on the **HP DeskJet 890C** icon, then click **Connect**.
- 5 Choose the port to which the printer is connected (for example LPT3)
- 6 Click **Network...** then select the network path for the printer. To set up the printer as a permanent network printer on your system, click the **Permanent** box, and then click **Connect**.

Windows for WorkGroups 3.11 - Locally Shared

At the Server (where the printer is directly connected to the computer)

Setup the printer, make the cable connections to your computer, and follow the procedures for installing the printer software as outlined in the Setup Card.

- 1 Launch **"Print Manager"** found in the **"Main"** program group
- 2 Click on the HP DeskJet 890C printer, choose **Printer**, and **Share this printer as...**
- 3 Follow the dialogs to complete the sharing of your printer.

At the Client (who wants to connect to the shared printer)

Follow the same steps as shown for Windows 3.1 - Network Connect.

Windows for WorkGroups 3.11 - Network Connect

Follow the same steps as shown for Windows 3.1 - Network Connect.

Windows 95 - Locally Shared

At the Server (where the printer is directly connected to the computer)

- ◆ Setup the printer, make the cable connections to your computer, and follow the procedures to install the printer software as outlined in the Setup Card.
- ◆ Share the printer. For more information on sharing the printer, refer to "Sharing your printer with other people" in Windows 95 Help.

At the Client (who wants to connect to the shared printer)

Begin installing the printer software at the clients computer with one of these methods:

- ◆ Execute **setup.exe**, either on the "Printer Software CD," "Installation Disk 1," or wherever your network administrator has installed it.
- ◆ Use the **Add Printer** wizard, select **Network Printer**, choose **Browse** to find the Shared Printer and then select **Have Disk...** to install the printer software.

- ◆ Drag a document onto a network printer icon.
- ◆ Drag a network printer icon into the **Printers Folder**.
- ◆ Double-click a network printer icon.
- ◆ Right-click a network printer icon and select **Install**.

Windows 95 - Network Connect

- ◆ Setup the printer and make the cable connections to your print server and network.
- ◆ Begin installing the printer software at the clients computer with one of the methods outlined above in Locally Shared, but browse to find the **DeskJet 890C** that is configured and connected for a HP JetDirect print server.

Windows NT 4.0

To install the printer software onto a Windows NT 4.0 system, the user **MUST** have Administrator privileges on the computer he or she is installing on.

Windows NT 4.0 - Locally Shared

At the Server (where the printer is directly connected to the computer)

- ◆ Setup the printer, make the cable connections to your computer, and follow the procedures to install the printer software as outlined in the Setup Card.
- ◆ Share the printer. For more information on sharing the printer, refer to "Sharing printers" and "To share your printer with other people" in Windows NT Help.

At the Client (who wants to connect to the shared printer)

- 1 Install the printer software at the client's computer as if for direct connect. The printer software must exist on each client's PC in order for network printing to succeed. Select the **HP DeskJet 890C** and any LPT port when installing.
- 2 Follow one of these methods to select the printer at the "server":
 - ◆ Select the **HP DeskJet 890C** in the **Printers Folder**, right click the mouse and select **Properties**. Go to the **Ports** tab, select **Add Port**, highlight **Local Port**, select **New Port** and type in the name of the server followed by the name of the printer, such as \\ComputerName\PrinterName.
 - ◆ Or, from the **Start** menu, select **Run...** type in the name of the server, and when the folder shows up on the computer, drag the printer icon into the **Printers Folder**. Unfortunately, this will create another HP DeskJet 890C printer icon in your Printers Folder but you will be set up to use the printer at the server.

Windows NT 4.0 - Network Connect

At the NT 4.0 Server (where the print jobs will be spooled)

Setup the printer and make the cable connections to your computer as outlined in the Setup Card. Follow the procedures to install the printer software for a LPTx port.

- ◆ Select the **HP DeskJet 890C** in the **Printers Folder**, right click the mouse and select **Properties**. Go to the **Ports** tab, select **Add Port**, and configure the type of Port Monitor you wish to use for this Network Printer, such as LPR Port or HP JetDirect Port.
- ◆ Be sure to set up this printer so that it is "shared".

At the Client (who wants to connect to the shared network printer)

- ◆ Follow the same steps as shown for Locally Shared at the Client.

Printing from DOS Software Programs

When printing from DOS, there are two different ways you can adjust print settings when you are preparing to print a document: The HP DeskJet Control Panel for DOS and DOS printer drivers.

HP DeskJet Control Panel for DOS

DOS users have access to many printer features through specific DOS printer drivers; however, many software manufacturers do not develop printer drivers for their software programs. The HP DeskJet 800 Series printers provide their own DOS software Control Panel for improved printer control when DOS printer drivers are not available or when certain print settings are not available through DOS software programs.

To install the HP DeskJet Control Panel for DOS

Before you install the Control Panel, make sure you have performed all setup procedures given on the setup card, and make sure that both the computer and the printer are turned on.

- 1 Insert Installation Disk 3 into your computer's floppy disk drive.
- 2 At the DOS prompt C:\>, type your computer's floppy disk drive letter, for example A:\, and then type INSTALL and press enter.
- 3 Follow the instructions on your computer screen.

NOTE *If you receive a message that the installation of the Control Panel was unsuccessful, reinstall the Control Panel. If the installation is again unsuccessful, or if the Control Panel software is damaged or missing, contact your authorized HP dealer.*

Using the HP DeskJet Control Panel for DOS

To open the Control Panel, type **DJCP** at the DOS prompt C:\>.

Use the Control Panel to select print settings that may not be available from some DOS programs. Duplicate print settings that are selected from a DOS software program may override print settings selected in the Control Panel.

NOTE *See the file README2.TXT for more information about the Control Panel. In Windows 95, the README2.TXT file is in the C:\WINDOWS\SYSTEM directory. In Windows 3.1, the README2.TXT file is in the C:\DESKJET directory.*

To clean the print cartridges

Clean the print cartridges when you notice that lines or dots are missing from your printed text and graphics.

- 1 At the DOS prompt, type **DJCP**, and then press **enter**. The Control Panel appears
- 2 Select **Clean Print Cartridge**, and then follow the instructions on your computer screen

NOTE Do not clean the print cartridge unnecessarily, as this wastes ink and shortens the print cartridge life. If you suspect that dried ink is clogging the print cartridge, refer to the Troubleshooting section of your user's guide.

To align the print cartridges

Your HP DeskJet 890C will provide the best possible print quality with the cartridges aligned. You should align the print cartridges whenever a cartridge is installed. This ensures that black and color inks will align when printed together on the same text, line, or graphic.

- 1 At the DOS prompt, type **DJCP**, and then press **enter**. The Control Panel appears
- 2 Select **Align Print Cartridge**, and then follow the instructions on your computer screen.

DOS Printer Drivers

Printer drivers are supplied by the manufacturers of DOS software programs. The following table lists some commonly used DOS software programs and their recommended printer drivers. If you do not use any of these programs, contact the manufacturer of the software program you are using to obtain a compatible printer driver.

DOS Software Program	Version	Recommended Printer Driver
WordPerfect	5.1, 5.1+, 6x	HP DeskJet 600, 660C or 850C
Harvard Graphics	3.0	HP DeskJet 540
Lotus 1-2-3	2x, 3x, 4.0	HP DeskJet 540
MS Word	5.5, 6.0	HP DeskJet 560C

Troubleshooting

No page came out of the printer

- **Be Patient** – Complex documents with many fonts, graphics, and/or color photos take longer to begin printing. If the power light is blinking, 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 power light on the front panel of the printer should be lit.
- **Check the paper** – Make sure paper is loaded correctly in the bottom (IN) tray and that the paper is not jammed in the printer. See page 18 to clear paper jam.
- **Check the print cartridges** – Make sure that both the black and color print cartridges are properly installed and that the top cover of the printer is closed.
- **Try printing a “sample page”** – Turn the printer off, then back on. Press and release the “resume” button. If the sample page prints, the problem is not with the printer itself.
- **Check the interface cable** – Make sure that a high quality bi-directional interface cable is connected properly to both the printer and the computer. (IEEE-1284 Compliant Parallel Interface Cable is recommended.)
- **Check the printer setup** – Make sure your HP DeskJet printer is selected as the current or default printer. (See “Selecting Your Printer”, pg. 8.)

A blank page came out of the printer

- **Check the print cartridges for tape** – New print cartridges are packaged with a protective plastic tape covering the ink nozzles. Make sure this tape is removed from both print cartridges.
- **Check for an empty print cartridge** – If you are printing black text and a blank page came out, your black print cartridge may be empty. Replace the black print cartridge.
- **Check the printer setup** – Make sure your HP DeskJet printer is selected as the current or default printer. (See “Selecting Your Printer”, pg. 8.)

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 (portrait vs. landscape) selected in the software program match the settings in the HP print settings dialog box. (See “Change Print Settings” on the “How Do I?” tab in the HP DeskJet 890C Toolbox.)
- **The black and color print cartridges may need to be aligned** – Print cartridges need to be aligned whenever one has been removed or replaced, or if the black ink and color ink do not seem to line up properly with each other on the page. (See the “Printer Services” tab in the HP DeskJet 890C Toolbox for instructions.)
- **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 is no more than a 5/8” (16mm) stack of paper in the IN tray
- **The margin settings may be wrong** – If 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 HP DeskJet printer. (See “Minimum Margins” in the “Specifications” section of this user’s guide.)

Print quality is poor

- **The print quality setting may need to be changed** – While the EconoFast setting prints faster and uses less ink, it may cause text to appear faded or colors to be dull. Select Normal or Best Print Quality in the HP print settings dialog box. (See “Change Print Settings” on the “How Do I?” tab in the HP DeskJet 890C Toolbox.)
- **A print cartridge may be low on ink or clogged** – If print quality deteriorates, click on the Printer Services tab in the HP DeskJet 890C Toolbox, and select Clean Print Cartridges. Follow the instructions on the screen. If print quality doesn’t improve, a cartridge may be low on ink, and will need to be replaced.
- **The paper type setting may be incorrect** – When printing on transparencies or other special paper types, select the corresponding paper type in the HP print settings dialog box. (See “Print on a variety of paper types...” on the “How Do I” tab in the HP DeskJet 890C Toolbox.)
- **The paper may not be suitable for use with your HP DeskJet printer** – Paper that is too thin or has a slick surface may not feed properly. Paper that is heavily textured does not accept ink well. Use HP Premium Papers or test other paper types before purchasing large quantities. (See “Recommended Media Weight and Sizes” in the “Printer Specifications” section of this user’s guide.)

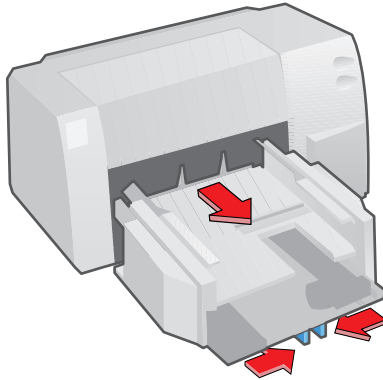
Something on the page is missing or incorrect




- **The margin settings may be wrong** – If 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 HP DeskJet printer. (See “Minimum Margins” in the “Printer Specifications” section of this user’s guide.)
- **Cable connection may be poor or cable may be bad** – If meaningless characters are printing, make sure you are using a bi-directional cable and that the cable is firmly connected to both your printer and computer. To test the cable, click the **Printer Services tab** in the HP DeskJet 890C Toolbox, and select “Test printer communication.”
- **ColorSmart print settings may be wrong** – If colors are printing in shades of gray, “**Print in Grayscale**” is probably selected in the HP print settings dialog box. Also, the “**Automatic**” ColorSmart selection will give the best color representation.
- **The wrong printer may be selected** – Make sure your HP DeskJet printer is selected as the current or default printer. (See “Selecting Your Printer”, pg. 8.)

Paper is Jammed in the printer


■ Clear the paper jam – Perform the following steps to clear a paper jam:


- 1 Remove all paper from the IN tray.
- 2 Remove the IN/OUT tray using the tray removal latch found underneath the IN/OUT tray.



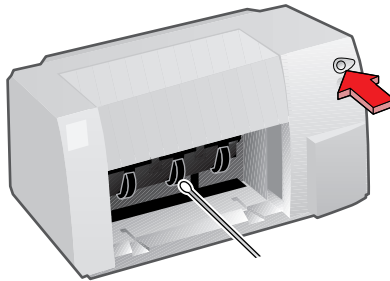
- 3 Open the top cover.
- 4 Press and hold down the resume  button to feed the paper out.
- 5 If necessary, release the resume  button and press it again to feed the paper in the opposite direction.
- 6 After removing all jammed paper, turn off the printer and replace the IN/OUT tray.
- 7 Close the top cover.
- 8 Place paper in the IN tray and press the power  button to turn on the printer.

The printer is not picking up paper

- **Clean the paper pick rollers** – Paper dust, ink, or other substances occasionally build up on the paper pick rollers. When this happens, the printer tries to pick up a piece of paper but stops in the middle of the print job, and the Resume  light begins flashing. If this begins to happen frequently, clean the rollers by following these steps:

- 1 Open the printer's top cover and remove all paper from the IN tray.
- 2 Remove the IN tray by squeezing the release levers on the underside of the IN tray.
- 3 Hold a slightly dampened foam rubber swab lightly against each paper pick roller while you press and hold down the Resume  button. Release the Resume button and repeat this step.

NOTE *Each time you press and release the Resume button, the rollers reverse the direction they turn.*



- 4 Re-insert the IN tray and reload the stack of paper.
- 5 Close the printer's top cover.

Customer Support

If you encounter a printing problem that you cannot solve using the information in this guide, or by using the HP DeskJet 890C Toolbox, you can obtain assistance from one or more of the following HP support services.

HP FIRST Fax

Use your fax machine to get help 24 hours a day, seven days a week. Call (800) 333-1917 to access HP FIRST Fax, which gives you troubleshooting tips and detailed support information on using your printer with the most common software programs. You may access this service from any touch tone phone and request up to three documents per call. These documents will be faxed to you within minutes.

Support Center Help

The HP Support Center staff will answer questions about setting up and using your printer with the most widely available software programs. Agents are also available to assist with hardware repair information. Hours of operation in the U.S. are Monday–Friday, 6 am to 10 pm (MST), and Saturday, 9 am to 4 pm (MST).

During the Printer Warranty

This service is free during the first 90 days of your printer warranty, however, your long distance phone charges still apply. Please be at your computer when you call.

For the support center in the U.S., call (208) 323-2551. In Canada, call (905) 206-4383 or (800) 268-1221.

If your printer needs repair during the warranty period, Hewlett-Packard offers a free Express Exchange program for customers in the U.S. and Canada. A refurbished (like new) printer can be delivered on the next business day, while the damaged printer is returned using a pre-paid shipping label. The HP customer Support Center agent can make the necessary arrangements.

HP also offers a variety of service contract options to complement the standard warranty. Call (800) 633-3600 (U.S.A.) or (800) 268-1221 (Canada).

After the Warranty Period

For quick questions in the United States only, call (900) 555-1500 (\$2.50 per minute). Charges begin only when you are connected with a technician.

For calls from Canada, or for calls in the U.S. that you anticipate will be longer than ten minutes in length, call (800) 999-1148. The fee is \$25 per call, charged to your Visa or Master Card. (Prices subject to change without notice).

Extended Coverage Options

If you would like to extend your printer coverage beyond the one year factory warranty, you have the following options:

- Consult your reseller to obtain extended coverage.
- If your reseller does not offer service contracts, please call Hewlett-Packard directly and ask about our service agreement offerings. In the U.S. call 1-800-446-0522; in Canada call 1-800-268-1221. For service agreements outside the U.S. and Canada, contact your local HP Sales Office.

Updating Printer Software by Mail

HP's Distribution Center provides Windows printer drivers and printer driver updates for the cost of the disks plus shipping. Order by calling (970) 339-7009, Monday through Saturday, 24 hours per day.

Electronic Information Services

Internet

Access HP's World-Wide Web site at <http://www.hp.com> for the latest support information, including updated world-wide support phone numbers and driver update information.

HP Download Service

For convenient access to HP printer drivers, product information, and troubleshooting hints, call (208) 344-1691. Set your communications software to N, 8, 1. Help is available 24 hours per day, 7 days a week.

CompuServe

CompuServe is an electronic information and communication service run by an independent company. The "GO" word to place you in the HP Forum is HP. From the HP Forum, you can choose a specific forum to leave messages, ask (or answer) questions about HP products, or download drivers, software application notes, or utilities for HP products.

America Online

America Online is another electronic information and communication service run by an independent company. To access the HP Forum, select Keyword from the Go To menu, type HP and press enter. This will load the HP "Home Page" directly to your computer screen. From the HP Forum, you can ask or answer questions about HP products, or you can download drivers, software application notes, or utilities for HP products.

For Customers in Latin America

For technical questions about setting up or using your printer, call one of the following numbers. This service is free during the warranty of your printer; however, your long distance phone charges still apply.

Argentina	541781-4061/69
Brazil	55 11 709-1444
Mexico D.F.	326 46 00
Mexico, Guadalajara	669 95 00
Mexico, Monterey	378 42 40
Venezuela	58 2 239 5664

For Customers Elsewhere in the World

If you encounter a printing problem that you cannot solve using the information in this guide, or by using the HP DeskJet 890C Toolbox, please consult the HP Customer Support Guide that was included in the box with your printer. This guide provides complete service, support, and repair information that will enable you to obtain the assistance you need via telephone, fax, or the internet. In countries that do not have a HP Support Center, contact your local dealer or nearest HP Sales and Support Office for instructions on returning your printer for service and repair.

Ordering Parts and Accessories

Replaceable Parts	HP Reorder Number
Power Cords	
U.S.A., Canada, Mexico, Taiwan, Arabic Countries	8120-6836
Europe (except U.K.), Jordan, Lebanon, N. Africa, Russia	8120-6174
U.K.	8120-6173
South Africa, India	8120-6180
Australia, New Zealand, mainland China	8120-6175
Switzerland	8120-6179
Denmark	8120-6178
Korea	8120-6785
HP DeskJet 890C Printer User's Guide Kits	
US English User's Guide Kit	C5876-60042
European English User's Guide Kit	C5876-60029
Asian English User's Guide Kit	C5876-60087
Arabic User's Guide Kit	C5876-60019
Simplified Chinese User's Guide Kit	C5876-60041
Traditional Chinese User's Guide Kit	C5876-60038
Czech User's Guide Kit	C5876-60020
Danish User's Guide Kit	C5876-60021
Dutch User's Guide Kit	C5876-60022
Finnish User's Guide Kit	C5876-60023
French User's Guide Kit	C5876-60024
German User's Guide Kit	C5876-60025
Greek User's Guide Kit	C5876-60026
Hebrew User's Guide Kit	C5876-60027
Hungarian User's Guide Kit	C5876-60028
Italian User's Guide Kit	C5876-60030
Korean User's Guide Kit	C5876-60040
Norwegian User's Guide Kit	C5876-60031
Polish User's Guide Kit	C5876-60032
Portuguese User's Guide Kit	C5876-60033
Russian User's Guide Kit	C5876-60034
Spanish User's Guide Kit	C5876-60035
Swedish User's Guide Kit	C5876-60036
Thai User's Guide Kit	C5876-60037
Turkish User's Guide Kit	C5876-60039
In/Out Tray Assembly	C4602-67902
Service Station Assembly	C4602-67901
Base Foot Assembly (4 ea.)	C2162-60098

Accessories

HP Reorder Number

Windows/DOS I/O Interface Cables

HP IEEE-1284 Compliant Parallel Interface Cable (with one 1284-A connector for the computer port and one 1284-B connector for the printer port)

2-meter length

C2950A

3-meter length

C2951A

Print Cartridges

Black Inkjet Print Cartridge

51645A

Color Inkjet Print Cartridge

C1823A

Media

HP Premium InkJet Paper (U.S. Letter, 200 sheets)

51634Y

HP Premium InkJet Paper (European A4, 200 sheets)

51634Z

HP Premium Heavyweight InkJet Paper (U.S. Letter, 100 sheets)

C1852A

HP Premium Heavyweight InkJet Paper (European A4, 100 sheets)

C1853A

HP Premium Photo Paper (U.S. Letter, 20 sheets)

C6039A

HP Premium Photo Paper (European A4, 20 sheets)

C6040A

HP Premium Photo Paper (Asian A4, 20 sheets)

C6043A

HP Deluxe Photo Paper (U.S. Letter, 20 sheets)

C6055A

HP Deluxe Photo Paper (European A4, 20 sheets)

C6057A

HP Deluxe Photo Paper (Asian A4, 20 sheets)

C6056A

HP Premium Transparency Film (U.S. letter, 50 sheets)

C3834A

HP Premium Transparency Film (U.S. letter, 20 sheets)

C3828A

HP Premium Transparency Film (European A4, 50 sheets)

C3835A

HP Premium Transparency Film (European A4, 20 sheets)

C3832A

Ordering Information

To order printer parts or accessories, call your nearest HP dealer. If your dealer does not have the parts or accessories you need, call HP DIRECT for fast shipping service.

Within the U.S.: 1 (800) 538-8787

To order **replaceable parts** within the U.S.:

1 (800) 227-8164. For information on **HP Service**

Agreements within the U.S.: (800) 835-4747

(Monday–Friday, 7:30 am to 12 noon PST

and 1:00 pm to 4:00 pm PST)

Canada: (800) 387-3154, (905) 206-4725,

Fax: (905) 206-3485/-3739,

Hewlett-Packard (Canada) Ltd., 5150 Spectrum Way, Mississauga, Ontario L4W 5G1

Toronto: (416) 671-8383

Europe/Africa/Middle East: (31) 20/547 999

Hewlett-Packard S.A., Central Mailing Department, P.O. Box 529, 1180 AA Amstelveen, The Netherlands

Australia/ New Zealand: (03) 895-2895

China Resources Bldg., 26 Harbour Road, Wanchai, Hong Kong

Latin America Headquarters: (305) 267-4220,

Fax: (305) 267-4247, 5200 Blue Lagoon Drive, Suite 950, Miami, FL 33126

Argentina: (54 1) 787-7100, Fax: (54 1) 787-7213,

Hewlett-Packard Argentina, Montañeses 2150, 1428 Buenos Aires, Argentina

Brazil: (55 11) 7296-4991, Fax: (55 11) 7296-4967, Edisa-HP SA, R. Aruana 125, Tambore, Barueri São Paulo, Brazil

Chile: (56 2) 203-3233, Fax: (56 2) 203-3234, Hewlett-Packard de Chile SA, Av. Andres Bello 2777, Oficina 1302, Las Condes, Santiago, Chile

Mexico: (52 5) 258-4600, Fax: (52 5) 258-4362, Hewlett-Packard de México, S.A. de C.V. Prol. Reforma #700, Colonia Lomas de Santa Fe, 01210 México, D.F.

Venezuela: (58 2) 239-4244/239-4133, Fax: (58 2) 207-8014, Hewlett-Packard de Venezuela, C.A., Tercera Transversal de Los Ruices Norte, Edificio Segre, Caracas 1071, Venezuela Apartado Postal 50933, Caracas 1050

Elsewhere in the World

Hewlett-Packard Company, Intercontinental Headquarters, 3495 Deer Creek Road, Palo Alto, CA 94304, U.S.A.

Specifications

Minimum Margins

Paper

Size	Right/Left	Top	Bottom
U.S. Letter 8.5 x 11 in. (216 x 279 mm)	0.25 in. (6.4 mm)	0.04 in. (1.0 mm)	0.46 in. (11.7 mm)
U.S. Legal 8.5 x 14 in. (216 x 356 mm)	0.25 in. (6.4 mm)	0.04 in. (1.0 mm)	0.46 in. (11.7 mm)
Executive 7.25 x 10.5 in. (184 x 267 mm)	0.25 in. (6.4 mm)	0.04 in. (1.0 mm)	0.46 in. (11.7 mm)
A4 size 8.27 x 11.7 in. (210 x 297 mm)	0.13 in. (3.4 mm)	0.04 in. (1.0 mm)	0.46 in. (11.7 mm)
A5 size 5.8 x 8.3 in. (148 x 210 mm)	0.13 in. (3.4 mm)	0.04 in. (1.0 mm)	0.46 in. (11.7 mm)

Cards

Size	Right/Left	Top	Bottom
U.S. Card 4 x 6 in. (102 x 152 mm)	0.125 in. (3.2 mm)	0.04 in. (1.0 mm)	0.46 in. (11.7 mm)
U.S. Card 5 x 8 in. (127 x 203 mm)	0.125 in. (3.2 mm)	0.04 in. (1.0 mm)	0.46 in. (11.7 mm)
A6 Card 4.13 x 5.83 in. (105 x 148 mm)	0.125 in. (3.2 mm)	0.04 in. (1.0 mm)	0.46 in. (11.7 mm)

Envelopes

Size	Right	Left	Top/Bottom
#10 4.125 x 9.5 in. (104.8 x 241.3 mm)	0.04 in. (1.0 mm)	0.87 in. (22.0 mm)	0.125 in. (3.2 mm)
DL 4.33 x 8.66 in. (110 x 220 mm)	0.04 in. (1.0 mm)	0.87 in. (22.0 mm)	0.125 in. (3.2 mm)
C6 4.49 x 6.38 in. (114 x 162 mm)	0.04 in. (1.0 mm)	0.87 in. (22.0 mm)	0.125 in. (3.2 mm)

Custom

Size	Right/left	Top	Bottom
Custom ranging from 3.94 in. (w) to 14 in (h) (from 100 to 356 mm)	0.13 in. (3.4 mm)	0.04 in. (1.0 mm)	0.46 in. (11.7 mm)

Printer Specifications

Print Method

Plain paper drop-on-demand thermal inkjet printing

Black Text Print Speed*

Best: 4 pages per minute

Normal: 7 pages per minute

EconoFast: 9 pages per minute

Color Print Speed*

Best: 1 page per minute

Normal: 1.5 pages per minute

Econofast: 5 pages per minute

Black Print Quality

Up to 600 dpi**

Color Print Quality

Up to Photo REt II

DOS (graphics)

Full-page 75, 150, 300 dpi

Printer Command Language

HP PCL Level 3

Character Sets

PC-8, PC-8 Danish/Norwegian, PC Turkish, PC-850, PC-852, Roman-8, ECMA-94 Latin 1 (ISO 8859/1), ECMA-94 Latin 2 (ISO 8859/2), ECMA - 128 Latin 5 (ISO 8859/5), United Kingdom (ISO 4), ANSI ASCII (ISO 6), Swedish (ISO 11), Italian (ISO 15), Spanish (ISO 17), German (ISO 21), Danish/Norwegian (ISO 60), French (ISO 69), Legal, Wingdings, Symbol.

Windows 3.1: Latin 1, Latin 2, Latin 5.

Cyrillic/Arabic optional ROM: C4602A-002

Hebrew/Greek optional ROM: C4602A-003

Software Compatibility

Windows 3.1, Windows '95, Windows NT 4.0 (Windows NT 3.51 supported with Microsoft driver).

DOS 3.3 and above.

Built-in (internal) Scalable Fonts

Arial, Courier, Letter Gothic, CG Times, Univers, Symbol, Times New Roman, Wingdings

Scalable TrueType Fonts for Microsoft Windows (Available through FontSmart on Printer Software CD)

Albertus, Albertus Extra Bold, Antique Olive, Antique Olive Compact, Arial, Arial Narrow, Arial Black, PL Benguiat Frisky, Bertram, Bodoni, Bodoni Black, Book Antiqua, ITC Bookman Old Style, Century Gothic, Century Schoolbook, Challenge Extrabold, Clarendon, Clarendon Condensed Bold, Clarendon Extra Bold, Coronet, Corsiva, Courier, Garamond, Gill Sans, Gill Sans Light, Gill Sans Condensed, Gill Sans Extra Bold, Gloworm, CG Goudy Oldstyle, CG Goudy Oldstyle Extra Bold, Graphite Light, Graphos, Letter Gothic, Lucida Casual, Lucida Casual Italic, Marigold, Metrostyle, Metrostyle Extended, Milestones, Nadianne Bold, Old English, CG Omega, Ozzie Black, Party, CG Poster Bodoni, Pompeii Capitals, Signet Roundhand, Sorts, Strider, Symbol, Theatre Antione, CG Times, Times New Roman, Univers, Univers Condensed, Univers Light Condensed, Univers Extended, Wingdings

Recommended Media Weight

Paper: 60 to 135 g/m² (16 to 36 lb)

Envelopes: 75 to 90 g/m² (20 to 24 lb)

Cards: 110 to 200 g/m² (110 lb index max.; 8.5 pt max. thickness)

* Approximate figures. Exact speed will vary depending on the system configuration, software program, and document complexity.

** Measured in addressable raster points per inch.

Media Size

U.S. letter 216 x 279 mm (8.5 x 11 in.)
U.S. legal 216 x 356 mm (8.5 x 14 in.)
U.S. transparency 216 x 279 mm (8.5 x 11 in.)
U.S. glossy 216 x 279 mm (8.5 x 11 in.)
U.S. Special 216 x 279 mm (8.5 x 11 in.)
U.S. Executive 184 x 267 mm (7.25 x 10.5 in.)
U.S. No. 10 Envelope 105 x 241 mm (4.12 x 9.5 in.)
Index card 102 x 152 mm (4 x 6 in.)
Index card 127 x 203 mm (5 x 8 in.)
European A4 210 x 297 mm
European A4 transparency 210 x 297 mm
European A4 glossy 210 x 297 mm
European A4 Special 210 x 297 mm
European A5 148 x 210 mm
European DL envelope 220 x 110 mm
European C6 envelope 114 x 162 mm
European A6 card 105 x 148.5 mm
Custom size: Width 100 to 216 mm (3.94 to 8.5 in.);
Length 148 to 356 mm (5.79 to 14 in.)
Avery Inkjet Labels

Media Handling (Built-In Feeders)

Sheets: up to 150 sheets
Single sheet: only one sheet
Multiple envelopes: up to 15 envelopes
Cards: up to 30 cards
OUT tray capacity: up to 50 sheets
Labels: up to 25 sheets

Buttons/Lights

Resume and Power

DOS/Windows I/O Interface

Centronics parallel, IEEE 1284 compliant with 1284-B
receptacle
(ECP, Compatibility Mode, Nibble Mode)

Printer Memory

0.5MB of built-in RAM
32 Kbyte receive buffer

Dimensions

444 mm (17.5 in.) W
226 mm (8.9 in.) H
396 mm (15.6 in.) D

Weight

6.5 kg (14.3 lbs).

Power Requirements

Input Voltage: 100 to 240 VAC±10%
50/60 Hz ±3 Hz

Power consumption

1 watt maximum when off
5.25 watts maximum non-printing
48 watts maximum printing

Reliability

20,000 hours MTBF
2000 hours power-on and 12,000 printed pages per year

Duty Cycle

3000 total black pages per month max.
500 total color pages per month

Operating Environment

Operating temperature range:

5° to 40°C (41°F to 104°F)

Humidity: 15 to 80% RH non-condensing

Recommended operating conditions for best print
quality: 15° to 35°C (59°F to 95°F), 20 to 80% RH non-
condensing

Storage temperature: -40° to 60°C (-40°F to 140°F)

Noise Levels per ISO 9296:

	Best Mode	Normal Mode
Sound Power, L_{wAd} :	6.0 B(A) max.	6.3 B(A)
Sound Pressure, L_{pAm} :	47 dB(A)	50 dB(A)
Bystander position		

Additional Symbol Sets and Fonts

For some languages additional symbol sets and fonts are included with the HP DeskJet 890C printer on a separate disk. This “Regional Font Support” disk contains custom files for use with the HP DeskJet Control panel for DOS, allowing access to special character sets.

Supported Languages

You only need to install the one file that supports your particular language. If you are uncertain which language is included in your printer, check the serial number label on the back of the printer for one of the following codes:

- ARB = Arabic
- CYR = Cyrillic
- GRK = Greek
- HBR = Hebrew
- THA = Thai

Installing a Special Symbol or Font

To install the appropriate character set file on your computer:

- 1 First install the printer software as described in the setup card.
- 2 Put the Regional Font Support disk into your computer’s floppy disk drive.
- 3 From the DOS prompt on your hard disk drive (usually the C:\ drive), type the drive designator for your floppy drive, followed by “DIR”, then press the Enter key to display the subdirectories on the Regional Font Support disk. For example, type:

```
C:\> A:\DIR
```

and then press the Enter key.

- 4 Copy the appropriate SYMSETS.DAT file from the subdirectory for the language of your printer to your \DESKJET directory. For example, to copy the file for the Cyrillic language, type:

```
C:\>copy A:\CYRILLIC\SYMSETS.DAT C:\DESKJET
```

and then press the Enter key.

- 5 Remove the Regional Font Disk from the floppy drive when the copying process is completed.

Regulatory Notice

FCC Statement (USA)

The United States Federal Communications Commission (in 47 CFR 15.105) has specified that the following notice be brought to the attention of users of this product:

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 harmful 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 harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try and correct the interferences by one or more of the following measures:

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

Use of a shielded cable is required to comply with Class B limits of Part 15 of FCC Rules.

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

LED Indicator Statement

The display LEDs meet the requirements of EN 60825-1.

사용자 안내문

기종별	사용자 안내문
A급 기기	이 기기는 업무용으로 전자파 강해검정을 받은 기기이오니 판매자 또는 사용자는 이 점을 주의하시기 바라며, 만약 잘못 구입하셨을 때에는 구입한 곳에서 비업무용으로 교환하시기 바랍니다.
B급 기기	이 기기는 비업무용으로 전자파강해검정을 받은 기기로서 주거지역에서는 물론 모든 지역에서 사용할 수 있습니다.

비고 A급: 업무용 기기를 말한다.
B급: 업무용 기기 외의 기기를 말한다.

Declaration of Conformity

according to ISO/IEC Guide 22 and EN 45014

Manufacturer's Name:

Hewlett-Packard Company

Manufacturer's Address:

Hewlett-Packard Co.
Vancouver Printer Division
18110 S.E. 34th Street
Vancouver, WA 98683

Hewlett-Packard Singapore (PTE) Ltd.
Asia Hardcopy Manufacturing Operation
20 Gul Way
Singapore 629196

Hewlett-Packard Espanola, S.A.
Barcelona Division
Avenida Graells, 501
08190 Sant Cugat del Valles
Barcelona, Spain

declares, that the product(s):**Product Name:**

DeskJet Printers

Model Number(s):

C4602A, C4603A, C5876A, C5877A

Product Options:

All

conforms to the following Product Specifications:

Safety: IEC 950 : 1991 Second Edition +A1 +A2 +A3/EN 60950 : 1992 +A1 +A2 +A3
IEC 825-1 : 1993/EN 60825-1 : 1994 Class 1 for LEDs

EMC: EN55022 : 1994 Class B/CISPR 22 : 1993 Class B
EN 50082-1 : 1992
IEC 801-2 : 1991 Second Edition/prEN 55024-2 : 1992 : 4 kV CD, 8 kV AD
IEC 801-3 : 1984/prEN 55024-3 : 1991 - 3 V/m
IEC 801-4 : 1988/prEN 55024-4 : 1993 : 0.5 kV Signal Lines, 1 kV Power Lines
IEC 1000-3-2 : 1995/EN 61000-3-2 : 1995*
IEC 1000-3-3 : 1994/EN 61000-3-3 : 1995

Supplementary Information:

The products herewith comply with the requirements of the Low Voltage Directive 73/23/EEC and the EMC Directive 89/336/EEC and carry the CE marking accordingly. The products were tested in a typical configuration.

*Products have less than 75 Watts active input power.

Vancouver, WA., April 9, 1997

Janet Hoppe
Customer Assurance Manager

European Contact: Your local Hewlett-Packard Sales and Service Office or Hewlett-Packard GmbH, Department ZQ/ Standards Europe, Herrenberger Straße 130, D-7030 Böblingen FAX: +49-7031-143143