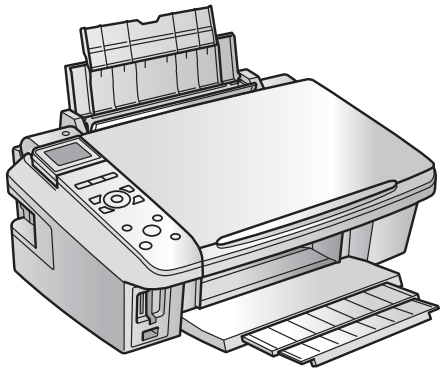
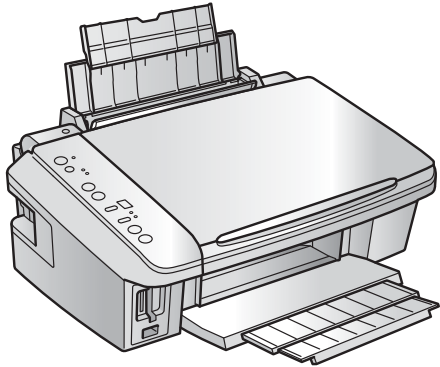


SERVICE MANUAL



Color Inkjet Printer

**EPSON Stylus CX7300/CX7400/DX7400/
CX8300/CX8400/DX8400**

Notice:

- All rights reserved. No part of this manual may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the prior written permission of SEIKO EPSON CORPORATION.
- The contents of this manual are subject to change without notice.
- All effort have been made to ensure the accuracy of the contents of this manual. However, should any errors be detected, SEIKO EPSON would greatly appreciate being informed of them.
- The above notwithstanding SEIKO EPSON CORPORATION can assume no responsibility for any errors in this manual or the consequences thereof.

EPSON is a registered trademark of SEIKO EPSON CORPORATION.

General Notice: Other product names used herein are for identification purpose only and may be trademarks or registered trademarks of their respective owners. EPSON disclaims any and all rights in those marks.

Copyright © 2007 **SEIKO EPSON CORPORATION.**
Imaging Products CS, PL & Environmental Management

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.
4. WHEN DISASSEMBLING OR ASSEMBLING A PRODUCT, MAKE SURE TO WEAR GLOVES TO AVOID INJURIES FROM METAL PARTS WITH SHARP EDGES.

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.
6. WHEN USING COMPRESSED AIR PRODUCTS; SUCH AS AIR DUSTER, FOR CLEANING DURING REPAIR AND MAINTENANCE, THE USE OF SUCH PRODUCTS CONTAINING FLAMMABLE GAS IS PROHIBITED.

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:

- Exploded Diagram
- Parts List
- Circuit Diagrams

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.



Indicates that a particular task must be carried out according to a certain standard after disassembly and before re-assembly, otherwise the quality of the components in question may be adversely affected.

Revision Status

Revision	Date of Issue	Description
A	August 9, 2007	First Release

Contents

Chapter 1 PRODUCT DESCRIPTION

1.1 Features.....	9
1.2 Printing Specifications.....	10
1.2.1 Basic Specifications.....	10
1.2.2 Ink Cartridge.....	10
1.2.3 Print Mode.....	11
1.2.4 Supported Paper.....	13
1.2.5 Printing Area.....	15
1.3 Scanner Specifications.....	15
1.3.1 Scanning Range.....	15
1.4 General Specifications.....	16
1.4.1 Electrical Specifications.....	16
1.4.2 Environmental Conditions.....	16
1.4.3 Durability.....	17
1.4.4 Acoustic Noise.....	17
1.4.5 Safety Approvals (Safety standards/EMI).....	17
1.5 Interface.....	17
1.5.1 USB Interface.....	17
1.5.2 Memory Card Slots.....	18
1.6 Control Panel.....	19
1.6.1 Operation Buttons & LEDs.....	19
1.6.2 Control Panel Functions in Each Mode.....	21
1.7 Specification for Each Function.....	29
1.7.1 Stand-alone Copy Function.....	29
1.7.2 Memory Card Direct Print Function.....	31
1.7.3 Camera Direct Print Function(USB Direct Print/PictBridge).....	36
1.7.4 Reprint/Restore Photos Function (CX8300/CX8400/DX8400 only).....	38
1.7.5 Setup Mode.....	39

Chapter 2 OPERATING PRINCIPLES

2.1 Overview.....	42
2.1.1 Printer Mechanism.....	42
2.1.2 Motors & Sensors.....	43
2.1.3 Printhead.....	44
2.1.4 Carriage Mechanism.....	46
2.1.5 Paper Loading/Paper Feed Mechanism.....	47
2.1.6 Ink System Mechanism.....	52
2.1.7 Ink Sequence.....	55
2.2 Scanner Mechanism.....	56
2.2.1 Scanner Carriage Mechanism.....	56
2.3 Electrical Circuit Operating Principles.....	58
2.3.1 PSB Board.....	58
2.3.2 C690 Main Board.....	59

Chapter 3 TROUBLESHOOTING

3.1 Overview.....	66
3.1.1 Specified Tools.....	66
3.1.2 Preliminary Checks.....	66
3.2 Troubleshooting.....	67
3.2.1 Motor and Sensor Troubleshooting.....	67
3.3 Error Indications and Fault Occurrence Causes.....	68
3.3.1 Error Indication Method.....	68
3.3.2 Troubleshooting by Error Message.....	72
3.3.3 Superficial Phenomenon-Based Troubleshooting.....	90

Chapter 4 DISASSEMBLY/ASSEMBLY

4.1 Overview	98
4.1.1 Precautions	98
4.1.2 Tools	98
4.1.3 Work Completion Check	99
4.1.4 Procedural Differences between the Models	100
4.2 Disassembly Procedures	101
4.3 Removing the Housing	102
4.3.1 Paper Support Assy	102
4.3.2 Stacker Assy	102
4.3.3 Document Cover/ASF Cover	103
4.3.4 Scanner Unit/Hinge	104
4.3.5 Upper Housing/Card Slot Cover	106
4.4 Removing the Circuit Boards	107
4.4.1 Main Board Unit	107
4.4.2 Panel Unit/LCD Unit	109
4.4.3 Power Supply Unit	111
4.5 Disassembling the Printer Mechanism	113
4.5.1 Printhead	113
4.5.2 CR Scale	115
4.5.3 Hopper	116
4.5.4 Removing the Printer Mechanism (Lower Housing)	117
4.5.5 Left Frame	119
4.5.6 Front Frame/Right Frame	120
4.5.7 Star Wheel Holder Assy	122
4.5.8 EJ Roller	122
4.5.9 PF Encoder Sensor	123
4.5.10 PF Scale	124
4.5.11 PF Motor	124
4.5.12 CR Motor	126
4.5.13 Main Frame Assy	127
4.5.14 CR Unit	130
4.5.15 Upper Paper Guide	131
4.5.16 ASF Unit	132
4.5.17 Ink System Unit	133
4.5.18 Front Paper Guide	136
4.5.19 PF Roller	137
4.5.20 Waste Ink Pads	138

4.6 Disassembling the Scanner Unit	139
4.6.1 Upper/Front Scanner Housing	139
4.6.2 Scanner Carriage Unit	140
4.6.3 Scanner Motor Unit	143
4.7 Differences in Disassembling/Reassembling Stylus CX7300/CX7400/DX7400	144
4.7.1 Panel Unit (CX7300/CX7400/DX7400)	144

Chapter 5 ADJUSTMENT

5.1 Adjustment Items and Overview	147
5.1.1 Servicing Adjustment Item List	147
5.1.2 Required Adjustments	149
5.2 Using the Adjustment Program	151
5.2.1 TOP Margin Adjustment	151
5.2.2 First Dot Position Adjustment	151
5.2.3 Head Angular Adjustment	152
5.2.4 Bi-D Adjustment	153
5.2.5 PF Adjustment	153
5.2.6 PF Band Adjustment	154
5.2.7 Bottom Margin Adjustment	155

Chapter 6 MAINTENANCE

6.1 Overview	157
6.1.1 Cleaning	157
6.1.2 Service Maintenance	157
6.1.3 Lubrication	158

Chapter 7 APPENDIX

7.1 Exploded Diagram / Parts List	164
7.2 Electrical Circuits	164

CHAPTER

1

PRODUCT DESCRIPTION

1.1 Features

EPSON Stylus CX7300/CX7400/DX7400/CX8300/CX8400/DX8400 are color ink-jet printers with scanner function and have the following features.

The difference in appearance between the two models is LCD; CX8300/CX8400/DX8400 is equipped with LCD, and CX7300/CX7400/DX7400 is not equipped with it.

□ Available Functions

- Printer
Printing from a computer or directly printing from a memory card.
- Scanner
Scanning from a computer
- Copy
Stand alone copy using the scanning and printing functions
- Memory card slot
Available as USB memory card slot for PC
- Color LCD (CX8300/CX8400/DX8400 only)
2.5-inch color TFD LCD

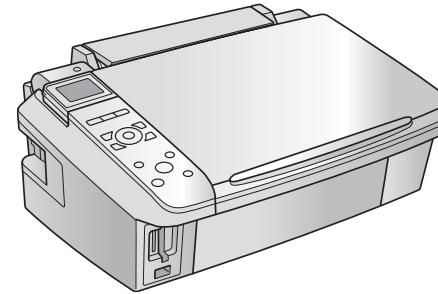
□ High speed & High quality

- Maximum print resolution: SMGA 5760 (H) x 1440 (V) dpi
- D4-chips Turbo II Printhead achieves higher print speed than ever.
(Black: 90 nozzles x 1, Color: 90 nozzles x 1 per color)
- Four independent ink cartridges is installed.
- Newly developed pigment ink is employed.
- Borderless printing on specified EPSON brand paper is available.

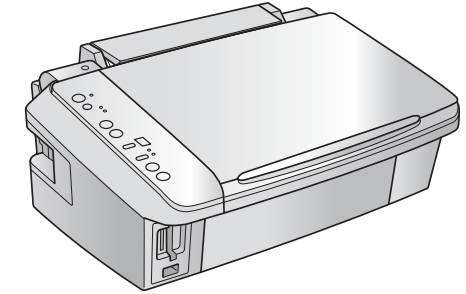
□ Dimensions

- Dimensions: 450 mm (W) x 340 mm (D) x 179 mm (H)
(Paper support and stacker are closed. Rubber feet are excluded)
- Weight: CX8300/CX8400/DX8400: 5.9 kg
CX7300/CX7400/DX7400: 5.8 kg
(Paper support and stacker are closed. Rubber feet are excluded)

CX8300/CX8400/DX8400

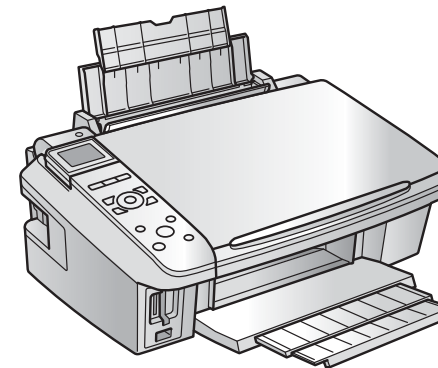


CX7300/CX7400/DX7400

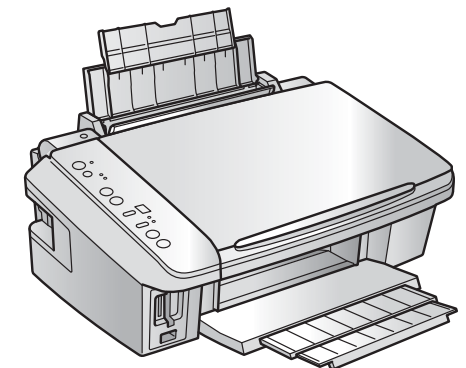


Paper Support & Stacker are Closed

CX8300/CX8400/DX8400



CX7300/CX7400/DX7400



Paper Support & Stacker are Opened

Figure 1-1. External View

1.2 Printing Specifications

1.2.1 Basic Specifications

Table 1-1. Printer Specifications

Item	Specification
Print method	On-demand ink jet
Nozzle configuration	Black: 90 nozzles x 1 Color: 90 nozzles x 3 (Cyan, Magenta, Yellow)
Print direction	Bi-directional minimum distance printing, Unidirectional printing
Print resolution	Horizontal x Vertical (dpi) <ul style="list-style-type: none"> • 360 x 120 • 1440 x 720 • 360 x 360 • 1440 x 1440 • 360 x 720 • SMGA 5760 x 1440 (2880 x 1440) • 720 x 720
Control code	<ul style="list-style-type: none"> • ESC/P Raster command • EPSON Remote command
Input buffer size	64 Kbytes
Paper feed method	Friction feed, using the ASF (Auto Sheet Feeder)
Paper path	Top feed, front out
Paper feed rates	T.B.D. mm/sec (at 25.4 mm feed)
PF interval	Programmable in 0.01764 mm (1/1440 inch) steps

1.2.2 Ink Cartridge

The product numbers of the EPSON ink cartridges for this printer are shown below.

Table 1-2. Product No. of Ink Cartridges

Color	EAI	Latin	Euro	CISMEA	Asia
Black	T0681 (S)*1 T0691 (2S) T0881 (3S)*2	T0731H (S) T0731 (2S) T0901 (3S)	T0711H (S) T0711 (2S)	T0731H (S) T0731 (2S)	T0731 (2S)
Cyan	T0692 (3S) T0882 (4S)*2	T0732 (3S)	T0712 (3S)	T0732 (3S)	T0732 (3S)
Magenta	T0693 (3S) T0883 (4S)*2	T0733 (3S)	T0713 (3S)	T0733 (3S)	T0733 (3S)
Yellow	T0694 (3S) T0884 (4S)*2	T0734 (3S)	T0714 (3S)	T0734 (3S)	T0734 (3S)

Note *1: Available only with CX8300/CX8400/DX8400.

*2: Available only with CX7300/CX7400/DX7400.

Shelf life

Two years from production date (if unopened), six months after opening package.

Storage Temperature

Table 1-3. Storage Temperature

Situation	Storage Temperature	Limit
When stored in individual boxes	-20 °C to 40 °C (-4°F to 104°F)	1 month max. at 40 °C (104°F)
When installed in main unit	-20 °C to 40 °C (-4°F to 104°F)	

Dimension

12.7 mm (W) x 68 mm (D) x 47 mm (H)



- Do not use expired ink cartridges.
- The ink in the ink cartridge freezes at -16 °C (3.2 °F). It takes about three hours under 25 °C (77°F) until the ink thaws and becomes usable.

1.2.3 Print Mode

Table 1-4. Print Mode (Color)

Media	Print Mode	Resolution (H x V dpi)	Dot Size (cps)	Bi-d	Micro Weave	Border-less
<ul style="list-style-type: none"> Plain paper Premium Bright White Paper (EAI) Premium Bright White Inkjet Paper (others) 	Fast Economy/Economy	360x120	Eco (400cps)	ON	OFF	N/A
	Draft	360x120	Eco (400cps)	ON	OFF	N/A
	Normal	360x360	VSD1 (245cps)	ON	OFF	N/A
	Fine (360)	360x720	VSD2 (285cps)	ON	ON	OK
	Fine (720)	720x720	VSD3 (285cps)	ON	ON	OK
	<ul style="list-style-type: none"> Ultra Premium Glossy Photo Paper (EAI) Ultra Glossy Photo Paper (others) 	Photo (1440)	1440x720	VSD3 (285cps)	ON	ON
Photo2 (1440)		1440x1440	VSD3 (285cps)	ON	ON	OK
Photo (5760)		2880x1440	VSD3 (285cps)	ON	ON	OK
<ul style="list-style-type: none"> Photo Paper Glossy (EAI) Glossy Photo Paper (others) Premium Photo Paper Glossy (EAI) Premium Glossy Photo Paper (others) Premium Photo Paper Semi-Gloss (EAI) Premium Semigloss Photo Paper (other) 	Photo Draft	360x720	VSD1 (245cps)	ON	ON	N/A
	Photo (720)	720x720	VSD2 (285cps)	ON	ON	OK
	Photo (1440)	1440x720	VSD3 (285cps)	ON	ON	OK
	Photo2 (1440)	1440x1440	VSD3 (285cps)	ON	ON	OK
	Photo (5760)	2880x1440	VSD3 (285cps)	ON	ON	OK
	<ul style="list-style-type: none"> Premium Presentation Paper Matte (EAI) Matte Paper Heavy-weight (others) 	Photo (720)	720x720	VSD2 (285cps)	ON	ON
Photo (1440)		1440x720	VSD3 (285cps)	ON	ON	OK

Table 1-4. Print Mode (Color)

Media	Print Mode	Resolution (H x V dpi)	Dot Size (cps)	Bi-d	Micro Weave	Border-less
<ul style="list-style-type: none"> Photo Quality Inkjet Paper* (others) 	Photo (720)	720x720	VSD2 (285cps)	ON	ON	N/A
	Photo (1440)	1440x720	VSD3 (285cps)	ON	ON	N/A
Envelope	Normal	360x360	VSD1 (245cps)	OFF	OFF	N/A
	Fine (720)	720x720	VSD3 (285cps)	OFF	ON	N/A

Note* : Not supported in EAI.

Table 1-5. Print Mode (Monochrome)

Media	Print Mode	Resolution (H x V dpi)	Dot Size (cps)	Bi-d	Micro Weave	Border-less
<ul style="list-style-type: none"> • Plain paper • Premium Bright White Paper (EAI) • Premium Ink Jet Plain papers (others) 	Fast Economy/Economy	360x120	Eco (400cps)	ON	OFF	N/A
	Draft	360x120	Eco (400cps)	ON	OFF	N/A
	Normal	360x360	VSD1 (245cps)	ON	OFF	N/A
	Fine (360)	360x720	VSD2 (285cps)	ON	ON	N/A
	Fine (720)	720x720	VSD3 (285cps)	ON	ON	N/A
<ul style="list-style-type: none"> • Ultra Premium Glossy Photo Paper (EAI) • Ultra Glossy Photo Paper (others) 	Photo (1440)	1440x720	VSD3 (285cps)	ON	ON	OK
	Photo2 (1440)	1440x1440	VSD3 (285cps)	ON	ON	OK
	Photo (5760)	2880x1440	VSD3 (285cps)	ON	ON	OK
<ul style="list-style-type: none"> • Photo Paper Glossy (EAI) • Glossy Photo Paper (others) • Premium Photo Paper Glossy (EAI) • Premium Glossy Photo Paper (others) • Premium Photo Paper Semi-Gloss (EAI) • Premium Semigloss Photo Paper (other) 	Photo Draft	360x720	VSD1 (245cps)	ON	ON	OK
	Photo (720)	720x720	VSD2 (285cps)	ON	ON	OK
	Photo (1440)	1440x720	VSD3 (285cps)	ON	ON	OK
	Photo2 (1440)	1440x1440	VSD3 (285cps)	ON	ON	OK
	Photo (5760)	2880x1440	VSD3 (285cps)	ON	ON	OK
<ul style="list-style-type: none"> • Premium Presentation Paper Matte (EAI) • Matte Paper Heavy-weight (others) 	Photo (720)	720x720	VSD2 (285cps)	ON	ON	OK
	Photo (1440)	1440x720	VSD3 (285cps)	ON	ON	OK

Table 1-5. Print Mode (Monochrome)

Media	Print Mode	Resolution (H x V dpi)	Dot Size (cps)	Bi-d	Micro Weave	Border-less
<ul style="list-style-type: none"> • Photo Quality Inkjet Paper* (others) 	Photo (720)	720x720	VSD2 (285cps)	ON	ON	N/A
	Photo (1440)	1440x720	VSD3 (285cps)	ON	ON	N/A
Envelope	Normal	360x360	VSD1 (320cps)	OFF	OFF	N/A
	Fine (720)	360x720	VSD3 (285cps)	OFF	ON	N/A

Note* : Not supported in EAI.

1.2.4 Supported Paper

The table below lists the paper type and sizes supported by the printer. The supported paper type and sizes vary depending on destinations (between EAI, EUR, and Asia).

Table 1-6. Supported Paper

Paper Name	Paper Size		Thickness (mm)	Weight	EAI		EUR		Asia	
					P*1	B*2	P*1	B*2	P*1	B*2
Plain paper	Legal	215.9 x 355.6 mm (8.5"x14")	0.08-0.11	64-90 g/m ² (17-24 lb.)	Y	-	Y	-	Y	-
	Letter	215.9 x 279.4 mm (8.5"x11")			Y	-	Y	-	Y	-
	A4	210 x 297 mm (8.3"x11.7")			Y	-	Y	-	Y	-
	B5	182 x 257 mm (7.2"x10.1")			-	-	Y	-	Y	-
	A5	148 x 210 mm (5.8"x8.3")			-	-	Y	-	Y	-
	Half Letter	139.7 x 215.9 mm (5.5"x8.5")			Y	-	-	-	-	-
	A6	105 x 148 mm (4.2"x5.8")			Y	-	Y	-	Y	-
	User Defined	89 x 127- 329 x 1117.6 mm (3.56"x 5.08" - 13.16"x44.7")			Y	-	Y	-	Y	-
Premium Inkjet Plain Paper	A4	210 x 297 mm (8.3"x11.7")	0.11	80 g/m ² (21 lb.)	-	-	Y	-	Y	-
Premium Bright White Paper (EAI) Bright White Inkjet Paper (Euro, Asia)	Letter	215.9 x 279.4 mm (8.5"x11")	0.11	90 g/m ² (24 lb.)	Y	-	-	-	-	-
	A4	210 x 297 mm (8.3"x11.7")	0.13	92.5 g/m ² (25 lb.)	-	-	Y	-	Y	-
Ultra Premium Glossy Photo Paper (EAI) Ultra Glossy Photo Paper (Euro, Asia)	Letter	215.9 x 279.4 mm (8.5"x11")	0.30	290 g/m ² (77 lb.)	Y	Y	-	-	-	-
	A4	210 x 297 mm (8.3"x11.7")			-	-	Y	Y	Y	Y
	8" x 10"	203.2 x 254 mm			Y	Y	-	-	-	-
	5" x 7"	127 x 178 mm			Y	Y	Y	Y	-	-
	4" x 6"	101.6 x 152.4 mm			Y	Y	Y	Y	Y	Y

Note *1: "Y" in the "P" column stands for "the paper type/size is Supported".

*2: "Y" in the "B" column stands for "Borderless printing is available".



- **Make sure the paper is not wrinkled, fluffed, torn, or folded.**
- **The curve of paper must be 5 mm or below.**
- **When printing on an envelope, be sure the flap is folded neatly.**
- **Do not use the adhesive envelopes.**
- **Do not use double envelopes and cellophane window envelopes.**

Table 1-6. Supported Paper

Paper Name	Paper Size		Thickness (mm)	Weight	EAI		EUR		Asia	
					P*1	B*2	P*1	B*2	P*1	B*2
Premium Photo Paper Glossy (EAI) Premium Glossy Photo Paper (Euro, Asia)	Letter	215.9 x 279.4 mm (8.5"x11")	0.27	255 g/m ² (68 lb.)	Y	Y	-	-	-	-
	A4	210 x 297 mm (8.3"x11.7")			Y	Y	Y	Y	Y	Y
	8" x 10"	203.2 x 254 mm			Y	Y	-	-	-	-
	5" x 7"	127 x 178 mm			Y	Y	Y	Y	Y	Y
	4" x 6"	101.6 x 152.4 mm			Y	Y	Y	Y	Y	Y
	16:9 wide	101.6 x 180.6 mm			Y	Y	Y	Y	Y	Y
Photo Paper Glossy (EAI) Glossy Photo Paper (Euro, Asia)	Letter	215.9 x 279.4 mm (8.5"x11")	0.25	258 g/m ² (68 lb.)	Y	Y	-	-	-	-
	A4	210 x 297 mm (8.3"x11.7")			Y	Y	Y	Y	Y	Y
	5" x 7"	127 x 178 mm			-	-	Y	Y	-	-
	4" x 6"	101.6 x 152.4 mm			Y	Y	Y	Y	Y	Y
Premium Photo Paper Semi-Gloss (EAI) Premium Semigloss Photo Paper (Euro, Asia)	Letter	215.9 x 279.4 mm (8.5"x11")	0.27	250 g/m ² (66 lb.)	Y	Y	-	-	-	-
	A4	210 x 297 mm (8.3"x11.7")			-	-	Y	Y	Y	Y
	4" x 6"	101.6 x 152.4 mm			Y	Y	Y	Y	Y	Y
Premium Presentation Paper Matte (EAI) Matte Paper-Heavyweight (Euro, Asia)	Letter	215.9 x 279.4 mm (8.5"x11")	0.23	167 g/m ² (44 lb.)	Y	Y	-	-	-	-
	A4	210 x 297 mm (8.3"x11.7")			-	-	Y	Y	Y	Y
	8" x 10"	203.2 x 254 mm			Y	Y	-	-	-	-
Photo Quality Inkjet Paper	A4	210 x 297 mm (8.3"x11.7")	0.13	102 g/m ² (27 lb.)	-	-	Y	-	Y	-
Envelopes	#10	104.8 x 241.3 mm (4.125"x9.5")	-	75-100 g/m ² (20-27 lb.)	Y	-	Y	-	Y	-
	#DL	110 x 220 mm			-	-	Y	-	Y	-
	#C6	114 x 162 mm			-	-	Y	-	Y	-

Note *1: "Y" in the "P" column stands for "the paper type/size is Supported".

*2: "Y" in the "B" column stands for "Borderless printing is available".



- Make sure the paper is not wrinkled, fluffed, torn, or folded.
- The curve of paper must be 5 mm or below.
- When printing on an envelope, be sure the flap is folded neatly.
- Do not use the adhesive envelopes.
- Do not use double envelopes and cellophane window envelopes.

1.2.5 Printing Area

The printing area for this printer is shown below.

Table 1-7. Printing Area (Margins)

Print Mode	Paper Size	Margin			
		Left	Right	Top	Bottom
Standard print	Any size	3 mm	3 mm	3 mm	3 mm
	Envelope	5 mm	5 mm	3 mm	20 mm
Borderless print	A4/Letter to 5" x 7" / Hi-Vision	2.54 mm*	2.54 mm*	2.96 mm*	3.39 mm*
	4" x 6"			2.82 mm*	3.39 mm*

Note *: The margins for Borderless print are margins that bleed off the edges of paper.

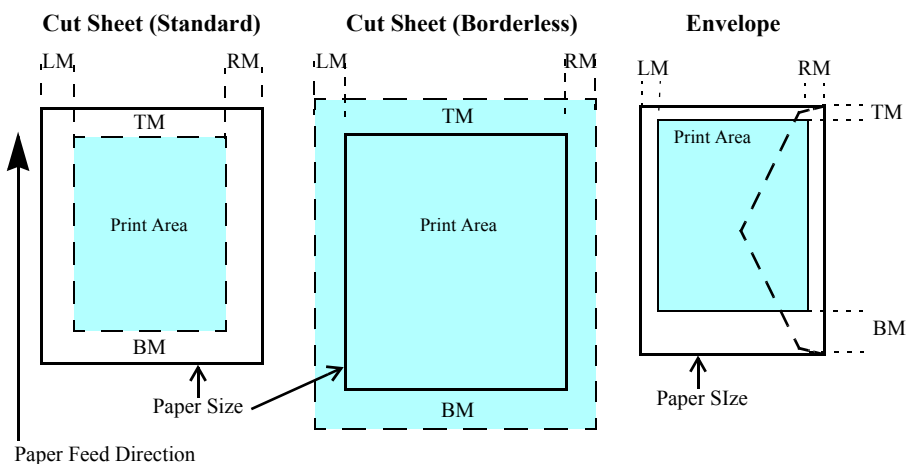


Figure 1-2. Printing Area

1.3 Scanner Specifications

Table 1-8. Basic Specifications

Item	Specification
Scanner type	Flatbed, color
Scanning method	Moving carriage, stationary document
Home position	The front right corner
Photoelectric device	CIS
Light source	LED
Maximum document sizes	A4 or US letter
Scanning range	8.5" x 11.7" (216 mm x 297 mm)
Maximum resolution	Main scan: 1200 dpi Sub scan: 2400 dpi
Maximum effective pixels	10,200 x 14,040 pixels (CIS optical resolution x Microstep drive)
Pixel depth	16 bit per pixel (input) and 8 bit per pixel (output).

1.3.1 Scanning Range

Table 1-9. Scanning Range

RL (read length)	RW (read width)	OLM (left margin)	OTM (top margin)
216 mm	297 mm	1.5 mm	1.5 mm

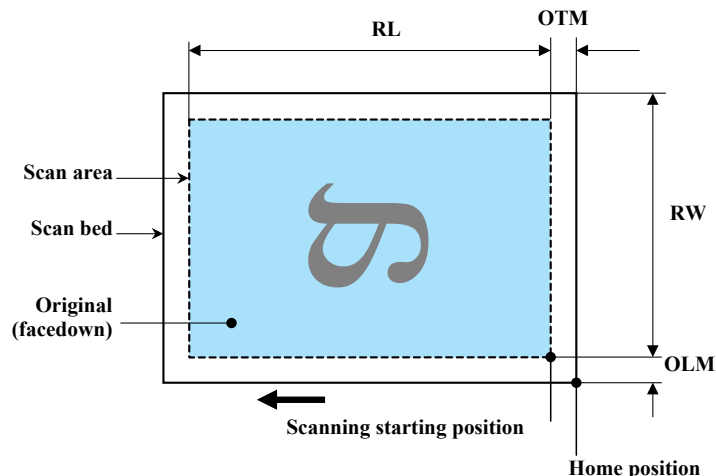


Figure 1-3. Scanning Range

1.4 General Specifications

1.4.1 Electrical Specifications

Table 1-10. Primary Power Specifications

Item		100-120 V model	220-240 V model
Rated power supply voltage		100 to 120 VAC	220 to 240 VAC
Input voltage range		90 to 132 VAC	198 to 264 VAC
Rated current (Max. rated current)		T.B.D. A (T.B.D. A)	T.B.D. A (T.B.D. A)
Rated frequency		50 to 60 Hz	
Input frequency range		49.5 to 60.5 Hz	
Insulation resistance		3000 V (for one minute)	
Energy conservation		International Energy Star Program compliant	
Power consumption	Printing (ISO10561 Letter Pattern)	T.B.D. W	T.B.D. W
	Low-power mode	T.B.D. W	T.B.D. W
	Sleep mode	T.B.D. W	T.B.D. W
	Standby mode (power-off)	T.B.D. W	T.B.D. W

- Note 1: If the printer or scanner is not operated for more than three minutes, the printer goes into the power save mode within two minutes.
- 2: When no operation is made with the control panel for more than 13 minutes, the panel goes to the power save mode within two minutes.

1.4.2 Environmental Conditions

Table 1-11. Environmental Conditions

Condition	Temperature*1	Humidity*1,2	Shock	Vibration
Operating	10 to 35°C (50 to 95°F)	20 to 80%	1G (1 msec or less)	0.15G, 10 to 55Hz
Storage (unpacked)	-20 to 40°C*3 (-4°F to 104°F)	5 to 85%	2G (2 msec or less)	0.50G, 10 to 55Hz

- Note *1: The combined Temperature and Humidity conditions must be within the blue-shaded range in Fig.1-4.
- *2: No condensation
- *3: Must be less than 1 month at 40°C.

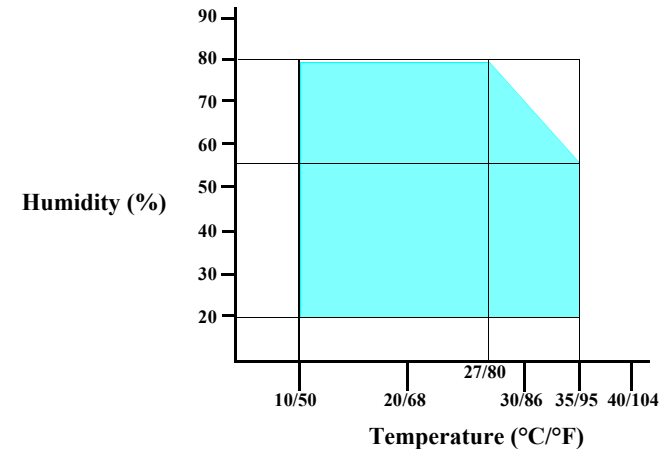


Figure 1-4. Temperature/Humidity Range



- When returning the repaired printer to the customer, make sure the Printhead is covered with the cap and the ink cartridge is installed.
- If the Printhead is not covered with the cap when the printer is off, turn on the printer with the ink cartridge installed, make sure the Printhead is covered with the cap, and then turn the printer off.

1.4.3 Durability

- Total print life: Black 20,000 pages (A4, 3.5% duty), Color 10,000 pages (A4, ISO FDC24712), or five years which ever comes first
- Printhead: Five billions shots (per nozzle) or five years which ever comes first
- Scanner carriage: 36,000 cycles of carriage movement

1.4.4 Acoustic Noise

- **T.B.D.** dB (when printing from PC, on Premium Glossy Photo Paper, in highest quality)
- **T.B.D.** dB (when scanning, default setting)

1.4.5 Safety Approvals (Safety standards/EMI)

USA	UL60950-1 FCC Part15 Subpart B Class B
Canada	CSA No.60950-1 CAN/CSA-CEI/IEC CISPR 22 Class B
Mexico	NOM-019-SCFI-1998
Taiwan	CNS13438 Class B CNS14336
EU	EN60950-1 EN55022 Class B EN61000-3-2, EN61000-3-3 EN55024
Germany	EN60950-1
Russia	GOST-R (IEC60950-1, CISPR 22)
Singapore	IEC60950-1
Korea	K60950-1 KN22 Class B KN61000-4-2/-3/-4/-5/-6/-11
China*	GB4943 GB9254 Class B, GB17625.1
Hong Kong*	IEC60950-1
Argentina	IEC60950-1
Australia	AS/NZS CISPR22 Class B

Note* : Only for CX8300/CX8400/DX8400

1.5 Interface

This printer has USB interface and memory card slots of the following specifications.

1.5.1 USB Interface

The table below describes the specifications of the two USB ports; USB device port for connecting with a host such as a computer, and the USB host port for connecting with an external devices such as a DSC (digital still camera).

Table 1-12. USB Interface Specifications

Item	USB Device port	USB Host port*
Compatible standards	<ul style="list-style-type: none"> • Universal Serial Bus Specifications Revision 2.0 • Universal Serial Bus Device Class Definition for Printing Devices Version 1.1 	<ul style="list-style-type: none"> • Universal Serial Bus Specifications Revision 2.0 • Universal Serial Bus Mass Storage Class Bulk-Only Transport Revision 1.0
Transfer rate	480 Mbps (High Speed)	12 Mbps (Full Speed)
Data format	NRZI	
Compatible connector	USB Series B	USB Series A
Max. cable length	2 [m] or less	

Note* : External devices that can be connected to the USB device port are:
 DSC compliant with the USB Direct Print Protocol specification Rev 1.0
 DSC compliant with the CIPA DC-001-2003 (PictBridge) specifications

Table 1-13. Device ID

When IEEE 1284.4 is Enabled	When IEEE 1284.4 is Disabled
MFG:EPSON; CMD:ESCPL2,BDC,D4,D4PX,ESCPR1; MDL: <i>Model Name</i> ; CLS:PRINTER; DES:EPSON[SP] <i>Model Name</i> ;	MFG:EPSON; CMD:ESCPL2,BDC;ESCPR1; MDL: <i>Model Name</i> ; CLS:PRINTER; DES:EPSON[SP] <i>Model Name</i> ;

The “*Model Name*” is replaced as shown in the following table.

Table 1-14. Model Names Indicated in the Device ID

Destination	CX7300/CX7400/DX7400	CX8300/CX8400/DX8400
North America	Stylus CX7400	Stylus CX8400
Euro	Stylus DX7400	Stylus DX8400
Asia/Pacific	Stylus CX7300	Stylus CX8300

1.5.2 Memory Card Slots

Table 1-15. List of Supported Memory Card

Priority	Slot	Compatible memory card	Standard	Max. capacity	Remarks	
1	Memory Stick/ Memory Stick PRO	Memory Stick	“MemoryStick Standard” Format Specification Ver.1.42-00 compatible	128MB	Includes versions with memory select function	
		MagicGate Memory Stick		128MB	Copy protection function is not supported	
		MagicGate Memory Stick Duo			An adapter should be used	
		Memory Stick PRO	Memory Stick PRO Format Specifications-without security specifications Ver.1.02-00 compatible	4GB	Copy protection function is not supported	
		Memory Stick Duo	MemoryStick Duo Format Specification Ver.1.11-00 compatible		The Memory Stick Duo adapter should be used	
		Memory Stick Pro Duo	MemoryStick PRO Duo Format Specification Ver.1.02-00 compatible		The Memory Stick Duo adapter should be used.	
		Memory Stick micro	Memory Stick Micro Format Specification Ver.1.02-00 compatible		The Memory Stick adapter for standard size should be used.	
	SD/MMC	SD (Security Digital)	SD Memory Card Specifications / PART1. Physical Layer Specification Ver. 2.0 compatible		2GB	The SD adapter should be used
		miniSD/microSD				
		SDHC			8GB	Speed Class is not supported The SD adapter should be used Speed Class is not supported
		miniSDHC/microSDHC				
		MultiMediaCard MultiMediaCard Plus	MultiMediaCard Standard Ver. 4.1 compatible	64MB/ 4GB	Only MultiMediaCard Plus supports 4GB	
	xD-Picture card	xD-Picture card	xD-Picture Card Specification Ver.1.20 compatible	2GB	Type M/H supported	
2	CF Type II	Compact Flash	CF+ and CompactFlash Specification Revision 3.0 compatible	4GB	True-IDE compatible memory card only	
		Microdrive				

- Note:
- Memory Stick/PRO, SD/MMC and xD-Picture Card shares the same slot.
 - When cards are inserted in the two slots at once, the slot which will be accessed first is determined according to the priority shown in the table.
 - To select a card that has been inserted in a non-active slot, first remove the card in the active slot.
 - In memory card direct printing mode, the image files in the active slot are valid and have assigned frame numbers. The number of images will not change if a card is inserted in another nonselected slot.
 - When the card inserted in the slot is accessed from the PC, only one drive is displayed at a time as a removable disk* and only the card that is in the active slot can be accessed via the removable disk. A card that has been inserted into a non-selected slot cannot be accessed.
(This is for Windows. For Macintosh, the card in the active slot will be mounted on the desktop.)
 - Does not support 5V type of memory cards.
 - When a memory card is being accessed, do not touch the memory card.
 - For detailed information on the supported file system and formatting the memory card, refer to “[1.7.2 Memory Card Direct Print Function \(p. 31\)](#)”.

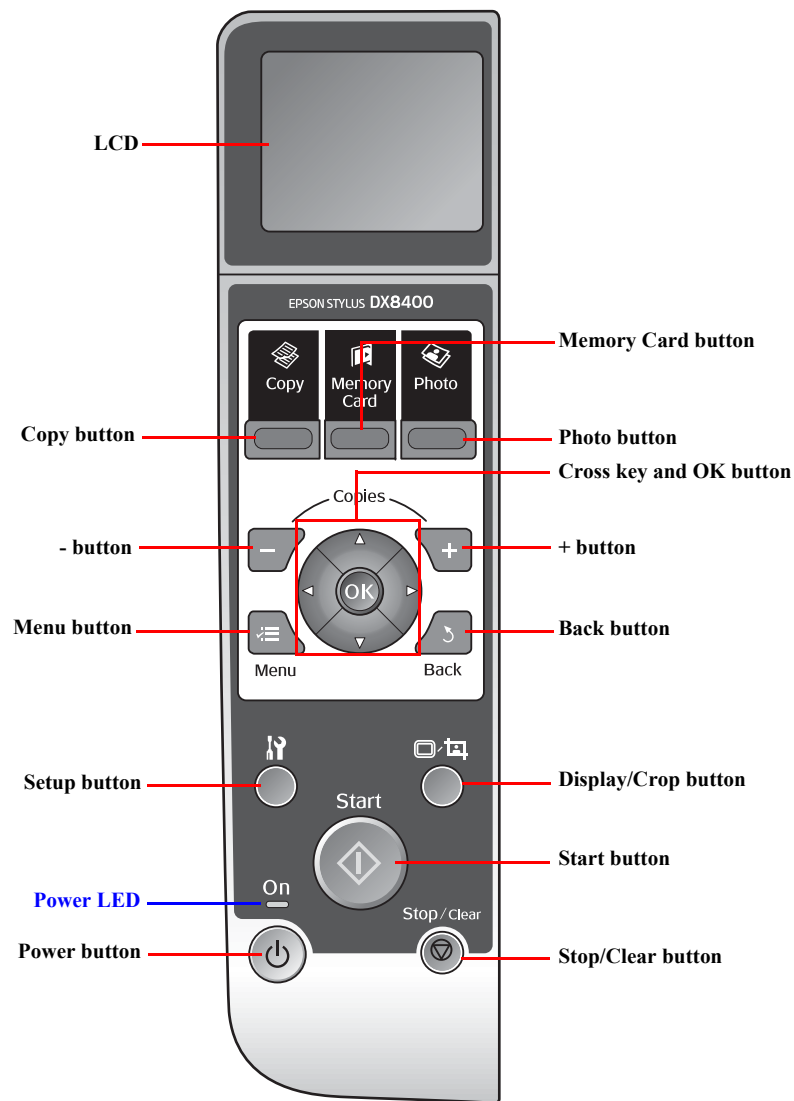
1.6 Control Panel

1.6.1 Operation Buttons & LEDs

□ CX8300/CX8400/DX8400 (LCD-equipped model)

Table 1-16. CX8300/CX8400/DX8400 Buttons & LEDs

Button/LED		Function
Button	Power	Turns the power ON/OFF.
	Start	Starts printing.
	Stop/Clear	<ul style="list-style-type: none"> Stops operation and displays the menu screen. Stops printing and ejects paper. Returns the print settings in the current mode to their default and displays the Top screen. (Returns to the previous screen during printing maintaining the current settings)
	Setup	Goes to the Setup mode that provides maintenance menu (head cleaning, head alignment, etc.) and various setting menu.
	Display/Crop	<ul style="list-style-type: none"> Goes to the zoom setting screen for the selected image. Changes the image preview layout on the LCD.
	Menu	Goes to the print setting menu screen.
	OK	Accepts the changed settings
	Back	Cancels the previous operation.
	Cross Key (Up/Down/Left/Right)	Selects a menu item or a setting value.
	+	Sets the number of copies.
	-	
	Copy	Goes to the stand alone Copy mode.
	Memory Card	Goes to the memory card direct print mode.
	Photo	Goes to the special mode that provides Reprint/Restore Photos function.
	LED	Power (Green)
Card Access (Green)		<ul style="list-style-type: none"> Lights when a memory card is inserted. Flashes when a memory card is being identified or accessed.



Note : The Card Access LED is provided near the memory card slot.

Figure 1-5. CX8300/CX8400/DX8400 Control Panel

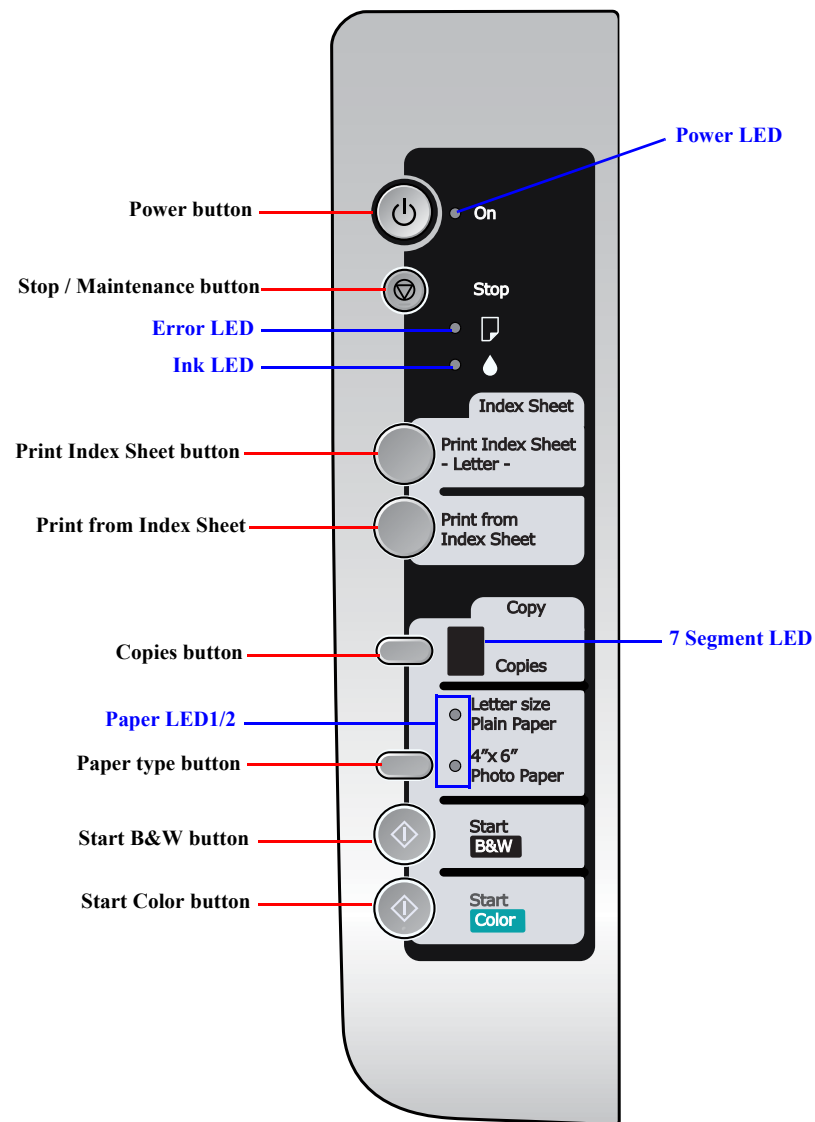
□ CX7300/CX7400/DX7400 (LCD-non-equipped model)

The printer has the following buttons and LEDs on the control panel.

Table 1-17. CX7300/CX7400/DX7400 Operation Buttons & LEDs

Button/LED		Function
Button	Power	Turns the power ON/OFF.
	Stop / Maintenance	[When printing] Stops printing, cancels the job, or cancels the error. [When not printing] Performs maintenance such as head cleaning and Ink replacement. Clears the settings.
	Print Index Sheet	Prints an index sheet.
	Print from Index Sheet	Starts reading an index sheet and prints photos stored in memory card.
	Copies	Sets a number of copies.
	Paper Type	Selects paper type and size.
	Start B&W	Starts B&W copying.
	Start Color	Starts color copying.
LED*	Power (Green)	<ul style="list-style-type: none"> Flashes at power ON/OFF. Flashes during some sequence is in progress. Flashes when maintenance is performed or a fatal error occurs. Lights when the printer status is other than above. (standby / while the control panel is used for setting)
	Error (Orange)	Flashes when a paper- related error occurs.
	Ink (Orange)	Flashes when an ink-related error occurs.
	7 Segments	Displays the number of copies, status, or error code.
	Paper LED 1 (Green)	Lights while plain paper is selected.
	Paper LED 2 (Green)	Lights while photo paper is selected.
	Card Access (Green)	<ul style="list-style-type: none"> Lights while a memory card is inserted in the slot. Flashes while a memory card is accessed.

Note *: See Table 1-19 on page 22 and Table 1-20 on page 25 for details on the button functions, and Table 1-21 on page 26 for details on the LED functions.



Note : The Card Access LED is provided near the memory card slot.

Figure 1-6. CX7300/CX7400/DX7400 Control Panel