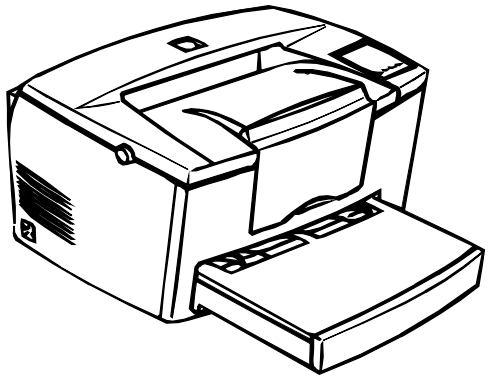
SERVICE MANUAL



Page Printer

EPSON EPL-5700

COLOR IMAGING EPSON

EPSON®

4009173

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PRECAUTIONS

Precautionary notations throughout the text are categorized relative to 1)Personal injury and 2) damage to equipment.

DANGER Signals a precaution which, if ignored, could result in serious or fatal personal injury. Great caution should be exercised in performing procedures preceded by DANGER Headings.

WARNING Signals a precaution which, if ignored, could result in damage to equipment.

The precautionary measures itemized below should always be observed when performing repair/maintenance procedures.

DANGER

1. ALWAYS DISCONNECT THE PRODUCT FROM THE POWER SOURCE AND PERIPHERAL DEVICES PERFORMING ANY MAINTENANCE OR REPAIR PROCEDURES.
2. NOWORK SHOULD BE PERFORMED ON THE UNIT BY PERSONS UNFAMILIER WITH BASIC SAFETY MEASURES AS DICTATED FOR ALL ELECTRONICS TECHNICIANS IN THEIR LINE OF WORK.
3. WHEN PERFORMING TESTING AS DICTATED WITHIN THIS MANUAL, DO NOT CONNECT THE UNIT TO A POWER SOURCE UNTIL INSTRUCTED TO DO SO. WHEN THE POWER SUPPLY CABLE MUST BE CONNECTED, USE EXTREME CAUTION IN WORKING ON POWER SUPPLY AND OTHER ELECTRONIC COMPONENTS.

WARNING

1. REPAIRS ON EPSON PRODUCT SHOULD BE PERFORMED ONLY BY AN EPSON CERTIFIED REPAIR TECHNICIAN.
2. MAKE CERTAIN THAT THE SOURCE VOLTAGES IS THE SAME AS THE RATED VOLTAGE, LISTED ON THE SERIAL NUMBER/RATING PLATE. IF THE EPSON PRODUCT HAS A PRIMARY AC RATING DIFFERENT FROM AVAILABLE POWER SOURCE, DO NOT CONNECT IT TO THE POWER SOURCE.
3. ALWAYS VERIFY THAT THE EPSON PRODUCT HAS BEEN DISCONNECTED FROM THE POWER SOURCE BEFORE REMOVING OR REPLACING PRINTED CIRCUIT BOARDS AND/OR INDIVIDUAL CHIPS.
4. IN ORDER TO PROTECT SENSITIVE MICROPROCESSORS AND CIRCUITRY, USE STATIC DISCHARGE EQUIPMENT, SUCH AS ANTI-STATIC WRIST STRAPS, WHEN ACCESSING INTERNAL COMPONENTS.
5. REPLACE MALFUNCTIONING COMPONENTS ONLY WITH THOSE COMPONENTS BY THE MANUFACTURE; INTRODUCTION OF SECOND-SOURCE ICs OR OTHER NONAPPROVED COMPONENTS MAY DAMAGE THE PRODUCT AND VOID ANY APPLICABLE EPSON WARRANTY.

PREFACE

This manual describes basic functions, theory of electrical and mechanical operations, maintenance and repair procedures of EPL-5700. The instructions and procedures included herein are intended for the experienced repair technicians, and attention should be given to the precautions on the preceding page. The chapters are organized as follows:

CHAPTER 1. PRODUCT DESCRIPTIONS

Provides a general overview and specifications of the product.

CHAPTER 2. OPERATING PRINCIPLES

Describes the theory of electrical and mechanical operations of the product.

CHAPTER 3. TROUBLESHOOTING

Provides the step-by-step procedures for troubleshooting.

CHAPTER 4. DISASSEMBLY AND ASSEMBLY

Describes the step-by-step procedures for disassembling and assembling the product.

CHAPTER 5. ADJUSTMENTS

Provides Epson-approved methods for adjustment.

CHAPTER 6. MAINTENANCE

Provides preventive maintenance procedures and the lists of Epson-approved lubricants and adhesives required for servicing the product.

APPENDIX

Provides the following additional information for reference:

- *Connector pin assignments*
- *Electric circuit boards components layout*
- *Exploded diagram*
- *Electrical circuit boards schematics*

REVISION STATUS

Rev.	Date	Page(s)	Contents
A	1998/05/06	All	First release

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CHAPTER

1

PRODUCT DESCRIPTION

1.1 FEATURES

EPL-5700 is a small and compact A4 size page printer that semiconductor laser beam scanning is applied for. Following shows features.

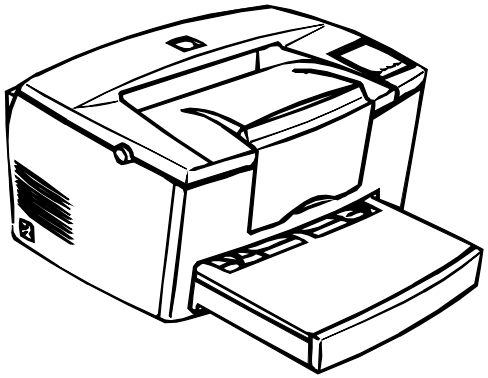

Figure 1-1. Exterior View

PROCESS SPECIFICATION

- ❑ Method: Dry mono-component xerographic method
- ❑ Light source: Semiconductor laser
- ❑ Photoelectric unit: OPC drum(organic photoconductor)
- ❑ Charge: Rotating brush charging type
- ❑ Developer: Exposed section developer system
- ❑ Toner: Mono-component nonmagnetic toner
- ❑ Transfer method: Roller transfer
- ❑ Fixing: Heat roller system
- ❑ Density regulator: Developer bias variation system(user can regulate)

PRINT SPEED

- ❑ Resolution: 600 dpi
- ❑ Print Speed: 8ppm(A4/LTR/B5/A5),
  6.9ppm(legal)
  *1:Same with optional cassette
  *2:Regarding printing with custom size(non-standard size)paper, the printing speed will become faster because cleaning takes place automatically.
- ❑ First print: 19 seconds(A4/LTR), 18.2 seconds(B5)
  17.3 seconds(A5), 20.2 seconds(legal)
- ❑ Warm-up time: 20 seconds or less (at 23 degree Celsius, standard voltage)

PRINTABLE AREA

- ❑ Print area Area within margins of 4mm from each side.
  (Refer to Figure 1-2)
  Note) The printable area may change depending on the print mode.

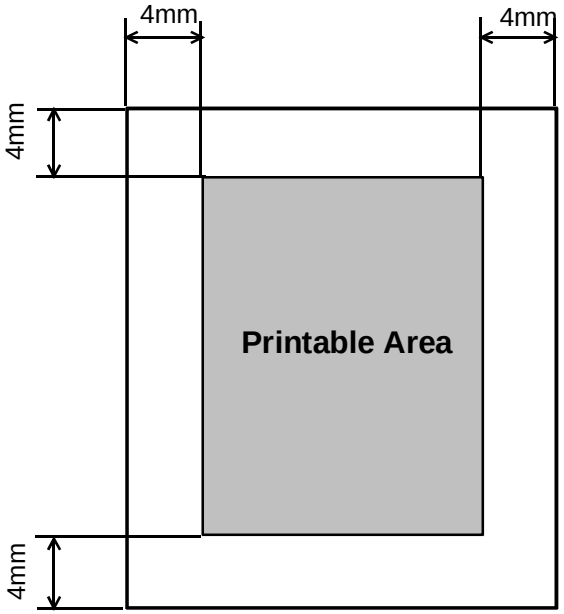

Figure 1-2. Printable Area

PAPER HANDLING

Table 1-1. Paper Handling

Paper supply method	Capacity	Supplied paper size	Permissible paper thickness
Multipurpose tray	150 sheets*1	Standard paper types are those that fall within the range of those usable sizes given below. 76.2 x 127~ 215.9 x355.6 mm (A4, JIS-B5,A5, Letter, Government letter, Executive, Legal, Government Legal, F4, Half Letter) or Custom size (optional size that falls within the range of standard paper sizes)	Normal paper 60 to 90g/m^2 (16 to 24lb)
	50sheets 20sheets	Japanese official post card*2 Japanese official post card*2 (when printing on back)	Special paper 190g/m^2
	10 sheets	Envelopes Monarch, C10, DL, C5,C6 International-B5 Labels/OHP/thick pages	Normal paper 60 to 90g/m^2(16 to 24lb) Thick paper 90 to 157 g/m^2 Special paper (labels, OHP)

Note) *1 For 20lb(75g/m^2) paper.
*2 When printing on the back file of the paper using manual printing, since the paper may curl, a maximum of 20 pages can be set.

Table 1-2. Paper Handling (Cont.)

Paper supply method	Capacity	Supplied paper size	Permissible paper thickness
Manual Feed slot*4	1 sheet	Standard or Custom paper sizes that fall within the range of usable sizes given below. 100x148~215.9x 355.6 mm	Normal paper 60 to 90g/m^2(16 to 24lb) Thick paper 90 to 157g/m^2 Special paper (labels, OHP)
Lower cassette *1,*5	500 sheets*1	A4, LG, LT	Normal paper 60 to 90g/m^2 (16 to 24lb)

Note) *1: For 20lb(75g/m^2) paper.
*4: Manually fed papers are inserted one page at a time above the cover of the paper tray.
*5: Cassette trays can be used for each of the standard paper sizes. The maximum size of the paper supply including the paper tray is 650 sheets.

CONSUMABLES

- ❑ Name: Developer and Toner cartridge
  Organic Photoconductor Unit
- ❑ Life1* Developer equipment
  (Black colored mono component nonmagnetic toner: Average 6000 sheets.)
  OPC drum(organic photo conductor unit):20000 sheets.

Note 1)* These number represent the number of printed pages that can be printed assuming continuous printing on an A4 page with print duty of 5%. The life will change based on the print duty and method of printing (continuous printing, intermittent printing, printing density, toner economizing)

CONTROLLER SPECIFICATION

- ❑ CPU — RISC VR4300 100MHz
- ❑ RAM — Standard 4MB(EDO type)
  SIMM option: 1
  32MB, 16MB, 8MB, 4MB (EDO type, 1 slot)
  Maximum 36MB(4MB(standard) + 32MB(expansion SIMM slot)
- ❑ ROM — Font: 2Mbytes(mounted on main board)
  Program: 4Mbytes (mounted on ROM DIMM board)
- ❑ Host interface — Standard, Centronics, Bi-direnctional parallel
  IEEE-1284 nibble
  ECP
  RS232C Serial
  Type-B I/F: 1 slot

SOFT SPECIFICATION

- ❑ Control Code — Bi-direction EJL
- ❑ Emulation — ESC/Page mode
  PCL5E mode
  GL/2 mode
  FX mode
  ESC/P2 mode
  I239x
  Post Script level 2(Option)

ENVIRONMENTAL CONDITION

[Usage conditions including expendable parts]

- ❑ Temperature: 10 to 35 °C
- ❑ Humidity: 15% to 85% without condensation
- ❑ Air pressure(altitude): 760hPa or more(2500 meters or less)
- ❑ Surface angle: 1 degree incline or less (for both front to rear and side to side)
- ❑ Luminosity: 3000 lux or less(not exposed to direct sunlight)

[Environmental conditions for storage and transportation]

Temperature	Normal		0 to 35 °C
	Extremes (1/3 of total holding period)	High	35 to 40 °C
		Low	-20 to 0 °C
Humidity	Normal		30 to 85%
	Extremes (1/3 of total holding period)	High	85 to 95%
		Low	10 to 30%
Holding Period			18 months after manufacture

- ❑ Shipping Air Pressure: 460 to 760 hPa
- ❑ Resistance to shock: For JIS Z0200 1987 Level 1 with no abnormalities.
  Dropping direction: 1 corner, 6 sides, 3 edges

ELECTRICAL SPECIFICATION

- ❑ Power supply:
  - ■ 120 model
    120V +/- 10%, 50-60Hz +/-3Hz
  - ■ 200V model
    220 to 240V +/- 10%, 50-60Hz +/- 3Hz
- ❑ Electrical characteristic

1) AC line noise:
   Pulse width: 50 to 1000 ns
   Pulse polarity: ±
   Repeat: non-simultaneous
   Modes: common/normal
   Voltage: 1kv
   However, the parts can withstand up to 2kv without damage.
2) Instant cutoff: DIP 100%(for standard voltage-10%) for one cycle with normal print quality.
3) Electrostatic durability:
   up to ± 10kv: no hardware errors
   no unrecoverable software errors for the operator
   up to ± 15kv: without damage to components
4) Rush current: 1/2 cycle, 50A or less
5) Insulation resistance: 10 M Ω or less
6) Dielectric strength: Assuming the following voltages are input for one minute with no breakdowns.
   120V model: AC 1000V(duration of one surge)
   200V model: AC1500V(duration of one surge)
7) Leakage current: 3.5mA or less (120V model)
   3.5mA or less (200V model)

DIMENSIONS

- ❑ Dimensions: Main unit 397(W)mm x 463(L)mm x251(H) mm
- ❑ Weight: Approximately 7.5Kg(not including expendable or optional parts)

RELIABILITY AND DURABILITY

- ❑ Product life: Approximately 180000 printed pages or five years, whichever comes first.
- ❑ MPBF: 25000 sheets or more
  Note) This is the average number of sheets before a breakdown will occur that either requires the change of parts or for which the user is unable to resolve.
- ❑ MTBF: 3000 hrs(10 months) or more
- ❑ Paper Feed Reliability(for recommended paper or normal paper)
  - ■ Jam rate: 1/2000 or less(not including multiple pages)
  - ■ Misfeed: 1/2000 or less
  - ■ Multiple page feed rate: 1/500 or less
  - ■ Paper wrinkling: 1/1000 or less
  - ■ Paper leading edge folds: 1C or more, 1/1000 or less
    Instances of only 1C excluded*1
    *Note)**1: 1C signifies a corner folded 1mm.

APPLICABLE CERTIFICATION STANDARDS AND REGULATIONS

The specification of this engine meet the certification standards and regulations below. There are cases in which the standards and regulations that apply differently to products, including the controller, depending on their destination.

[Safety Standards]

Table 1-3. Safety Standards

Model Name	Applicable certification
120V model	UL 1950 CSA 22.2 No.950
200V model	TÜV-GS(EN60950) NEMKO(EN60950)

[Safety Regulations]

Table 1-4. Safety Regulations

Model Name	Applicable certification
120V model	FDA(NCDRH) Class 1
200V model	TÜV-GS(EN60825) NEMKO(EN60825)

[EMC]

Table 1-5. EMC

Model Name	Applicable certification
100V model	CNS 13438 CISPR22(Taiwan) FCC Part15 Subpart B Class B/CSA C108.8 Class B
200V model	EC EMC Directive 89/336/PEC EN55022 Class B EN61000-3-2 EN61000-3-3 EN50082-1 AS 3548(Australia)

- ❑ Power consumption: In compliance with international Energy Star standards.
- ❑ Others:
  - ■ Toner: Do not effect on human body(in accordance with OSHA, TSCA, EINECS and CSCL)
  - ■ OPC: Does not effect human body(in accordance with OSHA)
  - ■ Ozone emissions: Conforms to UL 478, 5th version.
  - ■ Materials: Conforms to Swiss environmental protection laws(does not include CdS)
- ❑ Ozone: 0.02 ppm or less.
- ❑ Potential toxicity: OPC, toner, and plastic parts are nontoxic.
- ❑ Noise: Stand-by 30 dB(A) or less.
  In operation, 47.0 dB(A) or less.

POWER CONSUMPTION

❑ Power consumption

		120V model	220-240V model
Standard Maximum current		5.3A	3.0A
Power consumption	Maximum(during warming up)	580W	580W
Average during continuous printing		Less than 200W	Less than 210W
Standby mode (average)	heater on	Less than 40W	Less than 40W
	heater off*1	Less than 15W	Less than 15W

*Note)**1 Energy star compliment.

❑ Resistance to vibration: Vibration frequency, 5 to 100Hz, 100 to 5 Hz.
Acceleration:1G
Cleaning time:10 minutes(one way)
Added vibration direction: 3 directions
Added vibration time: 60 minutes in each direction X,Y, and Z, for 180 minutes total.

❑ Output paper: Face-down-maximum 100 sheets (for 20lb. (75g/m^2)paper)
Face up-maximum 20 sheets(for 20lb. (75g/m^2) paper, when using the optional face up tray)
Use the lever on the right side of the printer to switch the front and rear sides of the paper when changing the face up orientation.

1.2 PAPER SPECIFICATION

Useable paper types are mentioned below.

PAPER TYPES

❑ Normal Paper 60g/m^2 to 90g/ m^2 (16 lbs. to 24 lbs.)
Copy, bond, and recycled paper in general use.

❑ Special Paper Labels, Japanese official post cards, OHP film, Color paper, thick paper(90 to 157 g/ m^2), special DTP paper, letterhead.

Note) lbs:ream weight= ib./500 pages/17x22 g/m^2:1g/m^2=0.2659763 lbs.

⚠CAUTION

■ The paper type listed below can not be used with this printer. They will result in bad printouts, paper jams, and can damage the printer.

- ***Carbon paper, non-carbon paper, thermal transfer paper, impact paper, acidic paper.***
- ***Paper that has gone through a thermal transfer or ink-jet printer.***
- ***Paper that is too thick or too thin.***
- ***Wet(damp) paper.***
- ***Paper to which a special coating has been applied, or colored paper that has gone through surface process.***
- ***Paper that has been lubricated(too smooth or slippery), too rough, or whose texture is different on the front and back.***
- ***Paper with holes for binders or perforations.***
- ***Folder, curled, or damaged paper.***
- ***Paper of irregular shape or not cut with right angles.***
- ***Paper with labels that come off and stick easily.***
- ***Paper with glue, staples, or paper clips attached.***

⚠CAUTION

- ***Special ink-jet paper(surface fine paper, glossy paper, glossy film, etc).***

PAPER CLASSIFICATIONS

Table 1-6.Paper Classification

Paper supply	Standard paper	Normal Paper (60 to 90 g/m^2)	Special Paper				
			1*	2*	3*	4*	5*
Paper Tray	O	♦	♠	♠	♠	♠	♠
Lower Cassette**	O	♦	X	X	X	X	X

Note) 1* OHP
2* Government postcards.
3* Labels.
4*Thick paper(90 to 157g/m2)
5* Envelopes(MON, C10, DL, C5, C6, International-B5)
O: Can guarantee paper feed reliability and image quality.
♦: Can guarantee paper feed reliability and image quality. However, this is limited to those paper types used generally.
♠: Can print characters. However, this is limited to those paper types used generally.
X: Can not feed.
**:Option.

PAPER SIZE

Table 1-7.Paper Size and Paper Feeding

Paper Type	Paper	Size	Paper Tray	Manual Feed Slot	Optional Lower Cassette
Normal Paper	A4	210x297	O	O	O*
	A5	148x210	O	O	
	JIS-B5	182x257	O	O	
	Letter	(8.5)x(11)	O	O	O*
	Half Letter	(5.5)x(8.5)	O	O	
	Legal	(8.5)x(14)	O	O	O*
	EXE	(7.25)x(10.5)	O	O	
	Government Legal	(8.5)x(13)	O	O	
	Government Legal	(8)x(10.5)	O	O	
	F4	210x330	O	O	
	3x5”	3x5” (76.2x127)	O		

Note) O: O.K
*: Depends on destinations.

Table 1-8. Paper Size and Paper Feeding(Cont.)

Paper Type	Paper	Paper Size (mm/inch)	Paper Tray	Manual Feed Slot
Special Paper	Post Card	100x148	O	O
	Monarch(MO)	98.43x190.5	O	O
	C10	104.78x241.3	O	O
	DL	110x220	O	O
	C5	162x229	O	O
	C6	114x162	O	O
	International-B5	176x250	O	O
	16MO	198x275	O	O

1.3 PANEL OPERATION

1.3.1 Power Switch

Power switch is located left rear side of the printer. It controls power On/Off.

1.3.2 Control Panel

The control panel of EPL-5700 is located right edge of the front printer. There are six LED lights and four non lock type switches.

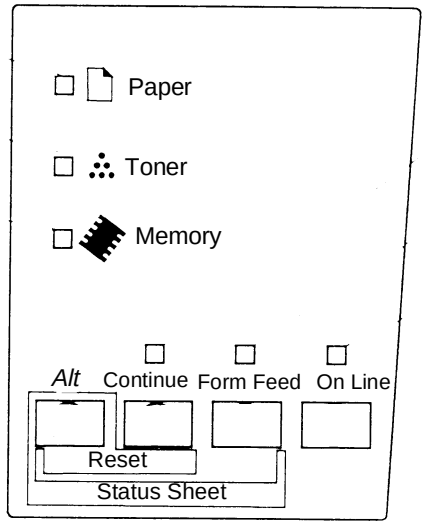

Figure 1-3. Control Panel

1.3.2.1 Switches

- ❑ On line switch: Switches the printer between on line and off line status.
- ❑ Form feed switch: When the printer is off line and data remains in the printer's memory, prints out the data and clears the buffer. If used in combination with the Alt button, a status sheet is printed.
- ❑ Continuous switch: Enables the printer to resume printing after certain maintenance-required conditions or errors have been cleared. If used in combination with the Alt button, the printer is reset.
- ❑ Alternate switch: Use this button in combination with the Continue button in order to stop printing and reset (Warm boot). In the reset condition, if both Alt switch and Continue switch are pressed more than 5 seconds, the printer goes to "Reset All" condition.

1.3.2.2 Lights

- ❑ On Line LED(green): Displays a non-flashing light when the printer is on line, indicating the printer can receive print data. When the printer is off line, this light is off. The light flashes as the system switches between on-line and off-line status.
- ❑ Form Feed LED(yellow): Comes on when data is received and stored in the printer's buffer prior to printing. Flashing indicates the printer is processing data. When no data remains in the printer buffer(the section of memory reserved for receiving data), this light is off.
- ❑ Continue LED(red): Flashes when an error is detected or a maintenance procedure must be performed.
- ❑ Paper LED(yellow): Displays a non-flashing light when a general paper error, or "Printer Open" error has occurred.
- ❑ Toner LED(yellow): Displays a non-flashing light when it is time to change the developer cartridge (toner). Flashes to indicate the toner is low.

❑ Memory LED(yellow): Displays a non-flashing light when either a Print Overrun or Mem Overflow error has occurred. Flashes when the resolution is reduced from 600 to 300 dpi, because of lack of memory size.

Refer to Chapter 3 for error conditions.

⚠CAUTION

This printer has EEPROM to maintain the function setting. Data-writing to EEPROM can not be guaranteed, if the power is turned off during writing. Therefore, sometimes service error call occurs or the panel setting returns to the initial setting by all reset or at the next power on. In order to prevent this, do not turn off the printer at the following conditions, since data-writing to EEPROM is performed.

- ***From the power is turned on until the On Line light stays on.***
- ***When On-line light is flashing.***

1.3.3 List of Panel Setting

This printer has no LCD display in the control panel, so it is not possible to make function settings from the control panel, excluding toner left quantity reset and OPC drum life reset by the special operation and status sheet. Function settings can be performed using "RCP"(remote control panel). In the Table below, note that the bold and italic value in the "Value" column indicates the factory default setting.

Table 1-9. Function Setting for Control Panel

Menu	Item	Value
Test Menu	• Status sheet • ESC/Page Font Sample. • LJ4 Font Sample. • ESCP2 Font Sample. • FX Front Sample • 1239X Front Sample. • PS Status Sheet[*1] • PS Font Sample[*1] • PS Fact Sheet[*1]	
Emulation Menu	• Parallel • Serial • AUX[*2]	***LJ4***, ESCP2, I239X, PS[*1], GL2, AUTO
Printing Menu	• Paper Source • Page Size • Wide A4 • Orientation • Copies • Manual Feed • Resolution • Skip Blank Page	• ***Auto***, MP, LC1[*3]. • ***A4***[*10], A5, B5, ***LT***[*17], HLT, LGL, GLT, GLG, EXE, F4, MON, C10, DL, C5, C6, IB5, CTM. • ***Off,*** ON • ***Port***, Land • ***1***-999 • ***Off,*** On • ***600,*** 300 • ***Off***, On[*14]

Table 1-10. Function Setting for the Control Panel(Cont.)

Menu	Item	Value
Tray Size Menu	• MP Tray Size	• ***A4***[*16], A5, B5, ***LT***[*17], HLT, LGL, GLT, GLG, EXE, F4, MON, C10, DL, C5, C6, IB5.
	• LC1 Size[*3]	• ***A4***, LT, LGL.
Config Menu	• RITech	• ***On***, Off.
	• Toner Save	• ***Off***, On.
	• Density	• ***3,*** 4, 5, 1, 2
	• Top Offset, Left Offset	• -9.0, -***0.0***, -99.0 mm step 0.5mm.
	• Size Ignore	• ***Off,*** On
	• Auto Cont	• ***Off,*** On
	• Page Protect	• ***Auto***, On
	• Image Optimum	• ***Auto***, Off, On
	• Paper Type[*5]	• ***Normal***, Thin[*5], Thick, Transprnc.
Setup Menu	• Interface	• ***Auto***, Parallel, Serial, AUX[*2].
	• Time Out	• 0, 5-***60***-300
	• Standby	• ***Enable***, Disable
	• Language	• ***English***, Francais, Deutsch, ITALIANO, ESPANOL, SVENSKA, Dansk, Dederl., SUOMI, Portugues.
	• Toner	• 0~100
	• Page Count	• 0~999999999
	• SelecType Init	
Parallel Menu	• Speed	• ***Fast,*** Normal
	• Bi-D	• ***Nibble***, ECP, Off
	• Buffer Size	• ***Normal***, Maximum, Minimum.

Table 1-11. Function Setting for the Control Panel(Cont.)

Menu	Item	Value
Serial Menu	• Word Length	• ***8***, 7
	• Baud Rate	• ***9600***, 19200, 38400, 57600, 300, 600, 1200, 2400, 4800
	• Parity	• ***None,*** Even, odd
	• Stop Bit	• ***1***, 2
	• DTR	• ***On***, Off
	• Xon/Xoff	• ***On,*** Off, Robust
	• Buffer Size	• ***Normal***, Maximum, Minimum.
AUX Menu[*2]	• Buffer Size	***Normal,*** Maximum, Minimum.
ESC/Page Menu[*4]	• Auto CR	• ***On***, Off
	• Auto FF	• ***On,*** Off
	• CR Function	• ***CR,*** CR+LF
	• LF Function	• ***LF+CR,*** LF
	• FF Function	• ***FF+CR***, FF
	• Error Code	• ***Ignore,*** Space
	• Avoid Error	• ***Off***, On
LJ4 Menu	• Font Source	• ***Resident,*** DIMM, Download.
	• Font Number	• ***0*** ~ available(Max 65535)
	• Pitch[*15]	• 0.44~***10.00***~99.99 cpi step 0.01 cpi
	• Height[*15]	• 4.00~***12.00***~999.75pt step 0.25 pt
	• SymSet[*7]	• ***IBM-US***, Roman-8, ECM94-1, 8859-2 ISO, 8859-9 ISO, IBM-DN, PcMuktiling, PcE. Europe, PcTk437, WiAnsi, WiE.Europe, WiTurkish, DeskTop, PsText, VeInternati, VeUS, MsPublishin, Math-8, PsMath, PiFont, Legal, UK, ANSI ASCII, Swedis2, Intalian, Spanish, German,Norweg1, Fench2, Windows.
	• Form	• 5~***60***[*17]~***64***[*16]~128 Lines.
	• Source SymSet[*7]	• 0~***277***~3199

Table 1-12. Function Setting for the Control Panel(Cont.)

Menu	Item	Value
LJ4 Menu	Dest Symset	0~***277***~3199
GL2 Menu	• GL-Mode • Scale • Origin • Pen • End • Join • Pen0 • Pen1 • Pen2[*6] • Pen3[*6] • Pen4[*6] • Pen5[*6] • Pen6[*6]	• GLlike, ***LJ4GL2*** • ***Off***, A0, A1, A2, A3 • ***Corner,*** Center • ***Pen0***, Pen1, Pen2[*6], Pen3[*6], Pen4[*6], Pen5[*6], Pen6[*6] • ***Butt,*** Square, Triangular, Round. • ***Mitered***, Miteredbeveled. Triangular, Round, Beveled, None. • 0.05~***0.35***~5.00mm step 0.05mm. • 0.05~***0.35***~5.00mm step 0.05mm. • 0.05~***0.35***~5.00mm step 0.05mm. • 0.05~***0.35***~5.00mm step 0.05mm. • 0.05~***0.35***~5.00mm step 0.05mm. • 0.05~***0.35***~5.00mm step 0.05mm.
PS Menu	• Error Sheet • Protect Level • MicroGray	• ***Off***, On • ***1***~5 • ***On***, Off

Table 1-13. Function Setting for the Control Panel(Cont.)

Menu	Item	Value
ESCP2 Menu	• Font • Pitch • Condensed • T. Margin • Text • CGTable[*7] • Country • Auto CR • Auto LF • Bit Image • ZeroChar	• ***Courier,*** Prestige, Roman, Sans, serif, Roman T, Orator S, Sans H, Script, OCR A, OCR B. • ***10cpi***, 12cpi, 15cpi, Prop. • ***Off,*** On • 0.40~***0.50***~1.50 inch step 0.05 inch • 1~***62***[*17] ***66***[*16]~available (Max 81) Lines • ***PcUSA***, Italic, PcMultiln, PcPortugue, PcCanFrenc, PcNordic, PcTurkish2, PcE. Europe, BpBRASCII, BpAbicomp • ***USA,*** France, Germany, UK, Denmark, Sweden, Italy, Spain1, Japan, Norway, Denmark2, Spain2, LatinAmeric, Korea, Legal. • ***On,*** Off • ***Off,*** On • ***Dark***, Light, BarCode • ***0***, ϕ
FX Menu	• Font • Pitch • Condensed • T.Margin • Text • CGTable • Country	• ***Courier***, Prestige, Roman, Sans serif, Script, Orator S, OCR A, OCR B • ***10cpi***, 12cpi, 15cpi, Prop. • ***Off,*** On • 0.40~***0.50***~1.50 inch step 0.05 inch • 1~***62***[*17] ***66***[*16]~available (Max 81) Lines • ***PcUSA***, Italic, PcMultiln, PcPortugue, PcCanFrenc, PcNordic, PcTurkish2, PcE. Europe, BpBRASCII, BpAbicomp • ***USA,*** France, Germany, UK, Denmark, Sweden, Italy, Spain1, Japan, Norway, Denmark2, Spain2, LatinAmeric

Table 1-14. Function Setting for the Control Panel(Cont.)

Menu	Item	Value
FX Menu	• Auto CR • Auto LF • Bit Image • ZeroChar	• ***On,*** Off • ***Off,*** On • ***Dark***, Light, BarCode • ***0***, ϕ
1239X Menu	• Font • Pitch • Code Page • Text • Auto CR • Auto LF • Alt.Graphic • Bit Image • ZeroChar • CharacterSet	• ***Courier***, Prestige, Roman, Sans serif, Script, Orator S, OCR A, OCR B • ***10cpi***, 12cpi, 15cpi, 17cpi, 20cpi, 24cpi,Prop. • ***437,*** 850, 860, 863, 865 • 0.30~***0.40***~1.50 inch step 0.05 inch • 1~***63***[*17]~***67***[*16]~available (Max111)Lines • ***Off,*** On • ***Off,*** On • ***Off,*** On • ***Dark***, Light, BarCode • ***0***, ϕ • 1, ***2***

Note)

*1: Can only be selected when Parrot-V option.

*2: Can only be selected when Type-BI/F option is installed.

*3: Can only be selected when optional lower cassette is installed.

*4: These item will not be displayed on the panel and can not select or change from the RCP etc. And these items will not be printed on status sheet. Also these items will be hidden to the users.

*5:
- Normal — Select when using normal paper.
- Thin — Invalid for EPL-5700. This setting is only possible to change by EJL command, but if printer receive this command, internal setting will force to set to Normal setting.
- Thick — Select when using narrow media such as envelopes, postcards, etc.

*6 Can only be selected in GLlike mode.

*7 When the NLSP font DIMM is added, the selectable SymSet and CGTable for RCP for DOS are added. Following symbol set will be added.

For LJ4 mode:

PcIcelandic*[8], PCLt774*[8], PcTurk1*[8]*[9], PcPortugues*[8], PcEt850*[8], PcTurk2*[8]*[9], PcCanFrench*[8], PcSI437*[8], PcNordic*[8], 8859-3ISO*[8], 8859-4ISO*[8],WiBaltic*[8], WiEstonian*[8], WiLantvian*[8] Mazowia*[8]*[12], CodeMJK*[8]*[12], BpBRASCII*[8], BPAbicomp*[8], PcGk437*[8*10], PcGk851*[8], PcGk869*[8]*[10], 8859-7ISO*[8]*[10], WiGreek*[8], Europe3*[8], PcCy855*[8]*[11], PcCy866*[8]*[11], PcLt866*[8], 8859-5ISO*[8], WiCyrillic*[8], Bulgarian*[8]*[11], PcUkr866*[8], Hebrew7*[8], 8859-8ISO*[8], Bebrew8*[8], PcHe862*[8], Arabic8*[8], PcAr864*[8],8859-6ISO*[8], OCR A*[8], OCR B*[8]

For ESCP2 mode:

PcSI437*[8], PCTurkish1*[8], PcIceiandic*[8], 8859-ISO*[8], Mazowia*[8],CodeMJK*[8], PcGk437*[8], PcGk851*[8], PcGk869*[8], 8859-7ISO*[8],PcCy855*[8], PcCy866*[8], Bulgarian*[8], PcUkr866*[8], Hebrew7*[8],Hebrew8*[8], PcAr864*[8], PcHe862*[8].

8 Indicated only when NLSP Bitmap3 Font ROM for Turkey[13].

9 Indicated only when NLSP EDG OEM Scalable Font ROM for Turkey[13].

10 Indicated only when NLSP EDG OEM Scalable Font ROM for Greek[13].
11 Indicated only when NLSP EDG OEM Scalable Font ROM for Cyrillic[13].
12 Indicated only when NLSP EDG OEM Scalable Font ROM for Latin[13].
*13 When changing the “SymSet” to this value, “Font Source” and “Front Number” is set to “Resident” and “0”. So it is necessary to change “Font Source” and “Front Number” to the font which supports this symbol set.
*14 Only applied to LJ4 and ESC/Page mode.
*15 Either pitch or height will be displayed.(decided by selected font)
*16 Factory setting for Europe and Pacific.
*17 Factory setting for North America.

1.3.4 Special(alternative) Operation

1.3.4.1 Operation at Power On

After turning the power on while pressing a particular button, and keep pressing the switch until the paper feed lamp, toner lamp and memory lamp are turned on, following function will start.

- Hexadecimal Damp
  - Turn on the power while pressing the Form Feed switch, then the printer will enter damp mode. The received data is converted by hexadecimal ASCII and printed out.
  - This function is canceled by Warm Boot(see page 1-8) or turning power again.

- Toner Reset
  - Turn on the power while pressing On Line switch and Form Feed switch, the left toner quantity is reset and becomes toner full condition. (E■■■■F)
  - Then, printer returns to the normal condition.

- OPC Drum life reset
  - Turn on the power while pressing On-line switch and Continue switch. The printer sets OPC drum life 100%.
  - Then, printer returns to the normal condition.

Following is not opened to the users.

- Initialization of EEPROM
  - Turn on the power while pressing On-line switch, Continue Switch and Alt switch. Then, EEPROM setting returns to the original settings, which were set at the factory. All setting including the total print count is cleared.
  - Then, printer goes to Warm Boot and returns to the normal condition.

❑ Initialization of Panel Setting Values
- Turn on the power while pressing Continue switch, then the printer resets panel setting values to the original setting which were set at the factory.
- Then, printer goes to Warm Boot and returns to the normal condition.

1.3.4.2 Up-dating ROM Program

Since the ROM programs, which were produced during the initial mass-production, are using Flash-ROM, they can be up-dated through the parallel interface from the host computer, when it becomes necessary to up-date.

❑ Procedure for up-dating

1. Connect the printer and host computer by parallel interface cable.
2. Turn the power of the printer on, while pressing On-line, Form Feed and Continue switches.
3. Stop pressing switches after Paper, Toner and Memory lights turn on.

Continue light and From Feed light turns off 3 seconds after other lights turn on with flashing On-line light. The printer is ready to receive the program data from the host computer.

4. Transfer the program data by COPY command of DOS from the host computer, as it is shown below.

>COPY_/B_File Name_LPT1 press Return key.

Note)"_" above means to take one space.

✓CHECK POINT

Printer should be receiving condition before the data is sent from the host computer.

The printer indicates that old program is being erased, turning the Toner, Memory and Form Feed lights on and blinking the on-line light.
Then, the printer indicates that new program is being written, turning the Memory and Form Feed lights on and blinking On-line light.

5. On-line light blinks and other lights turns off after up-date process is completed normally.
6. Press On-line switch and re-boot the printer.

⚠CAUTION

If you fail to up-date the program ROM correctly, Service Req. Error appears and the printer will not be able to start.

❑ Solution when error occurs.

If up-dating RON fails, error is indicated and goes to Check SUM error (service req. error) without appropriate operations.

- Write Error
  Because of defective device of Flash-ROM or defective confection with DIMM slot, Paper, Continue and Form Feed lights turn on while writing or erasing program , then On-line light blinks and light error is indicated. Operation is canceled by pressing Alt switch. In this case, old program still remains and transferred data is red but abandoned. Up-date is proceeded by pressing On-line switch, but the printer does not operate well.
- Data Error
  Data error is indicated by turning Toner, Continue and Form Feed lights on and blinking On-line light.
  Operation is canceled by pressing Alt switch. In this case, old program still remains and transferred data is red but abandoned. Up-date is proceeded by pressing On-line switch, but the printer does not operate well.
- Address Error
  This error occurs when writing address to program ROM is done out of range. Address error is indicated by turning Toner, Continue and Form Feed lights on and blinking On-line light. Operation is canceled by pressing Alt switch. In this case, old program still remains and transferred data is red but abandoned. Up-date is proceeded by pressing On-line switch, but the printer does not operate well.

- Check SUM Error of Program ROM
  When up-dating ROM fails, Check SUM error appears. Memory and Continue lights turn on and On-line light blinks to indicate Check SUM error. Press On-line switch and re-boot the printer.

1.4 OPTIONS AND CONSUMABLE

Following shows options and consumable for EPL-5700.

Table 1-15. Printer Options

Name	Code
500 Sheet Lower Paper Cassette	C81287*
Face Up Tray	C81286*
Operational memory module	Refer to Reference Guide
EPSON Script Level 2 module	C83229*
Optional Interface Cards; • Optional Ethernet Card • 32KB Serial Interface Card • 32KB Parallel Interface Card • Coax Interface Card • Twinax Interface Card • AppleTalk Interface Card • GPIB Interface Card	 • C82357*/C82362* • C82307* • C82310* • C82314* • C82315* • C82312* • C82313*

*Note)** The asterisk(*) is a substitute for the last digit of the product number, which varies by country.