Portable Manual

MF4100 Series

TONER
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Application

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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.
	Indicates an item intended to provide notes assisting the understanding of the topic in question.
	Indicates an item of reference assisting the understanding of the topic in question.
	Provides a description of a service mode.
	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 Maintenance and Inspection

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Chapter 1 Maintenance and Inspection

1.1 Periodically Replaced Parts

1.1.1 Periodically Replaced Parts

i-SENSYS MF4150 / i-SENSYS MF4140 / i-SENSYS MF4120 /

There are no periodically replaced parts with this machine.

1.2 Durables and Consumables

1.2.1 Consumable

i-SENSYS MF4150 / i-SENSYS MF4140 / i-SENSYS MF4120

T-1-1

Charge	Consumable	Standard of exchange
User	Toner cartridge FX-10	The toner disappears and.
Field engineer	-	-

1.3 Scheduled Servicing Basic Procedure

1.3.1 Periodically Service Items

i-SENSYS MF4150 / i-SENSYS MF4140 / i-SENSYS MF4120 /

There are no periodically service items with this machine.

1.4 Cleaning

1.4.1 Cleaning Items

i-SENSYS MF4150 / i-SENSYS MF4140 / i-SENSYS MF4120 /

T-1-2

Responsible by:Cleaning area	Cleaning area	Cleaning timing
User	External covers	When they are smudged
	Copyboard glass	When the image read from the copyboard is smudged
	Backside of copyboard cover	When the image read from the copyboard is smudged
	ADF reading area	When the image read from the ADF has a black line in vertical direction
Service Technician	Document pickup roller	When document pickup performance drops away
	Scraper	When document separating performance drops away
	Document feed roller	When document feeding performance drops away
	Document delivery roller	When document delivery performance drops away
	Reading white area	When the image read from ADF is lighter
	Pickup roller	When paper pickup performance drops away
	Separation pad	When paper separating performance drops away
	Feed roller	When paper feeding performance drops away
	Transfer charging roller	When there is smudge at the back of the paper, or when there are white spots at the constant intervals of approx. 46mm in the image.
	Static eliminator	When there are dot patterns in the image
	Fixing inlet guide	When there is smudge in the paper, when there are irregular black lines in vertical direction, when there is paper jam, when there are wrinkles in the paper

⚠
Make sure to turn off the power and disconnect the power supply plug upon cleaning. It may cause fire/electric shock if failing turning off the power.

1.4.2 Cleaning Method (External Covers)

i-SENSYS MF4150 / i-SENSYS MF4140 / i-SENSYS MF4120 /

Wring of the cloth moistened with water or mild detergent, and wipe off the smudges.
In the case of using mild detergent, make sure to wipe off the detergent with the cloth moistened with water afterward.
Once the smudge is removed, dry with the soft dry cloth.

1.4.3 Cleaning Method (Reader Unit)

i-SENSYS MF4150 / i-SENSYS MF4140 / i-SENSYS MF4120 /
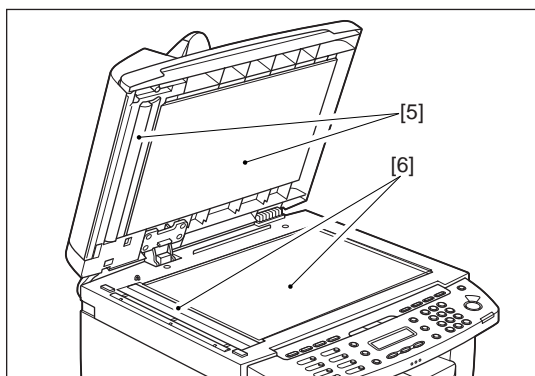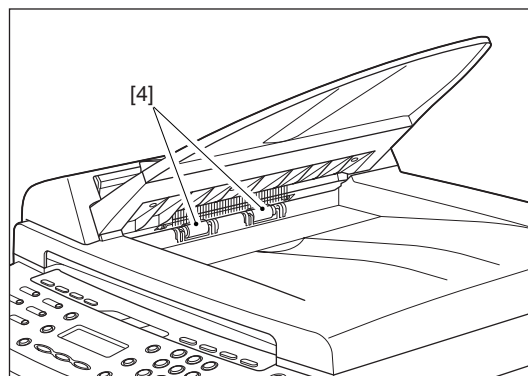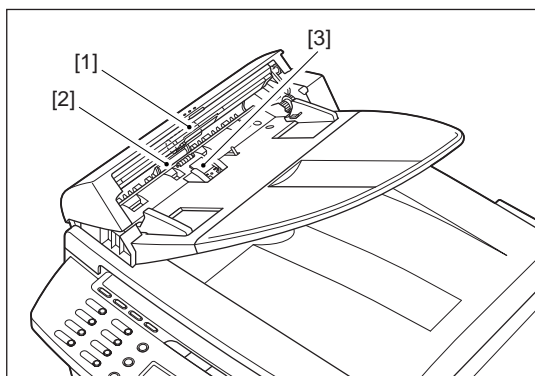
F-1-1

[1] Document pickup roller
    Open the ADF and wipe off the smudge with the soft dry cloth.
[2] Document feed roller
    Open the ADF and wipe off the smudge with the soft dry cloth.
[3] Scraper
    Open the ADF and wipe off the smudge with the soft dry cloth.
[4] Document delivery roller
    Wipe off the smudge with the soft dry cloth.
[5] Backside of copyboard cover
    Open the copyboard cover and wipe off the smudge with the soft dry cloth.
[6] Copyboard glass
    Open the copyboard cover and wipe off the smudge with the soft dry cloth.
[7] Backside of copyboard cover
    Open the copyboard cover and wipe off the smudge with the soft dry cloth.

Chapter 2 Service Mode

2.1 Service Soft Switch Settings (SSSW)

2.1.1 Outline

2.1.1.1 SOFT SWITCH Explained

i-SENSYS MF4150 / i-SENSYS MF4140 / i-SENSYS MF4120 /

Each entry / setting item of SOFT SWITCH consists of 8 bitswitches. Each bitswitch displayed on the screen has an assigned number as shown in the figure below. Each Bit has a value - either 0 or 1.
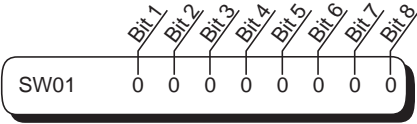
F-2-1

Shown below is what each number and data indicates in the bitswitch table.

Bit	Function	1	0
1	Not in Use		
2	Not in Use		
3	Original Reading Width	Letter	A4*
4	Not in Use		
5	Not in Use		
6	Not in Use		
7	Not in Use		
8	Not in Use		

F-2-2

2.1.2 SSSW-SW02

2.1.2.1 Function List

i-SENSYS MF4150 / i-SENSYS MF4140 / i-SENSYS MF4120 /

T-2-1

Bit	Function	1	0
1	Not in Use	-	-
2	RTN Transmission Condition	1	0*
3	RTN Transmission Condition	1	0*
4	Not in Use	-	-
5	Change the Message Language	Displayed	Not displayed
6	Not in Use	-	-
7	Not in Use	-	-
8	Not in Use	-	-

2.1.2.2 Bit 2 and 3 Elaborated

i-SENSYS MF4150 / i-SENSYS MF4140 / i-SENSYS MF4120 /

If errors resulting from RTN signal transmission occur frequently while receiving, increase the parameter and ease the RTN transmission condition.
The RTN transmission condition is defined as a percentage of the number of error lines in the total number of lines of a received image page.
It is a combination of Bit 2 and Bit 3 and the percentages are shown below.

T-2-2

(Bit2, Bit3)=	(0, 0) 10%
	(1, 0) 15%
	(0, 1) 20%
	(1, 1) 25%

2.1.2.3 Bit 5 Elaborated

i-SENSYS MF4150 / i-SENSYS MF4140 / i-SENSYS MF4120 /

If 'displayed' is selected, an item is added to the user data so that the message language can be changed. By doing so, the language in which messages displayed on the screen and printed on the reports can be selected from a list of languages.

2.1.3 SSSW-SW04

2.1.3.1 Function List

i-SENSYS MF4150 / i-SENSYS MF4140 / i-SENSYS MF4120 /

T-2-3

Bit	Function	1	0
1	Not in Use	-	-
2	Not in Use	-	-
3	Not in Use	-	-
4	Not in Use	-	-
5	Not in Use	-	-
6	Not in Use	-	-
7	Not in Use	-	-
8	Alarm at the Completion of Transmission	ON	OFF *

2.1.3.2 Bit 8 Elaborated

i-SENSYS MF4150 / i-SENSYS MF4140 / i-SENSYS MF4120 /

An alarm can be set to go off when the transmission has been completed without a problem. Change the setting to ON in order to activate this alarm.

2.1.4 SSSW-SW10

2.1.4.1 Function List

i-SENSYS MF4150 / i-SENSYS MF4140 / i-SENSYS MF4120 /

T-2-4

Bit	Function	1	0
1	Alarm at Termination due to Error	ON *	OFF
2	Page Timer in Manual Sending	8 minutes	No Limit *
3	Not in Use	-	-
4	Not in Use	-	-
5	Not in Use	-	-
6	Not in Use	-	-
7	Not in Use	-	-
8	Not in Use	-	-

2.1.4.2 Bit 1 Elaborated

i-SENSYS MF4150 / i-SENSYS MF4140 / i-SENSYS MF4120 /

An alarm goes off when the transmission has been terminated due to some error. Change the setting to OFF in order to make this alarm inactive.

2.1.4.3 Bit 2 Elaborated

i-SENSYS MF4150 / i-SENSYS MF4140 / i-SENSYS MF4120 /

Enables to select a page timer used during manual sending.

2.1.5 SSSW-SW16

2.1.5.1 Function List

i-SENSYS MF4150 / i-SENSYS MF4140 / i-SENSYS MF4120 /

T-2-5

Bit	Function	1	0
1	Not in Use	-	-
2	Not in Use	-	-
3	Original Reading Width	Letter	A4*
4	Not in Use	-	-
5	Not in Use	-	-
6	Not in Use	-	-
7	Not in Use	-	-
8	Not in Use	-	-

2.1.5.2 Bit 3 Elaborated

i-SENSYS MF4150 / i-SENSYS MF4140 / i-SENSYS MF4120 /

Enables to select the width of original reading.
When 'Letter' is selected, a letter-sized original will be read with the letter width (214mm).

2.1.6 SSSW-SW21

2.1.6.1 Function List

i-SENSYS MF4150 / i-SENSYS MF4140 / i-SENSYS MF4120 /

T-2-6

Bit	Function	1	0
1	Not in Use	-	-
2	Not in Use	-	-
3	Not in Use	-	-
4	Received data in G3 mode contains 100 lines or less.	Print	Do Not Print*
5	Not in Use	-	-
6	Not in Use	-	-
7	Not in Use	-	-
8	Not in Use	-	-

2.1.6.2 Bit 4 Elaborated

i-SENSYS MF4150 / i-SENSYS MF4140 / i-SENSYS MF4120 /

When received data in G3 mode consists 100 lines or less, the data can be chosen to print or not to print. If the setting is changed to 'Do Not Print,' received data with 100 or less lines will be canceled and will not be printed out.

2.1.7 SSSW-SW30

2.1.7.1 Function List

i-SENSYS MF4150 / i-SENSYS MF4140 / i-SENSYS MF4120 /

T-2-7

Bit	Function	1	0
1	Not in Use	-	-
2	Not in Use	-	-
3	Not in Use	-	-
4	Not in Use	-	-
5	Not in Use	-	-
6	Not in Use	-	-
7	Duration of Pause	1*	0
8	Duration of Pause	1	0*

2.1.7.2 Bit 7 and 8 Elaborated

i-SENSYS MF4150 / i-SENSYS MF4140 / i-SENSYS MF4120 /

Enables to set the duration of pause.
It is a combination of Bit 7 and Bit 8 and the duration is as listed below.

T-2-8

(Bit7, Bit8)=	(0, 0) 2.0 seconds
	(1, 0) 2.5 seconds
	(0, 1) 3.0 seconds
	(1, 1) 3.5 seconds

2.1.8 SSSW-SW37

2.1.8.1 Function List

i-SENSYS MF4150 / i-SENSYS MF4140 / i-SENSYS MF4120 /

T-2-9

Bit	Function	1	0
1	V.34 Maximum Baud Rate (TX)	1	0*
2	V.34 Maximum Baud Rate (TX)	1	0*
3	V.34 Maximum Baud Rate (TX)	1	0*
4	V.34 Maximum Baud Rate (RX)	1	0*
5	V.34 Maximum Baud Rate (RX)	1	0*
6	V.34 Maximum Baud Rate (RX)	1	0*
7	Not in Use	-	-
8	Not in Use	-	-

2.1.8.2 Bit 1 to Bit 6 Elaborated

i-SENSYS MF4150 / i-SENSYS MF4140 / i-SENSYS MF4120 /

Enables to select the maximum baud rate in V.34 primary channel from 2400, 2800, 3000, 3200, 3429 baud.
Different combinations of Bit 1 to Bit 6 lead to different baud rates as shown below.
In Sending

T-2-10

(Bit1, Bit2, Bit3)=	(0, 0, 0) 3429
	(1, 0, 0) 3200
	(0, 1, 0) 3000
	(1, 1, 0) 2800
	(0, 0, 1) 2400

In Receiving

T-2-11

(Bit4, Bit5, Bit6)=	(0, 0, 0) 3429
	(1, 0, 0) 3200
	(0, 1, 0) 3000
	(1, 1, 0) 2800
	(0, 0, 1) 2400

2.1.9 SSSW-SW39

2.1.9.1 Function List

i-SENSYS MF4150 / i-SENSYS MF4140 / i-SENSYS MF4120 /

T-2-12

Bit	Function	1	0
1	Not in Use	-	-
2	Not in Use	-	-
3	Not in Use	-	-
4	Not in Use	-	-
5	Not in Use	-	-
6	Not in Use	-	-
7	V8 Procedure at Incoming Call	Yes	No *
8	V8 Procedure at Outgoing Call	Yes	No *

2.1.9.2 Bit 7 Elaborated

i-SENSYS MF4150 / i-SENSYS MF4140 / i-SENSYS MF4120 /

Enables to choose whether or not to carry out V.8 procedure during incoming calls.
Change the setting to 'No' and V.8 procedure will not be carried out and T.30 procedure will start.

2.1.9.3 Bit 8 Elaborated

i-SENSYS MF4150 / i-SENSYS MF4140 / i-SENSYS MF4120 /

Enables to choose whether or not to carry out V.8 procedure during outgoing calls.
Change the setting to 'No' and V.8 procedure will not be carried out even if V.8 procedur has been received from the caller and T.30 procedure will be initiated.

2.1.10 SSSW-SW51

2.1.10.1 Function List

i-SENSYS MF4150 / i-SENSYS MF4140 / i-SENSYS MF4120 /

T-2-13

Bit	Function	1	0
1	Not in Use	-	-
2	Not in Use	-	-
3	Protocol Monitor Report Output	1	0*
4	Protocol Monitor Report Output	1	0*
5	Not in Use	-	-
6	Not in Use	-	-
7	Not in Use	-	-
8	Not in Use	-	-

2.1.10.2 Bit 3 and 4 Elaborated

i-SENSYS MF4150 / i-SENSYS MF4140 / i-SENSYS MF4120 /

Enables to specify the output setting of protocol monitor report.
Each combination of Bit 3 and Bit 4 as shown below determines the output setting.

T-2-14

(Bit3, Bit4)=	(0, 0) Do not print
	(1, 0) Print
	(0, 1) Print when error occurs
	(1, 1) Not in use

2.1.11 SSSW-SW54

2.1.11.1 Function List

i-SENSYS MF4150 / i-SENSYS MF4140 / i-SENSYS MF4120 /

T-2-15

Bit	Function	1	0
1	Not in Use	-	-
2	Not in Use	-	-
3	Not in Use	-	-
4	Not in Use	-	-
5	Not in Use	-	-
6	Time and Date Display in Reports	1	0*
7	Time and Date Display in Reports	1*	0
8	Not in Use	-	-

2.1.11.2 Bit 6 and 7 Elaborated

i-SENSYS MF4150 / i-SENSYS MF4140 / i-SENSYS MF4120 /

Enables to select from different types of time and date display used in reports.
Each combination of Bit 6 and Bit7 as shown below determines the type.

T-2-16

(Bit6, Bit7)=	(0, 0) YYYY MM/DD
	(1, 0) MM/DD YYYY
	(0, 1) DD/MM YYYY
	(1, 1) Not in Use

2.2 Report Output (REPORT)

2.2.1 Service data list

i-SENSYS MF4150 / i-SENSYS MF4140 / i-SENSYS MF4120 /
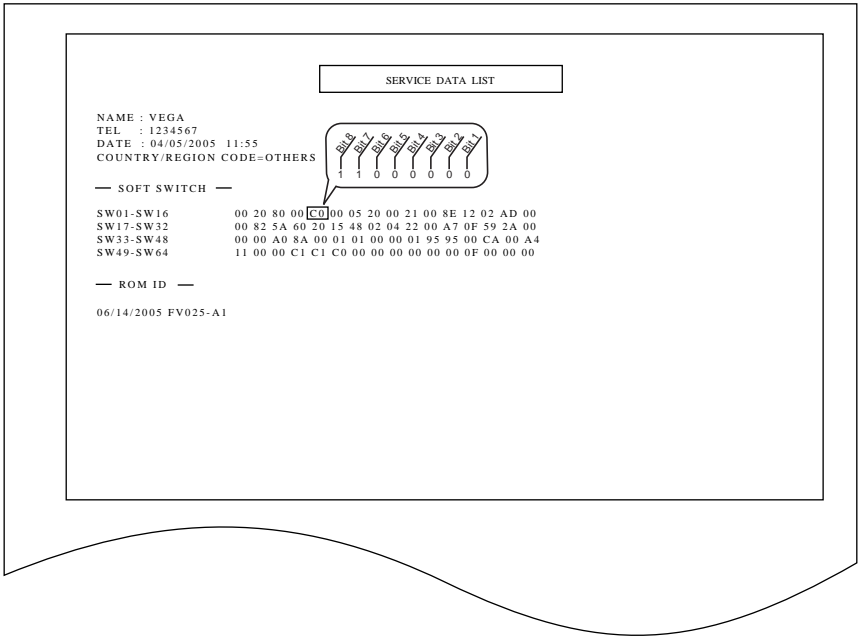
F-2-3

2.3 Test Mode (TEST)

2.3.1 Overview

2.3.1.1 Outline of test mode

i-SENSYS MF4150 / i-SENSYS MF4140 / i-SENSYS MF4120 /

The static test mode can be operated according to the menu item displayed on the display.

    Print test
        The test pattern is printed in the print area.
    H/W TEST
        The function of the sensor and the operation panel can test.

2.3.1.2 Test mode menu

i-SENSYS MF4150 / i-SENSYS MF4140 / i-SENSYS MF4120 /

To operate the test mode,
1) Push the additional functions key and # key to enter SERVICE MODE.
2) Select FUNCTION or H/W TEST by the cursor button, and push the OK button.

Stoppbotaning is pushed when coming off the test mode.

F-2-4

2.3.2 Faculty Test

2.3.2.1 Print test pattern

i-SENSYS MF4150 / i-SENSYS MF4140 / i-SENSYS MF4120 /

From the FUNCTION menu, select PRINT TEST PATTERN.
In this test, the printer unit will be used to print various patterns. For service work, be sure to use the BLACK pattern and the SQUARE pattern.
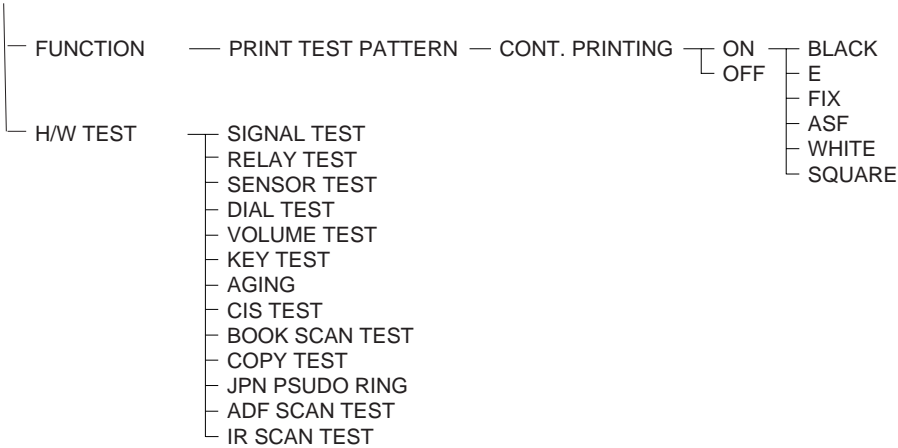Use the BLACK print pattern to meke sure that the printout is free of white lines and unevenness; on the other hand, use the SQUARE printout to make sure that the printout is free of image contraction, elongation, and soiling.

> **MEMO**
> After completion of the print test, if the printing was normal, copy a document. If there is any defect in the copied image, there is a defect in the scan section.

2.3.2.2 Sensor test

i-SENSYS MF4150 / i-SENSYS MF4140 / i-SENSYS MF4120 /

SENSOR TEST is selected from the H/W TEST menu. In this test, the state of each sensor of this machine can be checked on the display. For the sensor that uses the sensor arm and the microswitch, the output of the sensor can be confirmed by moving them by the hand.

```
SENSOR TEST ─┬─ HOOK1 TEST              : handset status
             ├─ HOOK2 TEST
             ├─ ADF DS TEST             :
             ├─ ADF DES TEST            : ADF detect
             ├─ CRG TEST                : ADF detect
             ├─ TN VALUE                : toner remain value (0-255)
             ├─ RING DETECT
             ├─ CNG DETECT(AnsMode)
             └─ CNG DETECT(FAX/TEL)
```

F-2-5

2.3.2.3 Key test

i-SENSYS MF4150 / i-SENSYS MF4140 / i-SENSYS MF4120 /

KEY TEST is selected from the H/W TEST menu. In this test, whether the button on the operation panel works correctly can be checked.
Operation key test
In this test, the character on the display disappears when the key corresponding to the character is pushed. The correspondence table of the character and the key is as follows.
When the key is pushed for all keys, it is checked that the corresponding character on the display disappears.

T-2-17

Character	Operation button	Character	Operation button	Character	Operation button
0-9,*,#	Numeric key, tone key	K	[Start] key	V	[Hook] key
A	[COPY] key	L	[Clear] key	a	One-Touch Speed Dial [01] key
B	[SCAN] key	M	[Energy Saver] key	b	One-Touch Speed Dial [02] key
C	[Additional Functions] key	N	[View Settings] key	c	One-Touch Speed Dial [03] key
D	[System Monitor] key	O	[2-Sided] key	d	One-Touch Speed Dial [04] key
E	[Enlarge/Reduce] key	P	[Toner Gauge] key	e	One-Touch Speed Dial [05] key
F	[Density] key	Q	[OK] key	f	One-Touch Speed Dial [06] key
G	[Image Quality] key	R	[FAX] key	g	One-Touch Speed Dial [07] key
H	[Collate/2 on 1] key	S	[Address Book] key	h	One-Touch Speed Dial [08] key or [Reset] key
I	[+] key	T	[Coded Dial] key		
J	[-] key	U	[Redial/Pause] key		

One-touch dial key test
When the OK button is pushed, it becomes an one-touch dial key test.
The a thorough h characters corresponding to One-touch01 through 08 key are displayed. The character corresponding to respectively disappears when an one-touch key is pushed. Check that all characters disappear after all one-touch keys are pressed.

Chapter 3 System Construction

3.1 Construction

3.1.1 Function Configuration

i-SENSYS MF4150 / i-SENSYS MF4140 / i-SENSYS MF4120 /

The functions of this host machine are mainly composed of the 7 blocks: System
Control System, Scanning Control System, Printer Control System, Laser Scanner System, Image Formation System, Fixing System, Pickup/Feeding System.
Below is the block diagram.
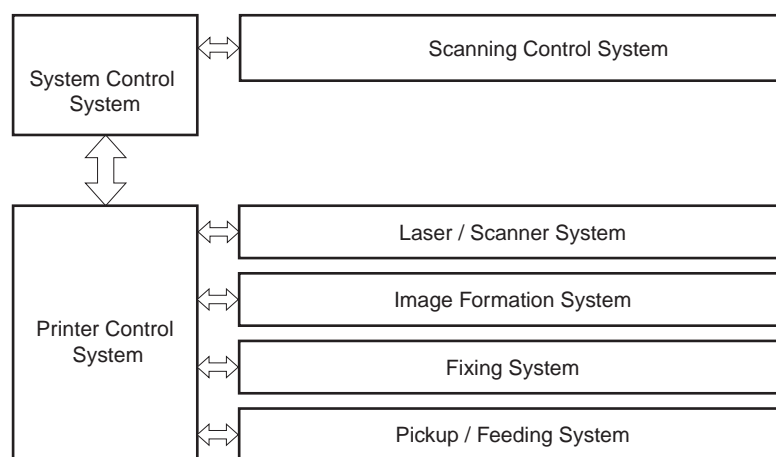
F-3-1

3.2 Product Specifications

3.2.1 Host Machine Specifications

i-SENSYS MF4150 / i-SENSYS MF4140 / i-SENSYS MF4120

Copyboard	fixed type
Body	desktop (ADF standard type: MF4130/MF4150 only)
Light source type	LED
Image reading method	contact sensor scanning method
Photosensitive medium	OPC drum
Reproduction method	indirect static copying method
Exposure method	semiconductor laser
Charging method	roller contact charging method
Development method	dry/single-component projection development
Transfer method	roller transfer method
Separation method	electrostatic separation (static eliminator) + curvature separation
Pickup method	cassette pickup: 1 multi-manual feeder
Cassette pickup method	pad separation method
Multifeeder pickup method	pad separation method
Drum cleaning method	rubber blade
Fixing method	SURF (on-demand method) fusing
Toner supply type	built-in drum toner cartridge
Toner type	magnetic negative toner
Toner save mode	Yes
Original type	sheet, book, three dimensional objects (up to 2kg)

Maximum original size	fixed type: 216mm x 297mm ADF: 216mm x 356mm
Reproduction ratio	1: 1+/-1.0%, 1:2.00, 1:1.41, 1:0.70, 1:0.50 zoom: 0.50 to 2.00 (minimum unit: 1%)
Reading resolution	600 x 600 dpi
Printing resolution	600 x 600 dpi
Warm-up time	9.0 sec or less
First print time	9.6 sec or less (A4/LTR)
Print speed	1-side: approx. 20 ppm (A4) approx. 21 ppm (LTR) 2-side: approx. 10 ppm
Cassette paper size	LTR, LGL, A4, B5, A5, Executive, Envelope (COM10, Monarch, DL,ISO-C5), Oficio, Brazil-Oficio, Mexico-Oficio, Folio, Government-LTR, Government-LGL, Foolscap (76 x 127 to 216 x 356 mm)
Multifeeder paper size	LTR, LGL, A4, B5, A5, Executive, Envelope (COM10, Monarch, DL,ISO-C5), Oficio, Brazil-Oficio, Mexico-Oficio, Folio, Government-LTR, Government-LGL, Foolscap (76 x 127 to 216 x 356 mm)
Cassette paper type	plain paper (64 to 90 g/m2), thick paper (105 to 128 g/m2), recycled paper (64 to 80 g/m2), transparency, label, envelope, postcard
Multifeeder tray paper type	plain paper (64 to 90 g/m2), thick paper (105 to 163 g/m2), recycled paper (64 to 80 g/m2), transparency, label, envelope, postcard
Cassette capacity	250 sheets (80 g/m2)
Multifeeder tray capacity	10 sheets (plain paper: 80 g/m2) 1 sheet (transparency, envelope)
Delivery tray stack	100 sheets (plain paper: 80 g/m2) 50 sheets (thick paper: 91 to 105 g/m2) 30 sheets (thick paper: 106 to 128 g/m2) 10 sheets (label, transparency, envelope, postcard)
Continuous reproduction	1 to 99 print (s)
Energy save mode	Yes (manual ON/OFF, auto OFF at a certain period of time, auto ON at fax reception/print data reception)
Operating environment (temperature range)	15 to 30 degC
Operating environment (humidity range)	10 - 80 %
Operating environment (atmospheric pressure)	0.61 to 1.01 hpa (0.6 to 1 atm)
Power supply rating	- 220V - 240V (50/60Hz) - 120V, 60Hz
Power consumption (maximum)	maximum consumption: 670W or less
Power consumption	consumption at operation mode: approx. 340W or less(reference value) consumption at standby mode: approx. 8.5W (reference value) consumption at sleep mode: approx. 3W (reference value)
Ozone	max: 0.05 ppm or less, average: 0.02 ppm or less
Dimensions	MF4150: 390 (W) x 432 (D) x 370 (H) mm (document pickup tray attached) MF4120/MF4122/MF4140: 390 (W) x 432 (D) x 303 (H) mm
Weight	MF4150: 13.4 kg approx. (toner cartridge included) MF4120/MF4122/MF4140: 12.4 kg approx. (toner cartridge included)

3.2.2 ADF Specifications

i-SENSYS MF4150 /

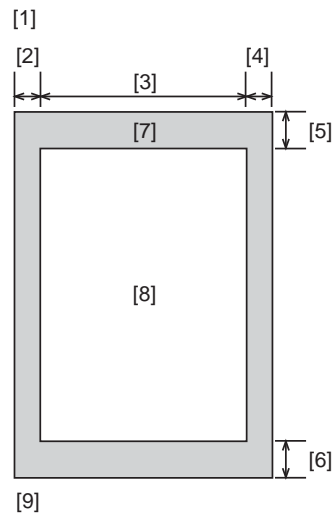| Original orientation	Face-up method
Original position	center reference
Original processing mode	1-sided to 1-sided copy, 1-sided to 2-sided copy
Original reading	stream reading method
Stack	35 sheets (80 g/m2 or less) 25 sheets (LGL size)
Mixed original sizes	No
Original AE detection	No
Original size recognition	No
Stamp	No
Operating environment	pursuant to the host machine

3.2.3 FAX Specifications

i-SENSYS MF4150 / i-SENSYS MF4140

Applicable lines	Analog line (single line) - Telephone subscriber line (PSTN)
Transmission method	Half-duplex communication
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 With automatic fallback function
Coding	MMR, MR, MH
Error correction	ITU-T ECM
Minimum receive input level	V.17, V.27ter, V.29: -6 to -43 dBm V.34: -10 to -43 dBm
Modem IC	CONEXANT DFX336
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
Half tone	256 gradation sequence
Printing resolution	600 dpi x 600 dpi
Reduction for reception	Fixed reduction: No Automatic reduction: 75 to 100%
FAX/TEL switching	Yes.
Answering machine connection	Yes.
Remote reception	ID entry method ID: 2 digits (default is 25)
Auto dialing	One-touch dial: 7 Speed dial: 100 Group dial: Maximum 106
Delayed transmission	No.
Broadcast transmission	Number of Destination: Maximum 123 (one-touch / speed dial: 107, ten key: 16)
Dual access	Reservation Capacity: Maximum 64 jobs
Memory reception	Approximately 256 sheets (Canon FAX standard chart No.1)
Image data backup	No.

3.3 Function List

3.3.1 Scanning Range (ADF)

i-SENSYS MF4150

F-3-2

[1] leading edge of original   [6] trailing edge margin

[2] left margin   [7] non-scanning area

[3] effective scanning width   [8] scanning range

[4] right marginmargin   [9] trailing edge of original

[5] leading edge margin

T-3-1

item	A4	Letter	Legal
effective scanning width	206 +2.0/-2.0 mm	212 +2.0/-2.0 mm	212 +2.0/-2.0 mm
left margin	2.0 +2.0/-2.0 mm	2.0 +2.0/-2.0 mm	2.0 +2.0/-2.0 mm
right margin	2.0 +2.0/-2.0 mm	2.0 +2.0/-2.0 mm	2.0 +2.0/-2.0 mm
leading edge margin	2.0 +2.0/-2.0 mm	2.0 +2.0/-2.0 mm	2.0 +2.0/-2.0 mm
trailing edge margin	2.0 +2.0/-2.0 mm	2.0 +2.0/-2.0 mm	2.0 +2.0/-2.0 mm

3.3.2 Scanning Range (copyboard)

i-SENSYS MF4150 / i-SENSYS MF4140 / i-SENSYS MF4120
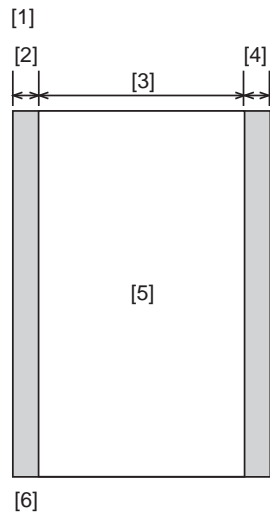
F-3-3

[1] leading edge of document   [4] right margin

[2] left margin   [5] scanning range

[3] effective scanning width   [6] trailing edge of document

T-3-2

item	A4	Letter
effective scanning width	206 mm	212 mm
left margin	2.0 +2.0/-2.0 mm	2.0 +2.0/-2.0 mm
right margin	2.0 +2.0/-2.0 mm	2.0 +2.0/-2.0 mm

3.3.3 Recording Range (Copy)
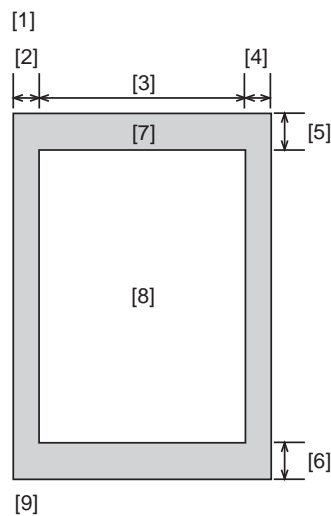
i-SENSYS MF4150 / i-SENSYS MF4140 / i-SENSYS MF4120
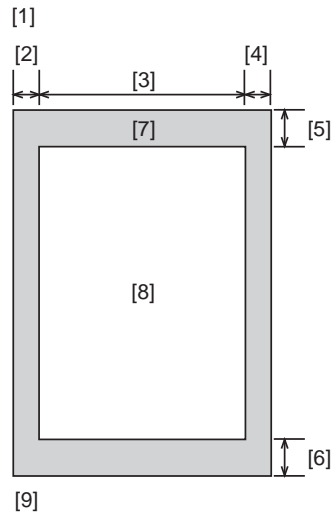
F-3-4

[1] leading edge of document   [6] trailing edge margin
[2] left margin   [7] non-scanning area
[3] effective scanning width   [8] scanning range
[4] right margin   [9] trailing edge of document
[5] trailing edge margin

T-3-3

item	A4	Letter	Legal
effective recording width	204 +1.0/-2.0 mm	210 +2.0/-2.0 mm	210 +2.0/-2.0 mm
effective recording left margin	3.0 +2.0/-2.0 mm	3.0 +2.0/-2.0 mm	3.0 +2.0/-2.0 mm
right margin	3.0 +2.0/-2.0 mm	3.0 +2.0/-2.0 mm	3.0 +2.0/-2.0 mm
leading edge margin	4.0 +2.0/-2.0 mm	4.0 +2.0/-2.0 mm	4.0 +2.0/-2.0 mm
trailing edge margin	5.0 +2.0/-2.0 mm	5.0 +2.0/-2.0 mm	5.0 +2.0/-2.0 mm

3.3.4 Recording Range (Reception)

i-SENSYS MF4150 / i-SENSYS MF4140

F-3-5

[1] leading edge of document   [6] trailing edge margin
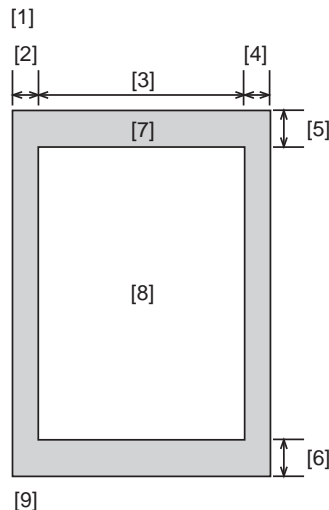[2]left margin   [7] non-scanning area

[3] effective scanning width   [8] scanning range

[4] right margin   [9] trailing edge of document

[5] leading edge margin

T-3-4

item	A4	Letter	Legal
effective recording width	206 +1.0/-2.0 mm	212 +2.0/-2.0 mm	212 +2.0/-2.0 mm
left margin	2.0 +2.0/-2.0 mm	2.0 +2.0/-2.0 mm	2.0 +2.0/-2.0 mm
right margin	2.0 +2.0/-2.0 mm	2.0 +2.0/-2.0 mm	2.0 +2.0/-2.0 mm
leading edge margin	2.0 +2.0/-2.0 mm	2.0 +2.0/-2.0 mm	2.0 +2.0/-2.0 mm
trailing edge margin	6.0 +2.0/-2.0 mm	6.0 +2.0/-2.0 mm	6.0 +2.0/-2.0 mm

3.3.5 Recording Range (Printer)

i-SENSYS MF4150 / i-SENSYS MF4140 / i-SENSYS MF4120

F-3-6

[1] leading edge of document   [6] trailing edge margin

[2] left margin   [7] non-scanning area

[3] effective scanning width   [8] scanning range

[4] right margin   [9] trailing edge of document

[5] leading edge margin

T-3-5

item	A4	Letter	Legal
left margin	5.0 +2.0/-2.0 mm	5.0 +2.0/-2.0 mm	5.0 +2.0/-2.0 mm
right margin	5.0 +2.0/-2.0 mm	5.0 +2.0/-2.0 mm	5.0 +2.0/-2.0 mm
leading edge margin	6.0 +2.0/-2.0 mm	6.0 +2.0/-2.0 mm	6.0 +2.0/-2.0 mm
trailing edge margin	6.0 +2.0/-2.0 mm	6.0 +2.0/-2.0 mm	6.0 +2.0/-2.0 mm

3.3.6 Operation Environment of the Printer Driver

i-SENSYS MF4150 / i-SENSYS MF4140 / i-SENSYS MF4120 /

Operation environment
    Windows 98/98SE, Windows Me, Windows 2000, Windows XP
Computer
    Computer in which Windows 98/98SE, Windows Me, Windows 2000, or Windows XP runs properly.
Hardware environment
    - IBM PC or IBM compatible PC
    - CD-ROM drive or network environment accessible to CD-ROM
    - PC equipped with USB port and installed with USB class driver

T-3-6

OS	CPU	RAM
Windows 98/98SE	Intel Pentium 90 MHz or more	128 MB or more
Windows Me	Intel Pentium 150 MHz or more	128 MB or more
Windows 2000	Intel Pentium 133 MHz or more	128 MB or more
Windows XP	Intel Pentium ii/ Celeron 300 MHz or more	128 MB or more

    * Log in as a user account to which the administrator's right is authorized.

Aug 21 2006