Service Bulletin

Issued by Canon Europa N.V.

Model:	Ref No.:
iR2270	iR4570-005
iR2870 iR3570	(F1-T01-0M4-10009-01)
iR4570	Date:
	26-11-04

#### Subject:

SST Operation Guide

Particulars:

An iR4570/3570, 2870/2270 Series machine may be upgraded using a PC to which the SST (v3.01 or later) has been installed and the System CD supplied for the iR4570/3570, 2870/2270 Series. This bulletin provides an overview of upgrading work and details of its procedure.

Note:

Previous Service Manuals do not contain descriptions of upgrading procedures in keeping with the release of each version of the SST. Future Service Manuals, on the other hand, will contain appropriate descriptions that are current at time of downloading.

# SST Operation Guide

# iR4570/3570, 2870/2270 Series iR2270



Nov 5 2004

#### 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.

#### Corrections

This manual may contain technical inaccuracies or typographical errors due to improvements or changes in products. When changes occur in applicable products or in the contents of this manual, Canon will release technical information as the need arises. In the event of major changes in the contents of this manual over a long or short period, Canon will issue a new edition of this manual.

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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
e je	



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 Upgrading

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## 1.1 Outline

#### 1.1.1 Outline of Upgrading the Machine

The machine and its accessories may be upgraded by replacing DIMM-ROM or using the Service Support Tool (hereafter, SST) installed on a personal computer (PC). The following table shows the various system software used in conjunction with the machine and how they may be upgraded.

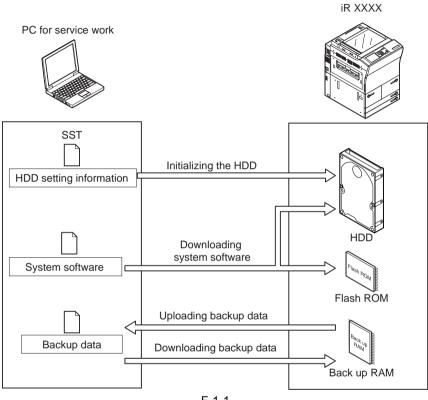
Туре	Type of system software	Meth	od of upgrading	Remarks
		SST	ROM-DIMM replacement	
Machin	2	•		
	System (main controller)	Yes	No	The machine controller is also used to control the Super G3 Fax Board-Q1.
	Language (language mode)	Yes	No	
	RUI (remote user interface)	Yes	No	
	Boot (boot program)	Yes	Yes	
	MEAP CONT (MEAP library)	Yes	No	
	SDICT (OCR dictionary)	Yes	No	
	KEY (encryption communication key)	Yes	No	
	DCON (DC controller)	Yes	No	
	RCON (reader controller)	Yes	No	The reader controller is also used to control the ADF.
Accesso	ry			
	Multi-FAX Board-D1	Yes	Yes	
	Fin-S1 (Finisher-S1)	Yes	No	A special service tool (downloader PCB: FY9-2034) is needed.
	Fin_QR (Finisher-Q3/Saddle Finisher-Q4)	Yes	No	A special service tool (downloader PCB: FY9-2034) is needed.

T-1-1

## 1.1.2 Outline of the Service Support Tool

0008-7307

The Service Support Tool (hereafter, SST) has the following functions:



F-1-1

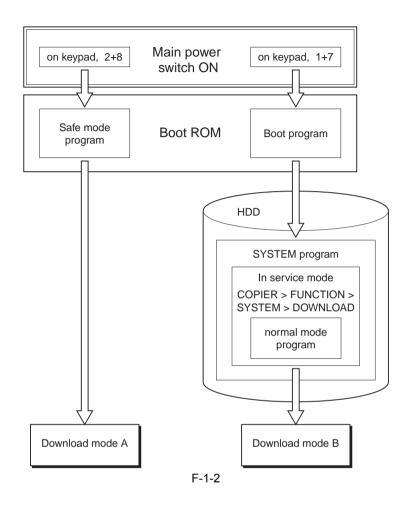
The machine must be in download mode when the SST is used. The download control program comes in 2 types:

#### -Normal Mode (download mode B)

turn on the main power while holding down 1+7; then, make the following selections in service mode: COPIER>FUNCTION>SYSTEM>DOWNLOAD

#### -Safe Mode(download mode A)

turn on the main power while holding down 2+8



## Â

Use safe mode for the following: -when you have replaced the HDD. -when the system fails to start up normally.

The following table shows the functions that may be used in download mode with the SST

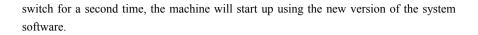
in use:

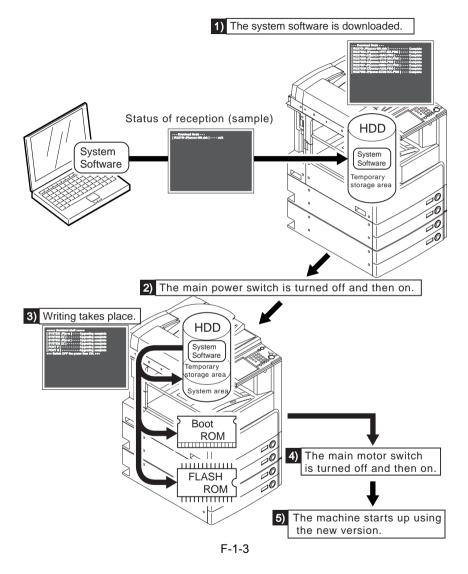
#### T-1-2

Function	Download mode		
	Normal mode (download mode B)	Safe mode (download mode A)	
	(uowinoau moue D)	· · · · ·	
Formatting the HDD	-	Entire HDD	
	-	BOOTDEV	
	FSTDEV	-	
	TMP_GEN	-	
	TMP_PSS	-	
	TMP_FAX	-	
	APL_SEND	-	
	APL_MEAP	-	
	APL_GEN	-	
	PDL_DEV	-	
	FSTCDEV	-	
Downloading the system	-System	-System	
software	-Language	-Language	
	-RUI	-RUI	
	-Boot	-Boot	
	-G3FAX	-	
	-Dcon	-Dcon	
	-Rcon	-Rcon	
	-SDICT	-SDICT	
	-MEAPCONT	-MEAPCONT	
	-KEY	-KEY	
Uploading/downloading	-	-SramImg	
backup data	-	-Meapback	

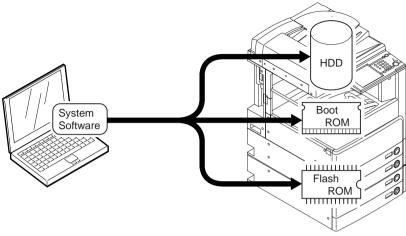
#### Installing the System Software

The system software that has been downloaded by the SST (version 3.01 or later) is saved in the temporary storage area of the HDD. You must then turn off and then on the main power switch so that the system software will be written to the system area, boot ROM, and flash ROM when the machine starts up. When you turn off and then on the main power





If a previous version of the SST is used for downloading, the system software will be written directly to the HDD, boot ROM, and flash ROM.



F-1-4

## **1.2** Making Preparations

### 1.2.1 Registering the System Software

You must first register the system software found on the System CD to the SST.

[Preparatory Work] Items to Prepare -PC to which the SST (version 3.01 or later) has been installed -System CD for the iR4570/3570, 2870/2270 Series

[Registering the System Software]

- 1) Start up the PC.
- 2) Set the system CD in the PC.
- 3) Start up the SST.
- 4) Click [Register System Software]

Service Support Tool DLMO (Ver. 3.03E)		
→ 🌏		
	Click a button to execute.	Select a model to connect
)	CONNECT	_
	Register System Software	
	Delete System Software	
	Delete Backup Data	
	System Management	
	START	
	CANGEL	
	EXIT	

F-1-5

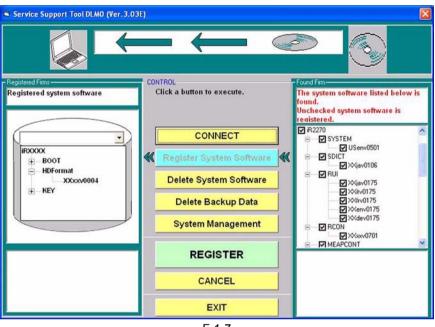
0008-7310

5) Select the drive in which you have set the System CD, and click [SEARCH].

Service Support Tool DLMO (Ver. 3.0	E)	
- Registered Firms	CONTROL	- Regist Firm-
Registered system software	Click a button to execute.	Select a drive and folder.
	CONNECT	
	Register System Software	
	Delete System Software	ServTool
	Delete Backup Data	
	System Management	
	REGISTER	SEARCH
	CANCEL	
	EXIT	

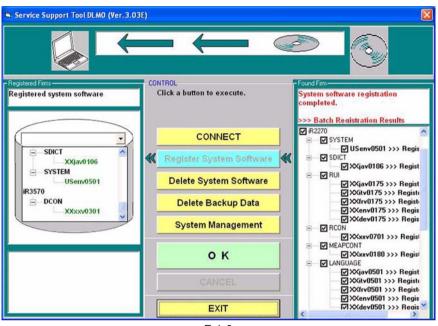
F-1-6

6) The list of system software found on the System CD appears. Remove the check from the folders and software you will not need; then, click [REGISTER].



F-1-7

7) When the result of registration is indicated, click [OK].



F-1-8

### 1.2.2 Making Connections

#### 0008-7373

You are now ready to connect the PC to the machine.

[Preparatory Work]

Items to Prepare

- PC to which the SST (version 3.01 or later) and the system software for the iR4570/3570,

2870/2270 has been registered

- Twisted pair cross cable

10Base-T: Category 3 or 5

100Base-TX: Category 5

[Procedure]

1) Start up the PC.

2) Check the network settings of the PC.

- At the command prompt, type 'IPCONFIG', and press the Return key.

- Check to see that the network settings are as follows:

IP address: 172.16.1.160 subnet mask: 255.255.255.0

default gateway: any

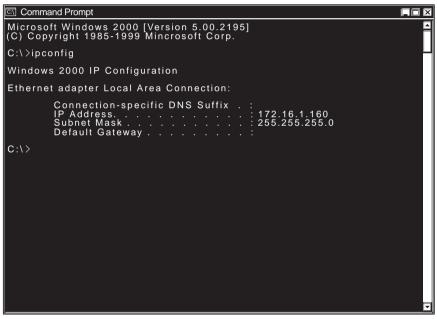
Do not use the following IP address:

- 172.16.1.0

- 172.16.1.100

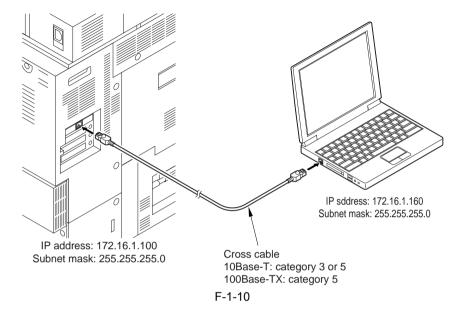
- 172.16.1.255

If the settings are not as indicated below, make the appropriate changes:



F-1-9

- Check to see that the Execute/Memory lamp on the control panel is off, and turn off the main power switch (iR4570/3570, 2870/2270 Series).
- 3-1) Hold down the power switch on the control panel for 3 sec or more.
- 3-2) Follow the instructions indicated on the control panel so that the main power switch may be turned off.
- 3-3) Turn off the main power switch.



4) Connect the PC to the machine using a cross cable (iR4570/3570, 2870/2270 Series).

5) Start up the machine to suit the download mode you will be using (iR4570/3570, 2870/2270 Series).

#### - Normal Mode

Turn on the main power switch while holding down 1+7.

When the machine has started up, make the following selections: COPIER > FUNCTION > SYSTEM > DOWNLOAD.

#### - Safe Mode

Turn on the main power switch while holding down 2+8.

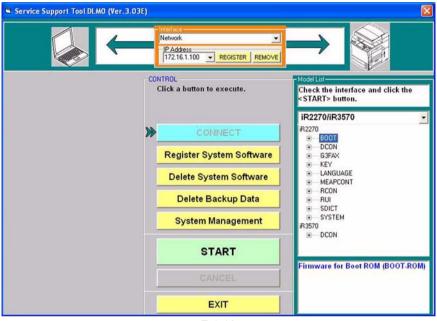
6) Start up the Service Support Tool.

7) Select the model of the machine to connect (iR2270/3570).

Service Support Tool DLMO (Ver. 3.03E)	)			
→ 📣				
		ITROL Click a button to execute.		Model List Select a model to connect
				Select a model to connect
	>>	CONNECT	>>	iR2220/iR2820/iR3320 iR2270/iR3570
		Register System Software		iR5570 iR8070/iR8570N
		Delete System Software		iR9999 iRC6800 iRXXXX
		Delete Backup Data		100000
		System Management		
		START	1	
		CANGEL		
		EXIT		

F-1-11

8) Click [START].



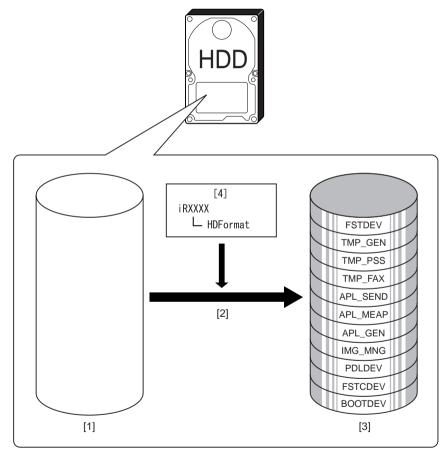
F-1-12

## 1.3 Formatting the HDD

#### 1.3.1 Formatting All Partitions

When you format all partitions of the HDD, all individual partitions will be initialized and made ready for use by the main controller.

The information needed for partition settings is stored under HDFormat of the iRXXXX.



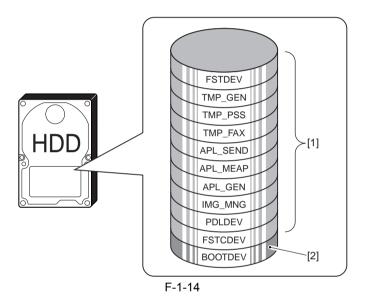
#### 0008-7381

- [1] HDD (service part; without partition setup)
- [2] Formatting of all partitions (in safe mode only)
- [3] HDD after formatting
- [4] Partition setup information

## 1.3.2 Formatting Selected Partitions

0008-7382

You can also format (initialize) only those partitions that you select.



- [1] Formatting possible in normal mode
- [2] Formatting possible in safe mode (requires downloading of System and RUI after formatting)

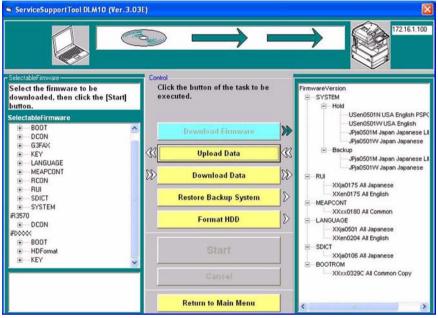
## A

- 1. Unless you have selected 'ALL', you may execute formatting without registering HDFormat.
- 2. An attempt to format after selecting TMP\_FAX in the absence of a fax board will cause an error.
- 3. An attempt to format after selecting FSTCDEV for expansion will cause an

## 1.3.3 Formatting Procedure

0008-7387

1) Click [Format HDD].



F-1-15

2) Select the partitions you want to format. Or, select 'ALL'.

ServiceSupportTool DLM10 (Ver.3.03E)		
		172 16.1.100
Contro	l.	- HDDFormat-
	ck the button of the task to be ecuted.	Select the partition, then click [Start] button.
\$\$_	Download Firmware	
_>>	Upload Data	Safe Mode
»»_	Download Data	BOOTDEV Normal Mode
	Restore Backup System	
	Format HDD	ALL:Initialize whole HDD (Reset
	Start	partioning
	Cancel	
	Return to Main Menu	

F-1-16

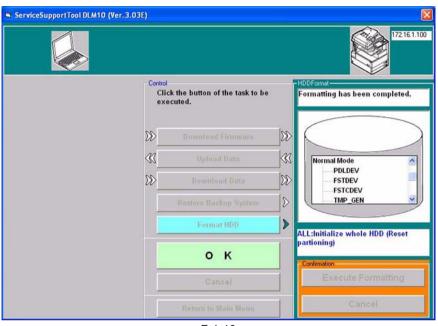
3) Click [Start].

4) When the Confirmation screen has appeared, click [Execute Formatting].

ServiceSupportTool DLM10 (Ver. 3.03E)		
		172 16.1.100
Contro	I	- HDDFormat
	ck the button of the task to be ecuted.	Execute formating ?
ex	eculea.	
22>	Download Firmware	$\mathbb{P}$
<b>3</b> 2	Upload Data	Safe Mode
>>	Download Data	BOOTDEV
<i>w</i>		Normal Mode
	Restore Backup System	POLDEV
	Format HDD	ALL:Initialize whole HDD (Reset
	Start	partioning)
	Gancel	Execute Formatting
	Return to Main Menu	Cancel

F-1-17

5) When the session has ended, click [OK].



F-1-18

6) Start a download session. Or, turn off and then on the machine to end the work.

## A

- If you have formatted all partitions or formatted BOOTDEV, be sure to download System newly. (Otherwise, 'E602' will occur when you turn on the main power.)

1-21

## 1.4 Downloading System Software

## 1.4.1 Downloading System

#### 1.4.1.1 Outline

The system software comes in 2 types (one for use inside Japan and the other, outside Japan).

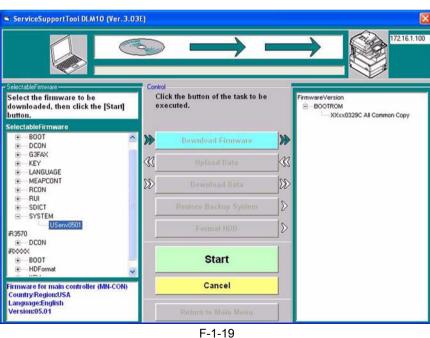
Unlike previous iR controllers, however, there is only one type of system software. (Previously, one type supported NetWare while the other did not. There is now only one type for the machine supporting NetWare.)

#### 1.4.1.2 Downloading Procedure

You can run a downloading session either in normal or safe mode.

1) Select the version of the system you want to download.

Control Click the button of the task to be Select the firmware to be FirmwareVersion executed. downloaded, then click the [Start] BOOTROM XXxx0329C All Common Copy button. SelectableFirmware BOOT >> >> DCON rà. G3FAX ÷ KEY LANGUAGE (Å) MEAPCONT Ŵ 20 RCON ŵ RUI 8 SDICT ÷, SYSTEM É. USenv050 8 R3570 + DCON ROOM BOOT Start (iii) HDFormal ÷. Firmware for main controller (MN-CON) Cancel Country Region:USA Language:English Version:05.01



#### 0009-0501

0008-7395

#### 2) Click [Start].

ServiceSupportTool DLM10 (Ver. 3.03	IE)			
	>>			172161.100
- SelectableFirmware	Contro	1		
Select the firmware to be downloaded, then click the [Start] button.		ck the button of the task to be ecuted.		FirmwareVersion BOOTROM Xxxx0329C All Common Copy
SelectableFirmware			-1	
BOOT     DCON	>>	Download Firmware	>>	
€—G3FAX			100	
€— KEY	<<<		38	
LANGUAGE     MEAPCONT	00		00	
RCON	DD		D	
B RUI			8	
SDICT     SYSTEM	_	termore tracemb system		
USenv0501			8	
R3570 	_			
FROOM			1	
€—BOOT —		Start		
+ HDFormat	-			
Firmware for main controller (MN-CON) Country:Region:USA Language:English Version:05.01		Cancel		

F-1-20

3) When the session has ended, click [OK].

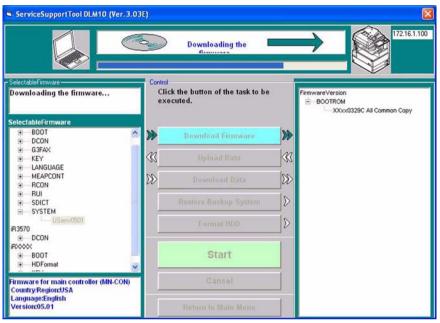
ServiceSupportTool DLM10 (Ve	r. 3.03E)		► 172.16.1.100
SelectableFirmware Downloading complete		ck the button of the task to be ecuted.	FirmwareVersion BOOTROM XXxx0329C All Common Copy
SelectableFirmware =	▲ **	Download Finnware Uploait Data Download Data Restore Backup System Format HDD O K	
Firmware for main controller (MN-CC Country:Region:USA Language:English Version:05.01		Cancel Return to Moin Menu	

F-1-21

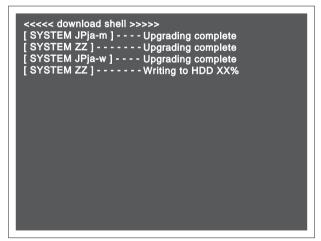
- 4) If you want to start another downloading session, see the appropriate instructions.
- 5) When you are done with downloading, turn off and then on the main power (iR4570/ 3570, 2870/2270 Series).
- 6) See the upgrade status indicated on the control panel (iR4570/3570, 2870/2270 Series). When a message appears asking you to turn off and then on the switch, turn off and then on the main power (iR4570/3570,2870/2270 Series).

## A

Be sure never to turn off the power while the machine is executing a downloading session or writing downloaded software. The ongoing session will be suspended and the machine may fail to start up.



F-1-22



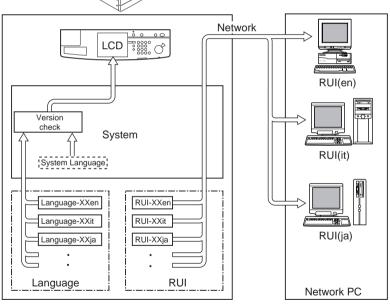
If the machine fails to start up, format BOOTDEV using HDFormat and then download such software as System, Language, and RUI.

### 1.4.2 Downloading RUI, and Language

### 1.4.2.1 Outline

0008-7410





F-1-24

#### **Control Panel LCD Display Language**

Check the version of System and Language.

1. If correct, You can switch languages by making the following selections in user mode: common settings>display language change.

2. If not correct, 'E744' will be indicated, and System Language will be used when the main power is turned off and then on.

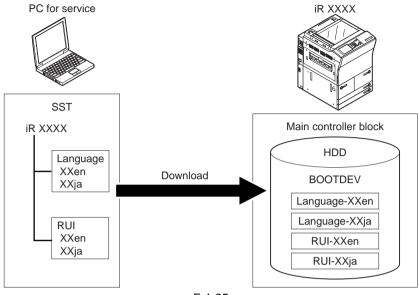
#### T-1-4

#### RUI Display Language

Select using the RUI.

You can select a different language for a different PC.

<language code=""></language>	<language></language>
de	German
en	English
fr	French
it	Italian
ja	Japanese



F-1-25

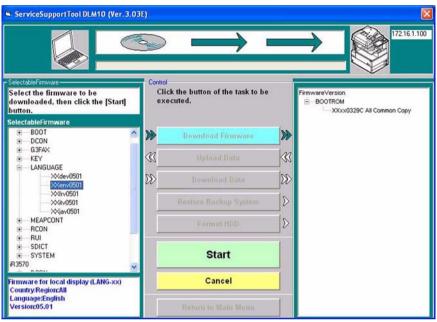
### 1.4.2.2 Downloading Procedure

#### 0008-7411

You can run a download session in either normal or safe mode.

[In the Case of Language]

1) Select the version of Language to download.



F-1-26

2) Click [Start].

ServiceSupportTool DLM10 (Ver.3.	D3E)	$\rightarrow$		►
SelectableFirmware	Contro			
Select the firmware to be downloaded, then click the [Start] button.		ck the button of the task to be ecuted.	8	FirmwareVersion BOOTROM XXxx0329C All Common Copy
SelectableFirmware + B00T + DC0N	*	Download Firmware	>>>	
● G3FAX ● KEY ● LANGUAGE	< <u>(</u>	Upload Data	< * *	
	X>	Download Data	_\X	
→          →          →          ×          ×          ×          ×          ×          ×          ×          ×         ×          × <t< td=""><td></td><td>Restore Backup System</td><td>⊳</td><td></td></t<>		Restore Backup System	⊳	
		Format HDD	⊳	
		Start		
Firmware for local display (LANG-xx) Country:Region:All		Cancel		
Language:English Version:05.01			1	

F-1-27

3) When the result of the downloading session has appeared, click [OK].

ServiceSupportTool DLM10 (Ver.3.	03E)		17216.1.100
SelectableFirmware Downloading complete		ck the button of the task to be ecuted.	FirmwareVersion
SelectableFirmware	★	Download Firmware Upload Data Dewnload Data Restore Backup System Format HDD O K Cancel	— XXxx0329C All Common Copy
Firmware for local display (LANG-xx) Country:Region:All Language:English Version:05.01		Cancel Return to Main Menu	

F-1-28

- 4) If you want another downloading session, see the appropriate instructions.
- 5) When you are done, turn off and then on the main power (iR4570/3570, 2870/2270 Series).
- 6) See the status of upgrading indicated on the control panel (iR4570/3570, 2870/2270 Series). When a message appears asking you to turn off and then on the machine, turn off and then on the main power (iR4570/3570, 2870/2270 Series).

# 

Be sure never to turn off the power while the machine is executing a downloading session or writing downloaded software. Otherwise, the ongoing session will be suspended and the machine may fail to start up.

If the machine fails to start up, format BOOTDEV using HDFormat, and download such software as System, Language, and RUI.

### 1.4.3 Downloading SDICT

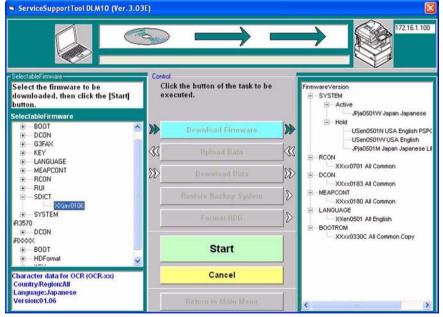
#### 1.4.3.1 Outline

SDICT is a dictionary used when converting image data read by the reader unit into character code (OCR processing). This function is used in conjunction with the PDF Generation Expansion Kit-B1.

### 1.4.3.2 Downloading Procedure

You can run a downloading session in either normal or safe mode.

1) Select the version of SDICT to download.

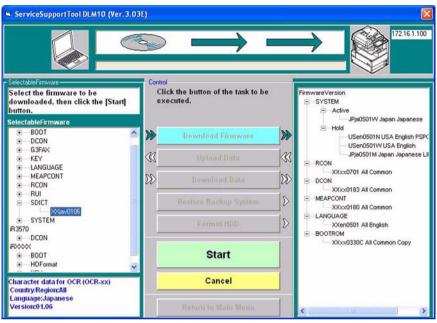


F-1-29

2) Click [Start].

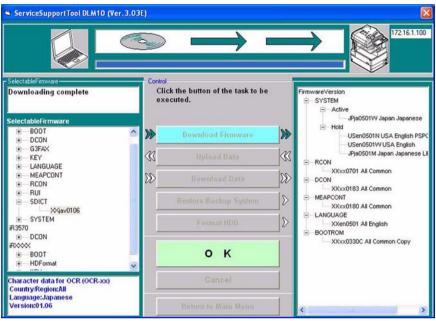
#### 0009-0391

0008-7842



F-1-30

3) When the session has ended, click [OK].



F-1-31

- 4) If you want to run another downloading session, see the appropriate instructions.
- 5) When you are done, turn off and then on the main power (iR4570/3570, 2870/2270 Series).
- 6) See the status of upgrading indicated on the control panel (iR4570/3570, 2870/2270 Series). When a message appears asking you to turn off and then on the switch, turn off and then on the main power (iR4570/3570, 2870/2270 Series).

# A

Be sure never to turn off the machine while it is executing a downloading session or writing downloaded software. Otherwise, the ongoing session will be suspended and the machine may fail to start up.

If the machine fails to start up, format BOOTDEV using HDFormat, and download such software as System, Language, and RUI.

### 1.4.4 Downloading MEAPCONT

#### 1.4.4.1 Outline

MEAPCONT is a standard library used in conjunction with a MEAP application.

#### 1.4.4.2 Downloading Procedure

You can execute a downloading session in either normal or safe mode.

1) Select the version of MEAPCONT you want to download.

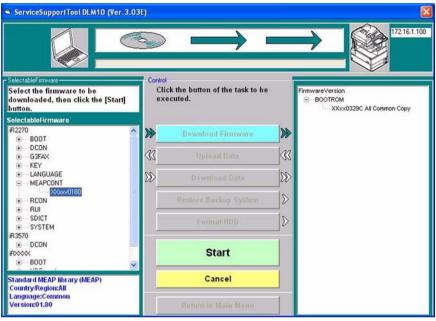
ServiceSupportTool DLM10 (Ver. 3.03	IE)			X
	5			172.16.1.100
- SelectableFirmware	Contro	l	- 1	
Select the firmware to be downloaded, then click the [Start] button.		ck the button of the task to be ecuted.		FirmwareVersion BOOTROM XXxx0329C All Common Copy
SelectableFirmware			- 6	
R2270	*	Download Firmware	>>	
DCON	22		100	
⊕—G3FAX ⊛—KEY	≪≤		38	
LANGUAGE     MEAPCONT	8		22	
XXxxv0180	ΙĒ	Restore Backup System	8	
BUI     SDICT	ΙĒ	Format HDD	8	
DCON		Start		
₩000X		Start		
Standard MEAP library (MEAP) Country:Region:All		Cancel		
Language:Common Version:01.80	Г			

F-1-32

2) Click [Start].

0009-0413

0008-7844



F-1-33

3) When the downloading session has ended, click [OK].

ServiceSupportTool DLM10 (Ver.3)	03E)		► 172:16.1:100
SelectableFimware Downloading complete		ck the button of the task to be ecuted.	FirmwareVersion B-BOOTROM 
SelectableFirmware           P2270           P = BOOT           P = DOT           P = DOT           P = G3FAX           P = LANGUAGE           P = MEAPCONT           P = ACON           P = RUI           P = SUICT           P = SYSTEM           R3570           P = DOCN           PXXXXVI80           P = DOT           P = SOT           P = SOT	★	Download Firmware Upload Data Download Data Restore Backup System Format HDD O K Cancel	

F-1-34

- 4) If you want to run another downloading session, see the appropriate instructions.
- 5) When you are done, turn off and then on the main power (iR4570/3570, 2870/2270 Series).
- 6) See the status of upgrading indicated on the control panel (iR4570/3570, 2870/2270 Series). When a message appears asking you to turn off and then on the switch, turn off and then on the main power (iR4570/3570, 2870/2270 Series).

# A

Be sure never to turn off the machine while it is executing a downloading session or writing downloaded software. Otherwise, the ongoing session will be suspended and the machine may fail to start up.

If the machine fails to start up, format BOOTDEV using HDFormat, and download such software as System, Language, and RUI.

### 1.4.5 Downloading KEY

### 1.4.5.1 Outline

2) Click [Start].

KEY serves as a certificate used for encrypted communications over a network.

# A

KEY may be either of 2 types: XXxc and XXxp. Be sure to download both types.

### 1.4.5.2 Downloading Procedure

You can execute a download session in either normal or safe mode.

1) Select the version of KEY you want to download.

	3	$\longrightarrow$		→ (¥172161.
SelectableFirmware Downloading complete		ck the button of the task to be ecuted.		FirmwareVersion B. BOTROM - XXxx0329C All Common Copy
electableFirmware				
R2270	^ <b>&gt;&gt;</b>	Download Firmware	>>>	
DCON     G3FAX	3	Upload Data	3	
E-KEY		- #300a00 107775		
×××××××××××××××××××××××××××××××××××××	22>		D	
LANGUAGE     MEAPCONT			8	
. SDICT	_	Format HDD	8	
SYSTEM R3570     DCON R00000		Start		
Key and certificate for encrypted		Cancel		
Country/Region:All Language:xc Var siaur04_34			1	

0009-0010

0008-9881

ServiceSupportTool DLM10 (Ver	.3.03E)	$\rightarrow$		► 17216.1.100
SelectableFirmware Downloading complete		ck the button of the task to be ecuted.		FirmwareVersion. B→BOOTROM → XXxx03239C All Common Copy
SelectableFirmware  P2270  B = B00T  CON  G = G3FAX  KEY  KEY  KEY  KEY  KEY  KEY  KEY  KE	▲ ₩ ≪3 ₩	Download Firmware Upload Data Download Data Restore Backup System Format HDD	<ul> <li>★</li> <li>↓</li> <li>↓</li></ul>	
SDICT     SYSTEM     SYSTEM     SYSTEM     SST0     DCDN     FOCOX     Communication     Signametry		Start Cancel		

F-1-36

3) When the downloading session has ended, click [OK].

ServiceSupportTool DLM10 (Ve	r. 3.03E)			X
	S			<b>172 16 1.100</b>
- SelectableFirmware	Contro	[	-	
Downloading complete		ck the button of the task to be ecuted.	8	FirmwareVersion BOOTROM XXxx0329C All Common Copy
SelectableFirmware R2270		Download Firmware	>>	
BOOT  DCON		Dominoliti Fittiriti e		
⊕— G3FAX ⊟— KEY	38		≪<	
Ххсv0431 Ххрv0431	DD>		28>	
LANGUAGE     MEAPCONT     RCON		Restore Backup System	⊳	
		Format HDD	⊳	
SYSTEM     R3570     DCON     FD0000		ок		
Key and certificate for encrypted communication		Cancel		
Country:Region:All Language:xc Version:01:31		Return to Main Menu		

F-1-37

- 4) If you want to execute a different downloading session, see the appropriate instructions.
- 5) When you are done, turn off and then on the main power (iR4570/3570, 2870/2270 Series).
- 6) See the status of upgrading indicated on the control panel of the machine (iR4570/3570, 2870/2270 Series). When a message appears asking you to turn off and then on the switch, turn off and then on the main power (iR4570/3570, 2870/2270 Series).

# 

Be sure never to turn off the machine while it is executing a downloading session or writing downloaded system software. Otherwise, the ongoing write operation will be suspended and the machine may fail to start up.

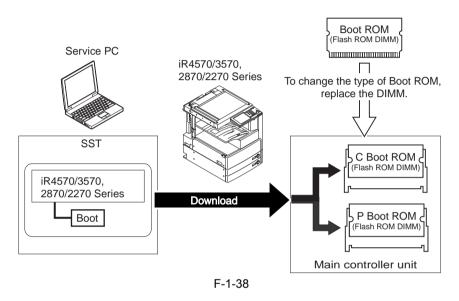
If the machine fails to start up, format BOOTDEV using HDFormat, and download such software as System, Language, and RUI.

### 1.4.6 Downloading BOOT

#### 1.4.6.1 Outline

0008-7421

Boot registered in the SST may be used in common for various types of boot ROMs. You cannot change the type of a boot ROM by means of downloading.



# 

If a downloading session fails, you will have to replace the boot ROM.

#### 1.4.6.2 Downloading Procedure

0008-7422

You can execute a downloading session in either normal or safe mode.

1) Select the version of BOOT to download.

ServiceSupportTool DLM10 (Ver. 3.03	IE)			
	>>			172161.100
SelectableFirmware	Contro			
Select the firmware to be downloaded, then click the [Start] button.		ck the button of the task to be ecuted.		FirmwareVersion BOOTROM XXxx0329C All Common Copy
SelectableFirmware			- 1	
R2270	*	Download Firmware	>>	
×xxxv0330				
DCON     G3FAX	<<		38	
GIFAX     E     KEY     LANGUAGE	$\gg$		22	
MEAPCONT     RCON		Restore Backup System	>	
⊕ RUI     ⊕ SDICT     ⊕ SYSTEM		Format HDD	⊳	
R3570		Start		
Firmware for Boot ROM (BOOT-ROM) Country:Region:All		Cancel		
Language:Common Version:03.30	Г			

F-1-39

2) Click [Start].

ServiceSupportTool DLM10 (Ver.3.0	3E)	$\rightarrow$		►
SelectableFirmware	Contro		4	
Select the firmware to be downloaded, then click the [Start] button.		ck the button of the task to be ecuted.		FirmwareVersion BOOTROM XXxx0329C All Common Copy
SelectableFirmware			1.0	
BOOT	W	Download Firmware	*	
+ DCON	<b>3</b>		3	
⊕ G3FAX	-	opression or state		
KEY     LANGUAGE	D		D	
MEAPCONT     RCON     RUI	Ē	Restore Backup System	⊳	
<ul> <li>● SDICT</li> <li>● SYSTEM</li> </ul>		Format HDD	8	
R3570 ⊕ DCON RXXXX ⊕ B00T		Start		
Firmware for Boot ROM (BOOT-ROM) Country:Region:All		Cancel		
Language:Common Version:03.30				

F-1-40

3) When the downloading session has ended, click [OK].

ServiceSupportTool DLM10 (Ver. 3.	03E)			
	5	$\rightarrow$		172 16 1.100
SelectableFirmware	Contro			
Downloading complete SelectableFirmware		ck the button of the task to be ecuted.		FirmwareVersion BOOTROM XXxx0329C All Common Copy
Sector of the se	^ »»	Download Firmware	>>>	
	<<		< K K	
● KEY ● LANGUAGE	X>	Download Data	28	
MEAPCONT     RCON     RUI		Restore Backup System	⊳	
		Format HDD	⊳	
BOOOT		ок		
Firmware for Boot ROM (BOOT-ROM) Country:Region:All		Cancel		
Language:Common Version:03.30				

F-1-41

- 4) If you want to execute a different downloading session, see the appropriate instructions.
- 5) When you are done, turn off and then on the main power (iR4570/3570, 2870/2270 Series).
- 6) See the status of upgrading indicated on the control panel of the machine (iR4570/3570, 2870/2270 Series). When a message appears asking you to turn off and then on the switch, turn off and then on the main power (iR4570/3570, 2870/2270 Series).

# 

Be sure never to turn off the machine while it is executing a download session or writing downloaded system software. Otherwise, the ongoing write operation will be suspended and the machine may not start up.

If the machine fails to start up, format BOOTDEV using HDFormat, and download such software as System, Language, and RUI.

# 

If the machine fails to start up, be sure to replace the boot ROM.

### 1.4.7 Downloading Dcon and Rcon

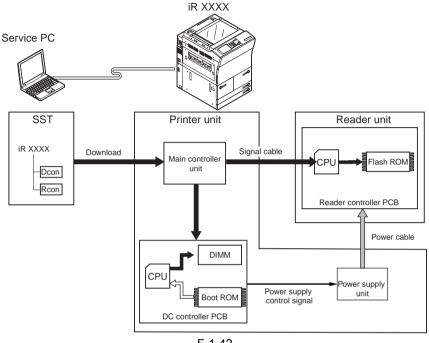
1.4.7.1 Outline

0008-7605

Dcon/Rcon is downloaded by way of the main controller unit.

# Â

- The DC controller PCB/reader controller PCB is equipped with a boot ROM, and downloading may be attempted multiple times in the event of failure.
- The system software used in the DC controller differs between the iR3570/3570 and the iR2870/2270. The system software designed for the iR4570/3570 is stored as iR3570, while the system software designed for the iR2870/2270 is stored as iR2270. The machine has a mechanism to read the appropriate system software. It is a good idea to download both types of system software.



F-1-42

# Δ

You will not be able to download Rcon unless the DC controller has started up normally (as, otherwise, the power supply control signal will not be valid and, as a result, the reader unit remains without power).

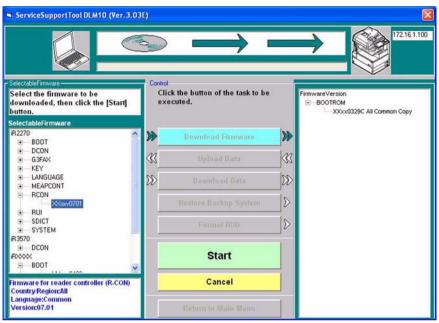
### 1.4.7.2 Downloading Procedure

#### 0008-7824

You can execute a downloading session in either normal or safe mode. In the case of safe mode, however, you will not be able to find out the version of Dcon/Rcon, causing all downloading to occur (overwriting of the same version and downgrading).

[Downloading Rcon]

1) Select the version of Rcon to download.



F-1-43

2) Click [Start].

ServiceSupportTool DLM10 (Ver. 3.0)	3E)			
	5			172 16.1.100
- SelectableFirmware	Contro	(	4	
Select the firmware to be downloaded, then click the [Start] button.		ck the button of the task to be ecuted.		FirmwareVersion BOOTROM XXxx0329C All Common Copy
SelectableFirmware			-	
R2270	>>>	Download Firmware	>>	
DCON	m		3	
⊕—G3FAX ⊛—KEY	< <u> 3</u>	Upload Data	a	
LANGUAGE     MEAPCONT	SD		D	
- RCON		416-1 at 144 - 24	_	
		Restore Backup System	D	
+ SDICT			8	
	-			
DCON		Ctart		
RXXXXX B		Start		
Firmware for reader controller (R-CON) Country:Region:All		Cancel		
Language:Common Version:07.01	Г		1	

F-1-44

3) When the downloading session has ended, click [OK].

ServiceSupportTool DLM10 (Ver.	3.03E)			172 16.1.100
SelectableFirmware Downloading complete		ck the button of the task to be scuted.		FirmwareVersion B- BOOTROM - SX0x03292 All Common Copy
SelectableFirmware			-	
#2270 (#	^ ≫_	Download Firmware	>>>	
	<<<		1	
<ul> <li>₩ KEY</li> <li>₩ LANGUAGE</li> </ul>	28	Download Data	22	
MEAPCONT     RCON     Xxxv0701		Restore Backup System	8	
RUI     SDICT     SYSTEM     B3570		Format HDD	>	
B) DCON RXXXX □ BOOT		ок		
Firmware for reader controller (R-CON Country:Region:All	4)	Cancel		
Language:Common Version:07.01			1	

F-1-45

- 4) If you want to execute a different downloading session, see the appropriate instructions.
- 5) When the downloading session has ended, turn off and then on the machine (iR4570/ 3570, 2870/2270 Series).
- 6) See the status of upgrading indicated on the control panel of the machine (iR4570/3570, 2870/2270 Series). When a message appears asking you to turn off and then on the machine, turn off and then on the main power (iR4570/3570, 2870/2270 Series).

# 

Be sure never to turn off the machine while it is executing a downloading session or writing downloaded system software. Otherwise, the machine may not be able to start up.

If the machine fails to start up, format BOOTDEV using HDFormat, and download such software as System, Language, and RUI.

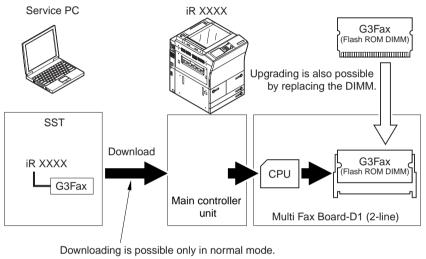
If an error code is indicated, be sure to download appropriate firmware.

0009-0281

### 1.4.8 Downloading G3 FAX

#### 1.4.8.1 Outline

The Multi Fax Board-D1 (2-line) comes with a control CPU and its system software, which is downloaded by way of the main controller unit.



F-1-46

# A

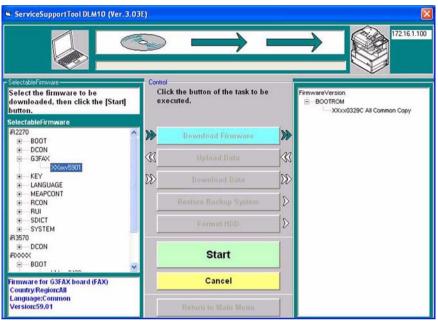
If a downloading session fails, you will have to replace the flash ROM DIMM.

#### 1.4.8.2 Downloading Procedure

You will have to use normal mode for downloading.

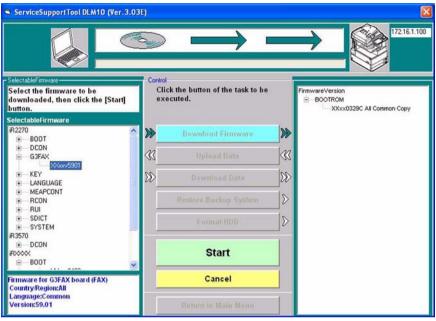
1) Select the version of G3FAX you want to download.

#### 0009-0280



F-1-47

2) Click [Start].



F-1-48

3) When the downloading session has ended, click [OK].

ServiceSupportTool DLM10 (Ver.	3.03E)			17216.1.100
SelectableFirmware Downloading complete		ck the button of the task to be ecuted.		FirmwareVersion B- BooTROM XXXx0329C All Common Copy
SelectableFirmware  FR2270  B B00T  G G3FAX  CANNED  CANNED  CANNED  FR2  CANNED  FR2  FR2  FR2  FR2  FR2  FR2  FR2  FR		Download Finnware Upload Data Download Data Restore Backup System Format HDD O K Cancel	<ul> <li>★</li> <li>↓</li> <li>↓</li></ul>	

F-1-49

- 4) When you are done, turn off and then on the main power of the machine (iR4570/3570, 2870/2270 Series).
- 5) See the status of upgrading indicated on the control panel of the machine (iR4570/3570, 2870/2270 Series). When a message appears asking you to turn off and then on the machine, turn off and then on the main power (iR4570/570, 2870/2270 Series).

# A

You will not be able to download G3Fax twice in succession. (Once downloading is executed, the board will be reset, causing download mode to end.)

Be sure never to turn off the machine while it is executing a downloading session or writing downloaded system software. Otherwise, the write operation (to the flash ROM DIMM of the G3 fax board) may fail, preventing board functions. In the event the board fails to function, be sure to replace the flash ROM DIMM found on the G3 fax board.

### 1.4.9 Uploading and Downloading Backup Data

#### 1.4.9.1 Outline

SramImg is data that is stored in the SRAM of the main controller PCB, while MeapBack is a MEAP application and its data stored on the HDD.

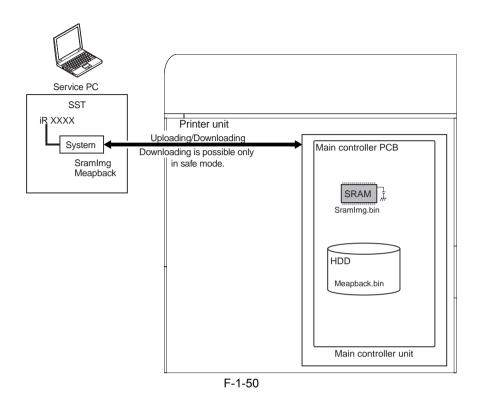
#### T-1-5

Backup data	Files to select for downloading/uploading
Main controller PCB backup RAM	SramImg.bin
MEAP application	MeapBack.bin
for R&D	Sublog.bin

### A

- If you are replacing the main controller PCB, you can transfer such data as parts counter readings by uploading the data before replacement and downloading it after replacement.
- If you are replacing the HDD or executing 'ALL' or 'APL\_MEP', you can temporarily set aside MEAP applications by uploading MeapBack before execution and downloading it after execution.

#### 0008-7845

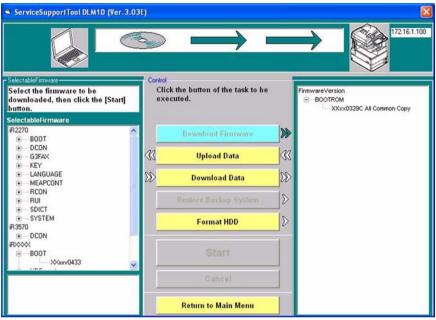


### 1.4.9.2 Uploading Procedure

0008-7854

Use safe mode for uploading.

1) Select [Upload Data].



F-1-51

2) Select the data you want to back up.

ServiceSupportTool DLM10 (Ver. 3.03	IE)			X
↓ ←				17216.1.100
- FileSave	Contro			SelectableData
		ck the button of the task to be ecuted.		Select the data to be uploaded, then click the IStartl button.
	1			
File Name	)))	Download Firmware	28	SramImg.bin MeapBack.bin
Memo	*	Upload Data		Sublog.txt
	X>	Download Data	28	
		Restore Backup System	⊳	ļ
(IBM_PRELOAD)		Format HDD	⊳	
	Γ	Start		
		Cancel		
		Return to Main Menu		

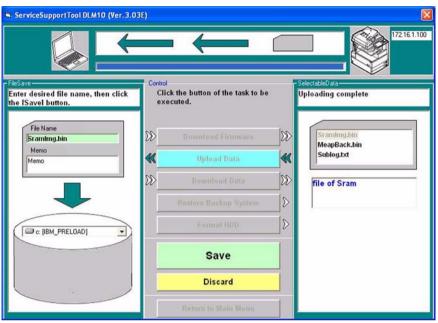
F-1-52

3) Click [Start].

ServiceSupportTool DLM10 (Ver. 3.03	e)	
-		172.16.1.100
FileSave	Control	- SelectableD ata
	Click the button of the task to be executed.	Select the data to be uploaded, then click the IStart1 button.
File Name	20	SramImg.bin
Memo	Download Firmware	Sraming.bin MeapBack.bin
Memo	W Upload Data	Sublog.txt
	Download Data	D file of Sram
	Restore Backup System	⊳
( IBM_PRELOAD]	Format HDD	∫⊳
	Start	
	Cancel	
	Return to Main Menu	

F-1-53

4) Click [Save].



F-1-54

5) Click [OK].

ServiceSupportTool DLM10 (Ver. 3.03)	E)			
				172.16.1.100
- FileSave	Control			SelectableData
Saving data complete.		ck the button of the task to be ecuted.	8	
	ext	eculea.		
File Name	00		00	Sramling,bin
SramImg.bin.upd	X>	Download Firmware	28	MeapBack.bin
Memo Memo	*	Upload Data	*	Sublog.txt
	28	Download Data	$\gg$	file of Sram
		Restore Backup System	⊳	
( C [IBM_PRELOAD]		Format HDD	⊳	
		ок		
		Discard		

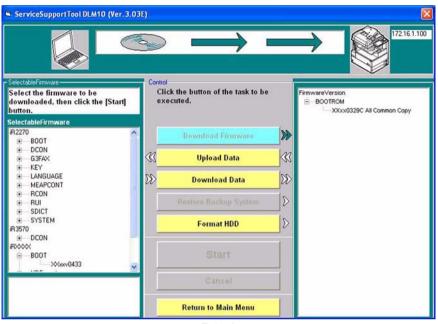
F-1-55

### 1.4.9.3 Downloading Procedur

0008-7856

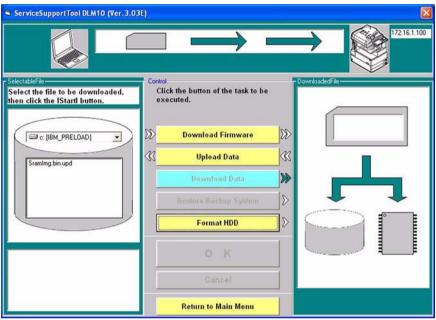
Use safe mode for downloading.

1) Select [Download Data].



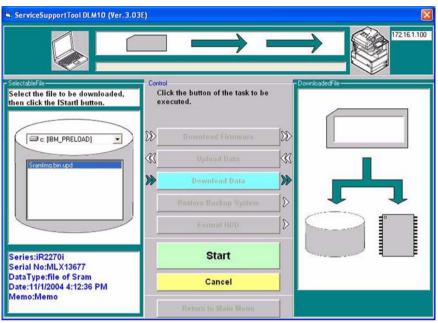
F-1-56

2) Select the data to download.



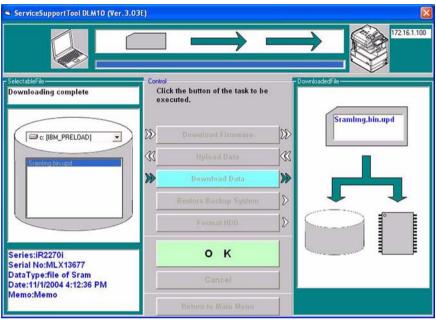
F-1-57

3) Click [Start].



F-1-58

4) Click [OK].





- 5) When you are done with downloading, turn off and then on the main power (iR4570/ 3570, 2870/2270 Series).
- 6) See the status of upgrading indicated on the control panel of the machine (iR4570/3570, 2870/2270 Series). When a message appears asking you to turn off and then on the switch, turn off and then on the main power (iR4570/3570, 2870/2270 Series).

# A

Be sure not to turn off the machine while it is executing a downloading session or writing downloaded system software. The write operation will be suspended, and the machine may fail to start up.

If the machine fails to start up, format BOOTDEV using HDFormat, and download System, Language, and RUI.

Nov 5 2004

