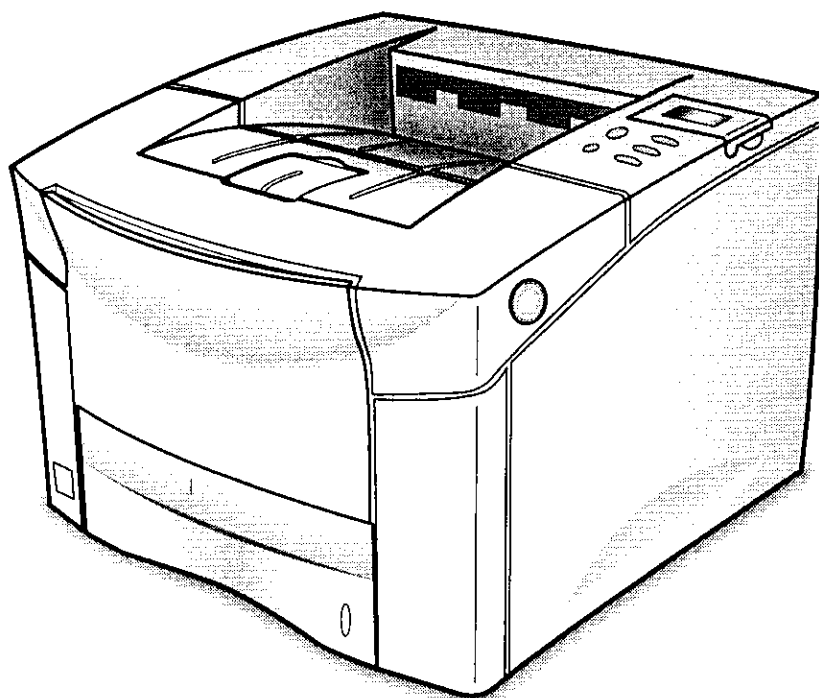
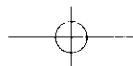


QwikLaser 7000 Series

User's Guide





Notices

Without a Network Card Installed

FCC Compliance

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. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Re-orient or relocate the receiving antenna
- Increase the separation between the equipment and receiver
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Shielded interface cables and I/O cords must be used for this equipment to comply with the relevant FCC regulations.

Changes or modifications not expressly approved in writing by Samsung may void the user's authority to operate this equipment.

IC COMPLIANCE NOTICE

This Class B digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulations of ICES-003.

Cet appareil numérique de la Classe B respecte toutes les exigences du Règlement ICES-003 sur le Matériel brouilleur du Canada.



With a Network Card Installed

FCC Compliance

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

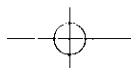
Shielded interface cables and I/O cords must be used for this equipment to comply with the relevant FCC regulations.

Changes or modifications not expressly approved in writing by Samsung may void the user's authority to operate this equipment.

IC COMPLIANCE NOTICE

This Class A digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulations of ICES-003.

Cet appareil numérique de la Classe A respecte toutes les exigences du Règlement ICES-003 sur le Matériel brouilleur du Canada.



Laser safety statement

The printer is certified in the U.S. to conform to the requirements of DHHS 21 CFR Subchapter J for Class I(1) laser products, and elsewhere is certified as a Class I laser product conforming to the requirements of IEC 825.

Class I laser products are not considered to be hazardous.

The laser system and printer are designed so there is never any human access to laser radiation above a Class I level during normal operation, user maintenance, or prescribed service condition.

WARNING Never operate or service the printer with the protective cover removed from Laser/Scanner assembly. The reflected beam, although invisible, can damage your eyes.



CAUTION - INVISIBLE LASER RADIATION WHEN THIS COVER IS OPEN.
DO NOT OPEN THIS COVER

VORSICHT - UNSICHTBARE LASERSTRAHLUNG, WENN
ABDECKUNG GEÖFFNET. NICHT DEM STRAHL
AUSSETZEN.

ATTENTION - RAYONNEMENT LASER INVISIBLE EN CAS D'OUVERTURE.
EXPOSITION DANGEREUSE AU FAISCEAU.

ATTENZIONE - RADIAZIONE LASER INVISIBLE IN CASO DI APERTURA.
EVITARE L'ESPOSIZIONE AL FASCIO.

PRECAUCION - RADIACION LASER IVISIBLE CUANDO SE ABRE. EVITAR EXPONERSE AL RAYO.

ADVARSEL - USYNLIG LASERSTRÅLNING VED ÄBNING NÄR SIKKERHEDSBRYDERE ER
UDE AF FUNKTION UNDGA UDSAETTELSE FOR STRÅLNING.

ADVARSEL - USYNLIG LASERSTRÅLNING NÄR DEKSEL ÄPNES. STIRR IKKE INN I STRÅLEN.
UNNGÅ EKSPONERING FOR STRÅLEN.

VARNING - OSYNLIG LASERSTRÅLNING NÄR DENNA DEL ÄR ÖPPAND OCH SPÄRREN ÄR
URKOPPLAD. BETRakta EJ STRÅLEN STRÅLEN ÄR FARLIG.

VARO - AVATTAESSA JA SUOJALUKITUS OHITETTAESSA OLET ALTTIINA
NÄKYMÄTTÖMÄLLE LASERSÄTEILYLLE ÄLÄ KATSO SÄTEESEEN.

CAUTION

- Avoid exposure to invisible laser radiation
- When the development unit is not installed.



SAFETY INFORMATION

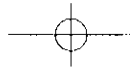
Safety and Regulatory Listing for this printer.

PRODUCT SAFETY

- USA UL 1950(UL listing)
- CANADA CSA C22.2-950(CSA Certification)
- EEC(Europe) IEC 60950/EN 60950(TÜV GS Certification)
- CB IEC 60950

LASER SAFETY

- EEC(Europe) HD 194. & EN 60825
- USA 21 CFR, Chapter 1, Subchapter J(CDRH Certified)



Overview

Your new printer

Your new ML-1605 LaserJet Printer is designed for use in an office environment, providing such advantages as :

- Vast choice of paper types and sizes
- High-quality high-speed text and graphics printing
- Full operating display and error messages display on operator panel display
- On-screen or verbal feedback of the printing status
- Various printer menus

Main features

The ML-1605 LaserJet Printer provides the following main features.

- Printing speeds of 16ppm(pages per minutes) for A4-size paper
- High-quality printing at a maximum resolution of 600 dpi
- Automatic paper feed with a capacity of up to 500 sheets
- Wide range of paper sizes and weights
- Printing both sides of paper
- Expandable design
 - 500-sheet universal paper tray
 - Flash storage for forms, fonts and signatures
 - Memory(up to 100 MB)
 - Two EIO slots for connecting to networks



Structure of the Guide

Introduction

The guide is divided into :

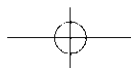
- Six chapters
- One appendix

At the back of the guide, you will also find a glossary of the main technical terms used an index to enable you to find a specific topic by keyword.

Chapters/Appendix

The following table briefly describes the information in each of the chapters and appendix in this guide.

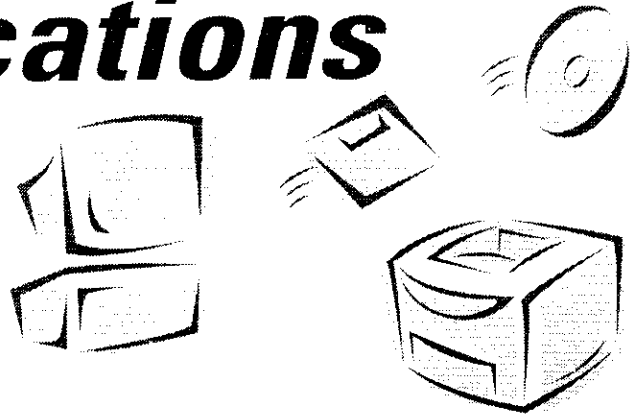
Chapter/Appendix	Contents
1. Setting up Your Printer	• Unpacking your printer • Installing toner cartridge • Loading Tray • Attaching the parallel cable • Plugging the printer in • Testing the printer
2. Setting up the Print Driver	• Installing PCL print driver • Selecting the printer
3. Using Your Printer	• Understanding menu and the operator panel • Printing Tasks • Using feature in the printer driver
4. Caring for Your Printer	• Maintaining the toner cartridges • Cleaning the printer



Chapter/Appendix	Contents
5. Problem Solving	• Clearing paper jams • Error messages • General printing problems • Poor print quality • Option problems
6. Installing Options	• Tray 2 • Memory and option cards
Technical Specifications	• Paper specifications • Main print, mechanical, electrical, environment and security specifications for the printer • Cable specifications



Technical Specifications



Overview

The appendix is divided into :

- Paper specifications
- Printer specifications
- Cable Specifications

Paper specifications

Acceptable paper size for all trays

The following table gives details about the print material you can load in each of the printer trays.

Paper	Paper size	Tray 1	OPT Tray	MP Tray	Duplex
A4	210 × 297	●	●	●	●
LETTER	216 × 279(8.5×11")	●	●	●	●
FOLIO(LEGAL 13")	216 × 330(8.5×13")	●	●	●	●
LEGAL(LEGAL 14")	216 × 356(8.5×14")	●	●	●	●
EXECUTIVE	184 × 267(7.25×10.5")	●	●	●	●
STATEMENT	140 × 216(5.5×8.5")				
ISO B5	176 × 250	●	●	●	●
JIS B5	182 × 257	●	●	●	●
A5	148.5 × 210				
A6	105 × 148.5				
ENVELOPE					
- COM-10	105 × 241(4.12×9.5")		●	●	
- MONARCH	98 × 191(3.87×7.5")		●	●	
- DL	110 × 220(4.33×8.66")		●	●	
- C5	162 × 229(6.38×9.01")		●	●	
- C6	114 × 162(4.49×6.38")			●	
TRANSPARENCY					
- A4	210 × 297				
- LETTER	216 × 279(8.5×11")				
LABEL					
- A4	210 × 297				
- LETTER	216 × 279(8.5×11")				
A6(INTERNATIONAL POST CARD)	100 × 148				
PAPER WEIGHT					
- CUT SHEET		16-24lb	16-24lb	16-36lb	16-24lb
- ENVELOPE			16-20lb	16-28lb	
PAPER CAPACITY					
- CUT SHEET		500(20lb)	500(20lb)	100	
- ENVELOPE			40(20lb)	10	
- LABEL				25	
- TRANSPARENCY				30	



Supported types of paper

The printer supports the following types of paper :

- Plain
- Letterhead
- Bond
- Rough
- Prepunched
- Preprinted
- Color
- Recycled
- Transparency
- Labels
- Card Stock

Guidelines for using paper

Make sure the paper is good quality

Labels

To avoid damaging the printer, use only labels recommended for use in laser printers.

- The adhesive material should be stable at 400°F(205°C), the printer's maximum temperature.

Transparencies

To avoid damaging the printer, use only transparencies recommended for use in laser printers.

- Transparencies used in the printer must be able to withstand 400°F(205°C), the printer's maximum temperature.

Printer Specifications

Mechanical characteristics

Characteristic	Description
Dimensions	
Weight	
Acoustic noise	
Input voltage range	
Rated frequency range	
Power Consumption	Idling Printing(average) Printing(peak)

Environment

Characteristic	Description
Temperature	Operating Recommended Storage
Humidity	Operating Recommended



Toner cartridge

Characteristic	Description
References	
Print capacity	Approximately pages(A4, % Duty)

Engine

Characteristic	Description
Speed	16 PPM
Resolution	600 DPI + RET
Imaging	Eletrophotography
Toning/Fusing	Non-mag monocomponent/contact
WarmUp time	Less than 55 secs
FPOT	Less than 13 secs
Duty Cycle	Mazimum 50,000 pages per month
Size(WDH)	427 X 442 X 301mm
Weight	Less than 18kg(39.7lbs)
Power Consumption	750W Max/ 280W Avg/ 20W Sleep
Noise Level	Printing : 50dB Standby : 36dB Sleep : Background noise

Paper Handling

Characteristic	Description
Input Capacity	500 sheets
Optional Input	500 sheets
Output Capacity	250 sheets Facedown
MP Tray	100 sheets(10 envelopes)
Envelop Feeder	Supported by Multi-Purpose tray • 1st Tray : A4, LT, FO, LG, EXE, ISO B5 (16~24lbs)
Type of Media	• Manual : COM-10, MON, DL, C5, C6 (16~36 lbs) • Minimum Paper size : A6 • 2nd Tray : (1st tray + manual) Papers
Duplexing	• Speed : 8 IPM • Paper : A4, LT, FO, LG
Paper Sensor	Yes

Imaging Cartridge

Characteristic	Description
CRU type	Single cartridge Replacement
CRU Life	8,000 pages at 5% coverage
Cleaning System	Mechanical Cleaning
Charging/Transfer	Contact Charging & Transfer
Toner Sensor	Yes
Toner Saving	Yes

Others

Characteristic	Description
Control Panel	• 8 × 2 LCD • LCD Display angle adjusting • Backlighting
Paper Gauge	Visible
Power Switch	Front & Left side, Push button

Controller

Characteristic	Description
CPU	Power PC, 100MHZ
Emulations	• Default : PCL6 • Option : Postscript level 2
Memory	• 4MB Standard • Max up to 68MB • 2, 4MB Flash memory option • Postscript : 12MB Standard
Interface	• IEEE 1284 B type • Option : - Serial RS 232C - IrDA connector - LocalTalk, Internal Network
AIS/AES	Y/Y
Font	35 Intellifont, 10 TrueType, 1 Bit Map
N/W Card	• Ethernet • 10 base T • SNMP in MIB • TCP/IP • Netware, Windows, OS/2, Unix, Mac
Device Driver	PCL : Windows 3.1/95/NT, DOS