PDL Reference Guide for the WorkCentre M128/M123

Accessing Extended

Features

Overview

This document enables you to access the extended features of the WorkCentre M128/M123 in environments where Xerox does not provide a custom driver.

NOTE: Some of the commands and syntax used in this documents requires familiarity with either PostScript (PS) or Printer Command Language (PCL).

This document provides the Printer Description Language (PDL) commands and syntax for each feature. The following items are also included:

- A PostScript tables that describes the PostScript features the WorkCentre supports and the syntax to use the feature.

- A PCL table that describes the PCL features the WorkCentre supports and the syntax to use the feature.

This document is not intended to be a complete PS or PCL reference manual: it is a guide for using the PS and PCL commands with WorkCentre. Refer to these additional reference materials: *PostScript Language Reference Manual, Third Edition*, ISBN 0-201-38922-8, *PCL5 Printer Language Technical Reference Manual* Hewlett-Packard manual and *Printer Job Language Technical Reference Manual*, Hewlett-Packard manual.

Using this Guide

1. Search the Feature Table to determine whether the feature you wish to use is supported.

2. Verify that the feature is supported by the platform. For example, the WorkCentre must have the Finisher option installed to use stapling commands.

3. Following across the table to find the syntax listed for the PDL examples shown. Read the Dependencies/Caveats section.

PostScript

This WorkCentre supports PostScript 3 commands that enable the features listed in the following table.

Feature	Description
Media Size	Physical paper (media) size (width and height)
Media Direction	Feed direction of paper
Media Source	Feed tray
Media Source from SMH	Specify if you feed from SMH (Sheet Media Handler).
Media Color	Paper color
Media Weight	Media weight. Unit: (g/m²) gram per square-meter
Media Class	Specify a Media Class value to trigger media-related actions (for example, half-speed).
Media Type	Spefify a paper type (for example, cover stock).
Media Selection	Specify if you apply the strict setpagedevice rule to media selection.
Resolution	Horizontal and vertical resolution
Duplex	Delivers two-sided output. landscape documents read like a calendar, and portrait documents read like a book.
Image Enhancement	Specify whether to apply edge-smoothing to output after rendering.
Toner Save	Specify whether to lighten output density to save toner.
Halftone Screen Selection	Screen type
Output Location	Output bin
Quantity	Number of copies. (maximum: 9999)
Collation	Multiple pages in sequential sets (page 1, 2, 3, 4, etc.) or multiple pages in sets of the same page (4 copies of page 1, 4 copies of page 2, etc.)
Jog	Deliversoffsetting document sets.
Stapling	Indicates a staple position.
Interleaving Paper	Insert blank sheet between OHP (transparency) sheets
Process Color Model	Select process color model (DeviceGray, DeviceRGB, DeviceCMYK,)
Separations	Specify to generate multiple color separations for each page of output

Feature	Description
Separation Color Names	Specify the process colorant name.
Separation Order	Specify the order of process colorant name.
Use CIE Color	Specify to apply CIE-based color space through color conversion

PostScript Implementation

This section describes the PostScript commands required to access specific WorkCentre features. The following table lists each feature and the PostScript syntax required to use the feature. After the table are examples of how to use these commands and what the PostScript file looks like.

For more information about PostScript commands, refer to the *PostScript Language Reference Manual, Third Edition*, ISBN 0-201-37992-8.

PostScript Print Features/Implementation

* = default value

Feature	Implementation	Values
Media Size	<</PageSize [*width height*]>> setpagedevice	[*width* x *height*] in 1/72 inch (points) [842 1191] = A3 [595 842] = A4 [420 595] = A5 † [729 1032] = B4 [516 729] = B5 [396 612] = Statement (5.5 x 8.5) † [612 792] = Letter (8.5 x 11) [612 936] = Legal 13 (8.5 x 13) [612 1008] = Legal (8.5 x 14) [792 1224] = 11 x 17 [522 756] = Executive (7.25 x 10.5) † [765 1106] = 8Kai † [757 1100] = 8Kai † [553 765] = 16Kai † [550 757] = 16Kai † †: Each paper size is available based on non-volatile memory setting. The following paper sizes are only available with SMH. [297 420] = A6 [363 516] = B6 [576 720] = 8 x 10 [609 892] = 8.46 x 12.4 [792 1080] = 11 x 15 [632 842] = A4 Cover [648 792] = Letter Cover (9 x 11) [283 420] = Hagaki (Japanese PostCard) [420 567] = Double Hagaki [279 540] = Monarch [297 684] = Com-10 [312 624] = DL [288 432] = Postcard [649 918] = C4

Feature	Implementation	Values
		[459 649]　　= C5 [340 666]　　= Tyoukei You 3
Media Direction	<</LeadingEdge *int* >> setpagedevice	Where *int* is one of the following: 0 = Short Edge; top of page in portrait orientation. 1 = Long Edge; left side of page in portrait orientation. 2 = Short Edge; bottom of page in portrait orientation. 3 = Long Edge; right side of page in portrait orientation. null* = Auto
Media Source	<</MediaPosition *int*>> setpagedevice	Where *int* is one of the following: 0 = Tray1 1 = Tray2 2 = Tray3 3 = Tray4 null* = Auto
Media Source from SMH	<</ManualFeed *value*>> setpagedevice	Where *value* is one of the following: true = Feed paper from SMH false* = Feed paper from a tray other than SMH
Media Color	<</MediaColor (*string*) >> setpagedevice	Where *string* is any value.
Media Weight	<</MediaWeight *real* >> setpagedevice	Where *real* is in g/m²(gram per square-meter) or null
Media Class	<</MediaClass (*string*)>> setpagedevice	Where *string* is one of the following: Stationary = normal paper recycled = recycled paper transparency = OHP sheet thick1　 = thick paper 1 thick2　 = thick paper 2 user1　 = user defined paper 1 user2　 = user defined paper 2 user3　 = user defined paper 3 user4　 = user defined paper 4 user5　 = user defined paper 5 thin　　 = thin paper label　 = label paper used　　 = backing paper
Media Type	<</MediaType (*string*)>> setpagedevice	Where *string* is any value.

Feature	Implementation	Values
Media Selection	<</DeferredMediaSelection *value*>> setpagedevice	Where *value* is one of the following: true* = Deferred media selection by output device (more powerful and flexible media selection) false = Immediate media selection by strict setpagedevice operator
Resolution	<</HWResolution [*x y*]>> setpagedevice	Where *x* and *y* are one of the following: 600 600*(dpi) 1200 1200
Duplex	<</Duplex *value*>> setpagedevice	Where *value* is one of the following: true = Duplex false* = Simplex
Tumble	<</Tumble *value*>> setpagedevice	This feature is effective only in conjunction with Duplex = true. Where *value* is one of the following: true = Tumble (Short edge binding Duplex) false* = Duplex (Long edge binding Duplex)
Image Enhancement	<</PostRenderingEnhance true /PostRenderingEnhanceDetails << /Type 32 /REValue *int* >> >> setpagedevice	Where *int* is one of the following: 0 = No image enhancement 1* = Activate image enhancement
Toner Save	<</PostRenderingEnhance true /PostRenderingEnhanceDetails << /Type 32 /TonerSaver *int* >> >> setpagedevice	Where *int* is one of the following: 0* = No toner saving 1 = Lighten output density, toner saving
Halftone Screen Selection	<</PostRenderingEnhance true /PostRenderingEnhanceDetails << /Type 32 /EngineScreen *int* >> >> setpagedevice	Where *int* is one of the following: 0* = Low frequency screen 1 = High frequency screen 2 = Compatible screen with FX standard PDL's
Output Location	<</OutputType (*string*)>> setpagedevice	Where *string* is one of the following: CENTER TRAY: facedown tray #1 (w/o finisher) CENTER TRAY2: facedown tray #2 (w/ finisher) SIDE TRAY: faceup tray FINISHER TRAY1: finisher tray Null = Not specified

Feature	Implementation	Values

Quantity	<</NumCopies *value* >>
	 setpagedevice
		Where *value* is one of the following:
		   integer from 1 to 9999: number of copies
		   null: Not specified

Collation	<</Collate *value* >>
	 setpagedevice
		Where *value* is one of the following:
		   true = collated
		   false* = uncollated

Jog	<</Jog *int* >>setpagedevice	Where *int* is one of the following:
		   0 = Do not offset
		   3 = Offset at the beginning of each page [set]

Stapling	<</Staple *int1*
	 /StapleDetails << /Type 7
	   /Location *int2* >>
	 >>
	 setpagedevice
		Where *int1* is one of the following:
		   0* = Do not staple
		   3 = Staple at the end of each set
		 Where *int2* is one of the following:
		   0* = top-left-single
		   1 = bottom-left-single
		   2 = top-right-single
		   3 = bottom-right-single
		   4 = top-double
		   5 = bottom-double
		   6 = left-double
		   7 = right-double

Interleaving Paper	<</SlipSheet *int1*
	 /SlipSheetDetails << /Type 1
	   /AutoTraySelect *int2*
	   /SheetTray *int3*
	   /MediaClass (*string*) >>
	 >>
	 setpagedevice
		Where *int1* is one of the following:
		   0 = Do not deliver interleaving paper.
		   4 = Deliver interleaving paper at the end of each page
		 Where *int2* is one of the following:
		   0 = SheetTray is referred and feed interleaving paper from the SheetTray
		   1* = Feed interleaving paper from a tray following system setting. SheetTray is not referred.
		 Where *int3* is one of the following:
		   0* = Feed interleaving paper from Tray1
		   1 = Tray2
		   2 = Tray3
		   3 = Tray4
		   100 = SMH
		   Where *string* is same as the "Media Class" feature. It means media class for the interleaving paper.

Feature	Implementation	Values

Process Color Model	<</ProcessColorModel *name* >> setpagedevice	Where *name* is one of the following:
		  /DeviceGray
		  /DeviceRGB (with Separations true)
		  /DeviceCMYK (with Separations true)
		  /DeviceCMY (with Separations true)
		  /DeviceRGBK (with Separations true)

Separations	<</Separations *value* >> setpagedevice	Where *value* is one of the following:
		  true = Multiple color separations will be generated for each page of output.
		  false* = All colorants will be combined into a single composite page on a single sheet of physical medium.

Separation Color Names	<</SeparationColorNames *value*>> setpagedevice	Where *value* is an array.
		  Legal element values are the process colorant names implied by the process color model.
		  Valid colorant names for each process color model are like the following in case of separation
		  DeviceCMYK = Cyan, Magenta, Yellow, Black
		  DeviceCMY = Cyan, Magenta, Yellow
		  DeviceRGB = Red, Green, Blue
		  DeviceRGBK = Red, Green, Blue, Gray
		  DeviceGray = Gray

Separation Order	<</SeparationOrder *value*>> setpagedevice	Where *value* is an array. Legal element values are the process colorant names implied by the process color model.

Use CIE Color	<</UseCIEColor *value*>> setpagedevice	Where *value* is one of the following:
		  true = Re-map each color from device color space to device independent's CIE- based color space
		  false* = Do not re-map color

Job Name	These features use PJL commands as described in "PCL/PJL Implementation." Refer to that section for information about these features.	
Job Type		
Accounting		
Delay Print		

Sample PostScript Headers

Example 1 Header for Simple Print
```
%!PS
```

Example 2 Header for Finishing
(Letter paper, duplex, 10 copies with collation, stapling with left-upper single
and stacker tray for output bin)

```
%!PS
<</PageSize [612 792]>>setpagedevice
<</Duplex true /Tumble false>>setpagedevice
<</OutputType (FINISHER TRAY1)>>setpagedevice
<</Collate true>>setpagedevice
<</NumCopies 10>>setpagedevice
<</Staple 3 /StapleDetails << /Type 7 /Location 0 >>
>>setpagedevice
```

PostScript Feature Dependencies/Caveats

- All DSC comments are ignored and not interpreted.
- The WorkCentre supports PostScript resolutions up to and including 1200 x 1200. Some PostScript jobs may not print if you use this resolution. If printing stops, reprint the same job at a lower resolution.
- Valid media sizes for duplexing are between [253 x 360] and [841 x 1224] (point) except Hagaki, Double Hagaki, Postcard, Tyou-Youkei 3, Com10, Monarch, DL, C4, and C5.
- Valid media sizes for stapling include A3, A4, B4, B5, 8.5x11, 8.5x13, 8.5x14, 11x17, 8-Kai, 16-Kai, and 7.25 x 10.5.
- Do not duplex transparency and recycled paper jobs.
- Do not staple any job with all paper class except stationary, recycled and used (backing) paper.

PostScript Fonts

The following PostScript fonts are resident with Adobe interpreter.

Albertus
Albertus Italic
Albertus Light
Antique Olive Roman
Antique Olive Italic
Antique Olive Bold
Antique Olive Compact
Apple Chancery
Arial
Arial Italic
Arial Bold
Arial Bold Italic
ITC Avant Garde Gothic Book
ITC Avant Garde Gothic Book Oblique
ITC Avant Garde Gothic Demi
ITC Avant Garde Gothic Demi Oblique
Bodoni Roman
Bodoni Italic
Bodoni Bold
Bodoni Bold Italic
Bodoni Poster
Bodoni Poster Compressed
ITC Bookman Light
ITC Bookman Light Italic
ITC Bookman Demi
ITC Bookman Demi Italic
Carta
Chicago
Clarendon Roman
Clarendon Bold
Clarendon Light
Cooper Black
Cooper Black Italic
Copperplate Gothic 32BC
Copperplate Gothic 33BC
Coronet
Courier
Courier Oblique
Courier Bold
Courier Bold Oblique
Eurostile Medium
Eurostile Bold
Eurostile Extended No. 2
Eurostile Bold Extended No. 2
Geneva
Gill Sans
Gill Sans Italic
Gill Sans Bold
Gill Sans Bold Italic
Gill Sans Light
Gill Sans Light Italic
Gill Sans Extra Bold
Gill Sans Condensed
Gill Sans Condensed Bold
Goudy Oldstyle

Goudy Oldstyle Italic
Goudy Bold
Goudy Bold Italic
Goudy Extra Bold
Helvetica
Helvetica Oblique
Helvetica Bold
Helvetica Bold Oblique
Helvetica Narrow
Helvetica Narrow Oblique
Helvetica Narrow Bold
Helvetica Narrow Bold Oblique
Helvetica Condensed
Helvetica Condensed Oblique
Helvetica Condensed Bold
Helvetica Condensed Bold Oblique
Hoefler Text
Hoefler Text Italic
Hoefler Text Black
Hoefler Text Black Italic
Hoefler Ornaments
Joanna
Joanna Italic
Joanna Bold
Joanna Bold Italic
Letter Gothic
Letter Gothic Slanted
Letter Gothic Bold
Letter Gothic Bold Slanted
ITC Lubalin Graph Book
ITC Lubalin Graph Book Oblique
ITC Lubalin Graph Demi
ITC Lubalin Graph Demi Oblique
Marigold
Monaco
ITC Mona Lisa Recut
New Century Schoolbook Roman
New Century Schoolbook Italic
New Century Schoolbook Bold
New Century Schoolbook Bold Italic
NewYork
OCR-B Letterpress M
Optima Roman
Optima Italic
Optima Bold
Optima Bold Italic
Oxford
Palatino Roman
Palatino Italic
Palatino Bold
Palatino Bold Italic
Stempel Garamond Roman
Stempel Garamond Italic
Stempel Garamond Bold
Stempel Garamond Bold Italic

Symbol
Tekton Regular
Times Roman
Times Italic
Times Bold
Times Bold Italic
Times New Roman
Times New Roman Italic
Times New Roman Bold
Times New Roman Bold Italic
Univers 45 Light
Univers 45 Light Oblique
Univers 55
Univers 55 Oblique

Univers 65 Bold
Univers 65 Bold Oblique
Univers 57 Condensed
Univers 57 Condensed Oblique
Univers 67 Condensed Bold
Univers 67 Condensed Bold Oblique
Univers 53 Extended
Univers 53 Extended Oblique
Univers 63 Extended Bold
Univers 63 Extended Bold Oblique
Wingdings
ITC Zapf Chancery Medium Italic
ITC Zapf Dingbat

PCL

This WorkCentre supports PCL5e and PCL XL color emulations that enable the features listed in the following table.

Feature	Description
Job Name	Job identifier
Custom Paper Size – available only for PCL	Customer designated paper size
Media Size	Dimensions of paper
Media Source	Feed tray
Output Location	Output bin
Stapling	Indicate a staple position
Collation	Multiple pages in sequential sets (page 1, 2, 3, 4, etc.) or multiple pages in sets of the same page (4 copies of page 1, 4 copies of page 2, etc.)
Resolution	Horizontal and vertical resolution
Quantity	Number of copies (maximum 999)
Simplex	Deliver one-sided output
Duplex	Deliver two-sided output
Orientation	Landscape or portrait
Force Short Edge Feeding	Short edge feed or long edge feed
Job Mode	Specify mode as Job Mode: Normal Job, Secure Job, Delayed Job, Sample Job, Fax Job
Job Type	Specify Confidential Print or Proof Print
Interleaving Paper	Insert blank sheet between OHP sheets
Accounting	Enter user-account string to track printer usage
Delay Print	Specify the time to print a job

PCL/PJL Implementation

This section includes the PCL commands for specific features. The following table lists each feature and the PCL syntax required to use the feature. Following the table are examples of how to use these commands and the PCL file.

Refer to these reference materials: *PCL5 Printer Language Technical Reference Manual* and *Printer Job Language Technical Reference Manual*, Hewlett-Packard Manual.

Feature	Implementation	Values
Job Name	@PJL SET JOBNAME = "*jobname-string*"	Where *jobname-string* is a maximum of 32 characters Exclude 「"」 (22H) character
Custom Paper Size – available only for PCL	Not in PJL command. Use PCL to specify: <ESC>&l101A	Width of Custom Paper is specified by <ESC>*c#X where # = decipoints for (100 - 305) mm. Length of Custom Paper is specified by <ESC>*c#Y where # = decipoints for (140 - 482) mm. For instance: 4.25-inch x 5.5-inch produces <ESC>*c3060X3960Y 4.25-inch x 720 decipoints/inch = 3060 and 5.5-inch x 720 decipoints/inch = 3960.
Media Size	@PJL SET PAPER = *value*	Where *value* is one of the following: B4 B5 LETTER = 8.5x11 LEGAL = 8.5x14 A4 JISEXEC LEDGER = 11x17 A3 CUSTOM = Custom paper A5 ROC8 = 8Kai KROK16K = 16Kai

Feature	Implementation	Values
Media Size (continued)	<ESC>&l *int* A	Where *int* is one of the following: 2 = Letter (8.5 x 11) 3 = Legal (8.5 x 14) 6 = Ledger (11x17) 12 = B5 (JIS) 13 = A5 26 = A4 27 = A3 46 = B4 (JIS) 74 = 8Kai 131 = 16Kai
Media Source	@PJL SET MEDIASOURCE = *value*	Where *value* is one of the following: TRAY1 = Feed from paper tray1 TRAY2 = Tray2 TRAY3 = Tray3 TRAY4 = Tray4 TRAY5 = SMH
	<ESC>&l *int* H	Where *int* is one of the following: 0 = Feed paper from default tray 4 = Tray1 1 = Tray2 5 = Tray3 8 = Tray4 20 = Auto 2 or 3 = SMH
Output Location	@PJL SET OUTBIN = *value*	Where *value* is one of the following: UPPER = main tray MAINTRAY = main tray CENTERTRAY = main tray OUTBIN101 = finisher stacker
Stapling	@PJL SET STAPLE = *value*	Where *value* is one of the following: TOPDUAL TOPLEFT TOPRIGHT BOTTOMDUAL BOTTOMLEFT BOTTOMRIGHT LEFTDUAL RIGHTDUAL NONE
Collation	@PJL SET QTY = *int*	Where *int* is: 1 ~ 999 (When you use this parameter, collation is automatically enabled.)
Resolution	@PJL SET RESOLUTION = *value*	Where *value* is one of the following: 600 1200
Quantity	@PJL SET COPIES = *int*	Where *int* is: 1 ~ 999 Use this parameter for uncollated sets.

Feature	Implementation	Values
	<ESC>&l *int* X	Where *int* is: 1 ~ 999
Simplex	@PJL SET DUPLEX = *value1*	Where *value1* = OFF (simplex)
	<ESC>&l *int* S	Where *int* is one of the following: 0 = simplex

Duplex	@PJL SET DUPLEX = *value1*
	
	@PJL SET BINDING = *value2*
		Where *value1* = ON (duplex)
		Where *value2* is one of the following:
		  LONGEDGE
		  SHORTEDGE
		  (Use *value2* combined with value1 = ON)

	<ESC>&l *int* S	Where *int* is one of the following:
		  1 = Duplex long edge binding
		  2 = Duplex short edge binding

Orientation	@PJL SET ORIENTATION = *value*	Where *value* is one of the following:
		  PORTRAIT
		  LANDSCAPE

	<ESC>&l *int* 0	Where *int* is one of the following:
		  0 = Portrait
		  1 = Landscape
		  2 = Reverse portrait
		  3 = Reverse landscape

Force short edge feeding	@PJL SET PAPERDIRECTION = *value*	Where *value* is one of the following:
		  SEF = Short Edge Feed
		  LEF = Long Edge Feed

Job Mode	@PJL JOB MODE = *value*	Where *value* = PRINTER
Job Type	@PJL SET HOLD = *value* (see Example 3)	Where *value* = PROOF (proof print)
	@PJL SET HOLD = *value* @PJL SET HOLDKEY="*four-digit string*" (see Example 4)	Where *value* = STORE (confidential print) The HOLDKEY variable acts as a password to release a job held by the Store value. The variable value is any four-digit value from 0000 to 9999. The default value is "".

Feature	Implementation	Values

Interleaving Paper	@PJL SET SLIPSHEET = *value*	Where *value* is one of the following:
		   OFF = no slipsheet
		   BLANK = blank slipsheet
		   COPY = imaged slipsheet

Accounting	@PJL SET JOBATTR = "@JOAU = *string*"	Where *string* is a maximum of 32 characters (case sensitive)
Delay Print	@PJL SET JOBATTR = "@PRTM = *YYYY:MM:DD:hh:mm*"	*YYYY:MM:DD:hh:mm* *YYYY* = year (AD 2000 ~ 2099) *MM* = month (1 ~ 12) *DD* = day (1 ~ 31) *Hh* = hour (0 ~ 23) *Mm* = minute (0 ~ 59)

PCL Template

This section illustrates a standard PCL template used to access general print features as well as WorkCentre product-specific features. This template lists each feature and the syntax, both PCL commands and PJL, required to use these features. The next section of this document contains other examples of how to use these commands.

Section 1 (Opening Command, required for all files)

<ESC>%-12345X@PJL JOB MODE=PRINTER

Section 2 (PJL Set Commands)

@PJL SET RESOLUTION=600
@PJL SET COPIES=1

Section 3 (PCL Code used to invoke PCL Language)

@PJL ENTER LANGUAGE=PCL

Section 4 (PCL Data Stream or ASCII Document inserted here for Options such as selecting different fonts, simplex, duplex, etc.)

,,,,,,,,,,

Section 5 (Closing Command, Required at end of Document)

<ESC>%-12345X@PJL EOJ

Sample PCL Headers

Example 1 Header for Simple Print

```
<ESC>%-12345X@PJL JOB MODE=PRINTER<CR><LF>
@PJL COMMENT Beginning PCL Job<CR><LF>
@PJL SET OUTBIN=MAINTRAY<CR><LF>
@PJL SET QTY=1<CR><LF>
@PJL SET RESOLUTION=600<CR><LF>
@PJL SET JOBATTR="@JOAU=Nagaoka" <CR><LF>
@PJL ENTER LANGUAGE=PCL<CR><LF>
 PCL DATA ……….
<ESC>%-12345X@PJL EOJ <CR><LF>
```

Example 2 Header for Finishing Options

```
<ESC>%-12345X@PJL JOB MODE=PRINTER<CR><LF>
@PJL COMMENT Beginning PCL Job<CR><LF>
@PJL SET OUTBIN=OUTBIN101<CR><LF>
@PJL SET FINISH=ON<CR><LF>
@PJL SET STAPLE=TOPLEFT<CR><LF>
@PJL ENTER LANGUAGE=PCL<CR><LF>
 PCL DATA ……….
<ESC>%-12345X@PJL EOJ <CR><LF>
```

Example 3 Header for Proof Print

```
<ESC>%-12345X@PJL JOB MODE=PRINTER<CR><LF>
@PJL COMMENT Beginning PCL Job<CR><LF>
@PJL SET OUTBIN=MAINTRAY<CR><LF>
@PJL SET QTY=2<CR><LF>
@PJL SET RESOLUTION=600<CR><LF>
@PJL SET HOLD=PROOF <CR><LF>
@PJL SET USERNAME="Nagaoka" <CR><LF>
@PJL SET JOBNAME="Job1" <CR><LF>
@PJL ENTER LANGUAGE=PCLXL<CR><LF>
 PCL DATA ……….
<ESC>%-12345X@PJL EOJ <CR><LF>
```

Example 4 Header for Confidential Print

```
<ESC>%-12345X@PJL JOB MODE=PRINTER<CR><LF>
@PJL COMMENT Beginning PCL Job<CR><LF>
@PJL SET OUTBIN=MAINTRAY<CR><LF>
@PJL SET QTY=1<CR><LF>
@PJL SET RESOLUTION=600<CR><LF>
@PJL SET HOLD=STORE <CR><LF>
@PJL SET HOLDKEY="1234"<CR><LF>
@PJL SET USERNAME="Nagaoka" <CR><LF>
@PJL SET JOBNAME="Job1" <CR><LF>
@PJL ENTER LANGUAGE=PCLXL<CR><LF>
 PCL DATA ……….
<ESC>%-12345X@PJL EOJ <CR><LF>
```

PCL Feature Dependencies/Caveats

- All PJL commands must be in the first 2,500 bytes of the job.
- To combine printer escape commands (not including PJL commands):
  - The first two characters after the <esc> MUST be the same.
  - All alpha characters MUST be lowercase, except the final terminating character.
  - Commands are read left to right. Combine commands in the order you wish them to execute.
  - For example, combine print 5 copies (<ESC>&|5X) and use letter size (<ESC>&|2A) as <ESC>&|5x2A.
- In case of duplicate commands, the last one requested takes precedence.
- The @PJL SET COPIES takes precedence over the PCL Escape Command (<ESC>& | int X>) to set copies. In general, a PJL command takes precedence over a PCL command.
- Do not duplex any job with these media sizes: A6, B6. A request to duplex these media sizes is ignored.
- Do not staple any job with these media sizes: A6, B6, A5, 5.5 x 8.5. A request to staple these media sizes is ignored.
- Do not duplex any job with transparencies, labels, envelopes or tab-stock The duplex print request is ignored if you use any of these media types.
- Use one of these methods to specify media selection:
  - Describe the media attributes with size and type and allow the device to select the correct source tray. If you describe the media, leave source tray information out of the request or set to Auto. Otherwise, the tray selection defeats the auto tray selection capabilities of the device.
  - Indicate the media feed tray to use. In doing so, you allow the device to select media feed trays based on paper type defined by SYSTEM DEFAULT unless specified otherwise. This method prevents inadvertent use of special paper types. To override a paper type definition, include a paper type specification of UNSPECIFIED in the job.

PCL Fonts

The following PCL fonts are resident on the device.

Each of the commands reference a 12-point font. If you wish to use any other point size, change the 12v to the desired size (.25 – 999.75).

The commands listed use the default symbol set, Roman-8. To change the symbol set, include the alternate symbol set after the first <ESC> and before the second <ESC>. Use the line printer examples as a reference.

Font Name	PCL Escape Command
Albertus Medium	<esc>(<esc>(s1p12v0s1b4362T
Albertus Extra Bold	<esc>(<esc>(s1p12v0s4b4362T
Antique Olive	<esc>(<esc>(s1p12v0s0b4168T
Antique Olive Bold	<esc>(<esc>(s1p12v0s3b4168T
Antique Olive Italic	<esc>(<esc>(s1p12v1s0b4168T
Arial	<esc>(<esc>(s1p12v0s0b16602T
Arial Bold	<esc>(<esc>(s1p12v0s3b16602T
Arial Italic	<esc>(<esc>(s1p12v1s0b16602T
Arial Bold Italic	<esc>(<esc>(s1p12v1s3b16602T
CG Times	<esc>(<esc>(s1p12v0s0b4101T
CG Times Bold	<esc>(<esc>(s1p12v0s3b4101T
CG Times Italic	<esc>(<esc>(s1p12v1s0b4101T
CG Times Bold Italic	<esc>(<esc>(s1p12v1s3b4101T
CG Omega	<esc>(<esc>(s1p12v0s0b4113T
CG Omega Bold	<esc>(<esc>(s1p12v0s3b4113T
CG Omega Italic	<esc>(<esc>(s1p12v1s0b4113T
CG Omega Bold Italic	<esc>(<esc>(s1p12v1s3b4113T
Clarendon Condensed	<esc>(<esc>(s1p12v4s3b4140T
Coronet	<esc>(<esc>(s1p12v1s0b4116T
Courier	<esc>(<esc>(s1p12v0s0b4099T
Courier Bold	<esc>(<esc>(s1p12v0s3b4099T
Courier Italic	<esc>(<esc>(s1p12v1s0b4099T
Courier Bold Italic	<esc>(<esc>(s1p12v1s3b4099T
Garamond Antiqua	<esc>(<esc>(s1p12v0s0b4197T
Garamond Halbfett	<esc>(<esc>(s1p12v0s3b4197T
Garamond Kursiv	<esc>(<esc>(s1p12v1s0b4197T
Garamond Kursiv Halbfett	<esc>(<esc>(s1p12v1s1b4197T
Line Printer (Roman-8)	<esc>(8U<esc>(s0p16.67h8.5v0s0b0T
Line Printer (Latin-1)	<esc>(0U<esc>(s0p16.67h8.5v0s0b0T
Line Printer (PC-8)	<esc>(10U<esc>(s0p16.67h8.5v0s0b0T
Line Printer (PC-8 D/N)	<esc>(11U<esc>(s0p16.67h8.5v0s0b0T
Line Printer (PC-850)	<esc>(12U<esc>(s0p16.67h8.5v0s0b0T
Line Printer (Legal)	<esc>(1U<esc>(s0p16.67h8.5v0s0b0T
Marigold	<esc>(<esc>(s1p12v0s0b4297T
Times New	<esc>(<esc>(s1p12v0s0b16901T
Times New Bold	<esc>(<esc>(s1p12v0s3b16901T
Times New Italic	<esc>(<esc>(s1p12v1s0b16901T
Times New Bold Italic	<esc>(<esc>(s1p12v1s3b16901T
Symbol	<esc>(19M<esc>(s1p12v0s0b16686T
Wingdings	<esc>(579L<esc>(s1p12v0s1b31402T
Univers Bold	<esc>(<esc>(s1p12v0s3b4148T
Univers Bold Italic	<esc>(<esc>(s1p12v1s3b4148T
Univers Bold Condensed	<esc>(<esc>(s1p12v4s3b4148T
Univers Bold Condensed Italic	<esc>(<esc>(s1p12v5s3b4148T
Univers Medium	<esc>(<esc>(s1p12v0s0b4148T

Font Name	PCL Escape Command
Univers Medium Italic	<esc>(<esc>(s1p12v1s0b4148T
Univers Medium Condensed	<esc>(<esc>(s1p12v4s0b4148T
Univers Medium Condensed Italic	<esc>(<esc>(s1p12v5s0b4148T
Letter Gothic	<esc>(<esc>(s1p12h0s0b4102T
Letter Gothic Italic	<esc>(<esc>(s1p12h1s0b4102T
Letter Gothic Bold	<esc>(<esc>(s1p12h0s3b4102T
Times Roman	<esc>(<esc>(s1p12h0s3b4102T
Times Italic	<esc>(<esc>(s1p12h0s3b4102T
Times Bold	<esc>(<esc>(s1p12h0s3b4102T
Times Bold Italic	<esc>(<esc>(s1p12h0s3b4102T
Helvetica	<esc>(<esc>(s1p12v0s0b24580T
Helvetica Oblique	<esc>(<esc>(s1p12v1s0b24580T
Helvetica Bold	<esc>(<esc>(s1p12v0s3b24580T
Helvetica Bold Oblique	<esc>(<esc>(s1p12v1s3b24580T
CourierPS	<esc>(<esc>(s0p12h0s0b24579T
CourierPS Oblique	<esc>(<esc>(s0p12h1s0b24579T
CourierPS Bold	<esc>(<esc>(s0p12h0s3b24579T
CourierPS Bold Oblique	<esc>(<esc>(s0p12h1s3b24579T
SymbolPS	<esc>(19M<esc>(s1p12v0s0b45358T
Palatino Roman	<esc>(<esc>(s1p12v0s0b24591T
Palatino Italic	<esc>(<esc>(s1p12v0s0b24591T
Palatino Bold	<esc>(<esc>(s1p12v0s0b24591T
Palatino Bold Italic	<esc>(<esc>(s1p12v0s0b24591T
ITC Bookman Light	<esc>(<esc>(s1p12v0s-3b24623T
ITC Bookman Light Italic	<esc>(<esc>(s1p12v1s-3b24623T
ITC Bookman Demi	<esc>(<esc>(s1p12v0s2b24623T
ITC Bookman Demi Italic	<esc>(<esc>(s1p12v1s2b24623T
Helvetica Narrow	<esc>(<esc>(s1p12v4s0b24580T
Helvetica Narrow Oblique	<esc>(<esc>(s1p12v5s0b24580T
Helvetica Narrow Bold	<esc>(<esc>(s1p12v4s3b24580T
Helvetica Narrow Bold Oblique	<esc>(<esc>(s1p12v5s3b24580T
New Century Schoolbook Roman	<esc>(<esc>(s1p12v0s0b24703T
New Century Schoolbook Italic	<esc>(<esc>(s1p12v1s0b24703T
New Century Schoolbook Bold	<esc>(<esc>(s1p12v0s3b24703T
New Century Schoolbook Bold Italic	<esc>(<esc>(s1p12v1s3b24703T
ITC Avant Garde Book	<esc>(<esc>(s1p12v0s0b24607T
ITC Avant Garde Book Oblique	<esc>(<esc>(s1p12v1s0b24607T
ITC Avant Garde Demi	<esc>(<esc>(s1p12v0s2b24607T
ITC Avant Garde Demi Oblique	<esc>(<esc>(s1p12v1s2b24607T
ITC Zapf Chancery Medium Italic	<esc>(<esc>(s1p12v1s0b45099T
ITC Zapf Dingbats	<esc>(<esc>(s1p12v0s0b45101T

Additional Information

Xerox Customer Support welcomes feedback on all documentation - send feedback via e-mail to: USA.DSSC.Doc.Feedback@mc.usa.xerox.com.

You can reach Xerox Customer Support at 1-800-821-2797 (USA), TTY 1-800-855-2880 or at http://www.xerox.com.

Other Tips about Xerox multifunction devices are available at the following URL: http://www.office.xerox.com/support/dctips/dctips.html.

XEROX ®, The Document Company ®, the digital X ®, and all Xerox product names are trademarks of XEROX CORPORATION. Other trademarks belong to their respective owners.

Copyright © XEROX CORPORATION 2005. All Rights Reserved.

THE DOCUMENT COMPANY

XEROX®