

HP LaserJet III D printer

Technical Data



Meet the laser printer with advanced paper handling and breakthrough print quality.

- *Flexibility.* Two standard 200-sheet input trays and optional envelope feeder.
- *Capacity.* Print up to 8 pages a minute, 400 pages without refill, 20,000 pages a month.
- *More professional output* with the best 300-dpi print quality, thanks to HP Resolution Enhancement technology.
- *More creative tools with built-in PCL 5 printer language.* Easily scale type from tiny footnotes to huge headlines. Create new text and graphic formats. Print multiple directions on the same page.
- *Eight scalable typefaces* and 14 bitmapped fonts built in.
- *Better-looking graphics* that print faster, with HP-GL/2 vector graphics integrated into PCL 5 printer language.
- *Compatibility...* with existing software, HP typefaces, fonts and most accessories. Optional accessories for PostScript, Apple Macintosh applications.
- *Savings...* on paper, filing and mailing costs with duplex printing as a standard feature.

Watch your paperwork flow more easily and look better with the HP LaserJet IIID printer.

Two-tray convenience means twice the flexibility for every high-volume application.

Easily print letterhead from the top tray, second sheets from the bottom tray, and envelopes from the optional envelope feeder. Or, print letter paper from one tray, legal from the other. Control everything from the printer's front panel or from your software.

Give documents the professional look of a book or magazine by printing on both sides of the paper (duplex) from either tray.

Three powerful ways to lick envelope problems.

Correspondence is a snap when you attach an optional HP power envelope feeder to automatically print up to 50 envelopes in DL, #10 and Monarch sizes. Or, use the optional envelope tray to print up to 15 envelopes in four sizes. Or, manually feed envelopes one at a time.

No matter how you want to print envelopes, HP gives you easy, flexible ways to bring a consistent, professional look to all components of your correspondence.

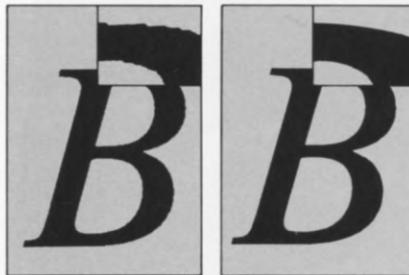
A multi-media performer. Multi-directional, too.

Work with bond or copier paper in four sizes—letter, legal, A4 and executive. Print on labels and overhead transparencies. Autorotate fonts and graphics for portrait or landscape printing. Choose binding formats for documents as diverse as calendars, legal briefs, spreadsheets or proposals—in portrait or landscape printing.

All this comes to you quietly, quickly and reliably at up to eight pages per minute, 20,000 pages per month.

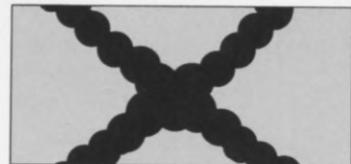
Text and graphics as sharp as the ideas they represent.

Like the HP LaserJet III printer, the HP LaserJet IIID printer makes documents look more professional and more credible—because it uses Resolution Enhancement technology to achieve unsurpassed 300-dpi print quality. You'll find Resolution Enhancement only within the HP LaserJet printer family.

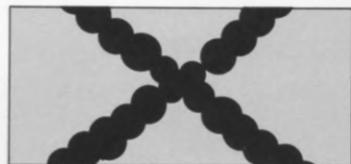


Note the jagged edges of conventional laser printing (left) when compared with the smooth edges produced by the HP LaserJet IIID printer (right).

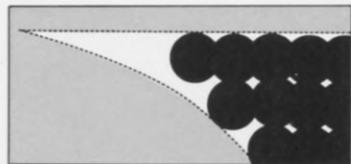
Resolution Enhancement improves readability by smoothing edges of curves and angles, and by removing the jagged edges and stair-stepping produced by conventional 300-dpi printers. It makes intersections crisper by eliminating toner pooling. And it sharpens the fine points of serif endings, instead of leaving them blunt.



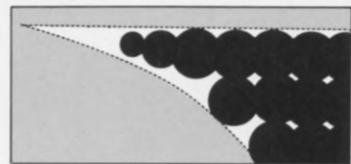
Without Resolution Enhancement, toner can accumulate in intersections, producing pooling effects like this.



Resolution Enhancement creates smaller dots in the intersection to compensate for pooling.



Unenhanced serifs can be blunt...



while enhanced serifs have finer points.

Result: documents look more professional, especially when they're duplex-printed. And you have the flexibility of printing a broader variety of jobs in-house, including desktop and technical publishing.

Built-in PCL 5 printer language gives you creative capabilities to expand your imagination.

Combine typeface scaling with enhanced text and graphics formatting. Save time by creating a wider range of documents in-house. Save money with printer features you won't soon outgrow.

The creativity starts with eight built-in scalable typefaces and 14 bitmapped fonts.

INTERNAL SCALABLE	
CG Times	
CG Times Bold	
CG Times Italic	
CG Times Bold Italic	
Univers	
Univers Bold	
Univers Italic	
Univers Bold Italic	
INTERNAL BITMAPPED	
Courier	10 & 12pt.
Courier	10 & 12pt.
<i>Courier</i>	<i>10 & 12pt.</i>
Line Printer Medium	8.5pt.

Because they're built in, you conserve PC and printer memory, and expend no downloading time. Since PCL 5 printer language integrates Intellifont typescaling, you can—from one typeface—create thousands of fonts, from tiny footnotes to page-filling headlines.

Extend printing power with hundreds of accessory scalable typefaces and bitmapped fonts.

Choose them from the HP Master-Type Library, to fit your layout and space. Use HP Type Director 2.0 font management software to install fonts and create screen fonts to match your layouts. Type Director can even create font drivers for many popular software programs.

Print better-looking graphics faster with built-in HP-GL/2 vector graphics.

HP has integrated HP-GL/2, its industry-standard pen plotter language, into PCL 5 printer language. Result: vector graphics that print far faster in most applications. That's important when many users share a printer and all need output quickly.

HP-GL/2 lets you merge high-quality typefaces and graphics to maintain a consistent look throughout your document.

Together, PCL 5 printer language and HP-GL/2 work with supporting software to let you rotate text and graphics. Print white letters on black. Print lines, shadows and mirror images. Fill text with printer-resident shades or patterns.

SCALE

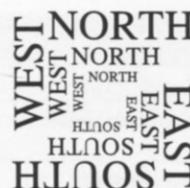
Scale from .25 to 999.75 points...



print at different angles...

10 Degrees
50 Degrees

create picture-frame scaling...



rotate fonts and graphics...

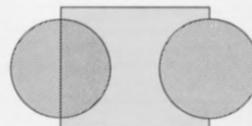


vary shades of gray...

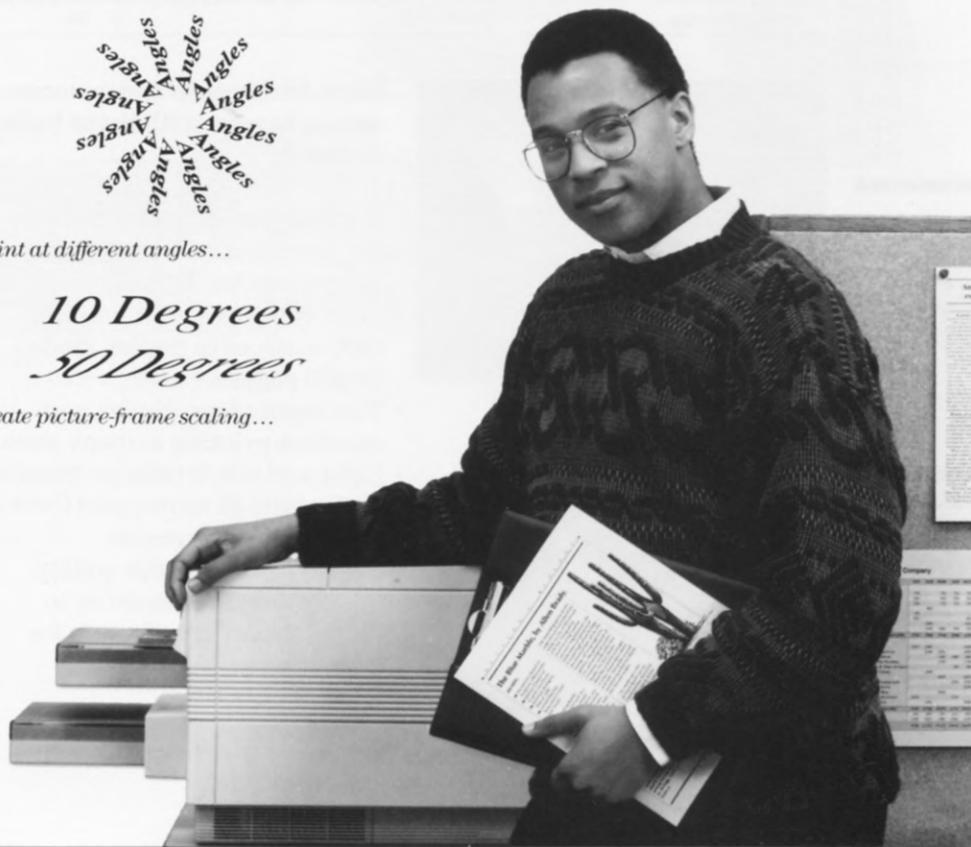


and printer-resident patterns...

Reverse



and use special effects to create high-impact layout effects.



Features comparison

Feature	HP LaserJet IIP printer	HP LaserJet III printer	HP LaserJet IIID printer
Print speed	Up to 4 pages per minute	Up to 8 pages per minute	Up to 8 pages per minute
Text and graphics resolution	300 dpi	300 dpi, with Resolution Enhancement technology	300 dpi, with Resolution Enhancement technology
Maximum monthly usage	6,000 pages	16,000 pages	20,000 pages
Memory Standard Optional Memory slots Required for Postscript	512 Kbytes 1 or 2 Mbytes (up to 4.5 total) 2 1 Mbyte added	1 Mbyte 1 or 2 Mbytes (up to 5 total) 2 1 Mbyte added	1 Mbyte 1 or 2 Mbytes (up to 5 total) 2 2 Mbytes added (4 for duplex printing)
Number of input trays	2 including optional lower cassette	1	3 including optional power envelope feeder
Paper capacity	50 sheets in multipurpose tray; 250 sheets in optional lower cassette	200 sheets	400 sheets (200 per tray)
Envelope printing capability/capacity Manual Optional tray Optional power feeder	Yes/5 Yes/20 No	Yes/1 Yes/15 No	Yes/1 Yes/15 Yes/50
Internal fonts and typefaces	14 bitmapped fonts	14 bitmapped fonts 8 scalable typefaces	14 bitmapped fonts 8 scalable typefaces
Internal symbol sets	24	35	35
Font cartridge slots	1	2	2
Downloaded type or macros	Limited only by memory	Limited only by memory	Limited only by memory
Fonts per page	Limited only by memory	Limited only by memory	Limited only by memory
Standard interfaces	Serial and parallel	Serial, parallel, expanded	Serial, parallel, expanded
Optional interface	AppleTalk	AppleTalk	AppleTalk
Printer language	HP PCL 4	HP PCL 5	HP PCL 5
Optional languages	Epson FX/IBM Proprinter emulation; authentic Adobe PostScript	Adobe PostScript	Adobe Postscript
Duplex printing	No	No	Yes



More features to share, more money to save with these built-in features:

- Print up to eight pages per minute, reducing wait time and improving throughput.
- Print 400 pages without refill (800 surfaces in duplex mode), 20,000 pages a month.
- Two input trays, duplex and envelope printing in many sizes.
- Eight scalable typefaces, typeface scaling and 14 bitmapped fonts to meet many user needs.
- Unsurpassed 300-dpi quality.
- One megabyte of memory to support a variety of needs for many users.

- High-impact documents with PCL 5 printer language and HP-GL/2 for faster graphics.

More ways to share.

- Third party switch boxes, electronic sharing devices and spoolers to connect to several PCs.
- HP LAN accessory to connect to Novell® Netware® networks.
- AppleTalk interface from HP to connect to Macintosh computers (also requires accessory memory and Adobe Postscript cartridge from HP).
- Third party interfaces to connect to IBM mainframes and minicomputers.

Interfaces and accessory support.

Centronics parallel, RS-232-C/RS-422-A serial (300-19,200 baud). Optional I/O port for AppleTalk and other interfaces.

PCL 5 printer language supports 1200/2400-dpi typesetting on AGFA Compugraphic Series 9000 imagesetters using AGFA Compugraphic DirectSet software.

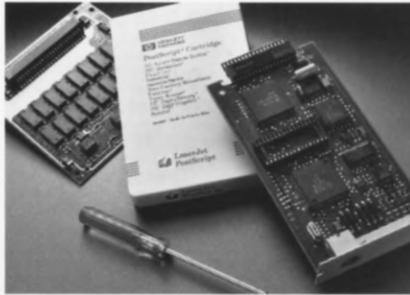
Add the impact of photos, charts and logos with the HP ScanJet Plus scanner's high-quality imaging. You can also scan text directly into your computer, eliminating rekeying and saving valuable time.

Plenty of built-in printer memory to start you off, and more available as your needs evolve.

With the one megabyte that's built into the printer, you can easily print most complex documents and up to 8x7 inch 300-dpi graphics. As your needs evolve, you can add memory in one- or two-megabyte increments, using the printer's two memory slots. Add up to four megabytes for a five megabyte total. That's enough to handle the toughest jobs from many demanding users who work with many fonts, large fonts, full-page graphics, legal-size or duplex printing, or all of the above.

Add authentic PostScript from HP in an easy-to-use cartridge.

HP packs the power of PostScript into one conveniently sharable cartridge that fits in either front cartridge slot. It includes the Adobe PostScript page description language plus 35 Adobe-licensed scalable typefaces. It works with



all PostScript software, fonts and high-performance output devices such as slidemakers and typesetters.

Polish your Apple output with HP LaserJet quality.

Use the optional AppleTalk interface kit from HP with the

PostScript cartridge and accessory memory for full compatibility with Apple LaserWriters, Macintosh computers and AppleTalk networks.

Binding possibilities.

Via the printer front control panel, you can set binding edges for four formats. These widen the appropriate margins to accommodate physical binding mechanics.

Fig. 1: portrait (vertical) long-edge;
Fig. 2: landscape (horizontal) long-edge;
Fig. 3: portrait short-edge;
Fig. 4: landscape short-edge.

Fig. 1:

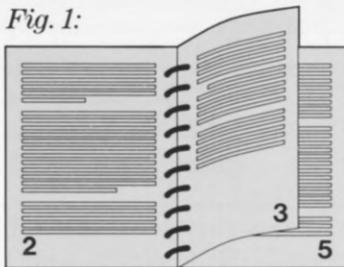


Fig. 2:

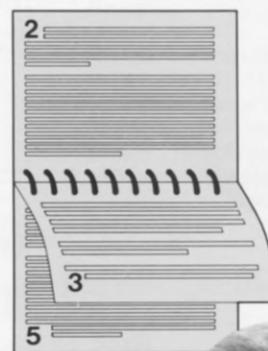


Fig. 3:

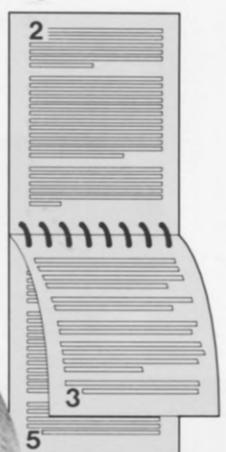
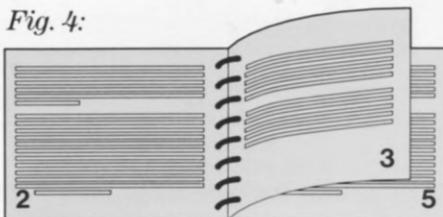


Fig. 4:



Paper types.

Quality cut-sheet copier and bond paper, special-application paper, envelopes, labels and overhead transparency films designed for laser printers. Overhead transparencies handle like regular paper.

HP recommends testing all media before purchasing. Refer to the Users Manual, Appendix D: "Paper and Print Media Specifications," or see your HP dealer for more information. You'll get best results with 16-36 lb. paper (16-24 lb. for duplex printing or the lower input tray). Paper is best used and stored at 17°-23° C (63°-73° F), and at relative humidity from 40 to 50%.

Paper sizes.

Letter	8.5 x 11 in.
Legal	8.5 x 14 in.
A4 European	210 x 297 mm
Executive	7.25 x 10.5 in.

Paper handling.

Two standard letter-size 200-sheet paper trays. Optional paper trays for legal, A4, and executive sizes. Accepts HP LaserJet Series II, LaserJet IID and LaserJet III printer trays. Manually feed heavy or odd-size papers. Correct-order output (face down) onto top output tray (100 sheets). Reverse-

order output (face up) onto rear output tray (20 sheets, printing one-side only). Optional power envelope feeder holds up to 50 envelopes. Optional envelope input tray holds up to 15 envelopes.

Printing formats.

Simplex (single-sided) or duplex (two-sided) printing; select from control panel or software.

Envelope weight.

Envelope tray and manual feed: 60 to 90 gm/m² (16 to 24 lb).

Envelope handling.

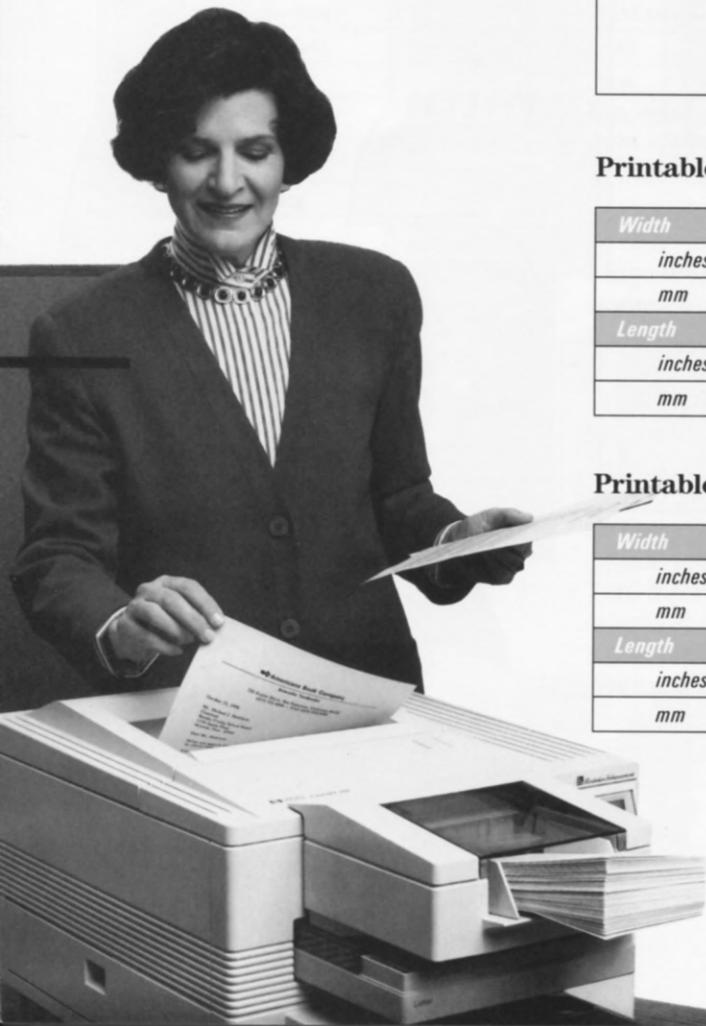
	<i>Optional envelope feeder</i>	<i>Optional envelope tray</i>	<i>Manual feed</i>
Capacity	Up to 50	Up to 15	One at a time
Types	Comm. #10	Comm. #10	Comm. #10
	Monarch	Monarch	Monarch
	DL	DL	DL
		C5	C5

Printable surface for envelopes (landscape).

<i>Width</i>	<i>Comm. #10</i>	<i>Monarch</i>	<i>DL</i>	<i>C5</i>
<i>inches</i>	9.10	7.10	8.27	8.62
<i>mm</i>	231	180	210	219
Length				
<i>inches</i>	3.72	3.47	3.86	5.91
<i>mm</i>	94	88	98	150

Printable surface for paper (portrait).

<i>Width</i>	<i>Letter</i>	<i>Legal</i>	<i>A4</i>	<i>Executive</i>
<i>inches</i>	8.0	8.0	7.8	6.75
<i>mm</i>	203	203	198	171
Length				
<i>inches</i>	10.6	13.6	11.3	10.1
<i>mm</i>	269	345	287	257



Specifications.

Printing process.

Dry-type laser electrophotography.

Printing speed.

First page less than 21 seconds after receipt of data. Print at speeds up to 8 pages per minute. Printer throughput is application- and system-dependent.

Warm-up time.

Less than 30 seconds from cold turn on. Time may vary depending on the amount of accessory memory installed.

Control panel-16 character LCD display.

Buttons: online; continue/reset; print fonts/test; form feed; enter/reset menu; menu; +; -.

Indicators: ready; manual; duplex; on-line; form-feed.

Select display languages: English; French; German; Spanish; Italian.



LCD on printer front control panel shows that the optional Adobe PostScript cartridge is installed.

Internal symbol sets.

These symbol sets are built into the printer: Roman-8, PC-8, DN, PC-850, ECMA Latin 1, Legal, HP Spanish, HP German and 17 ISO variations for foreign language characters. Ten additional symbol

Interface and cable requirements for personal computers.

System	Interface	HP cable
HP 150	Serial	13242G
(45643A interface required)	Parallel	13242D
HP Vectra PC	Serial	24542G
(24540A interface required)	Parallel	92284A
IBM PC/AT*	Serial	24542G
	Parallel	92284A
IBM PC, PC/XT & PS/2**	Serial	17255D
	Parallel	92284A
Macintosh	AppleTalk	33416A

*Compatibles include HP Vectra PC and COMPAQ DeskPro. (HP 24540A interface may be required for some models.)

**Compatibles include COMPAQ Portable.

Note: Some PCs must have specific interface accessory cards installed to connect to a printer. Consult your PC salesperson for more information.

sets are available for CG Times and Univers internal scalable typefaces, including Microsoft Publishing, DeskTop, Windows, PS Test, Math-8, PS Math, Pi Font, and Ventura U.S., International and Math.

Standard memory.

1 Mbyte of memory standard (approximately 720 Kbytes user-accessible); upgradable to 5 Mbytes in 1- or 2-Mbyte increments. Accessory memory compatible with HP LaserJet IIP and HP LaserJet III printers.

Environmental ranges.

Temperature, printer and toner:

Operating: 10 to 32.5°C (50 to 90°F)

Storage: 0 to 35°C (32 to 95°F)

Altitude:

Operating: 0 to 4,600 M (0 to 15,000 ft.)

Storage: 0 to 15,000 M (0 to 49,200 ft.)

Humidity:

Operating: 20 to 80% RH

Storage: 10 to 80% RH

Acoustics (declared noise emissions in accordance with ISO 9296):

During printing:

L_{WAd} : 6.3 Bels

L_{pAm} (bystander): 47.7 dB

During standby:

L_{WAd} : 4.9 Bels

L_{pAm} (bystander): 33.6 dB

Power requirements

Source:

100 to 115 volts ($\pm 10\%$) or 220 to 240 volts ($\pm 10\%$) depending on the country of purchase.

Frequency:

50 or 60 Hz ± 3 Hz (100-115 volts)

50 Hz ± 3 Hz (220-240 volts)

Power consumption at 115 VAC:

Printing: 870 watts maximum

Standby: 170 watts (typical)

Power consumption at 220 VAC:

Printing: 850 watts maximum

Standby: 170 watts (typical)

Physical specifications

Height	13.5 in.
Width	18.0 in.
Depth	26.4 in.
Depth with letter tray	33.2 in.
Weight	75.9 lbs.

Product certifications

UL 478 listed; CSA 22.2 No. 220 certified; complies with IEC 380; FCC level B, VDE 0871B, IEC 825, and CDRH certified Class 1 Laser Product (safe for office/EDP use).



Ordering Information

Number	Description
Standard Unit 33459A	HP LaserJet IIID printer (includes 1 Mbyte RAM; Centronics (parallel) and RS-232-C/RS-422-A (serial) interfaces; one EP-S toner cartridge; two letter-size paper input trays; power cord; User's Manual; Guide to Setting Up the HP LaserJet IIID printer; Quick Reference Guide; Software Application Notes.)*
Supplies 92295A 92295Q	Black toner cartridge (EP-S); approx. 4000 pages at 5% page coverage Ozone filter replacement; replace at approx. 50,000 pages.
Accessories 33458A 33439P 33416A 33474B 33475B 92297F 92297B 92297C 92297D 92297E 92297R 92297S 33480A	Power envelope feeder Adobe PostScript printer cartridge from HP AppleTalk interface kit 1-Mbyte memory board 2-Mbyte memory board 15-envelope capacity tray Letter (8.5 x 11 in.) paper tray Legal (8.5 x 14 in.) paper tray A4 (210 x 297 mm) paper tray Executive (7.25 x 10.5 in.) paper tray Replacement top cover for letter, A4, executive trays Replacement top cover for legal tray LAN connection accessory for Novell Netware networks
Documentation 33459-90901 33459-90905 33459-90902 33459-90918 33459-90903 33459-90904	User's Manual Guide to Setting Up the HP LaserJet IIID printer Quick Reference Guide** Software Application Notes Technical Reference Manual Technical Quick Reference Card**

*Computer interface cables not included; see the interface and cable requirements section for your computer needs.

**These documents cannot be ordered separately. Each is included with the document directly above it in the column. The Quick Reference Guide comes with the Guide to Setting Up. The Technical Quick Reference Card comes with the Technical Reference Manual.

HP: one compatible solution.

If you've already invested in HP LaserJet printers, you'll be pleased to know that the newest family member works with the same applications software, scalable typefaces, bitmapped fonts and toner cartridges—in fact, almost all HP accessories, old and new. You lose no time retraining, reformatting files or creating new procedures. You can use your present PC, whether standalone or shared.

HP: one reliable vendor.

Behind this compatibility stand 3,000,000-plus reliable HP LaserJet printers successfully meeting the world's business printing needs.

Plus single-vendor support for handily consolidating purchases:

- Expert, in-depth service from your authorized HP dealer.
- One-year *on-site* warranty plus sensibly priced service agreements.
- U.S. Personal Peripherals Assistance for fast help over the phone.
- New fax service in U.S. for fast, written software support.

For more information or a demonstration, call your authorized HP dealer now.

For the nearest authorized HP dealer in the United States, call toll-free: 1-800-752-0900. For the HP regional and worldwide offices, refer to the list below:

United States:

Hewlett-Packard Company
4 Choke Cherry Road
Rockville, MD 20850
(301) 670-4300

Hewlett-Packard Company
5201 Tollview Drive
Rolling Meadows, IL 60008
(708) 255-9800

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5161 Lankershim Blvd.
N. Hollywood, CA 91601
(818) 505-5600

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(03) 895-2895

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(416) 678-9430

European Headquarters:

Geneva, Switzerland
41/22 780-8111

Far East:

Hong Kong
848-7777

Japan:

Tokyo 160, Japan
(03) 5371-1351

Latin America:

Mexico, D.F.
(905) 202-0155

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