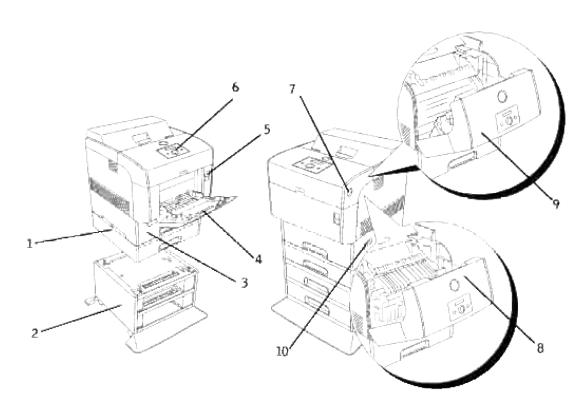
Dell™ Color Laser Printer 5110cn User's Guide

Notes, Notices, and Cautions

Click the links to the left for information on the features, options, and operation of your printer. For information on other documentation included with your printer, see "Finding Information."



1	Optional 500-sheet tray module		
2	Optional 1000-sheet tray module NOTE: Your printer allows for a maximum of 4 trays (standard 500-sheet tray, optional 500-sheet tray module, and optional 1000-sheet tray module).		
3	Standard 500-sheet tray		
4	Multipurpose feeder		
5	Front latch		
6	Operator panel		
7	Side button		

8	Front cover NOTE: The front cover opens by pushing the front latch up.
9	Outer Front Cover NOTE: The outer front cover opens by pushing the side button.
10	Power switch

To order replacement toner cartridges or supplies from Dell:

1. Double-click the icon on your desktop.



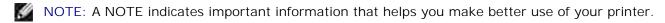
2. Visit Dell's website, or order Dell printer supplies by phone.

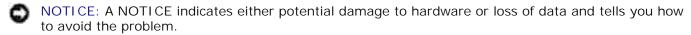
www.dell.com/supplies

For best service, have your Dell printer Service Tag available.

For help locating your Service Tag number, see "Express Service Code and Service Tag number."

Notes, Notices, and Cautions





CAUTION: A CAUTION indicates a potential for property damage, personal injury, or death.

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Our printer software uses some of codes created by the Independent JPEG Group.

As for libtiff

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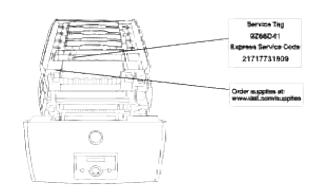
This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC rules.

August 2007 Rev. A02

Finding Information

What are you looking	Find it here
for? • Drivers for my printer • My User's Guide	Drivers and Utilities CD
	The <i>Drivers and Utilities</i> CD contains documentation and drivers for your printer. You can use the CD to uninstall/reinstall drivers or access your documentation. Readme files may be included on your CD to provide last-minute updates about technical changes to your printer or advanced technical reference material for experienced users or technicians.
Safety information How to use my printer Warranty information	Owner's Manual CAUTION: Read and follow all safety instructions in your Owner's Manual prior to setting up and operating your printer.
How to set up my printer	Setup diagram
Troubleshooting Guide	Troubleshooting Guide: - User Settings - Configuration - Troubleshooting Instructions - Others

Express Service Code and Service Tag number



The Express Service Code and Service Tag numbers are located inside the front door of your printer.

- Latest drivers for my printer
- Answers to technical service and support questions
- Documentation for my printer

Dell Support Website

The Dell Support Website provides several online tools, including:

- · Solutions Troubleshooting hints and tips, articles from technicians, and online courses
- · Upgrades Upgrade information for components, such as memory
- Customer Care Contact information, order status, warranty, and repair information
- · Downloads Drivers
- · Reference Printer documentation and product specifications

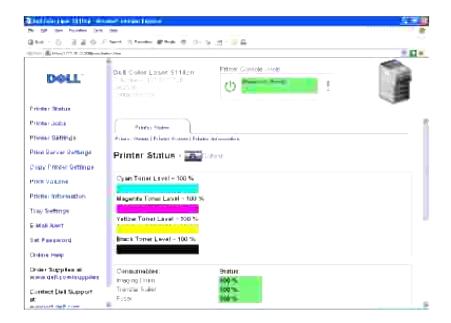
You can access Dell Support at support.dell.com. Select your region on the WELCOME TO DELL SUPPORT page, and fill in the requested details to access help tools and information.

Dell Printer Configuration Web Tool

Using the Dell Printer Configuration Web Tool

One of the features of the Dell Printer Configuration Web Tool is the E-Mail Alert Setup, which sends you or the key operator an e-mail when the printer needs supplies or intervention.

If you fill out printer inventory reports requiring the asset tag number of all of the printers in your area, use the Printer Information feature in the Dell Printer Configuration Web Tool. Just type the IP address of each printer on the network to display the asset tag number.



The Dell Printer Configuration Web Tool feature also lets you change printer settings and keep track of printing trends. If you are a network administrator, you can easily copy the printer's settings to one or all printers on the network – right from your Web browser.

To launch the Dell Printer Configuration Web Tool, just type your network printer's IP address in your Web browser.

If you do not know what your printer's IP address is, print a Printer Settings page, which lists the IP address:

- 1. Press Menu.
- 2. Press ▼ until Report/List appears, and then press ▶ or ✓.
- 3. Printer Setting is displayed. Press ✓.

The Printer Settings page is printed.

If the IP address shows 0.0.0.0 (the factory default), an IP address has not been assigned. To assign one for your printer, see "Assign an IP Address."

Use the Dell Printer Configuration Web Tool for:

Printer Status

Get immediate feedback on printer supply status. When toner is running low, click the Order Supplies link on the first screen to order additional toner cartridges.

Printer Jobs

The Printer Jobs menu contains information on Job List page and Completed Jobs page. These pages show the details of the status regarding each protocol or the print jobs.

Printer Settings

To change printer settings, view the operator panel remotely.

Print Server Settings

Use the Print Server Settings menu to set the type of printer interface and necessary conditions for communications.

Copy Printer Settings

Quickly copy the printer's settings to another printer or printers on the network just by typing each printer's IP address.



NOTE: You must be a network administrator to use this feature.

Print Volume

Keep track of printing trends, such as paper usage and types of jobs being printed.

Dell ColorTrack

Limit which users use the color mode and the maximum number of sheets they can print. You can open the Dell ColorTrack page from the Print Volume menu.

Printer Information

Get the information you need for service calls, inventory reports, or the status of current memory and engine code levels.

Tray Settings

Get the information about the paper type and size for each tray.

E-Mail Alert

Receive an e-mail when the printer needs supplies or intervention. Type your name or the key operator's name in the e-mail list box to be notified.

Set Password

Lock the operator panel with a password so that other users don't inadvertently change the printer settings you selected.



NOTE: You must be a network administrator to use this feature.

Online Help

Click Help to visit the Dell web page, and see the *User's Guide* on that page to verify configured settings.

Order Supplies at:

www.dell.com/supplies

Contact Dell Support at:

support.dell.com

Using the Dell Printer Configuration Web Tool

Environment Settings for Web Browsers

Dell recommends configuring the environment settings for your Web browsers, before using the Dell Printer Configuration Web Tool.



NOTE: The Embedded Web Server (EWS) pages may be displayed unreadable if you browse the pages that were configured by using a browser with a different language setting than that of your browser.

For Netscape Communicator 7.1

Setting Up the Display Language

- 1. Select Preferences from Edit on the menu bar.
- 2. Select Languages under the Navigator group.
- 3. Specify the display language in order of preference in the Language in order of preference list.
 - ja, Japanese
 - en, English
 - fr, French
 - it, Italian
 - de, German
 - es, Spanish
 - da, Danish
 - nl, Danish
 - fi, Finnish
 - no, Norwegian
 - pl, Polish
 - pt, Portuguese
 - sv, Swedish
 - zh, Traditional Chinese

Setting the Printer's IP Address to Non-proxy

- 1. Select Preferences from Edit on the menu bar.
- 2. Select Proxies under Advanced of the Navigator group.
- 3. Select either Direct connection to the Internet or Manual proxy configuration. When you select Manual proxy configuration, specify the printer's IP address in the No Proxy for: box.

When you have finished setting the language and proxy, type http://nnn.nnn.nnn/nnn/ (the printer's IP address) in the URL entry field of the browser to activate the Dell Printer Configuration Web Tool.

For Internet Explorer 6.0/7.0

Setting Up the Display Language

1. Select Internet Options from Tools on the menu bar.

- 2. Select Languages in the General tab.
- 3. Specify the display language in order of preference in the Language list.

For example:
Italian (Italy) [it]
Spanish (Traditional Sort) [es]
German (Germany) [de]
French (France) [fr]
English [en] or English (United States) [en-us]

Setting the Printer's IP Address to Non-proxy

- 1. Select Internet Options from Tools on the menu bar.
- 2. Select Proxy server under LAN Settings in the Connections tab.
- 3. Do either of the following.
 - o Clear the Direct connection to the Internet check box.
 - o Click Advanced, and then specify the printer's IP address in the Do not use proxy server for addresses beginning with field under Exceptions.

When you have finished setting the language and proxy, type http://nnn.nnn.nnn/nnn/ (the printer's IP address) in the URL entry field of the browser to activate the Dell Printer Configuration Web Tool.

Page Display Format

The layout of the page is divided into three sections.

Top Frame

Located at the top of all pages is the Top Frame. When Dell Printer Configuration Web Tool is activated, the current status and specifications of the printer are displayed in the Top Frame on every page.

The following items are displayed in the Top Frame.

Dell Color Laser 5110cn	Displays the printer product name.		
IP Address:	Displays the printer's IP address.		
Location:	Displays the printer's location. The location can be changed in Basic Information on the Print Server Settings page.		
Contact Person:	Displays the printer's administrator's name. The name can be changed in the Basic Information on the Print Server Settings page.		
Printer Console	Displays the status of the printer operator panel display and indicators. This is automatically refreshed at the set interval. The interval can be changed in the Basic Information on Print Server Settings page.		
Help	Links to the Dell web page. See the <i>User's Guide</i> on that page.		
Printer Bitmap	Shows the printer bitmap. The Printer Status menu appears in the Right Frame by clicking this image.		

Left Frame

Located at the left side of all pages is the Left Frame. The titles of menus displayed in the Left Frame are linked to corresponding menus and pages. You can go to the corresponding page by clicking their characters.

The following menus are displayed in the Left Frame.

Printer Status	Links to the Printer Status menu.
Printer Jobs	Links to the Printer Jobs menu.
Printer Settings	Links to the Printer Settings Report menu.
Print Server Settings	Links to the Print Server Settings Reports menu.
Copy Printer Settings	Links to the Copy Printer Settings menu.
Print Volume	Links to the Print Volume menu
Printer Information	Links to the Printer Information menu.
Tray Settings	Links to the Tray Settings menu.
E-Mail Alert	Links to the E-Mail Alert menu.
Set Password	Links to the Set Password menu.
Online Help	Links to the Dell web page. See the <i>User's Guide</i> on that page.
Order Supplies at:	Links to the Dell web page. Web address: www.dell.com/supplies

Contact Dell Support at: Links to the Dell support page. Web address: support.dell.com

Right Frame

Located at the right side of all pages is the Right Frame. The contents of the Right Frame correspond to the menu that you select in the Left Frame. For details on the items displayed in the Right Frame, see "<u>Details of Menu Items</u>."

Buttons on the Right Frame

Refresh Button

Receives the current printer configuration and updates the latest information in the Right Frame.

Apply New Settings Button

Submits new settings made on the Dell Printer Configuration Web Tool to the printer. The old printer settings will be replaced by the new settings.

Restart printer to apply new settings. Button

Submits new settings made on the Dell Printer Configuration Web Tool to the printer and reboots the printer. The old printer settings will be replaced by the new settings.

Restore Settings Button

Restores the old settings from before changes made. New settings will not be submitted to the printer.

Changing the Settings of Menu I tems

Some menus allow you to change the printer settings through the Dell Printer Configuration Web Tool. When you are accessing these menus, the authentication dialog appears on the screen. Type a user name and password for the printer's administrator by following the prompts displayed in the dialog box.

The default user name is admin, and the default password is left blank (NULL). You can change only the password in the Set Password page in the Print Server Settings menu. The user name cannot be changed. See "Set Password" for more information.

Details of Menu I tems

"Printer Status"		"Printer Status"
		"Printer Events"
		"Printer Information"
" <u>Printer Jobs</u> "		"Job List"
		"Completed Jobs"
"Printer Settings"	"Printer Settings Report"	"Menu Settings"
		"Reports"
	"Printer Settings"	"System Settings"
		"Parallel Settings"
		"Network Settings"*5
		" <u>USB Settings</u> "*5
		"PCL Settings"
		"PS Settings"*5
		"Panel Settings"
	"Printer Maintenance"	"Paper Density"
		"Adjust BTR"
		"Adjust Fuser"
		"Auto Registration Adjustment"
		"Color Registration Adjustments"
		"Clean Developer"
		"Reset Defaults"
		"Clear Storage"*1
		"Format HDD"*2
		"Non-Dell Toner"
		"Initialize PrintMeter"
		"Web Link Customization"
"Print Server Settings"	"Print Server Reports"	"Print Server Setup Page"
		"NetWare Setup Page"*3

I	I	
		"E-Mail Alert Setup Page"
	"Print Server Settings"	"Basic Information"
		"Port Settings"
		"Wireless LAN"*4
		" <u>TCP/IP</u> "
		" <u>NetWare</u> "*3
		" <u>SMB</u> "*3
		"AppleTalk"
		"E-Mail Alert"
		"SNMP"
		"Bonjour (mDNS)"*2
	"Other Features"	"Set Password"
		"Security"*3
		" <u>IPsec</u> "*2
		"Reset Print Server"
		"Print Volume"
"Copy Printer Settings"		"Copy Printer Settings"
		"Copy Printer Settings Report"

- *1 This item is only available when the RAM Disk is set to on or the optional hard disk is installed.
- *2 This item is only available when the optional hard disk is installed.
- *3 This item is only available when the optional multi protocol card is installed.
- *4 This item is only available when the optional wireless printer adapter is installed.
- *⁵ This item is only available with PostScript models.

Printer Status

Use the Printer Status menu to check the status of consumables, hardware, and specifications of the printer.

The following pages are displayed in the Printer Status menu.

Printer Status

Purpose:

To check the status of remaining consumables and trays.

Values:

Toner Level			Displays the percent of toner remaining. When the printer runs out of toner, the message appears. The text Order Toner is linked to the Dell Printer Supplies website.
Consumables Status OK		ОК	Indicates that consumables are available.
		Empty	Indicates that consumables are used up.
Paper Trays	Status	ОК	Indicates that there is some paper in the tray but the quantity is unknown.
		Add Paper	Indicates that there is no paper in the tray.
	Capacity		Displays the maximum capacity status of the paper tray.
	Size		Displays the size of paper in the tray.
Output Tray	Status	ОК	Indicates that the tray is available.
		Full	Indicates that the tray is not available.
	Capacit	ty	Displays the maximum capacity status of the paper tray.
Cover	Status	Closed	Indicates that the cover is closed.
		Open	Indicates that the cover is open.
Printer Type			Displays the type of printing for your printer. Color Laser is displayed normally.
Printing Speed			Displays the printing speed for your printer.

Printer Events

Purpose:

When printer faults occur such as *running out of paper* or *running out of toner*, the details of all alerts or indications of faults are displayed in the Printer Events page.

Location	Displays the location where the printer fault occurred.
Details	Displays the details of the printer fault.

Printer Information

Purpose:

To verify the printer details such as hardware configuration and software version. This page can also be displayed by clicking Printer Information in the Left Frame.

Values:

Dell Service Tag Numbe	r	Displays Dell's service tag number.
Asset Tag Number		Displays the printer's asset tag number.
Printer Serial Number		Displays the printer's serial number.
Memory Capacity		Displays the memory capacity.
Hard Disk*1		Displays information on the printer's hard disk.
Processor Speed		Displays the processing speed.
Printer Revision Levels Firmware Version		Displays the revision date (revision level).
	Network Firmware Version	Displays the revision date (revision level).

^{*1} Hard Disk Drive is only displayed when an optional hard disk card is inserted into a HDD-installable model.

Printer Jobs

The Printer Jobs menu contains information on the Job List and Completed Jobs pages. These pages show the details of the status regarding each protocol or the print jobs.

Job List

Purpose:

To confirm the print jobs that are being processed.

To update the screen, click the Refresh button.

Values:

ID	Displays the job id.
Job Name	Displays the file name of the job being printed.
Owner	Displays the job owner's name.
Host Name	Displays the name of the host computer.
Job Status	Displays the status of the job being printed.
Host I/F	Displays the status of the host interface.
Job Submitted Time	Displays the date the print job was submitted.

Completed Jobs

Purpose:

To check the completed print jobs. Up to the last 22 print jobs are displayed.

To update the screen, click the Refresh button.

Values:

ID	Displays the job id.
Job Name	Displays the file name of the completed print job.
Owner	Displays the job owner's name.
Host Name	Displays the name of the host computer.
Output Result	Displays the status of completed print jobs.
Impression Number	Displays the impression number.
No. of Sheets	Displays the number of pages in the job.
Host I/F	Displays the status of the host interface.
Job Submitted Time	Displays the date the print job was submitted.

Printer Settings

Use the Printer Settings menu to display the printer settings report and to configure printer settings.

The following tabbed pages are displayed at the top of the Right Frame.

Printer Settings Report

The Printer Settings Report tab includes the Menu Settings and Reports pages.

Menu Settings

Purpose:

To display the current settings of the operator panel menus.

System Settings	Power Saver Time*	Displays the amount of time before the printer enters the power saver mode after it finishes a print job.
	Alert Tone	Displays whether the printer sounds an alarm when an error occurs.
	Time-Out	Displays the specific amount of time the printer waits to receive additional bytes of data from the computer.
	Panel Language	Displays the language of the text on the operator panel screen.
	Auto Log Print	Displays whether the printer outputs logs automatically.
	Print ID	Displays a location where the user ID is printed.
	Print Text	Displays whether the printer outputs PDL data, which is not supported by the printer, as text when the printer receives it.
	Banner Sheet Insert Position	Displays the position of banner sheet.
	Banner Sheet Specify Tray	Displays the tray in which the banner sheet is loaded.
	Substitute Tray	Displays whether or not to use another size paper when the paper that is loaded in the specified tray does not match the paper size settings for the current job.
	mm / inch	Switches measurements between millimeters and inches.

	RAM Disk	Displays whether to allocate memory to the RAM Disk file system for the Secure Print and Proof Print features. This item is only available when the 256 MB, or higher, optional memory card is installed, and also when the optional hard disk is not installed.
Parallel Settings	ECP	Displays the ECP communication mode of the parallel interface.
	Adobe Protocol	Displays PostScript communication protocol for each interface.
Network Settings	Adobe Protocol	Displays PostScript communication protocol for each interface.
USB Settings	Adobe Protocol	Displays PostScript communication protocol for each interface.
PCL Settings	Paper Tray	Displays the input tray.
	Paper Size	Displays the default paper size.
	Custom Size - X	Displays the size in the X-axis
	Custom Size - Y	Displays the size in the Y-axis
	Orientation	Displays how text and graphics are oriented on the page.
	2 Sided	Displays whether to do duplexing as the default for all print jobs.
	Font	Displays the default font from the registered fonts in the printer.
	Symbol Set	Displays a symbol set for a specified font.
	Font Size	Displays the font size for scalable typographic fonts.
	Font Pitch	Displays the font pitch for scalable monospaced fonts.
	Form Line	Displays the number of characters in a line.
	Quantity	Displays the number of copies you want for the printer default value.
	I mage Enhancement	Displays whether to perform the image enhancement feature.
	Hex Dump	Displays whether the Hex Dump feature is on or off.
	Draft Mode	Displays whether to print in the draft mode.
	Line Termination	Displays whether to set the line termination.
	Default Color	Displays the color mode setting.
PS Settings	PS Error Report	Displays whether the printer outputs error contents for a

		PostScript error.
	PS Job Time-Out	Displays the execution time for one PostScript job.
	Paper Select Mode	Displays the tray that is selected in the PostScript printing.
Panel Settings	Panel Lock	Displays whether the panel is locked by a password.
Paper Density	Plain	Displays the paper density for the plain paper.
	Label	Displays the paper density for the label.
Adjust BTR	Plain	Displays the voltage settings of the transfer roller for plain paper.
	Plain Thick	Displays the voltage settings of the transfer roller for plain thick paper.
	Transparency	Displays the voltage settings of the transfer roller for transparencies.
	Covers	Displays the voltage settings of the transfer roller for cover.
	Covers Thick	Displays the voltage settings of the transfer roller for thick cover.
	Label	Displays the voltage settings of the transfer roller for labels.
	Coated	Displays the voltage settings of the transfer roller for coated paper.
	Coated Thick	Displays the voltage settings of the transfer roller for coated thick paper.
	Envelope	Displays the voltage settings of the transfer roller for envelopes.
Adjust Fuser	Plain	Displays the temperature settings of the fuser for plain paper.
	Plain Thick	Displays the temperature settings of the fuser for plain thick paper.
	Transparency	Displays the temperature settings of the fuser for transparencies.
	Covers	Displays the temperature settings of the fuser for covers.
	Covers Thick	Displays the temperature settings of the fuser for thick covers.
	Label	Displays the temperature settings of the fuser for labels.
	Coated	Displays the temperature settings of the fuser for coated paper.
	Coated Thick	Displays the temperature settings of the fuser for coated thick paper.

I		
	Envelope	Displays the temperature settings of the fuser for envelopes.
Auto Registration Adjustment	Auto Registration Adjustment	Displays whether to adjust the color registration automatically.
Non-Dell Toner	Non-Dell Toner	Displays whether to use a refilled toner cartridge.
Web Link Customization	Select Reorder URL	Selects the URL specified in Regular or Premier.
	Regular	Displays the Regular link.
	Premier	Displays the Premier link.
Tray Settings	Tray 1 Paper Type	Displays the type of paper loaded in the standard 500-sheet tray.
	Tray 2 Paper Type	Displays the type of paper loaded in the optional 500-sheet tray module or 1000-sheet module.
	Tray 3 Paper Type	Displays the type of paper loaded in the optional 1000-sheet module.
	Tray 4 Paper Type	Displays the type of paper loaded in the optional 1000-sheet module.
	MPF Mode	Displays the paper size and type when paper is loaded in the multipurpose feeder.
	Display Popup	Displays a popup menu when paper is loaded in the multipurpose feeder.
	MPF Paper Type	Displays the type of paper loaded in the multipurpose feeder.
	MPF Paper Size	Displays the size of paper loaded in the multipurpose feeder.

^{*1} When the Power Saver mode is active, you cannot change the settings for Printer Settings, Copy Printer Settings (where the settings are copied), Dell ColorTrack, and Tray Settings. Be sure to change the settings after you release the Power Saver mode.

Settings (where the settings are copied), Deli Color Frack, and	i iray settings.	Be sure to change	the settings
after you release the Power Saver mode.			
Reports			

Purpose:

To print various types of reports and lists.

Printer Settings	Click Start button to print the Printer Settings page.
Panel Settings	Click Start button to print the Panel Settings page.
PCL Fonts List	Click Start button to print the PCL Fonts List.
PCL Macro List	Click Start button to print the PCL Macro List.
Job History	Click Start button to print the Job History page.
Error History	Click Start button to print the Error Log page.
PS Fonts List	Click Start button to print the PS Fonts List.
Print Meter	Click Start button to print the Print Meter page.
Color Test Page	Click Start button to print the Color Test page.
Stored Documents	Click Start button to print the Documents page. This item is only available when the RAM Disk is set to on or the optional hard disk is installed.

Printer Settings

The Printer Settings tab includes System Settings, Parallel Settings, Network Settings, USB Settings, PCL Settings, PS Settings, and Panel Settings pages.

bettings, 1 of settings, 1 s settings, and 1 and settings pages.	
System Settings	

Purpose:

To configure the basic printer settings.

Power Saver Time Displays the amount of time before the printer enters the power saver mode finishes a print job in minutes between 5 and 60.	
Alert Tone	Specifies whether the printer sounds an alarm when an error occurs.
Time-Out	Specifies the amount of time the printer waits to receive additional bytes of data from the computer. When this timeout expires, the print job is canceled.
Panel Language	Determines the language of the text on the operator panel screen.
Auto Log Print	Specifies whether the printer outputs logs automatically.
Print ID	Specifies a location where the user ID is printed.
Print Text	Specifies whether the printer outputs PDL data, which is not supported by the printer, as text when the printer receives it.
Banner Sheet Insert Position	Specifies the position of banner sheet.
Banner Sheet Specify Tray	Specifies the tray in which the banner sheet is loaded.
Substitute Tray	Specifies whether or not to use another size paper when the paper that is loaded in the specified tray does not match the paper size settings for the current job.
mm / inch	Switches measurements between millimeters and inches.
RAM Disk	Specifies whether to allocate memory to the RAM Disk file system for the Secure Print and Store Print features. This item is only available when the 256 MB, or higher, optional memory card is installed, and also when the optional hard disk is not installed.

Parallel Settings

Purpose:

To configure the parallel interface.

Values:

ECP	Specifies the ECP communication mode of the parallel interface.
Adobe Protocol	Specifies PostScript communication protocol for each interface.

Network Settings

Purpose:

To Specify the PostScript communication protocol for this printer.

Values:

1			L
	Adobe Protocol	Specifies PostScript communication protocol for each interface.	ı

USB Settings

Purpose:

To change printer settings affecting a USB port.

Values:

- 1		
	Adobe Protocol	Specifies PostScript communication protocol for each interface.

PCL Settings

Purpose:

To change printer settings that only affect jobs using the PCL emulation printer language.

Donor Troy	Specifies the input tray	
Paper Tray	Specifies the input tray.	
Paper Size	Specifies the default paper size.	
Custom Size - X	Displays the size in the X-axis	
Custom Size - Y	Displays the size in the Y-axis	
Orientation	Specifies how text and graphics are oriented on the page.	
2 Sided	Sets duplexing as the default for all print jobs.	
Font	Specifies the default font from the registered fonts in the printer.	
Symbol Set	Specifies a symbol set for a specified font.	
Font Size	Specifies the font size for scalable typographic fonts.	
Font Pitch	Specifies the font pitch for scalable monospaced fonts.	
Form Line	Specifies the number of characters in a line.	

Quantity	Sets the number of copies you want for the printer default value.		
I mage Enhancement	Specifies whether to perform the image enhancement feature.		
Hex Dump	Specifies whether to help isolate the source of a print job problem. With Hex Dump selected, all data sent to the printer is printed in hexadecimal and character representation. Control codes are not executed.		
Draft Mode	Specifies whether to print in the draft mode.		
Line Termination	Sets the line termination.		
Default Color	Specifies the color mode to Color or Black. This setting is used when the color printing mode setting is not specified for the print job that is sent to the printer.		

PS Settings

Purpose:

To change printer settings that only affect jobs using the PostScript emulation printer language.

Values:

PS Error Report	Specifies whether the printer outputs error contents for a PostScript error.
PS Job Time- Out	Specifies the execution time for one PostScript job.
Init PS Disk	Erases the PS fonts stored on the optional hard disk. This item is only available when the optional hard disk is installed.
Paper Select Mode	Specifies the way to select the tray for the PostScript mode.

Panel Settings

Purpose:

To set or change the password to limit access to the menus from the operator panel.

Set the password of the Dell Printer Configuration Web Tool from Set Password in Print Server Settings.

Panel Lock	Specifies whether to limit access to the menus.
New Password	Sets a password to limit access to the menus.
Re-enter Password	Type the new password again to confirm.

Printer Maintenance

Printer Maintenance tab includes Paper Density, Adjust BTR, Adjust Fuser, Auto Registration Adjustment, Color Registration Adjustments, Clean Developer, Reset Defaults, Clear Storage, Format HDD, Non-Dell Toner, Initialize PrintMeter, and Web Link Customization pages.

Purpose:	
To specify the paper density.	
Values:	

Plain	Light
	Normal
Label	Light
	Normal

Paper Density

Adjust BTR

Purpose:

To specify the reference voltage settings for the transfer roller.

Plain	Sets the reference voltage settings for the transfer roller for plain paper.	
Plain Thick	Sets the reference voltage settings for the transfer roller for plain thick paper.	
Transparency	Sets the reference voltage settings for the transfer roller for transparencies.	
Covers	Sets the reference voltage settings for the transfer roller for covers.	
Covers Thick	Sets the reference voltage settings for the transfer roller for thick covers.	
Label	Sets the reference voltage settings for the transfer roller for labels.	
Coated	Sets the reference voltage settings for the transfer roller for coated paper.	
Coated Thick	Sets the reference voltage settings for the transfer roller for coated thick paper.	
Envelope	Sets the reference voltage settings for the transfer roller for envelopes.	

Adjust Fuser

Purpose:

To specify the temperature settings value for the fuser.

Values:

Plain	Sets the temperature settings for the fuser for plain paper.
Plain Thick	Sets the temperature settings for the fuser for plain thick paper.
Transparency	Sets the temperature settings for the fuser for transparencies.
Covers	Sets the temperature settings for the fuser for covers.
Covers Thick	Sets the temperature settings for the fuser for thick covers.
Label	Sets the temperature settings for the fuser for labels.
Coated	Sets the temperature settings for the fuser for coated paper.
Coated Thick	Sets the temperature settings for the fuser for coated thick paper.
Envelope	Sets the temperature settings for the fuser for envelopes.

Auto Registration Adjustment

Purpose:

Specifies whether to adjust the color registration automatically.

Values:

Auto Registration Adjustment	Specifies whether to adjust the color registration automatically.
rate registration rajustinent	specifies whether to adjust the color registration automatically.

Color Registration Adjustments

Purpose:

To print the color registration chart and to adjust the color registration by using the chart.

This function is required after the printer is set up or moved.

Values:

Auto Correct		Click Start to adjust color registration automatically.
Color Regi Chart		Click Start to print the color registration chart.
Enter Number	Yellow	Specifies the values that are found in the color registration chart.
	Magenta	
	Cyan	

Clean Developer

Purpose:

While printing is repeated, one color toner may be mixed in another color toner in the developer. When this occurs, use this feature.

Using this feature consumes some toner.

Yellow	Click the Start button to clean the developer.
Magenta	
Cyan	
Black	

Reset Defaults
Purpose:
To initialize the NV (non-volatile) memory. After executing this function and rebooting the printer, all the menu parameters are reset to their default values.
Values:
Reset Defaults and restart printer. Click Start to initialize NVM Memory.
Clear Storage
Purpose:
To clear all files that are stored as Secure and Proof Print in the RAM Disk or the optional hard disk. This item is only available when the RAM Disk is set to Enable or the optional hard disk is installed.
Values:
Clear Storage Click Start to clear all files stored in the RAM Disk or the optional hard disk.
Format HDD
Purpose:
To format the optional hard disk. All fonts, forms and files for Secure Print and Proof Print stored in the optional hard disk are cleared. The data relating to PostScript isn't cleared. To clear the data relating to PostScript, refer to "Init PS Disk". This item is only available when the optional hard disk is installed.
Values:
Format HDD Click Start to format the optional hard disk.
Non-Dell Toner
Purpose:
Specifies whether to use the refilled toner cartridge or not. When this setting is on, you can use toner cartridges provided by other companies.

Values:

Non-
Dell
Toner

Overrides factory toner cartridge setting.

Non-Dell-brand toner cartridges may disable some printer features, reduce print quality and reduce the reliability of your printer. Dell recommends only new Dell-brand toner cartridges for your printer. Dell does not provide warranty coverage for problems caused by using accessories, parts, or components not supplied by Dell.

Initialize PrintMeter

Dir	rn	00	_
Pu	ıν	US	e.

To initialize PrintMeter.

Values:

Initialize PrintMete	Click Start to format PrintMeter.

Web Link Customization

Purpose:

To configure the link used for ordering supplies.

Values:

Select Reorder URL	Selects the URL specified in Regular or Premier	
Regular	Displays the Regular link.	
Premier	Displays the Premier link.	

Copy Printer Settings

The Copy Printer Settings menu includes the Copy Printer Settings and Copy Printer Settings Report pages.

Copy Printer Settings

Purpose:
To copy the printer settings to one or more of the same model of printer.
Use the password of this printer.
To copy the settings to another printer, specify the IP address and password of the printer to which the settings are copied in the IP Address text box and Password text box. Then, click the Copy the settings to the Host in the above list. button. Copying the settings is complete. The connection time-out period is 60 seconds. After that, you can check whether settings were copied or not on this page. And you need to check the Copy the settings to the Host in the above list and reboot the machine. menu of the Dell Printer Configuration Web Tool in the destination printer to verify if settings were actually copied or not.
If the settings can be copied but printer configuration is different, the settings of only the same items are copied. Printer settings are simultaneously copied to printers of up to 10 IP addresses.
Copy Printer Settings Report
Purpose:
To verify the histories of copying after turning on the printer.
Print Server Settings
Use the Print Server Settings menu to set the type of printer interface and necessary conditions for communications.
The following tabbed pages are displayed in the top of the Right Frame.
Print Server Reports
The Print Server Reports tab includes Print Server Setup Page, NetWare Setup Page, and E-Mail Alert Setup Page.
Print Server Setup Page
Purpose:
To verify the current settings of TCP/IP protocol and printing ports. On this page, you can only verify the settings of items. If you want to change the settings, go to the pages in the Print Server Settings tab.
Values:

Ethernet*1,*2	Ethernet Settings		Displays the current settings of Ethernet transmission rate and the duplex settings.
	Curre	ent Ethernet Settings	Displays the current Ethernet settings.
	MAC A	Address	Displays the printer's MAC address.
Wireless	SSID		Displays the name that identifies the network.
Settings*3	Network Type		Displays the network type from either the Ad-Hoc or Infrastructure mode.
	MAC	Address	Displays the MAC address of the wireless printer adapter.
	Link (Channel	Displays the channel number of the connection.
	Link (Quality	Displays the quality of the connection.
TCP/IP	IP Mode		Displays the IP mode.
Settings	Host	Name	Displays the host name.
	IPv4	IP Address Mode	Displays the IP address mode.
		IP Address	Displays the IP address.
		Subnet Mask	Displays the subnet mask.
		Gateway Address	Displays the gateway address.
	IPv6	Use Manual Address	Displays whether to set the IP address manually.
		Manual Address	Displays the IP address.
		Stateless Address 1-3	Displays the stateless addresses.
		Link Local Address	Displays the link local address.
		Manual Gateway Address	Displays the gateway address.
		Auto Configure Gateway Address	Displays the gateway address.
DNS*3	IPv4	Get DNS Server Address from DHCP	Displays whether to automatically get a DNS (Domain Name System) server address from the DHCP (Dynamic Host Configuration Protocol) server.
		Current DNS Server Address	Displays the DNS server address.

1			
	IPv6	Get DNS Server Address from DHCPv6-lite	Displays whether to automatically get a DNS server address from the DHCPv6-lite server.
		Current DNS Server Address	Displays the DNS server address.
	DNS [Dynamic Update)* ²	Displays the status of the DNS Dynamic Update feature.
	DNS [Dynamic Update)* ²	Displays the status of the DNS Dynamic Update feature.
	Auto	Generate Search List	Displays whether to automatically generate a search list.
	Searc	h Domain Name	Displays the search domain name.
	Time-	out	Displays the time-out period.
		ty to IPv6 DNS Resolution	Displays whether to use the DNS Name Resolution feature.
WINS*4	WINS Mode		Displays the settings for the WINS Address Mode.
	WINS Primary Server		Displays the primary WINS server address.
	WINS Secondary Server		Displays the secondary WINS server address.
LPD	Port Status		Displays the port status.
	Connection Time-Out		Displays the connection timeout period.
Port9100	Port Status		Displays the port status.
	Port Number		Displays the port number.
	Conne	ection Time-Out	Displays the connection timeout period.
IPP*4	Port S	Status	Displays the port status.
	Printe	er URI	Displays the printer URI.
	Conne	ection Time-Out	Displays the connection timeout period.
	Port Number		Displays the port number.
	Maximum Sessions		Displays the maximum number of connections received simultaneously by the client.
WSD*3	Port S	Status	Displays the WSD port status.
	Port N	Number	Displays the WSD port number.
	Recei	ve Time-Out	Displays the receive timeout period.
	Notifi	cation Time-Out	Displays the notification timeout period.

I .		
	Maximum Number of TTL	Displays the maximum number of TTLs.
	Maximum Number of Notification	Displays the maximum number of notifications.
HTTP	Port Status	Displays the port status.
	Port Number	Displays the port number.
	Simultaneous Connections	Displays the number of connections received simultaneously by the client.
	Connection Time-Out	Displays the connection timeout period.
FTP	Port Status	Displays the port status.
	Connection Time-Out	Displays the connection timeout period.
SMB*4	Port Status	Displays the port status.
	Host Name	Displays the host name.
	Workgroup	Displays the workgroup name.
	Maximum Sessions	Displays the maximum sessions.
	Unicode Support	Displays the status of the Unicode Support feature.
	Auto Master Mode	Displays the status of the Auto Master Mode feature.
	Encrypt Password	Displays the status of the Encrypt Password feature.
	Job Time-Out	Displays the timeout period.
	Connection Time-Out	Displays the connection timeout period.
AppleTalk*4	Port Status	Displays the port status.
	Printer	Displays the printer name used in AppleTalk.
	AppleTalk Zone	Displays the AppleTalk zone name.
	AppleTalk Type	Displays the AppleTalk type.
	Delay Start Time	Specifies the print start time period in second.
Bonjour	Port Status	Displays the port status.
(mDNS)*4	Host Name	Displays the host name.
	Printer Name	Display the printer name.
SNMP Agent	Port Status	Displays the port status.
	Trap Notification 1-4	Displays the status of the Trap Notification feature and IP address.

	Authenticate Error Trap	Displays the status of the Authenticate Error Trap.
IPsec Settings	Protocol	Displays the protocol status.
	IKE	Displays to use a preshared key for IKE authentication.
	IKE SA Lifetime	Displays the lifetime for IKE SA.
	I Psec SA Lifetime	Displays the lifetime for IPsec SA.
	DH Group	Displays the DH group.
	PFS	Displays the PFS status.
	Remote peers IPv4 address	Displays the IP address to connect to.
	Remote peers IPv6 address	Displays the IP address to connect to.
	Non I Psec communication policy	Displays the status of the Non I Psec communication policy feature.
IP Filter (IPv4)* ⁵	Access List	Displays the list of IP addresses that are permitted or denied access to the printer.

^{*1} The Ethernet settings are not displayed when the optional wireless printer adapter is installed.

NetWare Setup Page

Purpose:

To verify the current settings of IPX/SPX and Netware. In this page, you can only verify the settings of items. If you want to change the settings, go to the pages in the Print Server Settings tab.

^{*2} When you use wired LAN, Ethernet is displayed. When you use wireless LAN, Wireless LAN is displayed.

^{*3} An optional wireless printer adapter is required to display the Wireless settings.

^{*4} An optional multi protocol card is required to display these items.

^{*5} This item is only available for LPD or Port9100.

	4	
IPX/SPX	Frame Type	Displays the active frame type.
Settings	Current Frame Type	Displays the current frame type.
	Network Address	Displays the IPX network address.
NetWare	Port Status	Displays the port status. When NetWare is implemented, the status of IPX/SPX and TCP/IP is also displayed.
	Device Name	Displays the printer name.
	Active Mode	Displays the current mode for Active Mode.
	Tree Name	Displays the tree name.
	Context Name	Displays the context name of the Print Server Object.
	File Server Name	Displays the file server name.
	Polling Interval	Displays the time interval.
	NCP Packet Burst	Displays the status, and whether to use NCP packet burst.
	Status Information	Displays messages according to the conditions of the printer.
SLP	Active Discovery	Displays whether active discovery is enabled.

NOTE: An optional multi protocol card is required to display the NetWare Setup page.

E-Mail Alert Setup Page

Purpose:

To verify the current settings of SMTP/POP used for the e-mail feature and E-Mail Alerts feature. In this page, you can only verify the settings of items. If you want to change the settings, go to the pages in the Print Server Settings tab.

E-Mail Server	Port Status		Displays the port status.
Settings	Primary SMTP	Gateway	Displays the primary SMTP gateway.
	SMTP Port Nur	mber	Displays the SMTP port number.
	E-Mail Send Au	uthentication	Displays the authentication method for outgoing e-mail.
	POP3 Server A	address	Displays the POP3 server address.
	POP3 Port Nur	mber	Displays the POP3 port number.
	Reply Address		Displays the IP address of servers connected with SMTP protocol when data is incoming.
	SMTP Server C	Connection	Displays the status of the SMTP server connection.
E-Mail Alert Settings	E-Mail List 1		Displays the acceptable e-mail addresses for the E-Mail Alert feature specified in E-mail List 1.
	E-Mail List 2		Displays the acceptable e-mail addresses for the E-Mail Alert feature specified in E-mail List 2.
	Select Alerts for List 1	Supplies Alerts	Displays the status, and whether to receive an E-Mail Alert for consumables.
		Paper Handling Alerts	Displays the status, and whether to receive an E-Mail Alert for paper handling.
		Service Call	Displays the status, and whether to receive an E-Mail Alert for Service Calls.
	Select Alerts for List 2	Supplies Alerts	Displays the status, and whether to receive an E-Mail Alert for consumables.
		Paper Handling Alerts	Displays the status, and whether to receive an E-Mail Alert for paper handling.
		Service Call	Displays the status, and whether to receive an E-Mail Alert for Service Calls.

Print Server Settings

The Print Server Settings tab includes Basic Information, Port Settings, Wireless LAN, TCP/IP, NetWare, SMB, AppleTalk, E-Mail Alert, Bonjour (mDNS), and SNMP pages.

Basic Information

Purpose:

To configure the printer's basic information.

Values:

System	Printer Name		Specifies the name of the printer up to 31 alphanumeric characters.
Settings	Device Name		Specifies the device name up to 31 alphanumeric characters.
	Location		Specifies the location of the printer up to 63 alphanumeric characters.
	Contact Person		Specifies the contact name, number, and other information of the printer administrator and service center up to 63 alphanumeric characters.
	Administrator E- Mail Address		Specifies the contact address of the printer administrator and service center up to 63 alphanumeric characters.
EWS	Auto Refresh	On	Refreshes the contents of the status display pages automatically.
Settings		Off	Does not refresh the status display pages automatically.
	Auto Refresh Interval		Sets the time interval for refreshing the contents of the status display pages automatically from 15 to 600 seconds.

4

NOTE: The auto refresh feature is effective for the contents of the Top Frame, Printer Status page, Job List page, and Completed Jobs page.

Port Settings

Purpose:

To specify whether to enable or disable printing ports and management protocol features.

Ethernet*1	Ethernet Settings	Auto	Detects Ethernet transmission rate and the duplex settings automatically.
		10Base-T Half-Duplex	Selects 10Base-T Half-Duplex as the default value.
		10Base-T Full-Duplex	Selects 10Base-T Full-Duplex as the default value.
		100Base-TX Half-Duplex	Selects 100Base-T Half-Duplex as the default value.
		100Base-TX Full-Duplex	Selects 100Base-T Full-Duplex as the default value.
	Current Eth	ernet Settings	Displays the current settings of Ethernet.
	MAC Addres	SS	Displays the printer's MAC address.
Port	LPD		Select the check box to enable the LPD.
Settings	Port9100		Select the check box to enable the Port9100.
	IPP*2		Select the check box to enable the IPP port.
	WSD		Select the check box to enable the WSD port.
	FTP		Select the check box to enable the FTP port.
	SMB*2		Select the check box to enable the SMB. You can also configure the transport protocol to be used. TCP/IP and NetBEUI can be selected simultaneously as the transport protocol.
	NetWare* ²		Select the check box to enable the NetWare port. You can also configure the transport protocol to be used. IPX/SPX and TCP/IP can be selected simultaneously as the transport protocol.
	AppleTalk* ²		Select the check box to enable the AppleTalk port.
	Bonjour (mDNS)*2		Select the check box to enable the Bonjour (mDNS) feature.
	E-Mail Alert		Select the check box to enable the E-Mail Alert feature.
	SNMP Agent		Select the check box to enable the SNMP. You can also configure the transport protocol to be used. UDP and IPX can be selected simultaneously as the transport protocol. IPX is only available when the multi protocol card is installed.

^{*1} The Ethernet settings are not displayed when the optional wireless printer adapter is installed.

^{*2} An optional multi protocol card is required to display these items.



NOTE: The settings in the Port Settings item will be valid only when the printer is rebooted. When you change or set this item, click the Restart printer to apply new settings, button to apply new settings.

Wireless LAN

Purpose:

To configure the detailed setting for the wireless network.

	4	
Wireless Settings	SSID	Specifies the name that identifies the wireless network. Up to 32 alphanumeric characters.
	Network Type	Specifies the network type from either Ad-hoc or Infrastructure.
	MAC Address	Displays the MAC address of the printer's wireless network adapter.
	Link Channel	Displays the channel number of the printer's wireless connection.
Link Quality		Displays the quality of the printer's wireless network connection.
Security	Encryption	Select the security method from the list.
Settings	WEP Key 1-	Specifies the WEP key set used through the wireless network only when WEP 128bits or WEP 64bits is selected for Encryption.
	Transmit Key	Specifies the transmit key from the list.
	Pass Phrase	Specifies the pass phrase of alphanumeric characters from 8 to 63 bytes long only when WPA-PSK AES or WPA-PSK TKIP is selected for Encryption.



NOTE: To set WPA2-PSK, select WPA-PSK AES.



NOTE: An optional wireless printer adapter is required to display the Wireless page.

TCP/IP

Purpose:

To configure the IP address, subnet mask, and gateway address of the printer.

TCP/IP	IP Mo	ode	Specifies the IP mode.
Settings	Host	Name	Specifies the host name.
	IPv4	IP Address Mode	Selects the IP address mode.
		Manual IP Address	Sets the IP address.
		Manual Subnet Mask	Sets the subnet mask.
		Manual Gateway Address	Sets the gateway address.
	IPv6	Use Manual Address	Select the check box to set the IP address manually.
		Manual Address	Sets the IP address.
		Manual Gateway Address	Sets the gateway address.
DNS	DNS Domain Name*1		Specifies the domain name of the domain name server. Up to 255 alphanumeric characters, periods, and hyphens can be used. If you need to specify more than one domain name, separate them using a comma or semicolon.
	IPv4	Get DNS Server Address from DHCP	Select the check box to get the DNS server address automatically from the DHCP server.
		Manual DNS Server Address	Sets the DNS server address.
	IPv6	Get DNS Server Address from DHCPv6-lite	Select the check box to get the DNS server address automatically from the DHCPv6-lite server.
		Manual DNS Server Address	Sets the DNS server address.
	DNS Dynamic Update (IPv4)*1		Select the check box to enable dynamic updates to DNS.
	DNS Dynamic Update (IPv6)*1		Select the check box to enable dynamic updates to DNS.
	Auto List*	Generate Search	Select the check box to automatically generate the search list.
	Searc Name	ch Domain 9*1	Specifies the search domain name. Up to 255 alphanumeric characters, periods, and hyphens can be used. If you need to specify more than one domain name, separate them using a comma or semicolon.
	Time-	-out*1	Specifies the time-out period between 1 and 60 seconds.

	Priority to I Pv6 DNS Name Resolution	Select the check box to enable the DNS Name Resolution feature.
WINS*1	WINS Mode	Select the check box to get the WINS server address automatically from the DHCP server.
	WINS Primary Server	Sets WINS server address in the <i>nnn.nnn.nnn.nnn</i> format. Each section of <i>nnn.nnn.nnn</i> is a value between 0 and 254. Note that values 127 and 224 to 254 are not valid for the first three-digits.
	WINS Secondary Server	Sets a back up WINS server address in the <i>nnn.nnn.nnn.nnn</i> format. Each section of <i>nnn.nnn.nnn.nnn</i> is a value between 0 and 254. Note that values 127 and 224 to 254 are not valid for the first three-digits.
LPD	Connection Time-Out	Sets the connection timeout period from 1 to 1000 seconds.
	IP Filter (IPv4)	To set the IP Filter settings, click IP Filter. The "IP Filter (IPv4)" page is displayed.
Port9100	Port Number	Sets the port number from 9000 to9999.
	Connection Time-Out	Sets the connection timeout period between 1 and 1000 seconds.
	IP Filter (IPv4)	To set the IP Filter settings, click IP Filter. The "IP Filter (IPv4)" page is displayed.
IPP*1	Printer URI	Displays the printer URI.
	Connection Time-Out	Sets the connection timeout period from 1 to 1000 seconds.
	Port Number	Displays the port number for receiving requests from the client.
	Maximum Sessions	Displays the maximum number of connections received simultaneously by the client.
WSD	Maximum Sessions Port Number	
WSD		simultaneously by the client.
WSD	Port Number	simultaneously by the client. Sets the port number from 8000 to 9999.
WSD	Port Number Receive Time-Out	Sets the port number from 8000 to 9999. Sets the receive timeout period from 1 to 65535 seconds.
WSD	Port Number Receive Time-Out Notification Time-Out Maximum Number of	Sets the port number from 8000 to 9999. Sets the receive timeout period from 1 to 65535 seconds. Sets the notification timeout period from 1 to 60 seconds.
WSD	Port Number Receive Time-Out Notification Time-Out Maximum Number of TTL Maximum Number of	Sets the port number from 8000 to 9999. Sets the receive timeout period from 1 to 65535 seconds. Sets the notification timeout period from 1 to 60 seconds. Sets the maximum number of TTL from 1 to 10.
	Port Number Receive Time-Out Notification Time-Out Maximum Number of TTL Maximum Number of Notification	Sets the port number from 8000 to 9999. Sets the receive timeout period from 1 to 65535 seconds. Sets the notification timeout period from 1 to 60 seconds. Sets the maximum number of TTL from 1 to 10. Sets the maximum number of notifications from 10 to 20.

FTP	Password	Sets whether to enable or disable the password. And also specifies the password value up to seven characters.
	Connection Time-Out	Sets the connection timeout period from 1 to 1000 seconds.
IP Filter	Access List	Enter the IP address which is added to the IP filter list.
(IPv4)* ²	Subnet Mask	Enter the subnet mask.
	Operation	Select from Disable, Permit, or Reject. Selecting Disable deactivates the IP filter function. However, selecting Permit (or Reject) allows (or blocks) the network access from the IP addresses registered on the IP filter list.

^{*1} An optional multi protocol card is required to use.

NetWare

Purpose:

To configure detailed settings for IPX/SPX and NetWare.

	1		
IPX/SPX	Frame	Auto	Specifies the active frame type automatically.
Settings	Settings Type	Ethernet II	Selects Ethernet II frame type.
		Ethernet 802.3	Selects IEEE802.3 frame type.
		Ethernet 802.2	Selects IEEE802.2 frame type.
		Ethernet SNAP	Selects SNAP frame type.
	Current Frame Type		Displays the current frame type.
	Network	Address	Displays the IPX network address.
NetWare	Device Name* ¹		Specifies the printer name up to 47 alphanumeric characters. For PServer Mode, set the Print Server Name (Print Server Object Name). The original setting remains valid if no input is made.
	Active Mode	Bindery: PServer Mode	Selects this option when using Bindery: PServer Mode.

^{*2} This item is only available for LPD or Port9100.

		Directory: PServer Mode	Selects this option when using Directory: PServer Mode.
	Tree Name*1		Specifies the tree name up to 32 alphanumeric characters. Configure this item only when Directory: PServer Mode or Directory: RPrinter Mode is selected.
	Context Name		Specifies the context name of the Print Server Object up to 255 alphanumeric characters. Configure this item only when Directory: PServer Mode.
	File Serve	er Name* ¹	Specifies the file server name up to 47 alphanumeric characters. Configure this item only when Bindery: PServer Mode is selected.
	Polling Ir	nterval	Sets the time interval from when print data enters the print queue until printing starts. The setting range is from 1 to 1000 seconds. The original setting remains valid if no input is made. Configure this item only when Bindery: PServer Mode or Directory: PServer Mode is selected.
	NCP	On	Uses NCP packet burst.
	Packet Burst	Off	Does not use NCP packet burst.
	Password	1	Sets the print server password up to 32 alphanumeric characters.
	Confirm F	Password	Enter the password again.
	Status Inform		Displays the status of NetWare.
SLP	Active Discovery		Select the check box to enable Active Discovery.

^{*1} The following are illegal characters: semicolon (;), colon (:), asterisk (*), question mark (?), period (.), comma (,), yen mark (ξ), back slash (ξ), double quotation ("), comparison symbols (ξ), brackets ([]), operation symbols (ξ), pipe (|), slash (/), and space ().



NOTE: The settings in the NetWare page will be valid only when NetWare or the printer is rebooted. Click the Restart printer to apply new settings. button to apply new settings.



NOTE: An optional multi protocol card is required to display the NetWare page.

SMB

Purpose:

To configure detailed settings for SMB.

Host Name		Specifies the host name up to 15 alphanumeric characters. The original setting will remain valid if no input is made.
Workgroup		Specifies the workgroup name up to 15 alphanumeric characters. The original setting will remain valid if no input is made.
Administrator Na	me	Specifies the administrator name up to 20 alphanumeric characters. The original setting will remain valid if no input is made. The default name is <i>admin</i> .
Administrator Password		Specifies the administrator password up to 14 alphanumeric characters. The original setting will remain valid if no input is made. The default password is password.
Confirm Administ Password	rator	Allows you to confirm the configured administrator password by re-entering the same password.
Maximum Session	ns	Displays the maximum sessions.
Unicode Support	On	Notifies the host name and workgroup name in Unicode characters.
	Off	Does not notify the host name and workgroup name in Unicode characters.
Auto Master	On	Enable the Auto Master Mode.
Mode	Off	Disable the Auto Master Mode.
Encrypt	On	Encrypts the password.
Password	Off	Does not encrypt the password.
Job Time-Out		Sets the timeout period from 60 to 3600 seconds.
Connection Time-Out		Sets the connection timeout period from 60 to 3600 seconds.



NOTE: The settings in the SMB page will be valid only when the printer is rebooted. Click the Restart printer to apply new settings. button to apply new settings.



NOTE: An optional multi protocol card is required to display the SMB page.

AppleTalk

Purpose:

To configure the detailed settings for AppleTalk.

AppleTalk	Printer	Specifies the printer name in the AppleTalk network up to 32 alphanumeric characters and symbol sets.
	AppleTalk Zone	Specifies the AppleTalk zone name up to 32 alphanumeric characters and symbol sets.
	AppleTalk Type	Displays the AppleTalk type.
	Delay Start Time	Specifies the delay start time between 1 and 255 seconds. A zero (0) value specifies no delay.



NOTE: An optional multi protocol card is required to display the AppleTalk page.

E-Mail Alert

Purpose:

To configure detailed settings for E-Mail Alert. This page can also be displayed by clicking E-Mail Alert in the Left Frame.

E-Mail Server Settings	Primary SMTP Gateway	Sets the primary SMTP gateway.
	SMTP Port Number	Specifies the SMTP port number. This must be 25 or between 5000 and 65535.
	E-Mail Send Authentication	Specifies the authentication method for outgoing e-mail.
	POP User Name	Specifies the SMTP login user. Up to 63 alphanumeric characters, periods, hyphens, under bars, and at symbols (@) can be used. If specifying more than one address, separate them using commas.
	POP User Password	Specifies the SMTP account password up to 31 alphanumeric characters.
	POP3 Server Address*1	Specifies the POP3 server address in IP address format of "aaa.bbb.ccc.ddd" or as a DNS host name up to 63 characters.
	POP3 Port Number*1	Specifies the POP3 server port number up to 15 alphanumeric characters.
	POP Login User*1	Specifies the POP3 account user name. Up to 63 alphanumeric characters, periods, hyphens, under bars, and at symbols (@) can be used. If specifying more than one address, separate them using commas.
	POP Login Password*1	Specifies the POP3 account password up to 31 alphanumeric characters.

	Reply Address		Designates the reply e-mail address sent with each E-mail Alert.
SMTP Server Connection		- ·	Displays the status of the SMTP server connection.
E-Mail Alert Settings	E-Mail List 1		Sets acceptable e-mail addresses for the E-Mail Alert feature up to 255 alphanumeric characters.
	E-Mail List 2		Sets acceptable e-mail addresses for the E-Mail Alert feature up to 255 alphanumeric characters.
	Select Alerts for List 1	Supplies Alerts	Select the check box to receive an E-Mail Alert for consumables.
		Paper Handling Alerts	Select the check box to receive an E-Mail Alert for paper handling.
		Service Call	Select the check box to receive an E-Mail Alert for Service Calls.
	Select Alerts for List 2	Supplies Alerts	Select the check box to receive an E-Mail Alert for consumables.
		Paper Handling Alerts	Select the check box to receive an E-Mail Alert for paper handling.
		Service Call	Select the check box to receive an E-Mail Alert for Service Calls.

^{*1} Available when POP before SMTP for E-Mail Send Authentication is selected.

Bonjour (mDNS)

Purpose:

To configure the detailed settings for Bonjour.

Values:

Bonjour (mDNS)	Host Name	Specify the host name up to 63 alphanumeric characters and "-" (dash).
	Printer Name	Specify the printer name up to 63 alphanumeric characters and symbol sets.



NOTE: An optional multi protocol card is required to display the Bonjour (mDNS) page.

SNMP

Purpose:

To configure the detailed settings of SNMP.

Values:

Community Name (Read only)*1	Specifies the community name to access (read only) the data up to 31 alphanumeric characters. The original setting will remain valid if no input is made. Characters entered for community Name in previous settings will not be displayed on the screen. The default Read Community is public.
Community Name (Read/Write)*1	Specifies the community name to access (read and write) the data up to 31 alphanumeric characters. The original setting will remain valid if no input is made. Characters entered for community Name in previous settings will not be displayed on the screen. The default Read/Write Community is private.
Community Name (Trap)*1	Specifies the community name used for trap up to 31 alphanumeric characters. The original settings will remain valid if no input is made. Characters entered for Community Name (Trap) in previous settings will not be displayed on the screen. The default Trap Community is " " (NULL).
Trap Notification 1-4	Select the check boxes to notify trap occurrence. In this case, specify the IP address and IP socket in the following format: • IPv4
	Specify the IP address and IP socket in the nnn.nnn.nnn.nnn:mmmmm format. Each section of "nnn" is a variable value between 0 and 255. Note that values 127 and 224-254 are not valid for the first three-digits only. IP socket mmmmm is a variable value between 0 and 65535. • IPv6
	Specify the IP address and IP socket in the xxxx:xxxx:xxxx:xxxx:xxxx:xxxx:xxxx:xx
	Specify the IPX address in the nnnnnnnn.mmmmmmmmmmmmmm.IIII format. IP network nnnnnnnn is a hexadecimal variable value between 0 and ffffffffffff and IPX socket IIII is a hexadecimal variable value between 0 and ffff.
Authenticate Error Trap	Select the check box to notify Authenticate Error Trap.

^{*1} The default value of each items can be changed by using Dell Printer Configuration Web Tool.

IP Filter (IPv4)

Purpose:

^{*2} An optional multi protocol card is required to use.

To configure the detailed settings for the IP Filter used for LPD and Port9100. This page can be linked from LPD and Port9100 settings on the TCP/IP page.

Values:

Address		Sets the address in the address field. Enter a numeric value between 0 and 255 in each field of "aaa.bbb.ccc.ddd." However, 127 and 224 to 254 cannot be used to "aaa."		
Address Mask		Sets the Address Mask in the Mask field. Enter a numeric value between 0 and 255 in each field.		
Active	Permit	Permits printing from specified network address.		
Mode	Disabled	Disables the IP Filter feature for the specified IP address.		
	Reject	Rejects printing from specified network address.		

When you make the settings for the filter, enter the IP address of the IP Filter in the Address field and the Subnet Mask in the Address Mask field. Enter a numeric value between 0 and 255 in each field. "*" is appended to the current value.

Setup Procedure

You can set up to a maximum of five items and the first item takes priority. Enter the shortest address first before proceeding to the next longer address when setting multiple filters.

The following section explains how the IP Filter operates.

IP Filter Procedure

Enabling Printing From a Specified User

The following describes the procedure to enable printing only from the "192.168.100.10" IP address.

Procedures:

- 1. Click the first column of Access List row 1.
- 2. Enter "192.168.100.10" in the Address field and "255.255.255" in the Address Mask field.
- 3. Select Permit.
- 4. Click Apply New Settings.

Disabling Printing From a Specified User

The following describes the procedure to disable printing only from the "192.168.100.10" IP address.

Procedures:

- 1. Click the first column of Access List row 1.
- 2. Enter "192.168.100.10" in the Address field and "255.255.255" in the Address Mask field.
- 3. Select Reject.
- 4. Click the first column of Access List row 2.
- 5. Enter "0.0.0.0" in the Address field and "0.0.0.0" in the Address Mask field.
- 6. Select Permit.
- 7. Click Apply New Settings.

Enabling and Disabling Printing from Network Addresses

You can enable printing from the "192.168" network address and disable printing from the "192.168.200" network address. However, the example below describes how to enable printing from the "192.168.200.10" IP address.

Procedures:

- 1. Click the first column of the Access List row 1.
- 2. Enter "192.168.200.10" in the Address field and "255.255.255" in the Address Mask field.
- 3. Select Permit.
- 4. Click the first column of the Access List row 2.
- 5. Enter "192.168.200.0" in the Address field and "255.255.255.0" in the Address Mask field.
- 6. Select Reject.
- 7. Click the first column of the Access List row 3.
- 8. Enter "192.168.0.0" in the Address field and "255.255.0.0" in the Address Mask field.
- 9. Select Permit.
- 10. Click Apply New Settings.

Other Features

The Other Features tab includes Set Password, Security, I Psec and Reset Print Server pages.

Set Password				
Purpose:				
To set or change the password that is required to access the printer setup parameters from the Dell Printer Configuration Web Tool.				
Set the password of the oper	ator panel from Panel Settings in the Printer Settings.			
This page can also be display	red by clicking Set Password in the Left Frame.			
NOTE: To restore the p	assword to default (NULL), initialize the NVM memory.			
Values:				
Administrator Password	Sets the password up to 10 alphanumeric characters. The password will			
Confirm Administrator Password	appear as asterisks (*) in the field when it is entered.			
Security				
Purpose:				
To use SSL encryption. You must turn on SSL on the browser server.				
Values:				

To generates a self-signed certificate, select 512 bits or 1024 bits and click Generate Signed Certificate. You can delete or view a self-signed certificate from

Enables SSL encryption.

Disables SSL encryption.

Specifies the port number

the Manage Certificate page.

NOTE: An optional multi protocol card is required to display the Security page.

HTTPS

I Psec

Purpose:

Port Number

Generate Self-

Signed Certificate

On

Off

To specify the Security Architecture settings for Internet Protocol (IPsec) for encrypted communication to the printer.

Values:

Protocol	Select the check box to enable the protocol.	
IKE	Use a preshared key for IKE authentication.	
Pre-Shared Key	Specifies a shared key.	
Re-enter Pre-Shared Key	Enter the shared key again to confirm it.	
IKE SA Lifetime	Sets the lifetime for IKE SA from 5 to 28800 minutes.	
IPsec SA Lifetime	Sets the lifetime for IPsec SA from 5 to 2880 minutes.	
DH Group	Selects the DH group.	
PFS	Selects the check box to enable the PFS setting.	
Remote peers I Pv4 address	Specifies the IP address to connect to.	
Remote peers I Pv6 address	Specifies the IP address to connect to.	
Non I Psec communication policy	Selects whether or not to communicate with a device which does not support IPsec.	



NOTE: If IPsec is enabled with incorrect settings, you must disable it using the Reset IPsec menu on the operator panel.

Reset Print Server

Purpose:

To initialize NVRAM for the network feature and reboot the printer.

Initialize the printer's NVRAM from the Initialize NVM in the Printer Settings.

Values:

Initialize NIC NVRAM Memory and restart printer	Click the Start button to initialize NVRAM. Network settings will revert to the factory default settings and reboot the network capability.	
Restart Printer	Click the Start button to reboot printer.	

Print Volume

Purpose:

To verify the number of printed pages. This page can also be displayed by clicking Print Volume in the Left Frame.

Values:

Printer Page Count	Displays the total number of pages printed since the printer was shipped from the factory.
Paper Used	Displays the number of pages for each paper size.

Dell ColorTrack

Use the Dell ColorTrack menu to limit users, color mode, and maximum volumes.

Values:

Print User Limitation	Enables the Dell ColorTrack mode. Accepts jobs from unauthorized users. This mode is ignored when Dell ColorTrack is disabled.	
Permit printing without specifying user		
User Registration	Displayed when Print User Limitation is enabled. To register a user, click Edit User Registration to open the Edit Print User Registration page, and then specify User Registration No. and click Edit to open the Print User Settings page.	

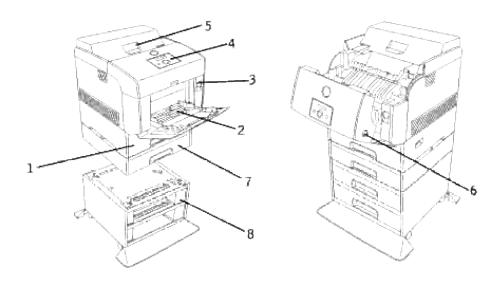
Tray Settings

Use the Tray Settings menu to set the printer media types and sizes for trays respectively.

Tray 1 Paper Type	Sets the type of paper loaded in the standard 500-sheet tray.
Tray 2 Paper Type	Sets the type of paper loaded in the optional 500-sheet tray module or 1000-sheet module.
Tray 3 Paper Type	Sets the type of paper loaded in the optional 1000-sheet module.
Tray 4 Paper Type	Sets the type of paper loaded in the optional 1000-sheet module.
MPF Mode	Sets the paper size and type when paper is loaded in the multipurpose feeder.
Display Popup	Sets a popup menu for when paper is loaded in the multipurpose feeder.
MPF Paper Type	Sets the type of paper loaded in the multipurpose feeder.
MPF Paper Size	Sets the size of paper loaded in the multipurpose feeder.

About Your Printer

The following illustrations show the standard Dell Color Laser Printer 5110cn, with an optional 500-sheet tray module and 1000-sheet module.

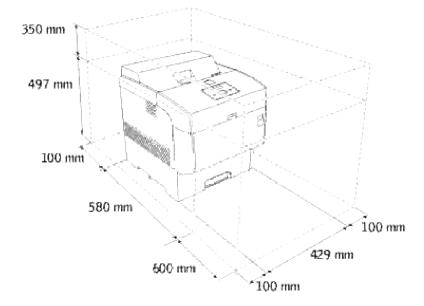


St	Standard printer		Printer with options		
1	Standard 500- sheet tray	7	7 Optional 500-sheet tray module		
2	Multipurpose feeder	8	Optional 1000-sheet module		
3	Front latch		NOTE: Your printer allows for a maximum of 4 trays (standard		
4	Operator panel		500-sheet tray, optional 500-sheet tray module, and optional 1000-		
5	Top cover		sheet module).		
6	Side button				



NOTE: When you use the printer with the multipurpose feeder opened, do not locate the printer in direct sunlight. Doing so may cause a malfunction or unnatural screen image.

Leave enough room to open the printer trays, covers, and options. It is also important to allow space around the printer for proper ventilation.



Installing the Toner Cartridges and Imaging Drum

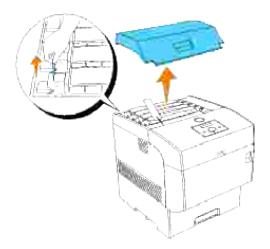
- Installing the Toner Cartridge
- Installing the Imaging Drum



CAUTION: Before performing any of the following procedures, read and follow the safety instructions in your *Owner's Manual*.

Installing the Toner Cartridge

1. Remove the top cover.



2. Pull the toner seal for each toner cartridge straight up to remove it.



NOTICE: Pull the toner seal straight up. Pulling the toner seal diagonally may tear the seal.

3. Replace the top cover by inserting its front side into the printer first.

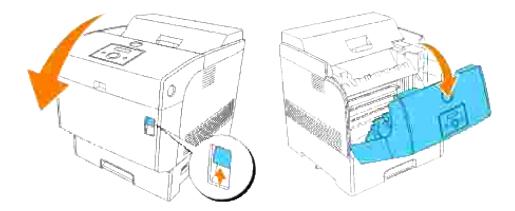


Installing the Imaging Drum

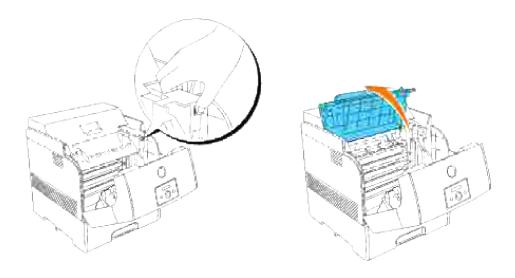


CAUTION: Make sure nothing touches or scratches the surface of the light-sensitive drum surface (green-colored roller) or the transfer roller (black-colored roller). Scratches, dirt, or oil from your hands on the imaging drum or transfer roller may reduce the print quality.

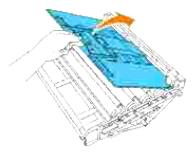
1. Push the front latch up and fully open the front cover.



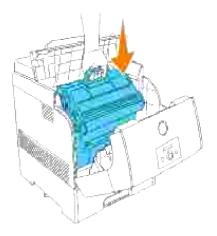
2. Push the button as shown in the following illustration and open the top cover.



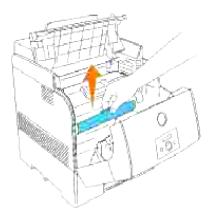
3. Remove the protective cover from the imaging drum.



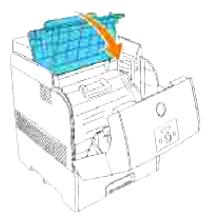
4. Holding the imaging drum by the handle with the flat part facing the back of the printer, align the plastic guides on both sides of the imaging drum with the slots in front of the arrows on the printer. Gently lower the imaging drum into the printer.



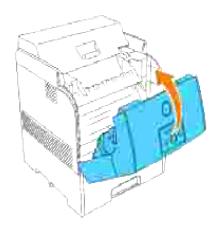
- NOTICE: Lowering the cartridge into the printer without correctly aligning the rollers with the slots can damage the cartridge.
- NOTICE: Do not allow the surface covered with a protective sheet to come into contact with anything.
- 5. Pull the protective cover on the imaging drum straight up to remove it.
- NOTICE: Do not touch the transfer roller (black-colored roller). Make sure that nothing touches or scratches the roller surface. Scratches or oil from your hands on the roller deteriorates print quality.



6. Close the top cover.



7. Close the front cover.



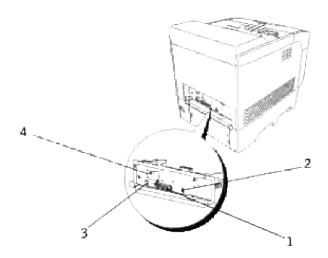
Connecting Your Printer

- Choosing the Right Cable
- Connecting the Printer Locally
- Connecting the Printer to the Network

Choosing the Right Cable

Your Dell Color Laser Printer 5110cn interconnection cable must meet the following requirements:

Connection	Cable certification
Parallel	Parallel IEEE 1284
USB	USB 2.0
10/100Base-TX Ethernet	CAT-5E
Wireless	IEEE802.11b/802.11g



1	Parallel port	
		10101
2	USB port	
		•
3	Ethernet port	
		४ ८
4	Wireless port	-

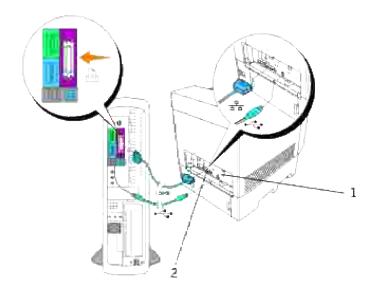
Connecting the Printer Locally

A local printer is a printer attached to your computer using a USB or parallel cable. If your printer is attached to a network instead of your computer, skip this step and go on to "Connecting the Printer to the Network."

Microsoft[®] Windows[®] 2000, XP, Server 2003, XP x64, Server 2003 x64, Vista and Mac[®] OS X or later operating systems support USB connections. Some UNIX[®] and Linux[®] computers also support USB connections. See your computer operating system documentation to see if your system supports USB.

To attach the printer to a computer:

- 1. Make sure the printer, computer, and any other attached devices are turned off and unplugged.
- 2. Connect the printer to the computer using a USB or parallel cable.



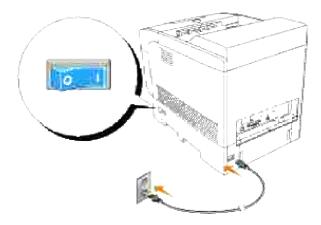
1	USB port
2	Parallel port

A USB/parallel port requires a USB/parallel cable. Be sure to match the USB/parallel symbol on the cable to the USB/parallel symbol on the printer.

Plug the other end of the cable into a USB or parallel port on the back of the computer. For a USB cable, do not plug it into the USB keyboard.

Turn On the Printer

1. Plug one end of the printer power cable into the socket at the back of the printer and the other end into a properly grounded outlet.

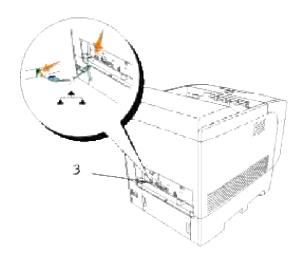


2. Turn on the computer and the printer.

Connecting the Printer to the Network

To attach the printer to a network:

- 1. Make sure the printer, computer, and any other attached devices are turned off and unplugged.
- 2. Plug one end of a standard category 5 cable into a LAN drop or hub, and the other end into the Ethernet port on the back of the printer. The printer automatically adjusts for the network speed.



3 Ethernet port

To turn on the printer, see "Turn On the Printer".

Print and Check the Printer Settings Page

Print a Printer Settings page to verify the network connection. This page also provides important information that helps you configure for network printing.

- 1. Press Menu.
- 2. Press ▼ until Report/List appears, and then press ▶ or ✔.
- 3. Printer Setting is displayed. Press ✓.

The Printer Settings page is printed.

4. If the IP address shows anything other than 0.0.0.0 (the factory default) or 169.254.xx.xx, the printer has an IP address assigned and stored. Go to "Verify the IP Settings."

Assign an IP Address



NOTE: When you assign an IP address manually in IPv6 Mode, use the Dell Printer Configuration Web Tool. To open the Dell Printer Configuration Web Tool, use the link local address. (To check a link local address, see "Print and Check the Printer Settings Page".)

An IP address is a unique number that consists of four sections that are delimited by a period and can include up to three digits in each section, for example, 111.222.33.44.

Assigning an IP address already in use can cause network performance issues.



NOTE: Assigning an IP address is considered as an advanced function and is normally done by a system administrator.

For more information on using your operator panel, see "Operator Panel."

1. Turn on the printer.

The Ready to Print appears.

- 2. Press Menu.
- 3. Press ▼ until Admin Menu appears, and then press ▶ or ✓.
- 4. Press ▼ until Wired Network or Wireless Net appears, and then press ▶ or ✔.
- 5. Press ▼ until TCP/IP appears, and then press ▶ or ✔.

- 6. Press ▼ until Get IP Address appears, and then press ▶ or ✔.
- 7. Press ▼ until Panel appears, and then press ✓.
- 8. Press ◀.
- 9. Press ▼ until IP Address appears, and then press ▶ or ✔.
- 10. The cursor is located at the first digit of the IP address. Press ▲ ▼ to enter the numbers for the IP address.
- 11. Press ▶ .

The cursor moves to the next digit.

- 12. Repeat steps 10 and 11 to enter all of the digits in the IP address, and then press ✓.
- 13. Press ◀ .
- 14. Press ▼ until Subnet Mask appears, and then press ▶ or ✔.
- 15. Repeat steps 10 to 11 to set Subnet Mask, and then press ✓.
- 16. Press ◀ .
- 17. Press ▼ until Gateway Address appears, and then press ▶ or ✔.
- 18. Repeat steps 10 to 11 to set Gateway Address, and then press \checkmark .
- 19. Turn off the printer, and then turn it on again.

The IP address is assigned to your printer. To verify the setting, open the web browser on any computer connected to the network and enter the IP address into the address bar on the browser. If the IP address is set up correctly, the Dell Printer Configuration Web Tool displays in your browser.

You can also assign the IP address to the printer when installing the printer drivers with installer. When you use the Network Installation feature, and the Get IP Address is set to AutoIP on the operator panel menu, you can set the IP address from 0.0.0.0 to the desired IP address on the printer selection window.

Verify the IP Settings

- 1. Print another Printer Settings page.
- 2. Look under the TCP/IP heading on the Printer Settings page to make sure the IP address, netmask, and gateway are what you expected.

Ping the printer and verify that it responds. For example, at a command prompt on a network computer, type ping followed by the new printer IP address (for example, 192.168.0.11):

ping 192.168.0.11

If the printer is active on the network, you will receive a reply.

Enterprise Console Management Modules

The following enterprise console management modules and user's manuals are available on your *Drivers and Utilities* CD:

- IBM Tivoli® NetView®
- CA Unicenter®
- HP OpenView®

To use the modules, go to the following directory on your CD and run each .exe file or .chm file.

IBM Tivoli: \Utilities\SnapIns\IBM Tivoli

CA Unicenter: \Utilities\SnapIns\CA Unicenter

HP OpenView: \Utilities\SnapIns\HP OpenView

Installing the Optional Tray Module and Cards

- Precautions
- Installing the Optional 500-Sheet Tray Module
- Installing the Optional 1000-Sheet Tray Module
- Installing the Optional 500-Sheet Tray Module and 1000-Sheet Tray Module
- Installing a Memory Card
- Installing a Multi Protocol Card
- Installing the Dell Wireless Printer Adapter 3310 USB
- Installing the Hard Disk

Precautions



NOTE: If you are adding an optional 500-sheet tray module or 1000-sheet tray module after setting up the printer, be sure to turn off the printer, unplug the power cable, and disconnect all cables from the back of the printer before completing these tasks.



CAUTION: To lift the optional 1000-sheet tray module safely requires two people.



NOTICE: Place the imaging drum on a clean flat surface. Also, cover the imaging drum with something like newspaper to keep it out of direct light.

• Only one optional 500-sheet tray module and one optional 1000-sheet tray module can be installed under the printer.

Some instructions may vary depending on the tray module configuration in your printer.



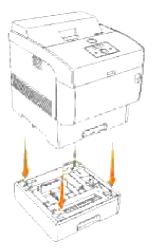
NOTE: Some tray module configurations differ from those described in this manual.

Installing the Optional 500-Sheet Tray Module

- 1. Make sure that the printer is turned off and unplug all cables including the power cord from the rear of the printer.
- 2. Lift the printer and align the four guide pins of the 500-sheet tray module with the holes at the bottom of the printer. Gently lower the printer onto the optional 500-sheet tray module.



CAUTION: To lift the printer safely, remove the imaging drum and lift it with two people. Never try to lift the printer while facing its right and left sides.



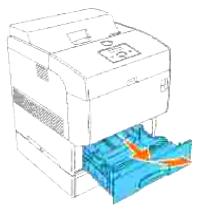


NOTE: Be careful not to pinch your fingers when lowering the printer onto the optional 500-sheet tray module.

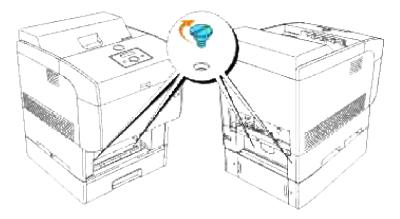
3. Hold the upper side of the paper tray cover and pull it toward you to remove it from the back of the printer.



4. Pull the printer's tray out until it stops. Hold the tray with both hands, lift up the front slightly and remove it from the printer.



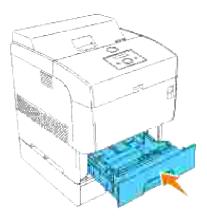
5. Insert the four screws provided into the four holes inside the printer and tighten them to secure the printer to the optional 500-sheet tray module.



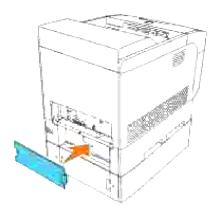
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NOTE: Make sure the screws are firmly tightened.

6. Insert the tray into the printer.



7. Reattach the paper tray cover to the back of the printer.



- 8. Turn on the printer.
- NOTE: The printer will automatically detect the attached tray(s) but will not detect the paper type.

- 9. Print a Printer Settings page to verify the optional 500-sheet tray module is installed correctly.
 - a. Press Menu.
 - b. Press ▼ until Report/List appears, and then press ▶ or ✓.
 - c. Printer Setting is displayed. Press ✓. The Printer Settings page is printed.
 - d. Verify 500-Sheet Tray Module is listed in the printer settings under Printer Options.

If the tray modules are not listed, turn off the printer, unplug the power cable, and reinstall the optional 500-sheet tray module.

- 10. After loading paper in the installed tray, specify the paper type from the printer operator panel.

 Press ▼ until the paper type for the installed tray appears, and then press ▼ .
- 11. If you installed the optional 500-sheet tray module after installing the printer driver, update your driver by following the instructions for each operating system. If the printer is on a network, update the driver for each client.

When Using PCL driver

Windows Vista™

- 1. Click Start → Control Panel → Hardware and Sound → Printers.
- 2. Right-click this printer icon and select Properties.
- 3. Click the Options tab, and then select Get Information from Printer.
- 4. Click Apply, and then click OK.
- 5. Close the Printers folder.

Windows XP/XP x64/Server 2003/Server 2003 x64

- 1. Click Start → Printers and Faxes.
- 2. Right-click this printer icon and select Properties.
- 3. Click the Options tab, and then select Get Information from Printer.

- 4. Click Apply, and then click OK.
- 5. Close the Printers and Faxes folder.

Windows 2000/NT 4.0

- 1. Click Start → Settings → Printers.
- 2. Right-click this printer icon and select Properties.
- 3. Click the Options tab, and then select Get Information from Printer.
- 4. Click Apply, and then click OK.
- 5. Close the Printers folder.

When Using PS Driver

Windows Vista

- 1. Click Start → Control Panel → Hardware and Sound → Printers.
- 2. Right-click this printer icon and select Properties.
- 3. Click the Device Settings tab, and then select your tray configuration under Installable Options: Paper Tray Configuration.
- 4. Click Apply, and then click OK.

Windows XP/XP x64/Server 2003/Server 2003 x64

- 1. Click Start → Printers and Faxes.
- 2. Right-click this printer icon and select Properties.
- 3. Click the Device Settings tab, and then select your tray configuration under Installable Options: Paper Tray Configuration.
- 4. Click Apply, and then click OK.

Windows 2000/NT 4.0

- 1. Click Start \rightarrow Settings \rightarrow Printers.
- 2. Right-click this printer icon and select Properties.
- 3. Click the Device Settings tab, and then select your tray configuration under Installable Options: Paper Tray Configuration.

4. Click Apply, and then click OK.

Mac OS X

- 1. Select the printer from the Printer List screen in Print Center (or Printer Setup Utility).
- 2. Click Printers on the Print Center (or Printer Setup Utility) menu bar, and select Show Info.
- 3. Select Installable Options, and select the options that have been installed on the printer, and then click Apply Changes.

Installing the Optional 1000-Sheet Tray Module

- 1. Make sure that the printer is turned off and unplug all cables including the power cord from the rear of the printer.
- 2. Lock down the brakes of the two casters at the front of optional 1000-sheet tray module.



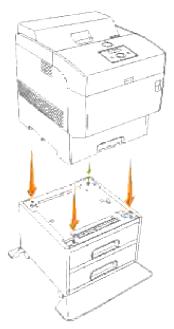


CAUTION: Failure to lock down the brakes can cause the printer to move unexpectedly, resulting in injury.

3. Lift the printer and align the four guide pins of the optional 1000-sheet tray module with the holes at the bottom of the printer. Gently lower the printer onto the 1000-sheet tray module.

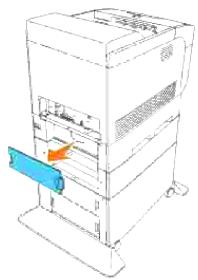


CAUTION: To lift the printer safely, remove the imaging drum and lift it with two people. Never try to lift the printer while facing its right and left sides.

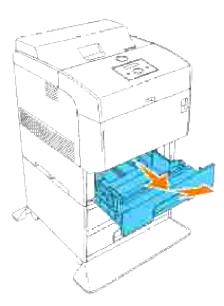


NOTE: Be careful not to pinch your fingers when lowering the printer onto the optional 1000-sheet tray module.

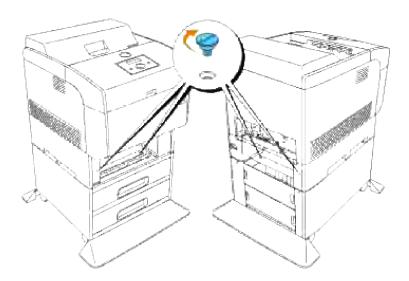
4. Hold the upper side of the paper tray cover and pull it toward you to remove it from the back of the printer.



5. Pull the printer's tray out until it stops. Hold the tray with both hands, lift up the front slightly and remove it from the printer.



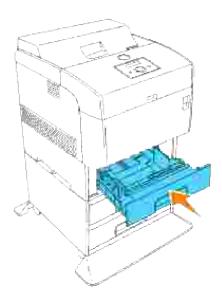
6. Insert the four screws provided into the four holes inside the printer and tighten them to secure the printer to the optional 1000-sheet tray module.



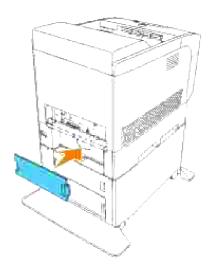
W

NOTE: Make sure the screws are firmly tightened.

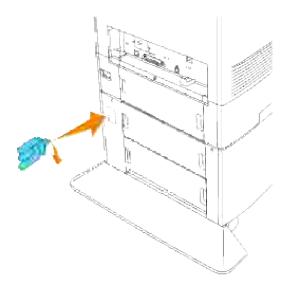
7. Insert the tray into the printer.



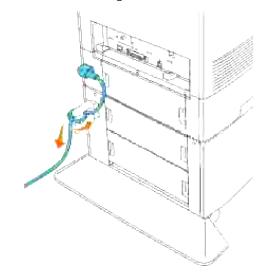
8. Reattach the paper tray cover to the back of the printer.



9. Peel off the mylar film on the cable hook, and attach the cable hook on the back of the printer.



- 10. Connect the power cable correctly.
 - a. Plug the power cable into the power cable connecter at the back of the printer.
 - b. Wind the power cable onto the cable hook as shown in the graphic.
 - c. Lightly pull the power cable.
 - d. Plug the other end of the cable into the grounded outlet.



- 11. Turn on the printer.
- NOTE: The printer will automatically detect the attached tray(s) but will not detect the paper type.
- 12. Print a Printer Settings page to verify the optional 1000-sheet tray module is installed correctly.

- a. Press Menu.
- b. Report/List appears. Press ▶ or ✓.
- c. Printer Setting is displayed. Press ✓. The Printer Settings page is printed.
- d. Verify 1000-Sheet Tray Module is listed in the printer settings under Printer Options.

If the tray modules are not listed, turn off the printer, unplug the power cable, and reinstall the optional 1000-sheet tray module.

- 13. After loading paper in the installed tray, specify the paper type from the printer operator panel.

 Press ▼ until the paper type for the installed tray appears, and then press ✓.
- 14. If you installed the optional 1000-sheet tray module after installing the printer driver, update your driver by following the instructions for each operating system. If the printer is on a network, update the driver for each client.

When Using PCL driver

Windows Vista

- 1. Click Start → Control Panel → Hardware and Sound → Printers.
- 2. Right-click this printer icon and select Properties.
- 3. Click the Options tab, and then select Get Information from Printer.
- 4. Click Apply, and then click OK.
- 5. Close the Printers folder.

Windows XP/XP x64/Server 2003/Server 2003 x64

- 1. Click Start \rightarrow Printers and Faxes.
- 2. Right-click this printer icon and select Properties.
- 3. Click the Options tab, and then select Get Information from Printer.
- 4. Click Apply, and then click OK.
- 5. Close the Printers and Faxes folder.

Windows 2000/NT 4.0

- 1. Click Start → Settings → Printers.
- 2. Right-click this printer icon and select Properties.
- 3. Click the Options tab, and then select Get Information from Printer.
- 4. Click Apply, and then click OK.
- 5. Close the Printers folder.

When Using PS Driver

Windows Vista

- 1. Click Start \rightarrow Control Panel \rightarrow Hardware and Sound \rightarrow Printers.
- 2. Right-click this printer icon and select Properties.
- 3. Click the Device Settings tab, and then select your tray configuration under Installable Options: Paper Tray Configuration.
- 4. Click Apply, and then click OK.

Windows XP/XP x64/Server 2003/Server 2003 x64

- 1. Click Start → Printers and Faxes.
- 2. Right-click this printer icon and select Properties.
- 3. Click the Device Settings tab, and then select your tray configuration under Installable Options: Paper Tray Configuration.
- 4. Modify your tray assignments from Not Available to the appropriate form for each tray under Form to Tray Assignment.
- 5. Click Apply, and then click OK.

Windows 2000/NT 4.0

- 1. Click Start → Settings → Printers.
- 2. Right-click this printer icon and select Properties.
- 3. Click the Device Settings tab, and then select your tray configuration under Installable Options: Paper Tray Configuration.
- 4. Modify your tray assignments from Not Available to the appropriate form for each tray under Form to Tray Assignment.
- 5. Click Apply, and then click OK.

Mac OS X

- 1. Select the printer from the Printer List screen in Print Center (or Printer Setup Utility).
- 2. Click Printers on the Print Center (or Printer Setup Utility) menu bar, and select Show Info.
- 3. Select Installable Options, and select the options that have been installed on the printer, and then click Apply Changes.

Installing the Optional 500-Sheet Tray Module and 1000-Sheet Tray Module

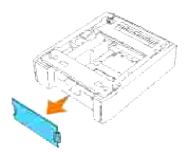
- 1. Make sure that the printer is turned off and unplug all cables including the power cord from the rear of the printer.
- 2. Lock down the brakes of the two casters at the front of optional 1000-sheet tray module.



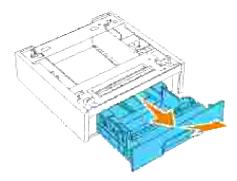


CAUTION: Failure to lock down the brakes can cause the printer to move unexpectedly, resulting in injury.

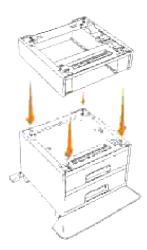
3. Hold the upper side of the paper tray cover and pull it toward you to remove it from the back of the printer.



4. Gently pull out the tray of the optional 500-sheet tray module until it stops. Hold the tray with both hands, lift up the front slightly and remove it from the tray module.

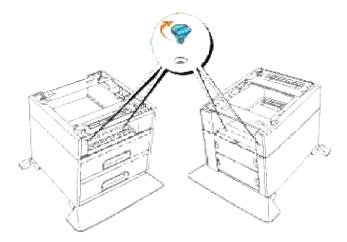


 Lift the optional 500-sheet tray module and align the four guide pins of the optional 1000-sheet tray module with the holes at the bottom of the 500-sheet tray module.
 Gently lower the 500-sheet tray module onto the 1000-sheet tray module.



6. Insert the four screws provided into the four holes inside the optional 500-sheet tray module and

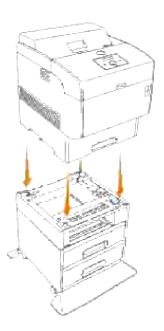
tighten them to secure the 500-sheet tray module to the optional 1000-sheet tray module.



7. Lift the printer and align the four guide pins of the optional 500-sheet tray module with the holes at the bottom of the printer. Gently lower the printer onto the optional 500-sheet tray module.



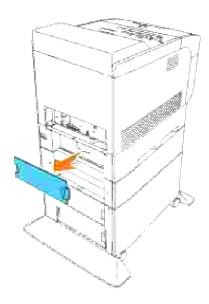
CAUTION: To lift the printer safely, remove the imaging drum and lift it with two people. Never try to lift the printer while facing its right and left sides.



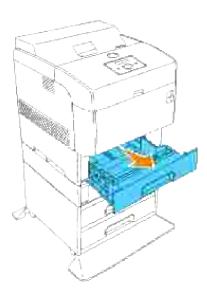
 Λ

CAUTION: Be careful not to pinch your fingers when lowering the printer onto the optional 1000-sheet tray module.

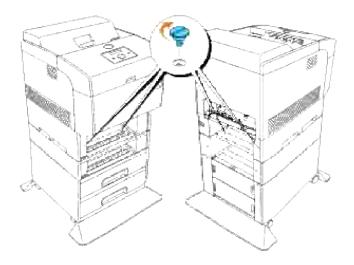
8. Hold the upper side of the paper tray cover and pull it toward you to remove it from the back of the printer.



9. Pull the printer's tray out until it stops. Hold the tray with both hands, lift up the front slightly and remove it from the printer.



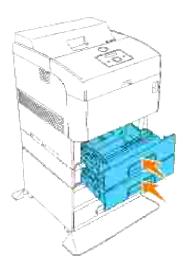
10. Insert the four screws provided into the four holes inside the printer and tighten them to secure the printer to the optional 1000-sheet tray module.



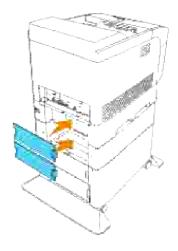
4

NOTE: Make sure the screws are firmly tightened.

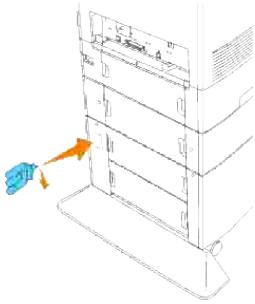
11. Insert the trays into the printer.



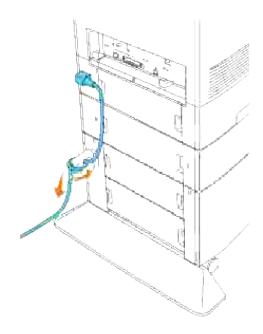
12. Reattach the paper tray cover to the back of the printer and the optional 500-sheet tray module.



13. Peel off the mylar film on the cable hook, and attach the cable hook on the back of the printer.



- 14. Connect the power cable correctly.
 - a. Plug the power cable into the power cable connecter at the back of the printer.
 - b. Wind the power cable onto the cable hook as shown in the graphic.
 - c. Lightly pull the power cable.
 - d. Plug the other end of the cable into the grounded outlet.



15. Turn on the printer.



NOTE: The printer will automatically detect the attached tray(s) but will not detect the paper type.

- 16. Print a Printer Settings page to verify the optional 500-sheet tray module or 1000-sheet tray module is installed correctly.
 - a. Press Menu.
 - b. Reports/List appears. Press ▶ or ✔.
 - c. Printer Settings is displayed. Press ✓. The Printer Settings page is printed.
 - d. Verify that 500-Sheet Tray Module and 1000-Sheet Tray Module are listed in the printer settings under Printer Options.

If the tray modules are not listed, turn off the printer, unplug the power cable, and reinstall the optional 500-sheet tray module and 1000-sheet tray module.

- 17. After loading paper in the optional tray, specify the paper type from the printer operator panel.
 - a. Press $\overline{\ }$ until the paper type for the installed tray appears, and then press $\overline{\ }$.
- 18. If you installed the optional 500-sheet tray module and 1000-sheet tray module after installing the printer driver, update your driver by following the instructions for each operating system. If the printer is on a network, update the driver for each client.

When Using PCL driver

Windows Vista

- 1. Click Start → Control Panel → Hardware and Sound → Printers.
- 2. Right-click this printer icon and select Properties.
- 3. Click the Options tab, and then select Get Information from Printer.
- 4. Click Apply, and then click OK.
- 5. Close the Printers folder.

Windows XP/XP x64/Server 2003/Server 2003 x64

- 1. Click Start → Printers and Faxes.
- 2. Right-click this printer icon and select Properties.
- 3. Click the Options tab, and then select Get Information from Printer.
- 4. Click Apply, and then click OK.
- 5. Close the Printers and Faxes folder.

Windows 2000/NT 4.0

- 1. Click Start → Settings → Printers.
- 2. Right-click this printer icon and select Properties.
- 3. Click the Options tab, and then select Get Information from Printer.
- 4. Click Apply, and then click OK.
- 5. Close the Printers folder.

When Using PS Driver

Windows Vista

- 1. Click Start \rightarrow Control Panel \rightarrow Hardware and Sound \rightarrow Printers.
- 2. Right-click this printer icon and select Properties.
- 3. Click the Device Settings tab, and then select your tray configuration under Installable Options: Paper Tray Configuration.
- 4. Click Apply, and then click OK.

Windows XP/XP x64/Server 2003/Server 2003 x64

- 1. Click Start → Printers and Faxes.
- 2. Right-click this printer icon and select Properties.
- 3. Click the Device Settings tab, and then select your tray configuration under Installable Options: Paper Tray Configuration.
- 4. Modify your tray assignments from Not Available to the appropriate form for each tray under Form to Tray Assignment.
- 5. Click Apply, and then click OK.

Windows 2000/NT 4.0

- 1. Click Start → Settings → Printers.
- 2. Right-click this printer icon and select Properties.
- 3. Click the Device Settings tab, and then select your tray configuration under Installable Options: Paper Tray Configuration.
- 4. Modify your tray assignments from Not Available to the appropriate form for each tray under Form to Tray Assignment.
- 5. Click Apply, and then click OK.

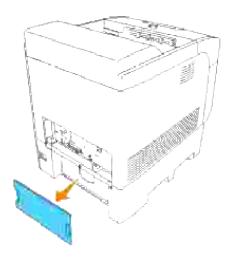
Mac OS X

- 1. Select the printer from the Printer List screen in Print Center (or Printer Setup Utility).
- 2. Click Printers on the Print Center (or Printer Setup Utility) menu bar, and select Show Info.
- 3. Select Installable Options, and select the options that have been installed on the printer, and then click Apply Changes.

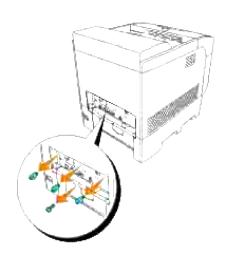
Installing a Memory Card

Your printer supports 256 MB, 512 MB, and 1024 MB additional memory cards.

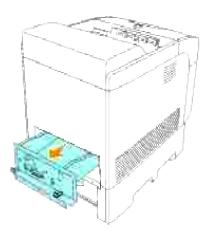
- 1. Make sure that the printer is turned off and unplug all cables including the power cord from the rear of the printer.
- 2. Hold the upper side of the paper tray cover and pull it toward you to remove it from the back of the printer.



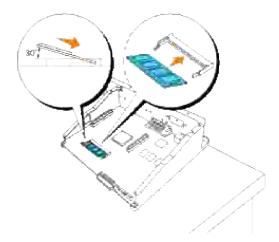
3. Remove the four screws on the controller card from the back side of the printer.



4. Remove the controller card from the printer by the handles.

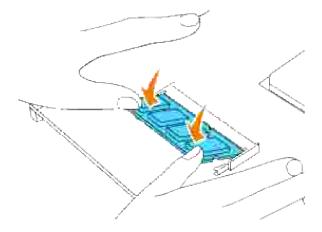


5. Place the controller card on a table so that it is horizontal and extends its edge hangs over the edge of the table. Hold the memory card so its notch is aligned with the connector rib in the slot on the controller card, and insert the memory card at an angle of 30 degrees until it stops.

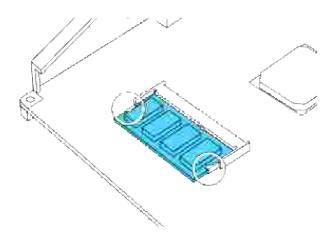


NOTE: Ensure that the notch of the memory card is aligned with the connector rib in the slot. If you insert the memory card in the other way around, you cannot insert it correctly because the notch on the memory card is not aligned with the connector rib. Be sure to insert the memory card until it stops. If you go to the next step without inserting the card correctly, the memory card or connector may be damaged.

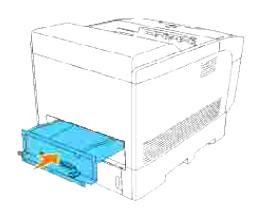
6. Snap the memory card notch into place by pushing down on the memory card until it is lying flat and parallel to the controller card. If you cannot easily snap the memory card into place, push down on the memory card with your thumbs as shown.



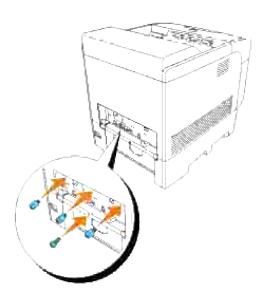
7. Ensure that the memory card is securely inserted in place.



8. Insert the controller card into the printer.

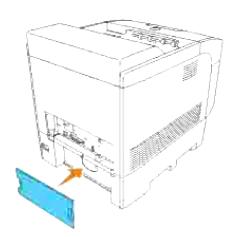


9. Tighten the four screws on the controller card from the back side of the printer. The three screws on the upper side are different in shape from the one on the lower side. Be careful not to confuse them.



NOTE: Make sure the screws are firmly tightened.

10. Reattach the paper tray cover to the back of the printer.



11. Turn on the printer.

When Using PCL driver

Windows Vista

- 1. Click Start \rightarrow Control Panel \rightarrow Hardware and Sound \rightarrow Printers.
- 2. Right-click this printer icon and select Properties.
- 3. Click the Options tab, and then select Get Information from Printer.
- 4. Click Apply, and then click OK.
- 5. Close the Printers folder.

Windows XP/XP x64/Server 2003/Server 2003 x64

- 1. Click Start → Printers and Faxes.
- 2. Right-click this printer icon and select Properties.
- 3. Click the Options tab, and then select Get Information from Printer.
- 4. Click Apply, and then click OK.
- 5. Close the Printers and Faxes folder.

Windows 2000/NT 4.0

- 1. Click Start \rightarrow Settings \rightarrow Printers.
- 2. Right-click this printer icon and select Properties.
- 3. Click the Options tab, and then select Get Information from Printer.
- 4. Click Apply, and then click OK.
- 5. Close the Printers folder.

When Using PS Driver

Windows Vista

- 1. Click Start \rightarrow Control Panel \rightarrow Hardware and Sound \rightarrow Printers.
- 2. Right-click this printer icon and select Properties.
- 3. Click the Device Settings tab, and then select your tray configuration under Installable Options: Paper Tray Configuration.
- 4. Click Apply, and then click OK.

Windows XP/XP x64/Server 2003/Server 2003 x64

- 1. Click Start → Printers and Faxes.
- 2. Right-click this printer icon and select Properties.
- 3. Click the Device Settings tab, and then select your tray configuration under Installable Options: Paper Tray Configuration.
- 4. Modify your tray assignments from Not Available to the appropriate form for each tray under Form to Tray Assignment.
- 5. Click Apply, and then click OK.

Windows 2000/NT 4.0

- 1. Click Start \rightarrow Settings \rightarrow Printers.
- 2. Right-click this printer icon and select Properties.
- 3. Click the Device Settings tab, and then select your tray configuration under Installable Options: Paper Tray Configuration.
- 4. Modify your tray assignments from Not Available to the appropriate form for each tray under Form to Tray Assignment.
- 5. Click Apply, and then click OK.

Mac OS X

- 1. Select the printer from the Printer List screen in Print Center (or Printer Setup Utility).
- 2. Click Printers on the Print Center (or Printer Setup Utility) menu bar, and select Show Info.
- 3. Select Installable Options, and select the options that have been installed on the printer, and then click Apply Changes.

Installing a Multi Protocol Card

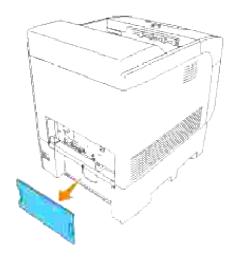
A multi protocol card allows you to use the following network protocols.

Network protocol	Supported operating systems
IPP	Windows Vista/XP/XP x64/Server 2003/Server 2003 x64/2000/NT 4.0/Mac OS X 10.3
SMB	Windows Vista/XP/XP x64/Server 2003/Server 2003 x64/2000/ NT 4.0
IPX/SPX	NetWare3.12/3.2/4.1/4.11/4.2/5/6/6.5*
AppleTalk	Mac OS X
Bonjour(mDNS)	Mac OS 10.2 or later
IPv6	Windows Vista

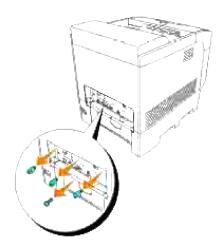
^{*}Supports only Support Pack 1.1 or later.

To Install the Multi Protocol Card

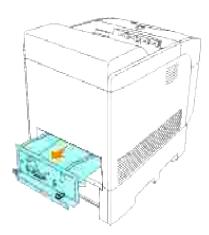
- 1. Make sure that the printer is turned off and unplug all cables including the power cord from the rear of the printer.
- 2. Hold the upper side of the paper tray cover and pull it forward to remove it from the back of the printer.



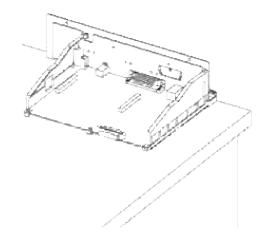
3. Remove the four screws on the controller card from the back side of the printer.



4. Remove the controller card from the printer by the handles.

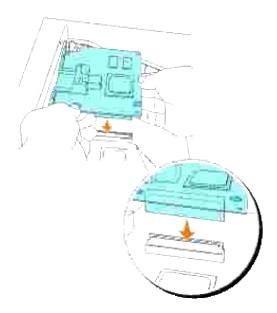


5. Place the controller card on the table so that its edge hangs over the edge of the table and the controller card is horizontal.

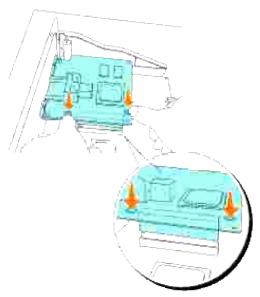


6. Hold the multi protocol card so its connector is aligned with the slot on the controller card (do not touch any exposed circuitry on the board).

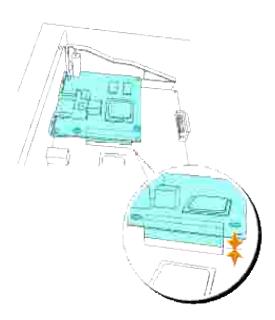
Before actually inserting the multi protocol card into the slot, confirm the alignment is correct.



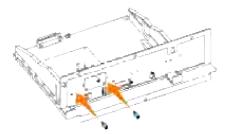
7. Press the printed circles with your fingers to connect the multi protocol card to the slot.



NOTE: Ensure that the multi protocol card is securely inserted into the slot on the controller card.



8. Align the two protrusions with the holes on the controller card, and then tighten the two screws from the back side of the controller card.

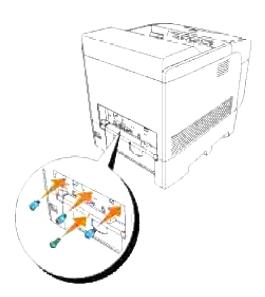


NOTE: Ensure that the multi protocol card is securely inserted into the slot on the controller card.

9. Insert the controller card into the printer.



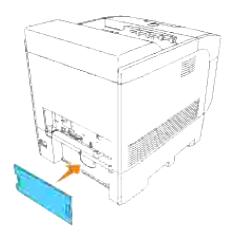
10. Tighten the four screws on the controller card from the back side of the printer. The three screws on the upper side are different in shape from the one on the lower side. Be careful not to confuse them.





NOTE: Make sure the screws are firmly tightened.

11. Reattach the paper tray cover to the back of the printer.



- 12. Turn on the printer.
- 13. Print a Print Settings page to confirm that the following information is listed:

Wired Network

Firmware Version

(MPC)

Printer Options

Multi-Protocol Card

See "Printer Settings" for more information.

If the information above is not listed, the multi protocol card is not inserted correctly. If this is the case, reinsert the multi protocol card from step 1.

Installing the Dell Wireless Printer Adapter 3310 USB

The Wireless printer adapter allows you to use the following wireless protocols.

Connectivity Technology	Wireless
Compliant Standards	802.11b/802.11g
Bandwidth	2.4GHz
Data Transfer Rate	11g mode: 54, 48, 36, 24, 18, 12, 9, 6 Mbps 11b mode: 11, 5.5, 2, 1 Mbps
Device Type	Wireless Printer Adapter
Security	64(40-bit key)/128(104-bit key) WEP Encryption/WPA/WPA2

To use the Wireless Printer Adapter, an optional multi protocol card is required.

If an optional multi protocol card is not installed, be sure to install it by following the steps in "Installing a Multi Protocol Card".

- 1. Make sure that the printer is turned off and unplug all cables including the power cord from the rear of the printer.
- 2. Remove the upper screw on the wireless port cover from the back side of the controller card.



- 3. Remove the cover from the controller card by the handles.
- 4. Check that the Wireless Printer Adapter is positioned with the USB mark on the top, and then insert the adapter until it stops.



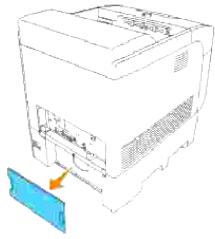
5. Check that the Wireless Printer Adapter cap is positioned with the mark facing up, and then attach the cap until it clicks.



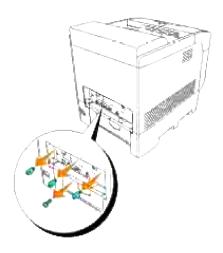
6. After you have completed the steps above, run the installation software that comes with the Wireless Printer Adapter, and follow the instructions on the screen.

Installing the Hard Disk

- 1. Make sure that the printer is turned off and unplug all cables including the power cord from the rear of the printer.
- 2. Hold the upper side of the paper tray cover and pull it toward you to remove it from the back of the printer.



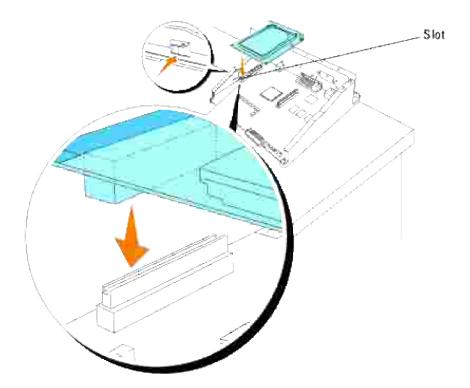
3. Remove the four screws on the controller card from the back side of the printer.



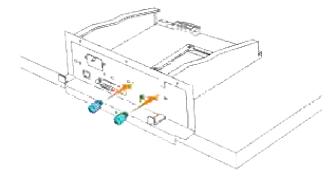
4. Remove the controller card from the printer by the handles.



5. Place the controller card on the table so that its edge hangs over the edge of the table and the controller card is horizontal. Hold the hard disk so its connector is aligned with the slot on the controller card, and push down the shaded part (do not touch any exposed circuitry on the board).

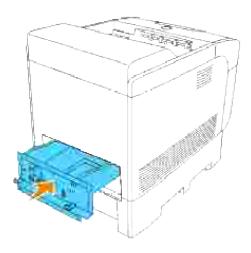


6. Align the two protrusions with the holes on the controller card, and then tighten the two screws from the back side of the controller card.

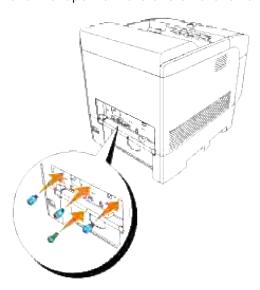


NOTE: Ensure that the hard disk is securely inserted into the slot on the controller card.

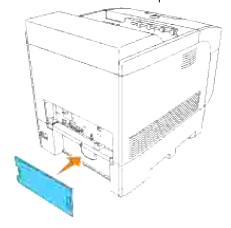
7. Insert the controller card into the printer.



8. Tighten the four screws on the controller card from the back side of the printer. The three screws on the upper side are different in shape from the one on the lower side. Be careful not to confuse them.



9. Reattach the paper tray cover to the back of the printer.



Print Media Guidelines

Print media is paper, transparencies, labels, envelopes, coated paper among others. Your printer provides high-quality printing on a variety of print media. Selecting the appropriate print media for your printer helps avoid printing troubles. This section describes how to select print media, how to care for print media, and how to load the print media in the standard 500-sheet tray, optional 500-sheet tray module, or 1000-sheet module.

- Paper
- Transparencies
- Envelopes
- Labels
- Storing Print Media
- Identifying Print Media Sources and Specifications

Paper

For the best print quality in color, use 75 g/m² (20 lb) xerographic, grain long paper. For the best print quality in black and white, use 90 g/m² (24 lb) xerographic, grain long paper. Before buying large quantities of any print media, Dell recommends trying a sample first.

When loading paper, identify the recommended print side on the paper package, and load the paper accordingly. See "Loading Print Media in Standard and Optional Trays" and "Loading the Multipurpose Feeder" for detailed loading instructions.

Paper Characteristics

The following paper characteristics affect print quality and reliability. Dell recommends that you follow these guidelines when evaluating new paper stock.

Weight

The tray automatically feeds paper weights from 60 to 163 g/m 2 (16 to 60 lb bond) grain long. The multipurpose feeder automatically feeds paper weights from 60 to 216 g/m 2 (16 to 80 lb bond) grain long. Paper lighter than 60 g/m 2 (16 lb) might not be stiff enough to feed properly, and could cause paper jams. For best performance, use 75 g/m 2 (20 lb bond) grain long paper.

Curl

Curl is the tendency of print media to curve at its edges. Excessive curl can cause paper feeding problems. Curl usually occurs after the paper passes through the printer, where it is exposed to high temperatures.

Storing paper unwrapped in humid conditions, even in the paper tray, can contribute to paper curling prior to printing and cause feeding problems.

Smoothness

The degree of paper smoothness directly affects print quality. If the paper is too rough, the toner does not fuse to the paper properly, resulting in poor print quality. If the paper is too smooth, it can cause paper feeding problems. Smoothness between 150 and 250 Sheffield points produces the best print quality.

Moisture Content

The amount of moisture in the paper affects both print quality and the ability of the printer to feed the paper properly. Leave the paper in its original packaging until you are ready to use it. This limits the exposure of the paper to moisture changes that can degrade its performance.

Grain Direction

Grain refers to the alignment of the paper fibers in a sheet of paper. Grain is either grain long, running the length of the paper, or grain short, running the width of the paper. Grain long paper is recommended.

Fiber Content

Most high-quality xerographic paper is made from 100% chemically pulped wood. Paper containing fibers such as cotton possess characteristics that can result in degraded paper handling.

Recommended Paper

To ensure the best print quality and feed reliability, use 75 g/m 2 (20 lb) xerographic paper. Business papers designed for general business use also provide acceptable print quality.

Always print several samples before buying large quantities of any type of print media. When choosing any print media, you should consider the weight, fiber content, and color.

The laser printing process heats paper to high temperatures of 225°C (437°F) for Magnetic Ink Character Recognition (MICR) applications, and 205°C (401°F) for non-MICR applications. Only use paper able to withstand these temperatures without discoloring, bleeding, or releasing hazardous emissions. Check with the manufacturer or vendor to determine whether the paper you have chosen is acceptable for laser printers.

Unacceptable Paper

The following paper types are not recommended for use with the printer:

• Chemically treated papers used to make copies without carbon paper, also known as carbonless papers, carbonless copy paper (CCP), or no carbon required (NCR) paper

- Preprinted papers with chemicals that may contaminate the printer
- Preprinted papers that can be affected by the temperature in the printer fuser
- Preprinted papers that require a registration (the precise print location on the page) greater than ±0.09 in., such as optical character recognition (OCR) forms

In some cases, you can adjust registration with your software program to successfully print on these forms.

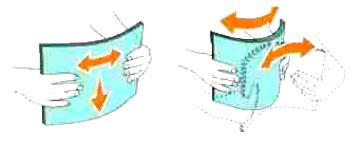
- Coated papers (erasable bond), synthetic papers, thermal papers
- Rough-edged, rough or heavily textured surface papers or curled papers
- Recycled papers containing more than 25% post-consumer waste that do not meet DIN 19 309
- Multiple-part forms or documents

Selecting Paper

Proper paper selection helps prevent jams and ensures trouble-free printing.

To help avoid jams or poor print quality:

- Always use new, undamaged paper.
- Before loading the paper, identify the recommended print side of the paper. This information is usually indicated on the paper package.
- Do not use paper that you have cut or trimmed yourself.
- Do not mix print media sizes, weights, or types in the same source. This may result in a paper jam.
- Do not remove trays while a job is printing or Printing is displayed on the operator panel.
- Make sure the Paper Type setting is correct. (See "<u>Tray Settings</u>" for detailed information about these settings.)
- Make sure the paper is properly loaded in the tray.
- Flex paper back and forth, and then fan them. Straighten the edges of the stack on a level surface.



Selecting Preprinted Forms and Letterhead

When selecting preprinted forms and letterhead paper for the printer:

- Use grain long papers for best results.
- Use only forms and letterhead printed using an offset lithographic or engraved printing process.
- Select papers that absorb ink, but do not bleed.
- Avoid papers with rough or heavily textured surfaces.
- Use papers printed with heat-resistant inks designed for use in xerographic copiers. The ink must withstand temperatures of 225°C (437°F) without melting or releasing hazardous emissions.
- Use inks that are not affected by the resin in toner or the silicone in the fuser. Inks that are oxidationset or oil-based should meet these requirements; latex inks might not. If you are in doubt, contact your paper supplier.

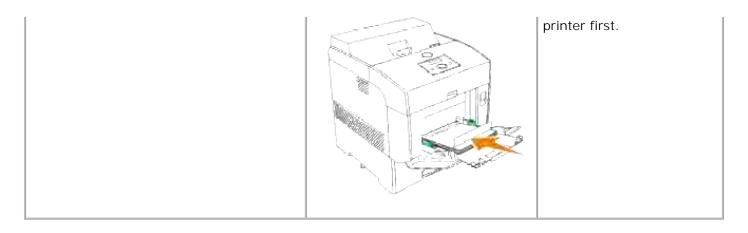
Printing on Letterhead

Check with the manufacturer or vendor to determine whether the preprinted letterhead you have selected is acceptable for laser printers.

Page orientation is important when printing on letterhead. Use the following table for help when loading

letterhead in the print media sources.

letternedu in the print media sources.				
Print media source	Print side	Page orientation		
Standard 500-sheet tray Optional 500-sheet tray module or 1000- sheet module	Face up	Letterhead at the back of the tray		
Multipurpose feeder	Face down	Letterhead enters the		



Selecting Pre-punched Paper

Pre-punched paper brands can differ in the number and placement of holes and in manufacturing techniques.

To select and use pre-punched paper:

- Test paper from several manufacturers before ordering and using large quantities of pre-punched paper.
- Paper should be punched at the paper manufacturer and not drilled into paper already packaged in a ream. Drilled paper can cause jams when multiple sheets feed through the printer. This may result in a paper jam.
- Pre-punched paper can include more paper dust than standard paper. Your printer may require more frequent cleaning and feed reliability may not be as good as standard paper.
- Weight guidelines for pre-punched paper are the same as non-punched paper.

Transparencies

You can load up to 75 transparencies in the multipurpose feeder for a single print job. Before buying large quantities of any print media, Dell recommends trying a sample first.

When printing on transparencies:

- Set the Paper Type to Transparency from the printer driver to avoid damaging your printer.
- Use transparencies designed specifically for laser printers. Do not use regular transparencies.
 Transparencies must be able to withstand temperatures of 205°C (401°F) without melting, discoloring, offsetting or releasing hazardous emissions.
- Avoid getting fingerprints on the transparencies. This may result in poor print quality.
- Before loading transparencies, fan the stack to prevent sheets from sticking together.

Selecting Transparencies

The printer can print directly on transparencies designed for use in laser printers. Print quality and durability depend on the transparency used. Before buying large quantities of any print media, Dell recommends trying a sample first.

The Paper Type setting should be set to Transparency to help prevent jams. (See "Paper Type" for detailed information about this setting.) Check with the manufacturer or vendor to determine whether your transparencies are compatible with laser printers that reach temperatures as high as 205°C (401°F). Only use transparencies that are able to withstand these temperatures without melting, discoloring, offsetting, or releasing hazardous emissions.

Envelopes

You can load envelopes in the multipurpose feeder for a single print job. Before buying large quantities of any print media, Dell recommends trying a sample first. See "Loading the Multipurpose Feeder" for instructions on loading an envelope.

When printing on envelopes:

- Use only high-quality envelopes that are designed for use in laser printers.
- Set the print media source to MPF. Set the Paper Type to Envelope, and select the correct size of envelope from the printer driver.
- Use only new, undamaged envelopes.
- For best performance, do not use envelopes that:
 - Have excessive curl or twist
 - Are stuck together or damaged in any way
 - o Contain windows, holes, perforations, cutouts, embossing
 - O Use metal clasps, string ties, or metal folding bars
 - o Have an interlocking design
 - o Have postage stamps attached
 - o Have any exposed adhesive when the flap is in the sealed or closed position
 - o Have nicked edges or bent corners
 - o Have rough, cockle, or laid finishes
- Use envelopes that can withstand temperatures of 205°C (401°F) without sealing, excessive curling, wrinkling, or releasing hazardous emissions. If you have any doubts about the envelopes you are considering, check with the envelope supplier.

- Adjust the width guide to fit the width of the envelopes.
- To load envelopes in the multipurpose feeder, insert the envelopes either with the flaps open and at the rear, or with the flaps closed and the short-edge of the envelopes facing into the printer.
- See "Loading the Multipurpose Feeder" for instructions on loading an envelope.
- Use one envelope size during a print job.
- Make sure the humidity is low because high humidity (more than 60%) and the high printing temperatures may seal the envelopes.

Labels

Your printer can print on many labels designed for use with laser printers. Label adhesives, face sheet (printable stock), and topcoats must be able to withstand temperatures of 205°C (401°F) and pressure of 25 pounds per square inch (psi).

Before buying large quantities of any print media, Dell recommends trying a sample first.

When printing on labels:

- Set the Paper Type to Label in the Tray Settings. Set the Paper Type on the printer driver.
- Do not load labels together with paper or transparencies in the same tray. This may result in a jam.
- Do not use label sheets with a slick backing material.
- Use full label sheets. Partial sheets may cause labels to peel off during printing, resulting in a jam. Partial sheets also contaminate your printer and your cartridge with adhesive, and could void your printer and cartridge warranties.
- Use labels that can withstand temperatures of 205°C (401°F) without sealing, excessive curling, wrinkling, or releasing hazardous emissions.
- Do not use label sheets that have adhesive to the edge of the sheet. Dell recommends zone coating of the adhesive at least 1 mm (0.04 in.) away from edges. Adhesive material contaminates your printer and could void your warranty.
- Portrait orientation is preferred, especially when printing bar codes.
- Do not use labels that have exposed adhesive.

Storing Print Media

For proper print media storage, the following guidelines help avoid media feeding problems and uneven print

quality.

- For best results, store print media in an environment where the temperature is approximately 22°C and the relative humidity is 55%.
- Store cartons of print media on a pallet or shelf, rather than directly on the floor.
- If you store individual packages of print media out of the original carton, make sure they rest on a flat surface so that the edges do not buckle or curl.
- Do not place anything on top of the print media packages.

Identifying Print Media Sources and Specifications

The following tables provide information on standard and optional print media sources.

Print Media Sizes and Support

	Multipurpose feeder	Standard paper tray/ Optional 500-sheet tray module	Optional 1000-sheet module	Duplexer
A4	Υ	Υ	Υ	Y
A5	Y	Υ	Υ	Υ
B5	Y	Υ	Υ	Υ
Letter	Y	Υ	Υ	Υ
Folio (8.5 x 13 in.)	Y	Y	Y	Y
Legal (8.5 x 14 in.)	Y	Y	Y	Y
Executive	Y	Υ	Υ	Υ
COM-10 envelope	Υ	N	N	N
Monarch	Υ	N	N	N
C5	Υ	N	N	N
DL	Υ	N	N	N
User-specified print size	Y	N	N	Υ*

^{*} Duplexer support user-specified print media that are 149 mm to 220 mm wide and 210 mm to 355.6 mm long.

Print Media Supported

	Multipurpose feeder	Standard 500-sheet tray	Optional 1000-sheet module	Duplexer
Plain Paper (60–80 gsm)	Y	Υ	Y	Y
Plain Paper-Side 2 (60-80 gsm)	Υ	N	N	N
Plain Thick Paper (81–105 gsm)	Υ	Υ	Υ	Υ
Plain Thick Paper-Side 2 (81–105gsm)	Y	N	N	N
Covers (106–163 gsm)	Y	Y	Υ	Υ
Covers-Side 2 (106–163 gsm)	Υ	N	N	N
Covers Thick (164–216 gsm)	Y	N	N	N
Covers Thick-Side 2 (164–216 gsm)	Y	N	N	N
Transparency	Υ	N	N	N
Labels	Υ	N	N	N
Coated (106–163 gsm)	Y	N	N	Y
Coated-Side 2 (106 –163 gsm)	Y	N	N	N
Coated Thick (164–216 gsm)	Y	N	N	N
Coated Thick-Side 2 (164 –216 gsm)	Y	N	N	N
Envelope	Y	N	N	N

Setup Paper Type

Paper type	Weight (gsm)	Remarks
Plain1	60-80	-
Plain2	81-105	-
Covers1	106-163	-
Covers2	164-216	-
Coated1	106-163	Inkjet Printer paper cannot be used.
Coated2	164-216	Inkjet Printer paper cannot be used.
Transparency	-	Inkjet Printer paper cannot be used.
Label	-	Inkjet Printer paper cannot be used.
Envelopes	-	-

Loading Print Media

Proper print media loading helps prevent jams and ensures trouble-free printing.

Before loading print media, identify the recommended print side of the print media. This information is usually on the print media package.

- Loading Print Media in Standard and Optional Trays
- Multipurpose Feeder
- Loading the Multipurpose Feeder
- Using the Multipurpose Feeder
- Linking Trays
- Using the Duplex Function
- Using the Center Output Tray
- #

NOTE: After loading paper in the tray, specify the same paper type on the operator panel.

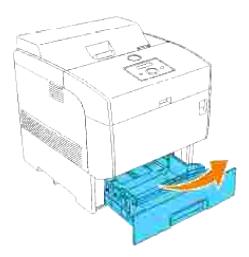
Loading Print Media in Standard and Optional Trays



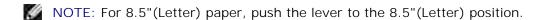
NOTE: To avoid paper jams, do not remove trays while a job prints.

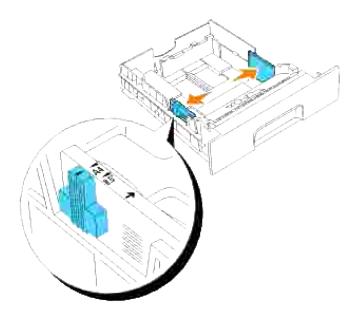
All trays are loaded the same way.

1. Pull the tray out of the printer until it stops. Hold the tray with both hands, lift the front slightly, and remove it from the printer.

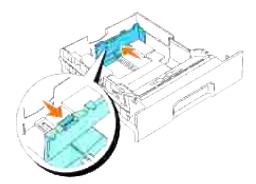


2. Slide the width guides to the edge of the tray. The width guides should be fully extended.

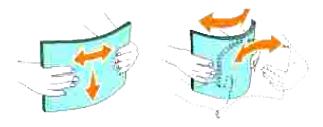




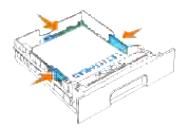
3. Squeeze the length guide and slide it to the edge of the tray.



4. Before loading the print media, flex the sheets back and forth, and then fan them. Straighten the edges of the stack on a level surface.



- 5. Place the print media into the tray with the recommended print side face up.
- NOTE: Do not exceed the maximum fill line in the tray. Overfilling the tray may cause paper jams.
- 6. Slide the width guides and length guide until they rest lightly against the edge of the print media stack.



- 7. Insert the tray into the printer, and push until it stops.
- 8. If you load any print media into the tray, configure the Paper Type setting for that tray according to the message on the operator panel.

Loading Letterhead

Place the printed side face up.

Print media source	Print side	Page orientation
Standard 500-sheet tray Optional 500-sheet tray module or 1000- sheet module	Face up	Letterhead at the back of the tray
Multipurpose feeder	Face down	Letterhead enters the printer first.

Multipurpose Feeder

Capacity

The maximum stack height is 15 mm (0.6 in.). The multipurpose feeder can hold approximately:

• 150 sheets or a stack less than 15 mm (60 g/m² to 216 g/m²) paper.

Print Media Dimensions

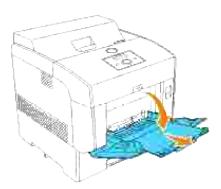
The multipurpose feeder accepts print media within the following dimensions:

- Width -- 88.9 mm to 220 mm
- Length -- 139.7 mm to 355.6 mm

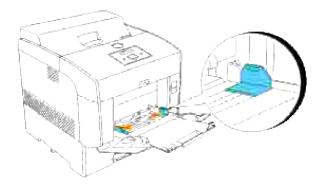
Loading the Multipurpose Feeder

In addition to plain paper, the multipurpose feeder can use various other sizes and types of print media such as envelopes, and transparencies.

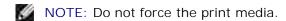
1. Gently pull open the multipurpose feeder cover, and pull out the extension tray.

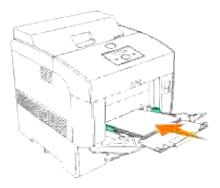


2. Slide the width guides to the edge of the tray. The width guides should be fully extended.



3. Insert all media face down and top edge first into the multipurpose feeder.

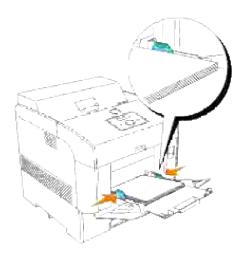




4. Slide the width guides until they rest lightly against the edge of the print media stack.

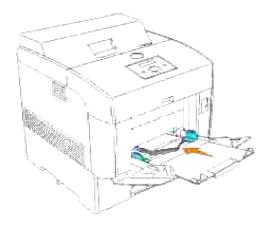


NOTE: Be careful not to bend the print media.



- 5. Make sure the type setting for the multipurpose feeder is set to the correct value for the print media you have loaded.
- 6. Select print media source, size, and type in your software program and select the print media size and type on the printer operator panel.

Loading Envelopes



To load envelopes that are under 8.66 inches (220 mm) in width in the multipurpose feeder, insert the envelopes either with the flaps closed and at the right side or the flaps open and at the rear. To load envelopes that are over 8.66 inches (220 mm) in width in the multipurpose feeder, insert the envelopes with the flaps closed and the short-edge of the envelopes facing into the printer. The print side must be facing down. You can load envelopes up to the maximum fill line in the tray at one time.

- NOTE: Make sure set the envelope flaps are completely unfolded.
- NOTICE: Never use envelopes with windows, coated linings, or self-stick adhesives. These lead to paper jams and damage to the printer.
- NOTICE: If you insert the long-edge of the envelopes facing into the printer (using DL or Monarch), specify Portrait & Landscape (For envelopes) in Turn I mage by 180deg in the Booklet/Poster/Mixed Document dialog box of your printer driver.

Using the Multipurpose Feeder

- Load only one size and type of print media during a single print job.
- To achieve the best possible print quality, use only high-quality print media that is designed for use in laser printers. For more guidelines on print media, see "Print Media Guidelines."
- Do not add or remove print media when there is still print media in the multipurpose feeder or when the printer is printing from the multipurpose feeder. This may result in a paper jam.
- Print media should be loaded with the recommended print side down and the top of the print media going into the multipurpose feeder first.
- Do not place objects on the multipurpose feeder. Also, avoid pressing down or applying excessive force on it.
- Do not remove any tray while a job is printing from the multipurpose feeder or Printing is displayed on the operator panel. This may result in a paper jam.

The icons on the multipurpose feeder identify how to load the multipurpose feeder with paper, and how to turn an envelope for printing.



Linking Trays

Tray linking allows you to load the same size and type of print media in multiple sources. The printer automatically links the source/trays and will use the first tray until it runs out, then switch to the linked tray.

If you load the same size print media in each tray, make sure the print media is the same type in order to link the trays.

When the selected trays are loaded with the same size and type of print media, select the Paper Type settings in the Tray Settings for each source.

To disable tray linking, set the Paper Type to a unique value in each one of the trays. If all trays do not have the same type of print media when linked, you could mistakenly print a job on the wrong paper type.

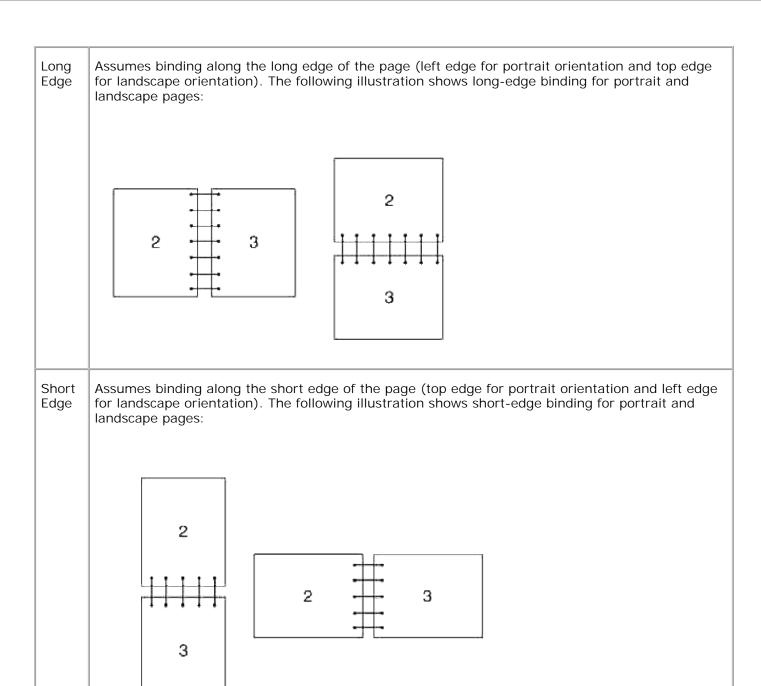
Using the Duplex Function

Duplex printing (or two-sided printing) allows you to print on both sides of a sheet of paper. For sizes that are acceptable for duplex printing, see "Print Media Sizes and Support."

Using Duplex Bind

When using duplex bind printing in the printer driver, you must select either Flip on Short Edge or Flip on Long Edge. Binding Edge in the 2 Sided menu item defines the way duplexed pages are bound, and how the printing on the back of the sheet (even-numbered pages) is oriented in relation to the printing on the front (odd-numbered pages).

The two values for Binding Edge are:



#

NOTE: When you print on both sides of postcard-size paper, make sure the paper is not curled.

Using the Center Output Tray

The center output tray holds up to:

• Plain paper: 250 sheets (20 lb (75 g/m²))

• Transparency: 36mm or 25 sheets

• Label: 36mm

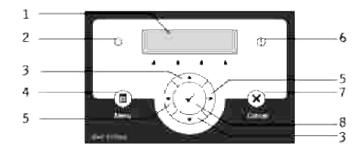
• Envelope: 36mm

Operator Panel

- Using the Operator Panel Buttons
- Printing a Panel Settings Page

Using the Operator Panel Buttons

The printer operator panel has a 2-line by 16-character liquid crystal display (LCD), seven buttons, and two indicators that flash when the printer is ready to print, and when a error occurs.



- 1. LCD display
- 2. Ready indicator
 - o Lights green when the printer is ready and blinks when data is being received.
- 3. ▼ ▲ buttons
 - o In the Menu mode, scrolls through menus or items.
- 4. Menu button
 - o Switches to the Menu mode.
- 5. ◀ ▶ buttons
 - o In the Menu mode, selects submenus or setting values.
- 6. Error indicator
 - o Lights orange when an error occurs and blinks when an irrecoverable error occurs.
- 7. Cancel button
 - O In the Menu mode, switches to the Print mode.
 - o Cancels the current print job.

- 8. 🗸 button
 - o In the Menu mode, displays the selected menu or item and determines the selected value.
 - o In the Print mode, prints data that is in the printer.

Printing a Panel Settings Page

The Panel Settings page shows current settings for the operator panel menus.

- 1. Press Menu.
- 2. Press ▼ until Report/List appears, and then press ▶ or ✔.
- 3. Press ▼ until Panel Settings appears, and then press ▼ . The Panel Settings page is printed.

Printer Settings

You can change most printer settings from your software program or printer driver. If your printer is attached to the network, you can change settings from the Dell Printer Configuration Web Tool. To launch the Dell Printer Configuration Web Tool, type the printer IP address in your Web browser. Print a Printer Settings page to find your printer's IP address (see "Printing a Printer Settings Page").

From the software program print settings, settings you change apply only to the job you are preparing to send to the printer.

From the driver settings, changes made to the printer settings override changes made from the printer operator panel and may require you to change the operator panel default settings.

If you cannot change a setting from your software program, use the printer operator panel or the Dell Printer Configuration Web Tool. Changing a printer setting from the printer operator panel or from the Dell Printer Configuration Web Tool makes that setting the user default.

Printing a Printer Settings Page

The Printer Settings page lists all the options you purchased or installed. If a feature or an option is not listed, you need to check your installation.

- 1. Press Menu.
- 2. Press ▼ until Report/List appears, and then press ▶ or ✔.
- 3. Printer Setting is displayed. Press ✓. The Printer Settings page is printed.
- 4. Verify that the options you installed are correctly listed under Printer Options.
- 5. If an option you installed is not listed, turn off the printer, unplug the power cord, and reinstall the option.
- 6. Verify the amount of memory installed is correctly listed under General.

Using the Operator Panel to Change Printer Settings

You can select menu items and corresponding values from the operator panel.

When you first enter the printer menus from the operator panel, you see an asterisk (*) next to a value in the menus.

This asterisk indicates the factory default menu setting. These settings are the original printer settings.

(Factory defaults may vary for different countries.)

When you select a new setting from the operator panel, an asterisk appears next to the setting to identify it as the current user default menu setting.

These settings are active until new ones are selected or the factory defaults are restored.

To select a new value as a setting:

- 1. Press Menu.
- 2. Press ▼ ▲ until the required menu appears, and press ▶ or ✓.
- 3. Press ▼ ▲ until the desired menu or menu item appears, and press ▶ or ✓.
 - o If the selection is a menu, the menu is opened and the first printer setting in the menu appears.
 - o If the selection is a menu item, the default menu setting for the menu item appears. (The current user default menu setting has an asterisk (*) beside it.)

Each menu item has a list of values for the menu item. A value can be:

- o A phrase or word to describe a setting
- o A numerical value that can be changed
- o An On or Off setting
- o Press ▼ ▲ at the same time. This will display the factory default menu settings. Press ✔ to return the settings to the factory default menu settings.
- 4. Press \P \blacktriangle to scroll until the desired value appears.
- 5. Press ✓.

 This enables the setting value, which is indicated by an asterisk (*) next to the setting value.
- 6. Press Cancel or ◀ to return to the previous menu.

 To continue setting other items, select the desired menu. To quit setting new values, press Cancel.

Driver settings may override changes previously made and may require you to change the operator panel defaults.

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 ${\sf NOTE}$: Driver settings you choose from your software program may override the settings you select from the operator panel.

Using the Dell Printer Configuration Web Tool to Change Printer Settings

If your printer is connected to the network, you can change the operator panel settings from your Web browser. If you are a network administrator, you can clone the printer settings of one printer to one or all printers on the network.

Type your network printer IP address in your Web browser. Choose Printer Settings from the topics list, and then select the printer settings you want to change.

To copy your printer settings to another printer on the network, choose Copy Printer Settings from the topics list, and then type the other printer's IP address.

If you do not know your printer IP address, it is specified on the Printer Settings page. To print a Printer Settings page:

- 1. Press Menu.
- 2. Press ▼ until Report/List appears, and then press ▶ or ✓.
- 3. Printer Setting is displayed. Press ✓. The Printer Settings page is printed.

Initializing NVRAM

You can restore the original factory default menu settings by initializing NVRAM.

- 1. Press Menu.
- 2. Press $\overline{}$ until Admin Menu appears, and then press or .
- 3. Press $\overline{}$ until Maintenance appears, and then press $\overline{}$ or $\overline{}$.
- 4. Press ▼ until Reset Defaults appears, and then press ▶ or ✔.
- 5. The Are you sure? message appears on the operator panel. Press ✓.
- 6. Turn off the printer, and then on again.

Deleting NVRAM From Network Settings

You can initialize the IP address and network-related settings by deleting NVRAM from Network settings.

1. Press Menu.

- 2. Press ▼ until Admin Menu appears, and then press ▶ or ✔.
- 3. Press ▼ until Wired Network or Wireless Net appears, and then press ▶ or ✔.
- 4. Press $\overline{}$ until Reset Lan (in Wired Network) or Reset MPC (in Wireless Net) appears, and then press $\overline{}$ or $\overline{}$.
- 5. The Are you sure? message appears on the operator panel. Press ✔.
- 6. Turn off the printer, and then on again.

Understanding Printer Menus

When your printer is configured as a network printer available to a number of users, the access to the Admin Menu menus can be limited. This prevents other users from using the operator panel to inadvertently change a printer user default that has been set by the administrator. In this case, you can access the Stored Print, and Tray Settings menus only.

However, you can use your printer driver to override printer user defaults and select settings for individual print jobs.

To complete print jobs, you may also need to modify tray settings.

- Using the Printer Menus
- Setting of Panel Lock

Using the Printer Menus

Report/List

Use the Report/List menu to print various types of reports and lists.

Printer Settings

Purpose:

To print a list of the current user default values, the installed options, the amount of installed printer memory, and the status of printer supplies.

Panel Settings

Purpose:

To print a detailed list of all the settings on the operator panel menus.

PCL Fonts List

Purpose:

To print a sample of the available PCL fonts.
See also:
"Understanding Fonts", "Printing a Font Sample List"
PCL Macro List
Purpose:
To print information about the downloaded PCL macros.
PS Fonts List
Purpose:
To print a sample of the available PostScript fonts.
See also:
"Understanding Fonts", "Printing a Font Sample List"
Job History
Purpose:
To print a detailed list of the processed print jobs. This list contains the latest 20 print jobs.
Error History
Purpose:
To print an error history.
Print Meter
Purpose:
To print the collected reports from Print Meter or Dell ColorTrack. You can switch between Print Meter or Dell ColorTrack from the Dell Printer Configuration Web Tool.

Purpose: To print a color sample page. Stored Document Purpose: To print a list of all files that are stored as Secure, Store, and Proof Print in the RAM Disk or hard disk. Stored Print This menu provides applicable printing services such as Secure Print and Proof Print. Secure Print Purpose: To print confidential jobs. The printer can hold the job in memory or hard disk until you arrive at the printer and type the password on the operator panel. This requires hard disk, 384 MB or more of RAM to be enabled. Values: Prints the job, and then deletes it from printer memory or hard disk. Del after Print Prints the job, and then saves it in printer memory or hard disk. Print and Save

Proof Print

Color Test Page

Purpose:

Delete

To print only one copy and check the print result before printing all of the copies. This prevents a large number of misprinted copies from being printed at one time. This requires hard disk, 384 MB or more of RAM to be enabled.

Deletes the job from printer memory or hard disk.

Values:

Del after Print	Prints the job, and then deletes it from printer memory or hard disk.
Print and Save	Prints the job, and then saves it in printer memory or hard disk.
Delete	Deletes the job from printer memory or hard disk.

Tray Settings

Use the Tray Settings menu to define the print media loaded in each tray.



NOTE: Values marked by an asterisk (*) are the factory default menu settings.

MPF

Purpose:

To specify the paper loaded in the multipurpose feeder.

Paper Type	Plain*
гарег туре	Plain Thick
	Transparency
	Covers
	Covers Thick
	Label
	Coated
	Coated Thick
	Envelope
	Plain S2
	Plain Thick S2

	Covers S2
	Covers Thick S2
	Coated S2
	Coated Thick S2
Danas Cias	A4
Paper Size	A5
	B5
	Driver Size*
	Letter
	8.5x13"
	Legal
	Executive
	Monarch
	Monarch LEF
	DL
	DL LEF
	C5
	Envelope #10

MPF Mode	Panel Specified	Stop printing and show an error on the operation panel if the paper specified from the printer driver does not match the paper configured for the MPF from the operation panel.
	DriverSpecified	Continue to print even if the paper specified from the printer driver does not match the paper configured for the MPF from the operation panel.
Display	On	Specifies the paper size and type when paper is loaded in the multipurpose feeder. You can only use this option if Panel Specified is set to on.
Popup	Off	Does not specify the paper size and type when paper is loaded in the multipurpose feeder. You can only use this option if Panel Specified is set to on.



NOTE: For the standard 500-sheet tray, optional 500-sheet tray module, or 1000-sheet module, setting paper size is not required. These trays detect the paper size automatically. For more information on supported paper size for the standard and optional trays, see "Print Media Sizes and Support."

Use this menu item to:

- Optimize print quality for the specified paper.
- Select paper source through your software program by selecting type and size.
- Automatically link trays. The printer automatically links any trays containing the same type and size of paper, if you have set the Paper Type to the correct values.

Tray N

Purpose:

To specify the paper loaded in the tray N(N) is 1 to 4).

Values:



Admin Menu

Use the Admin Menu menu to configure a variety of printer features.

System Settings

Use the System Settings menu to configure the basic printer settings.



NOTE: Values marked by an asterisk (*) are the factory default menu settings.

PowerSaver Time

Purpose:

To specify the amount of time the printer waits after a job is printed before it goes into the power saver mode.

5-60 min.	Specifies the amount of time before the printer enters power saver mode after it finishes a print job.
15 min.*	

Enter 5 to put the printer in power saver mode five minutes after it finishes a print job. This uses much less energy, but requires more warm-up time for the printer. Enter 5 if your printer shares an electrical circuit with room lighting and you notice lights flickering.

Select a high value if your printer is in constant use. Under most circumstances, this keeps the printer ready to print with minimum warm-up time. Select a value between 5 and 60 minutes for power save mode if you want a balance between energy consumption and a shorter warm-up period.

The printer automatically returns to the print mode from the power saver mode when it receives data from the computer. You can also return the printer to the print mode by pressing any button on the operator panel.

Alert Tone

Purpose:

To establish whether the printer sounds an alarm when an error occurs.

Values:

Off*	Does not sound an alarm when an error occurs.
On	Sounds an alarm when an error occurs.

Time-Out

Purpose:

To specify the amount of time the printer waits to receive additional bytes of data from the computer. When this timeout expires, the print job is canceled.

Off	Disables the job timeout.
5-300 sec.	Specifies the amount of time the printer waits for additional data before it cancels the job.
30 sec.*	

Panel Language

Purpose:

To determine the language of the text on the operator panel screen.

Values:

English*	French
Italian	German
Spanish	Danish
Dutch	Finnish
Portuguese	Norwegian
Polish	Swedish

Auto Log Print

Purpose:

To specify whether the printer outputs logs automatically.

Off*	Does not print the logs.
On	Prints the logs.

Print logs can also be printed using the Report/List menu.

See also:

"Report/List"

Print ID

Purpose:

To specify a location where the user ID is printed. This feature is available for the PCL driver and unavailable for the PS driver.

Values:

Off*	Does not print the user ID.
Top Left	Prints the user ID on the top left of the page.
Top Right	Prints the user ID on the top right of the page.
Bottom Left	Prints the user ID on the bottom left of the page.
Bottom Right	Prints the user ID on the bottom right of the page.

NOTE: When printing on DL size paper, a part of the user ID may not be printed correctly.

Print Text

Purpose:

To specify whether the printer outputs PDL data, which is not supported by the printer, as text when the printer receives it. Text data is printed on A4 or Letter size paper.

Off	Does not print the received data.
On*	Prints the received data as text data.

Banner Sheet

Purpose:

To specify the position of banner sheet, and also specify the tray in which the banner sheet is loaded. This feature is available for the PCL driver and unavailable for the PS driver.

Values:

Insert Position	Off*	Does not print the banner sheet.
	Front	Prints on the beginning of document.
	Back	Prints on the end of document.
	Front & Back	Prints on both beginning and end of document.
Specify Tray	Tray 1*	The banner sheet is loaded in tray 1.
	Tray 2 ^{*1}	The banner sheet is loaded in tray 2.
	Tray 3 *2	The banner sheet is loaded in tray 3.
	Tray 4 *2	The banner sheet is loaded in tray 4.
	MPF	The banner sheet is loaded in multipurpose feeder.

^{*1} Only displayed when an optional 500-sheet tray module or 1000-sheet module is installed on the printer.

RAM Disk

Purpose:

^{*2} Only displayed when an optional 1000-sheet module, or both the optional 500-sheet tray module and 1000-sheet module are installed on the printer.

To allocate memory to the RAM Disk file system for the Secure Print and Proof Print features. The change becomes effective after the printer is turned off and then on again.

Values:

Enable*	Allocates memory to the RAM Disk file system automatically.
Disable	Does not allocate memory to the RAM Disk file system. Secure Print and Proof Print jobs will abort and be recorded to the job log.



NOTE: The RAM $\tt Disk$ menu is only displayed when 256 MB or more of optional memory card is installed on the printer.



NOTE: Restart your printer when you change the setting for the RAM Disk menu.

Substitute Tray

Purpose:

Specifies whether or not to use another size paper when the paper that is loaded in the specified tray does not match the paper size settings for the current job.

Values:

Off*	No tray size substitute accepted.
Larger Size	Substitutes paper of next largest size. When there is no larger paper size, the printer substitutes paper of nearest size.
Nearest Size	Substitutes paper of nearest size.
MPF Feed	Substitutes paper from the multipurpose feeder.

mm/inch

Purpose:

Switches measurements between millimeters and inches.

millimeter(mm)*1	Displays length in millimeters.
inch(")*1	Displays length in inches.

^{*1} Denotes country-specific factory default values.

Maintenance

Use the Maintenance menu to initialize the NV (non-volatile) memory, configure the plain paper quality adjustment settings, and configure the security settings.

Paper Density

Purpose:

To specify the paper density.

Values:

Plain	Light
	Normal*
Label	Light
	Normal*

Adjust BTR

Purpose:

To specify the reference voltage settings for the transfer roller.

Plain	-20 - +30
	0*
Plain Thick	-20 - +30
	0*
Transparency	-20 - +30
	0*
Covers	-20 - +30
	0*
Covers Thick	-20 - +30
	0*
Label	-20 - +30
	0*
Coated	-20 - +30
	0*
Coated Thick	-20 - +30
	0*
Envelope	-20 - +30
	0*

Adjust Fuser

Purpose:

To specify the temperature settings value for the fuser.

Plain	-4 - +2
	0*
Plain Thick	-4 - +2
	0*
Transparency	-4 - +2
	0*
Covers	-4 - +2
	0*
Covers Thick	-4 - +2
	0*
Label	-4 - +2
	0*
Coated	-4 - +2
	0*
Coated Thick	-4 - +2
	0*
Envelope	-4 - +2
	0*

Auto Reg Adj

Purpose:

To adjust the registration automatically.

Values:

On*	Adjusts the registration automatically.
Off	Does not adjust the registration automatically.

Color Reg Adj

Purpose:

To print the color registration chart and to adjust the color registration by using the chart. This function is required after the printer is set up or moved.

Values:

Auto Correct	Ac	Adjusts color registration automatically. Prints the color registration chart.		
ColorRegi Chart	Pr			
Enter Number	Υ	-9-+9	Specifies the values that are found in the color registration chart for Yellow.	
Effici Number	М	-9-+9	Specifies the values that are found in the color registration chart for Magenta.	
	С	-9-+9	Specifies the values that are found in the color registration chart for Cyan.	

Clean Developer

Purpose:

While printing is repeated, one color toner may be mixed in another color toner in the developer. When this occurs, use this feature.

Using this feature consumes some toner.

Values:

Yellow	Specify to clean the developer for the yellow toner.
Magenta	Specify to clean the developer for the magenta toner.
Cyan	Specify to clean the developer for the cyan toner.
Black	Specify to clean the developer for the black toner.

Init PrintMeter

Purpose:

To initialize PrintMeter. After executing this function and rebooting the printer, all the menu parameters are reset to their default values.

Reset Defaults

Purpose:

To initialize the NV (non-volatile) memory. After executing this function and rebooting the printer, all the menu parameters are reset to their default values.

Clear Storage

Purpose:

To clear all files that are stored as Secure, Store, and Proof Print in the RAM Disk.



NOTE: The Clear Storage menu is only displayed when an optional hard disk is installed on your printer.

Format HDD

Purpose:

To initialize the optional hard disk.



NOTE: The Format HDD menu is only displayed when an optional hard disk is installed on your printer.

Non-Dell Toner

Purpose:

To specify whether to use the refilled toner cartridge or not. When this setting is on, you can use toner cartridges provided by other companies.

Values:

On	Enables the use of refilled toner cartridges.
Off*	Disables the use of refilled toner cartridges.

Parallel

The Parallel menu can be adjusted to configure the parallel interface.



NOTE: Values marked by an asterisk (*) are the factory default menu settings.

ECP

Purpose:

To specify the ECP communication mode of the parallel interface. The change becomes effective after the printer is turned off and then on again.

Values:

Enable*	The ECP communication mode is enabled.
Disable	The ECP communication mode is disabled.

Adobe Protocol

Purpose:

To specify PostScript communication protocol for the parallel interface. The change becomes effective after the printer is turned off and then on again.

Values:

Auto	Used when auto-detecting the PostScript communication protocol.
Standard	Used when the communication protocol is in ASCII format.
ВСР	Used when the communication protocol is in binary format.
TBCP*	Used when the communication protocol supports both ASCII and binary data to switch between them according to the specified control code.
Binary	Used when no special processing is required.

USB Settings

Use the USB Settings menu to change printer settings affecting a USB port.

Adobe Protocol

Purpose:

To specify PostScript communication protocol for each interface. The change becomes effective after the printer is turned off and then on again.

Values:

Auto	Automatically selects a tray according to the paper size and type settings of the job being printed except for the multipurpose feeder.				
Standard	Used when the communication protocol is in ASCII interface.				
ВСР	Used when the communication protocol is in binary format.				
TBCP*	Used when the communication protocol supports both ASCII and binary data to switch between them according to the specified control code.				
Binary	Used when no special processing is required.				

Wired Network

Use the \mathtt{Wired} $\mathtt{Network}$ menu to change printer settings affecting jobs sent to the printer through a wired network port.

Ethernet

Purpose:

To specify the communication speed and the duplex settings of Ethernet. The change becomes effective after the printer is turned off and then on again.

Values:

Auto*	Detects the Ethernet settings automatically.
10Base Half	Uses 10base-T half-duplex.
10Base Full	Uses 10base-T full-duplex.
100Base Half	Uses 100base-TX half-duplex.
100Base Full	Uses 100base-TX full-duplex.

TCP/IP

Purpose:

To specify the TCP/IP settings. The change becomes effective after the printer is turned off and then on again.

IP Mode*1	Dual Stack IPv4 Mode		Uses both IPv4 and IPv6 to set the IP address.
			Uses IPv4 to set the IP address.
			Uses IPv6 to set the IP address.
IPv4	Get IP	AutoIP*	Automatically sets the IP address.
	Address	ВООТР	Uses BOOTP to set the IP address.
		RARP	Uses RARP to set the IP address.
		DHCP	Uses DHCP to set the IP address.
		Panel	Enables the IP address entered on the operator panel.
	IP Address		Sets the IP address allocated to the printer by using the keys on the operator panel.
	Subnet Mask		Sets the subnet mask.
	Gateway Address		Sets the gateway address.
Reset IPsec* ²			Disables IPsec.

^{*1} Only displayed when an optional multi-protocol card is installed on the printer.

Protocol

Pi	ur	n	0	S	0	
	aı.	\sim	$\mathbf{\mathcal{C}}$		し	

To enable or disable each item. The change becomes effective after the printer is turned off and then on again.

Values:			

^{*2} Only displayed when IPsec is enabled.

^{*&}lt;sup>3</sup> This mode is available only when firmware version 200705311932 or later and network (MPC) firmware version 16.03 or later are installed. Since you cannot set IPsec in Windows Vista in this mode, use the Dell Printer Configuration Web Tool. The Get Information from Printer function on the Options tab of the printer driver is not available when using this mode.

LPD		Enable*	Enables the LPD port.	
		Disable	Disables the LPD port.	
Port9100		Enable*	Enables the Port9100 port.	
		Disable	Disables the Port9100 port.	
IPP*1		Enable*	Enables the IPP port.	
		Disable	Disables the IPP port.	
SMB TCP/IF) *1	Enable*	Uses TCP/IP for SMB.	
		Disable	Does not use TCP/IP for SSB.	
SMB NetBE	UI ^{*1}	Enable*	Uses NetBEUI for SMB.	
		Disable	Does not use Net BEUI for SMB.	
FTP		Enable*	Enables the FTP port.	
			Disables the FTP port.	
NetWare* 1	NetWare ^{*1} NetWare IP		Enables the NetWare IP port.	
		Disable	Disables the NetWare IP port.	
	NetWare	Enable*	Enables the NetWare IPX port.	
IPX		Disable	Disables the NetWare IPX port.	
WSD		Enable*	Enables the WSD port.	
		Disable	Disables the WSD port.	
SNMP	SNMP	Enable*	Enables the UDP.	
UDP		Disable	Disables the UDP.	

	SNMP	Enable*	Enables the IPX.	
	IPX* ¹	Disable	Disables the IPX.	
E-Mail Aler	t	Enable*	Enables the E-Mail Alert feature.	
		Disable	Disables the E-Mail Alert feature.	
EWS		Enable*	Enables an access to Dell Printer Configuration Web Tool embedded in the printer.	
Di		Disable	Disables an access to Dell Printer Configuration Web Tool embedded in the printer.	
AppleTalk*1		Enable*	Enables the AppleTalk port.	
		Disable	Disables the AppleTalk port.	
Bonjour(mDNS)*1		Enable*	Enables the Bonjour (mDNS) port.	
		Disable	Disables the Bonjour (mDNS) port.	
HTTP-SSL/TLS*1 Enable* Disable		Enable*	Enables the HTTP-SSL/TLS port.	
		Disable	Disables the HTTP-SSL/TLS port.	

^{*1} Only displayed when an optional multi protocol card is installed on the printer and the optional wireless printer adapter is not installed on the card.

IPX/SPX

Purpose:

To configure the IPX/SPX settings. The change becomes effective after the printer is turned off and then on again.

Auto*	Automatically sets the frame type.
Ethernet II	Uses the Ethernet II frame type.
Ethernet 802.3	Uses the IEEE802.3 frame type.
Ethernet 802.2	Uses the IEEE802.2 frame type.
Ethernet SNAP	Use the SNAP frame type.



NOTE: The IPX/SPX menu is only displayed when an optional multi protocol card is installed on the printer.

IP Filter (IPv4)

Purpose:

To specify the reception of data from certain IP addresses for blocking. You can set up to five IP addresses. The change becomes effective after the printer is turned off and then on again.

Values:

No. 11		Address		Sets the IP address for Filter <i>n</i> .
	(n is 1 to 5.)	Mask		Sets the mask for Filter <i>n</i> .
		Mode Off*		Disable the IP Filter feature for Filter <i>n</i> .
		Accept		Accepts an access from specified IP address.
			Reject	Rejects an access from specified IP address.



NOTE: This item is only available for LPD or Port9100.

Reset LAN

Purpose:

To initialize network data stored in NVRAM.

Adobe Protocol

Purpose:

To specify PostScript communication protocol for each interface. You can configure Adobe Protocol settings for Network. The change becomes effective after the printer is turned off and then on again.

Values:

Auto*	Used when auto-detecting the PostScript communication protocol.
Standard	Used when the communication protocol is in ASCII interface.
ВСР	Used when the communication protocol is in binary format.
ТВСР	Used when the communication protocol supports both ASCII and binary data to switch between them according to the specified control code.
Binary	Used when no special processing is required.

Wireless Net

Use the Wireless Net menu to change printer settings affecting jobs sent to the printer through a wireless network.



NOTE: The Wireless Net menu is only displayed when an optional multi protocol card is installed on the printer and the optional wireless printer adapter is installed on the card.



NOTE: Values marked by an asterisk (*) are the factory default menu settings.

Status

Purpose:

To display the information on the wireless signal strength. Any change cannot be made on the operator panel to improve the status of the wireless connection.

Good	Indicates good signal strength.
Acceptable	Indicates marginal signal strength.
Low	Indicates insufficient signal strength.
No Reception	Indicates that no signal is received.

Reset Wireless

Purpose

To initialize wireless network settings. After executing this function and rebooting the printer, all wireless network settings are reset to their default values.

TCP/IP

Purpose:

To specify the TCP/IP settings. The change becomes effective after the printer is turned off and then on again.

IP Mode*1	Dual Stack		Uses both IPv4 and IPv6 to set the IP address.
	IPv4 Mode IPv6 Mode*3		Uses IPv4 to set the IP address.
			Uses IPv6 to set the IP address.
IPv4	Get IP	AutoIP*	Automatically sets the IP address.
	Address	ВООТР	Uses BOOTP to set the IP address.
	RARP		Uses RARP to set the IP address.
	DHCP		Uses DHCP to set the IP address.
Panel		Panel	Enables the IP address entered on the operator panel.

	IP Address	Sets the IP address allocated to the printer by using the keys on the operator panel.
	Subnet Mask	Sets the subnet mask.
	Gateway Address	Sets the gateway address.
Reset IPsec* ²		Disables IPsec.

^{*1} Only displayed when an optional multi-protocol card is installed on the printer.

Protocol

Purpose:

To enable or disable each item. The change becomes effective after the printer is turned off and then on again.

values.	,	
LPD	Enable*	Enables the LPD port.
	Disable	Disables the LPD port.
Port9100	Enable*	Enables the Port9100 port.
	Disable	Disables the Port9100 port.
IPP*1	Enable*	Enables the IPP port.
	Disable	Disables the IPP port.
SMB TCP/IP*1	Enable*	Uses TCP/IP for SMB.
	Disable	Does not use TCP/IP for SSB.

^{*2} Only displayed when IPsec is enabled.

^{*&}lt;sup>3</sup> This mode is available only when firmware version 200705311932 or later and network (MPC) firmware version 16.03 or later are installed. Since you cannot set IPsec in Windows Vista in this mode, use the Dell Printer Configuration Web Tool. The Get Information from Printer function on the Options tab of the printer driver is not available when using this mode.

SMB NetBEUI*1		Enable*	Uses NetBEUI for SMB.		
		Disable	Does not use Net BEUI for SMB.		
FTP		Enable*	Enables the FTP port.		
		Disable	Disables the FTP port.		
NetWare* 1	NetWare IP	Enable*	Enables the NetWare IP port.		
		Disable	Disables the NetWare IP port.		
	NetWare	Enable*	Enables the NetWare IPX port.		
	IPX	Disable	Disables the NetWare IPX port.		
WSD		Enable*	Enables the WSD port.		
		Disable	Disables the WSD port.		
SNMP UDP SNMP IPX*1		Enable*	Enables the UDP.		
		Disable	Disables the UDP.		
		Enable*	Enables the IPX.		
		Disable	Disables the IPX.		
E-Mail Alert		Enable*	Enables the E-Mail Alert feature.		
		Disable	Disables the E-Mail Alert feature.		
EWS		Enable*	Enables an access to Dell Printer Configuration Web Tool embedded in the printer.		
		Disable	Disables an access to Dell Printer Configuration Web Tool embedded in the printer.		
AppleTalk*1		Enable*	Enables the AppleTalk port.		
		Disable	Disables the AppleTalk port.		

Bonjour (mDNS)*1	Enable*	Enables the Bonjour (mDNS) port.
	Disable	Disables the Bonjour (mDNS) port.
HTTP-SSL/TLS*1	Enable*	Enables the HTTP-SSL/TLS port.
	Disable	Disables the HTTP-SSL/TLS port.

^{*1} Only displayed when an optional multi protocol card is installed on the printer and the optional wireless printer adapter is not installed on the card.

IPX/SPX

Purpose:

To configure the IPX/SPX settings. The change becomes effective after the printer is turned off and then on again.

Values:

Auto*	Automatically sets the frame type.
Ethernet II	Uses the Ethernet II frame type.
Ethernet 802.3	Uses the IEEE802.3 frame type.
Ethernet 802.2	Uses the IEEE802.2 frame type.
Ethernet SNAP	Use the SNAP frame type.



NOTE: The ${\tt IPX/SPX}$ menu is only displayed when an optional multi protocol card is installed on the printer.

IP Filter (IPv4)

Purpose:

To specify the reception of data from certain IP addresses for blocking. You can set up to five IP addresses. The change becomes effective after the printer is turned off and then on again.

Values:

Filter n	Address		Sets the IP address for Filter <i>n</i> .
(n is 1 to 5.)			Sets the mask for Filter <i>n</i> .
Mode Of		Off*	Disable the IP Filter feature for Filter n.
		Accept	Accepts an access from specified IP address.
		Reject	Rejects an access from specified IP address.



NOTE: This item is only available for LPD or Port9100.

Reset MPC

Purpose:

To initialize NVRAM on the multi protocol card.

Adobe Protocol

Purpose:

To specify PostScript communication protocol for each interface. You can configure Adobe Protocol settings for Network. The change becomes effective after the printer is turned off and then on again.

Auto*	Used when auto-detecting the PostScript communication protocol.
Standard	Used when the communication protocol is in ASCII interface.
ВСР	Used when the communication protocol is in binary format.
ТВСР	Used when the communication protocol supports both ASCII and binary data to switch between them according to the specified control code.
Binary	Used when no special processing is required.

PCL

Use the PCL to change printer settings that only affect jobs using the PCL emulation printer language	Use the PCL	to change p	orinter settings	that only a	ffect jobs	using the PCL	emulation printer	language
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NOTE: Values marked by an asterisk (*) are the factory default menu settings.

Paper Tray

Purpose:

To specify the input tray.

Values:

Auto*	Automatically selects a tray according to the paper size and type settings of the printing job.
Tray 1	The paper is fed from the standard 500-sheet tray.
Tray 2 *1	The paper is fed from the optional 500-sheet tray module or 1000-sheet module.
Tray 3 *2	The paper is fed from the optional 1000-sheet module.
Tray 4 *2	The paper is fed from the optional 1000-sheet module.
MPF	The paper is fed from the multipurpose feeder.

^{*1} Only displayed when an optional 500-sheet tray module or 1000-sheet module installed on your printer.

Paper Size

Purpose:

To specify the default paper size.

^{*2} Only displayed when an optional 1000-sheet module, or both the optional 500-sheet tray module and 1000-sheet module are installed on the printer.

Letter*1	B5
A5	A4*1
Executive	8.5 x 13
Legal	Envelope #10
Monarch	DL
C5	Custom Size

^{*1} Denotes country-specific factory default values.

Orientation

Purpose:

To specify how text and graphics are oriented on the page.

Values:

Portrait*	Prints text and graphics parallel to the short edge of the paper.
Landscape	Prints text and graphics parallel to the long edge of the paper.

2 Sided

Purpose:

To set duplexing as the default for all print jobs. (Select 2-Sided Print from the printer driver to duplex only specific jobs.)

2 Sided Print	Off*	Prints on one side of the paper.
	On	Prints on both sides of the paper.
Binding Edge	Flip long edge*	Assumes binding along the long edge of the page. (Left edge for portrait orientation and top edge for landscape orientation)
	Flip short edge	Assumes binding along the short edge of the page. (Top edge for portrait orientation and left edge for landscape orientation)

Font

Purpose:

To specify the default font from the registered fonts in the printer.

CG Times	CG Times It	CG Times Bd
CG Times BdIt	Univers Md	Univers MdIt
OG TIMES BUTT	OTHIVETS IVIG	Offivers Wart
Univers Bd	Univers BdIt	Univers MdCd
Univers MdCdIt	Univers BdCd	Univers BdCdIt
AntiqueOlv	AntiqueOlv It	AntiqueOlv Bd
CG Omega	CG Omega It	CG Omega Bd
CG Omega BdIt	GaramondAntiqua	Garamond Krsv
Garamond Hlb	GaramondKrsvHlb	Courier*
Courier It	Courier Bd	Courier BdIt
LetterGothic	LetterGothic It	LetterGothic Bd
Albertus Md	Albertus XBd	Clarendon Cd

Coronet	Marigold	Arial
Arial It	Arial Bd	Arial Bdlt
Times New	Times New It	Times New Bd
Times New BdIt	Symbol	Wingdings
Line Printer	Times Roman	Times It
Times Bd	Times BdIt	Helvetica
Helvetica Ob	Helvetica Bd	Helvetica BdOb
CourierPS	CourierPS Ob	CourierPS Bd
CourierPS BdOb	SymbolPS	Palatino Roman
Palatino It	Palatino Bd	Palatino BdIt
ITCBookman Lt	ITCBookman LtIt	ITCBookmanDm
ITCBookmanDm It	HelveticaNr	HelveticaNr Ob
HelveticaNr Bd	HelveticaNrBdOb	N C Schbk Roman
N C Schbk It	N C Schbk Bd	N C Schbk Bdlt
ITC A G Go Bk	ITC A G Go BkOb	ITC A G Go Dm
ITC A G Go DmOb	ZapfC MdIt	ZapfDingbats

Symbol Set

Purpose:

To specify a symbol set for a specified font.

ROMAN-8*	ISO L1	ISO L2
ISO L5	ISO L6	PC-8
PC-8 DN	PC-775	PC-850
PC-852	PC-1004	PC-8 TK
WIN L1	WIN L2	WIN L5
DESKTOP	PS TEXT	MC TEXT
MS PUB	MATH-8	PS MATH
PI FONT	LEGAL	ISO-4
ISO-6	ISO-11	ISO-15
ISO-17	ISO-21	ISO-60
ISO-69	WIN 3.0	WINBALT
SYMBOL	WINGDINGS	DNGBTSMS

Font Size

Purpose:

To specify the font size for scalable typographic fonts.

Values:

4.00 - 50.00	The values are in steps of 0.25.
12.00*	

Font size refers to the height of the characters in the font. One point equals approximately 1/72 of an inch.



NOTE: The Font Size menu is only displayed for typographic fonts.

See also:
" <u>Pitch and Point Size</u> "
Font Pitch
Purpose:
To specify the font pitch for scalable monospaced fonts.
Values:
6.00 - 24.00 The values are in steps of 0.01.
10.00*
Font pitch refers to the number of fixed-space characters in a horizontal inch of type. For nonscalable monospaced fonts, the pitch is displayed, but cannot be changed.
NOTE: The Font Pitch menu is only displayed for fixed, or monospaced, fonts.
See also:
" <u>Pitch and Point Size</u> "
Form Line
Purpose:
To set the number of lines in a page.
Values:
The values are in steps of 1.
60*1, 64*1

^{*1} Denotes country-specific factory default values.

The printer sets the amount of space between each line (vertical line spacing) based on the Form Line and Orientation menu items. Select the correct Form Line and Orientation before changing Form Line.	
See also:	
"Orientation," "Use this menu item to:	
Quantity	
Purpose:	
To set the number of copies you want for the printer default value. (Set the number of copies required for a specific job from the printer driver. Values selected from the printer driver always override values selected from the operator panel.)	ì
Values:	
1-999 The values are in steps of 1.	
1*	
I mage Enhance	
Purpose:	
To specify whether to perform the image enhancement feature. Image enhancement is a feature that make the boundary line between black and white smoother to decrease jagged edges and enhance the visual appearance.	S
Values:	
On* Enables to perform the image enhancement feature.	
Off Disables to perform the image enhancement feature.	
Hex Dump	
Purpose:	

To help isolate the source of a print job problem. With Hex Dump selected, all data sent to the printer is printed in hexadecimal and character representation. Control codes are not executed.

Values:

Disable*	Disables the Hex Dump feature.
Enable	Enables the Hex Dump feature.

Draft Mode

Purpose:

To save toner by printing in the draft mode. The print quality is reduced when printing in the draft mode.

Values:

Disable*	Does not print in the draft mode.
Enable	Prints in the draft mode.

Line Termination

Purpose:

To add the line termination commands.

Off*	The line termination command is not added. CR=CR, LF=LF, FF=FF
Add-LF	The LF command is added. CR=CR-LF, LF=LF, FF=FF
Add-CR	The CR command is added. CR=CR, LF=CR-LF, FF=CR-FF
CR-XX	The CR and LF commands are added. CR=CR-LF, LF=CR-LF, FF=CR-FF

Default Color

Purpose:

To specify the color mode to Color or Black. This setting is used when the color printing mode setting is not specified for the print job that is sent to the printer.

Value:

Black*	Prints in the black and white mode.
Color	Prints in the color mode.

PostScript

Use the PostScript menu to change printer settings that only affect jobs using the PostScript emulation printer language.



NOTE: Values marked by an asterisk (*) are the factory default menu settings.

PS Error Report

Purpose:

To specify whether the printer outputs error contents for a PostScript error. The change becomes effective after the printer is turned off and then on again.

Values:

On*	Prints an error message before it discards the job.
Off	Discards the print job without printing an error message.



NOTE: This instructions from the PS driver override the settings specified on the operator panel.

PS Job Time-Out

Purpose:

To specify the execution time for one PostScript job. The change becomes effective after the printer is turned off and then on again.

Values:

Off*	Job timeout does not occur.
1-900min.	A PostScript error occurs if processing is not completed after the specified time.

Init PS Disk

Purpose:

To initialize the PostScript file system on the optional hard disk.



NOTE: The Init PS Disk menu is only displayed when an optional hard disk is installed on your printer.

PaperSelectMode

Purpose:

To specify the way to select the tray for PostScript mode. The change becomes effective after the printer is turned off and then on again.

Value:

Auto*	The tray is selected as the same setting as in the PCL mode.
Select FromTray	The tray is selected in a method compatible with regular Post Script printers.

Panel Settings

Use the Panel Settings menu to set a password to limit access to the menus. This prevents items from being change accidentally.



NOTE: Values marked by an asterisk (*) are the factory default menu settings.

See also:					
"Setting of Panel Lock"					
Panel Lock					
Purpose:					
To limit access to the menus.					
Values:					
Disable*	Does not limit access to the menus.				
Enable	Limits access to the menus.				
Change Password					
Purpose:					
To set a password to limit access to the menus.					
Values:					
0000-999	99				
Settir	ng of Panel Lock				

This feature prevents unauthorized personnel from changing settings made by the printer administrator. For regular printing, items can be selected from the menu and printer settings remain unchanged. For regular printing, items can be configured using the printer driver.



NOTE: Disabling the operator panel menus does not prevent access to the Stored Printand Tray Settings menus.

- 1. Press Menu.
- 2. Press ▼ until Admin Menu appears, and then press ▶ or ✔.
- 3. Press ▼ until Panel Settings appears, and then press ▶ or ✓.
- 4. Panel Lock is displayed. Press ▶ or ✔.
- 5. Press ▼ until Enable appears, and then press ✔.
- 6. Press ◀.
- 7. Press ▼ until Change Password appears, and then press ▶ or ✓.
- 8. Enter the old password (when you enter it for the first time after doing the settings, enter 0000), and then press .
- 9. Enter the new password, and then press \checkmark .
- 10. Reenter the password to confirm the password that you entered, and then press ✓. The password has been changed.
- NOTE: If you forget your password, turn off the printer. Then, while holding Menu, turn on the printer. Continue to hold Menu until the display indicates Are you sure? Release Menu and press . Press to select Yes, then press to . The display will briefly indicate Password reset. This will recover the factory default panel password.
- NOTE: If panel lock is Enable, the factory-default panel password is 0000.

See also:

"Change Password"

Disabling Panel Lock

- 1. Press Menu.
- 2. Press ▼ until Admin Menu appears, and then press ▶ or ✔.
- 3. Press ▼ until Panel Settings appears, and then press ▶ or ✓.
- 4. Panel Lock is displayed. Press ▶ or ✔.
- 5. Press ▼ until Disable appears, and then press ✔.

Understanding Your Printer Software

Use the *Drivers and Utilities* CD that came with your printer to install a combination of software programs, depending on your operating system.

The following software programs can only operate on Windows. They cannot operate on Macintosh, UNIX, or Linux.

Printing Status Window

The Printing Status Window alerts you when an error or warning occurs, for example, when the top cover is open or toner is running low.

You can select whether to display the Printing Status Window when printing. When an error occurs, the error message appears on the Printing Status Window.

Status Window

On the Status Window, you can check how much toner and paper are remaining or the configuration of options for the local printer.

Status Monitor Console

Use the Status Monitor Console to manage multiple Status Window.

- Select a printer from the list view (or Printer Selection) by clicking its name to open a Status Window or Dell Printer Configuration Web Tool for a particular printer.
- Click Start → Programs → Dell Printers → Additional Color Laser Software → Dell Supplies Management System
- The Status Monitor Console displays the Status Window for local connections, or the Dell Printer Configuration Web Tool for network connections.

Dell Supplies Management System

You can launch the Dell Supplies Management System dialog box from the Printing Status Window, the Programs menu, or the desktop icon. You can also launch it from the Status Window when a toner error occurs.

You can order consumables by phone or from the web.

 Click Start → Programs → Dell Printers → Additional Color Laser Software → Dell Supplies Management System

The Dell Supplies Management System window appears.

- 2. Select your printer from the Select Printer Model list.
- 3. If ordering from the Web:
 - a. When you cannot get information from the printer automatically by two-way communication, a window that prompts you to type the Service Tag number appears. Type your Dell printer Service Tag number in the field provided.
 - Your Service Tag number is located inside the front door of your printer.
 - b. Select an URL from the Select Reorder URL list.
 - c. Click Visit Dell printer supplies ordering web site.
- 4. If ordering by phone, call the number that appears under the By Telephone heading.

User Setup Disk Creating Tool

The User Setup Disk Creating Tool program located in the MakeDisk folder of the Utilities folder on the *Drivers and Utilities* CD and the printer drivers located on the *Drivers and Utilities* CD are used to create driver installation packages that contain custom driver settings. A driver installation package can contain a group of saved printer driver settings and other data for things such as:

- Print orientation and Multiple Up (document settings)
- Watermarks
- Font references

If you want to install the printer driver with the same settings to multiple computers running the same operating system, create a setup disk in a floppy disk or in a server on the network. Using the setup disk that you have created will reduce the amount of work required when installing the printer driver.

- Install in advance the Dell™ Color Laser Printer 5110cn printer driver in the computer on which the setup disk is to be created.
- The setup disk can only be used on the operating system on which the disk was created or computers running the same operating system. Create a separate setup disk for different types of operating

Software Update

The firmware and/or driver updates can be downloaded from www.dell.com/printers/.

Printing

This chapter covers tips for printing, how to print certain lists of information from your printer, and how to cancel a job.

- Tips for Successful Printing
- Sending a Job to Print
- Canceling a Print Job
- Printing a Printer Settings Page
- Printing a Font Sample List
- Using the Print and Hold Function

Tips for Successful Printing

Tips on Storing Print Media

Store your print media properly. For more information, see "Storing Print Media."

Avoiding Jams



NOTE: Dell recommends that you try a limited sample of any print media you are considering using with the printer before purchasing large quantities.

By selecting appropriate print media and loading it properly, you are able to avoid most jams. See the following for instructions on loading print media:

- "Loading Print Media in Standard and Optional Trays" (which includes the standard 500-sheet tray, the optional 500-sheet tray module and 1000-sheet module)
- "Loading the Multipurpose Feeder"
- "Avoiding Jams"

If you experience a jam, see "Clearing Jams" for instructions.

Sending a Job to Print

To support all of the printer features, use the printer driver. When you choose Print from a software program, a window representing the printer driver opens. Select the appropriate settings for the specific job

you are sending to print. Print settings selected from the driver override the default menu settings selected from the printer operator panel.

You may need to click Properties or Setup from the initial Print box to see all of the available printer settings you can change. If you are not familiar with a feature in the printer driver window, open the online Help for more information. Changing paper size or type that is different from type setting in the operator panel will require a user to change the operator panel tray setting before the job will print.

To print a job from a typical Windows application:

- 1. Open the file you want to print.
- 2. From the File menu, select Print.
- 3. Verify that the correct printer is selected in the dialog box. Modify the printer settings as appropriate (such as the pages you want to print or the number of copies).
- 4. Click Properties or Setup to adjust printer settings not available from the first screen, and then click OK.
- 5. Click OK or Print to send the job to the selected printer.

Canceling a Print Job

There are several methods for canceling a print job.

Canceling From the Printer Operator Panel

To cancel a print job after it has started printing:

1. Press Cancel.
Printing is canceled only for the current print job. All following print queues will continue to print.

Canceling a Job From the Computer Running Windows

Canceling a Job From the Taskbar

When you send a job to print, a small printer icon appears in the right corner of the taskbar.

- Double-click the printer icon.
 A list of print jobs appears in the printer window.
- 2. Select the job you want to cancel.
- 3. Press < Delete > on the keyboard.

Canceling a Job From the Desktop

- 1. Minimize all programs to reveal the desktop.
- Click Start → Printers and Faxes.
 Click Start → Control Panel → Hardware and Sound → Printers (for Windows Vista™).
 A list of available printers appears.
- 3. Double-click the printer you selected when you sent the job. A list of print jobs appears in the printer window.
- 4. Select the job you want to cancel.
- 5. Press < Delete > on the keyboard.

Printing a Printer Settings Page

To verify detailed printer settings, print a Printer Settings page. A printed Printer Settings page also allows you to verify whether or not options have been installed properly.

See "<u>Understanding Printer Menus</u>" to identify the display and operator panel buttons if you need help.

- 1. Press Menu.
- 2. Press ∇ until Report/List appears, and then press \triangleright or \checkmark .
- 3. Printer Setting is displayed, and then press \checkmark . The Printer Settings page is printed.

The message Printer Settings Printing appears while the page prints. The printer returns to the Ready to Print message after the Printer Settings page prints.

If any other message appears when you print this page, see "<u>Understanding Printer Messages</u>" for more information.

Printing a Font Sample List

To print samples of all the fonts currently available for your printer:

1. Press Menu.

- 2. Press ▼ until Report/List appears, and then press ▶ or ✓.
- 3. Press ▼ until either PCL Fonts List or PS Fonts List appears.
 - o Select PCL Fonts List to print a list of the fonts available to the PCL.
 - o Select PS Fonts List to print a listing of the fonts available to the PostScript ® 3™.
- 4. Press ✓

The message PCL Fonts List Printing or PS Fonts List Printing appears and remains on the operator panel until the page prints. The printer returns to the Ready to Print state after the font sample list prints.

Using the Print and Hold Function

When you send a job to the printer, you can specify in the driver that you want the printer to hold the job in memory or hard disk. When you are ready to print the job, you must go to the printer and use the operator panel menus to identify which job in the memory or hard disk you want to print. You can use this function to print a confidential job (Secure Print), delay printing a job (Store Print), or verify one copy before printing additional copies (Proof Print).



NOTE: The printer holds the job until you delete it by using the operator panel or you turn off the printer. The data on memory is cleared when the printer is turned off. The data on the optional hard disk is not cleared even when the printer is turned off.



NOTE: Print and Hold functions require a minimum of 384 MB available printer memory or hard disk. Also, you need to configure the RAM disk settings on the operator panel and the printer driver.



NOTE: Depending on the documents, its job may be too big for the available memory. In this case, an error occurs.



NOTE: If a document name is not assigned to your print job in the print driver, the job's name will be identified using the PC's time and date of submission to distinguish it from other jobs you have stored under your name.

Printing and Deleting Held Jobs

Once held jobs are stored in printer memory or hard disk, you can use the printer operator panel to specify what you want to do with one or more of the jobs. You can select either Secure Print and Proof Print from the "Stored Print." Then, you select your user name from a list. If you select Secure Print, you must type the password you specified in the driver when you sent the job. See "Secure Print" for more information.

From either the Secure Print, Store Print and Proof Print menu items, you have three choices:

- Del after Print
- Print and Save

Accessing Held Jobs From the Operator Panel

- 1. Press Menu.
- 2. Stored Print is displayed. Press ▶ or ✔.
- 3. Secure Print is displayed. Press ▶ or ✔.
- 4. Press ▼ until your user name appears, and then press ▶ or ✓.
- 5. If you print confidential jobs (Secure Print jobs), enter the password you have specified on the printer driver, and then press .
- 6. Press ▼ until the job you want to print appears, and then press ▶ or ✓.
- 7. Press $\overline{}$ until the action you want to do appears, and then press $\overline{}$.
- 8. Enter the print quantity, and then press . When you select Select All in step 6 and the print quantity has been set on the computer, select Default in Doc, and then press . When you select a document in step 6, the number of copies that is specified in the printer driver appears.

Accessing the Proof Print Jobs

- 1. Press Menu.
- 2. Stored Print is displayed. Press ▶ or ✔.
- 3. Press $\overline{}$ until Proof Print appears, and then press $\overline{}$ or $\overline{}$.
- 4. Press ▼ until your user name appears, and then press ▶ or ✓.
- 5. Press ▼ until the job you want to print appears, and then press ▶ or ✓.
- 6. Press $\overline{}$ until the action you want to do appears, and then press .
- 7. Enter the print quantity, and then press .

 When you select Select All in step 5 and the print quantity has been set on the computer, select

 Default in Doc, and then press . When you select a document in step 5, the number of copies that is specified in the printer driver appears.

Store Print

If you send a Store Print job, the printer does not print the job immediately, but stores the job in memory or hard disk so you can print the job later. See "Printing and Deleting Held Jobs" for more information.



NOTE: The printer holds the job until you delete it by using the operator panel or you turn off the printer.



NOTE: When you select Del after Print, the held job is automatically deleted after printing.



NOTE: If you use Windows 9x, make sure to enable Collate in your application when doing Proof Print with Post Script.

Proof Print

If you send a Proof Print job, the printer prints one copy and holds the remaining copies you requested from the driver in printer memory or hard disk. Use Proof Print function to examine the first copy to see if it is satisfactory before printing the remaining copies.

See "Printing and Deleting Held Jobs" if you need help printing the additional copies stored in memory or hard disk.



NOTE: The printer holds the job until you delete it by using the operator panel or you turn off the printer. The data on memory is cleared when the printer is turned off. The data on the optional hard disk is not cleared even when the printer is turned off.



NOTE: When you select Del after Print, the held job is automatically deleted after printing.

Secure Print

When you send a job to the printer, you can specify a password from the driver. The password must be between 1 and 12 digits using numbers 0 through 9. The job is then held in printer memory or hard disk until you enter the same numeric password from the printer operator panel and choose to print or delete the job. This function is called "Store Print". This ensures that the job does not print until you are there to retrieve it, and no one else using the printer can print the job.

When you select Secure Print from Stored Print after selecting your user name, the following prompt is displayed:

Password [xxxxxxxxxxx]

Use the buttons on the operator panel to enter the numeric password associated with your confidential job. As you enter the password, the password you entered is displayed to ensure confidentiality.

If you enter an invalid password, the message \mathtt{Wrong} password appears. Wait three seconds, or Press \checkmark or Cancel to return to the screen for user selection.

When you enter a valid password, you have access to all print jobs matching the user name and password you entered. The print jobs matching the password you entered appear on the screen. You can then choose to print or delete jobs matching the password you entered. (See "Printing and Deleting Held Jobs" for more information.)



NOTE: The printer holds the job until you delete it by using the operator panel or you turn off the printer. The data on memory is cleared when the printer is turned off. The data on the optional hard disk is not cleared even when the printer is turned off.



NOTE: When you select Del after Print, the held job is automatically deleted after printing.

Setting Up Shared Printing

- Point and Print
- Peer-to-Peer

You can share your new printer on the network using the *Drivers and Utilities* CD that shipped with your printer, or using Microsoft's point and print or peer-to-peer method. However, if you use one of the Microsoft methods, you will not have all of the features, such as the status monitor and other printer utilities, that are installed with the *Drivers and Utilities* CD.

To share a locally-attached printer on the network, you need to share the printer, and then install the shared printer on network clients:

- 1. Click Start → Settings → Printers (Properties and Faxes for Windows XP).
- 2. Right-click this printer icon and select Properties.
- 3. From the Sharing tab, check the Shared (Share this printer for Windows XP) option button, and then type a name in the Shared as (Share name for Windows XP) text box.
- 4. Click Additional Drivers and select the operating systems of all network clients printing to this printer.
- 5. Click OK.

 If you are missing files, you are prompted to insert the server operating system CD.

For Windows Vista™

- 1. Click Start \rightarrow Control Panel \rightarrow Hardware and Sound \rightarrow Printers.
- 2. Right-click the printer's icon and select Sharing.
- 3. Click the Change sharing options button.
- 4. Click the Continue button.
- 5. Check the Share this printer check box, and then type a name in the Share name text box.
- 6. Click OK.

The PCL driver supports an Additional Driver for Windows Vista (not including Itanium). To register the Additional Driver, follow the instructions below.

- 1. Click Start \rightarrow Control Panel \rightarrow Hardware and Sound \rightarrow Printers.
- 2. Right-click the printer's icon and select Sharing.

- 3. Click the Change sharing options button.
- 4. Click the Continue button.
- 5. Click Additional Drivers and select the processors of all the network clients printing with this printer.
- 6. Click OK.
- 7. Click the Browse button and locate the driver in the *Drivers and Utilities* CD.

To check that the printer was successfully shared:

- Make sure the printer object in the Printers (Properties and Faxes for Windows XP) folder shows it is shared. For example, in Windows 2000, a hand is shown underneath the printer icon.
- Browse Network Neighborhood (My Network Places for Windows XP). Find the host name of the server and look for the shared name you assigned to the printer.

Now that the printer is shared, you can install the printer on network clients using the point and print method or the peer-to-peer method.

Point and Print

This method is usually the best use of system resources. The server handles driver modifications and print job processing. This lets network clients return to their programs much faster.

If you use the point and print method, a subset of driver information is copied from the server to the client computer. This is just enough information to send a print job to the printer.

- 1. On the Windows desktop of the client computer, double-click Network Neighborhood (My Network Places for Windows XP).
- 2. Locate the host name of the server computer, and then double-click the host name.
- 3. Right-click the shared printer name, and then click Install.

Wait for the driver information to copy from the server computer to the client computer, and for a new printer object to be added to the Printers (Properties and Faxes for Windows XP) folder. The time this takes varies, based on network traffic and other factors.

Close Network Neighborhood (My Network Places for Windows XP).

- 4. Print a test page to verify print installation.
- 5. Click Start \rightarrow Settings \rightarrow Printers (Properties and Faxes for Windows XP).
- 6. Select the printer you just created.
- 7. Click File → Properties.
- 8. From the General tab, click Print a Test Page (Print Test Page for Windows XP).

When a test page prints successfully, printer installation is complete.

For Windows Vista

- 1. On the Windows desktop of the client computer, click Start → Network.
- 2. Locate the host name of the server computer, and then double-click the host name.
- 3. Right-click the shared printer name, and then click Connect.
- 4. Click Install driver.
- 5. Click Continue in the User Account Control dialog box.
- 6. Wait for the driver information to copy from the server computer to the client computer, and for a new printer object to be added to the Printers folder. The time this takes varies, based on network traffic and other factors.
- 7. Print a test page to verify printer driver installation.
- 8. Click Start \rightarrow Control Panel \rightarrow Hardware and Sound \rightarrow Printers.
- 9. Right-click the printer you just created and select Properties.
- 10. From the General tab, click Print Test Page.

If the test page prints successfully, the printer driver installation is complete.

Peer-to-Peer

If you use the peer-to-peer method, the printer driver is fully installed on each client computer. Network clients retain control of driver modifications. The client computer handles the print job processing.

- 1. Click Start \rightarrow Settings \rightarrow Printers (Properties and Faxes for Windows XP).
- 2. Click Add Printer to launch the Add Printer wizard.
- 3. Click Network Print Server (For Windows XP, click Next).
- 4. Select the network printer from the Shared printers list (For Windows XP, select A network printer, or a printer attached to another computer, and click Next). If the printer is not listed, type in the path of the printer in the text box.

For example: \\<server host name>\<shared printer name>

The server host name is the name of the server computer that identifies it to the network. The shared printer name is the name assigned during the server installation process.

5. Click OK (For Windows XP, click Browse for a printer, and then click Yes). If this is a new printer, you may be prompted to install a printer driver. If no system driver is available, then you will need to provide a path to available drivers.

- 6. Select whether you want this printer to be the default printer for the client, and then click Finish (For Windows XP, click Next, and then click Finish).
- 7. Print a test page to verify printer installation:
 - a. Click Start \rightarrow Settings \rightarrow Printers (Properties and Faxes for Windows XP).
 - b. Select the printer you just created.
 - c. Click File → Properties.
 - d. From the General tab, click Print a Test Page (Print Test Page for Windows XP). When a test page prints successfully, printer installation is complete.

For Windows Vista

- 1. Click Start \rightarrow Control Panel \rightarrow Hardware and Sound \rightarrow Printers.
- 2. Click Add a printer to launch the Add Printer wizard.
- 3. Select Add a network, wireless or Bluetooth printer, and then click Next. If the printer is listed, select the printer and click Next, or select The printer that I want isn't listed and type in the path of the printer in the Select a shared printer by name text box and click Next.

For example: \\<server host name>\<shared printer name>

The server host name is the name of the server computer that identifies it to the network. The shared printer name is the name assigned to the printer during the server installation process.

- 4. If this is a new printer, you may be prompted to install a printer driver. If no system driver is available, then you will need to provide a path to available drivers.
- 5. Select whether you want this printer to be the default printer for the client, click Next.
- 6. If you want to the verify printer driver installation then click Print a test page.
- 7. Click Finish.

Understanding Fonts

- Typefaces and fonts
- Bitmapped and Scalable Fonts
- Resident Fonts
- Symbol Sets

Typefaces and fonts

A font is a set of characters and symbols created with a distinct design. The distinct design is called a typeface. The typefaces you select add personality to a document. Well-chosen typefaces make a document easier to read.

The printer has numerous resident fonts in PCL 5/PCL 6 and PostScript 3. See "Resident Fonts" for a listing of all resident fonts.

Weight and style

Typefaces are often available in different weights and styles. These variations modify the original typeface so you can, for example, emphasize important words in text or highlight book titles. The different weights and styles are designed to complement the original typeface.

Weight refers to the thickness of the lines that form the characters. Thicker lines result in darker characters. Some words commonly used to describe the weight of a typeface are bold, medium, light, black, and heavy.

Style refers to other typeface modifications, such as tilt or character width. Italic and oblique are styles where the characters are tilted. Narrow, condensed, and extended are three common styles that modify the character widths.

Some fonts combine several weight and style modifications; for example, Helvetica Narrow Bold Oblique. A group of several weight and style variations of a single typeface is called a typeface family. Most typeface families have four variations: regular, italic (oblique), bold, and bold italic (bold oblique). Some families have more variations, as the following illustration for the Helvetica typeface family shows:

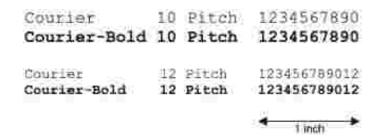
> Helvetica. Helvetica Oblique Helvetica Bold Helvetica Bold Oblique Helvetica Narrow Helvetica Narrow Oblique Helyetica Narrow Bold

ABCDEFGHIJKLMNOabcdefghijkimno1234587890 ABCDEFGHIJKLMNOabcdefghijklmno1234567890 ABCDEFGHIJKLMNOabcdefghijklmno1234567890 ABCDEFGHIJKLMNOabcdefghijkinno1234567890 ABCDEFGHLIKLMNOabcdefghijklmno1234567890 ABCDEFGHLIKLANOubcdefghlikimno1234567890 ABCDEFGHIJKLMNOabcdefghijklmno1234567898 Helivetica Narrow Bold Oblique ABCDEFGHIJKLMNOabcdelghijkimno1234567890

Pitch and Point Size

The size of a font is specified as either a pitch or point size, depending on whether the font is fixed space or proportional.

In fixed space fonts, each character has the same width. Pitch is used to specify the size of fixed space fonts. It is a measure of the number of characters that will print in one horizontal inch of type. For example, all 10-pitch fonts print 10 characters per inch (cpi) and all 12-pitch fonts print 12 cpi:



In proportional (or typographic) fonts, every character can have a different width. Since proportional fonts have characters with different widths, the font size is specified in point size, not pitch. Point size refers to the height of the characters in the font. A point is defined as 1/72 inch. The characters in a font printed at 24 point will be twice as large as the characters in the same font printed at 12 point.

The following illustration shows samples of a font printed in different point sizes:

24 point 18 point 12 point 10 point

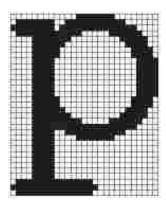
The point size of a font is defined as the distance from the top of the tallest character in the font to the bottom of the lowest character in the font. Due to the definition of point size, different fonts printed at the same point size may appear quite different in size. This is because there are other font parameters that affect how the font looks. However, the point size of a font is an excellent specification of the relative size of a font. The following examples illustrate two very different proportional fonts at 14 point:

ITC Avant Garde abadefghABCDEFGH ITC Zapf Chancery abedefghABCDEFGH

Bitmapped and Scalable Fonts

The printer uses both bitmapped and scalable fonts.

Bitmapped fonts are stored in printer memory as predefined patterns of bits that represent a typeface at a specific size, style, and resolution. The following illustration shows an example of a character from a bitmapped font.



Bitmapped fonts are available in different type styles and point sizes as downloadable fonts. Contact the place where you bought your printer for more information about downloadable fonts.

Scalable fonts (also called outline fonts) are stored as computer programs that define the outlines of the characters in the font. Each time you print characters from a scalable font, the printer creates a bitmap of the characters at the point size you choose and saves it temporarily in printer memory.





These temporary bitmapped fonts are deleted when you turn off or reset the printer. Scalable fonts provide the flexibility of printing in many different point sizes.

Your printer uses different scalable font formats for downloading fonts to the printer. PCL 5/PCL 6 uses Intellifont and TrueType scalable fonts. PostScript 3 uses Type 1 and TrueType scalable fonts. There are thousands of different scalable fonts available in these different font formats from numerous font suppliers.

If you plan to use many downloadable bitmapped or scalable fonts or if you plan to use many different sizes of scalable fonts, you may need to purchase additional memory for your printer.

Resident Fonts

Your printer is equipped with resident fonts stored permanently in printer memory. Different fonts are available in PCL 5/PCL 6 and PostScript 3. Some of the most popular typefaces, like Courier and TimesNew (PCL 5/PCL 6)/Times New Roman (PostScript 3), are available for all printer languages.

The following table lists all the fonts resident in your printer. See "Printing a Font Sample List" for instructions on how to print samples of the fonts. You can select the resident fonts from your software program if you are using PCL 5/PCL 6. You can also select the resident fonts from the operator panel if you are using PCL 5.

Resident scalable fonts	
PCL 5/PCL 6	PostScript 3
CG Times	Albertus
CG Times Italic	Albertus Italic
CG Times Bold	Albertus Light
CG Times Bold Italic	Antique Olive Roman
Univers Medium	Antique Olive Italic
Univers Medium Italic	Antique Olive Bold
Univers Bold	Antique Olive Compact
Univers Bold Italic	Apple Chancery
Univers Medium Condensed	Arial
Univers Medium Condensed Italic	Arial Italic
Univers Bold Condensed	Arial Bold
Univers Bold Condensed Italic	Arial Bold Italic
Antique Olive	ITC Avant Garde Book
Antique Olive Italic	ITC Avant Garde Book Oblique
Antique Olive Bold	ITC Avant Garde Demi

CG Omega	ITC Avan tGarde Demi Oblique
CG Omega Italic	Bodoni Roman
CG Omega Bold	Bodoni Italic
CG Omega Bold Italic	Bodoni Bold
Garamond Antiqua	Bodoni Bold Italic
Garamond Kursiv	Bodoni Poster
Garamond Halbfett	Bodoni Poster Compressed
Garamond Kursiv Halbfett	ITC Bookman Light
Courier	ITC Bookman Light Italic
Courier Italic	ITC Bookman Demi
Courier Bold	ITC Bookman Demi Italic
Courier Bold Italic	Carta
Letter Gothic	Chicago
Letter Gothic Italic	Clarendon Roman
Letter Gothic Bold	Clarendon Bold
Albertus Medium	Clarendon Light
Albertus Extra Bold	Cooper Black
Clarendon Condensed	Cooper Black Italic
Coronet	Copperplate Gothic 32BC
Marigold	Copperplate Gothic 33BC
Arial	Coronet
Arial Italic	Courier
Arial Bold	Courier Oblique
Arial Bold Italic	Courier Bold
Times New	Courier Bold Oblique
Times New Italic	Eurostile Medium
Times New Bold	Eurostile Bold
Times New Bold Italic	Eurostile Extended No. 2

Symbol	Eurostile Bold Extended No. 2
Wingdings	Geneva
	GillSans
	GillSans Italic
	GillSans Bold
	GillSans Bold Italic
	GillSans Light
	GillSans Light Italic
	GillSans Extra Bold
	GillSans Condensed
	GillSans Condensed Bold
Times Roman	Goudy Oldstyle
Times Italic	Goudy Oldstyle Italic
Times Bold	Goudy Bold
Times Bold Italic	Goudy Bold Italic
Helvetica	Goudy Extra Bold
Helvetica Oblique	Helvetica
Helvetica Bold	Helvetica Oblique
Helvetica Bold Oblique	Helvetica Bold
CourierPS	Helvetica Bold Oblique
CourierPS Oblique	Helvetica Narrow
CourierPS Bold	Helvetica Narrow Oblique
CourierPS Bold Oblique	Helvetica Narrow Bold
SymbolPS	Helvetica Narrow Bold Oblique
Palatino Roman	Helvetica Condensed
Palatino Italic	Helvetica Condensed Oblique
Palatino Bold	Helvetica Condensed Bold
Palatino Bold Italic	Helvetica Condensed Bold Oblique

ITC Bookman Light	Hoefler Text
ITC Bookman Light Italic	Hoefler Text Italic
ITC Bookman Demi	Hoefler Text Black
ITC Bookman Demi Italic	Hoefler Text Black Italic
Helvetica Narrow	Hoefler Text Ornaments
Helvetica Narrow Oblique	Joanna
Helvetica Narrow Bold	Joanna Italic
Helvetica Narrow Bold Oblique	Joanna Bold
New Century Schoolbook Roman	Joanna Bold Italic
New Century Schoolbook Italic	Letter Gothic
New Century Schoolbook Bold	Letter Gothic Slanted
New Century Schoolbook Bold Italic	Letter Gothic Bold
ITC Avant Garde Gothic Book	Letter Gothic Bold Slanted
ITC Avant Garde Gothic Book Oblique	ITC Lubalin Graph Book
ITC Avant Garde Gothic Demi	ITC Lubalin Graph Book Oblique
ITC Avant Garde Gothic Demi Oblique	ITC Lubalin Graph Demi
Zapf Chancery Medium Italic	ITC Lubalin Graph Demi Oblique
Zapf Dingbats	Marigold
	Monaco
	ITC Mona Lisa Recut
	New Century Schoolbook Roman
	New Century Schoolbook Italic
	New Century Schoolbook Bold
	New Century Schoolbook Bold Italic
	NewYork
	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 Dingbats

Symbol Sets

A symbol set is the collection of alphabetic and numeric characters, punctuation, and special characters available in the font you select. Symbol sets support the requirements for different languages or specific applications, such as math symbols used for scientific text.

In PCL 5/PCL 6, a symbol set also defines which character will print for each key on the keyboard (or more specifically, for each *code point*). Some applications require different characters at some code points. To support multiple applications and languages, your printer has 36 symbol sets for the resident PCL 5/PCL 6 fonts.

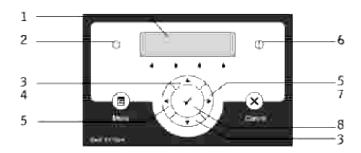
Symbol Sets for PCL 5/PCL 6

Not all font names support all of the symbol sets listed.

Roman 8 (Default)	ISO 8859-1 Latin 1	ISO 8859-2 Latin 2
ISO 8859-9 Latin 5	ISO 8859-10 Latin 6	PC-8
PC-8 DN	PC-775 Baltic	PC-850 Multilingual
PC-852 Latin 2	PC-1004 OS/2	PC Turkish
Windows 3.1 Latin 1	Windows 3.1 Latin 2	Windows 3.1 Latin 5
DeskTop	PS Text	MC Text
Microsoft Publishing	Math 8	PS Math
Pi Font	Legal	ISO 4 United Kingdom
ISO 6 ASCII	ISO 11 Swedish: names	ISO 15 Italian
ISO 17 Spanish	ISO 21 German	ISO 60 Norwegian v1
ISO 69 French	Windows 3.0 Latin 1	Windows Baltic
Symbol	Wingdings	ITC ZapfDingbats MS

Understanding Printer Messages

The printer operator panel displays messages describing the current state of the printer and indicates possible printer problems you must resolve. This topic provides a list of all printer messages, explains what they mean, and tells you how to clear the messages.



1	LCD display	5	◀ ▶ buttons
2	2 Ready indicator		Error indicator
3	▼ ▲ buttons	7	Cancel button
4	Menu button	8	√ button

Message (The first and second lines are displayed together. The third and forth lines blink every second.)	What this message means	What you can do
WWV-WWW Restart Printer Contact Support IfMessageReturns	Error <i>WWV-WWV</i> relates to printer problems.	Turn off the printer, and then on. If this does not solve the problem, contact Dell. See "Contacting Dell" in the <i>Owner's Manual</i> .
NNN-NNN Restart Printer Reseat Fuser Contact Support	The outer levers on both sides of the fuser unit are not securely locked. Error <i>WWV-WWV</i> relates to printer problems.	Confirm that the outer levers on both sides of the fuser unit are securely locked. If this does not solve the problem, contact Dell. See "Contacting Dell" in the <i>Owner's Manual</i> .
016-316 Restart Printer Reseat Memory Contact Support	The printer detected an unsupported additional memory module in the memory slot.	Remove the additional memory module. If this does not solve the problem, contact Dell. See "Contacting Dell" in the <i>Owner's Manual</i> .

016-318 Restart Printer Reseat Memory Contact Support	The additional memory module is not fully inserted into the slot.	Remove the additional memory module from the slot, and then reattach it firmly. If this does not solve the problem, contact Dell. See "Contacting Dell" in the <i>Owner's Manual</i> .
016-340 Restart Printer Contact Support IfMessageReturns	A communication card error occurred between the network and control card modules.	Turn off the printer, and then on. If this does not solve the problem, contact Dell. See "Contacting Dell" in the <i>Owner's Manual</i> .
016-330 Restart Printer Reseat MPC Contact Support	A communication card error occurred between the network interface card and control card.	Turn off the printer, and then on. If this does not solve the problem, contact Dell. See "Contacting Dell" in the <i>Owner's Manual</i> .
016-338 Restart Printer Reseat Wireless Contact Support	An error occurred in the wireless printer adapter.	Turn the printer off, and then on. Ensure the following: The wireless printer adapter is securely inserted into the slot on the controller card. Unauthorized USB devices are not used. If this does not solve the problem, contact Dell. See "Contacting Dell" in the <i>Owner's Manual</i> .
NWN-NWN Restart Printer Reseat XXX Contact Support	XXX is not fully inserted. Error WWV-WWV relates to printer problems.	Confirm that the unit is securely inserted. If this does not solve the problem, contact Dell. See "Contacting Dell" in the <i>Owner's Manual</i> .
Paper Jam **MWV-MWV** Open **XX** Remove Paper	The printer detects a paper jam. **XXX** and **YY** indicates a position that you open.	Clear the paper path. When "Reg Cover" appears in XXX, the procedure to remove print media is different depending on whether the Duplexer is attached or not.
Jam Fuser Exit NNN-NNN Open XXX Remove Paper	Error <i>WWW-WWW</i> relates to printer problems.	See "Clearing Jams"
Paper Jam **MWW-MWW** Open **XXX** and **YYY** **AMATERIST AND **PYY** **AMATERIST AND **AMATERIST AND **PYY** **AMATERIST AND **PYY** **AMATERIST AND **AMATERIST AND **PYY** **AMATERIST AND **AMAT		
Paper Jam **MWW-MWW** Open **XXX** Open **YYY** **Transport of the content of th		
Paper Jam 077-101 Open Tray Remove Paper Open & Close Front Latch	The printer detects a paper jam.	Pull out the specified tray and clear the paper path. See "Clearing Jams"

Transparency 024-934 Open Covers Remove Paper	The printer detects jammed transparencies.	Clear the paper path. Then load the transparencies again. See "Clearing Jams"
Insert TonerCart WWW-WWW Insert YToner	The specified toner cartridge is either missing or not fully inserted into the printer. Y is one of the following: B C Y M Error WWV-WWV relates to printer problems.	Reinsert the specified toner cartridge. See "Replacing the Toner Cartridge"
Insert Drum 091-972 Insert/Reseat Imaging Drum	The drum cartridge is either missing or not fully inserted into the printer.	Reinsert the drum cartridge. See "Replacing the Imaging Drums"
Replace Toner //////////// Replace /Toner	The toner cartridge is low on toner. Y is one of the following: B C Y M Error NNN-NNN relates to printer problems.	Remove the specified toner cartridge and install a new one. NOTE: If you do not replace the toner cartridge, print quality problems may occur. Order a new toner cartridge at the website (www.dell.com/supplies or www.euro.dell.com/supplies). See "Replacing the Toner Cartridge"
Imaging Drum 091-935 Replace Imaging Drum	The drum cartridge needs to be replaced.	Replace the drum cartridge. See "Replacing the Imaging Drums"
Toner Type **MWV-WWW Reseat **XXX***	An unsupported toner cartridge is installed. **XX** is one of the following: • Yellow Toner • Cyan Toner • Magenta Toner • Black Toner Error **WW-WWV* relates to printer problems.	Replace the specified toner cartridge. See "Replacing the Toner Cartridge"
Imaging Drum 091-912 Reseat Imaging Drum	An unsupported drum cartridge is installed.	Replace the drum cartridge. See "Replacing the Imaging Drums"

Close Front Door 077-300 Front Door Is Open	Printer cover is open.	Close the specified cover.
Load XXX NWW-NWW Load YYY YYY	Incorrect paper size is loaded in the specified tray. XXX indicates the number of the tray or multipurpose feeder. YYY indicates a paper size. yyy indicates paper quality. Error WWV-WWV relates to printer problems.	Load the specified paper in the specified trays. See "Loading Print Media in Standard and Optional Trays"
Out of Memory 016-700 Job too Large Press •	The printer memory is full and cannot continue processing the current print job. Error <i>WWV-WWV</i> relates to printer problems.	 Press ✓ to clear the message, cancel the current print job, and conduct the next print job, if any. Press Cancel to cancel the print job. Press Menu to open the Stored Print and delete the holding job. To avoid this error in the future, do the following: Delete unnecessary fonts, macros, and other data in printer memory. Install additional printer memory. See "Accessing Held Jobs From the Operator Panel"
Disk Full 016-980 Job too Large Press √	RAM disk memory is full and cannot continue processing the current print job.	 Press ✓ to clear the message, cancel the current print job, and conduct the next print job, if any. Press Cancel to cancel the print job. Press Menu to open the Stored Print and delete the current job. To avoid this error in the future, do the following: Reduce the number of print pages such as splitting the print data. Increase free memory space by deleting unnecessary data in the RAM disk. See "Accessing Held Jobs From the Operator Panel"
PCL Request 016-720 Data Violation Press √	Error relating to PCL emulation problems occurs.	 Press to clear the message, cancel the current print job, and conduct the next print job, if any. Press Cancel to cancel the print job.
Invalid Job 016-799 Data Violation Press √	When the configuration of the printer on the printer does not conform to the printer you are using, this message appears.	 Press Cancel to cancel the print job. Press ✓ to clear the message, cancel the current print job, and conduct the next print job, if any. Make sure that the configuration of the printer on the printer driver conforms to the printer you are using.

Ready to Print NNN-NNN XXX Is Low	Toner cartridge is nearly empty. ***XX**Is one of the following: 'Yellow Toner(Y) 'Cyan Toner(C) 'Magenta Toner(M) 'Black Toner(B) Error ***WW-**WW**relates to printer problems.	Replace the specified toner cartridge. See "Replacing the Toner Cartridge"
Ready to Print NWW-NWW Imaging Drum Replace Soon	Drum life warning. The drum cartridge needs to be replaced.	Replace the drum cartridge. See "Replacing the Imaging Drums"

Clearing Jams

Careful selection of appropriate print media and proper loading allow you to avoid most jams. See "Print Media Guidelines" for more information.

- Avoiding Jams
- Identifying the Location of Paper Jams
- Removing Print Jams From the Multipurpose Feeder
- Removing Print Jams From the Standard Tray
- Removing Print Jams Between the Imaging Drum and Fuser
- Removing Print Jams From the Fuser
- Removing Print Jams From the Duplexer
- Removing Print Jams From the Optional Tray Modules



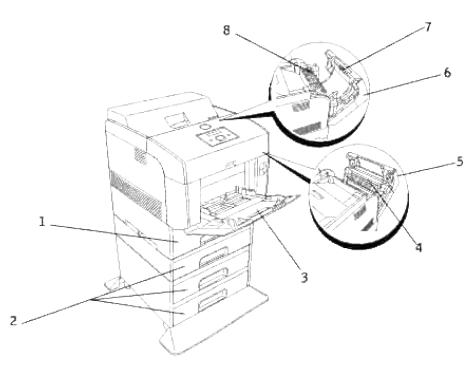
NOTE: Before buying large quantities of any print media, Dell recommends trying a sample first.

Avoiding Jams

- Use only recommended print media. See "Print Media Guidelines" for more information.
- See "Loading Print Media in Standard and Optional Trays" and "Loading the Multipurpose Feeder" to load printer media properly.
- Do not overload the print media sources. Make sure the stack print media height does not exceed the maximum height indicated by the load line labels in the trays.
- Do not load wrinkled, creased, damp, or curled print media.
- Flex, fan, and straighten print media before you load it. If a jam occurs with print media, try feeding one sheet at a time through the multipurpose feeder.
- Do not use print media that you have cut or trimmed yourself.
- Do not mix print media sizes, weights, or types in the same print media source.
- Make sure the recommended print side is face up when you insert the print media. However, when using the multipurpose feeder the recommended print side is face down.
- Keep print media stored in an acceptable environment. For more information, see "<u>Storing Print Media</u>".
- Do not remove the feeding tray during a print job.
- Push all trays in firmly after loading them.
- Make sure all cables that connect to the printer are correctly attached.
- Overtightening the guides may cause jams.

Identifying the Location of Paper Jams

The following illustration shows where paper jams may occur along the print media path.



 Λ

CAUTION: Do not attempt to clear any jams using tools or instruments. This may permanently damage the printer.

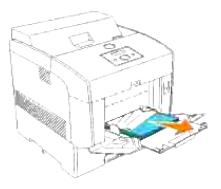
1	Standard tray	
2	Optional tray modules	
3	Multipurpose feeder	
4	Between the imaging drum and fuser	
5	Front cover	
6	Outer Front Cover	
7	Duplexer	
8	Fuser	

Removing Print Jams From the Multipurpose Feeder



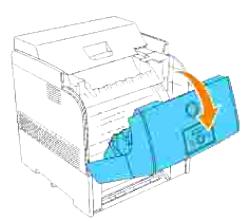
NOTE: To resolve the message displayed on the operator panel, you must clear all print media from the print media path.

1. Pull the jammed paper out of the multipurpose feeder.

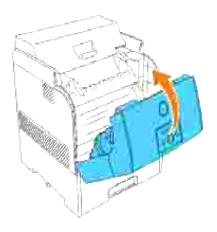


- 2. Close the multipurpose feeder cover once.
- 3. Push the front latch up and fully open the front cover. Confirm that there are no scraps of paper remaining inside the printer.





4. Close the front cover.



Removing Print Jams From the Standard Tray

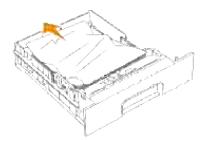


NOTE: To resolve the message displayed on the operator panel, you must clear all print media from the print media path.

1. Slowly, completely remove the paper tray from the printer.



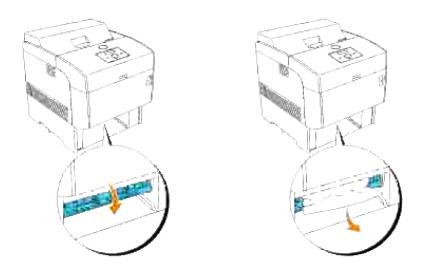
2. Remove all the jammed and/or creased paper from the tray.



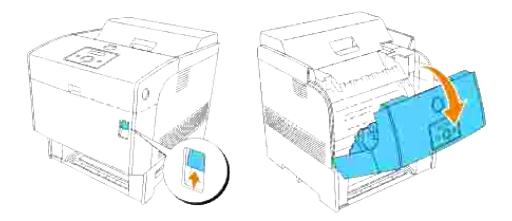
3. If there is jammed paper remaining inside the printer, pull it out carefully to avoid tearing it.



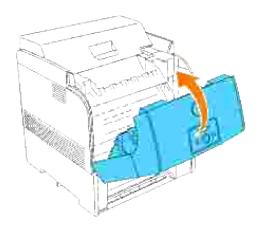
4. If jammed paper cannot be found, pull down the blue cover along the top of the hole where the tray cartridge was in the printer, and pull the jammed paper out carefully. Close blue cover after removing jammed paper.



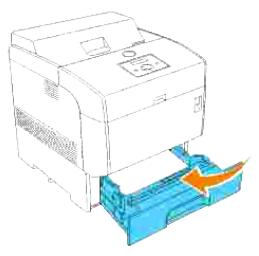
5. Push the front latch up and fully open the front cover. Confirm that there are no scraps of paper remaining inside the printer.



6. Close the front cover.



7. Insert the tray into the printer, and push until it stops.





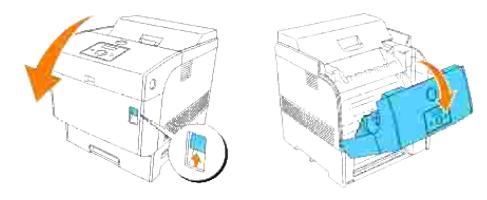
CAUTION: Do not use excessive force on the tray. Doing so could damage the tray or the inside the printer.

Removing Print Jams Between the Imaging Drum and Fuser



NOTE: To resolve the message displayed on the operator panel, you must clear all print media from the print media path.

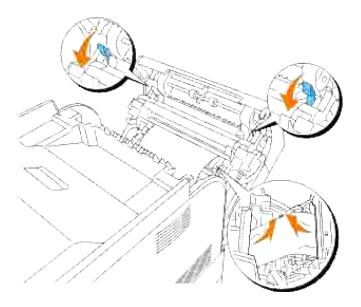
- 1. Turn off the printer and wait for 30 minutes.
- 2. Push the front latch up and fully open the front cover.



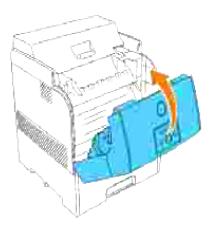
3. Move the levers at both ends of the fuser to their open position and remove the jammed paper. If the paper is torn, remove any scraps of paper remaining inside the printer.



NOTICE: Be sure to move the levers back to their close position after removing the jammed paper from the fuser.



4. Close the front cover.

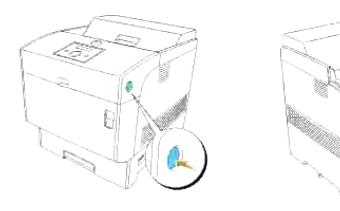


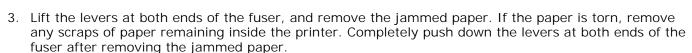
Removing Print Jams From the Fuser

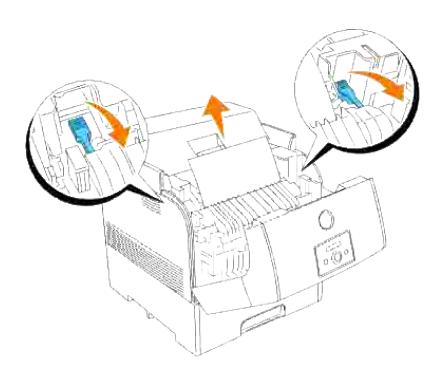


NOTE: To resolve the message displayed on the operator panel, you must clear all print media from the print media path.

- 1. Turn off the printer and wait for 30 minutes.
- 2. Push the side button and open the outer front cover.





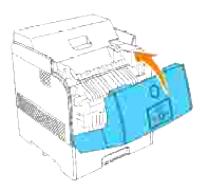


CAUTION: The fuser is hot. Do not touch, doing so may cause burns.

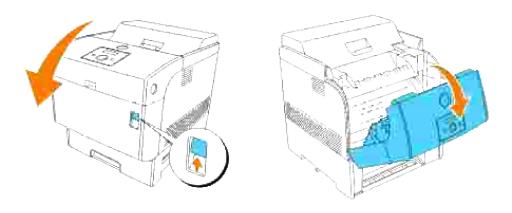


NOTE: If only a small portion of the jammed paper is visible, making it difficult to remove, see "Removing Print Jams Between the Imaging Drum and Fuser" to remove the jammed paper.

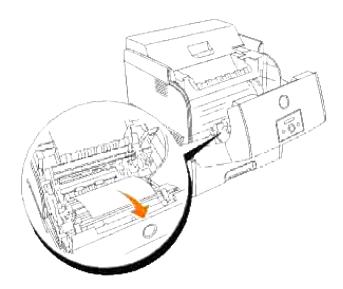
4. Close the outer front cover. If a sheet of paper has been already fed from the tray, a paper jam message may appear. Go to step 5.



5. If a paper jam message is displayed, push the front latch up and fully open the front cover.

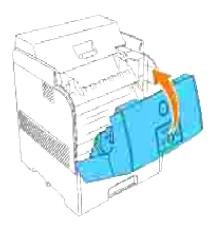


6. Remove the jammed paper if you see it. If you cannot see the jammed paper, go to step 7.



NOTE: If a paper jam occurs in the fuser area, a sheet of paper may already have been fed from the tray. Make sure there is no paper remaining inside the printer, using step 8 through 14.

7. Close the front cover.



8. Slowly, completely remove the tray from the printer. If the printer is equipped with an optional tray module, remove the trays sequentially, starting with the bottom one.



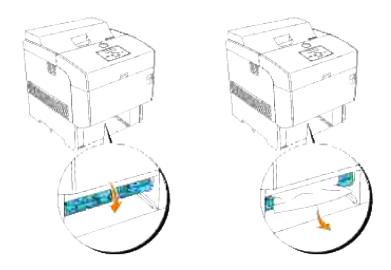
9. Remove all the jammed and/or creased paper from the tray.



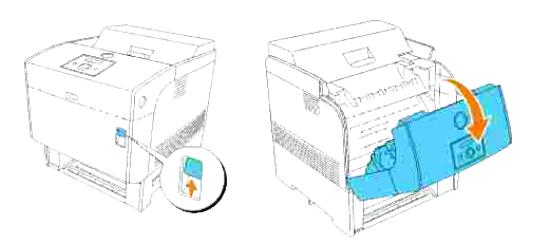
10. If there is jammed paper remaining inside the printer, pull it out carefully to avoid tearing it.



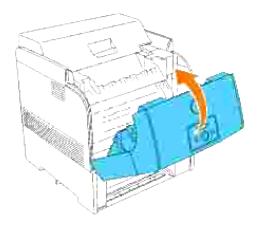
11. If jammed paper cannot be found, pull down the blue cover along the top of the hole where the tray cartridge was in the printer, and pull the jammed paper out carefully. Close blue cover after removing jammed paper.



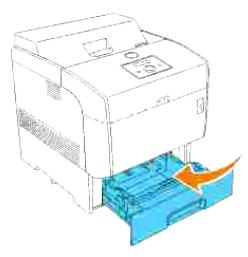
12. Push the front latch up and fully open the front cover. Confirm that there are no scraps of paper remaining inside the printer.



13. Close the front cover.

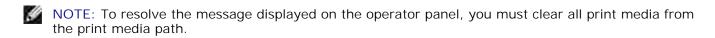


14. Insert the tray into the printer, and push until it stops.

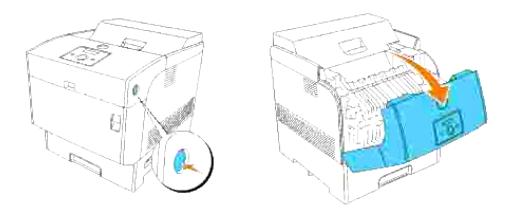


NOTICE: Do not use excessive force on the tray. Doing so could damage the tray or the inside the printer.

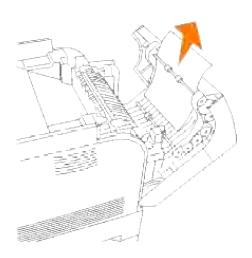
Removing Print Jams From the Duplexer



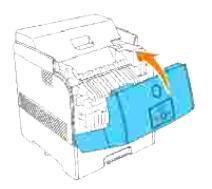
1. Push the side button and open the outer front cover.



2. Remove the jammed paper. If the paper is torn, remove any scraps of paper remaining inside the printer.



3. Close the outer front cover.



Removing Print Jams From the Optional Tray Modules

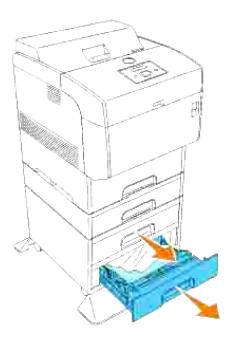


NOTE: To resolve the message displayed on the operator panel, you must clear all print media from the print media path.

1. Open the trays until you find the jammed paper.



NOTE: Paper in the tray module feeds to the printer from the front of the trays, therefore paper jammed in the lower tray can block the upper tray of the module or the tray in the printer, preventing you from opening them. Look for the jammed paper sequentially, starting with the lowest tray.



2. Remove all jammed and/or creased paper from the tray.

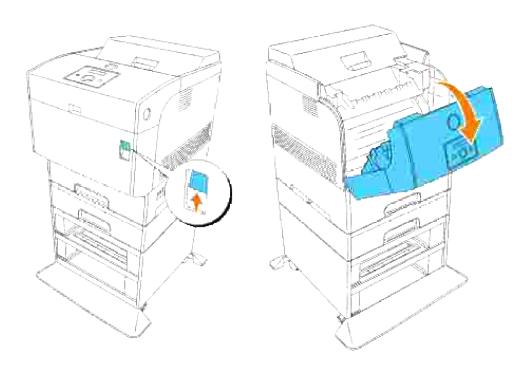


3. Pull the jammed paper out carefully to avoid tearing it.

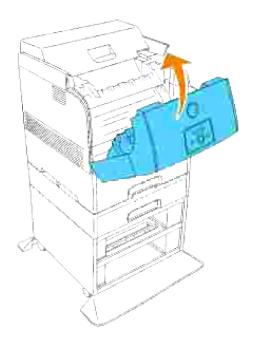
If the paper is torn, confirm that there are no scraps of paper remaining inside the printer.



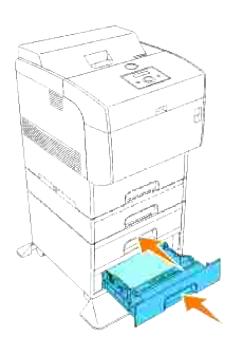
4. Push the front latch up and fully open the front cover. Confirm that there are no scraps of paper remaining inside the printer.



5. Close the front cover.



6. Insert the trays into the printer. Push the trays in until they stop.



Troubleshooting

Troubleshooting Guide

This section consists of the following instructions.

Configuration of your printer instructions

<u>User Settings</u>

- o Menu Map
- o Setup printing Letter Plain 1 from Multipurpose Feeder
- o Setup printing Letter Plain 1 from Tray1
- o Setup printing Letter Plain 1 from Tray2
- o Setup printing Transparency from Multipurpose Feeder
- o Setup printing Envelope from Multipurpose Feeder
- o Setup Paper Size
- o Setup Paper Type

Configuration

- o Parallel Printing
- o **USB** Printing
- o Setup Network
- o Setup Security

Troubleshooting Instructions

- o Diagnostic Menu Map (Customer Mode)
- o Testing "Print Quality"
- o Testing "Toner Pallet Check" or "Contamination Chk"

Others

- o How to replace the Imaging Drum
- o How to install the Toner Cartridge
- How to install the Transfer Roller
- How to install the Fuser
- o Basic toner cleaning instructions

The section will help you solve problems with the printer, options, or print quality.

- Troubleshooting Guide
- Basic Printer Problems
- Printing Problems
- Print Quality Problems
- Wireless Adapter Problem
- Other Problem
- Contacting Service
- Troubleshooting Guide
- Installing Printer Drivers

Basic Printer Problems

Some printer problems can be easy to resolve. If a problem occurs with your printer, check each the following:

- If a message displays on the operator panel, see "Understanding Printer Messages."
- The printer power cable is plugged into the printer and a properly grounded electrical outlet.
- The printer power is on.
- The electrical outlet is not turned off at any switch or breaker.
- Other electrical equipment plugged into the outlet is working.
- All options are properly installed.
- If you have checked all of the above and still have a problem, turn off the printer, wait for 10 seconds, and then turn on the printer. This often fixes the problem.



NOTICE: If an error message appears, see "Understanding Printer Messages."

Printing Problems

Problem	Action
Job did not print or incorrect characters printed.	Make sure Ready to Print appears on the operator panel before you send a job to print. Press Menu to return to Ready to Print.
	Make sure print media is loaded in the printer. Press Menu to return to Ready to Print.
	Verify the printer is using the correct page-description language (PDL).
	Verify that you are using the correct printer driver.
	Make sure you are using the correct Ethernet, USB, or IEEE cable and it is securely connected at the back of the printer.
	Verify that the correct print media size is selected.
	If using a print spooler, verify that the spooler has not stalled.
	Check the printer interface from the Admin Menu menu. Determine the host interface you are using. Print a Panel Settings page to verify that the current interface settings are correct.
Print media misfeeds or multiple feeds occur.	Make sure the print media you are using meets the specifications for your printer. See "Print Media Supported" for more information.
	Flex print media before loading it in any of the sources.
	Make sure the print media is loaded correctly.
	Make sure the width and length guides on the print media sources are adjusted correctly.
	Do not overfill the print media sources.
	Do not force print media into the multipurpose feeder when you load it; otherwise, it may skew or buckle.
	Remove any curled print media from sources.
	Load the recommended print side correctly for the type of print media you are using. See "Loading Print Media in Standard and Optional Trays" for more information.
	Turn the print media over or around and try printing again to see if feeding improves.
	Do not mix print media types.
	Do not mix reams of print media.

	Remove the top and bottom sheets of a ream before loading the print media.
	Load a print media source only when it is empty.
Envelope misfeeds or multiple feeds occur.	Remove the stack of envelopes from the multipurpose feeder.
Page breaks in unexpected places.	Check the <u>Time-Out</u> in the System Settings menu. Increase the setting.
Job prints from the wrong source or on the wrong print media.	Check the Paper Type in the Tray Settings menu on the printer operator panel and in the printer driver.
Print media does not stack neatly in the output bin.	Turn the print media stack over in the tray or multipurpose feeder.
Printer does not duplex pages.	Make sure 2 Sided is selected in both the PCL (Printer Control Language) menu on the printer operator panel and in the printer driver.
	Make sure you have enough printer memory installed.

Print Quality Problems

Problem	Action
Print is too light. ABC DEF	 The toner may be low. Confirm the amount of the toner and change the toner cartridges if necessary. Set the Toner Saving Mode check box to off in the Advanced tab in the printer driver. If you are printing on an uneven print surface, change the Paper Type settings in the Tray Settings menu. See "Tray Settings." Verify that the correct print media is being used. The imaging drum may need to be replaced. Change the imaging drum. The developer is damaged. Contact Dell. See "Contacting Dell" in the Owner's Manual. The transfer roller may need to be replaced. Contact Dell. See "Contacting Dell" in the Owner's Manual. The drive assembly developer is damaged. Contact Dell. See "Contacting Dell" in the Owner's Manual.
Toner smears or print comes off page.	· If you are printing on an uneven print surface, change the Paper Type settings in the Tray Settings menu. See "Tray Settings."



- · Verify that the print media is within the printer specifications.
- The fuser is old or damaged. Replace the fuser. See "Replacing the Fuser and Separator Roller".
- The imaging drum is out of order. For example, paper is jammed between the imaging drum and fuser. Contact Dell. See "Contacting Dell" in the *Owner's Manual.*

Toner spots appear on the page/printing is blurred.



- \cdot Check the toner cartridge to make sure it is installed correctly.
- · Change the imaging drum. See "Replacing the Imaging Drums."
- · The developer is damaged. Contact Dell. See "Contacting Dell" in the Owner's Manual.
- The fuser is damaged. Contact Dell. See "Contacting Dell" in the Owner's Manual.

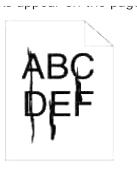
Entire page is white.



- · Make sure the packaging material is removed from the toner cartridge.
- · Check the toner cartridge to make sure it is installed correctly.
- The toner may be low. Change the toner cartridge. See "Replacing the Toner Cartridge."
- The developer is damaged. Contact Dell. See "Contacting Dell" in the Owner's Manual.
- The raster output scanner (ROS) is broken. Contact Dell. See "Contacting Dell" in the *Owner's Manual*.
- The drive assembly developer is damaged. Contact Dell. See "Contacting Dell" in the *Owner's Manual*.
- · The controller card is damaged. Contact Dell. See "Contacting Dell" in the *Owner's Manual.*

Streaks appear on the page.

• The toner may be low. Change the toner cartridge. See "Replacing the



Toner Cartridge."

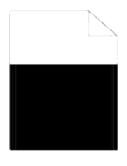
- If you are using preprinted forms, make sure the toner can withstand temperatures of 0 °C to 35 °C.
- · The developer is damaged. Contact Dell. See "Contacting Dell" in the Owner's Manual.

Characters have jagged or uneven edges.



- In the printer driver, change the Print Mode in the Graphics tab to High Quality.
- Select Bitmap Text Smoothing in the Advanced tab in the printer driver.
- · If you are using downloaded fonts, verify that the fonts are supported by the printer, the host computer, and the software program.

Part or all of the page prints in black.



- · Check the toner cartridge to make sure it is installed correctly.
- Deselect Change All Colors to Black in the Advanced tab in the printer driver.
- The high-voltage power supply (HVPS) is broken. See "Contacting Dell" in the *Owner's Manual*.
- The machine control unit (IOT control unit) is broken. See "Contacting Dell" in the *Owner's Manual*.

The job prints, but the top and side margins are incorrect.

· Make sure the margins are set correctly in your software program.



Printing on both ends of the transparencies is faded.



- This occurs when the printer is operating in a location where relative humidity reaches 85% or more. Adjust the humidity or relocate the printer to an appropriate environment.
- The raster output scanner (ROS) is broken. Contact Dell. See "Contacting Dell" in the *Owner's Manual*.

Color registration is out of alignment.



- · Print the color registration chart and adjust the color registration from the operator panel by using the chart.
- · See "Color Reg Adj" for more details.

Colored dots are printed at regular intervals.

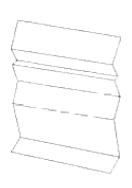


- · Clean the imaging drum.
- · See "Cleaning the Imaging Drum" for more details.

Partial blanks, creased paper or blotted printing.

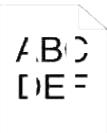


Condensation inside the printer causes partial blanks or creased paper. Turn on the printer and leave it one hour at least to get rid of the condensation. If the problems still occur, contact Dell. See "Contacting Dell" in the *Owner's Manual*.





Vertical blanks



- · The developer is damaged. Contact Dell. See "Contacting Dell" in the *Owner's Manual.*
- The raster output scanner (ROS) is broken. Contact Dell. See "Contacting Dell" in the *Owner's Manual*.
- The mirror in the printer is broken. Contact Dell. See "Contacting Dell" in the *Owner's Manual.*

Wireless Adapter Problem

Problem	Action	
The wireless printer is not connected to the network.	 Check the settings for the wireless printer match the settings for the network. Check the wireless printer is installed in the range of the network. If you use the wireless filter for Macintosh networking, check if the Macintosh address is specified in the wireless printer. 	
The wireless printer is not connected to the network even if the settings are correct.	 Check the wireless printer is installed in the range of the network. Keep the wireless printer apart from other electronic devices including a microwave oven and cordless phone. These devices may emit electromagnetic signals which can cause interference. Print the Printer Settings page, and then check if Link Quality is Good in Wireless Network. Otherwise, move the wireless printer to the place accessible to the network, such as a wireless access point. 	

Other Problem

Problem	Action	
Condensation has occured inside the printer.	This occurs when the printer is operating in a location where relative humidity reaches 85% or more. Adjust the humidity or relocate the printer to an appropriate environment.	

Contacting Service

When you call for printer service, be prepared to describe the problem you are experiencing or the error message on the display.

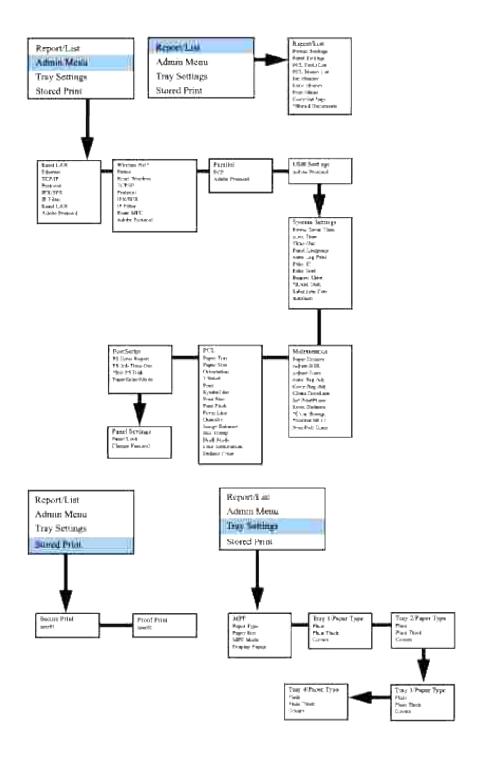
You need to know your printer model type and serial number. See the label on the back of the printer near the controller card for this information.

Troubleshooting Guide

Configuration of your printer instructions

User Settings

Menu Map



Setup printing Letter Plain 1 from Multipurpose Feeder

- 1. On the printer operator panel press MENU.
- 2. Press ▼ to get to Tray Settings.
- 3. Press ▶ to select Tray Settings.

- 4. Press ▼ to get to Paper Size.
- 5. Press ▶ to select Paper Size.
- 6. Press ▼ to get to MPF.
- 7. Press to select MPF.
- 8. Using ▲ and ▼, select the appropriate paper size (Letter).
- 9. Press the middle button, SELECT, once Letter is displayed on the lower line, this puts a * by it.
- 10. Now we have the MPF Size set to Letter.
- 11. Now press MENU to get back to Tray Settings/Paper Size.
- 12. Press ▼ to get to Paper Type.
- 13. Press to select Paper Type.
- 14. Press ▼ to get to MPF.
- 15. Press ▼ to select MPF.
- Using ▲ and ▼, select the appropriate paper type (Plain 1).
- 17. Press SELECT, once Plain 1 is displayed on the lower line.
- 18. Now we have the MPF Type set to Plain 1.
- 19. Now press MENU to get back to Ready to Print
- 20. Now insert the Letter-sized stack of paper into the MPF.
- 21. On the screen MPF/Letter will appear.
- 22. Press SELECT to confirm this.
- 23. Now on the screen MPF/Plain 1 will appear.
- 24. Press SELECT to confirm this.
- 25. We now have all the hardware settings on the printer correct

Now, all software settings screen shots are from WORD, this was done in Word 2003. However if in any application, you go File \rightarrow Print and then click the Properties button, you will get this same driver properties window.

- 26. Open up Word and create a new document.
- 27. Go to File \rightarrow Print.
- 28. Select the Dell Color Laser Printer from the printers list
- 29. Click the Properties button to the right.

- 30. This brings up Driver Properties.
- 31. Click on the Paper Tray Tab.
- 32. Change the Paper Source to MPF.
- 33. Click the Print Setup Tab.
- 34. Select in paper size, Letter.
- 35. Select for Output Size, Same as Paper Size.
- 36. Click OK.
- 37. Click Close.
- 38. Now the printer driver is setup correctly.
- 39. Now go to File \rightarrow Page Setup.
- 40. Click the Paper Tab.
- 41. Change Paper Size to Legal.
- 42. Change the Paper source settings BOTH to "DEFAULT TRAY AS PER PRINTER".
- 43. Click OK.
- 44. Type in some gibberish in the body of the document and click Print!

Setup printing Letter Plain 1 from Tray1

- 1. On the printer operator panel press MENU.
- 2. Press ▼ to get to Tray Settings.
- 3. Press ► to select Tray Settings.
- 4. Press ▼ to get to Paper Size.
- 5. Press ▶ to select Paper Size.
- 6. Press ▼ to get to Tray 1.
- 7. Press ▶ to select Tray 1.
- 8. Using ▲ and ▼, select the appropriate paper size (Letter).
- 9. Press the middle button, SELECT, once Letter is displayed on the lower line, this puts a * by it.
- 10. Now we have the Tray 1 Size set to Letter.
- 11. Now press MENU to get back to Tray Settings/Paper Size.

- 12. Press ▼ to get to Paper Type.
- 13. Press to select Paper Type.
- 14. Press ▼ to get to Tray 1.
- 15. Press ▶ to select Tray 1.
- 16. Using ▲ and ▼, select the appropriate paper type (Plain 1).
- 17. Press SELECT, once Plain 1 is displayed on the lower line.
- 18. Now we have the Tray 1 Type set to Plain 1.
- 19. Now press MENU to get back to Ready to Print.
- 20. Now insert the Letter-sized stack of paper into the Tray 1.
- 21. On the screen Tray 1/Letter will appear.
- 22. Press SELECT to confirm this.
- 23. Now on the screen Tray 1/Plain 1 will appear.
- 24. Press SELECT to confirm this.
- 25. We now have all the hardware settings on the printer correct.

Now, all software settings screen shots are from WORD, this was done in Word 2003. However if in any application, you go File \rightarrow Print and then click the Properties button, you will get this same driver properties window.

- 26. Open up Word and create a new document.
- 27. Go to File \rightarrow Print.
- 28. Select the Dell Color Laser Printer from the printers list.
- 29. Click the Properties button to the right.
- 30. This brings up Driver Properties.
- 31. Click on the Paper Tray Tab.
- 32. Change the Paper Source to Tray 1.
- 33. Click the Print Setup Tab.
- 34. Select in paper size, Letter.
- 35. Select for Output Size, Same as Paper Size.
- 36. Click OK.
- 37. Click Close.

- 38. Now the printer driver is setup correctly.
- 39. Now go to File \rightarrow Page Setup.
- 40. Click the Paper Tab.
- 41. Change Paper Size to Legal.
- 42. Change the Paper source settings BOTH to "DEFAULT TRAY AS PER PRINTER".
- 43. Click OK.
- 44. Type in some gibberish in the body of the document and click Print!

Setup printing Letter Plain 1 from Tray2

- 1. On the printer operator panel press MENU.
- 2. Press ▼ to get to Tray Settings.
- 3. Press ▶ to select Tray Settings.
- 4. Press ▼ to get to Paper Size.
- 5. Press to select Paper Size.
- 6. Press ▼ to get to Tray 2.
- 7. Press to select Tray 2.
- 8. Using ▲ and ▼, select the appropriate paper size (Letter).
- 9. Press the middle button, SELECT, once Letter is displayed on the lower line, this puts a * by it.
- 10. Now we have the Tray 2 Size set to Letter.
- 11. Now press MENU to get back to Tray Settings/Paper Size.
- 12. Press ▼ to get to Paper Type.
- 13. Press ▶ to select Paper Type.
- 14. Press ▼ to get to Tray 2.
- 15. Press ▼ to select Tray 2.
- 16. Using ▲ and ▼ ,, select the appropriate paper type (Plain 1).
- 17. Press SELECT, once Plain 1 is displayed on the lower line.
- 18. Now we have the Tray 2 Type set to Plain 1.
- 19. Now press MENU to get back to Ready to Print

- 20. Now insert the Letter-sized stack of paper into the Tray 2.
- 21. On the screen Tray 2/Letter will appear.
- 22. Press SELECT to confirm this.
- 23. Now on the screen Tray 2/Plain 1 will appear.
- 24. Press SELECT to confirm this.
- 25. We now have all the hardware settings on the printer correct

Now, all software settings screen shots are from WORD, this was done in Word 2003. However if in any application, you go File \rightarrow Print and then click the Properties button, you will get this same driver properties window.

- 26. Open up Word and create a new document.
- 27. Go to File \rightarrow Print.
- 28. Select the Dell Color Laser Printer from the printers list
- 29. Click the Properties button to the right.
- 30. This brings up Driver Properties.
- 31. Click on the Print Setup Tray Tab.
- 32. Change the Paper Source to Tray 2.
- 33. Click the Print Setup Tab.
- 34. Select in paper size, Letter.
- 35. Select for Output Size, Same as Paper Size.
- 36. Click OK.
- 37. Click Close.
- 38. Now the printer driver is setup correctly.
- 39. Now go to File → Page Setup.
- 40. Click the Paper Tab.
- 41. Change Paper Size to Legal.
- 42. Change the Paper source settings BOTH to "DEFAULT TRAY AS PER PRINTER".
- 43. Click OK.
- 44. Type in some gibberish in the body of the document and click Print!

Setup printing Transparency from Multipurpose Feeder

- 1. On the printer operator panel press MENU.
- 2. Press ▼ to get to Tray Settings.
- 3. Press ▶ to select Tray Settings.
- 4. Press ▼ to get to Paper Size.
- 5. Press to select Paper Size.
- 6. Press ▼ to get to MPF.
- 7. Press ▶ to select MPF.
- 8. Using \triangle and ∇ , select the appropriate paper size (Transparency).
- 9. Press the middle button, SELECT, once Transparency is displayed on the lower line, this puts a * by it.
- 10. Now we have the MPF Size set to Transparency.
- 11. Now press MENU to get back to Tray Settings/Paper Size.
- 12. Press ▼ to get to Paper Type.
- 13. Press to select Paper Type.
- 14. Press ▼ to get to MPF.
- 15. Press ▼ to select MPF.
- 16. Using ▲ and ▼, select the appropriate paper type (Plain 1).
- 17. Press SELECT, once Plain 1 is displayed on the lower line.
- 18. Now we have the MPF Type set to Plain 1.
- 19. Now press MENU to get back to Ready to Print
- 20. Now insert the Transparency-sized stack of paper into the MPF.
- 21. On the screen MPF/Transparency will appear.
- 22. Press SELECT to confirm this.
- 23. Now on the screen MPF/Plain 1 will appear.
- 24. Press SELECT to confirm this.
- 25. We now have all the hardware settings on the printer correct

Now, all software settings screen shots are from WORD, this was done in Word 2003. However if in any application, you go File \rightarrow Print and then click the Properties button, you will get this same driver properties window.

- 26. Open up Word and create a new document.
- 27. Go to File \rightarrow Print.
- 28. Select the Dell Color Laser Printer from the printers list
- 29. Click the Properties button to the right.
- 30. This brings up Driver Properties.
- 31. Click on the Paper Tray Tab.
- 32. Change the Paper Source to MPF.
- 33. Click the Print Setup Tab.
- 34. Select in paper size, Transparency.
- 35. Select for Output Size, Same as Paper Size.
- 36. Click OK.
- 37. Click Close.
- 38. Now the printer driver is setup correctly.
- 39. Now go to File \rightarrow Page Setup.
- 40. Click the Paper Tab.
- 41. Change Paper Size to Legal.
- 42. Change the Paper source settings BOTH to "DEFAULT TRAY AS PER PRINTER".
- 43. Click OK.
- 44. Type in some gibberish in the body of the document and click Print!

Setup printing Envelope from Multipurpose Feeder

- 1. On the printer operator panel press MENU.
- 2. Press ▼ to get to Tray Settings.
- 3. Press ▶ to select Tray Settings.
- 4. Press ▼ to get to Paper Size.
- 5. Press to select Paper Size.
- 6. Press ▼ to get to MPF.
- 7. Press to select MPF.
- 8. Using ▲ and ▼, select the appropriate paper size (Envelope).

- 9. Press the middle button, SELECT, once Envelope is displayed on the lower line, this puts a * by it.
- 10. Now we have the MPF Size set to Envelope.
- 11. Now press MENU to get back to Tray Settings/Paper Size.
- 12. Press ▼ to get to Paper Type.
- 13. Press to select Paper Type.
- 14. Press ▼ to get to MPF.
- 15. Press ▼ to select MPF.
- 16. Using ▲ and ▼, select the appropriate paper type (Plain 1).
- 17. Press SELECT, once Plain 1 is displayed on the lower line.
- 18. Now we have the MPF Type set to Plain 1.
- 19. Now press MENU to get back to Ready to Print
- 20. Now insert the Envelope-sized stack of paper into the MPF.
- 21. On the screen MPF/Envelope will appear.
- 22. Press SELECT to confirm this.
- 23. Now on the screen MPF/Plain 1 will appear.
- 24. Press SELECT to confirm this.
- 25. We now have all the hardware settings on the printer correct

Now, all software settings screen shots are from WORD, this was done in Word 2003. However if in any application, you go File \rightarrow Print and then click the Properties button, you will get this same driver properties window.

- 26. Open up Word and create a new document.
- 27. Go to File \rightarrow Print.
- 28. Select the Dell Color Laser Printer from the printers list
- 29. Click the Properties button to the right.
- 30. This brings up Driver Properties.
- 31. Click on the Paper Tray Tab.
- 32. Change the Paper Source to MPF.
- 33. Click the Print Setup Tab.
- 34. Select in paper size, Envelope.

- 35. Select for Output Size, Same as Paper Size.
- 36. Click OK.
- 37. Click Close.
- 38. Now the printer driver is setup correctly.
- 39. Now go to File → Page Setup.
- 40. Click the Paper Tab.
- 41. Change Paper Size to Legal.
- 42. Change the Paper source settings BOTH to "DEFAULT TRAY AS PER PRINTER".
- 43. Click OK.
- 44. Type in some gibberish in the body of the document and click Print!

Setup Paper Size

- 1. Start Here
- 2. On the printer press MENU.
- 3. Press ▼ to get to Tray Settings.
- 4. Press ▶ to select Tray Settings.
- 5. Press ▼ to get to Paper Size.
- 6. Press ▶ to select Paper Size.
- 7. Press ▼ to get to MPF.
- 8. Press to select MPF.
- 9. Using \triangle and ∇ , select the appropriate paper size (Letter).
- 10. Press the middle button, SELECT, once Letter is displayed on the lower line, this puts a * by it.
- 11. Now we have the MPF Size set to Letter.
- 12. Now press MENU to get back to Tray Settings/Paper Size.
- 13. Press ▼ to get to Paper Type.
- 14. Press ▶ to select Paper Type.
- 15. Press ▼ to get to MPF.
- 16. Press ▼ to select MPF.

- 17. Using ▲ and ▼, select the appropriate paper type (Plain 1).
- 18. Press SELECT, once Plain 1 is displayed on the lower line.
- 19. Now we have the MPF Type set to Plain 1.
- 20. Now press MENU to get back to Ready to Print
- 21. Now insert the Letter-sized stack of paper into the MPF.
- 22. On the screen MPF/Letter will appear.
- 23. Press SELECT to confirm this.
- 24. Now on the screen MPF/Plain 1 will appear.
- 25. Press SELECT to confirm this.
- 26. We now have all the hardware settings on the printer correct

Now, all software settings screen shots are from WORD, this was done in Word 2003. However if in any application, you go File → Print and then click the Properties button, you will get this same driver properties window.

- 27. Open up Word and create a new document.
- 28. Go to File \rightarrow Print.
- 29. Select the Dell Color Laser Printer from the printers list
- 30. Click the Properties button to the right.
- 31. This brings up Driver Properties.
- 32. Click on the Paper Tray Tab.
- 33. Change the Paper Source to MPF.
- 34. Click the MPF Settings button.
- 35. Select Plain 1 from the list of paper types.
- 36. Click OK.
- 37. Now click the Print Setup Tab.
- 38. Select in paper size, Letter.
- 39. Select for Output Size, Same as Paper Size.
- 40. Click OK.
- 41. Click Close.

Setup Paper Type

Paper type	Weight (gsm)	Remarks
Plain1	60-80	-
Plain2	81-105	-
Covers1	106-163	-
Covers2	164-216	-
Coated1	106-163	Inkjet Printer paper cannot be used.
Coated2	164-216	Inkjet Printer paper cannot be used.
Transparency	-	Inkjet Printer paper cannot be used.
Label	-	Inkjet Printer paper cannot be used.
Envelopes	-	-

Configuration

Parallel Printing

A local printer is a printer attached to your computer or a print server using a USB or parallel cable. If your printer is attached to a network and not your computer, see "Setting Up Network Printing" in the Owner's Manual.

Installing Printer Drivers

After the printer driver has been installed, you need to do the Installable Options settings in Printer Property are needed according to the options you installed.

Microsoft® Windows Vista™

1. Insert the *Drivers and Utilities* CD into your computer.



NOTE: Click Continue when the User Account Control dialog box appears.

- 2. Click Personal Installation.
- 3. Connect your printer to your computer.

At this point, Plug and Play is activate automatically and installs the printer. If the Plug and Play is not activate, click Install.

When the Plug and Play is complete, the Installation goes to the next step automatically.

- 4. Select either the Typical Installation or Custom Installation radio button, and then click Next. If you select Custom Installation, you can select the specific software you want to install.
- 5. When the Congratulations! screen appears, click Print Test Page if necessary. Click Finish.

Windows XP, Windows XP 64-bit Edition, Windows Server® 2003, Windows Server 2003 64-bit Edition, and Windows 2000

- 1. Connect your printer to your computer.
- 2. When the Found New Hardware Wizard appears, click Cancel.
- 3. Insert the *Drivers and Utilities* CD into your computer.
- 4. Click Personal Installation.
- 5. Click Next.
- 6. Click Install. The Found New Hardware Wizard appears.
- 7. Click Next. The wizard automatically finds and installs the corresponding printer driver.
- 8. When the Completing the Found New Hardware Wizard screen appears, click Finish.
- 9. Select either the Typical Installation or Custom Installation option button, and then click Install. If you select Custom Installation, you can select the specific software you want to install.
- 10. When the Congratulations! screen appears, click Print Test Page if necessary. Click Finish.

Windows NT® 4.0

- 1. Connect your printer to your computer.
- 2. Insert the *Drivers and Utilities* CD into your computer.
- 3. Click Personal Installation.
- 4. Click Next.
- 5. On the Add Printer screen, select the port name from the Port Name combo box, and then set the printer's options under Printer Configuration. Click Next.
- 6. Select either Typical Installation or Custom Installation, and then click Install. If you select Custom Installation, you can select the specific software you want to install.
- 7. The Adobe License Agreement appears, click to accept the agreement and then click Install.
- 8. When the Congratulations! screen appears, click Finish.

USB Printing

A local printer is a printer attached to your computer or a print server using a USB or parallel cable. If your printer is attached to a network and not your computer, see "Setting Up Network Printing" in the Owner's Manual.

Setup Network



NOTE: To use this printer in a UNIX or Linux environment, you need to install a UX Filter or Linux Driver. For more information on how to install and use these, refer to your User's Guide.



NOTE: When using a CD drive in a Linux environment, you need to mount the CD according to your system environment. The command strings are mount/media/cdrom.



NOTE: For additional network set-up configurations, refer to your *User's Guide*.

Disable Microsoft® Windows Vista or Windows XP Firewall Before Printer Software Installation



NOTE: This step may not be necessary if you have Windows XP Service Pack 2 installed.

If your multifunction printer is connected directly to a network and the built-in operating system firewall is enabled, you cannot view your networked printer(s) when you run the Dell™ printer installation software. To prevent this situation, disable the built-in operating system firewall before you install the Dell printer software. To disable or enable your built-in operating system firewall, perform the following steps:



NOTICE: Dell recommends that you enable your built-in operating system firewall after you install the printer software. Enabling the built-in operating system firewall after you install the printer software does not limit the use of your network printer.

- 1. Click the Start button and click Help and Support.
- 2. In the Search box, type firewall and then click the green arrow.
- 3. In the Pick a Task list, click Enable or disable Internet Connection Firewall and then follow the instructions on the screen.

Print and Check the Printer Settings Page

- 1. Print the Printer Settings page.
 - a. When Ready to Print appears in the LCD, press Menu.
 - b. Report/List appears. Press ▶ or ✔.
 - c. Printer Setting is displayed. Press ✓.

The Printer Settings page is printed.

2. Under the TCP/IP heading, verify the IP address.

If the IP address is 0.0.0.0, wait for a few minutes to resolve the IP address automatically, and then print the Printer Settings page again.

Printer Setup



NOTE: When you use I Pv6 Mode for network printing, you cannot install the printer driver from the *Drivers and Utilities* CD. Use the Add Printer wizard in Windows Vista. For details, see " <u>Printing With Web Services for Devices (WSD)</u>" in the *User's Guide*.

- 1. Insert the *Drivers and Utilities* CD into your computer to launch the installation software.
- NOTE: If the CD does not automatically launch, click Start → Run, and then type D:\setup.exe (where D is the drive letter of your CD), and then click OK.
- NOTE: For Windows Vista, click Continue when the User Account Control dialog box appears.
- 2. Select Network Installation, and then click Next.
- 3. Select Configure New Wired Printer, or Install Driver and Software for existing network printer, and then click Next.
- 4. For local installation, select Local Installation, and then click Next.

For remote installation:

a. Select Remote Installation, and then click Next.



NOTE: Remote installation between Windows NT and the following operating systems is not supported.

- Windows XP Professional x64 Edition
- Windows Server 2003 x64 Edition
- Windows Vista
- Windows Vista x64



NOTE: Installation on Windows XP Home Edition, Windows Vista Home Basic, Windows Vista Home Premium, Windows Vista x64 Home Basic, and Windows Vista x64 Home Premium is not supported.

- b. Enter the computer name, user ID, and password. Then, click Add.
- c. Click Next.
- 5. Select the printer you want to install from the printer list, and then click Next. If the target printer is not displayed on the list, click Update to refresh the list or click Add Printer to add a printer to the list manually. You may specify the IP address and port name at this point.

If you have installed this printer on the server computer, select the I am setting up this printer on a server check box.



NOTE: When using AutoIP, 0.0.0.0 is displayed in the installer. Before you can continue, you must enter a valid IP address.

- 6. Specify the printer settings, and then click Next.
 - a. Enter the printer name.
 - b. If you want other users on the network to access this printer, select Share this printer with other computers on the network, and then enter a share name that users will easily identify.
 - c. If you want to set a printer as the default, select the Set this printer as default check box.
 - d. If you want to restrict color printing, select the appropriate Dell ColorTrack option. Enter the password when Color-Password Enabled is selected for Dell ColorTrack.
 - e. If the postscript driver is available and you want to install it, select the PostScript Driver check box.
- 7. Select the software and documentation you want to install, and then click Next. You can specify folders in which to install the Dell software and documentation. To change the folders, click Browser.
- 8. If the Adobe license agreement screen appears, click to accept the agreement and then click Install.
- 9. Click Finish to exit the wizard when the Congratulations! screen appears. If necessary, click Print Test Page to print a test page.

Use the Dell Printer Configuration Web Tool to monitor the status of your network printer without leaving your desk. You can view and/or change the printer configuration settings, monitor toner level, and when it is time to order replacement consumables, just click the Dell supplies link right from your Web browser.



NOTE: The Dell Printer Configuration Web Tool is not available when the printer is locally attached to a computer or a print server.

To launch the Dell Printer Configuration Web Tool, type the network printer IP address in your Web browser, and the printer configuration appears on the screen. Refer to your *User's Guide* for more information.

You can set up the Dell Printer Configuration Web Tool to send you an email when the printer needs supplies or intervention.

To set up e-mail alerts:

- 1. Launch the Dell Printer Configuration Web Tool.
- 2. Click E-Mail Alert link.
- 3. Under Setup E-Mail Lists and Alerts, enter the Primary SMTP Gateway, the Reply Address, and enter your email address or the key operator's email address in the email list box.

4. Click Apply New Settings.



NOTE: The SMTP server will display Connection in Progress until an error occurs.

Determining the Wireless Network Settings

You need to know the settings for the wireless network to set up the wireless printer. For details of the settings, contact your network administrator

settings, con	igs, contact your network authinistrator.		
Wireless Settings	SSID	Specifies the name that identifies the wireless network. Up to 32 alphanumeric characters.	
	Network Type	Specifies the network type from Ad-hoc or Infrastructure.	
Security Settings	Security	Selects the security method from No security, WEP, WPA-PSK TKIP and WPA-PSK AES.	
	Transmit Key	Specifies the transmit key from the list.	
	WEP Key	Specified the WEP key set used through the wireless network only when WEP is selected for Security.	
	Pass Phrase	Specifies the pass phrase of alphanumeric characters from 8 to 63 bytes long only when WPA-PSK is selected for Encryption.	



NOTE: To set WPA2-PSK as security, select WPA-PSK AES.

Wireless Installation using USB connection



NOTE: The optional multi protocol card with the Wireless Printer Adapter attached must be installed on the printer.

Scene 1. Install a printer to the already-operating wireless network (When wireless setting is already set to your computer)

- 1. Insert the *Drivers and Utilities* CD into your computer.
- 2. The *Drivers and Utilities* CD should launch the installation software automatically. If the CD does not automatically launch, click Start → Run, type D:\Setup.exe (where D is the drive letter of your CD), and then click OK.



NOTE: For Windows Vista, click Continue when the User Account Control dialog box appears.

- 3. Select the Network Installation option button, and then click Next.
- 4. Select the Configure Wireless Printer using a USB connection (Recommended) option button, and then click Next.

- 5. Reset the wireless setting of the printer following the steps on the Reset Wireless Setting screen.
- 6. In the list on the Select Printer screen, check the check box of the target printer that you are making wireless setting for, and then click Next. On the Enter Wireless Network Settings screen, set each wireless setting item, and then click Next. When you select the Fixed IP option button for IP Address assignment, click Change... and enter the IP address and subnet mask on the screen.



NOTE: When you enter a fixed IP address, avoid the "169.254.xxx.xxx" address used by AutoIP.

- 7. Set each item on the Enter Printer Settings screen, and then click Next.
- 8. On the Printer Software screen, specify the software that you want to install and installation path, and then click Next. At this point, the wireless setting specified on the Enter Wireless Network Settings screen is sent to the printer.
- 9. On the Wireless configuration is now complete screen, click Next. Since wireless setting is already made to your computer, no operation is necessary on this screen.
- 10. On the Setting-Ready Printer screen, verify that the correct IP address is assigned to the printer to which the wireless setting is set, and then click Install.



NOTE: If your system has any of the following operating systems:

Windows XP x64 Windows Server® 2003 x64 Windows Vista x64 Windows Vista x86

- ,skip step 11 and go to step 12.
- 11. If you select the I am setting up this printer on a server check box on the Select Printer screen and also select the PostScript Driver check box on the Enter Printer Settings screen, the Adobe Systems Inc. License Agreement screen appears. Select the I accept the terms of the license agreement option button, and then click Install.
- 12. On the Congratulations! screen, click Finish to complete the installation. A test page will be printed with the installed printer by clicking the Print Test Page button.

Scene 2. Construct new wireless network environment for both computer and printer (When wireless setting needs to be set to your computer)

- 1. Insert the *Drivers and Utilities* CD into your computer.
- 2. The *Drivers and Utilities* CD should launch the installation software automatically. If the CD does not automatically launch, click Start → Run, type D:\Setup.exe (where D is the drive letter of your CD), and then click OK.



NOTE: For Windows Vista, click Continue when the User Account Control dialog box appears.

- 3. Select the Network Installation option button, and then click Next.
- 4. Select the Configure Wireless Printer using a USB connection (Recommended) option button,

and then click Next.

- 5. Reset the wireless setting of the printer following the steps on the Reset Wireless Setting screen.
- 6. In the list on the Select Printer screen, check the check box of the target printer that you are making wireless setting for, and then click Next.



NOTE: When you enter a fixed IP address, avoid the "169.254.xxx.xxx" address used by AutoIP.

- 7. On the Enter Wireless Network Settings screen, set each wireless setting item, and then click Next. When you select the Fixed IP option button for IP Address assignment, click Change... and enter the IP address and subnet mask on the screen.
- 8. Set each item on the Enter Printer Settings screen, and then click Next.
- 9. On the Printer Software screen, specify the software that you want to install and installation path, and then click Next. At this point, the wireless setting specified on the Enter Wireless Network Settings screen is sent to the printer.
- 10. On the Wireless configuration is now complete screen, create the wireless setting sent to the printer on your computer following the steps below, and then click Next.



NOTE: If your computer provides a wireless LAN adapter tool, change the wireless settings using this tool. Or you can change the wireless settings using the tool provided by the operating system. See the instructions below.

For Windows XP and Windows Server 2003:

- a. Select Network Connections from Control Panel.
- b. Right-click Wireless Network Connection and select Properties.
- c. Select the Wireless Network tab.
- d. Make sure the check box for Use Windows to configure my wireless network settings is checked.
- e. Click Advanced.
- f. Do either of the following:

When wireless ad-hoc mode is set to the printer:

Select Computer to Computer (ad hoc) networks only and close the Advanced dialog box. When wireless infrastructure mode is set to the printer:

Select Access point (Infrastructure) networks only and close the Advanced dialog box.

- g. Click Add to display Wireless network properties.
- h. Enter the setting that you send to the printer and click OK.
- i. Click Move up to move the setting to the top of the list.

j. Click OK to close the Property dialog box.

For Windows Vista:

- a. Open Control Panel.
- b. Select Network and Internet.
- c. Select Network and Sharing Center.
- d. Select Connect to a network.
- e. Select the setting you send to the printer from the network items listed in Connect to a network.
- f. Select Connect Anyway in the warning dialog box indication indicating you are entering an unsecured area.
- g. Click Close in the dialog box after confirming the connection is a success.
- 11. On the Setting-Ready Printer screen, verify that the correct IP address is assigned to the printer to which the wireless setting is set, and then click Install.



NOTE: If your system has any of the following operating systems:

Windows XP x64
Windows Server® 2003 x64
Windows Vista x64
Windows Vista x86

,skip step 12 and go to step 13.

- 12. If you select the I am setting up this printer on a server check box on the Select Printer screen and also select the PostScript Driver check box on the Enter Printer Settings screen, the Adobe Systems Inc. License Agreement screen appears. Select the I accept the terms of the license agreement option button, and then click Install.
- 13. On the Congratulations! screen, click Finish to complete the installation. A test page will be printed with the installed printer by clicking the Print Test Page button.

Use the Dell Printer Configuration Web Tool to monitor the status of your network printer without leaving your desk. You can view and/or change the printer configuration settings, monitor toner level, and when it is time to order replacement consumables, just click the Dell supplies link right from your Web browser.



NOTE: The Dell Printer Configuration Web Tool is not available when the printer is locally attached to a computer or a print server.

Wireless Installation using wireless connection

Scene 1. Install a printer to the already-operating wireless network (When wireless setting is already set to your computer)

- 1. Insert the *Drivers and Utilities* CD into your computer to launch the installation software.
- NOTE: If the CD does not automatically launch, click Start → Run, and then type D:\setup.exe (where D is the drive letter of your CD), and then click OK.
- NOTE: For Windows Vista, click Continue when the User Account Control dialog box appears.
- 2. Select the Network Installation option button, and then click Next.
- 3. Select the Configure Wireless Printer using a wireless connection (Advanced) option button, and then click Next.
- 4. Reset the wireless setting of the printer following the steps on the Reset Wireless Setting screen.
- 5. Create the wireless setting of your computer following the steps shown on the Enable Communication with Printer screen, and then click Next.
- NOTE: If your computer provides a wireless LAN adapter tool, change the wireless settings using this tool. Or you can change the wireless settings using the tool provided by the operating system. See the instructions below.

The steps are as follows.

For Windows XP and Windows Server 2003:

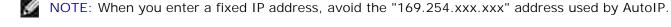
- a. Select Network Connections from Control Panel.
- b. Right-click Wireless Network Connection and select Properties.
- c. Select the Wireless Networks tab.
- d. Make sure the check box for Use Windows to configure my wireless network settings is checked.
- NOTE: Be sure to write down the current wireless computer settings in steps d and f so that you can restore them later.
- e. Click the Advanced button.
- f. Select Computer to Computer (ad hoc) networks only and close the Advanced dialog box.
- g. Click the Add button to display Wireless network properties.
- h. Under the Association tab, enter the following information and click OK.

Network name (SSID): dell_device Network Authentication: Open Data encryption: Disabled Ad hoc network: checked

- i. Click the Move up button to move the newly added SSID to the top of the list.
- j. Click OK to close the Property dialog box.

For Windows Vista:

- a. Open Control Panel.
- b. Select Network and Internet.
- c. Select Network and Sharing Center.
- d. Select Connect to a network.
- e. Select dell_device from the network items listed in Connect to a network.
- f. Select Connect Anyway in the warning dialog box indicating you are entering an unsecured area.
- g. Click Close in the dialog box after confirming the connection is a success.
- 6. On the Enter Wireless Network Settings screen, set each wireless setting item, and then click Next.
- 7. When you select the Fixed IP option button for IP Address assignment, click Change... and enter the IP address and subnet mask on the screen.



- 8. Set each item on the Enter Printer Settings screen, and then click Next.
- 9. On the Printer Software screen, specify the software that you want to install and installation path, and then click Next. At this point, the wireless setting specified on the Enter Wireless Network Settings screen is sent to the printer.
- 10. On the Wireless configuration is now complete screen, change the wireless setting of your computer to the same as that sent to the printer, and then click Next.



NOTE: If your computer provides a wireless LAN adapter tool, change the wireless settings using this tool. Or you can change the wireless settings using the tool provided by the operating system. See the instructions below.

For Windows XP and Windows Server 2003:

a. Select Network Connections from Control Panel.

- b. Right-click Wireless Network Connection and select Properties.
- c. Select the Wireless Network tab.
- d. Click Advanced.
- e. Do either of the following:

When wireless ad-hoc mode is set to the printer:

Select Computer to Computer (ad hoc) networks only and close the Advanced dialog box. When wireless infrastructure mode is set to the printer:

Select Access point (Infrastructure) networks only and close the Advanced dialog box.

- f. Select the setting that you send to the printer in the list in Preferred Network group.
- g. Click Move up to move the setting to the top of the list.
- h. Click OK to close the Property dialog box.

For Windows Vista:

- a. Open Control Panel.
- b. Select Network and Internet.
- c. Select Network and Sharing Center.
- d. Select Connect to a network.
- e. Select the original setting from the network items listed in Connect to a network, and then click Connect.
- 11. On the Setting-Ready Printer screen, verify that the correct IP address is assigned to the printer to which the wireless setting is set, and then click Install.



NOTE: If your system has any of the following operating systems:

agreement option button, and then click Install.

Windows XP x64 Windows Server® 2003 x64 Windows Vista x64 Windows Vista x86 ,skip step 12 and go to step 13.

- 12. If you select the Lam setting up this printer on a server check box on the Select Printer screen and also select the PostScript Driver check box on the Enter Printer Settings screen, the Adobe Systems Inc. License Agreement screen appears. Select the I accept the terms of the license
- 13. On the Congratulations! screen, click Finish to complete the installation. A test page will be printed with the installed printer by clicking the Print Test Page button.

Scene 2. Construct new wireless network environment for both computer and printer (When wireless setting needs to be set to your computer)

1. Insert the *Drivers and Utilities* CD into your computer to launch the installation software.



NOTE: If the CD does not automatically launch, click Start → Run, and then type D:\setup.exe (where D is the drive letter of your CD), and then click OK.



NOTE: For Windows Vista, click Continue when the User Account Control dialog box appears.

- 2. Select the Network Installation option button, and then click Next.
- 3. Select the Configure Wireless Printer using a wireless connection (Advanced) option button, and then click Next.
- 4. Reset the wireless setting of the printer following the steps on the Reset Wireless Setting screen.
- 5. Create the wireless setting of your computer following the steps shown on the Enable Communication with Printer screen, and then click Next. The steps are as follows.



NOTE: If your computer provides a wireless LAN adapter tool, change the wireless settings using this tool. Or you can change the wireless settings using the tool provided by the operating system. See the instructions below.

For Windows XP and Windows Server 2003:

- a. Select Network Connections from Control Panel.
- b. Right-click Wireless Network Connection and select Properties.
- c. Select the Wireless Networks tab.
- d. Make sure the check box for Use Windows to configure my wireless network settings is checked.



NOTE: Be sure to write down the current wireless computer settings in steps d and f so that you can restore them later.

- e. Click the Advanced button.
- f. Select Computer to Computer (ad hoc) networks only and close the Advanced dialog box.
- g. Click the Add button to display Wireless network properties.
- h. Under the Association tab, enter the following information and click OK.

Network name (SSID): dell device Network Authentication: Open Data encryption: Disabled

Ad hoc network: checked

- i. Click the Move up button to move the newly added SSID to the top of the list.
- j. Click OK to close the Property dialog box.

For Windows Vista:

- a. Open Control Panel.
- b. Select Network and Internet.
- c. Select Network and Sharing Center.
- d. Select Connect to a network.
- e. Select dell_device from the network items listed in Connect to a network.
- f. Select Connect Anyway in the warning dialog box indicating you are entering an unsecured area.
- g. Click Close in the dialog box after confirming the connection is a success.
- 6. On the Enter Wireless Network Settings screen, set each wireless setting item, and then click Next.
- 7. When you select the Fixed IP option button for IP Address assignment, click Change... and enter the IP address and subnet mask on the screen.
- NOTE: When you enter a fixed IP address, avoid the "169.254.xxx.xxx" address used by AutoIP.
- 8. Set each item on the Enter Printer Settings screen, and then click Next.
- 9. On the Printer Software screen, specify the software that you want to install and installation path, and then click Next. At this point, the wireless setting specified on the Enter Wireless Network Settings screen is sent to the printer.
- 10. On the Wireless configuration is now complete screen, create the wireless setting sent to the printer on your computer following the steps below, and then click Next.



NOTE: If your computer provides a wireless LAN adapter tool, change the wireless settings using this tool. Or you can change the wireless settings using the tool provided by the operating system. See the instructions below.

For Windows XP and Windows Server 2003:

- a. Select Network Connections from Control Panel.
- b. Right-click Wireless Network Connection and select Properties.

- c. Select the Wireless Network tab.
- Make sure the check box for Use Windows to configure my wireless network settings is checked.
- e. Click Advanced.
- f. Do either of the following:

When wireless ad-hoc mode is set to the printer:

Select Computer to Computer (ad hoc) networks only and close the Advanced dialog box. When wireless infrastructure mode is set to the printer:

Select Access point (Infrastructure) networks only and close the Advanced dialog box.

- g. Click Add to display Wireless network properties.
- h. Enter the setting that you send to printer and click OK.
- i. Click Move up to move the setting to the top of the list.
- j. Click OK to close the Property dialog box.

For Windows Vista:

- a. Open Control Panel.
- b. Select Network and Internet.
- c. Select Network and Sharing Center.
- d. Select Connect to a network.
- e. Select the setting you send to the printer from the network items listed in Connect to a network.
- f. Select Connect Anyway in the warning dialog box indication indicating you are entering an unsecured area.
- g. Click Close in the dialog box after confirming the connection is a success.
- 11. On the Setting-Ready Printer screen, verify that the correct IP address is assigned to the printer to which the wireless setting is set, and then click Install.

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NOTE: If your system has any of the following operating systems:

Windows XP x64

Windows Server® 2003 x64

Windows Vista x64

Windows Vista x86

,skip step 12 and go to step 13.

- 12. If you select the I am setting up this printer on a server check box on the Select Printer screen and also select the PostScript Driver check box on the Enter Printer Settings screen, the Adobe Systems Inc. License Agreement screen appears. Select the I accept the terms of the license agreement option button, and then click Install.
- 13. On the Congratulations! screen, click Finish to complete the installation. A test page will be printed with the installed printer by clicking the Print Test Page button.

Use the Dell Printer Configuration Web Tool to monitor the status of your network printer without leaving your desk. You can view and/or change the printer configuration settings, monitor toner level, and when it is time to order replacement consumables, just click the Dell supplies link right from your Web browser.



NOTE: The Dell Printer Configuration Web Tool is not available when the printer is locally attached to a computer or a print server.

Wireless Installation using Dell Printer Configuration Web Tool

Scene 1. Install a printer to the already-operating wireless network (When wireless setting is already set to your computer)

For DHCP network:

1. Create wireless setting of your computer following the steps below.



NOTE: If your computer provides a wireless LAN adapter tool, change the wireless settings using this tool. Or you can change the wireless settings using the tool provided by the operating system. See the instructions below.

For Windows XP and Windows Server 2003:

- a. Select Network Connections from Control Panel.
- b. Right-click Wireless Network Connection and select Properties.
- c. Select the Wireless Networks tab.
- Make sure the check box for Use Windows to configure my wireless network settings is checked.



NOTE: Be sure to write down the current wireless computer settings in steps d and f so that you can restore them later.

- e. Click the Advanced button.
- f. Select Computer to Computer (ad hoc) networks only and close the Advanced dialog box.

- g. Click the Add button to display Wireless network properties.
- h. Under the Association tab, enter the following information and click OK.

Network name (SSID): dell_device

Network Authentication: Open

Data encryption: Disabled Ad hoc network: checked

- i. Click the Move up button to move the newly added SSID to the top of the list.
- j. Click OK to close the Property dialog box.



NOTE: When your operating system is earlier than Windows 2000, create settings according to the manual of the wireless setting tool provided by your wireless device manufacturer.

For Windows Vista:

- a. Open Control Panel.
- b. Select Network and Internet.
- c. Select Network and Sharing Center.
- d. Select Connect to a network.
- e. Select dell_device from the network items listed in Connect to a network.
- f. Select Connect Anyway in the warning dialog box indicating you are entering an unsecured area.
- g. Click Close in the dialog box after confirming the connection is a success.
- 2. Check the IP address assigned by AutoIP on the printer.

```
e.g.: 168.254.1.1
```

- 3. Check that the IP address on your computer is assigned by DHCP.
- 4. Open Dell Printer Configuration Web Tool using WEB browser.

```
e.g.: http://168.254.1.1/
```

- 5. Change the wireless setting of the printer on Dell Printer Configuration Web Tool.
- 6. Reboot the printer.
- 7. Restore the wireless setting on your computer.



NOTE: If your computer provides a wireless LAN adapter tool, change the wireless settings using this tool. Or you can change the wireless settings using the tool provided by the operating system. See the instructions below.

For Windows XP and Windows Server 2003:

- a. Select Network Connections from Control Panel.
- b. Right-click Wireless Network Connection and select Properties.
- c. Select Wireless Network tab.
- d. Click Advanced.
- e. Do either of the following:

When wireless ad-hoc mode is set to the printer:

Select Computer to Computer (ad hoc) networks only and close the Advanced dialog box. When wireless infrastructure mode is set to the printer:

Select Access point (Infrastructure) networks only and close the Advanced dialog box.

- f. Select the setting that you send to the printer in the list in Preferred Network group.
- g. Click Move up to move the setting to the top of the list.
- h. Click OK to close the Property dialog box.



NOTE: When your operating system is earlier than Windows 2000, create settings according to the manual of the wireless setting tool provided by your wireless device manufacturer.

For Windows Vista:

- a. Open Control Panel.
- b. Select Network and Internet.
- c. Select Network and Sharing Center.
- d. Select Connect to a network.
- e. Select the original setting from the network items listed in Connect to a network, and then click Connect.

For Fixed IP network:

1. Create wireless setting of your computer following the steps below.

4

NOTE: If your computer provides a wireless LAN adapter tool, change the wireless settings using this tool. Or you can change the wireless settings using the tool provided by the operating system. See the instructions below.

For Windows XP and Windows Server 2003:

- a. Select Network Connections from Control Panel.
- b. Right-click Wireless Network Connection and select Properties.
- c. Select the Wireless Networks tab.
- Make sure the check box for Use Windows to configure my wireless network settings is checked.



NOTE: When Be sure to write down the current wireless computer settings in steps 4 and 6 so that you can restore them later.)

- e. Click the Advanced button.
- f. Select Computer to Computer (ad hoc) networks only and close the Advanced dialog box.
- g. Click the Add button to display Wireless network properties.
- h. Under the Association tab, enter the following information and click OK.

Network name (SSID): dell_device

Network Authentication: Open

Data encryption: Disabled Ad hoc network: checked

- i. Click the Move up button to move the newly added SSID to the top of the list.
- j. Click OK to close the Property dialog box.



NOTE: When your operating system is earlier than Windows 2000, create settings according to the manual of the wireless setting tool provided by your wireless device manufacturer.

For Windows Vista:

- a. Open Control Panel.
- b. Select Network and Internet.
- c. Select Network and Sharing Center.
- d. Select Connect to a network.
- e. Select dell device from the network items listed in Connect to a network.

- f. Select Connect Anyway in the warning dialog box indicating you are entering an unsecured area.
- g. Click Close in the dialog box after confirming the connection is a success.
- 2. Check the IP address on your computer.

e.g.: 1.2.3.4

3. Set the IP address on the printer.

e.g.: 1.2.3.5

4. Open Dell Printer Configuration Web Tool using WEB browser.

e.g.: http://1.2.3.5/

- 5. Change the wireless setting of the printer on Dell Printer Configuration Web Tool.
- 6. Reboot the printer.
- 7. Restore the wireless setting on your computer.



NOTE: If your computer provides a wireless LAN adapter tool, change the wireless settings using this tool. Or you can change the wireless settings using the tool provided by the operating system. See the instructions below.

For Windows XP and Windows Server 2003:

- a. Select Network Connections from Control Panel.
- b. Right-click Wireless Network Connection and select Properties.
- c. Select Wireless Network tab.
- d. Click Advanced.
- e. Do either of the following:

When wireless ad-hoc mode is set to the printer:

Select Computer to Computer (ad hoc) networks only and close the Advanced dialog box. When wireless infrastructure mode is set to the printer:

Select Access point (Infrastructure) networks only and close the Advanced dialog box.

f. Select the setting that you send to the printer in the list in Preferred Network group.

- g. Click Move up to move the setting to the top of the list.
- h. Click OK to close the Property dialog box.



NOTE: When your operating system is earlier than Windows 2000, create settings according to the manual of the wireless setting tool provided by your wireless device manufacturer.

For Windows Vista:

- a. Open Control Panel.
- b. Select Network and Internet.
- c. Select Network and Sharing Center.
- d. Select Connect to a network.
- e. Select the original setting from the network items listed in Connect to a network, and then click Connect.

Scene 2. Construct new wireless network environment for both computer and printer (When wireless setting needs to be set to your computer)

For DHCP network:

1. Create wireless setting of your computer following the steps below.



NOTE: If your computer provides a wireless LAN adapter tool, change the wireless settings using this tool. Or you can change the wireless settings using the tool provided by the operating system. See the instructions below.

For Windows XP and Windows Server 2003:

- a. Select Network Connections from Control Panel.
- b. Right-click Wireless Network Connection and select Properties.
- c. Select the Wireless Networks tab.
- Make sure the check box for Use Windows to configure my wireless network settings is checked.



NOTE: Be sure to write down the current wireless computer settings in steps e and g so that you can restore them later.

- e. Click the Advanced button.
- f. Select Computer to Computer (ad hoc) networks only and close the Advanced dialog box.

- g. Click the Add button to display Wireless network properties.
- h. Under the Association tab, enter the following information and click OK.

Network name (SSID): dell_device

Network Authentication: Open

Data encryption: Disabled Ad hoc network: checked

- i. Click the Move up button to move the newly added SSID to the top of the list.
- j. Click OK to close the Property dialog box.



NOTE: When your operating system is earlier than Windows 2000, create settings according to the manual of the wireless setting tool provided by your wireless device manufacturer.

For Windows Vista:

- a. Open Control Panel.
- b. Select Network and Internet.
- c. Select Network and Sharing Center.
- d. Select Connect to a network.
- e. Select dell_device from the network items listed in Connect to a network.
- f. Select Connect Anyway in the warning dialog box indicating you are entering an unsecured area.
- g. Click Close in the dialog box after confirming the connection is a success.
- 2. Check the IP address assigned by AutoIP on the printer.

```
e.g.: 168.254.1.1
```

- 3. Check that the IP address on your computer is assigned by DHCP.
- 4. Open Dell Printer Configuration Web Tool using WEB browser.

e.g.: http://168.254.1.1

- 5. Create wireless setting of the printer on Dell Printer Configuration Web Tool.
- 6. Reboot the printer.
- 7. Restore the wireless setting on your computer.



NOTE: If your computer provides a wireless LAN adapter tool, change the wireless settings using this tool. Or you can change the wireless settings using the tool provided by the operating system. See the instructions below.

For Windows XP and Windows Server 2003:

- a. Select Network Connections from Control Panel.
- b. Right-click Wireless Network Connection and select Properties.
- c. Select Wireless Network tab.
- d. Make sure the check box for Use Windows to configure my wireless network settings is checked.
- e. Click Advanced.
- f. Do either of the following:

When wireless ad-hoc mode is set to the printer:

Select Computer to Computer (ad hoc) networks only and close the Advanced dialog box. When wireless infrastructure mode is set to the printer:

Select Access point (Infrastructure) networks only and close the Advanced dialog box.

- g. Click Add to display Wireless network properties.
- h. Enter the setting that you send to printer and click OK.
- i. Click Move up to move the setting to the top of the list.
- j. Click OK to close the Property dialog box.



NOTE: WhenWhen your operating system is earlier than Windows 2000, create settings according to the manual of the wireless setting tool provided by your wireless device manufacturer.

For Windows Vista:

- a. Open Control Panel.
- b. Select Network and Internet.
- c. Select Network and Sharing Center.
- d. Select Connect to a network.
- e. Select the setting you send to the printer from the network items listed in Connect to a network.
- f. Select Connect Anyway in the warning dialog box indication indicating you are entering an unsecured area.

g. Click Close in the dialog box after confirming the connection is a success.

For Fixed IP network:

1. Create wireless setting of your computer following the steps below.



NOTE: If your computer provides a wireless LAN adapter tool, change the wireless settings using this tool. Or you can change the wireless settings using the tool provided by the operating system. See the instructions below.

For Windows XP and Windows Server 2003:

- a. Select Network Connections from Control Panel.
- b. Right-click Wireless Network Connection and select Properties.
- c. Select the Wireless Networks tab.
- Make sure the check box for Use Windows to configure my wireless network settings is checked.



NOTE: Be sure to write down the current wireless computer settings in steps d and f so that you can restore them later.

- e. Click the Advanced button.
- f. Select Computer to Computer (ad hoc) networks only and close the Advanced dialog box.
- g. Click the Add button to display Wireless network properties.
- h. Under the Association tab, enter the following information and click OK.

Network name (SSID): dell_device

Network Authentication: Open

Data encryption: Disabled Ad hoc network: checked

- i. Click the Move up button to move the newly added SSID to the top of the list.
- j. Click OK to close the Property dialog box.



NOTE: When your operating system is earlier than Windows 2000, create settings according to the manual of the wireless setting tool provided by your wireless device manufacturer.

For Windows Vista:

a. Open Control Panel.

- b. Select Network and Internet.
- c. Select Network and Sharing Center.
- d. Select Connect to a network.
- e. Select dell_device from the network items listed in Connect to a network.
- f. Select Connect Anyway in the warning dialog box indicating you are entering an unsecured area.
- g. Click Close in the dialog box after confirming the connection is a success.
- 2. Check the IP address on your computer.

e.g.: 1.2.3.4

3. Set the IP address on the printer.

e.g.: 1.2.3.5

4. Open Dell Printer Configuration Web Tool using WEB browser.

e.g.: http://1.2.3.5

- 5. Change the wireless setting of the printer on Dell Printer Configuration Web Tool.
- 6. Reboot the printer.
- 7. Restore the wireless setting on your computer.

#

NOTE: If your computer provides a wireless LAN adapter tool, change the wireless settings using this tool. Or you can change the wireless settings using the tool provided by the operating system. See the instructions below.

For Windows XP and Windows Server 2003:

- a. Select Network Connections from Control Panel.
- b. Right-click Wireless Network Connection and select Properties.
- c. Select Wireless Network tab.
- Make sure the check box for Use Windows to configure my wireless network settings is checked.
- e. Click Advanced.
- f. Do either of the following:

When wireless ad-hoc mode is set to the printer:

Select Computer to Computer (ad hoc) networks only and close the Advanced dialog box. When wireless infrastructure mode is set to the printer:

Select Access point (Infrastructure) networks only and close the Advanced dialog box.

- g. Click Add to display Wireless network properties.
- h. Enter the setting that you send to printer and click OK.
- i. Click Move up to move the setting to the top of the list.
- j. Click OK to close the Property dialog box.



NOTE: When your operating system is earlier than Windows 2000, create settings according to the manual of the wireless setting tool provided by your wireless device manufacturer.

For Windows Vista:

- a. Open Control Panel.
- b. Select Network and Internet.
- c. Select Network and Sharing Center.
- d. Select Connect to a network.
- e. Select the setting you send to the printer from the network items listed in Connect to a network.
- f. Select Connect Anyway in the warning dialog box indication indicating you are entering an unsecured area.
- g. Click Close in the dialog box after confirming the connection is a success.

Wireless Setting through Dell Printer Configuration Web Tool - Advanced setup

Access point (Infrastructure, DHCP network)

1. Create new wireless settings for your computer.



NOTE: If your computer provides a wireless LAN adapter tool, change the wireless settings using this tool. Or you can change the wireless settings using the tool provided by the operating system. See the instructions below.

For Windows XP and Windows Server 2003:

a. Select Network Connections from Control Panel.

- b. Right-click Wireless Network Connection and select Properties.
- c. Select the Wireless Networks tab.
- Make sure the check box for Use Windows to configure my wireless network settings is checked.



NOTE: Be sure to write down the current wireless computer settings in steps d and g so that you can restore them later.

- e. Click the Advanced button.
- f. Select Computer to Computer (ad hoc) networks only and close the Advanced dialog box.
- g. Click the Add button to display Wireless network properties.
- h. Under the Association tab, enter the following information and click OK.

Network name (SSID): dell_device Network Authentication: Open Data encryption: Disabled

- i. Click the Move up button to move the newly added SSID to the top of the list.
- j. Click OK to close the Property dialog box.



NOTE: When your operating system is earlier than Windows 2000, create settings according to the manual of the wireless setting tool provided by your wireless device manufacturer.

For Windows Vista:

Ad hoc network: checked

- a. Open Control Panel.
- b. Select Network and Internet.
- c. Select Network and Sharing Center.
- d. Select Connect to a network.
- e. Select dell_device from the network items listed in Connect to a network.
- f. Select Connect Anyway in the warning dialog box indicating you are entering an unsecured area.
- g. Click Close in the dialog box after confirming the connection is a success.
- 2. Set up the printer wireless adapter IP address.

- a. Reset the settings for the wireless adapter to the default.
- i. Press Menu on printer control panel.
- ii. Scroll down and select Admin Menu.
- iii. Scroll down and select Wireless net.
- iv. Scroll down and select Reset MPC.
- v. Restart the printer.
 - b. Retrieve the wireless adapter IP address on the printer.
- i. Press Menu on the printer control panel.
- ii. Scroll down and select Admin Menu.
- iii. Scroll down and select wireless net.
- iv. Scroll down and select TCP/IP.
- v. Scroll down and select IP Address.

(Default IP address range: 169.254.xxx.yyy)

- 3. Access Dell Printer Configuration Web Tool on your computer browser.
 - a. Assign the PC IP address by DHCP mode (Change the TCP/IP properties to obtain the IP address automatically).
 - b. Make sure your computer has the same IP address range as the printer wireless adapter.
 - e.g. 169.254.xxx.zzz
 - c. Access the Dell Printer Configuration Web Tool using the WEB browser, and then type printer wireless adapter settings in the address field of the browser.
 - e.g. http://169.254.xxx.yyy/ (Your wireless adapter IP address)
 - d. Change wireless settings (SSID/ communication mode) from Dell Printer Configuration Web Tool.
 - i. Click Print server setting on the left navigational bar.
 - ii. Click the Print server setting tab.
 - iii. Click the TCP/IP sub-tab.
 - iv. Select DHCP.
 - v. Click the Apply new setting button without restarting the printer (Ignore the screen instructions to restart the printer).
 - vi. Click the Wireless LAN sub-tab.
 - vii. Change the SSID setting (according to your Access point SSID) and change Network type to Infrastructure.

viii. Click the Restart printer to apply new settings button.

- 4. Once printer wireless adapter is properly configured, you may use the typical network printer installation method to complete driver installation.
- 5. To communicate with printer, you need to restore the previous wireless settings on your computer.
- 6. Restore the previous wireless settings for your computer.



NOTE: If your computer provides a wireless LAN adapter tool, change the wireless settings using this tool. Or you can change the wireless settings using the tool provided by the operating system. See the instructions below.

For Windows XP and Windows Server 2003:

- a. Select Network Connections from Control Panel.
- b. Right-click Wireless Network Connection and select Properties.
- c. Select the Wireless Network tab.
- d. Click the Advanced button.
- e. Select Access point (Infrastructure) networks only and close the Advanced dialog box (Applicable to printer with the wireless infrastructure mode).
- f. Select the setting that you send to the printer in the list in the Preferred Network group
- g. Click Move up to move the setting to the top of the list.
- h. Click OK to close the Property dialog box.



NOTE: When your operating system is earlier than Windows 2000, create settings according to the manual of the wireless setting tool provided by your wireless device manufacturer.

For Windows Vista:

- a. Open Control Panel.
- b. Select Network and Internet.
- c. Select Network and Sharing Center.
- d. Select Connect to a network.
- e. Select the setting you send to the printer from the network items listed in Connect to a network.
- f. Select Connect Anyway in the warning dialog box indication indicating you are entering an unsecured area.
- g. Click Close in the dialog box after confirming the connection is a success.

Access point (Infrastructure, Fixed IP network)

- 1. Ensure that the addresses of your computer and access point is in the same IP range. Match the subnet mask and gateway addresses of your computer to the access point settings.
- 2. Create new wireless settings of your computer by following the steps below.



NOTE: If your computer provides a wireless LAN adapter tool, change the wireless settings using this tool. Or you can change the wireless settings using the tool provided by the operating system. See the instructions below.

For Windows XP and Windows Server 2003:

- a. Select Network Connections from Control Panel.
- b. Right-click Wireless Network Connection and select Properties.
- c. Select the Wireless Networks tab.
- d. Make sure the check box for Use Windows to configure my wireless network settings is checked.



NOTE: Be sure to write down the current wireless computer settings in steps d and f so that you can restore them later.

- e. Click the Advanced button.
- f. Select Computer to Computer (ad hoc) networks only and close the Advanced dialog box.
- g. Click the Add button to display Wireless network properties.
- h. Under the Association tab, enter the following information and click OK.

Network name (SSID): dell_device Network Authentication: Open Data encryption: Disabled Ad hoc network: Checked

- i. Click the Move up button to move the newly added SSID to the top of the list.
- j. Click OK to close the Property dialog box.



NOTE: When your OS is earlier than Windows 2000, create settings according to the manual of the wireless setting tool provided by your wireless device manufacturer.

For Windows Vista:

a. Open Control Panel.

- b. Select Network and Internet.
- c. Select Network and Sharing Center.
- d. Select Connect to a network.
- e. Select dell_device from the network items listed in Connect to a network.
- f. Select Connect Anyway in the warning dialog box indicating you are entering an unsecured area.
- g. Click Close in the dialog box after confirming the connection is a success.
- 3. Check the IP, subnet mask and gateway address on your computer.

e.g. IP: 192.168.1.1

Subnet mask: 255.255.0.0

- 4. Set the IP address from the printer control panel to be in the same range as that of your computer. Match the subnet mask and gateway addresses of the printer to your computer settings.
 - a. Press Menu button.
 - b. Scroll to Admin menu.
 - c. Select Wireless Net.
 - d. Select TCP/IP.
 - e. Select Get IP Address.
 - f. Select Panel.
 - g. Scroll back to IP Address.
 - h. Manually enter the IP address using the directional buttons on the control panel and press enter button.

e.g.: 192.168.1.2

- i. Scroll back to Subnet Mask.
- j. Manually enter the subnet mask address using the directional buttons on the control panel and press enter button.
- k. Scroll back to Gateway Address.
- I. Manually enter the gateway address using the directional buttons on the control panel and press the Enter button.
- m. Restart the printer.

- 5. Open Dell Printer Configuration Web Tool using the WEB browser.
 - e.g.: http://:192.168.1.2
- 6. Change wireless settings of the printer from Dell Printer Configuration Web Tool.
 - a. Click Print server setting on the left navigational bar.
 - b. Click Print server setting tab.
 - c. Click Wireless LAN sub-tab.
 - d. Change the SSID setting (according to your access point SSID) and change Network type to Infrastructure.
 - e. Click the Restart printer to apply new settings button.
- 7. Restore the previous wireless settings for your computer.



NOTE: If your computer provides a wireless LAN adapter tool, change the wireless settings using this tool. Or you can change the wireless settings using the tool provided by the operating system. See the instructions below.

For Windows XP and Windows Server 2003:

- a. Select Network Connections from Control Panel.
- b. Right-click Wireless Network Connection and select Properties.
- c. Select Wireless Network tab.
- d. Click Advanced.
- e. Do either of the following:

When wireless ad-hoc mode is set to the printer:

Select Computer to Computer (ad hoc) networks only and close the Advanced dialog box. When wireless infrastructure mode is set to the printer:

Select Access point (Infrastructure) networks only and close the Advanced dialog box.

- f. Select the setting that you send to the printer in the list in Preferred Network group.
- g. Click Move up to move the setting to the top of the list.

For Windows Vista:

a. Open Control Panel.

- b. Select Network and Internet.
- c. Select Network and Sharing Center.
- d. Select Connect to a network.
- Select the setting you send to the printer from the network items listed in Connect to a network.
- f. Select Connect Anyway in the warning dialog box indication indicating you are entering an unsecured area.
- g. Click Close in the dialog box after confirming the connection is a success.
- 8. Click OK to close the Property dialog box.



NOTE: When your operating system is earlier than Windows 2000, create settings according to the manual of the wireless setting tool provided by your wireless device manufacturer.

Setup Security

- 1. Press Menu.
- 2. Press ▼ until Admin Menu appears, and then press ▶ or ✓.
- 3. Press $\overline{}$ until Panel Settings appears, and then press $\stackrel{\blacktriangleright}{}$ or $\stackrel{\checkmark}{}$.
- Press ▼ until Panel Lock appears, and then press ► or ▼. Security Settings is displayed.

To set or change the password to limit access to the menus from the operator panel.

Set the password of the Dell Printer Configuration Web Tool from Set Password in Print Server Settings.

Values:

Panel Lock	Specifies whether to limit access to the menus.
Change Password	Sets a password to limit access to the menus.
Re-enter Password	Type the new password again to confirm.



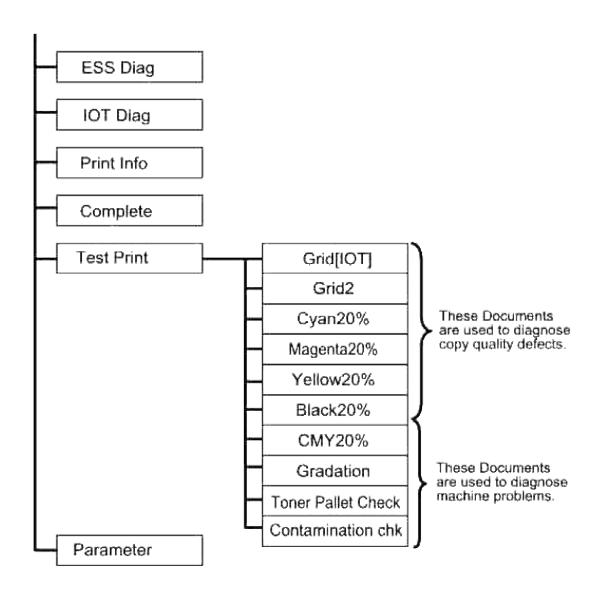
NOTE: This menu sets a password to lock the operator panel. When changing the password for the Dell Printer Configuration Web Tool, click Set Password on the left frame and set the password.

Troubleshooting Instructions

Use the Customer Mode to locate the unit in the printer that causes a problem.

Diagnostic Menu Map (Customer Mode)

- 1. Turn off the printer.
- 2. Turn on the printer while holding down ▲ and ▼. The Customer Mode menu appears.



Testing "Print Quality"

"Print Quality" is used to diagnose print quality defects.

1. On the Customer Mode menu, go down to Cyan20%, Magenta20%, Yellow20%, or Black20% and press ✓



	Cyan20%	Outputs cyan toner at 20% density on the whole area of the paper.
	Magenta20%	Outputs magenta toner at 20% density on the whole area of the paper.
	Yellow20%	Outputs yellow toner at 20% density on the whole area of the paper.
	Black20%	Outputs black toner at 20% density on the whole area of the paper.

After you output the test results, contact Dell.

Testing "Toner Pallet Check" or "Contamination Chk"

"Toner Pallet Check" and "Contamination Chk" are used to diagnose machine problems.

1. On the Customer Mode menu, go down to TonerPalletCheck or ContaminationChk, and press ✓.



Toner Pallet Check	Allows you to identify the problem with the toner when print quality problems occur while printing pictures or photos.	
Contamination Check	Allows you to check for any regular lines or spots when printing if print quality problems are occurring.	

After you output the test results, contact Dell.

Clear NVRAM

You can restore the original factory default menu settings by initializing NVRAM.

- 1. Press Menu.
- 2. Press ▼ until Admin Menu appears, and then press ▶ or ✓.
- 3. Press ▼ until Maintenance appears, and then press ▶ or ✔.
- 4. Press ▼ until Reset Defaults appears, and then press ▶ or ✓.

5. The Are you sure? message appears on the operator panel. Press ✓.

Turn off the printer, and then on again.

Others

How to replace the Imaging Drum



CAUTION: Before performing any of the following procedures, read and follow the safety instructions in your *Owner's Manual*.



CAUTION: Never throw a used imaging drum into a fire. It could explode resulting in burns and injuries.

Dell cartridges are available only through Dell. You can order more online at www.dell.com/supplies or by phone. To order by phone, see your *Owner's Manual*.

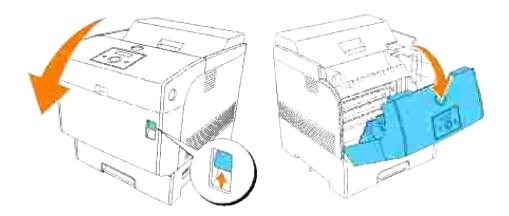
Dell recommends Dell imaging drums for your printer. Dell does not provide warranty coverage for problems caused by using accessories, parts, or components not supplied by Dell.

Removing the Used I maging Drum

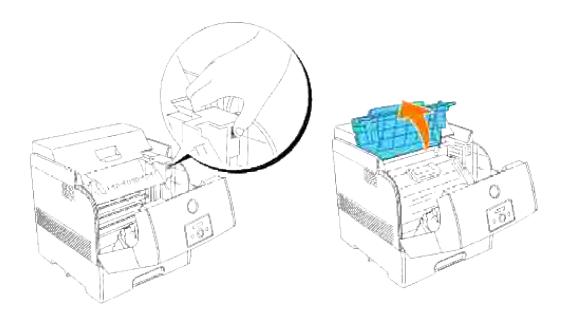


NOTE: Remove any print jobs from the center output tray, and close the multipurpose feeder cover before opening the front cover.

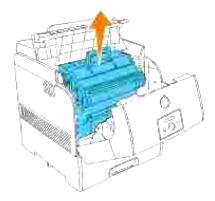
1. Push the front latch up and fully open the front cover.



2. Push the button as shown in the following illustration and open the top cover.



3. Grab the imaging drum by the handle, and pull it up and out.

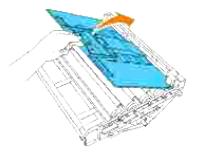


 Λ

CAUTION: Do not touch inside the printer with your hands. Some parts may be hot. Allow time for the printer to cool before attempting to remove parts in this area.

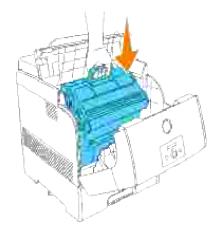
Installing the New Imaging Drum

1. Remove the protective cover from the imaging drum.

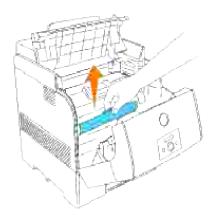


CAUTION: Make sure nothing touches or scratches the surface of the light-sensitive drum surface (green-colored roller) or the transfer roller (black-colored roller). Scratches, dirt, or oil from your hands on the imaging drum or transfer roller may reduce the print quality.

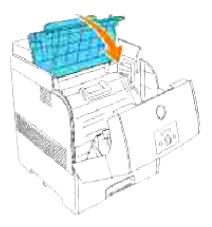
2. Holding the imaging drum by the handle with the flat part facing the back of the printer, align the plastic guides on both sides of the imaging drum with the slots in front of the arrows on the printer.



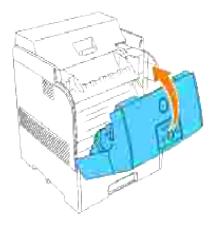
- 3. Pull the protective cover on the imaging drum straight up to remove it.
- NOTICE: Do not touch the transfer roller (black-colored roller). Make sure that nothing touches or scratches the roller surface. Scratches or oil from your hands on the roller deteriorates print quality.



4. Close the top cover.

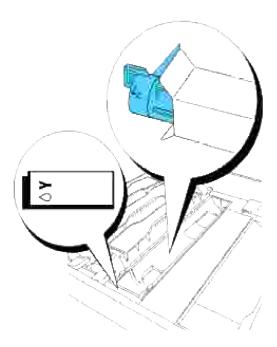


5. Close the front cover.

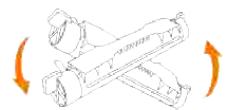


How to install the Toner Cartridge

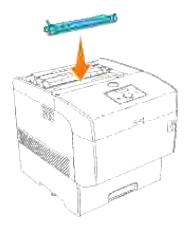
1. Select the new toner cartridge whose color matches the cartridge carrier and remove it from its packaging.



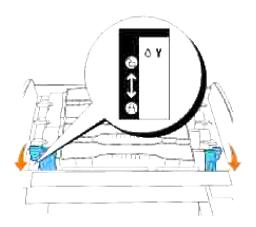
2. Shake the toner cartridge several times as illustrated to distribute the toner evenly.



3. Align the toner cartridge with the corresponding cartridge carrier in the printer and insert it.



4. Grip the levers at each end of the toner cartridge with your fingers, then push down firmly to rotate the levers forward.



5. Pull the toner seal straight up to remove it.



NOTICE: Pull the toner seal straight up. Pulling the toner seal diagonally may tear the seal.



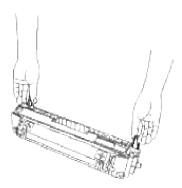
NOTICE: If it takes more than five seconds until you remove the toner seal after inserting the toner cartridge in the printer, an error message may appear. In this case, perform step 4 again, or turn the printer off once and then on again.

6. Replace the top cover by inserting its front side into the printer first.

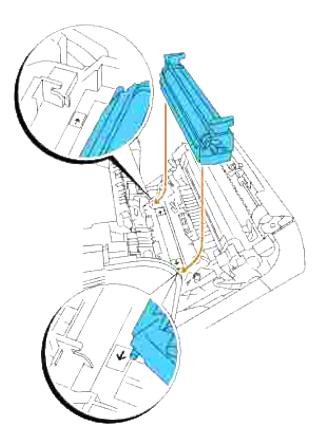


How to install the Transfer Roller

1. Unpack a new transfer roller and grip the tabs as shown.



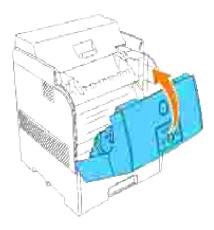
2. Align the arrow marks on the transfer roller to the marks on the printer, and gently push the roller into the printer.



3. To lock the transfer roller into the printer, push down the tabs until you hear a click.

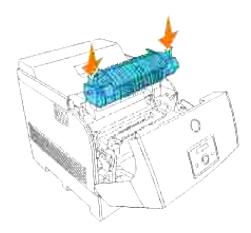


4. Close the front cover.

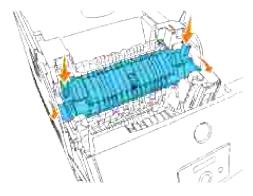


How to install the Fuser

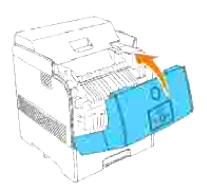
1. Unpack a new fuser, grip the fuser by the handles, align it with the slots in the printer, and slowly push it in.



2. Completely push down the fuser by holding the handles at both ends of the fuser until the levers next to both ends of the fuser return to their original position.



3. Close the outer front cover.

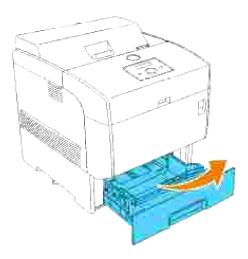


Removing the Used Separator Roller

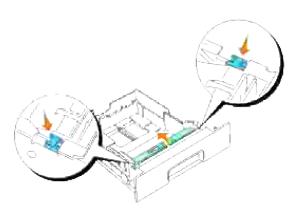


NOTE: Remove any print jobs from the tray before pulling the tray out of the printer.

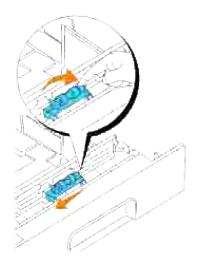
1. Pull the tray out of the printer until it stops. Hold the tray with both hands, lift the front slightly, and remove it from the printer.



2. Press both tabs inward and hold while gently lifting the separator roller cover to the open position.



3. Gently raise the separator roller assembly, and slide it to the left.



Basic toner cleaning instructions



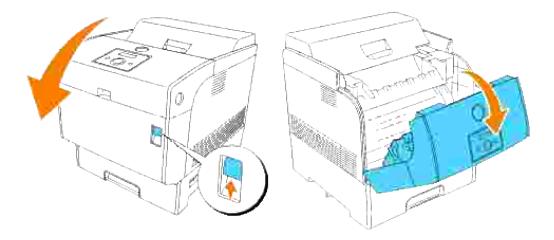
CAUTION: Before performing any of the following procedures, read and follow the safety instructions in your *Owner's Manual*.



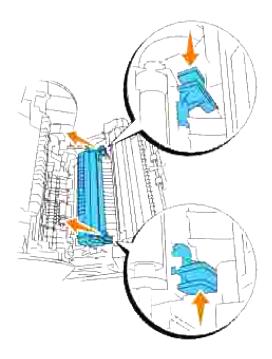
CAUTION: Do not touch the edge of the plate at the upper side of the transfer roller because it is sharp.

When the printer's automatic density control (ADC) sensor is dirty, follow the procedure below to clean it.

- 1. Turn off the printer.
- 2. Push the front latch up and fully open the front cover.



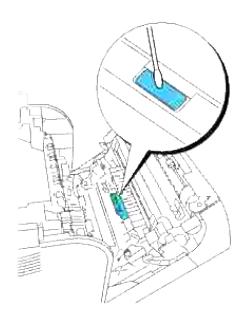
3. Grip the tabs at both ends of the transfer roller and gently lift it out of the printer.



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CAUTION: Do not touch inside the printer with your hands. Some parts may be hot. Allow time for the printer to cool before attempting to remove parts in this area.

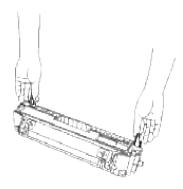
4. Gently wipe the automatic density control (ADC) sensor window with a clean dry cloth or cotton swab.



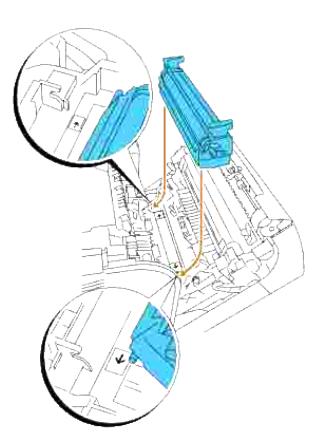
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NOTE: Do not allow anything hard to come in contact with the automatic density control (ADC) sensor window. Do not use excessive force to clean the window.

5. Replace the transfer roller. Grip the tabs as shown.



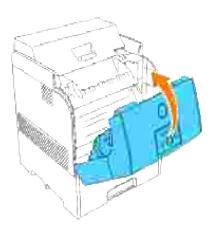
6. Align the arrow marks on the transfer roller to the marks on the printer, and gently push the roller into the printer.



7. To lock the transfer roller into the printer push down the tabs until you hear a click.



8. Close the front cover.



9. Turn on the printer.

Printing With Web Services for Devices (WSD)

This section provides information for network printing with WSD, Microsoft's new Windows Vista protocol.

Printer Setup

Printer Setup

You can install your new printer on the network using the Drivers and Utilities CD that shipped with your printer, or using Microsoft's Windows Add Printer wizard.

However, when you use I Pv6 Mode, you cannot install the printer driver from the *Drivers and Utilities* CD. Use the Add Printer wizard.

Installing a Printer Driver Using the Add Printer Wizard

- 1. Click Start → Control Panel → Hardware and Sound → Printers.
- 2. Click Add a printer to launch the Add Printer wizard.
- 3. Select Add a network, wireless or Bluetooth printer.
- 4. In the list of available printers, select the one you want to use, and then click Next. If your computer is connected to a network, only printers listed in Active Directory for your domain are displayed in the list.
- 5. If prompted, install the printer driver on your computer. If you are prompted for an administrator password or confirmation, type the password or provide confirmation.
- 6. Complete the additional steps in the wizard, and then click Finish.
- 7. Print a test page to verify print installation.
- 8. Click Start → Control Panel → Hardware and Sound → Printers.
- 9. Right-click the printer you just created, and then click Properties.
- 10. On the General tab, click Print Test Page. When a test page prints successfully, printer installation is complete.

Maintaining Your Printer

Periodically your printer requires you to complete certain tasks to maintain optimum print quality. If several people are using the printer, you may want to designate a key operator to maintain your printer. Refer printing problems and maintenance tasks to this key operator.

- Determining the Status of Supplies
- Conserving Supplies
- Ordering Supplies
- Storing Print Media
- Storing Consumables
- Replacing the Imaging Drums
- Replacing the Toner Cartridge
- Replacing the Transfer Roller
- Replacing the Fuser and Separator Roller
- Cleaning the Automatic Density Control (ADC) Sensor
- Cleaning the Imaging Drum
- Adjusting Color Registration

Determining the Status of Supplies

If your printer is connected to the network, the Dell Printer Configuration Web Tool can provide instant feedback on remaining toner levels. Type the printer IP address in your Web browser to view this information. To use the E-Mail Alert Setup feature that notifies you when the printer requires new supplies, type your name or the name of the key operator in the e-mail list box.

On the operator panel, you can also confirm the following:

- Any supply or maintenance items that require attention replacing (However, the printer can only display information about one item at a time.)
- · Remains of each toner cartridges

Conserving Supplies

You can change several settings in your software program or on the operator panel to conserve toner and paper.

Supply	Setting	Function	For more information
Toner		This check box allows the users to select a print mode that uses less toner. When this feature is used, the image quality will be lower than when it is not used.	
Print media	Multiple Up	The printer prints two or more pages on one side of a sheet. Values for Multiple Up are 2 Up, 4 Up, 8 Up, 16 Up, or 32 Up. Combined with the duplex setting, Multiple Up allows you to print up to 64 pages on one sheet of paper. (32 images on the front and 32 on the back)	
	Duplex	Double-sided printing is available. This allows you to print on both sides of a sheet of paper.	"2 Sided "

Ordering Supplies

You can order consumables from Dell on the Internet when using a networked printer. Type the IP address of your printer in your Web browser, launch the Dell Printer Configuration Web Tool , and click the Order Supplies at: to order toner for your printer.

You can also order toner by the following method.

 Click Start → Programs → Dell Printers → Additional Color Laser Software → Dell Supplies Management System.

The Dell Supplies Management System window appears.

- 2. Select your printer from the Select Printer Model list.
- 3. If ordering from the Web:
 - a. When you cannot get information from the printer automatically by two-way communication, a window that prompts you to type the Service Tag number appears. Type your Dell printer Service Tag number in the field provided.
 - Your Service Tag number is located inside the front door of your printer.
 - b. Select an URL from the Select Reorder URL list.
 - c. Click Visit Dell printer supplies ordering web site.
- 4. If ordering by phone, call the number that appears under the By Telephone heading.

Storing Print Media

To avoid potential paper feeding problems and uneven print quality, there are several things you can do.

• To achieve the best possible print quality, store print media in an environment where the temperature

is approximately 21°C (70°F) and the relative humidity is 40%.

- Store cartons of print media on a pallet or shelf, rather than directly on the floor.
- If you store individual packages of print media out of the original carton, make sure they rest on a flat surface so the edges do not buckle or curl.
- Do not place anything on top of the print media packages.

Storing Consumables

Store consumables in their original packaging until you need to use them. Do not store consumables in:

- Temperatures greater than 40°C (104°F).
- An environment with extreme changes in humidity or temperature.
- Direct sunlight.
- · Dusty places.
- A car for a long period of time.
- An environment where corrosive gases are present.
- An environment with salty air.

Replacing the Imaging Drums



CAUTION: Before performing any of the following procedures, read and follow the safety instructions in your *Owner's Manual*.



CAUTION: Never throw a used imaging drum into a fire. It could explode resulting in burns and injuries.

Dell cartridges are available only through Dell. You can order more online at www.dell.com/supplies or by phone. To order by phone, see your *Owner's Manual*.

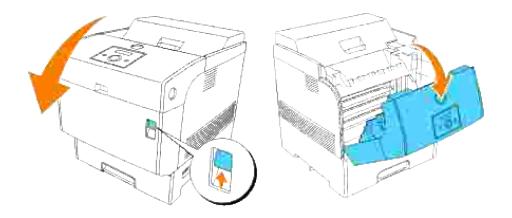
Dell recommends Dell imaging drums for your printer. Dell does not provide warranty coverage for problems caused by using accessories, parts, or components not supplied by Dell.

Removing the Used Imaging Drum

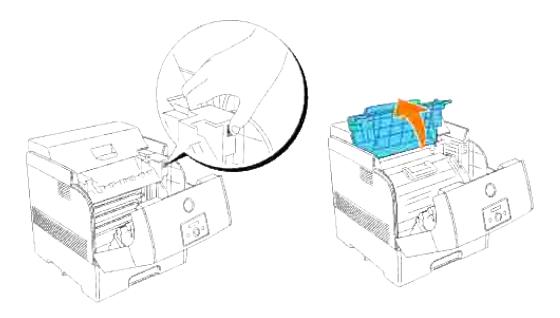


NOTE: Remove any print jobs from the center output tray, and close the multipurpose feeder cover before opening the front cover.

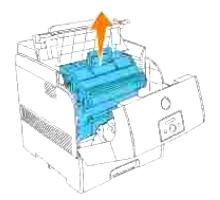
1. Push the front latch up and fully open the front cover.



2. Push the button as shown in the following illustration and open the top cover.



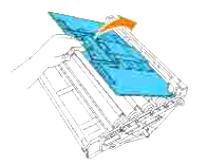
3. Grab the imaging drum by the handle, and pull it up and out.



CAUTION: Do not touch inside the printer with your hands. Some parts may be hot. Allow time for the printer to cool before attempting to remove parts in this area.

Installing the New Imaging Drum

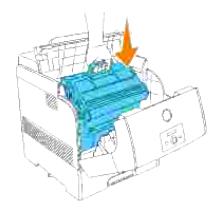
1. Remove the protective cover from the imaging drum.



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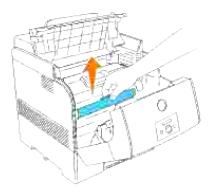
CAUTION: Make sure nothing touches or scratches the surface of the light-sensitive drum surface (green-colored roller) or the transfer roller (black-colored roller). Scratches, dirt, or oil from your hands on the imaging drum or transfer roller may reduce the print quality.

2. Holding the imaging drum by the handle with the flat part facing the back of the printer, align the plastic guides on both sides of the imaging drum with the slots in front of the arrows on the printer.

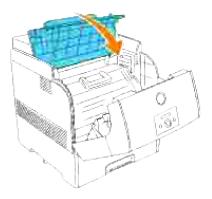


3. Pull the protective cover on the imaging drum straight up to remove it.

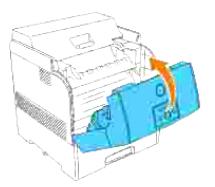
NOTICE: Do not touch the transfer roller (black-colored roller). Make sure that nothing touches or scratches the roller surface. Scratches or oil from your hands on the roller deteriorates print quality.



4. Close the top cover.



5. Close the front cover.



Replacing the Toner Cartridge



CAUTION: Before performing any of the following procedures, read and follow the safety instructions in your *Owner's Manual* .

In addition to the toner level indicator that appears each time you send a job to print, a message appears on

the operator panel to alert you when it's time to order a new toner cartridge.

Dell toner cartridges are available only through Dell. You can order more toner online at www.dell.com/supplies or by phone. To order by phone, see "Ordering toner cartridges" in your *Owner's Manual*.

Dell recommends Dell toner cartridges for your printer. Dell does not provide warranty coverage for problems caused by using accessories, parts, or components not supplied by Dell.



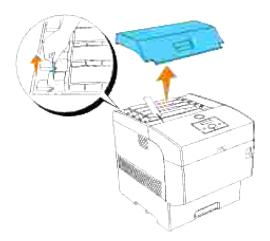
CAUTION: Never throw used toner cartridges into a fire. The residual toner could explode resulting in burns and injuries.

Removing the Used Toner Cartridge

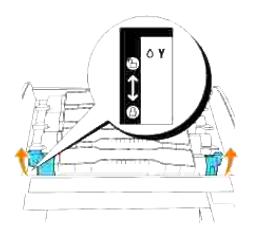


NOTE: Remove any print jobs from the outer front cover before removing the top cover.

1. Remove the top cover.



2. Grip the levers at the ends of the toner cartridge that you want to replace and pull them up.

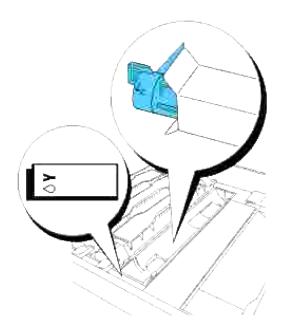


3. Pull out the toner cartridge.

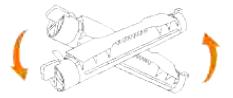


Installing the New Toner Cartridge

1. Select the new toner cartridge whose color matches the cartridge carrier and remove it from its packaging.



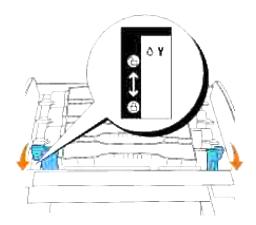
2. Shake the toner cartridge several times as illustrated to distribute the toner evenly.



3. Align the toner cartridge with the corresponding cartridge carrier in the printer and insert it.



4. Grip the levers at each end of the toner cartridge with your fingers, then push down firmly to rotate the levers forward.



5. Pull the toner seal straight up to remove it.



- NOTICE: Pull the toner seal straight up. Pulling the toner seal diagonally may tear the seal.
- NOTICE: If it takes more than five seconds until you remove the toner seal after inserting the toner cartridge in the printer, an error message may appear. In this case, perform step 4 again, or turn the printer off once and then on again.
- 6. Replace the top cover by inserting its front side into the printer first.



Replacing the Transfer Roller



CAUTION: Before performing any of the following procedures, read and follow the safety instructions in your Owner's Manual.



CAUTION: Never throw a used transfer roller into a fire. It could explode resulting in burns. and injuries.



CAUTION: Do not touch the edge of the plate at the upper side of the transfer roller because it is sharp.

Dell transfer rollers are available only through Dell. You can order more online at www.dell.com/supplies or by phone. To order by phone, see your Owner's Manual.

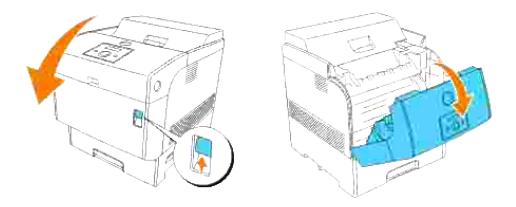
Dell recommends Dell transfer roller for your printer. Dell does not provide warranty coverage for problems caused by using accessories, parts, or components not supplied by Dell.

Removing the Used Transfer Roller

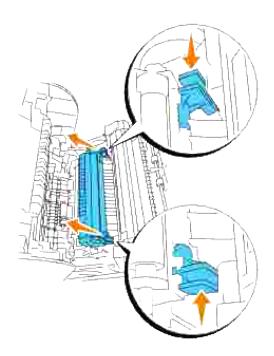


NOTE: Remove any print jobs from the center output tray, and close the multipurpose feeder cover before opening the front cover.

1. Push the front latch up and fully open the front cover.



2. Grip the tabs at both ends of the transfer roller and gently lift it out of the printer.

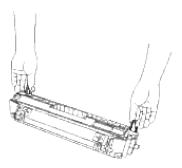


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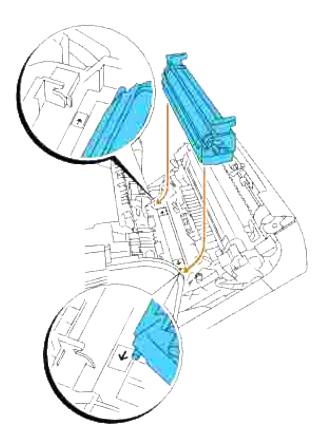
CAUTION: Do not touch inside the printer with your hands. Some parts may be hot. Allow time for the printer to cool before attempting to remove parts in this area.

Installing the New Transfer Roller

1. Unpack a new transfer roller and grip the tabs as shown.



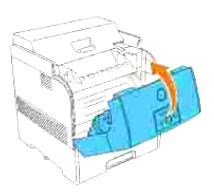
2. Align the arrow marks on the transfer roller to the marks on the printer, and gently push the roller into the printer.



3. To lock the transfer roller into the printer, push down the tabs until you hear a click.



4. Close the front cover.



Replacing the Fuser and Separator Roller

To avoid burns, do not replace the fuser immediately after printing, as the fuser gets very hot during this process.



CAUTION: To prevent electric shock, always turn off the printer and disconnect the power cable from the grounded outlet before cleaning the printer or performing maintenance.



CAUTION: Before performing any of the following procedures, read and follow the safety instructions in your *Owner's Manual*.

Dell fuser are available only through Dell. You can order more online at www.dell.com/supplies or by phone. To order by phone, see your Owner's Manual.

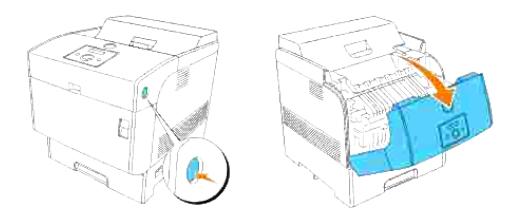
Dell recommends Dell fuser for your printer. Dell does not provide warranty coverage for problems caused by using accessories, parts, or components not supplied by Dell.

Removing the Used Fuser

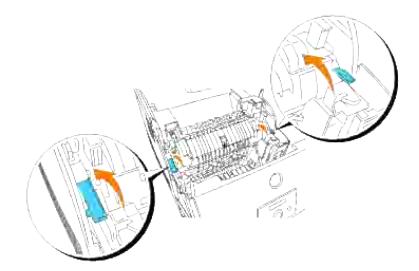


NOTE: Remove any print jobs from the center output tray, and close the multipurpose feeder cover before opening the outer front cover.

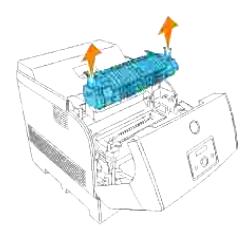
- 1. Turn off the printer and wait for 30 minutes.
- 2. Push the side button and open the outer front cover.



3. Lift up the levers next to both ends of the fuser.

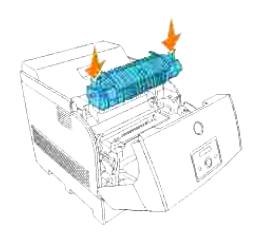


4. Grip the handles and gently lift the fuser out of the printer.

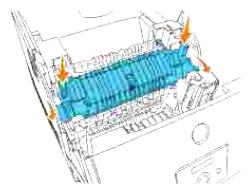


Installing the New Fuser

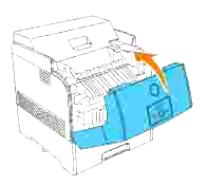
1. Unpack a new fuser, grip the fuser by the handles, align it with the slots in the printer, and slowly push it in.



2. Completely push down the fuser by holding the handles at both ends of the fuser until the levers next to both ends of the fuser return to their original position.



3. Close the outer front cover.

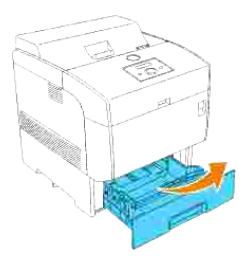


Removing the Used Separator Roller

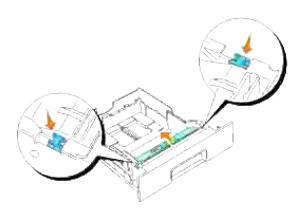


NOTE: Remove any print jobs from the tray before pulling the tray out of the printer.

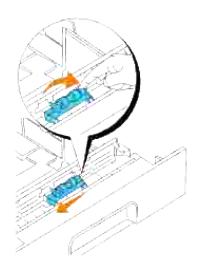
1. Pull the tray out of the printer until it stops. Hold the tray with both hands, lift the front slightly, and remove it from the printer.



2. Press both tabs inward and hold while gently lifting the separator roller cover to the open position.

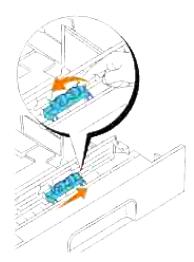


3. Gently raise the separator roller assembly, and slide it to the left.

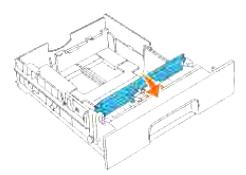


Installing the New Separator Roller

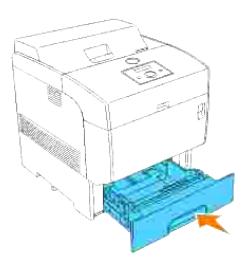
1. Align the holes of the new separator roller with the projections in the tray and slide the separator roller until it stops. Then, release your hand from the separator roller.



2. Close the separator roller cover.



3. Replace the printer's tray into the printer.



Cleaning the Automatic Density Control (ADC) Sensor



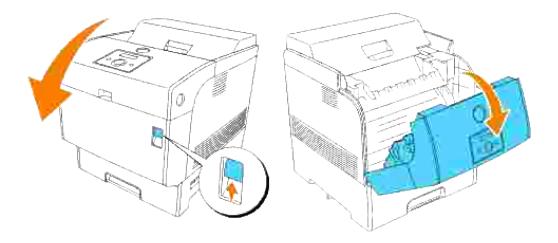
CAUTION: Before performing any of the following procedures, read and follow the safety instructions in your *Owner's Manual*.



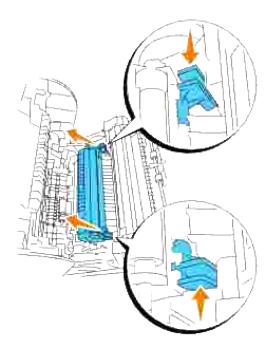
CAUTION: Do not touch the edge of the plate at the upper side of the transfer roller because it is sharp.

When the printer's automatic density control (ADC) sensor is dirty, follow the procedure below to clean it.

- 1. Turn off the printer.
- 2. Push the front latch up and fully open the front cover.



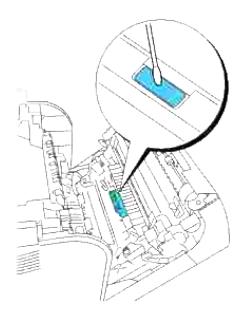
3. Grip the tabs at both ends of the transfer roller and gently lift it out of the printer.



 Λ

CAUTION: Do not touch inside the printer with your hands. Some parts may be hot. Allow time for the printer to cool before attempting to remove parts in this area.

4. Gently wipe the automatic density control (ADC) sensor window with a clean dry cloth or cotton swab.



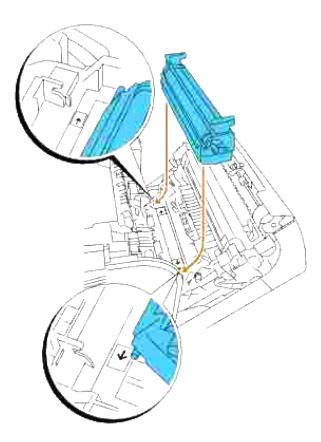
Ŋ

NOTE: Do not allow anything hard to come in contact with the automatic density control (ADC) sensor window. Do not use excessive force to clean the window.

5. Replace the transfer roller. Grip the tabs as shown.



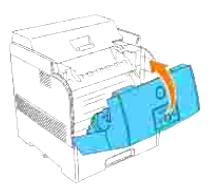
6. Align the arrow marks on the transfer roller to the marks on the printer, and gently push the roller into the printer.



7. To lock the transfer roller into the printer push down the tabs until you hear a click.



8. Close the front cover.



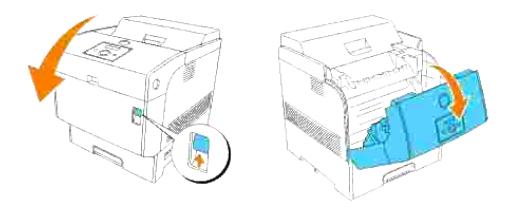
9. Turn on the printer.

Cleaning the I maging Drum

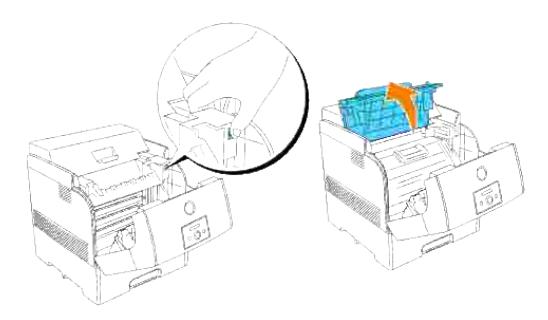


NOTE: Remove any print jobs from the center output tray, close the multipurpose feeder cover before opening the front door.

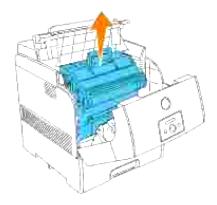
1. Push the front latch up and fully open the front cover.



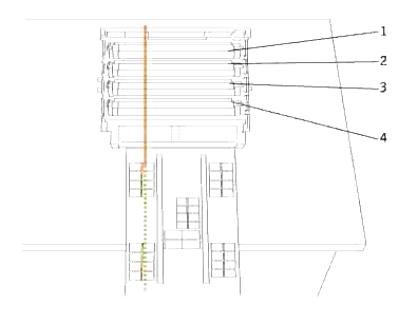
2. Push the button as shown in the following illustration and open the top cover.



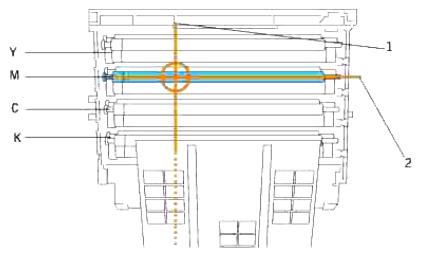
3. Grab the imaging drum by the handle, and pull it up and out.



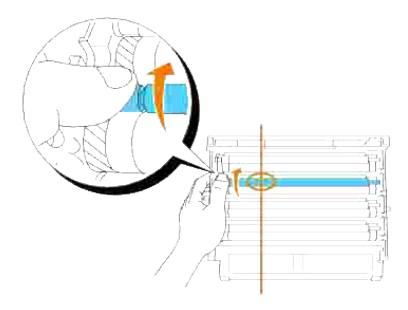
- A
- CAUTION: Do not touch inside the printer with your hands. Some parts may be hot. Allow time for the printer to cool before attempting to remove parts in this area.
- 4. Place the imaging drum next to the print sample on which the colored dots appear to find the part that needs to be cleaned.



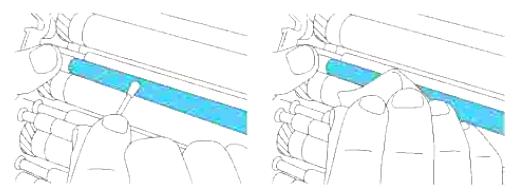
- #
- NOTE: You must find the part to be cleaned yourself.
- 11
- NOTE: The above graphic shows the parts, one to four, to be cleaned.
- #
- NOTE: To prevent the light-sensitive drum being overexposed, do the operation quickly.
- 5. Align the colored dots printed on the print sample with the corresponding part of the imaging drum.

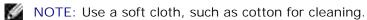


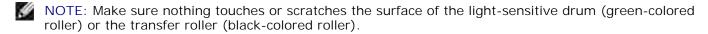
- 1 indicates the lateral position of the colored dots.
- 2 indicates the color of the colored dots.
- NOTE: The graphic shows an example with magenta colored dots.
- 6. Determine the position where colored dots were printed. Then turn the transfer roller (black-colored roller) by rolling it with your finger on its left side to find the dirt.



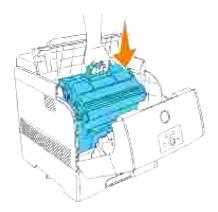
7. Clean any dirt from the roller.



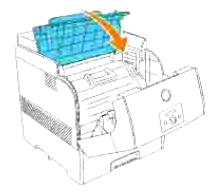




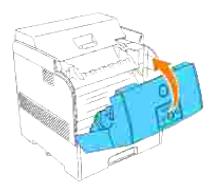
8. Replace the imaging drum. Holding the imaging drum by the handle with the flat part facing the back of the printer, align the plastic guides on both sides of the imaging drum with the slots in front of the arrows on the printer.



9. Close the top cover.



10. Close the front cover.



Adjusting Color Registration

To adjust the color registration when you first install the printer or after moving it to a new location, follow the procedure below. See "Operator Panel" and "Color Reg Adj" for information about the operator panel.

Printing the Color Registration Chart

Use the operator panel to print the color registration chart.

- 1. Press Menu.
- 2. Press ▼ until Maintenance appears, and then press ▶ or ✓.
- 3. Press ▼ until Color Reg Adj appears, and then press ▶ or ✓.
- 4. Press ▼ until ColorRegi Chart appears, and then press ✓.

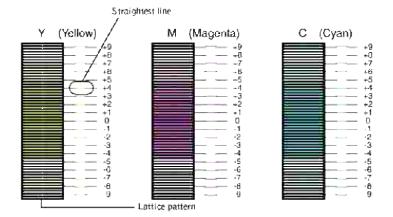
The color registration chart is printed.

Determining Values

From the lines to the right of the Y (yellow), M (magenta), and C (cyan) pattern, find the values of the straightest lines.



NOTE: You can also use the densest colors of the lattice pattern to find the straightest lines. The colors printed at the highest density are those next to the straightest lines. When 0 is the value nearest the straightest line, you do not need to adjust the color registration. When the value is not 0, follow the procedure outlined in "Entering Values".



Entering Values

Using the operator panel, enter the values that you found in the color registration chart to make adjustments.

- 1. Press Menu.
- 2. Press ∇ until Maintenance appears, and then press \triangleright or \checkmark .
- 3. Press ▼ until Color Reg Adj appears, and then press ▶ or ✓.
- 4. Press ▼ until Enter Number appears, and then press ▶ or ✔. The cursor is located at the first digit of the Enter Number.
- 5. Press ▲ ▼ until you reach the value (for example, +3) displayed on the chart.
- 6. Press once and move the cursor to the next value.
- 7. Repeat steps 6 and 7 to enter all of the digits of the Enter Number, and then press .
- 8. Press ▼ until Color Reji Chart appears, and then press ✔ . The color registration chart is printed with the new values.
- 9. Color registration adjustment is complete when the straightest Y (yellow), M (magenta), and C (cyan) lines are next to the O line.
- CAUTION: After printing the color registration chart, do not turn off the printer until the printer motor has stopped running.
- NOTE: If 0 is not next to the straightest lines, determine the values and adjust the printer again.

Removing Options

If the printer location needs to change or the printer and print media handling options need to be shipped to a new location, all print media handling options must be removed from the printer. For shipping, pack the printer and print media handling options securely to avoid damage.

- Removing Optional Tray Modules
- Removing the Optional Memory Card
- Removing the Optional Multi Protocol Card
- Removing the Wireless Printer Adaptor
- Removing the Optional Hard Disk

Removing Optional Tray Modules



NOTE: To lift the printer safely and replace the optional 500-sheet tray module or 1000-sheet tray module requires two people to stand in front (operator panel side) and behind the printer and to lift at the same time. Do not try to lift the printer from the sides.



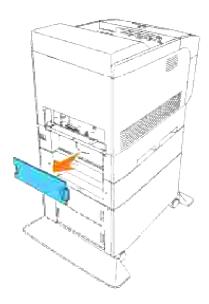
CAUTION: To lift the printer safely, remove the imaging drum and lift it with two people.



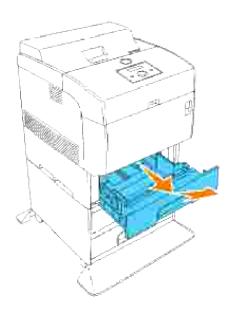
NOTICE: Place the imaging drum on a clean flat surface. Also, cover the imaging drum with something like newspaper to keep it out of direct light.

Some instructions may vary depending on the tray module configuration in your printer.

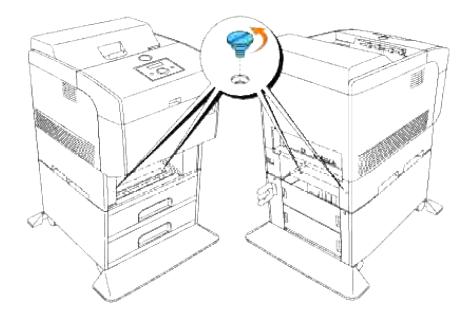
- 1. Turn off the printer and unplug the printer power cable.
- 2. Remove the paper tray cover from the back of the printer.



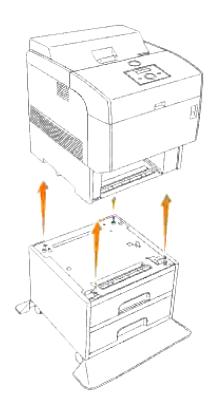
3. Pull the printer's tray out until it stops. Hold the tray with both hands, lift the front slightly and remove it from the printer.



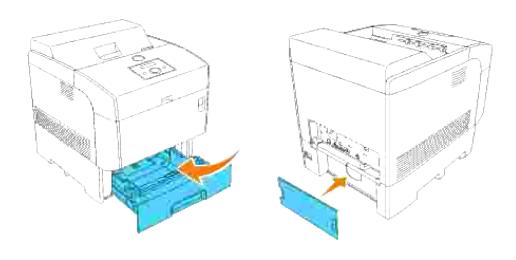
4. Remove the four screws inside the printer.



5. Gently lift the printer off the tray module, and place it on a level surface.

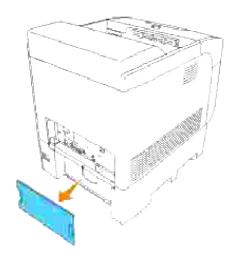


6. Insert the tray into the printer. Reattach the paper tray cover to the back of the printer.

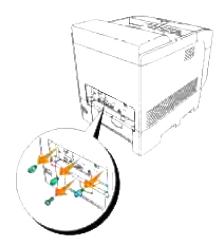


Removing the Optional Memory Card

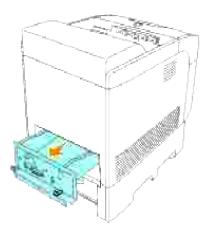
- 1. Make sure that the printer is turned off and unplug all cables including the power cord from the rear of the printer.
- 2. Pull the paper tray cover so that the top edge tilts out and then lift the paper tray cover off its hinges.



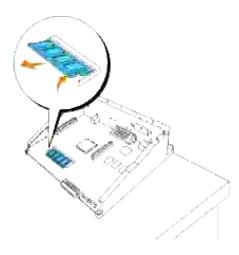
3. Remove the four screws on the controller card from the back side of the printer.



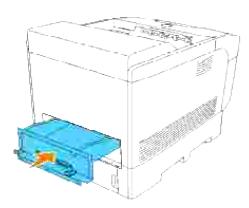
4. Remove the controller card from the printer by the handles.



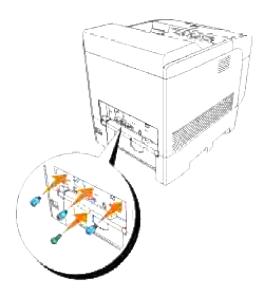
5. Place the controller card on the table so that its edge hangs over the edge of the table and the controller card is horizontal. Push the clips on both sides of the slot outward. Remove the memory card from the slot.



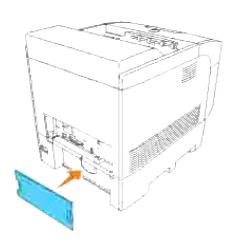
6. Insert the controller card into the printer.



7. Tighten the four screws on the controller card from the back side of the printer. The three screws on the upper side are different in the shape from the one on the lower side. Be careful not to confuse them.

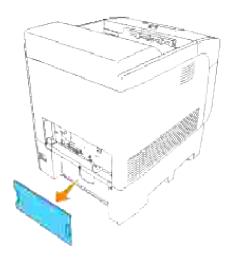


8. Reattach the paper tray cover to the back of the printer.

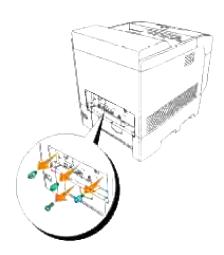


Removing the Optional Multi Protocol Card

- 1. Make sure that the printer is turned off and unplug all cables including the power cord from the rear of the printer.
- 2. Pull the paper tray cover so that the top edge tilts out and then lift the paper tray cover off its hinges.



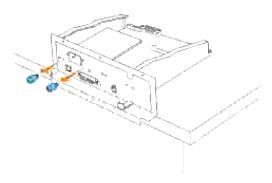
3. Remove the four screws on the controller card from the back side of the printer.



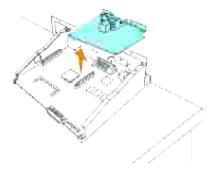
4. Remove the controller card from the printer by the handles.



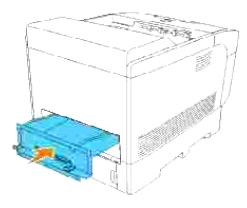
5. Remove the two screws from the back side of the controller card.



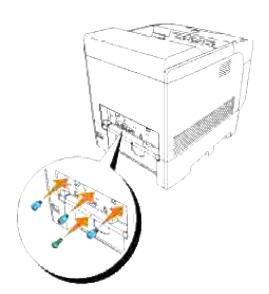
6. Hold the multi protocol card and remove it from the controller card.



7. Insert the controller card into the printer.



8. Tighten the four screws on the controller card from the back side of the printer. The three screws on the upper side are different in the shape from the one on the lower side. Be careful not to confuse them.

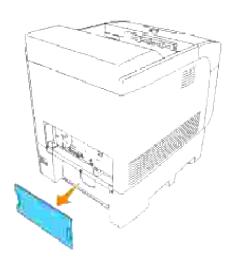


9. Reattach the paper tray cover to the back of the printer.

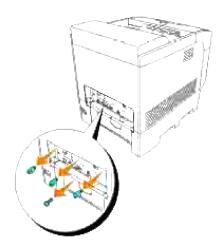


Removing the Wireless Printer Adaptor

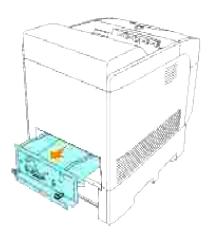
- 1. Make sure that the printer is turned off and unplug all cables including the power cord from the rear of the printer.
- 2. Pull the paper tray cover so that the top edge tilts out and then lift the paper tray cover off its hinges.



3. Remove the four screws on the controller card from the back side of the printer.



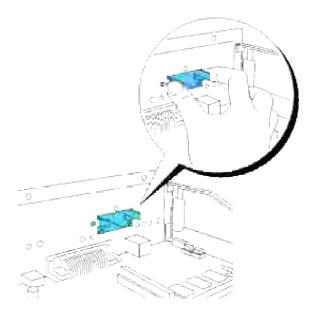
4. Remove the controller card from the printer by the handles.



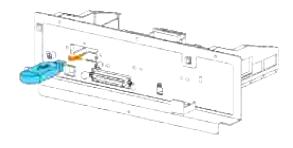
5. Place the controller card on a table so that it is horizontal and extends over its edge of the table. Hold the latches with the fingers and push LAN adapter cap as shown in the figure.



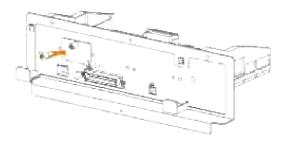
NOTE: You cannot remove the printer adapter cap without removing the controller card from the printer.



6. Remove the wireless printer adapter from the multi protocol card.



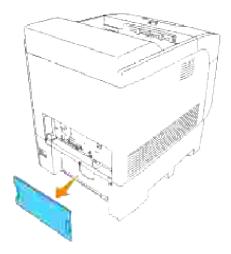
7. Attach the wireless port cover by tighten a screw on the controller card.



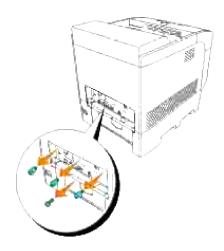
Removing the Optional Hard Disk

1. Make sure that the printer is turned off and unplug all cables including the power cord from the rear of the printer.

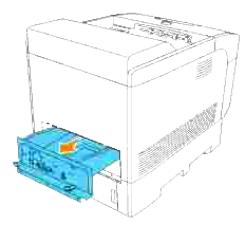
2. Pull the paper tray cover so that the top edge tilts out and then lift the paper tray cover off its hinges.



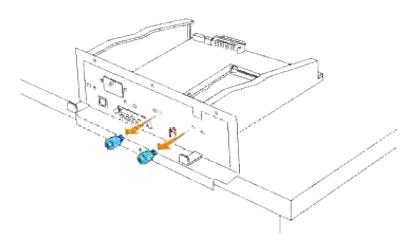
3. Remove the four screws on the controller card from the back side of the printer.



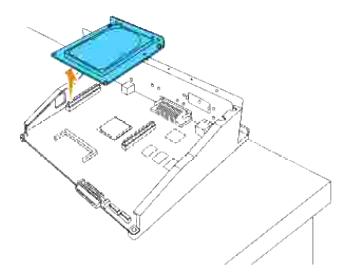
4. Remove the controller card from the printer by the handles.



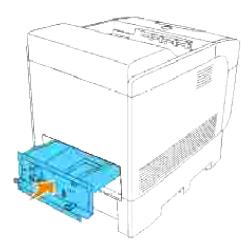
5. Remove the two screws from the back side of the controller card.



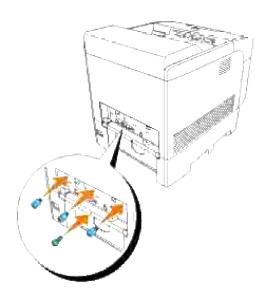
6. Hold the hard disk and remove it from the controller card.



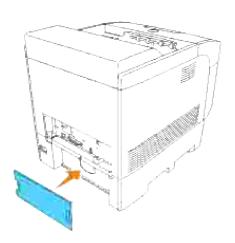
7. Insert the controller card into the printer.



8. Tighten the four screws on the controller card from the back side of the printer. The three screws on the upper side are different in the shape from the one on the lower side. Be careful not to confuse them.



9. Reattach the paper tray cover to the back of the printer.



Printer Specifications

- OS Compatibility
- Power Supply
- Dimensions
- Memory
- Page-description Language (PDL)/Emulation, Operating System, and Interface
- Environmental
- Cables

OS Compatibility

Compatible with Windows (Vista, Vista x64, XP, Server 2003, XP x64, Server 2003 x64, 2000, NT 4.0); Novell® (3.X, 4.X, 5.X, 6, 6.5) but not supported¹; Mac OS (10.2.8, 10.3.9, 10.4.x), Linux for CUPS (RedHat ES3, RedHat ES4, SUSE 9.2, SUSE 9.3, TurboLinus 10 Desktop) and UNIX Filter for LPR (RedHat AS 2.1, HP-UX 11.i, Solaris 9, Solaris 10) but not supported².

¹ Dell networked Printers are compatible with Microsoft, Novell and Linux operating systems, but Dell telephone support only supports factory-installed operating systems (Microsoft) for the first 30 days for free. See www1.us.dell.com/content/products/compare.aspx/laser?c=us&cs=555&l=en&s=biz for more details. The customer will have to purchase technical support from the manufacturer of the operating system in order to get technical assistance beyond 30 days.

² If the customer has other operating systems, such as Novell or Linux, and has purchased Gold Technical Support (for more information on Gold Technical Support, see www.dell.com/us/en/gen/services/service_gts.htm), the telephone support will be a "best effort" attempt to resolve the operating system issue. If the manufacturer needs to be contacted, the customer must pay an additional fee for that support. The only time that Dell pays for the third party support is when Dell is responsible for the issue. In the case of getting the printers installed and working, this is configuration and the customer would be responsible for paying.

Power Supply

Rated Voltage	220 to 240 VAC	110 to 127 VAC
Frequency	50/60 Hz	50/60 Hz
Current	5 A	10 A

Dimensions

Height: 497 mm (19.5 in.) Width: 429 mm (16.9 in.) Depth: 580 mm (22.8 in.)

Weight (not including cartridge): 31.5 kg (69.3 lb)

Memory

Base memory	128 MB
Maximum memory	1152 MB
Connector	200 pin DDR2 SO-DIMM
DIMM Size	256 MB, 512 MB, 1024 MB
Speed	PC2-3200, PC2-4200, PC2-5300

Page-description Language (PDL)/Emulation, Operating System, and Interface

PDL/Emulations	PostScript 3, PCL 6, PCL 5c		
OSes	Windows Vista/Vista x64//XP/XP x64/Server 2003/Server 2003 x64/2000/NT 4.0, UNIX (Solaris 9/10, HP-UX 11.i), Linux (Turbolinux 10 Desktop, SUSE Linux 9.2/9.3 Professional, RedHat Enterprise Linux ES 3/4 (English)), Mac OS X (10.2.8, 10.3.9, 10.4)		
Interfaces	Standard local: Standard network: Optional network: USB, IEEE 1284 10Base-T/100Base-TX Ethernet IEEE802.11b/802.11g (Wireless)		

MIB Compatibility

A Management Information Base (MIB) is a database containing information about network devices (such as adapters, bridges, routers, or computers). This information helps network administrators manage the network (analyze performance, traffic, errors, and so on). The 5110cn complies with standard industry MIB specifications, allowing the printer to be recognized and managed by various printer and network management software systems, such as IBM Tivoli, Hewlett-Packard OpenView, CA Unicenter, Hewlett-Packard Web JetAdmin, and so on.

Environmental

Operation

Temperature	5°C to 32°C
Relative humidity	15% RH to 85% RH (no-condensation)

Print Quality Guarantee

Temperature	15°C to 28°C
Relative humidity	20% RH to 70% RH (no-condensation) (Temperature should be 28°C or below at 85% RH.)

Storage

Temperature range	0 °F to 104 °F (-20°C to 40°C)
Storage humidity range	5% RH to 95% RH (no-condensation)

Altitude

Operating	Up to 3,100 m (10,000 feet)
Storage	70.9275 Kpa

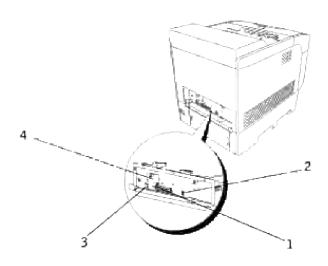
Chemical Emission

Concentration of ozone	0.019 mg/m ³
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Cables

Your interconnection cable must meet the following requirements:

	Connection	Cable certification
1	Parallel (IEEE 1284)	10101
2	USB	USB2.0
3	10/100Base-Tx Ethernet	CAT-5E
4	Wireless port	-



Printing With UX Filter (UNI X/Linux)

- Overview
- Installing the UX Filter
- Uninstalling the UX Filter
- Printing and Using the Utilities
- Precautions and Limitations

Overview

The UX Filter

This section describes the features of the UX filter and its operating environment.

Features

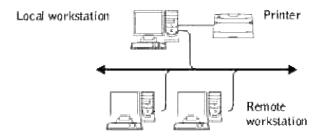
The UX filter is a utility software which converts files created by the UNIX workstation into a format which conforms to the PostScript language loaded in the printer. The utility provides software that converts text files, SunRaster image files (for Sun/Solaris only), TIFF image files and XWD image files into the PostScript language program. Also, it makes use of the printer features to output in the following manner.

- Input paper selection
- Double-sided printing
- Output paper selection

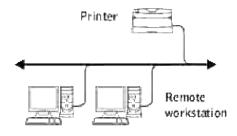


Operating Environment

Text files, SunRaster image files (for Solaris only), TIFF image files and XWD image files received from a workstation connected to a printer by a USB cable or parallel cable (hereinafter referred to as the local workstation), or from one located on the network (hereinafter referred to as the remote workstation), can be converted into the PostScript language program and output to the printer.



In addition, it can also be used in an environment where a printer, installed with an interface board, is connected directly to the network.



Before Using UX Filter

Check the following items before using the UX filter. Before setting up the workstation, set up the printer as follows.

1. Make sure the lpd port is working when using the network environment. If the lpd port is not working, set LPD to on on the operator panel. (Mandatory) See "Protocol" for more information.

When a parallel or USB port is to be used, make sure these are working. (Mandatory)

- 2. Set up IP address and subnet mask when the printer is used in the network environment. (Mandatory)
- 3. Make TBCPFilter function available if TBCPFilter function is installed on the printer. See "Adobe Protocol" for more information.

Installing the UX Filter

Before Installation

The following are required for the installation.

• Supported operating system is described in "Page-description Language (PDL)/Emulation, Operating System, and Interface."

Disk capacity: 20 MB of free disk space required, including temporary working space for installation.

- Log on as a root account to perform the operation here. If you have no root privilege, contact your system administrator.
- Output printer must be registered in the workstation before using UX filter. (HP-UX)
 Use sam command for registration of output printer.
 For more information, see the HP-UX related manual.

Files Added by the Installation

The following files will be added when the UX filter is installed.

Solaris

Directory	File name	Contents	
/usr/local/dellbin5110	txt2ps2	Text conversion utility	
	sunras2ps2	SunRaster conversion utility	
	tiff2ps2	TIFF conversion utility	
	xwd2ps2	XWD conversion utility	
	dellpsif	Input filter	
/usr/lib/lp/postscript	dellposttxt5110cn	Symbolic link file to txt2ps2	
	dellpostps5110cn	Symbolic link file to dellpsif	
	dellbinpath5110	Directory description file for the UX filter print tool	
/usr/lib/lp/model	Model interface program	Source file of the model interface program (stored as the printer name during registration)	
/etc/lp/interfaces	Model interface program	Interface program for PRINTER (stored as the printer name during registration)	
/etc/lp/fd	posttxt5110cn.fd	Filter description file for txt2ps2	

	dell5110cn.fd	dell5110cn filter description file for Dell Color Laser Printer 5110cn
	postio5110.fd	dellpostio5110 Filter description file
	download5110.fd	delldownload5110 Filter description file
/usr/share/man/man1	txt2ps25110cn.1	Manual page file for txt2ps2
	sunras2ps25110cn.1	Manual page file for sunras2ps2
	tiff2ps25110cn.1	Manual page file for tiff2ps2
	xwd2ps25110cn.1	Manual page file for xwd2ps2
	dellpsif5110cn.1	Manual page file for dellpsif



NOTE: The directories listed are default directories.

Linux

Directory	File name	Contents
/usr/local/dellbin5110	txt2ps2	Text conversion utility
	tiff2ps2	TIFF conversion utility
	xwd2ps2	XWD conversion utility
	printcap. sample	Printcap file sample
	dellpsif	Input Filter
	.dellpsdefault5110	Default command option file
/usr/share/man/man1	txt2ps25110cn.1	Manual page file for txt2ps2
	tiff2ps25110cn.1	Manual page file for tiff2ps2
	xwd2ps25110cn.1	Manual page file for xwd2ps2
	dellpsif5110cn.1	Manual page file for dellpsif

NOTE: The directories listed are default directories.

HP-UX

Directory	File name	Contents
/usr/local/dellbin5110	txt2ps2	Text conversion utility
	xwd2ps2	XWD conversion utility
	tiff2ps2	TIFF conversion utility
/usr/lib/lp/postscript	dellbinpath5110	Directory description file for the UX filter print tool
/usr/spool/lp/interface	Model interface program	Interface program for PRINTER (stored as the printer name during registration)
/usr/share/man/man1	txt2ps25110cn.1	Manual page file for txt2ps2
	tiff2ps25110cn.1	Manual page file for tiff2ps2
	xwd2ps25110cn.1	Manual page file for xwd2ps2



NOTE: The directories listed are default directories.

Installation Procedure Overview

This section provides information on the installation of the UX filter using the UNIX workstation.

Linux

- 1. Setup the printer and network.
- 2. Insert the *Drivers and Utilities* CD into the local workstation.
- 3. Run the installer and begin the installation.
- 4. Edit /etc/printcap and print for testing the printer.

Solaris

- 1. Setup the printer and network.
- 2. Insert the *Drivers and Utilities* CD into the local workstation.
- 3. Run the installer and begin the installation.
- 4. Print for testing the printer.

HP-UX

1. Setup the printer and network.

- 2. Insert the *Drivers and Utilities* CD into the local workstation.
- 3. Run the installer and begin the installation.
- 4. Print for testing the printer.

Operation on Linux

Installation of Software

- 1. Insert the *Drivers and Utilities* CD in the CD-ROM drive of the local workstation. If CD-ROM drive is not mounted on your workstation, extract files by using another workstation that has a CD-ROM drive to transfer those files to your workstation.
- 2. Log on as a root account and extract the installation script from the *Drivers and Utilities* CD.
- NOTICE: If you have no root privilege, contact your system administrator.

```
# mount /dev/cdrom /mnt/cdrom
# cd /tmp
# cp /mnt/cdrom/UXFILTER.tar /tmp
# tar xvf ./UXFILTER.tar
```

- NOTE: CD-ROM is sometimes mounted automatically.
 - 3. Type ./install.sh and run the installer.

```
#./install.sh
```

4. Select the printer model to install.

```
Printer Model?

1. Dell Color Laser Printer 5110cn
2. Exit
Enter Process No(1/2)? : 1
```

5. It asks whether you want to install the filter. Type <y>.

```
Install Filter? (y/n) [y] : y
```

NOTE: If [] appears in a message, the default value will appear inside the []. It will be selected when you press the <Enter> key.

The disk status on the workstation appears. 20 MB of free disk space is required for the installation of the filter.

6. Specify the directory to install the filter. To install into /usr/local/dellbin5110, press the <Enter>

```
key. To change the directory, specify one. Change the directory to.

Enter Library directory name [/usr/local/dellbin5110]
```

7. Confirm the directory to be installed.

```
directory is '/usr/local/dellbin5110' (y/n)[n] : y
```

The software installation is complete.

Setting the Printer

Write printer setting in /etc/printcap Or /etc/printcap.local referencing/usr/local/dellbin5110/printcap.sample.

Linux (LPRng):

/etc/printcap.local Or /etc/printcap

```
lp:\
   :bk:\
   :bkf:\
   :lpd_bounce=true:\
   :sd=/var/spool/lpd/lp:\
   :af=/var/spool/lpd/lp/lp.acct:\
   :lf=/var/spool/lpd/lp/log:\
   :rm=PrinterHostName:\
   :rp=ps:\
   :if=/usr/local/dellbin5110/dellpsif:
```

- NOTICE: The directory to spool can be created in the partition with sufficient disk space. If there is no spooling directory, it is not possible to print large files.
- NOTICE: The account files or logging files can be created with the file name specified in the directory path specified.

Operation on Solaris

Installation/Printer Setting

- 1. Insert the *Drivers and Utilities* CD in the CD-ROM drive of the local workstation. If CD-ROM drive is not mounted on your workstation, extract files by using another workstation that has a CD-ROM drive to transfer those files to your workstation.
- 2. Log on as a root account and extract the installation script from the *Drivers and Utilities* CD.

NOTICE: If you have no root privilege, contact your system administrator.

```
# cd /tmp
# cp /cdrom/cdrom0/UXFILTER.tar /tmp
# tar xvf ./UXFILTER.tar
```

3. Type ./install.sh and run the installer.

```
# ./install.sh
```

4. Select the printer model to install.

```
Printer Model ?

1. Dell Color Laser Printer 5110cn

2. Exit
Enter Process No (1/2)? : 1
```

5. The following menu appears. Select <1> and set up the local printer.

```
Solaris Installation for Dell Color Laser Printer 5110cn Type Printer

1. Set Local Printer

2. Set Remote Printer

Enter Process No (1/2)? : 1
```

6. Type the device name of the connection port.

```
Enter port-device-name? [/dev/ecpp0] : /dev/bpp0
```

- NOTICE: Specify the device file in the communication port available.
- 7. When Set Remote Printer is selected, type the host name of the server or the host name of the printer.

```
Enter server-hostname? : server
server-hostname is 'server' (y/n)[y] : y
```

- NOTICE: The host name of the server must be pre-registered with DNS, NIS, NIS+ or /etc/hosts.
- 8. When Set Remote Printer is selected, type the remote printer name.

```
Enter server-printer-name? : ps
server-printer-name is 'ps' (y/n)[y] : y
```

- NOTICE: Type ps when the printer is a network connection printer.
- 9. Type the printer name to be registered with the system.

```
Enter printer-name? [del15110cn] : del15110cn
Printer-name is 'del15110cn' (y/n)[y] : y
```

10. Specify the directory to install the utility. To install into /usr/local/dellbin5110, press the <Enter> key. To change the directory, specify one.

```
Enter Binary directory name? [/usr/local/dellbin5110] :
```

11. If this utility has been installed earlier, the user will be prompted whether to overwrite the earlier version.

```
directory is '/usr/local/dellbin5110' (y/n)[n] : y
```

12. If the server input at step 5 the printer connected by the network, type $\langle y \rangle$. If the server and the printer are connected locally, type $\langle n \rangle$.

```
'dell5110cn'is network printer?:(y/n)[y] : y
```

The software installation is complete.

NOTICE: When the printing settings are modified or changed by the Administration Tool (admintool) after the installation, printing may not work.

Operation on HP-UX

Installation Procedure

- 1. Insert the *Drivers and Utilities* CD into the CD-ROM drive of the local workstation.
- 2. Log on as a root account and extract the installation script from the *Drivers and Utilities* CD.
- NOTICE: If you have no root privilege, contact your system administrator.

```
# mount -F cdfs -o cdcase /dev/dsk/c1t2d0 /cdrom
# cd /tmp
# cp /cdrom/UXFILTER.tar /tmp
# tar xvf UXFILTER.tar
```



NOTE: /dev/ds/clt2d0 is an example. Specify the CD-ROM device file for all workstations.

3. Type ./install.sh and run the installer.

```
# ./install.sh
```

4. Select the printer model to install.

```
Printer Model ?

1. Dell Color Laser Printer 5110cn

2. Exit
Enter Process No (1/2)? : 1
```

5. Specify the directory to install the utility.

```
Enter install directory name /usr/local/dellbin5110] :
directory is '/usr/local/dellbin5110' (y/n)[n]: y
```

6. Type the name of the output printer. Type delllp5110cn. Type the printer name to be registered with the system.

```
Enter output-printer-name? : delllp5110cn
output-printer-name is 'delllp5110cn' (y/n)[y]: y
```



NOTE: The registered printer name can be verified by executing lpstat -v.

7. Type the logical printer name. Register del15110cn. Type a printer name that has not already been registered with the system.

```
Enter logical-printer-name? : dell5110cn
Printer-name is 'dell5110cn' (y/n)[y]: y
```

8. The utility will be installed in the directory specified at step 5. Registration will be executed here so that the logical printer registered at step 7 can access the utility. As this process is automatically executed, no input is required. With the above steps, the installation is complete.

Uninstalling the UX Filter

About Uninstalling

The UX filter does not come with an uninstaller. To uninstall the UX filter, follow the following procedure.

٥

NOTICE: Log on as a root account to perform the operation here. If you have no root privilege, contact your system administrator.

Linux

- 1. Delete the descriptions for each printer from /etc/printcap.
- 2. Delete the added spool directory.
- 3. Restart lpd.
- 4. Delete all the directories that contain the UX filters and the files in these directories created during the installation. The following directories must be deleted.

```
/usr/local/dellbin5110
```

The above directories are standard directories created during the installation. If you had specified other directories for the installation, delete those directories.

Solaris

1. Delete the printer that was registered with the system. Use the printer name created during the installation and the lpadmin command.

```
# lpadmin -x printername
```

2. Delete the filters registered with the system. Delete the filters registered during the installation using the lpfilter command.

```
# lpfilter -f dell5110cn -x (for Dell Color Laser Printer 5110cn)
# lpfilter -f download5110 -x
# lpfilter -f postio5110cn -x
# lpfilter -f posttxt5110cn -x
```

3. Delete the symbolic files required to call up the filter. Delete the following files from /usr/lib/lp/postscript.

```
dellposttxt5110cn
dellpostps5110cn
dellbinpath5110
```

- 4. Delete the interface program files of *Selected printer type name* from /usr/lib/lp/model. Please also delete the interface program files of *Selected printer name* from /etc/lp/interfaces.
- 5. Delete all the directories that contain the UX filters and the files in these directories created during the installation. The following directories must be deleted.

```
/usr/local/dellbin5110
```

6. Delete the filter description files. Delete the following files from /etc/lp/fd. Filter description files for various printers.

```
dell5110cn.fd (for Dell Color Laser Printer 5110cn)
download5110.fd
postio5110cn.fd
posttxt5110cn.fd
```

HP-UX

1. Delete the printer that was registered with the system. Use the sam command to delete the printer set up during the installation.

```
# sam
```

2. Delete all the directories that contain the UX filters and the files in these directories created during the installation. The following directories must be deleted.

/usr/local/dellbin5110 (directory specified during the installation)

Printing and Using the Utilities

Printing (Linux)

This section provides information on printing with the filter.

To print, specify the printer registered with /etc/printcap as the output destination.

Printing From Linux

To print to the default printer:

If the printer is registered as the default printer, the name of the printer can be shortened and specified as shown in the following example.

```
% lpr filename
```

To print to other printers:

To print to a printer named dell5110cn, type as follows.

```
% lpr -Pdell5110cn filename
```

To select a paper tray for printing:

To select a paper tray, you need to define a printer which uses the desired tray by using a .dellpsdefault5110 file in your home directory. After setting the .dellpsdefault5110 file, you can print using the command.

```
% lpr -Ptray2 filename
```

About /usr/local/dellbin5110/.dellpsdefault5110:

This is the file for system default settings when using various utilities via /etc/printcap. Hereinafter, it is referred to as the *default command option setting file*.

Method:

To define a printer named *a4d* which prints on A4 with the long-edge binding feature turned on, follow the following steps.

Procedure:

1. Register the printer *a4d* with /etc/printcap.

Linux (LPRng):

/etc/printcap.local Or /etc/printcap

```
a4d:\
  :bk:\
  :bkf:\
  :lpd_bounce=true:\
  :sd=/var/spool/lpd/a4d:\
  :af=/var/spool/lpd/a4d/a4d.acct:\
  :lf=/var/spool/lpd/a4d/log:\
  :rm=PrinterHostName:\
  :rp=ps:\
  :if=/usr/local/dellbin5110/dellpsif_a4d:
```

2. Log on as the root account and create the symbolic links for dellpsif_a4d of IF Filter for printing on A4 with the long-edge binding feature turned on.

```
# ln -s /usr/local/dellbin5110/dellpsif /usr/local/dellbin5110/dellpsif_a4d
```

3. Add the following descriptions to the default command option setting file that specifies the user defined commands of the dellpsif_a4d of IF Filter.

```
/usr/local/dellbin5110/.dellpsdefault5110
dellpsif_a4d -IA4 -D
```

4. When the printer name *a4d* is specified, printing can be done on A4 with the long-edge binding feature turned on.

% lpr -Pa4d filename

Printing (Solaris)

This section provides information on printing that makes use of the filter. To print from Solaris, specify the printer registered during the installation of filters as the output destination.



NOTICE: To use the lp command, make sure the operating environment of the spooler has been set up correctly (enabled, available) using the lpstat command (lpstat-p all). For details on the options of the lp command and the lpstat command or how to make use of them, see the related manuals of Solaris.

Printing From Solaris

To print to the default printer:

If the printer is registered as the default printer, the name of the printer can be shortened and specified as shown in the following example.

% lp filename

To print to other printers:

To print to a printer named dell5110cn, type as follows.

% lp -d dell5110cn filename



NOTE: The name of the printer can be confirmed by executing lpstat -v.

To change the default printer temporarily for printing:

To change the default printer, set the printer name in the environment variable LPDEST. To set a printer named *dell5110cn* as the default printer for printing, type as follows.

% setenv LPDEST dell5110cn % lp filename



NOTE: Using this method, a default printer can be set up for each user.



NOTE: The above example describes the setup method executed when csh is used.

To select a paper tray for printing:

To select a paper tray for printing, specify the paper tray after the -y option of the 1p command.

4

NOTE: Depending on installed options, the available paper trays are different.

To select and print to a letter size paper of the printer named *dell5110cn* with landscape, specify as follows.

```
% lp -d dell5110cn -y landscape -y letter filename
```

The following options can be specified by the 1p command. To print text files:



NOTE: It prints according to the length and width specified by the lpadmin command.

-y double

Sets printing to 2-column printing.

-y landscape

Rotates the image by 90° and uses the paper in the landscape orientation.

-y size=n

Sets the font size to n point.

-y outcolumn=n

This option converts text to single-byte text and sets printing to start from the nth column.

-y outline=n

Sets printing to start from the nth line.

-y font=font

Sets the font for printing single-byte alphanumeric characters. If the font specified is not available for the printer, the default fonts are used.



NOTE: To specify a font, type the font name as-is after the -y font= option.

% lp -y font=Courier-Oblique filename



NOTE: For information on the available fonts, see the PS Fonts List.

-y margin=u:b:r:1

Specifies the margin of a page in inches. The ω (upper margin), β (bottom margin), Γ (right margin), and /(left margin) are positive real numbers (up to two decimal points). The default is 0.

-y ps

The input file will be processed as the PostScript file. If the file does not begin with "%!", "%!" will be output to the beginning line. Whether the file contains "%!" will be ignored.

To print text/PostScript files:

-y DuplexBook

Enables the long-edge binding feature. When it is specified, the printing direction or position will be adjusted and both sides of the paper printed so that the longer edge of the pages can be

bound.

-y DuplexList

Enables the short-edge binding feature. When it is specified, the printing direction or position will be adjusted and both sides of the paper printed so that the shorter edge of the pages can be bound.

-y tray-input

The paper tray-related parameters that can be specified by the 1p command are as follows.

tray1

Feed paper from tray 1 (500-sheet tray).

tray2

Feed paper from tray 2 (optional 500-sheet tray module or 1000-sheet module).

tray3

Feed paper from tray 3 (optional 1000-sheet module).

tray4

Feed paper from tray 4 (optional 1000-sheet module).

a4

Feed paper from the tray loaded with A4 (210 x 297 mm).

a5

Feed paper from the tray loaded with A5 (148 x 210 mm).

b5

Feed paper from the tray loaded with B5 (182 x 257 mm).

letter

Feed paper from the tray loaded with Letter (8.5 x 11 inches).

folio

Feed paper from the tray loaded with Folio (8.5 x 13 inches).

legal

Feed paper from the tray loaded with Legal (8.5 x 14 inches).

executive

Feed paper from the tray loaded with Executive (7.25 x 10.5 inches).

monarch

Feed paper from the tray loaded with Monarch (3.875 x 7.5 inches).

com10

Feed paper from the tray loaded with Envelope #10 (4.125 x 9.5 inches).

dl

Feed paper from the tray loaded with DL (110 x 220 mm).

с5

Feed paper from the tray loaded with C5 (162 x 229 mm).

M×*N*mm

Feed paper from the tray loaded with MxNmm defined by users.

Possible range specified: Width: 88.9 to 220 mm Length: 139.7 to 355.6 mm

MxNin

Feed paper from the tray loaded with MxNinches defined by users.

Possible range specified: Width: 3.50 to 8.50 inches Length: 5.50 to 14.0 inches

If this option is not specified or the tray specified tray is not available, feed paper from the default tray.

-y toner_save

Turns on the *save toner* mode for printing. The print result will be fainter than that of normal printing.

-y nc=n

Specifies the number of output copies (the value of copies must be a positive integer). If this option is not specified, 1 will be selected.

-y cl

Specifies that printing be collated. If the copies option is not specified, this option will be ignored.

-y ps

The input file will be processed as the PostScript file. If the file does not begin with \%!, \%! will be output to the beginning line. If a file contains \%!, this option will be ignored.

-y msi

Specifies multipurpose feeder.

-y m=type

Specifies multipurpose feeder Paper Type.

Available multipurpose feeder Paper Types are as follows.

В

FinePaper/Bond/Plain Paper 2

ВВ

FinePaperBack/Bond/Plain Paper 2 - Side 2

Ρ

Stationary/Plain/Plain Paper 1

PВ

StationaryBack/Plain/Plain Paper 1 - Side 2

R

Recycled Paper

RB

RecycledPaperBack/ Recycled Paper - Side 2

```
Н1
      ThickPaper/Heavyweight 1/Covers 1
      H1B
      ThickPaperBack/Heavyweight 1/Covers 1 - Side 2
      Н2
      ThickPaper2/Heavyweight 2/Covers 2
      н2в
      ThickPaper2Back/Heavyweight 2/Covers 2 - Side 2
      OHP
      Transparency
      LabelPaper/Labels
      Coated/Coated 2/Coated Paper 2
      C2B
      Coated Back/Coated 2/Coated Paper 2- Side 2
      Coated Thick/Coated 3/Coated Paper 3
      СЗВ
      Coated Thick Back/Coated 3/Coated Paper 3- Side 2
      Ε
      Envelope
      If this option is not specified, multipurpose feeder Paper Type for the printer can be used.
-y mfo=mode
      Specifies orientation for multipurpose feeder.
      Available orientations for multipurpose feeder are as follows.
      le
      Landscape
      ler
      Landscape (Rotated)
      se
      Portrait
      ser
      Portrait (Rotated)
-y po=n
      Specifies Alternate Tray.
      Available Alternate Trays are as follows.
```

```
Use Printer Settings
      Display Message
      Feed from multipurpose feeder
      Use Nearest Size (Adjust to Fit)
      Use Larger Size (Adjust to Fit)
      Use Nearest Size (No Zoom)
      Use Larger Size (No Zoom)
-y st=mode
      Specifies Feed Separators from.
      Available Feed Separators from the following.
      AutoTray/Auto
      1stTray/Tray 1 (standard 500-sheet tray)
      2ndTray/Tray 2 (optional 500-sheet tray module or 1000-sheet module)
      3rdTray/Tray 3 (optional 1000-sheet module)
      4thTray/Tray 4 (optional 1000-sheet module)
      off
      Off
-y sp
      Specifies Printed Separators.
-y sb
      Specifies Skip Blank Pages.
-y cm=mode
      Specifies Output Color.
```

```
Color (CMYK)
      Black
-y pr=mode
      Specifies Print Mode.
      Available Print Modes are as follows.
      hs
      High Speed
      hq
      High Quality
-y cc=mode
      Specifies RGB Color Correction.
      Available RGB Color Corrections are as follows.
      Off
      Photo
      sRGB
      Standard/ Normal
      4
      Presentation
      This option is available only for color printing and when entry data is RGB data.
-y gc=mode
      Specifies RGB Gamma Correction.
      Available RGB Gamma Corrections are as follows.
      1.0
      1.0
      1.4
      1.4
      1.8
      1.8
```

Available Output Colors are as follows.

```
2.2
      2.6
      2.6
      off
      Off
      This option is available only for color printing and when entry data is RGB data.
-y sc=mode
      Specifies Screen.
      Available Screens are as follows.
      Fineness
      Gradation
      2
      Auto
      For Transparency
-y gg=mode
      Specifies Gray Guaranteed.
      Available Gray Guaranteed modes are as follows.
      on
      On
      off
      Off
      This option is available only for color printing.
-y ct
      Specifies Color Transformation.
      This option is available only for color printing.
-y br= mode
      Specifies Brightness Adjustment.
      Available brightness adjustment option values are as follows.
      +5
      Bright 5
```

2.2

```
+4
      Bright 4
      +3
      Bright 3
      +2
      Bright 2
      +1
      Bright 1
      0
      Normal
      -1
      Dark 1
      -2
      Dark 2
      -3
      Dark 3
      -4
      Dark 4
      -5
      Dark 5
-y rgbc= mode
      Specifies RGB Color Correction.
      Available RGB Color Corrections are as follows.
      10
      Perceptual
      11
      Saturation
      12
      RelativeC
```

AbsoluteC

This option is available only for color printing and when entry data is RGB data.

```
-y rgbpr= mode
```

Specifies RGB input profile.

Available RGB input profile option values are as follows.

0

sRGB

1

AdobeRGB

This option is available only for color printing and when entry data is RGB data.

```
-y rgbtp= mode
```

Specifies RGB color temperature.

Available RGB color temperature option values are as follows.

5000

5000K

6000

6000K

9300

9300K

This option is available only for color printing and when entry data is RGB data.

```
-y Cb=cyan-low:cyan-middle:cyan-high:magenta-low:magenta-middle:magenta-high:yellow-low:
```

```
yellow-middle:yellow high:black-low:black-middle:black-high
```

Specifies adjustment value for color balance of each color/density.

Available adjustment values are as follows.

+3

Dark 3

+2

Dark 2

```
Dark 1
           0
           Normal
           -1
           Light 1
           -2
           Light 2
           -3
           Light 3
           -Cb option value must be specified in the following order:
           Cyan low density, Cyan medium density, Cyan high density, Magenta low density, Magenta
           medium density, Magenta high density, Yellow low density, Yellow medium density, Yellow high
           density, Black low density, Black medium density, Black high density
           If no value is specified, it is treated as "0" (Normal).
           For example, if you want to specify "Light 2" for Cyan medium density, "Dark 3" for Yellow high
           density, and "Dark 2" for Black low density, it can be specified using either of the following:
-Cb=0:-2:0:0:0:0:0:0:0:+3:+2:0:0
-Cb=:-2:::::+3:+2::
     -y -hld=PrintType:UserID:Password:DocumentName
           Secure Print
           PrintType
           store
           Secure Print/Store Print
           proof
           Proof Print
           UserID
           Up to eight single-byte characters from 0x20 to 0x7E, except 0x20 " " (blank) and 0x3A": "
           (colon).
           Password
           Up to 12 single-byte characters from 0x30 to 0x39 (numeric characters).
           DocumentName
```

+1

```
Up to 12 single-byte characters from 0x20 to 0x7E, except 0x20 " " (blank) and 0x3A": " (colon).
```

Secure Print

```
-y hld=store:UserID:Password:DocumentName
-y hld=store:UserID:Password:
Store Print
-y hld=store:UserID::DocumentName
-y hld=store:UserID::
Proof Print
-y hld=proof:UserID::DocumentName
-y hld=proof:UserID::DocumentName
-y hld=proof:UserID::
```

Authentication Setting

Specifies job owner name and password for authentication.

- o When only job owner name is specified (-Jown=jobownername:) (no password specified), authentication password is treated as not specified.
- o When only password is specified (-Jown=:password) (no job owner name specified), login user name is used as job owner name. Entered password is used as authentication password.
- o When neither of job owner name nor password is specified (-Jown=:), login user name is used as job owner name, and authentication password is treated as not specified.
- O When a job owner name exceeds allowable character length, the extra characters are ignored.
- o When an unacceptable character is specified for job owner name, "Unknown User" is used as job owner name.
- o * Characters acceptable for job owner name are alphanumeric characters and symbols, except for space and colon.
- o * Up to 32 characters are acceptable for job owner name.
- o When an unacceptable character is specified for password, or when a specified password is not within the range of the allowable character length, the authentication password is treated as not specified.
- o * Only numbers are acceptable for password.
- o * Acceptable password length is between 4 and 12 characters.
- Incomplete form of -Jown option is treated as no authentication setting being made. In such
 case, if authentication setting is made with the environmental variable, it is used as setting
 information.

Printing (HP-UX)

This section provides information on printing from the registered logical printer during the installation.

Printing From HP-UX

To print to the default printer:

If the printer is registered as the default printer, the name of the printer can be shortened and specified as shown in the following example.

```
% lp filename
```

To print to other printers:

To print to a printer named del15110cn, type as follows.

```
% lp -d dell5110cn filename
```

To change the default printer temporarily for printing:

To change the default printer, set the printer name in the environment variable PRINTER. To set a printer named del15110cm as the default printer for printing, type as follows.

```
% setenv PRINTER dell5110cn
% lp filename
```

To print with added options:

To print with the options, specify the option of the 1p command using -o as follows.

The available options are the same as txt2ps2/tiff2ps/xwd2ps2.

Depending on installed options, the available paper trays are different.

```
%lp -d dell5110cn -o r -o ILT filename
```

To print using file format:

To print text files:

```
% lp -d dell5110cn filename
```

To print XWD files:

```
% lp -d dell5110cn -o XWD filename
```

To print TIFF format files:

```
% lp -d dell5110cn -o TIF filename
```

To print PostScript files:

```
% lp -d dell5110cn filename
```

To print PostScript files as text files:

```
% lp -d dell5110cn -o TX filename
```

However, for PostScript files with options set up, such as paper selection, etc., when the same option is specified, it will be ignored.

Authentication Printing

This section provides information on how to specify the user name used for authentication printing in the environment variable.

Specifying the User Name

To Specify the User Name for Authentication Printing:

You can specify a unique user name in the environment variable as follows.

```
% setenv JOWN5110U " jobownername"
```

You can specify the login name as the user name as follows.

```
% setenv JOWN5110U ""
```



NOTE: Up to 32 characters are acceptable for the user name. When a user name exceeds allowable character length, the extra characters are ignored.



NOTE: If you specify the filter option when authentication printing is already specified, the filter option has the higher priority over authentication printing.

Specifying the Password

To Specify the Password for Authentication Printing:

If you need to specify the password in authentication printing, you can specify the password in the environment variable as follows.

```
% setenv JOWN5110P "password"
```

If you do not specify the password inexplicitly, type as follows.

```
% setenv JOWN5110P ""
```



NOTE: Acceptable password length is between 4 and 12 characters. When an unacceptable character is specified for password, or when a specified password is not within the range of the allowable character length, the extra characters are ignored.



NOTE: If you specify the filter option when authentication printing is already specified, the filter option has the higher priority over authentication printing.



NOTE: If you only specify the password without specifying the user name in the environment variable, the login name is assumed as the user name.



NOTICE: If you enter the password in the login file for automatically allocating the environment variable when you log in, you are recommended to specify the appropriate access privilege that prevents unauthorized users from reading the login file.

txt2ps2 (Linux/Solaris/HP-UX)

Format

/usr/local/dellbin5110/txt2ps2 [-d] [-D] [-Itray-input] [-t] [-2] [-r] [-F] [-llines] [-wcolumns] [-ooutcolumns] [-Loutlines] [-en] [-ssize] [-E] [-ffont] [-Nc=copies] [-Cl] [-ps] [-mg=up:bottom:right:left] [-Hd=position:format:page] [-Hffont] [-MSI] [-M=type] [-Mfo=mode] [-Pon] [-St=mode] [-Sp] [-Sb] [-Cm=mode] [-Pr=mode] [-Cc=mode] [-Gc=mode] [-Sc=mode] [-Gg=mode] [-Ct] [-Br=mode] [-RGBPr=mode] [-RGBPr=mode] [-RGBTp=mode] [-Cb=cyan-low:cyan-middle:cyan-high:magenta-low:magenta-middle:magenta-high:yellow-low;yellow-middle:yellow-high:black-low:black-middle:black-high] [-Hld=PrintType:UserID:Password:DocumentName] [-Jown= jobownername:password] [filename...]

Function

Reads text, converts it to the PostScript language program, and writes to standard output. If the filename is not specified, the standard input will be taken as the command input.

By typing character strings in the environmental variable TXT2PS2OPTION, the input of option at the command line can be omitted.

At the environmental variable TXT2PS2OPTION and the command line, if no option is specified, the printer will output in 10-point font size in the portrait orientation.

At the environmental variable TXT2PS2OPTION and the command line, if the same option is specified, the one specified at the command line will prevail.

txt2ps2 outputs the PostScript language program that adjusts the line/column according to the paper size. For this reason, the user need not be aware of the paper size. If there is an option to specify the line/column, automatic line feed according to the paper size will not be executed. Printing will be output according to the line/column specified.

txt2ps2 interprets the following control codes. Other control codes/undefined codes will be converted to octal numbers and output as-is.

Line feed

FF

Form feed (modifiable by option)

TAB

8-column tab stop (modifiable by option)

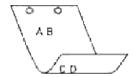
BS

Backspace 1 character

Option

-d

Enables the short-edge binding feature. When it is specified, the printing direction or position will be adjusted and both sides of the paper printed so that the shorter edge of the pages can be bound.



-D

Enables the long-edge binding feature. When it is specified, the printing direction or position will be adjusted and both sides of the paper printed so that the longer edge of the pages can be bound.



-Itray-input

Specifies the paper tray. A paper tray can be selected by directly specifying a tray or by specifying a paper size.

When a paper size is specified, the tray loaded with paper of the specified size will be found and selected automatically.

The parameters for selecting a paper tray are as follows.

1

Feed paper from tray 1 (standard 500-sheet tray).

2

Feed paper from tray 2 (optional 500-sheet tray module or 1000-sheet module).

3

Feed paper from tray 3 (optional 1000-sheet module).

4

```
Feed paper from tray 4 (optional 1000-sheet module).
Α4
      Feed paper from the tray loaded with A4 (210 x 297 mm).
Α5
      Feed paper from the tray loaded with A5 (148 x 210 mm).
В5
      Feed paper from the tray loaded with B5 (182 x 257 mm).
LT
      Feed paper from the tray loaded with Letter (8.5 x 11 inches).
FL
      Feed paper from the tray loaded with Folio (8.5 x 13 inches).
LG
      Feed paper from the tray loaded with Legal (8.5 x 14 inches).
ΕX
      Feed paper from the tray loaded with Executive (7.25 x 10.5 inches).
МО
      Feed paper from the tray loaded with Monarch (3.875 x 7.5 inches).
COM10
      Feed paper from the tray loaded with Envelope #10 (4.125 x 9.5 inches).
DL
      Feed paper from the tray loaded with DL (110 x 220 mm).
C5
      Feed paper from the tray loaded with C5 (162 x 229 mm).
MxNmm
      Feed paper from the tray loaded with MxNmm defined by users.
      Possible range specified:
      Width: 88.9 to 220 mm
      Length: 139.7 to 355.6 mm
MxNin
      Feed paper from the tray loaded with MxNinches defined by users.
      Possible range specified:
```

Width: 3.50 to 8.50 inches

Length: 5.50 to 14.0 inches

If this option is not specified or the tray specified is not available, feed paper from the default tray.

-t

Turns on the *save toner* mode for printing. The print result will be fainter than that of normal printing. In some cases, this option will be ignored.

-2

Sets printing to 2-column printing.

-r

Rotates the image by 90° and uses the paper in the landscape orientation.

-F

Ignores the form feed code (FF).

-llines

Specifies the number of lines per page.

-wcolumns

Specifies the number of columns per line.

-ooutcolumns

Converts print data to single-byte text and sets printing to start from outcolumns.

-Loutlines

Prints text from the outline columns.

-en

Expands horizontal tabs to n columns (space). The default is 8.

-ssize

Specifies the font size as point size. The default is 10.

 $-\mathbf{E}$

This function turns on the image enhancement function. In some cases, this option will be ignored.

-ffont

Sets the font.



NOTE: The available fonts are limited to the font in the printer. For more information, see "Understanding Fonts."

-Nc=copies

Specifies the number of output copies (the value of copies must be a positive integer).

-Cl

Specifies that printing be collated. If the copies option is not specified, this option will be ignored.

-ps

The input file will be processed as the PostScript file. If the file does not begin with \%!, \%! will be output to the beginning line. If a file contains \%!, it will be processed in the same way as dellpsif.

-mg=up:bottom:right:left

Specifies the margin of a page in inches. The upper margin, bottom margin, right margin, and left margin are positive real numbers (up to two decimal points). The default is 0.

-mg=0:0:0:3

Sets the left margin to 3 inches.

-mg=3:3:0:5

Sets the upper margin to 3 inches; bottom margin, 3 inches; and left margin, 5 inches. If the margin is 0, it can be omitted.

-mg=:::3

Sets the left margin to 3 inches.

-Hd=position:format:page

Specifies the position that the user information of the header or footer is output at. *position* specifies output position. But this option is available only for converting text files.

ul

Output on the upper left corner of the paper.

ur

Output on the upper right corner of the paper.

Output on the lower left corner of the paper.

dr

Output on the lower right corner of the paper.

format specifies the contents and the order to output. This option is omissible. If this option is omitted, uh is specified as the default value.

u

User name

h

Host name

t

Date and time

If the output contents are specified as tuh, it is output as follows.

Date and Time User: username Host: hostname

page specifies the page to output. This option is omissible.

f

Output the top page only.

(default in case of PostScriptfiles conversion)

а

Output all pages.

(default in case of Text files conversion)

Specify these options as follows.

In the case that convert text file, output the host name following the user name on the upper right corner of the paper, output all pages.

(User name, Host name, all page output are default)

```
-Hd=ur
```

-Hd=ur:uh

-Hd=ur:uh:a

In the case that convert PostScript file, output the host name following the date and time on the lower left corner of the paper, output all pages (a option value is necessary because *output the top page only* is default when PostScript file is converted.)

```
-Hd=dl:th:a
```



NOTICE: If the paper size is not specified, it outputs the header and footer at the position of A4 size by default. If the paper size is specified by 1p command, the output position of the header or footer is not changed from the position of the paper size specified by txt2ps2. Specify the paper size at the same time when the header and footer option is used. Sometimes all pages are not printed despite specifying all page output when PostScript file conversion is specified. In such cases, specify *output the top page only*. By using TZ environmental variable, specify time zone (GMT etc.).

-Hffont

Specify the font to print the header and footer. European fonts the same as half size alphanumeric fonts can be specified. Helvetica is specified as default. If the wrong font is specified, the default European font of the printer can be used. If the header/footer output option is specified, the font specification for the header/footer is ignored.

-MSI

Specifies multipurpose feeder.

-M=type

Specifies multipurpose feeder Paper Type. Available multipurpose feeder Paper Types are as follows.

В

FinePaper/Bond/Plain Paper 2

ВВ

FinePaperBack/Bond/Plain Paper 2- Side 2

Ρ

Stationary/Plain/Plain Paper 1

PΒ

StationaryBack/Plain/Plain Paper 1 - Side 2

R

Recycled Paper

RB

RecycledPaperBack/ Recycled Paper - Side 2

R

Recycled Paper

RB

RecycledPaperBack/ Recycled Paper - Side 2

```
н1
            ThickPaper/Heavyweight 1/Covers 1
     H1B
            ThickPaperBack/Heavyweight 1/Covers 1 - Side 2
     Н2
            ThickPaper2/Heavyweight 2/Covers 2
     н2в
            ThickPaper2Back/Heavyweight 2/Covers 2 - Side 2
     OHP
            Transparency
     L
            LabelPaper/Labels
     C2
            Coated/Coated 2/Coated Paper 2
     C2B
            Coated Back/Coated 2/Coated Paper 2- Side 2
     C3
            Coated Thick/Coated 3/Coated Paper 3
     СЗВ
            Coated Thick Back/Coated 3/Coated Paper 3- Side 2
     Ε
            Envelope
     If this option is not specified, multipurpose feeder Paper Type of the printer can be used.
-Mfo=mode
     Specifies orientation for multipurpose feeder.
     Available orientations for multipurpose feeder are as follows.
     le
            Landscape
```

ler

```
Landscape (Rotated)
      se
            Portrait
      ser
            Portrait (Rotated)
-Pon
      Specifies Alternate Tray.
      Available Alternate Trays are as follows.
      0
            Use Printer Settings
      1
            Display Message
      2
            Feed from multipurpose feeder
      3
            Use Nearest Size (Adjust to Fit)
      4
            Use Larger Size (Adjust to Fit)
      5
            Use Nearest Size (No Zoom)
      6
            Use Larger Size (No Zoom)
-St=mode
      Specifies Feed Separators from.
      Available Feed Separators froms are as follows.
      auto
            AutoTray/Auto
      1
            1stTray/Tray 1 (standard 500-sheet tray)
```

```
2ndTray/Tray 2 (optional 500-sheet tray module or 1000-sheet module)
      3
            3rdTray/Tray 3 (optional 1000-sheet module)
      4
            4thTray/Tray 4 (optional 1000-sheet module)
      off
            Off
-Sp
      Specified Printed Separators.
      Available only when the paper tray for separators is specified.
-Sb
      Specifies Skip Blank Pages.
-Cm=mode
      Specifies Output Color.
      Available Output Colors are as follows.
      С
            Color (CMYK)
      k
            Black
-Pr=mode
      Specifies Print Mode.
      Available Print Modes are as follows.
      hs
            High Speed
      hq
            High Quality
-Cc=mode
```

2

	Specifi Availal	ies RGB Color Correction. ble RGB Color Corrections are as follows.
	0	
		Off
	1	
		Photo
	2	
		sRGB
	3	
		Standard/ Normal
	4	
		Presentation
	This o	otion is available only for color printing.
-Gc=mode		
	Specif Availal	ies RGB Gamma Correction. ble RGB Gamma Corrections are as follows.
	1.0	
		1.0
	1.4	
		1.4
	1.8	
		1.8
	2.2	
		2.2
	2.6	
		2.6
	off	
		Off
-Sc=m	ıode	

```
Specifies Screen.
      Available Screens are as follows.
      0
             Fineness
      1
             Gradation
      2
             Auto
      3
             For Transparency
-Gg=mode
      Specifies Gray Guaranteed.
      Available Gray Guaranteed options are as follows.
      on
             On
      off
             Off
      This option is available only for color printing.
-Ct
      Specifies Color Transformation. This option is available only for color printing.
      -Br= mode
             Specifies Brightness Adjustment.
             Available brightness adjustment option values are as follows.
             +5
             Bright 5
             +4
             Bright 4
             +3
             Bright 3
```

```
+2
      Bright 2
      +1
      Bright 1
      0
      Normal
      -1
      Dark 1
      -2
      Dark 2
      -3
      Dark
      -4
      Dark
      -5
      Dark
-RGBc= mode
      Specifies RGB Color Correction.
      Available RGB Color Corrections are as follows.
      10
      Perceptual
      11
      Saturation
      12
      RelativeC
      13
      AbsoluteC
      This option is available only for color printing and when entry data is RGB data.
-RGBPr= mode
      Specifies RGB input profile.
```

	Available RGB input profile option values are as follows.		
	0		
	sRGB		
	1		
	AdobeRGB		
	This option is available only for color printing and when entry data is RGB data.		
RGBT	p= mode		
	Specifies RGB color temperature. Available RGB color temperature option values are as follows.		
	5000		
	5000K		
	6000		
	6000K		
	9300		
	9300K		
	This option is available only for color printing and when entry data is RGB data.		
Cb=cyan-low:cyan-middle:cyan-high:magenta-low:magenta-middle:magenta-high: low;yellow-middle:yellow high:black-low:black-middle:black-high			
	Specifies adjustment value for color balance of each color/density.		
	Available adjustment values are as follows.		
	+3		
	Dark 3		
	+2		
	Dark 2		
	+1		
	Dark 1		
	0		
	Normal		
	-1		
	Light 1		

```
-2
```

Light 2

-3

Light 3

-Cb option value must be specified in the following order:

Cyan low density, Cyan medium density, Cyan high density, Magenta low density, Magenta medium density, Magenta high density, Yellow low density, Yellow medium density, Yellow high density, Black low density, Black medium density, Black high density

If no value is specified, it is treated as "0" (Normal).

For example, if you want to specify "Light 2" for Cyan medium density, "Dark 3" for Yellow high density, and "Dark 2" for Black low density, it can be specified using either of the following:

```
-Cb=0:-2:0:0:0:0:0:0:+3:+2:0:0
-Cb=:-2::::::+3:+2::
```

-Hld=PrintType:UserID:Password:DocumentName

Secure Print

PrintType

store

Secure Print/Store Print

proof

Proof Print

UserID

Up to eight single-byte characters from 0x20 to 0x7E, except 0x20 " " (blank) and 0x3A": " (colon).

Password

Up to 12 single-byte characters from 0x30 to 0x39 (numeric characters).

DocumentName

Up to 12 single-byte characters from 0x20 to 0x7E, except 0x20 " " (blank) and 0x3A ": " (colon).

Secure Print

```
-Hld=store:UserID:Password:DocumentName
-Hld=store:UserID:Password:
```

Store Print

```
-Hld=store:UserID::DocumentName
-Hld=store:UserID::

Proof Print
-Hld=proof:UserID::DocumentName
-Hld=proof:UserID::
```

NOTICE: Make sure you specify Secure Print only when you directly print data to a printer. Secure Print may not be available if you specify it when data need to be printed through another server or data need to be handled by another program such as PostScript files. Collate is automatically specified when you specify Proof Print.

-Jown= jobownername: Password

Authentication Setting

Specifies job owner name and password for authentication.

- o When only job owner name is specified (-Jown=jobownername:) (no password specified), authentication password is treated as not specified.
- o When only password is specified (-Jown=:password) (no job owner name specified), login user name is used as job owner name. Entered password is used as authentication password.
- o When neither of job owner name nor password is specified (-Jown=:), login user name is used as job owner name, and authentication password is treated as not specified.
- o When a job owner name exceeds allowable character length, the extra characters are ignored.
- o When an unacceptable character is specified for job owner name, "Unknown User" is used as job owner name.
- o * Characters acceptable for job owner name are alphanumeric characters and symbols, except for space and colon.
- o * Up to 32 characters are acceptable for job owner name.
- o When an unacceptable character is specified for password, or when a specified password is not within the range of the allowable character length, the authentication password is treated as not specified.
- o * Only numbers are acceptable for password.
- o * Acceptable password length is between 4 and 12 characters.
- Incomplete form of -Jown option is treated as no authentication setting being made. In such
 case, if authentication setting is made with the environmental variable, it is used as setting
 information.

Example

To convert the program list of the file.txt file into the PostScript language program that sets the paper to the landscape orientation and prints in the 2-column mode, type as follows:

```
% txt2ps2 -r -2 file.txt | lpr (for Linux)
% txt2ps2 -r -2 file.txt | lp (for Solaris/HP-UX)
```

To convert file.txt to the PostScript language program and output it to the file.ps file, type as follows:

```
% txt2ps2 file.txt > file.ps
% lpr file.ps (for Linux)
% lp file.ps (for Solaris/HP-UX)
```

To convert the output result of the command into the PostScript language program using txt2ps2 and print it to the printer, type as follows:

```
% ls -alF | txt2ps2 | lpr (for Linux)
% ls -alF | txt2ps2 | lp (for Solaris/HP-UX)
```

Environmental Variable

TXT2PS2OPTION

Optional settings based on the environmental variable. To output in the 2-column mode, 8 points and the landscape orientation, type as follows:

```
% setenv TXT2PS2OPTION "-2 -s8 -r"
```

To use the same options as those of the dellpsif filter specified by printcap, type as follows:

```
% setenv TXT2PS2OPTION "<dellpsif>"
```

File

/usr/local/dellbin5110/.dellpsdefault5110
This is the default command option setting file for individual users.

Important

- When the same option is specified twice, the later setting will prevail. As TXT2PS2OPTION is analyzed before the option of the command line, it is possible to temporarily modify the options already set in TXT2PS2OPTION by typing at the command line.
- The comment description (%%page:m n) of the page number cannot be output to the PostScript program file which is output by the default option of txt2ps2. Thus, when the output of txt2ps2 is to be taken as the output of another application (psrev of TRANSCRIPT, etc.), add the page number description by inserting the line command (-Ilines).
- If a BS code is found at the beginning of a line, the print position of the next character will be located at the left of the beginning of the line.
- When there are multiple tab codes in one line, the tab position may be off as a result of automatic line

feed. In such case, use the -I or -w option.

- The number of columns specified by the -w option is not the actual number of printed characters. The actual number of single-byte characters to be printed is derived by deducting the output column position (outcolumns) specified by the o option from the number of columns specified by the -w option. The -mg option cannot be specified when -w, -1, -o, and -L option are specified. The start positions of margin of the margin command (-mg=u:b:r:1) are not set against the edge of the paper. The margins are set against the printable area of the paper allowed by the printer. Use the -ps option only when a PostScript file that contains no %! at the beginning of the file is used as the PostScript file. If a normal text file is input, it will not function correctly.
- In HP-UX, txt2ps2 considers files written by PostScript that contain %! at the beginning of the file as the PostScript files. To print PostScript files as text files, specify the TX option. With this option, PostScript files will be processed as text files.

sunras2ps2 (Solaris)

Format

```
/usr/local/dellbin5110/sunras2ps2 [-d] [-D] [-Itray-input] [-t] [-n] [-l=left,bottom - s=width,height] [-S=width] [-E] [-Nc=copies] [-Cl] [-Hd=position: format] [-Hffont] [-MSI] [-M=type] [-Mfo=mode] [-Pon] [-St=mode] [-Sp] [-Sb] [-Cm=mode] [-Pr=mode] [-Cc=mode] [-Gc=mode] [-Sc=mode] [-Gg=mode] [-Ct] [-Br=mode] [-RGBr=mode] [-RGBrp=mode] [-Cb=cyan-low:cyan-middle:cyan-high:magenta-low:magenta-middle:magenta-high:yellow-low;yellow-middle:yellow-high:black-low:black-middle:black-high] [-Hld=PrintType:UserID:Password:DocumentName] [-Jown=jobownername:password] [filename...]
```

Function

Reads SunRaster data, converts it to the PostScript language program and writes to standard output. If the filename is not specified, the standard input will be taken as the command input. SunRaster files with a pixel depth of 1, 8, 24, and 32 bits can be specified.

sunran2ps2 takes filename as having been created in 72dpi and calculates the output size. Thus, to convert SunRaster files created in other resolutions, specify the size option (-s, -s) explicitly.

Option

-d

Enables the short-edge binding feature. When it is specified, the printing direction or position will be adjusted and both sides of the paper printed so that the shorter edge of the pages can be bound.

-D

Enables the long-edge binding feature. When it is specified, the printing direction or position will be adjusted and both sides of the paper printed so that the longer edge of the pages can be bound.



-Itray-input

Specifies the paper tray.

A paper tray can be selected by directly specifying a tray or by specifying a paper size.

When a paper size is specified, the tray loaded with paper of the specified size will be found and selected automatically.

The parameters for selecting a paper tray are as follows.

1

Feed paper from tray 1 (standard 500-sheet tray).

2

Feed paper from tray 2 (optional 500-sheet tray module or 1000-sheet module).

3

Feed paper from tray 3 (optional 1000-sheet module).

4

Feed paper from tray 4 (optional 1000-sheet module).

Α4

Feed paper from the tray loaded with A4 (210 x 297 mm).

Α5

Feed paper from the tray loaded with A5 (148 x 210 mm).

В5

Feed paper from the tray loaded with B5 (182 x 257 mm).

 $_{
m LT}$

Feed paper from the tray loaded with Letter (8.5 \times 11 inches).

FL

Feed paper from the tray loaded with Folio (8.5 \times 13 inches).

LG

Feed paper from the tray loaded with Legal (8.5 \times 14 inches).

EX

Feed paper from the tray loaded with Executive $(7.25 \times 10.5 \text{ inches})$.

MO

Feed paper from the tray loaded with Monarch (3.875 \times 7.5 inches).

COM10

Feed paper from the tray loaded with Envelope #10 (4.125 \times 9.5 inches).

DL

Feed paper from the tray loaded with DL (110 x 220 mm).

C5

Feed paper from the tray loaded with C5 (162 x 229 mm).

*M*x*N*mm

Feed paper from the tray loaded with MxNmm defined by users.

Possible range specified: Width: 88.9 to 220 mm Length: 139.7 to 355.6 mm

MxNin

Feed paper from the tray loaded with MxN inches defined by users.

Possible range specified: Width: 3.50 to 8.50 inches Length: 5.50 to 14.0 inches

If this option is not specified or the tray specified is not available, feed paper from the default tray.

Turns on the *save toner* mode for printing. The print result will be fainter than that of normal printing. In some cases, this option will be ignored.

-r

Rotates the image by 90o and uses the paper in the landscape orientation.

-n

Disables the addition of the showpage. It is used when files converted to the PostScript language program are merged with files created with other applications.

-l=left,bottom

Specifies the print position. Printing will be executed from the left and bottom of the page. The default is 0.25 inches for both left and bottom.

-s=width, height

Specifies the output size. Printing will be executed with the width and height in inches.

-S=width

Sets the width of the output size in inches. The height will be calculated automatically according to the width.

 $-\mathbf{E}$

This function turns on the image enhancement function. In some cases, this option will be ignored.

-Nc=copies

Specifies the number of output copies (the value of copies must be a positive integer).

-Cl

Specifies that printing be collated. If the copies option is not specified, this option will be ignored.

-Hd=position:format

Specifies the position to be output the user information as the header or footer. *position* specifies output position. But this option is available only for converting text files.

ul

Output on the upper left corner of the paper.

dl

Output on the lower left corner of the paper. dr Output on the lower right corner of the paper. format specifies the contents and the order to output. This option is omissible. If this option is omitted, uh is specified as the default value. u User name h Host name t Date and time If the output contents are specified as tuh, it is output as follows. Date and Time User: username Host: hostname. Specify these options as follows. In the case that convert text file, output the host name following the user name on the upper right corner of the paper, output all pages. (User name, Host name, all page output are default) -Hd=ur -Hd=ur:uh -Hffont Specify the font to print the header and footer. European fonts the same as half size alphanumeric fonts can be specified. Helvetica is specified as default. If the wrong font is specified, default European font of the printer can be used. If header/footer output option is specified, the font specification of header/footer is ignored. -MSI Specifies multipurpose feeder. -M=typeSpecifies multipurpose feeder Paper Type. Available multipurpose feeder Paper Types are as follows. В FinePaper/Bond/Plain Paper 2

BB

FinePaperBack/Bond/Plain Paper 2 - Side 2

```
Ρ
      Stationary/Plain/Plain Paper 1
PΒ
      StationaryBack/Plain/Plain Paper 1 - Side 2
R
      Recycled Paper
RB
      RecycledPaperBack/ Recycled Paper - Side 2
Н1
      ThickPaper/Heavyweight 1/Covers 1
H1B
      ThickPaperBack/Heavyweight 1/Covers 1 - Side 2
Н2
      ThickPaper2/Heavyweight 2/Covers 2
H2B
      ThickPaper2Back/Heavyweight 2/Covers 2 - Side 2
OHP
      Transparency
L
      LabelPaper/Labels
C2
      Coated/Coated 2/Coated Paper 2
C2B
      Coated Back/Coated 2/Coated Paper 2- Side 2
C3
      Coated Thick/Coated 3/Coated Paper 3
СЗВ
      Coated Thick Back/Coated 3/Coated Paper 3- Side 2
```

Ε

Envelope

If this option is not specified, multipurpose feeder Paper Type of the printer can be used.

```
-Mfo=mode
```

```
Specifies orientation for multipurpose feeder.
      Available orientations for multipurpose feeder are as follows.
      le
             Landscape
      ler
             Landscape (Rotated)
      se
             Portrait
      ser
             Portrait (Rotated)
-Pon
      Specifies Alternate Tray.
      Available Alternate Trays are as follows.
      0
             Use Printer Settings
      1
             Display Message
      2
             Feed from multipurpose feeder
      3
             Use Nearest Size (Adjust to Fit)
      4
             Use Larger Size (Adjust to Fit)
      5
```

Use Nearest Size (No Zoom)

6

Black

```
-St=mode
     Specifies Feed Separators from.
     Available Feed Separators from the following.
     auto
            AutoTray/Auto
     1
            1stTray/Tray 1 (standard 500-sheet tray)
     2
            2ndTray/Tray 2 (optional 500-sheet tray module or 1000-sheet module)
     3
            3rdTray/Tray 3 (optional 1000-sheet module)
     4
            4thTray/Tray 4 (optional 1000-sheet module)
     off
            Off
-Sp
     Specifies Specifies Printed Separators.
     Available only when the paper tray for separators is specified.
-Sb
     Specifies Skip Blank Pages.
-Cm=mode
     Specifies Output Color.
     Available Output Colors are as follows.
     С
            Color (CMYK)
     k
```

```
-Pr=mode
      Specifies Print Mode.
      Available Print Modes are as follows.
      hs
            High Speed
      hq
            High Quality
-Cc=mode
      Specifies RGB Color Correction.
      Available RGB Color Corrections are as follows.
      0
            Off
      1
            Photo
      2
            sRGB
      3
            Standard/ Normal
      4
            Presentation
      This option is available only for color printing and when entry data is RGB data.
-Gc=mode
      Specifies RGB Gamma Correction.
      Available RGB Gamma Corrections are as follows.
      1.0
            1.0
      1.4
            1.4
      1.8
            1.8
```

```
2.2
             2.2
      2.6
             2.6
      off
             Off
      This option is available only for color printing and when entry data is RGB data.
-Sc=mode
      Specifies Screen.
      Available Screens are as follows.
      0
             Fineness
      1
             Gradation
      2
             Auto
      3
             For Transparency
-Gg=mode
      Specifies Gray Guaranteed.
      Available Gray Guaranteed options are as follows.
      on
             On
      off
             Off
      This option is available only for color printing.
      Specifies Color Transformation.
      This option is available only for color printing.
```

-Ct

-Br= mode

	Specifies Brightness Adjustment. Available brightness adjustment option values are as follows.
	+5
	Bright 5
	+4
	Bright 4
	+3
	Bright 3
	+2
	Bright 2
	+1
	Bright 1
	0
	Normal
	-1
	Dark 1
	-2
	Dark 2
	-3
	Dark
	-4
	Dark
	-5
	Dark
-RGBc= mode	
	Specifies RGB Color Correction. Available RGB Color Corrections are as follows.
	10
	Perceptual

-Cb=cyan-low:cyan-middle:cyan-high:magenta-low:magenta-middle:magenta-high:yellow-low;yellow-middle:yellow high:black-low:black-middle:black-high

Specifies adjustment value for color balance of each color/density.

Available adjustment values are as follows.

+3

Dark 3

```
+2
              Dark 2
              +1
              Dark 1
              0
              Normal
              -1
              Light 1
              -2
              Light 2
              -3
              Light 3
              -Cb option value must be specified in the following order:
              Cyan low density, Cyan medium density, Cyan high density, Magenta low density, Magenta medium density, Magenta high density, Yellow low density, Yellow medium density, Yellow high
              density, Black low density, Black medium density, Black high density
              If no value is specified, it is treated as "0" (Normal).
              For example, if you want to specify "Light 2" for Cyan medium density, "Dark 3" for Yellow high
              density, and "Dark 2" for Black low density, it can be specified using either of the following:
 -Cb=0:-2:0:0:0:0:0:0:+3:+2:0:0
 -Cb=:-2::::::+3:+2::
-Hld=PrintType:UserID:Password:DocumentName
      Secure Print
      PrintType
              store
              Secure Print/Store Print
              proof
              Proof Print
      UserID
```

Up to eight single-byte characters from 0x20 to 0x7E, except 0x20 " " (blank) and 0x3A": "

(colon).

Up to 12 single-byte characters from 0x30 to 0x39 (numeric characters).

DocumentName

Up to 12 single-byte characters from 0x20 to 0x7E, except 0x20 " " (blank) and 0x3A ": " (colon).

Secure Print

```
-Hld=store:UserID:Password:DocumentName
-Hld=store:UserID:Password:
Store Print
```

Proof Print

```
-Hld=proof: UserID:: DocumentName
-Hld=proof: UserID::
```

-Hld=store:UserID::DocumentName

NOTICE: Make sure you specify Secure Print only when you directly print data to a printer. Secure Print may not be available if you specify it when data need to be printed through another server or data need to be handled by another program such as PostScript files. Collate is automatically specified when you specify Proof Print.

-Jown= jobownername: Password

Authentication Setting

-Hld=store: UserID::

Specifies job owner name and password for authentication.

- o When only job owner name is specified (-Jown=jobownername:) (no password specified), authentication password is treated as not specified.
- o When only password is specified (-Jown=:password) (no job owner name specified), login user name is used as job owner name. Entered password is used as authentication password.
- o When neither of job owner name nor password is specified (-Jown=:), login user name is used as job owner name, and authentication password is treated as not specified.
- o When a job owner name exceeds allowable character length, the extra characters are ignored.
- o When an unacceptable character is specified for job owner name, "Unknown User" is used as job owner name.
- o * Characters acceptable for job owner name are alphanumeric characters and symbols, except for space and colon.
- o * Up to 32 characters are acceptable for job owner name.

- o When an unacceptable character is specified for password, or when a specified password is not within the range of the allowable character length, the authentication password is treated as not specified.
- o * Only numbers are acceptable for password.
- o * Acceptable password length is between 4 and 12 characters.
- Incomplete form of -Jown option is treated as no authentication setting being made. In such
 case, if authentication setting is made with the environmental variable, it is used as setting
 information.

Example

To output the displayed screen image to a file using the snapshot command and convert the file into the PostScript language program using the sunras2ps2 command, type as follows.

```
% sunras2ps2 file.rs > file.ps
```

To output the displayed screen image to a file using the snapshot command, convert the file into the PostScript language program using the sunras2ps2 command and output it to a printer, type as follows.

```
% sunras2ps2 file.rs | lp
```

I mportant

- When -s and -s are specified at the same time or when the same option is specified twice, the later setting will prevail.
- If the output size option (-s, -s) is not specified, scaling will be executed taking one pixel of the raster data as one pixel of the printer.
- If the print position option specifies a point beyond the printable area of the printer, data beyond the printable area will not be printed.

tiff2ps2 (Linux/Solaris/HP-UX)

Format

```
/usr/local/dellbin5110/tiff2ps2 [-d] [-D] [-Itray-input] [-t] [-n] [-l=left,bottom] [-s=width,height] [-S=width] [-E] [-Nc=copies] [-Cl] [-Hd=position:format] [-Hffont] [-MSI] [-M=type] [-Mfo=mode] [-Pon] [-St=mode] [-Sp] [-Sb] [-Cm=mode] [-Pr=mode] [-Cc=mode] [-Cc=mode] [-Gc=mode] [-Sc=mode] [-Gg=mode] [-Ct] [-Br=mode] [-RGBr=mode] [-RGBrp=mode] [-Cb=cyan-low:cyan-middle:cyan-high:magenta-low:magenta-middle:magenta-high:yellow-low;yellow-middle:yellow-high:black-low:black-middle:black-high] [-Hld=PrintType:UserID:Password:DocumentName] [-Jown=jobownername:password] [filename...]
```

Function

Reads TIFF data, converts it to the PostScript language program and writes to standard output. If the filename is not specified, the standard input will be taken as the command input. TIFF files with a pixel depth of 1, 4, 8, 24, and 32 bits can be specified.

There are four types of supported compression formats.

Huffman compression (CCITT Group 3 transformed Huffman run length encoding)

Fax-CCITT3 compression (facsimile-compatible CCITT Group 3)

PackBits compression

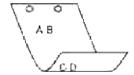
Non-compression

Even in the above compression format, the TIFF file that has multiple images in one file is not supported. tiff2ps2 takes filename as having been created in 72 dpi and calculates the output size. Thus, to convert TIFF files created in other resolutions, specify the size option (-s, -s) explicitly for conversion.

Option

-d

Enables the short-edge binding feature. When it is specified, the printing direction or position will be adjusted and both sides of the paper printed so that the shorter edge of the pages can be bound.



-D

Enables the long-edge binding feature. When it is specified, the printing direction or position will be adjusted and both sides of the paper printed so that the longer edge of the pages can be bound.



-Itray-input

Specifies the paper tray.

A paper tray can be selected by directly specifying a tray or by specifying a paper size. When a paper size is specified, the tray loaded with paper of the specified size will be found and selected automatically.

The parameters for selecting a paper tray are as follows.

1

```
Feed paper from tray 1 (standard 500-sheet tray).
2
      Feed paper from tray 2 (optional 500-sheet tray module or 1000-sheet module).
3
      Feed paper from tray 3 (optional 1000-sheet module).
4
      Feed paper from tray 4 (optional 1000-sheet module).
Α4
      Feed paper from the tray loaded with A4 (210 x 297 mm).
Α5
      Feed paper from the tray loaded with A5 (148 x 210 mm).
В5
      Feed paper from the tray loaded with B5 (182 x 257 mm).
LT
      Feed paper from the tray loaded with Letter (8.5 \times 11 inches).
FL
      Feed paper from the tray loaded with Folio (8.5 \times 13 inches).
LG
      Feed paper from the tray loaded with Legal (8.5 \times 14 inches).
EX
      Feed paper from the tray loaded with Executive (7.25 \times 10.5 inches).
MO
      Feed paper from the tray loaded with Monarch (3.875 \times 7.5 inches).
COM10
      Feed paper from the tray loaded with Envelope #10 (4.125 \times 9.5 inches).
DL
      Feed paper from the tray loaded with DL (110 x 220 mm).
C5
      Feed paper from the tray loaded with C5 (162 x 229 mm).
```

M×*N*mm

Feed paper from the tray loaded with MxNmm defined by users

Possible range specified: Width: 88.9 to 220 mm Length: 139.7 to 355.6 mm

MxNin

Feed paper from the tray loaded with MxNinches defined by users

Possible range specified: Width: 3.50 to 8.50 inches Length: 5.50 to 14.0 inches

If this option is not specified or the tray specified is not available, feed paper from the default tray.

-t

Turns on the *save toner* mode for printing. The print result will be fainter than that of normal printing. In some cases, this option will be ignored.

-r

Rotates the image by 90o and uses the paper in the landscape orientation.

-n

Disables the addition of the showpage. It is used when files converted to the PostScript language program are merged with files created with other applications.

-1 = left, bottom

Specifies the print position. Printing will be executed from the left and bottom of the page. The default is 0.25 inches for both left and bottom.

-s=width,height

Specifies the output size. Printing will be executed with the width and height in inches.

-S=width

Sets the width of the output size in inches. The height will be calculated automatically according to the width.

 $-\mathbf{E}$

This function turns on the image enhancement function. In some cases, this option will be ignored.

-Nc=copies

Specifies the number of output copies (the value of copies must be a positive integer).

-Cl

Specifies that printing be collated. If the copies option is not specified, this option will be ignored.

-Hd=position:format

Specifies the position to be output the user information as the header or footer. *position* specifies output position. But this option is available only for converting text files.

ul

Output on the upper left corner of the paper.

ur

Output on the upper right corner of the paper.

dl

Output on the lower left corner of the paper.

dr

Output on the lower right corner of the paper.

format specifies the contents and the order to output. This option is omissible. If this option is omitted, uh is specified as the default value.

u

User name

h

Host name

t

Date and time

If the output contents are specified as tuh, it is output as follows.

Date and Time User: username Host: hostname.

Specify these options as follows.

In the case that convert text file, output the host name following the user name on the upper right corner of the paper, output all pages.

(User name, Host name, all page output are default)

-Hd=ur

-Hd=ur:uh

-Hffont

Specify the font to print header and footer. European fonts the same as half size alphanumeric fonts

```
can be specified. Helvetica is specified as default.
If the wrong font is specified, default European font of the printer can be used.
If header/footer output option is specified, the font specification of header/footer is ignored.
```

```
-MSI
      Specifies multipurpose feeder.
-M=type
     В
```

ВВ

Ρ

PΒ

R

RB

RB

Н1

н1в

Н2

Specifies multipurpose feeder Paper Type. Available multipurpose feeder Paper Types are as follows.

FinePaper/Bond/Plain Paper 2

FinePaperBack/Bond/Plain Paper 2 - Side 2

Stationary/Plain/Plain Paper 1

StationaryBack/Plain/Plain Paper 1 - Side 2

Recycled Paper

RecycledPaperBack/ Recycled Paper - Side 2

R Recycled Paper

RecycledPaperBack/ Recycled Paper - Side 2

ThickPaper/Heavyweight 1/Covers 1

ThickPaperBack/Heavyweight 1/Covers 1 - Side 2

ThickPaper2/Heavyweight 2/Covers 2

```
н2в
            ThickPaper2Back/Heavyweight 2/Covers 2 - Side 2
     OHP
            Transparency
     L
            LabelPaper/Labels
     C2
            Coated/Coated 2/Coated Paper 2
     C2B
            Coated Back/Coated 2/Coated Paper 2- Side 2
     C3
            Coated Thick/Coated 3/Coated Paper 3
     СЗВ
            Coated Thick Back/Coated 3/Coated Paper 3- Side 2
     Ε
            Envelope
     If this option is not specified, multipurpose feeder Paper Type of the printer can be used.
-Mfo=mode
     Specifies orientation for multipurpose feeder.
     Available orientations for multipurpose feeder are as follows.
     le
            Landscape
     ler
            Landscape (Rotated)
     se
            Portrait
     ser
            Portrait (Rotated)
```

```
Specifies Alternate Tray.
     Available Alternate Trays are follows.
     0
            Use Printer Settings
     1
            Display Message
     2
            Feed from multipurpose feeder
     3
            Use Nearest Size (Adjust to Fit)
     4
            Use Larger Size (Adjust to Fit)
     5
            Use Nearest Size (No Zoom)
     6
            Use Larger Size (No Zoom)
-St=mode
     Specifies Feed Separators from.
     Available Feed Separators from the following.
     auto
            AutoTray/Auto
     1
            1stTray/Tray 1 (standard 500-sheet tray)
     2
            2ndTray/Tray 2 (optional 500-sheet tray module or 1000-sheet module)
     3
            3rdTray/Tray 3 (optional 1000-sheet module)
     4
            4thTray/Tray 4 (optional 1000-sheet module)
     off
```

```
-Sp
      Specifies Printed Separators.
      Available only when the paper tray for separators is specified.
-Sb
      Specifies Skip Blank Pages.
-Cm=mode
      Specifies Output Color.
      Available Output Colors are as follows.
      С
             Color (CMYK)
      k
             Black
-Pr=mode
      Specifies Print Mode.
      Available Print Modes are as follows.
      hs
             High Speed
      hq
             High Quality
-Cc=mode
      Specifies RGB Color Correction.
      Available RGB Color Corrections are as follows.
      0
             Off
      1
             Photo
      2
```

```
3
            Standard/ Normal
      4
            Presentation
      This option is available only for color printing and when entry data is RGB data.
-Gc=mode
      Specifies RGB Gamma Correction.
      Available RGB Gamma Corrections are as follows.
      1.0
            1.0
      1.4
            1.4
      1.8
            1.8
      2.2
            2.2
      2.6
            2.6
      off
            Off
      This option is available only for color printing and when entry data is RGB data.
-Sc=mode
      Specifies Screen.
      . Available Screens are as follows.
      0
            Fineness
      1
            Gradation
```

sRGB

```
2
             Auto
      3
             For Transparency
-Gg=mode
      Specifies Gray Guaranteed.
      Available Gray Guaranteed options are as follows.
      on
             On
      off
             Off
      This option is available only for color printing.
-Ct
      Specifies Color Transformation.
      This option is available only for color printing.
      -Br= mode
             Specifies Brightness Adjustment.
             Available brightness adjustment option values are as follows.
             +5
             Bright 5
             +4
             Bright 4
             +3
             Bright 3
             +2
             Bright 2
             +1
             Bright 1
             0
             Normal
```

```
-1
      Dark 1
      -2
      Dark 2
      -3
      Dark
      -4
      Dark
      -5
      Dark
-RGBc= mode
      Specifies RGB Color Correction.
      Available RGB Color Corrections are as follows.
      10
      Perceptual
      11
      Saturation
      12
      RelativeC
      13
      AbsoluteC
      This option is available only for color printing and when entry data is RGB data.
-RGBPr= mode
      Specifies RGB input profile.
      Available RGB input profile option values are as follows.
      0
      sRGB
      1
      AdobeRGB
      This option is available only for color printing and when entry data is RGB data.
```

-RGBTp= mode Specifies RGB color temperature. Available RGB color temperature option values are as follows. 5000 5000K 6000 6000K 9300 9300K This option is available only for color printing and when entry data is RGB data. -Cb=cyan-low:cyan-middle:cyan-high:magenta-low:magenta-middle:magenta-high:yellowlow;yellow-middle:yellow high:black-low:black-middle:black-high Specifies adjustment value for color balance of each color/density. Available adjustment values are as follows. +3 Dark 3 +2 Dark 2 +1 Dark 1 0 Normal -1 Light 1 -2 Light 2 -3 Light 3 -Cb option value must be specified in the following order:

Cyan low density, Cyan medium density, Cyan high density, Magenta low density, Magenta medium density, Magenta high density, Yellow low density, Yellow medium density, Yellow high

```
density, Black low density, Black medium density, Black high density

If no value is specified, it is treated as "0"(Normal).
```

For example, if you want to specify "Light 2" for Cyan medium density, "Dark 3" for Yellow high density, and "Dark 2" for Black low density, it can be specified using either of the following:

```
-Cb=0:-2:0:0:0:0:0:0:+3:+2:0:0
-Cb=:-2:::::+3:+2::
```

```
-Hld=PrintType:UserID:Password:DocumentName
```

Secure Print

PrintType

store

Secure Print/Store Print

proof

Proof Print

UserID

Up to eight single-byte characters from 0x20 to 0x7E, except 0x20 " " (blank) and 0x3A": " (colon).

Password

Up to 12 single-byte characters from 0x30 to 0x39 (numeric characters).

DocumentName

Up to 12 single-byte characters from 0x20 to 0x7E, except 0x20 " " (blank) and 0x3A ": " (colon).

Secure Print

```
-Hld=store:UserID:Password:DocumentName
```

-Hld=store: UserID: Password:

Store Print

```
-Hld=store: UserID:: DocumentName
```

-Hld=store: UserID::

Proof Print

```
-Hld=proof: UserID:: DocumentName
```

-Hld=proof: UserID::

0

NOTICE: Make sure you specify Secure Print only when you directly print data to a printer. Secure Print may not be available if you specify it when data need to be printed through another server or data need to be handled by another program such as PostScript files. Collate is automatically specified when you specify Proof Print.

-Jown= jobownername: Password

Authentication Setting

Specifies job owner name and password for authentication.

- O When only job owner name is specified (-Jown=jobownername:) (no password specified), authentication password is treated as not specified.
- o When only password is specified (-Jown=: password) (no job owner name specified), login user name is used as job owner name. Entered password is used as authentication password.
- o When neither of job owner name nor password is specified (-Jown=:), login user name is used as job owner name, and authentication password is treated as not specified.
- O When a job owner name exceeds allowable character length, the extra characters are ignored.
- o When an unacceptable character is specified for job owner name, "Unknown User" is used as job owner name.
- o * Characters acceptable for job owner name are alphanumeric characters and symbols, except for space and colon.
- o * Up to 32 characters are acceptable for job owner name.
- o When an unacceptable character is specified for password, or when a specified password is not within the range of the allowable character length, the authentication password is treated as not specified.
- o * Only numbers are acceptable for password.
- o * Acceptable password length is between 4 and 12 characters.
- Incomplete form of -Jown option is treated as no authentication setting being made. In such
 case, if authentication setting is made with the environmental variable, it is used as setting
 information.

Example

To convert the TIFF image into the PostScript language program and output it to a file, type as follows.

```
% tiff2ps2 file.tiff > file1.ps
```

To output the TIFF image to a printer, type as follows.

```
% tiff2ps2 file.tiff | lpr (for Linux)
% tiff2ps2 file.tiff | lp (for Solaris/HP-UX)
```

Important

- When -s and -s are specified at the same time or when the same option is specified twice, the later setting will prevail.
- When the output size option (-s, -s) is not specified, scaling will be executed taking one pixel of the TIFF data as one pixel of the printer.
- If the print position option (-1/eft bottom) specifies a point beyond the printable area of the printer, data beyond the printable area will not be printed.

xwd2ps2 (Linux/Solaris/HP-UX)

Format

```
/usr/local/dellbin5110/xwd2ps2 [-d] [-D] [-Itray-input] [-t] [-r] [-n] [-l=left,bottom] [-s=width,height] [-S=width] [-E] [-Nc=copies] [-Cl] [-Hd=position:format] [-Hffont] [-MSI] [-M=type] [-Mfo=mode] [-Pon] [-St=mode] [-Sp] [-Sb] [-Cm=mode] [-Pr=mode] [-Cc=mode] [-Gc=mode] [-Gc=mode] [-Gg=mode] [-Ct] [-Br=mode] [-RGBr=mode] [-RGBrp=mode] [-Cb=cyan-low:cyan-middle:cyan-high:magenta-low:magenta-middle:magenta-high:yellow-low;yellow-middle:yellow-high:black-low:black-middle:black-high] [-Hld=PrintType:UserID:Password:DocumentName] [-Jown=jobownername:password] [filename...]
```

Function

Reads XWD data, converts it to the PostScript language program and writes to standard output. If the filename is not specified, the standard input will be taken as the command input. XWD files with a pixel depth of 1, 4, 8, 24, and 32 bits can be specified.

There are three types of supported compression formats.

The visual class is Static Gray and the pixel is 1 bit.

The visual class is Pseudo Color and the pixel is 4 bits or 8 bit. The image format is Zpixmap.

The visual class is True Color and the pixel is 24 bits or 32 bit. The image format is Zpixmap.

xwd2ps2 takes filename as having been created in 72dpi and calculates the output size. Thus, to convert XWD files created in other resolutions, specify the size option (-s, -s) explicitly for conversion.

Option

-d

Enables the short-edge binding feature. When it is specified, the printing direction or position will be adjusted and both sides of the paper printed so that the shorter edge of the pages can be bound.

-D

Enables the long-edge binding feature. When it is specified, the printing direction or position will be adjusted and both sides of the paper printed so that the longer edge of the pages can be bound.



-Itray-input

Specifies the paper tray.

A paper tray can be selected by directly specifying a tray or by specifying a paper size.

When a paper size is specified, the tray loaded with paper of the specified size will be found and selected automatically.

The parameters for selecting a paper tray are as follows.

1

Feed paper from tray 1 (standard 500-sheet tray).

2

Feed paper from tray 2 (optional 500-sheet tray module or 1000-sheet module).

3

Feed paper from tray 3 (optional 1000-sheet module).

4

Feed paper from tray 4 (optional 1000-sheet module).

Α4

Feed paper from the tray loaded with A4 (210 x 297 mm).

Α5

Feed paper from the tray loaded with A5 (148 x 210 mm).

В5

Feed paper from the tray loaded with B5 (182 x 257 mm).

LT

Feed paper from the tray loaded with Letter (8.5 \times 11 inches).

FL

Feed paper from the tray loaded with Folio (8.5 \times 13 inches).

LG

Feed paper from the tray loaded with Legal (8.5 \times 14 inches).

ΕX

Feed paper from the tray loaded with Executive $(7.25 \times 10.5 \text{ inches})$.

MO

Feed paper from the tray loaded with Monarch (3.875 \times 7.5 inches).

COM10

Feed paper from the tray loaded with Envelope #10 (4.125 \times 9.5 inches).

DL

Feed paper from the tray loaded with DL (110 x 220 mm).

C5

Feed paper from the tray loaded with C5 (162 x 229 mm).

M×*N*mm

Feed paper from the tray loaded with MxN mm defined by users.

Possible range specified: Width: 88.9 to 220 mm Length: 139.7.8 to 355.6 mm

MxNin

Feed paper from the tray loaded with MxNinches defined by users

Possible range specified: Width: 3.50 to 8.50 inches Length: 5.50 to 14.0 inches

If this option is not specified or the tray specified is not available, feed paper from the default tray.

-t

Turns on the *save toner* mode for printing. The print result will be fainter than that of normal printing. In some cases, this option will be ignored.

Rotates the image by 90o and uses the paper in the landscape orientation

-n

Disables the addition of the showpage. It is used when files converted to the PostScript language program are merged with files created with other applications.

-l=left,bottom

Specifies the print position. Printing will be executed from the left and bottom of the page. The default is 0.25 inches for both left and bottom.

-s=width,height

Specifies the output size. Printing will be executed with the width and height in inches.

-S=width

Sets the width of the output size in inches. The height will be calculated automatically according to the width.

 $-\mathbf{E}$

This function turns on the image enhancement function. In some cases, this option will be ignored.

-Nc=copies

Specifies the number of output copies (the value of copies must be a positive integer).

-Cl

Specifies that printing be collated. If the copies option is not specified, this option will be ignored.

-Hd=position:format

Specifies the position to be output the user information as the header or footer. *position* specifies output position. But this option is available only for converting text files.

ul

Output on the upper left corner of the paper.

ur

Output on the upper right corner of the paper.

dl

Output on the lower left corner of the paper. dr Output on the lower right corner of the paper. format specifies the contents and the order to output. This option is omissible. If this option is omitted, uh is specified as the default value. u User name h Host name t Date and time If the output contents are specified as tuh, it is output as follows. Date and Time User: username Host: hostname. -Hffont Specify the font to print header and footer. European fonts the same as half size alphanumeric fonts can be specified. Helvetica is specified as default. If the wrong font is specified, default European font of the printer can be used. If header/footer output option is specified, the font specification of header/footer is ignored. -MSI Specifies multipurpose feeder. -M=type Specifies multipurpose feeder Paper Type. Available multipurpose feeder Paper Types are as follows. В FinePaper/Bond/Plain Paper 2 вв FinePaperBack/Bond/Plain Paper 2 - Side 2

Ρ

ΡВ

Stationary/Plain/Plain Paper 1

StationaryBack/Plain/Plain Paper 1 - Side 2

```
R
      Recycled Paper
RB
      RecycledPaperBack/ Recycled Paper - Side 2
Н1
      ThickPaper/Heavyweight 1/Covers 1
н1в
      ThickPaperBack/Heavyweight 1/Covers 1 - Side 2
Н2
      ThickPaper2/Heavyweight 2/Covers 2
н2в
      ThickPaper2Back/Heavyweight 2/Covers 2 - Side 2
OHP
      Transparency
L
      LabelPaper/Labels
C2
      Coated/Coated 2/Coated Paper 2
C2B
      Coated Back/Coated 2/Coated Paper 2- Side 2
C3
      Coated Thick/Coated 3/Coated Paper 3
C3B
      Coated Thick Back/Coated 3/Coated Paper 3- Side 2
Ε
```

If this option is not specified, multipurpose feeder Paper Type of the printer can be used.

-Mfo=mode

Specifies orientation for multipurpose feeder.

Envelope

```
le
            Landscape
      ler
            Landscape (Rotated)
      se
            Portrait
      ser
            Portrait (Rotated)
-Pon
      Specifies Alternate Tray.
      Available Alternate Trays are as follows.
      0
            Use Printer Settings
      1
            Display Message
      2
            Feed from multipurpose feeder
      3
            Use Nearest Size (Adjust to Fit)
      4
            Use Larger Size (Adjust to Fit)
      5
            Use Nearest Size (No Zoom)
      6
            Use Larger Size (No Zoom)
-St=mode
      Specifies Feed Separators from.
      Available Feed Separators from the following.
```

Available orientations for multipurpose feeder are as follows.

```
AutoTray/Auto
     1
            1stTray/Tray 1 (standard 500-sheet tray)
     2
            2ndTray/Tray 2 (optional 500-sheet tray module or 1000-sheet module)
     3
            3rdTray/Tray 3 (optional 1000-sheet module)
     4
            4thTray/Tray 4 (optional 1000-sheet module)
     off
            Off
-Sp
     Specifies Printed Separators.
     Available only when the paper tray for separators is specified.
-Sb
     Specifies Skip Blank Pages.
-Cm=mode
     Specifies Output Color.
     Available Output Colors are as follows.
     С
            Color (CMYK)
     k
            Black
-Pr=mode
     Specifies Print Mode.
     Available Print Modes are as follows.
     hs
            High Speed
```

auto

```
hq
            High Quality
-Cc=mode
     Specifies RGB Color Correction.
     Available RGB Color Corrections are as follows.
     0
            Off
     1
            Photo
     2
            sRGB
     3
            Standard/ Normal
     4
            Presentation
     This option is available only for color printing and when entry data is RGB data.
-Gc=mode
     Specifies RGB Gamma Correction.
     Available RGB Gamma Corrections are as follows.
     1.0
            1.0
     1.4
            1.4
     1.8
            1.8
     2.2
```

2.2

2.6

2.6

```
off
             Off
      This option is available only for color printing and when entry data is RGB data.
-Sc=mode
      Specifies Screen.
      Available Screens are as follows.
      0
             Fineness
      1
             Gradation
      2
             Auto
      3
             For Transparency
-Gg=mode
      Specifies Gray Guaranteed.
      Available Gray Guaranteed options are as follows.
      on
             On
      off
             Off
      This option is available only for color printing.
-Ct
      Specifies Color Transformation.
```

This option is available only for color printing.

Specifies Brightness Adjustment.

Available brightness adjustment option values are as follows.

-Br= mode

+5

Bright 5

```
+4
       Bright 4
       +3
       Bright 3
       +2
       Bright 2
       +1
       Bright 1
       Normal
       -1
       Dark 1
       -2
       Dark 2
       -3
       Dark
       -4
       Dark
       -5
       Dark
-RGBc= mode
       Specifies RGB Color Correction.
Available RGB Color Corrections are as follows.
       10
       Perceptual
       11
       Saturation
       12
       RelativeC
       13
```

AbsoluteC This option is available only for color printing and when entry data is RGB data. -RGBPr= mode Specifies RGB input profile. Available RGB input profile option values are as follows. 0 sRGB 1 AdobeRGB This option is available only for color printing and when entry data is RGB data. -RGBTp= mode Specifies RGB color temperature. Available RGB color temperature option values are as follows. 5000 5000K 6000 6000K 9300 9300K This option is available only for color printing and when entry data is RGB data. -Cb=cyan-low:cyan-middle:cyan-high:magenta-low:magenta-middle:magenta-high:yellowlow;yellow-middle:yellow high:black-low:black-middle:black-high Specifies adjustment value for color balance of each color/density.

Available adjustment values are as follows.

+3

+2

+1

Dark 3

Dark 2

Dark 1

Normal

-1

Light 1

-2

Light 2

-3

Light 3

-Cb option value must be specified in the following order:

Cyan low density, Cyan medium density, Cyan high density, Magenta low density, Magenta medium density, Magenta high density, Yellow low density, Yellow medium density, Yellow high density, Black low density, Black medium density, Black high density

If no value is specified, it is treated as "0" (Normal).

For example, if you want to specify "Light 2" for Cyan medium density, "Dark 3" for Yellow high density, and "Dark 2" for Black low density, it can be specified using either of the following:

```
-Cb=0:-2:0:0:0:0:0:0:0:+3:+2:0:0
-Cb=:-2::::::+3:+2::
```

-Hld=PrintType:UserID:Password:DocumentName

Secure Print

PrintType

store

Secure Print/Store Print

proof

Proof Print

UserID

Up to eight single-byte characters from 0x20 to 0x7E, except 0x20 " " (blank) and 0x3A": " (colon).

Password

Up to 12 single-byte characters from 0x30 to 0x39 (numeric characters).

DocumentName

Up to 12 single-byte characters from 0x20 to 0x7E, except 0x20 " " (blank) and 0x3A ": " (colon).

Secure Print

```
-Hld=store:UserID:Password:DocumentName
-Hld=store:UserID:Password:

Store Print
-Hld=store:UserID::DocumentName
-Hld=store:UserID::

Proof Print
-Hld=proof:UserID::DocumentName
-Hld=proof:UserID::DocumentName
```



NOTICE: Make sure you specify Secure Print only when you directly print data to a printer. Secure Print may not be available if you specify it when data need to be printed through another server or data need to be handled by another program such as PostScript files. Collate is automatically specified when you specify Proof Print.

-Jown= jobownername: Password

Authentication Setting

Specifies job owner name and password for authentication.

- When only job owner name is specified (-Jown=jobownername:) (no password specified), authentication password is treated as not specified.
- o When only password is specified (-Jown=:password) (no job owner name specified), login user name is used as job owner name. Entered password is used as authentication password.
- o When neither of job owner name nor password is specified (-Jown=:), login user name is used as job owner name, and authentication password is treated as not specified.
- o When a job owner name exceeds allowable character length, the extra characters are ignored.
- o When an unacceptable character is specified for job owner name, "Unknown User" is used as job owner name.
- o * Characters acceptable for job owner name are alphanumeric characters and symbols, except for space and colon.
- o * Up to 32 characters are acceptable for job owner name.
- o When an unacceptable character is specified for password, or when a specified password is not within the range of the allowable character length, the authentication password is treated as not specified.
- o * Only numbers are acceptable for password.
- o * Acceptable password length is between 4 and 12 characters.
- o Incomplete form of -Jown option is treated as no authentication setting being made. In such

case, if authentication setting is made with the environmental variable, it is used as setting information.

Example

To convert the XWD image into the PostScript language program and output it to a file, type as follows.

```
% xwd2ps2 file.xwd > file.ps
```

To output the XWD image to a printer, type as follows.

```
% xwd2ps2 file.xwd | lpr (for Linux)
% xwd2ps2 file.xwd | lp (for Solaris/HP-UX)
```

Important

- When -s and -s are specified at the same time or when the same option is specified twice, the later setting will prevail.
- When the output size option (-s, -s) is not specified, scaling will be executed taking one pixel of the TIFF data as one pixel of the printer.
- If the print position option (-1/eft bottom) specifies a point beyond the printable area of the printer, data beyond the printable area will not be printed.

dellpsif (Linux)

Format

/usr/local/dellbin5110/dellpsif -w width -l length -i indent -n login -h host accountfile

Function

If the first two characters of the input data are not \$!, the dellpsif filter will convert it to the PostScript language program that can be output according to the paper size. If the first two characters of the input data are \$!, it will be considered the PostScript language program and no data conversion will be executed. The following control codes are interpreted for the conversion of input data.

LF

Line feed

FF

Form feed

TAB

8-column tab stop

BS

Backspace 1 character

The dellpsif is the hard link file of txt2ps2.

The delipsif filter will be used as the IF filter specified by /etc/printcap.

The lpd daemon will specify the following command options and start up the dellpsif filter.

dellpsif -w width -l length -i indent -n login -h host accountfile

In addition, options useable by txt2ps2 can be specified by the /usr/local/dellbin5110/.dellpsdefault5110 file. With this option, detailed control can be achieved. However, if the input data are PostScript files, only the following options of txt2ps2 will become valid.

-d

Enables the short-edge binding feature. When it is specified, the printing direction or position will be adjusted and both sides of the paper printed so that the shorter edge of the pages can be bound.

-D

Enables the long-edge binding feature. When it is specified, the printing direction or position will be adjusted and both sides of the paper printed so that the longer edge of the pages can be bound.

-Itray-input

Specifies the paper tray.

The parameters to be able to specify are the same as txt2ps2.

-t

Turns on the *save toner* mode for printing. The print result will be fainter than that of normal printing. In some cases, this option will be ignored.

 $-\mathbf{E}$

This function turns on the image enhancement function. In some cases, this option will be ignored.

-Nc=copies

Specifies the number of output copies (the value of copies must be a positive integer).

-Cl	
	Specifies that printing be collated. If the copies option is not specified, this option will be ignored.
-ps	
	The input file will be processed as the PostScript file. If the file does not begin with \%!, \%! will be output to the beginning line. For files with \%!, this option will be ignored.
-MSI	
NOI	Specifies Multi-purpose Feeder.
-M=ty	rpe
	Specifies multipurpose feeder Paper Type. If this option is not specified, multipurpose feeder Paper Type of the printer can be used.
-Mfo=mode	
	Specifies orientation for multipurpose feeder.
-Pon	
	Specifies Alternate Tray.
-St=mode	
	Specifies Feed Separators from.
-Sp	
	Specifies Printed Separators.
-Sb	
	Specifies Skip Blank Pages.
-Cm=mode	
	Specifies Output Color.
-Pr=mode	
	Specifies Print Mode.
-Cc=n	node

Specifies RGB Color Correction.

This option is available only for color printing.

-Gc=mode

Specifies RGB Gamma Correction.

-Sc=mode

Specifies Screen.

-Gg=mode

Specifies Gray Guaranteed. This option is available only for color printing.

-Ct

Specifies Color Transformation.
This option is available only for color printing.

-Br= mode

Specifies Brightness Adjustment.

-RGBc= mode

Specifies RGB Color Correction.

This option is available only for color printing and when entry data is RGB data.

-RGBPr= mode

Specifies RGB Input Profile.

This option is available only for color printing and when entry data is RGB data.

-RGBTp= mode

Specifies RGB Color Temperature

This option is available only for color printing and when entry data is RGB data.

-Cb=cyan-low:cyan-middle:cyan-high:magenta-low:magenta-middle:magenta-high:yellow-low;yellow-middle:yellow high:black-low:black-middle:black-high

Specifies adjustment value for color balance of each color/density.

-Cb option value must be specified in the following order:

Cyan low density, Cyan medium density, Cyan high density, Magenta low density, Magenta medium density, Magenta high density, Yellow low density, Yellow medium density, Yellow high density, Black low density, Black medium density, Black high density

If no value is specified, it is treated as "0" (Normal).

File

/usr/local/dellbin5110/.dellpsdefault5110 This is the default command option setting.

Important

- The dellpsif filter ignores the pw and pl entries of /etc/printcap. Thus, the pw and pl entries cannot be used to change the option of each paper size.
- If the same option is specified for PostScript files which already have added options, such as paper selection, it will be ignored.
- Use the -ps option only when a PostScript file that contains no %! at the beginning of the file is processed as the PostScript file. If a normal text file is input, it will not function correctly.

Precautions and Limitations

During Installation

Pay attention to the following points during the installation.

Solaris

- Use lpadmin command to register the default printer.
 - # lpadmin -d Printer Name
- To inhibit the banner sheets output, change the value of nobanner=no to nobanner=yes that includes in the file corresponding to the printer name in /etc/lp/interfaces/.
- The printer registered by UX filter must not be changed by admintool.
- When Content types: postscript is displayed by typing lpstat -p printername -1, it's necessary to delete the printer and reinstall.
- To install UX filter into the default directory (/usr/local/dellbin5110), it's necessary to create /usr/local directory in advance.

HP-UX

• The printer to specify as an output printer must be registered in your system. To register an output

printer, use sam command and so on. See the HP-UX related manual for details.

• To install UX filter into the default directory (/usr/local/dellbin5110), it's necessary to create /usr/local directory in advance.

Linux

• To install UX filter into the default directory (/usr/local/dellbin5110), it's necessary to create /usr/local directory in advance.

During Printing

Pay attention to the following points during printing.

Using Ip/Ipr Command (Linux/Solaris/HP-UX)

- If an option is specified incorrectly, no error message will be output. If printing is not executed after
 the lp command is executed, activate each utility individually and error messages will be output.
 (Using Solaris, the error message is displayed on the screen. Using Linux, the error message is written
 into the error log file specified by printcap.)
- In text printing, the environmental variable TXT2PS20PTION will be ignored.
- In text printing, if a BS code is found at the beginning of a line, the print position of the next character will be on the left of the beginning of the line.
- In text printing, when there are multiple tab codes in one line, the positions of tab may be off due to automatic line feed. If this happens, specify 1 or w option.
- In text printing, the number of columns specified by the w option does not reflect the number of characters actually printed. The actual number of single-byte characters to be printed is derived by deducting the output column position (out columns) specified by the o option from the number of columns specified by the w option.
- If the same option is specified, or if s, S are both specified, the one specified later will prevail.
- In printing images, If the print position option (1) specifies an area beyond the printable area of the printer, data beyond the printable area will not be printed. (Using Solaris, It's impossible to output images by 1p command.)

Using txt2ps2 (Linux/Solaris/HP-UX)

- When the same option is specified twice, the later setting will prevail. As TXT2PS2OPTION is analyzed before the option of the command line, it is possible to temporarily modify the options already set in TXT2PS2OPTION by inputting at the command line
- The default output of txt2ps2 cannot output the comment description (%%page:m n)of the page number. This is because the converted PostScript language program controls line feed and form feed. Thus, when the output of txt2ps2 is to be taken as the output of another application (psrev of

TRANSCRIPT, etc.), add the page number description by inserting the line command (-Ilines).

- If a BS code is found at the beginning of a line, the print position of the next character will be on the left of the beginning of a line.
- When there are multiple tab codes in one line, the positions of tab may be off due to automatic line feed. If this happens, specify the -1 or -w option.
- The number of columns specified by the -w option does not reflect the number of characters actually printed. The actual number of single-byte characters to be printed is derived by deducting the output column position (out columns) specified by the o option from the number of columns specified by the w option.
- The -mg option cannot be specified when -w, -1, -o, and -L option are specified.
- The start positions of margins of the margin command (-mg=u:b:r:1) are not set against the edge of paper. The margins are set against the printable area for paper allowed by the printer.
- Use the -ps option only when a PostScript file that contains no %! at the beginning of the file is used as the PostScript file. If a normal text file is input, it will not function correctly.
- To use the same options as those of the dellpsif filter by TXT2PS2OPTION, set the user's home directory in the environmental variable HOME. If the environmental variable HOME is not set up, the same options as those of the dellpsif filter cannot be used. (Linux)

Using sunras2ps2/tiff2ps2/xwd2ps2 (sunras2ps2 apply to Solaris only)

- If the same option is specified, or if s, s are both specified, the one specified later will prevail.
- If the size option (s, s) is not specified, scaling will be executed taking one pixel of the image data as one pixel of the printer.
- If the print position option (-1 left bottom) specifies a point beyond the printable area of the printer, data beyond the printable area will not be printed.

Using tiff2ps2 (Linux/Solaris/HP-UX)

There are four types of supported compression formats.
 Huffman compression (CCITT Group 3 transformed Huffman run length encoding)
 Fax-CCITT3 compression (facsimile-compatible CCITT Group 3)
 PackBits compression
 Non-compression

Even if the format is a supported format, the tiff that has multiple images in one file is not supported.

Using xwd2ps2 (Linux/Solaris/ HP-UX)

• There are three types of supported compression formats.

The visual class is Static Gray and the pixel is 1 bit.

The visual class is Pseudo Color and the pixel is 4 bits or 8 bit. The image format is Zpixmap.

The visual class is True Color and the pixel is 24 bits. The image format is Zpixmap.

Using dellpsif (Linux)

- Use the -ps option only when a PostScript file that contains no %! at the beginning of the file is used as the PostScript file. If a normal text file is input, it will not function correctly.
- -w, -l option usually correspond to pw, pl entry of /etc/printcap. However, this UX filter ignore pw, pl entry of /etc/printcap. So, the option cannot be changed by each page size using pw, pl entry.

Printing PostScript Files (Linux/Solaris/ HP-UX)

• If same options for the PostScript file that contains options, such as paper size, are specified using dellpsif (Linux) or the lp command (Solaris/HP-UX), the specified option will be ignored.

Printing Image Files (Solaris)

• To print image files from Solaris the user cannot specify the image file directly with the Ip command for printing. Make use of sunras2ps2, tiff2ps2, xwd2ps2 and convert the file to a PostScript file. Output it using the 1p command after the conversion.

```
% xwd2ps2 file.xwd | lp
```

The double-sided printing (Linux/Solaris/HP-UX)

The printer without a optional duplex unit is unable to do double-sided printing.

Header/footer Option (-Hd=position:format:page, -Hfheaderfont) (txt2ps2,sunras2ps2,tiff2ps2,xwd2ps2)

- If the paper size is not specified when using options, it outputs the header/footer at the position of A4-size paper. To specify the paper size at the same time to use header/footer option. (If the paper size for the PostScript file converted by using the option is specified by the option of 1p command for example, the position of the header and footer cannot be changed.)
- The margin is specified automatically when the option is used. When the option to specify the margin is used at the same time, the value that is smaller than the value specified automatically as follows is ignored.

In case of text files

Upper margin: 0.23 inch Lower margin: 0.06 inch Right margin: 0.03 inch Left margin: 0.09 inch

In case of images

Lower margin: 0.3 inch

- When using the option, the number of lines and the number of columns specified are ignored. Also, it is impossible to specify landscape and 2-column.
- In case of the PostScript file, it happens that the printer doesn't output all pages despite that *output all page* is specified. In such a case, specify *print the only top page*.
- It's impossible to use 1p command in Solaris.

TBCPFilter (Solaris/Linux/HP-UX)

Make sure the TBCPFilter is available so the printer can specify the availability of the TBCPFilter.

As for libtiff

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Printing With CUPS (Linux)

This section provides information for printing or setting up the printer driver with CUPS (Common UNIX Printing System) on Turbolinux 10D, RedHat ES 3/4 and SUSE 9.2/9.3.

- Operation on Turbolinux 10D, RedHat ES 3/4
- Operation on SUSE 9.2/9.3

Operation on Turbolinux 10D, RedHat ES 3/4

Setting Overview

Turbolinux 10D, RedHat ES 3/4:

- 1. Install the printer driver.
- 2. Set up the print queue.
- 3. Specify the default queue.
- 4. Specify the printing options.

Installing the Printer Driver

- 1. Double-click Dell-Color-Laser-5110cn-x.x.x.noarch.rpm in the *Drivers and Utilities* CD.
- 2. Type the administrator's password.
- 3. Click Continue in the Completed System Preparation window.
 Installation starts. When the installation is complete, the window is automatically closed.

Setting Up the Queue

To execute printing, you must set up the print queue on your workstation.

- 1. Select Main Menu \rightarrow Run Program. Type <code>cupsconfig</code> and click Run in the Run Program window. The browser is activated and the CUPS window appears.
- 2. Click Manage Printers.
- 3. Click Add Printer at the bottom of the window.
- 4. Type root as the user name, and type the administrator's password.

- 5. Type the printer's name in the Name box in the Add New Printer window, and then click Continue. The Location and Description do not have to be specified.
- 6. Select LPD/LPR Host or Printer from Device menu, and then click Continue.
- 7. Type the printer's IP address in Device URI. Format: lpd://xxx.xxx.xxx (printer's IP address)
- 8. Select Dell from the Make menu, and then click Continue.
- 9. Select Dell™ Color Laser 5110cn... from the Model menu, and then click Continue. The message Printer xxx has been added successfully. appears.

The set up is complete.

When you have finished setting up the queue you can print jobs from the software program. Start the print job from the software program, and then specify the queue in the print dialog box.

However, sometimes you can only print from the default queue depending on the software program (for example Mozilla). In these cases, before you start printing, set queue you want to print to as the default queue. For information on specifying the default queue, see "Setting the Default Queue."

Setting the Default Queue

- 1. Select Main Menu → System Tools → Terminal.
- 2. Type the following command in the terminal window.

su
(Type the administrator's password)
lpadmin -d (The queue name)

Specifying the Printing Options

You can specify the printing options such as color mode or double-sided printing.

- 1. Select Main Menu → Run Program. Type cupsconfig and click Run in the Run Program window. The browser is activated and the CUPS window appears.
- 2. Click Manage Printers.
- 3. Click Configure Printer of the queue for which you want to specify the printing options.
- 4. Type root as the user name, and type the administrator's password.
- 5. Specify the required settings, and then click Continue. The message Printer xxx has been configured successfully. appears.

The setting is complete. Execute printing from the software program.

Uninstalling the Printer Driver

- 1. Select Main Menu \rightarrow System Tools \rightarrow Terminal.
- 2. Type the following command in the terminal window.

```
su
(Type the administrator's password)
rpm -e Dell-Color-Laser-5110cn
```

The printer driver is uninstalled.

Operation on SUSE 9.2/9.3

Installing the Printer Driver

- 1. Double-click Dell-Color-Laser-5110cn-x.x-x.noarch.rpm in the *Drivers and Utilities* CD.
- 2. Click Install package with YaST.
- 3. Type the administrator's password. Installation starts. When the installation is complete, the window is automatically closed.

Setting Up the Queue

To execute printing, you must set up the print queue on your workstation.

- 1. Select Start Applications → System → YaST.
- 2. Type the administrator's password. YaST Control Center is activated.
- 3. Select Hardware from Printer.
- 4. Printer setup: Autodetected printers is activated. For USB connections:
 - a. Select Dell Color Laser 5110cn on USB (//Dell/Color% 20Laser% 20511cn or /dev/usblp*) as Available are, and then click Configure....
 - b. Confirm the settings in Edit configuration, and then click OK.

For parallel connections:

- Select Other (not detected) as Available are in Printers to configure, and then click Configure....
- b. Select Parallel printer as Printer Type, and then click Next.
- c. Click Next.
- d. Set the name of the printer queue in Queue name, and type the queue name for printing in Name for printing.
 The Description of Printer and Location of Printer do not have to be specified.
- e. Select the Do Local Filtering check box, and then click Next.
- f. Select DELL in Select manufacturer. Select Color Laser 5110cn in Select Model, and then click Next.
- g. Confirm the settings in Edit configuration, and then click OK.

For network connections:

- a. Select Other (not detected) as Available are in Printers to configure, and then click Configure....
- b. Select the Print via LPD-Style Network Server as Printer Type, and then click Next.
- c. Type the printer's IP address in Host name of the printer server. And type the name of the printer queue in Name of the remote queue, and then click Next.
- d. Set the name of the printer queue in Queue name, and type the queue name for printing in Name for printing.
 The Description of Printer and Location of Printer do not have to be specified.
- e. Select the Do Local Filtering check box, and then click Next.
- f. Select DELL as Select manufacturer. Select Color Laser 5110cn as Select Model, and then click Next.
- g. Confirm the settings in Edit configuration, and then click OK.
- 5. Click Finish.

Printing From the Application Program

When you have finished setting up the queue you can print jobs from the application program. Start the print job from the application program, and then specify the queue in the print dialog box.

However, sometimes you can only print from the default queue depending on the application program (for

example Mozilla). In these cases, before you start printing, set queue you want to print to as the default queue. For information on specifying the default queue, see "Setting the Default Queue."

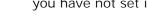
Setting the Default Queue

- 1. To activate the Printer setup: Autodetected printers, do the following.
 - a. Select Start Applications \rightarrow System \rightarrow YaST.
 - b. Type the administrator's password. YaST Control Center is activated.
 - c. Select Hardware from Printer.
- 2. Printer setup: Autodetected printers is activated.
- 3. Click Change....
- 4. Select the printer you wan to set to default, and then click Set as default.
- 5. Click Finish.

Specifying the Printing Options

You can specify the printing options such as color mode or double-sided printing.

- Select Start Applications → Internet → Web Browser.
 The browser is activated.
- 2. Type http://localhost:631/admin in Location, and then press the <Enter> key.
- 3. Type root as the user name, and type the administrator's password. The CUPS window appears.



NOTE: Set the password for authority as the printer administrator before setting the printer queue. If you have not set it, go to "Setting the Password for Authority as the Printer Administrator."

- 4. Click Manage Printers.
- 5. Specify the required settings, and then click Continue.
 The message Printer xxx has been configured successfully. appears.

The setting is complete. Execute printing from the application program.

Setting the Password for Authority as the Printer Administrator

You must set the password for authority as the printer administrator to do operations as the printer administrator.

- 1. Select Start Applications \rightarrow System \rightarrow Terminal \rightarrow Konsole.
- 2. Type the following command on the terminal window.

```
su (Type the administrator's password.)
lppasswd -g sys -a root
(Type the password for authority as the printer administrator after the Enter password prompt.)
(Retype the password for authority as the printer administrator after the Enter password again prompt.)
```

Uninstalling the Printer Driver

- 1. Select Start Applications \rightarrow System \rightarrow Terminal \rightarrow Konsole.
- 2. Type the following command on the terminal window.

```
su
(Type the administrator's password)
rpm -e Dell-Color-Laser-5110cn
```

The printer driver is uninstalled.

Appendix

- Dell Technical Support Policy
- Contacting Dell
- Warranty and Return Policy

Dell Technical Support Policy

Technician-assisted technical support requires the cooperation and participation of the customer in the troubleshooting process and provides for restoration of the operating system, software program and hardware drivers to the original default configuration as shipped from Dell, as well as the verification of appropriate functionality of the printer and all Dell-installed hardware. In addition to this technician assisted technical support, online technical support is available at Dell Support. Additional technical support options may be available for purchase.

Dell provides limited technical support for the printer and any Dell-installed software and peripherals. Support for third-party software and peripherals is provided by the original manufacturer, including those purchased and/or installed through Software & Peripherals (DellWare), ReadyWare, and Custom Factory Integration (CFI/DellPlus).

Contacting Dell

You can access Dell Support at support.dell.com. Select your region on the WELCOME TO DELL SUPPORT page, and fill in the requested details to access help tools and information.

You can contact Dell electronically using the following addresses:

- World Wide Web www.dell.com/ www.dell.com/ap/ (for Asian/Pacific countries only) www.euro.dell.com (for Europe only) www.dell.com/la/ (for Latin American countries)
- Anonymous file transfer protocol (FTP)
 ftp.dell.com/
 Log in as user: anonymous, and use your email address as your password.
- Electronic Support Service mobile_support@us.dell.com support@us.dell.com apsupport@dell.com (for Asian/Pacific countries only) support.euro.dell.com (for Europe only)
- Electronic Quote Service sales@dell.com apmarketing@dell.com (for Asian/Pacific countries only)

Electronic Information Service info@dell.com

For more information, see "Contacting Dell" in the Owner's Manual.

Warranty and Return Policy

Dell Inc. ("Dell") manufactures its hardware products from parts and components that are new or equivalent to new in accordance with industry-standard practices. For information about the Dell warranty for your printer, see the *Owner's Manual*.