

User Guide

12ppm laser printer

Compuprint S.p.A.
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English

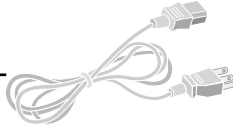
Thank you for purchasing the Compuprint - Genicom 12ppm laser printer. In this guide you will find information essential for setting up and operating your laser printer.

TABLE OF CONTENTS

Unpacking	1-2
Printer Components	1-3
Connections	1-4
Control Panel	1-4
Cartridge Installation	1-5
Loading Paper	1-7
Installing Software	1-9
Print Driver Features	1-12
Multi-Purpose Tray Printing	1-13
Printer Specifications	1-15
Troubleshooting	1-16
Installing Memory	1-20
Getting More Information	1-22
Printer Certifications	1-24

Unpacking

AC Power
Cord

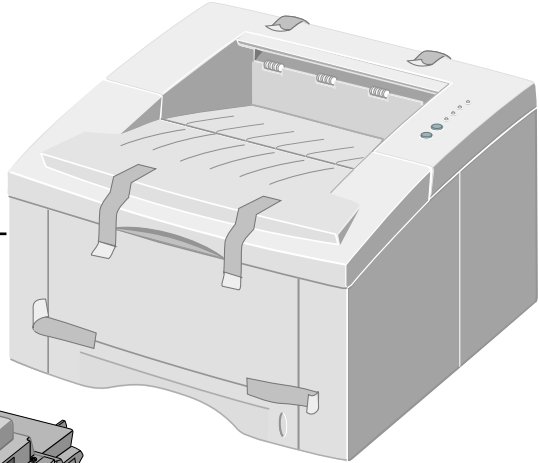


PC Parallel
Cable

Included in some countries.
(meets IEEE 1284
specifications)

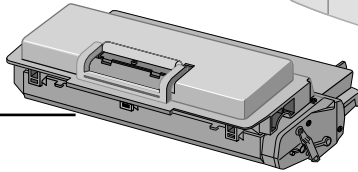


12ppm laser printer

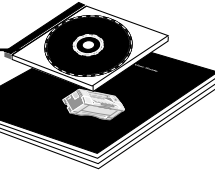


*Note: Carefully
remove any shipping
tape from the
printer.*

Print
Cartridge



CD



User Guide



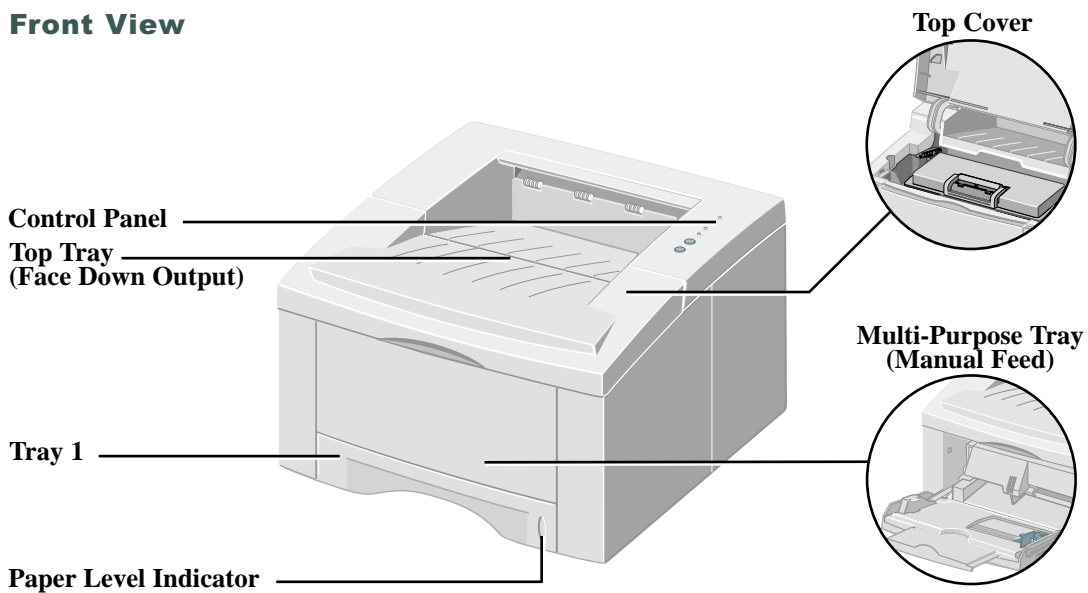
*Note: The 12ppm laser printer is equipped with
a parallel port for use with IBM Compatible
computers (with a 100mhz Pentium or higher
equivalent processor). USB cable sold separately.*



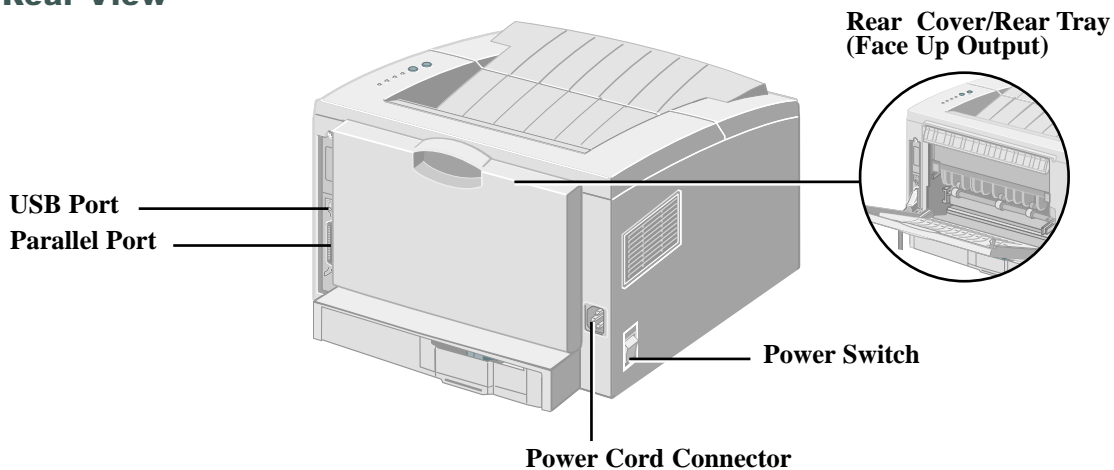
*Note: Place the printer on a flat, stable surface
leaving 6 inches (15cm) around the printer and
1 foot (30cm) of space in front.*

*Do not place the printer in direct sunlight, near
heat sources or air conditioners, in dusty or
dirty environments, or near devices that contain
magnets or generate magnetic fields (such as
loud speakers or base units of cordless
telephones).*

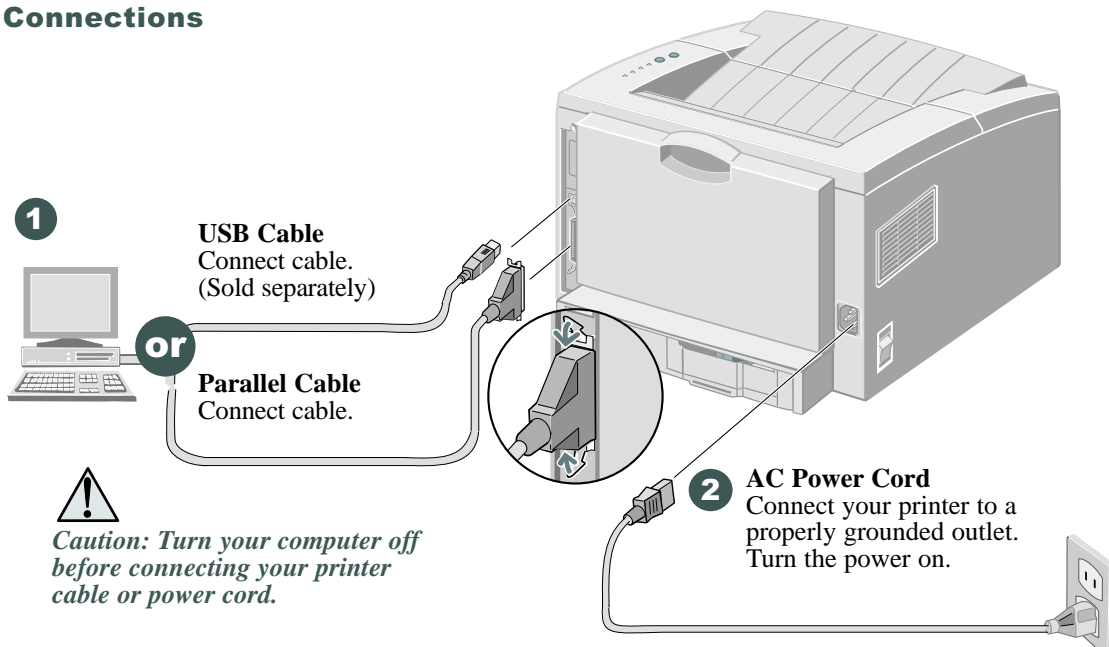
Front View



Rear View



Connections



Control Panel

Error Light

Blinking: Insufficient memory
On: Cover open, cartridge not installed or not seated properly
On with Paper Light: Paper jam

Paper Light

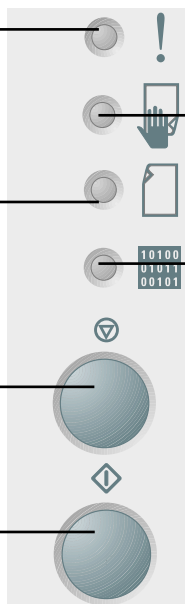
On: Out of Paper
On with Error Light: Paper jam

Cancel Button

To cancel print job, hold the cancel button down until all lights blink, then release.

Print Button

To print a **Configuration Sheet**, hold the print button down until all lights blink, then release.



Manual Light

On: Multi-purpose tray (manual feed) ready
Press print button to start job.

Data Light

On: Ready to receive data
Slow blink: Receiving data
Fast blink: Printing

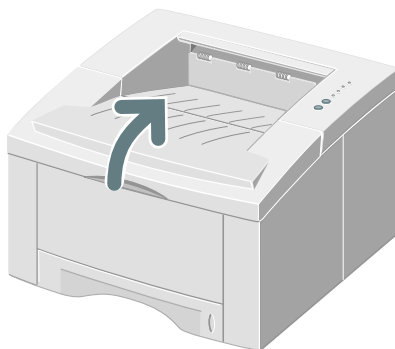


Note: When all lights are blinking, this indicates a system error. Turn the power off and then back on to clear. If problem persists, call your local Customer Service.

Print Cartridge Installation

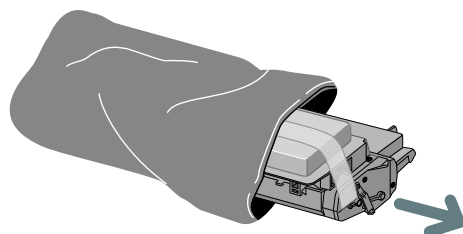
Open the top cover.

1



Remove the print cartridge from the bag.

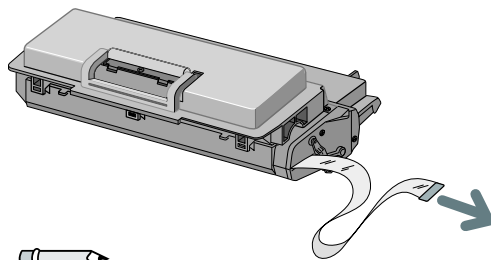
2



Note: Do not expose cartridge to direct sunlight or strong room light for more than 10 minutes.

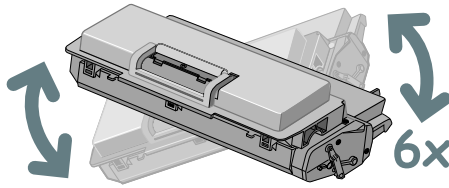
Carefully remove the sealing tape from the print cartridge.

3



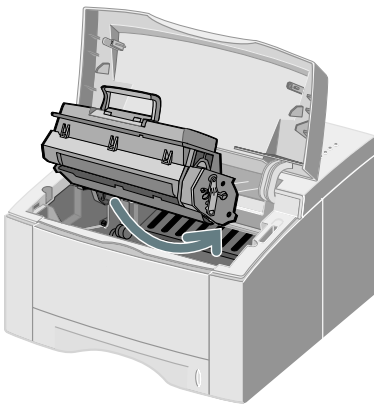
Note: Pull sealing tape completely out of the cartridge.

CARTRIDGE INSTALLATION



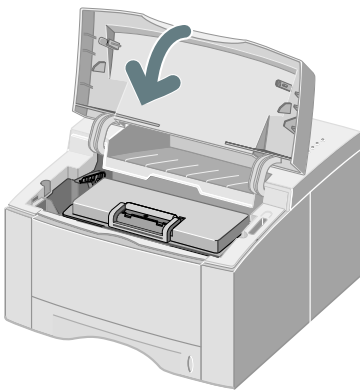
4

Shake the print cartridge from side to side to distribute the toner evenly.



5

Holding the print cartridge by the handle, insert the cartridge into the printer until it clicks into place.



6

Close the top cover securely.

Loading Paper

Pull the paper tray out.



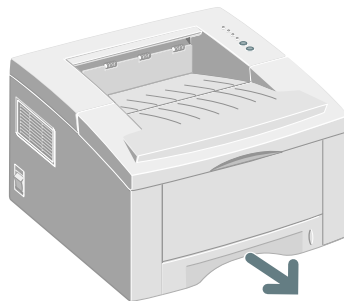
*Caution: Do not remove tray while printing.
This may cause paper jams.*

Press the bottom plate until it locks into place.

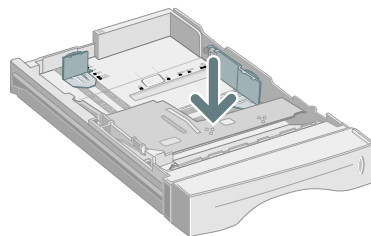
Pinch the **Rear Paper Guide** and adjust to the length of the print media.

For legal or folio size paper, press the tab down and pull the rear wall all the way out, to adjust tray length.

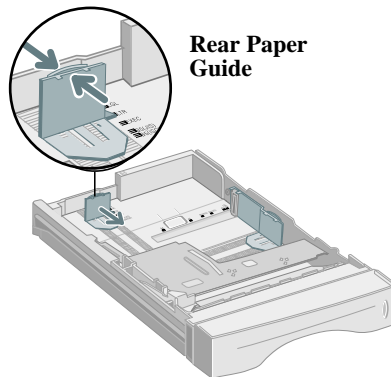
1



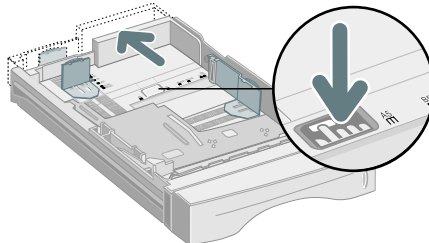
2

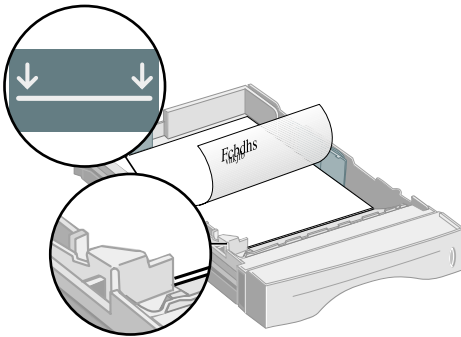


3

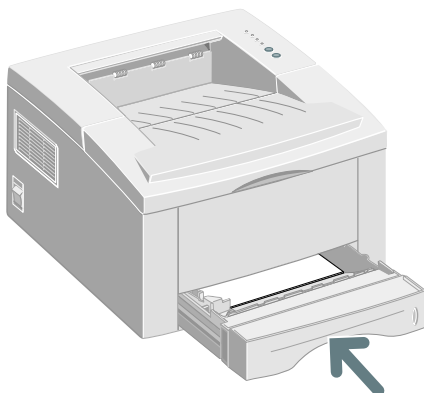
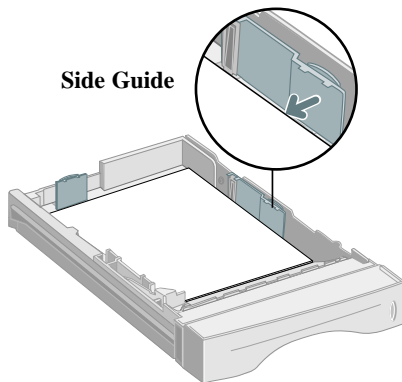


4





Note: Observe the maximum limit indicator. Tray holds a maximum of 250 sheets of paper.



5

Load paper. Ensure that the paper is placed beneath the metal corner guide. If using pre-printed paper, load paper with the print side facing down.

6

Adjust the **Side Guide** to lightly touch the paper.

7

Insert the tray back into the printer.

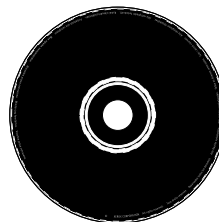
Installing Software

The 12ppm laser printer supports many operating systems. Please go to the section which corresponds with your operating system for installation instructions.

Installation for Windows 95, 98, NT 4.0, 2000

- 1** Insert the Compuprint - Genicom 12ppm laser printer CD into your CD-ROM drive. If Windows runs your CD automatically, skip to step 4.
- 2** Select Run from the Start menu.
- 3** Type d:\setup.exe (where “d” is your CD-ROM drive letter), then click OK.
- 4** Select the appropriate language.
- 5** Select the Print Driver and follow the on-screen instructions to install.
- 6** If desired, install **RCP** (Remote Control Panel).
- 7** If connected to the printer by a USB connection and using Windows 98, you will need to install the USB Port Driver located on the CD. Select your appropriate language, then select USB Port Driver.

You are now ready to print from your PC.



CD Contents

- Software Utilities
- Print Drivers
- Reference Guide
 - Print Media Specifications
 - Configuring the PCL Driver
 - Setting Properties
 - Driver Features
 - Using Printer Utilities
 - Solving Printing Problems



Note: RCP is a Windows-based program that allows the user to set default printer values.



Note: For Windows 98, the USB port driver must be installed in order to print to the 12ppm laser printer via a USB connection.



Note: these instructions are a guide to installing the PCL5e driver for Linux. The Linux driver installation script supports RedHat 6.0 or greater.



Linux Installation

- 1** Log in to Linux as Super User (root) account.
- 2** Insert the Compuprint - Genicom 12ppm laser printer CD into the CD-ROM drive.
- 3** Open a terminal window.
For Gnome interface users, (Utilities → GNOME terminal.)
- 4** Mount your CD-ROM and run a script file:

```
mount -t iso9660 /dev/cdrom /mnt/ cdrom
cd /mnt/cdrom/en/linux
./install.sh
```
- 5** Setup your print driver using printtool.
 - Run the printtool program.
Run program... → printtool, select Run.
If you get an error message, regarding ncps, click Ignore to continue installing a local printer.
 - From the RedHat Linux Print System Manager, select Add, Printer type: Check mark Local printer, then click OK.
 - An Auto-detection device dialogue box should indicate that /dev/lp0 is "Detected". click OK.
 - The Edit Local Print Entry dialogue box should appear. Use the defaults, click Select.

- For printer type, select Compuprint - Genicom 12ppm laser printer Series PCL5e Compatible, click OK.
- On Edit Local Printer Entry dialogue box, click OK.

6 At the end of installation, close RedHat's printtool by clicking "X" in the upper right hand corner of the windows.

Your Compuprint - Genicom Printer will be the default printer (lp) for printing. If printing a postscript (.ps) file, use the lpr command to print. For instance, if a print command for readme.pdf generates a readme.ps file, open a terminal window and type "lpr readme.ps" in order to print this file.



Note: The 12ppm laser printer is dependent upon the native driver shipping with your Linux RedHat OS. Therefore, the features and functions listed in the table on the next page may not all be available.

PCL Print Driver Features

	Properties	Usage /Description	Windows *
Paper	Number of Copies	Select 1-999 copies	*
	Paper Size	Select from supported paper sizes (See “Printer Specifications”).	*
	Paper Source	Select Printing from Tray 1, MP Tray or Tray 2 (if installed).	*
	Paper Type	Select from Plain paper, Bond, Transparency, Card stock, Preprinted, Colored paper, Envelope	*
Image Quality	Image Quality	Select enhancement setting for graphical and/or text printing.	*
	True Type Fonts	Select font printing.	*
	Toner Saver	Select for draft mode printing.	*
	Graphics Mode	Select vector or raster mode.	*
Page Layout	Page Orientation	Select Portrait or Landscape.	*
	Manual 2 Sided printing	Print two-sided documents.	*
	Multiple Up (Win)	Select 1-16 (Windows) images per physical page.	*
	Booklet Printing	Create booklets from documents.	*
	Poster Printing	Create posters from documents.	*
	Fit to Page (Win)	Adjust image to fit to page size.	*
	Watermarks	Create and use watermarks on documents.	*



*Note: Refer to the Reference Guide on your CD for more information.
These features can be located under the Properties tab of your Print Menu.

Multi-Purpose Tray Printing

The Multi-Purpose Tray (Manual Feed) is to be used as an alternate paper source for printing onto special print media.

Pull open the Multi-Purpose Tray (front panel).

Pull out the **Multi-Purpose Tray Extension**.

Load print media against the left edge of the tray then slide the width guide on the right against the print media. Observe the maximum limit indicator. Do not overload tray.

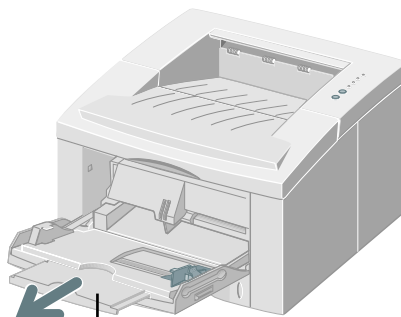


Note: When printing on certain envelopes, heavier weight papers, transparencies, or paper labels, manually feed them one at a time through the Multi-Purpose tray.

1

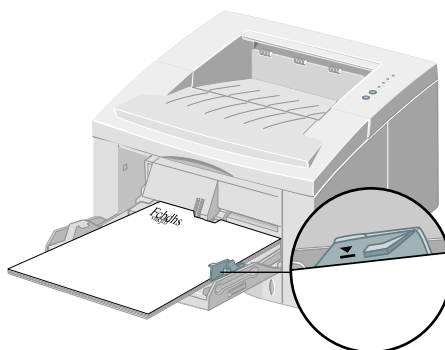


2



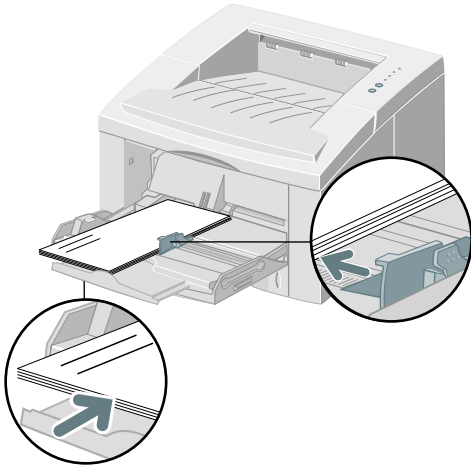
Multi-Purpose Tray Extension

3





Note: You can stack up to 100 sheets of paper or 10 envelopes for automatic feeding.



4

Load envelopes, with the flap down, against the left edge of the tray then slide the width guide on the right against the envelopes.



Caution: Never use envelopes with clasps, snaps, windows, coated linings, or self-stick adhesives. These envelopes may severely damage the printer. Do not feed stamped envelopes through the printer.



5

When printing on special media, open the rear output tray cover and pull out the paper support extension.

6

When you finish printing from the Multi-Purpose Tray, push the support extensions back in and close both covers.

Printer Specifications

Item	Specification and Description
Print Speed	Up to 12ppm (A4/Letter)
Resolution	True 600 x 600 dpi; 1200 dpi Resolution (Windows)
Output Capacity	Face Down: 250 Sheets, Face Up: 100 Sheets
Input Capacity	Tray 1: 250 sheets of paper (16 to 28lbs/60 to 105gsm) MP Tray: 100 sheets of paper (16 to 53lbs/60 to 199gsm) or 10 envelopes Option Tray 2: 550 sheets of paper (16 to 28lbs/60 to 105gsm)
Power Rating	AC100~128V/200V~240V, 50/60Hz
Acoustic Noise	Standby: Less than 39dB; Operating: Less than 49dB
Operating Environment	Temperature: 10~30°C/ 50~90°F; Humidity: 20~80%RH
Weight	14.9 Kg/ 32.8 lbs. (with packaging materials)
External Dimensions	360(W) X 407(D) X 249(H)mm/ 14.2(W) X 16.1(D) X 9.8(H)in.
Emulation	PCL6, PCL5e, Epson; PostScript Level 3 (optional)
Fonts	45 scalable (35 Intellifont, 1 Bitmap, Euro)
CPU	66MHz, 32 bit RISC processor
Memory	Standard 4MB, Expandable to 68MB: (Installed into the slot labeled DRAM Module) 72 pin, EDO, non-parity: 60ns. 8MB, 16MB, 32MB or 64MB
Interface	Bidirectional Parallel Standard (IEEE 1284) –Modes supported: Compatible, Nibble, Byte, ECP USB Interface Standard –USB 1.0/1.1 compliant, 12Mbps, 1 port

Troubleshooting

Problem	Possible Cause	Things to try...
The printer does not print	Data Light is not on.	If the Data Light is off, check the power switch and power source.
	Printer Cable is not connected properly.	Check all connections. If using a parallel cable, make sure the clips on the connector are securely fastened.
	Error Light is on.	Check to see that the print cartridge is properly inserted in the machine.
	Paper Light and Error Light are on.	Check to see if there is a paper jam.
	Paper Light is on.	Printer is out of paper; add paper.
	Manual Light and Data Light are on.	Printer is in manual feed mode and is waiting for paper to be fed through the MP Tray.
Faded printing	Toner is low, time to replace the print cartridge.	Remove the print cartridge and shake it gently to evenly distribute the remaining toner, then reinsert the cartridge or insert a new print cartridge.
Job did not completely print; received an error sheet	Out of memory	Reduce the complexity of the print job; Do not send the entire job to the printer, instead print it in sections, i.e., pp 1-5, pp 6-10, etc.; Reduce the print resolution, i.e., from 1200 dpi to 600 dpi; Add a minimum of 8MB of additional memory.
Printed page has some missing characters or data	Differences in vector mode vs. raster mode	In PCL driver, change your Image Quality mode to raster and select text mode: download as bitmap image.
Difficulties printing via the parallel port (Windows users)	Printer is not directly connected to the PC.	If you have any intermediate device between PC and printer, please remove device and connect printer directly to PC.
Illegal Operation Error Message	Print Driver error	Report error to your local support organization.



Note: For more troubleshooting tips, please refer to the electronic Reference Guide, which is available on the product CD provided with your printer.

Clearing Paper Jams Inside the Printer

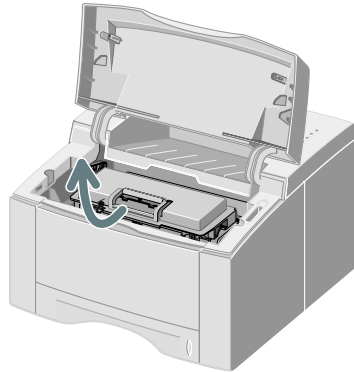
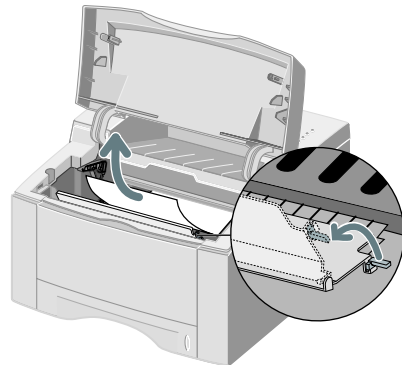
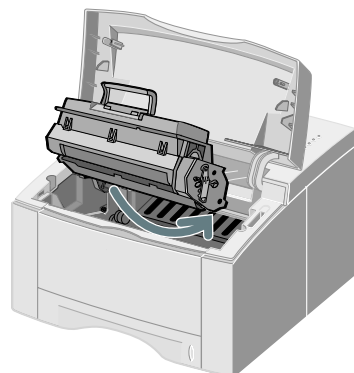
Open the top cover and remove the print cartridge. Once the print cartridge is removed from the printer, be careful not to expose it to heat or direct sunlight.

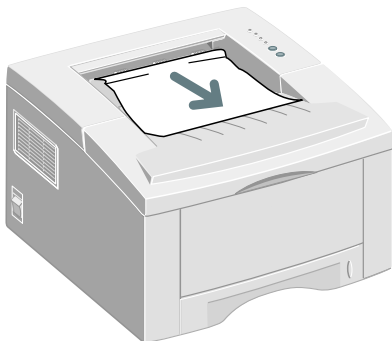
Carefully lift up the guide feed and gently remove jammed paper. After removing jammed paper, flip down the guide feed.

Replace the print cartridge and close the top cover. Printing will resume.



Note: On the rare occasion you encounter a paper jam, the following instructions will assist you in clearing the jam.

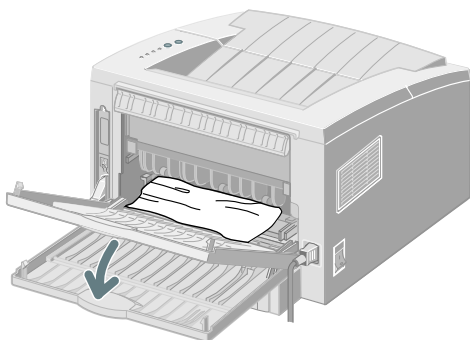
1**2****3**



1

Clearing Paper Jams in the Output Area

If the paper is almost completely visible, gently pull paper to remove.

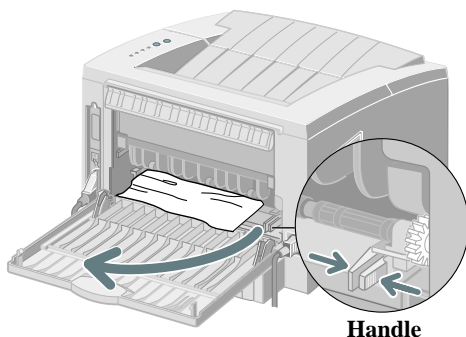


2

If the jammed paper is not visible or there is resistance when you pull the paper, open the rear cover. Detach the vinyl strip and press the rear cover down until the plastic clips of the tray snap out.



Note: Please detach the vinyl strap prior to pushing down the rear cover.



Handle

3

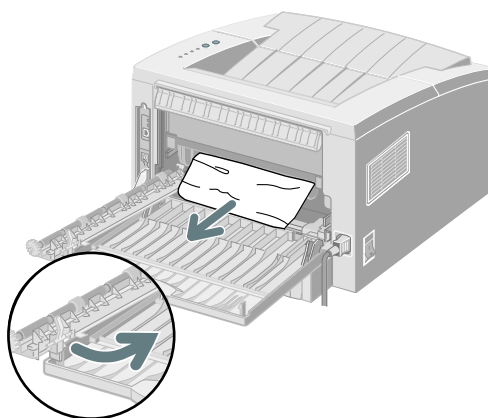
If there is still resistance when you try to remove the paper, pinch the **handle** and release the exit roller.

Gently remove the jammed paper. Refer to “Clearing Paper Jams Inside the Printer” if unable to remove the paper.

4

Replace and secure the exit roller and reattach the vinyl strap. Close the rear cover. Open and close the top cover to resume printing.

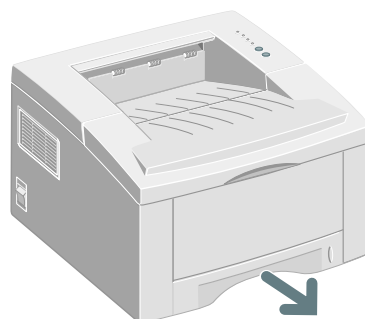
5



Clearing Paper Jams in the Input Area

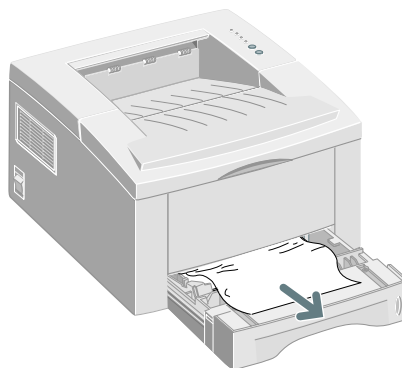
Pull out the paper tray.

1



Gently remove jammed paper.

2

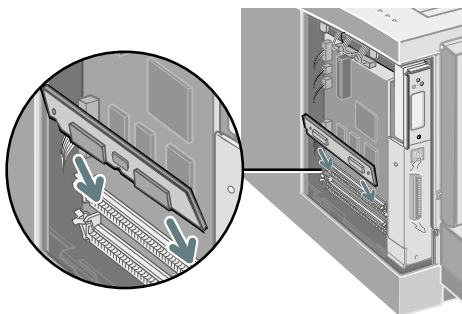
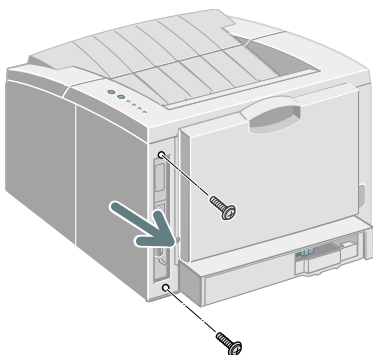


Slide the tray back into the printer. Open and close the top cover to resume printing.

3



Note: For users who plan to run complex print jobs or print a majority of print jobs at 1200dpi, a minimum of 8MB of additional memory is recommended. Memory needs to be purchased separately. (RAM Specifications: 72 pin, EDO, non-parity: 60ns.)



Installing Optional Memory



Caution: The controller board and internal options are sensitive to static electricity. Before installing or removing an internal option, discharge static electricity from your body by touching something metal, such as a metal plate on a device connected to a grounded outlet.

1

Go to the back of the printer. Turn the printer off and disconnect the power cord and printer cable.

2

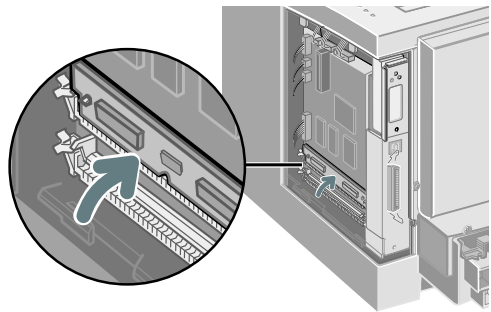
Remove the two outer screws and the control board cover.

3

Install the memory SIMM, at a slight angle, into the slot labeled “DRAM Module”.

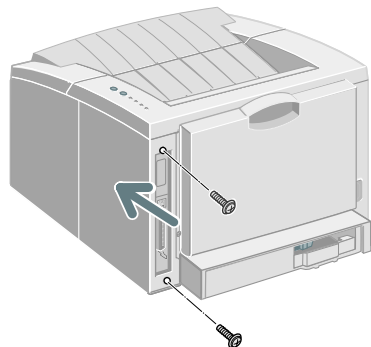
Push back on the SIMM until it clicks into place. (Make sure the SIMM is secured in place by the metal clips.)

4



Replace the side cover and tighten the two outer screws.

5

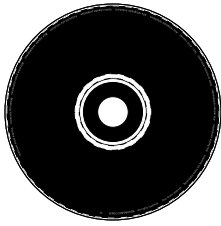


Reconnect the power cord and printer cable. Turn the power on.

6

Print a configuration sheet (hold down the print button until all lights blink, then release). Confirm the new memory value on your sheet.

7



CD Contents

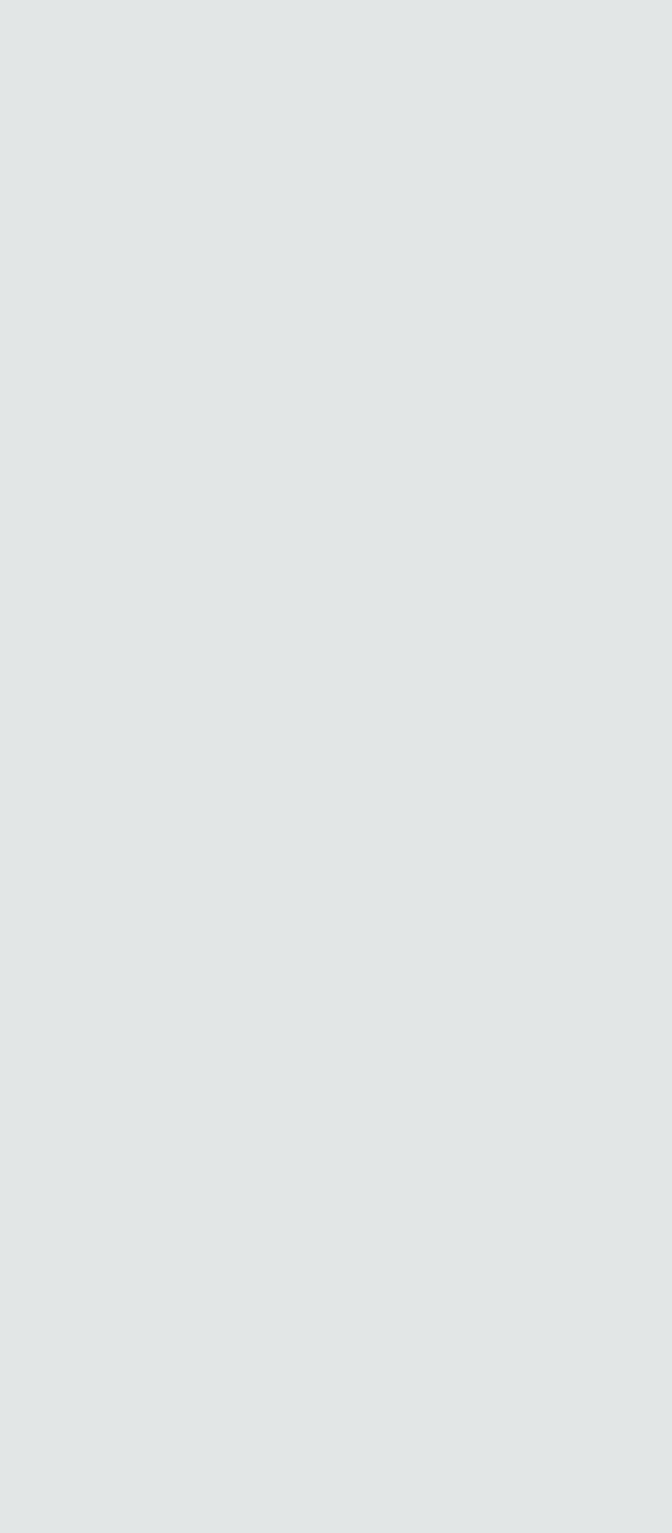
- Software Utilities
- Print Drivers
- Reference Guide (found in the folder labeled Docs)
 - Print Media Specifications
 - Configuring the PCL Driver
 - Setting Properties
 - Driver Features
 - Using Printer Utilities
 - Solving Printing Problems

Detailed information for your 12ppm laser printer is in the electronic Reference Guide, which is available on the product CD provided with your printer. The Reference Guide is provided in the following languages: English (EN), French (FR), Italian (IT), German (DE) and Spanish (ES).

The Windows PCL6 driver provided with your printer has many specialized print features, like Watermarks and multiple-up printing. To learn more about these features, please access the on-line Help available through the Compuprint - Genicom 12ppm laser printer PCL6 driver. To access the on-line help, just click the 'Help' button located on the lower right hand corner of the driver window.

Drivers are available on our website. Please visit www.compuprint.net and/or www.genicom-international.com and select "Get Drivers and Utilities."

For support and service, refer to your warranty pack for local customer service. Additional information can be found at www.compuprint.net and/or www.genicom-international.com.



Laser Safety

The Compuprint - Genicom 12ppm laser printer complies with safety standards, and is certified as a Class 1 Laser product under the U.S. Department of Health and Human Services (DHHS) Radiation Performance Standard according to the Radiation Control for Health and Safety Act of 1968. The printer does not emit hazardous laser radiation. The use of controls, adjustments, or procedures other than those specified in the documentation might result in hazardous exposure to laser light.

(European Union) Declaration of Conformance

The CE marking applied to this product symbolizes Compuprint - Genicom Declaration of Conformity with the following applicable Directives of the European Union as of the dates indicated:

January 1, 1995: Council Directive 73/23/EC amended by Council Directive 93/68/EC, on the harmonization of the laws of the Member States related to equipment designated for use within certain voltage limits.

January 1, 1996: Council Directive 89/336/EEC, approximation of the laws of the member states related to electromagnetic compatibility. When applicable

March 9, 1999: Council Directive 99/5/EC, on the harmonization of the laws of the Member States related to radio and telecommunications terminal equipment.

A full declaration, defining the relevant Directives and referenced standards can be obtained from your Compuprint - Genicom representative.

WARNING: Changes or modifications to this equipment not specifically approved by Compuprint - Genicom may void the user's authority to operate this equipment. Shielded cables must be used with this equipment to maintain compliance with the EMC Directive (89/336/EEC).

WARNING: In order to allow this equipment to operate in proximity to Industrial, Scientific and Medical (ISM) equipment, the external radiation from ISM equipment may have to be limited or special mitigation measures taken.

Australia and New Zealand

Changes or modifications to this equipment not specifically approved by Compuprint - Genicom may void the user's authority to operate this equipment. Shielded cables must be used with this equipment to maintain compliance with the Radiocommunications Act 1992.



Compuprint - Genicom 12ppm Laser Printer Reference Guide

BOOK TOC

CHAPTER TOC

SEARCH

Introduction 2

Overview 3

Printer Components 4

Printer Features 7

Printer Documentation 8

Additional Printer Setup Information 10

Connecting to the Computer 11

Installing Optional Software 12

Additional Print Media Specifications 14

Selecting Print Media 15

Printing 18

Windows Printing 19

Linux Printing 30

PostScript Driver Features 32

Using Remote Control Panel 33

Maintaining the Printer 39

Cleaning the Printer 40

Troubleshooting 42

Solving Printing Problems 43

Solving Print Quality Problems 47

Solving PostScript Problems 49

Obtaining Service 50

Environmental and Safety Considerations 51

Introduction 52

Laser Safety 53

Ozone Safety 54

Operational Safety 55

Chapter 1

Introduction

Overview3

Printer Components.....4

Printer Features7

Printer Documentation8

 Using the CD9

 Note, Caution and Warning Symbols.....9

BOOK TOC

CHAPTER TOC

SEARCH



PREVIOUS PAGE

NEXT PAGE

Overview

In this chapter, you will become familiar with the features of your printer and learn where to locate specific printer parts.

Before you use your printer, make sure that you perform all of the setup steps outlined in the User Guide that came with your printer. For installation options not covered in the User Guide, refer to the section *"Additional Printer Setup Information"* (page 10).

Recognizing that you may have special needs, Compuprint - Genicom offers optional printer accessories to better meet your requirements. Compuprint - Genicom, or your Compuprint - Genicom authorized reseller, may have provided some or all of these options. First verify your exact accessory options before proceeding further. If you see features described in this section that are not available with the printer and accessories you have, you can easily add them yourself.

[BOOK TOC](#)[CHAPTER TOC](#)[SEARCH](#)

Printer Components

Use Figures 1 through 3 below and on the following pages to identify the main components of your 12ppm laser printer.

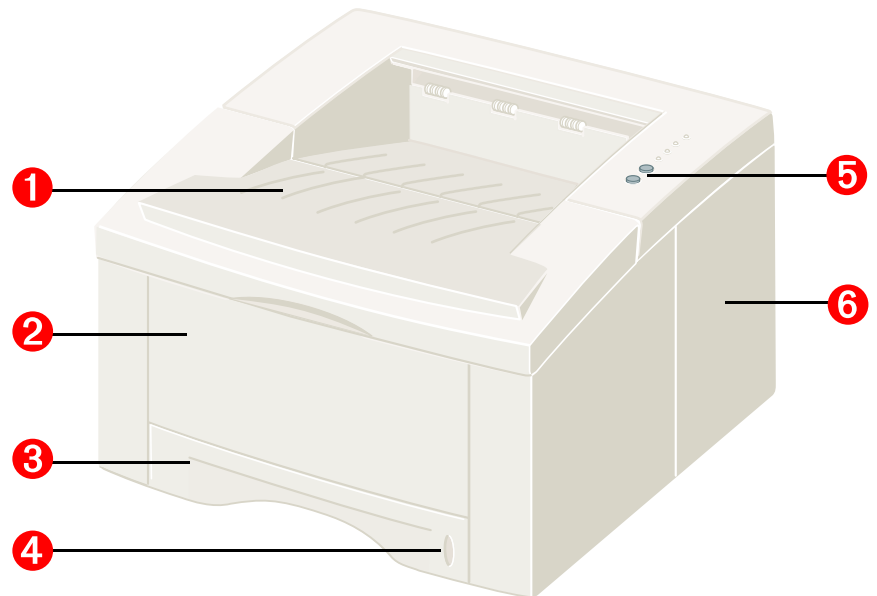


Figure 1: Printer Components, Front View

- 1 Top Tray** (face down output)
- 2 Multi-Purpose Tray** (shown closed), used to auto feed multiple sheets or manually feed single sheets, envelopes, etc.
- 3 Tray 1** (250 sheet)
- 4 Paper level indicator**
- 5 Control panel**
- 6 Control board cover**, protects and provides access to the control board.

BOOK TOC

CHAPTER TOC

SEARCH

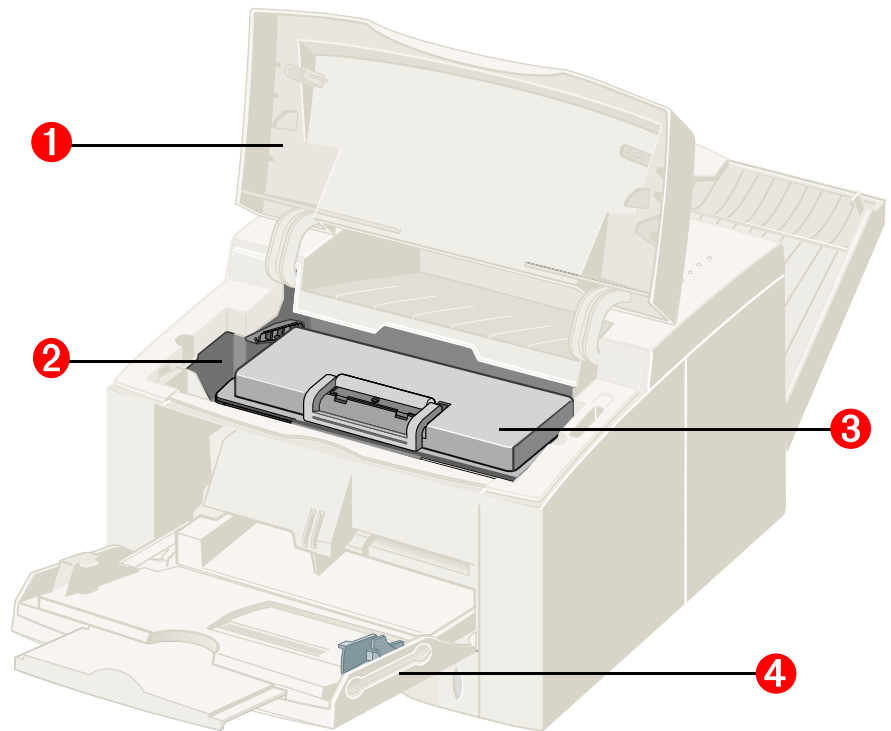


Figure 2: Printer Components, Inside Front View

- 1 Top cover** (shown open)
- 2 Serial number**
- 3 Laser print cartridge**
- 4 Multi-Purpose Tray** (shown open and extended), used to auto feed a stack of paper or manually feed single sheets, envelopes, transparencies, etc.

BOOK TOC

CHAPTER TOC

SEARCH

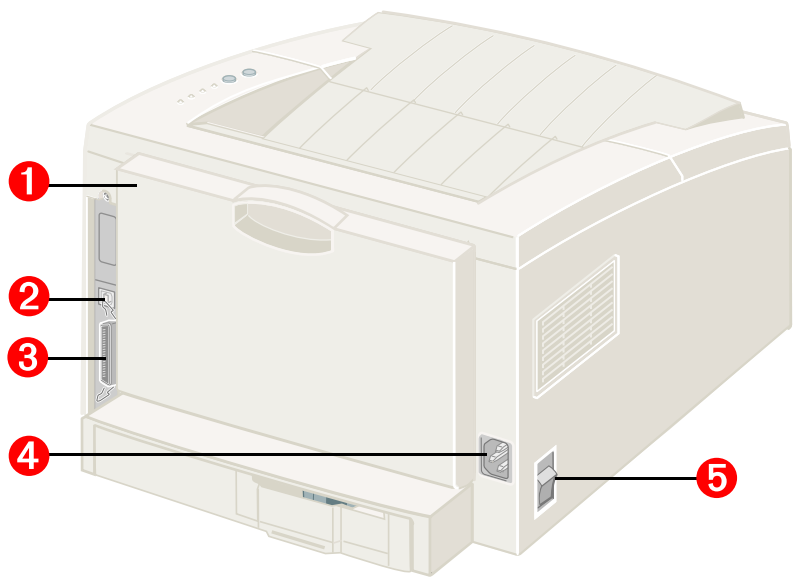


Figure 3: Printer Components, Rear View

- 1 Rear cover** (with rear tray inside for face up output)
- 2 USB interface connector**
- 3 Parallel interface connector**
- 4 Power cord connector**
- 5 Power switch**

BOOK TOC

CHAPTER TOC

SEARCH

Printer Features

Your 12ppm laser printer is a compact, easy to use laser printer, designed for the small office environment to provide years of high quality, high performance printing.

This manual supplements the printed User Guide that was packaged with the printer. It provides additional set up, operation and maintenance information, and contains advice on how you can get the best performance from your printer. Please use it in conjunction with the User Guide.

The maximum print speed for the 12ppm laser printer is 12 pages per minute. It offers true 600 x 600 dpi print resolution and 1200 dpi resolution. The printer features one 250 sheet paper tray and a 100 sheet Multi-Purpose Tray. The printer understands the PCL 5e and PCL 6 printer languages and Epson emulation, and has an option for PostScript Level 3. Other options include a second paper tray with a 550 sheet capacity. Options can be purchased where you purchased your printer.

BOOK TOC

CHAPTER TOC

SEARCH

Printer Documentation

Your 12ppm laser printer is packaged with the following documentation and information:

- User Guide, which shows you how to get your printer up and running, and provides the basic information needed to use your printer.
- This Reference Guide, which provides you with all of the detailed information you will need to use, maintain, upgrade and troubleshoot your printer.
- Warranty Information, which you should fill out and return in order to receive all of the benefits of owning a Compuprint - Genicom laser printer.
- The 12ppm laser printer CD, which contains the following:
 - User Guide
 - Reference Guide
 - Printer Drivers
 - Remote Control Panel
 - USB Port Driver (for Windows 98 only)
 - PostScript PPD Files



Note: *For the Windows PCL 6 driver contained on the CD, the majority of documentation is provided via the on-line Help included with the driver. Features and functionality of the drivers are discussed in Chapter 4: Printing.*

Since the CD contains so much information of importance, please ensure that you save it and keep it in a safe place.

BOOK TOC

CHAPTER TOC

SEARCH

BOOK TOC

CHAPTER TOC

SEARCH

Using the CD

The documentation on the CD is provided as a PDF file, which can be opened in Adobe Acrobat Reader. This file contains hypertext links that enable you to jump from the Table of Contents directly to the page where you are looking for information, as well as from page to page where information is cross-referenced. Simply move the cursor over a hypertext link and it changes to a pointing finger. Then click on the link to jump to the link's destination.

The PDF files also enable you to print the specific pages you need, rather than printing an entire chapter or manual.

Note, Caution and Warning Symbols

Throughout this Reference Guide, several symbols are used to emphasize useful, important and critical information. They are as follows:



Note: *This symbol indicates particularly useful or helpful information about your printer.*



Caution: *This symbol indicates a caution against performing any action that may damage your printer or degrade performance.*



Warning: *This symbol indicates a warning against performing any action that may lead to physical injury.*

Chapter 2

Additional Printer Setup Information

Connecting to the Computer	11
Installing Optional Software.....	12
Windows 95/98, NT 4.0 and 2000 Installation	13

BOOK TOC

CHAPTER TOC

SEARCH



◀ PREVIOUS PAGE

NEXT PAGE ▶

Connecting to the Computer

Your printer can be connected to a Windows-based PC, or to a PC running Red Hat Linux 6.0 or higher. Refer to Table 1 for your connection options.

Table 1: Interface options

Interface	Windows PC	Linux
Parallel	Yes	Yes
USB	Yes *	Not available

* Windows 98 and Windows 2000 systems only.

[BOOK TOC](#)[CHAPTER TOC](#)[SEARCH](#)

Installing Optional Software

Included with your printer is a CD containing printer drivers for some of the most popular Windows software applications. To operate your printer, you must install a printer driver, which translates data from your application into data the printer understands. Please refer to the User Guide for printer driver installation.

In addition, the CD shipped with your printer contains the PostScript Printer Description (PPD) files for Windows to allow PostScript printing. PostScript printing requires purchase and installation of the PostScript option and installation of a PostScript driver).

[BOOK TOC](#)[CHAPTER TOC](#)[SEARCH](#)

BOOK TOC

CHAPTER TOC

SEARCH

Windows 95/98, NT 4.0 and 2000 Installation

1. Insert the 12ppm laser printer CD into your CD-ROM drive. If Windows automatically runs the CD, skip to step 4.
2. Select **Run** from the **Start** menu.
3. Type d:\setup.exe on the command line (where “d” is the letter of your CD-ROM drive), then click **OK**. You are now ready to install software from your CD.
4. Select the appropriate language, then select the software you wish to install:
 - **Printer Driver**
 - **RCP** (Windows only)
 - **USB Port Driver** (for Windows 98 with USB Interface only)
5. Follow the on-screen instructions to complete the installation.

Installing a PostScript Driver and PPD Files

If you have installed the PostScript option in your printer, you can install a PostScript printer driver and select a PostScript Printer Description (PPD) file from the CD.

1. Select **Start→Settings→Printers**.
2. Double-click the **Add Printer** icon.
3. When prompted to select a printer, click the **Have Disk** button, then locate the PPD files on the CD and continue to follow the on-screen directions.

Note that this procedure may require the use of the operating system files on the original CD or diskettes that came with your system.

Chapter 3

Additional Print Media Specifications

Selecting Print Media	15
Media Sizes and Capacities.....	16
Basic Guidelines.....	17

BOOK TOC

CHAPTER TOC

SEARCH



◀ PREVIOUS PAGE

NEXT PAGE ▶

Selecting Print Media

One of the most important things you can do to assure the best possible print quality from your printer is to select the correct paper. Your printer produces letter quality output on most plain bond papers, including cotton bond and photocopying papers; it does not require special papers. However, the print quality varies with different paper types. Be sure to test a small quantity of paper before you purchase a large quantity.

[BOOK TOC](#)[CHAPTER TOC](#)[SEARCH](#)

Media Sizes and Capacities

Table 2 shows the 12ppm laser printer supported media sizes and input capacities.

Table 2: Supported Media Sizes and Tray Capacities *

Size	Tray 1	Tray 2	Multi-Purpose Tray
Paper			
Letter (8.5 x 11 in.)	250	550	100
Legal (8.5 x 14 in.)	250	550	100
Executive (7.25 x 10.5 in.)	250	550	100
A4 (210 x 297 mm)	250	550	100
A5 (148 x 210 mm)	250	550	100
A6 (105 x 148 mm)	250	550	100
Folio (8.5 x 13 in.)	250	550	100
B5 (182 x 257 mm)	250	550	100
Custom Paper Sizes			
Minimum: 80 x 148 mm Maximum: 8.5 x 14 in.	--	--	100
Envelopes			
Com-10 (4.125 x 9.5 in.)	--	--	10
Monarch (3.875 x 7.5 in.)	--	--	10
C5 (162 x 229 mm)	--	--	10
DL (110 x 220 mm)	--	--	10
B5 (176 x 250 mm)	--	--	10
#9	--	--	10
Card stock[†]	--	--	10
Transparency film[†]			30
Labels[†]			20

* Depending on paper thickness, maximum capacity may be reduced. Supported paper weights are 16 - 43 lbs. (60 - 163 g/m²).

[†] If you are experiencing excessive jamming, feed one sheet at a time. Be sure not to exceed the supported paper weight specification, above.

BOOK TOC

CHAPTER TOC

SEARCH

Basic Guidelines

When selecting or loading paper, envelopes, or other special media, keep these guidelines in mind:

- Attempting to print on damp, curled, wrinkled, or torn paper can cause paper jams and poor print quality.
- Use cut-sheet paper only.
- Use only high quality, copier grade paper. Avoid paper with embossed lettering, perforations, or texture that is too smooth or too rough.
- Colored paper should be of the same high quality as white photocopy paper. The pigments must withstand the printer's fusing temperature of 400°F (205°C) for 0.1 second without deterioration. Do not use paper with a colored coating that was added after the paper was produced.
- Preprinted forms must be printed with nonflammable, heat-resistant inks that do not melt, vaporize, or release hazardous emissions when subject to the printer's approximately 400°F (205°C) fusing temperature for 0.1 second.
- Store paper in its ream wrapper until ready to use. Place cartons on pallets or shelves, not on the floor. Do not place heavy objects on top of the paper, whether it is packaged or unpackaged. Keep it away from moisture, or other conditions that can cause it to wrinkle or curl.

[BOOK TOC](#)[CHAPTER TOC](#)[SEARCH](#)

Chapter 4

Printing

Windows Printing.....	19
Printing	19
Configuring the PCL Drivers	21
PCL 6 Driver Features	22
Manual 2-Sided Printing.....	25
Booklet Printing.....	26
Poster Printing.....	28
Linux Printing	30
PostScript Driver Features.....	32
Using Remote Control Panel.....	33

BOOK TOC

CHAPTER TOC

SEARCH

Windows Printing

The following procedure describes the general steps required for printing from various Windows applications. The exact steps for printing a document may vary depending on the application program you are using. Refer to your software application's documentation for the exact printing procedure.



Note: *To use your 12ppm laser printer, you must install a printer driver, described in the User Guide. The way you access the driver varies depending on the software programs you use.*

To use the PostScript driver, you must install the PostScript option.

Printing

1. Start the program you are using to create the document, and open the document you want to print.
2. Select **Print** from the File menu. The Print dialog box appears.

[BOOK TOC](#)[CHAPTER TOC](#)[SEARCH](#)



Note: *Most Windows applications allow you to make changes to the print settings, such as number of copies, sequence of the pages, paper orientation, and margins.*

If you click the Print dialog box's Properties button, you'll open the PCL 6 printer driver's setup window, in which you can set other printer properties such as Manual 2-Sided Printing, Multiple-Up, Booklet Printing, or Watermarks. See the section "Configuring the PCL Drivers" (page 21). When done, click OK to close the driver's setup window.

3. After making any necessary changes to the print settings, click **OK** to start the print job.

[BOOK TOC](#)[CHAPTER TOC](#)[SEARCH](#)

Configuring the PCL Drivers

The 12ppm laser printer driver's setup window allows you to set various printer properties.



Note: *Most Windows applications will override settings you specify in the printer driver. Change all print settings available in the software application first, and any remaining settings with the printer driver.*

The 12ppm laser printer PCL 6 setup window includes five tabs:

- Paper
- Image Quality
- Page Layout
- Watermark
- About



Note: *The basic capabilities of the printer driver are described here. For detailed explanations and assistance with specific settings, use the driver's Help functionality, accessed by clicking the Help button in the setup window.*

BOOK TOC

CHAPTER TOC

SEARCH

PCL 6 Driver Features

Paper

Use this tab to change the number of copies, paper size, paper type, paper source and cover source.

The Paper Source setting identifies the default paper source. Tray 2 is available as a source if the optional Tray 2 is installed. If the paper source is set to Auto Select, the printer automatically selects the print material according to the following priority: Multi-Purpose Tray, Tray 1, Tray 2.



Note: *If paper is loaded into the Multi-Purpose Tray, the printer will always pull from the Multi-Purpose Tray first, regardless of driver settings.*

Multi-Purpose Tray is recommended when printing on special media.

Cover Source identifies a source for a cover sheet (if different than the source for the actual print job). The default setting is None.

[BOOK TOC](#)[CHAPTER TOC](#)[SEARCH](#)

Image Quality

Use this tab to change resolution and enhancement, graphic settings, graphic mode, grayscale, and graphic quality. It also includes settings that determine how the printer handles TrueType fonts.

Page Layout

Use this tab to set page orientation, print order, manual 2-sided printing and multiple images per sheet, fit to page, booklet printing and poster printing.

If Reverse Print Order is selected, the job will be printed in reverse order, from last page to first. This feature is useful for printing to the rear tray, where output is face up.

Layout options include:

- **Multiple-Up**, which prints multiple pages of a document on a single physical sheet. The Images per Sheet feature has the following selections for this feature:

1-Up, 2-Up, 4-Up, 6-Up, 9-Up, 16-Up

For example, if you have a four-page electronic document and you select Images per Sheet to be 2-Up, there will be two physical sheets printed, each containing two electronic pages.

BOOK TOC

CHAPTER TOC

SEARCH

- **Booklet printing**, which arranges the printed output of pages so that a booklet can be constructed. It includes the option to print an instruction page along with the document.
For more information on Booklet Printing, see the section *"Booklet Printing"* (page 26).
- **Fit to page**, which forces the application's page size to fit the selected physical page size (by reducing or enlarging to fit).
- **Poster**, which is used to print the document's pages as segments of a poster, with the option to determine how many sheets comprise the final poster image.
For more information on Poster Printing, see the section *"Poster Printing"* (page 28).
- **Manual 2-Sided Printing**, which is used to print 2-sided pages.
For more information on manual 2 sided printing, see the section *"Manual 2-Sided Printing"* (page 25).

Watermark

Use this tab to create, modify and delete watermarks. You can control the font size, font type and placement of watermarks. Please refer to the on-line help in the PCL 6 driver.

About

This tab shows the software version and copyright information.

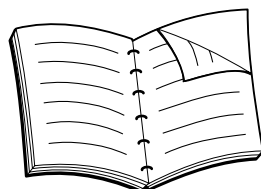
Manual 2-Sided Printing

Your 12ppm laser printer will print 2-sided pages by specifying 2-sided printing from the PCL 6 driver when you print from your applications.

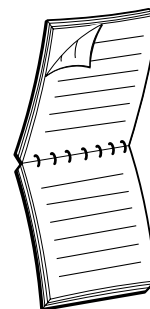
This feature will also print an instruction sheet to assist you. To select this option, check Instruction Page. For more detailed information, refer to the on-line help.

You can print the first side on paper loaded in either Tray 1 or Tray 2 (if installed) or the Multi-Purpose Tray (stacked or manual feed), but the reverse side must be fed from the Multi-Purpose Tray.

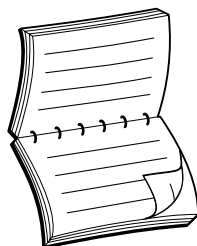
Figure 4 shows proper paper orientation and binding direction for 2-sided print jobs.



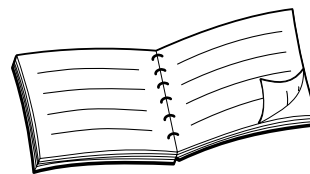
Orientation: *Portrait*
Binding: *Long Edge*



Orientation: *Portrait*
Binding: *Short Edge*



Orientation: *Landscape*
Binding: *Long Edge*



Orientation: *Landscape*
Binding: *Short Edge*

Figure 4: 2-Sided Printing Orientation

BOOK TOC

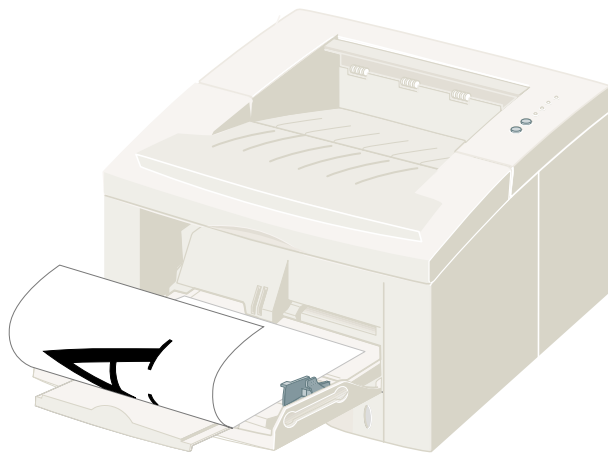
CHAPTER TOC

SEARCH

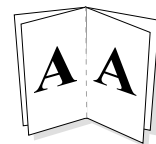
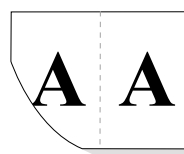
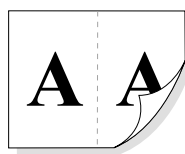
Booklet Printing

Your 12ppm laser printer PCL 6 driver gives you the capability to print your document in a booklet format. To perform booklet printing, follow these steps:

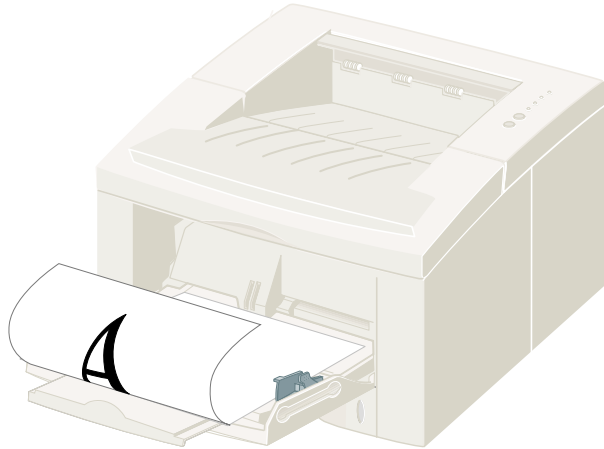
1. In the driver properties, select:
 - the appropriate paper size.
 - the appropriate paper orientation (portrait or landscape)
 - **Booklet Printing** from Layout options.
 - Print Instruction Page (if you want additional assistance in printing the booklet).
2. After printing, remove pages from the top tray.
3. For printing portrait orientation pages, insert the pages *printed side down, left edge first* into the Multi-Purpose Tray.



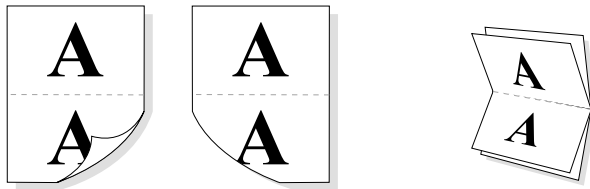
4. Click **OK** to resume printing. The resulting output will be:



5. For printing landscape orientation pages, insert the pages *printed side down, bottom edge first* into the Multi-Purpose Tray.



6. Click **OK** to resume printing. The resulting output will be:



BOOK TOC

CHAPTER TOC

SEARCH

Poster Printing

This feature allows you to print a single-page document onto 4, 9, or 16 sheets of paper, which can be pasted together to form one poster-size document.

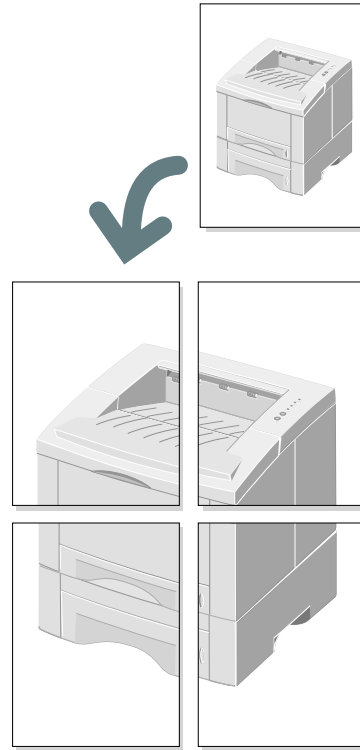
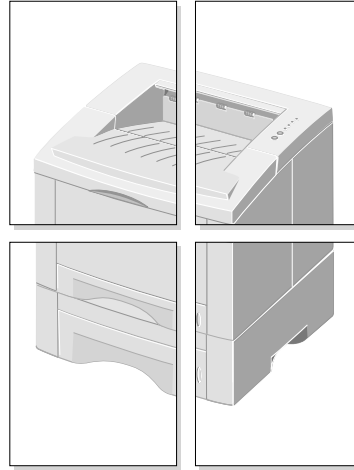


Figure 5: Poster Printing (with 2x2 style)

1. Print the document to the 12ppm laser printer using the PCL 6 driver.
2. In the driver properties, select:
 - the appropriate paper size.
 - the appropriate paper orientation (portrait or landscape)
 - **Poster Printing** from Layout options.

3. To determine the scaling factor, select the Style: 2x2, 3x3, or 4x4.

For example, if you select 2x2, the output will be automatically stretched to cover 4 physical pages.

[BOOK TOC](#)[CHAPTER TOC](#)[SEARCH](#)

Linux Printing

The following procedure describes the general steps required for printing from various Linux applications. The exact steps for printing a document may vary depending on the application program you are using. Refer to your software application's documentation for the exact printing procedure.



Note: *In order to use your 12ppm laser printer, you must install the printer driver provided on the CD. Compuprint - Genicom recommends using X-Windows "printtool" to install and setup the printer driver. The installation must be performed, as the root user and manual installation is not recommended.*

Printing in X-Windows

A majority of X-Windows applications offer the standard GUI interface of **File : Print** for the menu bar at the top of the active window. This will then spool the document to the default printer—usually dev/lp—and the printer will then carry out the job. More advanced printer controls are available via the terminal window in X-Windows or directly from the Linux shell.

[BOOK TOC](#)[CHAPTER TOC](#)[SEARCH](#)

Printing from the Linux Shell or Terminal Window within X-Windows

In the Linux environment you are given the ability to directly interface with the devices attached to the computer. There are 3 basic commands to initiate, view and delete print jobs:

LPR sends the document to the designated printer. The format is:

```
$ lpr [ options ] [ filename ... ]
```

Example: `$ lpr thesis.txt`

Options:

-#x = Number of copies.

Example: `$ lpr -#2 thesis.txt` produces 2 copies.

-Pprintername = specific printer name (if you have multiple printers installed).

Example: `$ lpr -P 12ppmlp thesis.txt`

LPQ displays all the documents that are in the printer queue waiting to be printed. The format is:

```
$ lpq
```

Example: `$ lpq` at the shell would return:

lp is ready and printing

Rank	Owner	Job	Files	Total Size
Active	mwf	31	thesis.txt	682048 bytes

LPRM deletes pending print jobs. The format is:

```
$ lprm -
```

Example: `$lprm 31` would delete print job #31 thesis.txt from the queue.

BOOK TOC

CHAPTER TOC

SEARCH

PostScript Driver Features

Table 3 lists features that can generally be set in the PostScript driver under each supported operating system. The actual features available to you will depend on the specific PostScript driver you are using (i.e., generic drivers usually have fewer features).

Table 3: PostScript Driver Features

Feature	Win 95/98	Win NT 4.0	Win 2000
Paper Selection	Auto Multi-Purpose Tray1 Tray2 Manual	Auto Multi-Purpose Tray1 Tray2 Manual	Auto Multi-Purpose Tray1 Tray2 Manual
Resolution	300, 600, 1200	300, 600, 1200	300, 600, 1200
Image Enhancement	Yes	Yes	Yes
Toner Saver	Yes	Yes	Yes
Miscellaneous Graphics Options			
Print As Negative Image	Yes	Yes	Yes
Print As Mirror Image	Yes	Yes	Yes
Scaling	Yes	Yes	Yes

BOOK TOC

CHAPTER TOC

SEARCH

Using Remote Control Panel

The Remote Control Panel is a Windows program that allows you to set printer-specific settings in the printer. It also allows you to properly set up your printer to work with DOS applications which run inside the Windows MS-DOS Command Prompt window.

Your 12ppm laser printer CD contains the Remote Control Panel utility, which can be installed when you install the printer drivers.



Note: *Remote Control Panel can be used when the printer is connected via the parallel interface for all Windows operating systems. For Windows 98 and Windows 2000, it can be used through the USB port.*

To access Remote Control Panel, from Windows 95/98 or Windows NT 4.0 or Windows 2000:

Select Start→Programs→12ppm Laser Printer Utility.



Note: *After you change Remote Control Panel settings, you must send them to the printer by pressing the Send button.*

BOOK TOC

CHAPTER TOC

SEARCH

The screen includes the following tabs.

PRINTING

Use this tab to control the following printer features:

- **Paper Size** sets the paper size.
- **Paper Source** sets the paper source.
- **Copies** sets the number of copies printed for each page.
- **Quality** sets the printer resolution to either 300, 600 or 1200 dpi. The higher the setting, the sharper the clarity of printed characters and graphics.
- **Orientation** determines how the output is printed on the page.
- **Top Margin** sets the top margin of the print material.
- **Left Margin** sets the left margin of the print material.
- **Auto CR** sets how the printer performs a carriage return.

BOOK TOC

CHAPTER TOC

SEARCH

CONFIG

Use this tab to control the following printer features:

- **Power Save** determines the length of time the printer waits after a job is printed before it goes to a reduced power state. If the printer is used frequently, select OFF which keeps the printer ready to print with the minimum warm-up time. This keeps the printer warm and ready to print.
- **Econo Mode** determines the toner quantity the printer should use when printing. If set to ON, the printer conserves toner when printing. The default value is OFF, which provides optimal quality output.
- **Auto Continue** determines what action the printer should take when a manual feed print job is sent to the printer and there is no paper in the Multi-Purpose Tray. If set to ON, the printer will pick up the paper from Tray 1 after ten seconds. Otherwise, the printer will wait for you to load paper in the Multi-Purpose Tray.
- **Jam Recovery** determines what action the printer should take when a paper jam occurs. When set to OFF, the printer does not reprint a page that has jammed. When set to ON, the printer keeps the image in memory until the printer signals that the page has successfully printed. The printer reprints all jammed pages.

[BOOK TOC](#)[CHAPTER TOC](#)[SEARCH](#)

BOOK TOC

CHAPTER TOC

SEARCH

JOB

Use this tab to control the following printer features:

- **Timeout** determines the amount of time the printer will wait before ending a job when it does not receive an end of job command. Valid range is 0 to 300 seconds.
- **Paper Type** provides the printer with information about the type of paper to be used for a print job. If you use paper with a weight of more than 42 lb. (90 g/m²), or an envelope, set this to Thick and use the Multi-Purpose Tray's manual feed slot. Otherwise use the Normal setting.
- **Toner Density** determines the overall density of the printed image. Valid selections are Light, Medium and Dark.
- **Image Quality** mode makes the printer optimize the print quality for text or photos.

TEST

Use this tab to control the following printer feature:

- **Configuration Page** prints the configuration sheet. A list of the user default settings, the installed options, and the amount of printer memory available prints.

PCL 5e

These settings are used by DOS applications. Be aware that settings selected in the print driver will override these settings.

- **Typeface** allows you to select the desired typeface. This setting is ignored when the software application specifies a font.
- **Symbol Set** determines the symbol set. A symbol set is a set of alphabetic and numeric characters, punctuation, and special symbols used when printing with a selected font.
- **Pitch** sets the font pitch (only if you have selected a scalable monospaced font). Pitch refers to the number of fixed-space characters in a horizontal inch of type.
- **Lines Per Page** sets the number of lines that print on each page. The setting can range from 1 to 225 lines per page.
- **Point Size** sets the font point size (only if you have selected a scalable typographic font). Point size refers to the height of the characters in the font. One point equals approximately 1/72 of an inch. You can select point sizes from 1 to 1008 in increments of 0.25 points.
- **Courier** determines the courier font type: Regular or Dark.
- **Font List** prints the font list showing all the fonts available for PCL emulation.

[BOOK TOC](#)[CHAPTER TOC](#)[SEARCH](#)

PS 3

This will allow printing of the PostScript font list (only available when the PostScript option is installed).

- **Font List** prints the font list showing all the fonts available for PostScript.

ABOUT

This tab shows the software version and copyright information.

BOOK TOC

CHAPTER TOC

SEARCH

Chapter 5

Maintaining the Printer

Cleaning the Printer.....	40
Cleaning the Outside	40
Cleaning the Inside	41

BOOK TOC

CHAPTER TOC

SEARCH



◀ PREVIOUS PAGE

NEXT PAGE ▶

Cleaning the Printer

This section contains some general guidelines for keeping your 12ppm laser printer clean.



Caution: *Do not use ammonia-based sprays or volatile solvents such as thinner to clean the printer, as these can damage the printer surface.*

Keep the front cover closed when cleaning the outside of the printer.



Warning: *Always unplug the power cord before cleaning the inside of the printer.*

Cleaning the Outside

Wipe the outside surfaces of the printer with a soft, clean, lint-free cloth. You can dampen the cloth slightly with water, but be careful not to let any water drip onto the printer or inside it.

BOOK TOC

CHAPTER TOC

SEARCH

Cleaning the Inside

When paper jams occur, unfused toner on the paper can fall off the paper and build up inside the printer.

1. Unplug the power cord.
2. Remove the laser print cartridge.
3. Use a soft cloth to wipe away any dust and spilled toner from the cartridge.



Note: *You can dampen the cloth slightly with water, but be careful not to let any water drip onto the printer or inside it.*

4. Reinsert the laser print cartridge.

BOOK TOC

CHAPTER TOC

SEARCH

Chapter 6

Troubleshooting

Solving Printing Problems	43
Solving Print Quality Problems.....	47
Solving PostScript Problems	49
Obtaining Service	50

BOOK TOC

CHAPTER TOC

SEARCH

Solving Printing Problems

If you have any problems with the operation of your 12ppm laser printer, refer to Table 4 for suggested remedies.



Note: *If you cannot solve a problem after carrying out the suggested remedies in this section, contact the Local Customer Service or look on-line at www.compuprint.net and/or www.genicom-international.com. See the section "Obtaining Service" (page 50).*

[BOOK TOC](#)
[CHAPTER TOC](#)
[SEARCH](#)

Table 4: Printer Operation Problems

Problem	Possible Cause	Remedy
The printer does not print.	The printer is not receiving power.	If no lights are on, check the power cord connections. Check the power switch and the power source.
	Your printer is not selected as the default printer.	Select 12ppmlp PCL or 12ppmlp PS as your default printer.
	The top cover may be open.	Make sure that all covers are closed securely.
	The printer cable is not connected properly.	Check all connections. If using a parallel cable, make sure the clips on the connector are securely fastened.
	The printer cable is defective.	Swap the cable with one known to work. If printing is now possible, replace the bad cable.
	The port setting is incorrect.	Check the Windows printer settings to make sure that the print job is being sent to the correct port (for example, LPT1).

Table 4: Printer Operation Problems (Continued)

Problem	Possible Cause	Remedy
The printer does not print. (continued)	The laser print cartridge is not installed properly.	Remove and reinsert the laser print cartridge.
	A paper jam has occurred.	Clear the paper jam.
	The printer may be configured incorrectly.	Check the application to make sure that all print settings are correct.
	The printer driver may be incorrectly installed.	Uninstall the printer driver, then reinstall the printer driver. Try printing a configuration sheet.
	The printer may be in manual feed mode and out of paper. (The Manual and the Data lights are blinking.)	Add paper to the Multi-Purpose Tray and press the Print button on the printer's control panel.
	The printer is malfunctioning.	Check the lights on the control panel to determine if the printer is indicating a system error.
Paper is not fed into the printer.	Paper has not been loaded correctly.	Remove the paper tray and reload the paper correctly.
	There is too much paper in the paper tray.	Remove some of the paper from the tray.
	The paper is too thick.	Use only paper that meets the specifications required by the printer.
The printer ejects blank pages.	The laser print cartridge is defective or out of toner.	Replace the laser print cartridge. See the User Guide.
	The sealing tape may still be in the laser print cartridge.	Remove the laser print cartridge and pull out the sealing tape, then reinstall the cartridge.
	The file may have blank pages.	Check the file to make sure that it does not contain blank pages.

BOOK TOC

CHAPTER TOC

SEARCH

Table 4: Printer Operation Problems (Continued)

Problem	Possible Cause	Remedy
Half of the page is blank.	The page layout is too complex.	Simplify the page layout and remove any unnecessary graphics from the document, if possible. Install more memory.
	The page orientation setting may be incorrect.	Change the page orientation in your application program.
	The paper size and the software paper size settings do not match.	Make sure the paper size in the software settings matches the paper in the tray.
The printer prints the wrong data, or it prints incorrect characters.	The printer cable is not connected properly.	Check the connection.
	There may be a problem with the printer driver software.	Exit Windows and reboot the computer. Turn the printer off and then back on again.
	The printer cable specifications may be incorrect.	Parallel connection: Replace with an IEEE-1284 rated cable. USB connection: Replace with a compliant cable rated USB Specification Revision 1.0 or 1.1.
	The wrong printer driver is selected.	Select the correct printer driver.
	The software application is malfunctioning.	Try printing a job from another application.

BOOK TOC

CHAPTER TOC

SEARCH

Table 4: Printer Operation Problems (Continued)

Problem	Possible Cause	Remedy
The paper keeps jamming.	There is too much paper in the paper tray.	Remove excess paper from the paper tray. If printing special media, use the MP Tray for printing.
	An incorrect type of paper is being used.	Use only paper that meets the specifications required by the printer.
	An incorrect output method is being used.	Items such as thick paper should not be printed using the standard face down stacker. Use the face-up output stacker instead.
Printing is too slow.	The job may be very complex.	Reduce the complexity of the page or try adjusting the print quality settings. If this problem occurs frequently, install more random-access memory (RAM) in your computer.
	The computer may have insufficient random-access memory (RAM).	Install more random-access memory (RAM) in your computer.

BOOK TOC

CHAPTER TOC

SEARCH

Solving Print Quality Problems

If you have any problems with the printed output of your 12ppm laser printer, refer to Table 5 for suggested remedies.



Note: *The causes listed in Table 5 are probable causes only, and may not represent all of the possible cases which may occur under actual operating conditions. If you experience a problem which does not seem to fall under any of the cases listed in this table, or if you are concerned about any other aspect of printer operation, contact the Local Customer Service or on-line at www.compuprint.net and/or www.genicom-international.com. See the section “Obtaining Service” (page 50).*

Table 5: Print Quality Problems

Problem	Possible Cause	Remedy
Irregular faded patches of print	There is a paper quality problem.	Use only paper that meets the specifications required by the printer.
	Toner may be unevenly distributed.	Remove the laser print cartridge and shake it gently to evenly distribute the toner. Then replace the cartridge back into the printer.
Black staining	There is a paper quality problem.	Use only paper that meets printer specifications. See the section “Selecting Print Media” (page 15).
	The printer requires a print quality adjustment.	Press and hold the control panel’s Print button for ten seconds until all lights remain steadily lit, then let go of the button. The printer will perform the print quality adjustment. After cleaning, one cleaning sheet prints.

BOOK TOC

CHAPTER TOC

SEARCH

Table 5: Print Quality Problems (Continued)

Problem	Possible Cause	Remedy
Character voids	The paper may be too dry.	Try printing with a different batch of paper.
Background scatter	The paper may be too damp.	Try printing with a different batch of paper. Do not open packages of paper until necessary so that the paper does not absorb too much moisture from the air.
	Printing over uneven surfaces.	If printing onto envelopes, change your printing layout to avoid printing over areas that have overlapping seams on the reverse side.
Missing characters	The paper may be too damp.	Try printing with a different batch of paper. Do not open packages of paper until necessary so that the paper does not absorb too much moisture from the air.
Back of printout dirty	The transfer roller may be dirty.	Print a few blank pages to clean the transfer roller.
Faded graphics.	Toner may be low.	Remove the laser print cartridge and shake it gently to evenly distribute the toner. Then replace the cartridge back into the printer.

BOOK TOC

CHAPTER TOC

SEARCH

Solving PostScript Problems

Table 6 contains problems that may occur with PostScript printing (available only if the PostScript option is installed).

Table 6: PostScript Problems

Problem	Possible Cause	Remedy
PostScript file can not be printed.	The PostScript option may not be installed, or the installed memory may be insufficient.	Print a configuration sheet and verify that the PS version is available for printing, and that total system memory is at least 12 MB. If PostScript is not available, install the PostScript option. If system memory is not at least 12 MB, install an 8 MB SIMM.
Error messages appear (i.e., "This job contains binary data...")	The pure binary data option is not supported by the PostScript driver.	Open the Properties tab of the PostScript printer driver, click on PostScript, and click on the Advanced button. The pure binary data option is not supported. Choose another.
A PostScript error page prints.	The print job may not be PostScript.	Make sure that the print job is a PostScript job. Check to see whether the software application expected a setup or PostScript header file to be sent to the printer.
The optional Tray 2 is not selected in the driver.	The printer driver has not been configured to recognize the optional tray.	Open the PostScript driver Properties and set 'Paper Tray 2' item of Device option to Installed.

BOOK TOC

CHAPTER TOC

SEARCH

Obtaining Service

If you are unable to solve your printer problem, you may want to visit www.compuprint.net and/or www.genicom-international.com, where you can find self help tips and contact information. Also, be sure to check these things:

- Is the power cord plugged into the printer?
- Is the power cord plugged directly into a wall outlet?
- Is your printer connected properly to your computer?
- Are all other devices attached to your printer plugged in and turned on?
- Is the wall outlet turned off by any switches?
- Has a power outage occurred in your area?
- Is a laser print cartridge installed in the printer?
- Is the cover closed completely?

Once you've checked all these things, turn your printer off and back on again. If your printer is still not operating properly, contact the Local Customer Service.



Note: *If the READY light is on, print out a configuration sheet by pressing and holding down the control panel's Print button for about four seconds until all indicators blink briefly, then let go of the button. The configuration sheet lists your printer model, any options you have installed, and your user default settings. The service representative will probably ask for this information.*

Also write down the printer's serial number (see Figure 2 on page 5 for location).

[BOOK TOC](#)[CHAPTER TOC](#)[SEARCH](#)

Appendix A

Environmental and Safety Considerations

Introduction	52
Quality Standards	52
Laser Safety	53
Ozone Safety.....	54
Operational Safety	55

BOOK TOC

CHAPTER TOC

SEARCH



◀ PREVIOUS PAGE

NEXT PAGE ▶

Introduction

The 12ppm laser printer and its supplies are designed and tested to meet strict safety requirements. These include safety agency examination and approval, and compliance to established environmental standards.

Please read the following instructions carefully before operating the printer and refer to them as needed to ensure the continued safe operation of your 12ppm laser printer. The safety testing and performance of this product have been verified using Compuprint - Genicom materials only.

Follow all warnings and instructions marked on or supplied with the product.

Quality Standards

The 12ppm laser printer is certified to EN60950. The equipment is manufactured under a BS5750 Quality system accepted by the British Standards Institution.

The 12ppm laser printer is also certified in compliance with applicable standards by various national bodies.

[BOOK TOC](#)[CHAPTER TOC](#)[SEARCH](#)

Laser Safety

The 12ppm laser printer complies with laser product performance standards set by governmental, national and international agencies as a Class 1 Laser Product. It does not emit hazardous radiation, as the beam is totally enclosed during all phases of customer operation and maintenance.

The use of controls, adjustments, or procedure other than those specified in the documentation might result in hazardous exposure to laser light.

The laser beam inside the printer is completely confined within the protective housings and external covers. The radiation emitted cannot escape from the machine during any phase of user operation.

The 12ppm laser printer contains laser danger labels. These labels are intended for use by Compuprint - Genicom Service Representatives, and are placed on or near panels or shields that require special tools for removal. Do not remove any of these panels. There are no operator serviceable areas inside these covers.

For complete laser safety certifications, please refer to the User Guide.

[BOOK TOC](#)[CHAPTER TOC](#)[SEARCH](#)

Ozone Safety

During normal operation, the 12ppm laser printer produces ozone. The ozone produced does not present a hazard to the operator. However, it is advisable that the machine be operated in a well ventilated area.

[BOOK TOC](#)[CHAPTER TOC](#)[SEARCH](#)

Operational Safety

The 12ppm laser printer and its supplies were designed and tested to meet strict safety requirements. These include safety agency examination, approval, and compliance with established environmental standards.

To ensure the continued safe operation of your 12ppm laser printer, follow these safety guidelines at all times.

- Follow warnings and instructions marked on or supplied with the equipment.
- Do not locate the 12ppm laser printer near a radiator or any other heat source.
- Do not attempt any maintenance function that is not specifically described in the 12ppm laser printer documentation.
- Use materials and supplies specifically designed for your 12ppm laser printer. The use of unsuitable materials may result in poor performance and possibly a hazardous situation.
- Do not remove the covers or guards that are fastened with screws.
- Do not operate the 12ppm laser printer if you notice unusual noises or odors. Disconnect the power cord from the power source receptacle, and contact your Compuprint - Genicom Service Representative immediately.

[BOOK TOC](#)[CHAPTER TOC](#)[SEARCH](#)

BOOK TOC

CHAPTER TOC

SEARCH

- Use only the power cord supplied with your 12ppm laser printer.
- Do not use a ground adapter plug to connect the 12ppm laser printer to a power source receptacle that lacks a ground connection terminal.
- Plug the power cable directly into a properly grounded electrical outlet. Do not use an extension cord. If you are not sure whether or not an outlet is properly grounded, consult an electrician.
- This product is equipped with a 3-wire grounding type plug (e.g., a plug having a third grounding pin). This plug will fit only into a grounding-type power outlet. This is a safety feature. To avoid risk of electrical shock, contact your electrician to replace the receptacle if you are unable to insert the plug into the outlet. Never use a grounding adapter plug to connect the printer to a power source receptacle that lacks a ground connection terminal.
- This printer should be operated from the type of power source indicated on the marking label. If you are not sure of the type of power available, consult your local power company.
- Your machine is equipped with an energy saving device to conserve power when the machine is not in use. The machine may be left on continuously.

BOOK TOC

CHAPTER TOC

SEARCH

- Do not place the 12ppm laser printer where people might step or trip on the power cable.
- Do not place objects on the power cable.
- Do not place the printer on an unstable cart, stand or table. The printer may fall causing personal injury or serious damage to the printer.
- Do not override or disable electrical or mechanical interlocks.
- Do not obstruct ventilation openings. These openings are provided to prevent overheating of the machine.
- Do not push objects into slots and openings on the 12ppm laser printer. Contacting a voltage point or shorting out a part might result in electrical shock or fire.
- Never remove covers or guards that require a tool for removal, unless directed to do so in a Compuprint - Genicom approved option kit.
- Never defeat interlock switched. Machines are designed to restrict operator access to unsafe areas. Covers, guards and interlock switches are provided to ensure that the machine will not operate with covers opened.
- Unplug the printer from the wall outlet before cleaning. Always use materials specifically designated for this printer. Use of other materials may result in poor performance and could create a hazardous situation.

BOOK TOC

CHAPTER TOC

SEARCH

- Do not use aerosol cleaners. Follow the instructions in this User Guide for proper cleaning methods.
- Never use supplies or cleaning materials for purposes other than what they were intended. Keep all supplies and materials out of reach of children.
- Avoid unnecessary handling of the printer cartridge and exposing the print cartridge to light for extended periods of time.
- Do not put your hands into the fuser are, located just inside the exit tray area, as you may be burned.
- Do not use this printer near water, wet locations, or outdoors.
- If any of the following conditions occur, turn off the 12ppm laser printer power immediately. Disconnect the power cable from the electrical outlet. Contact your local Helpline to correct the problem:
 - The 12ppm laser printer emits unusual odors, or makes unusual noises.
 - The power cord is damaged or frayed.
 - Liquid is spilled into the 12ppm laser printer.
 - Any part of the 12ppm laser printer is damaged.
 - The 12ppm laser printer is exposed to water.