

# D Printer commands

## Overview

Most software applications do not require you to enter printer commands. See your computer and software documentation to find the method for entering printer commands, if needed.

This appendix includes:

- [Understanding PCL 5e printer command syntax](#)
- [Selecting PCL 5e fonts](#)
- [Common PCL 5e printer commands](#)

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**Note**

The table at the end of this appendix contains commonly used PCL 5e commands (See “[Common PCL 5e printer commands](#)” on page 212). To order a *PCL 5/PJL Technical Reference Documentation Package*, see [www.hp.com/support/lj9000](http://www.hp.com/support/lj9000).

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## PCL 5e

PCL 5e printer commands tell the printer which tasks to perform or which fonts to use. This appendix provides a quick reference for users familiar with PCL 5e command structure.

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**Note**

Unless PCL 5e backward compatibility is required, HP recommends that PCL 6 printer drivers be used to take full advantage of all printer features. The PCL 5e printer driver in this printer is not backward compatible with older printers that use PCL 5e printer drivers.

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## HP-GL/2

The printer has the ability to print vector graphics using the HP-GL/2 graphics language. Printing in the HP-GL/2 language requires that the printer leave PCL 5e language and enter HP-GL/2 mode, which can be done by sending the printer PCL 5e code. Some software applications change languages through their drivers.

## PJL

HP's Printer Job Language (PJL) provides control above PCL 5e and other printer languages. The four major functions provided by PJL are: printer language changing, job separation, printer configuration, and status readback from the printer. PJL commands may be used to change printer default settings.

## Understanding PCL 5e printer command syntax

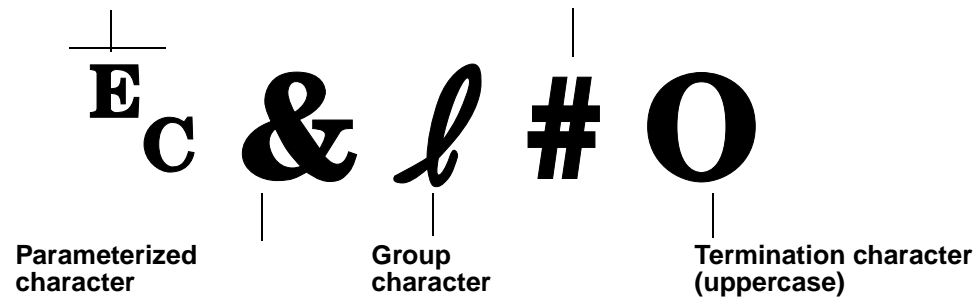
Before using printer commands, compare these characters:

Lowercase l:	l	Uppercase O:	O
Number one:	1	Number 0:	0

Many printer commands use the lowercase letter l (l) and the number one (1), or the uppercase letter O (O) and the number zero (0). These characters may not appear on your screen as shown here. You must use the exact character and case specified for PCL 5e printer commands.

**Escape character**  
(begins escape sequence)

**Value field** (contains both  
alpha and numeric characters)



## Combining escape sequences

Escape sequences may be combined into one escape sequence string. There are three important rules to follow when combining code:

- 1 The first two characters after the escape character (the parameterized and group characters) must be the same in all of the commands to be combined.

- 2 When combining escape sequences, change the uppercase (termination) character in each individual escape sequence to lower case.
- 3 The final character of the combined escape sequence must be uppercase.

The following is an example of an escape sequence string that would be sent to the printer to select legal paper, landscape orientation, and eight lines per inch:

```
Ec&13AEc&110Ec&18D
```

The following escape sequence sends the same printer commands by combining them into a shorter sequence:

```
Ec&13a1o8D
```

## Selecting PCL 5e fonts

Print a PCL font list to view the command for each internal font (See “PCL or PS font list” on page 159). A sample section is shown below. Notice the two variable boxes for symbol set and point size.

Univers Medium                      Scale                      <esc>(  <esc>(s1p  v0s0b4148T                      | 01

These variables must be filled in, or the printer will use defaults. For example, if you want a symbol set that contains line-draw characters, select the 10U (PC-8) or 12U (PC-850) symbol set. Other common symbol set codes are listed in the table in “Font selection” on page 215.

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### Note

Fonts are either "fixed" or "proportional" in spacing. The printer contains both fixed fonts (Courier, Letter Gothic, and Lineprinter) and proportional fonts (CG Times, Arial, Times New Roman, and others).

Fixed-spaced fonts are generally used in applications such as spreadsheets and databases, where it is important for columns to line up vertically. Proportional-spaced fonts are generally used in text and word processing applications.

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## Common PCL 5e printer commands

Function	Command	Options (#)
<b>Job control commands</b>		
Reset	?E	n/a
Number of copies	Ec&l#X	1 to 32,000
2-sided/1-sided printing	Ec&l#S	0 = Simplex (1-sided) printing 1 = Duplex (2-sided) with long-edge binding 2 = Duplex (2-sided) with short-edge binding

Function	Command	Options (#)
<b>Page control commands</b>		
Paper source	Ecl#H	0 = prints or ejects current page 1 = Tray 2 2 = manual feed, paper 3 = manual feed, envelope 4 = Optional Tray 1 5 = Tray 3 7 = auto select 20 = Optional Tray 4 22-69 = external trays
Paper size	Ecl#A	1 = Executive 2 = Letter 3 = Legal 6 = 11 by 17 17 = 16K 18 = JIS EXEC 19 = 8K 25 = A5 26 = A4 27 = A3 44 = B6-JIS 45 = B5-JIS 46 = B4-JIS 72 = Postcard (double) 80 = Monarch 81 = Commercial 10 90 = DL 91 = International C5 100 = B5 101 = Custom

Function	Command	Options (#)
Paper type	Ec&n#	5WdBond = Bond 6WdPlain = Plain 6WdColor = Color 7WdLabels = Labels 9WdRecycled = Recycled 11WdLetterhead = Letterhead 10WdCardstock = Cardstock 11WdPrepunched = Prepunched 11WdPreprinted = Preprinted 13WdTransparency = Transparency #WdCustompapertype = Custom <sup>a</sup>
Orientation	Ec&l#O	0 = Portrait 1 = Landscape 2 = Reverse Portrait 3 = Reverse Landscape
Top margin	Ec&l#E	# = number of lines
Text length (bottom margin)	Ec&l#F	# = number of lines from top margin
Left margin	Ec&a#L	# = column number
Right margin	Ec&a#M	# = column number from left margin
Horizontal motion index	Ec&k#H	1/120-inch increments (compresses print horizontally)
Vertical motion index	Ec&l#C	1/48-inch increments (compresses print vertically)
Line spacing	Ec&l#D	# = lines per inch (1, 2, 3, 4, 5, 6, 12, 16, 24, 48)
Perforation skip	Ec&l#L	0 = disable 1 = enable
<b>Programming hints</b>		
End of line wrap	Ec&s#C	0 = Enable 1 = Disable



Function	Command	Options (#)
Display functions On	EcY	n/a
Display functions Off	EcZ	n/a
<b>Language selection</b>		
Enter PCL mode	Ec%#A	0 = Use previous PCL cursor position 1 = Use current HP-GL/2 pen position
Enter HP-GL/2 mode	Ec%#B	0 = Use previous HP-GL/2 pen position 1 = Use current PCL cursor position
<b>Font selection</b>		
Symbol sets <sup>b</sup>	Ec(#	8U = HP Roman-8 Symbol Set 10U = IBM Layout (PC-8) (code page 437) Default Symbol Set 12U = IBM Layout for Europe (PC-850) (code page 850) 8M = Math-8 19U = Windows 3.1 Latin 1 9E = Windows 3.1 Latin 2 (commonly used in Eastern Europe) 5T = Windows 3.1 Latin 5 (commonly used in Turkey) 579L = Wingdings font
Primary spacing	Ec(s#P	0 = fixed 1 = proportional
Primary pitch	Ec(s#H	# = characters/inch
Set pitch mode <sup>c</sup>	Ec&k#S	0 = 10 4 = 12 (elite) 2 = 16.5 to 16.7 (compressed)
Primary height	Ec(s#V	# = points
Primary style <sup>b</sup>	Ec(s#S	0 = upright (solid) 1 = italic 4 = condensed 5 = condensed italic

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Function	Command	Options (#)
Primary stroke Wt. <sup>b</sup>	Ec(s#B	0 = medium (book or text) 1 = semi bold 3 = bold 4 = extra bold
Typeface <sup>b</sup>	Ec(s#T	Print a PCL font list to view the command for each internal font (See “Information menu” on page 175).

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- a. For custom paper, replace “Custompapertype” with the name of the paper, and replace the “#” with the number of characters in the name plus 1.
- b. Order the *PCL 5/PJL Technical Reference Documentation Package* for symbol set charts, or for more information see [www.hp.com/support/lj9000](http://www.hp.com/support/lj9000).
- c. The preferred method is to use the primary pitch command.