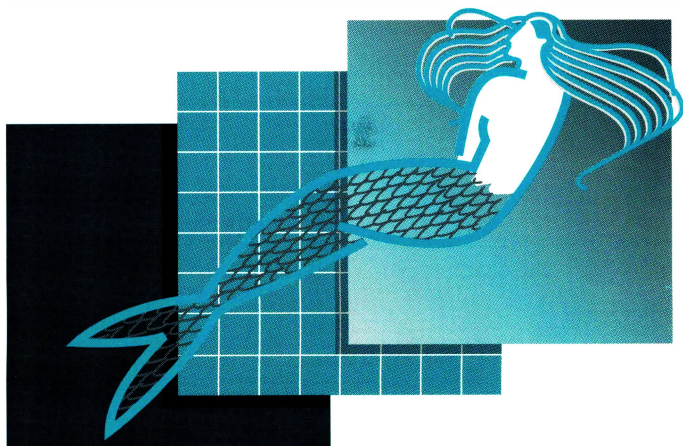


*PacificPage*TM P•E

POSTSCRIPT® LANGUAGE EMULATION CARTRIDGE



User's Guide

PACIFIC
DATA PRODUCTS

ENHANCEMENT PRODUCTS FOR LASER PRINTERS

*PacificPage*TM P•E

POSTSCRIPT[®] LANGUAGE EMULATION CARTRIDGE

User's Guide

PACIFIC
DATA PRODUCTS

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General Information

Introduction

Pacific Data Products' *PacificPage P•E* cartridge provides all the features of a PostScript® printer on your Hewlett-Packard LaserJet® IIP, IID, III, or IIID printer. The cartridge lets you enhance your documents with sophisticated graphics and fonts while still maintaining Printer Command Language (PCL) compatibility.

The cartridge provides enhanced image handling which shortens the imaging and printing time of scanned images and other graphics.

The special double buffering feature of the cartridge reduces your printing time by allowing your printer (with 4 MB of memory added) to process the next page while it is printing the current page.

Your *PacificPage P•E* cartridge is compatible with all major application programs which support PostScript. Simply install the cartridge in the left slot of your printer (single slot of Hewlett-Packard LaserJet IIP) and configure your application program for PostScript output. A table listing the driver preferences of key software packages is located in Chapter 2 of this guide.

With the cartridge installed and enabled, your laser printer receives instructions and then outputs data that is similar to the output received from Apple LaserWriter IINT and Apple LaserWriter IINTX printers. Pages printed with PostScript may look slightly different from pages printed in PCL mode.

PostScript

Unlike bitmapped fonts normally used with your laser printer, PostScript outline fonts are produced mathematically each time you print a document. Each character in a PostScript font is drawn as a series of lines and arcs that can be scaled and modified by your application program. PostScript allows you a tremendous amount of flexibility in specifying and manipulating fonts in a publication. Because PostScript fonts are actually graphic elements, you can create special design effects in your application software, such as reversing, stretching, rotating, and clipping type. PostScript font sizes are limited only by the capabilities of your software and your output paper size.

PostScript also allows you to create complicated illustrations and designs using special programs like Adobe Illustrator and Micrografx Designer. With page layout programs, like PageMaker or Ventura Publisher, you can combine text with graphics to produce a limitless variety of documents.

Refer to your application program user's manual for complete instructions on how to use the many features of PostScript. For more information about the PostScript programming language, refer to one of the following publications:

Holzgang, David A.
*PostScript Programmer's Reference Guide
Featuring PhoenixPage*
Scott Foresman Computer Books, Inc., 1988.

Adobe Systems Incorporated
PostScript Language Program Design
Menlo Park: Addison-Wesley Publishing
Company, Inc., 1988.

Adobe Systems Incorporated
PostScript Language Reference Manual
Menlo Park: Addison-Wesley Publishing
Company, Inc., 1985.

Adobe Systems Incorporated
PostScript Language Tutorial and Cookbook
Menlo Park: Addison-Wesley Publishing
Company, Inc., 1985.

PostScript output samples

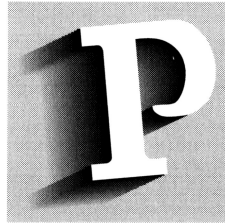
Reverse type

PACIFICPAGE

Skewed type

PP

Halftone gradation



Stretched type

PACIFICPAGE
PACIFICPAGE
PACIFICPAGE

Outline type

PacificPage

Scaled type

ABCDEFGHIJKLMNOPQRSTUVWXYZ
ABCDEFGHIJKLMNOPQRSTUVWXYZ
ABCDEFGHIJKLMNOPQRSTUVWXYZ
ABCDEFGHIJKLMNOPQRSTUVWXYZ
ABCDEFGHIJKLMNOPQRSTUVWXYZ
ABCDEFGHIJKLMNOPQRSTUVWXYZ
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ABCDEFGHIJKLMNOPQRSTUVWXYZ
ABCDEFGHIJKLMNOPQRSTUVWXYZ
ABCDEFGHIJKLMNOPQRSTUVWXYZ

Samples created using Corel Draw[®] and printed using PacificPage P•E[™].

Compatible printers

The cartridge is designed for use with the Hewlett-Packard LaserJet IIP, IID, III, and IIID printers only. The LaserJet IID and IIID duplexing feature is not supported in PostScript mode.

Compatible computers

The cartridge is compatible with IBM and IBM-compatible personal computers.

Pacific Data offers separately the PacificTalk adapter which allows Macintosh computers to print directly to a LaserJet printer over an AppleTalk network. The Macintosh will print to the Hewlett-Packard LaserJet as if it were a LaserWriter II, using the LaserWriter II driver.

Compatible software

The cartridge is compatible with all major IBM and Apple Macintosh software which can produce PostScript output including Microsoft Windows applications and software compatible with the Macintosh operating system.

Compatible interfaces

RS232-C (serial), Centronics (parallel), and optional I/O (XIO) are supported by the cartridge.

Note

Some application programs may not support parallel output to a PostScript printer. Refer to your application program manual for printer interface specifications.

Baud rates

The cartridge supports baud rates from 300 through 19,200 (19.2K).

Printer memory requirements

Pacific Data Products recommends a minimum of 2.5 megabytes of printer memory for optimal printer performance when printing complex documents containing multiple graphics or fonts, with legal or European A4 paper, or using PacificTalk interface or Pacific Connect. A minimum of 4.5 megabytes is required to use PacificPage's double buffering feature.

Pacific Data Products offers two memory upgrade boards, the *1-2-4 Plus* upgradeable memory board (for the IID) and the *Pacific 4* upgradeable memory board (for the IIP, III, and the IIID), that allows you to easily install extra memory in your printer.

Media sizes

The cartridge supports the following paper sizes:

<i>Letter</i>	8-1/2 x 11 in.
<i>Legal</i>	8-1/2 x 14 in.
<i>European A4</i>	210 x 297 mm

If you physically change paper size or paper tray size when using *PacificPage P•E*, you must reset the printer paper size parameters in PCL mode. You must use a paper tray that corresponds to the size of paper you have selected on the printer's control panel.

Resolution

The cartridge supports 300 dpi resolution (1/300 inch).

The Resolution Enhancement feature provided on the LaserJet III and IIID is fully supported by *PacificPage P•E* (refer to, "Setting Resolution Enhancement," in Chapter 2 of this *User's Guide*).

PacificPage fonts

With the cartridge installed, you can access all of the fonts listed below in Table 1-1. The left column lists the fonts contained in the cartridge. The right column lists the equivalent LaserWriter font name. See Appendix B for print samples of each font listed.

Table 1-1. PacificPage fonts

PacificPage fonts	Equivalent LaserWriter fonts
Swiss 721 - Normal	Helvetica - Normal
Swiss 721 - Bold	Helvetica - Bold
Swiss 721 - Oblique	Helvetica - Oblique
Swiss 721 - Bold/Oblique	Helvetica - Bold/Oblique
Swiss 721 Narrow - Normal	Helvetica Narrow - Normal
Swiss 721 Narrow - Bold	Helvetica Narrow - Bold
Swiss 721 Narrow - Oblique	Helvetica Narrow - Oblique
Swiss 721 Narrow - Bold/Oblique	Helvetica Narrow - Bold/Oblique
Dutch 801 - Normal	Times - Normal
Dutch 801 - Bold	Times - Bold
Dutch 801 - Italic	Times - Italic
Dutch 801 - Bold/Italic	Times - Bold/Italic
Courier - Normal	Courier - Normal
Courier - Bold	Courier - Bold
Courier - Italic	Courier - Italic
Courier - Bold/Italic	Courier - Bold/Italic
Geometric 711 ITC Avant Garde - Gothic Book	ITC Avant Garde - Book
Geometric 711 ITC Avant Garde - Gothic Book/Oblique	ITC Avant Garde - Book/Oblique

<i>PacificPage fonts</i>	<i>Equivalent LaserWriter fonts</i>
Geometric 711 ITC Avant Garde - Gothic Demi	ITC Avant Garde - Demi
Geometric 711 ITC Avant Garde - Gothic Demi/Oblique	ITC Avant Garde - Demi/Oblique
Revival 711 ITC Bookman - Demi	ITC Bookman - Demi
Revival 711 ITC Bookman - Demi/Italic	ITC Bookman - Demi/Italic
Revival 711 ITC Bookman - Light	ITC Bookman - Light
Revival 711 ITC Bookman - Light/Italic	ITC Bookman - Light/Italic
Zapf Calligraphic 801 - Normal	Palatino - Roman
Zapf Calligraphic 801 - Bold	Palatino - Bold
Zapf Calligraphic 801 - Italic	Palatino - Roman Italic
Zapf Calligraphic 801 - Bold/Italic	Palatino - Bold/Italic
Century 702 Century Schoolbook - Normal	New Century Schoolbook - Normal
Century 702 Century Schoolbook - Italic	New Century Schoolbook - Italic
Century 702 Century Schoolbook - Bold	New Century Schoolbook - Bold
Century 702 Century Schoolbook - Bold/Italic	New Century Schoolbook - Bold/Italic
Chancery 801 ITC Zapf Chancery - Medium/Italic	ITC Zapf Chancery - Medium/Italic
ITC Zapf Dingbats	ITC Zapf Dingbats
Symbol	Symbol

Resident font expansion

For those needing additional resident fonts, PacificPage P•E allows for the installation of a second “companion” cartridge to supplement fonts. Pacific Data Products offers separately the *PacificType* cartridge which provides an additional 40 printer resident fonts.

Downloadable outline fonts

The *PacificPage P•E* cartridge is compatible with Fontware™ Installation Kits and Fontware Typeface packages from Bitstream Inc. and with Adobe Type 1 fonts from Adobe Systems Incorporated.

For information concerning the number of downloadable outline fonts you can obtain using *PacificPage P•E* and for instructions on installing downloadable outline fonts, refer to your *PacificPage P•E Application Setup and Printing Guide*.

Screen fonts

Screen fonts for *PacificPage P•E* can be ordered from Pacific Data Products by phone at (619) 587-4690, by FAX at (619) 552-0889, or by mail using the order form provided in the package. Screen fonts are compatible with Microsoft Windows and Ventura Publisher.

Microsoft Windows also controls certain displays of screen fonts for some applications. For information concerning screen fonts, refer to the “Using Control Panel” chapter of your *Microsoft Windows User’s Guide* and to the applicable chapter of your application manual.

Notes

Installation and Setup

Initial setup

This section provides general information on printer setup and PostScript driver selection. Configuring the printer and your application program involves the following steps:

- Selecting and installing the correct PostScript printer driver in your application program
- Verifying your printer configuration
- Installing your cartridge
- Printing a test page to verify proper operation

Before you begin

Before you install *PacificPage P•E*, do the following:

1. Read the PacificPage P•E License Agreement.

If you do not agree to the terms set forth in the agreement, promptly return the product and your money will be refunded.

2. Complete and return the registration card.

Occasionally Pacific Data Products offers upgrades for *PacificPage P•E*, or announces accessory products. To receive the announcements, be sure to return the registration card.

Printer selection

When you first install your cartridge, you must change the default printer selection in your application program (you may want to retain the HP LaserJet as a second printer option for printing in PCL mode). Select one of the following as your target printer and follow your program's instructions for installing the printer driver (see Table 2-1 on the following page for the best driver to select for common software packages).

- Apple LaserWriter Plus, II, NT, or NTX
- PostScript (generic)

If the printer selection options shown above are not listed in your application's setup program, contact the application program manufacturer for any updated information. Refer to your *Application Setup and Printing Guide* for information on setup and printing with major application programs. Many application programs do not support all of PostScript's capabilities.

Table 2-1 indicates the printer driver file to select for common application programs.

Table 2-1. Printer drivers for common application programs

Application	Printer driver file to select
Adobe Illustrator	Windows LaserWriter II NT
Arts & Letters	Windows LaserWriter II NT
AutoCAD	Generic PostScript
CorelDraw	Windows LaserWriter II NT
Designer	Micrografx LaserWriter / PostScript
Freelance	Apple LaserWriter II NT
Harvard Graphics	Apple LaserWriter II NT
Lotus 1-2-3/3.0	Apple LaserWriter II NT Plus
MS Word 5.0	Generic PostScript
PageMaker	Windows LaserWriter II NT
PFS: 1st Publisher	LaserWriter
Q&A	LaserWriter
Slide Write	Generic PostScript
Ventura Publisher	Generic PostScript
Windows Paint	Windows LaserWriter II NT
Windows Write	Windows LaserWriter II NT
WordPerfect 5.0/5.1	Apple LaserWriter II NT
WordStar 2000	Generic PostScript
WordStar 5.5, 6.0	Generic PostScript
Zing	Windows LaserWriter II NT
Microsoft Windows	Windows LaserWriter II NTX

Printer configuration

The *PacificPage P•E* cartridge supports parallel, serial, and optional I/O interface configurations, and PacificTalk. Before installing the cartridge, check your printer configuration via the printer's control panel.

The interface and data communication parameters for your printer must be identical to those defined for your computer.

If you have the PacificTalk adapter, your Macintosh computer can print directly to the LaserJet printer over an AppleTalk network. The Macintosh will print to the Hewlett-Packard LaserJet as if it were a LaserWriter II using the LaserWriter II driver.

Parallel communication setting

Your printer comes with a standard Centronics parallel interface. The printer was configured for a default parallel interface at the factory.

Use the parallel interface when your documents contain large amounts of graphics or fonts. Since PostScript data files are usually quite large, you should setup your computer and printer for parallel (Centronics) communications if possible. This setup will significantly reduce printing times. Your printer's parallel interface is an input-only channel during PostScript printing, i.e., your computer cannot receive data from the printer.

Serial communication settings

Most PC application programs utilize the following serial communication settings:

- 9600 baud rate
- 8 data bits
- 1 stop bit
- No parity
- Robust XON - OFF
- DTR Polarity - Active High

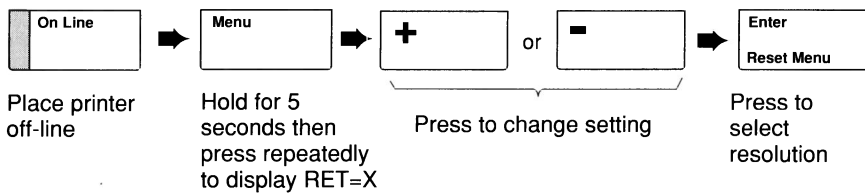
Ensure that these settings are correctly selected on the printer's control panel before installing the cartridge. Refer to your printer's installation guide and your application program's reference manual for specific instructions on how to change the default parameters.

Resolution Enhancement option (LaserJet III and IIID only)

Before you install the cartridge on your LaserJet III or IIID, you must set the Resolution Enhancement option from the second-level menu on the printer control panel. Follow these steps to set the Resolution Enhancement option:

1. If the cartridge is installed, turn your printer off, remove the cartridge, and turn the printer back on.
2. Press **On Line** to switch the printer to the off-line status (indicator light off).
3. Press and hold the **Menu** key for five seconds. The second level option menu will be displayed.
4. Press **Menu** repeatedly until RET=X is displayed. (X=OFF, DARK, MEDIUM, or LIGHT.)

5. Press the **+** (plus) or **-** (minus) key to change the setting. Press **Enter** to select dark, medium, or light resolution. For most printers a medium setting is suggested. An * (asterisk) will appear next to the selected value.
6. Press **On Line** to return the printer to on-line status.
7. Turn the printer off, re-install the cartridge, and turn the printer back on.



Once set, this option is stored in the printer's memory and is enabled during PostScript mode printing.

Cartridge installation

Use the following procedure to install the emulation cartridge:

1. Turn the printer off.

Caution

Failure to power down the printer before installation or removal of the cartridge may permanently damage the emulation cartridge.

2. With the label facing up, insert the cartridge into the left cartridge slot of the printer (or the single cartridge slot of the IIP). Ensure that cartridge is seated firmly in the slot.
3. Turn the printer on. The printer control panel will display the following four messages in sequence: "Ø5 SELF TEST", "Power Up", "Init PacPage", "PacificPage."

Cartridge removal

To remove the emulation cartridge, follow the procedure listed below:

1. Turn the printer off.
2. Grasp both sides of the cartridge and slowly pull it straight out to remove it from the printer.
3. Turn the printer on. After the "Ø5 SELF TEST", the printer control panel will display "ØØ READY."

Test and font pages

The test page shows the current printer configuration settings for:

- Mode
- Baud Rate
- Data Bits
- Stop Bits
- Parity
- Robust XON/OFF
- DTR Polarity

These settings can be changed only when the printer is in PCL mode (see “Switching Between PCL and PostScript” in this chapter).

Note

To see your PacificPage P•E version number displayed on the front panel without printing the test page, refer to the instructions for your printer in Chapter 3, “Control Panel Operation.”

The font page contains samples of each of the fonts provided in the cartridge.

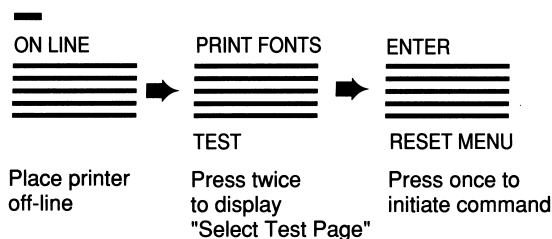
Instructions for printing the test and font pages on the Hewlett-Packard LaserJet IID, IIP, III, and IIID are provided on the following pages.

**Printing a
PostScript
test page -
LaserJet
IID, III, & IIID**

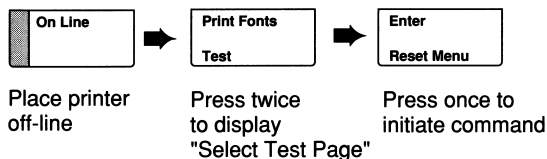
Check for proper cartridge installation on your Hewlett-Packard LaserJet IID, III, or IIID printer by printing a test page as follows:

1. Press **ON LINE** to switch the printer to the off-line status (indicator light off).
2. Press the **PRINT FONTS/Test** key twice. The "Select Test Page" message is displayed on the printer's control panel.
3. Press **Enter** to initiate the command to print the test page. The form feed light will flash as the data is being processed. The test page will take about 20 seconds to print.

Hewlett-Packard LaserJet IID



Hewlett-Packard LaserJet III/IIID

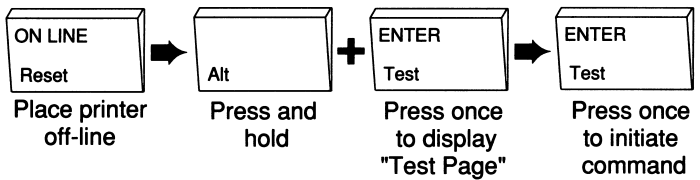


After printing the test page, the printer will automatically return to ready status (indicator light on).

**Printing a
PostScript
test page –
LaserJet IIP**

Check for proper cartridge installation on your Hewlett-Packard LaserJet IIP printer by printing a test page as follows:

1. Press **ON LINE/Reset** to switch the printer to the off-line status (indicator light off).
2. Hold down the **Alt** key while pressing the **ENTER/Test** key once. The "Test Page" message is displayed on the printer control panel.
3. Press **ENTER/Test** to begin printing the test page. The form feed light will flash as the data is being processed. The test page will take about 30 seconds to print.



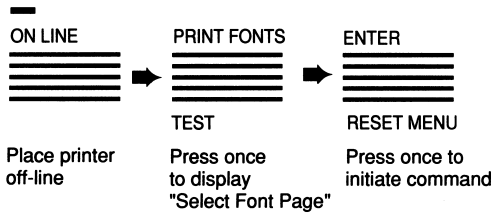
After printing the test page, the printer will automatically return to ready status (indicator light on).

**Printing a
PostScript font
page –
LaserJet IID,
III, & IIID**

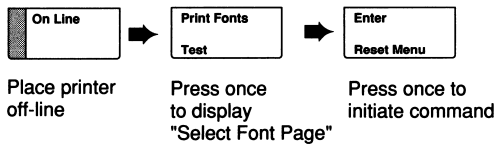
The font page contains samples of each of the fonts provided in the cartridge. Follow the steps listed below to print the font page.

1. Press **On Line** to switch the printer to off-line status.
2. Press the **Print Fonts/Test** key once. The "Select Font Page" message is displayed on the printer control panel.
3. Press **Enter** to begin the command to print the font sample page. The font page will take about one minute to print.

Hewlett-Packard LaserJet IID



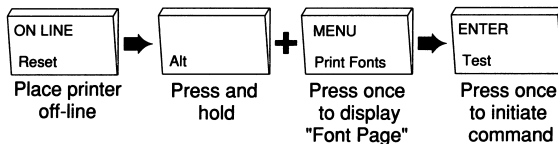
Hewlett-Packard LaserJet III/IIID



After printing the test page, the printer will automatically return to ready status.

**Printing a
PostScript font
page –
LaserJet IIP**

1. Press the **ON LINE/Reset** key to switch the printer to off-line status.
2. Hold down the **Alt** key while pressing the **MENU/Print Fonts** key once. The "Font Page" message is displayed on the printer control panel.
3. Press **ENTER/Test** to print the font sample page. The page will take about 1 minute and 15 seconds to print.



After printing the test page, the printer will automatically return to ready status.

Switching between PCL and PostScript

With the emulation cartridge installed, your printer can operate in either PCL (HP's Printer Control Language) or PostScript page description language. You can select either mode by using the printer's control panel, or by using the Software Switch (batch files) located on your Software Switch/CNTLD diskette.

The Software Switch batch files contain escape sequences that instruct your printer to operate in either PCL or PostScript mode. The Software Switch is not compatible with some "intelligent" buffers and spoolers; in this case, you must use the printer control panel to switch between PCL and PostScript modes.

If you are using the PacificTalk adapter to connect your Macintosh computer to your printer's parallel port, you can use the software switch only from the printer's front panel.

If you are using *PacificPage P•E* on a network, the printer should be used as a dedicated PostScript printer. Initiating the Software Switch in a networked environment will interrupt current print jobs and may disable the printer temporarily. Pacific Data's *PacificPrint* software package provides an ideal solution for this problem if you are using a Novell network.

Note

Your printer will not interpret DOS or other non-PostScript commands when it is in PostScript configuration.

If you have soft fonts downloaded to your printer, switching from PCL to PostScript or vice versa will delete the soft fonts from printer memory.

Installing the Software Switch

Follow these steps to install the Software Switch batch files in your computer.

1. From the DOS prompt, change to the subdirectory where your Software Switch batch files are to be stored.
2. Insert the *PacificPage P•E* Software Switch disk into drive A.
3. Use the DOS **COPY** command to copy the Software Switch batch files to your hard disk. Type:

COPY A:\PS*.* and press **Enter**.

This will copy the batch files to your subdirectory.

Switching from PCL to PostScript from your computer

After installing the software switch batch files, you can switch from PCL to PostScript directly from the computer:

At the DOS prompt type: **PS** and press **Enter**. The printer will switch to PostScript configuration.

Note

If your computer is running an operating system other than DOS, you will need to download the following escape sequence from your computer to your printer to switch from PCL to PostScript:
EC&15257.1058J

**Switching
from
PostScript to
PCL from your
computer**

After installing the software switch batch files, you can switch from PostScript to PCL directly from the computer:

At the DOS prompt type: **PCL** and press **Enter**. The printer will switch to PCL configuration.

Note

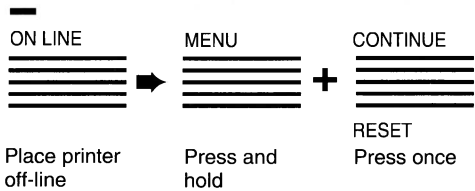
If your computer is running an operating system other than DOS, you will need to download the following escape sequence from your computer to your printer to switch from PostScript to PCL:
EC&/1057.32259J

**Switching
between PCL
and PostScript
from the
LaserJet
IID, III, & IIID
control panel**

Follow these steps to switch from PCL to PostScript directly from the printer's control panel:

1. Press the **ON LINE** key to take the printer off-line (indicator light off).
2. Press and hold the **MENU** key and press the **CONTINUE/RESET** key once as shown below. Then release the **MENU** key.

Hewlett-Packard LaserJet IID



Hewlett-Packard LaserJet III/IIID



The printer control panel will display "Ø5 SELF TEST," "Power Up," "Init PacPage," and then "PacificPage." The printer is now in PostScript configuration.

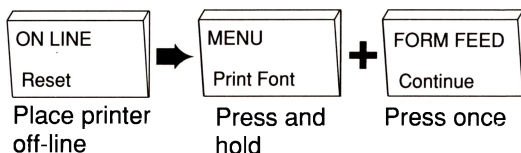
3. Repeat steps 1 and 2 above to switch back into PCL mode. The printer control panel will display "Ø5 SELF TEST," and then "Ready." The printer is now in PCL mode.

**Switching
between PCL
and PostScript
from the
LaserJet IIP
control panel**

Follow these steps to switch between PCL and PostScript directly from the printer's control panel:

1. Press the **ON LINE/Reset** key to take the printer off-line (indicator light off).
2. Press and hold the **MENU/ Print Fonts** key and press the **FORM FEED/ Continue** key once as shown below.

The printer control panel will display "Self Test", "power up," "Init PacPage," and then "PacificPage." The printer is now in PostScript configuration.



3. Repeat steps 1 and 2 above to switch back into PCL mode.

Printing your first PostScript document

After you have properly configured your system for PostScript output and installed your cartridge, you should test your setup by printing a simple PostScript document.

If you create a new document with your program set for PostScript output, simply send the document to your printer.

If you want to print a file that was composed for output to a PCL compatible printer, you must recompose the file for PostScript output. Some programs, like PageMaker and Ventura Publisher, automatically recompose documents for the selected output device. For WordPerfect and other word processing programs, you must replace all PCL font codes with their PostScript equivalent typeface codes. The *Application Setup and Printing Guide* describes how to print using some of the more popular application programs.

Note

You cannot combine PostScript typeface codes in the same document with PCL bitmapped font codes.

Printing PostScript files from DOS

To print PostScript files directly from DOS (files that are not printed directly from your application program), you will need to use the CNTLD (end of file command) file contained on your Software Switch/CNTLD disk. This end of file command tells the printer to clear all data in the printer's memory (including any downloaded soft fonts) from the previous print job.

Follow the steps below to install the CNTLD file in your computer.

1. Go to the directory where you want to store the CNTLD file.
2. Insert the *PacificPage P•E* Software Switch/CNTLD disk into drive A.
3. Use the DOS COPY command to copy the CNTLD file to your hard disk: Type **COPY A:CNTLD** and press **Enter**.

To send your file to the printer:

1. Type: **COPY CNTLD port** (*port* = LPT1, COM1, or PRN etc.) and press **Enter**. Although not required, this step ensures that the printer environment is cleared for the next print job.
2. Type: **COPY filename.ext port** (*filename.ext* = the PostScript file name) and press **Enter**.
3. Type: **COPY CNTLD port** (*port* = LPT1, COM1, or PRN etc.) and press **Enter**.

A CNTLD command may also be executed using the printer's control panel. Follow these steps:

1. Take the printer off line.
2. Press the **Enter** key on the printer's control panel (this is the CNTLD command). The printer will automatically return to on-line status, ready to receive data.

3. Send your file to the printer by typing: **COPY filename.ext port** (*filename.ext* = the PostScript file name) and press **Enter**.
4. Take the printer off line.
5. Press **Enter** on the control panel (CntlD command).
6. To print another file, repeat steps 3 through 5.

Resetting printer timeout parameters

When the printer buffer is temporarily full and unable to receive more data, you may see a "continue/retry or abort" type message from your program. If this happens often, you should reset your printer's timeout parameters. To do this, enter the following "continuous retry" command at your computer's DOS prompt:

If you are using a parallel interface, type:

MODE LPT1:.,P and press **Enter**.

If you are using a serial interface, type:

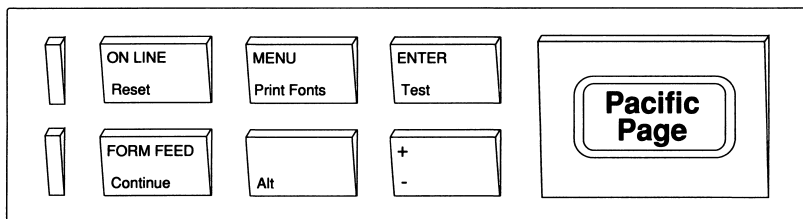
MODE COM1:96,N,8,1,P and press **Enter**.

The "96" indicates the default baud rate of 9600. If your computer and printer are set for a different baud rate, replace "96" with that number.

Some application programs, such as Windows and Q&A, will override your DOS Mode commands. In this case, refer to your application program manual for specific instructions on resetting printer timeout parameters.

Control Panel Operation

This chapter is divided into separate sections by printer type. Each section explains the function of the front panel keys and indicator lights on your Hewlett-Packard LaserJet IIP, IID, III, or IIID printer while in PostScript mode.

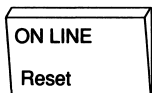


Control panel - LaserJet IIP

When installed and enabled, *PacificPage P•E* changes the function of the control panel on your printer. The control panel consists of six function keys, two indicator lights, and a 16-character LED display as illustrated above. The following paragraphs explain the function of each control panel key and indicator when your printer is in PostScript mode.

Size of file indicator

When a file is sent to the printer, the LED displays a file size counter that indicates how much data the printer has processed. The first 4K of data is received quickly. Then the counter increases in 4K increments until the end-of-file (^D) command is processed.

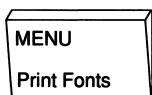


ON LINE – Press this key to switch your printer between on-line and off-line mode. (The printer must be on-line to receive data from your computer.)

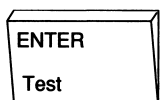
Reset – When the printer is off-line, press once, while holding down the **Alt** key to reset the printer. During reset, all soft fonts and page data are cleared from the printer memory.



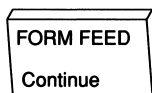
On Line indicator – This indicator is lit when the printer is on-line and ready to receive data. The indicator is not lit when the printer is off-line.



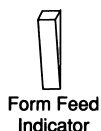
MENU/Print Fonts – When the printer is off-line, press once while holding down the **Alt** key to display the "Font Page" option. Press **Enter** to print a font page.



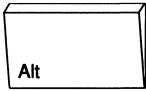
ENTER/Test – When the printer is off-line, press once, while holding down the **Alt** key to display the "Test Page" option. Press **Enter** to print a test page.



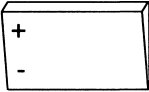
FORM FEED/Continue – Not supported in PostScript mode. In PCL mode, when the Form Feed indicator light is lit, switch the printer off-line and press this key to print any data stored in the printer buffer.



Form Feed indicator – This indicator is lit when the computer downloads data to the printer. It flashes when the printer is processing data or printing.

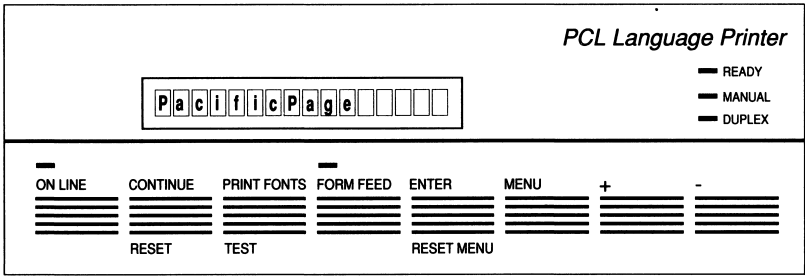


Alt – When the printer is off-line, press and hold this key to access other control panel options as described above.



+ (Plus) – When the printer is off-line, press this key to display the *PacificPage P•E* version number.

- (Minus) – This key is not supported in PostScript language mode.



**Control panel
- LaserJet IID**

When installed and enabled, *PacificPage P•E* changes the function of the control panel on your printer. The control panel consists of eight function keys, five indicator lights, and a 16-character LED display as illustrated above. The following paragraphs explain the function of each control panel key and indicator when your printer is in PostScript mode.

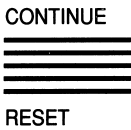
**Size of file
indicator**

When a file is sent to the printer, the LED displays a file size counter. This counter indicates how much data the printer has processed. The first 4K of data is received quickly. Then the counter increases in 4K increments until the end-of-file (^D) command is processed.

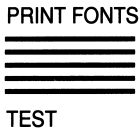


ON LINE – This key is used to take the printer off-line or return the printer to the on-line setting. When the printer is on-line it is ready to receive information. When off-line, the printer will not accept input from the computer.

On-Line indicator – This indicator is lit when the printer is on-line and ready to receive data. The indicator is not lit when the printer is off-line.



CONTINUE/RESET – Press and hold this key for five seconds while the printer is off-line to produce a “soft” reset. The printer will return to its default configuration.



PRINT FONTS/TEST – With the printer off-line, press this key once to display “Select Font Page” option. Press again to display “Select Test Page” option. Press **Enter** to initiate either command.



FORM FEED – This function key is not supported in PostScript language mode.

Form Feed indicator – This indicator is lit when the computer downloads data to the printer. It flashes when the printer is processing data or printing.

— MANUAL

Manual indicator – This indicator flashes simultaneously with the Ready Indicator when the computer is downloading data to the printer.

— DUPLEX

Duplex indicator - This indicator is not supported in PostScript mode.

— READY

Ready indicator – This indicator is lit when the printer is ready for operation.

MENU



MENU – This function key is used when switching modes (see instructions under the heading, “Switching Between PCL and PostScript From the Operator Control Panel”).

ENTER



RESET MENU

ENTER/RESET MENU – This function key is used to initiate a Test Page or a Font Page print command (see instructions under the headings, “Printing a PostScript Test Page” and “Printing a PostScript Font Page”).

+

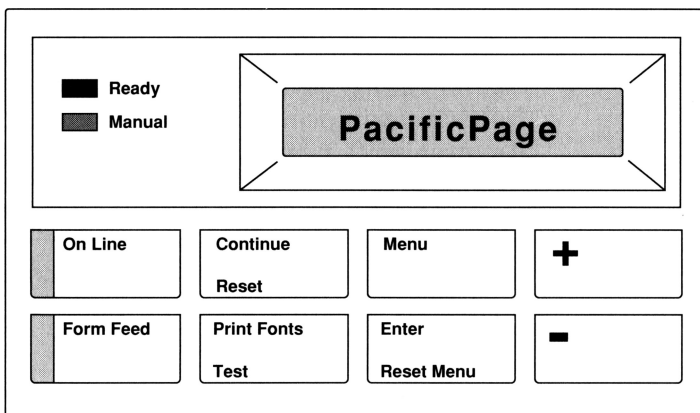


+ (Plus) – Press this key when the printer is off-line to display the *PacificPage P•E* version number.

-



- (Minus) – This key is not supported in PostScript language mode.



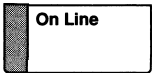
The control panel of the Hewlett-Packard LaserJet III is illustrated above. The LaserJet IIID control panel has an additional indicator light located beneath the manual indicator light.

Control panel - LaserJet III/IIID

When installed and enabled, *PacificPage P•E* changes the function of the control panel on your printer. The control panel consists of eight function keys, four indicator lights, and a 16-character LED display as illustrated above. The following paragraphs explain the function of each control panel key and indicator while the printer is in PostScript mode.

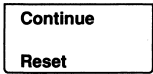
Size of file indicator

When a file is sent to the printer, the LED displays a file size counter. This counter indicates how much data the printer has processed. The first 4K of data is received quickly. Then the counter increases in 4K increments until the end-of-file (^D) command is processed.



On Line – This key is used to take the printer off-line or return the printer to the on-line setting. When the printer is on-line it is ready to receive information. When off-line, the printer will not accept input from the computer.

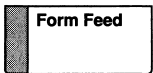
On-Line indicator – The indicator at the left of the On-Line key is lit when the printer is on-line and ready to receive data. The indicator is not lit when the printer is off-line.



Continue/Reset – Press this key once while the printer is off-line to produce a “soft” reset. The printer buffer and bit-map will be cleared and the printer will reinitialize.



Print Fonts/Test – With the printer off line, press this key once to display “Font Page” option. Press again to display “Test Page” option. Press **Enter** to initiate either command.



Form Feed – This function key is not supported in PostScript language mode.

Form Feed indicator – This indicator is lit when the computer downloads data to the printer. It flashes when the printer is processing data or printing.

 **Ready**

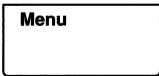
 **Manual**

 **Duplex**

Ready indicator – This indicator is lit when the printer is ready for operation and when the computer is downloading data to the printer.

Manual indicator – This indicator is lit when manual paper feed is selected.

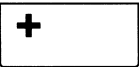
Duplex indicator (IIID only) – This indicator is not supported in PostScript mode.



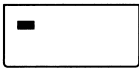
Menu – This function key is used when switching modes (see instructions under the heading "Switching Between PCL and PostScript from the Operator Control Panel").



Enter/Reset Menu – This function key is used to initiate a Test Page or a Font Page print command (see instructions under the headings "Printing a Postscript Test Page" and "Printing a PostScript Font Page").



+ (Plus) – Press this key when the printer is off-line to display the *PacificPage P•E* version number.



- (Minus) – This key is not supported in PostScript language mode.

Printer status messages

The printer status messages display the printer's current operating condition. The following printer status messages are supported by the cartridge.

Table 3-1. Printer status messages

Printer status message	Meaning
Out of Paper	Paper tray is empty.
Paper Jam	Paper is jammed in the paper path.
Printer Open	Top of printer is not closed securely.
Small Memory Error	Less than 1.5 MB of memory is installed in the printer, memory board is not installed properly, or memory chip speed/quality is inadequate.
Power Up	Printer diagnostics are being performed.
Init PacPage	Printer is preparing cartridge for operation.
Waiting	Printer is warming up.
PacificPage	Printer is in PostScript mode and ready for operation.
XXXXK File Size	Printer has processed data from the computer in the amount indicated.
Cart Fail	Cartridge emulation module has failed.

Appendix A Troubleshooting

Machine error codes

The following machine error codes are supported by *PacificPage P•E*.

Bus Error
Address Error
Illegal Instr
Zero Divide
CHK Instruct
Trap V Instr
Priv Violation
Trace
10 mach error
11 mach error
Stack error

A machine error code displayed on the operator control panel is usually caused by one of the conditions listed in Table A-1.

Table A-1. Machine error codes

Probable cause	Recommended action
Power fluctuations	<ol style="list-style-type: none">1. Turn the printer OFF.2. Ensure that printer is plugged into a stable AC power source.3. Turn printer ON and retry.
Faulty printer cable or connections	<ol style="list-style-type: none">1. Turn the printer OFF.2. Check the physical condition of the mechanical connections and cable.3. Ensure that all connections are secure.4. Turn printer ON and retry.
Erratic PostScript code	<ol style="list-style-type: none">1. Turn the printer OFF.2. Check for the conditions listed above.3. Turn printer ON and retry. If you still receive the machine error code, phone the Technical Support Department at (619) 587-4690 for further assistance.

PCL printer error codes

The PCL printer error messages are not supported when the cartridge is installed and enabled (PostScript mode). If you have difficulty printing in PostScript mode, follow the steps listed below to find out if a printer error has occurred.

1. Turn the printer off.
2. Remove the *PacificPage P•E* cartridge from the printer (see “Cartridge Removal” in Chapter 2).
3. Turn the printer on and check for an error message displayed on the Operator Control Panel. If an error message is displayed, refer to your printer’s operation manual for information.
4. If no error message is displayed, print a document while in PCL mode.
5. If an error message is displayed during printing, refer to your printer’s operation manual for information.
6. If no error message is displayed, refer to the Troubleshooting guide in Table A-2 on the following pages.

Table A-2. Troubleshooting guide

Symptom	Probable cause	Recommended action
Operator Control Panel does not display " PacificPage ."	Incompatible printer.	Install your cartridge in a Hewlett-Packard IIP, IID, III, or IIID Laser-Jet printer.
	Cartridge is not properly seated in slot, or the cartridge is not installed in left slot.	Turn printer OFF and re-insert cartridge in LEFT slot (or single slot of the IIP). Turn the printer on.
	Printer is in PCL configuration.	Execute Software Switch function. Refer to Chapter 2, "Switching between PCL and PostScript."
Operator control panel displays " Small Memory " message.	Not enough printer memory.	Install at least 1.5 megabytes of memory in your printer (2.5 megabytes is recommended).
	Memory board not properly installed.	Turn printer OFF and re-insert memory board.
	Memory chip speed/quality is not adequate for PostScript output.	Return memory board to manufacturer or install different chips on the memory board.
Operator control panel displays " Video Card Error " message.	Installed video card is not compatible with PacificPage P•E cartridge.	Disable video card.

Symptom	Probable cause	Recommended action
<p>FORM FEED indicator is not flashing and "XXXXX File Size" is not displayed on the operator control panel when you send your PostScript file to the printer.</p>	Printer is off line.	Press ON LINE key to place printer in on-line mode.
	Incorrect printer driver installed.	Refer to Chapter 2, "Initial Setup," and install one of the compatible drivers from within your application program.
	Incorrect printer interface settings.	Switch to PCL mode and make sure that serial/parallel settings on the operator control panel are set the same as your computer's. Refer to Chapter 2, "Switching between PCL and PostScript."
<p>FORM FEED indicator is lit and File Size counter has stopped incrementing for an indefinite period of time.</p>	PCL, DOS, or other non-PostScript command received by printer.	Remove all PCL font codes and commands from your document. Send only documents composed for PostScript output to your printer. Press the RESET key to cancel the print job and clear the buffer.
	Encapsulated files have not been bracketed with a CNTLD (end of file) command.	Refer to Chapter 2, "Printing PostScript Files from DOS."

Symptom	Probable cause	Recommended action
Printer does not accept Software Switch instruction.	A spooler or buffer is not allowing complete escape sequences to be sent to the printer.	Use the operator control panel option to switch between PCL and PostScript. Refer to Chapter 2, "Switching between PCL and PostScript from the Operator Control Panel."
Application program indicates that the printer is no longer receiving data and displays a " continue or abort? " message during print job.	The printer's buffer is temporarily full and unable to receive more data.	Reset time-out parameters using DOS MODE command or through your application program. Refer to Chapter 2, "Resetting printer time-out parameters."

Customer support

Pacific Data Products provides full technical support for our products. Before contacting one of our representatives, have a "Test Page" available for reference. Refer to Chapter 2, *Printing a PostScript Test Page*.

Pacific Data Products does not provide support for the PostScript language. If you are writing programs using the PostScript language, refer to one of the publications listed in Chapter 1, *Introduction*, or contact Adobe Systems, Inc. directly.

By phone

Please call (619) 587-4690 to speak with one of our customer support representatives if you experience problems with *Pacific Page P•E*, or if you have any questions about using your cartridge.

By bulletin board

Pacific Data Products maintains a 24-hour bulletin board system that provides information about the company's complete line of products, a question answering service, and updated software drivers for our products. To access the Pacific Data BBS, call (619) 452-6329, it will connect you to an available modem line.

By FAX

You may describe your problems to us by sending your FAX to (619) 552-0889. Please include a phone or FAX number for our response.

***International
support***

For product information or technical support for *PacificPage P•E*, contact the following office:

DCA Switzerland
Air Center Blandonnet
1214 Vernier
Geneva, Switzerland
Tel: 41-22-412650
Fax: 41-22-410682

Notes

Century 702 Century Schoolbook
(New Century Schoolbook Style) Normal

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ÆáíøæĂìÖÜÉíßÔÁĀāĐđÍĬłÓÒÕóŒœŠšŮ
ŸÿŽžŦŧ«»™©-®“”◊fifl†‡•„,„,„%o——’**

Bold/Italic

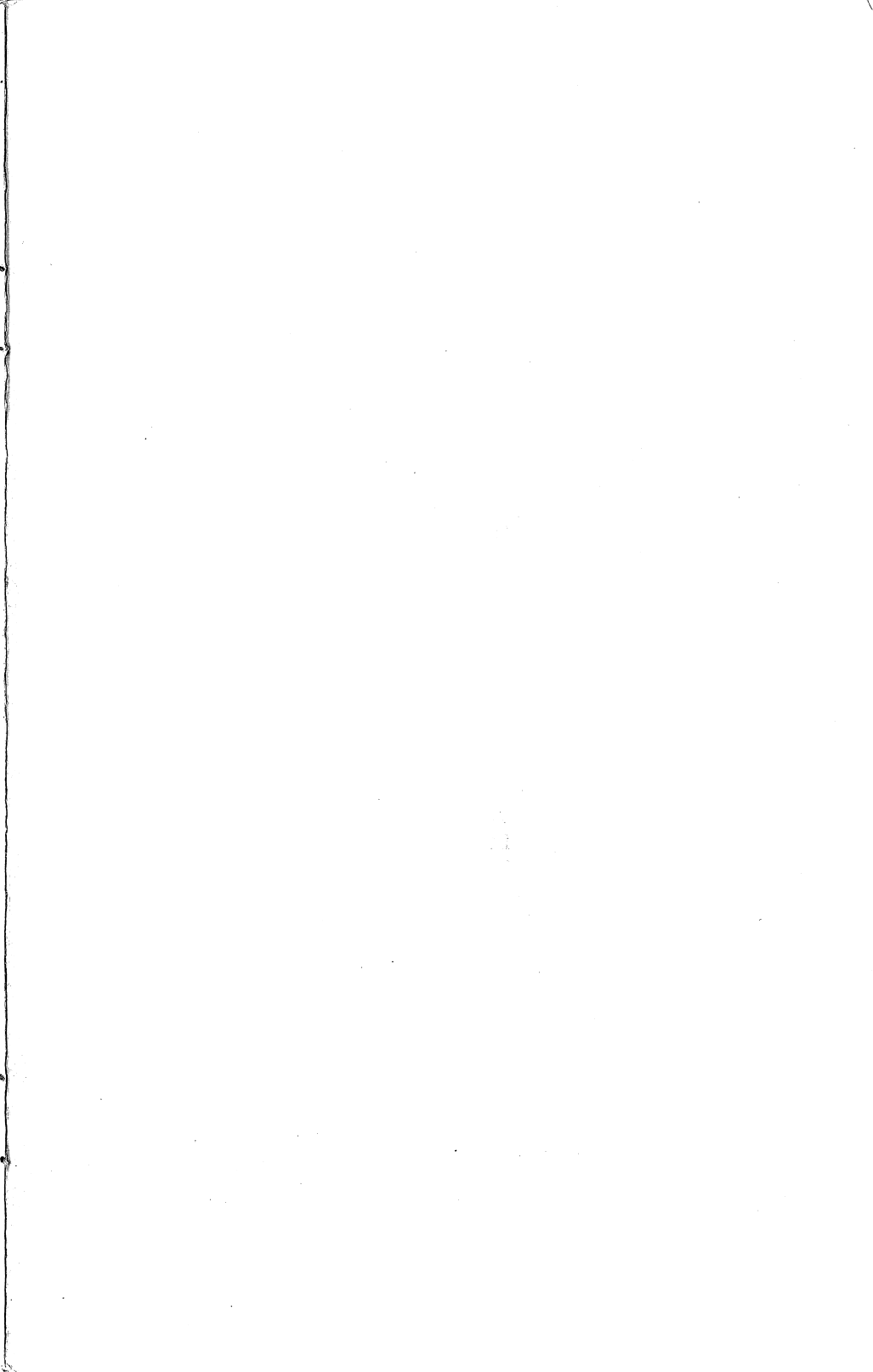
***ABCDEFGHIJKLMNOPQRSTUVWXYZabc
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LIFETIME WARRANTY
Pacific Data Products, Inc.

To the original purchaser only, Pacific Data Products, Inc. ("PDPI") warrants this product to be free of defects in material and workmanship under normal use for the lifetime of the original purchaser. PDPI makes no other express warranties on the Product. The purchaser's sole and exclusive remedy in the event of a breach of warranty is expressly limited to repair, refurbishment, or replacement of the defective product or, if replacement is not possible, a refund of the purchase price. Repair parts and replacement Products will be provided on an exchange basis and will be either reconditioned or new. All replaced parts and Products become the property of PDPI. This limited warranty does not cover damage to the Product resulting from accident, disaster, misuse, abuse, negligence, improper maintenance, or modification or repair of the Product other than by Pacific Data Products, Inc. Limited warranty service may be obtained by delivering the Product in its original container or equivalent to an authorized PDPI dealer and providing proof of purchase. This limited warranty gives you special legal rights, and you may also have other legal rights which vary from state to state.

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