Service Manual

LC800/L1000/L3000 Series

Canon

Application

This manual has been issued by Canon Inc. for qualified persons to learn technical theory, installation, maintenance, and repair of products. This manual covers all localities where the products are sold. For this reason, there may be information in this manual that does not apply to your locality.

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Caution

Use of this manual should be strictly supervised to avoid disclosure of confidential information.

Symbols Used

This documentation uses the following symbols to indicate special information:

Symbol	Description
	Indicates an item of a non-specific nature, possibly classified as Note, Caution, or Warning.
	Indicates an item requiring care to avoid electric shocks.
	Indicates an item requiring care to avoid combustion (fire).
	Indicates an item prohibiting disassembly to avoid electric shocks or problems.
	Indicates an item requiring disconnection of the power plug from the electric outlet.
Memo	Indicates an item intended to provide notes assisting the understanding of the topic in question.
REF.	Indicates an item of reference assisting the understanding of the topic in question.
	Provides a description of a service mode.
Error	Provides a description of the nature of an error indication.

The following rules apply throughout this Service Manual:

1. Each chapter contains sections explaining the purpose of specific functions and the relationship between electrical and mechanical systems with reference to the timing of operation.

   In the diagrams, ▆▌▐▆▐ represents the path of mechanical drive; where a signal name accompanies the symbol , the arrow ⟶ indicates the direction of the electric signal.

   The expression "turn on the power" means flipping on the power switch, closing the front door, and closing the delivery unit door, which results in supplying the machine with power.

2. In the digital circuits, '1'is used to indicate that the voltage level of a given signal is "High", while '0' is used to indicate "Low".(The voltage value, however, differs from circuit to circuit.) In addition, the asterisk (*) as in "DRMD*" indicates that the DRMD signal goes on when '0'.

   In practically all cases, the internal mechanisms of a microprocessor cannot be checked in the field. Therefore, the operations of the microprocessors used in the machines are not discussed: they are explained in terms of from sensors to the input of the DC controller PCB and from the output of the DC controller PCB to the loads.

The descriptions in this Service Manual are subject to change without notice for product improvement or other purposes, and major changes will be communicated in the form of Service Information bulletins.

All service persons are expected to have a good understanding of the contents of this Service Manual and all relevant Service Information bulletins and be able to identify and isolate faults in the machine."

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Chapter 1 Introduction

Contents

1.1 System Construction

1.1.1 System Configuration

i-SENSYS Fax-L3000IP

- Pickup/ Other Accessories

[1]

[2]

[3]

[4]

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[1]	Host machine	
[2]	FXL-Cassette Feeder 8	option
[3]	Handset Kit 10 (for US) HANDSET REST FP + TEL 6 KIT LONG CORD (except for US, HK and SPL) HANDSET REST FP + TEL 3 KIT LONG CORD (for HK and SPL)	option
[4]	Stamp Unit-C1	option

- Boards

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[1]   Color Send Kit-M1   option (standard for LASER CLASS 830i)

- Function table

Function	IMAGE CLASS 830i	FAX-L3000IP	i-SENSYS FAX-L3000IP
Copy	Std.	Std.	Std.
FAX	Std.	Std.	Std.
ADF	Std.	Std.	Std.
Print	Std.	Std.	Std.
PC-Fax			
RemoteUI			
Network			
SEND	Std.	Option Color Send kit-M1	Option Color Send kit-M1
Soft-counter	None	None	Std.
E-RDS	Std.	Option Color Send kit-M1	Option Color Send kit-M1

1.1.2 System Configuration

i-SENSYS Fax-L3000

- Pickup/ Other Accessories

[1]

[2]

[3]   [4]

F-1-3

[1]	Host machine	
[2]	FXL-Cassette Feeder 8	option
[3]	Handset Kit 10 (for US)	option
	HANDSET REST FP + TEL 6 KIT LONG CORD (except for US, HK and SPL)	
	HANDSET REST FP + TEL 3 KIT LONG CORD (for HK and SPL)	
[4]	Stamp Unit-C1	option

- Boards

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[1]   UFR II LT Printer kit-X1   option

- Function table

Function	IMAGE CLASS 810/ FAX-L3000/ i-SENSYS FAX-L3000
Copy	Std.
FAX	Std.
ADF	Std.
Print	Option UFRII LT Printer kit-X1
PC-Fax	
RemoteUI	
Network	
SEND	None
Soft-counter	None
E-RDS	None

1.2 Product Specifications

1.2.1 Names of Parts

1.2.1.1 External View (Front)

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

F-1-5

[1]	ADF	[8]	Paper cassette
[2]	Slide guides	[9]	Stack support
[3]	Document feeder tray	[10]	Left cover
[4]	Document delivery tray	[11]	ADF scanning area
[5]	Delivery tray	[12]	Multi-purpose tray
[6]	Paper stopper	[13]	Slide guides for multi-purpose tray
[7]	Operation panel	[14]	Multi-purpose tray extension

1.2.1.2 External View (Rear)

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

F-1-6

[1]	USB port	[5]	Handset jack
[2]	Ethernet port	[6]	Power socket
[3]	Telephone line jack	[7]	Main power switch
[4]	External device jack		

1.2.1.3 Cross-Section

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

F-1-7

[1]	Contact image sensor unit	[12]	Vertical path roller
[2]	ADF feed roller	[13]	Registration roller
[3]	ADF pickup roller	[14]	Developing cylinder
[4]	ADF delivery roller	[15]	Transfer charging roller
[5]	Laser scanner unit	[16]	Photopositive drum
[6]	Cassette	[17]	Primary charging roller
[7]	Pickup roller	[18]	Fixing film unit
[8]	Feed roller	[19]	Fixing pressure roller
[9]	Separation roller	[20]	Fixing unit
[10]	Manual feed separation pad	[21]	Delivery roller
[11]	Manual feed pickup roller		

1.2.2 Using the Machine

1.2.2.1 Turning On the Power Switch

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

The machine possesses the main power switch. Normally (i.e., unless the machine is in a sleep state), the machine will be supplied with power when you turn on its main power switch.

F-1-8

[1] Main power lamp

[2] Main power switch

1.2.2.2 When Turning Off the Main Power Switch

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

<During printing or fax data transmission/reception>

⚠

Be sure to operate the main power switch while the Processing/Data lamp on the control panel is not lit.
(Turning off the main switch during printing or fax data transmission/reception can erase the data being processed.)

F-1-9

<During downloading>

⚠
Do not turn off the power switch or ON/OFF switch on the control panel.
(Turning off the main power switch during downloading can make this machine inoperative.)

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1.2.2.3 Control Panel

i-SENSYS Fax-L3000

F-1-11

[1]	[Additional Functions] key	[15]	[Start] key
[2]	[Paper Select] key	[16]	Processing/Data indicator
[3]	[Density] key	[17]	[SYMBOLS] key
[4]	[2-Sided] key	[18]	Numeric keys
[5]	Density indicator	[19]	[Tone] key
[6]	Image Quality indicator	[20]	[Reset] key
[7]	[View Settings] key	[21]	[Image Quality] key
[8]	[Serial No.] key	[22]	[+/>] key
[9]	[Log In/Out] key	[23]	[OK] key
[10]	[Copy/Fax] key	[24]	[</-] key
[11]	[Clear] key	[25]	[Back] key
[12]	[Energy Saver] key	[26]	LCD display
[13]	[Stop] key	[27]	[System Monitor] key
[14]	Error indicator		

F-1-12

[1]	One-Touch keys	[6]	[Direct TX] key
[2]	One-Touch Key Panels	[7]	[Hook] key
[3]	[Address Book] key	[8]	[Pause] key
[4]	[Stamp] key	[9]	[Redial] key
[5]	[Delayed TX] key	[10]	[Coded Dial] key

1.2.2.4 Control Panel

i-SENSYS Fax-L3000IP

F-1-13

[1]	[Additional Functions] key	[16]	Processing/Data indicator
[2]	[Paper Select] key	[17]	[SYMBOLS] key
[3]	[Density] key	[18]	Numeric keys
[4]	[2-Sided] key	[19]	[Tone] key
[5]	Density indicator	[20]	[Reset] key
[6]	Image Quality indicator	[21]	[Fax/Send] key
[7]	[View Settings] key	[22]	Color indicator
[8]	[Serial No.] key	[23]	[Image Quality] key
[9]	[Log In/Out] key	[24]	[+/>] key
[10]	[Copy] key	[25]	[OK] key
[11]	[Clear] key	[26]	[</-] key
[12]	[Energy Saver] key	[27]	[Back] key
[13]	[Stop] key	[28]	LCD display
[14]	Error indicator	[29]	[System Monitor] key
[15]	[Start] key		

F-1-14

[1]	One-Touch keys	[6]	[Direct TX] key
[2]	One-Touch Key Panels	[7]	[Hook] key
[3]	[Address Book] key	[8]	[Pause] key
[4]	[Stamp] key	[9]	[Recall] key
[5]	[Delayed TX] key	[10]	[Coded Dial] key

1.2.3 User Mode Items

1.2.3.1 PAPER SETTINGS

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

MEMO:
User modes of the USA model are described. Menus and defaults may vary depending on the destination. For details, refer to the User's Guide.

T-1-1

Additional Functions	Available Settings *: indicates factory settings.
CASSETTE1	PAPER SIZE (A4, LGL, LTR*, OFICIO, FLSP, B-OFICIO, M-OFICIO) PAPER TYPE (PLAIN PAPER*, COLOR, RECYCLED, HEAVY1, BOND, 3HOLE PUNCH PAPER)
CASSETTE2*1	PAPER SIZE (A4, LGL, LTR*, OFICIO, FLSP, B-OFICIO, M-OFICIO) PAPER TYPE (PLAIN PAPER*, COLOR, RECYCLED, HEAVY1, BOND, 3HOLE PUNCH PAPER)
MP TRAY	PAPER SIZE (LTR*, LGL, A4, B5, A5, EXECUTIV, COM10, MONARCH, DL, ISO-C5, OFICIO,BRAZIL-OFICIO, MEXICO-OFICIO, FOLIO, G-LTR, G-LGL, FLSP) PAPER TYPE (PLAIN PAPER*, COLOR, RECYCLED, HEAVY1, HEAVY2, HEAVY3, BOND, 3HOLE PUNCH PAPER, TRANSPARENCY, LABELS, ENVELOPES)

If an optional cassette unit is attached.

1.2.3.2 VOLUME CONTROL

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

T-1-2

Additional Functions	Available Settings *: indicates factory settings.
MONITOR VOLUME	ON (1*-3), OFF
RING VOLUME	ON (1*-3), OFF
ENTRY TONE	ON (1*-3), OFF
ERROR TONE	ON (1*-3), OFF
TX JOB DONE TONE	ERROR ONLY (1*-3), OFF, ON (1-3)
RX JOB DONE TONE	ERROR ONLY (1*-3), OFF, ON (1-3)
SCAN DONE TONE	ERROR ONLY (1*-3), OFF, ON (1-3)
PRINT DONE TONE	ERROR ONLY (1*-3), OFF, ON (1-3)

1.2.3.3 COMMON SETTINGS

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

T-1-3

Additional Functions	Available Settings *: indicates factory settings.
TONER SAVER MODE	OFF*, ON
PRINTER DENSITY	1-5*-9
AUTO CASS. SELECT	COPY: CASSETTE 1* (ON*, OFF), CASSETTE 2 (ON*, OFF)*1, MP TRAY (OFF*, ON) PRINTER*2: CASSETTE 1* (ON*, OFF), CASSETTE 2 (ON*, OFF)*1 RECEIVE: CASSETTE 1* (ON*, OFF), CASSETTE 2 (ON*, OFF)*1, MP TRAY (OFF*, ON) OTHER: CASSETTE 1* (ON*, OFF), CASSETTE 2 (ON*, OFF)*1, MP TRAY (OFF*, ON)
ENERGY IN SLEEP	LOW*, HIGH
DIPLAY LANGUAGE	ENGLISH*/FRENCH/GERMAN/SPANISH/DUTCH/ITALIAN/SLOVENE/SWEDISH/FINNISH/NORWEGIAN/PORTUGUESE/DANISH/HUNGARIAN/CZECH/RUSSIAN/TURKISH
ADF DIRTY ERROR	DISPLAY*, DO NOT DISPLAY
INIT. COMMON SET.	YES, NO

*1:If an optional cassette unit is attached.
*2:If an network printer kit is attached.

1.2.3.4 COPY SETTINGS

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

T-1-4

Additional Functions	Available Settings *: indicates factory settings.
AUTO ZOOM	ON*, OFF
COPY DENSITY	1-5*-9
COL.	ON*, OFF

Additional Functions	Available Settings *: indicates factory settings.
NDARD SETTINGS	IMAGE QUALITY: TEXT/PHOTO*, TEXT, PHOTO DENSITY: STANDARD*, DARK, LIGHT COPIES: 1*-99 2-SIDED: OFF*, 1>2-SIDED, 2>2-SIDED, 2>1-SIDED PAPER SELECT: CASSETTE 1*, CASSETTE 2*1
SHARPNESS	1-5*-9
PAPER SIZE GROUP	INCHES*, A, AB
INIT. COPY SET.	YES, NO

*1:If an optional cassette unit is attached.

1.2.3.5 TX/RX SETTINGS

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

T-1-5

Additional Functions	Available Settings *: indicates factory settings.
TX/RX COMMON SET.	
TX SETTINGS	
UNIT NAME	
DATA COMPRESSION*1	NORMAL*, HIGH RATIO, LOW RATIO
RETRY TIMES*1	0-3*-5
SCANNING DENSITY	1-5*-9
STANDARD SETTINGS	DENSITY:STANDARD*, DK, LT RESOLUTION:200X200dpi*, 200X400dpi, 300X300dpi, 400X400dpi, 600X600dpi, 100X100dpi, 150X150dpi, 200X100dpi IMAGE FORMAT*1:PDF*, TIFF (B&W), PDF (COMPACT), JPEG ORIGINAL TYPE*1:TEXT/PHOTO*, TEXT, PHOTO DIVIDE INTO PAGES*1:OFF*, ON DIRECT TX:OFF*, ON STAMP DOCUMENT:OFF*, ON
SEND SETTINGS*1	TX FILE NAME: max. 24 characters, including spaces. SUBJECT: max. 40 characters, including spaces. MESSAGE TEXT: max. 140 characters, including spaces. REPLY-TO: max. 120 characters, including spaces. E-MAIL PRIORITY: NORMAL*, LOW, HIGH
TX TERMINAL ID	PRINTING POSITION*:OUTSIDE IMAGE*, INSIDE IMAGE, TELEPHONE # MARK: FAX*, TEL
COLOR TX GAMMA*1	GAMMA 1.8*, GAMMA 2.2, GAMMA 1.0, GAMMA 1.4
SHARPNESS*1	1-4*-7
COLOR TX SCAN SET*1	SPEED PRIORITY*, IMAGE PRIORITY
ROTATE TX*2	OFF, ON*
INIT STANDARD SET	YES, NO
RX SETTINGS	
SELECT CASSETTE	SWITCH A: ON*, OFF SWITCH B: ON*, OFF
TWO-SIDED PRINT	OFF*, ON
RECEIVE REDUCTION	OFF, ON* (RX REDUCTION: AUTO*, FIXED REDUCTION (90%, 95%, 97%. 75%), RX DIRECTION: HORIZ & VERTICAL, VERTICAL ONLY*
RX PAGE FOOTER	OFF*, ON
CONT. PRINTING	RX TO MEMORY*, KEEP PRINTING
FAX SETTINGS	
RX MODE	FaxOnly*, FaxTel, AnsMode, Manual
USER SETTINGS	
UNIT TELEPHONE #	max. 20 characters, including spaces
TEL LINE TYPE	TOUCH TONE*, ROTARY PULSE
OFFHOOK ALARM	OFF, ON*
TX SETTINGS	
ECM TX	ON*, OFF
PAUSE TIME	1-2*-15SEC
AUTO REDIAL	OFF, ON*(REDIAL TIMES: 1-2*-10, REDIAL INTERVAL: 2*-99TIMES, TX ERROR REDIAL: ON*, OFF
TIME OUT	OFF*, ON
STAMP DOCUMENT	DIRECT&MEMORY TX*, DIRECT TX
DIALING LINE CHCK	OFF, ON*
RX SETTINGS	
ECM RX	OFF, ON*
FAX/TEL OPT. SET	RING START TIME: 0-6*-30SEC F/T RING TIME: 15*-300SEC F/T SWITCH ACTION: RECEIVE*, DISCONNECT
INCOMING RING	OFF, ON*(RING COUNT: 1-2*-99)
REMOTE RX	ON*, OFF(REMOTE RX ID: 0-25*-99)
MANUAL/AUTO	OFF*, ON(F/T RING TIME:1-15*-99SEC)

Additional Functions	Available Settings *: indicates factory settings.
RX RESTRICTION	ON, OFF*

*1: if the optional Send kit is installed.
*2: A3 type only (A3 type: IMAGE CLASS 830i/FAX-L3000IP/I-SENSYS FAX-L3000IP)

1.2.3.6 ADDRESS BOOK SET.

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

T-1-6

Additional Functions	Available Settings *: indicates factory settings.
FAVORITES BUTTONS*1	
FAX	
TEL NUMBER ENTRY	max. 120 digits, including spaces
NAME	max. 16 characters, including spaces
IMAGEQUALITY	STANDARD*, FINE, PHOTO, SUPER FINE, ULTRA FINE
OPTIONAL SETTING	OFF*, ON (ECM: OFF, ON, TX SPEED: 33600bps, 14400bps, 9600bps, 4800bps, INTERNATIONAL: DOMESTIC, LONG DISTANCE 1, LONG DISTANCE 2, LONG DISTANCE 3
E-MAIL	
E-MAIL ADDRESS	max. 120 digits
NAME	max. 16 characters, including spaces
IMAGE FORMAT	PDF*, TIFF (B&W), PDF (COMPACT), JPEG
DIVIDE INTO PAGES	OFF*, ON
IMAGEQUALITY	200x200dpi*, 200x400dpi, 300x300dpi, 400x400dpi, 600X600dpi, 100X100dpi, 150X150dpi, 200x100dpi
ORIGINAL TYPE	TEXT/PHOTO*, TEXT, PHOTO
IFAX	
I-FAX ADDRESS	max. 120 digits
NAME	max. 16 characters, including spaces
DIVIDE INTO PAGES	OFF*, ON
IMAGEQUALITY	200x200dpi*, 200x400dpi, 300x300dpi, 400x400dpi, 600X600dpi, 100X100dpi, 150X150dpi, 200x100dpi
ORIGINAL TYPE	TEXT/PHOTO*, TEXT, PHOTO
FTP	
HOST NAME	max. 120 digits
NAME	max. 16 characters, including spaces
FILE PATH	max. 120 digits
LOGIN NAME	max. 24 characters
PASSWORD	max. 24 characters
IMAGE FORMAT	PDF*, TIFF (B&W), PDF (COMPACT), JPEG
DIVIDE INTO PAGES	OFF*, ON
IMAGEQUALITY	200x200dpi*, 200x400dpi, 300x300dpi, 400x400dpi, 600X600dpi, 100X100dpi, 150X150dpi, 200x100dpi
ORIGINAL TYPE	TEXT/PHOTO*, TEXT, PHOTO
SMB	
HOST NAME	max. 120 digits
NAME	max. 16 characters, including spaces
FILE PATH	max. 120 digits
LOGIN NAME	max. 24 characters
PASSWORD	max. 24 characters
IMAGE FORMAT	PDF*, TIFF (B&W), PDF (COMPACT), JPEG
DIVIDE INTO PAGES	OFF*, ON
IMAGEQUALITY	200x200dpi*, 200x400dpi, 300x300dpi, 400x400dpi, 600X600dpi, 100X100dpi, 150X150dpi, 200x100dpi
ORIGINAL TYPE	TEXT/PHOTO*, TEXT, PHOTO
1-TOUCH SPD DIAL	
FAX	
TEL NUMBER ENTRY	max. 120 digits
NAME Registers	max. 16 characters, including spaces
OPTIONAL SETTING	OFF*, ON (ECM: OFF, ON, TX SPEED: 33600bps, 14400bps, 9600bps, 4800bps, INTERNATIONAL: DOMESTIC, LONG DISTANCE 1, LONG DISTANCE 2, LONG DISTANCE 3
E-MAIL*1	
E-MAIL ADDRESS	max. 120 digits
NAME	max. 16 characters, including spaces
IFAX*1	
E-MAIL ADDRESS	max. 120 digits
NAME	max. 16 characters, including spaces

Additional Functions	Available Settings *: indicates factory settings.
FTP*1	
HOST NAME	max. 120 digits
NAME	max. 16 characters, including spaces
FILE PATH	max. 120 digits
LOGIN NAME	max. 24 characters
PASSWORD	max. 24 characters
SMB*1	
HOST NAME	max. 120 digits
NAME	max. 16 characters, including spaces
FILE PATH	max. 120 digits
LOGIN NAME	max. 24 characters
PASSWORD	max. 24 characters
CODED SPD DIAL	
FAX	
TEL NUMBER ENTRY	max. 120 digits
NAME	max. 16 characters, including spaces
OPTIONAL SETTING	OFF*, ON (ECM: OFF, ON, TX SPEED: 33600bps, 14400bps, 9600bps, 4800bps, INTERNATIONAL: DOMESTIC, LONG DISTANCE 1, LONG DISTANCE 2, LONG DISTANCE 3
E-MAIL*1	
E-MAIL ADDRESS	max. 120 digits
NAME	max. 16 characters, including spaces
IFAX*1	
E-MAIL ADDRESS	max. 120 digits
NAME	max. 16 characters, including spaces
FTP*1	
HOST NAME	max. 120 digits
NAME	max. 16 characters, including spaces
FILE PATH	max. 120 digits
LOGIN NAME	max. 24 characters
PASSWORD	max. 24 characters
SMB*1	
HOST NAME	max. 120 digits
NAME	max. 16 characters, including spaces
FILE PATH	max. 120 digits
LOGIN NAME	max. 24 characters
PASSWORD	max. 24 characters
GROUP DIAL	
SELECT ADD/TEL NO	
NAME	max. 16 characters, including spaces

*1: if the optional Send kit is installed.

1.2.3.7 PRINTER SETTINGS (If an network printer kit is attached.)

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

T-1-7

Additional Functions	Available Settings *: indicates factory settings.
DEFAULT PAPERSIZE	LTR*, EXECUTIV, ISO-C5, COM10, MONARCH, DL, A4, B5, A5, LGL
DEFAULT PAPERTYPE	PLAIN PAPER*, COLOR, RECYCLED, HEAVY PAPER 1, HEAVY PAPER 2, HEAVY PAPER 3, BOND, TRANSPARENCY, LABELS, ENVELOPE
COPIES	1*- 999
2-SIDED PRINTING	OFF*, ON
PRINT QUALITY	
IMAGE REFINEMENT	ON*, OFF
DENSITY	1-5*-9
TONER SAVER	OFF*, ON
PAGE LAYOUT	
BINDING	LONG EDGE*, SHORT EDGE
MARGIN	INCHES (-01.90INCHES - 00.00* - -01.90INCHES) MM (-50.0MM - 0.0* - -50.0MM)
AUTO ERROR SKIP	ON, OFF*
COLLATE	OFF*, COLLATE
ERROR TIME OUT	ON (5-15*-300SEC), OFF
INIT. PRINTER SET	YES, NO
PCL SETTINGS*1	

Additional Functions	Available Settings *: indicates factory settings.
PAPER SAVE	ON, OFF*
ORIENTATION	PORTRAIT, LANDSCAPE
FONT NUMBER	0-91
POINT SIZE	4.00-12.00*-999.75
PITCH	0.44-10.00*-99.99
FORM LINES	5-60*-128
SYMBOL SET	
CUSTOM PAPER	OFF*, ON (UNIT OF MEASURE: INCHES*, MILLIMETERS, X DIMENSION: 127-356 mm, Y DIMENSION: 76-216 mm)
APPEND CR TO LF	YES, NO*
ENLARGE A4	ON, OFF*
HALFTONES	
TEXT	RESOLUTION*, TONE, GRADATION
GRAPHICS	TONE*, GRADATION, RESOLUTION
IMAGE	TONE*, GRADATION, RESOLUTION
RESET PRINTER	YES, NO

*1: A3 type only (A3 type: IMAGE CLASS 830i/FAX-L3000IP/I-SENSYS FAX-L3000IP)

1.2.3.8 TIMER SETTINGS

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

T-1-8

Additional Functions	Available Settings *: indicates factory settings.
DATE&TIME SETTING	
TIME ZONE SETTING	GMT-12:00 - GMT+9:00* - GMT+12:00
DATE TYPE SELECT	YYYY MM/DD MM/DD/YYYY DD/MM YYYY*
AUTO SLEEP TIME	ON* (3-5*-30MIN), OFF
AUTO CLEAR TIME	ON*(1-2*-9MIN), OFF
DAYLIGHT SV.TIME	OFF, ON*(BEGIN DATE/TIME: MONTH, WEEK, DAY, END DATE/TIME: MONTH, WEEK, DAY)

1.2.3.9 ADJUST./CLEANING

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

T-1-9

Additional Functions	Available Settings *: indicates factory settings.
TRANS. ROLR CLEAN	
FIX.UNIT CLEANING	
FEEDER CLEANING	
SPECIAL MODE M	MID*, LOW, HIGH
SPECIAL MODE N	ON, OFF*
SPECIAL MODE P	ON, OFF*
SPECIAL MODE Q	ON, OFF*
SPECIAL MODE R	ON, OFF*
SPECIAL MODE S	OFF*, SPEED PRIORITY
CONT. PRINT MODE	ON, OFF*
BACK EDGE MODE	ON, OFF*
LARGE PAPER MODE	ON, OFF*
AUTO ADF DRTY ADJ	ON*, OFF
MAINTENANCE CODE	Not used.

1.2.3.10 REPORT SETTINGS

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

Additional Functions	Available Settings *: indicates factory settings.
SETTINGS	
TX REPORT	
PRINT ERROR ONLY	REPORT WITH TX IMAGE: OFF, ON
OUTPUT YES	REPORT WITH TX IMAGE: OFF, ON
RX REPORT	OUTPUT NO, PRINT ERROR ONLY*, OUTPUT YES

Additional Functions	Available Settings *: indicates factory settings.
ACTIVITY REPORT	
AUTO PRINT	OUTPUT YES, OUTPUT NO*
TX/RX SEPARATE	OFF*, ON
LIST PRINT	
ACTIVITY REPORT	max. last 40 transactions
SPEED DIAL LIST	1-TOUCH LIST, CODED DIAL LIST, GROUP DIAL LIST
ADD BOOK DETAILS	1-TOUCH(DETAILS), CODED (DETAILS)
USER DATA LIST	YES, NO
FORWARDING CONDITIONS LIST	YES, NO

1.2.3.11 SYSTEM SETTINGS

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

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Additional Functions	Available Settings *: indicates factory settings.
SYS. MANAGER INFO	
SYS. MANAGER ID	seven digits
SYSTEM PASSWORD	seven digits
SYSTEM MANAGER	max. 32 characters, including spaces
DEVICE INFO	
DEVICE NAME	max. 32 characters, including spaces
LOCATION	max. 32 characters, including spaces
MANAGE DEPT. ID	OFF*, ON
REGISTER DEPT. ID	Registers the seven digit department ID (max. 30)
PASSWORD	
PAGE LIMIT SET.	TOTAL PRINT LIMIT: OFF*, ON(000000-999999) COPY LIMIT: OFF*, ON(000000-999999) BLACK SCAN LIMIT: OFF*, ON(000000-999999) COLOR SCAN LIMIT: OFF*, ON(000000-999999) PRINT LIMIT: OFF*, ON(000000-999999)
ERASE	YES, NO
PAGE TOTALS	
VIEW PAGE TOTALS	TOTAL PRINT, COPY, SCAN, COLOR SCAN, PRINT
CLEAR ALL TOTAL	YES, NO
PRINT LIST	YES, NO
PDL JOBS W/OUT ID	ON, OFF*
MANAGE USER ID	ON, OFF*
NETWORK SETTINGS*1	
TCP/IP SETTINGS	
IPv4 SETTINGS	
IP ADDRESS	IP ADDRESS AUTO. : OFF, ON* (DHCP: ON*/OFF, BOOTP: OFF*/ON, RARP: OFF*/ON IP ADDRESS AUTO. , IP ADDRESS, SUBNET MASK, GATEWAY ADDRESS
PING COMMAND	
SET IP ADD RANGE	ON*, OFF
DNS SETTINGS	DNS SERVER SET: PRIM. DNS SERVER, SECOND DNS SERVER HOST/DOMAIN NAME: HOST NAME, DOMAIN NAME DNS DYNAMIC SET: DNS DYNA. UPDATE(OFF*, ON)
IPv6 SETTINGS	
USE IPv6	ON, OFF*
STATELESS ADD SET	ON*, OFF
MANUAL ADD SET	USE MANUAL ADD: ON*(USE MANUAL ADD, MANUAL ADDRESS, PREFIX LENGTH, DEF. ROUTER ADD),OFF
DHCPv6	ON, OFF*
PING COMMAND	PING COMMAND, HOST NAME
SET IP ADD RANGE	ON*, OFF
DNS SETTINGS	DNS SERVER SET: PRIM. DNS SERVER, SECOND DNS SERVER HOST/DOMAIN NAME: HOST NAME, DOMAIN NAME DNS DYNAMIC SET: DNS DYNA. UPDATE(OFF*, ON)
CONFIGURE WINS*2	
WINS RESOLUTION	ON, OFF*
WINS SERVER	
LPD PRINT	ON*, OFF
RAW PRINT	ON*, OFF
USE PASV MODE*2	ON, OFF*
FTP EXTENSION*2	ON, OFF*
USE HTTP	ON*, OFF

Additional Functions	Available Settings *: indicates factory settings.
PROXY SETTINGS*2	
USE PROXY	OFF, ON(SERVER ADDRESS, PORT. NO, USE SAME DOMAIN: ON, OFF*, AUTH SETTINGS: ON, OFF)
PORT NO.	
LPD	0-515*-65535
RAW	0-9100*-65535
HTTP	0-80*-65535
SMTP RX*2	0-25*-65535
POP3 RX*2	0-25*-65535
FTP SENDING*2	0-21*-65535
SMTP TX*2	0-25*-65535
SNMP	0-161*-65535
PERMIT RX MAC ADD	ON, OFF*
SMB SERVER SET*2	ON, OFF*(SERVER, WORKGROUP, COMMENT, LM ANNOUNCE)
SNMP SETTINGS	
USE SNMP	ON*, OFF
COMMUNITY NAME 1	
COMMUNITY NAME 2	
SNMP WRITABLE 1	ON*, OFF
SNMP WRITABLE 2	ON, OFF*
PRINTER MGMT INFO	ON, OFF*
DEDICATED PORT	ON*, OFF
ETHERNET DRIVER	
AUTO DETECT	AUTO*, MANUAL
DUPLEX	Half duplex*, Full duplex
ETHERNET TYPE	10 BASE-T*, 100 BASE-TX
NETWORK INFO	
IPv4	
IP ADDRESS	
SUBNET MASK	
GATEWAY ADDRESS	
DOMAIN NAME	
HOST NAME	
IPv6	
LINK LOCAL ADD	
STATELESS ADD. 1	
STATELESS ADD. 2	
STATELESS ADD. 3	
STATELESS ADD. 4	
STATELESS ADD. 5	
STATELESS ADD. 6	
STATEFUL ADDRESS	
DEF. ROUTERADD	
DOMAIN NAME	
HOST NAME	
E-MAIL/I-FAX*2	
SMTP RX	ON, OFF*
SMTP SERVER	
POP	ON, OFF*
AUTH/ENC SETTINGS	
POP BEFORE SEND	ON, OFF*
SMTP AUTH	ON, OFF*
E-MAIL ADDRESS	max. 64 characters
POP SERVER	max. 48 characters
POP ADDRESS	max. 32 characters
POP PASSWORD	max. 32 characters
POP INTERVAL	0*-99MIN
STARTUP TIME SET.	0-60*-300SEC
COMMUNICATIONS	

Additional Functions	Available Settings *: indicates factory settings.
C O U N T R Y S E L E C T	
E-MAIL/I-FAX SETTINGS*2	
MAX TX DATA SIZE	0MB* - 99MB
DIVIDED OVER MAX	ON, OFF*
FAX SETTINGS	
TX START SPEED	33600bps*, 2400bps, 4800bps, 7200bps, 9600bps, 14400bps
RX START SPEED	33600bps*, 2400bps, 4800bps, 7200bps, 9600bps, 14400bps
R-KEY SETTING	
TX DOC. ARCHIVING	
MEMORY LOCK	ON, OFF*
PASSWORD	
REPORT PRINT	ON, OFF*
MEMORY RX TIME	ON, OFF*
FW W/OUT CNDITION	
FAX	ON, OFF*
FORWARD	
IMAGE FORMAT	TIFF (B&W), PDF
DIVIDE INTO PAGES	ON, OFF*
i-FAX*2	ON, OFF*
FORWARD	
IMAGE FORMAT	TIFF(B&W), PDF
DIVIDE INTO PAGES	ON, OFF
FORWARD ERR. SET.	
PRINT	ON, OFF*
STORE TO MEMORY	ON*, OFF
REMOTE UI	ON*, OFF
RESTRICT TX FUNC	
ADD. BOOK PASSWORD	ON, OFF*
RESTRICT NEW ADD.	ON, OFF*
FAX DRIVER TX	ON*, OFF
REST. REDIAL/CALL*2	ON, OFF*
CONFIRM FAX NO.	ON, OFF*
REST. MULTI DEST	ON, CONFIRMATION, PROHIBIT
CHECKING THE LOG	ON*, OFF
USE DEVICE USB	ON*, OFF
PDL SELECT(PnP)	
UPDATE FIRMWARE	

*1: if an network printer kit is attached.
*2: if an optional Send kit is attached.

1.2.4 Maintenance by the User

1.2.4.1 User Maintenance Items

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

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No.	Item	Maintenance cycle
[1]	Platen guide (white plate) cleaning	As required
[2]	Stream reading glass cleaning	As required
[3]	Fixing pressure roller cleaning	As required
[4]	Transfer charging roller cleaning	As required
[5]	ADF roller cleaning	As required
[6]	Exterior cleaning	As required
[7]	Toner cartridge replacement	When the message appears
[8]	Stamp cartridge replacement	At ink out

1.2.4.2 Cleaning

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

The parts that should be cleaned by the customer to maintain the design performance and the cleaning method are described below.
The service engineer should instruct the customer to clean the machine at regular intervals (once a month).

1. Cleaning the Platen guide (white plate)
Clean the platen guide (white plate)[1] with a cloth dampened with water or neutral detergent and squeezed hard, and then wipe it with a dry soft cloth.

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2. Cleaning the Stream reading glass
Clean the stream reading glass [1] with a cloth dampened with water or neutral detergent and squeezed hard, and then wipe them with a dry soft cloth.

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3. Cleaning the Fixing pressure roller
If black streaks are seen on the printed paper, the fixing pressure roller can be dirty. If black streaks are seen on the printed paper, clean the fixing pressure roller in the user mode. Be sure to clean the fixing pressure roller after replacing the toner bottle.

⚠

When cleaning the fixing pressure roller, manually feed A4 or LTR paper.

MEMO:
The time required for cleaning is about 130 seconds.

1) Press the additonal functions key key to enter the user mode.
2) Using the left an right arrow keys, display the "ADJUST./CLEANING" menu.
3) Press the OK key.
4) Using the left and right arrow keys, select "FIX. UNIT CLEANING".

5) Open the manual feed tray.
6) Place an A4 or LTR sheet of plain paper in the manual feed tray.

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7) Press the OK key. The machine will start cleaning the fixing pressure roller.

4.Cleaning the Transfer roller
If the reverse side of the printed paper is stained, the transfer roller can be dirty. If the reverse side of the printed paper is stained, clean the transfer roller in the user mode.
1) Press the additonal functions key to enter the user mode.
2) Using the left and right arrow keys, display the "ADJUST./CLEANING".
3) Press the OK key.
4) Using the left and right arrow keys, select "TRANS. ROLR CLEAN". Next, press the OK key. Cleaning will start.

5. Cleaning the ADF roller
If black streaks are seen on the printed paper from the ADF, the internal roller in the ADF can be dirty. If this symptom occurs, clean the internal roller in the user mode.
1) Press the additonal functions key to enter the user mode.
2) Using the left and right arrow keys, display the "ADJUST./CLEANING" menu.
3) Press the OK key.
4) Using the left and right arrow keys, select "FEEDER CLEANING".
5) Load five sheets of paper in the ADF and press the OK key. Cleaning will start.

1.2.5 Safety

1.2.5.1 Safety of Toner

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

The machine's toner is a non-toxic material made of plastic, iron, and small amounts of dye.

⚠️ Do not throw toner into fire. It may cause explosion.

Toner on Clothing or Skin
1. If your clothing or skin has come into contact with toner, wipe it off with tissue; then, wash it off with water.
2. Do not use warm water, which will cause the toner to jell and fuse permanently with the fibers of the cloth.
3. Do not bring toner into contact with plastic material. It tends to react easily.

1.2.5.2 Safety of the Laser Light

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

Laser light can prove to be hazardous to the human body. The machine's laser unit is fully enclosed in a protective housing and external covers so that its light will not escape outside as long as the machine is used normally.

1.2.5.3 CDRH Regulations

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

The Center for Devices and Radiological Health of the US Food and Drum Administration put into force regulations concerning laser products on August 2, 1976. These regulations apply to laser products manufactured on and after August 1, 1976, and the sale of laser products not certified under the regulations is banned within the Untied States. The label shown here indicates compliance with the CDRH regulations, and its attachment is required on all laser products that are sold in the United States.

CANON
30-2, SHIMOMARUKO, 3-CHOME, OHTAKU, TOKYO,
146, JAPAN.

MANUFACTURED:
THIS PRODUCT CONFORMS WITH DHHS RADIATION
PERFORMANCE STANDARD 21CFR CHAPTER 1
SUBCHAPTER J.

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1.2.5.4 Handling the Laser Unit

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

The laser scanner unit emits invisible laser light inside it. If exposed to laser light, the human eye can irreparably be damaged. Never attempt to disassemble the laser scanner unit. (It is not designed for servicing in the field.)
Warning labels are affixed to the top cover of the laser scanner unit.

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1.2.5.5 Point to Note about Fire

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

It is dangerous to throw lithium batteries and parts and components containing flammable substances, such as cartridges, etc., into fire. Such parts and components must be disposed of in accordance with local laws and regulations.

1.2.5.6 Cautions as to the replacement and disposal of lithium battery

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

The machine's image processor is equipped with a fixed lithium battery.
Risk of explosion if Battery is replaced by an incorrect type.
Dispose of used Batteries according to the instructions.

1.2.5.7 Storing and Handling the Cartridge Before Unpacking

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

Whether it is left packed or unpacked, or is fitted to the machine, the cartridge is subject to the effects of the environment, and will deteriorate over time. The speed of deterioration depends on the site or storage condition, and cannot be generalized. Take full care when
storing or handing it.

If the cartridge is to be stored in a storeroom or a workshop, be sure to refer to table, and keep the following in mind:
- Avoid direct sunshine.
  - Avoid vibration.
  - Avoid impact. (Take care not to drop it.)

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Temperature

Normal (9/10 of total storage period)			0 to 35 deg C
Severe (1/10 of total storage time)		High	35 to 40 deg C
		Low	-20 to 0 deg C
Change in temperature (within about 3 min)			40 to 15 deg C -20 to 25 deg C
Humidity			
Normal (9/10 of total storage period)			35 to 85 %RH
Severe (1/10 of total storage time)		High	85 to 95 %RH
		Low	10 to 35 %RH
Atmospheric pressure			0.6 to 1.01hpa
Effective period			2.5 yr (approx.)

1.2.5.8 Storing or Handling the Cartridge After Unpacking

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

The photosensitive medium is made of organic photo-conducting material (OPC), and will deteriorate if exposed to strong light. It is also used to hold toner inside it. Be sure to advise the user to be fully careful when storing and handling the cartridge. (The cartridge must always be put inside a protective bag for storage.)
a. Use a protective bag for storage.
b. Avoid areas subject to direct sunshine (e.g., near a window). Do not leave it alone inside a card, as the temperature can rise to an extremely high level. (These are also true even if the cartridge is put in a protective bag.)
c. Avoid areas subject to high temperature/humidity or low temperature/humidity, areas subject to rapid changes in temperature or humidity, or areas subject to condensation (e.g., near an air conditioner).
d. Avoid areas exposed to corrosive gas (e.g., insecticide) or salty air.
e. Avoid areas subject to dust, ammonium gas, or organic solvent gas.
f. Avoid areas near a CRT display, disk drive, and floppy disk. (The magnetism from the cartridge can destroy the data.)
g. Keep it out of reach of children.
h. Keep the temperature between 0 and 35 deg C.

1.2.6 Product Specifications

1.2.6.1 Product Specifications

i-SENSYS Fax-L3000IP

Copyboard	stream reading, fixed reading
Body	desktop (ADF standard type)
Light source type	LED
Image reading method	CCD (CIS)
Photosensitive medium	OPC drum (24-mm dia.)
Reproduction method	indirect electrostatic
Exposure method	by laser light
Charging method	by roller contact
Development method	1-component toner projection
Transfer method	by transfer roller
Separation method	by curvature + static eliminator
Pickup method	Cassette: 1 cassette Multifeeder: 1 feeder
Cassette pickup method	claw + retard
Multifeeder pickup method	dual processing
Drum cleaning method	by cleaning blade
Fixing method	SURF (on-demand)
Toner supply type	by toner cartridge Cartridge lifetime (A4, ptint rate of 5%): Approx. 4,500 sheets (Same package for AU, HK, SPL Approx. 2,000 sheets)
Toner type	magnetic negative toner
Toner save mode	yes
Original type	plain paper (Multipage documents of the same size, thickness and weight or one page documents.)
Maximum original size	Max. 297mm X 432mm (Transmitting fax only on one side 297mm X 630 mm)
Reproduction ratio	Automatic magnification: 50% to 200% (1% increments)
Warm-up time	19.0 sec or less (A4/LTR)
First copy time	13.0 sec or less (A4/LTR)
First print time	9.0 sec or less (A4/LTR)
Print speed	A4: 22cpm, LTR: 23cpm
Printing resolution	1200 dpi enhanced x 600 dpi
Cassette paper size	A4 (Fix) LGL/LTR/OFICIO/BOFI/M-OFI/FOOLSCAP (by user chage)
Multifeeder paper size	Width: 76 to 216 mm Length: 127 to 356 mm Weight: 56 to 128 g/m2
Cassette paper type	Plain paper (64 to 80 g/m2), recycled paper (64 to 80 g/m2), colored paper (64 to 80 g/m2), Heavy paper 1 (81 to 90 g/m2)
Multifeeder tray paper type	Plain paper (64 to 80 g/m2), recycled paper (64 to 80 g/m2), colored paper (64 to 80 g/m2), Heavy paper 1 (81 to 90 g/m2) , Heavy paper 2 (91 to 105 g/m2), Heavy paper 3 (106 to 128 g/m2), Bond (75g/m2), 3hole punch paper, transparency, labels, envelopes (COM10, Monarch, DL, ISOB5, ISO-C5)
Duplex paper type	Plain paper, colored paper, recycled paper, Heavy paper 1
Cassette capacity	500 sheets (80 g/m2)
Multifeeder tray capacity	100 sheets (plain paper: 80g/m2) 80 sheets (heavy paper: 91 to 105g/m2) 50 sheets (heavy paper: 106 to 128g/m2) 40 sheets (label) 10 sheets (envelope, OHP) 50 sheets (post card)
Auto 2-sided printing	yes (standard)
Delivery tray stack	100 sheets (plain paper: 80g/m2) 80 sheets (heavy paper: 91 to 105g/m2) 50 sheets (heavy paper: 106 to 128g/m2) 40 sheets (label) 10 sheets (envelope, OHP) 50 sheets (post card)
Host interface	USB, 10BASE-T/100BASE-TX
Continuous reproduction	1 to 99 sheets
Memory	128MB (except for Laser Class830i) 256MB (Laser Class830i)

Hard disk	no
Image margin (leading edge)	5.0 -/+2.0 mm
Image margin (trailing edge)	5.0 -/+2.0 mm
Image margin (left/right)	left: 2.5 -/+2.0 mm right: 0.5mm or more
Image mode	Yes (text, text/photo, photo)
Energy save mode	yes (manually ON/OFF; auto OFF after specific time, auto ON after fax reception/print data reception)
Operating environment (temperature range)	15 to 30 deg C
Operating environment (humidity range)	10 to 80%
Operating environment (atmospheric pressure)	0.6 to 1.0 atm
Noise	Copying (A4/22cpm):66.7 dB or less (freference) (LTR/23cpm):67.05 dB or less (freference)
Power supply rating	120V/230V (50/60Hz)
Power consumption (maximum)	120V: Approx. 1020 kW (max.) 230V: Approx. 1011 kW (max.)
Power consumption	Continuous printing LASER CLASS 830i: approx.426W i-SENSYS FAX-L3000IP/FAX-L3000IP: approx.348W Energy save stanby LASER CLASS 830i: approx.2.5W i-SENSYS FAX-L3000IP/FAX-L3000IP: approx.2.9W (reference only)
Ozone	0.01ppm or less (initial) 0.035ppm or less (after endurance test)
Dimensions	520 mm (W) X 481 mm (D) X 452 mm (H): standard model 520 mm (W) X 481 mm (D) X 580 mm (H): with optional cassette unit
Weight	Approx. 25.5kg (including toner cartridge 0.9kg)
Option	FXL-Cassette Feeder 8 Color Send Kit-M1 (except for Laser Class 830i) Handset Stamp Unit-C1

1.2.6.2 Product Specifications

i-SENSYS Fax-L3000

Copyboard	stream reading, fixed reading
Body	desktop (ADF standard type)
Light source type	LED
Image reading method	CCD (CIS)
Photosensitive medium	OPC drum (24-mm dia.)
Reproduction method	indirect electrostatic
Exposure method	by laser light
Charging method	by roller contact
Development method	1-component toner projection
Transfer method	by transfer roller
Separation method	by curvature + static eliminator
Pickup method	Cassette: 1 cassette Multifeeder: 1 feeder
Cassette pickup method	claw + retard
Multifeeder pickup method	dual processing
Drum cleaning method	by cleaning blade
Fixing method	SURF (on-demand)
Toner supply type	by toner cartridge Cartridge lifetime (A4, ptint rate of 5%): Approx. 4,500 sheets (Same package for AU, HK, SPL Approx. 2,000 sheets)
Toner type	magnetic negative toner
Toner save mode	yes
Original type	plain paper (Multipage documents of the same size, thickness and weight or one page documents.)
Maximum original size	Max. 216mm X 356mm (Transmitting fax only on one side 297mm X 630 mm)

Reproduction ratio	Automatic magnification: 50% to 200% (1% increments)
Warm-up time	19.0 sec or less (A4/LTR)
First copy time	13.0 sec or less (A4/LTR)
First print time	9.0 sec or less (A4/LTR)
Print speed	A4: 22cpm, LTR: 23cpm
Printing resolution	1200 dpi enhanced x 600 dpi
Cassette paper size	A4 (Fix) LGL/LTR/OFICIO/BOFI/M-OFI/FOOLSCAP (by user chage)
Multifeeder paper size	Width: 76 to 216 mm Length: 127 to 356 mm Weight: 56 to 128 g/m2
Cassette paper type	Plain paper (64 to 80 g/m2), recycled paper (64 to 80 g/m2), colored paper (64 to 80 g/m2), Heavy paper 1 (81 to 90 g/m2)
Multifeeder tray paper type	Plain paper (64 to 80 g/m2), recycled paper (64 to 80 g/m2), colored paper (64 to 80 g/m2), Heavy paper 1 (81 to 90 g/m2) , Heavy paper 2 (91 to 105 g/m2), Heavy paper 3 (106 to 128 g/m2), Bond (75g/m2), 3hole punch paper, transparency, labels, envelopes (COM10, Monarch, DL, ISOB5, ISO-C5)
Duplex paper type	Plain paper, colored paper, recycled paper, Heavy paper 1
Cassette capacity	500 sheets (80 g/m2)
Multifeeder tray capacity	100 sheets (plain paper: 80g/m2) 80 sheets (heavy paper: 91 to 105g/m2) 50 sheets (heavy paper: 106 to 128g/m2) 40 sheets (label) 10 sheets (envelope, OHP) 50 sheets (post card)
Auto 2-sided printing	yes (standard)
Delivery tray stack	100 sheets (plain paper: 80g/m2) 80 sheets (heavy paper: 91 to 105g/m2) 50 sheets (heavy paper: 106 to 128g/m2) 40 sheets (label) 10 sheets (envelope, OHP) 50 sheets (post card)
Host interface	USB (standard) 10BASE-T/100BASE-TX (if equipped with the optional network board)
Continuous reproduction	1 to 99 sheets
Memory	128MB
Hard disk	no
Image margin (leading edge)	5.0 -/+2.0 mm
Image margin (trailing edge)	5.0 -/+2.0 mm
Image margin (left/right)	left: 2.5 -/+2.0 mm right: 0.5mm or more
Image mode	Yes (text, text/photo, photo)
Energy save mode	yes (manually ON/OFF; auto OFF after specific time, auto ON after fax reception/print data reception)
Operating environment (temperature range)	15 to 30 deg C
Operating environment (humidity range)	10 to 80%
Operating environment (atmospheric pressure)	0.6 to 1.0 atm
Noise	Copying (A4/22cpm):66.7 dB or less (freference) (LTR/23cpm):67.05 dB or less (freference)
Power supply rating	120V/230V (50/60Hz)
Power consumption (maximum)	120V: Approx. 1020 kW (max.) 230V: Approx. 1011 kW (max.)
Power consumption	Continuous printing LASER CLASS 810: approx.476W i-SENSYS FAX-L3000/FAX-L3000: approx.335W Energy save stanby LASER CLASS 810: approx.1.7W i-SENSYS FAX-L3000/FAX-L3000: approx.2.6W (reference only)
Ozone	0.01ppm or less (initial) 0.035ppm or less (after endurance test)
Dimensions	520 mm (W) X 481 mm (D) X 452 mm (H): standard model 520 mm (W) X 481 mm (D) X 580 mm (H): with optional cassette unit
Weight	Approx. 24.6kg (including toner cartridge 0.9kg)

Option	FXL-Cassette Feeder 8
	UFR II LT Printer kit-X1
	Handset Kit
	Stamp Unit-C1

1.2.6.3 ADF Specifications

i-SENSYS Fax-L3000IP

Original orientation	Face-up
Original position	Center reference
Original processing mode	- Single-sided document processing - Double-sided document processing
Original reading	Stream reading
Stack	small size *1: 50 sheets or less large size*2: 25 sheets or less *1: small size (A4R, B5R, A5R, B6, LTRR, SMTR) *2: large size (LGL)
Mixed original sizes	no
Original AE detection	no
Original size recognition	yes
Stamp	yes (option)

1.2.6.4 ADF Specifications

i-SENSYS Fax-L3000

Original orientation	Face-up
Original position	Center reference
Original processing mode	- Single-sided document processing - Double-sided document processing
Original reading	Stream reading
Stack	small size *1: 50 sheets or less large size*2: 25 sheets or less *1: small size (A4R, B5R, A5R, B6, LTRR, SMTR) *2: large size (LGL)
Mixed original sizes	no
Original AE detection	no
Original size recognition	no
Stamp	yes (option)

1.2.6.5 Fax Specifications

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

Applicable lines	Subscriber telephone line (PSTN)
Transmission method	G3 / IFAX Simple
Modulation method	<G3 image signal> ITU-T V.27 ter (2.4Kbps, 4.8Kbps) ITU-T V.29 (7.2Kbps, 9.6Kbps) ITU-T V.17 (TC7.2Kbps, TC9.6Kbps, 12Kbps, 14.4Kbps) ITU-T V.34 (2.4Kbps, 4.8Kbps, 7.2Kbps, 9.6Kbps, 12Kbps, 14.4Kbps, 16.8Kbps, 19.2Kbps, 21.6Kbps, 24Kbps, 26.4Kbps, 28.8Kbps, 31.2Kbps, 33.6Kbps) <G3 procedure signal> ITU-T V.21 No.2 (300bps) ITU-T V.8, V.34 (300bps)
Transmission speed	33.6Kbps, 31.2Kbps, 28.8Kbps, 26.4Kbps, 24Kbps, 21.6Kbps, 19.2Kbps, 16.8Kbps, 14.4Kbps, 12Kbps, TC9.6Kbps, TC7.2Kbps, 9.6Kbps, 7.2Kbps, 4.8Kbps, 2.4Kbps w/ auto fall-back mechanism
Coding	JBIG, MMR, MR, MH
Error correction	ITU-T ECM method
Scanning line density	Standard: 8 dots/mm x 3.85 lines/mm Fine: 8 dots/mm x 7.7 lines/mm Super Fine: 8 dots/mm x 15.4 lines/mm Ultra Fine: 16 dots/mm x 15.4 lines/mm
Scanning density adjustment	Possible (9 settings)
Half tone	256 gradations

Printing resolution	600 dpi x 600 dpi
Reduction for reception	Fixed reduction (75%, 90%, 95%, 97%) Auto reduction (75 to 100%)
FAX/TEL switching	Yes (no voice response, no pseudo CI transmission)
Answering machine connection	Yes
Remote reception	ID input method ID: 2 characters (default: 25)
Auto dialing	One-touch dialing: FAX80, TEL80 Speed dialing: FAX120, TEL120
Delayed transmission	Yes
Broadcast transmission	Number of addresses: 124 max.
Dual access	Number of reservations: 64 max.
Image data backup	Image memory type: SDRAM Storage method: JBIG Backup battery: rechargeable capacitor Backup length: 3 hr (approx.)

1.2.7 Function List

1.2.7.1 Printing Speed

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

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Type		Single-sided		Two-sided	
		Cassette feed	Manual feed	Cassette feed	Manual feed
Plain paper, colored paper, recycled paper, heavy paper 1	A4R	22	22	6	6
	B5R	-	13(8,3,2)	-	-
	A5R	-	13(8,3,2)	-	-
	LGL	18	18	5	5
	LTRR	23	23	6	6
	STMTR	-	13(8,3,2)	-	-
Heavy paper 2, labels	A4R	-	14(4,3,2)	-	-
	B5R	-	6(4,3,2)	-	-
	A5R	-	6(4,3,2)	-	-
	LGL	-	18	-	-
	LTRR	-	14(4,3,2)	-	-
	STMTR	-	6(8,3,2)	-	-
Heavy paper 3	A4R	-	6(4,3,2)	-	-
	B5R	-	6(4,3,2)	-	-
	A5R	-	6(4,3,2)	-	-
	LGL	-	10(4,3,2)	-	-
	LTRR	-	10(4,3,2)	-	-
	STMTR	-	6(4,3,2)	-	-
Transparency	A4R	-	6(4,3,2)	-	-
	LTRR	-	6(4,3,2)	-	-
Envelopes, postcard	Monarch	-	6(4,3,2)	-	-
	COM10	-	6(4,3,2)	-	-
	ISO-B5	-	6(4,3,2)	-	-
	ISO-C5	-	6(4,3,2)	-	-
	DL	-	6(4,3,2)	-	-
	Post card	-	6(4,3,2)	-	-

Supplement:
   - (): The speed may change by the state of a fixing unit.
   - The above copy speed does not change if magnification is changed.
   - The above copy speed does not change irrespective of whether paper is supplied from the cassette, the manual feed tray, or from the cassette unit.
   - The copy speed may become down when the copies make continuously one minutes or more with the narrow width paper. The slowdown is reduced with the following user mode. User Mode: Additional Functions > Adjust/Cleaning > Spesial Mode S> ON

1.2.7.2 Types of Paper

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

T-1-14

		Cassette	Manual feed tray	Duplex
Size (W X L)		A4 (For JP/KOR/EU/ASIA/OCE) LGL/LTR/OFICIO/BOFI/M-OFI/ FOOLSCAP (for USA/CA/LA) 16K/A4(for CHN)	76 x 127 to 216 x 356 mm	A4, LTR, LGL
Weight		64 to 90 g/m2	56 to 128 g/m2	64 to 90 g/m2
Quantity		Max. 500 sheets	Max. 100 sheets	by pickup inlet
Paper type	Plain paper (80 g/m2)	Yes	Yes	Yes
	Recycled paper	Yes	Yes	Yes
	Colored paper	Yes	Yes	Yes
	Heavy paper 1	Yes	Yes	Yes
	Heavy paper 2	No	Yes	No
	Heavy paper 3	No	Yes	No
	Bond	Yes	Yes	No
	3hole punch paper	Yes	Yes	No
	Transparency	No	Yes	No
	Labels	No	Yes	No
	Envelopes	No	Yes	No

Chapter 2 Installation

Contents

2.1 Making Pre-Checks

2.1.1 Selecting the Site of Installation

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

Select the site of installation against the following requirements; if possible, visit the user's before delivery of the machine:
1) There must be a power outlet properly grounded and rated as indicated (-/+10%) for exclusive use by the machine.
2) The environment of the room must be as indicated in the following diagram, and the machine must not be installed near a water faucet, water boiler, humidifier, or refrigerator:

F-2-1

<Environmental zone assured>
    [A]: Zone A: Satisfies all the conditions of the standard image quality and paper feed performance.
    [B]: Zone B: Inferior to Zone A in terms of the standard image quality and paper feed performance, or may not apply.
    [C]: Zone C: Problems associated with safety, malfunctions, or incorrect message display do not occur, but image quality and paper feed performance are not guaranteed.
3) The machine must not be installed near a source of fire or in an area subject to dust or ammonium gas.
    If the area is exposed to direct rays of the sun, provide curtains to the window.
4) The level of ozone generated by the machine will not affect the health of individuals around it. Some, however, may find its odor unpleasant as while remaining in contact with it for long hours. Be sure that the room is well ventilated.
5) The floor of the machine must be level so that the feet of the machine will remain in contact and the machine will remain level.
6) The machine must be at least 10 cm away from any wall, permitting unobstructed use.

with the handset installed

F-2-2

7) The machine must be placed in a well ventilated area. It is important to make sure, however, that the machine is not near the air vent (for suction) of the room.

2.1.2 Before Starting the Work

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

Be sure to go through the following before starting the work:
1) If you are installing the machine after moving it from a cold to warm location, be sure to leave the machine unpacked for at least 2 hours so that the machine is fully used to the site temperature, thus avoiding image faults caused by condensation. (The term "condensation" refers to the formation of droplets of water on the surface of a metal object brought in from a cold to warm place, i.e., as the result of the rapid cooling of the moisture (vapor) around the object.)
2) The machine weighs a maximum of about 25.5 kg. Be sure to work in a group of 2 persons when lifting it.

2.1.3 Checking the Contents

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

Check to be sure that none of the following contents is missing:

F-2-3

[1]	Host machine	1pc.	[2]	Toner cartridge	1pc.
[3]	Power cable	1pc.	[4]	Mojular jack cord	For EU1: 4 pcs. For EU2: 4 pcs. For EU3: None.
[5]	Ferrite core*1	i-SENSYS FAX-L3000IP only: 1pc.	[6]	Destination Label	1pc.
[7]	Registration Card	1pc.	[8]	Screwdriver instruction label*1	1pc.
[9]	TP screw (M3X6)*1	1pc.	[10]	Operation panel label	1pc.
[11]	New EWS warranty card	1pc.			

*1: This part is used when an optional handset is installed.

Check the documentation and CD against the following table:

Starter guide	
Manual CD	
Driver/utility CD-ROM unit	i-SENSYS FAX-L3000IP only: 3pcs.

2.2 Unpacking and Installation

2.2.1 Unpacking and Removing the Packaging Materials

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

1)Unpack the machine and remove vinyl, cushioning materials, and tape.
2)Hold the hand grips of the machine [1] together with one or more persons and take it out.

> ⚠
>
> The maximum weight of this machine is approximately 24kg. Two or more persons are required to lift the machine.

[1]

F-2-4

2.2.2 Installing the Toner Cartridge

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

1)Remove the toner cartridge from the bag. Keep the bag for future use.

F-2-5

> ⚠
>
> Do not open the drum protective shutter [1].

[1]

2)Gently rock the toner cartridge 5 or 6 times to distribute toner evenly.

F-2-6

3)Remove the two seals [1].

[1]

F-2-7

4)Raise the blue tab [1].

[1]

F-2-8

5)Pull out the seal [1] completely. Do not pull out the seal at an angle.

[1]

F-2-9

6)Open the left cover [1].

F-2-10

7)Hold the toner cartridge by its handle. Insert the toner cartridge into the machine with the arrows [1] on the toner cartridge pointing toward the machine.

F-2-11

8)The right side protrusions ([1] and [2]) of the toner cartridge should be aligned with the guides inside the machine. The blue tab [3] should be pulled up as seen in figure.

F-2-12

9)Close the left cover [1].

F-2-13

2.2.3 Setting the Paper

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

1)Holding the knob [1] at the center of the cassette, draw out the cassette [2] until it stops.

F-2-14

2)Load the paper stack print side up. Make sure the back edge of the paper stack touches the rear paper end guide [3], the paper stack should not exceed the load limit mark [1], and the load is under the hooks [2] on the paper guides.

F-2-15

3)Gently insert the paper cassette as far as it will go.

2.2.4 Connecting the Cable

i-SENSYS Fax-L3000

1)Connect the power cord [1] into the AC inlet.

F-2-16

2.2.5 Connecting the Cable

i-SENSYS Fax-L3000IP

1)Attach the ferrite core [2] to the user's USB cable, and then connect the USB cable to the USB port of the host machine.

⚠

To reduce noise, attach the ferrite core as close to the USB port of the host machine as possible.

F-2-17

2)Connect the power cord [1] into the AC inlet.

F-2-18

2.2.6 Checking the Image Quality

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

1)Plug the power cord [1] into the outlet, and then turn on the main power switch [2].

⚠

Use the specified power supply (rated voltage -/+10% and rated current).

F-2-19

2)Place a document on the document pickup tray, take a copy of it by supplying paper from the cassette or manual feed tray, and check the printed image. Also perform the following checks:
- Check whether abnormal sound is heard.
- Check the printed images at all preset magnifications.
- Check whether the document is copied normally on the specified number of sheets.

2.2.7 Setting the Date and Time

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

1)Press the additional functions key to display the user mode screen.
2)Select "TIMER SETTINGS" and then press the OK.
3)Select "DATE&TIME SETTING".
4)Enter the current date and time with the ten keys.
5)Press the OK to allow the entered date and time to take effect.

2.2.8 Checking the Network Connection

i-SENSYS Fax-L3000IP

1)Press the following keys to display the service mode screen:

⊛ > 2 Key > 8 Key > ⊛
2) Select "# REPORT" using the left and right cursor keys, and then press the OK key.
3) Select "REPORT OUTPUT" using the left and right cursor keys , and then press the OK.
4)Select "SPEC LIST" using the left and right cursor keys , and then press the OK.
5) When "SPEC REPORT" is displayed, check that "NETWORK" of "ACT-IBAT FUNCTION" is set to ON.
6) Contact the system administrator of the customer to make network settings.

2.2.9 Connecting to the Telephone Line

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

1)Turn off the main power switch of this machine.
2)Connect modular plug at either end of the modular cable [1] to the modular jack (LINE) at the back of the machine, and connect the other modular plug to the modular jack on the wall.

> ⚠
>
> Use the modular cable supplied with the machine. If you use another modular cable, its length must be within 3 m.

F-2-20

3)Turn on the main power switch.
4)Make the minimum settings required to use the fax feature.

a. Registering the User Telephone Number
Additional functions key > [Communications Settings] > [User Settings (Fax Settings)] > [Uit Telephone #] > Enter the fax No. > [OK]
b. Selecting the Telephone Line Type
Additional functions key > [Communications Settings] > [User Settings (Fax Settings)] > [Tel Line Type] > Select [Pulse] or [Tone]. > [OK]
5) Conduct a communication test to check the fax feature is implemented properly.

5-1) Using ten keys, enter the telephone number of a called party who allows you to conduct the communication test. Send a test document to check for normal transmission. If the test document cannot be sent normally, check whether the set telephone line type is the same as the type of the telephone line connected to this machine.
5-2) Ask the called party to send a test document to your to check for normal reception.

2.3 Installing the Hand Set

2.3.1 Checking the Contents

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

F-2-21

[1]	Handset	1pc.
[2]	Handset Cradle	1pc.
[3]	Bracket	1pc.
[4]	Knurled screw	2pcs.
[5]	B tight screw (M3X12)	2pcs.

2.3.2 Installing the Hand Set

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

1)Remove the cover [1] on the right side of the machine using the screwdriver.

F-2-22

2)Attach one TP screw (M3X6)[1], which is packed with the host machine.
3)Affix the supplied screwdriver instruction label [2]. (This label is required to prevent the screw [1] hidden under the handset from being forgotten to be removed during removal of the right cover.)

F-2-23

4)Install the handset cradle [1] on the bracket [2].
   - Knurled screw [3] 2pcs.

F-2-24

5)Attach the bracket [1].
   - B tight screw (M3X12)[2] 2pcs.

F-2-25

6)Place the handset [1] on the handset cradle.

F-2-26

7)Connect the curl code jack to the module jack [1] on the backside.

F-2-27

8)Connect the power cord.
9)Turn on the main power switch.
10)Confirm that there is a dial tone from the handset.

2.4 Installing the Stamp Unit

2.4.1 Checking the Contents

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

[1]   [2]   [3]

F-2-28

[1]	Stamp solenoid	1 pc.
[2]	Stamp	1 pc.
[3]	Binding screw (M3X6)	1 pc.

2.4.2 Installing to the Host Machine

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

1)Open the feeder cover.
2)Remove the open/close lever [1], and close the feeder guide [2].

F-2-29

3)Remove the stamp cover [1].
   - Screw [2] 1pc.

F-2-30

4)Connect the connector [1].

5)Attach the stamp solenoid [2].
   - Binding screw (M3X6)[3] 1pc.

F-2-31

6)Attach the stamp cover [1].
   - Screw [2] 1pc.

F-2-32

7)Install the stamp [1] using tweezers or the like.

⚠

A loosely installed stamp will cause a paper jam. Push the stamp all the way in until it clicks.

F-2-33

8)Close the feed guide and feeder cover.
9)Turn on the host machine.

2.4.3 Checking the Operation

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

1)Turn on the main power switch.
2)Enter in service mode.

✻ > 2 > 8 > ✻

3) Enter #1 SSSW06 > bit03, and change the setting from 0 to 1.
4)Press the reset key to exit the service mode.
5)Turn off the main power switch.
6)Turn on the main power switch.
7)Press the "STAMP key" on the operation panel.
8)Set document to the feeder, and test the transmission to check that the stamp is printed on the document.

Chapter 3 Basic Operation

Contents

3.1 Construction

3.1.1 Functional Construction

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

The machine may be divided into the following 7 functional blocks.

F-3-1

3.1.2 Functional Block Diagram

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

*1 : If equipped with printer functions.
*2 : If equipped with SEND functions.
*3 : only A3 model (LASER CLASS 810i/i-SENSYS FAX-L3000IP/FAX L-3000IP)

F-3-2

3.1.3 Image Processor PCB

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

1.function
The image processor PCB has the following functions.

Control Panel Control Block
The control panel control block receives the state of control keys while sending/receiving data in serial communication with the control IC of the control panel PCB. Also, it sends LED and LCD signals to the control panel PCB.

Image Processing Control Block
- It subjects the digital image data from the analog processor PCB to enlargement/reduction processing, smoothing, and other image processing, thereby converting it to 600x600-dpi image signals (VD0, VD01*, VDO2, VDO2*).
- It converts the analog image data from fax communication into 600x600-dpi image signals (VD0, VD01*, VDO2, VDO2*).
- It uses a horizontal sync signal (BD0*) as a trigger to send image signals (VD0, VD01*, VDO2, VDO2*) to the laser unit.

Smoothing
The 600 x 600-dpi image data from the PC is converted into image data equivalent of 1200 x 600 dpi.

Sensor Detection
It detects the state of each sensor of the reader unit and the ADF.

ESS Control
It controls the ESS function used to reduce the power consumption while the machine isin standby state.

Memory Storage
Image data is stored in SDRAM, and is retained for about 1 hr even after the power is removed by the work of the super capacitor mounted on the modem PCB. The system software and various data (e.g., user data, service data) are held by flash ROM.

Speaker Control (if equipped with fax functions.)
It turns on/off or control the volume of the error sound, key sound, and line monitor sound generated by the speaker.

MEMO:
The volume of the line monitor or the sound of the key sound or the error sound is adjusted in user mode.

2. Construction
The image processor comes in different ROM types/sizes and RAM sizes according to models.
The firmware stored in the flash ROM may be either SYSTEM or BOOT.
Using the service support tool, the following 2 types of firmware may be upgraded: SYSTEM and BOOT stored in the flash ROM and the firmware stored ion SEND ROM.

<with SEND functions>

Image processor PCB

SDRAM (256MB) — Flash ROM (16MB)

SEND ROM(32MB)*1

CPU

*1: LASER CLASS 830i is 16MB.

<w/o SEND functions, with network functions>
<w/o SEND functions, w/o network functions>

Image processor PCB

SDRAM (128MB) — Flash ROM (16MB)

CPU

F-3-3

3.1.4 DC Controller PCB

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

Fixing Heater Control Block
The fixing heater control block monitors the temperature reading of the thermistor to ensure that the temperature of the heater reaches a specific level. If an error is detected in the temperature of the heater, it stops the power to the heater.

High-Voltage Control Block
The high-voltage control block controls the high voltage for the primary charging roller, developing cylinder of the cartridge, transfer charging roller, and fixing film.

Drive Control Block
The drive control block controls the main motor, pickup solenoid, and fan.

Sensor Detection
It detects the state of the sensors in the pickup assemblies and the printer block, thereby monitoring the drive assembly.

Image Processor PCB Interface block
The image processor PCB interface block sends the horizontal sync signal (BD0*) to the image processor PCB. It also returns a state signal in response to a command signal (serial) from the image processor PCB, thereby communicating the state of the printer block to the image processor PCB.

Laser Control Block
The laser control block controls the drive of the laser diode of the laser scanner unit according to the image signals (VD01, VD01*, VD02, VD02*) from the image processor PCB. Also, it controls the intensity of the laser diode (auto power control) for each line of print data.

Horizontal Sync Signal Control
When the laser beam reaches the horizontal print start position, the laser beam detection signal (BDI*) from the laser scanner unit is detected, and the horizontal sync signal (BD0*) is sent to the image processor PCB. Also, the horizontal sync signal (BD*) is monitored for frequency of output.

Scanner Motor Control
The scanner motor is controlled so that the horizontal resolution of the print image is 600 dpi. Also, the laser beam detection signal (BDI*) from the laser scanner unit is detected to monitor the rotation of the scanner motor.

Cartridge Detection Mechanism
In wait state, the CPU on the DC controller PCB measures the voltage level of the cartridge detection signal (CRGSNS) a specific number of times to check the presence/absence of the cartridge when an AC bias is applied to the primary charging roller.

Toner Level Detection Mechanism
While the machine is in wait state, the toner level detection signal (ADDTNR; based on the comparison of the developing bias output and the antenna output inside the cartridge) occurring when the developing AC bias is detected during normal rotation to monitor the toner level inside the cartridge.

3.1.5 Reader Controller PCB

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

Image Processing Control Block
The analog image data read by the contact sensor is converted into digital image data and sent to the ASIC of the image processor PCB.

Drive Control Block
The drive control mechanism acts on the read motor and the ADF pickup motor by the motor drive IC of the reader controller processor PCB.

3.1.6 Power Supply PCB

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

Switching Regulator
The following is generated using power from the power outlet for loads: +24DC, +5 VDC, +5VRDC, +3.3VDC, +3.3VRDC.

3.1.7 NCU PCB

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

2-Line/4-Line Conversion Circuit
Signals from a 2-line telephone line are converted into 4-line signals (transmission signals and reception signals). Also, the transmission signals from the image processor PCB are prevented from entering the reception circuit.

Dial Pulse Generation Circuit
The dial pulse generation circuit generates dial pulses by turning on and off the relay inside it according to the control signals from the image processor PCB. It then sends the dial signals to the telephone line by way of the modular jack PCB.

Off-Hook Detection Circuit
An off-hook state is detected with reference to the direct current flowing into the circuit, occurring when the telephone connected to the telephone terminal of the modular jack PCB is off the hook.

Line Voltage Conversion Circuit
The primary side of the NCU PCB is controlled using a line voltage of +48 VDC. In light of this, the DC component is cut by the capacitor, and only the audio signals are converted into voltages suited to the modem level.

3.1.8 Modular Jack PCB

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

The signals from the 2 modular jacks (for telephone line and telephone connection) are communicated to the line voltage conversion circuit of the NCU PCB, and the signals from the fax are communicated to the telephone line.

3.1.9 Modem PCB

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

F-3-4

MPU (IC1)
Processes JBIG coding/decoding, controls combinations over lines, and controls SDRAM.

PATCH (IC40)
controls the various boards (NCU, speaker).

SDRAM
Controls coding/decoding of image data for transmission/reception, and stores data for the MPU work area and transmission/reception data.

MODEM IC (IC1)
For transmission, modulates data received from MPU according to ITU-T V.17, V21, V27ter, V29, or V.34; for reception, on the other hand, demodulates data received from the line according to ITU-T V.17, V.21, V.27ter, V.29, or V.34.

Super Capacitor
Backs up the transmission/reception image data stored in SDRAM.

DC/DC
When the main power is off (e.g., in the event of power failure), increases the voltage of the super capacitor to generate a backup voltage for SDRAM.

3.2 Basic Sequence

3.2.1 Basic Sequence

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

The machine's sequence of operation is controlled by the CPU on the image processor PCB and the CPU on the DC controller PCB.
The following figure shows the sequential flow, and table provides descriptions of the periods involved.

F-3-5

T-3-1

Period	Definition	Purpose	Remarks
WAIT (wait)	From when the power is turned on until the main motor is turned on and stopped.	The machine's mechanical and electrical states are checked.	A check is made on the presence/absence of a cartridge and for paper remaining inside the machine. The machine also shifts the WAIT state when the left cover is closed while power is on, or after returning from ESS mode.
STBY (standby)	After the end of WAIT, unit the Start key is pressed.	The machine is ready for a print command.	
INTR (initial rotation)	After a press on the Start key, until the leading edge is detected by the paper leading edge sensor.	The machine starts up process conditions and picks up paper for printing.	The fixing heater is subjected to temperature contro (start-up temperature control, paper passage temperature control); scanner rotation speed adjustment and ATVC control are executed.
PRINT (print)	After the registration sensor detects the leading edge of paper, until the delivery sensor detects the trailing edge of paper.	The DC controller PCB generates the BD0* signal, and the image processor PCB sends VD0* signal and VD0 signal, thereby forming a latent image on the photosensitive drum and turning it into a toner image.	
LSTR (last rotation)	From when printing ends until the main motor stops.	The drum surface is made free of potential and the transfer charging roller is cleaned.	After last rotation, the machine shifts to standby to wait for a print command, in response to which it immediately shifts to initial rotation.

Chapter 4 Original Exposure System

Contents

4.1 Basic Constraction

4.1.1 Specifications, Control Methods, and Functions

i-SENSYS Fax-L3000

T-4-1

Item	Function/Method
Exposure light source	LED
Original scan	Original stream reading is performed with the contact sensor (CS) fixed.
Scanning document size	A5/B5/A4, STMT/LTR/LGL length :148.5mm to 356mm width : 105mm to 216mm (Transmitting fax only on one side 216mm X 630 mm)
Scan resolution	600 dpi (vertical scan) x 600 dpi (horizontal scan)
Gradation	256
Carriage position detection	no
Magnification range	50% to 200% (auto magnification only)
	Vertical scan direction: Image processing is by image processor PCB
	Horizontal scan direction: The document feed speed is changed.
Lens	Rod lens array
CMOS sensor	Number of lines: 1
	Number of pixels: Total 5148 (incl. 5104 effective pixels)
	Maximum original scan width: 216 mm
CIS drive control	no
Original size detection	no
Dirt detection control	no

4.1.2 Specifications, Control Methods, and Functions

i-SENSYS Fax-L3000IP

T-4-2

Item	Function/Method
Exposure light source	LED
Original scan	Original stream reading is performed with the contact image sensor (CIS) fixed.
Scanning document size	A5/B5/A4/B4/A3, STMT/LTR/LGL/11X17 length :148.5mm to 432mm width : 105mm to 297mm (Transmitting fax only on one side 297mm X 630 mm)
Scan resolution	600 dpi (vertical scan) x 600 dpi (horizontal scan)
Gradation	256
Carriage position detection	Contact image sensor HP sensor (SR2006)
Magnification range	50% to 200% (auto magnification only)
	Vertical scan direction: Image processing is by image processor PCB
	Horizontal scan direction: The document feed speed is changed.
Lens	Rod lens array
CMOS sensor	Number of lines: 1
	Number of pixels: Total 7488 (incl. 7176 effective pixels)
	Maximum original scan width: 216 mm
CIS drive control	Drive control by read motor (M2001)
Original size detection	yes
Dirt detection control	yes

4.1.3 Major Components

i-SENSYS Fax-L3000

Major components of the image read/processing system are as follows:
- Contact sensor is used to read the document
- Reader controller PCB that is used to convert the analog image read by the contact sensor to the digital image data
Based on the drive signal from the image processor PCB, the image read system feeds the document using the ADF to read the document on the stream reading glass.

Reader controller PCB

Contact image sensor

Stream reading glass

F-4-1

4.1.4 Major Components

i-SENSYS Fax-L3000IP

Major components of the image read/processing system are as follows:
- Contact image sensor that is used to read the document
- Read motor, shading clutch, carriage, and carriage rail that are used to move the contact sensor
- Reader controller PCB that is used to convert the analog image read by the contact sensor to the digital image data
Based on the drive signal from the image processor PCB, the image read control system drives the motor to move the contact image sensor to the document read position and feeds the document using the ADF to read the document image.

Read motor (M2002)

Shading clutch (CL2001)

Reader controller PCB

Contact image sensor

Carriage rail

Forward

Backward

Contact image sensor HP sensor (SR2006)

Stream reading glass

F-4-2

4.2 Basic Sequence

4.2.1 Basic Sequence at Power-on

i-SENSYS Fax-L3000IP

F-4-3

F-4-4

4.2.2 Basic Sequence after Depression of Start Key (One Sheet of Original)

i-SENSYS Fax-L3000

F-4-5

CIS HP
sensor
▽
Shading   Stream reading
position   HP   start position
▽   ▽   ▽

1.black shading/
white shading/
Original scan

F-4-6

4.3 Various Control

4.3.1 Enlargement/Reduction

4.3.1.1 Magnification Change in Vertical Scan Direction

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

In the main scan direction, the image is read at 100%. Magnification is changed by processing data on the image processor PCB.

4.3.1.2 Magnification Change in Horizontal Scan Direction

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

In the horizontal scan direction, the document feed speed is changed depending on the magnification rate whether or not the image is enlarged or reduced. When the magnification rate is 100% copy, the speed is 78.66 mm/sec. Data is not processed by the image processor PCB.

4.3.2 Dirt Sensor Control

4.3.2.1 Outline

i-SENSYS Fax-L3000IP

The machine changes the document read position or corrects the read image depending on the presence/absence of dust on the stream reading glass or ADF platen guide, thus preventing dust from showing up in the image.

[Control Timing]
- At job end

Main power
switch
ON

Start key
ON

▽   ▽

| WAIT | STBY | | 1st SCAN | | 2nd SCAN | |

Dust detection control

Dust detection control

Dust detection control

F-4-7

[Description of Control]
- At job end
The contact image sensor (CIS) checks the light reflected by the ADF platen guide surface at the read position for presence/absence of dust.
After job end, presence/absence of dust is detected three times. First presence/absence of dust is detected at position A. If no dust is detected at position A, presence/absence of dust is detected twice. If no duct is detected three times, the document is read at position A. If duct is detected at position A, presence/absence of dust is detected at B twice. If no duct is detected at position B, the document is read at position B. If dust is also detected at position B, presence/absence of dust is detected at position C once. If dust is also detected at position C, the relevant message is displayed on the operation panel. If dust is also detected at position C, the sensor returns to position A and the document is read.

⚠

If dust is detected a all positions A, B, and C at job end, a message prompting to clean the glass surface appears on the operation panel.

0.5mm | 0.5mm

A B C

Platen guide

Steram
reading
glass

LED   lens

Contact image sensor

F-4-8
T-4-3

Position	Description
A	Read reference position
B	About 0.5 mm from the reference position toward the roller inside
C	About 1.0mm from the reference position toward the roller inside

4.4 Parts Replacement Procedure

4.4.1 Copyboard Glass

4.4.1.1 Removing the Stream Reading Glass

i-SENSYS Fax-L3000

1) Remove the left middle cover.
2) Open the feeder cover.
3) Remove the glass retainer [1].
- Screw [2] 3pcs.
4) Remove the stream reading glass [3].

F-4-9

⚠

- When removing the stream reading glass, take care not to touch the glass surface. If the glass surface is stained, white/black streaks can show up in the image. If the glass surface is stained, clean it with lint-free paper moistened with alcohol.
- Install the stream reading glass so the three sheet materials [1] are on the front side.

F-4-10

4.4.1.2 Removing the Stream Reading Glass

i-SENSYS Fax-L3000IP

1) Remove the left middle cover.
2) Open the feeder cover.
3) Remove the glass retainer [1].
- Screw [2] 3pcs.
4) Remove the stream reading glass [3].

F-4-11

⚠

- When removing the stream reading glass, take care not to touch the glass surface. If the glass surface is stained, white/black streaks can show up in the image. If the glass surface is stained, clean it with lint-free paper moistened with alcohol.
- Install the stream reading glass so the barcode seal [1] is at the rear.

F-4-12

4.4.1.3 Action after Replacing the Stream Reading Glass (if equipped with the SEND Functions)

i-SENSYS Fax-L3000IP

After replacing the stream reading glass, enter the shading correction values (X, Y, and Z) for the standard white plate on the surface of the new stream reading glass in the service mode.
Correction value (X): Service mode>#SCAN>#SCAN NUMERIC>No.213
Correction value (Y): Service mode>#SCAN>#SCAN NUMERIC>No.214
Correction value (Z): Service mode>#SCAN>#SCAN NUMERIC>No.215
Rewrite the values on the service label.

F-4-13

4.4.2 Reader Controller PCB

4.4.2.1 Removing the Reader Controller PCB

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

MEMO:
This machine stores adjustment values in the image processor PCB, not the

reader controller PCB.
Accordingly, it is not necessary to enter adjustment values after replacing the reader controller PCB.

1) Open the feeder cover.
2) Remove the tray stopper and open the document feed tray.
3) Remove the document delivery tray.
4) Remove the PCB cover [1].
   - Flexible cable [2] 1pc.
   - Connector [3] 1pc.
   - Screw [4] 2pcs.

F-4-14

5) Disconnect all connectors and flexible cables from the reader controller PCB.
6) Remove the reader controller PCB [1].
   - Screw [2] 8pcs.

F-4-15

4.4.3 Contact Sensor

4.4.3.1 Removing the Contact Image Sensor

i-SENSYS Fax-L3000

1) Remove the left middle cover.
2) Remove the feeder cover.
3) Remove the glass retainer and the stream reading glass.
4) Remove the jump mount [1].
   - Screw [2] 2pcs.

F-4-16

5) Remove the contact image sensor [1].
   - Shaft [2] 2pcs.
   - Flexible cable [3] 1pc.

F-4-17

⚠

1. When removing or installing the contact image sensor, do not touch the light guide [1] and rod lens array [2].
2. Be careful not to lose the front and rear height adjusting parts [3].

F-4-18

4.4.3.2 Removing the Contact Image Sensor

i-SENSYS Fax-L3000IP

1) Remove the left middle cover.
2) Remove the feeder cover.
3) Remove the glass retainer and the stream reading glass.
4) Remove the jump mount [1].
   - Screw [2] 2pcs.

F-4-19

5) Remove the contact image sensor [1].
   - Flexible cable [2] 1pc.

F-4-20

⚠️
1. When removing or installing the contact image sensor, do not touch the light guide [1] and rod lens array [2].
2. Be careful not to lose the front and rear height adjusting parts [3].

F-4-21

4.4.3.3 Action after Replacing the Contact Image Sensor

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

After replacing the contact image sensor (CIS), go through the following steps to perform inter-channel output correction:
1) Enter the service mode.

Sequentially press the User Mode key, 2 key, 8 key, and User Mode key on the operation panel.
2) Using the arrow keys on the operation panel, display "TEST MODE".
3) Press the "OK" key.
4) Press the 2 key. "SCAN TEST" appears.
5) Press the 1 key. "SHADING" appears.
6) Press the "OK" key.
After completion of the above steps, the contact sensor output correction will be performed and parameters will be set automatically.
After completion of automatic adjustment, "OK" is displayed.

⚠

Only on image processor PCB system software version WLaa-07-07 of IM-AGE CLASS 810/i-SENSYS FAX-L3000/FAX-L3000.
If the indicator indicates 'NG' after finishing the auto adjustment, change the service mode as mentioned below and redo the auto adjustment.
- #SCAN> SCAN SW> SW003> bit6, and change the setting from 1 to 0.

4.4.4 Contact Sensor HP Sensor

4.4.4.1 Removing the Contact Image Sensor Unit HP Sensor

i-SENSYS Fax-L3000IP

1) Remove the left middle cover.
2) Open the feeder cover.
3) Remove the glass retainer [1].
- Screw [2] 3pcs.
4) Remove the stream reading glass [3].

F-4-22

5) Remove the contact image sensor HP sensor [1].
   - Connector [2] 1pc.

F-4-23

Chapter 5 Original Feeding System

Contents

5.1 Basic Constraction

5.1.1 Overview

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

The ADF of this machine is a document feeder designed only for stream reading. It performs document pickup, transport, and delivery operations sequentially with the aid of the ADF pickup motor (M2001) and read motor (M2002). Feed of the document supplied from the document setting (placement) section is controlled by the ADF registration roller so that the document is ready at the same time for image reading by the contact image sensor in the main unit. The document transported to the stream reading position is read as analog image data, and then transported to the delivery section.
The ADF has five sensors for document status monitoring. Names and roles of these sensors are summarized below.

T-5-1

Symbol	Sensor name	Role
SR2001	Document set sensor	Detects presence/absence of document on the document set section.
SR2002	Document edge sensor	Detects the document transport state to trigger scanning.
SR2003	Registration sensor	Detects the timing of forming a loop at the leading edge of the document using the ADF registration roller.
SR2004	Delivery sensor	Detects the paper delivery state.
SR2005	Separation rear sensor	Detects the paper transport state to trigger supply of the next document.

F-5-1

5.1.2 Drive Mechanism

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

F-5-2

Symbol	Name
CL2002	Pickup clutch
SL2003	Roller release solenoid
M2001	ADF pickup motor
M2002	Read motor

5.2 Basic Operation

5.2.1 Outline of Operation Mode

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

This machine has 2 operation modes. This machine operates in the operation mode specified by the host machine to perform printing. Operation mode names, brief outline of operations, and associated print modes are given in the following table:

T-5-2

Operation mode name	Outline of operation	Associated print mode
[1] Forward pickup/delivery	Picks up, reads, and then delivers an document.	Single-sided document > Simplex printing Single-sided document > Duplex printing
[2] Forward feed/reversal delivery	Picks up, reads, reverses, and delivers an document.	Double-sided document > Duplex printing Double-sided document > Simplex printing

[1] Forward Pickup/Delivery Operation
The document flows as shown below.

F-5-3

[2] Forward Pickup/Reversal Delivery Operation
The document flow is shown below.

Document

Pickup

Feed

Reading

Feed

Reversal

Formation of loop

Reverse side reading

Feed

Next

F-5-4

Reversal

Feed

Idle feed

Delivery

End of job

F-5-5

5.2.2 Document Size Detection

i-SENSYS Fax-L3000

This machine detects only the paper length during transport. (The paper length in the banner mode is included.)
The document pickup tray has no sensor for paper size detection.

T-5-3

Function	Description	Sensor used (Symbol)
Document length detection	The document length is detected according to the distance from the point where the document edge sensor (SR2002) turns on to the point where this sensor turns off.	Document edge sensor (SR2002)

5.2.3 Document Size Detection

i-SENSYS Fax-L3000IP

1. Overview
This machine detects the document size using either of the following two methods depending on the print mode.
- Method used during normal printing (other than printing in the banner mode)
- Method used in the banner mode
a. Method used during normal printing (other than printing in the banner mode)
During normal printing, the following three document detection functions are used.

T-5-4

Function	Description	Sensor used (Symbol)
Document presence/ absence detection	Detects presence or absence of document on the document pickup tray.	Document set sensor (SR2001)
Document size detection		
- Feeding direction	Detects the length of the document set on the document pickup tray.	Document length sensor 1/2 (SR2009/SR2010)

Function	Description	Sensor used (Symbol)
- Widthwise direction	Detects the width of the document set on the document pickup tray.	Document width sensor 1/2 (SR2007/SR2008)

b. Method used in the banner mode
In the banner mode, the following two document detection functions are used.

T-5-5

Function	Description	Sensor used (Symbol)
Document presence/ absence detection	Detects presence or absence of document on the document pickup tray.	Document set sensor (SR2001)
Document length detection	Detects the length according to the distance from the point where the document edge sensor (SR2002) turns on to the point where this sensor turns off.	Document edge sensor (SR2002)

2. Document presence/absence detection
Presence/absence of document on the document tray is detected by the document set sensor (SR2001).
When document is placed on the document tray, the document detection levers move along with the light shielding plate, allowing light to pass through the photo interrupter. Thus, the document set sensor (SR2001) generates a document detection signal (EMPTY) to notify the host machine of presence of document under the control of the reader controller PCB.

F-5-6

3. Document Size Detection
When the size of the document set on the document tray is detected, the feeding-direction length is detected by the document length sensor 1 (SR2009) and document length sensor 2 (SR2010) and the widthwise length is detected by the document width sensor 1 (SR2007) and document width sensor 2 (SR2008).
When document is placed on the document tray, the levers of two document length sensors move along with the light shielding plate, shutting out the light to the photo interrupter.
When you adjust the slide guide to the document size, the light emitted to the two document width sensors inside the document tray is blocked by the light-shielding plate mounted at the bottom of the slide guide.
The document size is identified by the combination of the document length sensor states (ON/OFF) and the document width sensor states (ON/FFF).

F-5-7

The relationship between length detection sensor signals, document widths, and initially detected document sizes are as follows:

a. AB type

T-5-6

		Sensor name			
		Document width sensor 1	Document width sensor 2	Document length sensor 1	Document length sensor 2
Size	A3	ON	ON	ON	ON
	B4	OFF	ON	ON	ON
	A4R	OFF	OFF	ON	OFF
	B5R	ON	OFF	ON	OFF
	A4	ON	ON	OFF	OFF
	A5R	ON	OFF	OFF	OFF
	B5	OFF	ON	OFF	OFF
	A5	OFF	OFF	OFF	OFF

b. INCH type

T-5-7

		Sensor name			
		Document width sensor 1	Document width sensor 2	Document length sensor 1	Document length sensor 2
Size	11 x 17	-	ON	ON	ON
	LGL	-	OFF	ON	ON
	LTRR	-	OFF	ON	OFF
	LTR	-	ON	OFF	OFF
	STMT	-	OFF	OFF	OFF

5.2.4 Paper Pickup Operation

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

The pickup unit consists of pickup and transport rollers. When the Start Key signal or Document Pickup signal is input, the pickup clutch (CL2001) turns on to turn the ADF pickup motor (M2001) in the normal direction. The pickup unit lowers and the pickup and transport rollers rotate to feed the paper. The shutter moves up in conjunction with the pickup unit. A separation pad is used to prevent multiple sheets of paper from being transported at the same time.
After delivering the last sheet, the ADF pickup motor (M2001) turns in the reverse direction to raise the pickup unit to the original position.

Pickup clutch (CL2001) ADF pickup motor (M2001)

Shutter Pickup roller

Paper

Feed roller

Separation pad Shutter

F-5-8

5.2.5 Reversal Operation

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

There are two types of reversal operations, reversal from the top side to the back side and reversal from the back side to the top side. However, since their operating principles are the same, only reversal from the top side to the back side is described below.

a. Top side pickup
When the ADF pickup motor (M2001) starts, the registration roller turns to feed the paper along the platen guide for top side scanning. When the read motor (M2002) starts, the feed and delivery rollers turn to fees the paper to the delivery section.

M2001 M2002 M2001 M2002

Delivery roller

Platen guide Feed roller
Registration roller

F-5-9

b. Reversal/Feed 1
After lapse of the specified time since the trailing edge of the transported document passed through the delivery sensor (SR2004), the read motor (M2002) stops. Immediately after this, the read motor turns in the reverse direction to turn over the document, feed the document to the registration roller, and stops, thus turning on the roller release solenoid (SL2003) to release the delivery roller.

Delivery roller

F-5-10

c. Reversal/Feed 2
The document is transported by the ADF pickup motor (M2001), passing through the document read section.
Thus, the document has been turned over. The document is picked up again and its back side is read, turning off the roller release solenoid (M2003).
After this, the document is turned over again, fed, and delivered.

F-5-11

5.2.6 Delivery Operation

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

After completion of stream reading, the document is fed to the document delivery section as mentioned below.
a. Document feed/delivery
The document passed through the read position is fed by the delivery roller turned by the read motor (M2002). The delivery roller is pressurized normally. It is released only when the roller release solenoid (SL2003) turns on at turnover of the document in the duplex print mode.

Delivery roller

F-5-12

5.3 Detection Jams

5.3.1 Overview

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

This machine detects a document jam using the sensors shown in the figure below. The check timing for document jam detection is memorized in the ROM on the image processor PCB. Occurrence of a jam is judged according to whether document is present at the relevant sensor.
When a jam occurs, the host machine stores details of the jam with a jam code.
To check the jam code, enter the service mode of the host machine and output the jam error log report.

F-5-13

T-5-8

SR2001: Document set sensor

SR2002: Document edge sensor

SR2003: Registration sensor

SR2004: Delivery sensor

SR2005: Separation rear sensor

T-5-9

Code	Name	Sensor No.	Description
0000	Unknown jam	-	Some other error
0007	Initial stationary	SR2002, SR2003, SR2004, SR2005	Paper has been detected in the transport path before ADF initialization.
0008	Document edge sensor delay	SR2002	The document edge sensor cannot detect the document even when the document has been transported by the specified distance after reception of the pickup request.
0009	Document edge sensor stationary	SR2002	The trailing edge of document is not detected when the document has been transported by the specified distance after detection of paper by the document edge sensor.
000a	No paper (Pull out the document.)	SR2001	The document set sensor has been held off since start of document feed.
000c	Delivery delay jam	SR2004	The delivery sensor cannot detect document when the document has been transported by the specified distance since it was detected by the document edge sensor (after it had been transported by the specified distance in response to the pickup request).
000d	Delivery stationary jam	SR2004	The trailing edge of document is not detected when the document has been transported by the specified distance after detection of paper by the delivery sensor.
0010	Pickup NG	SR2003	The registration sensor has been held off since start of document feed.

5.4 ADF

5.4.1 Pick-up/Feed Roller Unit

5.4.1.1 Pickup/Feed Roller Unit

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

1) Open the feeder cover halfway.
2) With the ring arm [1] pressed, open the feeder cover in such a manner that it does not engage with the hook [2].
3) Remove the ring arm [1] from the arm shaft [3].

F-5-14

4) Remove the two shutters [1].
5) Remove the pickup/feed roller unit [2].
   - Shaft [3] 1pc. (Press the retaining plate with finger.)

F-5-15

⚠

Reinstallation precautions are as follows:
1. The arm [4] must be behind the shutter [1].
2. The arm [4] must be behind the rib [5].

5.4.2 Pick-up Roller

5.4.2.1 Removing the Pickup Roller

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

1) Remove the pickup/feed roller unit.
2) Remove the roller receiver [1].
   - Screw [2] 1pc.
3) Remove the pickup roller [3].

F-5-16

5.4.3 Feed Roller

5.4.3.1 Removing the Feed Roller

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

1) Remove the pickup/feed roller unit.
2) Remove the roller receiver [1].
   - Screw [2] 1pc.
3) Remove the feed roller [3].

F-5-17

5.4.4 Pick-up Motor

5.4.4.1 Removing the ADF Pickup Motor

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

1) Remove the rear cover.
2) Remove the left middle cover and the left rear cover.
3) Open the feeder cover.
4) Remove the gear cover [1].
   - Screw [2] 1pc.

F-5-18

5) Remove the ADF pickup motor [1].

- Connector [2] 1pc.
- Screw [3] 2pcs.
- Timing belt [4] 1pc.

F-5-19

5.4.5 Read Motor

5.4.5.1 Removing the Read Motor

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

1) Remove the rear cover.
2) Remove the left middle cover and the left rear cover.
3) Open the feeder cover.
4) Remove the gear cover [1].
   - Screw [2] 1pc.

F-5-20

5) Remove the read motor [1].
   - Connector [2] 1pc.
   - Screw [3] 2pcs.
   - Timing belt [4] 1pc.

F-5-21

5.4.6 Document Set Sensor

5.4.6.1 Removing the Document Set Sensor

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

1) Remove the rear cover.
2) Remove the left middle cover and the left rear cover.
3) Open the feeder cover.
4) Remove the gear cover [1].
   - Screw [2] 1pc.

F-5-22

5) Remove the sensor cover [1].
   - Screw [2] 1pc.

F-5-23

6) Remove the document set sensor [1].
   - Connector [2] 1pc.

F-5-24

5.4.7 Document Length Sensor

5.4.7.1 Removing the Document Length Sensor 1/2

i-SENSYS Fax-L3000IP

1) Remove the tray stopper and open the document pickup tray.
2) Remove the document pickup tray lower cover [1].
   - Screw [2] 3pcs.

F-5-25

3) Disconnect the document length sensor 1/2 [1].
   - Connector [2] 2pcs.

F-5-26

5.4.8 Document width sensor

5.4.8.1 Document Width Sensor

i-SENSYS Fax-L3000IP

1) Remove the tray stopper and open the document pickup tray.
2) Remove the delivery pickup tray lower cover [1].
   - Screw [2] 3pcs.

F-5-27

3) Remove the document width sensor unit [1].
   - Connector [2] 2pcs.
   - Screw [3] 2pcs.

F-5-28

4) Disconnect the document width sensor 1/2 [1].

F-5-29

5.4.9 Document Edge Sensor

5.4.9.1 Removing the Document Edge Sensor

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

1) Remove the rear cover.
2) Remove the left middle cover and the left rear cover.
3) Remove the ring arm and open the feeder cover.
4) Remove the stamp solenoid cover.
5) Disconnect the connector [1]. (When the stamp solenoid is installed)

6) Remove the screw [2].

F-5-30

7) Open the feeder cover guide.
8) Remove the white plate [1].
   - Tab [2] 2pcs.

F-5-31

⚠
Be careful not to lose the two springs [3].

9) Remove the read guide unit [1].
   - Screw [2] 2pcs.
   - Tab [3] 2pcs.

F-5-32

10) Remove the document edge sensor [1].
    - Connector [2] 1pc.

F-5-33

5.4.10 Registration Sensor

5.4.10.1 Removing the Registration Sensor

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

1) Remove the rear cover.
2) Remove the ring arm and open the feeder cover.
3) Remove the sensor cover [1].
   - Screw [2] 1pc.

F-5-34

4) Remove the registration sensor [1].
   - Connector [2] 1pc.

F-5-35

5.4.11 Separation Sensor

5.4.11.1 Removing the Separation Rear Sensor

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

1) Remove the rear cover.
2) Remove the left middle cover and the left rear cover.
3) Open the feeder cover.
4) Remove the gear cover [1].
   - Screw [2] 1pc.

F-5-36

5) Remove the sensor cover [1].
   - Screw [2] 1pc.

F-5-37

6) Remove the separation rear sensor [1].
   - Connector [2] 1pc.

F-5-38

5.4.12 Delivery Sensor

5.4.12.1 Removing the Delivery Sensor

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

1) Remove the rear cover and the left middle cover.
2) Remove the document feeder tray.
3) Remove the tray lower cover and the document delivery tray.
4) Remove the glass retainer, stream reading glass, and jump board.
5) Remove the gear cover [1].
   - Screw [2] 1pc.

F-5-39

6) Remove the document delivery unit [1].
   - E-ring [2] 1pc.
   - Gear [3] 1pc. (CIS shift type only)
   - Bearing [4] 1pc.
   - Connector [5] 1pc.
   - Screw [6] 2pcs.

[4]   [3]   [2]

[6]   [1]   [6]   [5]

F-5-40

7) Remove the delivery unit lower cover [1].
   - Screw [2] 1pc.

[2]   [1]

F-5-41

8) Remove the delivery sensor unit [1].
   - Screw [2] 1pc.

[1]   [2]

F-5-42

9) Remove the delivery sensor [1].

[1]

F-5-43

5.4.13 Release Solenoid

5.4.13.1 Removing the Roller Release Solenoid

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

1) Remove the rear cover.
2) Remove the left middle cover and the left rear cover.
3) Remove the roller release solenoid [1].
   - Connector [2] 1pc.
   - Screw [3] 1pc.

[2]   [1]

[3]

F-5-44

⚠

When reinstalling the roller release solenoid, insert the solenoid pin [2] in the hole [1] in the release lever.

[2]   [1]

F-5-45

5.4.14 Shading Clutch

5.4.14.1 Removing the Shading Clutch

i-SENSYS Fax-L3000IP

1) Remove the rear cover.

2) Remove the support base [1].
   - E-ring [2] 1 pc.
   - Bearing [3] 1 pc.
   - Screw [4] 1 pc.

[1]   [2]

[3]   [4]

F-5-46

3) Remove the shading clutch [1].

[1]

F-5-47

5.4.15 Pick-up Clutch

5.4.15.1 Removing the Pickup Clutch

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

1) Remove the rear cover.
2) Remove the left middle cover and the left rear cover.
3) Open the feeder cover.
4) Remove the gear cover [1].
   - Screw [2] 1pc.

[1]   [2]

F-5-48

5) Remove the pickup clutch support plate [1].
   - E-ring [2] 1pc.
   - Bearing [3] 1pc.
   - Screw [4] 5pcs.
   - Edge saddle [5] 2pcs.

[2]   [3]   [1]

[4]   [5]   [4]

F-5-49

6) Remove the pickup clutch [1].

[1]

F-5-50

5.4.16 Separation Pad

5.4.16.1 Removing the Separation Pad

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

1) Open the feeder cover halfway.
2) With the ring arm [1] pressed, open the feeder cover in such a manner that it does not engage with the hook [2].

3) Remove the ring arm [1] from the arm shaft [3].

F-5-51

4) Remove the separation pad [1].
   - Claw [2] 2pcs.

F-5-52

⚠

When reinstalling the separation pad, insert spring [2] in the hole [1].

F-5-53

Chapter 6 Laser Exposure

Contents

6.1 Overview/Configuration

6.1.1 Specifications and Control Mechanism

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

T-6-1

Item	Description
Laser beam	
Number of laser beams	2 beams
Scanner Motor	
Type of motor	DC brushless motor
Rotation control	Constant speed rotaion control
Polygon Mirror	
Number of facets	4 facets (20-mm dia.)
Control Mechanism	
Synchronous control	Horizontal (main scan) synchronization control
Light intensity control	Automatic photocurrent control (APC)
Others	Laser emission ON/OFF control
	Laser scanner motor control
	Laser shutter control

6.1.2 Main Components

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

The laser scanner unit consists of the following major components:
- laser unit, which serves as the source of laser beam.
- laser scanner motor, equipped with a 4-face mirror for laser scanning.
- laser driver/BD PCB used to detect laser beam or to control emission of laser beam.

The laser beam generated by the laser unit based on the signals from the DC controller PCB moves through the collimator lens (inside the laser unit) and the cylindrical lens to reach a 4-face polygon mirror rotating at a constant speed.

When reflected by the 4-face polygon mirror, the laser beam moves through the imaging lens, and is bent by the reflecting mirror to reach the photosensitive drum. At this time, the laser beam also is directed to the BD circuit of the laser driver/BD PCB.

As the 4-face polygon mirror rotates at a constant speed, the laser beam scans the surface of the photosensitive drum at a constant speed, thereby removing charges and forming static images.

F-6-1

6.2 Parts Replacement Procedure

6.2.1 Laser/Scanner Unit

6.2.1.1 Removing the Laser Scanner Unit

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

⚠

The laser scanner was-factory adjusted. Never disassemble it.

1) Remove the rear cover and front cover.
2) Remove the right cover and tray lower cover.
3) Remove the control panel and delivery tray.
4) Remove the laser shutter [1].
5) Remove the laser scanner unit [2].
   - Connector [3] 1pc.
   - Flexible cable [4] 1pc.
   - Screw [5] 4pcs. (using the stubby screwdriver)

F-6-2

MEMO:
When reinstalling the laser scanner unit, it is difficult to install the encircled screw if your stubby screw driver is not magnetized. In this case, first install the screw in the screw hole on the laser scanner unit, place the laser scanner unit in place, and then tighten the screw tightly.

F-6-3

Chapter 7 Image Formation

Contents

7.1 Overview/Configuration

7.1.1 Specifications and Control Mechanism

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

T-7-1

Items	Description
Photosensitive drum	
Drum type	OPC drum
Drum diameter	24mm
Cleaning mechanism	Cleaning blade
Processing speed	132.9mm/sec
Primary charging	
Charging method	Roller charging (AC + DC)
ng roller diameter	12mm
Transfer charging	
Charging method	Roller charging (DC)
Charging roller diameter	14.8mm
Developing assembly	
Developing cylinder diameter	20\\12mm
Developing method	Dry, 1-component jumping (AC + DC)
Toner	1-component, negative toner
Remaining toner level detection	Remaining toner level sensor (in toner cartridge)
Others	
Separation method	Static Eliminator + Curvature separation
Waste toner	Collected in the toner cartridge.

7.1.2 Outline

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

The following is below the construction of the image formation system.
The machine is a cartridge type, in which the core of its image formation components are constructed as a signal entity: photosensitive drum, primary charging roller, developing cylinder, cleaning blade, and toner housing.
The DC controller PCB has a built-in high-voltage output assembly, and generates high voltage for charging at such times as necessary.
This machine is provided with a humidity sensor to attain charging suitable for the environment.
The DC controller PCB monitors the humidity sensor status during standby to output the appropriate charging AC voltage.

F-7-1

MEMO:
1.The cartridge of this machine can be used to copy about 4,500 sheets (A4, ptint rate of 5%).
2.The number of prints that may be made after the first indication of the message "< TONER LOW/ PREPARE NEW TONER>" is about 530 sheets (A4, ptint rate of 5%).

7.2 Image Formation Process

7.2.1 Cross-Section (Main body)

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

The machine uses an indirect electrostatic method, and is constructed as shown below

F-7-2

The machine is designed as a cartridge model, in which its drum, toner, primary charging assembly, developing assembly, and drum cleaner assembly are all constructed as a single entity.
The machine's image formation processes can be divided into the following 5 blocks (7steps):

F-7-3

[1] **Latent Image Formation Block**
Step 1 primary charging (AC + negative DC)
Step 2 laser beam exposure
[2] **Developing Block**
Step 3 development (AC + negative DC bias)
[3] **Transfer Block**
Step 4 transfer (positive DC)
Step 5 separation (grounding)
[4] **Fixing Block**
Step 6 fixing
[5] **Drum Cleaning Block**
Step 7 drum cleaning

7.3 Parts Replacement Procedure

7.3.1 Transfer Charging Roller

7.3.1.1 Removing the Transfer Charging Roller

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

1) Remove the cartridge.
2) Remove the transfer charging roller [1].
   - Claw [2] 2pcs.

F-7-4

⚠

1. Do not touch the sponges of the transfer charging roller. If touched, it may cause stains on the back of paper or blank areas of images.
2. Replace the roller if it is not fully cleaned with the lint-free paper or deformed.
3. Never use solvents.

Chapter 8 Pickup and Feed System

Contents

8.1 Overview/Configuration

8.1.1 Outline

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

The machine is not equipped with a paper width detection mechanism. It uses center reference, in which paper moves centered through the pickup/feeding/delivery path. The source of paper may be from any of two: cassette and manual feed tray.
The paper is controlled so that its leading edge matches the leading edge of the image on the photosensitive drum by means of the registration sensor (SR11); it then is moved through the transfer, separation, feeding, and fixing assemblies to reach the delivery tray.
The machine is equipped with 5 sensors to monitor the movement of paper; the arrangement and of these sensors and rollers are as follows:

F-8-1
T-8-1

Symbol	Name
SR5	Delivery sensor
SR9	Cassette paper sensor
SR10	Delivery paper full sensor
SR11	Registration sensor
SR12	Multi feed paper sensor
[1]	Cassette pickup roller
[2]	Cassette feed roller
[3]	Cassette separation roller
[4]	Multi feed pickup roller
[5]	Multi feed separation pad
[6]	Registration roller

8.2 Detection Jams

8.2.1 Jam Detection Outline

8.2.1.1 Outline

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

The machine is equipped with 3 jam sensors and 1 jam switch used to motor the movement of paper.
The presence/absence of paper or of a jam is checked at such times as programmed in advance in the CPU of the DC controller PCB and in relation to the presence/absence of paper over a specific sensor at a given time. If the machine detects a jam, it will turn off the main
motor (M1), and will indicate a jam message in the control panel.

SR5

SW2

SR11

SR9

F-8-2

T-8-2

Symbol	Name
SR5	Delivey sensor
SR9	Cassette paper sensor
SR11	Registration sensor
SW2	Interlock switch

8.2.1.2 Types of Jams

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

The machine groups jams into 7 types. When a jam occurs, be sure to remove it, and start over the operation.

Pickup Delay Jam
After execution of a pickup retry, the registration sensor (SR11) does not detect the leading edge of paper within a specific period of time. Or after the duplex drive solenoid (SL1) is on, the registration sensor (SR11) does not detect the leading edge of paper within a specific period of time.

Delivery Sensor Delay Jam
After the registration sensor (SR11) has detected the leading edge of paper, the delivery sensor (SR5) does not detect the leading edge of paper within a specific period of time.

Pickup Stationary Jam
After the registration sensor (SR11) has detected the leading edge of paper, the registration sensor (SR11) does not detect the trailing edge of paper within a specific period of time.

Delivery Sensor Stationary Jam
After the registration sensor (SR11) has detected the trailing edge of paper, the delivery sensor (SR5) does not detect the trailing edge of paper within a specific period of time.

Wound Paper Jam at Fuser

The delivery sensor (SR5) has detected absence of paper within the prescribed time after it detected presence of paper.

Initial Jam
- When presence of paper is detected by the registration sensor (SR11) or delivery sensor (SR5) at the start of waiting.
- When presence of paper is detected by the delivery sensor (SR5) during waiting.

Left Cover Open Jam
During paper feeding, the interlock switch (SW2) has detected OFF.

8.3 Cassette Pickup Unit

8.3.1 Outline

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

Paper is picked up from the cassette under the control of the CPU on the DC controller PCB and using the drive of the main motor (M1). When the cassette pickup solenoid (SL2) goes ON, the drive of the main motor (M1) is transmitted to the cassette pickup roller assembly
to rotate the cassette pickup roller.
When the cassette pickup roller rotates, a single sheet of paper is separated from the stack by the separation claws of the cassette, and is sent as far as the registration roller by way of the feed roller.
After the paper passes a registration sensor (SR11), the paper reaches the registration roller. At this time the registration roller is at rest, causing the leading edge of the paper to butt against it to form an arch.
The DC controller PCB turns on the registration clutch (CL1) at specific timing to transmit the drive of the main motor to the registration roller, thereby moving the paper ahead. The paper reaches the delivery tray after moving through the transfer, separation, and fixing/delivery assemblies.
The deliver tray has a delivery paper full sensor (SR10) to detect that the delivered sheets are stacked fully.
When the total height of the delivered sheets reaches the specified value and the delivery paper full sensor (SR10) turns on, this machine detects occurrence of an error and displays an error message on the LCD.

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8.3.2 Retry Pickup

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

If the registration sensor (SR11) does not detect paper within a specific period of time after the cassette pickup roller has started to rotate, the machine will start to rotate the cassette pickup roller once again to execute a retry pickup operation.
If the registration sensor (SR11) still does not detect paper within a specific period of time after executing a retry pickup 3 times, the machine will identify the condition as a jam and will indicate a jam message on the LCD of its control panel.

8.3.3 Detecting the Size of Paper

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

The cassette paper size detection is performed using the registration sensor (SR11) based on the length of paper. In fax mode, if paper of a size different from the size selected from the control panel is placed, the DC controller will identify a paper size mismatch at the end of printing and indicate a message on the LCD.

8.4 Duplex Unit

8.4.1 Outline

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

The duplex pickup operation of this machine is performed by driving the main motor (M1) under the control of the CPU installed on the DC controller PCB. When the trailing edge of the paper finished with printing on its top surface reaches the point 10 mm away from the delivery sensor (SR5), the duplex drive solenoid (SL1) turns on and the drive power of the main motor is transmitted to the delivery roller and duplex drive roller. Paper is led to the duplex unit through the reverse rotation of the delivery roller, and then fed to the registration roller via the duplex drive roller.
The paper transport for duplex printing is not provided with a sensor that detects arrival or passage of paper.
The duplex unit does not have a function of stopping and holding paper temporarily.
The sequence of duplex printing of the original (e.g., two sheets of original) is: reverse side of first sheet (the memory function is used.) -> top side of first sheet -> reverse side of second side -> top side of second sheet.

F-8-4

8.5 Manual Feed Pickup Unit

8.5.1 Outline

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

Paper is picked up from the manual feed tray under the control of the CPU on the DC controller PCB and using the drive of the main motor (M1). When the manual feed pickup solenoid (SL5) goes ON, the drive of the main motor (M1) is transmitted as far as the
manual feed pickup roller assembly to rotate the manual feed pickup roller.
The sheets of paper stacked in the manual feed tray are lifted by the work of a spring and forced against the manual feed pickup roller. Thereafter, a single sheet of paper is separated by the work of the manual feed pickup roller and the separation pad, and is moved as far as the registration roller.
After the paper passes a registration sensor (SR11), the paper reaches the registration roller. At this time the registration roller is at rest, causing the leading edge of the paper to butt against it to form an arch.
The DC controller PCB turns on the registration clutch (CL1) at specific timing to transmit the drive of the main motor to the registration roller, thereby moving the paper ahead. The paper reaches the delivery tray after moving through the transfer, separation, and fixing/delivery assemblies.
The deliver tray has a delivered paper full sensor (SR10) to detect that the delivered sheets are stacked fully.
When the total height of the delivered sheets reaches the specified value and the delivered paper full sensor (SR10) turns on, this machine detects occurrence of an error and displays an error message on the LCD.

F-8-5

8.5.2 Retry Pickup

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

If the registration sensor (SR11) does not detect paper within a specific period of time after the manual feed pickup roller starts to rotate, the machine will rotate the manual feed pickup roller once again to execute a retry pickup operation. If the registration sensor (SR11) still does not detect the leading edge of paper after executing a retry pickup 3 times, the machine will identify the condition as a jam and will indicate a jam message on the LCD in its control panel.

8.5.3 Detecting the Size of Paper

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

The size of paper in the manual feed tray is detected using the registration sensor (SR11) with reference to the length of paper. In fax mode, if paper of a size different from the size selected from the control panel is placed, the DC controller will identify a paper size
mismatch at the end of printing and indicate a message on the LCD.

8.6 Parts Replacement Procedure

8.6.1 Cassette Pickup Roller

8.6.1.1 Removing the Cassette Pickup Roller

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

1) Remove the cassette.
2) Place the machine with the rear panel down. However, since the exhaust duct projects about 18 mm from other area of the rear panel, insert stacks of paper or the like under the rear panel so that the machine stands stably.

F-8-6

3) the pickup roller a half-turn with one hand, release the hook [1] with the other hand, and remove the cassette pickup roller [2].

F-8-7

8.6.2 Cassette Separation Roller

8.6.2.1 Removing the Cassette Separation Roller

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

1) Remove the cassette.
2) Place the machine with the rear panel down. However, since the exhaust duct projects about 18 mm from other area of the rear panel, insert stacks of paper or the like under the rear panel so that the machine stands stably.
3) While pressing the separation roller [1] to release the pressure, remove the boss [2] and slide the feed roller upward until the shafts [3] are separated.
4) Pull out the feed roller [4] to remove it.

F-8-8

5) Remove the two claws [1], and pull out the separation roller assembly [2].
6) Remove the boss [3] from the boss hole to remove the separation roller assembly [4].

F-8-9

7) Remove the separation roller [1].
   - Shaft [2] 1pc.

F-8-10

8.6.3 Cassette Paper Sensor

8.6.3.1 Removing the Cassette Paper Sensor

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

1) Remove the transfer guide [1].
   - Sfaft [2] 2pcs.

F-8-11

2) Remove the snesor cover plate [1].
   - Claw [2] 1pc.

F-8-12

3) Remove the cassette paper sensor [1].
   - Connector [2] 1pc.

F-8-13

8.6.4 Cassette Pickup Solenoid

8.6.4.1 Removing the Cassette Pickup Solenoid

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

1) Remove the rear cover, left middle cover, and left rear cover.
2) Remove the relay PCB, registration clutch, and pickup drive unit.
3) Remove the the cassette pickup solenoid [1].
   - Gear[2] 1pc.

- Screw [3] 1pc.

F-8-14

8.6.5 Paper Feed Roller

8.6.5.1 Removing the Cassete Feed Roller

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

1) Remove the cassette.
2) Place the machine with the rear panel down. However, since the exhaust duct projects about 18 mm from other area of the rear panel, insert stacks of paper or the like under the rear panel so that the machine stands stably.
3) While pressing the separation roller [1] to release the pressure, remove the boss [2] and slide the feed roller upward until the shafts [3] are separated.
4) Pull out the feed roller [4] to remove it.

F-8-15

5) Remove the feed roller [1].
   - Bushing [2] 1pc.
   - Shaft [3] 1pc.

F-8-16

8.6.6 Manual Pickup Roller

8.6.6.1 Removing the Manual Pickup Roller

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

1) Remove the rear cover, left middle cover, and left rear cover.
2) Flex the center and remove the roller cover [1].
   - Screw [2] 1pc.
   - Claw [3] 1pc.
   - Plugging part [4]1pc.

F-8-17

3) While holding the manual separation pad [1], release the right hook [2] and then slide the right bearing [3].
4) Remove the manual pickup roller [4].

F-8-18

8.6.7 Manual Feed Tray Paper Sensor

8.6.7.1 Removing the Manual Tray Sensor

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

1) Remove the rear cover, left middle cover, and left rear cover.
2) Remove the manual tray sensor [1].
   - Connector [2] 1pc.

F-8-19

8.6.8 Manual Pickup Solenoid

8.6.8.1 Removing the Manual Pickup Solenoid

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

1) Remove the rear cover, left middle cover, and left rear cover.
2) Remove the manual tray pickup solenoid [1].
   - Connector [2] 1pc.
   - Screw [3] 1pc.

F-8-20

8.6.9 Manual Separation Roller

8.6.9.1 Removing the Manual Separation Pad

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

1) Remove the manual pickup roller.
2) While holding the manual separation pad [1], release the claw [3] and slide the left bearing [4] with attention paid to the sensor flag [2].

F-8-21

3) Remove the manual pickup pad [1] with the flathead screwdriver.

F-8-22

8.6.10 Registration Roller

8.6.10.1 Removing the Registration Roller

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

1) Remove the front cover and rear cover.
2) Remove the left middle cover and left rear cover.
3) Remove the registration clutch.
4) Remove the transfer guide [1].
   - Shaft [1] 2pcs.

F-8-23

5) Remove the registration sensor cover [1].
   - Claw [2] 2pcs.

F-8-24

6) Remove the registration sensor unit [1].
   - Connector [2] 1pc.
   - Boss [3] 2pcs.

F-8-25

7) Make a note of the positions ([A] to [C]) of two springs [1]. Next, remove the two springs [1].

⚠

Each spring can be hooked at one of three positions. It is factory-hooked at the appropriate position for image adjustment.
Once you have removed a spring, be sure to hook it at the original position. Install the red spring in the rear side, and install the colorlessness in the front side.

8) Remove the right registration roller [2].
   - Bearing [3] 2pcs.

F-8-26

9) Remove the left registration roller [1].
   - E-ring [2] 1pc
   - Bearing [3] 2pcs.

- Shaft support [4] 1pc.

F-8-27

⚠

When reinstalling the right registration roller, the grounding spring [2] must be in touch with the end [1] of this roller. It is recommended to use tweezers when reinstalling the E-ring [3].

F-8-28

8.6.11 Registration Sensor

8.6.11.1 Removing the Registration Sensor

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

1) Remove the transfer guide [1].
   - Shaft [2] 2pcs.

F-8-29

2) Remove the registration sensor cover [1].
   - Claw [2] 2pcs.

F-8-30

3) Remove the registration snesor unit [1].
   - Connector [2] 1pc.
   - Boss [3] 2pcs.

F-8-31

4) Remove the registration sensor [1].

F-8-32

8.6.12 Duplex Pick-up Solenoid

8.6.12.1 Removing the Duplex Pickup Solenoid

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

1) Remove the rear cover, left middle cover, and left rear cover.
2) Remove the fan duct and main motor.
3) Remove the relay PCB and registration clutch.
4) Remove the pickup drive unit, main drive unit, and fixing/drive unit.
5) Remove the duplex pickup solenoid [1].
   - Screw [1] 1pc.

F-8-33

⚠

When installing the duplex pickup solenoid, be sure to install the solenoid lever [1] on the arm [2].

F-8-34

8.6.13 Registration Clutch

8.6.13.1 Removing the Registration Clutch

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

1) Remove the rear cover.
2) Remove the registration clutch [1].
   - Connector [2] 1pc.
   - E-ring [3] 1pc.

F-8-35

8.6.14 Main Motor

8.6.14.1 Removing the Main Motor

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

1) Remove the rear cover.
2) Remove the fan duct[1].
   - Screw [2] 1pc.
3) Remove the main motor [3].
   - Connector [4] 1pc.
   - Screw [5] 3 pcs.

F-8-36

Chapter 9 Fixing System

Contents

9.1 Overview/Configuration

9.1.1 Specifications, Control Mechanisms, and Functions

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

T-9-1

Item	Function/Method
Fixing method	by fixing film + pressure roller
Fixing heater	Unitary flat heater incorporating both main heater and sub heater
Fixing temperature detection	[1] Main thermistor (TH1): Temperature control and fault detection
	[2] Sub thermistor (TH2): Fault detection
	[3] Temperature-switch (TP): Fault detection
Fixing temperature control	[1] Warm-up temperature control
	[2] Normal temperature control
	[3] Sheet-to-sheet temperature control
Protection functions	[1] Detection of error in temperature control by thermistor
	[2] Detection of temperature rise by temperature huse

9.1.2 Outline

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

The fixing unit employing the on-demand fixing method consists of a fixing film unit (incorporating a fixing heater, thermistor, and temperature huse), a pressure roller, and a delivery roller.
The fixing pressure roller and the delivery roller are driven by the main motor (M1). The paper separated from the photosensitive drum is moved to the inside of the fixing assembly; the paper is then moved outside it after the toner is fused to the paper by the work
of the fixing film and the fixing pressure roller.
The delivery sensor (SR5) is used to detect paper coming out of the fixing assembly.

F-9-1

Fixing heater (H1)

Temperature fuse (TP)

Fixing pressure roller

Sub thermistor (TH2)

Main thermistor (TH1)

Fixing film

F-9-2

9.2 Various Control Mechanisms

9.2.1 Controlling the Temperature of the Fixing Unit

9.2.1.1 Outline

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

The fixing film unit has a plate-shaped fixing heater built into it for heating the fixing film.
The fixing heater is equipped with 2 thermistor: a main thermistor in the middle and a sub thermistor at the end. The main thermistor is used to control the temperature of the fixing heater and to detect its overheating, while the sub thermistor is used to detect an error temperature on the end of the fixing heater.
The CPU on the DC controller PCB monitors the main thermistor signal (FSRTH) and the sub thermistor signal (SUBTH) from the thermistors for control of the fixing heater drive signal (FSRD0) and the relay drive signal (RLYD), thus varying the supply of power to the heater and, ultimately, controlling the temperature of the fixing heater.

9.2.2 Controlling the Fixing Film Temperature

9.2.2.1 Controlling the Fixing Film Temperature

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

The CPU on the DC controller PCB executes the following 6 types of fixing temperature control:

1. Startup Temperature Control
Upon input of a print command from the image processor PCB, the fixing heater is heated up to the temperature lower than the target temperature of paper pass temperature control according to the fixing temperature control mode and the number of prints made previously.

2.Paper-present section temperature control
The fixing heater temperature is adjusted to the target paper-present section temperature according to the combination of the paper size, number of sheets fed, fixing mode, and temperature detected by the fixing main thermistor.

3.Sheet-to-sheet temperature control
The fixing heater temperature is held relatively below the target paper-present section temperature to prevent the paper-absent section temperature from rising between sheets.

4.Target temperature for the distance between sheets during duplex printing
To prevent the temperature rise of the no-paper pass unit for the distance between sheets during duplex printing, the fixing heater temperature is controlled as follows.
For the first to third prints, the fixing heater temperature is lowered by 25 deg C from the target temperature of paper pass temperature control.
For the fourth and succeeding prints, the fixing heater temperature is lowered by 35 deg C from the target temperature of paper pass temperature control

5. Control at Time of Down Sequence
When prints are made in the continuous print mode, the sub-thermistor in the no-paper pass unit may rise extremely. To prevent this, the print head and paper clearance is widen when the sub-thermistor detects a temperature equal to or higher than 250/255/260 deg C. The down sequence is performed in three steps according to the detected temperature. If the sub-thermistor detects a temperature equal to or lower than 180 deg C in the down sequence, the normal temperature control resumes.

Reference:
A5/STMT throughputs in three down sequence steps are as follows:
Down sequence 1 (Detection of 250oC): A5/STMT plain paper 8 pppm
Down sequence 2 (Detection of 255oC): A5/STMT plain paper 3 pppm
Down sequence 3 (Detection of 260oC): A5/STMT plain paper 2 pppm

6. Cooling Mode
If prints are made on large-size (*1) paper after making prints on small-size (*1) paper in the continuous print mode, a fixing offset can occur due to the difference in temperature between the edge and center of paper. To prevent this, the main motor is driven for 40 seconds after continuous printing on small-size paper or down-sequence control, thus lowering the temperature detected by the sub-thermistor to a temperature below 160 deg C. When the following heater cooling time lapses after stop of the main motor, normal control resumes.
*1 Large-size paper: 270 mm or longer Small-size paper: 215.9 mm or longer

T-9-2

	After printing on small-size paper.			After the throughput of printing on large-size paper has reduced.
Print count (sheets)	1-10	11-20	21 and more	Any number of prints
Heater cooling time (s)	0	5	10	10

9.2.2.2 Target Temperatures by Mode

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

This machine controls the fixing temperature according to the "media type" selected in the user mode and the "target temperature" set in the "special mode."
The correspondence between each mode and target temperature is as follows:

T-9-3

Paper type	Cassette pickup	Manual feed tray pickup	Duplex	Fixing mode	Target initial fixing temperature (*1)	Initial number of sheets (*2)	Reamarks
Plain paper/colored paper/recycled paper/ heavy paper1(81-90g/ m2)	Yes	Yes	Yes	Plain paper	210 deg C	1-30 (A4/LTR)	Special Mode S: OFF
					185 deg C	1-30 (A4/LTR)	Special Mode S: ON
Heavy paper2(91 to 105g/m2)	-	Yes	-	Heavy paper	210 deg C	1-30 (A4/LTR)	
Heavy paper3(106 - 128g/m2)	-	Yes	-	Heavy paper H	215 deg C	1-30 (A4/LTR)	
Transparency	-	Yes	-	OHP	195 deg C	1-30 (A4/LTR)	
Envelopes	-	Yes	-	Envelope H /Envelope L	215 deg C	1-5	The controller changes fixing mode by size.
Labels	-	Yes	-	Heavy paper	210 deg C	1-5 (A4/LTR)	
3hole punch paper	Yes	Yes	Yes	Plain	210 deg C	1-30 (A4/LTR)	Special Mode S: OFF
					185 deg C	1-30 (A4/LTR)	Special Mode S: ON

*1: Target fixing temperature at startup. When the initial temperature of the fixing unit is high, the target temperature is lowered. In the continuous copy mode, the target temperature is lowered.
*2: Number of sheets controlled at the initial target temperature. If it is exceeded, the target temperature is lowered. The prescribed number of sheets varies with the paper size.

9.3 Protection Function

9.3.1 Outline

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

This circuit is installed on the DC controller PCB. It is used to monitor abnormal rise of the fixing temperature at all times. If the main thermistor's output voltage is held below about 0.78 V (about 235 deg C or higher) for at least 1 second or the sub-thermistor's output voltage is held blow about 0.39 V for 0.15 seconds or longer due to the rise in the fixing heater temperature, the relay is turned off and the fixing heater is turned off irrespective of the relay drive signal (RLYD).
If the temperature of the fixing heater increases abnormally, on the other hand, to exceed about 228 deg c, the temperature fuse will melt to cut the power to the fixing heater.

F-9-3

9.3.2 Failure Detection

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

The CPU on the DC controller PCB will identify a fault in the fixing assembly if any of the following conditions (a through d) occurs; as a result,
- it will cut the power to the fixing heater.
- it will cause the relay drive signal (RYLD) to go '1' to turn off the relay and, at the same time, will communicate the presence of a fault to the image processor PCB.

a. Detection of thtermistor short circuit (excessively high temperature)
This failure is detected when the main thermistor has continuously detected a temperature equal to or higher than 235 deg C for 1 second or longer during temperature control.
This failure is detected when the sub-thermistor has continuously detected a temperature equal to or higher than 300 deg C for 0.15 second or longer during temperature control.

b. Detection of open thermistor (excessively low temperature)
This failure is detected when the main thermistor has continuously detected a temperature lower than 20 deg C for 0.5 second or longer during temperature control.
This failure is detected when the sub thermistor has continuously detected a temperature lower than 35 deg C for 0.15 second or longer after the end of start up.
This failure is detected when the sub-thermistor cannot detect a temperature equal to or higher than 75deg C even if 2.29 to 20 seconds have lapsed since start of power supply to the fixing heater.

c. Detection of Drive circuit failure (zero-cross error)
This failure is detected when the number (cycle) of zero-cross inputs that have been counted every second has been outside the range (45-65 Hz) twice.

d. Detection of startup failure
This failure is detected when the main thermistor has detected a temperature lower than 45 deg C 2.29 seconds after start of power supply to the fixing heater.
This failure is also detected when the main thermistor temperature is lower than 150 deg C and the rise in the main temperature per second is less than 12 deg C or when the main thermistor temperature does not reach the target value 20 seconds later.

9.4 Parts Replacement Procedure

9.4.1 Fixing Unit

9.4.1.1 Removing the Fixing Unit

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

⚠

The fixing assembly is in a very high temperature just after operation. Firstly turn off the power switch and remove the assembly when it is fully cooled.

⚠

The height of the fixing unit is adjusted at 2 mounting points at the front (left door + front cover) prior to shipment. If you need to detach the fixing unit, apply 2 markings [1] before detaching the unit to enable you to return the unit to its previous position. When replacing the fixing unit with a new one, carry out height adjustment.

F-9-4

1) Remove the rear cover and front cover.
2) Remove the left middle cover, left front cover, and left rear cover.
3) Remove the front left cover.

F-9-5

4) Slide the guide (front) [1] to remove it.
    - Boss [2] 1pc.

F-9-6

5) Remove the two connectors [1].

F-9-7

6) Remove the fan duct [1].
    - Screw [2] 1pc.
7) Slide the fan unit [3] upward to remove it.
    - Connector [4] 3pcs.

- Screw [5] 1pc.

F-9-8

8) Slide the guide (rear) [1] backward to remove it.
   - Boss [2] 1pc.

F-9-9

9) remove the fixing gear [1].
   - Fixing gear retainer [2] 1pc.

F-9-10

10) Apply marking [1].
11) Remove the positioning pin [2].
   - Screw [3] 1pc.

F-9-11

12) Apply marking [1].
13) Remove the fixing unit [2].
   - Screw [3] 4pcs.

F-9-12

⚠

To install the fixing unit, follow "Installing the fixing unit".

9.4.1.2 Installing the fixing unit

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

Follow the procedure described below when installing the fixing unit.
1) Install the fixing unit without tightening the screws.
2) Install the positioning pin [2] to align with marking [1] at the left door, and then fix it with 4 screws at the front and back of the left door. When installing a new fixing unit, install the positioning pin to align with reference mark [3].

[3]   [1]   [2]

F-9-13

3) Remove the positioning pin.
4) Install positioning pin [2] to align with marking [1] at the front cover, and then fix it with one screw [3]. When installing a new fixing unit, install the positioning pin to align with reference mark [4].

F-9-14

5) Perform the following procedure by reversing the installation procedure.

9.4.2 Fixing Film Unit

9.4.2.1 Removing the Fixing Film Unit

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

⚠

1. Do not touch the fixing film surface when removing the fixing film unit.
2. The thermo switch is attached in the fixing film unit. If disassembled, the switch may not be normally operated. Never disassemble the thermo switch.

1) Remove the fixing unit.
2) Remove the reversing guide [1].
   - Screw [2] 1pc.
3) Remove the sensor lever unit [3].
   - Screw [4] 2pcs.

[4]   [3]   [4]   [2]

[1]

F-9-15

4) Remove the two pressure plate [1].
   - Pressure spring [2] 2pcs.

F-9-16

⚠ See the illustration below when reinstalling the pressure springs [1] and plates [2].

F-9-17

5) Remove the delivery guide [1].
   - Screw [1] 2pcs.

F-9-18

6) Remove the guide [1].
   - Screw [2] 2pcs.
   - Grounding plate [3] 1pc.

F-9-19

7) Remove the fixing film unit [1].

F-9-20

9.4.3 Fixing Pressure Roller

9.4.3.1 Removing the Pressure Roller

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

1) Remove the fixing film unit.
2) Slide the fixing unit inlet guide [1] sideways to release it. (The fixing unit inlet guide need not be removed.)
   - Screw [2] 1pc.
3) Remove the pressure roller [3].

F-9-21

4) Remove the pressure roller [1].
   - Gear [2] 1pc.

F-9-22

⚠ Precautions for Installation of Pressure Roller
When reinstalling the pressure roller, pay attention to the following:
1. The pressure roller bearing must be in touch with the leaf spring [1].
2. The left and right bearings [2] must be installed properly.

F-9-23

9.4.4 Fixing Delivery Paper Sensor

9.4.4.1 Removing the Delivery Sensor

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

1) Remove the front cover, left front cover, and front left cover.
2) Slide the guide (front) [1] upward to remove it.
   - Boss [2] 1pc.

F-9-24

3) Remove the delivery sensor [1].
   - Connector [2] 1pc.

F-9-25

9.4.5 Delivery Full Sensor

9.4.5.1 Removing the Delivery Full Sensor

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

1) Remove the fixing unit.
2) Remove the delivery full sensor [1].
   - Connector [2] 1pc.

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Chapter 10 External and Controls

Contents

10.1 Control Panel

10.1.1 Outline

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

The machine's control panel consists of the following PCBs, and is controlled by the ASIC of the image processor PCB.

F-10-1

10.2 Fan

10.2.1 Outline

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

This machine has two fans on the rear side.
Fixing exhaust fan (FM1):Discharge the hot air around the fixing unit and cool the laser scanner unit and electric elements on PCBs. The fan is controlled by the CPU on the DC controller PCB.
Reader fan (FM2000): Cool the ADF pickup motor, the reader motor and the reader controller PCB. The fan is controlled by the CPU on the image processor PCB.
Its operating conditions are as follows:
a. Fixing exhaust fan (FM1)
<Startup conditions>
1. During normal rotation, in the fixing cleaning mode (user mode), or after paper has reached the registration clutch
2. During transfer roller cleaning (user mode) or after operation of the main motor

<Stop conditions>
1. After post-rotation, after completion of the cleaning mode, or 30 seconds after stop of the main motor
2. After stop of the main motor due to opening of a door or occurrence of a jam or other failures

The CPU on the DC controller CPU outputs a Fan Drive signal (FANON = 'H') to turn the fan.
The CPU judges that a fan failure has occurred if it detects a Fan Lock Detection signal (FANLOCK = 'H') during fan rotation.

b. Reader fan (FM2000)
<Drive conditions>
1. When the ADF pickup motor or the read motor started the rotation.

When the image processor PCB outputs the fan drive siganal, the ASIC on the reader controller outputs the Fan Drive signal (FANON = 'H') to turn the fan.
There is not the lock detection during the fan rotation.

F-10-2

10.3 Power Supply

10.3.1 Power Supply

10.3.1.1 Outline

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

When the main power switch (SW1) is turned on, AC power is supplied to the low-voltage power supply circuit in the power supply PCB.
The low-voltage power supply circuit supplies +3.3 V, +5 V, and +24 V to operate the machine.
+24 V is supplied to the motors, fan, electromagnetic clutch, solenoid, etc. +5 V and +3.3 V are supplied to the DC controller PCB, image processor PCB, anlog processor PCB.
There are two types of +24 V voltages: +24 VR which is normaly supplied from the low voltage power supply and +24 VU which is cut off when the left door is opened. The +24VU is supplied to the DC controller PCB and main motor. The +24 VU also plays the role of a door open detection signal (DOPEN). This signal allows the CPU to detect that the left door has opened.

T-10-1

Part Name	Function
Power supply PCB	Generates DC power from AC power.
Main power switch (SW1)	Supplies AC power to the power supply PCB.
Interlock switch (SW2)	Detects opening/closing of the left door and cuts off +24 VR.

*1 : Only if equipped with Printer functions.
*2 : Only if equipped with SEND functions.
*3 : Option

F-10-3

10.3.1.2 Rated Output of the Power Supply PCB

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

T-10-2

Output	24VR	5V	5VR	3.3V	3.3VR
Rated output voltage	24V	5.1V	5.1V	3.4V	3.4V
Output voltage tolerance	+10%, -5%	+3%, -4%	+3%, -4%	+3%, -3%	+3%, -3%
Rated output current	4.5A	0.3A	0.7A	2.4A	0.8A
Overcurrent protection trigger current	7.0A	4.0A	2.0A	3.7A	2.0A
Overvoltage protection trigger voltage	32.5V	8.0V	8.0V	5.5V	5.5V

10.3.2 Protection Function

10.3.2.1 Protective Functions

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

The power supply PCB is equipped with an over-current/over-voltage protection mechanism to prevent damage to the power circuit in the event of an over-current or over-voltage, as caused by a short circuit or the like on the load side.
If the over-current/over-voltage protective mechanism has gone ON, disconnect the power cord, and correct the fault; then, connect the power cord once gain to reset the machine. If short circuiting and resetting are repeated, the internal fuse (F1, F2) can melt.

10.4 Parts Replacement Procedure

10.4.1 External Cover

10.4.1.1 Exteranal Covers

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

F-10-4

[1]   Feeder cover
[2]   Document feeder tray
[3]   Front cover
[4]   Delivery tray
[5]   Left front cover
[6]   Left cover
[7]   Left middle cover
[8]   Multi-purpose tray
[9]   Left rear cover
[10]   Document delivery tray
[11]   Rear cover
[12]   Tray lower cover
[13]   Right cover

10.4.1.2 Removing the Rear Cover

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

1) Remove the rear cover [1].
   - Screw [2] 4pcs.

F-10-5

10.4.1.3 Removing the Left Middle Cover

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

1) Remove the left cover.
2) Slide the left middle cover [1] in the direction of the rear side to detach it.
   - Screw [2] 2pcs.

F-10-6

10.4.1.4 Removing the Left Front Cover

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

1) Remove the left middle cover.
2) Remove the left front cover[1].
   - Screw [2] 2pcs.
   - Claw [3] 2pcs.

F-10-7

10.4.1.5 Removing the Left Rear Cover

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

1) Remove the left middle cover.
2) Remove the left rear cover [1].
   - Screw [2] 2pcs.

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10.4.1.6 Removing the tray Lower Cover

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

1) Remove the tray lower cover [1].
   - Screw [2] 1pc.
   - Claw [3] 1pc. (with the flathead screwdriver)

F-10-9

10.4.1.7 Removing the Right Cover

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

1) Remove the cassette.
2) Remove the front cover.
3) Remove the rear cover.
4) Release the two claws [1] at the rear back of the right cover.
5) Using a flathead screwdriver, release the three claws [2] at the top of the right cover.

F-10-10

6) Remove the claw [1] at the front.
7) Remove the two claws [2] in main body using a flathead screwdriver.

F-10-11

8) Lift the right side of the main body, and then remove the right cover [1].

F-10-12

10.4.1.8 Removing the Front Cover

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

1) Remove the cassette.
2) Release the two claws [1] with the flathead screwdriver.
3) Hold the lower edge of the cover [2] and remove the the fronta cover [3].

F-10-13

10.4.1.9 Removing the Document Feeder Tray

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

1) Remove the rear cover.
2) Open the feeder cover.
3) Remove the gear cover [1].
   - Screw [2] 1pc.

F-10-14

4) Remove the document feeder tray [1].
   - Connector [2] 1pc. (if the CIS shift type)
   - Screw [3] 2pcs.
   - Bushing [4] 1pc.

F-10-15

10.4.1.10 Removing the Document Delivery Tray

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

1) Reamove the rear cover.
2) Remove the tray lower cover.
3) Remove the tray stopper [1].

F-10-16

4) Open the feeder cover and document feeder tray.
5) Slide the document delivery tray [1] toward the front side to remove it.

- Screw [2] 2pcs.

F-10-17

10.4.1.11 Removing the Delivery Tray

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

1) Remove the front cover and rear cover.
2) Remove the right cover and tray lower cover.
3) Remove the operation panel.
4) Detach the delivery tray [1].

F-10-18

10.4.2 Main Drive Unit

10.4.2.1 Removing the Main Drive Unit

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

1) Remove the rear cover.
2) Remove the left middle cover and left rear cover,
3) Remove the fan duct and main motor.
4) Remove the relay PCB, the registration clutch, and the pickup drive unit.
5) Release the cable from all clamps on the main drive unit.
6) Remove the main drive unit [1].
   - Screw [2] 5pcs.

F-10-19

10.4.3 Pick-up Drive Unit

10.4.3.1 Removing the Pickup Drive Unit

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

1) Remove the rear cover.
2) Remove the left middle cover and left rear cover,
3) Remove the relay PCB and registration clutch.
4) Release the cable from all clamps on the pickup drive unit.
5) Remove the pickup drive unit [1].
   - Screw [2] 3pcs.

F-10-20

10.4.4 Fixing/Duplex Drive Unit

10.4.4.1 Removing the Fixing/Duplex Drive Unit

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

1) Remove the rear cover.
2) Remove the left middle cover and left rear cover,
3) Remove the fan duct and main motor.
4) Remove the relay PCB and registration clutch.
5) Remove the pickup drive unit and main drive unit.
6) Release the cable from all clamps on the fixing/duplex drive unit.
7) Remove the fixing/duplex drive unit [1].
   - Screw [2] 3pcs.

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10.4.5 Operation Panel Unit

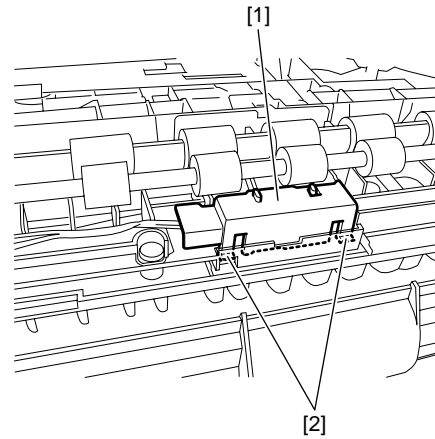### 10.4.5.1 Removing the Operation Panel Unit

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

1) Remove the front cover and rear cover.
2) Remove the left middle cover and left rear cover.
3) Remove the right cover and tray lower cover.
4) Remove the front left cover [1].

F-10-22

5) Remove the operation panel [1].
   - Screw [2] 4pcs.
   - Flexible cable [3] 1pc.

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10.4.6 Image Processor PCB

10.4.6.1 Before Installation (Backup of Data)

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

1. Printing out/transferring the image data.

MEMO:
This operation is not required if image data is not stored in the image memory (SDRAM) (the memory lamp of the control panel does not light up (green)).

The memory lamp lighting (green) of the control panel indicates that the image data is stored in the image memory (SDRAM).
Be sure either to print out the image data or transfer it to other machine beforehand when attaching the equipment.
Otherwise, the image data will be deleted.

2. Backup of User Registration Data. (When replacing the PCB.)
1) Output a user data list in the following user mode.
   Additional functions key > Report Setting > Plint List > User Data List
2) Press the following keys to enter the service mode.
   Additional functions key > 2 key > 8 key > Additional functions key
3) Select "#SYSTEM" using the arrow key, and then press the OK.
4) Select "#SYSTEM SW" using the arrow key, and then press the OK.
5) Press the following keys to display "SW003."
   # > 0 key > 3 key
   Message: #SYSTEM SW003 00001000
6) Position the cursor at Bit-6 (second from left) using the arrow key, and then press the 1 key.
   Message: #SYSTEM SW003 01001000
7) Press the OK key. Check that "SW003" changes to "SW004".
   Message: #SYSTEM SW004 00000000
8) Press the Reset key to exit the service mode.
9) Turn off the main power switch, and then turn it on again.
10) Start the PC and connect it to this machine with a USB cable.
11) Open My Computer on the PC to check that the "Removable Disk" icon is displayed.
   If the "Removable Disk" icon is not displayed, repeat the above procedure starting with step 1.
12) Double-click the "Removable Disk" icon, and then copy the user data (address_book.abk and user_data.dat) onto the Desktop.

⚠

The following registration data of user data cannot be backed up.
- System management setting > ID management according to section
- System management setting > user ID management

13) Close the window on the Desktop.
14) Turn off the main power switch of this machine.
15) Disconnect the USB cable from this machine.

10.4.6.2 Removing the Image Processor PCB

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

1) Remove the rear cover.
2) Remove the mojular jack PCB.
3) Remove the LAN cover [1].
   - Connector [2] 1pc.
   - Clamp [3] 1pc. (remove the cable.)
   - Screw [4] 6pcs.

F-10-24

4) Change the position of the jumper plug (JP100) [2] on the modem PCB [1].

⚠

Disconnecting/connecting the modem PCB without this operation may cause broken SDRAM.

F-10-25

MEMO:
The jumper plug is small. A needlenose pliers or tweezers may be useful in this operation.
Be sure not to short-circuit the jumper pin and its neighboring metal.

5) Remove the modem PCB [1].
   - Connector [2] 2pcs.
   - Flexible cable [3] 1pc.
   - Screw [4] 2pcs.

MEMO:
The modem PCB [1] is connected to the IP PCB with the connector [5].

6) Disconnect the connector [6] on the network PCB. (if equipped with fax functions)

F-10-26

7) Slide the guide [1] upward to remove it.
   - Connector [2] 1pc
   - Claw [3] 1pc
8) Remove the IP cover assembly [4].
   - Connector [5] 1pc.
   - Screw [6] 13pcs. (the encircled screw)

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9) Remove the SEND PCB [1]. (if equipped with SEND functions)
 - Screw [2] 1pc.
10) Remove the counter PCB [3]. (if equipped with softcounter functions)
 - Screw [4] 1pc.
11) Remove the memory PCB [5]. (Due to the model there would be one piece or two pieces)
12) Remove the SEND memory [6]. (if equipped with SEND functions)
12) Disconnect all connectors and flexible cables from the image processor PCB.
13) Remove the image processor PCB [7].
 - Screw [8] 8pcs.

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⚠

If the image processor controller PCB must be replaced, be sure to transfer the following from the old to new PCB:
1. SEND PCB [1] (if equipped with SEND functions)
2. counter PCB [4](if equipped with softcounter functions)

10.4.6.3 Procedure after Replacing the Image Processor PCB

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

If you have replaced the image processor PCB with a new one, perform the following operations:
1. Updating the system software
2. Executing all clear
3. Importing the service data/ user registration data
4. Reading related adjustment

1. Updating the system software
Using the service support tool, download the latest system software (System/Boot/SEND*1).
*1: if equipped with SEND functions

2. Executing all clear
1) After connecting the power plug to the host machine, turn on the main power switch.
2) Enter service mode.
 Sequentially press the Additional functions key, 2 key, 8 key, and Additional functions key on the operation panel.
3) Press the arrow key on the touch panel to display "CLEAR".
4) Press the arrow key to display 'ALL', and then press OK. All Clear is executed.(About 40 seconds)

3. Importing the service data/ user registration data
Service data
- Input the all value printed on the service label affixed to the rear cover.

User registration data
1) Press the flowing keys to enter the service mode.
 Additional functions key > 2 key > 8 key > Additional functions key
2) Select "#SYSTEM" using the arrow key, and then press the OK.
3) Select "#SYSTEM SW" using the arrow key, and then press the OK.
4) Press the following keys to display "SW003".
 # > 0 key > 3 key
 Message: #SYSTEM SW003 00001000
5) Check that Bit-6 (second from left) is set to set to "1". If Bit-6 is not set to "1", position the cursor at this bit using the arrow key and then press the 1 key.

 Message: #SYSTEM SW003 01001000
6) Press the OK key. Check that "SW003" changes to "SW004".
 Message: #SYSTEM SW004 00000000
7) Press the Reset key to exit the service mode.
8) Turn off the main power switch, and then turn it on again.
9) Open My Computer on the PC to check that the "Removal Disk" icon is displayed.
10) Write the user data (address_book.abk and user_data.dat) copied onto the Desktop as described in "a. Exporting user data" over the removable disk.
11) Disconnect the USB cable from the machine.
12) Turn off the main power switch of the machine.
13) Perform steps 1) to 4) again to reset Bit-6 of "SW003" to "0".
14) Press the OK key. When "SW003" changes to "SW004", press the Reset key to exit the service mode.
15) Check the user data list output as described in "a. Exporting user data" to make sure that the user data has been loaded into the machine properly.

4. Reading related adjustment

- Correction of output between CIS channels
1) Enter the service mode.
Sequentially press the Additional functions key, 2 key, 8 key, and Additional functions key on the operation panel.
2) Press the arrow key on the touch panel to display "TEST MODE".
3) Press [OK].
4) Press the [2] key to display "SCAN TEST".
5) Press the [1] key to display "SHADING".
6) Press [OK].
After completion of the above procedure, the contact sensor output is compensated and parameters are set automatically.
After completion of automatic adjustment, "OK" is displayed.

⚠

Only on image processor PCB system software version WLaa-07-07 of IMAGE CLASS 810/i-SENSYS FAX-L3000/FAX-L3000.
If the indicator indicates 'NG' after finishing the auto adjustment, change the service mode as mentioned below and redo the auto adjustment.
- #SCAN> SCAN SW> SW003> bit6, and change the setting from 1 to 0.

10.4.7 RAM

10.4.7.1 Removing the SDRAM

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

1) Remove the rear cover.
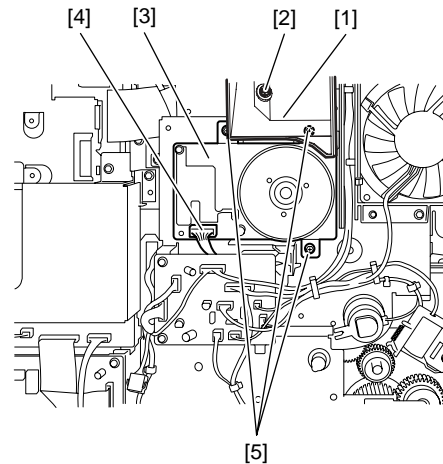2) Remove the LAN cover [1].
 - Connector [2] 1pc.
 - Clamp [3] 1pc. (remove the cable.)
 - Screw [4] 6pcs.

F-10-29

3) Change the position of the jumper plug (JP100) [2] on the modem PCB [1].

⚠

Disconnecting/connecting the modem PCB without this operation may cause broken SDRAM.

F-10-30

MEMO:
The jumper plug is small. A needlenose pliers or tweezers may be useful in this operation.
Be sure not to short-circuit the jumper pin and its neighboring metal.

3) Remove the SDRAM cover [1].
   - Connector [2] 5pcs.

F-10-31

4) Remove the SDRAM[1].

F-10-32

⚠ **Caution on attaching the jumper plug**
1. Put back the jumper plug (JP100) on the modem PCB to where it was.
2. If the jumper plug were not at the proper location, the backup would not function at the main switch 'OFF' status and at the power breakdown. And also it will lose the image data, which is stocked in the SDRAM.
3. Install the jumper plug after installing SDRAM. Installing SDRAM without this operation may cause broken SDRAM.

10.4.8 DC Controller PCB

10.4.8.1 Removing the DC Controller PCB

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

1) Remove the rear cover and front cover.
2) Remove the left middle cover, left front cover, and front left cover.
3) Remove the right cover, tray lower cover, and front left cover.
4) Remove the operation panel and delivery tray.
5) Remove the speaker and power supply PCB.
6) Remove the flexible cable stay [1].
   - Screw [2] 1pc.

F-10-33

7) Disconnect all connectors from the DC controller PCB.
8) Remove the DC controller PCB [1].
   - Screw [2] 3pcs.

F-10-34

10.4.9 Powwer Supply PCB

10.4.9.1 Removing the Power Supply PCB

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

1) Remove the rear cover and front cover.
2) Remove the left middle cover, left front cover, and front left cover.
3) Remove the control panel and delivery tray.
4) Remove the speaker.
5) Remove the power supply PCB [1].
   - Screw [2] 5pcs.

F-10-35

10.4.10 Relay PCB

10.4.10.1 Removing the Relay PCB

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

1) Remove the rear cover.
2) Disconnect all connectors from the relay PCB.
3) Remove the relay PCB [1].
   - Screw [2] 2pcs.

F-10-36

10.4.11 NCU PCB

10.4.11.1 Removing the NCU PCB

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

1) Remove the rear cover.
2) Remove all connectors and flexible cables from the NCU PCB.
3) Remove the NCU PCB [1].
   - Screw [2] 2pcs.

F-10-37

10.4.12 Modem PCB

10.4.12.1 Removing the Modem PCB

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

1) Remove the rear cover.
2) Remove the LAN cover [1].
   - Connector [2] 1pc.
   - Clamp [3] 1pc. (remove the cable.)
   - Screw [4] 6pcs.

F-10-38

3) Change the position of the jumper plug (JP100) [2] on the modem PCB [1].

⚠

Disconnecting/connecting the modem PCB without this operation may cause broken SDRAM.

F-10-39

MEMO:
The jumper plug is small. A needlenose pliers or tweezers may be useful in this operation.
Be sure not to short-circuit the jumper pin and its neighboring metal.

4) Remove the modem PCB [1].
   - Connector [2] 2pcs.
   - Flexible cable [3] 1pc.
   - Screw [4] 2pcs.

MEMO:
The modem PCB [1] is connected to the IP PCB with the connector [5].

F-10-40

⚠ **Caution on attaching the jumper plug**
1. Put back the jumper plug (JP100) on the modem PCB to where it was
2. If the jumper plug were not at the proper location, the backup would not function at the main switch 'OFF' status and at the power breakdown. And also it will lose the image data, which is stocked in the SDRAM.

10.4.13 Modular Jack PCB

10.4.13.1 Removing the Modular Jack PCB

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

1) Remove the rear cover.
2) Disconnect all connectors from the modular jack PCB.
3) Remove the modular jack PCB [1].
   - Screw [2] 2pcs.

F-10-41

10.4.14 Filter PCB

10.4.14.1 Removing the Filter PCB (230V model only)

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

1) Remove the rear cover.
2) Remove the filter PCB [1].
   - Connector [2] 3pcs.
   - Screw [3] 3pcs.

F-10-42

10.4.15 Network PCB

10.4.15.1 Removing the Network PCB (if equipped with the network functions)

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

1) Remove the rear cover.
2) Remove the LAN cover [1].
   - Connector [2] 1pc.
   - Clamp [3] 1pc. (remove the cable.)
   - Screw [4] 6pcs.

F-10-43

3) Remove the network PCB [1].
   - Connector [2] 1pc.
   - Screw [3] 4pcs.

F-10-44

10.4.16 Send PCB

10.4.16.1 Removing the SEND PCB (if equipped with SEND functions)

i-SENSYS Fax-L3000IP

1) Remove the rear cover.
2) Remove the LAN cover [1].
   - Connector [2] 1pc.
   - Clamp [3] 1pc. (remove the cable.)
   - Screw [4] 6pcs.

F-10-45

3) Remove the SEND PCB [1].
   - Connector [2] 1pc.
   - Screw [3] 4pcs.

F-10-46

4) Change the position of the jumper plug (JP100) [2] on the modem PCB [1].

⚠

Disconnecting/connecting the modem PCB without this operation may cause broken SDRAM.

F-10-47

MEMO:
The jumper plug is small. A needlenose pliers or tweezers may be useful in this operation.
Be sure not to short-circuit the jumper pin and its neighboring metal.

5) Remove the modem PCB [1].
   - Connector [2] 2pcs.
   - Flexible cable [3] 1pc.
   - Screw [4] 2pcs.

MEMO:
The modem PCB [1] is connected to the IP PCB with the connector [5].

F-10-48

6) Remove the SEND PCB cover [1].
   - Clamp [2] 1pc. (remove the cable.)
   - Scre [3] 4pcs.

F-10-49

7) Remove the SEND PCB [1].
   - Screw [2] 1pc.

F-10-50

10.4.17 Capacitor PCB

10.4.17.1 Removing the capacitor PCB

i-SENSYS Fax-L3000IP

1) Remove the rear cover.
2) Remove the capacitor PCB cover [1].
   - Screw [2] 1pc.

F-10-51

3) Remove the capacitor PCB [1].
   - Connector [2] 1pc.
   - Screw [3] 1pc.

F-10-52

10.4.18 Interlock Switch

10.4.18.1 Removing the Interlock Switch

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

1) Remove the rear cover and front cover.
2) Remove the right cover and tray lower cover.
3) Remove the control panel and delivery tray.
4) Disconnect the connector (J112) from the DC controller PCB, and then remove the cable from the cable guide by cutting cable ties.
5) Remove the interlock switch [1].
   - Claw [2] 1pc.

F-10-53

10-17

10.4.19 Fan

10.4.19.1 Removing the Heat Discharge Fan

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

1) Remove the rear cover, left middle cover, and left rear cover.
2) Remove the heat discharge fan [1].
   - Connector [2] 1pc.
   - Claw [3] 2pcs.

F-10-54

10.4.19.2 Removing the Reader Fan

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

1) Remove the rear cover.
2) Remove the tray lower cover and document delivery cover.
3) Remove the reader fan [1].
   - Connector [2] 1pc. (connector (J412) on the reader controller PCB)
   - Claw [3] 2 pcs.

F-10-55

⚠ When mounting the fan, be sure to pay attention to the mark [4] of air current.

10.4.20 Speaker

10.4.20.1 Removing the Speaker

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

1) Remove the rear cover, front cover, and right cover.
2) Disconnect the connector [1]. (remove the cable from the cable guide.)

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3) Remove the speaker [1].
   - Screw [2] 2pcs.

F-10-57

Chapter 11 RDS

Contents

11.1 RDS

11.1.1 Overview

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

Product Overview
Embedded RDS (henceforth: e-RDS) is the front-end module of e-Maintenance embedded with a network module of a device controller.

Product Package Configuration
Embedded with a network module of a device.

Features
e-RDS is embedded with a network module of a device controller, which works as a front-end module of e-Maintenance without any hardware other than device.
With use of e-RDS, device information such as counter information, failure information, consumables information of device controllers are transmitted to a back-end server called Universal Gateway (centralized device information management host computer, henceforth: UGW) using SOAP protocol. (https(SSL) communication)

11.1.2 Application Operation Mode

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

Whether to enable (ON) /disable (OFF) the Operation Mode is selectable by setting from e-RDS setting display from the service mode (E-RDS SWITCH).
    - OFF (default) : e-RDS is disabled.
    - ON : All e-RDS operations are enabled.
        By setting from UGW, operations including counter transmission, log transmission, and alert transmission can be controlled.

Note that the communication test (COM-TEST) is required prior to start of e-RDS operation.
(For detail, see 'Settings of e-RDS'.)

11.1.3 Communication Test

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

By implementing a communication test (COM-TEST) from the service mode, service technicians can test the connection of the device with UGW.
In case of a communication error, you can find its cause by referring to the communication error log.

e-RDS obtains the schedule information from UGW by performing COM-TEST.
The obtainment of the schedule information from UGW enables e-RDS to start its operation.

11.1.4 Communication Log

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

In case of a communication error (such as proxy server error), error log is recorded (for 5 cases).
Error code and error information can be displayed on the control panel as a list (service mode: COM-LOG), and printed out as a report.
(service mode: #REPORT > #REPORT OUTPUT > ERDS COM LOG LIST)

11.1.5 Detail of Communication Log

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

Error code and detail of the communication error log can be displayed on the control panel and printed out as a report.

11.1.6 Initialization of e-RDS

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

e-RDS setting can be returned to the factory default.

Step
Initialize the e-RDS setting values using the service mode items below:
#CLEAR > ERDS-DAT

Initialized setting values and data
Followings are the setting values and internally used data that are initialized:
#E-RDS > E-RDS SWITCH
#E-RDS > RGW-PORT
#E-RDS > RGW-ADDRESS
#E-RDS > COM-LOG

⚠

Initialization of e-RDS resets all the port and address settings so that they are suitable for UGW, but does not reset the CA certificate data.
For this reason, in case a non-default CA certificate data is installed, you need to delete the certificate (installation of the default certificate) after initialization of e-RDS.

(As for deletion of certificate, see 'CA certificate'.)

11.1.7 SOAP Communication Function

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

Following processings are enabled by use of SOAP communication (SSL client communication).
Server authentication is performed by use of CA*1 certificate issued by VeriSign.
In case the server certificate or CA certificate is expired, the device is not connected to UGW.

*1: CA stands for Certificate Authority, which are the institutions which issue electronic certificate used in e-commerce etc.

(1) Communication Test
    - Perform the communication test

(2) Transmit all or a part of the following data based on the schedule information obtained from UGW.
    - Counter details data
    - Service mode counter
    - Parts counter
    - Mode counter
    - ROM version
    - Schedule information
    - Application debug log
    - Environment log (Device condition log)

(3) In case of detecting jam, or alert/service call error from the device, transmit the following to UGW.
    - Transmission of alert code (transmit the counter information simultaneously)

     Transmit an alert code in case of a change in the status of the device.
     Main alert codes are toner LOW/OUT, jam, and door open.
     At error recovery, transmit again the data that indicates the recovery.
    - Transmission of jam log (transmit the counter information simultaneously)
    - Transmission of service call (Error code) log (transmit the counter information simultaneously)

(4) Change of device schedule information
    - Check whether there is a processing to execute.
    - Update the schedule information.
    - Return the result of the operation.

(5) Filtering reception from UGW
    - Alert filtering

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Transmission Detail List:

Transmission Detail / Process Detail	Transmission Timing	Remarks
Communication test communicatonTest	Either at the time of execution of the service mode of the device or upon a request from UGW with 'getOperationList'	
Counter details data collection/transmission postGlobalClickCount	Once every 16 hours.	The detailed counter data for each paper size such as Total.
Service mode counter collection/transmission postSeviceModeCounter	Once every 16 hours.	The counter data tied to the service mode number. Mainly used for billing.
Mode counter collection/transmission postModeCounter	Once every 16 hours.	The counter data by operation mode.
Parts counter collection/transmission postPartsCounter	Once every 16 hours.	The counter data indicating the amount of usage by part.
ROM version postFirmwareInfo	Once every 7 days.	
Schedule information transmission postConfiguration	Once every 16 hours.	
Debug log postDebugLog	At the time that the log has been accumulated 5kbyte	The log data output by an application for analyzing a malfunction.
Alert code postAlert	At the time of change in the device condition	The data when a status change occurs.
Jam log postJamLog	At the time of jam occurrence	Includes the jam code, date of occurrence, total counter at occurrence, paper feeding slot, and paper size.
Service call log postServiceCallLog	At the time of service call occurrence	Includes the error code, error subcode, date of occurrence, total counter at occurrence, paper feeding slot, and paper size.
Operation list check getOperationList	Once every 16 hours. Upon a request from UGW	
Schedule information update getConfiguration	At the time of communication test	

Transmission Detail / Process Detail	Transmission Timing	Remarks
Environment log (Device condition log) transmission postEnvironmentLog	Once every 12 hours.	The environment information inside the device such as temperature and humidity.
Alert filtering getAlertCodeNotificationList	Upon a request from UGW	When requested from UGW with 'getOperationList'

⚠

- The timing of transmission to UGW varies according to the device.
- The timing of transmission to UGW cannot be set on the side of the device.

11.1.8 Retransmission at the time of SOAP Transmission Error

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

In case the SOAP transmission error occurs due to the fault at UGW side at the time of the alert code transmission, store the last 3 data failed to transmit in the RAMDISK, and retransmit it with the predefined intervals.

In addition, in case the SOAP transmission error occurs at the time of the jam log or service call log transmission, retransmit the data failed to transmit with the predefined intervals. (When transmitting these 2 types of data, RAMDISK is not used, and the number of retransmission is not restricted.)

11.1.9 e-RDS Setting Screen

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

(1). Setting Items
   The forms and default values of the setting items related to the e-RDS in the service mode are as follow:

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Service Mode Setting Items (Meaning)	Description
E-RDS SWITCH	e-RDS OFF/ON 0: OFF/1: ON When the setting is ON, transmit the counter information and error information to UGW. Default value: 0 (OFF)
RGW-ADDRESS (RDS-Gateway ADDRESS)	URL of UGW Default value: the actual URL of UGW Number of characters: 129 bytes (Including NULL. 1-byte code only)
RGW-PORT (RDS-Gateway PORT)	Port number of UGW Default value: 443 Setting range: 1 to 65535
COM-TEST (Communication Test)	Execution of communication test Judge whether the connection with UGW is established, and display the result with either 'COM-TEST OK' or 'COM-TEST NG'.
COM-LOG (Communication Log)	Detail of the communication test result Display the error log for the communication with UGW. As the error information, occurred time, error code, and error detail information are displayed. Max. number of log: 5 Error information: max. 128 characters (Excluding NULL)

(2). Screen Menu

An example for the transition of the menu related to the e-RDS in the service mode.

arrow key

```
┌─────────────────┐       ┌─────────────────┐       ┌─────────────────┐
│ #E-RDS          │◄─────►│ #E-RDS          │◄─────►│ #E-RDS          │◄──┐
│ E-RDS SWITCH    │       │ RGW-ADDRESS     │       │ RGW-PORT        │   │
└────────┬────────┘       └────────┬────────┘       └────────┬────────┘   │
         │ OK key                  │                         │            │
┌────────▼────────┐       ┌────────▼──────────┐     ┌────────▼────────┐   │
│ #E-RDS SWITCH   │       │ #RGW-ADDRESS   :A │     │ #RGW-PORT       │   │
│  001          1 │       │ https://xxxxxxxxxxxx│   │  001        443 │   │
└─────────────────┘       └───────────────────┘     └─────────────────┘   │
                                                                          │
┌─────────────────┐       ┌─────────────────┐                            │
│ #E-RDS          │◄─────►│ #E-RDS          │◄───────────────────────────┘
│ COM-TEST        │       │ COM-LOG         │
└────────┬────────┘       └────────┬────────┘
         │                         │
┌────────▼────────┐       ┌────────▼──────────────┐
│ #E-RDS          │       │ No:1 Ecode:870F2052   │
│ COM-TEST OK     │       │ 2006 03/24 11:56      │
└─────────────────┘       └───────────────────────┘
```

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(3). Communication Error Log Selection Screen
   The communication error log is displayed by selecting #E-RDS > COM-LOG in the service mode, and pressing the OK key.

   The error log to be displayed is as follow:
      Communication error log : transmission error of counter and various logs up to the present, as well as the error occurred date, error code, and error information at the communication test.

   By pressing the arrow key (◄ key, ► key), the communication error log from No.1 to No. 5 can be checked.
   (Only the No. in which an error is registered can be selected.)

Example of Operation

arrow key

```
┌───────────────────────┐       ┌───────────────────────┐
│ No:1 Ecode:870F2052   │◄─────►│ No:2 Ecode:87053563   │ ···········
│ 2006 03/24 11:56      │       │ 2006 03/24 10:23      │
└───────────┬───────────┘       └───────────────────────┘
            │ OK key
```

It transits to the Communication Error Log Detail Screen.

F-11-2

   By pressing the OK key, it transits to the Communication Error Log Detail Screen.
   Max. number of the communication error log: 5

(4). Communication Error Log Detail Screen
   The detail information of the communication error log is displayed.
   For the message to be displayed, see the 'Error Message List'.

   By pressing the Menu key, it returns to the Communication Error Log Selection Screen.
   Detail error information: max. 128 characters (excluding NULL)

   For instance, in case of the detail error '*Server response error(0x800f0200): getConfiguration Not Found Agent(AgentID = E250SD01)', it is too long to fit in a screen; thus, display it with multiple screens as shown below. Switch each screen with the arrow key.

arrow key   arrow key

```
┌─────────────────┐       ┌─────────────────┐       ┌─────────────────┐
│ *Server response er│◄──►│ etConfiguration Not│◄──►│ D = E250SD01    )│
│ ror(0x800f0200) : g│    │ Found Agent(AgentI │    │                 │
└─────────────────┘       └─────────────────┘       └─────────────────┘
```

F-11-3

11.1.10 Report Output of Communication Error Log

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

The communication error log can be output as report.

Operation:
#REPORT > #REPORT OUTPUT > ERDS COM LOG LIST

11.1.11 Sleep Operation

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

Even in the sleep mode (power saving), the e-RDS executes the transmission if there is a message to be sent.

11.1.12 Alarm Filtering, Alert Filtering

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

With the instruction from UGW (getOperationList), change the alarm level for the specified alarm code, and transmit only the specified alert code.

11.1.13 CA Certificate

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

(1). Overview of functions
    CA certificate (CA-KEY) is included in the system software System (Default CA certificate. For UGW).

    The CA certificate other than the default is installable with SST.

    [Outline of the step]
    * See 'Downloading System Software' for details.
        1. Move it from SST to CA Certificate Install > Flash File System.
        2. Turn the power off/on.
           Read the CA Certificate file from Flash file system during initialization, and register CA Certificate through the key management module.
        3. Check the information in the service mode #NETWORK > #CERTIFICATE > #CA-CERTIFICATE to see if the same one as the installed CA Certificate has been registered.

(2). The number of CA Certificates stored in the device
    The upper limit of CA Certificates stored in the device : 1

(3). Saving the certificate
    When executing Service Mode > #CLEAR > CA-KEY and turning off/on the power, the default CA Certificate is loaded on the Flash memory.
    If necessary, install CA Certificate with SST.

(4). Update of the certificate
    The registered CA Certificate is renewed when overwriting with SST.

(5). Deleting the certificate
    The default CA Certificate is automatically installed when deleting CA Certificate in the service mode and turning off/on the power.
    Deleting CA Certificate therefore means installation of the default CA Certificate.

11.1.14 Settings of Network Connection (Installation/Maintenance)

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

Prior to the setting of e-RDS, you need to make network settings of the device properly.
(1). Display Additional Functions screen
        - Press [Additional Functions] key.
        - Enter System Manager ID and a password if you are asked to do so.
(2). Display TCP/IP Settings screen
        - On the LCD panel, select: [SYSTEM SETTINGS] > [NETWORK SETTINGS] > [TCP/IP SETTINGS].
(3). Setting IP Address-Related Items
        Automatic IP address allocation
            - Select [IP ADDRESS AUTO] and press [OK].
            - Press the arrow key, select 'ON', and then press [OK].
            - Select each item such as DHCP and make settings.
        Fixed IP address allocation
            - Select [IP ADDRESS] and press [OK].
            - Enter the IP address to make settings, and press [OK].
            - Likewise, make settings for [SUBNET MASK] and [GATEWAY ADDRESS].
(4). DNS SERVER
        - Select [DNS SETTINGS] to display DNS setting screen.
        - Press the required items and make settings.
(5). Proxy Settings
        - Select [PROXY SETTINGS] to display Proxy setting screen.
        - Press the required items and make settings.
(6). Return to the Basic Features screen
        - Press [Stop] or press [Additional Functions] until each setting screen is closed.

⚠

When changing the above Network Settings, it is necessary to turn off/on the power of the device.

11.1.15 Settings of e-RDS (Installation/Maintenance)

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

(1). Display the menu screen of e-RDS by the service mode of the device.
    (1)-1. Enter the service mode:
        [Additional Functions] key > 2 key > 8 key > [Additional Functions] key
    (1)-2. Initialization

#CLEAR > ERDS-DAT

If necessary, install or delete CA Certificate and turn off/on the power.
(1)-3. Display the menu screen of e-RDS
Press the arrow key to move to the menu (#E-RDS) of e-RDS.
(2). Set E-RDS SWITCH to 1 in order to enable e-RDS.
(3). If necessary, enter URL of UGW in RGW-ADDRESS (The setting has normally been done).
(4). Enter the port number of UGW in RGW-PORT (normally the setting done).
(5). Select COM-TEST and press OK key to execute the test of communication with UGW.
(6). If the result is 'COM-TEST NG', correct the settings of RGW-ADDRESS/RGW-PORT and repeat COM-TEST until it becomes 'COM-TEST OK'. If necessary, check the network settings of the device, the status of network connection and availability of the communication to UGW.

11.1.16 Troubleshooting

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

No.1
Q. Communication test fails.
A. Check the firmware version.
   Check the network settings.
   Check the results of communication test.

11.1.17 Error Message list

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

The followings are error information displayed on the 'Communication Error Log Detail Screen'.
(The term "server" used in this section refers to UGW.)

⚠ - When OK is pressed on the 'Communication Error Log Selection Screen' where a communication error log is displayed, the screen changes to the 'Communication Error Log Detail Screen'.
- When an error character string on the 'Communication Error Log Detail Screen' is so long that the entire message cannot be displayed on a screen at one time, use the arrow keys to switch between screens. The amount of error information displayed on the 'Communication Error Log Detail Screen' is 128 characters at maximum.

Error character strings from No.3 onward listed on the table below will be displayed in the following order.
   [*][Error character string] : [Method name] [Server detail error]
   Character strings bracketed in [] are replaced by the following.

[*]:
An '*' (asterisk) is added to the beginning of the error character string for errors occurred during communication test.

[Error character string]:
For No.1 and 2 of the [Error character string] below, only the error character strings are displayed. The rest of the error character strings are displayed in the order described above.

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	Error Character Strings	Error Description	Cause	Measures
1	SUSPEND: Communication test is not performed	e-RDS is ON but Communication test is not completed.	e-RDS is ON but e-RDS was activated without performing Communication test. (The device is rebooted.)	Perform and complete Communication test (COM-TEST).
2	Event Registration is Failed.	Event registration failure error	A processing (Event Registration) inside the device has been failed.	Turn OFF and then ON the device.Otherwise reinstall the device system software.
3	URL Scheme error(not https)	URL scheme specification error	The URL header of the server registered is not https.	Correct the header of the server URL to https. Service Mode > #E-RDS > RGW-ADDRESS
4	Server connection error	Server connection error	Displayed when a TCP / IP communication error occurs. This error also occurs as a result of the Proxy server dysfunction while the proxy server is in use.	- Check the network connection. - Check the port number for RGW-PORT. - Check the server status. - When the Proxy server is in use, check the Proxy server address. - When the Proxy server is in use, check the status of the Proxy server address.
5	URL server specified is illegal	Server-specified URL error	A different URL than the one specified by the server has been registered.	Check with the server helpdesk.

	Error Character Strings	Error Description	Cause	Measures
6	Proxy connection error	Proxy connection error	Cannot connect to the Proxy server.	Check the server IP address and port number and correct the settings accordingly. The device needs rebooting when network-related settings such as Proxy settings are modified.
7	Proxy authentication error	Proxy authentication error	Authentication for the Proxy server has failed.	Check the user name and password to log in to the Proxy server and re-set them.
8	Proxy address resolution error	Proxy address resolution error	Proxy server address resolution by DNS has failed.	- Check the network configurations of the device. (Check if PING by host name passes from computer to the device.) - Check the DNS settings. - Check if the host name set in RGW-ADDRESS is registered in the DNS server. - Check if the Proxy server address is correct.
9	Server certificate error	Server certificate error	During SSL negotiation, server certificate notified by the server cannot be authenticated by CA certificate of the device.	- Check that CA certificate has been installed. Service Mode > #NETWORK > #CERTIFICATE > #CA-CERTIFICATE - Install CA certificate corresponding the server.
10	Server certificate verify error	Server certificate verify (URL check) error	During SSL negotiation, host name written in server certificate notified by the server and URL host name set in RGW-ADDRESS have been different.	Check host name in the URL set in RGW-ADDRESS. Service More > #E-RDS > RGW-ADDRESS
11	Server certificate expired	Server certificate expired	- CA certificate registered in the device is expired. - Time and date on the device is invalid against the term specified in the certificate.	- Check expire date of CA certificate. Service Mode > #NETWORK > #CERTIFICATE > #CA-CERTIFICATE If the certificate is expired, register a valid CA certificate on the device. - Set the correct time and date on the device.
12	Unknown error	Unknown communication error	Unknown communication error has occurred.	Wait for a while and try again.
13	Server response error (NULL)	Server response error(When server error code processing has failed)	Server response error	This error can happen when Send function and e-RDS function are performed simultaneously. Wait for a while to try again and check that Send OK is displayed next time sending is performed.
14	Server response error ([Hexadecimal number]) [Server detail error]	Server response error	Displayed when server returns some kind of error although communication to the server was successful. [Hexadecimal number] Error code returned from the server. [Server detail error] Detailed character string of the error returned by the server.	Wait for a while and try again. Requires different actions according to the error returned from the server.
15	Device internal error	Device internal error	Internal error such as unable to acquire the memory has occurred.	Turn OFF and then ON the device.Or reinstall the device system software.
16	Server schedule is invalid	Invalid server-instructed schedule	Schedule setting value instructed by the server during Communication test is invalid.	Report detailed information on error occurred to the support division. After countermeasures are taken on the server side, perform Communication test again.

	Error Character Strings	Error Description	Cause	Measures
17	Server response time out	Server response time out	Due to network congestion etc., response from server does not return within a specified period of time.	In case this occurred when implementing the communication test, retry after a certain period of time. This error has been found to occur due to simultaneous operation of Send function and e-RDS function in some cases.
18	Service not found	Service is not found (invalid path)	Cannot access server due to wrong path for server URL.	Check the server URL including path, and set it again. Service mode > #E-RDS > RGW-ADDRESS
19	E-RDS switch is setted OFF	e-RDS is not enabled.	Executed communication test (COM-TEST) while e-RDS operation switch (E-RDS-SWITCH) is turned OFF.	Enable operation switch of e-RDS and execute communication test again. Service mode > #E-RDS > E-RDS SWITCH
20	Server schedule is not exist	Schedule of the target device does not exist within server.	Schedule of target device is not registered in server.	Check with Server Helpdesk
21	Network is not ready, try later	Network is not ready	Tried communication while connection to network is not established (at such timing as immediately after startup of device). (During the 60 seconds after startup of a device, connection to network may not be established.)	Check to see that connection to network is established. Furthermore, retry connection after long-enough period of time.
22	URL error	URL setting error	A host name of URL set as a server is invalid.	Check server URL including path, and set it again. Service mode > #E-RDS > RGW-ADDRESS
23	Server address resolution error	Server address resolution error	- Can access DNS server - Failed in address resolution of host name set as RGW-ADDRESS	- Check network status of device (Check to see that device responds to ping by host name from PC) - Check DNS setting - Check to see that host name set in RGW-ADDRESS is registered in DNS server - Check to see that URL set in RGW-ADDRESS is valid.
24	Server specified list is too big	Alarm/alert filtering information specified by server is too big	Ten or more alarm/alert filtering cases are registered.	Check with Server Helpdesk
25	Server specified list is wrong	Alarm/alert filtering information specified by server is invalid	Data values registered in alarm/alert filtering are invalid	Check with Server Helpdesk

[Method Name]:

T-11-4

	Method Name	Description
1	postServiceModeCount	Obtain software counters for copy/print charge
2	postModeCount	Obtain mode counter
3	postPartsCount	Obtain parts counter
4	postFirmwareInfo	Obtain ROM version
5	getOperationList	Check whether there is an operation execution command for you in UGW
6	postOperationOutcome	Transmit execution result of operation commanded in getOperationList
7	postConfiguration	Periodical environment information
8	postGlobalClickCount	Obtain counter details data
9	postJamLog	Obtain jam notification
10	postServiceCallLog	Obtain service call notification
11	postAlert	Obtain alert notification
12	postDebugLog	Obtain debug log
13	getConfiguration	Obtain schedule information
14	communicationTest	Communication test
15	postEnvironmentLog	Environment log transmission
16	getAlarmLevelConversionList	Alarm filtering
17	getAlertCodeNotificationList	Alert filtering

[Detail of server error]:
Display detailed error information from error in case there is an error response from UGW. However, in case the character number exceeds 128, character strings after 128th are omitted.
In case of the other error, nothing is displayed here.

Below is the example of the actual characters displayed:
Example) Unexpected error: postGlobalClickCount()

Chapter 12 Maintenance and Inspection

Contents

12.1 Periodically Replaced Parts

12.1.1 Periodically Replaced Parts

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

The machine does not have parts that require periodical replacement.

12.2 Consumables

12.2.1 Durables

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

The machine does not have durables.

12.3 Periodical Service

12.3.1 Periodeical Service Items

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

The machine does not have periodecal service items.

Chapter 13 Measurement and Adjustments

Contents

13.1 Image Adjustments

13.1.1 Image parallelism adjustment

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

1) Create a test chart, load it in the ADF, and make a copy of it.

Test Sheet

F-13-1

2) Compare the lines at the end of the test chart with those on the copy for parallelism. Measure dimensions A and B at the end of the copy and adjust the amount of skew (the range shown in the table) to within the spec.
Standard: A-B within ±1.7 mm

Copy of Test Sheet

F-13-2

<Adjustment method>
This machine allows parallelism between the leading and trailing edges of the image to be adjusted by changing the positions where the front and rear springs of the registration unit are hooked.
There are five types of spring hooking positions. (One step = Approx. 0.6 mm)

T-13-1

Settings	Spring positions at the back of host machine	Spring positions at the front of host machine
1	+1	-1
2	+1	0
3	0	0
4	-1	0
5	-1	1

MEMO:
Parallelism varies depending on the difference in the spring pressure between the front and rear springs.
For example, the spring position "0" at the back of the host machine and the spring position "-1" at the front of the host machine are not shown in this document because they are the same as the spring position "+1" at the back of the host machine and the spring position "0t the front of the host machine respectively.

F-13-3

1) Check the current hooking positions of the left and right springs of the registration roller. Change the spring hooking positions in reference to the table below. (They are adjustable in five steps. One step = Approx. 0.6 mm)

T-13-2

	Settings	Spring positions at the back of host machine	Spring positions at the front of host machine
Correction of image A (The A-side extends.)	1	+1	-1
	2	+1	0
	3	0	0
	4	-1	0
Correction of image B (The B-side extends.)	5	-1	1

-If the A-side image (at the front of the host machine) is short (shrunken), reduce the setting value.

F-13-4

-If the B-side image (at the back of the host machine) is short (shrunken), increase the setting value.

F-13-5

13.2 Scanning System

13.2.1 Action after Replacing the Contact Image Sensor

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

After replacing the contact image sensor (CIS), go through the following steps to perform inter-channel output correction:
1) Enter the service mode.
Sequentially press the User Mode key, 2 key, 8 key, and User Mode key on the operation panel.
2) Using the arrow keys on the operation panel, display "TEST MODE".
3) Press the "OK" key.
4) Press the 2 key. "SCAN TEST" appears.
5) Press the 1 key. "SHADING" appears.
6) Press the "OK" key.
After completion of the above steps, the contact sensor output correction will be performed and parameters will be set automatically.
After completion of automatic adjustment, "OK" is displayed.

⚠

Only on image processor PCB system software version WLaa-07-07 of IMAGE CLASS 810/i-SENSYS FAX-L3000/FAX-L3000.
If the indicator indicates 'NG' after finishing the auto adjustment, change the service mode as mentioned below and redo the auto adjustment.
- #SCAN> SCAN SW> SW003> bit6, and change the setting from 1 to 0.

13.3 Electrical Adjustments

13.3.1 Procedure after Replacing the Image Processor PCB

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

If you have replaced the image processor PCB with a new one, perform the following operations:
1. Updating the system software
2. Executing all clear
3. Importing the service data/ user registration data
4. Reading related adjustment

1. Updating the system software
Using the service support tool, download the latest system software (System/Boot/SEND*1).
*1: if equipped with SEND functions

2. Executing all clear
1) After connecting the power plug to the host machine, turn on the main power switch.
2) Enter service mode.
   Sequentially press the Additional functions key, 2 key, 8 key, and Additional functions key on the operation panel.
3) Press the arrow key on the touch panel to display "CLEAR".
4) Press the arrow key to display 'ALL', and then press OK. All Clear is executed.(About 40 seconds)

3. Importing the service data/ user registration data
Service data
- Input the all value printed on the service label affixed to the rear cover.

User registration data
1) Press the flowing keys to enter the service mode.
   Additional functions key > 2 key > 8 key > Additional functions key
2) Select "#SYSTEM" using the arrow key, and then press the OK.
3) Select "#SYSTEM SW" using the arrow key, and then press the OK.
4) Press the following keys to display "SW003".
   # > 0 key > 3 key
   Message: #SYSTEM SW003 00001000
5) Check that Bit-6 (second from left) is set to set to "1". If Bit-6 is not set to "1", position the cursor at this bit using the arrow key and then press the 1 key.
   Message: #SYSTEM SW003 01001000
6) Press the OK key. Check that "SW003" changes to "SW004".
   Message: #SYSTEM SW004 00000000
7) Press the Reset key to exit the service mode.
8) Turn off the main power switch, and then turn it on again.
9) Open My Computer on the PC to check that the "Removal Disk" icon is displayed.
10) Write the user data (address_book.abk and user_data.dat) copied onto the Desktop as described in "a. Exporting user data" over the removable disk.
11) Disconnect the USB cable from the machine.
12) Turn off the main power switch of the machine.

13) Perform steps 1) to 4) again to reset Bit-6 of "SW003" to "0".
14) Press the OK key. When "SW003" changes to "SW004", press the Reset key to exit the service mode.
15) Check the user data list output as described in "a. Exporting user data" to make sure that the user data has been loaded into the machine properly.

4. Reading related adjustment

- Correction of output between CIS channels
1) Enter the service mode.
Sequentially press the Additional functions key, 2 key, 8 key, and Additional functions key on the operation panel.
2) Press the arrow key on the touch panel to display "TEST MODE".
3) Press [OK].
4) Press the [2] key to display "SCAN TEST".
5) Press the [1] key to display "SHADING".
6) Press [OK].
After completion of the above procedure, the contact sensor output is compensated and parameters are set automatically.
After completion of automatic adjustment, "OK" is displayed.

⚠

Only on image processor PCB system software version WLaa-07-07 of IMAGE CLASS 810/i-SENSYS FAX-L3000/FAX-L3000.
If the indicator indicates 'NG' after finishing the auto adjustment, change the service mode as mentioned below and redo the auto adjustment.
- #SCAN> SCAN SW> SW003> bit6, and change the setting from 1 to 0.

13.3.2 Actions to Take before All Clearing (Backing up the User Data)

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

⚠

- Performing the all-clear operation in the service mode (#CLEAR > ALL) erases/initializes the user data such as address data and user mode settings.
  Be sure to back up the user data with the data export function before starting the all-clear operation, and then load the user data with tbe data import function.
- To export and import user data, a PC and a USB cable are required. Have them on hand.

a. Exporting user data
1) Output a user data list in the following user mode.
   Additional functions key > Report Setting > Plint List > User Data List
2) Press the following keys to enter the service mode.
   Additional functions key > 2 key > 8 key > Additional functions key
3) Select "#SYSTEM" using the arrow key, and then press the OK.
4) Select "#SYSTEM SW" using the arrow key, and then press the OK.
5) Press the following keys to display "SW003."
   # > 0 key > 3 key
   Message: #SYSTEM SW003 00001000
6) Position the cursor at Bit-6 (second from left) using the arrow key, and then press the 1 key.
   Message: #SYSTEM SW003 01001000
7) Press the OK key. Check that "SW003" changes to "SW004".
   Message: #SYSTEM SW004 00000000
8) Press the Reset key to exit the service mode.
9) Turn off the main power switch, and then turn it on again.
10) Start the PC and connect it to this machine with a USB cable.
11) Open My Computer on the PC to check that the "Removable Disk" icon is displayed.
   If the "Removable Disk" icon is not displayed, repeat the above procedure starting with step 1.
12) Double-click the "Removable Disk" icon, and then copy the user data (address_book.abk and user_data.dat) onto the Desktop.

⚠

Below items in the user data could not be backed up.
- System management setting> Department ID management
- System management setting> User ID management

13) Close the window on the Desktop.
14) Turn off the main power switch of this machine.
15) Disconnect the USB cable from this machine.

b. Importing user data
1) Press the flowing keys to enter the service mode.
   Additional functions key > 2 key > 8 key > Additional functions key
2) Select "#SYSTEM" using the arrow key, and then press the OK.
3) Select "#SYSTEM SW" using the arrow key, and then press the OK.

4) Press the following keys to display "SW003".
   # > 0 key > 3 key
   Message: #SYSTEM SW003 00001000
5) Check that Bit-6 (second from left) is set to set to "1". If Bit-6 is not set to "1", position the cursor at this bit using the arrow key and then press the 1 key.
   Message: #SYSTEM SW003 01001000

6) Press the OK key. Check that "SW003" changes to "SW004".
   Message: #SYSTEM SW004 00000000
7) Press the Reset key to exit the service mode.
8) Turn off the main power switch, and then turn it on again.
9) Open My Computer on the PC to check that the "Removal Disk" icon is displayed.
10) Write the user data (address_book.abk and user_data.dat) copied onto the Desktop as described in "a. Exporting user data" over the removable disk.
11) Disconnect the USB cable from the machine.
12) Turn off the main power switch of the machine.
13) Perform steps 1) to 4) again to reset Bit-6 of "SW003" to "0".
14) Press the OK key. When "SW003" changes to "SW004", press the Reset key to exit the service mode.
15) Check the user data list output as described in "a. Exporting user data" to make sure that the user data has been loaded into the machine properly.

13.4 ADF

13.4.1 Outline

13.4.1.1 Outline

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

This machine has the following adjustment items. Make the necessary adjustments after replacing each part.

T-13-3

No.	Adjustment type	Replaced parts
[1]	Magnification adjustment	Motor/roller
[2]	Side registration adjustment	-
[3]	Leading edge registration adjustment	-

13.4.1.2 Preparing a Test Sheet for Adjustment

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

Preparing a Test Sheet for Adjustment

F-13-6

F-13-7

13.4.2 Adjusting the Electrical System

13.4.2.1 Adjusting the Magnification

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

1) Create a test chart, load it in the ADF, and make a copy of it. This copy is called copy A.
2) Compare the longitudinal image length on the test chart with that on copy A. If required, make an adjustment in the service mode.
(A4-size paper: 277 +/-1mm LTR paper: 59 +/-1mm)
Image on copy A is shorter. -> Increase the value (or reduce the stream reading speed).
Image on copy A is longer. -> Decrease the value (or increase the stream reading speed).
3) Enter the service mode.
Sequentially press the additional functions key, 2 key, 8 key, and additional functions key on the operation panel of the host machine.
4) Using the arrow keys on the operation panel, display "#SCAN".
5) Press the OK key.
6) Using the arrow keys on the operation panel, display "#SCAN NUMERIC".
7) Press the OK key.
8) Using the arrow keys, select "48".

9) Using the numeric keys, change the value to determine the optimum value. Next, press the OK key. (Default: 32)

⚠ Do not change the adjustment value excessively.

13.4.2.2 Adjusting the Horizontal Registration

i-SENSYS Fax-L3000

1) Load the test chart in the ADF and make a copy of it.
2) Compare the horizontal registration of the chart with that of the copy. If required, make an adjustment.
The specified horizontal registration is 10mm +/-2mm.

F-13-8

1) Load the test chart in the ADF and make a copy of it.
2) Compare the horizontal registration of the chart with that of the copy. If required, make an adjustment.
The specified horizontal registration is 10mm +/-2mm.
3) Enter the service mode.
Sequentially press the Additional functions key, 2 key, 8 key, and Additional functions key on the operation panel of the host machine.
4) Using the arrow keys on the operation panel, display "#SCAN".
5) Press the OK key.
6) Using the arrow keys on the operation panel, display "#SCAN NUMERIC".
7) Press the OK key.
8) Using the arrow keys, select "41".
9) Using the numeric keys, change the value to determine the optimum value. Next, press the OK key. (Default: 35)

If the registration cannot be set to the specified value using software, use the following procedure:
1) Open the document pickup tray.
2) Remove the document pickup tray lower cover.
3) Loosen the one screw [1] and move the slide guide forward or backward according to the scale calibrated in mm so that the registration is within spec.

[1]

F-13-9

MEMO:
Making copies with the slide guide shifted 1 mm upward will increase the right registration (on the upper side of paper) by 1 mm.

13.4.2.3 Adjusting the Horizontal Registration

i-SENSYS Fax-L3000IP

1) Load the test chart in the ADF and make a copy of it.
2) Compare the horizontal registration of the chart with that of the copy. If

required, make an adjustment.
The specified horizontal registration is 10mm +/-2mm.

F-13-10

1) Load the test chart in the ADF and make a copy of it.
2) Compare the horizontal registration of the chart with that of the copy. If required, make an adjustment.
The specified horizontal registration is 10mm +/-2mm.
3) Enter the service mode.
Sequentially press the Additional functions key, 2 key, 8 key, and Additional functions key on the operation panel of the host machine.
4) Using the arrow keys on the operation panel, display "#SCAN".
5) Press the OK key.
6) Using the arrow keys on the operation panel, display "#SCAN NUMER-IC".
7) Press the OK key.
8) Using the arrow keys, select "41".
9) Using the numeric keys, change the value to determine the optimum value.
Next, press the OK key. (Default: 35)

   If the registration cannot be set to the specified value using software, use the following procedure:
1) Open the document pickup tray.
2) Remove the document pickup tray lower cover.
3) Loosen the one screw [1].
4) Remove the screw [2] and fasten on location [3]. Do not faten too tight.
5) Move the slide guide forward or backward according to the scale calibrated in mm so that the registration is within spec.

F-13-11

MEMO:
Making copies with the slide guide shifted 1 mm upward will increase the right registration (on the upper side of paper) by 1 mm.

13.4.2.4 Leading edge registration adjustment

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

1) Load the test chart in the ADF and make a copy of it.
2) Compare the end registration of the test chart with that on the copy. If required, make an adjustment.
The specified end registration is 10mm +/-2mm.

F-13-12

The image is shifted to the left. -> Decrease the value.

The image is shifted to the right. -> Increase the value.
Unit of adjustment   1 = 0.1 mm
3) Enter the service mode.
Sequentially press the Additional functions key, 2 key, 8 key, and Additional functions key on the operation panel of the host machine.
4) Using the arrow keys on the operation panel, display "#SCAN".
5) Press the OK key.
6) Using the arrow keys on the operation panel, display "#SCAN NUMER-IC".
7) Press the OK key.
8) Using the arrow keys, select "42".
9) Using the numeric keys, change the value to determine the optimum value.
Next, press the OK key. (Default: 241)

⚠

If the registration cannot be set to the specified value using software, make adjustments again starting with the perpendicular adjustment.

Chapter 14 Correcting Faulty Images

Contents

14.1 Initial Checkup

14.1.1 Site Environment

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

a. There must be a source of power whose voltage is as specified (+/-10%). The power plug must never be disconnected day and night.
b. The machine must not be in an area subject to high humidity (near a water faucet, water boiler, humidifier). The site must not be too cold or subject to dust. The machine must not be near a source of fire.
c. The site must not be subject to ammonium gas.
d. The machine must not be exposed to the rays of the sun. As necessary, curtains must be provided.
e. The area must be well ventilated. The machine must be on a level floor.
f. Be sure that there is a source of power that can be used by the machine.

14.1.2 Checking the Paper

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

a. Be sure the paper being used is of a type recommended by Canon.
b. Be sure that the paper is not moist. Try using paper fresh out of package.

14.1.3 Checking the Placement of Paper

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

a. There must be paper in the cassette or the tray deposited within a specific limit.
b. If transparencies are used, be sure that they are placed in the manual feed tray in the correct orientation.

14.1.4 Checking the Durables

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

Refer to the table of durables, and replace those that have reached the end of their lives.

14.1.5 Checking the Units and Functional Systems

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

<Reader>
- Check whether the optical system (contact image sensor/platen guide (white plate) /stream reading glass) is free from scratches, stain, foreign objects.
- Check whether the contact image sensor unit moves smoothly. Check whether the rails are free from dirt.
- Check whether the contact image sensor is not flickering.
- Check whether the optical system is free from dew condensation.

<Process>
- Check whether the toner cartridge is installed securely.
- Check whether the photoconductor drum is free from scratches and stain.

<Transfer>
- Check whether the transfer roller is free from scratches, stain, and deformation.

<Fixing>
- Check whether the fixing film and pressure roller are free from wear, scratches, dirt, and deformation.
- Check whether the fixing thermistor is broken.
- Check whether the temperature huse is conductive.

<Paper transport >
- Check whether the paper transport path is free from foreign objects such as paper chips.
- Check whether the paper pickup, feed, and separation rollers are free from paper dust. Also check whether these rollers are free from wear, scratches, dirt, and deformation.
- Check whether the registration roller and paper path are free from wear, scratches, dirt, and deformation.
- Check whether the transport guide is free from wear, scratches, dirt, and deformation.
- Check whether the leading edge of paper is not folded, curled, wavy, or damp.
- Check whether use of the Canon-recommended paper/transparency solves the problem.

<Machine>
- Check whether the drive system load is heavy.
- Check whether gears are worn or cracked?

<Cassette>
- Check whether the cassette is installed properly. Check whether the paper size is set properly. Check whether the same symptom occurs when the cassette is re-placed with the cassette verified to be normal.
- Check whether the middle plate of the cassette moves smoothly. Check whether it is deformed.
- Check whether the side and rear alignment plates are adjusted properly.
- Check whether the cassette heater switch is turned on (when a cassette heater is installed).

<Service Mode>
- Check whether various adjustment values are the same as those printed on the service label.
- Check whether the output between CIS channels has been corrected.
(Service mode>TEST MODE>"2"(SCANTEST)>"1")

<General>
- Check whether the power cord is plugged in the outlet securely.
- Check whether the specified AC voltage is applied to the outlet.
- Check whether sensors, clutches, motors, and solenoids are operating normally. Check whether connectors are connected properly.
(Check the power supply and signal routes with reference to the general circuit diagram.)
- Check whether all cables are routed properly and all screws are not loose.
- Check whether all outer covers are attached.
- Check whether the main power switch is turned on.
- Check the power cables and signal cables of options are connected properly.
- Check whether no fuse on PCBs is blown.
- Check whether the user uses the machine properly.

14.1.6 Others

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

If a machine is brought from a cold to warm room, its inside can start to develop condensation, leading to various problems.
a. condensation on the BD sensor is likely to cause problems associated with E100
b. condensation on the dust-proof glass is likely to cause poor image density in sub scanning direction
c. condensation on the contact image sensor of the reader unit can cause light images
d. condensation on the pickup or feed guide can cause paper feed problems

If the problem given in d. above has occurred, dry wipe the units in the feed system. Do not open the package containing a toner cartridge right after it has been brought in from a cold to warm place to avoid condensation. Be sure to leave it alone for a while (1 to 2 hr), opening it after it has become fully used to the temperature of the site.

14.2 Outline of Electrical Components

14.2.1 Clutch/Solenoid/Motor/Fan

14.2.1.1 List of Clutches/Solenoids/Motors/Fans

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

T-14-1

Symbol	Name	Function	Part No.	Connection jack No.	Error
CL1	Registration clutch	Drives the registration roller.	FK2-1401	J205 (Relay PCB)	
CL2001*1	Shading clutch	Drives the CIS unit.	FK2-5773	J407 (Reader controller PCB)	
CL2002	Pickup clutch	Drives the pickup roller.	FK2-5773	J407 (Reader controller PCB)	
SL1	Duplex pickup solenoid	Drives the duplex pickup roller.	FK2-1408	J204 (Relay PCB)	
SL2	Cassette pickup solenoid	Drives the cassette pickup roller.	FK2-1412	J207 (Relay PCB)	
SL5	Manual pickup solenoid	Drives the manual pickup roller.	FK2-1410	J203 (Relay PCB)	
SL2002	Stamp solenoid	Drives the stamp.	FK2-0216	J407 (Reader controller PCB)	
SL2003	Roller release solenoid	Drives the delivery roller.	FK2-1392	J407 (Reader controller PCB)	
M1	Main motor	Supplies a drive to each rollers.	FK2-1413	J110 (DC controller PCB)	E010
M2	Polygon motor	Drives the laser scanner.	FM2-5271	J105 (DC controller PCB)	
M2001	ADF pickup motor	Supplies a drive to the pickup roller.	FK2-5771	J406 (Reader controller PCB)	
M2002	Read motor	Supplies a drive to the CIS unit and delivery roller.	FK2-5771	J410 (Reader controller PCB)	
FM1	Heat discharge fan	Cools fixing unit.	FK2-1386	J206 (Relay PCB)	E805
FM2000	Reader fan	Cools reader controller PCB.	FK2-5776	J412 (Reader controller PCB)	

*1:A3 model only
A4 model: LASER CLASS 810/i-SENSYS FAX-L3000/FAX L-3000
A3 model: LASER CLASS 830i/i-SENSYS FAX-L3000IP/FAX L-3000IP/Canofax L-1000

F-14-1

14.2.2 Sensor

14.2.2.1 List of Sensors

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

T-14-2

Symbol	Name	Function	Part No.	Connection jack No.	Jam code
SR5	Delivery sensor	Detects delivery paper.	WG8-5776	J107 (DC controller PCB)	010c, 0210, 0214, 021c
SR9	Cassette paper sensor	Detects presence/absence of cassette paper.	WG8-5776	J208 (Relay PCB)	
SR10	Delivery full sensor	Detects the delivery paper full status.	WG8-5776	J208 (Relay PCB)	
SR11	Registration sensor	Detects registration paper.	WG8-5776	J202 (Relay PCB)	0104, 0208, 010c, 0210, 0214
SR12	Manual feed paper sensor	Detects presence/absence of manually fed paper.	WG8-5776	J202 (Relay PCB)	
SR2001	Document set sensor	Detects presence/absence of paper.	WG8-5696	J413 (Reader controller PCB)	000a
SR2002	Document edge sensor	Detects edge of paper.	WG8-5696	J413 (Reader controller PCB)	0007, 0008, 0009, 000c, 000d
SR2003	Registration sensor	Detects registration paper.	WG8-5696	J413 (Reader controller PCB)	0007, 0010
SR2004	Delivery sensor	Detects delivery paper.	WG8-5696	J410 (Reader controller PCB)	0007
SR2005	Separation rear sensor	Detects paper after separation.	WG8-5696	J407 (Reader controller PCB)	0007
SR2006*1	Contact image sensor HP sensor	Detects CIS hopme position.	WG8-5696	J414 (Reader controller PCB)	
SR2007*1	Document width sensor 1	Detects width of paper.	WG8-5696	J411 (Reader controller PCB)	
SR2008*1	Document width sensor 2	Detects width of paper.	WG8-5696	J411 (Reader controller PCB)	
SR2009*1	Document length sensor 1	Detects length of paper.	WG8-5696	J411 (Reader controller PCB)	
SR2010*1	Document length sensor 2	Detects length of paper.	WG8-5696	J411 (Reader controller PCB)	
SW2	Interlock switch	Detects opening/closing of the left cover.	WC4-5236	J112 (DC controller PCB)	1118

*1:A3 model only
A4 model: LASER CLASS 810/i-SENSYS FAX-L3000/FAX L-3000
A3 model: LASER CLASS 830i/i-SENSYS FAX-L3000IP/FAX L-3000IP/Canofax L-1000

F-14-2

14.2.3 PCBs

14.2.3.1 List of PCBs

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

T-14-3

Symbol	Name	Function	Part No.
[1]	Image processor PCB	Processes output image data	A4 model: FM3-3379 A3 model: FM3-3369
[2]	DC controller PCB	Controls the printer unit/option	100/120V: FM3-3841 230V: FM3-3842
[3]	Reader controller PCB	CIS drive, processes analog image data	A4 model: FM3-3465 A3 model: FM3-3464
[4]	Power supply PCB	Printer power supply	100V: FK2-5764 120V: FK2-5765 230V: FK2-5766
[5]	Relay PCB	Relay of drive system DC load	FM2-4918
[6]	Laser driver PCB/BD detection PCB	Laser drive/laser beam detection	FM2-5271
[7]	NCU PCB	Fax line interface	FM3-3332
[8]	Modular jack PCB	Controls the line switching operation	100V: FM3-3374 120V: FM3-3375 230V: FM3-3376
[9]	Modem PCB	Control the fax	FM3-3371
[10]	Network PCB	Network interface/printer function control	FM3-3370
[11]	Operation panel PCB	Controls the operation panel	A3 model: FM3-3539(JP), FM3-3542(US), FM3-3541(AU), FM3-3540(EU) A4 model: FM3-3536(US), FM3-3538(AUS/HK/SPL), FM3-3537(EU)
[12]	Humidity sensor	Humidity detection	WP2-5254
[13]	Capacitor PCB	Power for Back up	FM3-3372(A3 model only)
[14]	Filter PCB	Noise filter	FM3-3840 (230V only)
[15]	SEND PCB	SEND functuion expansion	FM3-3378(standard for LASER CLASS 830i only)
[16]	SDRAM	Image memory storage	64MB:FM3-3373 128MB:FM3-3324

A4 model: LASER CLASS 810/i-SENSYS FAX-L3000/FAX L-3000

A3 model: LASER CLASS 810i/i-SENSYS FAX-L3000IP/FAX L-3000IP/Canofax L-1000

F-14-3

14.2.4 Others

14.2.4.1 List of Lamps, Heaters, and Others

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

T-14-4

Symbol	Name	Function	Parts No.	Connection Jack No.	Error
H1	Fixing heater	Used as the heater for fixing.	Fixing unit (100V:FM2-5297, 120V:FM2-5278, 230V:FM2-5298)	J15(power supply PCB)	E000, E001, E002, E003
TH1	Fixing main thermistor	Detects the fixing heater temperature.	Fixing unit (100V:FM2-5297, 120V:FM2-5278, 230V:FM2-5298)		
TH2	Fixing sub thermistor	Detects the fixing heater temperature.	Fixing unit (100V:FM2-5297, 120V:FM2-5278, 230V:FM2-5298)		
TP	Temperature fuse	Cuts off the heater power supply line when an abnormal temperature is detected.	Fixing unit (100V:FM2-5297, 120V:FM2-5278, 230V:FM2-5298)	J15(power supply PCB)	
SP1	Speaker	Speaker	FK2-1378	J1203 (modem PCB)	

F-14-4

Chapter 15 Error Code

Contents

15.1 Error Code

15.1.1 List of Error Codes

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

T-15-1

Display Code	Detail Code	Main Cause/Symptom	Countermeasure
E000	0000	Startup error	
		The temperature detected by the main or sub thermistor does not rise to the specified value during startup control.	- Check the fixing film connector. - Replace the fixing film unit. - Replace the DC controller PCB.
E001	0000	Abnormally high temperature (detected by main thermistor)	
		The main thermistor detected an abnormally high temperature (235 deg C) during temperature control.	- Check the connector of the fixing film unit. - Replace the fixing film unit. - Replace the DC controller PCB.
	0001	Abnormally high temperature (detected by sub thermistor)	
		The sub thermistor detected an abnormally high temperature (300 deg C) during temperature control.	- Check the connector of the fixing film unit. - Replace the fixing film unit. - Replace the DC controller PCB.
E002	0000	Low temperature during temperature control.	
		The target temperature is not reached during temperature control.	- Check the connector of the fixing film unit. - Replace the fixing film unit. - Replace the DC controller PCB.
E003	0000	Abnormally low temperature (detected by main thermistor)	
		After the temperature detected by the main thermistor has reached the specified value, it does not reach the specified value during initial rotation.	- Check the connector of the fixing film unit. - Replace the fixing film unit. - Replace the DC controller PCB.
	0001	Abnormally low temperature (detected by sub thermistor)	
		After the temperature detected by the sub thermistor has reached the specified value, it does not reach the specified value during initial rotation.	- Check the connector of the fixing film unit. - Replace the fixing film unit. - Replace the DC controller PCB.
E010	0000	Main motor failure	
		The main motor is faulty.	- Check the connector of the main motor. - Replace the main motor. - Replace the DC controller PCB.
E100	0000	BD detection PCB failure	
		The BD detection PCB is faulty.	- Check the connector of the BD detection PCB. - Replace the laser scanner unit. - Replace the DC controller PCB.
E196	0001	Flash ROM write/read error	- Replace the image processor PCB.
		The write/read of Flash ROM in the image processor PCB is faulty.	
	0002	SEND ROM write/read error	- Replace the SEND PCB. - Replace the image processor PCB.
		The write/read of SEND ROM in the image processor PCB is faulty.	
E197	0000	Printer engine communication error	
		Erroneous communication between the DC controller PCB and image processor PCB was detected.	- Check the connectors of the DC controller PCB and image processor PCB. - Replace the DC controller PCB for normal connection. - Replace the image processor PCB.
E716	0000	Erroneous communication with optional cassette	
		Disconnection of the optional cassette was detected after power-on, detection of normal connection to the optional cassette, and start of communication.	- Check the connectors of the optional cassette PCB and DC controller PCB. - Replace the optional cassette PCB for normal connection. - Replace the DC controller PCB.
E730	0000	inside error of the image processor PCB (PDL system error)	- Replace the image processor PCB.
		The inside of the image processor PCB is faulty.	

Display Code	Detail Code	Main Cause/Symptom	Countermeasure
E733	0000	Erroneous communication between controller and printer	
		Cannot communicate with the printer at startup.	- Check the connectors of the DC controller PCB and image processor PCB for normal connection. - Check the power supply of the printer (Check whether initialization is performed at startup). - Replace the DC controller PCB or image processor PCB.
E736	0000	CCU communication error	
		The installed modem PCB is incompatible.	- Check the connectors of the image processor PCB and modem. - Replace the modem PCB. - Replace the image processor PCB.
E739	0000	Erroneous communication between controller and network board	
		The installed network board is incompatible.	- Check the connectors of the image processor PCB and network PCB for normal connection. - Replace the network PCB. - Replace the image processor PCB.
E805	0000	Fan failure	
		The fan is faulty.	- Check the fan connector. - Replace the fan. - Replace the DC controller PCB.
E808	0000	Fixing drive circuit failure	
		- The heater does not turn on. - A fixing drive motor failure was detected.	- Check the connector of the fixing film unit. - Replace the fixing film unit. - Replace the fixing drive motor. - Replace the DC controller PCB. - Replace the power supply PCB.

15.2 Jam Code

15.2.1 Jam Codes (Main body)

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

T-15-2

Code	Name	Sensor No.	Description
0104	Pickup Delay Jam	SR11	After execution of a pickup retry, the registration sensor (SR11) does not detect the leading edge of paper within a specific period of time. Or after the duplex drive solenoid (SL1) is on, the registration sensor (SR11) does not detect the leading edge of paper within a specific period of time.
0208	Pickup Stationary Jam	SR11	After the registration sensor (SR11) has detected the leading edge of paper, the registration sensor (SR11) does not detect the trailing edge of paper within a specific period of time.
010c	Delivery Sensor Delay Jam	SR5	After the registration sensor (SR11) has detected the leading edge of paper, the delivery sensor (SR5) does not detect the leading edge of paper within a specific period of time.
0210	Delivery Sensor Stationary Jam	SR5	- The delivery sensor cannot detect absence of paper within the specified time after turning off of the registration clutch. - The delivery sensor cannot detect absence of paper within the specified time after the sensor detected the leading edge of paper.
0214	Stationary jam in machine	SR5, SR9	After the registration sensor (SR11) has detected the trailing edge of paper, the delivery sensor (SR5) does not detect the trailing edge of paper within a specific period of time.
021c	Wound Paper Jam at Fuser	SR5, SR11	The delivery sensor (SR5) has detected absence of paper within the prescribed time after it detected presence of paper.
1118	Door open jam	SR5, SR9, SR11, SW2	The door was opened when there was printing paper in the transport path.

15.2.2 Jam Codes (ADF)

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

T-15-3

Code	Name	Sensor No.	Description
0000	Unknown jam	-	Some other error
0007	Initial stationary	SR2002, SR2003, SR2004, SR2005	Paper has been detected in the transport path before ADF initialization.
0008	Document edge sensor delay	SR2002	The document edge sensor cannot detect the document even when the document has been transported by the specified distance after reception of the pickup request.
0009	Document edge sensor stationary	SR2002	The trailing edge of document is not detected when the document has been transported by the specified distance after detection of paper by the document edge sensor.
000a	No paper (Pull out the document.)	SR2001	The document set sensor has been held off since start of document feed.
000c	Delivery delay jam	SR2004	The delivery sensor cannot detect document when the document has been transported by the specified distance since it was detected by the document edge sensor (after it had been transported by the specified distance in response to the pickup request).
000d	Delivery stationary jam	SR2004	The trailing edge of document is not detected when the document has been transported by the specified distance after detection of paper by the delivery sensor.
0010	Pickup NG	SR2003	The registration sensor has been held off since start of document feed.

15.3 Fax Error Codes

15.3.1 Outline

15.3.1.1 Error Code Outline

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

An error code is used to indicate a fault in a machine, and is indicated in the machine's LCD or reports, showing the nature (symptoms) of the fault. Using the error code, the user or the service man can readily find out how to correct the fault by simply referring to the User's Manual or service manual.
An error code may be either of the following two types:
User Error Codes
A fault indicated as a user error code is one that can easily be corrected by the user, as by operating the machine. It takes the form of "#+number."
Service Error Codes
If a fault calls for a service man for correction, it is indicated as a service man error code in the form of "##+number" or "SYSTEM ERROR E+number."

Memo
A service error code expressed in the form of "##+number" will not appear on the LCD, Error Tx Report, or Activity Report while the machine remains in factory default state. To check a service error code, shift bit 0 of service soft switch #1 SSSW SW01 to '1'.

Memo
Display only the error codes which are newly incorporated in this machine as well as which require remedies unique to the product. For the causes and countermeasures of other error codes, refer to the separate G3/G4 Facsimile Error Code List (Rev. 2).

15.3.2 User Error Code

15.3.2.1 User Error Code

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

T-15-4

No.	Tx/Rx	Description
#0001	[Tx]	an original has jammed.
#0003	[Tx/Rx]	tine-out for copying or sending/receiving a single page has occurred.
#0005	[Tx/Rx]	time-out for initial identification (T0/T1) has occurred.
#0009	[Rx]	recording paper has jammed or is absent.
#0012	[Tx]	recording paper is absent at the other party.
#0018	[Tx/Rx]	auto call initiation has failed.
#0037	[Rx]	image memory overflow at time of reception has occurred.
#0059	[Tx]	The number you dial and connected number (CSI) does not match.
#0995/0099	[Tx/Rx]	a memory communication reservation has been cancelled.

15.3.3 Service Error Code

15.3.3.1 Service Error Code

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

T-15-5

No.	Tx/Rx	Description
##0100	[Tx]	at time of transmission, the procedural signal has been transmitted more than specified.
##0101	[Tx/Rx]	the modem speed does not match that of the other party.
##0102	[Tx]	at time of transmission, fall-back cannot be used.
##0103	[Rx]	at time of reception, EOL cannot be detected for 5 sec (15 sec if CBT).
##0104	[Tx]	at time of transmission, RTN or PIN is received.
##0106	[Rx]	at time of reception, the procedural signal is received for 6 sec while in wait for the signal.
##0107	[Rx]	at time of reception, the transmitting party cannot use fall-back.
##0109	[Tx]	at time of transmission, a signal other than DIS, DTC, FTT, CFR, or CRP is received, and the procedural signal has been sent more than specified.
##0111	[Tx/Rx]	memory error has occurred.
##0114	[Rx]	at time of reception, RTN is transmitted.
##0200	[Rx]	at time of reception, no image carrier is detected for 5 sec.
##0201	[Tx/Rx]	DCN is received outside the normal parity procedure.
##0220	[Tx/Rx]	system error (main program out of control) has occurred.
##0232	[Tx]	encoding error has occurred.
##0237	[Rx]	decoding error has occurred.
##0261	[Tx/Rx]	system error has occurred.
##0280	[Tx]	at time of transmission, the procedural signal has been transmitted more than specified.
##0281	[Tx]	at time of transmission, the procedural signal has been transmitted more than specified.

No.	Tx/Rx	Description
##0282	[Tx]	at time of transmission, the procedural signal has been transmitted more than specified.
##0283	[Tx]	at time of transmission, the procedural signal has been transmitted more than specified.
##0284	[Tx]	at time of transmission, DCN is received after transmission of TCF.
##0285	[Tx]	at time of transmission, DCN is received after transmission of EOP.
##0286	[Tx]	at time of transmission, DCN is received after transmission of EOM.
##0287	[Tx]	at time of transmission DCN is received after transmission of MPS.
##0288	[Tx]	after transmission of EOP, a signal other than PIN, PIP, MCF, RTP, or RTN has been received.
##0289	[Tx]	after transmission of EOM, a signal other than PIN, PIP, MCF, RTP, or RTN has been received.
##0290	[Tx]	after transmission of MPS, a signal other than PIN, PIP, MCF, RTP, or RTN has been received.
##0670	[Tx]	at time of V.8 late start, the V.8 ability of DIS front the receiving party is expected to be detected, and the CI signal is expected to be transmitted in response; however, the procedure fails to advance, and the line is released because of T1 time-out.
##0671	[Rx]	at time of V.8 arrival, procedure fails to move to phase 2 after detection of CM signal from caller, causing T1 time-out and releasing line
##0672	[Tx]	at time of V.34 transmission, a shift in procedure from phase 2 to phase 3 and thereafter stops, causing the machine to release the line and suffer T1 timeout.
##0673	[Rx]	at time of V.34 reception, a shift in procedure from phase 2 to phase 3 and thereafter stops, causing the machine to release the line and suffer T1 timeout.
##0674	[Tx]	at time of V.34 transmission, a shift in procedure from phase 3 and phase 4 to the control channel and thereafter stops, causing the machine to release the line and suffer T1 timeout.
##0675	[Rx]	at time of V.34 reception, a shift in procedure from phase 3 and phase 4 to the control channel and thereafter stops, causing the machine to release the line and suffer T1 timeout.
##0750	[Tx]	at time of ECM transmission, no meaningful signal is received after transmission of PPS-NULL, causing the procedural signal to be transmitted more than specified.
##0752	[Tx]	at time of ECM transmission, DCN is received after transmission of PPS-NULL.
##0753	[Tx]	at time of ECM transmission, the procedural signal has been transmitted more than specified after transmission of PPS-NULL, or T5 time-out (60 sec) has occurred.
##0754	[Tx]	at time of ECM transmission, the procedural signal has been transmitted more than specified after transmission of PPS-NULL.
##0755	[Tx]	at time of ECM transmission, no meaningful signal is received after transmission of PPS-MPS, causing the procedural signal to be transmitted more than specified.
##0757	[Tx]	at time of ECM transmission, DCN is received after retransmission of PPS-MPS.
##0758	[Tx]	at time of ECM transmission, the procedural signal has been transmitted more than specified after transmission of PPS-MPS, or T5 time-out (60 sec) has occurred.
##0759	[Tx]	at time of ECM transmission, the procedural signal has been transmitted more than specified after transmission of PPS-MPS.
##0760	[Tx]	at time of ECM transmission, no meaningful signal is received after transmission of PPS-EOM, causing the procedural signal to be transmitted more than specified.
##0762	[Tx]	at time of ECM transmission, DCN is received after transmission of PPS-EOM.
##0763	[Tx]	at time of ECM transmission, the procedural signal has been transmitted more than specified after transmission of PPS-MPS, or T5 time-out (60 sec) has occurred.
##0764	[Tx]	at time of ECM transmission, the procedural signal has been transmitted more than specified after transmission of PPS-EOM.
##0765	[Tx]	at time of ECM transmission, no meaningful signal is received after transmission of PPS-EOP, causing the procedural signal to be transmitted more than specified.
##0767	[Tx]	at time of ECM transmission, DCN is received after transmission of PPS-EOP.
##0768	[Tx]	at time of ECM transmission, the procedural signal has been transmitted more than specified after transmission of PPS-EOP, or T5 time-out (60 sec) has occurred.
##0769	[Tx]	at time of ECM transmission, the procedural signal has been transmitted more than specified after transmission of PPS-EOP.
##0770	[Tx]	at time of ECM transmission, no meaningful signal is received after transmission of EOR-NULL, causing the procedural signal to be transmitted more than specified.
##0772	[Tx]	at time of ECM transmission, DCN is received after transmission of EOR-NULL.
##0773	[Tx]	at time of ECM transmission, the procedural signal has been transmitted more than specified after transmission of EOR-NULL, or T5 time-out (60 sec) has occurred.
##0774	[Tx]	at time of ECM transmission, ERR is received after transmission of EOR-NULL.
##0775	[Tx]	at time of ECM transmission, no meaningful signal is received after transmission of EOR-MPS, causing the procedural signal to be transmitted more than specified.
##0777	[Tx]	at time of ECM transmission, DCN is received after transmission of EOR-MPS.
##0778	[Tx]	at time of ECM transmission, the procedural signal has been transmitted more than specified after transmission EOR-MPS, or T5 time-out (60 sec) has occurred.
##0779	[Tx]	at time of ECM transmission, ERR is received after transmission of EOR-MPS.
##0780	[Tx]	at time of ECM transmission, no meaningful signal is received after transmission of EOR-EOM, causing the procedural signal to be transmitted more than specified.
##0782	[Tx]	at time of ECM transmission, DCN is received after transmission of EOR-EOM.
##0783	[Tx]	at time of ECM transmission, the procedural signal has been transmitted more than specified after transmission of EOR-EOM, or T5 time-out (60 sec) has occurred.
##0784	[Tx]	at time of ECM transmission, ERR is received after transmission of EOR-EOM.
##0785	[Tx]	at time of ECM transmission, no meaningful signal is received after transmission of EOR-EOP, causing the procedural signal to be transmitted more than specified.
##0787	[Tx]	at time of ECM transmission, DCN is received after transmission of EOR-EOP.
##0788	[Tx]	at time of ECM transmission, the procedural signal has been transmitted more than specified after transmission of EOR-EOP, or T5 time-out (60 sec) has occurred.
##0789	[Tx]	at time of ECM transmission, ERR is received after transmission of EOR-EOP.
##0790	[Rx]	at time of ECM reception, ERR is transmitted after transmission of EOR-Q.

No.	Tx/Rx	Description
##0791	[Tx/Rx]	while ECM mode procedure is under way, a signal other than a meaningful signal is received.
##0792	[Rx]	at time of ECM reception, PPS-NULL cannot be detected over partial page processing.
##0793	[Rx]	at time of ECM reception, no effective frame is received while high-speed signal reception is under way, thus causing time-out.
##0794	[Tx]	at time of ECM reception, PPR with all 0s is received.
##0795	[Tx/Rx]	a fault has occurred in code processing for communication.

Chapter 16 Service Mode

Contents

16.1 Default Settings

16.1.1 Service Mode Menus

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

#SSSW		
No.	**Initial setting**	**Function**
SW01	00100000	error/copy control
SW02		not used
SW03	00000000	echo remedy setting
SW04	10000000	communication fault remedy setting
SW05	00000000	standard function (DIS signal) setting
SW06 - SW11		not used
SW12	00000010	page timer setting
SW13	00000000	meter/inch resolution setting
SW14	00000001	inch/meter resolution setting
SW15 - SW24		not used
SW25	00000000	report indication resolution setting
SW26 - SW27		not used
SW28	00000000	V.8/V.34 protocol settings
SW29		not used
SW30	00000000(JPN)/ 00000011(EURO)/ 00000001(Other country/region)	Assigning a New Dial Tone Detection Method
SW31- SW32		not used
SW33	00000000	counter function settings
SW34 - SW50		not used

#MENU			
No.	**Initial setting**	**Range of setting**	**Function**
01: - 04:			not used
05:	0	ON/OFF	NL equalizer setting
06:	0	0: DIAL 1: SERVICEMAN [1] 2: SERVICEMAN [2] 3: OFF	line monitor setting
07:	10	0-15	transmission level setting
08:	0	0: 3429 1: 3200 2: 3000 3: 2800 4: 2743 5: 2400	V.34 baud rate
09:	0	0: 33.6kbs 1: 31.2kbs 2: 28.8kbs 3: 26.4kbs 4: 24.0kbs 5: 21.6kbs 6: 19.2kbs 7: 16.8kbs 8: 14.4kbs 9: 12.0kbs 10: 9.6kbs 11: 7.2kbs 12: 4.8kbs 13: 2.4kbs	V.34 transmission speed
10:	1	0: 50Hz 1: 25Hz 2: 17Hz	pseudo CI signal frequency setting
11: - 20:			not used

#NUMERIC Param.

No.	Initial setting	Range of setting	Function
001:			not used
002:	10 (10%)	(1 - 99)	RTN signal transmission condition (1) setting
003:	15 (15lines)	(2 - 9)	RTN signal transmission condition (2) setting
004:	12 (12times)	(1 - 99)	RTN signal transmission condition (3) setting
005:	4 (4sec)	(1 - 60)	NCC pause time (pre-ID code) setting
006:	4 (4sec)	(1 - 60)	NCC pause time (post-ID code) setting
007: - 009:			not used
010:	5500 (55sec)	(0 - 9999)	line connection identification time length
011:	3500 (35sec)	(0 - 9999)	T.30 T1 timer (for reception)
012:			not used
013:	1300 (13sec)	(500 - 3000)	T30 EOL timer
014:			not used
015:	120 (1200ms)	(0 - 999)	hooking detection time setting
016:	4 (4sec)	(0 - 9)	fax/tel switch-over function: between line acquisition and pseudo RBTtransmission
017:	100 (1000ms)	(0 - 999)	pseudo RBT signal pattern: ON time setting
018:	0 (0ms)	(0 - 999)	pseudo RBT signal pattern: OFF time (short) setting
019:	200 (2000ms)	(0 - 999)	pseudo RBT signal pattern: OFF time (long) setting
020:	100 (1000ms)	(0 - 999)	pseudo CI signal pattern: ON time setting
021:	0 (0ms)	(0 - 999)	pseudo CI signal pattern: OFF time (short) setting
022:	200 (2000ms)	(0 - 999)	pseudo CI signal pattern: OFF time (long) setting
023:	4	(0 - 7)	fax/tel switch-over pseudo RBT transmission level
024:	20 (-20dBm)	(0 - 20)	fax/tel switch-over pseudo RBT transmission level
025:	60 (60sec)	(0 - 999)	pseudo RBT signal pattern: OFF time (long) setting
026:			not used
027:	0	(0 - 20)	V21 low-speed flag preamble detection time length
028: - 054:			not used
055:	60 (min)	(0 - 480)	acquisition period of enviormental log data
056:	101	(0 - 999)	count type select 1
057:	103	(0 - 999)	count type select 2
058:	201	(0 - 999)	count type select 3
059:	203	(0 - 999)	count type select 4
060:	0	(0 - 999)	count type select 5
061:	0	(0 - 999)	count type select 6
062: - 080:			not used

#SPECIAL	Do not change.
#NCU	Do not change.
#FAX	Not used.

#SCAN

	No.	Initial setting	Range setting	Explanation
#SCAN SW	SW1 - SW50			Not used
#SCAN NUMERIC	001: - 025:			Not used
	026:	22	6 to 48, one unit=0.1mm	Distance from the standby position of CIS to the shading start point. (CIS shift type only)
	027: - 040:			Not used
	041:	0(CIS fixed type) 35(CIS shift type)	0 to 70, one unit=0.1mm	Vertical scan start position adjustment (scanning on ADF)
	042:	241	170 to 270, one unit=0.1mm	Horizontal scan start position adjustment (scanning on ADF)
	043:	45	0 to 200, one unit=0.1mm	Horizontal scan end position correction (copy)
	044:	65	0 to 200, one unit=0.1mm	Horizontal scan end position correction (superfine)
	045:	80	0 to 200, one unit=0.1mm	Horizontal scan end position correction (fine)
	046:	80	0 to 200, one unit=0.1mm	Horizontal scan end position correction (standard)
	047:	16	0 to 32, one unit=0.1%	Vertical scan magnification correction (scanning on ADF)
	048:	16	0 to 32, one unit=0.1%	Horizontal scan magnification correction (scanning on ADF)
	049: - 053:			Not used
	054:	16	0 to 32, one unit=0.1%	Pickup motor speed correction (when the ADF is used)
	055: - 099:			Not used
	100:	166	106 to 206, one unit=0.1mm	Adjustment of the registration loop volume (ADF)
	101: - 192:			Not used
	193:	0	0: LEGAL 1: FOOLSCAP 2: M_OFFICIO 3: A_FOOLSCAP 4: FOLIO 5: G_LEGAL 6: A_OFFICIO 7: B_OFFICIO	ADF special paper, standardized size: LGL misidentification-ready
	194:	0	0: LTR 1: G_LTR 2: A_LTR	ADF special paper, standardized size: LTR misidentification-ready
	195:	0	0: LTR_R 1: FOOLSCAP 2: OFFICIO 3: E_OFFICIO 4: G_LTR_R 5: A_LTR_R	ADF special paper, standardized size: LTR_R misidentification-ready
	196 - 212:			Not used
	213:	8273	1 to 9999	XYZ correction value of (X) of standard white plate (if equipped with SEND functions)
	214:	8737	1 to 9999	XYZ correction value of (Y) of standard white plate (if equipped with SEND functions)
	215:	9427	1 to 9999	XYZ correction value of (Z) of standard white plate (if equipped with SEND functions)
	216 - 350:			Not used

#PRINT

	No.	Initial setting	Range setting	Explanation
#PRINT SW	SW01 - SW04			Not used
	SW05	10000000		Horizontal scanning priority record
	SW06 - SW13			Not used
	SW14	00000000		Special mode setting
	SW15	00000000		IFAX Permission of split recording of text data
	SW16 - SW50			Not used

#PRINT

	No.	Initial setting	Range setting	Explanation
#PRINT NUMERIC	01: - 30:			Not used
	31:	50	0 to 100, one unit = 0.1 mm	Top registration adjustment (manual paper feed tray)
	32:	50	0 to 100, one unit = 0.1 mm	Top registration adjustment (cassette)
	33:	50	0 to 100, one unit = 0.1 mm	Top registration adjustment (duplex unit)
	34:	100	0 to 200, one unit = 0.1 mm	Left-end registration adjustment (manual paper feed tray)
	35:	100	0 to 200, one unit = 0.1 mm	Left-end registration adjustment (cassette)
	36:	100	0 to 200, one unit = 0.1 mm	Left-end registration adjustment (option cassette)
	37:-38:			not used
	39:	100	0 to 200, one unit = 0.1 mm	Left-end registration adjustment (duplex unit)
	40:	2	0 to 6, 1 unit = 5 deg C	Target fixing temperature adjustment (multi)
	41:	2	0 to 6, 1 unit = 5 deg C	Target fixing temperature adjustment (cassette)
	42:	2	0 to 6, 1 unit = 5 deg C	Target fixing temperature adjustment (option cassette)
	43:-50:			not used
	51:	3	0 to 6, 1 unit = 5 deg C	Target 2-sided temperature adjustment
	52:			not used
	53:	0	0 to 9999, one unit = 0.1 mm	Adjustment of margin at leading edge of copy
	54:	50	0 to 9999, one unit = 0.1 mm	Adjustment of margin at trailing edge of copy
	55:	48	0 to 9999, one unit = 0.1 mm	Adjustment of margin at right edge of copy
	56:	0	0 to 9999, one unit = 0.1 mm	Adjustment of margin at left edge of copy
#PRINT CST				not used

#NETWORK

	Item	Function
#NETWORK SW		not used
#NET NUMERIC		not used
#CERTIFICATE	#CA-CERTIFICATE	Used to confirm the contents of the installed CA certificates.

#CODEC	Not used.

#SYSTEM

	No.	Initial setting	Range of setting	Function
#SYSTEM SW	SW01- SW02			not used
	SW03	00001000		Import/export of the user information via USB
	SW04 - SW50			not used
#SYSTEM NUMERIC	001: -100:			not used

#ACC	Not used

#COUNTER

Item	Function
TOTAL	total counter
PICK_UP	pickup-related counter
FEEDER	feeder counter
JAM	jam-related counter
MISC	other counter

#COUNTER

Item	Function
DRBL-1	durables counter

#E-RDS

Item	Default	Setting Range	Description
E-RDS SWITCH	0	0 / 1	Operation mode setting
			0 (OFF): Does not operate e-RDS.
			1 (ON): Operates e-RDS.
RGW-ADDRESS	URL of UGW	Character string length: 129 bytes(including NULL, one-byte codes only)	URL of UGW
RGW-PORT	443	1 to 65535	UGW port No.
COM-TEST			Execution of communication test
COM-LOG			Details of communication test result

#REPORT

	Setting	Function
#REPORT SW		Not used
#REPORT OUTPUT	SERVICE DATA LIST	Output of service data list
	SYSTEM DATA LIST	Output of system data list
	SYSTEM DUMP LIST	Output of system dump list
	COUNTER LIST	Output of counter list
	ERROR LOG LIST	Output of error log list
	SPEC LIST	Output of spec list
	SERVICE LABEL	Output of service label
	ERDS COM LOG LIST	Output of communication error log information related to e-RDS
	ENV. LOG LIST	Output of environmental log information
#REPORT NUMERIC		Not used

#DOWNLOAD	Download mode

#CLEAR

Item	Level2	Function
TEL & USER DATA		Use it to clear all areas under user registration/setting.
SERVICE DATA		Use it to clear the counters (numerator), date, and start data form the system dump list.
COUNTER		Use it to clear the maintenance/parts counter data and each mode counter data.
SOFT-CNT		Not used.
TYPE		Use it to clear the user data and the service data by specified settings.
HST	ACTIVITY	Use it to clear the contents of the communications control report.
	ACCOUNT	Use it to clear each print history.
	JAM	Use it to clear the contents of the jam history.
	ERR	Use it to clear the contents of the error (E code) history.
	ALARM	Use it to clear the contents of the alarm history.
	ENVIROMENT	Initializes the enviroment log data.
CARD		Use it to clear the control cars error data.
ERR	E355	Not used.
	E719	Use it to clear the management information at the time of card reader removal.
PWD		Use it to clear the system administrator's password.
FILE SYSTEM*1		Not used.
FORMAT	USB MEMORY	Format the USB memory. (This mode is used when the USB memory error is damaged and E744 occurs.)
	LICENSE DRIVE	Not used.

#CLEAR

Item	Level2	Function
CA-KEY		Initializes an installed CA certification.
ERDS-DAT		The settings related to e-RDS are cleared to the factory settings.
DEPT USER CLEAR		Clears the system management password.
SYSTEM INFO CLEAR		Turn off the departmenet ID management and the user management.
ALL		Clears user and service data (except for some scan parameters and print parameters), and the counter setting/registration data in the system dump list, except for the print count.

#ERROR DISPLAY	Display the service error code.

#ROM

Item	Function
MAIN	Use it to indicate the version of the ROM (SYSTEM) on the image processor PCB.
MAIN2	Use it to indicate the version of the ROM (BOOT) on the image processor PCB.
OPROM	Use it to indicate the version of the ROM on the SEND PCB.
ECONT	Use it to indicate the version of the ROM on the DC controller PCB.

#TEST MODE [1] - [9]

Item	Function
(1) DRAM [1] - [2]	Data check in D-RAM
(2) SCAN TEST [1] - [8]	CIS automatic correction
(3) PRINT TEST [1] - [9]	Output of test prints
(4) MODEM TEST [1] - [9]	modem/NCU related tests
(5) AGING TEST	not used
(6) FACULTY TEST [1] - [9]	Various functional tests
(0) ROLLER CLEAN	Printer and ADF roller cleaning

16.2 Service Soft Switch Settings (SSSW)

16.2.1 Outline

16.2.1.1 Bit Switch Composition

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

The items registered and set by each of these switches comprise 8-bit switches. The figure below shows which numbers are assigned to which bits. Each bit has a value of either 0 or 1.

F-16-1

⚠ Do not change service data identified as "not used"; they are set as initial settings.

16.2.2 SSSW-SW01:

16.2.2.1 List of Functions

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

T-16-1

Bit	Function	1	0
0	service error code	output	not output
1	not used	-	-
2	not used	-	-
3	not used	-	-
4	not used	-	-
5	not used	-	-
6	not used	-	-
7	not used	-	-

16.2.2.2 Detailed Discussions of Bit 0

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

Selects whether or not service error codes are output.
When output is selected, service error codes is report.

16.2.3 SSSW-SW03

16.2.3.1 List of Functions

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

T-16-2

Bit	Function	1	0
0	not used	-	-
1	not used	-	-
2	not used	-	-
3	not used	-	-
4	not used	-	-
5	not used	-	-
6	not used	-	-

Bit	Function	1	0
7	tonal signal before CED signal transmission	transmit	do not transmit

16.2.3.2 Detailed Discussions of Bit 7

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

Use it to enable/disable transmission of a 1080-Hz tonal signal before transmission of the CED signal.
Select 'transmit' if errors occur frequently because of an echo when reception is from overseas.

Memo:
Any of the following error code may be indicated because of an echo at time of reception
##0005, ##0101, ##0106, ##0107, ##0114, ##0200, ##0201, ##0790

16.2.4 SSSW-SW04

16.2.4.1 List of Functions

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

T-16-3

Bit	Function	1	0
0	not used	-	-
1	not used	-	-
2	the number of final flag sequences of protocol signals	2	1
3	Reception mode after CFR signal transmission	high speed	high speed/low speed
4	the length of the period of ignoring low speed signals after CFR output	1500 ms	700 ms
5	not used	-	-
6	CNG signal for manual transmission	Not transmitted	Transmitted
7	CED signal for manual reception	Not transmitted	Transmitted

16.2.4.2 Detailed Discussions of Bit 2

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

Use it to select the number of last flag sequences for a protocol signal (transmission speed at 300 bps). Select '2' if the other party fails to receive the protocol signal properly.

Memo:
Any of the following error codes may be indicated at time of transmission
##0100, ##0280, ##0281, ##0750, ##0753, ##0754, ##0755, ##0758, ##0759, ##0760, ##0763 ##0764, ##0765, ##0768, ##0769,##0770, ##0773, ##0775, ##0778, ##0780, ##0783, ##0785, ##0788

16.2.4.3 Detailed Discussions of Bit 3

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

Use it to select an appropriate reception mode after transmission of the CFR signal.
If errors occur frequently at time of reception because of the condition of the line, select 'high speed' for reception mode and, at the same time, selects 'do not receive' for 'ECM reception.'

Memo:
Any of the following error codes may be indicated at time of reception because of line condition
##0107, ##0114, ##0201
Be sure to change bit 4 before changing this bit; if errors still occur, change this bit.
When 'high speed' is selected, only high-speed signals (images) will be received after transmission of the CFR signal.

16.2.4.4 Detailed Discussions of Bit 4

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

Use it to select the time length during which low-speed signals are ignored after transmission of the CFR signal.
If the condition of the line is not good and, therefore, the reception of image signals is difficult, select '1500 ms.'

16.2.4.5 Detailed Discussions of Bit 5

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

In the countries that need approval of CI signal frequency check, no checking on frequency set at PBX when changing the frequency to PSTN setting and PBX setting for frequency checks.

16.2.4.6 Detailed Discussions of Bit 6

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

Selects whether or not to transmit CNG signal during manual transmission.
In manual transmitting to a fax with the FAX/TEL switching mode, if there are frequent errors due to failure to switch to fax mode, select "Transmitted" for the CNG signal.

16.2.4.7 Detailed Discussions of Bit 7

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

Selects whether or not to transmit CED signals during manual reception. If the other fax does not transmit even when you start manual reception, select "Transmitted" for the CED signal.

16.2.5 SSSW-SW05

16.2.5.1 List of Functions

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

T-16-4

Bit	Function	1	0
0	not used	-	-
1	Conversion from mm to inch (text mode)	convert	do not convert
2	Conversion from mm to inch (text/photo mode)	convert	do not convert
3	not used	-	-
4	not used	-	-
5	not used	-	-
6	not used	-	-
7	not used	-	-

16.2.5.2 Detailed Discussions of Bit 1

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

Use it to enable/disable millimeter/inch conversion in sub scanning direction for images read in text mode.
Scanning direction in conversion follows the Bit 2 setting of SW14.

16.2.5.3 Detailed Discussions of Bit 2

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

Use it to enable/disable millimeter/inch conversion in sub scanning direction for images read in text/photo mode while bit 1 is set to '1'.
Scanning direction in conversion follows the Bit 2 setting of SW14.

16.2.6 SSSW-SW12

16.2.6.1 List of Functions

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

T-16-5

Bit	Function	1	0
0	Time-out period for one page upon transmission	1	0
1	Time-out period for one page upon transmission	1	0
2	not used	-	-
3	not used	-	-
4	Time-out period for one page upon reception	1	0
5	Time-out period for one page upon reception	1	0
6	not used	-	-
7	Respective page timer settings for transmission and for reception	enable	do not enable

The machine will stop the ongoing communication if the transmission/reception of a single original page takes 32 min or more. To use the timer for a purpose other than this function, refer to the tables that follow, and select an appropriate time length.

When 'do not enable' is selected using bit 7, the time-out length for a single page for all modes will depend on the setting of bit 0 and bit 1.

T-16-6

Time-Out Length for Transmission/Reception	Bit7	Bit6	Bit5	Bit4	Bit3	Bit2	Bit1	Bit0
8 min	0	*	*	*	*	*	0	0
16 min	0	*	*	*	*	*	0	1
32 min	0	*	*	*	*	*	1	0
64 min	0	*	*	*	*	*	1	1

T-16-7

Time-Out Length for Transmission (in text mode)	Bit7	Bit6	Bit5	Bit4	Bit3	Bit2	Bit1	Bit0
8 min	1	*	*	*	*	*	0	0
16 min	1	*	*	*	*	*	0	1
32 min	1	*	*	*	*	*	1	0
64 min	1	*	*	*	*	*	1	1

T-16-8

Time-Out Length for Reception	Bit7	Bit6	Bit5	Bit4	Bit3	Bit2	Bit1	Bit0
8 min	1	*	0	0	*	*	*	*
16 min	1	*	0	1	*	*	*	*
32 min	1	*	1	0	*	*	*	*
64 min	1	*	1	1	*	*	*	*

16.2.7 SSSW-SW13

16.2.7.1 List of Functions

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

T-16-9

Bit	Function	1	0
0	not used	-	-
1	not used	-	-
2	Convert "inch" into "mm" when transmitting the received image data	convert	do not convert
3	not used	-	-
4	not used	-	-
5	not used	-	-
6	not used	-	-
7	not used	-	-

16.2.7.2 Detailed Discussions of Bit 2

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

It converts "inch" into "mm" when transmitting the received image data.
Scanning direction in conversion follows the Bit 2 setting of SW14.

16.2.8 SSSW-SW14

16.2.8.1 List of Functions

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

T-16-10

Bit	Function	1	0
0	not used	-	-
1	not used	-	-
2	direction of scanning for inch/mm conversion	both main and sub scanning directions	sub scanning direction only
3	not used	-	-
4	inch-configuration resolution declaration	declare	do not declare
5	not used	-	-
6	not used	-	-
7	not used	-	-

16.2.8.2 Detailed Discussions of Bit 2

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

Use it to specify whether to convert or not convert an inch-configuration resolution into a millimeter-configuration resolution for image read in G3 transmission: either in sub scanning direction only or in both main and sub scanning directions. The setting is valid only when bit 1 of SW05 of #SSSW is set to '1'.

16.2.8.3 Detailed Discussions of Bit 4

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

Use it to specify whether to declare or not declare an inch-configuration resolution to the other machine for G3 communication: if 'declare' is selected, the machine will indicate that it reads and records at an inch-configuration resolution using the DIS, DCS, or DTC signal.

16.2.9 SSSW-SW25

16.2.9.1 List of Functions

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

T-16-11

Bit	Function	1	0
0	procedure of V.8 on the initiation side	receiver's number	initial call number
1	not used	-	-
2	If void CSI has been received, handle as non-received CSI.	Yes	No
3	not used	-	-
4	not used	-	-
5	not used	-	-
6	not used	-	-
7	not used	-	-

16.2.9.2 Detailed Discussions of Bit 0

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

Transmitted telephone number could be selected on the report indication after the transmission.
If the "Initiation number" is selected, report will indicate the telephone number of the initiation side.
If the "Receiver's number" is selected, report will indicate the phone number (CSI signal data) which is sent by the receiver's side.

16.2.9.3 Detailed Discussions of Bit 2

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

At "1" on this Bit, ignore the void CSI if received and if the dial has been made at this point, the dialed number will be indicated on the LCD/ Report screen.
At "0" on this Bit, even though the dialed number is acknowledged, LCD/Report screen will indicate nothing.

16.2.10 SSSW-SW28

16.2.10.1 List of Functions

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

T-16-12

Bit	Function	1	0
0	Caller V.8 protocol	NO	YES
1	Called party V.8 protocol	NO	YES
2	Caller V.8 protocol late start	NO	YES
3	Called party V.8 protocol late start	NO	YES
4	V.34 reception fallback	Prohibited	Not prohibited
5	V.34 transmission fallback	Prohibited	Not prohibited
6	not used	-	-
7	not used	-	-

16.2.10.2 Detailed Discussions of Bit 0

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

Select whether to use the V.8 protocol when calling. If NO is selected, the V.8 protocol is inhibited at calling and the V.21 protocol is used.

16.2.10.3 Detailed Discussions of Bit 1

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

Select whether to use the V.8 protocol when called. If NO is selected, the V8 protocol is inhibited when called and the V.21 protocol is used.

16.2.10.4 Detailed Discussions of Bit 2

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

If ANSam signal is not received during transmission, select whether to use the V.8 protocol when the other fax machine declares the V.8 protocol in DIS signal. If NO is selected, the CI signal is not transmitted and the V.8 protocol is not used even if the DIS that specifies the V.8 protocol is received.
The V.8 late start is not executed during manual transmission regardless of this setting.

16.2.10.5 Detailed Discussions of Bit 3

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

Select whether to declare the V.8 protocol in DIS signal for reception. If NO is selected, the V.8 protocol cannot be used because it is not declared in DIS signal.
The V.8 late start is not executed during manual reception regardless of this setting.

16.2.10.6 Detailed Discussions of Bit 4

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

Select whether the receiver falls back during V.34 reception. If 'Prohibit' is selected, the receiver does not fall back.

16.2.10.7 Detailed Discussions of Bit 5

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

Select whether the transmitter falls beck during V.34 transmission. If 'Prohibit' is selected, teh transmitter does not fall back.

16.2.11 SSSW-SW30

16.2.11.1 List of Functions

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

T-16-13

Bit	Function	1	0
0	Not used	-	-
1	Not used	-	-
2	Not used	-	-
3	Not used	-	-
4	Not used	-	-

Bit	Function	1	0
5	New dial tone detection method	Detect with the new method.	Detect with the existing method.
6	Not used	-	-
7	Not used	-	-

16.2.11.2 Detailed Discussions of Bit 5

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

When "Detect with the new method" is selected, tone is detected for 3.5 seconds before call origination in order to discriminate between dial tone and voice. If dial tone is detected and the time since line seizure is 3.5 seconds or longer, call origination takes place immediately. If the time since line seizure is less than 3.5 seconds, call origination takes place after waiting for 1 second. (If the time since line seizure reaches 3.5 seconds during the 1-second waiting period, call origination takes place immediately. By default, "Detect with a new method" is assigned for this SW.

16.2.12 SSSW-SW33

16.2.12.1 List of Functions

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

T-16-14

Bit	Function	1	0
0	count B4 (Print) as large size *1	Yes	No
1	indicate serial No. on counter check screen *1	Yes	No
2	count B4 (Scan) as large size *1	Yes	No
3	Not used	-	-
4	Not used	-	-
5	Not used	-	-
6	Not used	-	-
7	Not used	-	-

*1: if equipped with soft couter functions

16.2.12.2 Detailed Discussions of Bit 0

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

Use it to specify whether B4 paper (Print) should be counted as large-size paper.
If 'yes' is selected, B4 paper will be counted as large-size paper.
If 'no' is selected, on the other hand, B4 paper will be counted as small-size paper.

16.2.12.3 Detailed Discussions of Bit 1

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

Use it to specific whether to indicate the machine serial No. on the Counter Check screen, appearing when the Counter key is pressed.
If 'yes' is selected, the serial No. will be indicated.
If 'no' is selected, on the other hand, the serial No. will not be indicated.

16.2.12.4 Detailed Discussions of Bit 2

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

Use it to specify whether B4 paper (Scan) should be counted as large-size paper.
If 'yes' is selected, B4 paper will be counted as large-size paper.
If 'no' is selected, on the other hand, B4 paper will be counted as small-size paper.

16.3 Menu Switch Settings (MENU)

16.3.1 Menu Switch Composition

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

T-16-15

No.	Function	Range of settings
005	NL equalizer	1: ON, 0: OFF
006	telephone line monitor	0:DIAL, 1:SERVICEMAN1, 2:SERVICEMAN2, 3:OFF
007	transmission level (ATT)	from 0 to 15 (ex: 15= -15 dBm)

No.	Function	Range of settings
008	V.34 modulation speed upper limit	0:3429, 1:3200, 2:3000, 3:2800, 4:2743, 5:2400
009	V34 data speed upper limit	0:33.6 kbps, 1:31.2 kbps, 2:28.8 kbps, 3:26.4 kbps, 4:24.0 kbps, 5:21.6 kbps, 6:19.2 kbps, 7:16.8 kbps, 8:14.4 kbps, 9:12.0 kbps, 10:9.6 kbps, 11:7.2 kbps, 12:4.8 kbps, 13:2.4 kbps
010	Frequency of pseudoring signal	0:50 Hz, 1:25 Hz, 2:17 Hz

16.3.2 <No.005 NL equalizer>

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

Use it to enable-disable the NL equalizer.
If errors occur often during communication because of the condition of the line, enable (ON) the NL equalizer.

Any of the following error codes may be indicated at time of transmission because of the line condition:
##100, ##101, ##102, ##104, ##201, ##281, ##282, ##283, ##750, ##755, ##765, ##774, ##779, ##784, ##789
Any of the following error codes may be indicated at time of transmission because of the line condition:
##103, ##107, ##114, ##201, ##790, ##793

16.3.3 <No.006 telephone line monitor>

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

Use it to s the telephone line monitor function:
DIAL: generate the monitor sound of the telephone line using the speaker from the start of transmission to DIS.
SERVICEMAN [1]: generate the monitor sound of the telephone line using the speaker from the start of communication to the end of it.
SERVICEMAN [2]: generate the monitor sound of the telephone line2 (Option).
OFF: do not generate the monitor sound of the telephone line using the speaker.

16.3.4 <No.007 ATT transmission level>

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

Use it to set the transmission level (ATT).
Raise the transmission level if errors occur frequently at time of communication because of the condition of the line. (It means close to 8)

Any of the following error codes may be indicated at time of transmission because of the line condition:
##100, ##101, ##102, ##104, ##201, ##280, ##281, ##282, ##283, ##284, ##750, ##752, ##754, ##755, ##757, ##759, ##760, ##762, ##764, ##765, ##767, ##769, ##770, ##772, ##774, ##775, ##777, ##779, ##780, ##782, ##784, ##785, ##787, ##789
Any of the following error codes may be indicated at time of reception because of the line condition:
##103, ##106, ##107, ##201, ##793

16.3.5 <No.008 V.34 modulation speed upper limit>

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

Use it to set an upper limit to the modulation speed (baud rate) for the V.34 primary channel.

16.3.6 <No.009 V.34 data speed upper limit>

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

Use it to set an upper limit to the data transmission speed for the V.34 primary channel between 2.4K and 33.6K bps in increments of 2400 bps. (0: 2.4K to 13: 33.6K bps).

16.3.7 <No.010 Frequency of the pseudo CI signal>

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

You may select a frequency for the pseudo CI signal.
Some types of external telephones do not ring when the fax/tel switch-over function is ON. To sound the ring, change the pseudo CI signal.

16.4 Numeric Parameter Settings (NUMERIC Param.)

16.4.1 Numerical Parameter Composition

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

T-16-16

No.	Item	Range of settings
002	RTN transmission condition(1)	1% to 99%
003	RTN transmission condition (2)	2 to 99 item
004	RTN transmission condition (3)	1 to 99 lines
005	NCC pause time length (pre-ID code)	1 to 60 sec
006	NCC pause time length (post-ID code)	1 to 60 sec
010	line condition identification time length	0 to 9999 (10 msec)
011	T.30T1 timer (for reception)	0 to 9999 (10 msec)
013	T.30 EOL timer	500 to 3000 (10 msec)
015	hooking detection time length	0 to 999

No.	Item	Range of settings
016	time length to first response at time of fax/tel switchover	0 to 9
017	pseudo RBT signal pattern ON time length	0 to 999
018	pseudo RBT signal pattern OFF time length (short)	0 to 999
019	pseudo RBT signal pattern OFF time length (long)	0 to 999
020	pseudo CI signal pattern ON time length	0 to 999
021	pseudo CI signal pattern OFF time length (short)	0 to 999
022	pseudo CI signal pattern OFF time length (long)	0 to 999
023	CNG detection level at time of fax/tel switchover	0 to 7
024	pseudo RBT transmission level at time of fax/tel switchover	10 to 20 / 0 to 20 (120/230V)
025	Answering machine connection function signal detection time	0 to 999
027	preamble detection time length for V21 low-speed flag	20 (x 10ms)
055	acquisition period of environmental log data	0 to 480 (60min)
056	display the type of soft counter 1*1	101 (Fixed)
057	Display the type of soft counter 2*1	0 to 999
058	Display the type of soft counter 3*1	0 to 999
059	Display the type of soft counter 4*1	0 to 999
060	Display the type of soft counter 5*1	0 to 999
061	Display the type of soft counter 6*1	0 to 999

*1: if equipped with soft counter functions

16.4.2 <002: RTN transmission condition (1)><003: RTN transmission condition (2)><004: RTN transmission condition (3)>

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

Use it to set RTN signal transmission conditions. Raise these parameters for more lenient conditions if errors occur frequently at time of reception because of transmission of the RTN signal.

Memo:
Any of the following error codes may be indicated at time of reception because of RTN signal transmission
##0104, ##0107, ##0114, ##0201

RTN signal transmission condition (1) affects the ratio of error lines to the total number of lines per single page of received images.
RTN signal transmission condition (2) affects the standard value (*2) of burst errors (*1).
RTN signal condition (3) affects the number of errors not reaching the standard value of burst errors.

*1: transmission error occurring cover several lines.
*2: for instance, if '15' is set, a single burst error will represent an error occurring continuously cover 15 lines.

If any of these lines is detected while an image signal is being received, the RTN signal will be transmitted after receiving the protocol signal of the transmitting party. Higher parameters restrict the transmission of the RTN signal.

16.4.3 <005: NCC pause length (pre-ID code)>

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

Use it to set the length of the pause automatically entered between access code and ID code when the NCC (New Common Carrier) line is used for dialing.

16.4.4 <006: NCC pause length (post-ID code)>

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

Use it to set the length of the pause automatically entered between ID code and telephone number of the other party when the NCC (New Common Carrier) line is used for dialing.

16.4.5 <010: line connection identification length>

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

Use it to set the time for identifying the line connection. Raise this parameter if errors occur frequently at time of communication because of the condition of the line.

Memo:
Any of the following error codes may be indicated because of the condition of the line
##0005, ##0018
The line condition identification time is between when the dial signal is transmitted and when the line condition is cut for the transmitting party, while it is between when the DIS signal is transmitted and when the line is cut for the receiving party.

16.4.6 <011: T.30 T1 timer (for reception)>

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

Set the T1 timer for the receiver (wait time after DIS transmission starts until a significant signal is received).

16.4.7 <013: T.30 EOL timer>

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

Set it so that the 1-line transmission time is longer for reception to prevent reception errors caused by a long data length per line (e.g., computer FAX).

16.4.8 <015: hooking detection time>

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

Allows setting of the hooking detection time.

16.4.9 <016: time length to first response at time of fax/tel switchover>

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

Allows setting of the time from seizing the line till pseudo RBT is sent, when the Fax/ Tel switching function is operating.

16.4.10 <017: pseudo RBT signal pattern ON time length><018: pseudo RBT signal pattern OFF time length (short)><019: pseudo RBT signal pattern OFF time length (long)>

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

Use it to set the pattern of the pseudo RBT signal transmitted at time of a fax/tel switchover.

16.4.11 <020: pseudo CI signal pattern ON time length><021: pseudo CI signal pattern OFF time length (short)><022: pseudo CI signal pattern OFF time length (long)>

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

Use it to set the pseudo CI signal pattern transmitted at time of a fax/tel switchover.

16.4.12 <023: CNG detention level for fax/tel switchover>

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

Use it to set the CNG detention level for a fax/tel switchover.

16.4.13 <024: pseudo RBT transmission level at time of fax/tel switchover>

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

Use it to set the pseudo transmission level for a fax/tel switchover.

16.4.14 <025: Answering machine connection function signal detection time>

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

Sets the signal detection time for the answering machine connection function operation. When the answering machine connection function is operating, if the function does not operate normally because the fax does not detect CNG signal sent from the line, raise this parameter to increase the signal detection time.

16.4.15 <027: V.21 low-speed flag preamble identification length>

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

Use it to detect the time of detection after which command analysis is started after detecting V.21 low-speed command preambles continuously for a specific period of time.

16.4.16 <055: Acquisition period of environmental log data>

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

Use it to change the acquisition period of environmental log data.

16.4.17 <056 - 061: Count type select (if equipped with soft counter functions)>

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

Use it to confirm the count type indicated on the Counter Check screen, which appears in response to a press on the Counter key.
When '0' is selected, count type will not be indicated.
No.56: Use it to indicate the type of software counter 1 of the control panel. The type of soft counter 1 cannot be changed.
No.57: Use it to change the type of soft counter 2* of the control panel to suit the needs of the user.
No.58: Use it to change the type of soft counter 3* of the control panel to suit the needs of the user.
No.59: Use it to change the type of soft counter 4* of the control panel to suit the needs of the user.
No.60: Use it to change the type of soft counter 5* of the control panel to suit the needs of the user.
No.61: Use it to change the type of soft counter 6* of the control panel to suit the needs of the user.
*:The default type settings of soft counter is different from models.
<Soft Counter Specifications>
The soft counters are classified a follows in terms of input numbers:
100s: total
200s: copy
300s: print
400s: copy + print
500s: scan
700s: received file print
800s: report pint
900s: transmitted scan

Guide to the Table

- 1:Count sheets of all sizes by one.
- 2:Count sheets of the large size by two.
- C:full color
- Bk:black mono
- L:large size (larger than A4/LTR)
- S:small size (A4/LTR or smaller)

MEMO:
To make a change so that B4 papers (for print) will be counted as large-size, use service mode: make the following selections, and change bit 0 to '1': #SSSW>SW33.
To make a change so that B4 papers (for scan) will be counted as large-size, use service mode: make the following selections, and change bit 2 to '1': #SSSW>SW33.

Serial No. on counter check screen	Counter type	Print system															
		Bk 1-sided L				Bk 1-sided S				Bk 2-sided L				Bk 2-sided S			
		Local copy	PDL print	FAX print	Report print	Local copy	PDL print	FAX print	Report print	Local copy	PDL print	FAX print	Report print	Local copy	PDL print	FAX print	Report print
101	Total1	1	1	1	1	1	1	1	1								
102	Total2	2	2	2	2	1	1	1	1								
103	Total (L)	1	1	1	1												
104	Total (S)					1	1	1	1								
108	Total (Bk1)	1	1	1	1	1	1	1	1								
109	Total (Bk2)	2	2	2	2	1	1	1	1								
112	Total (Bk/L)	1	1	1	1												
113	Total (Bk/S)					1	1	1	1								
114	Total1 (2-sided)									1	1	1	1	1	1	1	1
115	Total2 (2-sided)									2	2	2	2	1	1	1	1
116	L (2-sided)									1	1	1	1				
117	S (2-sided)													1	1	1	1
126	TotalA1		1	1	1		1	1	1								
127	TotalA2		2	2	2		1	1	1								
128	TotalA (L)		1	1	1												
129	TotalA (S)						1	1	1								
132	TotalA (Bk1)		1	1	1		1	1	1								
133	TotalA (Bk2)		2	2	2		1	1	1								
136	TotalA (Bk/L)		1	1	1												
137	TotalA (Bk/S)						1	1	1								
138	TotalA1 (2-sided)										1	1	1		1	1	1
139	TotalA2 (2-sided)										2	2	2		1	1	1
140	L A (2-sided)										1	1	1				
141	S A (2-sided)														1	1	1
150	TotalB1		1	1	1		1	1	1								
151	TotalB2		2	2	2		1	1	1								
152	TotalB (L)		1	1	1												
153	TotalB (S)						1	1	1								
156	TotalB (Bk1)		1	1	1		1	1	1								
157	TotalB (Bk2)		2	2	2		1	1	1								
160	TotalB (Bk/L)		1	1	1												
161	TotalB (Bk/S)						1	1	1								
162	TotalB1 (2-sided)										1	1	1		1	1	1
163	TotalB2 (2-sided)										2	2	2		1	1	1
164	LB (2-sided)										1	1	1				
165	SB (2-sided)														1	1	1
201	Copy(Total1)	1				1											
202	Copy(Total2)	2				1											
203	Copy(L)	1															
204	Copy(S)					1											
205	CopyA (Total1)	1				1											
206	CopyA (Total2)	2				1											
207	CopyA (L)	1															
208	CopyA (S)					1											
209	Local copy(Total1)	1				1											
210	Local copy(Total2)	2				1											
211	Local copy(L)	1															
212	Local copy(S)					1											
221	Copy(Bk1)	1				1											
222	Copy(Bk2)	2				1											
227	Copy(Bk/L)	1															

Serial No. on counter check screen	Counter type	Print system															
		Bk 1-sided L				Bk 1-sided S				Bk 2-sided L				Bk 2-sided S			
		Local copy	PDL print	FAX print	Report print	Local copy	PDL print	FAX print	Report print	Local copy	PDL print	FAX print	Report print	Local copy	PDL print	FAX print	Report print
228	Copy(Bk/S)					1											
237	Copy(Bk/L/2-sided)									1							
238	Copy(Bk/S/2-sided)													1			
249	CopyA (Bk1)	1				1											
250	CopyA (Bk2)	2				1											
255	CopyA (Bk/L)	1															
256	CopyA (Bk/S)					1											
265	CopyA (Bk/L/2-sided)									1							
266	CopyA (Bk/S/2-sided)													1			
277	Local copy(Bk1)	1				1											
278	Local copy(Bk2)	2				1											
283	Local copy(Bk/L)	1															
284	Local copy(Bk/S)					1											
293	Local copy(Bk/L/2-sided)									1							
294	Local copy(Bk/S/2-sided)													1			
301	Print (Total1)		1		1		1		1								
302	Print (Total2)		2		2		1		1								
303	Print (L)		1		1												
304	Print (S)						1		1								
305	PrintA (Total1)		1		1		1		1								
306	PrintA (Total2)		2		2		1		1								
307	PrintA (L)		1		1												
308	PrintA (S)						1		1								
313	Print (Bk1)		1		1		1		1								
314	Print (Bk2)		2		2		1		1								
319	Print (Bk/L)		1		1												
320	Print (Bk/S)						1		1								
329	Print (Bk/L										1		1				
330	Print (Bk/S/2-sided)														1		1
331	PDL print (Total1)		1				1										
332	PDL print (Total2)		2				1										
333	PDL print (L)		1														
334	PDL print (S)						1										
339	PDL print (Bk1)		1				1										
340	PDL print (Bk2)		2				1										
345	PDL print (Bk/L)		1														
346	PDL print (Bk/S)						1										
355	PDL print (Bk/L/2-sided)										1						
356	PDL print (Bk/S)														1		
403	Copy+Print (Bk/L)	1	1		1												
404	Copy+Print (Bk/S)					1	1		1								
405	Copy+Print (Bk2)	2	2		2	1	1		1								
406	Copy+Print (Bk1)	1	1		1	1	1		1								
411	Copy+Print (L)	1	1		1												
412	Copy+Print (S)					1	1		1								
413	Copy+Print (2)	2	2		2	1	1		1								
414	Copy+Print (1)	1	1		1	1	1		1								
421	Copy+Print (Bk/L)									1	1		1				
422	Copy+Print (Bk/S)													1	1		1
701	Recieved print (Total1)																
702	Recieved print (Total2)																
703	Recieved print (L)																
704	Recieved print (S)																
709	Recieved print (Bk1)																
710	Recieved print (Bk2)																
715	Recieved print (Bk/L)																
716	Recieved print (Bk/S)																
725	Recieved print (Bk/L/2-sided)											1					

Serial No. on counter check screen	Counter type	Bk 1-sided L				Bk 1-sided S				Bk 2-sided L				Bk 2-sided S			
		Local copy	PDL print	FAX print	Report print	Local copy	PDL print	FAX print	Report print	Local copy	PDL print	FAX print	Report print	Local copy	PDL print	FAX print	Report print
726	Recieved print (Bk/S/2-sided)															1	
801	Report print (Total1)																
802	Report print (Total2)																
803	Report print (L)																
804	Report print (S)																
809	Report print (Bk1)																
810	Report print (Bk2)																
815	Report print (Bk/L)																
816	Report print (Bk/S)																
825	Report print (Bk/L)												1				
826	Report print (Bk/S)																1

Serial No. on counter check screen	Counter type	Bk 1-sided L							Bk 1-sided S	C 1-sided L							C 1-sided S
		Total scan	Pull scan	E-mail scan	FileShare DBscan	E-mail FileShare DB scan	FileShare DB BoxF scan	E-mail FileShare DB Box	Total scan	Total scan	Pull scan	E-mail scan	FileShare DB scan	E-mail FileShare DB scan	FileShare DB scan	E-mail FileShare DB BOX scan	Total scan
501	Scan (Total1)	1								1							
505	Bk scan (Total1)	1							1								
506	Bk scan (Total2)	2							1								
507	Bk scan (L)	1															
508	Bk scan (S)								1								
509	C scanTotal (1)									1							1
510	C scanTotal (2)									2							1
511	C scan (L)									1							
512	C scan (S)																1
915	Transmission scan total2 (C)															1	
916	Transmission scan total2 (Bk)							1									
917	Transmission scan total3 (C)													1			
918	Transmission scanTotal3 (Bk)					1											
921	Transmission scanTotal5 (C)												1				
922	Transmission scanTotal5 (Bk)				1												
929	Transmission scanTotal6 (C)														1		
930	Transmission scanTotal6 (Bk)						1										
939	Remote scan (C)										1						
940	Remote scan (Bk)		1														
945	Transmission scan/E-mail (C)																
946	Transmission scan/E-mail (Bk)											1					

16.5 Scanner Function Settings (SCANNER)

16.5.1 Numeric Parameter Functional configuration

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

No.	Function		Default	Setting range	Unit
001: - 023:	Not used				

No.	Function	Default	Setting range	Unit
024:	CIS scan position during ADF scanning. (CIS shift type only)	60	40-80	one unit=0.1mm
025:	Not used			
026:	Distance from the standby position of CIS to the shading start point. (CIS shift type only)	28	8-48	one unit=0.1mm
027: - 040:	Not used			
041:	Vertical scan start position adjustment (scanning on ADF)	0 (CIS fix type) 35 (CIS shift type)	0-70	one unit=0.1mm
042:	Horizontal scan start position adjustment (scanning on ADF)	241	171-311	one unit=0.1mm
043:	Horizontal scan end position correction (copy:scanning on ADF)	45	0-200	one unit=0.1mm
044:	Horizontal scan end position correction (superfine:scanning on ADF)	65	0-200	one unit=0.1mm
045:	Horizontal scan end position correction (fine:scanning on ADF)	80	0-200	one unit=0.1mm
046:	Horizontal scan end position correction (standard:scanning on ADF)	80	0-200	one unit=0.1mm
047:	Vertical scan magnification correction (scanning on ADF)	16	0-32	one unit=0.1%
048:	Horizontal scan magnification correction (scanning on ADF)	16	0-32	one unit=0.1%
049: - 053:	Not used			
054:	Pickup motor speed correction (when the ADF is used)	16	0-32	one unit=0.1%
055: - 99:	Not used			
100:	Adjustment of the registration loop volume (ADF)	166	126-206	one unit=0.1mm
101: - 192:	Not used			
193:	ADF special paper, standardized size: LGL misidentification-ready	0	0 : LEGAL 1 : FOOLSCAP 2 : M_OFFICIO 3 : A_FOOLSCAP 4 : FOLIO 5 : G_LEGAL 6 : A_OFFICIO 7 : B_OFFICIO	
194:	ADF special paper, standardized size: LTR misidentification-ready	0	0 : LTR 1 : G_LTR 2 : A_LTR	
195:	ADF special paper, standardized size: LTR_R misidentification-ready	0	0 : LTR_R 1 : FOOLSCAP 2 : OFFICIO 3 : E_OFFICIO 4 : G_LTR_R 5 : A_LTR_R	
196: - 212:	Not used			
213:	XYZ correction value (X) of standard white plate	8273	1-9999	
214:	XYZ correction value (Y) of standard white plate	8737	1-9999	
215:	XYZ correction value (Z) of standard white plate	9427	1-9999	
216:-350:	Not used			

⚠ If any operation error occurs after changing the setting value, change the setting value to the original one.

16.5.2 <026:Distance from the standby position of CIS to the shading start point>

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

White shading can be adjusted finely.

⚠ Normally, do not change the setting value. If any operation error occurs after changing the setting value, change the setting value to the original one.

16.5.3 <041: Vertical scan start position adjustment (when scanning on a document fed from ADF)>

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

Adjust the position at which vertical scanning of a document fed from the ADF starts. The larger the adjustment value, the narrower the left-side margin of the image becomes.

16.5.4 <042: Horizontal scan start position adjustment (when scanning on a document fed from ADF)>

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

Adjust the position at which horizontal scanning of a document fed from the ADF starts. The larger the adjustment value, the narrower the top margin of the image becomes.

16.5.5 <044: Horizontal scan end position correction (superfine:scanning on ADF)>

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

Adjust the position at which horizontal scanning of a FAX document scanned in superfine mode ends. The larger the adjustment value, the narrower the bottom margin of the image becomes.

16.5.6 <045: Horizontal scan end position correction (fine:scanning on ADF)>

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

Adjust the position at which horizontal scanning of a FAX document scanned in fine mode ends. The larger the adjustment value, the narrower the bottom margin of the image becomes.

16.5.7 <046: Horizontal scan end position correction (standard:scanning on ADF)>

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

Adjust the position at which horizontal scanning of a FAX document set to the standard scan resolution ends. The larger the adjustment value, the narrower the bottom margin of the image becomes.

16.5.8 <047: Vertical scan magnification correction (when scanning on a document fed from ADF)>

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

Correct the magnification of vertical scanning of a document fed from the ADF. The larger the adjustment value, the more the image stretches in the vertical scanning direction.

16.5.9 <048: Horizontal scan magnification correction (when scanning on a document fed from ADF)>

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

Correct the magnification of horizontal scanning of a document fed from the ADF. The smaller the adjustment value, the more the image stretches in the horizontal scanning direction.
This menu is used to adjust the ADF feed motor speed. If you changed the adjustment value in this mode, the adjustment value selected for SCAN NUMERIC>54 must also be incremented/decremented by the same amount.

⚠ Do not change the adjustment value extremely.

16.5.10 <054: Pickup motor speed correction (when the ADF is used) >

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

This menu is used to adjust the ADF pickup motor speed. If you have adjusted the ADF feed motor speed by selecting SCAN NUMERIC>48, the ADF pickup motor speed must also be incremented/decremented by the same amount.

⚠ Do not change the adjustment value extremely.

16.5.11 <100: Adjustment of the registration loop volume (ADF)>

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

Conduct the fine adjustment on loop volume of the registration roller. Making the value bigger will make the loop volume larger.

⚠ Do not change the adjustment value extremely.

16.5.12 <193: ADF special standard-sized paper: LGL misidentification-ready>

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

Set to use special standard-sized paper that is not otherwise identifiable to the ADF (because it is misidentified as "LEGAL").
0: LEGAL
1: FOOLSCAP
2: M_OFFICIO
3: A_FOOLSCAP
4: FOLIO
5: G_LEGAL
6: A_OFFICIO
7: B_OFFICIO

16.5.13 <194: ADF special standard-sized paper: LTR misidentification-ready>

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

Set to use special standard-sized paper that is not otherwise identifiable to the ADF (because it is misidentified as "LTR").
0: LTR
1: G_LTR
2: A_LTR

16.5.14 <195: ADF special standard-sized paper: LTR_R misidentification-ready>

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

Set to use special standard-sized paper that is not otherwise identifiable to the ADF (because it is misidentified as "LTRR").
0: LTR_R
1: FOOLSCAP
2: OFFICIO
3: E_OFFICIO
4: G_LTR_R
5: A_LTR_R

16.5.15 <213: XYZ correction value (X) of standard white plate> (if equipped with SEND functions)

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

If you replaced the image processor PCB, enter values indicated on the service label. If you have replaced the document glass, enter values indicated on the new

document glass and write the values on the service label.

correction value(X)

correction value(Y)

correction value(Z)

F-16-2

16.5.16 <214: XYZ correction value (Y) of standard white plate> (if equipped with SEND functions)

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

If you replaced the image processor PCB, enter values indicated on the service label. If you have replaced the document glass, enter values indicated on the new document glass and write the values on the service label.

補正値（X）

補正値（Y）

補正値（Z）

F-16-3

16.5.17 <215: XYZ correction value (Z) of standard white plate> (if equipped with SEND functions)

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

If you replaced the image processor PCB, enter values indicated on the service label. If you have replaced the document glass, enter values indicated on the new document glass and write the values on the service label.

correction value(X)

correction value(Y)

correction value(Z)

F-16-4

16.6 Printer Function Settings (PRINTER)

16.6.1 Service Soft Switch Settings (SSSW)

16.6.1.1 SSSW-SW05

16.6.1.1.1 List of Functions

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

T-16-17

Bit	Function	1	0
0	not used	-	-
1	not used	-	-
2	not used	-	-
3	not used	-	-
4	not used	-	-
5	not used	-	-
6	not used	-	-
7	priority on recording in sub scanning direction	place	do not place

16.6.1.1.2 Detailed Discussions of Bit 7

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

Use it to enable/disable placement of priority on recording in sub scanning direction.

T-16-18

place:	if B4 recording paper and A4 recording paper are set and an A4 extra-long image (*) is received, printing will be on the B4 recording paper.
do not place:	if B5 horizontal recording paper and A4 recording paper are set and a B4 image is received, printing will be by division and on B5 horizontal recording paper.

*: Image B4 or shorter and that cannot be printed by division and on A4 recording paper.

16.6.1.2 SSSW-SW14

16.6.1.2.1 List of Functions

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

T-16-19

Bit	Function	1	0
0	Transfer bias pressure reduction mode	Enable	Disable
1	Not used	-	-
2	Black belt addition mode	Enable	Disable
3	Not used	-	-
4	Flicker reduction mode	Enable	Disable
5	Silent mode	Enable	Disable
6	Not used	-	-
7	Not used	-	-

16.6.1.2.2 Detailed Discussions of Bit 0

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

Select whether to enable or disable transfer bias pressure reduction mode.
Select "Enable" to avoid image defects (black spots) produced by transfer bias leaks occurring in a low-pressure region, such as one at a high altitude. This setting regulates the transfer bias to keep it from exceeding a predetermined level during printing.

16.6.1.2.3 Detailed Discussions of Bit 2

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

Select whether to enable or disable black belt addition mode. If the user uses paper that causes fixed toner on paper to be fused and adhered to drum, selecting "Yes" will clean the drum by forming a black band on the drum surface during the reverse rotation which is performed after printing on 50 sheets.

16.6.1.2.4 Detailed Discussions of Bit 4

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

Select whether to enable or disable flicker reduction mode. Select "Enable" to modify fusing temperature control to cancel fluorescent flicking during printing.

⚠️ Implementation of this mode would degrade the throughput.

16.6.1.2.5 Detailed Discussions of Bit 5

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

Select whether to enable or disable silent mode. Select "Enable" to modify the registration loop amount and thus reduce noises or squeaks the registration rollers produce after picking paper from the individual paper inlets.

16.6.1.2.6 Detailed Discussions of Bit 7

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

Select whether the pre-rotation is to be extended.
If white streaks appear in the image in the H/H environment, selecting "Set" extends the pre-rotation by five turns. During the extended period, the charge Vpp is increased to prevent white streaks from occurring.

16.6.1.3 SSSW-SW15

16.6.1.3.1 List of Function

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

T-16-20

Bit	Function	1	0
0	Not used	-	-
1	Not used	-	-
2	Not used	-	-
3	IFAX Permission of split recording of text data	Enable	Disable
4	Not used	-	-
5	Not used	-	-
6	Not used	-	-
7	Not used	-	-

16.6.1.3.2 Detailed Discussions of Bit 3

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

Select whether split recording is to be enabled when text data such as a header and body text is recorded. Selecting "Set" may split text data when a small paper size such as A5 is selected. In this case, a page may be split in the middle of a character string.

16.6.2 Numeric Parameter Settings (NUMERIC Param.)

16.6.2.1 Numeric Parameter Functional configuration

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

No.	Function	Default	Setting range
01: - 30:	Not used		
31:	Top registration adjustment (manual feed tray)	50	0 to 100, one unit = 0.1 mm
32:	Top registration adjustment (cassette)	50	0 to 100, one unit = 0.1 mm
33:	Top registration adjustment (duplex unit)	50	0 to 100, one unit = 0.1 mm
34:	Left-end registration adjustment (manual feed tray)	100	0 to 200, one unit = 0.1 mm
35:	Left-end registration adjustment (cassette)	100	0 to 200, one unit = 0.1 mm
36:	Left-end registration adjustment (option cassette)	100	0 to 200, one unit = 0.1 mm
37: - 38:	Not used		
39:	Left-end registration adjustment (duplex unit)	100	0 to 200, one unit = 0.1 mm
40:	Target fixing temperature adjustment (multi)	2	0 to 4, one unit = 5 deg C
41:	Target fixing temperature adjustment (cassette)	2	0 to 4, one unit = 5 deg C
42:	Target fixing temperature adjustment (option cassette)	2	0 to 4, one unit = 5 deg C
43: - 50:	Not used		
51:	Two-sided curl reform mode	3	0 to 6, one unit = 5 deg C
52:	Not used		
53:	Adjustment of margin at leading edge of copy	0	0 to 9999, one unit = 5 deg C
54:	Adjustment of margin at trailing edge of copy	50	0 to 9999, one unit = 5 deg C
55:	Adjustment of margin at right edge of copy	0	0 to 9999, one unit = 5 deg C

No.	Function	Default	Setting range
56:	Adjustment of margin at left edge of copy	0	0 to 9999, one unit = 5 deg C

16.6.2.2 <031: Top registration adjustment (manual feed tray)>

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

Adjust the top registration margin of paper picked from a manual feed tray. The larger the adjustment value, the wider the top margin of the image becomes.

16.6.2.3 <032: Top registration adjustment (cassette)>

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

Adjust the top registration margin of paper picked from cassettes. The larger the adjustment value, the wider the top margin of the image becomes.

16.6.2.4 <033: Top registration adjustment (duplex unit)>

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

Adjust the top registration margin of paper picked from a duplex unit. The larger the adjustment value, the wider the top margin of the image becomes.

16.6.2.5 <034: Left-end registration adjustment (manual feed tray)>

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

Adjust the left-end registration margin of paper picked from a manual feed tray. The larger the adjustment value, the wider the left-end margin of the image becomes.

16.6.2.6 <035: Left-end registration adjustment (cassette 1)>

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

Adjust the left-end registration margin of paper picked from cassette 1. The larger the adjustment value, the wider the left-end margin of the image becomes.

16.6.2.7 <036: Left-end registration adjustment (cassette 2)>

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

Adjust the left-end registration margin of paper picked from cassette 2. The larger the adjustment value, the wider the left-end margin of the image becomes.

16.6.2.8 <039: Left-end registration adjustment (duplex unit)>

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

Adjust the left-end registration margin of paper picked from a duplex unit. The larger the adjustment value, the wider the left-end margin of the image becomes.

16.6.2.9 <040: Target fixing temperature adjustment (manual feed tray)>

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

Lower the fixing temperature from the target temperature setting to reduce the chances of fixing offsets and curled or stuck delivered sheets occurring with paper picked from a manual feed tray.

16.6.2.10 <041: Target fixing temperature adjustment (cassette 1)>

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

Lower the fixing temperature from the target temperature setting to reduce the chances of fixing offsets and curled or stuck delivered sheets occurring with paper picked from cassette 1.

16.6.2.11 <042: Target fixing temperature adjustment (cassette 2)>

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

Lower the fixing temperature from the target temperature setting to reduce the chances of fixing offsets and curled or stuck delivered sheets occurring with paper picked from cassette 2.

16.6.2.12 <051: Target 2-sided temperature adjustment>

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

This mode is used to adjust the target temperature for printing the second-side in double-sided printing. The higher the value, the higher will be the second-side target temperature, thus increasing the fusing capacity. The lower the value, the lower will be the second side target temperature, thus reducing curling of the delivered paper.

16.6.2.13 <053: Margin adjustment at the leading edge of the copy>

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

Adjust the margin at the leading edge of the copy. Increasing the value makes the margin at the leading edge larger.

16.6.2.14 <054: Margin adjustment at the trailing edge of the copy>

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

Adjust the margin at the trailing edge of the copy. Increasing the value makes the margin at the trailing edge larger.

16.6.2.15 <055: Margin adjustment at the right edge of the copy>

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

Adjust the margin at the right edge of the copy. Increasing the value makes the margin at the right edge larger.

16.6.2.16 <056: Margin adjustment at the left edge of the copy>

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

Adjust the margin at the left edge of the copy. Increasing the value makes the margin at the left edge larger.

16.7 Network Parameter Settings (NETWORK)

16.7.1 Confirmation of contents of CA certificate (if equipped with RDS and E-RDS functions)

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

Selecting the service mode "#NETWORK>#CERTIFICATE>#CA-CERTIFICATE" enables confirmation of the contents of the installed CA certificate.

16.8 Setting of System Functions (SYSTEM)

16.8.1 Bit Switch Settings

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

SSSW-SW03 functional configuration

T-16-21

Bit	Function	1	0
0	Not used	-	-
1	Not used	-	-
2	Not used	-	-
3	Not used	-	-
4	Not used	-	-
5	Not used	-	-
6	Imports and exports user information via USB.	Enable	Disable
7	Not used	-	-

Bit 6 details
Select whether to enable the host machine to work as a USB storage device or not. If the host machine is plugged into a PC with this setting enabled, it allows user registration data (user data and telephone registration data) to be imported and exported to and from the PC, except for the data embedded in the department management information and user management IDs in the system management information.

16.9 eRDS Parameter Settings (E-RDS)

16.9.1 Settings Related to e-RDS (if equipped with RDS and E-RDS functions)

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

Settings related to e-RDS are described below.

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Item	Description
E-RDS SWITCH	e-RDS OFF/ON setting (0:OFF / 1:ON)When used (ON), the counter information and error information are sent to UGW.Default: 0 (OFF)
RGW-ADDRESS	URL of UGWDefault: URL of actual UGWCharacter string length: 129 bytes (including NULL, one-byte codes only)
RGW-PORT	Port No. of UGW Default: 443Setting range: 1 to 65535
COM-TEST	Execution of communication test An attempt is made to connect to UGW, judges whether connection is successful, and displays "COM-TEST OK" or "COMTEST NG" as the judgment result.
COM-LOG	Details of communication test resultThe log of errors in communication with UGW is displayed. The error information includes the error occurrence time, error code, and details of the error.Maximum log count: 5Error information length: Max. 128 characters (excluding NULL)

16.10 Counter Indication (COUNTER)

16.10.1 Counters

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

This copier is furnished with a maintenance/supplies counter set (DRBL-1), which can be used to gain rough measures of when to replace supplies. The counter set increments by one on counting each sheet of small-sized paper (up to A4/LTR) and by two on counting each sheet of large-sized paper (larger than A4/LTR).

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Maintenance counter list		
Item	**Counter**	**Explanation**
TOTAL (Total counter)	SERVICE1	Service total counter 1
	SERVICE2	Service total counter 2
	TTL	Total counter
	COPY	Total copy counter
	PDL-PRT	PDL print counter
	FAX-PRT	Fax print counter
	REP-PRT	Report print counter
	2-SIDE	Double-sided copy/print counter
	SCAN	Scan counter
PICK-UP (Paper pickup counter)	C1	Cassette 1 jam counter
	C2	Cassette 2 jam counter
	C3	Not used
	C4	Not used
	MF	Manual feed tray pickup total counter
	2-SIDE	Double-sided paper pickup total counter
FEEDER (Feeder related counters)	FEED	Feeder pickup total counter
	DFOP-CNT	Not used
JAM (Jam counters)	TTL	Unit total jam count
	FEEDER	Feeder total jam count
	SORTER	Not used
	2-SIDE	Duplex unit jam counter
	MF	Manual feed tray jam counter
	C1	Cassette 1 jam counter
	C2	Cassette 2 jam counter
	C3	Not used
	C4	Not used
MISC (Other required counter)	WST-TNR	Not used

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Parts counter list			
Item	**Counter**	**Explanation**	**Service life**
DRBL-1 (Unit supplies)	FX-UNIT	Fixing unit paper pass count	150,000
	TR-ROLL	Transfer charger roller high-voltage ON count	150,000
	DV-UNT-C	Developing unit rotation count	150,000
	M-PU-RL	Manual feed tray pickup roller paper pass count	150,000
	M-SP-PD	Manual feed tray separation pad paper pass count	150,000

16.10.2 Clearing Counters

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

- Maintenance/parts counter all clear
Execute service mode > CLEAR > COUNTER to clear all maintenance/parts counters.

- Counter clear on parts replacement
Press the numeric keypad key 0 after displaying the counter for a part just replaced, and the counter will be cleared individually.

16.11 Report Output (REPORT)

16.11.1 Report Output

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

The table below lists the kinds of reports that are supported.

Item	Explanation
SERVICE DATA LIST	Service mode service soft switch output (SSSW, MENU, NUMERIC Param., SPECIAL, NCU, SCAN, PRINT, SYSTEM, ROM, start date)
SYSTEM DATA LIST	Service mode service soft switch output (SSSW, MENU, NUMERIC Param., SPECIAL, NCU, SCAN, PRINT, SYSTEM, ROM, start date) System dump list output
SYSTEM DUMP LIST	Transmission count, reception count, record chart count, error count and other outputs
COUNTER REPORT	Counter output
ERROR LOG LIST	Jam and error history output
SPEC LIST	Type setting, print speed, memory size, ROM indication, adjustment data and other outputs
SERVICE LABEL	Output of an entry format for the service label affixed to the rear cover as shipped
ERDS COM LOG LIST*1	Output of communication error log information related to e-RDS
ENV. LOG LIST *1	Output of environmental log information

*1: if equipped with RDS and E-RDS functions

16.11.2 System Data List

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

Use it to check the settings associated with the service soft switch and service parameters.

```
06/30/2005  12:00  FAX                                                            001
                              *****************************
                              ***   SYSTEM DATA LIST   ***
                              *****************************


        #SSSW

                SW01          ------      00000000
                SW02          ------      10000000
                SW03          ------      00000000
                SW04          ------      10000000
                SW05          ------      00000000
                SW06          ------      10000000
                SW07          ------      00000000
                SW08          ------      00000000
                SW09          ------      00000000
                SW10          ------      00000000
                SW11          ------      00000000
                SW12          ------      00000011
                SW13          ------      00000000
                SW14          ------      00000000
                SW15          ------      00000000
                SW16          ------      00000000
                SW17          ------      00000000
                SW18          ------      00000000
                SW19          ------      00011000
                SW20          ------      00000000
                SW21          ------      00000000
                SW22          ------      00000000
                SW23          ------      00000000
                SW24          ------      00000000
                SW25          ------      00000000
                SW26          ------      00100000
                SW27          ------      00000000
                SW28          ------      00000000
                SW29          ------      00000000
                SW30          ------      00000000
                SW31          ------      00000000
                SW32          ------      00000000
                SW33          ------      00000000
                SW34          ------      00000000
                SW35          ------      00000000
                SW36          ------      00000000
                SW37          ------      00000000
                SW38          ------      00000000
                SW39          ------      00000000
                SW40          ------      00000000
                SW41          ------      00000000
                SW42          ------      00000000
                SW43          ------      00000000
                SW44          ------      00000000
                SW45          ------      00000000
                SW46          ------      00000000
                SW47          ------      00000000
                SW48          ------      00000000
                SW49          ------      00000000
                SW50          ------      00000000


        #MENU
                01:           ------           0
                02:           ------           0
                03:           ------           0
                04:           ------           0
                05:           ------           0
```

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16.11.3 System Dump List

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

- System Dump List
Use it to check the history of communications, both successful and error.

```
  06/30 2005  19:18                                                    ☑ 001

     CLEAR DATE                         06/18 2005
[1]
     TX     =     7
[3]  A4     =     0    B4    =    0    A3    =    0
[2]  RX     =     0
[3]  A4     =     7    B4    =    0    A3    =    0    LTR   =    0    LGL   =    0
     ┌33600  =     0    31200 =    0    28800 =    0    26400 =    0    24000 =    0
     │21600  =     0    19200 =    0    16800 =    0    14400 =    0    12000 =    0
[4]  │9600   =     0    7200  =    0    4800  =    0    2400  =    0
     │14400  =     0    12000 =    0    TC9600 =   0    TC7200 =   0
     │14400  =     0    12000 =    0
[5]  └9600   =     7    7200  =    0    4800  =    0    2400  =    0
     STD    =     2    FINE  =    5    SUPER =    0    ULTRA =    0
[6]  MH     =     0    MR    =    0    MMR   =    7    JBIG  =    0    JPEG  =    0
[7]  G3     =     0    ECM   =    7

     PRINT    TTL   =    63 /   63
              C-S-TTL =   0 /    0
[8]           K-S-TTL =  51 /   51
     READ     SCAN  =    43 /   43


     #000          0      0      0      0      0      0      0      0
                   0      0      0      0      0      0      0      0
[9]                0      0      0      0      0      0      0      0
                                 0      0      0      0      0      0
                                 0      0      0      0      0      0
                                 0      0      0      0      0      0
                                 0      0
```

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*1: TX, number of total pages transmission.
*2: Total number of pages transmitted/received according to original size.
*3: RX, number of total pages reception.
*4: Total number of pages transmitted and received for each modem speed
*5: Total number of pages transmitted/received in connection with different modem speeds (Standard, Fine, Super Fine, Ultra Fine).
*6: Total number of pages transmitted and received for each coding method
*7: Total number of pages transmitted and received in each mode
*8: Total number of pages printed/scanned
*9: Total number of occurrences for error code

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Indication sample					
##280	1	7	3	0	0

##280	##281	##282
number of errors	number of errors	number of errors

It provides error information on the 3 most recent communications.

```
                    2003 09/02 TUE 12:00  FAX                                    001
*1 ────────── #1 LATEST                #000
*2 ──────────────── START TIME         09/02 10:00
*3 ──────────────── OTHER PARTY        12345678
*4 ──────────────── MAKER CODE         10001000
*5 ──────────────── MACHINE CODE       0100001 00000000
                    RCV V.8 FRAME       E0 81 85 D4 90 7E 00 00
                    SYMBOL RATE         3429 baud
                    DATA RATE           28800 bps [V. 34]
                    TX LVL REDUCTION     0
                    ERR ABCODE          00
                    ERR SECTXB          00
                    ERR SECRXB          00

*6 ────────────── Rx : (bit 1)     00000100 01110111 01011111 00100011 00000001 10101001 00000001 (bit 56)
                       (bit 57)    00000001 00000001 00000100 00000000 00000000             (bit 96)
*7 ────────────── Tx : (bit 1)     00000000 01000010 00011111 00100001 00000001 00000001 00000001 (bit 56)
                       (bit 57)    00000001 00000001 00000100 00000000 00000000             (bit 96)

*8 ──────────── Rx : NSF CSI DIS           CFR            MCF            MCF

*8 ──────────── Tx :          NSS TSI DCS      PIX-288 PPS-NUL    PIX-288 PPS-NUL    PIX-288 PPS-NUL

              Rx : MCF             MCF            MCF

              Tx :     PIX-288 PPS-NUL     PIX-288 PPS-EOP     DCN


              #2                   #000
                    START TIME        09/02 09:30
                    OTHER PARTY       12345678
                    MAKER CODE        10001000
                    MACHINE CODE      0100001 00000000
                    RCV V.8 FRAME     E0 81 85 D4 90 7E 00 00
                    SYMBOL RATE       3429 baud
                    DATA RATE         28800 bps [V. 34]
                    TX LVL REDUCTION   0
                    ERR ABCODE        00
                    ERR SECTXB        00
                    ERR SECRXB        00

                    Rx : (bit 1)     00000100 01110111 01011111 00100011 00000001 10101001 00000001 (bit 56)
                         (bit 57)    00000001 00000001 00000100 00000000 00000000             (bit 96)
                    Tx : (bit 1)     00000000 01000010 00011111 00100001 00000001 00000001 00000001 (bit 56)
                         (bit 57)    00000001 00000001 00000100 00000000 00000000             (bit 96)

              Rx : NSF CSI DIS           CFR            MCF            MCF

              Tx :          NSS TSI DCS      PIX-288 PPS-NUL    PIX-288 PPS-NUL    PIX-288 PPS-NUL

              Rx : MCF             MCF            MCF

              Tx :     PIX-288 PPS-NUL     PIX-288 PPS-EOP     DCN


              #3 OLDEST              #000
                    START TIME        09/02 09:00
                    OTHER PARTY       12345678
                    MAKER CODE        10001000
                    MACHINE CODE      0100001 00000000
                    RCV V.8 FRAME     E0 81 85 D4 90 7E 00 00
                    SYMBOL RATE       3429 baud
                    DATA RATE         28800 bps [V. 34]
                    TX LVL REDUCTION   0
                    ERR ABCODE        00
                    ERR SECTXB        00
                    ERR SECRXB        00
```

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*1: service error code.
*2: START TIME, date and time (in 24-hr notation).
*3: OTHER PARTY, telephone number sent by the other party.
*4: MAKER CODE, manufacturer code.
*5: MACHINE CODE, model code.
*6: bit 1 through bit 96 of DIS, DCS, or DTC that has been received.
*7: bit 1 through bit 96 of DIS, DCS, or DTC that has been transmitted.
*8: RX, procedural signal received; TX, procedural signal transmitted.

16.11.4 Counter List

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

Explanation: Maintenance/supplies counter output.
(For more detailed information about the maintenance/supplies counter output, execute service mode > Display counter information > Counters.)

16.11.5 Error Log List

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

```
07/12/2005 13:07 FAX                                                    001

                    ****************************************
                    ***   JAM/ERR LOG REPORT   ***
                    ****************************************

            [1]   [2]   [3]   [4] [5]   [6]   [7]    [8]  [9][10]
             |     |     |     |   |     |     |      |    |  |
  JAM
            01  04/12  12:17  20:03  4     1    0012  000026  1  A4




            20  04/12  12:17  20:03  4     1    0012  000026  1  A4



            [1]   [2]   [3]   [4] [5]       [6]    [7]    [8]
             |     |     |     |   |         |      |      |
  ERR
            01  04/12  12:17  15:36  3        0010  0000  000691




            20  04/12  12:17  15:36  3        0010  0000  000691
```

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Jam history description (JAM)

	Item	Explanation	
	Item	**Explanation**	
[1]	Number	The larger the number of a jam, the more recently it has occurred.	
[2]	Jam date	Date of jam occurrence	
[3]	Jam time		
[4]	Jam recovery time		
[5]	Location	3: Host machine, 4: ADF	
[6]	Occurrence category	0: Host machine, 1: ADF	
[7]	Jam code	Code	Jam cause
	Host machine	0104	Pickup delay jam
		0208	Pickup stationary jam
		010c	Delivery sensor delay jam
		0210	Delivery sensor stationary jam
		0214	Stationary jam in machine
		021c	Wound paper jam at fuser
		1118	Door open jam
	ADF	0000	Unknown jam
		0007	Initial stationary
		0008	Document edge sensor delay jam
		0009	Document edge sensor stationary jam
		000a	Paper absence (Pull out the document.)
		000c	Deliver delay jam
		000d	Delivery stationary jam
		0010	Pickup NG
[8]	Total counter display		
[9]	Pickup stage position	0: Manual feed tray, 1: Cassette 1, 2: Cassette 2	
[10]	Paper size		

Error history description (ERR)

	Item	Explanation
	Item	**Explanation**
[1]	Number	The larger the number of an error, the more recently it has occurred.
[2]	Error date	Date of error occurrence
[3]	Error time	
[4]	Error recovery time	

Error history description (ERR)		
	Item	**Explanation**
[5]	Location	3: Main unit
[6]	Error code	Error code (4-digit code; for a definition of the code, see the "Error Code" Chapter.)
[7]	Detail code	Detail code of the error code (4-digit code; for a definition of the code, see the "Error Code" Chapter.)
[8]	Total counter display	

16.11.6 Spec List

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

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```
07/12/2005 13:07 FAX                                                        002


                            045:                    – – – – –    0075
                            046:                    – – – – –    0075
                            047:                    – – – – –    0032
                            048:                    – – – – –    0032
                            054:                    – – – – –    0032
    [8]                     213:                    – – – – –    0000
                            214:                    – – – – –    0000
                            215:                    – – – – –    0000
                       WRITE ADJ PRM                – – – – –
                            031:                    – – – – –    0050
                            032:                    – – – – –    0050
                            033:                    – – – – –    0050
                            034:                    – – – – –    0100
                            035:                    – – – – –    0100
                            036:                    – – – – –    0100
     [9]                    037:                    – – – – –    0100
    [10]                    038:[                   – – – – –    0100
                            039:                    – – – – –    0100
    [11]               OPTYION ROM                  – – – – –    16MB
                       USB MEMORY                   – – – – –    OFF
    [12]               DELIVERY FULL SENSOR 1       – – – – –    ON
                       DELIVERY FULL SENSOR 2       – – – – –    OFF
    [13]               USB SERIAL No.               – – – – –    00XXXXXXX
                       MAC ADDRESS                  – – – – –    00 00 85 51 60 1C
    [14]               BACKUP BATTERY               – – – – –    OFF
                       LUGIA                                     2
    [15]               NUMBER OF LOGS               – – – – –
                            ACTIVITY                             0
    [16]                    PRINTJOB ACCOUNT – – – – –
                              COPY              – – – – –        0
                              PDL PRINT         – – – – –        0
                              RX PRINT          – – – – –        0
                              REPORT            – – – – –        0
                            JAM                 – – – – –        3
                            SERVICE CALL        – – – – –        0
                            ENVIROMENT                           0
```

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[1] Type setting
[2] Print speed
[3] Memory size
[4] ROM version (MAIN/BOOT/ECONT/option cassette)
[5] Activation function ON/OFF
[6] Soft ID information
[7] Total counter (TOTAL/COPY/FAX/PDL/REPORT record counts)
[8] Adjustment data (factory scan/record adjustment values)
[9] Option ROM availability
[10] USB memory availability
[11] No. 1/No. 2 paper full sensor sensor availability
[12] USB serial number
[13] MAC address
[14] Backup battery availability
[15] Reader controller PCB version
[16] output the number of histories (communication history, copy/print/report/JOB history of the reception print, jam history, E code history, humidity log)

16.11.7 Service Label

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

Enter the value given in the service label affixed to the rear cover when it has been replaced with a new one.

#PRINT>#PRINT NUMERIC				#SCAN>#SCAN NUMERIC				
	FACTORY	1	2	3		FACTORY	1	2	3
031	50				026				
032	50				031				
033	50				032				
034	100				033				
035	100				034				
036	100				041				
037	100				042				
038	100				043				
039	100				044				
					045				
					046				
					047				
#SCAN>#SCAN NUMERIC				048				
					054				
					213				
					214				
body No:BFDxxxxx				215				

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16.11.8 e-RDS Communication Error Log List

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

Description: Detailed information output when a communication error occurs
(For the output error message, see "RDS > Error Messages".)

16.11.9 Environmental Log Report

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

```
06/27/2007 13:07 FAX                                                    0001
   [1]             ********************************************
    │               ***  ENVIROMENTT LOG REPORT   ***
    │              ********************************************

 SERIAL NO      XXXxxxx
 ENVIROMENT

                No.    DATE    TIME    D+Temp E+Hum  F+Temp F+Temp
                001    0616    0930    D030   E026   F180   F180
                002    0616    1030    D028   E025   F181   F181

                 │      │       │       │      │      │      │
                 │      │       │       │      │      │      │

                [2]    [3]     [4]     [5]    [6]    [7]    [8]
```

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History description		
	Item	**Explanation**
[1]	Serial number	Serial number of this machine
[2]	Number	The larger the number of a enviroment log data, the more recently it has occurred.
[3]	Date	Data acquisition day
[4]	Time	Data acquisition time
[5]	Temperature (deg C)	
[6]	Humidity (%)	
[7]	Fixing roller temperature 1 (deg C)	
[8]	Fixing roller temperature 2 (deg C)	

16.12 Download (DOWNLOAD)

16.12.1 Download

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

The following parts of this unit can be upgraded by executing download mode using the service support tool (SST) (for more information, see the "Upgrading" section):

Main unit
- Flash ROM (system + boot) mounted on the image processor PCB
- ROM mounted on the SEND PCB

16.13 Data Initialization Mode (CLEAR)

16.13.1 Clear

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

Group	Item	Explanation
TEL & USER DATA		Clears all user-registered and -set areas of telephone registration data and user data. (Telephone registration refers to the registration of codes on one-touch dialing, abbreviated dialing, and group dialing.)
SERVICE DATA		Clears the system dump list, except for counters and clear dates.
COUNTER		Clears the maintenance counter, parts counter and mode-specific counters. Initializes the counter (numerator) in the system dump list.

Group	Item	Explanation
TYPE		Initializes user data and service data to suit specified destination settings.
SOFT-CNT		Not used
HST	ACTIVITY	Initializes the activity report
	ACCOUNT	Clears print histories.
	JAM	Clears the jam history.
	ERR	Clear the error (error code) history.
	ALARM	Clears the alarm history.
	ENVIROMENT	Initializes the enviroment log data.
CARD		Clears department management information held in the controller before the card reader is demounted.
ERR	E355	Not used
	E719	Not used
PWD		Clears the system administrator's password.
FILE SYSTEM		Not used
FORMAT	USB MEMORY	Format the USB memory. (This mode is used when the USB memory error is damaged and E744 occurs.)
	LICENSE DRIVE	Not used
CA-KEY		Initializes an installed CA certification.
ERDS-DAT		The settings related to e-RDS are cleared to the factory settings.
DEPT USER CLEAR		Clears the system management password.
SYSTEM INFO CLEAR		Turn off the departmenet ID management and the user management.
ALL		Clears user and service data (except for some scan parameters and print parameters), and the counter setting/registration data in the system dump list, except for the print count.

16.14 Error Display (ERROR DISPLAY)

16.14.1 Error Display

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

An error code is displayed when a service error has occurred. The E code is displayed in the upper step, and the detail code is displayed the bottom step.

16.15 ROM Management (ROM)

16.15.1 ROM display

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

The table below lists the items of ROM display mode that are supported.

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Item	Explanation
MAIN	Displays the version number of the ROM (SYSTEM) mounted on the image processor PCB.
MAIN2	Displays the version of the ROM (BOOT) mounted on the image processor PCB.
ECONT	Displays the version number of the ROM mounted on the DC controller PCB.
OPROM	Displays the version number of the ROM mounted on the SEND PCB.

16.16 Test Mode (TEST)

16.16.1 Overview

16.16.1.1 Outline

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

Test mode must be executed by keeping track the flow of menu items appearing on the LCD. Menu items in test mode are organized into seven blocks as described below. Numerals enclosed in parentheses denote a numeric keypad key to be pressed each.

1. D-RAM test ((1) D-RAM)
Checks to see if data can be correctly written to and read from D-RAM.

2. Scan test ((2) SCAN TEST)
Used to adjust contact sensor output and the position at which a document fed from the ADF is scanned.

3. Print test ((3) PRINT TEST)
Used to generate service test patterns.

4. Modem test ((4) MODEM TEST)
Performs relay actuation, modem DTMF and tonal signal transmission/reception tests.

5. Aging test ((5) AGING TEST)
Not used.

6. Function test ((6) FUNCTION TEST)
Used to verify the operations of microswitches, sensors, speakers and ADF functions.

7. Roller cleaning mode ((0) ROLLER CLEAN)
Used to clean the delivery roller or ADF pickup roller by idling them.

16.16.1.2 Test Mode Menu List

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

Test mode menu list
To invoke test mode, follow these steps:

1) Enter service mode.
Press the operation panel user mode key, 2 key, 8 key and user mode key in this order.
2) Press the operation panel arrow keys to show "TEST MODE."
3) Press the OK key.
To exit test mode, press the user mode key to return to standby mode.

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Numerals enclosed in parentheses denote a numeric keypad key to be pressed each.					
Group	**Subgroup**	**Item 1**	**Item 2**	**Item 3**	**Explanation**
TEST MODE [1] - [9], [#]					
(1) DRAM [1] - [2]					D-RAM data check
	(1) DRAM TEST				Write/read check
	(2) DRAM TEST				Read check
(2) SCAN TEST [1] - [8]					
	(1) SHADING				Automatic gain adjustment
	(4) TRASH DETECT				Dust detection (CIS shift type only)
	(2), (3), (5), (6), (9), (*)				Not used
(3) PRINT TEST [1] - [9]					
	(1)				Not used
	(2)				All-black output
	(3)				Not used
	(4)				Back belt output
	(5), (6), (7), (8), (9), (*)				Not used
(4) MODEM TEST [1] - [9]					

Group	Subgroup	Item 1	Item 2	Item 3	Explanation
	(1) RELAY TEST [1] - [2]				
		(1) RELAY TEST 1			NCU relay (and switch) ON/OFF test
		(2) RELAY TEST 2			230 V common NCU test
	(2) FREQ TEST [0] - [6]				Frequency test
		(0) FREQ TEST 462Hz			
		(1) FREQ TEST 1100Hz			
		(2) FREQ TEST 1300Hz			
		(3) FREQ TEST 1500Hz			
		(4) FREQ TSST 1650Hz			
		(5) FREQ TEST 1850Hz			
		(6) FREQ TEST 2100Hz			
	(4) G3 SIGNAL TX TEST [0] - [8]				G3 signal transmission test
		(0) G3 SIGNAL TX TEST 300bps			
		(1) G3 SIGNAL TX TEST 2400bps			
		(2) G3 SIGNAL TX TEST 4800bps			
		(3) G3 SIGNAL TX TEST 7200bps			
		(4) G3 SIGNAL TX TEST 9600bps			
		(5) G3 SIGNAL TX TEST TC7200bps			
		(6) G3 SIGNAL TX TEST TC9600bps			
		(7) G3 SIGNAL TX TEST 12000bps			
		(8) G3 SIGNAL TX TEST 14400bps			
	(5) DTMF TEST [0] - [9], * , #				DTMF transmission test
		(0) G3 SIGNAL TX TEST 300bps			
		(1) G3 SIGNAL TX TEST 2400bps			
		(2) G3 SIGNAL TX TEST 4800bps			
		(3) G3 SIGNAL TX TEST 7200bps			
		(4) G3 SIGNAL TX TEST 9600bps			
		(5) G3 SIGNAL TX TEST TC7200bps			
		(6) G3 SIGNAL TX TEST TC9600bps			
		(7) G3 SIGNAL TX TEST 12000bps			
		(8) G3 SIGNAL TX TEST 14400bps			
		(9) G3 SIGNAL TX TEST TC9600bps			
		(*) G3 SIGNAL TX TEST 12000bps			
		(#) G3 SIGNAL TX TEST 14400bps			
	(6) MODEM TEST				Tonal sign reception test
	(8) G3 V.34 Tx TEST				V34 G3 signal transmission test
	(9)				Not used
(5) AGING TEST					Not used
(6) FUNCTION TEST [1] - [9]					

Numerals enclosed in parentheses denote a numeric keypad key to be pressed each.					
Group	**Subgroup**	**Item 1**	**Item 2**	**Item 3**	**Explanation**
	(1) FUNCTION TEST G3 4800bps				G3 4800 bps signal transmission test
	(3) 6-3 SENSOR [1] - [8]				Sensor checks
		(1) SENSOR CHECK 0:NORMAL 1:LATCH			
			(0) SENSOR NORMAL [0] - [2]		
				(0) CAS 0 REG 0 DEL 0 MULTI 0	
				(1) TONER 0 FULL 0 2ND-DEL 0000	
				(2) OP1 0000 OP2 0000 OP3 0000 PATH 0000	
			(1) SENSOR LATCH [0] - [2]		
				(0) CAS 0 REG 0 DEL 0 MULTI 0	
				(1) TONER 0 FULL 0 2ND-DEL 0000	
				(2) OP1 0000 OP2 0000 OP3 0000 PATH 0000	
		(2) SWITCH CHECK [0] - [1]			
			(0) CAS 0000 LOCK 0000		
			(1) OP1 0000 OP2 0000 OP3 0000		
		(3) DS ON DES of HPS ON BCVS of			
		(4) REF xxx ANT xxx |ANT-REF| xxx			
		(5) BSCT on BDAC[A3] BDSS3-0 [of of of of]			
		(6) NCR Sts: NCR None TNT 0000			
		(7) LAST of EXIT of REG of CVR of			
		(8) WID1 of WID2 of WID3 of WID4 of			
		(9) D+Temp E+Temp F+Temp			
	(4) ADF FEED TEST				ADF delivery operation test
	(6) 6-6 SPEAKER FREQ:[1] VOL:[2]				Speaker volume and buzzer frequency test
	(7)				Not used
	(8) FUNCTION TEST LAMP TEST ALL				Lamp test
	(9) LINE TEST [1] - [3]				Line signal reception test
(0) ROLLER CLEAN 0:PRT 1:ADF					Printer and ADF roller cleaning
	(0) PRT ROL CLEAN Press start key				
	(1) ADF ROL CLEAN Press start key				

16.16.2 DRAM Test

16.16.2.1 D-RAM Test<(1) D-RAM TEST>

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

D-RAM Test((1) D-RAM)
Press the numeric keypad key 1 on the test mode menu to select the D-DRAM test.
Press numeric keypad keys 1 and 2 during the D-DRAM test to carry out the individual tests described below.

Numeric keypad key 1
Checks to see if data can be correctly written to and read from all areas of D-RAM (SDRAM). If an error occurs making this check, the test is aborted, with an error appearing on the touch panel (LCD).

Numeric keypad key 2
Checks to see if data can be correctly read from all areas of D-RAM (SDRAM). If an error occurs making this check, the test is aborted, with an error appearing on the touch panel (LCD).

```
D-RAM  TEST    30208KB
[1] - [2]
```

Press numeric keypad key 1

```
D-RAM  TEST    30208KB
* * * * * * *. . . . . .
```

30208KB:Total size of D-RAM memory (Bytes)
*:Size of data written to memory
.:Size of data read from memory

Press numeric keypad key 2

```
D-RAM  TEST    30208KB
. . . . . .
```

30208KB:Total size of D-RAM memory (bytes)
.:Size of data read from memory

Normal end

```
D-RAM  TEST    30208KB
complete     (no error)
```

```
WRT= 33CC  RD= 33EC
ADR= BF840201
```

Press the
start key   WRT:Written data
to resume   RD:Read data
                   ADR:Address
Error end

```
D-RAM  TEST    30208KB
complete     (error)
```

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16.16.3 Scan Test

16.16.3.1 Scan Test ((2) SCAN TEST)

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

Scan test ((2) SCAN TEST)

Press the numeric keypad key 2 on the test mode menu to select the CCD test.
Press numeric keypad keys 1 and 4 during the CCD test to carry out the individual tests described below.

Numeric keypad key 1
Corrects the LED output of the contact sensor and sets its parameters automatically. (AGC adjustment)

Numeric keypad key 4 (CIS shift type only)
Detects trash at reader scan positions A/B/C.
Pos A: Reference read position
Pos B: About 0.5 mm inside of the roller from the reference position
Pos C: About 1.0 mm inside of the roller from the reference position

16.16.4 Print Test

16.16.4.1 Print Test ((3) PRINT TEST)

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

Print test ((3) PRINT TEST)
Press the numeric keypad key 3 on the test mode menu to select the print test.
Press numeric keypad keys 2 and 4 during the print test to generate test patterns as described below. Two kinds of service test patterns are available. Other test patterns are reserved for factory/development purposes.

Numeric keypad key 2
(2) BLACK: All-black output
Numeric keypad key 4
(4) ENDURANCE: Black belt output

To cancel test printing, press the stop key.

Use it to make sure that the print pattern does not have white lines or uneven image.

Use it to make sure that the print pattern does not have contraction/elongation of an image or dirt/black line.s

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16.16.5 Modem Test

16.16.5.1 MODEM Test ((4) MODEM TEST)

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

MODEM test((4) MODEM TEST)
These tests test modem and NCU transmission and reception. The modem tests check whether signals are sent correctly from the modem by comparing the sound of the signals from the speaker with the sounds from a normal modem.
End this test by pressing the Stop key.

Keypad	Type	Description
1	Relay test	Use it to turn on/off a selected relay to execute a switch-over test
2	Frequency test	The modem sends tonal signals from the modular jack and the speaker.
4	G3 signal transmission test	The modem sends G3 signals from the modular jack and the speaker.
5	DTMF signal reception test	Use it to generate the DTMF signal coming from the modem using the telephone line terminal and the speaker.
6	Tonal signal reception test	Use it to monitor a specific frequency and the DTMF signal received from the telephone line terminal by causing them to be indicated on the LCD (i.e., the presence/absence as detected). The reception signal is generated by the speaker.
8	V.34 G3 signal transmission test	The modem sends V.34 G3 signals from the modular jack and the speaker.

Relay Test
Press '1'or '2' on the keypad on the Modem test menu to select relay test mode. Use the keypad to operate the various relays of the NCU. '2' on the keypad is used for 230V machine.
Numeric keypad key 1
The input key and relay are shown below:

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Numeric keypad key 2
The input key and relay are shown below:

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⚠
The touch panel (LCD) is turned on or off in relation to the transmission of the relay operation signal as is operated on the keypad; for this reason, you cannot use the touch panel (LCD) to check a fault on a single relay.

Frequency Test
A press on '2' on the keypad from the MODEM test menu selects the frequency test.
In this test, signals of the following frequencies from the modem are transmitted using the telephone line terminal and the speaker. To select a different frequency, use the keypad.

Keypad	Frequency
1	462Hz
2	1100Hz
3	1300Hz
4	1500Hz
5	1650Hz

Keypad	Frequency
6	1850Hz
7	2100Hz

MEMO:
The frequency and the output level of individual frequencies are in keeping with the output level set in service mode.

G3 Signal Transmission Test
A press on '4' on the keypad from the MODEM test menu selects the G3 signal transmission test. In this test, the following G3 signals from the modem are transmitted using the telephone line terminal and the speaker. To select a different transmission speed, use the keypad.

Keypad	Transmission speed
0	300bps
1	2400bps
2	4800bps
3	7200bps
4	9600bps
5	TC7200bps
6	TC9600bps
7	12000bps
8	14400bps

MEMO:
The output level of individual signals is in keeping with the setting made in service mode.

DTMF Signal Transmission Test
A press on '5' on the MODEM test menu selects the DTMF signal transmission test. In the test, the following DTMF signals from the modem are transmitted using the telephone line terminal and the speaker. The number pressed on the keypad selects a specific DTMF signal.

MEMO:
The output level of individual signals is in keeping with the setting made in service mode.

Tonal/DTMF Signal Reception Test
A press on '6' on the keypad from the MODEM test menu selects the tonal signal/DTMF signal reception 0 test. In this signal, the tonal signal/DTMF signal received from the telephone line terminal can be checked to find out if it was detected by the modem.

Tonal signal reception test

```
MODEM TEST
OFF OFF OFF
```

OFF OFF OFF
└ changes from '0' to '1' in response to detection of a signal of 462 ± 25 Hz.
changes from '0' to '1' in response to detection of a signal of 1100 ± 30 Hz.
changes from '0' to '1' in response to detection of a signal of 2100 ± 25 Hz.

DTMF signal reception test

```
MODEM TEST
OFF OFF OFF   5
```

The received DTMF signals are indicated starting
from the right using the 2nd character of the display.

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V.34 G3 Signal Transmission Test
A press on '8' on the keypad from the MODEM test menu selectes the V.34 G3 signal transmission test. The V.34 G3 signals below are sent from the modem using the modular jack and the speaker by pressing the start key. The Baud rate can be changed with the keypad, and the Speed can be changed with the left/right arrow key.

Keypad	Baud rate
0	3429baud
1	3200baud
2	3000baud
3	2800baud
4	2743baud
5	2400baud

Left/right arrow key	Transmission speed
	2400bps
	4800bps
	7200bps
	9600bps
<	12000bps
	14400bps
	16800bps
	19200bps
	21600bps
>	24000bps
	26400bps
	28800bps
	31200bps
	33600bps

16.16.6 Faculty Test

16.16.6.1 FUNCTION TEST <(6) FUNCTION TEST>

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

Function test ((6) FUNCTION TEST)
Press the numeric keypad key 6 on the test mode menu to select the function test.
Press numeric keypad keys 1 and 3 to 9 during the function test to enter the menus listed below.

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Keypad	Item	Explanation
1	G3 signal transmission test	Transmits 4800-bps G3 signals to a telephone line and speaker.
2	Not used	
3	Sensor test	Sensor actuation test
4	ADF test	ADF operation test
5	Not used	
6	Speaker test	Speaker operation test
7	Not used	
8	Lamp test	Contact sensor illumination test
9	Line signal reception test	NCU board signal sensor and frequency counter operation test

G3 signal transmission test (6-1: G3 480 bps Tx)
Press numeric keypad key 1 on the FUNCTION TEST menu to select the G3 signal transmission test. This test transmits 4800-bps G3 signals from the telephone line connection terminal and speaker.

Sensor test (6-3: SENSOR)
This mode is used to verify the status of the unit sensors from the touch panel (LCD) indications. Press numeric keypad key 3 on the FUNCTION TEST menu to select the sensor test. The touch panel (LCD) indications change as the associated sensors turn on and off.

6-3:SENOR
[1] - [8]

Press numeric keypad key 1.

SENSOR CHECK
0:NORMAL 1:LATCH

Select a sensor mode.
 0: NORMAL
 Indications change from 0
 to 1 as the sensors turn on.
 Indications change from 1
 to 0 as the sensors turn off.
 1: LATCH
 Indications change from 0
 to 1 as the sensors turn on.
 Indications do not change back
 from 1 to 0 once the sensors turn
 on from the off state.

Press numeric keypad key 0.

SENSOR NORMAL
[0] - [2]

Press numeric keypad key 1.

SENSOR LATCH
[0] - [2]

Press numeric keypad key 0.

CAS 0   REG 0
DEL 0 0   MULTI 0

CAS:Cassette paper sensor (SR9): 0/Document presence, 1/Document absence
REG:Registration sensor (SR11): 0/Document presence, 1/Document absence
DEL 0 0:
      ┬─Delivery sensor (SR5): 1/ Document presence, 0/ Document absence
      └─Not used
MULTI:Manual paper sensor (SR12): 0/Document presence, 1/Document absence

Press numeric keypad key 1.

TONER 0   FULL 0
2ND-DEL 0 0

TONER: Not used
FULL: Delivery full sensor (SR10): 0/Document presence, 1/Document absence
2ND-DEL 0 0:
        ┬─ Not used
        └─ Not used

Press numeric keypad key 2.

OP1 0 0   OP2 0 0
OP3 0 0   PATH 0 0

OP1 0 0:
       ┬─ Not used
       └─ Option casstte paper sensor (SR6)
         : 0/Document presence, 1/Document absence

OP2 0 0: Not used
OP3 0 0: Not used
PATH 0 0: Not used

Press numeric keypad key 2

SWITCH CHECK
[0] - [1]

Press numeric keypad key 0.

CAS 0000
LOCK 0

CAS 0000: Not used
LOCK 0: Not used

Press numeric keypad key 1.

OP1 0000   OP2 0000
OP3 0000

OP1: Not used
OP2: Not used
OP3: Not used

Press numeric keypad key 3

DS ON DES of HPS ON
BCVS of

DS: ADF original set sensor (SR2001): On/Paper presence, Of/Paper absence
DES: ADF document edge snsor (SR2002): On/Paper presence, Of/Paper absence
HP: CIS HP sensor (SR2006)*1: On/Paper presence, Of/Paper absence
BCVS: Not used
*1: CIS shift type only

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Press numeric keypad key 4.

```
REF xxx    ANT xxx
|ANT - LEF|  xxx
```

REF: Toner reference voltage (A/D value)
ANT: Toner antenna voltage (A/D value)
ANT - LEF: Differential voltage (A/D value)

Press numeric keypad key 5.

```
BSCT on        BDOC[A3 ]
BDSS3-0  [of of of of]
```

BCST: Not used
BDOC: Not used
BDSS3-0 [of of of of]: Not used

Press numeric keypad key 6.

```
NCR Sts: NCR None
TNT 0000
```

Not used

Press numeric keypad key 7.

```
LAST of      EXIT of
REG of       CVR of
```

LAST: Not used
EXIT: Not used
REG: Not used
CVR: Not used

Press numeric keypad key 8.

```
WID1 of      WID2 of
LEN1 of      LEN2 of
```

WID1: Document width sensor 1 (SR2007)*1: On/Paper presence, Of/Paper absence)
WID2: Document width sensor 2 (SR2008)*1:On/Paper presence, Of/Paper absence)
LEN1: Document length sensor 1(SR2009)*1:On/Paper presence, Of/Paper absence)
LEN2: Document length sensor 2(SR2010)*1: :On/Paper presence, Of/Paper absence)
*1: CIS shift type only

Press numeric keypad key 9.

```
D+Temp xxxx E+Hum xxxx
F+Temp
```

D+Temp: In-machine temperature (Unit: deg C)
E+Hum: In-machine humidity (Unit: %RH)
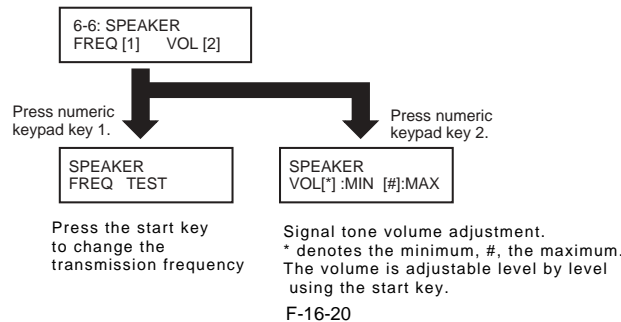F+Temp: Fixing roller temperature (Unit: deg C)

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ADF feed test (6-4: ADF FEED TEST)
ADF operation verification mode. Press numeric keypad key 4 on the FUNCTION TEST menu to select the ADF feed test. Place a document on the document platen and press the start key to transfer the document at the speed matched to the scan resolution setting. In this test, enter a transfer speed between 500 and 2000 (mm/s) from the numeric keypad and verify the transfer speed. Select between the ON and OFF states with the left and right cursor keys to select between single-sided document feed (OFF) and double-sided document feed (ON).

Speaker test (6-6: SPEAKER)
Speaker operation verification mode. Press numeric keypad key 6 on the FUNCTION TEST menu to select the speaker test. In this test, the speaker generates tonal signals at 100 Hz intervals, from 200 Hz to 5 kHz, in varying sound volumes. Signal output from the speaker is thus verified.

```
6-6: SPEAKER
FREQ [1]     VOL [2]
```

Press numeric keypad key 1.

```
SPEAKER
FREQ   TEST
```

Press the start key to change the transmission frequency

Press numeric keypad key 2.

```
SPEAKER
VOL[*] :MIN  [#]:MAX
```

Signal tone volume adjustment.
* denotes the minimum, #, the maximum.
The volume is adjustable level by level using the start key.

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Lamp test (6-8: LAMP TEST)
Press numeric keypad key 8 on the FACULTY menu to select the scan lamp illumination mode. The test checks to see if the scan lamp is on or not.
Numeric keypad key 1 selects LAMP TEST ALL. Press the start key to turn on all scan lamps. LAMP TEST AGC is not used.
Line signal reception test (6-9 LINE DETECT)
Press numeric keypad key 9 on the FACULTY menu to select the line signal reception test. In this test, verify the successful operations of the NCU signal sensor and the frequency counter. Menu 1 detects the CI state, while menu 3 detects the CNG signal.
> **Test menu 1**
> Press numeric keypad key 1 on the LINE DETECT menu to select test menu 1. When CI is detected on the telephone line connection terminal, the touch panel (LCD) display changes from OFF to ON, indicating the received frequency. The touch panel (LCD) also displays the on-hook or off-hook state of an external telephone set as detected. The touch panel (LCD) displays, from left to right, CI, CI frequency, hook port and FC with indications of 1:ON and 0:OFF.
> **Test menu 2**
> Press numeric keypad key 2 on the LINE DETECT menu to select test menu 2. When the CNG signal is detected on the telephone line connection terminal, the touch panel (LCD) display changes from OFF to ON, indicating the received frequency. The touch panel (LCD) displays the status of CML, CNG and FED detection, from left to right, with ON/OFF indications. Numeric keypad key 2 turns on the CML relay to detect CNG.

Test menu 3
Press numeric keypad key 3 on the LINE DETECT menu to select test menu 3. When the CNG signal is detected on the telephone line connection terminal, the touch panel (LCD) display changes from OFF to ON, indicating the received frequency. The touch panel (LCD) displays the status of CML, CNG and FED detection, from left to right, with ON/OFF indications. Numeric keypad key 3 turns off the CML relay to detect CNG.

16.16.7 Cleaning Mode

16.16.7.1 Roller cleaning mode ((0) ROLLER CLEAN)

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

Roller cleaning mode ((0) ROLLER CLEAN)
Press numeric keypad key 0 in test mode to select roller cleaning mode. Press numeric keypad keys 1 and 2 during this test to enter the following menus:
Numeric keypad key 1
Press the start key clean the ADF pickup/feed rollers by idling.

Press the stop key to exit this mode.

Numeric keypad key 2
Press the start key clean the unit transfer rollers by idling.
Press the stop key to exit this mode.

Chapter 17 Upgrading

Contents

17.1 Outline

17.1.1 Overview of Upgrade

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

This machine and options can be upgraded by downloading system software programs from the personal computer (hereafter called as the PC) in which a service support tool (hereafter called SST) has been loaded.
System software programs and upgrade tools are listed in the following table:

T-17-1

Type	System software type	Upgrade tool SST	Remarks
Main unit	Boot (boot program)	yes	
	System (main controller)	yes	Main controller also controls the reader.
	SEND (32MB ROM)	yes	Option. LASER CLASS 830i is 16MB standard.

Download the system software for SEND board following the same procedure described in "Downloading the System".

⚠

When updating the version of Boot (boot program) and System (main controller) at the same time, make sure to first update Boot. If you start by updating System, the unit may not start up.

17.1.2 Overview of Service Support Tool

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

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When using the SST, select "#DOWNLOAD" in the service mode to place the main unit in the download mode.

17.2 Making Preparations

17.2.1 Connection

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

1) Turn off the main power switch of this machine, and then disconnect the cables connected to this machine.
2) Connect USB connector on the back of this machine to the PC using the USB cable [1].

[1]

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17.2.2 Registering the System Software

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

System software programs to be downloaded need to be registered in the SST.
The system software programs are registered with the names listed below.

<Software Programs Preinstalled in Main Unit>

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Display model	Compatible product name	Remarks
LC810_L3000	Laser Class810, FAX-L3000, i-SENSYS FAX-L3000	Flash ROM 16MB
L1000	Cano Fax L1000	Flash ROM 16MB
LC830i_L3000IP	Laser Class830i, FAX-L3000IP, i-SENSYS FAX-L3000IP	Flash ROM 16MB

⚠️

Use the firmware for the model suitable for the compatible product.

Unit name:
- Main controller: System
- Boot program: Boot
- PCL board: SEND

The system software registration program is explained below taking Boot as an example.

[Preparation]
Have the following ready:
- PC in which SSTv3.34 or later is installed
- System CD containing the firmware for the relevant model

[System Software Registration Procedure]
1) Start the PC.
2) Insert the system CD in the PC.
3) Start SST.

4) Click the "Register Firmware" button.

F-17-3

5) Select the drive in which the system CD is inserted, and then click the "SEARCH" button.
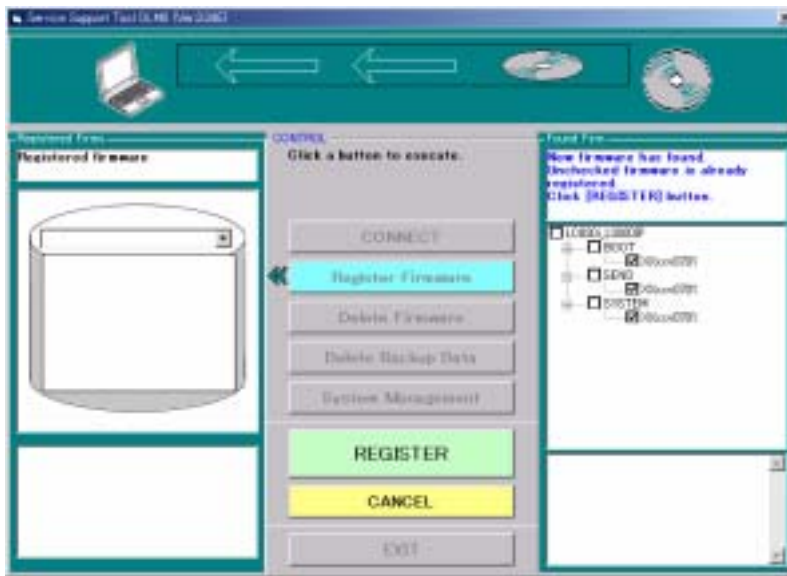

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6) A list of system software programs contained in the system CD is displayed. Uncheck the checkboxes of unnecessary folders and system software programs, and then click the "REGISTER" button.
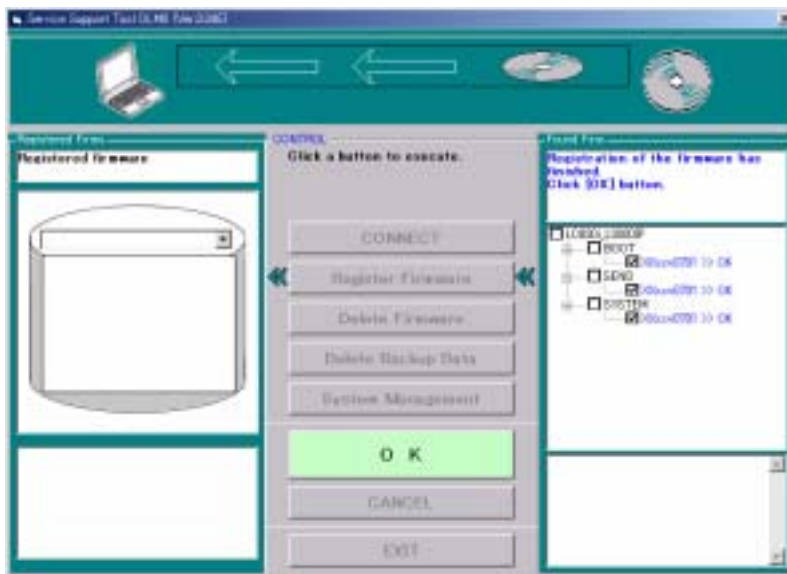
⚠️

This machine allows two or more system software programs to be register at the same time. However, it does not allow two or more them to be downloaded at the same time. If two or more software programs need to be upgraded, download them one by one.

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7) When the system software program registration result appears, click the OK button.

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17.3 Downloading System Software

17.3.1 Downloading the System Software

17.3.1.1 Downloading Procedure

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

To download the SYSTEM software, use the steps given for the BOOT software.

17.3.2 Downloading the Boot Software

17.3.2.1 Downloading Procedure

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

1) Turn on the power switch of the PC and start SST.

2) When the power switch is turned on, the Found New hardware Wizard appears. Click "Cancel".

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3) Select "MFP" in "Target Selection", and then select "LC810_L3000" in "Model List".

⚠

Use the firmware for the model suitable for the compatible product.

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4) Double-click the "Boot" folder in "Model List" to check the system software version. Select "USB" in "Interface", and then click the "START" button.
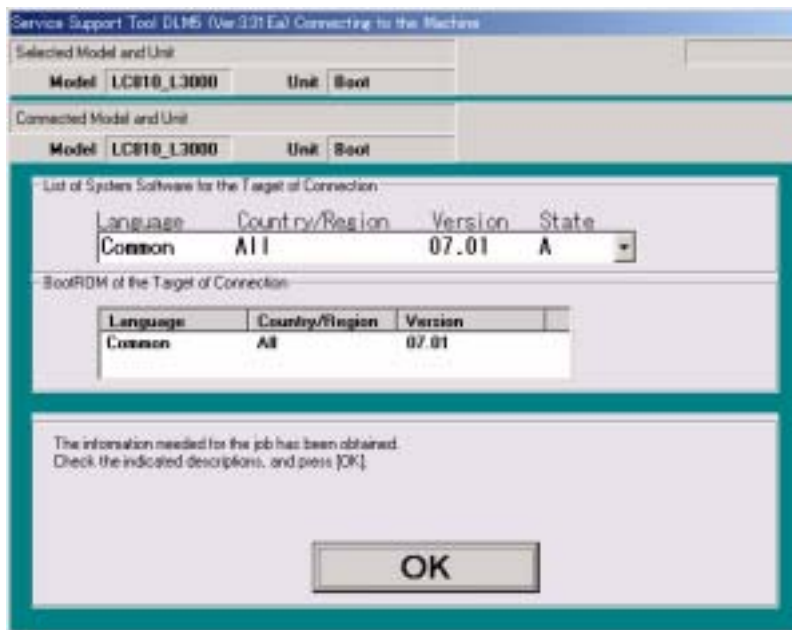

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5) Turn on the power switch of the host machine.
6) Press the following keys on the control panel to enter the service mode.
   Additional Functions Key > 2 Key > 8 Key > Additional Functions Key
7) Using the plus (+) or minus (-) key, select "#DOWNLOAD".

8) Press the OK key on the control panel to place the host machine in the downloading wait mode ("# #CONNECTED TO PC" is displayed).
9) Press the OK button on the SST screen displayed on the display of the PC.

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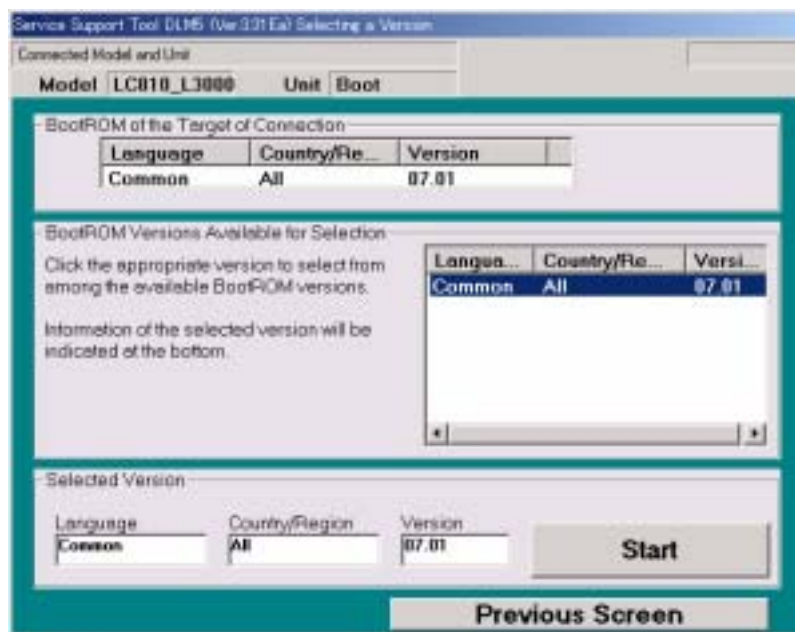10) When connection is complete, the following screen appears. Click the OK button.

F-17-11

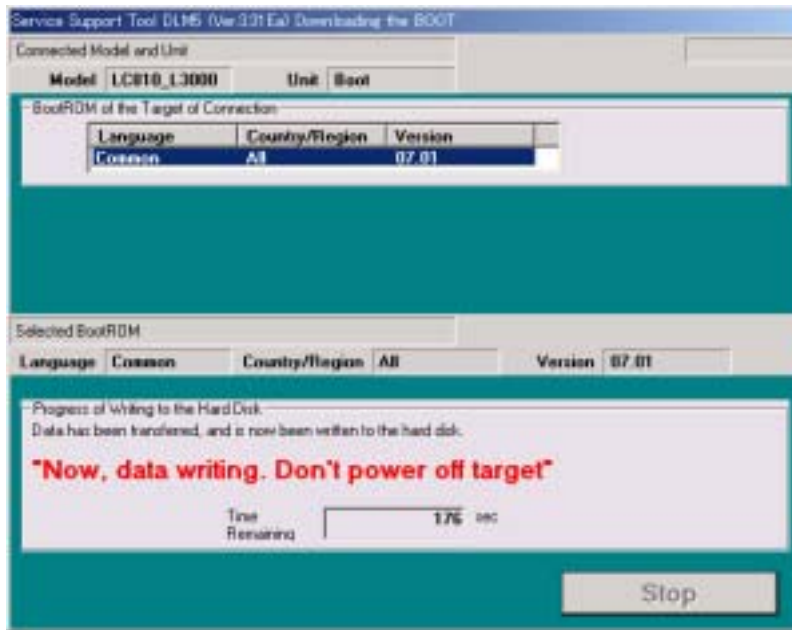11) Click "BootROM Download" on the Selecting a Job screen.

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12) Select the version of the system software to download from the list. Check that the selected version is displayed in "Selected Version", and then click the "START" button.
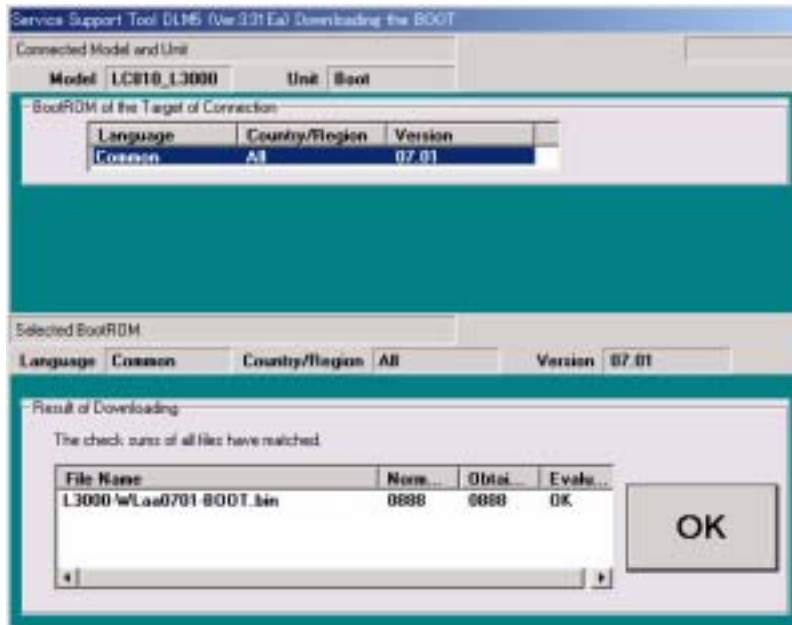

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13) While the received data is being written to the flash ROM after completion of downloading, the following screen is displayed:
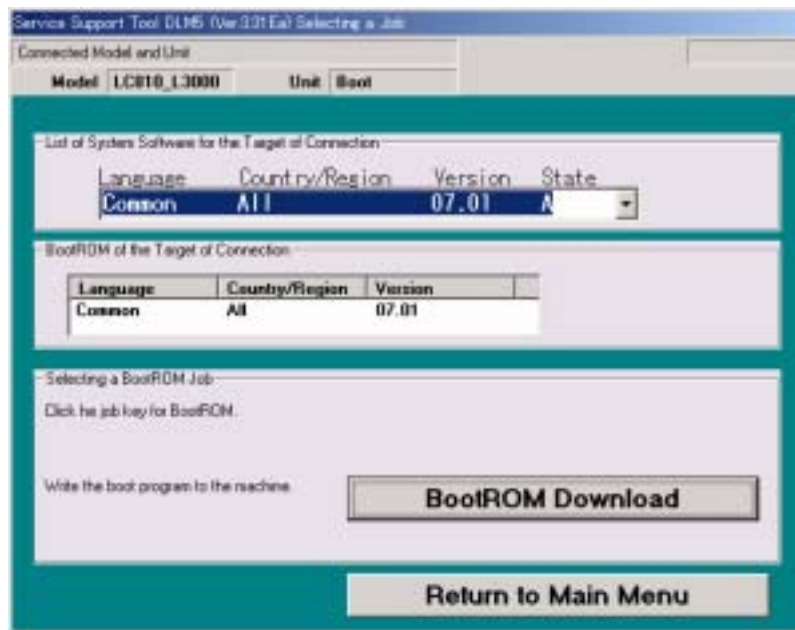

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⚠️
Never turn off the power switch of the machine while the data is being written to the flash ROM. If it becomes impossible to start this machine after turning its power switch off, the image processor PCB must be replaced.

14) When writing of the data to the Flash ROM is complete, its result is displayed. Click the OK button.
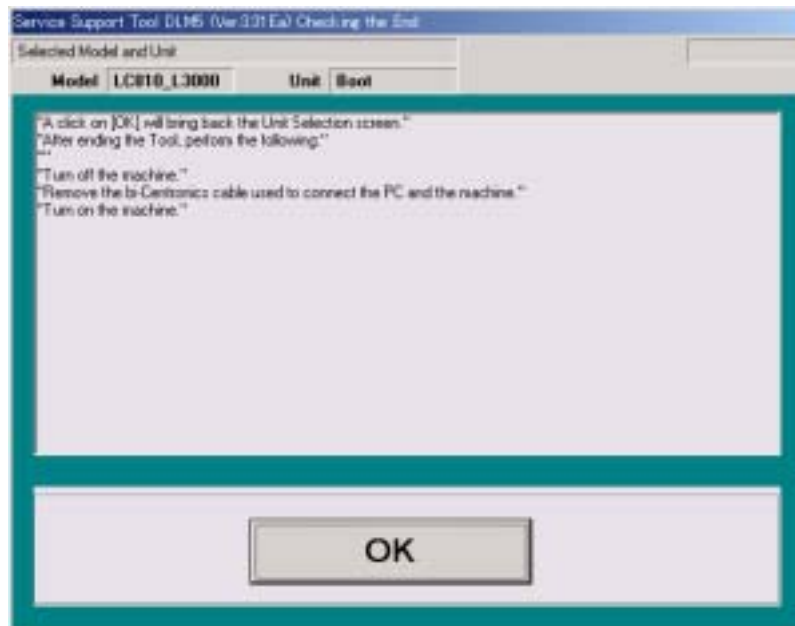

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Chapter 17

15) When the Selecting a Job screen appears, click "Return to Main Menu".
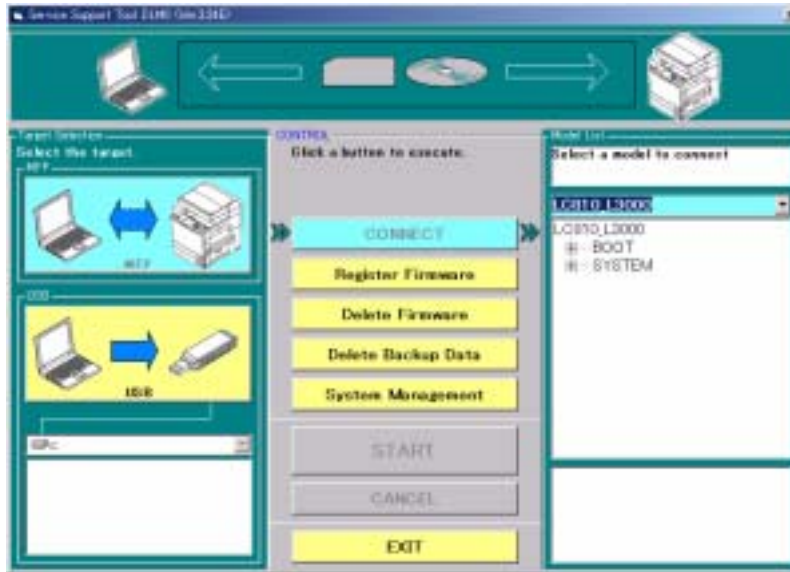

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16) Click the "OK" button to return to the menu screen of SST.

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17) If the other firmware is upgraded continuously, follow each downloading procedure. If the downloading is finished, click the "Exit" button and turn OFF/ON the main power switch.

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17.3.3 Otehr Upgrade Methods

17.3.3.1 Downloading the SEND Software

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

To download the software for the option SEND board *1, use the steps given for the BOOT software.
*1: standard for LASER CLASS 830i
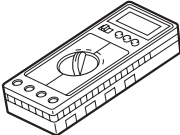
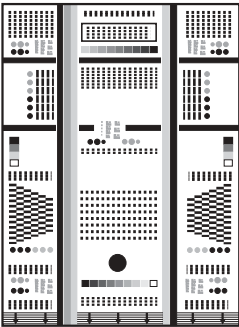# Chapter 18 Service Tools

Contents

18.1 Service Tools

18.1.1 Special Tools

i-SENSYS Fax-L3000 / i-SENSYS Fax-L3000IP

In addition to the standard tools set, you will need the following special tools for servicing of the machine:

T-18-1

No.	Tool name	Tool No.	Shape	Rank	Uses
1	Digital multimeter	FY9-2002		A	For making electrical checks.
2	NA-3 Test Chart	FY9-9196		A	For checking and adjusting images.

Key to Notation (rank)

A: each service engineer is expected to carry one.

Aug 29 2007