### LaserJet IIIP Printer Getting Started Guide





33481-90933 Edition 1 E0591 Printed in Germany 5/91

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### **Prepare a Location for the Printer**

#### Your location requirements are:

- a sturdy, level surface the size of the printer and clearance as shown at right.
- the temperature is maintained between
   50° and 90.5° F (10° to 32.5° C).
- relative humidity stays between 20% and 80%.
- a stable environment no abrupt temperature or humidity changes.
- no exposure to direct sunlight or chemicals.
- line voltage varies no more than 220 to 240V ± 10%.
- a well-ventilated room.



Note Make sure that the printer is placed on a hard and flat surface to prevent frequent paper jams.



Do not place on a pad or carpet, otherwise paper jams may occur.



Place on a hard, flat surface for reliable performance.







- 1. Control panel
- 2. Top output tray
- 3. Paper stops
- 4. Font cartridge door
- 5. Interface ports (serial and parallel)
- 6. Power cord receptacle
- 7. ON/OFF power switch

- 8. Output tray selector button
- 9. Paper path door release button
- 10. Multi-Purpose (MP) tray
- 11. Enhanced MP tray extender
- 12. MP tray extender
- 13. Front output tray

**Remove Internal Packing Material** 





Open the MP tray by pulling down.

Locate the Multi-Purpose (MP) tray.



Push up the release button (1) to open the paper path door (2).



Squeeze and remove the orange packing spacer from inside the printer. Save the packing spacer for possible future shipping.

#### **Unpack the Toner Cartridge**





**CAUTION**: Do not expose the cartridge to direct sunlight. Do not expose it to room light for more than a few minutes.



Locate the toner (EP-L) cartridge. It is in a separate box.



Rock the cartridge slowly from end to end 5 times to distribute the toner.



**CAUTION:** Do not stand cartridge on end or turn it upside down after it has been unpacked.



Remove the cartridge from its bag. Save the bag for possible storage.

**Install the Toner Cartridge** 



Firmly grasp the orange tab on the side of the cartridge.



Pull firmly to remove the 18 inches (45.7 cm) long strip of sealing tape. Discard the tape.



If the tab separates from the tape, pull the tape out.



Holding the tab, line up the green arrows and slide the cartridge down into the printer.



Hold the cartridge with the green arrow pointing toward the printer.



Close the paper path door, but leave the MP tray open.

#### Attach the Enhanced MP Tray Extender



Use the enhanced MP tray extender for longer size paper such as legal.



Locate the enhanced MP tray extender.



Fit the enhanced extender onto the MP tray with its center tab below the tray.



Do not attach the enhanced extender while the MP tray extender is pulled out.



Make sure the sliding MP tray extender is closed.



Slide the enhanced extender in against the MP tray until it stops.





### Load Paper into the MP Tray

#### **Paper Specifications**

Your LaserJet IIIP printer works well with many common papers with basis weights from 16 to 28 pounds (60 to 105 g/m<sup>2</sup>). However, we recommend you test a particular paper to determine if its performance is acceptable. Refer to appendix E, "Selecting Paper and Other Print Media," in the *LaserJet IIIP Printer User's Manual.* 

#### NOTE

Hewlett-Packard neither warrants nor recommends the use of a particular paper. Paper properties are subject to change by paper manufacturers and Hewlett-Packard has no control over such changes. The customer assumes all responsibility as to the quality and performance of paper. Although testing helps to characterize performance, long-term satisfaction requires process quality control by the paper manufacturer and proper handling until use.



Fill the MP tray no higher than the arrow point.



Place the paper forward in the tray and firmly against the right guide.



Slide the media width adjuster against your paper.



Flip up and click into place the appropriate paper stop. (1=Letter and Executive 2=A4 3=Legal)

## **Select Output Tray for Paper**

Follow these directions if you will be using paper. If you will be using print media other than paper, skip to K.

The LaserJet IIIP printer allows you to select from two output trays.



- A. Front output tray for envelopes, labels, and transparencies.
- B. Correct order, top output tray for paper.



For printing on paper, select the top output tray.



Locate the output tray selector button on the paper path door.



Push the selector button up, flush with the side of the door.



Your documents will now stack up in correct order on the top output tray.





#### Select Output Direction for Other Media

Follow these directions when using print media other than paper.



Your printer will print on envelopes, labels, and transparencies. (See the LaserJet IIIP User's Manual for media specifications.)



Locate the front output tray.



Push the selector button down toward the tray.



When using these types of media be sure to use the front output tray.



Gently squeeze the tray into the top notches located just below the deflector.



Your print media will now stack face-up on the front output tray.



Connect the power cord. Plug the other end into a power outlet.

Turn the printer ON by depressing the I on the ON/OFF switch.



After the **05 SELF TEST** and **02 WARM UP** messages, make sure the **On-Line** indicator is lit and the display window shows **00 READY A4**.

NOTE

00 READY should be displayed on the control panel. If an error message is displayed, refer to the *LaserJet IIIP User's Manual* chapter 8 for possible solutions. If problems persist, contact either your internal support organization, your HP dealer, or call the Hewlett-Packard Personal Peripherals Assist Line.

## Select Display Message Language

Follow these directions if you want to change display language from English. If not, skip to  ${\bf N}.$ 



Turn the printer OFF. Hold down the ENTER key while turning the printer back ON.



Wait for LANGUAGE ENGLISH to appear. Press the  $+\!\!/-\!\!$  key to choose your language.



Click the ONLINE key to return on-line. The On-Line indicator will come on.



Wait until CONFIG LANGUAGE appears. Release the ENTER key. 05 SELF TEST appears.



Click the ENTER key to save your language selection. An \* will appear.



Your display messages will now be in the language you selected.

# Set MP Size to Match Your Paper Size

Follow these directions if you are not using A4 size paper (210 x 297mm) since you must tell the printer what size of paper you are using. If you are using A4, the printer is already set for A4 (the printer default), skip to O.





Click the ONLINE key to take the printer off-line. The On-Line indicator goes off.





Click the +- key until the paper size you are using is displayed.



Click the ENTER key to save your selection. An \* appears.



Click the ONLINE key to return on-line. The display should show the size you selected.

### **Determine Job Size**



#### **Control Panel Job Size**

The printer is set for JOB SIZE A4 at the factory. Unless you have changed the JOB SIZE with the MENU key, it should still be A4. This means the printer will format the page of data to fit on A4 size paper (210 x 297mm) if your software does not tell it differently.



JOB SIZE

The factory default JOB SIZE for this printer is A4.

You generally set the JOB SIZE (image) to match your MP SIZE.

Display	Meaning
JOB SIZE	Image size to which data is formatted when it is sent to the printer

Software can override the JOB SIZE default, but not the MP SIZE. Your printer does not know what size of media you are using unless you set the MP SIZE.

If you are using A4 size paper, skip to section  ${f Q}.$ 

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## Set Job (Image) Size

Normally your JOB SIZE setting should match your MP SIZE setting.



Click the ONLINE key to take the printer off-line. The On-Line indicator goes off.



Click the +- key until the job size that matches your MP SIZE setting is displayed.



Click the ONLINE key to put the printer back on-line.



Click the MENU key until JOB SIZE A4 \* appears.



Click the ENTER key to save your selection. An \* appears.



The display should show 00 READY, with your selected MP size.

#### Print a Self Test and Generate Cleaning Paper



Click the  $\bigcirc$  LINE key to take the printer off-line. The On-Line indicator goes off.



After a few moments, 06 PRINT TEST will appear in the display.



While holding down the Alt key, click the Test key. The display will show 05 SELF TEST.

NOTE

If 04 SELF TEST appears, click the ONLINE key to stop the continuous self test. Up to 6 more pages will print. Then hold down the At key and CLICK the Test key. DO NOT hold down the Test key.

Two pages will print. The first sheet is a SELF TEST printout.



The second sheet is printer generated cleaning paper. (If you did not receive two self test pages, refer to chapter 8 in the *LaserJet IIIP User's Manual.*)

## Use Printer Generated Cleaning Paper

The cleaning paper cleans toner from the printer's internal parts.



Place the cleaning paper face-up in the MP tray on top of the paper stack.



Two pages will print.



Discard the SELF TEST and cleaning paper sheets.



Run another SELF TEST. (While holding down the Alt key, click the Test key.)



The first page should be on the back of the original cleaning paper. If it is, the internal parts have been cleaned.



Turn the printer OFF by depressing the  ${\bf O}$  on the ON/OFF switch.



If your computer doesn't already have a Centronics parallel or serial interface, you may need

to order and install a special interface card for your computer.

For the HP Vectra Personal Computer, the interface cards' part numbers are:

Centronics parallel interface - HP24540B Dual RS232/422 Serial interface - HP24541B

For computers other than the HP Vectra, contact your dealer for interface information.

### **Centronics Parallel Interface**

#### Use a Centronics parallel interface when:

- You want the fastest method of communicating data to your printer.
- Your printer is less than 10 feet (3 meters) from your computer.
- You send a lot of graphic information or soft fonts to the printer.



Graphic Information

A typical parallel cable looks like this:

Computers	Computer End	Parallel Cable		Printer End
HP Vectra IBM PC/AT/XT/PS2 and most IBM	۰ ۲۰۰۰۰۰۰۰۰۰۰۰۰۰۰۰۰۰۰۰۰۰۰۰۰۰۰۰۰۰۰۰۰۰۰۰	HP Part Number	Length	2[#########]3
compatibles Compaq	25 Pin Male Plug	HP 92284A	6.6' (2.0 m)	36 Pin Male Plug

Did you decide on a Centronics parallel interface? If so, go to section  ${f T}$ 

### **Serial Interface**



#### Use a serial interface when:

- Your computer does not have an available Centronics parallel interface.
- Serial data transfer rates will provide an acceptable solution for your application.
- Most of your documents are textual with little graphic information.

The RS 232 interface can support printers located up to 50 feet away from the computer.

An accessory RS 422 adaptor (HP part no. 92270N) can support printers located up to 4000 feet (1219 m) away from the computer. See your supplies and accessaries brochure or contact your local authorized HP dealer for more information.

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**Textual Information** 

Computers	Computer End	Serial RS23	32 Cable	Printer End
IBM PC/XT/PS2 and most IBM XT Compatibles	0 000000000000000000000000000000000000	HP Part Number	Length	○ () ○
Compaq Portable	25 Pin Female Plug	HP-17255D HP-92219J	3.9' (1.2 m) 16.7' (5.0)	25 Pin Male Plug
HP Vectra IBM PC/AT and most IBM AT Compatibles	0	HP Part Number	Length	
Compaq Deskpro 286/386	9 Pin Female Plug	HP24542G	9.9' (3.0 m)	25 Pin Male Plug
HP Vectra (dual serial card)	۰ <u>(</u> ۰)	HP Part Number	Length	۰ () ۰
	25 Pin Male Plug	HP17255M HP13242-60010	3.9' (1.2 m) 16.7' (5.0 m)	25 Pin Male Plug

Did you decide on a serial interface? If so, go to section  ${\bf U}$ 

#### A typical serial cable looks like this:

### Set Up to Use a Centronics Parallel Interface Cable



1. Make sure your computer and printer are turned OFF.

2. Plug the cable into your computer and your printer. You should rock the connector onto the printer to ensure the cable is fully seated.

- 3. Use the wire clips to help secure the cable to your printer.
- 4. Turn your computer and printer ON.
- 5. Follow the steps below to verify the printer configuration settings.

After installing the Centronics parallel cable, use wire clips to help secure it.

#### **Centronics Parallel Interface Configuration Verification**

Your printer is set at the factory for parallel communication. You do not need to make any changes to use a Centronics parallel cable interface. Follow these steps to verify the Centronics parallel configuration settings.

Step	Click:	Printer Displays:
1	ON LINE	00 READY A4 (The On-Line indicator goes off.)
2	MENU repeatedly until	DEVICE CONFIG
3	ENTER	AUTO CONT OFF*
4	MENU	I/O PARALEL* (If I/O SERIAL * appears, click +/- until PARALEL appears, then click ENTER )
5	ONLINE	00 READY A4 (The On-Line indicator comes on.)

An asterisk (\*) indicates an item has been selected and saved.

#### NOTE You may want to run a 05 SELF TEST and keep the printout as a record of your configuration. (Refer to section Q.)

Go on to section V to configure the computer to communicate with your printer.

### Set Up to Use a Serial Interface Cable



Secure the serial cable connector to the serial I/O port on the back of the printer. (You may need to use a small screwdriver.)

Configure the Control Panel for a Serial Interface

- 1. Make sure your computer and printer are turned OFF.
- Plug the cable into your computer and printer. If necessary, use a small screwdriver to secure the cable to the printer. (If you are using an RS-422 cable, you will have to purchase an RS-422 adaptor, HP part no. 92270N. Contact your local authorized dealer for more information.)
- 3. Turn your computer and printer ON.
- 4. Follow the steps below to change the factory default interface setting from parallel to serial.

Step	Click:		Printer Displays:	
1	ON LINE	00 READY A4	(The On-Line indicator goes off.)	
2	MENU repeatedly until	DEVICE CONFIG	1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 -	
3	ENTER	AUTO CONT OFF*		
4	MENU	I/O PARALEL*		
5	+/-	I/O SERIAL	I/O SERIAL	
6	ENTER	I/O SERIAL *		
7	(MENU)	BAUD RATE 9600*	(NOTE: Change BAUD RATE, ROBUST XON, and	
8	MENU	ROBUST XON ON *	DTR POLARITY only if it is necessary to match	
9	MENU	DTRPOLAR HI*	the configuration of your computer.)	
10	ON LINE	00 READY A4	(The On-Line indicator comes on.)	

An asterisk (\*) indicates an item has been selected and saved.

#### NOTE

You may want to run a 05 SELF TEST and keep the printout as a record of your configuration. (Refer to section Q for more information.)

Go on to section V to configure the computer to communicate with your printer.



## **Edit Your AUTOEXEC.BAT File**

This section and section W apply only to DOS users. (If you do not work in a DOS environment, you must read your computer's operating system manual for instructions on how to enter the printer configuration through your own operating system. Skip to section X.)

You must modify your AUTOEXEC.BAT file so that the computer knows what printer port you are using and can send data to the printer. The MODE statement, or statements, contain the information needed by the computer.

For PARALLEL	For SERIAL
MODE LPT1:,, P (Use B instead of P for MS-DOS 4.0 and above)	MODE COM1:9600,N,8,1,P
(The ports can be LPT1, or LPT2)	MODE LPT1:=COM1
	(The ports can be COM1 or COM2 or COM3)

You can use any word processing package to edit your AUTOEXEC.BAT file. (Make a backup copy of AUTOEXEC.BAT before you modify it.) Be sure you treat the file as unformatted ASCII text. For example, in WordPerfect you would use the *Text-in Text-out* feature. In Microsoft Word, you would SAVE the file using the *Text-only* option. You could also use the DOS editor EDLIN. See your software manual for more information.

Sample AUTOEXEC.BAT File with MODE statement for PARALLEL configuration entered after PATH statement.	Sample AUTOEXEC.BAT File with MODE statement for SERIAL configuration entered after PATH statement.
ECHO OFF	ECHO OFF
C:\MOUSE1\mouse	C:\MOUSE1\mouse
C:\MOUSE1\cpanel	C:\MOUSE1\cpanel
PROMPT \$P\$G	PROMPT \$P\$G
PATH C:\;C:\DOS;C:\BAT;C:\WORD5;	PATH C:\;C:\DOS;C:\WORD5;
MODE LPT1,,P	MODE COM1:9600,N,8,1,P
CD\NETWORK	MODE LPT1:=COM1
USRLOAD /A	CD\NETWORK
С:	USRLOAD /A
CD\	C:
	CD\

Your AUTOEXEC.BAT file may not look exactly like these examples. Computers are set up differently.

If you successfully added your MODE statement, Skip to section  $\boldsymbol{X}$ 

#### Edit Your AUTOEXEC.BAT File This section applies only to DOS users who do not have another method to edit their AUTOEXEC.BAT file. If you do not work in a DOS environment, skip to section X.



For DOS users, the AUTOEXEC.BAT file is used to set up the communication link between the computer and printer. When you enter the printer configuration (for example, LPT1, COM1) into this file, the computer knows what port to send data to.

#### The following procedure:

- Verifies you have an AUTOEXEC.BAT file.
- Prepares the computer to accept printer configuration commands.
- Inputs the MODE statement(s) in your AUTOEXEC.BAT file.

If you have DOS 4.0 or above, substitute the P with a B in the parallel MODE statement. (MODE LPT1:,,B)

Step	WHAT to do:	HOW to do it:	Computer Displays:
1	Select your root directory	Type: CD\ (ENTER)	A: \> or B: \> or C: \>
2	Make a backup copy of your AUTOEXEC.BAT file	Type: COPY AUTOEXEC.BAT AUTOEXEC.LJ (ENTER)	1 file(s) copied
3	Review your AUTOEXEC.BAT file	Type: TYPE AUTOEXEC.BAT (ENTER)	Your AUTOEXEC.BAT file. (If you don't have one, skip to Step 5.)
4	Look for a MODE statement in the file. If the correct statement is there, continue with section X. (If there is an incorrect MODE statement, you cannot use this procedure to edit your AUTOEXEC.BAT file.)		
5	Look for the MODE.COM in your root directory. If you can't find it, check in subdirectories on your computer, or on your original DOS disks.	Type: DIR *.COM(ENTER)	A list of files with the .COM extension.
6	If MODE.COM appears in the directory listing, skip to Step 9a		
7a	If MODE.COM does not appear in the root directory listing, copy it from your DOS disks to your root directory	IF YOU HAVE A HARD DRIVE: Insert the "startup" DOS disk in drive A and type: COPY A:MODE.COM (ENTER)	1 file(s) copied
7b		IF YOU HAVE A TWO-FLOPPY SYSTEM: Insert the "startup" DOS disk in drive B and the "bootup" DOS disk in drive A then type: COPY A: MODE.COM B: ENTER	1 file(s) copied
7c		IF YOU HAVE A SINGLE FLOPPY SYSTEM: Insert the "startup" DOS disk in drive A and type: COPY A:MODE.COM B: ENTER	1 file(s) copied

8	Remove the DOS diskette from the computer		
9a	List your PATH statement	Туре: РАТН	Your PATH statement
9b	If NO PATH appears go to Step 10a		
9c	If a PATH statement appears, copy it to LJMODE	Type: PATH>LJMODE	PATH>LJMODE
10a	Enter the MODE statement for PARALLEL, if you have a parallel cable	<b>Type</b> : ECHO MODE LPT1:,, P>>LJMODE	ECHO MODE LPT1:,,P>>LJMODE
10b	Enter the MODE statements for SERIAL, if you have a serial cable	Type: ECHO MODE COM1:9600,N,8,1,P>>LJMODE ENTER ECHO MODE LPT1:=COM1: >>LJMODE ENTER	ECHO MODE COM1:9600,N,8,M,1,P>>LJMODE ECHO MODE LPT1:=COM1: >>LJMODE
11	Verify your LJMODE file	Type: TYPE LJMODE	Your LJMODE file
12	If your MODE statement or statements contain a mistake, go back to Step 9a		
13	Insert the mode statements in your AUTOEXEC.BAT file	Type: COPY LJMODE+AUTOEXEC.LJ AUTOEXEC.BAT (ENTER)	1 file(s) copied
14	Verify that your AUTOEXEC.BAT file is correct	Type: type autoexec.bat	Your AUTOEXEC.BAT file
15	Delete the temporary LJMODE file	Type: DEL LJMODE (ENTER)	Your root prompt
16	Reboot your computer	Hold down the Ctrl key and the Del key and the Alt key at the same time	<ol> <li>A blank screen</li> <li>Your computer prompt</li> </ol>

#### Continue to section x.

### Verify Communication Between the Computer and Printer



#### To Verify Communication Between MS-DOS and Your Printer:

- 1. Make sure your computer and printer are turned on and your printer is on-line.
- 2.At the MS-DOS prompt, type DIR>PRN and press (ENTER). The computer will send a list of files to your LaserJet IIIP and the Form Feed indicator will light to indicate the printer has received this data.
- 3.Press the ONLINE key to take the printer off-line and press the FORMFEED key to eject the last page. The root directory should have printed, if not see the table below.
- 4. Press the ONLINE key to put the printer back on-line in preparation to receive more data.

# **Problems with printing the root directory**

SYMPTOM	PROBLEM	SOLUTION
You have a 40 ERROR message on your printer display. (Serial Printers Only)	You have turned off the printer while it was receiving data, or your printer's baud rate doesn't match the computer's.	Check your interface and cable. Check your AUTOEXEC.BAT file for errors.
An error message appears when you reboot the computer. After you type DIR>PRN Write fault error writing device Abort, Retry, Ignore, Fail? appears.	You entered the wrong MODE statement for your type of cable or your MODE statement contains an error.	Type A and press ENTER. Then go back to section $\mathbf{V}$ and carefully re-enter the MODE statment(s) for your cable, checking to make sure each character is correct.
Your printer doesn't print the root directory list and the root prompt appears on the computer.	Your MODE statement redirects your data to the wrong port or your COM statements do not match.	Go back to section $\mathbf{V}$ and carefully re-enter the MODE statement(s) for your cable, checking to make sure each character is correct.
Your computer is not responding to keyboard input after you typed DIR>PRN.	You have correctly configured the computer for your cable, but your printer has been configured wrong	Go back to sections ${f T}$ or ${f U}$ to configure the printer.

If you have problems with your printer, refer to chapter 8 in the HP LaserJet IIIP User's Manual for help.

# **Congratulations - You're Done!**

You should SAVE this document for future reference.

You can now configure your software to work with your new LaserJet IIIP printer. You can now install any accessories, such as the Optional Lower Cassette or Memory Boards (see the accessory's installation instructions).

## Notes



