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DesignJet ColorPro Series

Printers

User's Guide

HP DesignJet ColorPro CAD (C7777A)

HP DesignJet ColorPro GA (C7778A)

HP DesignJet ColorPro Series: User's Guide (version 1)

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Hewlett-Packard Company Barcelona Division Avda. Graells, 501 08190 Sant Cugat del Vallès Barcelona Spain



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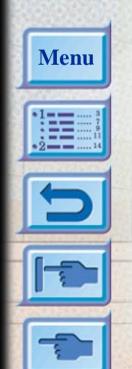
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Communication from HP to users includes:

- a quarterly newsletter focussing on usage tips, technical briefings and examples of HP DesignJet applications around the world;
- full information on worldwide HP Customer Care contacts:
- an online HP DesignJet Diagnosis troubleshooting tool;
- a calendar of HP DesignJet-related events and programs;
- online access to training videos and selected user documents;
- immediate information on new products.

Communication from users to HP includes:

- feedback on HP DesignJet features;
- automatic contact with HP Customer Care from the troubleshooting tool, for HP to follow up;
- the chance to ask industry experts technical questions on wide-format printing.

And finally, communication from user to user includes the chance to win prizes by submitting HP DesignJet success stories, as well as a user-to-user discussion forum where users can share best practices and ask for advice from their fellow professionals.

HP DesignJet Online is available in English, German, French, Italian, Spanish and Portuguese.





About HP Customer Care

As your strategic support partner, we make it our business to help keep your business running smoothly. HP Customer Care offers award-winning support to ensure you get the most from your HP DesignJet.

HP Customer Care provides comprehensive, proven support expertise and leverages new technologies to give customers unique end-to-end support. Services include setup and installation, troubleshooting tools, warranty upgrades, repair and exchange services, phone and Web support, software updates, and self-maintenance services. To find out more about HP Customer Care, please visit us at: www.hp.com/go/support.

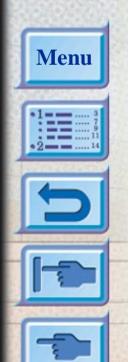
What to Do Before You Call

- 1. Review the troubleshooting suggestions in this document:
 - In the relevant driver documentation supplied with this printer (for users sending PostScript files or those using Microsoft Windows).
 - If you have installed third-party software drivers and RIPs refer to that user documentation.
 - If the problem appears to be related to your software application, first contact your software vendor.
- 2. If you still have difficulty, refer to the HP Support Services booklet shipped with this printer. This document contains a comprehensive list of various support services available to help solve printer problems.





- 3. If you do call one of the Hewlett-Packard offices, please have the following information available to help us answer your questions more quickly:
 - The printer you are using (the product number and the serial number, found on the label at the back of the printer).
 - The computer you are using.
 - Any special equipment or software you are using (for example, spoolers, networks, switch-boxes, modems, or special software drivers).
 - The cable you are using (by part number) and where you purchased it.
 - The type of interface used on your printer (parallel, or network).
 - The software name and version you are currently using.
 - The information (base firmware version, and so on) displayed in the Information Menu (see page 53).
 - If possible print out the Diagnostic Test (see page 63) and FAX it to the support center helping you.





Printer Basics

Congratulations on your purchase of an HP DesignJet ColorPro series printer. If you have not yet seen the *Setup Poster* and the *Getting Started Guide* provided with the printer, you should do so now for setup instructions.

Now that the printer is set up and ready to use, take a few moments to get to know the printer. This section introduces the following:

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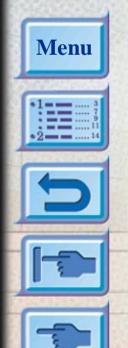
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System Requirements

HP DesignJet ColorPro GA Please ensure that you have the following computer setup:

Minimum: Macintosh System 7.6.1 or later: Power PC – 48Mb RAM

Windows 95/98: Pentium, 48Mb RAM Windows NT 4.0: Pentium, 64Mb RAM

150Mb free hard disk space for 11"x17" (279mm x 432mm)

or A3 size printing.

CD-ROM drive.

Recommended: Macintosh System 8 or later: Power PC – 64Mb RAM

Windows 95/98, Pentium 150/166, 64 Mb RAM Windows NT 4.0, Pentium 150/166, 64 Mb RAM

Graphics intensive files may require more disk space.

Minimum: Windows 3.1x: Pentium 100, 8Mb RAM

Windows 95/98 and NT 4.0: Pentium 100, 16Mb RAM

100Mb free hard disk space for 11"x17" (279mm x 432mm)

or A3 size printing.

Recommended: Windows 3.1x: Pentium 200, 16Mb RAM

Windows 95/98: Pentium 200, 32Mb RAM Windows NT 4.0: Pentium 200, 64Mb RAM

300Mb free hard disk space for 11"x17" (279mm x 432mm)

or A3 size printing.

Graphics intensive files may require more disk space.

Windows NT users—ensure that your system has a suitably defined amount of virtual memory (set using **Settings > Control Panel > System > Performance**).















Seamless Workgroup Integration with Robust Network Features

- The HP DesignJet ColorPro series printer supports all major networking operating systems and protocol.
- Easy printer setup and configuration with HP JetAdmin and WebJetAdmin.
- User friendly liquid-crystal display (LCD) and Key Panel for easy printer configuration and reduced MIS intervention.

Significant Cost Savings and Speed Gains with HP's New Modular Ink Delivery System (MIDS)

- New half-inch printheads prints larger swathes to achieve significant speed gains of up to 9 ppm black, 7 ppm color.
- HP's new Modular Ink Delivery System communicates with a smart chip built into each printhead and ink cartridge to monitor ink levels and printhead life.
- Printing in color becomes more affordable with lower costs per page.

Exceeds your Workgroup's Color Expectations with HP PhotoREt II (up to 13"x19" [330mm x 483mm])

- PhotoREt II uses the smallest ink drop size to create more shades of color, smoother transitions between tones, and crisper-looking output on any paper.
- Prints up to 13"x19" [330mm x 483mm] / A3 oversize when you need it.





ImationTM MatchprintTM Inkjet System Compatibility

If you require high-quality CMYK images created with leading-edge color matching technology from your HP DesignJet ColorPro GA printer, you should install the Imation Matchprint Inkjet System. This system, produced in conjunction with Imation Corp., a world-leading provider of color proofing systems, consists of:

- ImationTM MatchprintTM Color RIP Software, with its advanced productivity and functional features
- ImationTM MatchprintTM Inkjet Bases, formulated to deliver consistent, reliable color reproduction.

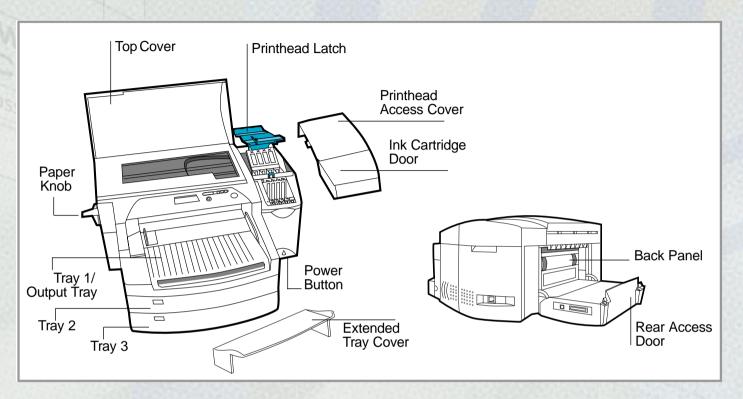
So the combination of your HP DesignJet ColorPro GA printer, ImationTM MatchprintTM Color RIP software, and ImationTM MatchprintTM Inkjet Bases enables you to create high-quality inkjet color proofs.

For further information about the ImationTM MatchprintTM Inkjet System, visit Imation's web site: www.imation.com.





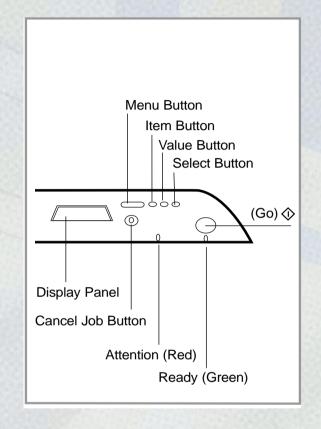
Printer Parts and Locations

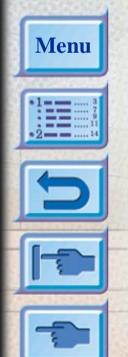






Control Panel Layout







Control Panel Keys

[Menu]	Cycles through the control panel menus. To print a menu map from the control panel:	
	1. Press [Menu] until SELF TEST MENU appears.	
	2. Press [Item] until PRINT MENU MAP appears.	
	3. Press [Select] to print the menu map.	
	For information on each menu item, see "Control Panel Menus" on page 50.	
[Item]	Cycles through the items of the selected menu.	
[Value]	Cycles through the values of the selected menu item.	
	Allows you to navigate between the different trays.	
[Select]	• Saves the selected value for that item. An asterisk (*) appears next to the	
	selection, indicating that it is the new default. Default settings remain when the printer is switched off or reset unless you reset all factory defaults from the [RESETS] menu. • Prints the selected printer information page from the control panel.	
[Cancel Job]	Cancels the print job that the printer is processing. The time it takes to cancel depends	
[Cureer 300]	on the size of the print job. (Press it only once.)	
(Go)	 Places the printer either on-line or off-line. Allows the printer to resume printing after being off-line. Clears most printer messages and places the printer on-line. 	
	• Allows the printer to continue printing with a warning message such as TRAY x LOAD [TYPE] [SIZE] or UNEXPECTED PAPER SIZE.	
	Exits the control panel menus.	
	(To save a selected control panel setting, first press the [Select] button.)Displays unrecoverable error codes.	



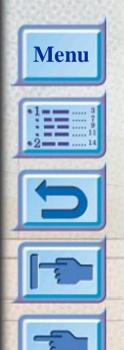
Menu



Control Panel Lights

There are two lights on the printer:

Indicator	Color	Function
Attention	Red	Blinks when the printer is in an error state, OR requires attention.
		For more information, see the section on "Troubleshooting" on page 37.
Ready	Green	Is lit up when the printer is printing, OR is in normal state, OR when it is online.





Basic Printing Tasks

This section presents information on basic printing tasks, such as:

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Loading Paper in Tray 1 17

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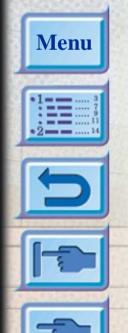
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Loading the Trays

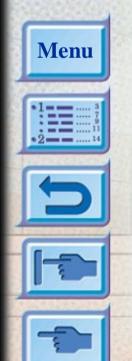
The HP DesignJet ColorPro series printer has three paper trays and one Rear Manual Feed for superior paper handling capabilities.

Tray 1 – This tray acts as a bypass tray. It holds up to 10 sheets of paper. This tray should be used for media types and sizes that are seldom used.

Tray 2 – This tray holds up to 150 sheets of paper. It is recommended that you use this tray to hold paper that is commonly used.

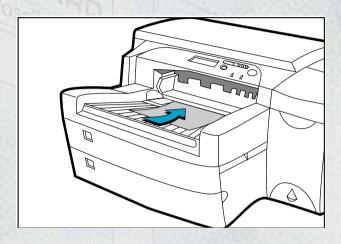
Tray 3 – This tray holds up to 250 sheets of paper. It is recommended that you use this tray to hold paper that is commonly used.

Rear Manual Feed – The Rear Manual Feed is designed to provide a straight paper path for printing on thicker media (up to 0.3mm) such as cardstock or labels without bending. This paper path allows you to print only one sheet at a time.





Loading Paper in Tray 1





Click to see a video clip of the following procedure.

- Set your driver to pick paper from Tray 1 and print your document.
 For more information on how to set your print settings, please refer to the section on "Changing Print Settings" on page 33.
- 2. After sending your print job to the printer, the display panel will show the message "TRAY 1 LOAD [TYPE] [SIZE]" where [TYPE] and [SIZE] are the media type and size respectively, as specified in your printer driver.
- 3. Slide the paper width guide to its outermost position before releasing it.
- 4. Insert up to 10 sheets of paper along the right side of Tray 1, print side down, until they encounter resistance.
- 5. Slide the paper width guide in until it stops at the edge of the paper.
- 6. Press the button to print.





Loading Commonly-Used Media in Tray 2

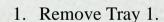
Note: Tray 2 is designed to hold up to 150 sheets of paper and can accommodate paper sizes such as Letter, A4, Legal, B4, A3, 11"x17" [279mm x 432mm], 13"x19" [330mm x 483mm].



Click to see a video clip of loading Letter, A4 or Legal paper.

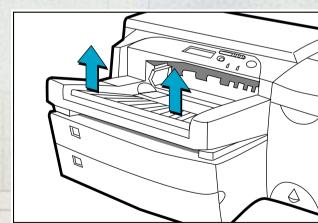


Click to see a video clip of loading B4, A3, 11"x17" [279mm x 432mm], 13"x19" [330mm x 483mm] paper.



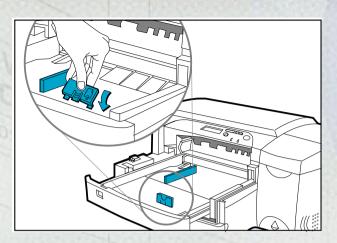
2. If you wish to change the paper size setting that has been set in the tray, go to step 3. If you wish to load paper using the existing tray setting, go to step 5.



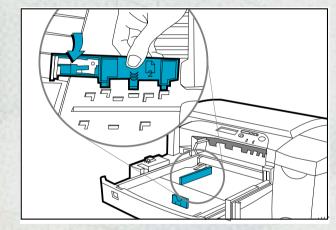




Loading Commonly-Used Media in Tray 2

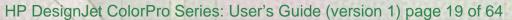


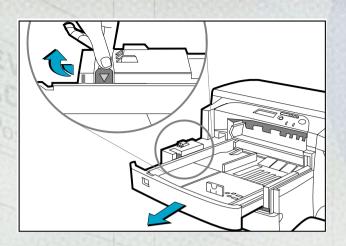
3. Snap the paper length and width guides to the slots. Paper size markings are indicated beside their respective slots.



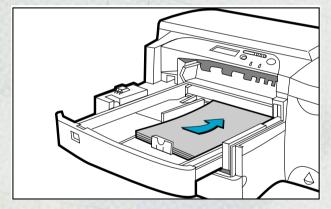
Menu







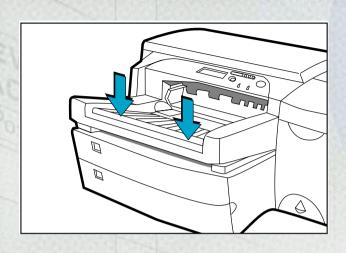
4. If you are loading paper sizes such as B4, A3, 11"x17" [279mm x 432mm], 13"x19" [330mm x 483mm], unlock the tray lock, extend the tray and re-lock the tray lock. If you are loading paper sizes such as Letter, A4 and Legal, check that the tray is not extended. If it is, unlock the tray lock, push in the tray and re-lock the tray lock.



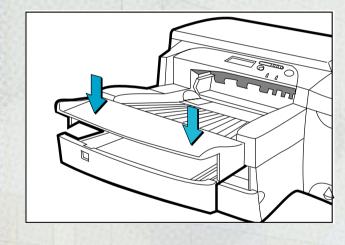
- 5. Insert paper, print side down into the printer.
- 6. Tap the left side of the stack of paper to ensure that it is flush to the right side of the tray.







7. Replace Tray 1.



- 8. If Tray 2 is extended, place the extended tray cover over the tray.
- 9. If you are loading a different type of media, press [Menu] on the control panel until the PAPER HANDLING MENU appears.
- 10. Press [Item] to select TRAY 2 TYPE=
- 11. Press [Value] to select the media type you have loaded into the tray and press [Select].





Menu

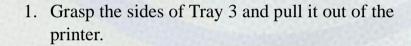
Loading Commonly-Used Media in Tray 3



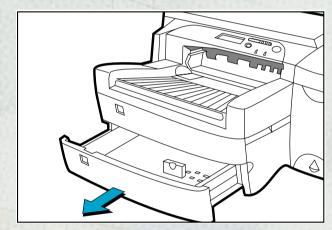
Click to see a video clip of loading Letter, A4 or Legal paper.



Click to see a video clip of loading B4, A3, 11"x17" [279mm x 432mm], 13"x19" [330mm x 483mm] paper.

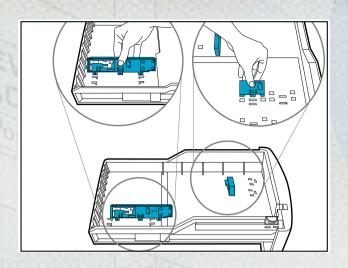


2. If you wish to change the paper size that has been set in the tray, go to step 3. If you wish to load paper into the tray using the existing setting, go to step 5.



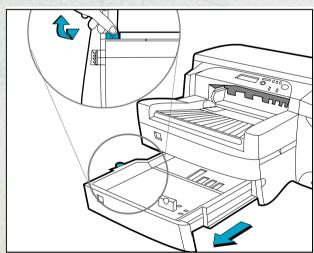






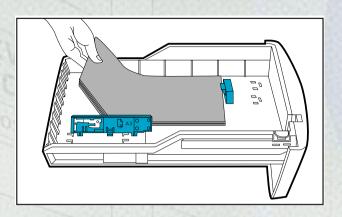
3. Snap the paper length and width guides into the slots. Paper size markings are indicated beside their respective slots.



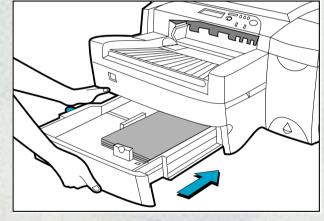


4. If you are loading paper sizes such as B4, A3, 11"x17" [279mm x 432mm], 13"x19" [330mm x 483mm], unlock the tray lock, extend the tray and re-lock the tray lock. If you are loading paper sizes such as Letter, A4 and Legal, check that the tray is not extended. If it is, unlock the tray lock, push in the tray and re-lock the tray lock.





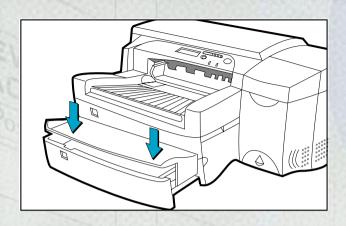
5. Load paper by aligning the paper edge to the paper length guide first. Tap the left side of the stack of paper to ensure that it is flush to the right side of the tray.



6. Reinsert Tray 3 into the printer.





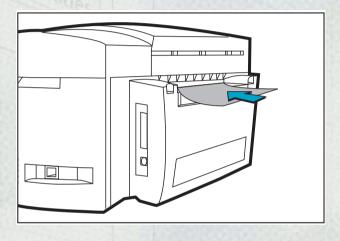


- 7. If Tray 3 is extended, place the extended tray cover over the tray.
- 8. If you are loading a different type of media, press [Menu] on the control panel until PAPER HANDLING MENU appears.
- 9. Press [Item] to select TRAY 3 TYPE=
- 10. Press [Value] to select the media type you have loaded into the tray and press [Select].





Loading Paper in the Rear Manual Feed





Click to see a video clip of the following procedure.

- Set your driver to pick paper from rear manual feed and print your document.
 For more information on how to set your print settings, please refer to the section on "Changing Print Settings" on page 33.
- 2. After sending your print job to the printer, the display panel will show the message "MNL FEED LOAD [TYPE] [SIZE]" where [TYPE] and [SIZE] are the media type and size respectively, as specified in your printer driver.
- 3. Insert the media into the rear manual feed at the back of the printer, making sure that the edge of the sheet is aligned with the alignment mark on the left side of the slot. Wait for the printer to grip the media.





Monitoring and Replacing Ink Cartridges

The printer monitors and shows in the display the amount of ink left in each ink cartridge. When the ink in the particular ink cartridge is about to be used up, a warning message will appear on the display panel. At this point, your ink cartridge will still have enough ink left in the cartridges for a few more print jobs. However, it is recommended that you get a replacement ready as soon as this warning message appears.

When the ink of a particular ink cartridge has fully run out, the display will show a message [X INK OUT, REPLACE CART] (where X is the color of the cartridge). When this happens, you will not be able to print until the corresponding cartridge is replaced.

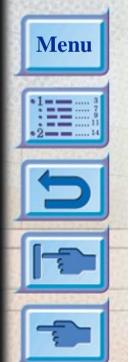


Click to see a video clip of the following procedure.

To replace a cartridge:

- 1. Lift to open the ink cartridge door.
- 2. Remove the old ink cartridge by pulling it upwards.
- 3. Remove the new ink cartridge from its packaging and insert it into its own color-coded slot. The arrow points to the front of the printer.
- 4. Push down the ink cartridge firmly.
- 5. Close the ink cartridge door.

Note: Use only original No. 10 HP ink cartridges. The use of incompatible cartridges may disrupt the intricate printing system, potentially resulting in reduced print quality and even printer damage. HP does not guarantee non-HP cartridges or the damage to the printer resulting from the use of non-HP cartridges. For more information on HP Supplies, refer to the *Getting Started Guide*.



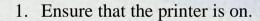


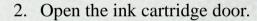
Replacing Printheads

If the printheads are faulty, the printer will show an error message and you will not be able to print from the printer. When this happens, replace the printhead. For more information, refer to the section on "Troubleshooting" on page 37.



Click to see a video clip of the following procedure.





3. Grasp the side of the printhead access cover and lift firmly to snap the cover open and remove it from the printer. You may have to use some force to open the cover.

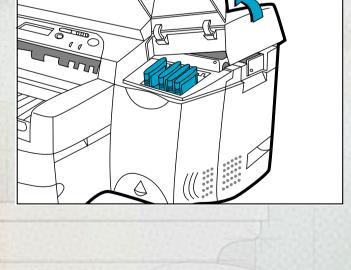




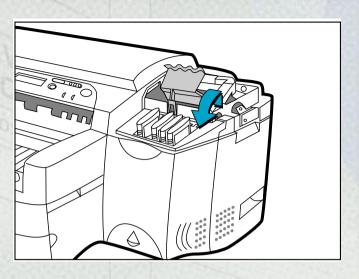




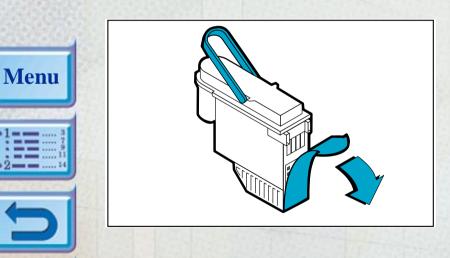






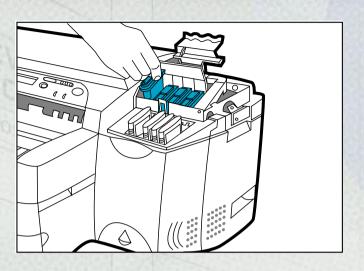


- 4. Release the printhead latch by pulling it towards you to unhook. Once unhooked, bring the latch towards the back of the printer.
- 5. Remove the damaged printhead by lifting it out of its socket.

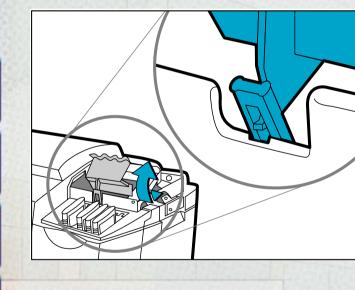


- 6. Remove the new printhead from its package.
- 7. Remove the protective tape from the printhead.





- 8. Insert the new printhead into its color-coded slot.
- 9. Push the printhead down firmly.

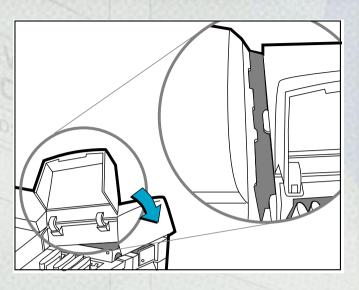


Menu

10. Close the printhead latch. Be sure that the hook on the printhead latch catches the carriage lock. You may have to use some force to close the printhead latch.



Replacing Printheads



- 11. Ensure that the ink cartridge door is lifted.

 Align the tabs of the cover with the tabs on the printer.
- 12. Lower and snap to close the cover.
- 13. Close the ink cartridge door.





Using the HP DesignJet ColorPro Series Printer Software

The HP DesignJet ColorPro series printer comes with printer software drivers that make printing from Macintosh- and Windows-based programs faster and easier than ever.

HP DesignJet ColorPro GA

The Adobe PostScript driver is available with the HP DesignJet ColorPro GA printer. Refer to the documentation for that driver for more information.

HP DesignJet ColorPro CAD

Two drivers are supplied with the HP DesignJet ColorPro CAD printer:

- The AutoCAD (ADI) driver, for use with Releases 10 through 14 of AutoCAD
- A Windows 3.1, Windows 95/98 and Windows NT 4.0 driver, for use with Windows applications, including other CAD applications.

Refer to the documentation that comes with these drivers for more information.





Changing Print Settings

This section describes:

Selecting a Tray for Printing 33

Selecting Your Printer 33

Changing Print Options 34

Using the Printer on a Network 34

Selecting a Tray for Printing You can select a different tray from that specified in the printer driver, if the correct paper is loaded in a different tray. To do this, when you see a prompt like "TRAY 1 LOAD [TYPE] [SIZE]", press the [Value] button until the correct tray is selected, and then press the & button to print..

Selecting Your Printer Touse your HP DesignJet ColorPro series printer, make sure that it is selected as the default printer.

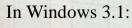
- In Windows 95, 98 or 1. Click **Start**, select **Settings** followed by **Printers**.
- NT 4.0:

2. Click the HP DesignJet ColorPro series Printer icon to select it. 3. From the File menu, select Set As Default, then close the window.



Menu

1. In the **Program Manager**, open the **Main** program group.



- 2. Double-click Control Panel to open it, then double-click Printers.
- 3. Select the HP DesignJet ColorPro series Printer from the Installed Printers list, and then click Set As Default Printer.
- 4. Click Close and exit the Control Panel.







Changing Print Options The HP DesignJet ColorPro series Print Settings dialog box allows you to select printing options such paper type and print quality that are not provided by the software application.

You can change the print settings for the current documents from your software program. This procedure will vary depending on the software program you are using.

- 1. Select either **Print**, **Print Setup** or **Printer Setup** from the **File** menu.
- 2. Click **Printer**, **Setup**, **Options** or **Properties** depending on your software application.
- 3. If you click **Printer** in step 2, you will need to click **Options**, then **Setup**. If you click **Setup**, you will either see the HP DesignJet ColorPro series **Print Settings** right away, or you will need to click **Options**. If you click **Options**, you will need to click **Setup**. If you click **Properties**, you will see the HP DesignJet ColorPro series **Print Settings** dialog box right away.
- 4. Change the settings in the HP DesignJet ColorPro series **Print Settings** dialog box.

You can change the default settings for your printer using the same procedure as in *Selecting Your Printer* above, but choosing **Properties** from the **File** menu.

Using the Printer on a Network

The HP DesignJet ColorPro series printer has a slot where you may install one of the supported HP JetDirect MIO print servers. An MIO card is installed as standard in the HP DesignJet ColorPro GA printer.





Maintaining the Printer

This section contains information on:

Cleaning Printheads 35

Aligning Printheads 36

Cleaning Printheads

Whenever print quality noticeably decreases it is a good idea to perform the cleaning procedure from the printer's Control Panel.

The "Clean Printhead" utility consists of three levels of cleaning. Each level of cleaning uses some ink to clear the printheads. It is recommended that you start with Level 1 before proceeding to subsequent levels. Note that Level 3 takes the longest and uses the most ink.

To run the "Clean Printhead" utility through the printer's Control Panel:

- 1. Press [Menu] until DIAGNOSTICS MENU appears.
- 2. Press [Item] to select CLEAN PRNT-HDS LEVEL 1, 2 or 3.
- 3. Press [Select] to clean the printheads.





Aligning Printheads

Although you may not notice misalignment, it is recommended that you run the "Align Printheads" utility whenever the display shows the message "PRNT-HDS NOT ALIGNED". This ensures that you have the best possible print quality.

You may align the printheads from the printer's Control Panel, as follows:

- 1. Press [Menu] until DIAGNOSTICS MENU appears.
- 2. Press [Item] until ALIGN PRNT-HDS appears.
- 3. Press [Select].
- 4. The printer will print a page with five sets of alignment patterns.
- 5. In each set (A, B, C, D or E) select the most aligned (straightest) pair of lines (1, 2, 3, 4 or 5).
- 6. Enter the corresponding numbers in the Control Panel by pressing [Value].
- 7. When you have entered a value for a set, press [Item] to move to the next.
- 8. When you have finished entering the values press [Select].
- 9. The printer will print a confirmation page consisting of two squares and a cross.
- 10. Check the confirmation page to see if the lines on the squares and the cross are aligned.
- 11. Realign the printheads if the confirmation page is not satisfactory.





Troubleshooting

This section documents the different troubleshooting tools and steps that can be used to assist you in diagnosing and solving most printer problems. The sections are:

General Troubleshooting Tips 38

Nonrecoverable Error 39

Printer does not Print 40

Partial or Blank Page Printed 41

Bad or Poor Print Quality 42

Text or Graphics are Cut Off 42

Garbage Printed 43

Removing Paper Jams 44

Tips for Avoiding Paper Jams 48

Printhead Diagnostics 49





General Troubleshooting Tips

1. Check the printer display panel. If the printer display panel shows a recoverable error message refer to "Understanding Printer Messages" on page 58 for instructions on how to resolve the problem.

Error Type	Example	Function	
Recoverable	Off-line, INK LOW	Refer to "Understanding Printer Messages" on page 58 for information on how to resolve such errors.	
Nonrecoverable	ERROR CODE: XXXX	Your printer may have a hardware problem. Turn off the printer and on again. If the message persists, call HP.	

2. Check the lights on the printer. If the red light is blinking, this means that the printer is in an error state or it requires attention. If both the lights are blinking, the printer is in a nonrecoverable error state.

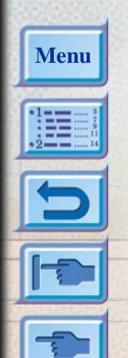




Nonrecoverable Error

If the display panel shows a nonrecoverable error message or if the printer is in a nonrecoverable error state:

- 1. Turn off your printer by pressing the Power button. Remove all cables and wait for about 10 seconds. Reconnect the cables and power on the printer.
- 2. If the printer comes on and recovers from the error state, you should see the message "READY" on the display panel.
- 3. Make sure that the tapes covering the ink nozzles and electrical contacts on all the printheads have been removed. For information on how to remove the tapes, see the section on "Replacing Printheads" on page 28.
- 4. If the error persists we recommend that you call HP for assistance. Please have the following information ready:
 - the model
 - the printer serial number
 - the error code number.





Hints and Tips

The following is a summary of troubleshooting tips:

Printer does not Print

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 green Ready light should be lit and the display should show "READY".

Check printer setup

Make sure your HP DesignJet ColorPro series printer is selected as the current or default printer. See the section on "Changing Print Settings" on page 33.

• Check printer port selection

Make sure that the correct port is selected and that the printer is connected to your computer properly. If your printer is connected to a switch box, make sure that you have selected the correct switch. If your printer is on a network, ensure that you have mapped to the correct port.

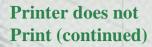
• Print a Diagnostic Page

Printing a Diagnostic Page will verify if the printer is functioning properly. To print the diagnostic page:

- 1. Press [Menu] until SELF TEST MENU appears.
- 2. Press [Item] until PRINT DIAGNOSTIC PAGE appears.
- 3. Press [Select] to print the diagnostic page.







Check network setup

If your printer is shared on a network, make sure that it is properly setup in the network environment. See the *Network Guide* as well as the documentation provided by your network vendors.

Check for paper feed problem

Make sure that paper is loaded correctly in the trays and that paper is not jammed in the printer. Check the printer display panel for paper jam messages. See the section on "Loading the Trays" on page 16.

If paper is jammed in the printer, see the section on "Removing Paper Jams" on page 44.

Partial or Blank Page Printed

Check the printhead for tape

New printheads are shipped with a protective tape that covers the nozzles. Make sure that the protective tape covering each printhead is removed.

Check printer setup

Make sure your HP DesignJet ColorPro series printer is selected as the current or default printer. See section on "Changing Print Settings" on page 33.

Tray 3 pulled out during printing

If Tray 3 is pulled out of the printer when it is printing, the job will be canceled and the page will be ejected. Wait until the page has been printed and ejected from the printer before removing the tray.







· Check print quality setting

Check the printer setting which you have selected for this print job in the printer software. While the EconoFast setting prints faster and uses less ink, it may cause text to appear faded or colors to appear dull. Select Normal or Best Print Quality in the **HP Print Settings** dialog box.

Check paper type setting

When printing on transparencies or other special media types, select the corresponding media type in the **HP Print Settings** dialog box.

Clean printheads

Whenever print quality deteriorates, it is advisable to clean the printheads. See the section on "Cleaning Printheads" on page 35 for instructions.



Text or Graphics are • Cut Off

Check margin settings

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. For information on the printer margins for the various supported paper sizes see "Minimum Printing Margins" on page 62.

· Check page orientation

The page orientation that you have selected may not be correct for the document you are printing. Check your print settings and try printing again.





Text or Graphics are Cut Off (continued)

Text or Graphics are • Tray 3 pulled out during printing

If Tray 3 is pulled out of the printer when it is printing, the job will be canceled and the page will be ejected. Wait until the page has been printed and ejected from the printer before removing the tray.

Garbage Printed

Check cable connection

Check that the printer and any network cables are securely connected to the printer. If you are using parallel cables, ensure that it is also firmly connected to the computer.

Check printer setup

Make sure your HP DesignJet ColorPro series printer is selected as the current or default printer. See section on "Changing Print Settings" on page 33.

Check document file

Your document may be corrupted. Try printing another file from the same software application.

• Check bidirectional communication or shared printer port

Disable bidirectional communication or stop sharing the printer port with another device. There may be a conflict between the printer and other devices such as zip drives or scanners that share the port.

- With Windows 3.1, do not share the printer port with another device.
- With Windows 95, 98 or NT 4.0, disable bidirectional printing.





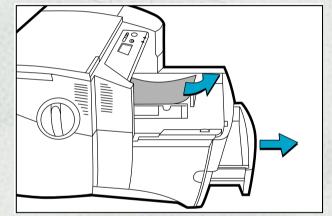
Removing Paper Jams

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



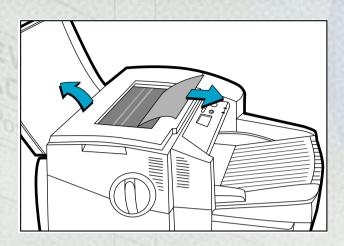
Click to see a video clip of the following procedure.

1. Remove all media from trays 1, 2 and 3. Pull out any paper that is visibly stuck.







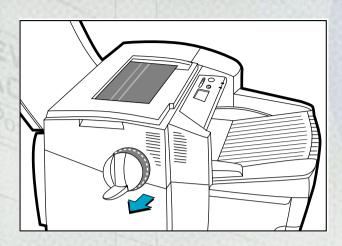


2. Lift the top cover and pull out any paper that may be stuck.

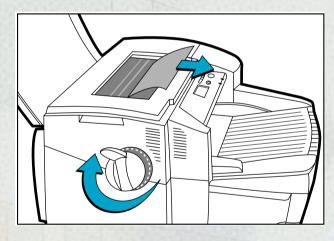




Removing Paper Jams

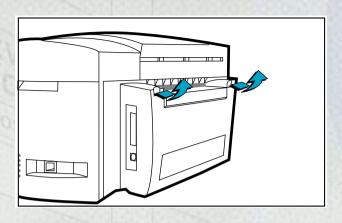


3. If you are unable to free the jammed paper, pull out the handle of the paper knob; pull the knob away from the printer and rotate to remove the paper.

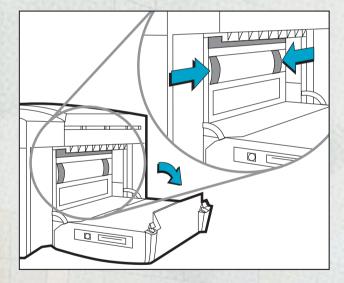


Menu





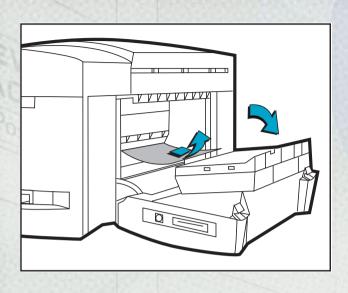
4. If the display still reports a paper jam, go to the back of the printer and lower the rear access door by lifting the two rear door latches.



Menu

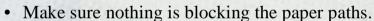
5. Remove the back panel by pressing the two catches inwards.





- 6. Pull out any paper that may be stuck inside.
- 7. Replace the back panel and make sure it fits securely.
- 8. Close the rear access door and turn on the printer.

Tips for Avoiding Paper Jams



- Do not overload the trays. Tray 1 holds up to 10 sheets of paper; Tray 2 holds up to 150 sheets and Tray 3 holds up to 250 sheets.
- Load the paper correctly.
- Do not use paper that is curled or crumpled.





Printhead Diagnostics

When the display panel shows the message "PRNT-HD DIAG PRESS \diamond ", it means that one or more of the pens may be faulty. You will need to determine which pen is faulty and replace it before you can continue printing.

This process requires you to remove and reinsert one printhead at a time, in the sequence black, cyan, magenta and yellow.

To determine which is the faulty printhead:

- 1. Open the printhead access cover and unlock the printhead latch.
- 2. Remove the cyan, magenta and yellow printheads and close the printhead access cover.
- 3. The display panel will show the message "DETECTING..." as it checks the printhead.
- 4. If the message "B PRNT-HD FAULTY, PRESS ⋄" appears, it means that the black printhead is faulty. If this happens, press the ⋄ button.
 - Remove the printhead access cover and replace the faulty black printhead with a new black printhead. Fasten the printhead latch and close the printhead access cover to verify that the new printhead is working.
 - If the message "B PRNT-HD OK, PRESS &" appears, it means that the black printhead is working. Press the & button, remove the printhead access cover and reinstall the black printhead.
- 5. Follow the sequence in step 4 for each of the other printheads in turn to verify that all the printheads are working.
- 6. The sequence will end when all the printheads have been checked and found to be in working order.





Control Panel Menus

You can perform most routine printing tasks from the computer through the printer driver. This is the most convenient way to set settings on the printer. See the Help files associated with the printer software.

You can also set the printer by changing settings in the printer's Control Panel.

The tables below list all the menu items and their values. Additional menu items can appear in the Control Panel, depending on which particular hardware modules are currently installed in the printer. The menus are:

Paper Handling Menu 51

Diagnostics Menu 52

Information Menu 53

Self Test Menu 53

Print Quality Menu 54

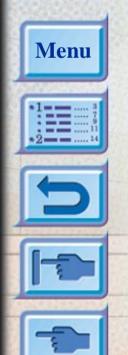
MIO Menu 54 (if an MIO card is installed)

Printing Menu 55

IO Menu 56

Resets Menu 57

Configuration Menu 57





Paper Handling Menu

5	Item	Values	Explanation
2000	TRAY 2 TYPE=	PLAIN HP INKJET/HEAVY	Set the value to correspond with the paper type currently loaded in Tray 2 or Tray 3.
	TRAY 3 TYPE=	HP PHOTO TRNSPRNCY/IRON RAPID TRNSPRNCY	PLAIN: Plain Paper or HP Bright White InkJet Paper HP INKJET/HEAVY: HP Premium InkJet Paper or HP Premium InkJet Heavyweight Paper or HP Professional Brochure & Flyer Paper Matte Finish HP PHOTO: HP Premium Photo Paper
			TRNSPRNCY/IRON: HP Premium Transparency Film or HP Iron-on T-shirt Transfer
			RAPID TRNSPRNCY: HP Premium InkJet Rapid Dry Transparencies.
			 Note: It is not advisable to load the following combination of paper types in Tray 2 and Tray 3 at the same time: HP Premium InkJet Paper and HP Premium InkJet Heavyweight Paper HP Premium Transparency Film and HP Iron-on T-shirt Transfer
			51111 11 a1151C1







Diagnostics Menu

	Item	Explanation
9	ALIGN PRNT-HDS	This item aligns the printheads to ensure the printout is of the best possible
P		print quality. For more information see the section on "Aligning Printheads"
F		on page 36.
	CLEAN PRNT-HD:	This item cleans the printheads. Level 1 is the basic level and should be
	LEVEL 1	performed first. For more information see the section on "Cleaning
		Printheads" on page 35.
	CLEAN PRNT-HD:	This item cleans the printheads. Level 2 is more thorough than Level 1, but
	LEVEL 2	it should be performed only when Level 1 cleaning does not solve the print
		quality problem.
h		For more information see the section on "Cleaning Printheads" on page 35.
Š	CLEAN PRNT-HD:	This item cleans the printheads. Level 3 is most thorough, but it should be
7	LEVEL 3	performed only when Level 2 cleaning does not solve the print quality problem
		as it uses the most ink.
		For more information see the section on "Cleaning Printheads" on page 35.
	PERFORM TRAY 1	This item performs a paper path test on Tray 1. When this is selected, the
Ó	PAPER PATH TEST	printer will pick paper from Tray 1 until all the paper has been ejected.
è	PERFORM TRAY 2	This item performs a paper path test on Tray 2. When this is selected, the
	PAPER PATH TEST	printer will pick paper from Tray 2 until all the paper has been ejected.
	PERFORM TRAY 3	This item performs a paper path test on Tray 3. When this is selected, the
	PAPER PATH TEST	printer will pick paper from Tray 3 until all the paper has been ejected.







Information Menu

Item	Explanation
BASE FW VER	This item displays the firmware version of printer.
CHECK INK LEVELS	This item displays the amount of ink remaining in each ink cartridge.
CHECK TOTAL RAM SIZE	This item displays the total amount of RAM installed in the printer.
MIO FW VER	This item displays the MIO print server firmware version (for the HP DesignJet ColorPro GA) if an MIO card is installed.
SERVICE ID	This item displays the Service Identification Number of the printer. This number is needed when you call the HP Customer Care Center for support.

Self Test Menu

Menu	
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	ltem	Explanation
	PRINT DIAGNOSTIC	The Diagnostic Page shows general printer information and current
k	PAGE	network parameters.
H	PRINT EXT	The Extended Diagnostic Page shows printer information that is useful
	DIAGNOSTIC PAGE	for troubleshooting.
	PRINT MENU MAP	The Menu Map shows the layout of the control panel menu items.
ī	PRINT PCL5 FONT	The PCL5 Font List shows all the PCL5 fonts currently available to the
	LIST	printer (for the HP DesignJet ColorPro CAD only).



Print Quality Menu

	Item	Values	Explanation
100	PRINT QUALITY=	NORMAL ECONOFAST BEST	NORMAL: Normal mode delivers high quality output and is the recommended setting for speed and quality. Normal mode is the default setting for most paper types.
			ECONOFAST: Draft quality printing. EconoFast mode prints faster than Normal mode and delivers comparable output. Using EconoFast will also cut down on the frequency of replacing your ink cartridges because it uses less ink. EconoFast printing is available only when you select plain paper or transparency as the paper type.
			BEST: High quality printing. Best mode produces the highest print quality for all paper types and eliminates the banding effect that sometimes occurs in solid areas. However, Best mode prints more slowly than Normal mode for most documents.



The MIO print server that is installed controls this menu and it varies accordingly. Please refer to the documentation that comes with the print server for more information. The MIO card is available only with the HP DesignJet ColorPro GA printer.

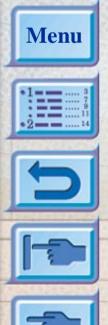




Menu

Printing Menu

	ltem	Values	Explanation
10/10/10	APPEND CR TO LF=	NO YES	Select YES to append a carriage return to line feed encountered in backward-compatible PCL jobs (pure text, no job control). Some environments indicate a new line using only the line feed control code. This option allows you to append the required carriage return to each line feed.
	ORIENTATION=	PORTRAIT LANDSCAPE	Determine the default orientation of print on the page. Note: It is best to set the page orientation from the printer driver or software application.
	PAPER=	LETTER LEGAL 13X19 A4 A3 11X17 JISB4	Set the paper size. "13X19" and "11x17" are dimensions in inches, and correspond to 330mm x 483 mm and 279 mm x 432 mm respectively.





IO Menu

8	Item	Values	Explanation	
201	IN JOB TIMEOUT=	5 to 300	Select the amount of time (in seconds) that the printer will wait within a print job before ending it. When the data from a print job fails to be sent to the printer completely, the printer will wait for the specified number of seconds. After that, it will abort the job and carry on to process the next print job. Press [Value] once to change the setting by increments of 1 or hold down [Value] to scroll.	
	OUT JOB TIMEOUT=	0 to 300	Select the amount of time (in seconds) that the printer will wait for the next print job before switching to another port. This is useful especially when your printer is connected to two different ports such as the parallel port and the network port. Press [Value] once to change the setting by increments of 1 or hold down [Value] to scroll.	
	I/O CHANNEL TIMEOUT=	0 to 300	Select the amount of time (in seconds) that the printer will receive data from a port before switching to the next port. When the printer is connected to different ports with data being sent to it simultaneously from these ports, the printer will be able to toggle between ports so that jobs sent through all ports will be given similar priority. Press [Value] once to change the setting by increments of 1 or hold down [Value] to scroll.	



Menu







Resets Menu

Item	Explanation
RESET ACTIVE I/O CHANNEL	This item performs a simple reset and clears the input and output buffers (for the active I/O only).
RESET ALL I/O CHANNELS	This item performs a simple reset and clears the input and output buffers for all I/O.
RESET MIO TO FACTORY SETTINGS	This item resets the MIO print server and restores most of the factory (default) settings; only if an MIO card is installed.
RESET TO FACTORY SETTINGS	This item performs a simple reset and restores most of the factory (default) settings. This item also clears the input buffer for the active I/O.

Configuration Menu

Menu				
Wicha	Item	Values	Explanation	
1	PERSONALITY=	AUTO	Select the default printer language (personality). Possible values are	
1		HP-GL/2	determined by which valid languages are installed in the printer.	
•214		PCL		
PARTY NAMED IN			Normally you should not change the printer language (the default is	
			AUTO). If you change it to a specific printer language, the printer	
			will not automatically switch from one language to another unless	
			specific software commands are sent to the printer.	





Note: [] in the Message column indicates variables.

Ą	Message Explanation		Solution
CART FAULTY, magenta or yellow) is faulty. REPLACE		One of the ink cartridges (black, cyan, magenta or yellow) is faulty.	Replace the indicated cartridge.
		One of the ink cartridges (black, cyan, magenta or yellow) is missing.	Insert the indicated cartridge.
			Be prepared to replace the indicated colour ink cartridge.
INK LOW magenta or yellow) is low on ink.		One of the ink cartridges (black, cyan, magenta or yellow) is low on ink. You may still continue to print with this cartridge until the ink has totally run out.	Be prepared to replace the indicated colour ink cartridge.
	[COLOR] INK OUT, REPLACE CART	One of the ink cartridges (black, cyan, magenta or yellow) is out of ink.	Replace the indicated cartridge.
	[COLOR] PRNT-HD FAULTY, REPLACE	One of the printheads (black, cyan, magenta or yellow) is faulty.	Replace the indicated printhead.





Message	Explanation	Solution
[COLOR] PRNT-HD MISSING, INSERT	One of the printheads (black, cyan, magenta or yellow) is missing.	Insert the indicated printhead.
CANCELING JOB	The printer is canceling current print job.	
CARRIAGE JAM, OPEN ACC COVER	The carriage is jammed.	Open the printhead access cover to remove obstruction. When finished, close the printhead access cover and align printheads.
CARRIAGE JAM, OPEN TOP COVER	The carriage is jammed.	Open the top cover to clear obstruction. When finished, close the top cover and press \diamond to resume printing.
LEFT BACK PANEL OUT	The left side of the back panel has not been inserted properly.	Open the rear access cover and ensure that the left side of the panel is properly installed.
MEDIA IN TRAY 1, REMOVE	There is media in Tray 1 which may not be the type or size that is specified in your current print job.	Remove the media in Tray 1 and press the * button to resume printing. If you wish to print through Tray 1, set your driver to pick from Tray 1 and send the print job before putting media in Tray 1.
MNL FEED LOAD [TYPE] [SIZE]	You have chosen to print through Tray 1.	Load the paper type and size as specified in the display panel and press \diamond to continue printing.





Message	Explanation	Solution
NON HP [COLOR] CART	A non-HP color cartridge has been detected. HP does not guarantee non-HP cartridges. The use of incompatible cartridges may disrupt the intricate printing system, potentially resulting in reduced print quality and even printer damage.	Use original HP ink cartridges instead.
OFFLINE	The printer is off-line.	Press * to set the printer on-line.
PAPER JAM, OPEN TOP COVER	There is paper jammed in the printer.	Open the top cover to remove paper. When finished, close the top cover and press \diamond to resume printing.
PRESS * TO CONTINUE	To continue your present task, press the blue button.	
PRINT-HDS NOT ALIGNED	The printheads have not been aligned. For best print quality, align the printheads before the next print job.	Align the printheads. For instructions see the section on "Aligning Printheads" on page 36.
PRNT-HD ACCESS COVER OPEN	The printhead access cover is open.	Close the cover to resume printing.
RIGHT BACK PANEL OUT	The right side of the back panel has not been inserted properly.	Open the rear access cover and ensure that the right side of the panel is properly installed.
TOP COVER OPEN	The top cover is open.	Close the cover and press \diamond to resume printing.
TRAY 2 PAPER GUIDE REMOVED	One of the paper guides in Tray 2 has been removed.	Insert the paper guide back into Tray 2.





Message	Explanation	Solution
TRAY 3 OPEN OR GUIDE REMOVED	Tray 3 is either open or one of its paper guides has been removed.	Ensure that both the paper guides are properly installed and that Tray 3 is inserted into the printer.
TRAY [NUMBER] EMPTY, LOAD & PRESS &	The specified tray is empty. Load the paper size and type which this tray has been set up for.	Load the paper size and type which this tray has been set up for. If you wish to change the paper size setting of this tray, please refer to the section on "Loading the Trays" on page 16.
TRAY [NUMBER] LOAD [TYPE] [SIZE]	The type of paper loaded in the specified tray is different from that expected by the printer driver.	Either load the paper as specified, or use the [Value] button to select a different tray (see "Selecting a Tray for Printing" on page 33).
UNEXPECTED PAPER SIZE	The specified paper size is different from the paper size in the selected input tray. The output was truncated to fit the paper in the printer. Some output may have been lost.	Reload the correct media into the tray and print again.
WRONG MEDIA TYPE, [ACTION]	The media type which the printer has detected is not the type specified in your print settings.	You may wish to either load in the right media, or choose to print on existing media. You may also cancel the current print job by pressing the [Cancel Job] button.







Minimum Printing Margins

The following are the minimum printer margins for the various supported paper sizes. Please note that these margins are based on the portrait orientation.

P	Paper Size	Left Margin	Right Margin	Top Margin	Bottom Margin
9	US Letter	0.25" 6.35mm	0.25" 6.35mm	0.117" 2.97mm	0.5" 12.7mm
-	11" x 17" (279mm x 432mm)	0.26" 6.6mm	0.26" 6.6mm	0.117" 2.97mm	0.5" 12.7mm
h	A4	0.113" 2.87mm	0.113" 2.87mm	0.117" 2.97mm	0.5" 12.7mm
	A3	0.205" 5.2mm	0.205" 5.2mm	0.117" 2.97mm	0.5" 12.7mm
	B4	0.205" 5.2mm	0.205" 5.2mm	0.117" 2.97mm	0.5" 12.7mm
	Legal	0.25" 6.25mm	0.25" 6.25mm	0.117" 2.97mm	0.5" 12.7mm
è	Executive	0.252" 6.4mm	0.252" 6.4mm	0.117" 2.97mm	0.5" 12.7mm
3	A5	0.127" 3.2mm	0.127" 3.2mm	0.117" 2.97mm	0.5" 12.7mm
100	B5	0.128" 3.23mm	0.128" 3.23mm	0.117" 2.97mm	0.5" 12.7mm
	4" x 6" (102mm x 152mm) Index Card	0.133" 3.38mm	0.133" 3.38mm	0.117" 2.97mm	0.5" 12.7mm
	5" x 8" (127mm x 203mm) Index Card	0.127" 3.2mm	0.127" 3.2mm	0.117" 2.97mm	0.5" 12.7mm
18	A6 Card	0.133" 3.38mm	0.133" 3.38mm	0.117" 2.97mm	0.5" 12.7mm
	13" x 19" (330mm x 483mm)	0.207" 5.26mm	0.207" 5.26mm	0.117" 2.97mm	0.5" 12.7mm
	Statement	0.203" 5.25mm	0.203" 5.25mm	0.117" 2.97mm	0.5" 12.7mm
	Custom(4"x5.83" to 13"x19") or (100mm x 148mm to	0.137" 3.48mm	0.137" 3.48mm	0.117" 2.97mm	0.5" 12.7mm
	330mm x 483mm)				





Understanding the Diagnostic Test

The Diagnostic Test page is a valuable tool for troubleshooting. This will help verify if the printer is working.

To print a Diagnostic Test:

- 1. Press [Menu] until SELF TEST MENU appears
- 2. Press [Item] until PRINT DIAGNOSTIC PAGE appears.
- 3. Press [Select] to print the diagnostic page.

The Diagnostic Test page is divided into four sections:

Item	Description	
0	Printer Information shows general printer information such as Firmware version number, Model and Service ID.	
2	Built-in Bitmap Fonts shows the type of fonts that are resident in your printer. This is different from the TrueType fonts that are installed in your computer.	
•	Printhead Information monitors and displays the status of your printhead. If these bars are printed properly, it shows that the printheads are in working order.	
4	Ink Cartridge Information displays the amount of ink left in each ink cartridge.	





The Diagnostic Test looks like this:

Menu

