

## 12. Reference Information

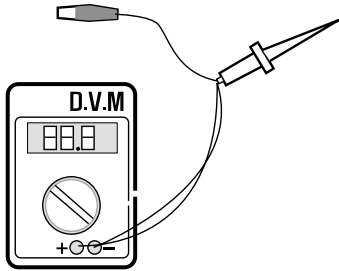
This chapter contains the tools list, list of abbreviations used in this manual, and a guide to the location space required when installing the printer. A definition of test pages and Wireless Network information definition is also included.

### 12.1 Tool for Troubleshooting

The following tools are recommended safe and easy troubleshooting as described in this service manual.

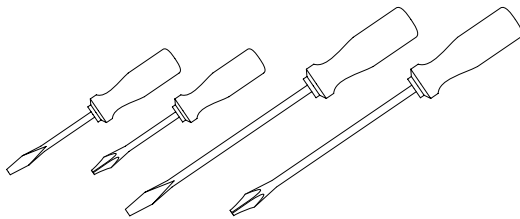
- **DVM (Digital Volt Meter)**

Standard : Indicates more than 3 digits.



- **Driver**

Standard : "-" type, "+" type (M3 long, M3 short, M2 long, M2 short).



- **Tweezers**

Standard : For general home use, small type.



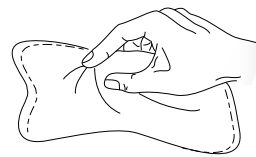
- **Cotton Swab**

Standard : For general home use, for medical service.

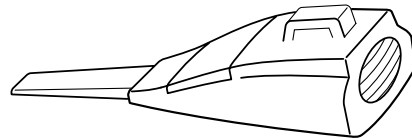


- **Cleaning Equipments**

Standard : An IPA (Isopropyl Alcohol) dry wipe tissue or a gentle neutral detergent and lint-free cloth.



- **Vacuum Cleaner**

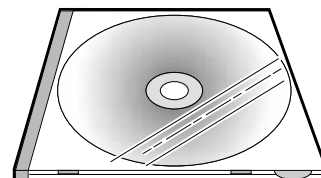


- **Spring Hook**

Standard : For general use



- **Software (Driver) installation CD ROM**



## 12.2 Acronyms and Abbreviations

The table in the below explains abbreviations used in this service manual.

The contents of this service manual are declared with abbreviations in many parts. Please refer to the table.

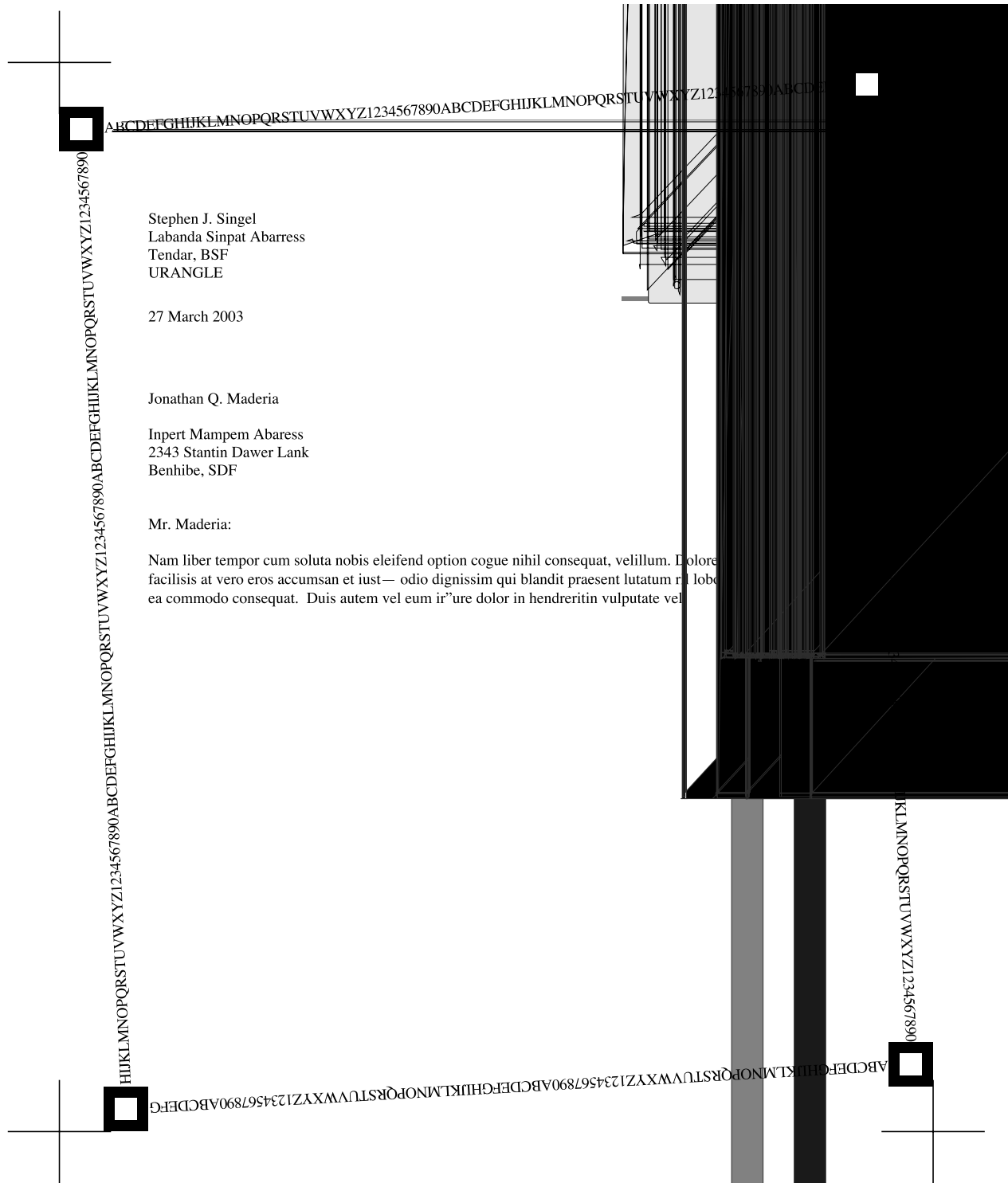
AC	Alternating Current	IC	integrated circuit
ADF	Automatic Document Feeder	IDE	Intelligent Drive electronics or Imbedded Drive Electronics
ASIC	Application Specific Integrated Circuit	IEEE	Institute of Electrical and Electronics Engineers. Inc
ASSY	assembly	IPA	Isopropyl Alcohol
BIOS	Basic Input Output System	IPM	Images Per Minute
CCD	Charge Coupled Device	LAN	local area network
CMOS	Complementary Metal Oxide Semiconductor	lb	pound(s)
CN	connector	LBP	Laser Beam Printer
CON	connector	LCD	Liquid Crystal Display
CPU	Central Processing Unit	LED	Light Emitting Diode
CRUM	Customer Replaceable Unit Memory	LSU	Laser Scanning Unit
dB	decibel	MB	Megabyte
dbA	decibelampere	MFP	Multi-Functional Product
dBm	decibel milliwatt	MHz	Megahertz
DC	direct current	NVRAM	Nonvolatile random access memory
DCU	Diagnostic Control Unit	OPC	Organic Photo Conductor
DPI	Dot Per Inch	PBA	Printed Board Assembly
DRAM	Dynamic Random Access Memory	PCL	Printer Command Language , Printer Control Language
DVM	Digital Voltmeter	PDL	Page Discription Language
ECP	Enhanced Capability Port	PPM	Page Per Minute
EEPROM	Electronically Erasable Programmable Read Only Memory	PTL	Pre-Transfer Lamp
EMI	Electro Magnetic Interference	Q'ty	Quantity
EP	electrophotographic	RAM	Random Access Memory
EPP	Enhanced Parallel Port	ROM	Read Only Memory
FCOT	First Copy Out Time	SCF	Second Cassette Feeder
FW	firmware	SMPS	Switching Mode Power Supply
GDI	graphics device interface	SPGP	Samsung Printer Graphic Processor
GND	ground	SPL	Samsung Printer Language
HBP	Host Based Printing	Spool	Simultaneous Peripheral Operation Online
HDD	Hard Disk Drive	SW	Switch
HV	high voltage	Sync	Synchronous or synchronization
HVPS	High Voltage Power Supply	TBD	To Be Determined
I/F	interface	USB	Universal Serial Bus
I/O	Input and Output		

## 12.3 The Sample Pattern for the Test

The sample pattern shown in below is the standard pattern used in the factory.  
The life of the toner cartridge and the printing speed are measured using the pattern shown below.  
(The image is 70% of the actual A4 size).

### 12.3.1 A4 ISO 19752 Standard Pattern

This test page is reproduced at 70% of the normal A4 size



## 12.4 Wireless LAN

- This product uses a printing function with a wireless LAN, which is an option.
  - The wireless LAN function uses a frequency instead of connecting LAN cable to connect data to an access point for print.
  - For a wireless LAN connection, an AP is needed, It is possible to use wireless LAN onnection with wired LAN. Also, if AP is installed in an office or at home, the wireless LAN function can be simply used.
- Types of desk top PC (or Lap top) that uses the wireless LAN.

Division	Basic type	Recommend type
CPU	Over PENTIUM 233M	PENTIUM 300MHz
MEMORY	Over 64MB	Over 128MB
VIDEO CARD	Over 800X600	Over 1024X768
OS	Over WINDOWS 98	Over WINDOWS ME
INTERFACE CARD	A product has a certificated mark of Wi-Fi™	

- **About the certificated mark of Wi-Fi™**



- The Wi-Fi™ is a registered trademark of WECA (Wireless Ethernet Compatibility Alliance). Over 50 of a wireless LAN companies are member of it. The most of main wireless networking companies are attending and the main companies are Lucent technologies, Cisco, Intel/Symbol, 3Com, Enterasys (Cabletron), Compaq, IBM, Nokia, Dell, Philips, Samsung electronic, Sony, Intersil, and so on. This mark certifies mutual compatibility among product has Wi-Fi™ (IEEE 802.1) and it is certified as a standard of a wireless LAN market.