DC Tips

... for the user

PDL Reference Guide for the DC 555/545/535

Accessing Extended Features

Extended Features:

- Accounting
- Proof Print
- Staple
- Collation
- Duplex
- Cover Options
- Media Source, Type, and Color
- Media Size
- Quantity
- Delay Print

Overview

This document enables you to access the extended features of the Document Centre in environments that do not have a custom driver. This includes the following environments:

- Custom DOS packages
- Other platforms (including mainframes and minis)

NOTE: Some of the commands and syntax used in this document requires some 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 table that describes features supported by the Document Centre.
- A PostScript table that describes the PostScript features the Document Centre supports and the syntax to use the feature.
- A PCL table that describes the PCL features the Document Centre 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 the Document Centre.

Refer to these additional reference materials *PostScript Language Reference Manual*, Third Edition, ISBN 0-201-37922-8 and *PCL 5 Printer Language Technical Reference Manual*, Hewlett-Packard Manual Part Number 5021-0377.

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 Document Centre must have the Finisher option installed to use stapling commands.
3. Follow across the table to find the syntax listed for the PDL examples shown. Read the Dependencies/Caveats section.

This document pertains to these Xerox products:

x	DC 555/545/535
	DC 490/480/470/460 ST
	DC 420/425/432/440 ST
	DC 332/340 ST
	DC 240/255/265 ST/LP
	DC 220/230 ST/LP
	DCCS 50

Print Features

The Document Centre supports PostScript level 2 and 3 commands or PCL5e and PCL6 escape sequences that enable the features listed in the following table.

Feature	Description
Job Name	Allows you to specify a job name.
Job Owner	Allows you to specify a job owner.
Media Size	Allows you to select media size.
Media Source	Allows you to select the paper tray that feeds a print job.
Media Type	Allows you to select type to media used to print a job.
Media Color	Allows you to select the color of media used to print a job.
Output Location	Allows you to select the output location where a job is delivered.
Stapling	Indicates stapling for a print job.
Hole Punching	Indicates hole drilling/punching after print job completes.
Collation	Allows you to select the order of the output. Collated creates a set that includes 1 copy of each page. Uncollated creates a stack of multiple copies of the same page.
Resolution	Allows you to select the resolution used to image a job. Currently, 600 x 600 x 1 (600 dpi resolution with 2 gray levels), 600 x 600 x 2 (600 dpi resolution with 4 gray levels), 1200 x 1200, and 1800 x 1800 are available.
Quantity	Allows you to select the number of sets to print.
Simplex	Delivers one-sided output.
Duplex Long Edge Binding	Delivers two-sided output. Landscape documents read like a calendar, and Portrait documents read like a book.
Duplex Short Edge Binding	Delivers two-sided output. Landscape documents read like a book and Portrait documents read like a calendar.
Orientation	Allows you to select portrait or landscape orientation.
Forcing Short-Edge Feed	Allow you to force some media sizes to print with the short-edge of the paper fed first.
Front Cover Imaged/Unimaged	Allows you to select a blank or imaged front cover.
Front Cover Media Type	Allows you to select media type for the front cover.
Front Cover Media Color	Allows you to select media color for the front cover.
Front and Back Cover Imaged/Unimaged	Allows you to select blank or imaged front and back covers.
Front and Back Cover Media Type	Allows you to select the media type for the front and back covers.
Front and Back Cover Media Color	Allows you to select the media color for the front and back cover.
Accounting	Allows you to enter an accounting code and UserID to track printer usage. **NOTE:** This feature requires the optional Network Accounting kit.
Draft Mode Printing	Allows you to select draft printing mode that conserves toner when printing.
Image Quality Selection	Allows you to increase or decrease the amount of toner used to create an image. Image quality levels range from 1 (darkest) to 7 (lightest).
Job Type	Allows you to select normal print, secure print, or proof print. Proof print is the same as sample set.

NOTE:
The Secure Print feature is not referenced in this document. This feature requires the encryption scheme that encodes the secure print password and is Xerox Private Data.

Feature	Description
Printer Banner Sheet	Allows you to turn printer banner pages on or off based on individual jobs.
Interleave	Allows you to insert blank or imaged sheets between transparencies.
Interleave Media Color	Allows you to select media color for the interleaves. Only use this feature in conjunction with the interleave feature.
Delay Print	Allows you to specify a time up to 72 hours from the current printer time, to print a job.

PostScript

This section describes the PostScript commands required to access specific Document Centre features. This table lists each feature and the PostScript syntax that is required to use the feature. Following this table are some 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 0-201-37922-8.

Print Features

Feature	Implementation	Values
Job Owner	%%OID_ATT_JOB_OWNER "*string*"	Where *string* is a maximum of 40 characters
Job Name	%%OID_ATT_JOB_NAME "string"	Where *string* is a maximum of 40 characters
Media Size	<</PageSize [width height]>> setpagedevice	[width x height] in 1/72 inch (points) [612 792] = Letter (8.5 x 11 inches) [612 1008 = Legal (8.5 x 14 inches) [792 1224] = Ledger (11 x 17 inches) [612 936] = Folio (8.5 x 13 inches) [522 756] = Executive (7.25 x 10.5 inches) [396 612] = 5.5 x 8.5 inches [360 504] = 5 x 7 inches [576 720] = 8 x 10 inches [648 792] = Letter Cover (9 x 11 inches) [324 432] = Postcard (4.5 x 6 inches) [842 1191] = A3 (297 x 420 mm) [595 842] = A4 (210 x 297 mm) [632 842] = A4 Cover (223 x 297 mm) [420 595] = A5 (148 x 210 mm) [297 420] = A6 (105 x 148 mm) [729 1032] = Jis b4 (257 x 364 mm) [516 729] = JIS B5 (182 x 257 mm) [363 516] = JIS B6 (128 x 182 mm) [279 540] = Monarch Envelope (3.9 x 7.5") [297 684] = No. 10 Envelope (4.1 x 9.5") [312 624] = DL Envelope (110 x 220 mm) [459 649] = C5 Envelope (162 x 229 mm) **NOTE:** Use this command in conjunction witth the Media Type and Media Color commands (see below in table)
Media Type	<</MediaType (string)>> setpagedevice	Where *string* is one of the following: bond, letterhead, standard, transparency, labels, drilled, recycled, preprinted, cardstock, other, system-default, envelopes, tabs, Custom1 – Custom7 **NOTE:** Use this command in conjunction with the commands Media Size and Media Color.
Media Color	<</MediaColor (string)>> setpagedevice	Where *string* is one of the following: buff, blue, clear, gray, green, ivory, orange, other, pink, red, white, yellow, goldenrod, unspecified, Custom1 - Custom 7. **NOTE:** Use this command in conjunction with the two commands Media Size and Media Type.

Feature	Implementation	Values
Media Source	`<</MediaPosition int>> setpagedevice`	Where *int* is one of the following: 0 = Auto Select 1 = Tray 1 2 = Tray 2 3 = Tray 3 (High Capacity) 4 = Tray 4 (High Capacity) 5 = Bypass Tray (SMH) **NOTE:** See the media selection comments in the Dependencies / Caveats section.

Output Location – options supported depend on output device.	`<< /OutputType (string) >> setpagedevice`
	
	OR
	
	`%%OID_ATT_OUTPUT_BINS value`
		Where *string* can be one of the following:
		When a catch tray is installed:
		• SideTray
		When a 2000 Sheet Stapler Stacker (Office Finisher) is installed:
		• TopTray
		• Stacker
		Where *value* can one of the following:
		OID_VAL_OUTPUT_BIN_TOP or
		OID_VAL_OUTPUT_BIN_SIDE
		OID_VAL_OUTPUT_BIN_STACKER
		
		NOTE: You cannot use the finisher stacker tray with envelopes and labels. Stapling or punching requires use of the stacker tray. If you indicate an invalid combination of commands, the output location request is ignored.

Stapling	`<</Staple int`
	`<</StapleDetails<</Type1/StapleLocation (string)>>`
	`>>`
	`>>setpagedevice`
		Where *int* is one of the following:
		0 = No Staple
		3 = Staple at the end of set
		
		Where *string* is one of the following three values:
		SinglePortrait - for single staple in portrait documents.
		SingleLandscape - for single staple in Landscape documents
		
		DualLandscape - two staples
		
		NOTE: Refer to the "Single Staple Location" table later in this document, for information about staple location restrictions.

Hole Punching	`<< /Punch int`
	`/PunchDetails << /Type 6`
	`/NumHoles 1 >> >> setpagedevice`
		Where *int* is one of the following:
		0 = No Punch
		4 = Punch each page
		
		NOTE: You can use the hole punching command with 8.5 x 11", 11 x 17", 9 x 11", A4, A3 and A4 cover size media only. Use the "rotated landscape" orientation with 11 x 17" and A3 pages.

Collation	`<</Collate value>> setpagedevice`	Where *value* is one of the following: true = Collated false = Uncollated

Feature	Implementation	Values

Resolution
 	
600 x 600 x 1
 	
1200 x 1200 x 1
 	
1800 x 1800 x 1
	<</DeviceRenderingInfo
	<< /Type 4 /ValuesPerColorComponent 2 >>
	/HWResolution [x y]>> setpagedevice
		Where *x* and *y* are one of the following:
		  600 600
		  1200 1200
		  1800 1800

600 x 600 x 2	<</DeviceRenderingInfo << /Type 4 /ValuesPerColorComponent 4 >> /HWResolution [x y]>> setpagedevice	
Quantity	<</NumCopies int>>setpagedevice OR %% OID_ATT_COPY_COUNT value	Where *int* **or** *value* is 1 to 9999
Simplex	<</Duplex value>> setpagedevice	Where *value* is false
Duplex Long Edge Binding	<</Duplex true /Tumble value>> setpagedevice	Where *value* is false
Duplex Short Edge Binding	<</Duplex true /Tumble value>> setpagedevice	Where *value* is true
Landscape Orientation	<</PageSize[height width]>> setpagedevice	[height/width] in 1/72 inch (points) To print landscape, use the Media Size command with height and width reversed. For example: [792 612] = Letter, landscape [842 595] = A4, landscape For landscape documents printed on 11 x 17", 8.5 x13", 8.5 x 14" or A3, apply a 180° rotation to landscape pages to ensure the correct location of stapling or punching. Use the PostScript command: "0 0 moveto 180 rotate -*height* -*width* translate" which should appear after any "setpagedevice" commands. The following example, for an A3 landscape page illustrates this syntax. <</PageSize [1191 843]>> setpagedevice …any other "setpagedevice" commands. 0 0 moveto 180 rotate -1191 -842 translate …rest of print commands for page.
Force short edge feeding	%%OID_ATT_FEED_EDGE value; or < /LeadingEdge *int* >> setpagedevice	Where *value* is one of the following: For portrait documents use: OID_VAL_FEED_EDGE_SHORT_TRAILING For landscape documents use: OID_VAL_FEED_EDGE_SHORT_LEADING Where *int* is one of the following: For portrait documents use: 2 For landscape documents use: 0 **NOTE:** The following media sizes default to printing with the long-edge fed first: Letter, Letter Cover, Statement, Executive, 8 x 10", A4, A4 Cover and B5. It is possible to force these media sizes to print with short-edge first.

Feature	Implementation	Values
Front Cover Imaged Enable/ Disable	%%OID_ATT_FIRST_PAGE_ IMAGED "value"	Where *value* is TRUE or FALSE TRUE produces an imaged cover. FALSE produces a blank cover. **NOTE:** Use this command in conjunction with these commands: Front Cover Media Type and Front Cover Media Color.
Front Cover Media Type	%%OID_ATT_FIRST_PAGE_ MEDIA_TYPE "value";	Where *value* is one of the following: standard, transparency, labels, drilled, recycled, pre-printed, heavyweight, other **NOTE:** Use this command in conjunction with these commands: Front Cover Imaged Enable and Front Cover Media Color.
Front Cover Media Color	%%OID_ATT_FIRST_PAGE_ MEDIA_COLOR "value";	Where *value* is one of the following: yellow, green, buff, white, red, ivory, gray, clear, pink, goldenrod, orange, blue, other **NOTE:** Use this command in conjunction with these commands: Front Cover Imaged Enable and Front Cover Media Type.
Front Cover Media Size	%%OID_ATT_FIRST_PAGE_MEDIA_SIZE "xxx yyy"	Where *xxx* and *yyy* are the media size expressed in mm. **NOTE:** This command is optional. Use only when printing blank front covers. Use this command in conjunction with the Front Cover Image Enable/Disable and the commends it required, that is, Front Cover Media Type, Front Cover Media Color, and Front Cover Imaged Enable/Disable.
Front & Back Cover Imaged Enable/ Disable	%%OID_ATT_FIRSTLAST_PAGE_IMAGED "value"	Where *value* is TRUE = an imaged front and back cover. or FALSE = a blank front and back cover. **NOTE:** Use this command in conjunction with these commands: Front & Back Cover Media Type and Front & Back Cover Media Color.
Front & Back Cover Media Type	%%OID_ATT_FIRSTLAST_PAGE_ MEDIA_TYPE "value";	Where *value* is one of the following: standard, transparency, labels, drilled, recycled, pre-printed, heavyweight, other **NOTE:** Use this command in conjunction with these commands: Front & Back Cover Imaged Enable and Front & Back Cover Media Color.
Front & Back Cover Media Color	%%OID_ATT_FIRSTLAST_PAGE_ MEDIA_COLOR "value";	Where *value* is one of the following: yellow, green, buff, white, red, ivory, gray, clear, pink, goldenrod, orange, blue, other **NOTE:** Use this command in conjunction with these commands: Front & Back Cover Imaged Enable and Front & Back Cover Media Type.
Front & Back Cover Media Size	%%OID_ATT_FIRSTLAST_PAGE_MEDIA_SIZE "xxx yyy"	Where xxx and yyy are the media size expressed in mm. **NOTE:** This command is optional. Use only when printing blank front and back covers. This command must be used in conjunction with the Front & Back Cover Image Enable/Disable and the commands it requires, that is, Front & Back Cover Media Type, Front & Back Cover Media Color, and Front & Back Cover Imaged Enable/Disable.
Draft Mode Printing	%%OID_ATT_PRINT_ QUALITY value;	Where *value* is one of the following: OID_VAL_PRINT_QUALITY_NORMAL OID_VAL_PRINT_QUALITY_DRAFT

Feature	Implementation	Values
Image Quality Selection	%%OID_ATT_IMAGE_QUALITY n;	Where value is one of the following: False = Bold HP type output True = Xerox High Accuracy output Where *n* applies for Xerox High Accuracy Output and is a number in the range: -3 (lightest) to 0 (normal) to +3 (darkest)
Job Type	%%OID_ATT_JOB_TYPE value;	Where *value* is one of the following: OID_VAL_JOB_TYPE_PRINT OID_VAL_JOB_TYPE_PROOF_PRINT
Printer Banner Sheet	%%OID_ATT_START_SHEET value;	Where *value* is one of the following: OID_VAL_JOB_SHEET_FULL (On) OID_VAL_JOB_SHEET_NONE (Off)
Interleave	%%OID_ATT_INTERLEAVE value;	Where *value* is one of the following: OID_VAL_INTERLEAVE_NONE OID_VAL_INTERLEAVE_BLANK OID_VAL_INTERLEAVE_IMAGED **NOTE:** Use this command in conjunction with the command: Interleave Media Color.
Interleave Media Color	%%OID_ATT_INTERLEAVE_ COLOR "value";	Where *value* is one of the following: yellow, green, buff, white, red, ivory, gray, clear, pink, goldenrod, orange, blue, other. **NOTE:** Use this command in conjunction with the command: Interleave.
Accounting	%%OID_ATT_ACCOUNTING_INFORMATION "UserID|042AccountID";	Where *UserID* is a value that the Printer Administrator assigns to a user. Where *AccountID* is a value that the Printer Administrator assigns to the account. **NOTE:** The User ID and the Account ID must be delimited by a |042.
Delay Print	%%OID_ATT_JOB_PRINT_AFTER "yyyymmddhhmmss"	Allows you to specify the time a job prints. Yyou can set this time up to 72 hours from the current printer time. Where *yyyy* is the year, *mm* is the month, *dd* is the date, *hh* is the hour, *mm* is the minute of the hour, and *ss* is the second of that minute. **NOTE:** The hours are expressed in a 24-hour clock. For example: July 29, 1999 at 3:25 PM is expressed as: 19990729152500.

EURO Font

The Euro character is provided in all standard Latin fonts (letter fonts such as Helvetica and Times) and the Symbol font included with the Adobe PostScript 3 interpreter. Special fonts such as ZapfDingbats do not contain the Euro symbol. Although the Euro character's "glyph" is added to the PostScript fonts, standard font encoding (that is, the character set) does not include the character.

To access the Euro character's glyph directly, use the "glyphshow" command as shown in the following example:

```
%!PS-Adobe-3.0
/Times-Roman findfont 12 scalefont setfont
120 735 moveto
(The price of this unit is: ) show /Euro glyphshow (200.00) show
showpage
```

Basic PostScript Template

This section illustrates a standard PostScript template used to access general print features, as well as, unique features of the Document Centre products. This template lists each feature and the syntax, both PostScript commands and DSC (Document Structuring Conventions), required to use these features.

Section 1 (Adobe Reference Command)
%!PS

Section 2 (XRXbegin - Opening Comment Statement, Required)
%% XRXbegin

<table>
<tr><td>

NOTE:
The print job specifies the following items:
- Job owner
- Job name
- 11 x 17 paper size
- Drilled
- Ivory paper
- 1200 x 1200 resolution
- Staple off
- Landscape
- Sample set
- Draft mode
- Offset off
- Banner sheet off
- Duplex long edge
- One copy

The quotations in the Job Name and Job Owner lines are required.

</td></tr>
</table>

Section 3 (OID Commands)

%%OID_ATT_JOB_OWNER "John Smith";

%%OID_ATT_JOB_TYPE OID_VAL_JOB_TYPE_PRINT;

%%OID_ATT_START_SHEET OID_VAL_JOB_SHEET_NONE;

%%OID_ATT_JOB_NAME "Readme.txt";

%%OID_ATT_PRINT_QUALITY OID_VAL_PRINT_QUALITY_DRAFT;

Section 4 (XRXend - Closing statement for Comment Section, Required)
%% XRXend

Section 5 (Options Such as Selecting Different Fonts, Simplex, Duplex, etc.)

<< /PostRenderingEnhance false >> setpagedevice

<< /Staple 0 >> setpagedevice

<< /Jog 0 >> setpagedevice

<< /ManualFeed false >> setpagedevice

<< /MediaType (Drilled) >> setpagedevice

<< /MediaColor (Ivory) >> setpagedevice

<< /DeviceRenderingInfo << /Type 4 /ValuesPerColorComponent 2 >>

/HWResolution [1200 1200] >> setpagedevice

<< /PageSize [792 1224] /ImagingBBox null >> setpagedevice

```
<< /Duplex true /Tumble false >> setpagedevice
<< /Collate false >> setpagedevice
```

Section 6 (Postscript Data Stream Inserted Here)

[PostScript]

Section 7 (EOF - Closing Statement for PostScript File, Required)

%%EOF

Sample PostScript Headers

Example 1 Header for Simple Print

```
%!PS

%%XRXbegin

%%OID_ATT_JOB_OWNER "John Smith"

%%OID_ATT_JOB_NAME "Print Job"

%%OID_ATT_COPY_COUNT 1

%%XRXend
```

Example 2 Header for Proof Print

```
%!PS
%%XRXbegin
%%OID_ATT_JOB_TYPE OID_VAL_JOB_TYPE_PROOF_PRINT
%%OID_ATT_COPY_COUNT 6
%%XRXend
```

Example 3 Header for Finishing Options

```
%!PS
%%XRXbegin
%%OID_ATT_JOB_OWNER "John Smith"
%%XRXend
<</PageSize [612 792]>>setpagedevice
<</OutputType (MainTray)>>setpagedevice
<</Staple 3>>setpagedevice
<</Duplex true /Tumble false>> setpagedevice
<</PostRenderingEnhance true>>setpagedevice
<</Collate true>>setpagedevice
<</NumCopies 10>>setpagedevice
```

PostScript Feature Dependencies/Caveats

- All %% commands (DSC comments) must be in the first 4096 bytes of the job.

- When using duplicate commands, the last command takes precedence. Since the setpagedevice commands are normally after the %% commands (DSC comments), the setpagedevice normally takes precedence.

- The Document Centre supports PostScript resolutions up to and including 1800 x 1800. Some PostScript jobs may not print if you use this resolution. If printing stops, reprint the same job at a lower resolution.

- Do not duplex or staple any job with media sizes A6, B6, 5 x 7" Postcard (4.5 x 6"), envelopes or any custom sized media where the page width is less than 5.5". A request to duplex or staple these media sizes is ignored.

- Do not duplex any job with transparencies, labels, envelopes or tab-stock. The duplex print request is ignored when it includes any of these media types.

- To use the duplex front and back imaged covers option most effectively, remember these items when you prepare the contents of the print file:

  - The Document Centre uses the contents of the first two and last two pages of the file as the front cover, inside front cover, back cover, and inside back cover.

  - The remaining pages print on the document body media type and color.

  - If a print file contains an odd number of pages, the Document Centre leaves the last body page (that is, the page adjacent to the inside back cover) blank.

- When using the Blank Front or the Blank Front and Back Cover command, the Cover Media Size command is optional. If the Cover Media Size command is not in the PDL, the printer uses the media size from the document body.

- Use one of the following methods to specify media selection:

  - Describe the media size, color, 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 the device should use. In doing so, you allow the device to select media feed trays based on the paper 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

This section describes the PCL commands required for specific features. This table lists each feature and the PCL syntax that is required to use the feature. Following this table are examples of how to use these commands and what the PCL file looks like.

Refer to these reference materials: *PCL 5 Printer Language Technical Reference Manual*, Hewlett-Packard Manual Part Number 5021-0377.

NOTE: Throughout this document, <esc> refers to the escape key. When you see <esc>, substitute the escape character appropriate for your environment.

PCL Print Features

Feature	Implementation	Values
Job Name	@PJL COMMENT OID_ATT_JOB_NAME "*string*";	Where *string* is a maximum of 40 characters
Job Owner	@PJL COMMENT OID_ATT_JOB_OWNER "*string*";	Where *string* is a maximum of 40 characters
Custom Paper Size – available only for PCL	@PJL COMMENT OID_ATT_PCL_CUSTOM_DIMENSIONS (*x*.0 *y*.0) <esc>101A	Where *x* and *y* are millimeters expressed as integer. **NOTE:** You must use both the PJL comment and the escape code. The value 101 in the escape code indicates custom sized job. The PJL comment communicates the media size to use.
Media Size	<esc> & l *int* A	Where *int* is one of the following: 2 = Letter (8.5 x 11 inches) 3 = Legal (8.5 x 14 inches) 6 = Ledger (11 x 17 inches) 44 = 8.5 x 13 inches (215 x 330 mm) 1 = 7.25 x 10.5 inches 41 = Statement (8.5 x 5.5 inches) 204 = 5 x 7 inches 208 = 8 x 10 inches 201 = 9 x 11 inches 211 = Postcard (4.5 x 6 inches) 27 = A3 (297 x 420 mm) 26 = A4 (210 x 297 mm) 200 = Oversized A4 (223 x 297 mm) 42 = A5 (148 x 210 mm) 203 = A6 (105 x 148 mm) 202 = B4 (257 x 364 mm) 45 = B5 (182 x 257 mm) 205 = B6 (128 x 182 mm) 80 = Monarch Envelope (3.9 x 7.5") 8 = No. 10 Envelope (4.1 x 9.5") 90 = DL Envelope (110 x 220 mm) 91 = C5 Envelope (162 x 229 mm) **NOTE:** Use this command in conjunction with these commands: Media Type and Media Color. All paper sizes are supported by all products. Please check the product documentation for paper sizes it supports.

Feature	Implementation	Values
Media Type	@PJL COMMENT OID_ATT_DEFAULT_MEDIUM_TYPE "*value*"	Where *value* is one of the following: bond, letterhead, standard, transparency, labels, drilled, recycled, preprinted, cardstock, other, system-default, envelopes, tabs, Custom1 – Custom7 **NOTE:** Use this command in conjunction with these commands: Media Size and Media Color.
Media Color	@PJL COMMENT OID_ATT_DEFAULT_MEDIUM_ COLOR "*value*"	Where *value* is one of the following: buff, blue, clear, gray, green, ivory, orange, other, pink, red, white, yellow, goldenrod, unspecified, Custom1 - Custom 7. **NOTE:** Use this command in conjunction with these commands Media Size and Media Type.
Media Source	<esc> & l *int* H	Where *int* is one of the following: 0 = Auto Select 1 = Tray 1 4 = Tray 2 23 = Tray 3 (High Capacity) 24 = Tray 4 (High Capacity) 2 = Bypass Tray **NOTE:** See the media selection comments in the Dependencies / Caveats section.
Output Location – Options supported depend on output device.	@PJL COMMENT OID_ATT_OUTPUT_BINS value	Where *value* can be one of the following: With a catch tray: OID_VAL_OUTPUT_BIN_SIDE With a 2000 Sheet Stapler/Stacker (Office Finisher) OID_VAL_OUTPUT_BIN_TOP OID_VAL_OUTPUT_BIN_STACKER **NOTE:** You cannot use the finisher stacker tray with envelopes and labels. Stapling or punching requires use of the stacker tray. If you indicate an invalid combination of commands, the output location request is ignored.
Stapling	@PJL COMMENT OID_ATT_FINISHING OID_VAL_FINISHING_STAPLE; @PJL COMMENT XRXSTAPLE = *value*	Where *value* is one of the following: PORTRAIT LANDSCAPE DUAL Refer to the "Single Staple Location" table later in this document, for information about staple location restrictions.
Hole Punching	@PJL COMMENT OID_ATT_PUNCH int;	Where *int* is one of the following: 0 = No Punch 1 = Punch each page **NOTE:** You can only use the optional hole punching command with 8.5 x 11", 11 x 17", 9 x 11", A4, A3 and A4 cover size media. Use the "rotated landscape" orientation with 11 x 17" and A3 pages.
Collation	@PJL COMMENT OID_ATT_OUTPUT *value*;	Where *value* is one of the following: OID_VAL_OUTPUT_PAGE_COLLATE OID_VAL_OUTPUT_NO_PAGE_COLLATE
Resolution	@PJL SET RESOLUTION = *value*;	Where *value* is the following: 600

Feature	Implementation	Values
Quantity	<esc> & l *int* X or @PJL SET COPIES = int	Where *int* is: 1 to 9999 (1 to 999 for DC2xx devices)
Simplex	<esc> & l *int* S	Where *int* is the following: 0 = Simplex

Duplex	<esc> & l *int* S	Where *int* is one of the following:
		  1 = Duplex Long Edge Binding
		  2 = Duplex Short Edge Binding

Orientation	<esc> & l *int* O	Where *int* is one of the following:
		  0 = Portrait
		  1 = Landscape
		  2 = Rotated Portrait
		  3 = Rotated Landscape
		
		NOTE: To ensure the correct location of stapling or punching, use 180°.rotated landscape mode to print landscape documents with media sizes of 11 x 17", 8.5 x13", 8.5 x 14" or A3.

Force short edge feeding	@PJL COMMENT OID_ATT_FEED_EDGE *value*;	Where *value* is one of the following: For portrait documents use: OID_VAL_FEED_EDGE_SHORT_TRAILING For landscape documents use: OID_VAL_FEED_EDGE_SHORT_LEADING **NOTE:** The following media sizes default to printing with the long-edge fed first: letter, letter cover, statement, executive, 8 x 10", a4, a4 cover and B5. It is possible to force these media sizes to print with short-edge first.

Front Cover Imaged Enable/Disable	@PJL COMMENT OID_ATT_FIRSTLAST_PAGE_ IMAGED *value*;	Where *value* is one of the following:
		  TRUE = an imaged cover
		  or
		  FALSE = a blank cover
		NOTE: Use this command in conjunction with these commands: Front Cover Media Type and Front Cover Media Color.

Front Cover Media Type	@PJL COMMENT OID_ATT_FIRST_PAGE_MEDIA_TYPE " *value*"	Where *value* is one of the following: system-default, standard, transparency, labels, drilled, recycled, preprinted, heavyweight, other. **NOTE:** Use this command in conjunction with the these commands: Front Cover Imaged Enable and Front Cover Media Color.
Front Cover Media Color	@PJL COMMENT OID_ATT_FIRST_PAGE_MEDIA_ COLOR "*value*"	Where *value* is one of the following: yellow, green, buff, white, red, ivory, gray, clear, pink, goldenrod, orange, blue, other **NOTE:** Use this command in conjunction with these commands: Front Cover Imaged Enable and Front Cover Media Type.
Front Cover Media Size	@PJL COMMENT OID_ATT_FIRST_PAGE_MEDIA_SIZE "*xxx yyy*"	Where *xxx* and *yyy* are the media size expressed in mm. **NOTE:** Only use this optional command when printing Blank Front Covers. Use this command with Front Cover Imaged Enable/Disable and its required commands, that is, Front Cover Media Type, Front Cover Media Color, and Front Cover Imaged Enable/Disable.

Front and Back Cover Imaged/Unimaged	@PJL COMMENT OID_ATT_FIRSTLAST_PAGE_ IMAGED *value*	Where *value* is one of the following:
		  TRUE = an imaged front and back
		  or
		  FALSE = a blank front and back cover
		NOTE: Use this command in conjunction with these commands: Front & Back Cover Media Type and Front & Back Cover Media Color.

Feature	Implementation	Values
Front & Back Cover Media Type	@PJL COMMENT OID_ATT_FIRSTLAST_PAGE_MEDIA_TYPE "*value*"	Where *value* is one of the following: system-default, standard, transparency, labels, drilled, recycled, pre-printed, heavyweight, and other. **NOTE:** Use this command in conjunction with the previous and these commands: Front and Back Cover Imaged Enable and Front and Back Cover Media Color.
Front & Back Cover Media Color	@PJL COMMENT OID_ATT_FIRSTLAST_PAGE_MEDIA_COLOR "*value*"	Where *value* is one of the following: yellow, green, buff, white, red, ivory, gray, clear, pink, goldenrod, orange, blue, other **NOTE:** Use this command in conjunction with these commands: Front & Back Cover Imaged Enable and Front & Back Cover Media Type.
Front & Back Cover Media Size	@PJL COMMENT OID_ATT_FIRSTLAST_PAGE_MEDIA_SIZE "*xxx yyy*"	Where *xxx* and *yyy* are the media size expressed in mm. **NOTE:** Only use this option when printing blank front and back covers. Use this command in conjunction with the Front/Back Cover Image Enable/Disable command and its required commands, that is, Front/Back Cover Media Type, Front/Back Cover Media Color, and Front/Back Cover Imaged Enable/Disable.
Image Quality Selection	@PJL SET DENSITY= *value*	Where *value* is a number in the range: 1 (lightest) to 7 (darkest).
Draft Mode Printing	@PJL COMMENT OID_ATT_PRINT_QUALITY *value*	Where *value* is one of the following: OID_VAL_PRINT_QUALITY_NORMAL OID_VAL_PRINT_QUALITY_DRAFT
Job Type	@PJL COMMENT OID_ATT_JOB_TYPE *value*	Where *value* is one of the following: OID_VAL_JOB_TYPE_PRINT OID_VAL_JOB_TYPE_ PROOF_PRINT
Banner Sheet	@PJL COMMENT OID_ATT_START_SHEET *value*	Where *value* is one of the following: OID_VAL_JOB_SHEET_FULL (On) OID_VAL_JOB_SHEET_NONE (Off)
Interleave	@PJL COMMENT OID_ATT_INTERLEAVE *value*	Where *value* is one of the following: OID_VAL_INTERLEAVE_NONE OID_VAL_INTERLEAVE_BLANK OID_VAL_INTERLEAVE_IMAGED
Interleave Media Color	@PJL COMMENT OID_ATT_INTERLEAVE_COLOR "*value*"	Where *value* is one of the following: yellow, green, buff, white, red, ivory, gray, clear, pink, goldenrod, orange, blue, other
Accounting	@PJL COMMENT OID_ATT_ACCOUNTING_INFORMATION "*UserID*|042*AccountID*";	Where *UserID* is a value the Printer Administrator assigns to a user. Where *AccountID* is a value the Printer Administrator assigns to the account. **NOTE:** Delimit the User ID and the Account ID by a |042.
Delay Print	@PJL COMMENT OID_ATT_JOB_PRINT_AFTER "*yyyymmddhhmmss*"	Where *yyyy* is the year, *mm* is the month, *dd* is the date, *hh* is the hour, *mm* is the minute of the hour, and *ss* is the second of that minute. **NOTE:** The hours are expressed in a 24 hour clock. For example: July 29, 1999 at 3:25 PM is expressed as: 19990729152500.
Condensed Printing	<esc>&k2S	See the DC Tip, *Formatting Condensed Print for Document Centre* for examples and additional information.
Stair-stepping	<esc>k2G	Helps to resolve stair-stepping in most instances.

EURO Font

For the DC 555/545/535 the Euro character is provided in all of the standard Latin in the following PCL symbol sets:

PCL Symbol Set	Symbol Set Code	Code Page	Euro Sign Character Code
Windows 3.1 Latin 1	19U	1252	128
Windows 3.1 Latin 2	9E	1250	128
Windows 3.1 Latin 5	5T	1254	128

You can select these symbol sets as default from the Document Centre Web client and the local user interface. The Euro character is not supported using other symbol sets including "Win 3.0 Latin 1" (9U) or "ISO-Latin-9" (9N) symbol sets.

The following example selects the "Antique Olive" font, 12 point size and the "Windows 3.1 Latin 1" symbol set.

<esc>%12345X
<esc>(19U<esc>(s1p12v0s0b4168T
The price of this unit is: €100.00
<esc>%12345X

Basic PCL Template

This section illustrates a standard PCL template that is used to access general print features as well as Document Centre 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

Section 2 (PJL Set Commands)

@PJL SET RESOLUTION=600
@PJL SET COPIES=1
@PJL SET DENSITY=4
@PJL SET JOBOFFSET=ON

Section 3 (XRXbegin – Opening Comment Statement, Required)

@PJL COMMENT XRXbegin

Section 4 (PJL Comments)

@PJL COMMENT OID_ATT_JOB_NAME "Readme.txt";
@PJL COMMENT OID_ATT_START_SHEET OID_VAL_JOB_SHEET_NONE;
@PJL COMMENT OID_ATT_JOB_OWNER "John Smith";
@PJL COMMENT OID_ATT_JOB_TYPE OID_VAL_JOB_TYPE_PRINT;
@PJL COMMENT OID_ATT_DEFAULT_MEDIUM_TYPE "Cardstock";
@PJL COMMENT OID_ATT_DEFAULT_MEDIUM_COLOUR "Green";
@PJL COMMENT OID_ATT_PRINT_QUALITY OID_VAL_PRINT_QUALITY_DRAFT;
@PJL COMMENT OID_ATT_FINISHING OID_VAL_FINISHING_STAPLE;
@PJL COMMENT XRXSTAPLE=PORTRAIT;
"6.15.0.128.95.124.157.20.0.1.11.4";

Section 5 (XRXend - Closing Statement for Comment Section, Required)

@PJL COMMENT XRXend

Section 6 (PCL Code used to invoke PCL Language)

@PJL ENTER LANGUAGE=PCL

Section 7 (PCL Data Stream or ASCII Document inserted here for Options such as Selecting Different Fonts, Simplex, Duplex, etc.)

[Document or Text to be printed out inserted here]

_%1BINWU0PW0,0PW0,1UL1,60,40UL2,12.5,12.5,12.5,12.5,12.5,12.5,12.5,12.5UL3,40,25,
10,25UL4,35,15,10,15,10,15LT0,10,1LTLA1,4,2,1SP1TR0CF2_%1A_&l1X_&l1S_&l0H_&l0o
6a4d1E_*t600R_*v1onT_*rF_*c7181x4609Y_*p162x555Y_*cT_*pxY_%1BIP0,0,1016,1016
SC0,600,0,600;_%1A_*v1O_*v1T_%0BFT10,0;_%0A_*p544x855Y_*c2160a3200b1P_(19U
_(s4099t0b0s20.00h0P_*vT_%0BFT;_%0A_*p544x883Y

Section 8 (Closing Command , Required at end of Document)

<ESC>%-12345X

Sample PCL Headers

Example 1 Header for Simple Print

```
<ESC>%-12345X@PJL JOB
@PJL SET COPIES= 1
@PJL COMMENT XRXbegin
@PJL COMMENT OID_ATT_JOB_OWNER "John Smith";
@PJL COMMENT OID_ATT_JOB_NAME "Print Job";
@PJL COMMENT XRXend
[Insert document or text to be printed here]
<ESC>%-12345X
```

Example 2 Header for Proof Print

```
<ESC>%-12345X@PJL JOB
@PJL SET COPIES= 6
@PJL COMMENT XRXbegin
@PJL COMMENT OID_ATT_JOB_TYPE OID_VAL_JOB_TYPE_ PROOF_PRINT
@PJL COMMENT XRXend
[Insert document or text to be printed here]
<ESC>%-12345X
```

Example 3 Header for Finishing Options

```
<ESC>%-12345X@PJL JOB
@PJL COMMENT XRXbegin
@PJL COMMENT OID_ATT_JOB_OWNER "John Smith"
@PJL COMMENT OID_ATT_JOB_TYPE OID_VAL_JOB_TYPE_PROOF_PRINT;
@PJL COMMENT OID_ATT_FINISHING OID_VAL_FINISHING_STAPLE;
@PJL COMMENT XRXSTAPLE=PORTRAIT;
@PJL COMMENT XRXend
<ESC>\027&l 2G
[Insert document or text to be printed here]
<ESC>%-12345X
```
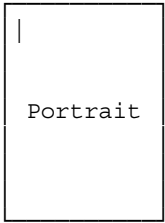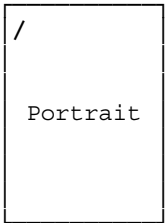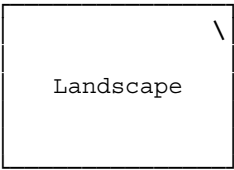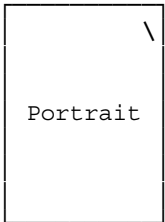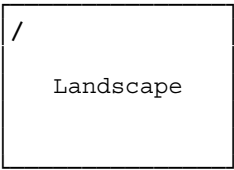
PCL Feature Dependencies/Caveats

- All PJL commands must be in the first 4096 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.

  - The commands are read left to right. Combine commands in the order you wish them to execute.

  For example, combine print 5 copies (<ESC>&l 5X) and use letter size (<ESC>&l 2A) as <ESC>&l 5x2A.

- In case of duplicate commands, the last one requested takes precedence.

- The @PJL SET COPIES takes precedence over the PCL Escape Command (<**ESC**> & l *int* X>) to set copies. In general, a PJL command takes precedence over a PCL command.

- Do not duplex and/or staple any job with these media sizes: A6, B6, 5 x 7" Postcard (4.5 x 6"), envelopes and any custom sized media where the page width is less than 5.5". A request to duplex or 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.

- To use the duplex front and back imaged covers option most effectively, remember these items when you prepare the contents of the print file:

  - The Document Centre uses the contents of the first two and last two pages of the file as the front cover, inside front cover, back cover, and inside back cover.

  - The remaining pages print on the document body media type and color.

  - If a print file contains an odd number of pages, the Document Centre leaves the last body page (that is, the page adjacent to the inside back cover) blank.

- When using the Blank Front or the Blank Front & Back Cover command the Cover Media Size command is optional. If the cover size command is not in the PDL, the printer assigns the media size of the document body to the cover.

- Use one of the methods described in the following list to specify media selection:

  - Describe the media attributes with size, color, 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.

Single Staple Location

The following table indicates the location of single staples for different media sizes when using the Document Centre 555/545/535 2000 Sheet Stapler/Stacker (Office Finisher).

Media Sizes	Portrait Staple Position	Landscape Staple Position
• Legal (8.5 x 14 inches) • 8.5 x 13 inches (215 x 330 mm) • Statement (8.5 x 5.5 inches) • A5 (148 x 210 mm) Also the following media sizes when short-edge feed printing is forced: • Letter (8.5 x 11 inches) • A4 (210 x 297 mm)	| Portrait	/ Landscape Note that you should use "Rotated Landscape" mode to ensure optimal staple location.
• Letter (8.5 x 11 inches) • 7.25 x 10.5 inches • 8 x 10 inches • 9 x 11 inches • A4 (210 x 297 mm) • Oversized A4 (223 x 297 mm) • B5 (182 x 257 mm)	/ Portrait	\\ Landscape Note that stapling in the top-left corner is not possible with these media sizes.
• Ledger (11 x 17 inches) • A3 (297 x 420 mm) • B4 (257 x 364 mm)	\\ Portrait Note that stapling in the top-left corner is not possible with these media sizes.	/ Landscape Note that you should use "Rotated Landscape" mode to ensure optimal staple location.

PostScript Fonts

The following PostScript fonts are resident with the Adobe interpreter.

AdobeSansMM
AdobeSerifMM
AlbertusMT
AlbertusMT-Italic
AlbertusMT-Light
AntiqueOlive-Bold
AntiqueOlive-Compact
AntiqueOlive-Italic
AntiqueOlive-Roman
Apple-Chancery
Arial-BoldItalicMT
Arial-BoldMT
Arial-ItalicMT
ArialMT
AvantGarde-Book
AvantGarde-BookOblique
AvantGarde-Demi
AvantGarde-DemiOblique
Bodoni
Bodoni-Bold
Bodoni-BoldItalic
Bodoni-Italic
Bodoni-Poster
Bodoni-PosterCompressed
Bookman-Demi
Bookman-DemiItalic
Bookman-Light
Bookman-LightItalic
Carta
Chicago
Clarendon
Clarendon-Bold
Clarendon-Light
CooperBlack
CooperBlack-Italic
Copperplate-ThirtyThreeBC
Copperplate-ThirtyTwoBC
Coronet-Regular
Courier
Courier-Bold
Courier-BoldOblique
Courier-Oblique
Eurostile
Eurostile-Bold
Eurostile-BoldExtendedTwo
Eurostile-ExtendedTwo
Geneva
GillSans
GillSans-Bold
GillSans-BoldCondensed
GillSans-BoldItalic
GillSans-Condensed
GillSans-ExtraBold

GillSans-Italic
GillSans-Light
GillSans-LightItalic
Goudy
Goudy-Bold
Goudy-BoldItalic
Goudy-ExtraBold
Goudy-Italic
Helvetica
Helvetica-Bold
Helvetica-BoldOblique
Helvetica-Condensed
Helvetica-Condensed-Bold
Helvetica-Condensed-BoldObl
Helvetica-Condensed-Oblique
Helvetica-Narrow
Helvetica-Narrow-Bold
Helvetica-Narrow-BoldOblique
Helvetica-Narrow-Oblique
Helvetica-Oblique
HoeflerText-Black
HoeflerText-BlackItalic
HoeflerText-Italic
HoeflerText-Ornaments
HoeflerText-Regular
JoannaMT
JoannaMT-Bold
JoannaMT-BoldItalic
JoannaMT-Italic
LetterGothic
LetterGothic-Bold
LetterGothic-BoldSlanted
LetterGothic-Slanted
LubalinGraph-Book
LubalinGraph-BookOblique
LubalinGraph-Demi
LubalinGraph-DemiOblique
Marigold
MonaLisa-Recut
Monaco
NewCenturySchlbk-Bold
NewCenturySchlbk-BoldItalic
NewCenturySchlbk-Italic
NewCenturySchlbk-Roman
NewYork
Optima
Optima-Bold
Optima-BoldItalic
Optima-Italic
Oxford
Palatino-Bold
Palatino-BoldItalic
Palatino-Italic

Palatino-Roman
StempelGaramond-Bold
StempelGaramond-BoldItalic
StempelGaramond-Italic
StempelGaramond-Roman
Symbol
Tekton
Times-Bold
Times-BoldItalic
Times-Italic
Times-Roman
TimesNewRomanPS-BoldItalicMT
TimesNewRomanPS-BoldMT
TimesNewRomanPS-ItalicMT
TimesNewRomanPSMT
Univers
Univers-Bold
Univers-BoldExt
Univers-BoldExtObl
Univers-BoldOblique
Univers-Condensed
Univers-CondensedBold
Univers-CondensedBoldOblique
Univers-CondensedOblique
Univers-Extended
Univers-ExtendedObl
Univers-Light
Univers-LightOblique
Univers-Oblique
Wingdings-Regular
ZapfChancery-MediumItalic
ZapfDingbats

PCL Fonts

The following PCL fonts are resident with the Phoenix interpreter.

Each of these commands references 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, you 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>(s0p12h0s0b4099T
Courier Bold	<esc>(<esc>(s0p12h0s3b4099T
Courier Italic	<esc>(<esc>(s0p12h1s0b4099T
Courier Bold Italic	<esc>(<esc>(s0p12h1s3b4099T
Garamond Antiqua	<esc>(<esc>(s1p12v0s0b4197T
Garamond Halbfett	<esc>(<esc>(s1p12v0s3b4197T
Garamond Kursiv	<esc>(<esc>(s1p12v1s0b4197T
Garamond Kursiv Halbfett	<esc>(<esc>(s1p12v1s3b4197T
Line Printer (Roman-8)	<esc>(8U<esc>(s0p16.67h8.5v0s0b0T
Line Printer (Latin-1)	<esc>(0N<esc>(s0p16.67h8.5v0s0b0T
Line Printer (PC-8)	<esc>(10U<esc>(s0p16.67h8.5v0s0b0T

Font Name	PCL Escape Command
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>(s1p12v0s0b31402T
Univers Bold	<esc>(<esc>(s1p12v0s3b4148T
Univers Bold Italic	<esc>(<esc>(s1p12v1s3b4148T
Univers Bold Condensed	<esc>(<esc>(s1p12v4s3b4148T
Univers Bold Condensed Italic	<esc>(<esc>(s1p12v5s3b4148T

ASCII Conversion Table

Hex	Dec	Alpha	EBCDIC	Description
00	000	Null	00	NULL
01	001	SOH	01	start-of-heading
02	002	STX	02	start-of-text
03	003	ETX	03	end-of-text
04	004	EOT	37	end-of-transmission
05	005	ENQ	2D	enquiry
06	006	ACK	2E	acknowledge
07	007	BEL	2F	bell
08	008	BS	16	backspace
09	009	HT	05	tab
0A	010	LF	25	linefeed
0B	011	VT	0B	vertical-tab
0C	012	FF	0C	formfeed page
0D	013	CR	0D	carriage-return
0E	014	SO	0E	shift-out
0F	015	SI	0F	shift-in
10	016	DLE	10	data-link-escape
11	017	DC1	11	XON
12	018	DC2	12	R
13	019	DC3	13	XOFF
14	020	DC4	3C	DC4 DCL
15	021	NAK	3D	negative-acknowledge
16	022	SYN	32	synchronous-idle
17	023	ETB	11	end-of-transmission
18	024	CAN	18	cancel
19	025	EM	19	end-of-medium
1A	026	SUB	3F	substitute
1B	027	ESC	27	escape
1C	028	FS	22	field-separator
1D	029	GS	-	group-separator
1E	030	RS	35	record-separator
1F	031	US	-	unit-separator
20	032	Space	40	space
21	033	!	5A	exclamation-point
22	034	"	7F	" straight-double
23	035	#	7B	# number-sign
24	036	$	5B	$ dollar-sign
25	037	%	6C	% percent-sign
26	038	&	50	& ampersand
27	039	'	7D	' apostrophe
28	040	(	4D	(left-parenthesis
29	041	)	5D	) right-parenthesis
2A	042	*	5C	* asterisk
2B	043	+	4E	+ addition-sign
2C	044	,	6B	, comma
2D	045	-	60	- hyphen
2E	046	"	4B	. period
2F	047	/	61	/ right-slash
30	048	0	F0	0
31	049	1	F1	1
32	050	2	F2	2
33	051	3	F3	3
34	052	4	F4	4

dc02cc0304

Hex	Dec	Alpha	EBCDIC	Description
35	053	5	F5	5
36	054	6	F6	6
37	055	7	F7	7
38	056	8	F8	8
39	057	9	F9	9
3A	058	:	7A	: colon
3B	059	;	5E	; semicolon
3C	060	<	4C	< less-than
3D	061	>	7E	= equals
3E	062	=	6E	> greater-than
3F	063	?	6F	? question-mark
40	064	@	7C	@ at-symbol
41	065	A	C1	A
42	066	B	C2	B
43	067	C	C3	C
44	068	D	C4	D
45	069	E	C5	E
46	070	F	C6	F
47	071	G	C7	G
48	072	H	C8	H
49	073	I	C9	I
4A	074	J	D1	J
4B	075	K	D2	K
4C	076	L	D3	L
4D	077	M	D4	M
4E	078	N	D5	N
4F	079	O	D6	O
50	080	P	D7	P
51	081	Q	D8	Q
52	082	R	D9	R
53	083	S	E2	S
54	084	T	E3	T
55	085	U	E4	U
56	086	V	E5	V
57	087	W	E6	W
58	088	X	E7	X
59	089	Y	E8	Y
5A	090	Z	E9	Z
5B	091	[	-	[left-bracket
5C	092	\	E0	\ left-slash backslash
5D	093	]	-	] right-bracket
5E	094	^	-	^ caret
5F	095	_	6D	_ underscore
60	096	`	-	` accent
61	097	a	81	a
62	098	b	82	b
63	099	c	83	c
64	100	d	84	d
65	101	e	85	e
66	102	f	86	f
67	103	g	87	g
68	104	h	88	h
69	105	i	89	i
6A	106	j	91	j
6B	107	k	92	k
6C	108	l	93	l
6D	109	m	94	m

Hex	Dec	Alpha	EBCDIC	Description
6E	110	n	95	n
6F	111	o	96	o
70	112	p	97	p
71	113	q	98	q
72	114	r	99	r
73	115	s	A2	s
74	116	t	A3	t
75	117	u	A4	u
76	118	v	A5	v
77	119	w	A6	w
78	120	x	A7	x
79	121	y	A8	y
7A	122	z	A9	z
7B	123	{	C0	{ left-brace
7C	124	|	6A	| vertical-bar
7D	125	}	D0	} right-brace
7E	126	~	A1	~ tilde
7F	127	DEL	07	^? delete

Additional Information

Xerox's Document Centre Technical Support Operations welcomes feedback on all DC Tips documentation - send feedback via e-mail to:
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