SERVICE MANUAL

Color Large Format Inkjet Printer

EPSON Stylus Pro 7600/9600

SEIJ01017

COLOR IMAGING
EPSON

EPSON®

Notice:

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. NO WORK SHOULD BE PERFORMED ON THE UNIT BY PERSONS UNFAMILIAR 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 NON-APPROVED COMPONENTS MAY DAMAGE THE PRODUCT AND VOID ANY APPLICABLE EPSON WARRANTY.

About This Manual

This manual describes basic functions, theory of electrical and mechanical operations, maintenance and repair procedures of the printer. 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.

Manual Configuration

This manual consists of six chapters and Appendix.

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
Describes the step-by-step procedures for the troubleshooting.

CHAPTER 4.DISASSEMBLY / ASSEMBLY
Describes the step-by-step procedures for disassembling and assembling the product.

CHAPTER 5.ADJUSTMENT
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
• Electrical circuit boards schematics
• Exploded diagram & Parts List

Symbols Used in this Manual

Various symbols are used throughout this manual either to provide additional information on a specific topic or to warn of possible danger present during a procedure or an action. Be aware of all symbols when they are used, and always read NOTE, CAUTION, or WARNING messages.

Indicates an operating or maintenance procedure, practice or condition that is necessary to keep the product's quality.

Indicates an operating or maintenance procedure, practice, or condition that, if not strictly observed, could result in damage to, or destruction of, equipment.

May indicate an operating or maintenance procedure, practice or condition that is necessary to accomplish a task efficiently. It may also provide additional information that is related to a specific subject, or comment on the results achieved through a previous action.

Indicates an operating or maintenance procedure, practice or condition that, if not strictly observed, could result in injury or loss of life.

Revision Status

Revision	Date of Issue	Description
A	May 10, 2002	First release

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Chapter 3 Troubleshooting

Chapter 4 Disassembly & Assembly

Chapter 6 Maintenance

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CHAPTER

1

PRODUCT DESCRIPTION

1.1 Product Description

1.1.1 Features

☐ Large Format

■ Stylus Pro 7600:   Max. 24 inch paper width, A1+ size supported
 Stylus Pro 9600:   Max. 44 inch paper width, B0+ size supported

☐ Pigment ink / Dye ink

■ Pigment ink:
 Users can select following blackish ink combinations.

• Photo Black + Light Black
• Matte Black + Light Black
• Matte Black × 2

■ Dye ink:
 2 black ink cartridges are installed.

☐ High-speed Throughput

■ Stylus Pro 7600

Table 1-1. Throughput (Stylus Pro 7600)

EPSON media	Quality	Resolution (dpi)	Mode	Throughput (A1 printing time)
Plain Paper	Draft*1	360 × 180	Pseudo 4-color	2 min.
	Speed	360 × 360	Bi-D MF 240 cps	3/2 (BK×2*2) min.
Doubleweight Matte Paper	Speed	360 × 360	Bi-D M/W(POL) 240 cps	5 min.
	Quality	720 × 360	Bi-DFOL(POL)	9 min
Glossy Photo Paper Glossy Paper-Heavy Weight	Speed	720 × 360	Bi-D 22POL 240 cps	8 min.
	Quality	720 × 720	Bi-D 14POL 240 cps	13 min.
	Adv.Photo	1440 × 720	Bi-D 4-pass 240 cps	25 min
	Photo 2880	2880 × 1440	Bi-D 4-pass 190 cps	55 min

Note *1:   Color high-speed 360×180dpi mode (for POP, for all ink combinations of pigment/ dye)

*2:   Black double-speed mode (for CAD, supported with FW),
(It is switched automatically with 2 BK ink cartridge installation (dye/PPI) + M/W OFF)

■ Stylus Pro 9600

Table 1-2. Throughput (Stylus Pro 9600)

EPSON media	Quality	Resolution (dpi)	Mode	Throughput (A1 printing time)
Plain Paper	Draft*1	360 × 180	Pseudo 4-color	3.5 min
	Speed	360 × 360	Bi-D MF 240 cps	6/3.5 (BK×2*2) min.
Doubleweight Matte Paper	Speed	360 × 360	Bi-D M/W(POL) 240 cps	9 min.
	Quality	720 × 360	Bi-DFOL(POL)	17 min
Glossy Photo Paper Glossy Paper-Heavy Weight	Speed	720 × 360	Bi-D 22POL 240 cps	14 min
	Quality	720 × 720	Bi-D 14POL 240 cps	24 min
	Adv.Photo	1440 × 720	Bi-D 4-pass 240 cps	46 min
	Photo 2880	2880 × 1440	Bi-D 4-pass 190 cps	102 min

Note *1:   Color high-speed 360×180dpi mode (for POP, for all ink combinations of pigment/ dye)

*2:   Black double-speed mode (for CAD, supported with FW),
(It is switched automatically with 2 BK ink cartridge installation (dye/PPI) + M/W OFF)

☐ Super High Quality
High image quality with 7-color ink, 2880×1440 dpi, and minimum 4pl various layers.

☐ Low Running Cost

• Independent for each color and 110 ml ink cartridge
• Large capacity 220 ml ink cartridge as an option

☐ Paper Handling

• Support various media.
• Automatic roll paper cutter, manual cutter
• Automatic loading (cut sheet)
• Borderless print for right and left

☐ Compatibility with other LFPs
Commands are upper compatible with Stylus Pro 10000, Stylus Pro 10000CF, Stylus Pro 9000, Stylus Pro 9500, Stylus Pro 7000, and Stylus Pro 7500.

☐ The latest RIP technology
CPSI Pro software RIP

1.1.2 Differences between Stylus Pro 7600 and Stylus Pro 9600

Table 1-3. Differences between Stylus Pro 7600 and Stylus Pro 9600

	Item	Stylus Pro 7600	Stylus Pro 9600
Product Specifications	Maximum paper width	610mm (About 24 inches / A1+size supported)	1118m (About 44 inches / B0+size supported)
	RAM capacity	32MB (16Mbit×2) (IC600/601 = not mounted)	64MB (16Mbit×4)
Option	Take-up Reel Unit	Not supported (CN30 = not mounted)	Supported
	220 ml ink cartridge	Not supported	Supported

1.2 Basic Specifications

1.2.1 Print Specifications

☐ Printing: On-demand ink-jet

☐ Nozzle configuration:

- ■ Black: 192 nozzles (Black1, Black2, 96 nozzles each)
- ■ Color: 480 nozzles (cyan, magenta, light cyan, light magenta, yellow, 96 nozzles each)
- ■ Nozzle pitch: 0.141mm (1/180 inch) for each color

☐ Printing direction:
Bi-direction with logic seeking (high-speed return, high-speed skip only)

☐ Printing speed and printable area

- ■ Character mode

  - • Character quality: high quality
  - • Character pitch: 10 cpi
  - • Printable area:
    Stylus Pro 7600:   237 characters (at 10 cpi) / 8,561 dots (360dpi)
    Stylus Pro 9600:   437 characters (at 10 cpi) / 15,840 dots (360dpi)
  - • Printing speed: 240 cps max.

- ■ Graphic Mode

Table 1-4. Graphics Modes (Stylus Pro 7600)

Horizontal resolution (dpi)	Printable area	Maximum number of printable dots	Printing speed
360	604 mm (24.16 inches)	8698	240 cps
720	604 mm (24.16 inches)	17395	240 cps
1440	604 mm (24.16 inches)	34790	240 cps
2880	604 mm (24.16 inches)	69581	190 cps

Table 1-5. Graphics Modes (Stylus Pro 9600)

Horizontal resolution (dpi)	Printable area	Maximum number of printable dots	Printing speed
360	1112 mm (43.78 inches)	15762	240 cps
720	1112 mm (43.78 inches)	31524	240 cps
1440	1112 mm (43.78 inches)	63048	240 cps
2880	1112 mm (43.78 inches)	126087	190 cps

1.2.2 Character Specification

☐ Character tables: 2 international character sets
PC 437 (US, Standard Europe)
PC 850 (Multilingual)

NOTE: This specification is not described in the user's manual.

☐ Typeface:
Bit map LQ font: EPSON Courier 10 cpi

NOTE: This specifications is not described in the user's manual.

1.2.3 Control Code

☐ Control code:
ESC/P Raster
ESC/P3

NOTE: This specifications is not described in the user's manual.

1.2.4 Paper Feed

☐ Paper feeding: Friction feed

☐ Line spacing: 1/6 inch or programmable at 1440 inch

☐ Paper path: Roll paper/manual

☐ Feed speed: 6.35 mm paper feed: 215 ± 10 msec
(except front rush, back rush, and hold time)

1.2.5 Paper Specifications

1.2.5.1 Roll Paper

ACCEPTABLE PAPER

The printer accepts following plain paper and EPSON special paper. With any other paper, proper paper feeding and satisfactory print quality are not ensured.

☐ Paper Size

Table 1-6. Acceptable Roll Paper Sizes (Acceptable Paper)

Core	Model	Paper Size
2-inch core	Stylus Pro 7600	203mm ~ 610 mm (W) × ~ 45 m (H) *
	Stylus Pro 9600	203 mm ~ 1118 mm (W) × ~ 45 m (H) *
3-inch core	Stylus Pro 7600	203 mm ~ 610 mm (W) × ~ 202 m (H) *
	Stylus Pro 9600	203 mm ~ 1118 mm (W) × ~ 202 m (H) *

Note "*": Within roll size

☐ Roll Size

- 2-inch core: 103 mm ext. diameter maximum for 1 roll setting
- 3-inch core: 150 mm ext. diameter maximum for 1 roll setting

☐ Thickness: 0.08 mm ~ 0.50 mm

PLAIN PAPER

Trouble-free paper feeding is ensured only in the following specifications.

☐ Paper Size

Table 1-7. Acceptable Roll Paper Sizes (Plain Paper)

Core	Model	Paper Size
2-inch core	Stylus Pro 7600	203 mm ~ 610 mm (W) × ~ 45m (H) *
	Stylus Pro 9600	203 mm ~ 1118 mm (W) × ~ 45m (H) *
3-inch core	Stylus Pro 7600	203 mm ~ 610 mm (W) × ~ 202m (H) *
	Stylus Pro 9600	203 mm ~ 1118 mm (W) × ~ 202m (H) *

Note "*": Within roll size

☐ Roll Size

- 2-inch core: 103 mm ext. diameter maximum for 1 roll setting
- 3-inch core: 150 mm ext. diameter maximum for 1 roll setting

☐ Thickness: 0.08 ~ 0.11 mm

☐ Weight: 64 ~ 90gf/m^2

☐ Type: Plain paper, Recycle paper

BORDERLESS PRINT ROLL PAPER

Borderless print for right and left is enssured for roll paper with any of the paper widths as specified in Figure 1-9 below.

NOTE: 300 mm, 400 mm, 500 mm and 600 mm are supported for Europe.

☐ Paper width

Table 1-8.

Stylus Pro 7600													
Stylus Pro 9600													
Japan	8"	210 mm	10"	-	12"	14"	-	16"	-	20"	-	24"	36"	44"
USA/Europe	8"	210 mm	10"	300 mm	12"	14"	400 mm	16"	500 mm	20"	600 mm	24"	36"	44"

Note 1: Paper should have no wrinkles, tears, or folds and the surface should be smooth.

2: The force to remove the end of the roll paper from the core should be between 300 gf and 2000 gf

3: If core is used, a product-exclusive option (roll paper spindle 3 inch) is necessary.

4: It is used under normal conditions. (temperature 15°C ~ 25°C, humidity 40 ~ 60%RH)

5: Roll paper can be printed before paper comes out of the core.
(Reference: Remaining paper length is 30cm approx. when roll paper come out of the core.)

6: The mechanism clips print data out of over-printable area for borderless printing.

1.2.5.2 Sheet

ACCEPTABLE PAPER

The printer accepts following plain paper and special paper. With any other paper, proper paper feeding and satisfactory print quality are not ensured.

☐ Paper Size (The sizes indicated in bold italic are only for Stylus Pro 9600.)

Table 1-9. Acceptable Sheet Sizes (Acceptable Paper)

Paper Size	Size (W × H)	Paper Size	Size (W × H)
B0+ *	**1118 mm × 1580 mm**	A4	210 mm × 297 mm
B0 *	**1030 mm × 1456 mm**	US E	34 × 44 in
B1 *	**728 mm × 1030 mm**	US D	22 × 34 in
B2	515 mm × 728 mm	US C	17 × 22 in
B3	364 mm × 515 mm	US B	11 × 17 in
B4	257 mm × 364 mm	**44 × 36 in ***	**44 × 36 in**
A0+ *	**914 mm × 1292 mm**	30 × 24 in	30 × 24 in
A0 *	**841 mm × 1189 mm**	Letter	8.5 × 11 in
A1+	24 × 36 in	**B1 (wide) ***	**1030 × 728 mm**
A1	594m × 841 mm	8 × 10 in	8 × 10 in
A2	420 mm × 594 mm	30 cm × 45 cm	30 cm × 45 cm
A3+	329 mm × 483 mm	60 cm × 90 cm	60 cm × 90 cm
A3	297 mm × 420 mm		

Note "*": Only for Stylus Pro 9600

☐ Thickness

  ■ 0.08 ~ 1.5 mm (paper length: 279 mm ~ 728 mm)
  ■ 0.08 ~ 0.5 mm (paper length: 728 mm ~ 1580 mm)

NOTE 1: Paper should have no wrinkles, tears, or folds and the surface should be smooth.

  2: 0.08 ~ 1.50 mm paper thickness is supported for long-edge insertion.

  3: The sizes indicated in bold italic are only for Stylus Pro 9600.

PLAIN PAPER

Proper feeding is ensured only in the following specifications.

☐ Paper Size: Same as above list

☐ Thickness: 0.08 ~ 0.11 mm

☐ Weight: 64 ~ 90 gf/m^2

☐ Type: Plain paper, Recycle paper

NOTE **1:** *Paper is fed short-edge first.*

   2: *Paper should have no wrinkles, tears, or folds and the surface should be smooth.*

   3: *It is used under normal conditions (temperature 15 ~ 25°C, humidity 40 ~ 60%RH)*

   4: *300mm, 400mm, 500mm, 600mm are supported for Europe.*

   5: *Mechanism clips print data out of over-printable area for borderless print.*

BORDERLESS PRINT WIDTH

Borderless print for right and left is assured with following paper width. *4

☐ Paper width

CHECK POINT ✓

Description of units of measure

cpi:	**characters per inch**
dpi:	**dots per inch**
cps:	**characters printed per second (at 10 cpi)**
	1 cps = 2.54 mm/s
ips:	**travel in inches per second**
	1 ips = 25.4 mm/s
G:	**Gravity**

General ambient conditions:
   Temperature 15°C ~ 25°C
   Humidity 40% ~ 60%

Table 1-10.

Stylus Pro 7600													
Stylus Pro 9600													
Japan	8"	210 mm	10"	-	12"	14"	-	16"	-	20"	-	24"	36"	44"
USA/Europe	8"	210 mm	10"	300 mm	12"	14"	400 mm	16"	500 mm	20"	600 mm	24"	36"	44"

1.2.5.3 Special Paper

☐ Roll (pigment)

Table 1-11. Availability with Special Paper (Pigment)

Roll / Pigment Name	Japan	USA/Europe/Asia	MK×2	MK+LK	PK+LK	core" spindle	Paper thickness (mm)	Auto cut	Borderless	8" (203)	210mm (210)	10" (254)	30cm (300)	12" (305)	14" (356)	40cm (400)	16" (406)	50cm (500)	20" (508)	22" (560)	60cm (600)	24" (610)	36" (914)	44" (1118)
Doubleweight Matte Paper	○	○	●	●	○	2	0.21	⊙		-	-	-	-	-	-	-	-	-	-	-	-	⊙	⊙	⊙
Glossy Paper - Photo Weight	○	○			○	2	0.22	⊙		-	-	-	-	-	-	-	-	-	-	⊙	-	-	⊙	⊙
Glossy Film	○	○			○	2	0.13	⊙		-	-	-	-	-	-	-	-	-	-	-	-	⊙	⊙	⊙
Premium Glossy Photo Paper	○	○			○	2	0.18	⊙		-	-	-	-	-	-	-	-	-	-	-	-	⊙	⊙	⊙
Premium Semigloss Photo Paper	○	○			○	2	0.18	⊙		-	-	-	-	-	-	-	-	-	-	-	-	⊙	⊙	⊙
Photo Glossy Paper / Photo Grade Glossy Paper	○	○			○	2	0.17	⊙		-	-	-	-	-	-	-	-	-	-	-	-	⊙	⊙	⊙
Photo Semigloss Paper / Photo Grade Semigloss Paper	○	○			○	2	0.18	⊙		-	-	-	-	-	-	-	-	-	-	-	-	⊙	⊙	⊙
Premium Glossy Photo Paper (250)	○	○			○	3	0.26	⊙	⊙	-	-	-	-	-	-	-	-	-	-	-	-	⊙	⊙	⊙
Premium Semigloss Photo Paper (250)	○	○			○	3	0.26	⊙	⊙	-	-	-	-	-	-	-	-	-	-	-	-	⊙	⊙	⊙
Premium Semimatte Photo Paper (250)	○	○			○	3	0.26	⊙	⊙	-	-	-	-	-	-	-	-	-	-	-	-	⊙	⊙	⊙
Premium Luster Photo Paper	○	○			○	3	0.26	⊙	⊙	-	-	⊙	⊙	⊙	⊙	⊙		⊙	⊙	-	⊙	⊙	⊙	⊙
Watercolor Paper - Radiant White	○	○		○	○	3H	0.29	⊙		-	-	-	-	-	-	-	-	-	-	-	-	⊙	⊙	⊙
Smooth Fine Art Paper (Roll)		○		○	○	3H	0.37			-	-	-	-	-	-	-	-	-	-	-	-	⊙	⊙	⊙
Textured Fine Art Paper (Roll)	○	○		○	○	3H	0.37			-	-	-	-	-	-	-	-	-	-	-	-	⊙	⊙	⊙
Canvas		○		○	○	2	0.46			-	-	-	-	-	-	-	-	-	-	-	-	⊙	⊙	⊙
Backlight Film	○				○	2	0.13	⊙		-	-	-	-	-	-	-	-	-	-	-	-	⊙	⊙	⊙
Backlight Film (USA / Europe)		○			○	2	0.18			-	-	-	-	-	-	-	-	-	-	-	-	⊙	⊙	⊙
Heavyweight Polyester Banner	○	○		●	○	2	0.28			-	-	-	-	-	-	-	-	-	-	-	-	⊙	⊙	⊙
Enhanced Synthetic Paper	○	○	●	●	○	2H	0.12	⊙		-	-	-	-	-	-	-	-	-	-	-	-	⊙	⊙	⊙
Adhesive Enhanced Synthetic Paper	○	○	●	●	○	2H	0.17	⊙		-	-	-	-	-	-	-	-	-	-	-	-	⊙	⊙	⊙
Tyvek Brillion		○	●	●	○	2	0.24	⊙		-	-	-	-	-	-	-	-	-	-	-	-	⊙	⊙	⊙
Adhesive Vinyl		○	●	●	○	2	0.33			-	-	-	-	-	-	-	-	-	-	-	-	⊙	⊙	⊙
Enhanced Matte Paper	○	○		○	○	3	0.25	⊙		-	-	-	-	-	-	-	-	-	-	-	-	⊙	⊙	⊙
Semiglossy 2	TBD	TBD			○	2	TBD	⊙		-	-	-	-	-	-	-	-	-	-	-	-	⊙	⊙	-
Semiglossy 4		○			○	2	TBD	⊙		-	-	-	-	-	-	-	-	-	-	-	-	⊙	⊙	-
Dupont / EPSON Semi - Gloss Proofing Paper - A		○			○	2	0.20			-	-	-	-	-	-	-	-	-	-	-	-	⊙	⊙	-

Note : Symbol ⊙: Assured, ○: Supported, ●: Supported conditionally, ×: Not supported, 2H/3H: High tension spindle

☐ Roll (dye)

Table 1-12. Availability with Special Paper (Dye)

Name	Japan	USA/Europe/Asia	core" spindle	Paper thickness (mm)	Auto cut	Borderless	8" 203	210 mm 210	10" 254	30cm 300	12" 305	14" 356	40cm 400	16" 406	50cm 500	20" 508	22" 560	60cm 600	24" 610	36" 914	44" 1118
Presentation Matte Paper	O	O	2	0.20	O		-	-	-	-	-	-	-	-	-	-	-	-	⊙	⊙	⊙
Semigloss Photo Paper (Asia / Europe) Semi Gloss Paper - Heavy Weight (US)	O	O	2	0.21	O		-	-	-	-	-	-	-	-	-	-	-	-	⊙	⊙	⊙
Glossy Photo Paper (Asia / Europe) Glossy Paper - Heavy Weight (US)	O	O	2	0.23	O		-	-	-	-	-	-	-	-	-	-	-	-	⊙	⊙	⊙
Doubleweight Matte Paper		O	2	0.21	O		-	-	-	-	-	-	-	-	-	-	-	-	⊙	⊙	⊙
Glossy Film	O	O	2	0.13	O		-	-	-	-	-	-	-	-	-	-	-	-	⊙	⊙	⊙
Photo Grade Glossy Paper (Asia / Europe) Photo Glossy Paper (US)		O	2	0.17	O		-	-	-	-	-	-	-	-	-	-	-	-	⊙	⊙	⊙
Photo Grade Semigloss Paper (Asia / Europe) Photo Semigloss Paper (US)		O	2	0.18	O		-	-	-	-	-	-	-	-	-	-	-	-	⊙	⊙	⊙
Heavyweight Polyester Banner	O	O	2	0.28			-	-	-	-	-	-	-	-	-	-	-	-	⊙	⊙	⊙
RC 10mil Glossy Paper (TBD)	TBD	O	3	0.26	O		-	-	-	-	-	-	-	-	-	-	-		⊙	⊙	⊙
RC 10mil Semigloss Paper (TBD)	TBD	O	3	0.26	O		-	-	-	-	-	-	-	-	-	-	-	-	⊙	⊙	⊙
Premium Luster Photo Paper	TBD	O	3	0.26	O	⊙	-	-	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	-	⊙	⊙	⊙	⊙
Dupont / EPSON Commercial Proofing Paper		O	2	0.21	O		-	-	-	-	-	-	-	-	-	-	-	-	⊙	⊙	-
Dupont / EPSON Commercial Matte Proofing Paper		O	2	0.24	O		-	-	-	-	-	-	-	-	-	-	-	-	⊙	⊙	-
Dupont / EPSON Publication Proofing Paper		O	2	0.24	O		-	-	-	-	-	-	-	-	-	-	-	-	⊙	⊙	-

Note :　Symbol ⊙: Assured, O: Supported, ●: Supported conditionally, ×: Not supported, 2H/3H: High tension spindle

Note　*1：　Assured with Uni-D print.

　　　*2：　Paper is fed short-edge first.

　　　*3：　Paper should have no wrinkles, tears, or folds and the surface should be smooth.

　　　*4：　It is used under normal conditions (temperature 15°C ~ 25°C, humidity 40% ~ 60%RH)

　　　*5：　Paper feeding and print quality with borderless print is not assured on paper which is not assured for borderless print.

　　　*6：　Borderless print is not assured with sheet.

☐ Sheet (pigment)

Table 1-13. Availability with Sheets (Pigment)

Sheet / Pigment			Characteristic				Media size												
			Black INK			Paper thickness (mm)	A4	LTR	A3	B	Super A3/B	A2	C	B2	A1	D	24"×30"	30"×40"	36"×44"
Name	Japan	USA/ Europe/ Asia	MK ×2	MK +LK	PK +LK		210×297	216×279	297×420	279×432	329×483	420×594	432×559	515×728	728×1030	559×864	610×762	762×1016	914×1118
Glossy Paper - Photo Weight	O	O			O		⊙	⊙	⊙	⊙	⊙	-	-	-	-	-	-	-	-
Watercolor Paper - Radiant White	O	O		O	O		-	-	-	-	⊙	-	-	-	-	-	-	-	-
Smooth Fine Art Paper		O		O	O	0.67	-	-	-	-	-	-	-	-	-	-	⊙	-	⊙
Textured Fine Art Paper	TBD	O		O	O	0.67	-	-	-	-	-	-	-	-	-	-	⊙	-	⊙
Enhanced Matte - Poster Board	O	O		O	O	1.3			-	-	-	-	-	-	-	-	⊙	⊙	-

Note ： Symbol ⊙: Assured, O: Supported, ●: Supported conditionally, ×: Not supported, 2H/3H: High tension spindle

☐ Sheet (dye)

Table 1-14. Availability with Sheets (Dye)

Sheet / Dye			Characteri stic	Mediasize										
			Paper thickness	A4	LTR	A3	B	Super A3/B	A2	C	B2	A1	D	B1"
Name	Japan	USA/Europe /Asia		210×297	216×279	297×420	279×432	329×483	420×594	432×559	515×728	728×1030	559×864	728×1030
Glossy Photo paper	O	O		⊙	⊙	⊙	⊙	⊙	-	-	-	-	-	-
Photo Quality Inkjet Paper	O	O		⊙	⊙	⊙	⊙	⊙	⊙	⊙	-	-	-	-
Glossy Film	O	O		⊙	⊙	⊙	⊙	⊙	-	-	-	-	-	-
Semigloss Paper - Poster Board		O		-	-	-	-	-	-	-	⊙	-	-	⊙

Note ： Symbol ⊙: Assured, O: Supported, ●: Supported conditionally, ×: Not supported, 2H/3H: High tension spindle

Note *1： Assured with Uni-D print.

    *2： Paper is fed short-edge first.

    *3： Paper should have no wrinkles, tears, or folds and the surface should be smooth.

    *4： It is used under normal conditions (temperature 15°C~25°C, humidity 40%~60%RH)

1.2.6 Mechanism Specifications

1.2.6.1 Printable Area

Table 1-15. Printable Area

Item	Roll paper /Sheet	Model	Dimension
PW (Paper width)	Roll paper	Stylus Pro 7600	203 mm ~ 610 mm
		Stylus Pro 9600	203 mm ~ 1118 mm
	Sheet	Stylus Pro 7600	203 mm ~ 610 mm
		Stylus Pro 9600	203 mm ~ 1118 mm
PL (Paper length)	Roll paper	Stylus Pro 7600/Stylus Pro 9600	Max. 202m
	Sheet	Stylus Pro 7600/Stylus Pro 9600	279 mm ~ 1580 mm
TM (Top margin)	Roll paper	Stylus Pro 7600/Stylus Pro 9600	3 mm/15 mm
	Sheet	Stylus Pro 7600/Stylus Pro 9600	3 mm
BM (Bottom margin)	Roll paper	Stylus Pro 7600/Stylus Pro 9600	3 mm/15 mm
	Sheet	Stylus Pro 7600/Stylus Pro 9600	14 mm
LM (Left margin)	Roll paper	Stylus Pro 7600/Stylus Pro 9600	0 mm/3 mm/15 mm
	Sheet	Stylus Pro 7600/Stylus Pro 9600	0 mm/3 mm
RM (Right margin)	Roll paper	Stylus Pro 7600/Stylus Pro 9600	0 mm/3 mm/15 mm
	Sheet	Stylus Pro 7600/Stylus Pro 9600	0 mm/3 mm

☐ The printer detects paper width when paper is set. (If paper width detection setting is OFF, it does not detect paper width.)

☐ It does not print the image beyond the detected paper width or the printable area specified by paper size setting.
(It may print on the platen if paper width detection setting is OFF.)

☐ Margins of roll paper can be changed on the panel as follows;
Top/bottom 15 mm, left/right 3 mm
Top/bottom/left/right 3 mm
Top/bottom/left/right 15 mm

NOTE: Under special conditions, it is possible to set right and left margin (LM, RM) to 0.

☐ For borderless print, right and left margins are 3mm each because skew detection limit is 3mm. If the distance from the paper edge to the platen (sponge width) is less than 3mm, the maximum surplus print quantity without ink discharge onto the platen (0mm~3mm) is printable area.
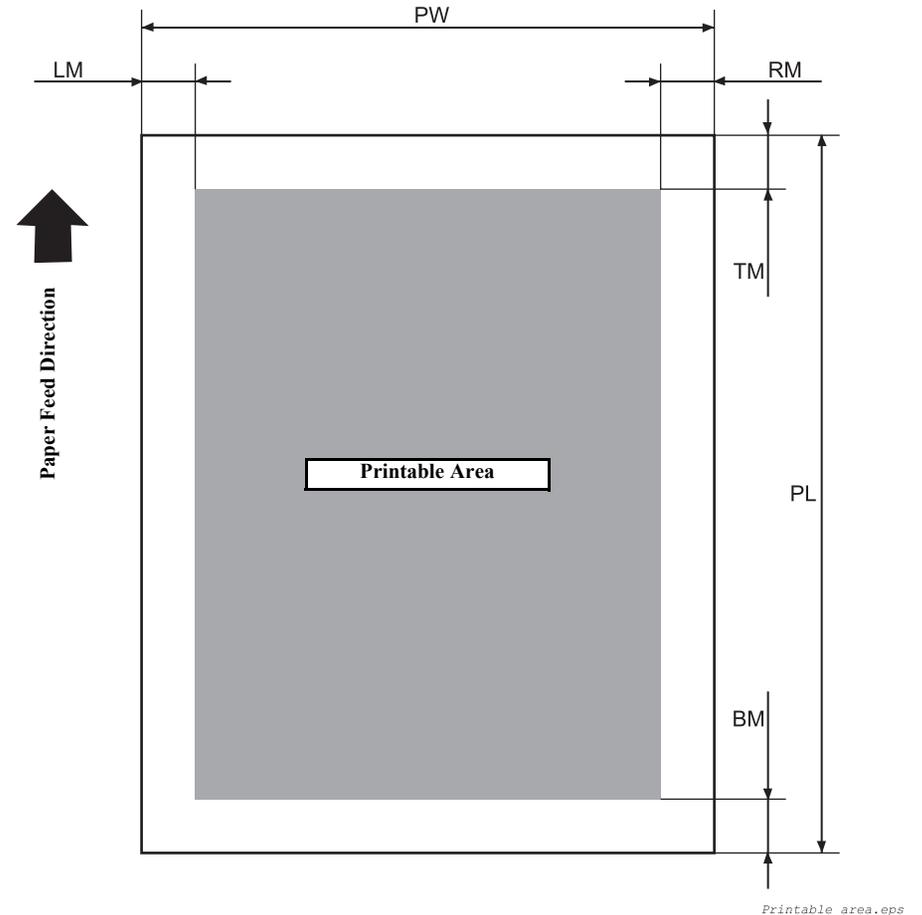

Figure 1-1. Printable Area

1.2.6.2 Paper Set Lever

Table 1-16. Paper Set Lever

Lever Position	Description
In the rear	Position for paper setting (You can set paper.)
In the front	Ready-to-print position (Paper is held with the paper holder.)

1.2.6.3 Cutting Specification

There are two methods to cut roll paper, automatic and manual cutting.

CAUTION **!**	**Do not use the auto cutting function with any paper for which auto cutting is prohibited; otherwise, the head would be damaged.**

AUTOMATIC CUTTING OF ROLL MEDIA

Automatic cutting under the following conditions can only be performed on the approved media.

☐ Mechanical conditions

- ■ Distance between cut position and paper setting position: L0=167mm
- ■ Distance between cut position and cutter mark: L1= 44mm
- ■ Minimum cut length (same as paper edge waiting position):   L2=030mm

Table 1-17. Cutting Conditions and Cutting Methods

Cut condition	Cut method
Initial cut (Cut with pushing "Cut/Eject" button after paper is set, and set lever is pushed down.)	Paper is fed for L1 length and cut in 4 steps. (50cps)
Cut after print completed by driver	4-step cut (200cps) When paper is shorter than L2, it is cut after feeding L2.
Initial cut during printing	Cut during printing is not allowed with this printer. (Product specification)
Initial cut during normal waiting status	Paper is fed for L1 length and cut in 4 steps. (50cps)
Initial cut with Auto cut ON after print with Auto cut OFF.	4-step cut (200cps), when paper is longer than L2. 4-step cut (50cps) after feeding L2, when paper is shorter than L2.
Cut with Paper width detection OFF	3-step cut always (100cps fixed)

Note :   Cutting pressure at high speed can be changed.
Cutting pressure at low speed is "Duty: 45%" fixed.
Paper edge waiting position is fed L2 for initial cut.

MANUAL CUTTING OF ROLL PAPER

Manual cutting is performed by the following procedure.

1. Select "Roll Cutter Off" on the panel.

2. Press "Cut/ Eject" button.

3. Paper is automatically fed toward the cutter guide, and printer becomes Off-line. "Pause" is indicated on the LCD panel.

4. Adjust cutting position with "Paper Feed +/-" button if necessary.

5. Slide the cutter along the cutter guide to cut the paper.

6. After cutting, release the printer from the pause status by pressing the "Pause" button. Then paper is fed backward and printer enters on-line.

CHECK POINT ✓	**For manual cutting of roll paper, use the manual cutter available as an option.**

1.2.6.4 Acoustic Noise

☐ Level: Approx. 50dB(A) (According to ISO 7779)

1.2.7 Electrical Specifications (TBD)

☐ Rated voltage: AC 100 ~ 240V

☐ Input voltage range: AC 90 ~ 264V

☐ Rated frequency range: 50 ~ 60Hz

☐ Input frequency range: 49 ~ 61Hz

☐ Rated current:
  - Stylus Pro 7600:   1.0A/100-120v, 0.5A/220-240v
  - Stylus Pro 9600:   1.0A/100-120v, 0.5A/220-240v

☐ Power consumption:
  - Operation status: Stylus Pro 7600 50W
    Stylus Pro 9600 55W
  - Waiting status: Less than 15W (shifting time: 15 minutes)
  - Power OFF: Less than 0.7W

☐ Insulation resistance: More than 10M ohms
(between AC line and chassis, DC 500V)

☐ Dielectric strength: AC 1.0kV rms 1min.
AC1.2kV rms 1 sec.
(between AC line and chassis)

☐ Leakage: Less than 0.25mA

☐ International Energy Star Program Compliant:
(Complies with the power supply harmonic control guideline)

1.2.8 Reliability

1.2.8.1 Total Print Volume

☐ Stylus Pro 7600: 50,000 pages, 6.5million pass approx. (A1, 360×360 M/F, Bi-D)

☐ Stylus Pro 9600: 20,000 pages, 5million pass approx. (B0, 360×360 M/F, Bi-D)

1.2.8.2 Print Head Life

☐ Monochrome: 28billion shot / nozzle

☐ Color: 28billion shot / nozzle

1.2.8.3 Maintenance Tank Life

☐ Stylus Pro 7600: 11,000 pages approx.
(A1, plain paper, Speed mode, continuous print)

☐ Stylus Pro 9600: 5,000 pages approx.
(B0, plain paper, Speed mode, continuous print)

1.2.8.4 Cutter Life average

Table 1-18. Cutter life average

Paper Type	Stylus Pro 7600 For 24-inch standard roll paper, 3-step cutting	Stylus Pro 9600 For 44-inch standard roll paper, 3-step cutting
Coated paper	Approx. 2000 sheets	Approx. 2000 sheets
Film	Approx. 1000 sheets	Approx. 1000 sheets

1.2.8.5 Maintenance Parts (TBD)

☐ RTC backup battery: (TBD)

☐ Cleaning unit life average
(Cap assembly, Pomp assembly, Flushing box, Wiper)
  - Stylus Pro 7600: 18,000 pages approx.
    (A1, plain paper, Speed mode, continuous print)
  - Stylus Pro 9600: 8,000 pages approx.
    (B0, plain paper, Speed mode, continuous print)

☐ Ink absorbent sponge for right/left borderless print: (TBD)

1.2.9 Ambient Conditions

1.2.9.1 Temperature/Humidity

Table 1-19. Temperature/Humidity

Condition	Temperature*1	Humidity*2
During operation	10 ~ 35°C	20 ~ 80%
During storage	-20 ~ 40°C	20 ~ 85%
During transport	-20 ~ 60°C	5 ~ 85%

Note *1: 120 hours max. at 60°C, one month max. at 40°C

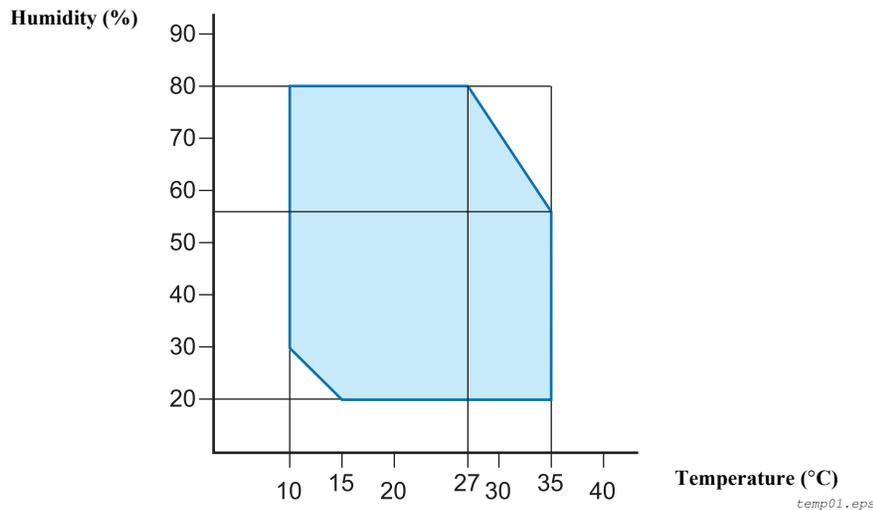   *2: No condensation. These values are applicable only within the range as shown below.

Figure 1-2. Environmental Conditions: Temperature/Humidity

1.2.9.2 Vibration

☐ During operation: 0.15G, 10 ~ 55Hz X,Y and Z directions

☐ During storage: 0.50G, 10 ~ 55Hz X,Y and Z directions

1.2.9.3 Shock

☐ During operation: 1G, 1ms max. X,Y and Z directions

☐ During storage: 2G, 2ms max. X,Y and Z directions

NOTE *1:* *For storage, check that the print head is capped.*

   2: *Before transportation, check that the print head is capped, remove the ink cartridges, and close the ink cartridge cover .*

   3: *If the power to the printer is OFF with the printer head uncapped, turn the power ON with the ink cartridges installed. Then wait until capping is completed, and turn the power OFF.*

   4: *If the printer is left standing at temperature of -15°C or below, the ink in the print head and ink cartridges will freeze. If the ink is frozen, leave the printer standing at temperature of 25°C for more than three hours before its use.*
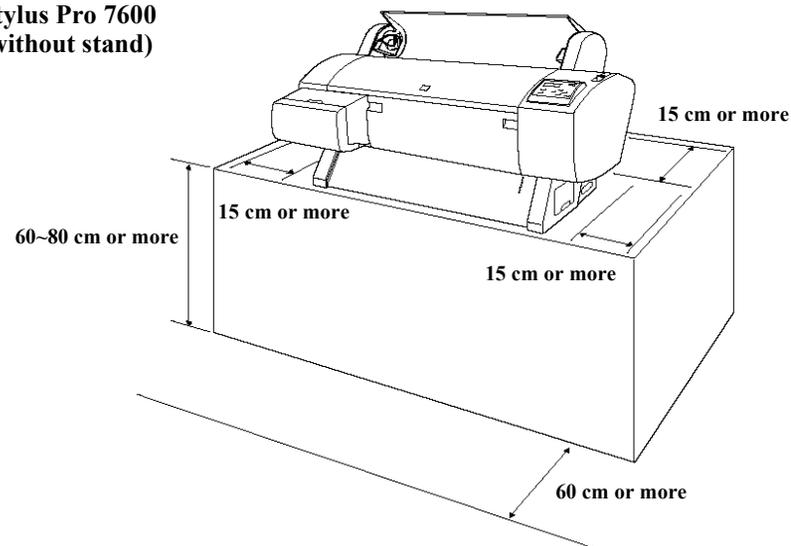
1.2.9.4 Surrounding Space

Provide the printer with an enough surrounding space to ensure proper installation of accessories and replacement of consumables and easy work for daily maintenance.

☐   From the front of the printer: 60 cm or more

☐   From the rear and both sides of the printer: 15 cm or more

■   When Stylus Pro 7600 is not equipped with the dedicated stand:
    Stylus Pro 7600 ejects paper downward. To prevent the ejected paper from being obstructed, install the printer on a table or desk 60 to 80 cm high above the floor and provide the printer with a 60 cm or more space in front.
    In doing so, locate the front rubber feet of the printer close to the front end of the table or the desk.

**Stylus Pro 7600
(without stand)**

15 cm or more

15 cm or more

60~80 cm or more

15 cm or more

60 cm or more

**Stylus Pro 7600 (with stand)/
Stylus Pro 9600**

15 cm or more

15 cm or more

15 cm or more

60 cm or more
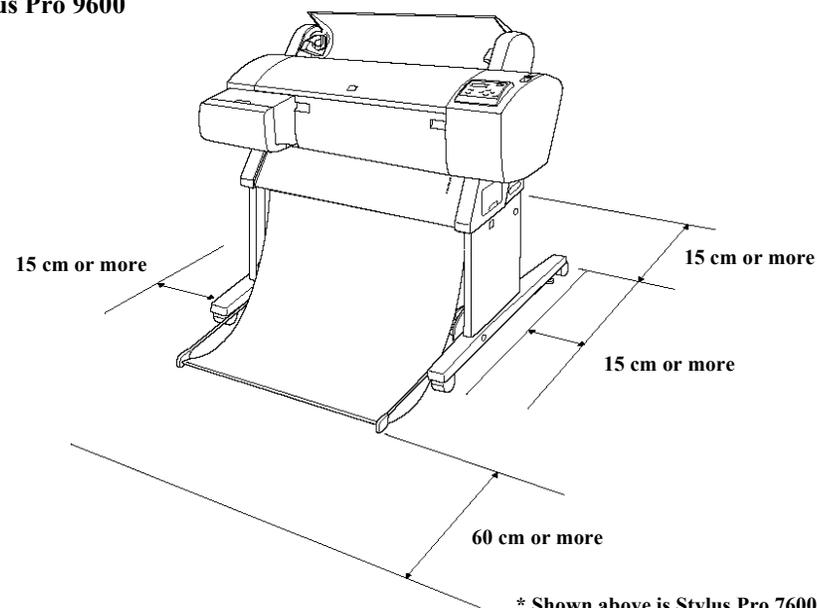
* Shown above is Stylus Pro 7600

Figure 1-3. Surrounding Space

1.2.10 Overall Dimensions
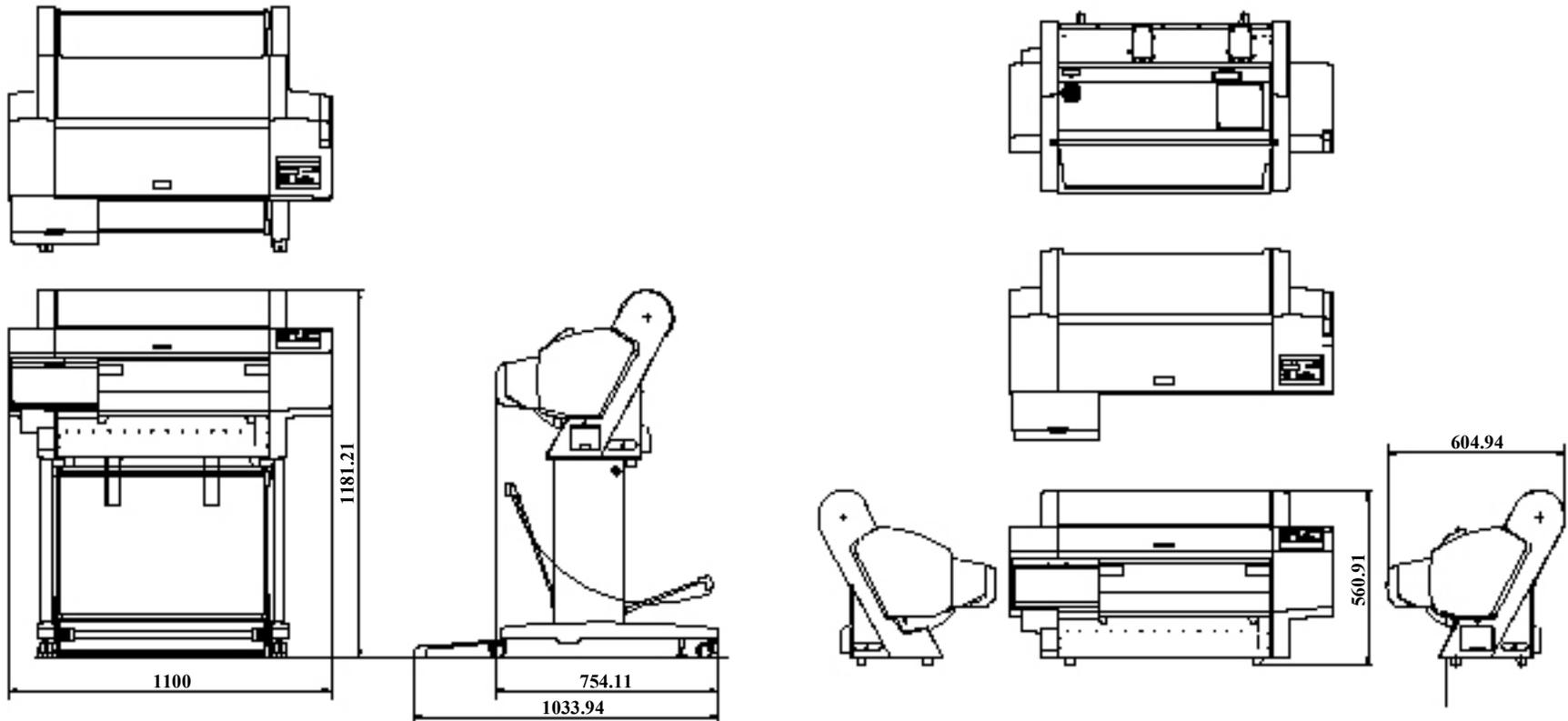
Figure 1-4. Overall Dimensions of Stylus Pro 7600

☐ Dimensions of Unit

Model	Condition	Width (W) × Depth (D) × Height (H) (mm)
Stylus Pro 7600	Printer body	1100 × 805 × 561
	Rearward paper eject	1100 × 754 × 1181
	Frontward paper eject	1100 × 1034 × 1181
Stylus Pro 9600	Frontward paper eject	1624 × 691 × 1178
	Rearward paper eject	1624 × 697 × 1178
	Frontward paper eject	1624 × 1076 × 1178

Note 1: For "rearward paper eject", the paper exit tray is brought down toward the rear.

2: For "frontward paper eject", the paper exit tray is brought down toward the front.
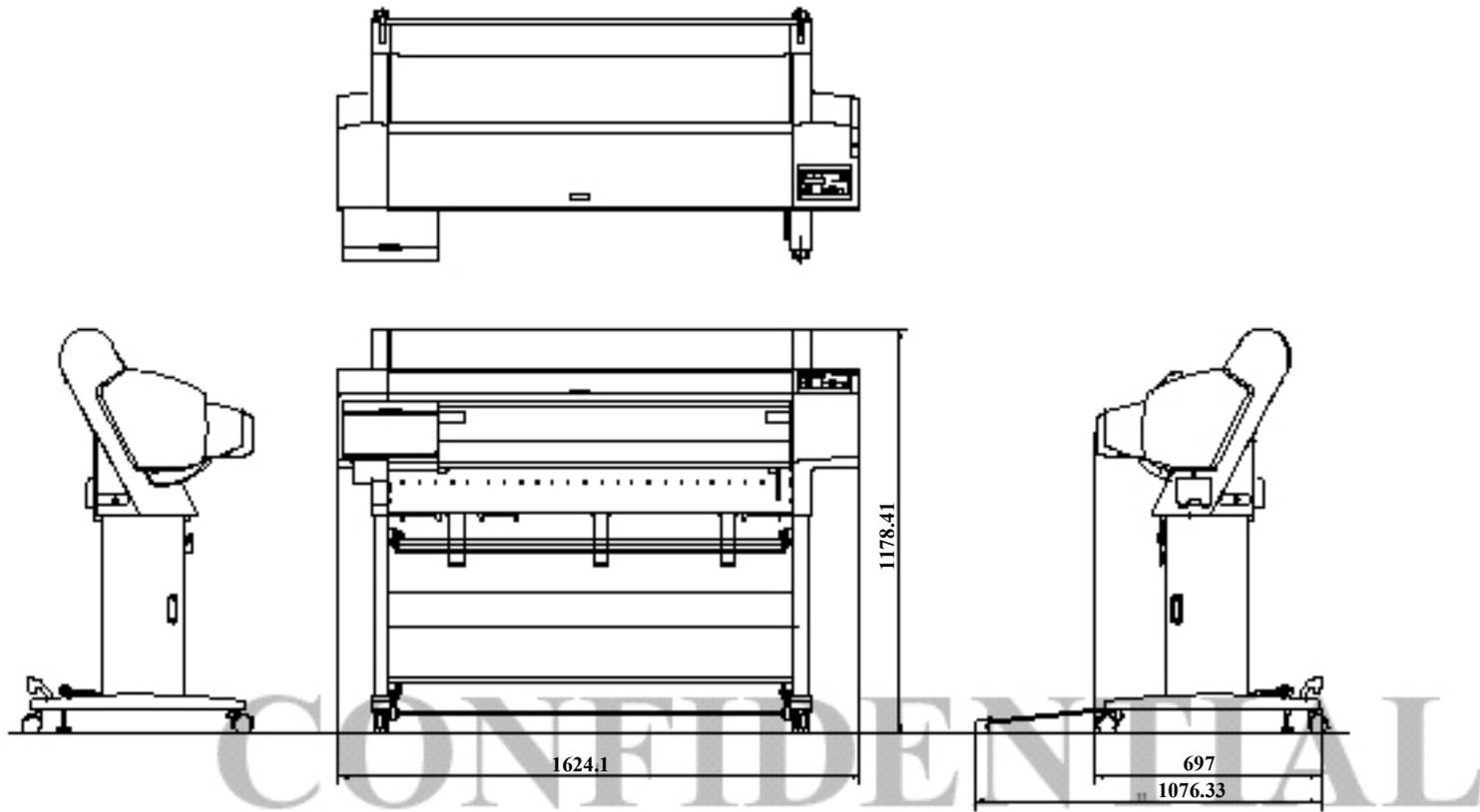
Figure 1-5. Overall Dimensions of Stylus Pro 9600

☐ Weight

Model	Condition	Weight
Stylus Pro 7600	Printer body (without feet mounted) *	About 43.5 kg
	Feet	About 10.5 kg
Stylus Pro 9600	Printer body (without feet mounted) *	About 62.0 kg
	Feet	About 22.5 kg

Note "*": Excluding the ink cartridges

1.2.11 Accessories

This section describes the accessories and options for Stylus Pro 7600 and Stylus Pro 9600.

1.2.11.1 Accessories and Options for Stylus Pro 7600

□ Standard Accessories
- AC Cable
- Change Plug Adapter 3pin to 2pin
- 24 (2/3) inch roll paper spindle
- Roll paper sample
- Roll paper belt
- Ink cartridges (110ml PK, MK, LK, C, M, LC, LM, Y)
- Maintenance Tank
- User's Manual
- Driver & User's Manual
- EPSON GrayBalancer & EPSON Printer Service Utility
- Utility Software
- Guarantee Card
- Card holder
- Carton Box

□ Special Options
- Special stand (PX70MCU)
- Manual cutter unit 24" (PX70MCU)
- Normal tension spindle 24"<2"/3"> (PX70RPSD)
- Black ink replacement kit (Draining cartridge, Cleaning cartridge)

□ Special Consumables
- Ink cartridge (110ml)

Name	Model Number
	110 ml (Standard Product)
Photo Black	ICBK24
Matte Black	ICMB24
Light Black	ICGY24
Cyan	ICC24
Magenta	ICLC24
Light Cyan	ICM24
Light Magenta	ICLM24
Yellow	ICY24

Note : The 220 ml ink cartridges are supported only by Stylus Pro 9600.

- Special paper (Refer to "1.2.5 Paper Specifications (p.15)" for paper type and size)
- Maintenance tank

□ Options Common to Other Printers
- Auto cutter blade (PM90SPB)
- Leo 2.13 (PRIFNW3S)
- Fairbanks (PRIF14)

1.2.11.2 Accessories and Options for Stylus Pro 9600

□ Standard accessories

- ■ AC Cable
- ■ Change Plug Adapter 3pin to 2pin
- ■ Special stand
- ■ 44 (2/3) inch roll paper spindle
- ■ Roll paper sample
- ■ Roll paper belt
- ■ Ink cartridges (110ml PK, MK, LK, C, M, LC, LM, Y)
- ■ Maintenance Tank
- ■ User's Manual
- ■ Driver & User's Manual
- ■ EPSON GrayBalancer & EPSON Printer Service Utility
- ■ Utility Software
- ■ Guarantee Card
- ■ Card holder
- ■ Carton Box

□ Special Options

- ■ Manual cutter unit 44"(PX90MCU)
- ■ Normal tension spindle 44"<2"/3"> (PX90RPSD)
- ■ High tension spindle 44"<2"/3"> (PX90HSD)
- ■ Black ink replacement kit (Draining cartridge, Cleaning cartridge)

□ Special Consumables

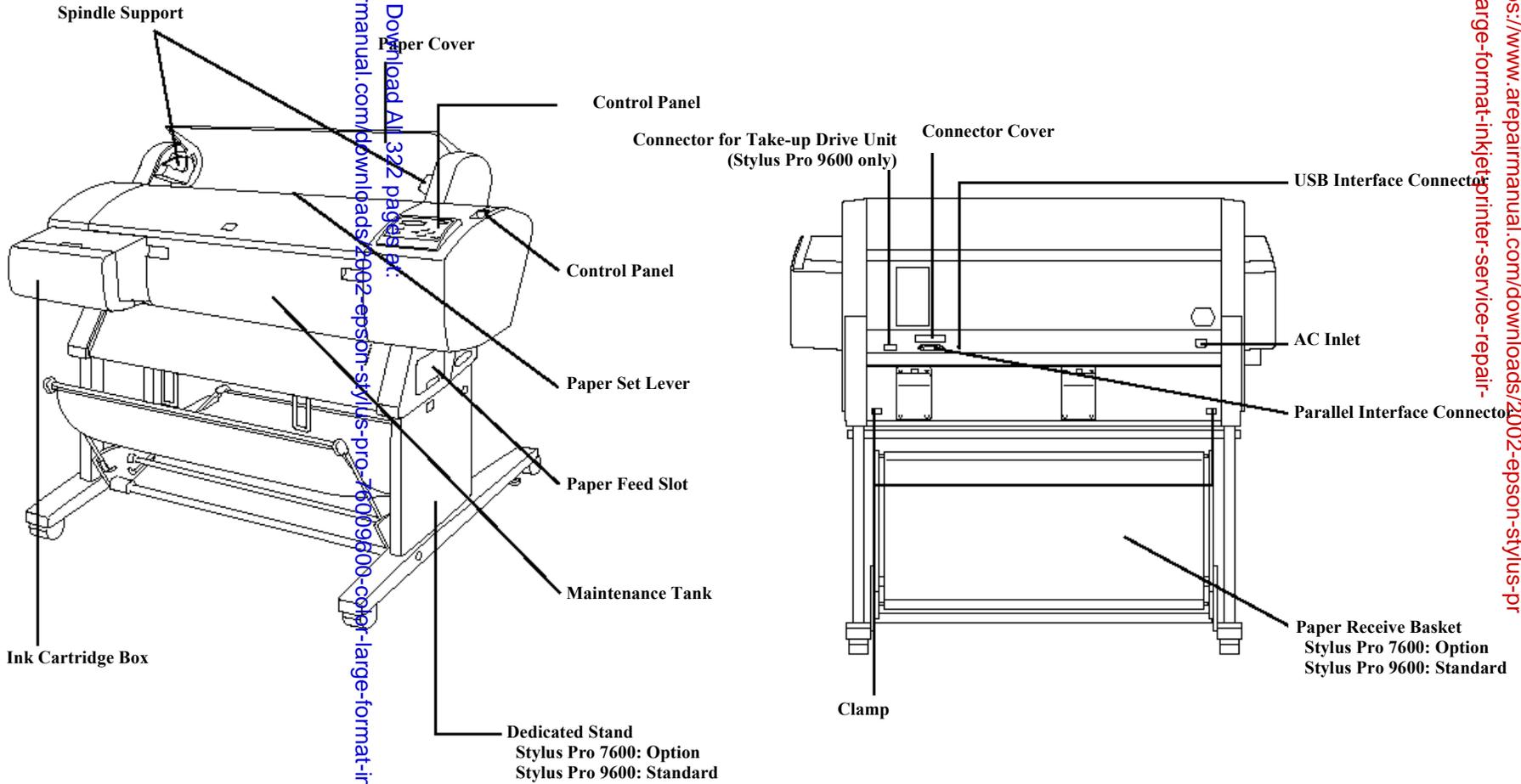- ■ Ink cartridge (110 ml/220 ml (only for pigment))

Name	Model Number	
	110 ml (Standard Product)	220ml (Option)*
Photo Black	ICBK24	ICBK25
Matte Black	ICMB24	ICMB25
Light Black	ICGY24	ICGY25
Cyan	ICC24	ICC25
Magenta	ICLC24	ICLC25
Light Cyan	ICM24	ICM25
Light Magenta	ICLM24	ICLM25
Yellow	ICY24	ICY25

Note : The 220 ml ink cartridges are supported only by Stylus Pro 9600.

- ■ Special paper (Refer to "1.2.5 Paper Specifications (p.15)" for paper type and size)
- ■ Maintenance tank

□ Options common to other printers

- ■ Auto cutter blade (PM90SPB)
- ■ Take-up roller (PMARFU1)
- ■ Leo 2.13 (PRIFNW3S)
- ■ Fairbanks (PRIF14)

1.3 External View and Parts Names

EXTERNAL VIEW

Spindle Support

Paper Cover

Control Panel

Connector for Take-up Drive Unit
(Stylus Pro 9600 only)

Connector Cover

USB Interface Connector

Control Panel

AC Inlet

Paper Set Lever

Parallel Interface Connector

Paper Feed Slot

Maintenance Tank

Ink Cartridge Box

Paper Receive Basket
  Stylus Pro 7600: Option
  Stylus Pro 9600: Standard

Clamp

Dedicated Stand
  Stylus Pro 7600: Option
  Stylus Pro 9600: Standard

Note :   Shown above is Stylus Pro 7600

Figure 1-6. External View and Parts Names