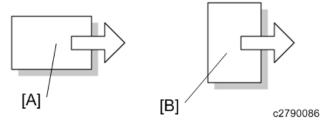
FAX Option Type M26 Machine Code: D3D9 Field Service Manual Ver 1.0

Latest Release: Oct, 2016 Initial Release: Oct, 2016 Copyright (c) 2016 Ricoh Co.,Ltd.

Symbols, Abbreviations

This manual uses several symbols and abbreviations. The meaning of those symbols and abbreviations are as follows:

Symbol	What it means
Ŵ	Clip ring
SF .	Screw
S.	Connector
\$	Clamp
B	E-ring
	Flat Flexible Cable
	Timing Belt
SEF	Short Edge Feed
LEF	Long Edge Feed
K	Black
С	Cyan
М	Magenta
Y	Yellow
B/W, BW	Black and White
FC	Full color



[A] Short Edge Feed (SEF)

[B] Long Edge Feed (LEF)

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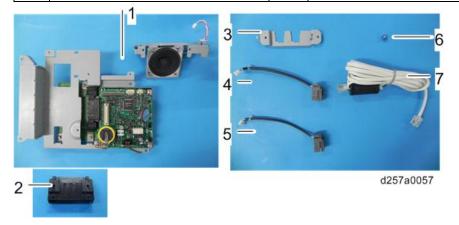
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Fax Option Type M26 (D3D9)

Accessory Check

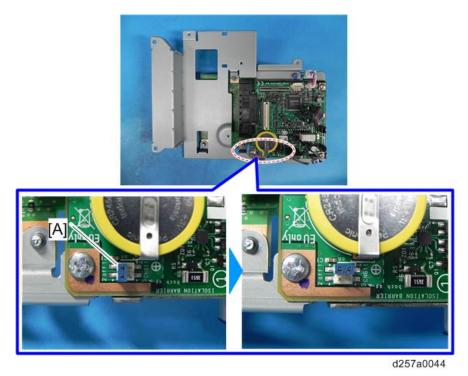
Check the quantity and condition of the accessories against the following list.

No.	Description	Q'ty	Remarks
1	FCU	1	
2	CONNECTOR:FX18-40PS-0.8H15	1	
3	Modular Bracket	1	
4	Harness: TEL	1	
5	Harness: LINE	1	
6	Screw: M3x6	8	
7	Telephone Cable	1	NA only
7	Ferrite Core	1	For NA, this ferrite core is attached to the telephone cable.
-	Serial number decal	1	
-	EMC Address Decal	1	EU only
-	FCC Decal	1	NA only



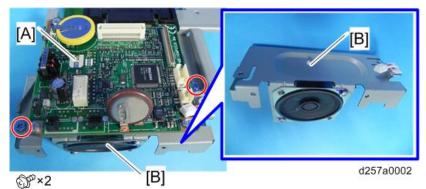
Installation Procedure

- Before installing this fax unit, print out all data in the printer buffer. Turn the main power to OFF and disconnect the power cord and the network cable.
- **<u>1.</u>** Switch the battery jumper switch [A] on the FCU to the "ON" position.



Important

- If you do not switch the battery jumper switch position, the fax unit is not recognized.
- **<u>2.</u>** Attach the speaker bracket [B] to the FCU [A].



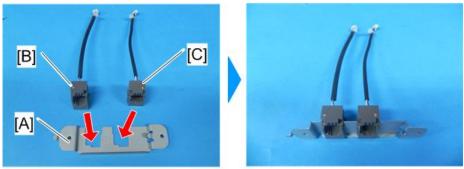
<u>3.</u> Connect the connector [A].



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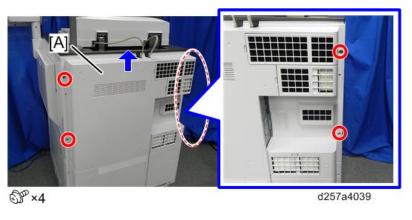
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4. Attach the two modular harnesses [B] (TEL: 2 pin) and [C] (LINE1: 3 pin) to the modular bracket [A].



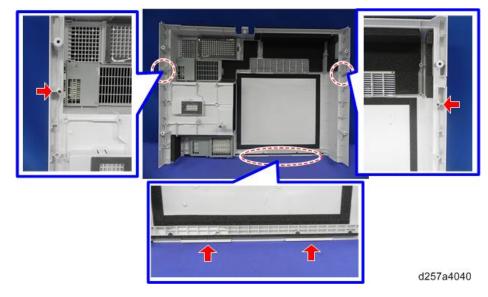
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<u>5.</u> Remove the rear middle cover [A].

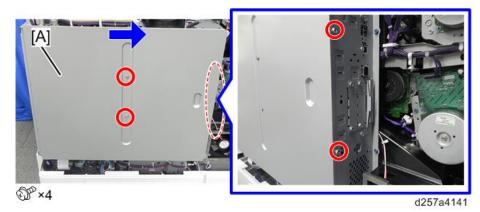


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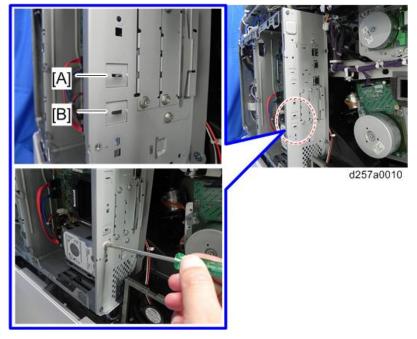
• Check the position of bosses and hooks before removing the cover.



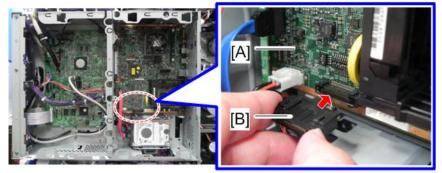
<u>6.</u> Remove the controller box cover [A].



7. Cut off the port of the "LINE1" [A] and "TEL" [B] of the controller box using a screwdriver.

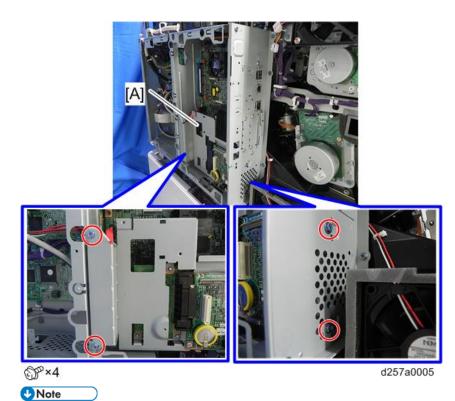


<u>8.</u> Insert the connector [B] provided with the fax unit to the controller board [A].

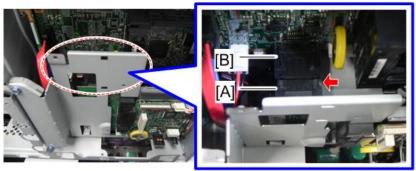


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<u>9.</u> Install the FCU [A] on the controller board.



• When attaching the FCU, connect the connector [A] of the FCU to the connector [B] on the controller box side.



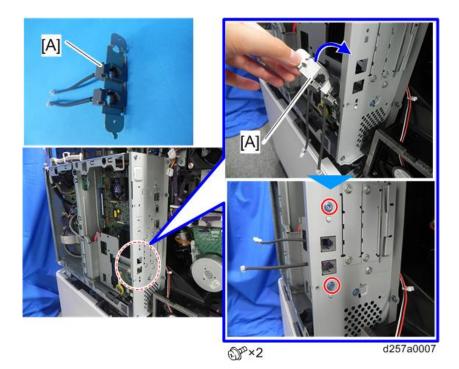
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• Check that the hooks of the fax unit are hooked to the controller box.



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<u>10.</u> Attach the modular bracket [A] to the controller box.



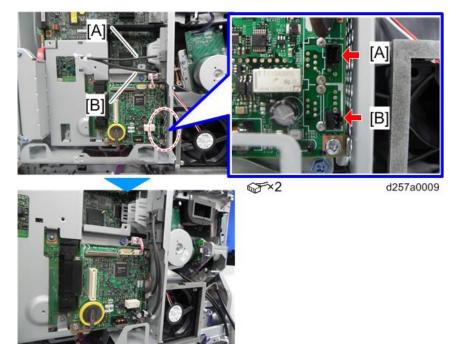
Note

• Insert the hooks of the modular bracket into the controller box when installing the modular bracket.



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11. Connect the two modular harnesses [A] (LINE1: 3 pin) and [B] (TEL: 2 pin) to the FCU.



- **12.** Reinstall the controller box cover and the rear middle cover.
- **<u>13.</u>** Connect the telephone cord to the "LINE 1" jack.
- **<u>14.</u>** Attach the serial number decal under the machine serial number decal on the rear cover of the machine.
- **15.** Attach the FCC decal on the rear cover of the machine (NA only).
- 16. Keep the EMC address decal at the customer site (EU only).
- **<u>17.</u>** Insert the power plug into the outlet. Turn ON the main power of the machine.

Note

- Make sure that the outlet is grounded.
- "SRAM formatted" is displayed on the operation panel after the main power is turned ON. Turn the main power OFF and then ON again for normal use.

Adding Fax Application Icons to the Home Screen

The fax application icon is normally added automatically. However, if it is missing from the Home screen, add it as follows:

<u>1.</u> Press the [Application List] key [A].



<u>2.</u> Press and hold the Fax application from the app list.



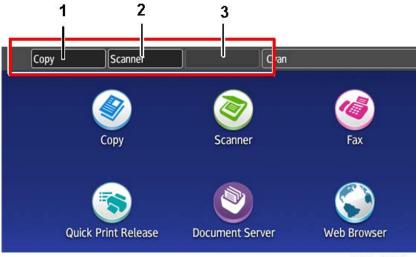
<u>3.</u> Drag and position the application on the home screen.



Registering Function Keys

By registering a fax application to a function key on the Home screen, you can open the application from any page. Specify the setting as required.

Function Keys 1, 2, and 3 are from the left, as shown:



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Allocate an application to a function key as follows:

- **<u>1.</u>** Login as the machine administrator
- **<u>2.</u>** Press "User Tools" icon > "Screen Features".

<u>3.</u> Press [Screen Device Settings].

1	Сору	Scanner		Cyan		Logout	
(°¢	Screen Feature	:5					
_	- FOICTON	raraing to mac	nine				
	DEVICE						-
	Sound 4						
	Display						
	Storage						
	PERSONAL						
	Security						
	🔺 Language	e & input					
	SYSTEM						_
	③ Screen D	evice Settings	Information				
	🗖 Screen D	evice Settings					
			•	谷			
						d238m0	988e

<u>4.</u> Press [Function Key Settings].

Сору	Scanner		Cyan		Logout	C
Screen De	vice Settings					
Screen Sta	rtup Mode					
Screen SD	Card Slot					
Operation	Panel USB Slot					
Server Set	tings					
Function P	riority					
Function K	ey Settings					
		◆	合			
				d2	38m099	94e

<u>5.</u> Select the key to register.

To disable a function key, deselect the corresponding function key check box.

Copy	Scanner		Toner Cartridge is almost empty.	Logout (
C Function K	ley Settings			
Function Ke	ey			×
Function Ke	ey 1			
Function Ke	ey 2			
Function Ke	ey 3			
		€		

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<u>6.</u> Press [Allocated Function], and then select the fax application.

In [Display Name], you can change the name of the icon on the Home screen (using up to 64 characters).



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Function Priority Setting

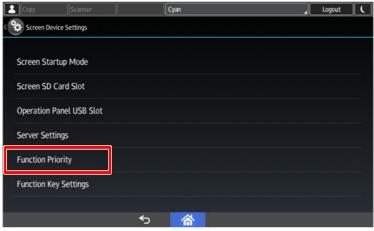
You can specify whether the fax application appears on the operation panel just after turning the power on or just after the system is reset automatically.

- **<u>1.</u>** Login as the machine administrator
- Press "User Tools" icon > "Screen Features". <u>2.</u>
- <u>3.</u> Press [Screen Device Settings].

1				Cyan			Logout			
(°¢	Screen Feature									
		raraing to Machin	rc.							
	DEVICE									
	Sound §	Sound								
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	SYSTEM							-		
	③ Screen D	evice Settings In	formation							
	Screen D	evice Settings								
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<u>4.</u> Press [Function Priority].



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<u>5.</u> Select the fax application.

Сору			Toner Cartridge is almost	empty.	Logou	t 🕻
Function F	Priority					
Home						
Cloud Fax						
Connector						
Copier (Classic))					
Сору						
Document Serv	ver					
Fax						
Fax (Classic)						
ID Card Copy						
		€	合			

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Notes for Connecting the Telephone Line

Checking the following before connecting the telephone line:

If a phone line dedicated to business phones is connected to the MFP, the fax board may be damaged. Make sure that the connecting phone line is for fax.

Reasons why the Fax Board may be damaged

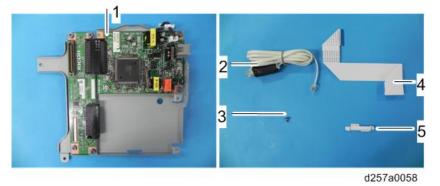
Business phones have various functions. To operate those functions, a high current is supplied to a business phone line. This may damage components on the Fax board.

G3 Interface Unit Type M26 (D3D9-07, -08, -12)

Accessory Check

Check the quantity and condition of the accessories against the following list.

No.	Description	Q'ty	Remarks
1	SG3 Interface Unit	1	
2	Telephone Cable	1	NA only
2	Ferrite Core	1	For NA, this ferrite core is attached to the telephone cable.
3	Screw: M3x6	4	
4	HARNESS:FFC-CCU	1	
5	CLAMP RFC-33V0	1	
-	EMC Address Decal	1	EU only
-	FCC Decal	1	NA only



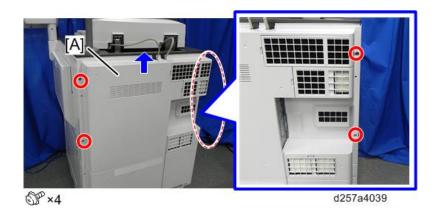
Installation Procedure

• Before installing this fax unit, print out all data in the printer buffer. Turn the main power to OFF and disconnect the power cord and the network cable.

An additional two SG3 boards can be added for this model. Follow the procedures for installing a single SG3 board or double SG3 board as required.

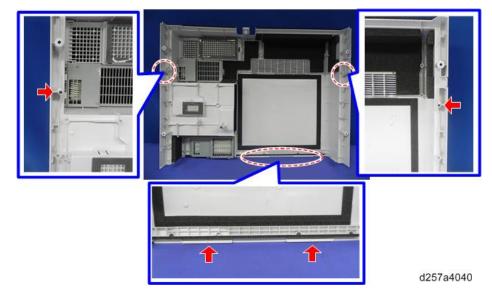
Single G3 Board

<u>1.</u> Remove the rear middle cover.



Vote

Check the position of bosses and hooks before removing the cover. •



Remove the controller box cover [A]. <u>2.</u>

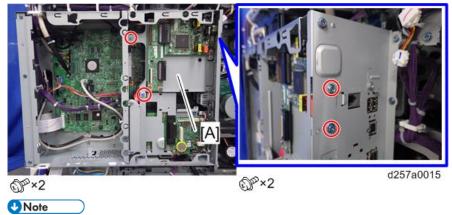


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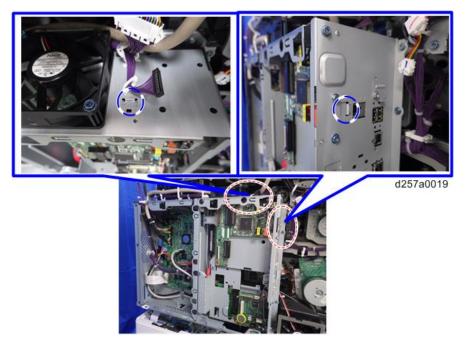
3. Cut off the port of the "LINE2" [A] and the slot next to it [B] of the controller box using a screwdriver.



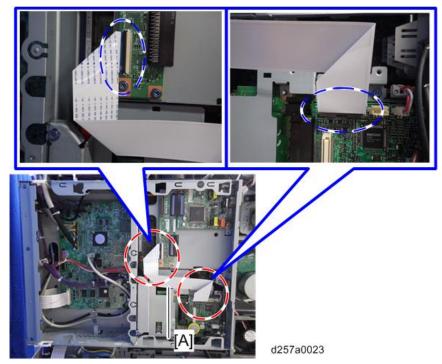
- d257a0011
- **<u>4.</u>** Install the G3 interface unit [A] on the controller box.



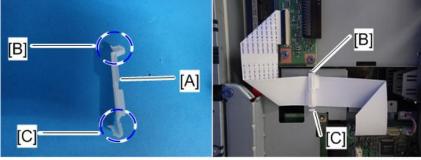
• Insert the hooks of the G3 interface unit into the controller box when installing the G3 interface box.



<u>5.</u> Connect the fax unit and the G3 interface unit with the flat cable [A].



<u>6.</u> Attach the clamp [A], facing upward the [B] side and facing downward the [C] side.



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- 7. Reinstall the controller box cover and the rear middle cover.
- **8.** Attach the FCC decal on the rear cover of the machine (NA only).
- 9. Keep the EMC address decal at the customer site (EU only).
- **<u>10.</u>** Connect the telephone cord to the "LINE2" jack.
- 11. Insert the power plug into the outlet. Turn ON the main power of the machine.
- 12. Enter the service mode. Set Bit 1 of Communication Switch 16 to "1" (SP1-104-023).
- **<u>13.</u>** Exit the service mode.
- **<u>14.</u>** Turn the main power OFF then ON.
- **15.** Print out the system parameter list. Check that "G3" is displayed as an option.
- 16. Set up and program the items required for PSTN-2 communications.

Double G3 Boards

<u>1.</u> Disconnect the clamp [A] and connector [B] from the second G3 interface unit.



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d257a0030

<u>2.</u> Remove the G3 board [A] from the second G3 interface unit for the two-G3 board installation.



3. Install the G3 board [A] removed from the second G3 interface unit on the first G3 interface unit.

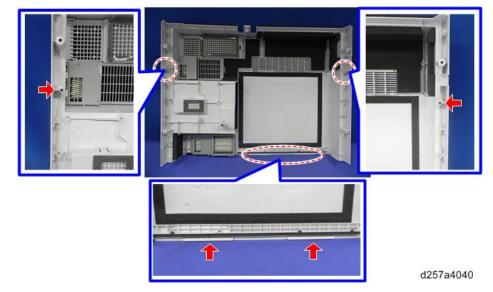


<u>4.</u> Remove the rear middle cover [A].

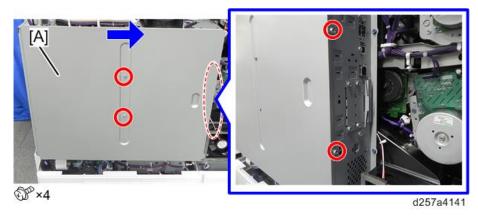


Note

• Check the position of bosses and hooks before removing the cover.



<u>5.</u> Remove the controller box cover [A].

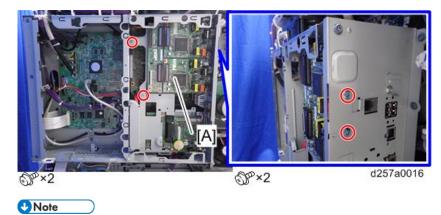


<u>6.</u> Cut off the covers for the "LINE2" [A] and "LINE3" [B] ports of the controller box using a screwdriver.

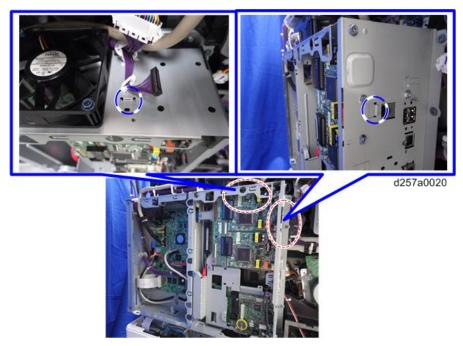
<u>7.</u> Cut off the cover of the port [C] using a screwdriver.



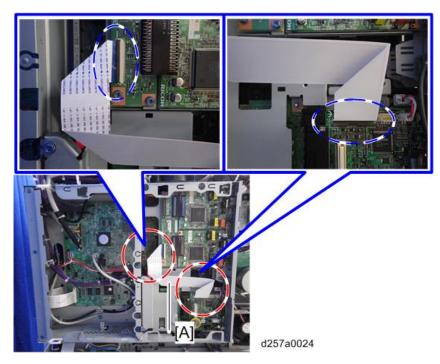
<u>8.</u> Install the G3 interface unit [A] on the controller board.



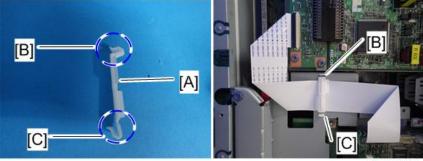
• Insert the hooks of the G3 interface unit into the controller box when installing the G3 interface box.



<u>9.</u> Connect the fax unit and the G3 interface unit with the flat cable [A].



10. Attach the clamp [A], with the [B] side facing upward and the [C] side facing downward.



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- **<u>11.</u>** Reinstall the controller box cover and the rear middle cover.
- **12.** Attach the FCC decal on the rear cover of the machine (NA only).
- **<u>13.</u>** Keep the EMC address decal at the customer site (EU only).
- 14. Connect the telephone cords to the "LINE2" and "LINE3" jacks for double-G3 board installation.
- **15.** Insert the power plug into the outlet. Turn ON the main power of the machine.
- 16. Enter the service mode. Set Bit 1 of Communication Switch 16 to "1" (SP1-104-023).
- 17. Set Bit 3 of Communication Switch 16 to "1" (SP1-104-023).
- **<u>18.</u>** Exit the service mode.
- **<u>19.</u>** Turn the main power ON then OFF.
- **20.** Print out the system parameter list. Check that "G3" is displayed as an option.
- 21. Set up and program the items required for PSTN-2 communications.

Notes for Connecting the Telephone Line

Checking the following before connecting the telephone line:

If a phone line dedicated to business phones is connected to the MFP, the fax board may be damaged. Make sure that the connecting phone line is for fax.

Reasons why the Fax Board may be damaged

Business phones have various functions. To operate those functions, a high current is supplied to a business phone line. This may damage components on the Fax board.

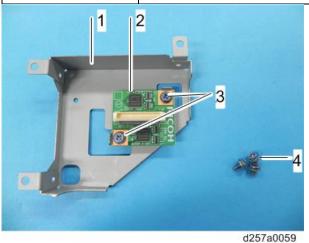
Fax Unit Options

Fax Memory Unit Type M26 64MB (D3D9)

Accessory Check

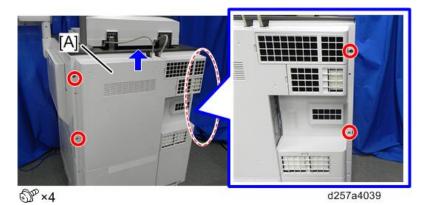
Check the quantity and condition of the accessories against the following list.

No.	Description	Q'ty
1	Bracket	1
2	Memory unit	1
3	Screws M3x5	2
4	Screws M3x6	3



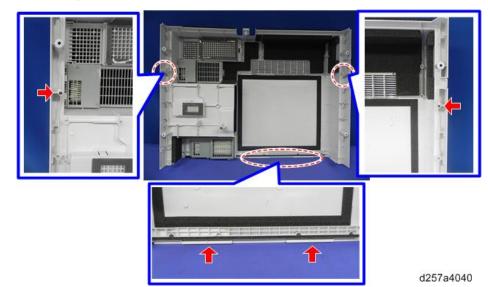
Installation Procedure

<u>1.</u> Remove the rear middle cover.

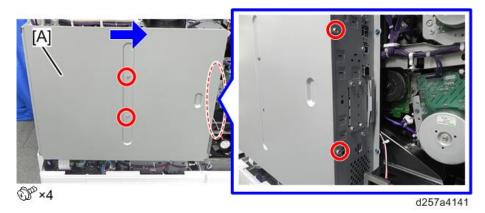


Note

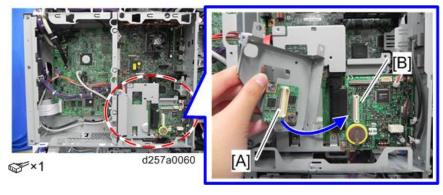
• Check the position of bosses and hooks before removing the cover.



<u>2.</u> Remove the controller box cover [A].



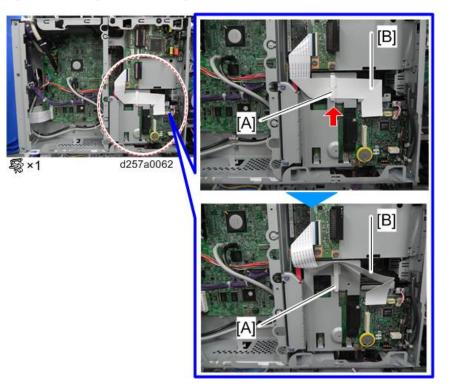
<u>3.</u> Connect the memory unit connector [A] to the FCU [B].



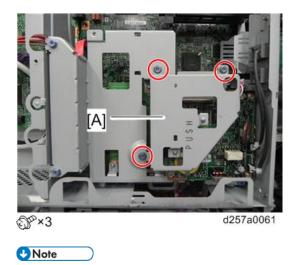
Note

If the G3 interface unit has been installed, do the following before Step 3.

• Open the lower part of the clamp [A] and slide the FFC until you see the screw hole.



<u>4.</u> Secure the bracket [A].



Put the FFC and clamp back into place if you moved them before step 3.

<u>5.</u> Re-assemble the machine.

Fax Connection Unit Type M26 (D3D8-01, 02, 03)

Accessory Check

Check the quanti	ty and condition	n of the acce	ssories against	the following list.

No.	Description	Q'ty	Remarks
1	Fax Connection Unit SD card	1	
1			
İ			
	d595i900b		

Installation Procedure

This unit allows a machine without the fax unit installed (client machine) to send and receive faxes via a machine with the fax unit installed (remote machine).

Requirements

- Up to six machines can be registered as the client machines.
- Machines that already have a fax unit installed cannot be used as client machines.
- Only one machine can be registered as the remote machine.
- Firmware for this unit: "aics" (software number: D3D85759)
- Remote Fax transmission is possible using a G3 line.
- The Remote Fax function does not support User Code Authentication. Disable the User Code Authentication on the remote machine.
- Use this function to check the contents of a file that is stored in memory and not yet sent. Also, use this function to cancel a transmission from the client machine.

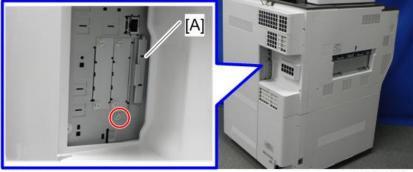
Order of installation

- **<u>1.</u>** Install the Fax Connection Unit in the remote machine (fax unit already installed).
- **<u>2.</u>** Install the Fax Connection Unit in the client machine (no fax unit is installed).
- 3. Register the client machine on the remote machine.
 - Comportant 🔿
 - Do not register the remote machine before the client machine is registered on the remote machine. Otherwise, the remote machine cannot be registered.
- **<u>4.</u>** Register the remote machine in the client machine.

Installing the fax connection unit

Note

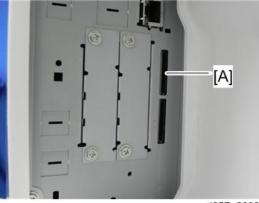
- Before starting this procedure, connect the network cable to the target machine(s), and then configure the network settings.
- When installing more than one SD card, perform the merge operation. For details about how to merge, refer to "Card Appli Move" in the field service manual for the main frame.
- **<u>1.</u>** Remove the SD card slot covers [A].



OP×1

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<u>2.</u> Insert the Fax Connection Unit SD card into SD card slot 1 [A: Upper Slot].



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- **<u>3.</u>** Reattach the SD-card slot cover (\Im x 1).
- **<u>4.</u>** Turn ON the main power.
- 5. Make sure that the machine can recognize the option (See 'Self-Diagnosis Report' and check whether the aics firmware (D3D85759) is listed in [Loading Program].)

Registering the client machine(s)

Vote

- Before starting this procedure, connect the network cable to the target machine(s), and then configure the network settings.
- **<u>1.</u>** On the remote machine, press the [User Tools/Counter] key on the operation panel.
- 2. Press [System Settings].
- **<u>3.</u>** Press [Administrator Tools].
- 4. Press [Program/Change/Delete Remote machine].
- 5. Enter the IP address or host name of the client machines.
- 28

Note

- Up to six machines can be registered as the client machines.
- **<u>6.</u>** Press [OK] to set after "connection test".
- 7. Press the [User Tools/Counter] key on the operation panel to terminate System Settings.

Registering the remote machine

Vote

- Only one machine can be registered as the remote machine.
- Before starting this procedure, connect the network cable to the target machine(s), and then configure the network settings.
- **<u>1.</u>** On the client machine, press the [User Tools/Counter] key on the operation panel
- **<u>2.</u>** Press [System Settings].
- 3. Press [Administrator Tools].
- 4. Press [Program/Change/Delete Remote machine].
- 5. Enter the IP address or host name of the remote machine.
- **<u>6.</u>** Press [OK] to set after "connection test".
- 7. Press [Exit].

Configuring the Remote Reception Settings

Perform the following procedure to enable the client machine(s) to receive faxes via the remote machine. You can forward or route received documents per line or to a specific sender.

Note

- Before starting this procedure, connect the network cable to the target machine(s), and then configure the network settings.
- By performing procedures #1-3 above, the client machines can send faxes via the remote machine. The procedures shown below are necessary to enable the client machines to receive faxes.

This procedure is performed on the remote machine.

Using "Remote Reception Setting per Line"

- **<u>1.</u>** Press [Facsimile Features].
- 2. Press [Remote Reception Setting per Line] in [Reception Settings].
- **<u>3.</u>** Enter an IP address or a host name of the client-side machine to connect.
- **<u>4.</u>** Press [Set], and [Exit] to exit from the setting.

Using "Remote Reception per Sender"

- **<u>1.</u>** Press [Facsimile Features].
- 2. Press [Program Special Sender] in [Reception Settings].

<u>3.</u> Select the Special Sender.

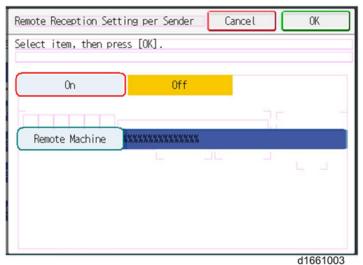
Program Special Sender				Exit
Select destination to pro	gram or change.			
Program / Change	Delete		Initia	l Set Up
001 Tokyo branch	Full Agree	002 Head office of Osaka	Full Agree	
003 branch	Part.Agree	004 ×Not Programmed	Full Agree	
005 ×Not Programmed	Full Agree	006 ×Not Programmed	Part.Agree	1 (0
007 ×Not Programmed	Full Agree	008 XNot Programmed	Full Agree	1∕2 ▲ Previous
009 XNot Programmed	Full Agree	010 ×Not Programmed	Full Agree	▼ Next

d1661001

4. Press [Remote Reception Setting per Sender].

Program / Change	Cancel	OK					
Check contents, then press [OK].							
Own Name and Fax Number	Conditions: F	Full Agreement	Partial Agreement				
Authorized Reception per Sender Off	Print 2 Sided per	Sender Same a	s Basic Settings				
RX File Print Oty per Sender Same as Basic Settings	Memory Lock RX pe	r Sender Same a	s Basic Settings				
Forwarding per Sender Same as Basic Settings	Paper Tray per S	Sender Same a	s Basic Settings				
Remote Reception Setting per Sender On							
Remote Machine:							
			d1661002				

5. Press [On] and [Remote machine].



- **<u>6.</u>** Enter an IP address or a host name of the client machine to connect.
- **<u>7.</u>** Press [OK] to exit from the setting.

2. Replacement and Adjustment

FCU

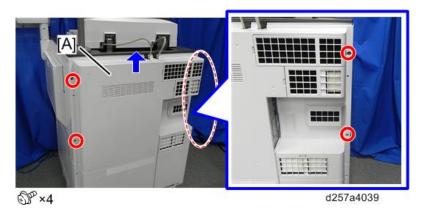
When you replace the FCU board, transfer the SRAM data from the old FCU board to the new FCU board. Do the following procedure to back up the SRAM data.

Vote

• The following data can be transferred: TTI, RTI, CSI, Fax bit switch settings, RAM address settings, NCU parameter settings.

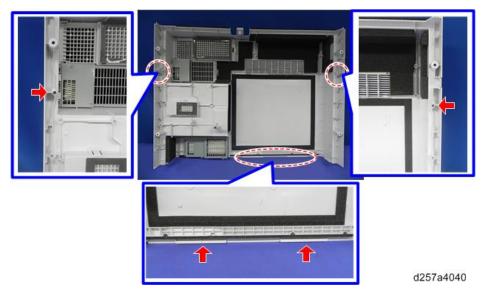
FCU

<u>1.</u> Remove the rear middle cover [A].



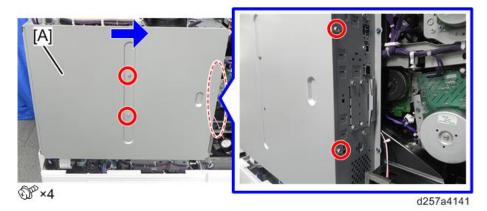
Vote

• Check the position of bosses and hooks before removing the cover.



2.Replacement and Adjustment

<u>2.</u> Remove the controller box cover [A].



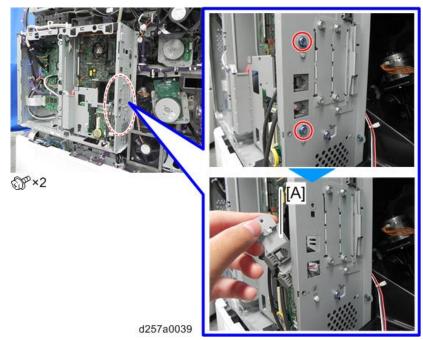
<u>3.</u> Disconnect the two modular harnesses [A] (LINE1) and [B] (TEL) from the FCU.



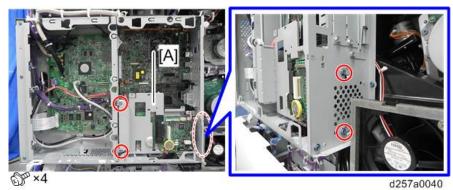
S×2

d257a0038

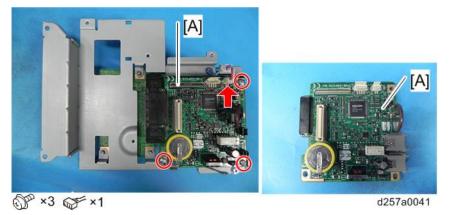
<u>4.</u> Remove the modular bracket [A] from the controller box.



<u>5.</u> Remove the fax unit [A] from the controller board.



<u>6.</u> Remove the FCU board [A] from the fax unit.



<u>7.</u> Change the orientation of the battery jumper switch [A] on the removed FCU board. Then attach another battery jumper switch [B] to the FCU board.

The battery jumper switch [B] is supplied with the new FCU board.



d257a0042

2.Replacement and Adjustment

<u>8.</u> Install the new FCU board [A] on the fax unit.



9. Switch the battery jumper switch [A] of the FCU board to the "ON" position before installing the fax unit on the controller board.

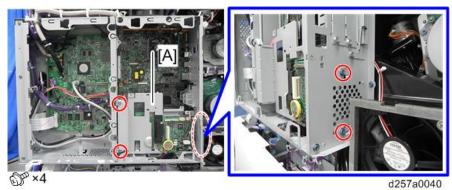
Note

- If you don't switch the battery jumper switch position, the following situation will occur.
 - SC820 will occur.
 - The registered data will not be saved when you turn off the main power switch.

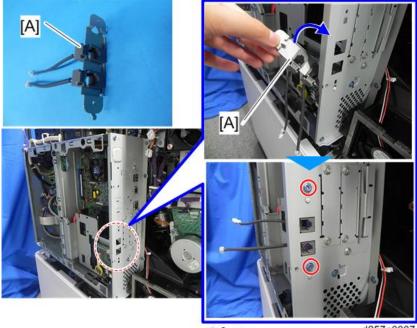


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<u>10.</u> Install the fax unit [A] on the controller board.



<u>11.</u> Attach the modular bracket [A] to the controller box.

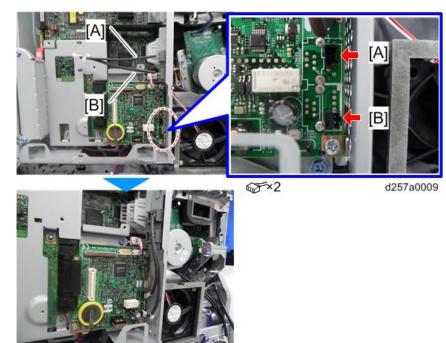


@P×2

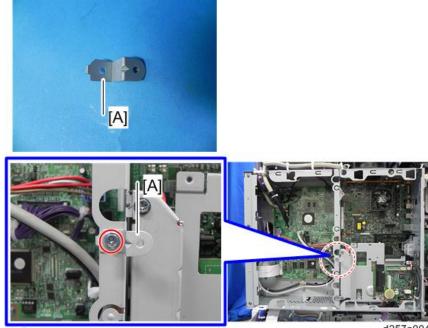
d257a0007

2.Replacement and Adjustment

<u>12.</u> Connect the two modular harness [A] (LINE1) and [B] (TEL) to the FCU.



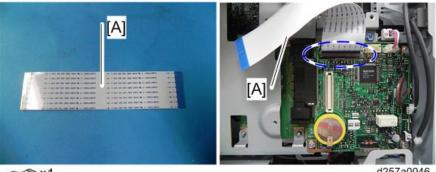
<u>13.</u> Attach the bracket for holding the old FCU board [A]. This bracket is provided with the new FCU board.



@P ×1

d257a0045

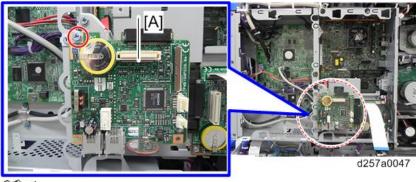
<u>14.</u> Connect the flat flexible cable [A] to the new FCU board. This flexible cable is provided with the new FCU board.



33×1

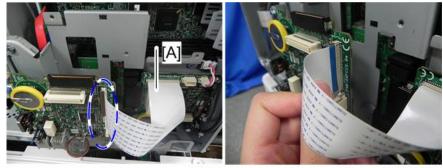
d257a0046

15. Attach the old FCU board [A] to the bracket.



×1

<u>16.</u> Connect the flat flexible cable to the old FCU board [A].



d257a0048

- 17. Insert the power plug into the outlet. Turn ON the main power of the machine.
- 18. SRAM data transmission starts. When the transmission is completed, you will hear a beeper sound.

Note

- The beeper sound is the same volume as the speaker sound. •
- The beeper sounds even if the speaker sound is turned off.
- If the beeper does not sound, turn the main power switch on and off repeatedly and do the transmission procedure 2 or 3 times.
- If the beeper does not sound after turning the main switch on and off 3 times, you need to input the settings stored in SRAM memory manually.
- **19.** When "Ready" appears on the copy display, turn OFF the main power switch, and then disconnect the flat flexible cable (connected in step 14 and 16) from the old FCU board.
- 20. Remove the old FCU board and bracket from the controller box.

2.Replacement and Adjustment

- **<u>21.</u>** Reinstall the controller box cover.
- 22. Reinstall the rear middle cover.
- 23. Turn ON the main power switch, then do SP6-101 to print the system parameter list.
- **<u>24.</u>** Check the system parameter list to make sure that the data was transferred correctly.
- **25.** Set the correct data and time with the User Tools: User Tools > System Settings > Timer Setting > Set Date/Time.

Note

• If any of the SRAM data was not transferred, input those settings manually.

3. Troubleshooting

Error Codes

Error Codes

If an error code is displayed, retry communication. If the same problem occurs, try to fix the problem as suggested below.

•Note

• Error codes appear in the error code display and on the service report.

Code	Meaning	Suggested Cause/Action
0-00	DIS/NSF not detected within 40 s of	• Check the connection.
	Start being pressed	• The other party may be incompatible.
		• Replace the FCU.
		• Check for DIS/NSF with an oscilloscope.
		• If the RX signal is weak, there may be a bad
		connection.
0-01	DCN received unexpectedly	• The other party is out of paper or has a paper jam.
		• The other party pressed [Stop] during communication.
0-03	Incompatible modem at the other party	• The other party is incompatible.
0-04	CFR or FTT not received after modem	• Check the connection.
	training	• Try changing the TX level and/or cable equalizer
		settings.
		• Replace the FCU.
		• The other machine may be defective. Try sending to
		another machine.
		• If the RX signal is weak or defective, there may be a
		bad connection.
		Reference:
		• TX level: NCU Parameter 01 (PSTN)
		• Cable equalizer: G3 Switch 07 (PSTN)
		Dedicated TX parameters in Service Program Mode
0-05	Modem training fails even G3 shifts	• Check the connection.
	down to 2400 bps.	• Try adjusting the TX level and/or cable equalizer.
		• Replace the FCU.
		• Check for line problems.
		Reference:
		See error code 0-04.

Code	Meaning	Suggested Cause/Action
0-06	The other terminal did not reply to DCS	• Check the connection.
		• Try adjusting the TX level and/or cable equalizer
		settings.
		• Replace the FCU.
		• The other party may be defective or incompatible; try
		sending to another machine.
		• Check for line problems.
		Reference:
		See error code 0-04.
0-07	No post-message response from the	• Check the connection.
	other party after a page was sent	• Replace the FCU.
		• The other party is out of paper or has a paper jam.
		• The other party may have disconnected the call.
		• Check for a bad line.
		• The other machine may be defective. Try sending to
		another machine.
0-08	The other party sent RTN or PIN after	• Check the connection.
	receiving a page, because there were too	• Replace the FCU.
	many errors	• The other party may have a paper jam, or run out of
		paper or memory space.
		• Try adjusting the TX level and/or cable equalizer
		settings.
		• The other party may have a defective modem/FCU; try
		sending to another machine.
		• Check for line problems and noise.
		Reference:
		• TX level: NCU Parameter 01 (PSTN)
		• Cable equalizer: G3 Switch 07 (PSTN)
		Dedicated TX parameters in Service Program Mode
0-14	Non-standard post message response	• Incompatible or defective remote terminal; try sending
	code received	to another machine.
		• Noisy line; resend.
		• Try adjusting the TX level and/or cable equalizer
		settings.
		• Replace the FCU.
		Reference:
		See error code 0-08.
0-15	The other terminal is not capable of	The other party is unable to accepting the following

Code	Meaning	Suggested Cause/Action	
	specific functions.	functions, or the other party's memory is full.	
		Confidential RX	
		Transfer function	
		• SEP/SUB/PWD/SID	
0-16	CFR or FTT not detected after modem	• Check the connection.	
	training in confidential or transfer mode	• Replace the FCU.	
		• Try adjusting the TX level and/or cable equalizer	
		settings.	
		• The other machine may have disconnected, or it may	
		be defective. Try sending to another machine.	
		• If the RX signal level is too low, there may be a line	
		problem.	
		Reference:	
		See error code 0-08.	
0-17	Communication was interrupted by	• If [Stop] was not pressed and this error keeps	
	pressing [Stop]	occurring, replace the operation panel or the operation	
		panel drive board.	
0-20	Facsimile data not received within 6 s of	• Check the connection.	
	retraining	• Replace the FCU.	
		• Check for line problems.	
		• Try calling another fax machine.	
		• Try adjusting the reconstruction time for the first line	
		and/or RX cable equalizer setting.	
		Reference:	
		Reconstruction time - G3 Switch 0A, Bit 6	
		RX cable equalizer - G3 Switch 07 (PSTN)	
0-21	EOL signal (end-of-line) from the other	• Check the connection between the FCU and line.	
	party not received within 5 s of the	• Check for line noise or other line problems.	
	previous EOL signal	• Replace the FCU.	
		• The remote machine may be defective or may have	
		been disconnected.	
		Reference:	
		Maximum interval between EOLs and between ECM	
		frames - G3 Bit Switch 0A, Bit 4	
0-22	The signal from the other party was	• Check the connection.	
	interrupted for more than the acceptable	• Replace the FCU.	
	modem carrier drop time (default: 200	• The remote machine may be defective.	
	ms)	• Check for line noise or other line problems.	

Code	Meaning	Suggested Cause/Action
		• Try adjusting the acceptable modem carrier drop time.
		Reference:
		Acceptable modem carrier drop time: G3 Switch 0A, Bits 0
		and 1
0-23	Too many errors during reception	• Check the connection.
		• Replace the FCU.
		• The remote machine may be defective.
		• Check for line noise or other line problems.
		• Try asking the other party to adjust their TX level.
		• Try adjusting the RX cable equalizer setting and/or RX
		error criteria.
		Reference:
		RX cable equalizer: G3 Switch 07 (PSTN)
		RX error criteria: Communication Switch 02, Bits 0 and 1
0-29	Data block format failure in ECM	• Check for line noise or other line problems.
	reception	• Check the FCU - NCU connectors.
		• Replace the NCU or FCU.
0-30	The other terminal did not reply to	Check the connection.
	NSS(A) in AI short protocol mode	• Try adjusting the TX level and/or cable equalizer
		settings.
		• The other terminal may not be compatible.
		Reference:
		Dedicated TX parameters - Section 4
0-32	The other terminal sent a DCS, which	Check the protocol dump list.
	contained functions that the receiving	• Ask the other party to contact the manufacturer.
	machine cannot handle.	
0-33	The data reception (not ECM) is not	Check the connection.
	completed within 10 minutes.	• The other terminal may have a defective modem/FCU.
0-52	Polarity changed during communication	Check the connection.
		Retry communication.
0-55	FCU does not detect the SG3.	• FCU firmware or board defective.
		• SG3 firmware or board defective.
0-56	The stored message data exceeds the	• SG3 firmware or board defective.
	capacity of the mailbox in the SG3.	
0-70	The communication mode specified in	• The other terminal did not have a compatible
	CM/JM was not available	communication mode (e.g., the other terminal was a
	(V.8 calling and called terminal)	V.34 data modem and not a fax modem.)
		• A polling TX file was not ready at the other terminal

Code	Meaning	Suggested Cause/Action
		when polling RX was initiated from the calling
		terminal.
0-74	The calling terminal fell back to T.30	• The calling terminal could not detect ANSam due to
	mode, because it could not detect	noise, etc.
	ANSam after sending CI.	• ANSam was too short to detect.
		• Check the connection and condition.
		• Try making a call to another V.8/V.34 fax.
0-75	The called terminal fell back to T.30	• The terminal could not detect ANSam.
	mode, because it could not detect a CM	• Check the connection and condition.
	in response to ANSam (ANSam	• Try receiving a call from another V.8/V.34 fax.
	timeout).	
0-76	The calling terminal fell back to T.30	• The called terminal could not detect a CM due to noise,
	mode, because it could not detect a JM	etc.
	in response to CM	• Check the connection. and condition.
	(CM timeout).	• Try making a call to another V.8/V.34 fax.
0-77	The called terminal fell back to T.30	• The calling terminal could not detect a JM due to
	mode, because it could not detect a CJ	noise, etc.
	in response to JM	• A network that has narrow bandwidth cannot pass JM
	(JM timeout).	to the other party.
		• Check the connection and condition.
		• Try receiving a call from another V.8/V.34 fax.
0-79	The called terminal detected CI while	• Check for line noise or other line problems.
	waiting for a V.21 signal.	• If this error occurs, the called terminal falls back to
		T.30 mode.
0-80	The line was disconnected due to a	• The guard timer expired while starting these phases.
	timeout in V.34 phase 2 – line probing.	Serious noise, narrow bandwidth, or low signal level
0-81	The line was disconnected due to a	can cause these errors.
	timeout in V.34 phase 3 – equalizer	If these errors happen at the transmitting terminal:
	training.	• Try making a call later.
0-82	The line was disconnected due to a	• Try using V.17 or a slower modem using dedicated TX
	timeout in the V.34 phase 4 – control	parameters.
	channel start-up.	• Try increasing the TX level.
0-83	The line was disconnected due to a	• Try adjusting the TX cable equalizer setting.
	timeout in the V.34 control channel	If these errors happen at the receiving terminal:
	restart sequence.	• Try adjusting the RX cable equalizer setting.
		• Try increasing the TX level.
		• Try using V.17 or a slower modem if the same error is
		frequent when receiving from multiple senders.

Code	Meaning	Suggested Cause/Action
0-84	The line was disconnected due to	• The signal did not stop within 10 s.
	abnormal signaling in V.34 phase 4 –	• Turn OFF the main power, and then turn it back ON.
	control channel start-up.	• If the same error is frequent, replace the FCU.
0-85	The line was disconnected due to	• The signal did not stop within 10 s.
	abnormal signaling in V.34 control	• Turn OFF the main power, and then turn it back ON.
	channel restart.	• If the same error is frequent, replace the FCU.
0-86	The line was disconnected because the	• The other terminal was incompatible.
	other terminal requested a data rate	• Ask the other party to contact the manufacturer.
	using MPh that was not available in the	
	currently selected symbol rate.	
0-87	The control channel started after an	• The receiving terminal restarted the control channel
	unsuccessful primary channel.	because data reception in the primary channel was not successful.
		• This does not result in an error communication.
0-88	The line was disconnected because PPR	• Try using a lower data rate at the start.
	was transmitted/received 9 (default)	• Try adjusting the cable equalizer setting.
	times within the same ECM frame.	
2-11	Only one V.21 connection flag was	• Replace the FCU.
	received	
2-12	Modem clock irregularity	• Replace the FCU.
2-13	Modem initialization error	• Turn OFF the main power, and then turn it back ON.
		• Update the modem ROM.
		• Replace the FCU.
2-22	Counter overflow error of JBIG chip	If error occurs frequently, change the settings for resolution,
		paper size, and compression type.
2-23	JBIG compression or reconstruction	Turn OFF the main power, and then turn it back ON.
	error	
2-24	JBIG ASIC error	• Turn OFF the main power, and then turn it back ON.
2-25	JBIG data reconstruction error (BIH	• JBIG data error
	error)	• Check the sender's JBIG function.
2-26	JBIG data reconstruction error (Float	• Update the FCU ROM.
	marker error)	
2-27	JBIG data reconstruction error (End	
	marker error)	
2-28	JBIG data reconstruction error	
	(Timeout)	
2-29	JBIG trailing edge maker error	FCU defective

Meaning	Suggested Cause/Action
	• Check the destination device.
The machine resets itself for a fatal FCU	• If this is frequent, update the ROM, or replace the
system error	FCU.
The machine resets itself because of a	• If this is frequent, update the ROM, or replace the
fatal communication error	FCU.
Snd msg() in the manual task is an error	• The user did the same operation many times, and this
because the mailbox for the operation	gave too much load to the machine.
task is full.	
Line current was cut	• Check the line connector.
	• Check for line problems.
	• Replace the FCU.
Communication failed because of an ID	• Get the ID Codes the same and/or the CSIs
Code mismatch (Closed Network) or	programmed correctly, and then resend.
Tel. No./CSI mismatch (Protection	• The machine at the other party may be defective.
Data reconstruction not possible	• Replace the FCU.
DCR timer expired	• Replace the FCU.
Storage impossible because of a lack of	• Temporary memory shortage.
memory	• Test the SAF memory.
-	
	• Test the SAF memory.
substitute RX or confidential RX	• Ask the other party to resend the message.
message	
SAF file access error	• Replace an SD card or HDD.
	• Replace the FCU.
	• Try adjusting the RX cable equalizer.
	• Replace the FCU.
G3 ECM - RTC not detected	Check the connection.
	• Check for a bad line or defective remote terminal.
C2 ECM fractivity 1 / f	Replace the FCU.
	Check the connection.
	 Check for a bad line or defective remote terminal. Declare the ECU
was no nne tan	 Replace the FCU. Try adjusting the PX ashle acqualizer
1	• Try adjusting the RX cable equalizer
	The machine resets itself for a fatal FCU system error The machine resets itself because of a fatal communication error Snd msg() in the manual task is an error because the mailbox for the operation task is full. Line current was cut Communication failed because of an ID Code mismatch (Closed Network) or Tel. No./CSI mismatch (Protection against Wrong Connections) Data reconstruction not possible DCR timer expired Storage impossible because of a lack of memory Memory overflow Print data error when printing a substitute RX or confidential RX

Code	Meaning	Su	aggested Cause/Action
		RX cable equal	lizer - G3 Switch 07 (PSTN)
6-06	G3 ECM - coding/decoding error	Defective FCU	•
		The other termi	inal may be defective.
6-08	G3 ECM - PIP/PIN received in reply to	The other party	pressed [Stop] during communication.
	PPS.NULL	The other termi	inal may be defective.
6-09	G3 ECM - ERR received	Check for a noi	isy line.
		Adjust the TX I	levels of the communicating machines.
		See code 6-05.	
6-10	G3 ECM - error frames still received at	Check for line	noise.
	the other party after all communication	Adjust the TX l	level (use NCU parameter 01 or the
	attempts at 2400 bps	dedicated TX p	parameter for that address).
		Check the conn	nection.
		Defective remo	ote terminal.
6-21	V.21 flag detected during high speed	The other termi	inal may be defective or incompatible.
	modem communication		
6-22	The machine resets the sequence	Check for line	noise.
	because of an abnormal handshake in	If the same error	or occurs frequently, replace the FCU.
	the V.34 control channel	Defective remo	ote terminal.
6-99	V.21 signal not stopped within 6 s	Replace the FC	CU.
13-	SIP user name registration error	Double registra	tion of the SIP user name.
17		Capacity for us	er-name registration in the SIP server is
		not sufficient.	
13-	SIP server access error	Incorrect initial	setting for the SIP server.
18		Defective SIP s	server.
13-	SIP authentication error	Registered pass	sword in the device does not match the
24		password in the	e SIP server.
13-	Network I/F setting error	IPV4 is not acti	ive in the active protocol setting.
25		IP address of th	e device is not registered.
13-	Network I/F setting error at power on	Active protocol	l setting does not match the I/F setting
26		for SIP server.	
		IP address of th	e device is not registered.
13-	IP address setting error	IP address of th	e device is not registered.
27			
14-	SMTP Send Error	Error occurred	during sending to the SMTP server.
00		Occurs for any	error other than 14-01 to 16. For
		example, the m	ail address of the system administrator
		is not registered	d

Code	Meaning	Suggested Cause/Action
14-	SMTP Connection Failed	• Failed to connect to the SMTP server (timeout) because
01		the server could not be found.
		• The PC is not ready to transfer files.
		• SMTP server not functioning correctly.
		• The DNS IP address is not registered.
		• Network not operating correctly.
		• Destination folder selection not correct.
14-	No Service by SMTP Service (421)	• SMTP server operating incorrectly or the destination
02		for direct SMTP sending is not correct.
		• Contact the system administrator and check that the
		SMTP server has the correct settings and operates
		correctly.
		• Contact the system administrator for direct SMTP
		sending and check the sending destination.
14-	Access to SMTP Server Denied (450)	• Failed to access the SMTP server because the access is
03		denied.
		• SMTP server operating incorrectly. Contact the system
		administrator to determine if there is a problem with
		the SMTP server and to check that the SMTP server
		settings are correct.
		• Folder send destination is incorrect. Contact the system
		administrator to determine that the SMTP server
		settings and path to the server are correct.
		• Device settings incorrect. Confirm that the user name
		and password settings are correct.
		• Direct SMTP destination incorrect. Contact the system
		administrator to determine if there is a problem at the
		destination and that the settings at the destination are
		correct.
14-	Access to SMTP Server Denied (550)	• SMTP server operating incorrectly
04		Direct SMTP sending not operating correctly
14-	SMTP Server HDD Full (452)	• Failed to access the SMTP server because the HDD on
05		the server is full.
		• Insufficient free space on the HDD of the SMTP server.
		Contact the system administrator and check the amount
		of space remaining on the SMTP server HDD.
		• Insufficient free space on the HDD where the
		destination folder is located. Contact the system

Code	Meaning	Suggested Cause/Action
		administrator and check the amount of space remaining
		on the HDD where the target folder is located.
		• Insufficient free space on the HDD at the target
		destination for SMTP direct sending. Contact the
		system administrator. Check the amount of space
		remaining on the target HDD or check if the mail size
		setting is the default value (2MB).
		• Check the size of the original data. For example, if the
		original has too many pages, the data size can be too
		big to send.
14-	User Not Found on SMTP Server (551)	• The designated user does not exist.
06		• The designated user does not exist on the SMTP server.
		• The designated address is not for use with direct SMTP
		sending.
14-	Data Send to SMTP Server Failed	• Failed to access the SMTP server because the
07	(4XX)	transmission failed.
		• PC not operating correctly.
		• SMTP server operating incorrectly.
		• Network not operating correctly.
		• Destination folder setting incorrect.
		• Direct SMTP sending not operating correctly.
14-	Data Send to SMTP Server Failed	• Failed to access the SMTP server because the
08	(5XX)	transmission failed.
		• SMTP server operating incorrectly.
		• Destination folder setting incorrect.
		• Direct SMTP sending not operating correctly.
		• Software application error.
14-	Authorization Failed for Sending to	• POP-Before-SMTP or SMTP authorization failed.
09	SMTP Server	Incorrect setting for file transfer
14-	Addresses Exceeded	• Number of broadcast addresses exceeded the limit for
10		the SMTP server.
14-	Buffer Full	• The send buffer is full so the transmission could not be
11		completed. Buffer is full due to using Scan-to-Email
		while the buffer is being used send mail at the same
		time.
14-	Data Size Too Large	Transmission was cancelled because the detected size
12		of the file was too large.
14-	Send Cancelled	Processing is interrupted because the user pressed

Code	Meaning	Suggested Cause/Action	
13		[Stop].	
14- 14	Security Locked File Error	• Update the software because of the defective software.	
14- 15	Mail Data Error	 The transmitting a mail is interrupted via DCS due to the incorrect data. Update the software because of the defective software. 	
14- 16	Maximum Division Number Error	 When a mail is divided for the mail transmission and the division number of a mail are more than the specified number, the mail transmission is interrupted. Update the software because of the defective software. 	
14- 17	Incorrect Ticket	• Update the software because of the defective software.	
14- 18	Access to MCS File Error	 The access to MCS file is denied due to the no permission of access. Update the software because of the defective software. 	
14- 20	SMTP Authentication error	Make sure the administrator's e-mail address is same as the SMTP authentication address or POP before SMTP address.	
14- 21	Transmission error of S/MIME	Register the correct user certificate and device certificate.	
14- 30	MCS File Creation Failed	 Failed to create the MCS file because: The number of files created with other applications on the Document Server has exceeded the limit. HDD is full or not operating correctly. Software error. 	
14- 31	UFS File Creation Failed	 UFS file could not be created: Not enough space in UFS area to handle both Scan-to- Email and IFAX transmission. HDD full or not operating correctly. Software error. 	
14- 32	Cancelled the Mail Due to Error Detected by NFAX	• Error detected with NFAX and send was cancelled due to a software error.	
14- 33	No Mail Address For the Machine	• Neither the mail address of the machine nor the mail address of the network administrator is registered.	
14- 34	Address designated in the domain for SMTP sending does not exist	 Operational error in normal mail sending or direct SMTP sending. Check the address selected in the address book for 	

Code	Meaning	Suggested Cause/Action
		SMTP sending.
		• Check the domain selection.
14-	Mail Job Task Error	Due to an FCU mail job task error, the send was cancelled:
50		• Address book was being edited during creation of the
		notification mail.
		Software error.
14-	UCS Destination Download Error	Not even one return notification can be downloaded:
51		• The address book was being edited.
		• The number for the specified destination does not exist
		(it was deleted or edited after the job was created).
14-	Send Cancel Failed	• The cancel operation by the user failed.
60		
14-	Notification Mail Send Failed for All	• All addresses for return notification mail failed.
61	Destinations	
14-	Transmission Error due to the existence	• When the 0 line page exists in received pages with G3
62	of zero line page	communication, the transmission is interrupted.
14-	Fax Communication Unit: Transmission	Check the followings.
63	Error	Name of SMTP server
		• Port number of SMTP
		• DNS setting
		• Server name (FTP)
		• Path name (computer name and shared folder name at
		SMTP/ NCP)
		• Active protocol setting (Netware/ NCP)
		• NW flame type (NCP)
		Log-on mode (NDS tree/ bindery)
-		Check the SMTP server.
		• Check if the SMTP server works normally and is
		connected to the network.
		• Check if the settings of the SMTP are correct.
-		Check the DNS server.
		• Check if the DNS server works normally and is
		connected to the network.
		• Check if the settings of the DNS server are correct.
-		Check the network.
		• Check if the LAN works normally.
		Check if the no firewall exists.
-		Check the destination folder for the data transfer.

Code	Meaning	Suggested Cause/Action
		• Check if the destination folder works normally.
		• Check if the settings of the destination folder are
		correct.
-		Ask an administrator of the direct SMTP server in which the
		data is supposed to be transferred.
		• Check if the destination SMTP server works normally.
		• Check if the settings of the destination SMTP server
		are correct.
15-	POP3/IMAP4 Server Not Registered	• At startup, the system detected that the IP address of
01		the POP3/IMAP4 server has not been registered in the
		machine.
15-	POP3/IMAP4 Mail Account	• The POP3/IMAP4 mail account has not been
02	Information Not Registered	registered.
15-	Mail Address Not Registered	• The mail address has not been registered.
03		
15-	DCS Mail Receive Error	• Error other than 15-11 to 15-18.
10		
15-	Connection Error	The DNS or POP3/IMAP4 server could not be found:
11		• The IP address for DNS or POP3/IMAP4 server is not
		stored in the machine.
		• The DNS IP address is not registered.
		Network not operating correctly.
15-	Authorization Error	POP3/IMAP4 send authorization failed:
12		• Incorrect IFAX user name or password.
		• Another device, such as the PC, attempted access.
		POP3/IMAP4 settings incorrect.
15-	Receive Buffer Full	Occurs only during manual reception. Transmission
13		cannot be received due to insufficient buffer space. The
		buffer is being used for mail send or Scan-to-Email.
15-	Mail Header Format Error	• The mail header is not standard format. For example,
14		the Date line description is incorrect.
15-	Mail Divide Error	• The e-mail is not in standard format. There is no
15		boundary between parts of the e-mail, including the
		header.
15-	Mail Size Receive Error	• The mail cannot be received because it is too large.
16		
15-	Receive Timeout	• May occur during manual receiving only because the

Code	Meaning	Suggested Cause/Action	
17		network is not operating correctly.	
15-	Incomplete Mail Received	• Only one portion of the mail was received.	
18			
15-	Final Destination for Transfer Request	• The format of the final destination for the transfer	
31	Reception Format Error	request was incorrect.	
15-	Send/Delivery Destination Error	The transmission cannot be delivered to the final	
39		destination:	
		• Destination file format is incorrect.	
		• Could not create the destination for the file	
		transmission.	
15-	SMTP Receive Error	• Reception rejected because the transaction exceeded	
41		the limit for the "Auth. E-mail RX" setting.	
15-	Off Ramp Gateway Error	• The delivery destination address was specified with Off	
42		Ramp Gateway OFF.	
15-	Address Format Error	• Format error in the address of the Off Ramp Gateway.	
43			
15-	Addresses Over	• The number of addresses for the Off Ramp Gateway	
44		exceeded the limit of 30.	
15-	Attachment File Format Error	• The attached file is not TIFF format.	
61			
15-	TIFF File Compatibility Error	Could not receive transmission due to:	
62		Resolution error	
		• Image of resolution greater than 200 dpi without	
		extended memory.	
		• Resolution is not supported.	
		Page size error	
		• The page size was larger than A3.	
		Compression error	
		• File was compressed with other than MH, MR, or	
		MMR.	
15-	TIFF Parameter Error	The TIFF file sent as the attachment could not be received	
63		because the TIFF header is incorrect:	
		• The TIFF file attachment is a type not supported.	
		• The TIFF file attachment is corrupted.	
		Software error.	
15-	TIFF Decompression Error	The file received as an attachment caused the TIFF	
64		decompression error:	
		• The TIFF format of the attachment is corrupted.	

Code	Meaning	Suggested Cause/Action	
		•	Software error.
15-	Not Binary Image Data	•	The file could not be received because the attachment
71			was not binary image data.
15-	MDN Status Error	•	The disposition line in the header of the Return Receipt
73			could not be found, or there is a problem with the
			firmware.
15-	MDN Message ID Error	•	Could not find the Original Message ID line in the
74			header of the Return Receipt, or there is a problem
			with the firmware.
15-	Mail Job Task Read Error	•	Could not receive the transmission because the
80			destination buffer is full and the destination could not
			be created (this error may occur when receiving a
			transfer request or a request for notification of
			reception).
15-	Repeated Destination Registration Error	•	Could not repeat receive the transmission because the
81			destination buffer is full and the destination could not
			be created (this error may occur when receiving a
			transfer request or a request for notification of
			reception).
15-	Send Registration Error	Co	uld not receive the file for transfer to the final
91		destination:	
		•	The format of the final destination or the transfer
			destination is incorrect.
		•	Destinations are full so the final and transfer
			destinations could not be created.
15-	Memory Overflow	•	Transmission could not be received because memory
92			overflowed during the transaction.
15-	Memory Access Error	•	Transaction could not complete due to a malfunction of
93			SAF memory.
15-	Incorrect ID Code	•	The machine rejected an incoming e-mail for transfer
94			request, because the ID code in the incoming e-mail
			did not match the ID code registered in the machine.
15-	Transfer Station Function	•	The machine rejected an incoming e-mail for transfer
95			because the transfer function was unavailable.
16-	No IP address registered	•	The machine does not get an IP address because the
00		DNS server has not been registered for the remote	
			machine or IP address of the remote machine has not
			been registered.

Code	Meaning	Suggested Cause/Action
		• Register the DNS server for the remote machine or
		configure an IP address of the remote machine.
22-	Original length exceeded the maximum	• Divide the original into more than one page.
00	scan length	• Check the resolution used for scanning. Lower the scan
		resolution if possible.
		Add optional page memory.
22-	Memory overflow while receiving	• Wait for the files in the queue to be sent.
01		• Delete unnecessary files from memory.
		• Transfer the substitute reception files to another fax
		machine, if the machine's printer is busy or out of
		order.
		• Add an optional SAF memory card or hard disk.
22-	TX or RX job stalled due to line	• The job started normally but did not finish normally;
02	disconnection at the other party	data may or may not have been received fully.
		• Restart the machine.
22-	The machine cannot store received data	• Update the ROM
04	in the SAF	• Replace the FCU.
22-	No G3 parameter confirmation answer	• Defective FCU board or firmware.
05		
23-	Data read timeout during construction	• Restart the machine.
00		• Replace the FCU.
25-	The machine software resets itself after	• Update the ROM
00	a fatal transmission error occurred	• Replace the FCU.
F0-	V.34 modem error	• Replace the FCU.
XX		
F6-	SG3 modem error	• Update the SG3 modem ROM.
XX		• Replace the SG3 board.
		• Check for line noise or other line problems.
		• Try communicating another V.8/V.34 fax.

Fax Connection Unit Error Codes

Fax Connection Unit Error Code List

MACHINE ERR 01

Error	Possible Causes	Troubleshooting Procedures
Code		
01(1)	IPv4/IPv6 not enabled	Enable IPv4 and IPv6
01(3)	"Cancel" is pressed by user.	-
01(4)	A false connection ID is being used.	Check that the network is
01(5)	Network is disconnected because of no response within a	established.
	specified time.	
01(14)	• Either this machine or the machine at the other end has	• Exit SP or initial settings.
	entered SP or Initial settings.	• Wait until the connection
	• An established connection exists.	has finished.

MACHINE ERR 02

Error	Possible Causes			Troubleshooting Procedures
Code				
02(5)	•	Wrong IP address/host name was used.	•	Enter the correct IP address/host
	•	• The main power of the other machine at destination		name
		is OFF.	•	Turn ON the main power.
	•	LAN cable is disconnected.	•	Connect the LAN cable
	•	Network is rebooting.	•	Wait until rebooting has finished.

MACHINE ERR 03

Error		Possible Causes	Troubleshoot	ting Procedures
Code				
03	•	No user authentication (i.e.	Configure the user a	uthentication setting
		Basic/Windows/LDAP/Custom Auth.) applies to fax	for client and remote	e machines as
		application.	follows:	
	•	Settings other than user authentication are applied	Client Machine	Remote Machine
		to the fax application.	OFF	OFF
			ON	OFF
			ON	ON

MACHINE ERR 04

Error Code	Possible Causes		Troubleshooting Procedures
04	Although the same user is registered on the remote machine and client machine, the user name and login password do not match.	•	Register the same user to both the remote machine and client machine. Make sure to match the username and login password.

MACHINE ERR 05

Error Code Possible Causes		Troubleshooting Procedures		
05	An unauthorized user tried to connect.	Authorize the user to use fax connection.		

MACHINE ERR 06

Error	Possible Causes	Troubleshooting Procedures
Code		
06	Timeout error on the node	Adjust the value of SP5-741-001 to prolong the timeout for
	authentication	node authentication.

MACHINE ERR 07

Error	Possible Causes	Troubleshooting Procedures	
Code			
07	Multiple destinations are set in the client	On the client machine, execute SP5-801-021 to clear	
	machine.	AICS memory	

MACHINE ERR 08

Error		Possible Causes		Troubleshooting Procedures
Code				
08(1)	•	A client machine connects to another client	•	Connect to the remote machine.
		machine.	•	Register the client machine to the remote
	•	The client machine is not registered on the		machine as a destination.
		remote machine as destinations.		
08(2)	•	A remote machine connects to another	•	Connect to the client machine.
		Remote Machine.	•	Check the remote machine registered on
	•	The wrong remote machine is registered on		the client machine.
		the client machine.		

IFAX Troubleshooting

IFAX Troubleshooting

Use the following procedures to determine whether the machine or another part of the network is causing the problem.

Communication Route	Item	Troubleshooting Procedures
General LAN	1. Connection with the LAN	• Check that the LAN cable is connected to the machine.
		• Check that the LEDs on the hub are lit.
	2. LAN activity	Check that other devices connected to the LAN can
		communicate through the LAN.
Between IFAX and	1. Network settings on the	• Check the network settings on the PC.
PC	PC	• Check with the network administrator for the IP
		address. (Is the IP address registered in the TCP/IP
		properties in the network setup correct?)
	2. Check that PC can	Use the "ping" command on the PC to contact the
	connect with the machine	machine.
		At the MS-DOS prompt, type ping then the IP address of
		the machine, then press Enter.
	3. LAN settings in the	• Check the LAN parameters
	machine	• Check if there is an IP address conflict with other
		PCs.
		Use the "Network" function in the User Tools.
		If there is an IP address conflict, inform the
		administrator.
Between machine	1. LAN settings in the	• Check the LAN parameters
and e-mail server	machine	• Check if there is an IP address conflict with other
		PCs.
		Use the "Network" function in the User Tools.
		If there is an IP address conflict, inform the administrator.
	2. E-mail account on the	• Make sure that the machine can log into the e-mail
	server	server.
		• Check that the account and password stored in the
		server are the same as in the machine.
		Ask the administrator to check.
	3. E-mail server	Make sure that the client devices which have an account
		in the server can send/receive e-mail.

Communication	Item	Troubleshooting Procedures
Route		
		Ask the administrator to check.
		Send a test e-mail with the machine's own number as the
		destination. The machine receives the returned e-mail if
		the communication is performed successfully.
Between e-mail	1. E-mail account on the	• Make sure that the PC can log into the e-mail server.
server and internet	Server	• Check that the account and password stored in the
		server are the same as in the machine.
		Ask the administrator to check.
	2. E-mail server	Make sure that the client devices which have an account
		in the server can send/receive e-mail.
		Ask the administrator to check.
		Send a test e-mail with the machine's own number as the
		destination. The machine receives the returned e-mail if
		the communication is performed successfully.
	3. Destination e-mail	• Make sure that the e-mail address is actually used.
	address	• Check that the e-mail address contains no incorrect
		characters such as spaces.
	4. Router settings	• Use the "ping" command to contact the router.
		• Check that other devices connected to the router can
		sent data over the router.
		Ask the administrator of the server to check.
	5. Error message by e-	• Check whether e-mail can be sent to another address
	mail from the network of	on the same network, using the application e-mail
	the destination.	software.
		• Check the error e-mail message.
		Inform the administrator of the LAN.

IP-Fax Troubleshooting

IP-Fax Transmission

Cannot send by IP Address/Host Name

Che	ck Point	Troubleshooting Procedures
1	LAN cable connected?	Check the LAN cable connection.
2	Specified IP address/hostname correct?	Check the IP address/host name.
3	Firewall/NAT installed?	The firewall cannot be breached. Send by
		another method (Fax, Internet Fax)
4	Transmission sent manually?	Manual sending not supported.
5	IP address of local machine registered?	Register the IP address.
6	Remote terminal port number setting other than 1720	Send by specifying the port number.
	(when using H.323) or 5060 (when using SIP)?	
7	Specified port number correct?	Confirm the port number of the remote fax.
8	DNS server registered when host name specified?	Contact the network administrator.
9	Remote fax a T.38 terminal?	Check whether the remote fax is a T38
		terminal.
10	Remote fax switched off or busy?	Check that the remote fax is ON.
11	Network bandwidth too narrow?	Request the network administrator to increase
		the bandwidth.
		Raise the delay level.
		(IPFAX SW 01 Bit 0 to 3)
		IP-Fax bandwidth is the same as the DCS
		speed. Set IP-Fax SW00 Bit 6 to 1.
12	Remote fax cancelled transmission?	Check whether the remote fax cancelled the
		transmission.

Cannot send via VoIP Gateway

Che	eck Point	Troubleshooting Procedures
1	LAN cable connected?	Check the LAN cable connection.
2	VoIP Gateway T.38 standard?	Contact the network administrator.
3	VoIP Gateway installed correctly?	Contact the network administrator.
4	VoIP Gateway power switched on?	Contact the network administrator.
5	Is the IP address/host name of the specified	Check the IP address/host name.
	Gateway correct?	
6	Number of the specified fax correct?	Check the remote fax number.
7	Firewall/NAT installed?	The firewall cannot be breached. Send by another method
		(Fax, Internet Fax)

8	Transmission sent manually?	Manual sending not supported.
9	IP address of local fax registered?	Register the IP address.
10	DNS registered when host name specified?	Contact the network administrator.
11	Remote fax a G3 fax?	Check that the remote fax is a G3 fax.
12	G3 fax connected to VoIP gateway?	Check that G3 fax is connected.
13	Remote G3 fax turned ON?	Check that G3 fax is ON.
14	Network bandwidth too narrow?	Request the network administrator to increase the
		bandwidth.
		Raise the network delay level.
		(IPFAX SW 01 Bit 0 to 3)
		IP-Fax bandwidth is the same as the DCS speed. Set IP-
		Fax SW00 Bit 6 to 1.

Cannot send by Alias Fax number.

Che	ck Point	Troubleshooting Procedures
1	LAN cable connected?	Check the LAN cable connection.
2	Number of specified Alias fax correct?	Confirm the Alias of the remote fax.
		Error Code: 13-14
3	Firewall/NAT installed?	The firewall cannot be breached. Send by another
		method (Fax, Internet Fax)
4	Transmission sent manually?	Manual sending not supported.
5	Gatekeeper/SIP server installed correctly?	Contact the network administrator.
6	Gatekeeper/SIP server power turned ON?	Contact the network administrator.
7	IP address/host name of Gatekeeper/SIP server	Check the IP address/host name.
	correct?	
8	DNS server registered when Gatekeeper/SIP	Contact the network administrator.
	server host name specified?	
9	Enable H.323/Enable SIP SW is set to on?	Check the settings.
		See User Parameter SW 34 Bit 0/SW 34 Bit 1
10	IP address of local fax registered?	Register the IP address of the local fax.
11	Alias number of local fax registered?	Register the Alias number of the local fax.
12	Remote fax registered in Gatekeeper?	Contact the network administrator.
13	Remote fax a T.38 terminal?	Check whether the remote fax is a T38 terminal.
14	Remote fax switched off or busy?	Contact the network administrator.
15	Network bandwidth too narrow?	Request the system administrator to increase the
		bandwidth.
		Raise the delay level.
		(IPFAX SW 01 Bit 0 to 3)

		Lower the modem transmission baud rate.
		(IPFAX SW 05)
16	Remote fax cancelled transmission?	Check whether the remote fax cancelled the
		transmission.

IP-Fax Reception

Cannot receive via IP Address/Host Name.

Cł	neck Point	Troubleshooting Procedures
1	LAN cable connected?	Check the LAN cable connection.
2	Firewall/NAT installed?	The firewall cannot be breached. Send by another method
		(Fax, Internet Fax)
3	IP address of local fax registered?	Register the IP address.
4	Port number specified at remote sender fax	Request the sender to specify the port number.
	(if required)?	
5	Specified port number correct (if required)?	Request the sender to check the port number.
6	DNS server registered when host name	Contact the network administrator.
	specified on sender side?	♦ Note
		• The sender machine displays this error code if the
		sender fax is a Ricoh model.
7	Network bandwidth too narrow?	Request the system administrator to increase the bandwidth.
		Lower the start modem reception baud rate on the receiving
		side.
		(IPFAX SW06)
8	Remote fax cancelled transmission?	Check whether the remote fax cancelled the transmission.

Cannot receive by VoIP Gateway.

Cł	neck Point	Troubleshooting Procedures
1	LAN cable connected?	Check the LAN cable connection.
2	Firewall/NAT installed?	The firewall cannot be breached. Send by another
		method (Fax, Internet Fax)
3	VoIP Gateway installed correctly?	Contact the network administrator.
4	VoIP Gateway power turned ON?	Contact the network administrator.
5	IP address/host name of specified VoIP Gateway	Request the remote fax to check the IP address/host
	correct on sender's side?	name.
6	DNS server registered when host name specified	Contact the network administrator.
	on sender side?	
7	Network bandwidth too narrow?	Request the network administrator to increase the
		bandwidth.

8	G3 fax connected?	Check that G3 fax is connected.
9	G3 fax power turned ON?	Check that G3 fax is ON.

Cannot receive by Alias Fax number.

Che	eck Point	Troubleshooting Procedures
1	LAN cable connected?	Check the LAN cable connection.
2	Firewall/NAT installed?	The firewall cannot be breached. Send by another
		method (Fax, Internet Fax)
3	Gatekeeper/SIP server installed correctly?	Contact the network administrator.
		♦ Note
		• The sender machine displays this error
		code when the sender fax is a Ricoh model.
4	Power to Gatekeeper/SIP server turned ON?	Contact the network administrator.
		♦ Note
		• The sender machine displays this error
		code when the sender fax is a Ricoh model.
5	IP address/host name of Gatekeeper/SIP server	Request the sender to check the IP address/host
	correct on the sender's side?	name.
		♦ Note
		• The sender machine displays this error
		code when the sender fax is a Ricoh model.
6	DNS server registered when Gatekeeper/SIP	Contact the network administrator.
	server host name specified on sender's side?	♦ Note
		• The sender machine displays this error
		code when the sender fax is a Ricoh model.
7	Enable H.323/Enable SIP SW set to on?	Request the sender to check the settings.
		User Parameter SW 34 Bit 0/SW 34 Bit 1
		♦ Note
		• Only if the remote sender fax is a Ricoh
		fax.
8	Local fax IP address registered?	Register the IP address.
9	Local fax Alias number registered?	Register the Alias number.
10	Network bandwidth too narrow?	Request the system administrator to increase the
		bandwidth.
		Lower the start modem reception baud rate on the
		receiving side.
		(IPFAX SW06)
11	Remote fax cancelled transmission?	Check whether the remote fax cancelled the
		transmission.

12	Local fax registered in Gatekeeper/SIP server?	Contact the network administrator.
		♦ Note
		• The sender machine displays this error
		code when the sender fax is a Ricoh model.

4. Service Tables

Cautions

😭 Important 🔵

• Never turn off the main power switch when the power LED is lit or flashing. To avoid damaging the hard disk or memory, press the operation power switch to switch the power off, wait for the power LED to go off, and then switch the main power switch off.

Vote

• The main power LED lights or flashes while the platen cover or ARDF is open, while the main machine is communicating with a facsimile or the network server, or while the machine is accessing the hard disk or memory for reading or writing data.

Service Program Tables

SP1-XXX (BIT Switches)

1	Mode No.		Function		
101	System Switch				
	001 - 032	00 – 1F	Change the bit switches for system settings for the fax option		
			"Bit Switches - 1" : "System Switches"		
102	Ifax Switch				
	001 - 016	00 – 0F	Change the bit switches for internet fax settings for the fax option		
			"Bit Switches - 2" : "I-Fax Switches"		
103	Printer Swit	Printer Switch			
	001 – 016	00 – 0F	Change the bit switches for printer settings for the fax option		
			"Bit Switches - 2": "Printer Switches"		
104	Communica	tion Switch	1		
	001 - 032	00 – 1F	Change the bit switches for communication settings for the fax option		
			"Bit Switches - 3" : "Communication Switches"		
105	G3-1 Switch	1			
	001 – 016	00 – 0F	Change the bit switches for the protocol settings of the standard G3 board		
			"Bit Switches - 4" : "G3 Switches"		
106	G3-2 Switch	G3-2 Switch			
	001 – 016	00 – 0F	Change the bit switches for the protocol settings of the optional G3 board		
			"Bit Switches - 5" : "G3-2 and G3-3 Switches"		
107	G3-3 Switch				
	001 – 016	00 - 0F	Change the bit switches for the protocol settings of the optional G3 board		
			"Bit Switches - 5": "G3-2 and G3-3 Switches"		
108	G4 Internal Switch				
	001 - 032	00 – 1F	Not used (Do not change the bit switches)		
109	G4 Parameter Switch				
	001 - 016	00 - 0F	Not used (Do not change the bit switches)		
111	IP fax Switc	h			
	001 - 016	00 - 0F	Change the bit switches for optional IP fax parameters		
			"Bit Switches - 6" : "IP Fax Switches"		

SP2-XXX (RAM)

2	Mode No.		Function	
101	RAM Re	RAM Read/Write		
	001 Change RAM data for the fax board directly.			

			"Service RAM Addresses"	
102	Memory Dump			
	001	G3-1 Memory	Print out RAM data for the fax board.	
		Dump	Specify the addresses of the required data (The data within the G3-2/G3-3	
			range can also be specified).	
			"Service RAM Addresses"	
	002	G3-2 Memory	Not used	
		Dump		
	003	G3-3 Memory	Not used	
		Dump		
	004	G4 Memory	Not used	
		Dump		
103	03 G3-1 NCU Parameters			
	001 –	CC, 01 – 22	NCU parameter settings for the standard G3 board. "NCU Parameters"	
	023			
104 G3-2 NCU Parameters				
	001 –	CC, 01 – 22	NCU parameter settings for the optional G3 board. "NCU Parameters"	
	023			
105	G3-3 NC	U Parameters		
	001 –	CC, 01 – 22	NCU parameter settings for the optional G3 board. "NCU Parameters"	
	023			

SP3-XXX (Machine Set)

3	Mode No.		Function
101	Service Station		
	001	Fax Number	Enter the fax number of the service station.
	002	Select Line	Select the line type.
102	102 Serial Number		
	001		Enter the fax unit's serial number.
103	103 PSTN-1 Port Settings		
	001	Select Line	Select the line type setting for the G3-1 line. If the machine is installed on
			a PABX line, select "PABX", "PABX (GND)" or "PABX (FLASH)".
	002	PSTN Access	Enter the PSTN access number for the
		Number	G3-1 line.
	003	Memory Lock	Not used
		Disabled	
104	PSTN-2 Port Settings		
	001	Select Line	Select the line setting for the G3-2 line. If the machine is installed on a

			PABX line, select "PABX", "PABX (GND)" or "PABX (FLASH)".	
	002	PSTN Access	Enter the PSTN access number for the G3-2 line.	
		Number		
	003	Memory Lock	Not used	
		Disabled		
	004	Transmission	If you turn this SP on, the machine does not send any fax messages on the	
		Disabled	G3-2 line.	
105	PSTN-3 Port Settings			
	001	Select Line	Select the line setting for the G3-3 line. If the machine is installed on a	
			PABX line, select "PABX", "PABX (GND)" or "PABX (FLASH)".	
	002	PSTN Access	Enter the PSTN access number for the G3-3 line.	
		Number		
	003	Memory Lock	Not used	
		Disabled		
	004	Transmission	If you turn this SP on, the machine does not send any fax messages on the	
		Disabled	G3-3 line.	
106	ISDN Port Settings			
	001	Select Line	Not used (Do not change the settings.)	
	002	PSTN Access		
		Number		
	003	Memory Lock		
		Disabled		
	004	Transmission		
		Disabled		
107	IPFAX Port Settings			
	001	H323 Port	Sets the H323 port number.	
	002	SIP Port	Sets the SIP port number.	
	003	RAS Port	Sets the RAS port number.	
	004	Gatekeeper port	Sets the Gatekeeper port number.	
	005	T.38 Port	Sets the T.38 port number.	
	006	SIP Server Port	Sets the SIP port number.	
	007	IPFAX Protocol	Select "H323" or "SIP".	
		Priority		
201	FAX SW			
	001 -	00 – 1F		
	032			

SP4-XXX (ROM Versions)

4	Mode N	Io.	Function
101	001	FCU ROM Version	Displays the FCU ROM version.
102	001	Error Codes	Displays the latest 64 fax error codes.
103	001	G3-1 ROM Version	Displays the G3-1 modem version.
104	001	G3-2 ROM Version	Displays the G3-2 modem version.
105	001	G3-3 ROM Version	Displays the G3-3 modem version.
106	001	G4 ROM Version	Not used (Do not change the settings.)

SP5-XXX (RAM Clear)

5	Mode	Function	
	No.		
101	Initialize	SRAM (except Secure)	
	000	Initializes the bit switches and user parameters, user data in the SRAM, files in the SAF	
		memory, and clock.	
102	Erase All	Files	
	000	Erases all files stored in the SAF memory.	
103	Reset Bit	Switches (except Secure)	
	000	Resets the bit switches and user parameters.	
104 Factory Setting		betting	
	000	Resets the bit switches and user parameters, user data in the SRAM and files in the SAF	
		memory.	
105 Reset All Bit Switches		Bit Switches	
	000	Resets all the current bit switch settings.	
106 Reset Security Bit Switches		curity Bit Switches	
	000	Resets only the security bit switches. If you select automatic output/display for the user	
		parameter switches, the security settings are initialized.	

SP6-XXX (Reports)

6	Mode No.		Function
101	System Parameter List		
	000	-	Touch the "ON" button to print the system parameter list.
102	Service Monitor Report		
	000	-	Touch the "ON" button to print the service monitor report.
103	G3 Protocol Dump List		
	001	G3 All	Prints the protocol dump list of all communications for all G3 lines.
		Communications	

	002	C2 1 (A11	
	002	G3-1 (All	Prints the protocol dump list of all communications for the G3-1 line.
	0.7	Communications)	
	003	G3-1	Prints the protocol dump list of the last communication for the G3-1 line.
		(1 Communication)	
	004	G3-2	Prints the protocol dump list of all communications for the G3-2 line.
		(All	
		Communications)	
	005	G3-2	Prints the protocol dump list of the last communication for the G3-2 line.
		(1 Communication)	
	006	G3-3	Prints the protocol dump list of all communications for the G3-3 line.
		(All	
		Communications)	
	007	G3-3	Prints the protocol dump list of the last communication for the G3-3 line.
		(1 Communication)	
104	G4 P	rotocol Dump List	
	001	Dch + Bch 1	Not used (Do not change the settings.)
	002	Dch	
	003	Bch 1 Link Layer	
	004	Dch Link Layer	
	005	Dch +Bch 2	
	006	Bch 2 Link Layer	
105	All F	iles print out	
	000	-	Prints out all the user files in the SAF memory, including confidential
			messages.
			♦ Note
			• Do not use this function, unless the customer is having trouble
			printing confidential messages or recovering files stored using
			the memory lock feature.
106	Journal Print out		
	001	All Journals	The machine prints all the communication records on the report.
	002	Specified Date	The machine prints all communication records after the specified date.
107	Log	Log List Print out	
	001	All log files	These log print out functions are for designer use only.
	002	Printer	
	003	SC/TRAP Stored	
	004	Decompression	1
	005	Scanner	1
	006	JOB/SAF	
105	G4 P 001 002 003 004 005 006 A11 F 000 000 Jourr 001 002 Log I 001 002 003 004	G3-3 (1 Communication) rotocol Dump List Dch + Bch 1 Dch Bch 1 Link Layer Dch Link Layer Dch +Bch 2 Bch 2 Link Layer iles print out - - - - - - - - - - - - - - - - - - -	Not used (Do not change the settings.) Prints out all the user files in the SAF memory, including confidential messages. Image: Note • Do not use this function, unless the customer is having trouble printing confidential messages or recovering files stored usin the memory lock feature. The machine prints all the communication records on the report. The machine prints all communication records after the specified date.

4.Service Tables

	1		
	007	Reconstruction	
	008	JBIG	
	009	Fax Driver	
	010	G3CCU	
	011	Fax Job	
	012	CCU	
	013	Scanner Condition	
108	IP Pr	otocol Dump List	
	001	All Communications	Prints the protocol dump list of all communications for the IP fax line.
	002	1 Communication	Prints the protocol dump list of the last communication for the IP fax line.

SP7-XXX (Tests)

These are the test modes for PTT approval.

7	Function
101	G3-1 Modem Tests
102	G3-1 DTMF Tests
103	Ringer Test
104	G3-1 V34 (S2400baud)
105	G3-1 V34 (S2800baud)
106	G3-1 V34 (S3000baud)
107	G3-1 V34 (S3200baud)
108	G3-1 V34 (S3429baud)
109	Recorded Message Test
110	G3-2 Modem Tests
111	G3-2 DTMF Tests
112	G3-2 V34 (S2400baud)
113	G3-2 V34 (S2800baud)
114	G3-2 V34 (S3000baud)
115	G3-2 V34 (S3200baud)
116	G3-2 V34 (S3429baud)
117	G3-3 Modem Tests
118	G3-3 DTMF Tests
119	G3-3 V34 (S2400baud)
120	G3-3 V34 (S2800baud)
121	G3-3 V34 (S3000baud)
122	G3-3 V34 (S3200baud)
123	G3-3 V34 (S3429baud)
124	IG3-1 Modem Tests - Not used

125	IG3-1 DTMF Tests - Not used
126	IG3-1 V34 (S2400baud) - Not used
127	IG3-1 V34 (S2800baud) - Not used
128	IG3-1 V34 (S3000baud) - Not used
129	IG3-1 V34 (S3200baud) - Not used
130	IG3-1 V34 (S3429baud) - Not used
131	IG3-2 Modem Tests - Not used
132	IG3-2 DTMF Tests - Not used
133	IG3-2 V34 (S2400baud) - Not used
134	IG3-2 V34 (S2800baud) - Not used
135	IG3-2 V34 (S3000baud) - Not used
136	IG3-2 V34 (S3200baud) - Not used
137	IG3-2 V34 (S3429baud) - Not used

Bit Switches - 1

Coloration (

• Do not adjust a bit switch or use a setting that is described as "Not used", as this may cause the machine to malfunction or to operate in a manner that is not accepted by local regulations. Such bits are for use only in other areas, such as Japan.

Default settings for bit switches are not listed in this manual. Refer to the System Parameter List printed by the machine.

System Switches

Syst	ystem Switch 00 (SP No. 1-101-001)		
No	Function	Comments	
0	Dedicated transmission	Set this bit to 1 before changing any dedicated transmission parameters.	
	parameter programming	This setting is automatically reset to "0" after turning off and on.	
	0: Disabled		
	1: Enabled		
1	Not used	Do not change this setting.	
2	Technical data printout on	1: Instead of the personal name, the following data are listed in the	
	the journal	journal for each G3 communication.	
	0: Disabled		
	1: Enabled		
	Example:		
	0000 32V34 288/264 (1) (2)(3) (4) (5)	L0100 03 04 (6) (7) (8)	
	(1): EQM value (Line quality data). A larger number means more errors.		
	(2): Symbol rate (V.34 only)		
	(3): Final modem type used		
	(4): Starting data rate (for example, 288 means 28.8 kbps)		
	(5): Final data rate		
	(6): RX level (see below for how to read the RX level)		
	(7): Total number of error lines that occurred during non-ECM reception.		
	(8): Total number of burst error	r lines that occurred during non-ECM reception.	
	♦ Note		
	• EQM and RX level a	are fixed at "FFFF" in TX mode.	
	• The seventh and eight	th numbers are fixed at "00" for transmission records and ECM reception	
	records.		
	RX level calculation		
	Example:		

	0000 32V34 288/264 (1) (2)(3) (4) (5)	L0100 03 04 (6) (7) (8)
	The four-digit hexadecimal val	ue (N) after "L" indicates the RX level.
	The high byte is given first, for	llowed by the low byte. Divide the decimal value of N by -16 to get the RX
	level.	
	In the above example, the decir	mal value of N (= 0100 [H]) is 256.
	So, the actual RX level is 256/-	-16 = -16 dB
3	Not used	Do not change this setting.
4	Line error mark print	When "1" is selected, a line error mark is printed on the printout if a line
	0: OFF, 1: ON (print)	error occurs during reception. This shows error locations when ECM is
		turned off.
5	G3 communication	This is a fault-finding aid. The LCD shows the key parameters (see "G3
	parameter display	Communication Parameters" below this table). This is normally disabled
	0: Disabled	because it cancels the CSI display for the user.
	1: Enabled	Be sure to reset this bit to "0" after testing.
6	Protocol dump list output	This is only used for communication troubleshooting. It shows the
	after each communication	content of the transmitted facsimile protocol signals. Always reset this bit
	0: Off	to 0 after finishing testing.
	1: On	If system switch 09 bit 6 is at "1", the list is only printed if there was an
		error during the communication.
7	Not used	Do not change the setting.

G3 Communication Parameters

Modem rate	336: 33600 bps 168: 16800 bps
	312: 31200 bps 144: 14400 bps
	288: 28800 bps 120: 12000 bps
	264: 26400 bps 96: 9600 bps
	240: 24000 bps 72: 7200 bps
	216: 21600 bps 48: 4800 bps
	192: 19200 bps 24: 2400 bps
Resolution	S: Standard (8 x 3.85 dots/mm)
	D: Detail (8 x 7.7 dots/mm)
	F: Fine (8 x 15.4 dots/mm)
	SF: Superfine (16 x 15.4 dots/mm)
	21: Standard (200 x 100 dpi)
	22: Detail (200 x 200 dpi)
	44: Superfine (400 x 400 dpi)
Compression mode	MMR: MMR compression
	MR: MR compression
	MH: MH compression

	JBO: JBIG compression (Optional mode)
	JBB: JBIG compression (Basic mode)
Communication mode	ECM: With ECM
	NML: With no ECM
Width and reduction	A4: A4 (8.3"), no reduction
	B4: B4 (10.1"), no reduction
	A3: A3 (11.7"), no reduction
I/O rate	0: 0 ms/line
	5: 5 ms/line
	10: 10 ms/line
	20: 20 ms/line
	25: 2.5 ms/line
	40: 40 ms/line
	♦ Note
	• "40" is displayed while receiving a fax message using AI short protocol.

System Switch 01 - Not used (Do not change the factory settings.)

Syst	System Switch 02 (SP No. 1-101-003)		
No	Function	Comments	
0-	Not used	Do not change these settings.	
1			
2	Forced reset after	With this setting on, the machine resets itself automatically if a	
	transmission stalls	transmission stalls and fails to complete the job.	
	0: Off		
	1: On		
3	Not used	Do not change these settings.	
4	File retention time	1: A file that had a communication error will not be erased unless the	
	0: Depends on User	communication is successful.	
	Parameter 24 [18(H)]		
	1: No limit		
5-	-	Do not change this setting	
7			

System Switch 03 - Not used (Do not change the factory settings.)

Syst	System Switch 04 (SP No. 1-101-005)		
No	Function	Comments	

4.Service Tables

0-	Not used	Do not change these settings.
2		
3	Printing dedicated TX	1: Each Quick/Speed dial number on the list is printed with the
	parameters on Quick/Speed	dedicated TX parameters (10 bytes each).
	Dial Lists	The first 10 bytes of data are the programmed dedicated TX
	0: Disabled	parameters; 34 bytes of data are printed (the other 24 bytes have no use
	1: Enabled	for service technicians).
4-	Not used	Do not change these settings.
7		

System Switch 05 - Not used (Do not change the factory settings.)
System Switch 06 - Not used (Do not change the factory settings.)
System Switch 07 - Not used (Do not change the factory settings.)
System Switch 08 - Not used (Do not change the factory settings.)

Syst	System Switch 09 (SP No. 1-101-010)			
No	Function	Comments		
0	Addition of image data from	If this feature is enabled, the top half of the first page of		
	confidential transmissions on the	confidential messages will be printed on transmission result		
	transmission result report	reports.		
	0: Disabled 1: Enabled			
1	Print timing of communication reports	0: The Journal is printed only when image data is sent.		
	on the Journal when no image data was	1: The Journal is printed when any data is sent.		
	exchanged.			
	0: After DCS/NSS communication			
	(default),			
	1: After polling			
2	Automatic error report printout	0: Error reports will not be printed.		
	0: Disabled 1: Enabled	1: Error reports will be printed automatically after failed		
		communications.		
3	Printing of the error code on the error	1: Error codes are printed on the error reports.		
	report	This can be used for detecting an error which occurs rarely.		
	0: No 1: Yes			
4	Not used	Do not change this setting.		
5	Power failure report	1: A power failure report will be automatically printed after the		
	0: Disabled	power is turned ON if a fax message disappeared from the		
	1: Enabled (default)	memory when the power was turned off last.		
		NOTE: If "0" is selected, no reports are printed and no one		

		may recognize that fax data is gone due to a power failure.
6	Conditions for printing the protocol	This switch becomes effective only when system switch 00 bit
	dump list	6 is set to 1.
	0: Print for all communications	1: Set this bit to 1 when you wish to print a protocol dump list
	1: Print only when there is a	only for communications with errors.
	communication error	NOTE: The memory size is limited. Use this bit switch only
		when some log reports are necessary.
7	Not used	Do not change this setting.

Syst	System Switch 0A (SP No. 1-101-011)			
No	Function	Comments		
0	Automatic port selection	When "1" is selected, a suitable port is automatically selected if the		
	0: Disabled, 1: Enabled	selected port is not used.		
		NOTE: This bit is useful if all communication lines at a customer site are		
		not the same quality		
1-	Not used	Do not change these settings.		
3				
4	Dialing on the ten-key pad	0: Prevents dialing from the ten-key pad while the external telephone is off-		
	when the external	hook. Use this setting when the external telephone is not by the machine, or		
	telephone is off-hook	if a wireless telephone is connected as an external telephone.		
	0: Disabled 1: Enabled	1: The user can dial on the machine's ten-key pad when the handset is off-		
		hook.		
5	On hook dial	0: On hook dial is disabled.		
	0: Disabled 1: Enabled			
6-	Not used	Do not change these settings		
7				

System Switch 0B - Not used (Do not change the factory settings.)		
System Switch 0C - Not used (Do not change the factory settings.)		
System Switch 0D - Not used (Do not change the factory settings.)		

Syst	System Switch 0E (SP No. 1-101-015)			
No	No Function Comments			
0-	Not used	Do not change the settings.		
1				
2	Enable/disable for direct	Direct sending cannot operate when the capture function is on during		
	sending selection	sending. Setting this switch to "1" enables direct sending without		
	0: Direct sending off	capture.		

	1: Direct sending on	Setting this switch to "0" masks the direct sending function on the
		operation panel so direct sending with ScanRouter cannot be selected.
3	Action when the external	0: Manual TX is possible while the external handset is off-hook.
	handset goes off-hook	However, manual TX during handset off-hook may not be sent to a
	0: Manual TX and RX	correct direction. Manual TX is not possible.
	operation	1: The display stays in standby mode even when the external handset is
	1: Memory TX and RX	used, so that other people can use the machine for memory TX operation.
	operation (the display remains	Note that manual TX and RX are not possible with this setting.
	the same)	
4-	Not used	Do not change these settings.
7		

Syst	System Switch 0F (SP No. 1-101-016)			
No	Function		Comments	
0	Country/area code for		This country/area code determines the factory settings of bit switches and	
to	functional set	tings (Hex)	RAM addresses. However, it has no effect on the NCU parameter	
7	00: France	12: Asia	settings and communication parameter RAM addresses.	
	01:	13: Japan	Cross reference	
	Germany		NCU country code:	
	02: UK	14: Hong	SP No. 2-103-001 for G3-1	
		Kong	SP No. 2-104-001 for G3-2	
	03: Italy	15: South	SP No. 2-105-001 for G3-3	
		Africa		
	04: Austria	16: Australia		
	05: Belgium	17: New		
		Zealand		
	06: 18: Singaj			
	Denmark			
	07: Finland	19: Malaysia		
	08: Ireland	1A: China		
	09: Norway	1B: Taiwan		
	0A: Sweden	1C: Korea		
	0B: Switz.	1D: Brazil		
	0C: 20: Turkey			
	Portugal			
	0D: Holland	21: Greece		
	0E: Spain	22: Hungary		
	0F: Israel	23: Czech		

10:	24: Poland	
11: USA		

System Switch 10 (SP No. 1-101-017)			
No	Function	Comments	
0-7	Threshold memory level for parallel memory transmission	Threshold = N x 128 KB + 256 KB	
		N can be between 00 - FF(H)	
		Default setting: $02(H) = 512 \text{ KB}$	

Syst	System Switch 11 (SP No. 1-101-018)		
No	Function	Comments	
0	TTI printing position	Change this bit to 1 if the TTI overprints information that the	
	0: Superimposed on the page data	customer considers to be important (G3 transmissions).	
	1: Printed before the data leading	NOTE: If "1" is selected, it is possible that sent data is printed on	
	edge	two sheets of paper.	
1-	Not used	Do not change these settings.	
2			
3	TTI used for broadcasting	1: The TTI (TTI_1 or TTI_2) which is selected for all destinations	
	0: The TTIs selected for each	during broadcasting.	
	Quick/Speed dial are used		
	1: The same TTI is used for all		
	destinations		
4-	Not used	Do not change these settings.	
7			

Syst	System Switch 12 (SP No. 1-101-019)			
No	Function	Comments		
0-	TTI printing	TTI: 08 to 92 (BCD) mm		
7	position in the	Input even numbers only.		
	main scan	This setting determines the print start position for the TTI from the left edge of the		
	direction	paper. If the TTI is moved too far to the right, it may overwrite the file number		
		which is on the top right of the page. On an A4 page, if the TTI is moved over by		
		more than 50 mm, it may overwrite the page number.		

System Switch 13 - Not used (do not change these settings)

System Switch 14 - Not used (do not change these settings)

System Switch 15 (SP No. 1-101-022)

No	Functio	n		Comments
0	Not used			Do not change the settings.
1	Going in	to the Energ	gy Saver mode	1: The machine will restart from the Energy Saver mode
	automati	ically		quickly, because the +5V power supply is active even in the
	0: Enabl	ed		Energy Saver mode. The LED of the operation switch is
	1: Disab	led		flashing instead of entering Energy Saver mode.
				Use this setting if an external telephone has to be used when
				the machine is in the Energy Saver mode.
2-	Not used	1		Do not change these settings.
3				
4-	Interval for preventing the machine		ng the machine	If there is a file waiting for transmission, the machine does not
5	from entering Energy Saver mode if		y Saver mode if	go to Energy Saver mode during the selected period.
	there is a	a pending tr	ansmission file.	After transmitting the file, if there is no file waiting for
	Bit 5	Bit 4	Setting	transmission, the machine goes to the Energy Saver mode.
	0	0	1 min	
	0	1	30 min	
	1	0	1 hour	
	1	1	24 hours	
6-	Not used			Do not change
7				

Syst	System Switch 16 (SP No. 1-101-023)		
No	Function	Comments	
0	Parallel Broadcasting	1: The machine sends messages simultaneously using all available ports during	
	0: Disabled	broadcasting.	
	1: Enabled	NOTE: If a customer wants to keep a line available for fax reception or other	
		reasons, select "0" (Disable).	
1	Priority setting for the	This function allows the user to select the default G3 line type. The optional	
	G3 line.	SG3 units are required to use the PSTN-2 or 3 setting.	
	0: PSTN-1 > PSTN-2		
	or 3		
	1: PSTN-2 or 3 >		
	PSTN-1		
2-	Not used	Do not change these settings.	
7			

System Switch 17 - Not used (do not change these settings)	
System Switch 18 - Not used (do not change these settings)	

Syst	System Switch 19 (SP No. 1-101-026)		
No	Function	Comments	
0-	Not used	Do not change the settings.	
5			
6	Extended scanner page	0: After installing the memory expansion option, the scanner page memory is	
	memory after memory	extended to 4 MB from 2 MB.	
	option is installed	1: If this bit is set to 1 after installing the memory expansion option, the	
	0: Disabled	scanner page memory is extended to 12 MB. But the SAF memory decreases	
	1: Enabled	to 56 MB.	
7*	Special Original mode	1: If the customer frequently wishes to transmit a form or letterhead which	
	0: Disabled	has a colored or printed background, change this bit to "1". "Original 1" and	
	1: Enabled	"Original 2" can be selected in addition to the "Text", "Text/Photo" and	
		"Photo" modes.	

Syst	System Switch 1A (SP No. 1-101-027)		
No	Function	Comments	
0	LS RX memory capacity	Sets the value to x4KB. When the amount of available memory drops below	
to	threshold setting	this setting, RX documents are printed to conserve memory.	
7	00-FF (0-1020 Kbyte:	Initial setting 0x80 (512 KB)	
	Hex)	♦ Note	
		• If a customer wants available memory size to be larger, decrease	
		this threshold.	

System Switch 1B - Not used (do not change these settings)
System Switch 1C - Not used (do not change these settings)

Syst	System Switch 1D (SP No. 1-101-030)		
No	Function	Comments	
0	RTI/CSI/CPS code	0: RTI, CSI, CPS codes are displayed on the top line of the LCD panel during	
	display	communication.	
	0: Enable	1: Codes are switched off (no display)	
	1: Disable		
1-	Not used	Do not change these settings.	
7			

Syst	System Switch 1E (SP No. 1-101-031)		
No	Function	Comments	

0	Communication after the Journal	0: When this switch is on and the journal history becomes full, the
	data storage area has become full	next report prints. If the journal history is not deleted, the next
	0: Impossible	transmission cannot be received. This prevents overwriting
	1: Possible	communication records before the machine can print them.
		1: If the buffer memory of the communication records for the Journal
		is full, fax communications are still possible. But the machine will
		overwrite the oldest communication records.
		♦ Note
		• This setting is effective only when Automatic Journal
		printout is enabled but the machine cannot print the report
1.4		(e.g., no paper).
1*	Action when the SAF memory	0: If the SAF memory becomes full during scanning for a memory
	has become full during scanning	transmission, the successfully scanned pages are transmitted.
	0: The current page is erased.	1: If the SAF memory becomes full during scanning for a memory
	1: The entire file is erased.	transmission, the file is erased and no pages are transmitted.
		♦ Note
		• This setting is effective only when Automatic Journal
		printout is enabled but the machine cannot print the report
		(e.g., no paper).
2	RTI/CSI display priority	This bit determines which identifier, RTI or CSI, is displayed on the
	0: RTI 1: CSI	LCD while the machine is communicating in G3 non-standard mode.
3	File No. printing	1: File numbers are not printed on any reports.
	0: Enabled	NOTE: The file numbers may not be printed in the sequential order.
	1: Disabled	If a customer does not like this numbering, select "0".
4	Action when authorized	0: If the user has stored no acceptable sender RTIs or CSIs, the user
	reception is enabled but	can select "ON" in the authorized reception setting but the setting
	authorized RTIs/CSIs are not yet	becomes invalid ("OFF"). The machine will not be able to receive any
	programmed	fax messages.
	0: All fax reception is disabled	If the customer wishes to receive messages from any sender that
	1: Faxes can be received if the	includes an RTI or CSI, and to block messages from senders that do
	sender has an RTI or CSI	not include an RTI or CSI, change this bit to "0", then enable
		Authorized Reception.
		Otherwise, keep this bit at "1 (default setting)".
5-	Not used	Do not change the settings
7		
	s satting can be used for the client m	

System Switch 1F (SP No. 1-101-032)		
No	Function	Comments
0	Not used	Do not change the settings.

1	Report printout after an original jam during	0: When an original jams, or the SAF memory overflows
	SAF storage or if the SAF memory fills up	during scanning, a report will be printed.
	0: Enabled	Change this bit to "1" if the customer does not want to have
	1: Disabled	a report in these cases.
		Memory TX – Memory storage report
		Parallel memory TX – Transmission result report
2	Not used	Do not change the settings.
3	Received fax print start timing	0: The machine prints each page immediately after the
	(G3 reception)	machine receives it.
	0: After receiving each page	1: The machine prints the complete message after the
	1: After receiving all pages	machine receives all the pages in the memory.
4-	Not used	Do not change the factory settings.
6		
7	Action when a fax SC has occurred	0: When the fax unit detects a fax SC code other than
	0: Automatic reset	SC1201 and SC1207, the fax unit automatically resets
	1: Fax unit stops	itself.
		1: When the fax unit detects any fax SC code, the fax unit
		stops.
		Reference:
		For fax SC codes, see "Troubleshooting".

Bit Switches - 2

Coloration (

• Do not adjust a bit switch or use a setting that is described as "Not used", as this may cause the machine to malfunction or to operate in a manner that is not accepted by local regulations. Such bits are for use only in other areas, such as Japan.

Default settings for bit switches are not listed in this manual. Refer to the System Parameter List printed by the machine.

I-Fax Switches

I-fax	I-fax Switch 00 (SP No. 1-102-001)	
No	Function	Comments
Origi	nal Width of TX	This setting sets the maximum size of the original that the destination can
Attac	hment File	receive. (Bits 3 to 6 are reserved for future use or not used.)
0	A4	-
1	B4	
2	A3	
3-6	Reserved	
7	Not used	
	0: Off (not selected), 1	: On (selected)
	If more than one of these three bits is set to "1", the larger size has priority. For example, if both Bit 2	
	and Bit 1 are set to "1" then the maximum size is "A3" (Bit 2).	
	When mail is sent, there is no negotiation with the receiving machine at the destination, so the sending	
	machine cannot make a selection for the receiving capabilities (original width setting) of the receiving	
	machine. The original width selected with this switch is used as the RX machine's original width setting,	
	and the original is reduced to this size before sending. The default is A4.	
	If the width selected with this switch is higher than the receiving machine can accept, the machine	
	detects this and this causes an error.	

I-fax	I-fax Switch 01 (SP No. 1-102-002)		
No	Function	Comments	
Origi	nal Line Resolution of	These settings set the maximum resolution of the original that the destination	
TX A	ttachment File	can receive.	
0	200x100 Standard	0: Not selected	
1	200x200 Detail	1: Selected	
2	200x400 Fine	If more than one of these three bits is set to "1", the higher resolution has	
3	300 x 300 Reserve	priority. For example, if both Bit 0 and Bit 2 are set to "1" Then The Resolution	
4	400 x 400 Super	is set for "Bit 2 200 x 400.	
	Fine		

5	600 x 600 Reserve
6	Reserve
7	mm/inch
	This setting selects mm/inch conversion for mail transmission.
	0: Off (No conversion), 1: On (Conversion)
	When on (set to "1"), the machine converts millimeters to inches for sending mail. There is no switch
	for converting inches to millimeters.
	Unlike G3 fax transmissions which can negotiate between sender and receiver to determine the setting,
	mail cannot negotiate between terminals; the mm/inch selection is determined by the sender fax.
	When this switch is Off (0):
	Images scanned in inches are sent in inches.
	• Images scanned in mm are sent in mm.
	Images received in inches are transmitted in inches.
	Images received in mm are transmitted in mm.
	When this switch is On (1):
	Images scanned in inches are sent in inches.
	Images scanned in mm are converted to inches.
	Images received in inches are transmitted in inches.
	Images received in mm are converted to inches.

I-fax	I-fax Switch 02 (SP No. 1-102-003)		
No	To Function Comments		
0	RX Text Mail Header Processing		
	This setting determines whether the header inform	nation is printed with text e-mails when they are	
	received.		
	0: Prints only text mail.		
	1: Prints mail header information attached to text	mail.	
	When a text mail is received with this switch On	(1), the "From" address and "Subject" address are	
	printed as header information.		
	When a mail with only binary data is received (a TIFF-F file, for example), this setting is ignored and no		
	header is printed.		
1	Output from Attached Document at E-mail TX E	rror	
	This setting determines whether only the first page	ge or all pages of an e-mail attachment are printed at the	
	sending station when a transmission error occurs	. This allows the customer to see which documents have	
	not reached their intended destinations if sent to	the wrong e-mail addresses, for example.	
	0: Prints 1st page only.		
	1: Prints all pages.		
2-3	Text String for Return Receipt		
	This setting determines the text string output for the Return Receipt that confirms the transmission was		

	received normally at the destination.		
	00: "Dispatched"		
	Sends from PC mail a request for a Return Receipt. Receives the Return Receipt with "dispatched" in the		
	2nd part:		
	Disposition: Automatic-action/MDN-send automatically; dispatched		
	The "dispatched" string is included in the Subject string.		
	01: "Displayed"		
	Sends from PC mail a request for a Return Receipt. Receives the Return Receipt with "displayed" in the		
	2nd part:		
	Disposition: Automatic-action/MDN-send automatically; displayed		
	The "displayed" string is included in the Subject string.		
	10: Reserved		
	11: Reserved		
	A mail requesting a Return Receipt sent from an IFAX with this switch set to "00" (for "dispatched")		
	received by Microsoft Outlook 2000 may cause an error. If any setting other than "displayed" (01) causes		
	a problem, change the setting to "01" to enable normal sending of the Return Receipt.		
4	Media accept feature		
	This setting adds or does not add the media accept feature to the answer mail to confirm a reception.		
	0: Does not add the media accept feature to the answer mail		
	1: Adds the media accept feature to the answer mail.		
	Use this bit switch if a problem occurs when the machine receives an answer mail, which contains the		
	media accept feature field.		
5-6	Not Used		
7	Image Resolution of RX Text Mail		
	This setting determines the image resolution of the received mail.		
	0: 200 x 200		
	1: 400 x 400		
	The "1" setting requires installation of the Memory Unit in order to have enough SAF (Store and		
	Forward) memory to receive images at 400 x 400 resolution.		

I-fax Switch 03 - Not used (do not change these settings)

I-fax Switch 04 (SP No. 1-102-005)			
No	o Function Comments		
0	Subject for Delivery TX/Memory Transfer		
	This setting determines whether the RTI/CSI registered on this machine or the RTI/CSI of the originator		
	is used in the subject lines of transferred documents.		
	0: Puts the RTI/CSI of the originator in the Subject line. If this is used, either the RTI or CSI is used.		

	Only one of these can be received for use in the subject line.
	1: Puts the RTI/CSI registered on this machine in the Subject line.
	When this switch is used to transfer and deliver mail to a PC, the information in the Subject line that
	indicates where the transmission originated can be used to determine automatically the destination folder
	for each e-mail.
1-7	Not Used

I-fax	I-fax Switch 05 (SP No. 1-102-006)			
No	Function	Comments		
0	Mail Addresses of SMTP Broadcast Recipients			
	Determines whether the e-mail addresses of the o	destinations that receive transmissions broadcasted using		
	SMTP protocol are recorded in the Journal.			
	For example:			
"1st destination + Total number of destinations: 9" in the Journal indicates a broadcast to 9 destination				
	0: Not recorded			
	1: Recorded			
1	IFAXTX Retries			
	Determines whether the machine retries sending IFAX when connection and transmission fails due to			
	errors.			
0: Disabled				
	1: Enabled			
2-7	Not Used			

I-fax Switch 06 - Not used (do not change the settings)	
I-fax Switch 07 - Not used (do not change the settings)	

I-fax	I-fax Switch 08 (SP No. 1-102-009)		
No	Function	Comments	
0-7	Memory Threshold for POP Mail Reception		
	This setting determines the amount of SAF (Store and Forward) memory. (SAF stores fax messages to		
	send later for transmission to more than one location, and also holds incoming messages if they cannot be		
	printed.) When the amount of SAF memory available falls below this setting, mail can no longer be		
	received; received mail is then stored on the mail server.		
	00-FF (0 to 1024 KB: HEX)		
	The hexadecimal number you enter is multiplied by 4 KB to determine the amount of memory.		

I-fax	I-fax Switch 09 (SP No. 1-102-010)			
No	Function	Comments		

0-	Not used	Do not change the settings
3		
4-	Restrict TX	This setting determines the number of retries when connection and transmission fails
7	Retries	due to errors.
		01-F (1-15 Hex)

I-fax Switch 0A - Not used (do not change the settings)		
I-fax Switch 0B - Not used (do not change the settings)		
I-fax Switch 0C - Not used (do not change the settings)		

I-fax Switch 0D (SP No. 1-102-014)				
No	Function			Comments
0-	Not used			Do not change the
1				settings
2-	Select the signatu	are when s	ending mail notification of the send results	In response to
3	Bit 2	Bit 3	Setting	IEEE2600.1.
	0	0	No sign	
	0	1	No setting	
	1	0	Individual setting	
	1	1	Always sign	
4-	Select the signatu	ure when s	ending mail.	In response to
5				IEEE2600.1.
	Bit 5	Bit	Setting	
		4		
	0	0	No sign	
	0	1	No setting	
	1	0	Individual setting	
	1	1	Always sign	
6-	Not used			Do not change the
7				settings.

I-fax Switch 0E - Not used (do not change the settings)

I-fax Switch 0F (SP No. 1-102-016)						
No	Function Comments					
0	Delivery Method for SMTP RX Files					
	This setting determines whether files received with SMTP protocol are delivered or output immediately.					
	0: Off. Files received via SMTP are output imme	ediately without delivery.				

4.Service Tables

	1: On. Files received via SMTP are delivered immediately to their destinations.					
1	Set to select the signature when receiving SMTP mail.					
	0: No sign					
	1: Always sign					
2	Set to encrypt the data when receiving SMTP mail.					
	0: No encryption					
	1: Encryption					
3-7	Not used					

Printer Switches

Prir	Printer Switch 00 (SP No. 1-103-001)				
No	Function	Comments			
0	Select page separation	0: If a 2 page RX transmission is split, [*] is printed in the bottom right			
	marks	corner of the 1st page and only a [2] is printed in the upper right corner of			
	0: Off	the 2nd page.			
	1: On	1: If a 2 page RX transmission is split into two pages, for example, [*] [2]			
		is printed in the bottom right corner of the 1st page and only a [2] is			
		printed in the upper right corner of the 2nd page.			
		♦ Note			
		• This helps the user to identify pages that have been split because			
		the size of the paper is smaller than the size of the document			
		received. (When A5 is used to print an A4 size document, for			
		example.)			
1	Repetition of data when the	1: Default. 10 mm of the trailing edge of the previous page are repeated at			
	received page is longer than	the top of the next page.			
	the printer paper	0: The next page continues from where the previous page stopped without			
	0: Off	any repeated text.			
	1: On				
2	Prints the date and time on	This switch is only effective when user parameter 02 - bit 2 (printing the			
	received fax messages	received date and time on received fax messages) is enabled.			
	0: Disabled	1: The machine prints the received and printed date and time at the bottom			
	1: Enabled	of each received page.			
3-	Not used	Do not change the settings.			
7					

Prin	Printer Switch 01 (SP No. 1-103-002)			
No	Function Comments			
0-	Not used	Do not change the settings.		

2				
3-	Maximum print width used in the setup			These bits are only effective when bit 7 of printer switch 01 is
4	protocol			"1".
	Bit 4	Bit 3	Setting	
	0	0	Not used	
	0	1	A3	
	1	0	B4	
	1 1 A4		A4	
5-	Not used	l		Do not change the settings.
6				
7	Received message width restriction in		vidth restriction in	0: The machine informs the transmitting machine of the print
	the proto	col signal t	o the sender	width depending on the paper size available from the paper
	0: Disabl	led		feed stations.
	1: Enabled			Refer to the table on the next page for how the machine
				chooses the paper width used in the setup protocol (NSF/DIS).
				1: The machine informs the transmitting machine of the fixed
				paper width which is specified by bits 3 and 4 above.

Relationship between available paper sizes and printer width used in the setup protocol

Available Paper Size	Printer width used in the Protocol (NSF/DIS)
A4 or 8.5" x 11"	297 mm width
B5	256 mm width
A5 or 8.5" x 5.5"	216 mm width
No paper available (Paper end)	216 mm width

Prin	Printer Switch 02 (SP No. 1-103-003)						
No	Function	Comments					
0*	1st paper feed station	0: The paper feed station can be used to print fax messages and reports.					
	usage for fax printing	1: The specified paper feed station will not be used for printing fax messages					
	0: Enabled	and reports.					
	1: Disabled	♦ Note					
1*	2nd paper feed station	• Do not disable usage for a paper feed station which has been specified					
	usage for fax printing	by User Parameter Switch 0F (15), or which is used for the Specified					
	0: Enabled	Cassette Selection feature.					
	1: Disabled						
2*	3rd paper feed station						
	usage for fax printing						
	0: Enabled						
	1: Disabled						

3*	4th paper feed station	
	usage for fax printing	
	0: Enabled	
	1: Disabled	
4*	LCT usage for fax	
	printing	
	0: Enabled	
	1: Disabled	
5-	Not used	Do not change the settings.
7		

* This setting can be used for the client machine which has no FCU.

Prin	Printer Switch 03 (SP No. 1-103-004)				
No	Function	Comments			
0*	Length reduction of received data	0: Incoming pages are printed without length reduction.			
	0: Disabled	(Page separation threshold: Printer Switch 03, bits 4 to 7)			
	1: Enabled	1: Incoming page length is reduced when printing.			
		(Maximum reducible length: Printer Switches 04, bits 0 to 4)			
1-	Not used	Do not change the settings			
3					
4	Page separation setting when sub scan	Page separation threshold (with reduction disabled with			
to	compression is forbidden	switch 03-0 above).			
7	00-0F (0-15 mm: Hex)	For example, if this setting is set to "10", and A4 is the			
	Default: 6 mm	selected paper size:			
		If the received document is 10 mm or less longer than A4,			
		then the 10 mm are cut and only 1 page prints.			
		If the received document is 10 mm longer than A4, then the			
		document is split into 2 pages.			

* This setting can be used for the client machine which has no FCU.

Prin	Printer Switch 04 (SP No. 1-103-005)							
No	Function			Comments				
0	Maximum reduct	ible length when le	ength re	eduction is enabled	with switch 03-0 al	bove.		
to	[Maximum reduc	cible length] = [Paj	per leng	gth] + (N x 5mm)				
4	"N" is the decima	al value of the bina	ary setti	ing of bits 0 to 4.				
	Bit 4 Bit 3 Bit			Bit 1	Bit 0	Setting		
	0	0 0 0			0	0 mm		
	0 0 0			0	1	5 mm		
	0 0 1			0	0	20 mm		
	1	1	1	1	1	155 mm		

-

	For A5 sideways and B5 sideways paper						
	[Maximum reducible length] = [Paper length] + 0.75 x (N x 5mm)						
5	Length of the duplicated image on	the	next page, when page se	eparation has taken place.			
6	Bit 6 Bit 5 Setting						
	0 4 mm 0 1 1 10 mm 1 0						
	1 Not used						
7	Not used. Do not change the setting.						

Printer Switch 05 - Not used (do not change the settings)

Prin	Printer Switch 06 (SP No. 1-103-007)				
No	Function	Comments			
0*	Printing while a paper cassette is pulled out, when the Just Size	Reference:			
	Printing feature is enabled.	Just size printing on/off – User			
	0: Printing will not start	switch 05, bit 5			
	1: Printing will start if another cassette has a suitable size of paper,				
	based on the paper size selection priority tables.				
1-	Not used.	Do not change the settings.			
7					

Prin	Printer Switch 07 (SP No. 1-103-008)			
No	Function	Comments		
0-	Not used.	Do not change the settings.		
3				
4	Receiver name printed on the transmission	Selects the printing target on the transmission result		
	result report	report.		
		0: All receivers		
		1: Printing only receivers which have received fax		
		transmission.		
5-	Not used.	Do not change the settings.		
7				

Printer Switch 08 - Not used (do not change the settings)		
Printer Switch 09 - Not used (do not change the settings)		
Printer Switch 0A - Not used (do not change the settings)		
Printer Switch 0B - Not used (do not change the settings)		

Printer Switch 0C - Not used (do not change the settings)

Prin	rinter Switch 0E (SP No. 1-103-015)				
No	Func	Function		Comments	
0*	* Paper size selection priority		election priority	0: A paper size that has the same width as the received data is selected	
	0: W	idth		first.	
	1: Le	ngth		1: A paper size which has enough length to print all the received lines	
				without reduction is selected first.	
1*	Pape	r size s	elected for printing	This switch determines which paper size is selected for printing A4	
	A4 w	vidth fa	ax data	width fax data, when the machine has both A4 and 8.5" x 11" size	
	0: 8.	5" x 11	" size	paper.	
	1: A4	l size			
2	Page	separa	tion	1: If all paper sizes in the machine require page separation to print a	
	0: Er	abled		received fax message, the machine does not print the message	
	1: Di	sabled		(Substitute Reception is used).	
				After a larger size of paper is set in a cassette, the machine	
				automatically prints the fax message.	
3-	Print	ing the	sample image on	"Same size" means the sample image is printed at 100%, even if page	
4	repor	rts		separation occurs.	
	Bit	Bit	Setting	User Parameter Switch 19 (13H) bit 4 must be set to "0" to enable this	
	4	3		switch.	
	0	0	The upper half	Refer to "Detailed Descriptions" for more details.	
			only		
	0	1	50% reduction		
			(sub-scan only)		
	1	0	Same size		
	1	1	Not used		
5-	Not u	Not used		Do not change the settings.	
6					
7	Equa	lizing	the reduction ratio	0: When page separation has taken place, all the pages are reduced	
	among separated pages (Page Separation)			with the same reduction ratio.	
				1: Only the last page is reduced to fit the selected paper size when	
	0: Er	abled		page separation has taken place. Other pages are printed without	
	1: Di	sabled		reduction.	

	Printer Switch 0F (SP No. 1-103-016)		
No Function Comments		Comments	
	0-	Smoothing feature	(0, 0) $(0, 1)$: Disable smoothing if the machine receives halftone images

1*	Bit 1	Bit 0	Setting	from other manufacturers fax machines frequently.
	0	0	Disabled	
	0	1	Disabled	
	1	0	Enabled	
	1	1	Not used	
2*	Duplex	printing		1: The machine always prints received fax messages in duplex printing
	0: Disabled			mode:
	1: Enabled			
3	Binding direction for Duplex		on for Duplex	0: Sets the binding for the left edge of the stack.
	printing			1: Sets the binding for the top of the stack.
	0: Left binding			
	1: Top binding			
4-7	Not used			Do not change the settings.

Bit Switches - 3

Coloration (

• Do not adjust a bit switch or use a setting that is described as "Not used", as this may cause the machine to malfunction or to operate in a manner that is not accepted by local regulations. Such bits are for use only in other areas, such as Japan.

Default settings for bit switches are not listed in this manual. Refer to the System Parameter List printed by the machine.

Communication Switches

Con	nmuni	cation	Switch 00 (SP No. 1-104-	001)
No	Fund	ction		Comments
0-	Compression modes available in			These bits determine the compression capabilities to be declared
1	receive mode			in phase B (handshaking) of the T.30 protocol.
	Bit	Bit	Modes	
	1	0		
	0	0	MH only	
	0	1	MH/MR	
	1	0	MH/MR/MMR	
	1	1	MH/MR/MMR/JBIG	
2-	Com	pressio	n modes available in	These bits determine the compression capabilities to be used in
3	transmit mode			the transmission and to be declared in phase B (handshaking) of
	Bit	Bit	Modes	the T.30 protocol.
	3	2		
	0	0	MH only	
	0	1	MH/MR	
	1	0	MH/MR/MMR	
	1	1	MH/MR/MMR/JBIG	
4	Not	used		Do not change the settings.
5	JBIG	comp	ression method:	Change the setting when communication problems occur using
	Rece	ption		JBIG compression.
	0: Only basic supported			
	1: Ba	asic and	d optional both supported	
6	JBIG	comp	ression method:	Change the setting when communication problems occur using
	Tran	smissic	on	JBIG compression.
	0: Ba	asic mo	de priority	
	1: O	otional	mode priority	
7	Clos	ed netw	work (reception)	1: Reception will not go ahead if the polling ID code of the
	0: Di	sabled		remote terminal does not match the polling ID code of the local

terminal. This function is only available in NSF/NSS mode.

Con	nmunication Switch 01 (SP No. 1-104-002)				
No	Funct	Function		Comments	
0	ECM	ECM		If this bit is set to 0, ECM is switched off for all communications.	
	0: Off	1: On		In addition, V.8 protocol and JBIG compression are switched off	
				automatically.	
1	Not us	ed		Do not change the setting.	
2-	Wrong	, conne	ection prevention	(0,1): The machine will disconnect the line without sending a fax	
3	metho	d		message, if the last 8 digits of the received CSI do not match the last 8	
	Bit 3	Bit 2	Setting	digits of the dialed telephone number. This does not work when manually	
	0	0	None	dialed.	
	0	1	8 digit CSI	(1,0): The same as above, except that only the last 4 digits are compared.	
	1	0	4 digit CSI	(1,1): The machine will disconnect the line without sending a fax	
	1	1	CSI/RTI	message, if the other end does not identify itself with an RTI or CSI.	
			·	(0,0): Nothing is checked; transmission will always go ahead.	
				♦ Note	
				• This function does not work when dialing is done from the	
				external telephone.	
4-	Not us	ed		Do not change the setting.	
5					
6-	Maxim	num pi	rintable page	The setting determined by these bits is informed to the transmitting	
7	length	availa	ble	terminal in the pre-message protocol exchange (in the DIS/NSF frames).	
	Bit 7	Bit	Setting		
		6			
	0	0	No limit		
	0	1	B4 (364 mm)		
	1	0	A4 (297 mm)		
	1 1 Not used		Not used		

Con	Communication Switch 02 (SP No. 1-104-003)				
No	Function	Comments			
0	G3 Burst error threshold	If there are more consecutive error lines in the received page than			
	0: Low 1: High	the threshold, the machine will send a negative response. The			
		and High threshold values depend on the sub-scan resolution, and are as follows.			
		100 dpi 6(L) →12(H)			
		200 dpi	12(L) →24(H)		

		300 dpi	18(L) →36(H)
		400 dpi	24(L) →48(H)
1	Acceptable total error line ratio	If the error line ratio for a	a page exceeds the acceptable ratio, RTN
	0: 5% 1: 10%	will be sent to the other e	end.
2	Treatment of pages received with	0: Pages received with er	rrors are not printed.
	errors during G3 reception		
	0: Deleted from memory without		
	printing		
	1: Printed		
3	Hang-up decision when a negative	0: The next page will be	sent even if RTN or PIN is received.
	code (RTN or PIN) is received	1: The machine will send	d DCN and hang up if it receives RTN or
	during G3 immediate transmission	PIN.	
	0: No hang-up, 1: Hang-up	This bit is ignored for me	emory transmissions or if ECM is being
		used.	
4-	Not used	Do not change these setti	ings.
7			

Con	Communication Switch 03 (SP No. 1-104-004)			
No	Function	Comments		
0-	Maximum number of page retransmissions in a G3 memory	00 - FF (Hex) times.		
7	transmission	This setting is not used if ECM is		
		switched on.		
		Default setting - 03(H)		

Con	Communication Switch 04 (SP No. 1-104-005)				
No	Function	Comments			
0	Remote mode switch	Set this bit to ON when you wish to switch TEL mode to FAX mode			
	(TEL mode)	remotely.			
	0: Disable				
	1: Enable (Active)				
1	Remote mode switch	Set this bit to ON when you wish to turn on the remote mode switch after			
	(FAX mode)	automatic reception with FAX mode.			
	0: Disable				
	1: Enable (Active)				
2	Remote mode switch	Set this bit to ON when you wish to turn on the remote mode switch after			
	(AUTO mode)	automatic reception with AUTO mode.			
	0: Disable				
	1: Enable (Active)				

3-	Not used	Do not change the settings.
7		

Con	Communication Switch 05 (SP No. 1-104-006)		
No	Function	Comments	
0-	Remote mode switch	Enter the number to switch between TEL/FAX modes using the external	
3	number	phone.	
	00-09 (0-9:HEX)		
4-	Not used	Do not change the settings.	
7			

Communication Switch 06 - Not used (do not change the settings)	
Communication Switch 07 - Not used (do not change the settings)	
Communication Switch 08 - Not used (do not change the settings)	

Communication Switch 09 (SP No. 1-104-009)				
No	Function	Comments		
0-	Minimum interval between automatic	This value is the minimum time that the machine waits before it		
7	dialing attempts	dials the next destination.		

Con	Communication Switch 0A (SP No. 1-104-011)			
No	Function	Comments		
0	Point of resumption of memory	0: The transmission begins from the page where		
	transmission upon redialing	transmission failed the previous time.		
	0: From the error page	1: Transmission begins from the first page, using normal		
	1: From page 1	memory transmission.		
1-	Not used	Do not change these settings.		
7				

Con	Communication Switch 0B (SP No. 1-104-012)		
No	Function	Comments	
0-	Not used	Do not change these settings.	
3			
4	Printout of the message when	When the machine is acting as a Transfer Station, this bit determines	
	acting as a Transfer Station	whether the machine prints the fax message coming in from the	
	0: Disabled, 1: Enabled	Requesting Terminal.	
5-	Not used	Do not change the settings.	
7			

Communication Switch 0C - Not used (do not change the settings)

Con	Communication Switch 0D (SP No. 1-104-014)			
No	Function	Comments		
0-	The available memory threshold, below	00 to FF (Hex), unit = 4 Kbytes		
7	which ringing detection (and therefore	(e.g., 06(H) = 24 Kbytes)		
	reception into memory) is disabled	One page is about 24 Kbytes.		
		The machine refers to this setting before each fax reception. If		
		the amount of remaining memory is below this threshold, the		
		machine cannot receive any fax messages.		
		If this setting is kept at 0, the machine will detect ringing		
		signals and go into receive mode even if there is no memory		
		available. This will result in communication failure.		

Con	Communication Switch 0E (SP No. 1-104-015)			
No	Function	Comments		
0-	Minimum interval between automatic	06 to FF (Hex), unit = 2 s		
7	dialing attempts	(e.g., 06(H) = 12 s)		
		This value is the minimum time that the machine waits before it		
		dials the next destination.		

 $Communication \ Switch \ 0F - \ Not \ used \ (do \ not \ change \ the \ settings.)$

Communication Switch 10 (SP No. 1-104-017)			
No	Function	Comments	
0-7	Memory transmission: Maximum number of dialing attempts to the same $01 - FE$ (Hex)		
	destination	times	

Communication Switch 11 – Not used (do not change the settings.)

Communication Switch 12 (SP No. 1-104-019)		
No	Function	Comments
0-7	Memory transmission: Interval between dialing attempts to the same destination	01 – FF (Hex) minutes

Communication Switch 13 – Not used (do not change the settings.)

Communication Switch 14 (SP No. 1-104-021)

No	Functio	n		Comments
0	Inch-to-mm conversion during		ersion during	0: In immediate transmission, data scanned in inch format are
	transmi	ssion		transmitted without conversion.
	0: Disal	oled, 1: Ei	nabled	In memory transmission, data stored in the SAF memory in mm
				format are transmitted without conversion.
				Note: When storing the scanned data into SAF memory, the fax unit
				always converts the data into mm format.
				1: The machine converts the scanned data or stored data in the SAF
				memory to the format which was specified in the set-up protocol
				(DIS/NSF) before transmission.
1-	Not used			Do not change the factory settings.
5				
6-	Availab	le unit of	resolution in	For the best performance, do not change the factory settings.
7	which f	ax messag	ges are received	The setting determined by these bits is informed to the transmitting
	Bit 7	Bit 6	Unit	terminal in the pre-message protocol exchange (in the DIS/NSF
	0	0	mm	frames).
	0	1	inch	
	1	0	mm and inch	
	1	1	Not used	

Communication Switch 15 – Not used (do not change the settings)

Com	Communication Switch 16 (SP No. 1-104-023)		
No	Function	Comments	
0	Not used	Do not change the settings.	
1	Optional G3 unit (G3-2)	Change this bit to 1 when installing the first optional G3 unit.	
	0: Not installed		
	1: Installed		
2	Not used		
3	Select PSTN connection	This switch enables the G3-2.	
	0: Off	0: Off, no connection	
	1: On	1: Recognizes and enables G3-2.	
		This switch can be used only after G3-2 has been installed.	
4-7	Not used	Do not change the settings.	

Communication Switch 17 (SP No. 1-104-024)		
No Function Comments		

0	SEP reception	0: Polling transmission to another maker's machine using the SEP
	0: Disabled	(Selective Polling) signal is disabled.
	1: Enabled	
1	SUB reception	0: Confidential reception to another maker's machine using the
	0: Disabled	SUB (Sub-address) signal is disabled.
	1: Enabled	
2	PWD reception	0: Disables features that require PWD (Password) signal
	0: Disabled	reception.
	1: Enabled	
3-	Not used	Do not change the settings.
4		
5	PSTN dial-in routing setting	1: The machine sets multiple PSTN dial-in numbers in the PSTN
	0: OFF	dial-in line and transfers received data from each PSTN dial-in
	1: ON	number to each address.
6	Not used	Do not change the settings.
7	Action when there is no box with an	Change this setting when the customer requires.
	F-code that matches the received	
	SUB code	
	0: Disconnect the line	
	1: Receive the message	
	(using normal reception mode)	

Com	Communication Switch 18 (SP No. 1-104-025)			
No	Function	Comments		
0-4	Not used	Do not change the settings.		
5	IP-Fax dial-in routing selection	1: Transfers received data to each IP-Fax dial-in number.		
	0: Off	IP-Fax dial-in number is a 4-digit number.		
	1: On			
6	PSTN 2 dial-in routing	Enables or disables dial-in routing for the PSTN 2 connection.		
	0: Off			
	1: On			
7	PSTN 3 dial-in routing	Enables or disables dial-in routing for the PSTN 3 connection.		
	0: Off			
	1: On			

Communication Switch 19 - Not used (do not change the settings)	
Communication Switch 1A - Not used (do not change the settings)	

Con	Communication Switch 1B (SP No. 1-104-028)		
No	Function	Comments	
0-	Extension access code (0	If the PABX does not support V.8/V.34 protocol procedure, set this bit to "1"	
7	to 7) to turn V.8 protocol	to disable V.8.	
	On/Off	Example: If "0" is the PSTN access code, set bit 0 to 1. When the machine	
	0: On	detects "0" as the first dialed number, it automatically disables V.8 protocol.	
	1: Off	(Alternatively, if "3" is the PSTN access code, set bit 3 to 1.)	

Con	Communication Switch 1C (SP No. 1-104-029)			
No	Function	Comments		
0-	Extension access code (8	Refer to communication switch 1B.		
1	and 9) to turn V.8 protocol	Example: If "8" is the PSTN access code, set bit 0 to 1. When the machine		
	On/Off	detects "8" as the first dialed number, it automatically disables V.8 protocol.		
	0: On	(If "9" is the PSTN access code, use bit 1.)		
	1: Off			
2-	Not used	Do not change the settings.		
7				

Communication Switch 1D - Not used (do not change the settings)	
Communication Switch 1E - Not used (do not change the settings)	
Communication Switch 1F - Not used (do not change the settings)	

Bit Switches - 4

Coloration (

• Do not adjust a bit switch or use a setting that is described as "Not used", as this may cause the machine to malfunction or to operate in a manner that is not accepted by local regulations. Such bits are for use only in other areas, such as Japan.

Default settings for bit switches are not listed in this manual. Refer to the System Parameter List printed by the machine.

G3 Switches

G3 \$	Switch 0	0 (SP No	. 1-105-001)	
No	Functi	on		Comments
0	Monito	or speaker	during	(0, 0): The monitor speaker is disabled all through the
1	commu	inication	(TX and RX)	communication.
	Bit 1	Bit 0	Setting	(0, 1): The monitor speaker is on up to phase B in the T.30 protocol.
	0	0	Disabled	(1, 0): Used for testing. The monitor speaker is on all through the
	0	1	Up to Phase B	communication. Make sure that you reset these bits after testing.
	1	0	All the time	
	1	1	Not used	
2	Monito	or speaker	during memory	1: The monitor speaker is enabled during memory transmission.
	transm	ission		
	0: Disa	bled 1: E	nabled	
3-	Not use	Not used		Do not change the settings.
5				
6	Dedica	Dedicated G3 line mode selection		Set this bit to 1 when you wish to dedicate a line for G3.
	0: Off	1: On (De	edicated)	
7	Not use	ed		Do not change this setting.

G3 \$	G3 Switch 01 (SP No. 1-105-002)			
No	Function	Comments		
0-	Not used	Do not change the settings.		
3				
4	DIS frame length	1: The bytes in the DIS frame after the 4th byte will not be transmitted (set to 1 if		
	0: 10 bytes 1: 4	there are communication problems with PC-based faxes which cannot receive the		
	bytes	extended DIS frames).		
5	Not used	Do not change the setting.		
6	Forbid	Do not change this setting (Default: 0: Off), unless communication problem is		

	CED/ANsam	caused by a CED or ANSam transmission.
	output	
	0: Off	
	1: On (Forbid	
	output)	
7	Not used	Do not change this setting.

G3 \$	G3 Switch 02 (SP No. 1-105-003)		
No	Function	Comments	
0	G3 protocol mode	Change this bit to 1 only when the other end can only communicate with	
	used	machines that send T.30-standard frames only.	
	0: Standard and non-	1: Disables NSF/NSS signals (these are used in non-standard mode	
	standard	communication)	
	1: Standard only		
1-	Not used	Do not change the settings.	
6			
7	Short preamble	Refer to Appendix B in the Group 3 Facsimile Manual for details about Short	
	0: Disabled 1:	Preamble.	
	Enabled		

G3 9	G3 Switch 03 (SP No. 1-105-004)			
No	Function	Comments		
0	DIS detection number	0: The machine will hang up if it receives the same DIS frame twice.		
	(Echo countermeasure)	1: Before sending DCS, the machine will wait for the second DIS which		
	0: 1	is caused by echo on the line.		
	1:2			
1	Not Used	Do not change the settings.		
2	Not Used	Do not change the settings.		
3	ECM frame size	Keep this bit at "0" in most cases.		
	0: 256 bytes			
	1: 64 bytes			
4	CTC transmission conditions	0: When using ECM in non-standard (NSF/NSS) mode, the machine		
	0: After one PPR signal	sends a CTC to drop back the modem rate after receiving a PPR, if the		
	received	following condition is met in communications at 14.4, 12.0, 9.6, and 7.2		
	1: After four PPR signals	kbps.		
	received (ITU-T standard)	√NTransmit≤NRe send		
		NTransmit- Number of transmitted frames		

		NResend- Number of frames to be retransmitted
		1: When using ECM, the machine sends a CTC to drop back the modem
		rate after receiving four PPRs.
		PPR, CTC: These are ECM protocol signals.
		This bit is not effective in V.34 communications.
5	Modem rate used for the next	1: The machine's TX modem rate will fall back before sending the next
	page after receiving a negative	page if a negative code is received. This bit is ignored if ECM is being
	code (RTN or PIN)	used.
	0: No change 1: Fallback	
6	Not used	Do not change the settings
7	Select detection of reverse	This switch is used to prevent reverse polarity in ringing on the phone
	polarity in ringing	line (applied to PSTN-G3 ringing). Do not change this setting
	0: Off	0: No detection
	1: On	1: Detection (Japan and Korea only)

G3 Switch 04 (SP No. 1-105-005)							
No	Function	Comments					
0-	Training error	0 - F (Hex); 0 - 15 bits					
3	detection threshold	If the number of error bits in the received TCF is below this threshold, the					
		machine informs the sender that training has succeeded.					
4-	Not used	Do not change the settings.					
7							

G3 Switch 05 (SP No. 1-105-006)							
No	Function					Comments	
0-	Initial TX modem rate (kbps))	These bits set the initial starting modem rate for transmission.	
3	Bit 3	Bit	Bit	Bit 0	kbps	Use the dedicated transmission parameters if you need to change	
		2	1			this for specific receivers.	
	0	0	0	1	2.4	If a modem rate 14.4 kbps or slower is selected, V.8 protocol	
	0	0	1	0	4.8	should be disabled manually.	
	0	0	1	1	7.2	Cross reference	
	0	1	0	0	9.6	V.8 protocol on/off - G3 switch 03, bit 2	
	0	1	0	1	12.0		
	0	1	1	0	14.4		
	0	1	1	1	16.8		
	1	0	0	0	19.2		
	1	0	0	1	21.6]	

	1	0	1	0	24.0	
	1	0	1	1	26.4	
	1	1	0	0	28.8	
	1	1	0	1	31.2	
	1	1	1	0	33.6	
	Other s	Other settings - Not used				
4-	Initial r	noden	n type	e for 9.6 l	x or 7.2	These bits set the initial modem type for 9.6 and 7.2 kbps, if the
5	kbps.					initial modem rate is set at these speeds.
	Bit 5	В	it	Setting		
		4				
	0	0		V.29		
	0	1		V.17		
	1	0		V.34		
	1	1		Not used	l	1
6-	Not use	ed				Do not change the settings.
7						

G3 \$	Switch 06 (SP No. 1-10	05-007)			
No	Function					Comments
0-	Initial RX modem rat	e(kbps)			These bits set the initial starting modem rate for
3	Bit 3	Bit	Bit	Bit	kbps	reception.
		2	1	0		Use a lower setting if high speeds pose problems
	0	0	0	1	2.4	during reception.
	0	0	1	0	4.8	If a modem rate 14.4 kbps or slower is selected, V.8
	0	0	1	1	7.2	protocol should be disabled manually.
	0	1	0	0	9.6	Cross reference
	0	1	0	1	12.0	V.8 protocol on/off - G3 switch 03, bit2
	0	1	1	0	14.4	
	0	1	1	1	16.8	
	1	0	0	0	19.2	
	1	0	0	1	21.6	
	1	0	1	0	24.0	
	1	0	1	1	26.4	
	1	1	0	0	28.8	
	1	1	0	1	31.2	
	1	1	1	0	33.6	
	Other settings - Not used				•	
4-	Modem types availab	le for r	reception	on		

7 The setting of these bits is used to inform the transmitting terminal of the available modem type for the machine in receive mode.

If V.34 is not selected, V.8 protocol must be disabled manually.

Cross reference

V.8 protocol on/off - G3 switch 03, bit 2

Bit	Bit	Bit	Types
6	5	4	
0	0	1	V.27ter
0	1	0	V.27ter, V.29
0	1	1	V.27ter, V.29, V.33
1	0	0	V.27ter, V.29, V.17
1	0	1	V.27ter, V.29, V.17, V.34
-	6 0 0	6 5 0 0 0 1 0 1 1 0	6 5 4 0 0 1 0 1 0 0 1 1 1 0 0

G3 \$	Switch	07 (SP N	No. 1-105-00	8)
No	Function			Comments
0-	PSTN	cable ed	qualizer	Use a higher setting if there is signal loss at higher frequencies because of
1	(TX n	node: Int	ernal)	the length of wire between the modem and the telephone exchange.
	Bit	Bit 0	Setting	Use the dedicated transmission parameters for specific receivers.
	1			Also, try using the cable equalizer if one or more of the following symptoms
	0	0	None	occurs.
	0	1	Low	Communication error
	1	0	Medium	Modem rate fallback occurs frequently.
	1	1	High	♦ Note
			·	• This setting is not effective in V.34 communications.
2-	PSTN	cable ed	qualizer	Use a higher setting if there is signal loss at higher frequencies because of
3	(RX n	node: Int	ernal)	the length of wire between the modem and the telephone exchange.
	Bit 3	Bit	Setting	Also, try using the cable equalizer if one or more of the following symptoms
		2		occurs.
	0	0	None	Communication error with error codes such as 0-20, 0-23, etc.
	0	1	Low	Modem rate fallback occurs frequently.
	1	0	Medium	♦ Note
	1	1	High	• This setting is not effective in V.34 communications.
4	PSTN cable equalizer		qualizer	Keep this bit at "1".
	(V.8/V	7.17 RX	mode:	
	Extern	nal)		
	0: Dis	abled		

	1: Enabled	
5	Not used	Do not change the settings.
6	Parameter selection for	0: This uses the fixed table in the ROM for dial tone detection.
	dial tone	1: This uses the specific parameter adjusted with SRAM (69ECBEH -
	detection	69ECDEH). Select this if the dial tone cannot be detected when the "Normal
	0: Normal parameter	parameter: 0" is selected.
	1: Specific parameter	
7	Not used	Do not change the settings.

G3 Switch 08 - Not used (do not change the settings)

G3 Switch 09 - Not used (do not change the settings)

G3 5	3 Switch 0A (SP No. 1-105-011)					
No	Function			Comments		
0-	Maxim	um allov	wable carrier	These bits set the acceptable modem carrier drop time.		
1	drop d	uring ima	age data	Try a longer setting if error code 0-22 is frequent.		
	recepti	on				
	Bit 1	Bit 0	Value (ms)			
	0	0	200			
	0	1	400			
	1	0	800			
	1	1	Not used			
2	Select	cancellat	ion of high-	This switch setting determines if high-speed receiving ends if the carrier		
	speed	RX if car	rier signal	signal is lost when receiving during non-ECM mode		
	lost wł	nile recei	ving			
	0: Off					
	1: On					
3	Not us	ed		Do not change the settings		
4	Maxim	num allov	wable frame	This bit set the maximum interval between EOL (end-of-line) signals and		
	interva	l during	image data	the maximum interval between ECM frames from the other end.		
	recepti	on.		Try using a longer setting if error code 0-21 is frequent.		
	0:5 s 1	l: 13 s				
5	Not used			Do not change the settings.		
6	Recon	struction	time for the	When the sending terminal is controlled by a computer, there may be a		
	first lin	ne in rece	eive mode	delay in receiving page data after the local machine accepts set-up data		
	0:6 s 1	1:12 s		and sends CFR. This is outside the T.30 recommendation. But, if this delay		

		occurs, set this bit to 1 to give the sending machine more time to send
		data.
		Refer to error code 0-20.
		ITU-T T.30 recommendation: The first line should come within 5 s of
		CFR.
7	Not used	Do not change the settings.

G3 Switch 0B Not used (do not change the settings).

G3 \$	G3 Switch 0E (SP No. 1-105-013)				
No	Function	Comments			
0-	Not used	Do not change these settings.			
1					
4-	Select detection of DTMF/DP detection	This setting determines how to detect the signals from the			
5	when using remote switch.	handset when remote switch is active.			
	00: DTMF+PSTN (Simultaneous detection)				
	01: DTMF				
	10: DP (10 PPPS)				
	11: DP (20 PPS)				

G3 Switch 0D Not used (do not change the settings).

G3 \$	G3 Switch 0E (SP No. 1-105-015)					
No	Function	Comments				
0-7	Set CNG send time inte	rval				
	Some machines on the	receiving side may not be able to automatically switch the 3-second CNG interval.				
	High order bit	3000-2250ms: 3000-50xNms				
		3000 – 50 x Nms 0F (3000 ms) ≤= N ≤= FF (2250 ms)				
	Low order bit	00-0E(3000-3700ms: 3000+50xNms				
		3000 – 50 x Nms 0F (3000 ms) ≤= N ≤= 0F (3700 ms)				

G3 \$	G3 Switch 0F (SP No. 1-105-016)				
No	Function	Comments			
0	Alarm when an error occurred in	If the customer wants to hear an alarm after each error			
	Phase C or later	communication, change this bit to "1".			
	0: Disabled				
	1: Enabled				
1	Alarm when the handset is off-hook at	If the customer wants to hear an alarm if the handset is off-hook			

	the end of communication	at the end of fax communication, change this bit to "1".
	0: Disabled	
	1: Enabled	
2-	Not used	Do not change these settings.
3		
4	Manual calibration setting	1: manually calibrates for communication with a line whose
	0: Off	current change occurs such as an optical fiber line.
	1: On	
5-	Not used	Do not change the settings.
7		

Bit Switches - 5

Coloration (

• Do not adjust a bit switch or use a setting that is described as "Not used", as this may cause the machine to malfunction or to operate in a manner that is not accepted by local regulations. Such bits are for use only in other areas, such as Japan.

Default settings for bit switches are not listed in this manual. Refer to the System Parameter List printed by the machine.

G3-2 and G3-3 Switches

These switches require an optional G3 interface unit.

G3-3 switches are the same as for G3-2 switches.

G3-	2 Switch	n 00 (SP 1	No. 1-106-001)	
No	Functi	on		Comments
0	Monito	or speaker	r during	(0, 0): The monitor speaker is disabled all through the
1	commu	unication	(TX and RX)	communication.
	Bit 1	Bit 0	Setting	(0, 1): The monitor speaker is on up to phase B in the T.30 protocol.
	0	0	Disable	(1, 0): Used for testing. The monitor speaker is on all through the
	0 1 Up to Pha		Up to Phase B	communication. Make sure that you reset these bits after testing.
	1	0	All the time	
	1	1	Not used	
2	Monito	or speaker	r during memory	1: The monitor speaker is enabled during memory transmission.
	transmission 0: Disabled 1: Enabled			
3-	Not use	ed		Do not change the settings.
7				

G3-2	G3-2 Switch 01 (SP No. 1-106-002)							
No	No Function Comments							
0-	Not used	Do not change the settings.						
3								
4	DIS frame length	1: The bytes in the DIS frame after the 4th byte will not be transmitted (set to 1 if						
	0: 10 bytes 1: 4	there are communication problems with PC-based faxes which cannot receive the						
	bytes	extended DIS frames).						
5	Not used	Do not change the setting.						
6	Forbid	Do not change this setting (Default: 0: Off), unless communication problem is						
	CED/ANSam	caused by a CED or ANSam transmission.						
	output							

	0: Off	
	1: On (Forbid	
	output)	
7	Not used	Do not change the setting.

G3-2	G3-2 Switch 02 (SP No. 1-106-003)						
No	Function	Comments					
0	G3 protocol mode	Change this bit to 1 only when the other end can only communicate with					
	used	machines that send T.30-standard frames only.					
	0: Standard and non-	1: Disables NSF/NSS signals (these are used in non-standard mode					
	standard	communication)					
	1: Standard only						
1-	Not used	Do not change the settings.					
4							
5	AI modem rate	Selects if the AI modem rate is ON or OFF.					
	selection						
	0: OFF, 1: ON						
6	Not used	Do not change the settings.					
7	Short preamble	Refer to Appendix B in the Group 3 Facsimile Manual for details about Short					
	0: Disabled 1:	Preamble.					
	Enabled						

G3-	2 Switch 03 (SP No. 1-106-004)	
No	Function	Comments
0	DIS detection number	0: The machine will hang up if it receives the same DIS frame twice.
	(Echo countermeasure)	1: Before sending DCS, the machine will wait for the second DIS which
	0: 1	is caused by echo on the line.
	1:2	
1	Not Used	Do not change the settings.
2	Not Used	Do not change the settings.
3	ECM frame size	Keep this bit at "0" in most cases.
	0: 256 bytes	
	1: 64 bytes	
4	CTC transmission conditions	0: When using ECM in non-standard (NSF/NSS) mode, the machine
	0: After one PPR signal	sends a CTC to drop back the modem rate after receiving a PPR, if the
	received	following condition is met in communications at 14.4, 12.0, 9.6, and 7.2
	1: After four PPR signals	kbps.
	received (ITU-T standard)	

		√NTransmit≤NRe send
		Ntransmit = Number of transmitted frames
		Nresend = Number of frames to be retransmitted
		1: When using ECM, the machine sends a CTC to drop back the modem
		rate after receiving four PPRs.
		PPR, CTC: These are ECM protocol signals.
		This bit is not effective in V.34 communications.
5	Modem rate used for the next	1: The machine's TX modem rate will fall back before sending the next
	page after receiving a negative	page if a negative code is received. This bit is ignored if ECM is being
	code (RTN or PIN)	used.
	0: No change 1: Fallback	
6	Not used	Do not change the settings
7	Select detection of reverse	This switch is used to prevent reverse polarity in ringing on the phone
	polarity in ringing	line (applied to PSTN-G3 ringing). Do not change this setting
	0: Off	0: No detection
	1: On	1: Detection (Japan and Korea only)

G3-2	G3-2 Switch 04 (SP No. 1-106-005)								
No	No Function Comments								
0-	Training error	0 - F (Hex); 0 - 15 bits							
3	detection threshold	If the number of error bits in the received TCF is below this threshold, the machine informs the sender that training has succeeded.							
4-	Not used	Do not change the settings.							
7									

G3-2 Switch 05 (SP No. 1-106-006)								
No	Function					Comments		
0-	Initial 7	ГХ то	dem ra	te (kbps)		These bits set the initial starting modem rate for transmission.		
3	Bit 3 Bit Bit Bit 0 kbps		kbps	Use the dedicated transmission parameters if you need to change				
		2	1			this for specific receivers.		
	0 0 0 1 2.4 0 0 1 0 4.8		2.4	If a modem rate 14.4 kbps or slower is selected, V.8 protocol				
			4.8	should be disabled manually.				
	0	0 1 1 7.2	7.2	Cross reference				
	0	1	0	0	9.6	V.8 protocol on/off - G3 switch 03, bit 2		
	0	1	0	1	12.0			
	0	1	1	0	14.4			

		1	1		T	
	0	1	1	1	16.8	
	1	0	0	0	19.2	
	1	0	0	1	21.6	
	1	0	1	0	24.0	
	1	0	1	1	26.4	
	1	1	0	0	28.8	
	1	1	0	1	31.2	
	Other settings - Not used					1
4-	Initial 1	nodem	type	for 9.6 k	or 7.2	These bits set the initial modem type for 9.6 and 7.2 kbps, if the
5	kbps.					initial modem rate is set at these speeds.
	Bit 5	B	it S	letting		
		4				
	0	0	V	/.29		
	0	1	V	/.17		1
	1	0	V	/.34		1
	1	1	Ν	Not used		
6-	Not use	ed	1			Do not change the settings.
7						

No	Functio	n				Comments
0-3	Initial R	X moder	m rate(kbp	os)		These bits set the initial starting modem rate for
	Bit 3	Bit	Bit 1	Bit	kbps	reception.
		2		0		Use a lower setting if high speeds pose problems during
	0	0	0	1	2.4	reception.
	0	0	1	0	4.8	If a modem rate 14.4 kbps or slower is selected, V.8
	0	0	1	1	7.2	protocol should be disabled manually.
	0	1	0	0	9.6	Cross reference
	0	1	0	1	12.0	V.8 protocol on/off - G3 switch 03, bit2
	0	1	1	0	14.4	
	0	1	1	1	16.8	
	1	0	0	0	19.2	
	1	0	0	1	21.6	
	1	0	1	0	24.0	
	1	0	1	1	26.4	
	1	1	0	0	28.8	7
	1	1	0	1	31.2	7

4-7	Modem types	available for recep	otion							
	The setting of these bits is used to inform the transmitting terminal of the available modem type for the									
	machine in receive mode.									
	If V.34 is not	If V.34 is not selected, V.8 protocol must be disabled manually.								
	Cross reference									
	V.8 protocol	V.8 protocol on/off - G3 switch 03, bit 2								
	Bit 7	Bit 6	Bit	Bit	Types					
			5	4						
	0	0	0	1	V.27ter					
	0	0	1	0	V.27ter					
	0	0	1	1	V.27ter					
	0	1	0	0	V.27ter					
	0	1	0	1	V.27ter					
	Other settings	Other settings - Not used								

G3-2	2 Swit	ch 07 (S	SP No. 1-106	5-008)			
No	Func	tion		Comments			
0-	PSTN	V cable	equalizer	Use a higher setting if there is signal loss at higher frequencies because of the			
1	(TX I	mode: I	nternal)	length of wire between the modem and the telephone exchange.			
	Bit	Bit	Setting	Use the dedicated transmission parameters for specific receivers.			
	1	0		-			
	0	0	None	Also, try using the cable equalizer if one or more of the following symptoms			
	0	1	Low	occurs.			
	1	0	Medium	Communication error			
	1 1 High		High	Modem rate fallback occurs frequently.			
				♦ Note			
				• This setting is not effective in V.34 communications.			
2-	PSTN cable equalizer			Use a higher setting if there is signal loss at higher frequencies because of the			
3	(RX :	mode: I	nternal)	length of wire between the modem and the telephone exchange.			
	Bit	Bit	Setting	Also, try using the cable equalizer if one or more of the following symptoms			
	3	2		occurs.			
	0	0	None	Communication error with error codes such as 0-20, 0-23, etc.			
	0 1 Low		Low	Modem rate fallback occurs frequently.			
	1	0	Medium	♦ Note			
	1	1	High	• This setting is not effective in V.34 communications.			
4	PSTN	N cable	equalizer	Keep this bit at "1".			
	(V.8/	V.17 RX	K mode:				

	External)	
	0: Disabled	
	1: Enabled	
5-	Not used	Do not change the settings.
7		

G3-2 Switch 08 - Not used (do not change the settings)					
G3-2 Switch 09 - Not used (do not change the settings)					

G3-	G3-2 Switch 0A (SP No. 1-106-011)							
No	Function			Comments				
0-	Maximum allowable		wable	These bits set the acceptable modem carrier drop time.				
1	carrier	drop du	ring image	Try a longer setting if error code 0-22 is frequent.				
	data re	ception						
	Bit 1	Bit 0	Value					
			(ms)					
	0	0	200					
	0	1	400					
	1	0	800					
	1	1	Not used					
2-	Not us	ed		Do not change the settings				
3								
4	Maxin	num allo	wable	This bit set the maximum interval between EOL (end-of-line) signals and				
	frame	interval	during	the maximum interval between ECM frames from the other end.				
	image	data rec	eption.	Try using a longer setting if error code 0-21 is frequent.				
	0:5 s	1: 13 s						
5	Not us	ed		Do not change the settings.				
6	Recon	struction	n time for	When the sending terminal is controlled by a computer, there may be a				
	the first	st line in	receive	delay in receiving page data after the local machine accepts set-up data and				
	mode			sends CFR. This is outside the T.30 recommendation. But, if this delay				
	0: 6 s 1: 12 s			occurs, set this bit to 1 to give the sending machine more time to send data.				
				Refer to error code 0-20.				
				ITU-T T.30 recommendation: The first line should come within 5 s of CFR.				
7	Not us	ed		Do not change the settings.				

G3-2 Switch 0B- Not used (do not change the settings)						
G3-2 Switch 0C- Not used (do not change the settings)						
G3-2 Switch 0E- Not used (do not change the settings)						

G3-2 Switch 0F- Not used (do not change the settings)

G4 Internal Switches

The G4 internal switches (SW00 to 1F) are displayed but do not change these settings.

G4 Parameter Switches

The G4 parameter switches (SW00 to 0F) are displayed but do not change these settings.

Bit Switches - 6

Coloration (

• Do not adjust a bit switch or use a setting that is described as "Not used", as this may cause the machine to malfunction or to operate in a manner that is not accepted by local regulations. Such bits are for use only in other areas, such as Japan.

Default settings for bit switches are not listed in this manual. Refer to the System Parameter List printed by the machine.

IP Fax Switches

IP Fa	IP Fax Switch 00 (SP No. 1-111-001)							
No.	Function	Comments						
0	Not used	Do not change this setting.						
1	IP Fax Transport	Selects TCP or UDP protocol for IP-Fax						
	0: TCP, 1: UDP							
2	IP Fax single port	Selects single data port.						
	selection							
	0: OFF, 1: ON (enable)							
3	IP Fax double ports	Selects whether IP-Fax uses a double port.						
	(single data port)							
	selection							
	0: OFF, 1: ON (enable)							
4	IP Fax Gatekeeper	Enables/disables the gatekeeper for IP-Fax.						
	0: OFF, 1: ON (enable)							
5	IP Fax T30 bit signal	Reverses the T30 bit signal.						
	reverse							
	0: LSB first, 1: MSB							
	first							
6	IP Fax max bit rate	When "0" is selected, the max bit rate does not affect the value of the						
	setting	DIS/DCS.						
	0: Not affected, 1:	When "1" is selected, the max bit rate affects the value of the DIS/DCS.						
	Affected							
7 IP Fax received When "0" is selected, fax data is received		When "0" is selected, fax data is received without checking the telephone						
	telephone number	number.						
confirmation When "1" is selected, fax data is receive		When "1" is selected, fax data is received only when confirming that the						
	0: No confirmation, 1:	telephone number from the sender matches the registered telephone number in						
	Confirmation	this machine. If this confirmation fails, the line is disconnected.						

No.	Function			Commer	nts			
0-3	IP Fax delay level setting							
	Selects the acceptable delay level.							
	Level 0 is the	highest quality						
	Default is "00	Default is "0000" (level 0).						
	Bit 3	Bit 2	Bit 1		Bit 0			
	0	0	0		0	Level 0		
	0	0	0		1	Level 1		
	0	0	1		0	Level 2		
	0	0	1		1	Level 3		
4-7	IP Fax preamb	ole wait time sett	ing	Selects the preamble wait time.				
				[00 to 0f]				
				There are 16 values in this 4-bit binary switch combination.				
				Waiting time: set value level x 100 ms				
				Max: 0f (1500 ms) Min: 00 (No wait time)				
					The default is "0000" (00H).			

IP Fa	P Fax Switch 02 (SP No. 1-111-003)					
No.	Function	Comments				
0	IP Fax bit signal reverse setting	When "0" is selected, the bit signal reverse method is decided by				
	0: Maker code setting	the maker code.				
	1: Internal bit switch setting	When "1" is selected, the bit signal reverse method is decided by				
		the internal bit switch.				
		When communicating between IP Fax devices, LSB first is				
		selected.)				
1	IP Fax transmission speed setting	Selects the transmit speed for IP Fax communication.				
	0: Modem speed					
	1: No limitation					
2	SIP transport setting	This bit switch sets the transport that has priority for receiving IP				
	0: TCP	Fax data.				
	1: UDP	This function is activated only when the sender has both TCP and				
		UDP.				
3	CCM connection	When "1" is selected, only the connection call message with H.323				
	0: No CCM connection	or no tunneled H.245 is transmitted via CCM.				
	1: CCM connection					
4	Message reception selection from	0: This answers the INVITE message from the SIP server not				
	non-registered SIP server	registered for the machine.				
	0: Answer	1: This does not receive the INVITE message from the SIP server				

	1: Not answer	not registered for the machine and send a refusal message.
5	ECM communication setting	0: This does not limit the type of the image compression with ECM
	0: No limit for image compression	communication.
	1: Limit for image compression	1: When the other end machine is Ciscco, this permits the image
		compression other than JBIG or MMR with ECM communication.
6-7	Not used	Do not change these settings.

IP Fa	IP Fax Switch 03 (SP No. 1-111-004)						
No.	Function	Comments					
0	Effective field limitation for G3 standard	Limits the effective field for standard G3 function					
	function information	information.					
	0: OFF, 1: 4byte (DIS)						
1	Switching between G3 standard and G3	Enables/disables switching between G3 standard and G3					
	non standard	non-standard.					
	0: Enable switching						
	1: G3 standard only						
2	Not used	Do not change this setting.					
3	ECM frame size selection at transmitting	Selects the ECM frame size for sending.					
	0: 256byte, 1: 64byte						
4	DIS detection times for echo prevention	Sets the number of times for DIS to detect echoes.					
	0: 1 time, 1: 2 times						
5	CTC transmission selection	When "0" is selected, the transmission condition is decided					
	0: PPRx1	by error frame numbers.					
	1: PPRx4	When "1" is selected, the transmission condition is based					
		on the ITU-T method.					
6	Shift down setting at receiving negative	Selects whether to shift down when negative codes are					
	code	received.					
	0: OFF, 1: ON						
7	Not used	Do not change this setting.					

IP Fax Switch 04 (SP No. 1-111-005)					
No.	. Function Comments				
0-3	TCF error threshold Sets the TCF error threshold level. [00 to 0f]				
		The default is "1111" (0fH).			
4-7	Not used	Do not change these settings.			

IP Fa	IP Fax Switch 05 (SP No. 1-111-006)				
No.	Function	Comments			

4.Service Tables

0-3	Modem bit rate setting for transmission (kbps)					Sets the modem bit rate for transmission. The default
	Bit 3	Bit	Bit 1	Bit	kbps	is "0110" (14.4K bps).
		2		0		
	0	0	0	1	2.4	
	0	0	1	1	4.8	
	0	0	1	1	7.2	
	0	1	0	0	9.6	
	0	1	0	1	12.0	
	0	1	1	0	14.4	
4-5	Modem set	ting for	r transmissio	n		Sets the modem type for transmission.
	Bit 5	Bi	it 4	Т	ypes	The default is "00" (V29).
	0		0		29	
	0 1		V		17	
	1		0		ot used	
	1		1		ot used	
6-7	Not used					Do not change these settings.

IP Fa	P Fax Switch 06 (SP No. 1-111-007)							
No.	Function				omments			
0-3	Modem bit ra	ate setting for r	eception					
	Sets the mod	em bit rate for	reception. The c	default i	s "0110" (14.4K bps).			
4-7	Modem settin	ng for reception	1					
	Sets the mod	em type for rec	eption. The def	ault is "	0100" (V27ter, V29, V17).			
	Bit 7Bit 6Bit 5Bit 4Types							
	0 0 0 1 V.27ter							
	0	0	1	0	V.27ter, V.29			
	0 0 1 1 V.27ter, V.29, V.33							
	0 1 0 V.27ter, V.29, V.17/V.33							
	Other setting	s - Not used						

IP Fa	IP Fax Switch 07 (SP No. 1-111-008)				
No.	o. Function Comments				
0	TSI information	Adds or does not add TSI information to NSS(S).			
	0: Not added, 1: Added				
1	DCN transmission setting at T1 timeout	Transmits or does not transmit DCN at T1 timeout.			
	0: Not transmitted				
	1: Transmitted				
2	Not used	Do not change this setting.			

3	Hang up setting at DIS reception disabled	Sets whether the machine disconnects after DIS
	0: No hang up	reception.
	1: Hang up after transmitting DCN	
4	Number of times for training	Selects the number of times training is done at the same
	0: 1 time, 1: 2 times	bit rate.
5	Space CSI transmission setting at no CSI	When "0" is selected, frame data is enabled.
	registration	When "1" is selected, the transmitted data is all spaces.
	0: Not transmitted	
	1: Transmitted	
6-7	Not used	Do not change these settings.

IP Fa	P Fax Switch 08 (SP No. 1-111-009)				
No.	Functi	on		Comments	
0-1	1 T1 timer adjustment		tment	Adjusts the T1 timer.	
	Bit 1	Bit 0		The default is "00" (35 seconds).	
	0	0	35 s		
	0	1	40 s		
	1	0	50 s		
	1	1	60 s		
2-3	T4 tim	er adjust	tment	Adjust the T4 timer.	
	Bit 3	Bit 2		The default is "00" (3 seconds).	
	0	0	3 s		
	0	1	3.5		
			s		
	1	0	4 s		
	1	1	5 s		
4-5	T0 tim	er adjust	tment	Adjusts the fail safe timer. This timer sets the interval between "setup" data	
	Bit 5	Bit 4		transmission and T.38 phase decision. If your destination return is late on the	
	0	0	75 s	network or G3 fax return is late, adjust the longer interval timer.	
	0	1	120	The default is "00" (75 seconds).	
			s		
	1	0	180		
			s		
	1	1	240		
			s		
6-7	Not us	ed	D	o not change these settings.	

IP Fax Switch 09 (SP No. 1-111-010)

No.	Function			Comments
0				Selects the connection type (IPV4 or IPV6) to connect to the SIP
				server.
	0: IPv4			
	1: IPv6.			
1	Network	I/F setting	g for Fax	0: The I/F setting for fax communication follows the setting for SIP
	commun	ication		server connection.
	0: Same	setting as	SIP server	1: The negotiation between the SIP server and the device decides
	connecti	on		whether IPv4 or IPv6 is used for the I/F setting for fax
	1: Autor	natic settin	g	communication.
2	Record-	route settin	g	0: Disables the record-route function of the SIP server.
	0: Disab	le		1: Enables the record-route function of the SIP server.
	1: Enabl	e		
3-4	re-INVI	ГЕ transmi	ssion delay	This changes the interval for transmit re-INVITE after receiving
	timer setting			the ACK message transmitted by T.38 device.
	Bit 4	Bit 3		
	0	0	No delay	
	0	1	1 sec	
	1	0	2 sec	
	1	1	3 sec	
5	SIP-IPF	AX: Addin	g vender	0: Use this setting normally.
	informat	ion selection	on	1: This setting is used only when a customer wants to connect the
	0: Declare			machine with SIP server + VOIP-GW provided by AVAYA Inc.
	T38Ven	dorInfo=RI	СОН	
	1: Not d	eclare		
	T38Ven	dorInfo=RI	СОН	
6-7	Not used	1.		Do not change these settings.

IP Fax Switch 0A - Not used (do not change the settings)
IP Fax Switch 0B - Not used (do not change the settings)
IP Fax Switch 0C - Not used (do not change the settings)
IP Fax Switch 0D - Not used (do not change the settings)

IP Fa	IP Fax Switch 0E (SP No. 1-111-013)				
No.	Function	Comments			
0-1	SIP: IP-FAX port mode	Switch the port mode for IP-FAX (T38 transport: UDP) at SIP call			
	(UDP)	control.			
	00: 3 port mode				

	01: 2 port mode	
	10: 1 port mode	
2-3	SIP: IP-FAX port mode	Switch the port mode for IP-FAX (T38 transport: TCP) at SIP call
	(TCP)	control.
	00: 3 port mode	
	01: 2 port mode	
	10: 1 port mode	
4-7	Not used.	Do not change these settings.

NCU Parameters

NCU Parameters

The following tables give the RAM addresses and the parameter calculation units that the machine uses for ringing signal detection and automatic dialing. The factory settings for each country are also given. Most of these must be changed by RAM read/write (SP2-102), but some can be changed using NCU Parameter programming (SP2-103, 104 and 105); if SP2-103, 104 and 105 can be used, this will be indicated in the Remarks column. The RAM is programmed in hex code unless (BCD) is included in the Unit column.

Vote

- The following addresses describe settings for the standard NCU.
- Change the fourth digit from "5" to "6" (e.g. 680500 to 680600) for the settings for the first optional G3 interface unit and from "5" to "7" (e.g. 680700) for the settings for the second optional G3 interface unit.

Address	Function							
680500	Country/Area code for NCU parameters							
	Use the Hex value to program the country/area code directly into this address, or							
	value to program it using SP2-103-001							
	Country		Hex	Country	Decimal	Hex		
	/Area			/Area				
	France	00	00	Asia	18	12		
	Germany	01	01	Japan	19	13		
	UK	02	02	Hong Kong	20	14		
	Italy	03	03	South Africa	21	15		
	Austria	04	04	Australia	22	16		
	Belgium	05	05	New Zealand	26	17		
	Denmark	06	06	Singapore	24	18		
	Finland	07	07	Malaysia	25	19		
	Ireland	08	08	China	26	1A		
	Norway	09	09	Taiwan	27	1B		
	Sweden	10	0A	Korea	28	1C		
	Switzerland	11	0B Brazil		29	1D		
	Portugal	12	0C	Turkey	32	20		
	Holland	13	0D	Greece	33	21		
	Spain	14	0E	Hungary	34	22		
	Israel	15	0F	Czech	35	23		
	USA	17	11	Poland	36	24		

Address	Function	Unit	Remarks
680501	Line current detection time	20 ms	Line current detection is disabled.

Address	Function	Unit	Remarks
680502	Line current wait time		Line current is not detected if 680501
680503	Line current drop detect time		contains FF.
680504	PSTN dial tone frequency upper limit	Hz (BCD)	If both addresses contain FF (H), tone
	(high byte)		detection is disabled.
680505	PSTN dial tone frequency upper limit		
	(low byte)		
680506	PSTN dial tone frequency lower limit	Hz (BCD)	If both addresses contain FF (H), tone
	(high byte)		detection is disabled.
680507	PSTN dial tone frequency lower limit		
	(low byte)		
680508	PSTN dial tone detection time	20 ms	If 680508 contains FF (H), the machine
680509	PSTN dial tone reset time (LOW)		pauses for the pause time (address 68050D
68050A	PSTN dial tone reset time (HIGH)		/ 68050E).
68050B	PSTN dial tone continuous tone time		Italy: See Note 2.
68050C	PSTN dial tone permissible drop time		
68050D	PSTN wait interval (LOW)		-
68050E	PSTN wait interval (HIGH)		
68050F	PSTN ring-back tone detection time	20 ms	Detection is disabled if this contains FF.
680510	PSTN ring-back tone off detection	20 ms	-
	time		
680511	PSTN detection time for silent period	20 ms	-
	after ring-back tone detected (LOW)		
680512	PSTN detection time for silent period	20 ms	-
	after ring-back tone detected (HIGH)		
680513	PSTN busy tone frequency upper limit	Hz (BCD)	If both addresses contain FF (H), tone
	(high byte)		detection is disabled.
680514	PSTN busy tone frequency upper limit		
	(low byte)		
680515	PSTN busy tone frequency lower limit	Hz (BCD)	If both addresses contain FF (H), tone
	(high byte)		detection is disabled.
680516	PSTN busy tone frequency lower limit		
	(low byte)		
680517	PABX dial tone frequency upper limit	Hz (BCD)	If both addresses contain FF (H), tone
	(high byte)		detection is disabled.
680518	PABX dial tone frequency upper limit		
	(low byte)		
680519	PABX dial tone frequency lower limit	Hz (BCD)	If both addresses contain FF (H), tone

Address	Function	Unit	Remarks
	(high byte)		detection is disabled.
68051A	PABX dial tone frequency lower limit		
	(low byte)		
68051B	PABX dial tone detection time	20 ms	If 68051B contains FF, the machine
68051C	PABX dial tone reset time (LOW)		pauses for the pause time (680520 /
68051D	PABX dial tone reset time (HIGH)		680521).
68051E	PABX dial tone continuous tone time		
68051F	PABX dial tone permissible drop time		
680520	PABX wait interval (LOW)		-
680521	PABX wait interval (HIGH)		
680522	PABX ringback tone detection time	20 ms	If both addresses contain FF (H), tone
680523	PABX ringback tone off detection	20 ms	detection is disabled.
	time		
680524	PABX detection time for silent	20 ms	If both addresses contain FF (H), tone
	period after ringback tone detected		detection is disabled.
	(LOW)		
680525	PABX detection time for silent	20 ms	
	period after ringback tone detected		
	(HIGH)		
680526	PABX busy tone frequency upper	Hz (BCD)	If both addresses contain FF (H), tone
	limit (high byte)		detection is disabled.
680527	PABX busy tone frequency upper		
	limit (low byte)		
680528	PABX busy tone frequency lower	Hz (BCD)	If both addresses contain FF (H), tone
	limit (high byte)		detection is disabled.
680529	PABX busy tone frequency lower		
	limit (low byte)		
68052A	Busy tone ON time: range 1	20 ms	-
68052B	Busy tone OFF time: range 1	_	
68052C	Busy tone ON time: range 2	_	
68052D	Busy tone OFF time: range 2		
68052E	Busy tone ON time: range 3		
68052F	Busy tone OFF time: range 3	20 ms	
680530	Busy tone ON time: range 4		
680531	Busy tone OFF time: range 4		
680532	Busy tone continuous tone detection		
	time		

Address	Function	Unit	Remarks			
680533	Busy tone signal state time tolerance for	all ranges, an	d number of cycles required for detection (a			
	setting of 4 cycles means that ON-OFF-ON or OFF-ON-OFF must be detected twice).					
	Tolerance (±)					
	Bit 1: 0, Bit 0: $0 = 75\%$ Bits 2 and 3 must always be kept at 0.					
	Bit 1: 0, Bit 0: 0 = 50% Bits 2 and 3 mu	st always be k	ept at 0.			
	Bit 1: 0, Bit 0: 0 = 25%					
	Bit 1: 0, Bit 0: 0 = 12.5%					
	Bits 7, 6, 5, 4 - number of cycles require	ed for cadence	detection			
680534	International dial tone frequency	Hz (BCD)	If both addresses contain FF (H), tone			
	upper limit (high byte)		detection is disabled.			
680535	International dial tone frequency					
	upper limit (low byte)					
680536	International dial tone frequency	Hz (BCD)	If both addresses contain FF (H), tone			
	lower limit (high byte)		detection is disabled.			
680537	International dial tone frequency					
	lower limit (low byte)					
680538	International dial tone detection time	20 ms	If 680538 contains FF, the machine pauses			
680539	International dial tone reset time		for the pause time (68053D / 68053E).			
	(LOW)		Belgium: See Note 2.			
68053A	International dial tone reset time					
	(HIGH)					
68053B	International dial tone continuous tone					
	time					
68053C	International dial tone permissible					
	drop time					
68053D	International dial wait interval (LOW)		-			
68053E	International dial wait interval (HIGH)					
68053F	Country dial tone upper frequency	Hz (BCD)	If both addresses contain FF (H), tone			
	limit (HIGH)		detection is disabled.			
680540	Country dial tone upper frequency					
	limit (LOW)					
680541	Country dial tone lower frequency		If both addresses contain FF (H), tone			
	limit (HIGH)		detection is disabled.			
680542	Country dial tone lower frequency					
	limit (LOW)					
680543	Country dial tone detection time	20 ms	If 680543 contains FF, the machine pauses			
680544	Country dial tone reset time (LOW)		for the pause time (680548 / 680549).			

Address	Function	Unit	Remarks
680545	Country dial tone reset time (HIGH)		
680546	Country dial tone continuous tone	-	-
	time		
680547	Country dial tone permissible drop	20 ms	-
	time		
680548	Country dial wait interval (LOW)		
680549	Country dial wait interval (HIGH)		
68054A	Time between opening or closing the	1 ms	See Notes 3, 6 and 8. SP2-103-012
	DO relay and opening the OHDI relay		(parameter 11).
68054B	Break time for pulse dialing	1 ms	See Note 3.
			SP2-103-013 (parameter 12).
68054C	Make time for pulse dialing	1 ms	See Note 3.
			SP2-103-014 (parameter 13).
68054D	Time between final OHDI relay	1 ms	See Notes 3, 6 and 8.
	closure and DO relay opening or		SP2-103-015 (parameter 14).
	closing		This parameter is only valid in Europe.
68054E	Minimum pause between dialed digits	20 ms	See Note 3 and 8. SP2-103-016
	(pulse dial mode)		(parameter 15).
68054F	Time waited when a pause is entered		SP2-103-017 (parameter 16). See Note 3.
	at the operation panel		
680550	DTMF tone on time	1 ms	SP2-103-018 (parameter 17).
680551	DTMF tone off time		SP2-103-019 (parameter 18).
680552	Tone attenuation level of DTMF	-N x 0.5	SP2-103-020 (parameter 19).
	signals while dialing	-3.5 dBm	See Note 5.
680553	Tone attenuation value difference	-dBm x 0.5	SP2-103-021 (parameter 20).
	between high frequency tone and low		The setting must be less than –5dBm, and
	frequency tone in DTMF signals		should not exceed the setting at 680552h
			above.
			See Note 5.
680554	PSTN: DTMF tone attenuation level	-N x 0.5	SP2-103-022 (parameter 21). See Note 5.
	after dialing	-3.5 dBm	
680555	ISDN: DTMF tone attenuation level	-dBm x 0.5	See Note 5
	after dialing		
680556	Not used	-	Do not change the settings.
680557	Time between 68054Dh (NCU	1 ms	This parameter takes effect when the
	parameter 14) and 68054Eh (NCU		country code is set to France.
	parameter 15)		

Address	Function	Ur	nit	Remarks
680558	Not used	-		Do not change the setting.
680559	Grounding time (ground start mode)	20 ms		The Gs relay is closed for this interval.
68055A	Break time (flash start mode)	1 ms		The OHDI relay is open for this interval.
68055B	International dial access code (High)	BCD		For a code of 100:
68055C	International dial access code (Low)	-		68055B - F1
				68055C - 00
68055D	PSTN access pause time	20 ms		This time is waited for each pause input
				after the PSTN access code. If this address
				contains FF [H], the pause time stored in
				address 68054F is used.
				Do not set a number more than 7 in the
				UK.
68055E	Progress tone detection level, and cader	ice	Bit 7:	0, Bit 6: 0, Bit 5: 0 = -25.0 dBm
	detection enable flags		Bit 7:	0, Bit 6: 0, Bit 5: 1 = -35.0 dBm
			Bit 7:	0, Bit 6: 1, Bit 5: 0 = -30.0 dBm
			Bit 7:	1, Bit 6: 0, Bit 5: 0 = -40.0 dBm
			Bit 7:	1, Bit 6: 1, Bit 5: 0 = -49.0 dBm
			Bits 2	2, 0 - See Note 2.
68055F	Not used	-		Do not change the settings.
То				
680564				
680565	Long distance call prefix (HIGH)	BCD		For a code of 0:
680566	Long distance call prefix (LOW)	BCD		680565 – FF
				680566 - FF
680567	Not used	-		Do not change the settings.
to				
680571				
680572	Acceptable ringing signal frequency:	1000/	Ν	SP2-103-003 (parameter 02).
	range 1, upper limit	(Hz).		
680573	Acceptable ringing signal frequency:			SP2-103-004 (parameter 03).
	range 1, lower limit	-		
680574	Acceptable ringing signal frequency:			SP2-103-005 (parameter 04).
	range 2, upper limit			
680575	Acceptable ringing signal frequency:			SP2-103-006 (parameter 05).
	range 2, lower limit			
680576	Number of rings until a call is	1		SP2-103-007 (parameter 06).
	detected			The setting must not be zero.

Address	Function	Unit	Remarks
680577	Minimum required length of the first	20 ms	See Note 4.
	ring		SP2-103-008 (parameter 07).
680578	Minimum required length of the	20 ms	SP2-103-009 (parameter 08).
	second and subsequent rings		
680579	Ringing signal detection reset time	20 ms	SP2-103-010 (parameter 09).
	(LOW)		
68057A	Ringing signal detection reset time		SP2-103-011 (parameter 10).
	(HIGH)		
68057B	Not used	-	Do not change the settings.
to			
680580			
680581	Interval between dialing the last digit	20 ms	Factory setting: 500 ms
	and switching the Oh relay over to the		
	external telephone when dialing from		
	the operation panel in handset mode.		
680582	Bits 0 and 1 - Handset off-hook detection	on time	-
	Bit 1:0, Bit 0: 0 = 200 ms		
	Bit 1:0, Bit 0: 1 = 800 ms		
	Other Not used		
	Bits 2 and 3 - Handset on-hook detection		
	Bit 3: 0, Bit 2: 0 = 200 ms		
	Bit 3: 0, Bit 2: 1 = 800 ms		
	Other Not used		
	Bits 4 to 7 - Not used		
680583	Not used	-	Do not change the settings.
То			
6805A0			
6805A1	Acceptable CED detection frequency	BCD (Hz)	If both addresses contain FF (H), tone
	upper limit (high byte)		detection is disabled.
6805A2	Acceptable CED detection frequency		
	upper limit (low byte)		
6805A3	Acceptable CED detection frequency	BCD (Hz)	If both addresses contain FF (H), tone
	lower limit (high byte)		detection is disabled.
6805A4	Acceptable CED detection frequency		
	lower limit (low byte)		
6805A5	CED detection time	20 ms ± 20	Factory setting: 200 ms
		ms	

Address	Function	Unit	Remarks		
6805A6	Acceptable CNG detection frequency	BCD (Hz)	If both addresses contain FF (H), tone		
	upper limit (high byte)		detection is disabled.		
6805A7	Acceptable CNG detection frequency				
	upper limit (low byte)				
6805A8	Acceptable CNG detection frequency	BCD (Hz)	If both addresses contain FF (H), tone		
	lower limit (high byte)		detection is disabled.		
6805A9	Acceptable CNG detection frequency				
	lower limit (low byte)				
6805AA	Not used	-	Do not change the setting.		
6805AB	CNG on time	20 ms	Factory setting: 500 ms		
6805AC	CNG off time	20 ms	Factory setting: 3000 ms		
6805AD	Number of CNG cycles required for	-	The data is coded in the same way as		
	detection		address 680533.		
6805AE	Not used	-	Do not change the settings.		
6805AF	Acceptable AI short protocol tone	Hz (BCD)	If both addresses contain FF (H), tone		
	(800Hz) detection frequency upper		detection is disabled.		
	limit (high byte)				
6805B0	Acceptable AI short protocol tone				
	(800Hz) detection frequency upper				
	limit (low byte)				
6805B1	Acceptable AI short protocol tone	Hz(BCD)	If both addresses contain FF (H), tone		
	(800Hz) detection frequency lower		detection is disabled.		
	limit (high byte)				
6805B2	Acceptable AI short protocol tone				
	(800Hz) detection frequency lower				
	limit (low byte)				
6805B3	Detection time for 800 Hz AI short	20 ms	Factory setting: 360 ms		
	protocol tone				
6805B4	PSTN: TX level from the modem	-N – 3	SP2-103-002 (parameter 01).		
		dBm			
6805B5	PSTN: 1100 Hz tone transmission	- N 6805B4	- 0.5N 6805B5 –3.5 (dB)		
	level	See Note 7.			
6805B6	PSTN: 2100 Hz tone transmission	- N6805B4 -	0.5N 6805B6 –3 (dB)		
	level	See Note 7.			
6805B7	PABX: TX level from the modem	- dBm			
6805B8	PABX: 1100 Hz tone transmission	- N 6805B7	- 0.5N 6805B8 (dB)		
	level				

Address	Function	Unit	Remarks
6805B9	PABX: 2100 Hz tone transmission	- N 6805B7 -	- 0.5N 6805B9 (dB)
	level		
6805BD	Modem turn-on level (incoming signal	-37-0.5N	
	detection level)	(dBm)	
6805BE	Not used	-	Do not change the settings.
to 6805C6			
6805C7	Bits 0 to 3 – Not used		
	Bit 4 = V.34 protocol dump 0: Simple	e, 1: Detailed ((default)
	Bits 5 to 7 – Not used.		
6805C8 to	Not used	-	Do not change the settings.
6805D9			
6805DA	T.30 T1 timer	1 s	
6805E0	Maximum wait time for post message	0: 12 s	1: Maximum wait time for post message
bit 3		1: 30 s	(EOP/EOM/MPS) can be changed to 30 s.
			Change this bit to "1" if communication
			errors occur frequently during V.17
			reception.
6805E3	Bits 0 and 1 – DCV (TIP/RING) Voltage	e	
	Bit 1:0, Bit 0: 0 = 3.1 V		
	Bit 1:0, Bit 0: 1 = 3.2 V		
	Bit 1:1, Bit 0: 0 = 3.35 V		
	Bit 1:1, Bit 0: 1 = 3.5 V		
	Bits 2 and 3 – MINI (minimum loop ele	ctric current)	
	Bit 2:0, Bit 3: 0 = 10 mA		
	Bit 2:0, Bit 2: 1 = 12 mA		
	Bit 2:1, Bit 3: 0 = 14 mA		
	Bit 2:1, Bit 3: 1 = 16 mA		
	Bits 6 and 7 – ACIM (AC impedance)		
	Bit 7:0, Bit 6: 0 Bit 5:0, Bit 4: 0= 600		
	Bit 7:0, Bit 6: 0 Bit 5:1, Bit 4: 0= TBR2	1	
6805E4	Bit 0 – OHS (on hook speed)		
	0: OHS=0		
	1: OHS=1		
	Bit 1 – SQ (spark quench)		
	0: SQ=00		
	1: SQ=11		
	Bit 2 – RZ (call signal Impedance)		
	0: RZ=0 (high)		
32			

Address	Function	Unit	Remarks						
	1: RZ=1 (low)								
	Bit 3 – RT (call signal detection level)								
	0: RT=0 (low)								
	1: RT=1 (high)								
	Bit 4 – ILIM (DC limitation)								
	0: ILIM=0 (CTR 21)								
	1: ILIM=1 (other than CTR 21)								
	Bit 5 –FILTER								
	0: FILTER=0 (around 5Hz)								
	1: FILTER=1 (around 200Hz)								
	Bits 6 to 7 – Calibration in off hook state	9							
	Bit 6:0, Bit 7: 0 = off hook to ACAL:12	8 ms, off hook	to MCAL: 1000 ms						
	Bit 6:1, Bit 7: $0 = off$ hook to ACAL:12	8 ms, off hook	to MCAL: 500 ms						
	Bit 6:0, Bit 7: 1 = off hook to ACAL:12	8 ms (no MCA	L)						
	Bit 6:1, Bit 7: 1 = off hook to ACAL:8 ms (no MCAL)								
6805E5	Bits 0 to 6 – Not used								
	Bits 7 – Energy saving for DSP, COMBLK, SiDAA								
	0: Does not save energy								
	1: Saves energy								

NOTES

- 1. If a setting is not required, store FF in the address.
- 2. Italy and Belgium only

RAM address 68055E: the lower four bits have the following meaning.

- Bit 2 1: International dial tone cadence detection enabled (Belgium)
- Bit 1 Not used
- Bit 0 1: PSTN dial tone cadence detection enabled (Italy)

If bit 0 or bit 2 is set to 1, the functions of the following RAM addresses are changed.

680508 (if bit 0 = 1) or 680538 (if bit 2 = 1): tolerance for on or off state duration (%), and number of cycles

required for detection, coded as in address 680533.

68050B (if bit 0 = 1) or 68053B (if bit 2 = 1): on time, hex code (unit = 20 ms)

68050C (if bit 0 = 1) or 68053C (if bit 2 = 1): off time, hex code (unit = 20 ms)

- 3. Pulse dial parameters (addresses 68054A to 68054F) are the values for 10 pps. If 20 pps is used, the machine automatically compensates.
- 4. The first ring may not be detected until 1 to 2.5 wavelengths after the time specified by this parameter.
- 5. The calculated level must be between 0 and 10.

The attenuation levels calculated from RAM data are:

High frequency tone:

• - 0.5 x N₆₈₀₅₅₂/₆₈₀₅₅₄--3.5 dBm

• - 0.5 x N₆₈₀₅₅₅ dBm

Low frequency tone:

- $-0.5 \text{ x} (N_{680552}/_{680554} + N_{680553}) -3.5 \text{ dBm}$
- $-0.5 \text{ x} (N_{680555} + N_{680553}) \text{ dBm}$

Note

- N_{680552} , for example, means the value stored in address 680552(H)
- 68054A: Europe Between Ds opening and Di opening, France Between Ds closing and Di opening
 68054D: Europe Between Ds closing and Di closing, France Between Ds opening and Di closing
- 7. Tone signals which frequency is lower than 1500Hz (e.g., 800Hz tone for AI short protocol) refer to the setting at 6805B5h. Tones which frequency is higher than 1500Hz refer to the setting at 6805B6h.
- 8. 68054A, 68054D, 68054E: The actual inter-digit pause (pulse dial mode) is the sum of the period specified by the RAM addresses 68054A, 68054D, and 68054E.

Dedicated Transmission Parameters

There are two sets of transmission parameters: Fax and E-mail

Each Quick Dial Key and Speed Dial Code has eight bytes of programmable parameters allocated to it. If

transmissions to a particular machine often experience problems, store that terminal's fax number as a Quick Dial or Speed Dial, and adjust the parameters allocated to that number.

The programming procedure will be explained first. Then, the eight bytes will be described.

Programming Procedure

- 1. Set the bit 0 of System Bit Switch 00 to 1.
- Enter Address Book Management mode ([User Tools]> System Settings> Key Operator> Address Book Management).
- 3. Select the address book that you want to program.
- 4. For the fax parameter, select "Fax Dest.", for the E-mail parameter, select "E-mail", then press "Start". Make sure that the LED of the Start button lights green.
- 5. The settings for the switch 00 are now displayed. Press the bit number that you wish to change.
- 6. To scroll through the parameter switches, either:
- 7. Select the next switch: press "Next" or Select the previous switch: "Prev." until the correct switch is displayed. Then go back to step 6.
- 8. After the setting is changed, press "OK".
- 9. After finishing, reset bit 0 of System Bit Switch 00 to 0.

Parameters

Fax Parameters

The initial settings of the following fax parameters are all FF (H) - all the parameters are disabled.

Switch 00

FUNCTION AND COMMENTS

ITU-T T1 time (for PSTN G3 mode)

If the connection time to a particular terminal is longer than the NCU parameter setting, adjust this byte. The T1 time is the value stored in this byte (in hex code), multiplied by 1 second.

Range:

0 to 120 s (00h to 78h)

FFh - The local NCU parameter factory setting is used.

Do not program a value between 79h and FEh.

Swit	Switch 01					
No	FUNCTION	COMMENTS				
0-	TX level	If communication with a particular remote terminal often				

4	Bit4	Bit3	Bit2	Bit1	Bit0		contains errors, the signal level may be inappropriate.
	0	0	0	0	0	0	Adjust the TX level for communications with that terminal
	0	0	0	0	1	-1	until the results are better.
	0	0	0	1	0	-2	If the setting is "Disabled", the NCU parameter 01 setting is
	0	0	0	1	1	-3	used.
	0	0	1	0	0	_4	♦ Note
	\rightarrow	\rightarrow	\checkmark	→	→	\downarrow	• Do not use settings other than listed on the left.
	0	1	1	1	1	-15	
	1	1	1	1	1	Disabled	
5-	5- Cable equalizer					Use a higher setting if there is signal loss at higher	
7	Bit 7:	0, Bit	6: 0, B	it 5: 0 =	= None		frequencies because of the length of wire between the
	Bit 7:	0, Bit	6: 0, B	it 5: 1 =	= Low		modem and the telephone exchange when calling the
	Bit 7:	0, Bit	6: 1, B	it 5: 0 =	= Medi	um	number stored in this Quick/Speed Dial.
	Bit 7:	0, Bit	6: 1, B	it 5: 1 =	= High		Also, try using the cable equalizer if one or more of the
	Bit 7:	1, Bit	6: 1, B	it 5: 1 =	= Disat	oled	following symptoms occurs.
							Communication error with error codes such as 0-20, 0-23,
							etc.
							Modem rate fallback occurs frequently.
							♦ Note
							• Do not use settings other than listed on the left.
							If the setting is "Disabled", the bit switch setting is used.

Swit	Switch 02							
No	FUN	FUNCTION				COMMENTS		
0-	Initia	l TX m	odem 1	ate		If training with a particular remote terminal always takes too long,		
3	Bit3	Bit2	Bit1	Bit0	bps	the initial modem rate may be too high. Reduce the initial TX		
	0	0	0	0	Not	modem rate using these bits.		
					used	For the settings 14.4 or kbps slower, Switch 04 bit 4 must be		
	0	0	0	1	2400	changed to 0.		
	0	0	1	0	4800	♦ Note		
	0	0	1	1	7200	• Do not use settings other than listed on the left. If the		
	0	1	0	0	9600	setting is "Disabled", the bit switch setting is used.		
	0	1	0	1	12000			
	0	1	1	0	14400			
	0	1	1	1	16800			
	1	0	0	0	19200			
	1	0	0	1	21600			
	1	0	1	0	24000	1		

	1	0	1	1	26400		
	1	1	0	0	28800		
	1	1	0	1	31200		
	1	1	1	0	33600		
	1	1	1	1	Disabled		
	Other	r setting	gs: Not	used			
4-	- Not used					Do not change the settings.	
7							

Swit	ich 03	
No	FUNCTION	COMMENTS
0-	Inch-mm conversion	If "inch only" is selected on the machine uses inch-based resolutions for
1	before TX	scanning, the printed copy may be slightly distorted at the other end if that
	Bit 1: 0, Bit 0: 0	machine uses mm-based resolutions.
	= Inch-mm conversion	If the setting is "Inch-mm conversion available ", Inch-mm conversion become
	available	effective to the special senders.
	Bit 1: 0, Bit 0: 1 = Inch	If the setting is "Disabled", the bit switch setting is used.
	only	
	Bit 1: 1, Bit 0: 0 = Not	
	used	
	Bit 1: 1, Bit 0: 1 =	
	Disabled	
2-	DIS/NSF detection	(0, 1): Use this setting if echoes on the line are interfering with the set-up
3	method	protocol at the start of transmission. The machine will then wait for the second
	Bit 3: 0, Bit 2: 0	DIS or NSF before sending DCS or NSS.
	= First DIS or NSF	If the setting is "Disabled", the bit switch setting is used.
	Bit 3: 0, Bit 2: 1	
	= Second DIS or NSF	
	Bit 3: 1, Bit 2: 0 = Not	
	used	
	Bit 3: 1, Bit 2: 1 =	
	Disabled	
4	V.8 protocol	If transmissions to a specific destination always end at a lower modem rate
	0: Off	(14,400 bps or lower), disable V.8 protocol so as not to use V.34 protocol.
	1: Disabled	0: V.34 communication will not be possible.
		If the setting is "Disabled", the bit switch setting is used.
5	Compression modes	This bit determines the capabilities that are informed to the other terminal
	available in transmit	during transmission.

	mode	If the setting is "Disabled", the bit switch setting is used.
	0: MH only	
	1: Disabled	
6-	ECM during	For example, if ECM is switched on but is not wanted when sending to a
7	transmission	particular terminal, use the $(0, 0)$ setting.
	Bit 7: 0, Bit 6: 0 = Off	♦ Note
	Bit 7: 0, Bit 6: 1 = On	• V.8/V.34 protocol and JBIG compression are automatically disabled
	Bit 7: 1, Bit 6: 0 = Not	if ECM is disabled.
	used	• If the setting is "Disabled", the bit switch setting is used.
	Bit 7: 1, Bit 6: 1 =	
	Disabled	

Switch 04 - Not used (do not change the settings)
Switch 05 - Not used (do not change the settings)
Switch 06 - Not used (do not change the settings)
Switch 07 - Not used (do not change the settings)
Switch 08 - Not used (do not change the settings)
Switch 09 - Not used (do not change the settings)

E-mail Parameters

The initial settings of the following e-mail parameters are all "0" (all parameters disabled).

Switch 00		
No	FUNCTION	COMMENTS
0	MH Compression mode for e-mail	Switches MH compression on and off for files attached to e-
	attachments	mails for sending.
	0 : Off	
	1: On	
1	MR Compression mode for e-mail	Switches MR compression on and off for files attached to e-
	attachments	mails for sending.
	0 : Off	
	1: On	
2	MMR Compression mode for e-mail	Switches MMR compression on and off for files attached to e-
	attachments	mails for sending.
	0 : Off	
	1: On	
3-	Not used	Do not change these settings.
6		
7	Designates the bits to reference for	The "0" selection (default) references the settings for Bits 00,
	compression method of e-mail	01, 02 above. The "1" selection ignores the selections of Bits

4.Service Tables

attachments	00, 01, 02.
0 : Registered (Bit 0 to 6)	
1: No registration.	

Swit	tch 01	
No	FUNCTION	COMMENTS
0	Original width of e-mail attachment:	Sets the original width of the e-mail attachment as A4.
	A4	
	0 : Off	
	1: On	
1	Original width of e-mail attachment:	Sets the original width of the e-mail attachment as B4.
	B4	
	0 : Off	
	1: On	
2	Original width of e-mail attachment:	Sets the original width of the e-mail attachment as A3.
	A3	
	0 : Off	
	1: On	
3-	Not used	Do not change these settings.
6		
7	Designates the bits to reference for	The "0" selection (default) references the settings for Bits 00, 01,
	original size of e-mail attachments	02 above. The "1" selection ignores the selections of Bits 00, 01,
	0 : Registered (Bit 0 to 6)	02.
	1: No registration.	

Switch 02		
No	FUNCTION	COMMENTS
0	Line resolution of e-mail attachment: 200 x 100 0 : Off 1: On	Sets the line resolution of the e-mail attachment as 200 x100.
1	Line resolution of e-mail attachment: 200 x 200 0 : Off 1: On	Sets the line resolution of the e-mail attachment as 200 x 200.
2	Line resolution of e-mail attachment: 200 x 400 0 : Off	Sets the line resolution of the e-mail attachment as 200 x 400.

	1: On	
3	Not used	Do not change these settings.
4	Line resolution of e-mail	Sets the line resolution of the e-mail attachment as 400 x 400.
	attachment: 400 x 400	
	0 : Off	
	1: On	
5-	Not used	Do not change these settings.
6		
7	Designates the bits to reference for	The "0" selection (default) references the settings for Bits 00, 01,
	original size of e-mail attachments	02, 04 above. The "1" selection ignores the selections of Bits 00,
	0 : Registered (Bit 0 to 6)	01, 02, 04.
	1: No registration.	

Switch 03 - Not used (do not change the settings)

Swit	tch 04		
No	FUNCTION	COMMENTS	
0	Full mode address	If the other ends have the addresses, which have the full mode function flag	
	selection	("0"), this machine determines them as full mode standard machines.	
	0: Full mode address	• This machine attaches the "demand of reception confirmation" to a message	
	1: No full mode	when transmitting.	
	(simple mode)	• This machine updates the reception capability to the address book when	
		receiving.	
1-	Not used	Do not change these settings.	
7			

Switch 05		
No	FUNCTION	COMMENTS
0	Directr transmission selection to SMTP	Allows or does not allow the direct transmission to SMTP
	server	server.
	0: ON	
	1: OFF	
1-	Not used	Do not change these settings.
7		

Switch 06 - Not used (do not change the settings)	
Switch 07 - Not used (do not change the settings)	
Switch 08 - Not used (do not change the settings)	

Switch 09 - Not used (do not change the settings)

Service RAM Addresses

Service RAM Addresses

Content (1997)

• Do not change the settings that are marked as "Not used" or "Read only."

680001 to 680004(H) - ROM version (Read only)

- 680001(H) Revision number (BCD)
- 680002(H) Year (BCD)
- 680003(H) Month (BCD)
- 680004(H) Day (BCD)

680006 to 680015(H) - Machine's serial number (16 digits - ASCII)

- 680016(H) Language code
- 0: Japanese, 1: UK English, 2: US English, 3: French, 4: German, 5: Spanish, 6: Italian, 7: Dutch, 8: Swedish, 9:
- Norwegian, 10: Danish, 11: Finnish, 12: Czech, 13: Hungarian, 14: Polish, 15: Portuguese, 16: Russian, 17:
- Traditional Chinese, 18: Simplified Chinese, 19: Korean
- 680018(H) Total program checksum (low)
- 680019(H) Total program checksum (high)
- 680020 to 68003F(H) System bit switches
- 680050 to 68005F(H) Printer bit switches
- 680060 to 68007F(H) Communication bit switches
- 680080 to 68008F(H) G3 bit switches
- 680090 to 68009F(H) G3-2 bit switches: Not used
- 6800A0 to 6800AF(H) G3-3 bit switches: Not used
- 6800D0(H) User parameter switch 00 (SWUER_00): Not used
- 6800D1(H) User parameter switch 01 (SWUSR_01): Not used

6800D2(H) - User parameter switch 02 (SWUSR_02)

- Bit 0: Forwarding mark printing on forwarded messages 0: Disabled, 1: Enabled
- Bit 1: Center mark printing on received copies
- (This switch is not printed on the user parameter list.)
- 0: Disabled, 1: Enabled
- Bit 2: Reception time printing
- (This switch is not printed on the user parameter list.)
- 0: Disabled, 1: Enabled
- Bit 3: TSI print on received messages 0: Disabled, 1: Enabled
- Bit 4: Checkered mark printing
- (This switch is not printed on the user parameter list.)
- 0: Disabled, 1: Enabled
- Bit 5: Not used
- Bit 6: Not used
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Bit 7: Not used

6800D3(H) - User parameter switch 03 (SWUSR_03: Automatic report printout)

Bit 0: Transmission result report (memory transmissions) 0: Off, 1: On

Bit 1: Not used

Bit 2: Memory storage report 0: Off, 1: On

Bit 3: Polling reserve report (polling reception) 0: Off, 1: On

Bit 4: Polling result report (polling reception) 0: Off, 1: On

Bit 5: Transmission result report (immediate transmissions) 0: Off, 1: On

Bit 6: Not used

Bit 7: Journal 0: Off, 1: On

6800D4(H) - User parameter switch 04 (SWUSR_04: Automatic report printout)

Bit 0: Automatic printing of the Confidential File Report 0: Off, 1: On

Bit 1: Automatic communication failure report and transfer result report output 0: Off, 1: On

Bits 2 to 3: Not used

Bit 4: Indicates the parties 0: Not indicated, 1: Indicated

Bit 5: Include sender's name on reports 0: Off, 1: On

Bit 6: Not used

Bit 7: Inclusion of a sample image on reports 0: Off, 1: On

6800D5(H) - User parameter switch 05 (SWUSR_05)

Bit 0: Substitute reception when the base copier is in an SC condition

0: Enabled, 1: Disabled

Bits 1 and 2: Condition for substitute RX when the machine cannot print messages (Paper end, toner end, jam, and during night mode)

Bit 2: 0, Bit 1: 0 = The machine receives all the fax messages.

Bit 2: 0, Bit 1: 1 = The machine receives the fax messages with RTI or CSI.

Bit 2: 1, Bit 1: 0 = The machine receives the fax messages with the same ID code.

Bit 2: 1, Bit 1: 1 = The machine does not receive anything.

- Bit 3: Not used
- Bit 4: Not used

Bit 5: Just size printing 0: Off, 1: On

Bit 6: Not used

Bit 7: Add paper display when a cassette is empty 0: Off, 1: On

6800D6(H) - User parameter switch 06 (SWUSR_06)

Bit 0: Priority order of the information shown under "Destination" in the Journal, the Immediate TX Result

Report, and on the [Transmission File Status] screen for fax transmission 0: Gives priority to the destination

machine's information, 1: Gives priority to the Address Book information

Bit 1: V8 protocol (G3-1: Super G3) 0: Off, 1: On

Bit 2: V8 protocol (G3-2: Super G3) 0: Off, 1: On

Bit 3: V8 protocol (G3-3: Super G3) 0: Off, 1: On

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6800D7(H) - User parameter switch 07 (SWUSR_07)

Bit 0 Ringing 0: Off, 1: On

Bit1: Automatic answering message 0: Off, 1: On

Bit 2: Parallel memory transmission 0: Off, 1: On

Bits 3 and 4: Not used

Bit 5: Remote control 0: Off, 1: On

Bits 6 and 7: Not used

6800D8(H) - User parameter switch 08 (SWUSR_08)

Bits 0 and 1: Not used.

Bit 2: Authorized reception

0: Only faxes from senders whose RTIs/CSIs are specified for this feature are accepted.

1: Only faxes from senders whose RTIs/CSIs are not specified for this feature are accepted.

Bits 3 to 7: Not used.

6800D9(H) - User parameter switch 09 (SWUSR_09): Not used

6800DA(H) - User parameter switch 10 (SWUSR_0A)

Bit 0: Restrict control panel operations such as printing or deleting received documents. 0: Off, 1: On

Bit 1: Combine two originals 0: Off, 1: On

Bit 2: Not used

Bit 3: Page reduction 0: Off, 1: On

Bits 4 and 5: Not used

Bit 6: Use both e-mail notification and printed reports to confirm the transmission results 0: Off, 1: On

Bit 7: Specify whether to print the received document and delete it or print a report and delete the document when

a storage failure occurs. 0: Print the received document and delete it, 1: Print a report and delete the document

6800DB(H) - User parameter switch 11 (SWUSR_0B)

Bits 0 and 1: Not used

Bit 2: White original detection 0: Off, 1: On (alarm and alert message on the LCD)

Bit 3: Receive rejection for 1300 Hz transmission 0: Off (receive), 1: On (not receive)

Bit 4: Not used

Bit 5: Printout of messages received while acting as a forwarding station 0: Off, 1: On

Bits 6 and 7: Not used

6800DC(H) - User parameter switch 12 (SWUSR_0C): Not used

6800DD(H) - User parameter switch 13 (SWUSR_0D): Not used

6800DE(H) - User parameter switch 14 (SWUSR_0E)

Bit 0: Message printout while the machine is in Night Printing mode 0: On, 1: Off

Bit 1: Maximum document length detection 0: Double letter, 1: Longer than double-letter (well log) – up to 1,200 mm

Bit 2: Not used

Bit 3: Fax mode settings, such as resolution, before a mode key (Copy/Fax/Printer/Scanner) is pressed 0: Not cleared, 1: Cleared

Bits 4 to 7: Not used

6800DF(H) - User parameter switch 15 (SWUSR_0F)

(This switch is not printed on the user parameter list.)

Bits 0, 1 and 2: Cassette for fax printout

Bit 2: 0, Bit 1: 0, Bit 0: 1 = 1st paper feed station

Bit 2: 0, Bit 1: 1, Bit 0: 0 = 2nd paper feed station

Bit 2: 0, Bit 1: 1, Bit 0: 1 = 3rd paper feed station

Bit 2: 1, Bit 1: 0, Bit 0: 0 = 4th paper feed station

Bit 2: 1, Bit 1: 0, Bit 0: 1 = LCT

Other settings Not used

Bits 3 and 4: Not used

Bit 5: Using the cassette specified by bits 0, 1 and 2 above only 0: On, 1: Off

Bits 6 and 7: Not used

6800E0(H) - User parameter switch 16 (SWUSR_10)

(This switch is not printed on the user parameter list.)

Bits 0 and 1: Not used

Bit 2: Paper size selection priority for an A4 size fax message when A4/LT size paper is not available. 0: A3 has

priority, 1: B4 has priority

Bits 3 to 7: Not used

6800E1(H) - User parameter switch 17 (SWUSR_11)

Bit 0: Not used

Bit 1: Prohibit broadcasting

(This switch is not printed on the user parameter list.)

0: Do not prohibit, 1: Prohibit

Bit 2: Inclusion of the "Add" button when a sequence of Quick/Speed dials is selected for broadcasting 0: Not

needed, 1: Needed

Bit 3: Whether or not to reset the settings when original is scanned 0: On, 1: Off

Bit 4: Display destination confirmation screen before transmission

(This switch is not printed on the user parameter list.)

0: Do not display, 1: Display

Bit 5: Automatic addition of PSTN Access Number

(This switch is not printed on the user parameter list.)

0: Do not add, 1: Add. Use SP3-103, 104, 105, 106 to configure PABX line and PSTN Access Number.

Bit 6: Not used

Bit 7: Press "Start" key without an original when using the on hook dial or the external telephone,

0: displays "Cannot detect original size". 1: Receives fax messages.

6800E2(H) - User parameter switch 18 (SWUSR_12)

Bit 0: TTI date 0: Off, 1: On

Bit 1: TTI sender 0: Off, 1: On

Bit 2: TTI file number 0: Off, 1: On

Bit 3: TTI page number 0: Off, 1: On

Bits 4 to 6: Not used

Bit 7: Japan only

6800E3(H) - User parameter switch 19 (SWUSR_13)

Bit 0: Use paper delivery shift function (Offset Print) 0: Off, 1: On

Bit 1: Journal format

0: The Journal is separated into transmissions and receptions

1: The Journal is separated into G3-1, G3-2, and G3-3 communications

Bit 2: Print order switch function

(This switch is not printed on the user parameter list.)

0: If a tray selected by the Paper Tray per Sender function runs out of paper, no more documents are printed. 1:

Even if a tray selected by the Paper Tray per Sender function runs out of paper, other documents that use the other trays are printed.

Bit 3: 90° image rotation during B5 portrait TX (This switch is not printed on the user parameter list.) 0: Off, 1: On

Bit 4: Reduction of sample images on reports to 50% in the main scan and sub-scan directions. (This switch is not printed on the user parameter list.) 0: Technician adjustment (printer switch 0E bits 3 and 4), 1: 50% reduction Bit 5: Use of A5 size paper for reports (This switch is not printed on the user parameter list.) 0: Off, 1: On

Bits 6 and 7: Not used

6800E4(H) - User parameter switch 20 (SWUSR_14)

Bit 0: Automatic printing of the LAN fax result report 0: Off, 1: On

Bit 1: Not used.

Bits 2 to 5: Store documents in memory, which could not be printed from PC fax (LAN fax) driver

Bit 5	Bit 4	Bit 3	Bit 2	Setting
0	0	0	0	0 min.
0	0	0	1	1 min.
\checkmark	\checkmark	\rightarrow	\checkmark	\checkmark
1	1	1	0	14 min.

Bits 6 and 7: Not used.

6800E5(H) - User parameter switch 21 (SWUSR_15)

Bit 0: Print results of sending reception notice request message 0: Disabled (print only when error occurs), 1: Enabled

Bit 1: Respond to e-mail reception acknowledgment request 0: Disabled, 1: Enabled

Bit 2: Choose whether to print JPEG or PDF files attached to incoming e-mail. 0: Do not print, 1: Print

Bit 3: File format for forwarded folders 0: TIFF, 1: PDF

Bit 4: Transmit Journal by E-mail 0: Disabled, 1: Enabled

Bit 5: Limit printing of subjects and texts in normal e-mail (attached TIFF files). 0: No, 1: Yes

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Bit 6: Network error display 0: Displayed, 1: Not displayed

Bit 7: Transmit error mail notification 0: Enabled, 1: Disabled

6800E6(H) - User parameter switch 22 (SWUSR_16)

(This switch is not printed on the user parameter list.)

Bit 0: Dial tone detection (PSTN 1) 0: Disabled, 1: Enabled

Bit 1: Dial tone detection (PSTN 2) 0: Disabled, 1: Enabled

Bit 2: Dial tone detection (PSTN 3) 0: Disabled, 1: Enabled

Bit 3: Allow use of Handset and On Hook Dial function when fax number confirmation is enabled 0: Do not allow, 1: Allow

Bits 4 to 7: Fax number confirmation by entering the fax number n times 0000: Off, 0001: Repeat once (enter

twice in total), 0002: Repeat twice (enter three times in total) 1110: Repeat 14 times (enter 15 times in total),

1111: Repeat 15 times (enter 16 times in total)

6800E7(H) – User parameter switch 23 (SWUSR_17)

Bits 0 to 7: TTI name to be printed when sent by Handset or Backup File TX 0x00: OFF, 0x01: TTI name 1, ... 0x0A: TTI name 10

6800E8(H) - User parameter switch 24 (SWUSR_18)

Bit 0: Store documents that could not be transmitted in memory 0: Off, 1: On

Bit 1: Length of time documents that could not be transmitted are stored in memory 0: 24 hours, 1: 72 hours

Bit 2: Retain the files stored in the Document Server, regardless of the settings of [Auto Delete File in Document

Server] under [System Settings]

(This switch is not printed on the user parameter list.)

0: No, 1: Yes

Bit 3: Prevent system message from being sent when sending e-mail

(This switch is not printed on the user parameter list.)

0: Do not prevent 1: Prevent

Bits 4 to 7: Not used

6800E9(H) - User parameter switch 25 (SWUSR_19)

Bit 0: Not used

Bit 1: Reception mode switch timer 0: Off, 1: On (switching Fax or Fax/Tel)

Bit 2: Mode priority switch 0: Fax first, 1: Tel first

Bit 3: Not used

Bit 4: Do not Change this Bit.

Bits 5 to 7: Not used

6800EA(H) and 6800EB(H) - User parameter switches 26 and 27 (SWUSR_1A and 1B): Not used

6800EC(H) - User parameter switch 28(SWUSR_1C): Not used

6800ED(H) - User parameter switch 29(SWUSR_1D): Not used

6800EE(H) and 6800EF(H) - User parameter switches 30 and 31 (SWUSR_1E and 1F): Not used

6800F0(H) - User parameter switch 32 (SWUSR_20)

Bit 0: Quotation priority for a destination when there is no destination of the specified type

0: Paper output priority = Priority order: 1. IP-fax destination, 2. Fax Number, 3. E-mail address, 4. Folder

1: Electric putout order = Priority order: 1. E-mail address, 2. Folder, 3. IP-fax destination, 4. Fax number Bits 1 to 3: Not used

Bit 4: Whether or not to route a document received through G3-1 0: No, 1: Yes

Bit 5: Whether or not to route a document received through G3-2 0: No, 1: Yes

Bit 6: Whether or not to route a document received through G3-3 0: No, 1: Yes

Bit 7: Not used

6800F1(H) - User parameter switch 33 (SWUSR_21): Not used

6800F2(H) - User parameter switch 34 (SWUSR_22)

Bit 0: Gatekeeper server used with IP-Fax 0: Disabled, 1: Enabled

Bit 1: SIP server used with IP-Fax 0: Disabled, 1: Enabled

Bits 2 to 7: Not used

6800F3(H) - User parameter switch 35 (SWUSR_23)

Redial interval when sending a backup file

6800F4(H) - User parameter switch 36 (SWUSR_24)

Maximum number of redials when sending a backup file

6800F5(H) - User parameter switch 37 (SWUSR_25)

Bit 0: Whether to stop sending a backup file if the destination folder becomes full while the machine is sending or waiting to send a fax or the backup file. 0: No, • 1: Yes

Bit 2 and 3: Backup file is printed along with the TX communication failure report when a backup file

transmission failure occurs. 00: Do not print, 01: Print first page only, 10: Print whole file

Bit 4: Display the sender's information in the file name of documents that are forwarded to folder destinations. 0: Disabled, 1: Enabled

Bit 5: Limit the file names of documents that are forwarded to folder destinations to plain characters only. 0: Disabled, 1: Enabled

Bit 6: When using the remote fax function, the sub-machine beeps to let you know when it has printed a received document (If you specify "On", the machine will beep according to the setting of [Panel Key Sound] under [System Settings].) 0: On, 1: Off

Bit 7: Whether to use PSTN line or PABX line for AirPrintFaxOut when there are both types of lines 0: PSTN 1: PABX

6800F6(H) - User parameter switch 38 (SWUSR_26)

Maximum number of transmissions the machine attempts before determining that a fax cannot be forwarded from a sender (including special senders) to a folder destination

6800F7(H) - User parameter switch 39 (SWUSR_27)

Interval (in minutes) between resend attempts after failing to forward a fax from a sender (including special senders) to a folder destination

6800F8(H) - User parameter switch 40 (SWUSR_28)

Bit 0: When memory space is insufficient, the machine prints and then deletes the oldest faxes, creating memory space for storage of new faxes. 0: Disabled, 1: Enabled

Bit 1 to 7: Not used

6800FD(H) - User parameter switch 45 (SWUSR_2D)

Bit 0 and 1:

Bit 2: File format for files transmitted to e-mail addresses and folders registered as forwarding, destinations of backup file transmission, receivers for Personal Box, or end receivers for Transfer Box. 0: PDF 1: PDF/A Bit 3: Print or store received documents on the machine when the received documents were properly sent to all forwarding destinations. (Even if [Print] or [Store] is set to [On] in [Reception File Settings], select "Do not print or store" if you do not want to print or store documents when they were properly sent.) 0: Use the settings in [Reception File Settings], 1: Do not print or store Bit 4 to 7: Not used 680100 to 68010F(H) - G4 Parameter Switches - Not used 680110 to 68012F(H) - G4 Internal Switches - Not used 680130 to 68016F(H) - Service Switches 680170 to 68017F(H) - IFAX Switches 680180 to 68018F(H) - IP-FAX Switches 680190 to 6801A3(H) - PSTN-1 RTI (Max. 20 characters - ASCII) - See the following note. 6801A4 to 6801B7(H) - PSTN-2 RTI (Max. 20 characters - ASCII) 6801B8 to 6801CB(H) - PSTN-3 RTI (Max. 20 characters - ASCII) 6801CF to 68020E(H) - TTI 1 (Max. 64 characters - ASCII) - See the following note. 68020F to 68024E(H) - TTI 2 68024F to 68028E(H) - TTI 3 68028F to 6802CE(H) - TTI 4 6802CF to 68030E(H) - TTI 5 68030F to 68034E(H) - TTI 6 68034F to 68038E(H) - TTI 7 68038F to 6803CE(H) - TTI 8 6803CF to 68040E(H) - TTI 9 68040F to 68044E(H) - TTI 10

Note

• If the number of characters is less than the maximum (20 for RTI, 32 for TTI), add a stop code (00[H]) after the last character.

68044F(H)

Printing format for TTI 1

0: DOM (Japan), 1:EXP (Export)

680450(H)

Printing format for TTI 2

0: DOM, 1: EXP

680451(H)

Printing format for TTI 3

0: DOM, 1:EXP 680452(H) Printing format for TTI 4 0: DOM, 1:EXP 680453(H) Printing format for TTI 5 0: DOM, 1:EXP 680454(H) Printing format for TTI 6 0: DOM, 1:EXP 680455(H) Printing format for TTI 7 0: DOM, 1:EXP 680456(H) Printing format for TTI 8 0: DOM, 1:EXP 680457(H) Printing format for TTI 9 0: DOM, 1:EXP 680458(H) Printing format for TTI 10 0: DOM, 1: EXP 680459 to 68046C(H) - PSTN-1 CSI (Max. 20 characters - ASCII) 68046D to 680480(H) - PSTN-2 CSI (Max.20 characters - ASCII) 680481 to 680494(H) - PSTN-3 CSI (Max.20 characters - ASCII) 680495(H) - Number of PSTN-1 CSI characters (Hex) 680496(H) - Number of PSTN-2 CSI characters (Hex) 680497(H) - Number of PSTN-3 CSI characters (Hex) 6804C6(H) - Memory Lock ID (BCD) 6804D2 to 6804D9(H) - Last power off time (Read only) 6804D2(H) - 01(H) - 24-hour clock, 00(H) - 12-hour clock (AM), 02(H) - 12-hour clock (PM) 6804D3(H) - Year (BCD) 6804D4(H) - Month (BCD) 6804D5(H) - Day (BCD) 6804D6 (H) - Hour 6804D7 (H) – Minute 6804D8(H) - Second 6804D8 (H) - 00: Monday, 01: Tuesday, 02: Wednesday, ///, 06: Sunday 6804E6(H) - Optional equipment (Read only – Do not change the settings)

Bit 0: Page Memory 0: Not installed, 1: Installed Bit 1: SAF Memory (4M) 0: Not installed, 1: Installed Bit 2: SAF Memory 0: Not installed, 1: Installed Bits 3 to 7; Not used 6804E7(H) - Optional equipment (Read only – Do not change the settings) Bits 0 to 3: Not used Bit 4: G3-2 0: Not installed, 1: Installed Bit 5: G3-3 0: Not installed, 1: Installed Bit 6 and 7: Not used 6804EE(H) - Machine code (Check ram 3) 680500(H) - Start address of G3 table for G3-1 680600(H) - Start address of G3 table for G3-2 680700(H) - Start address of G3 table for G3-3 680800 to 68081F(H) - Service station's fax number (SP3-101) 680820 to 680829(H) - Own fax PABX extension number 68082A to 680833(H) - Own fax number (PSTN) 680834 to 680847(H) - Own fax number (ISDN G4) - Not used 680848 to 680853(H) - The first subscriber number (ISDN G3) - Not used 680854 to 68085F(H) - The second subscriber number (ISDN G3) – Not used 680860 to 68086B(H) - The first subscriber number (ISDN G4) - Not used **68086C to 680877(H)** - The second subscriber number (ISDN G4) – Not used 6808A0 to 6808B7(H) - G4TID registered information (Max.24 characters - ASCII) 6808B8 to 6808CB(H) - ISDN CSI (Max.20 characters - ASCII) 6808CC(H) - Number of ISDN CSI characters (Hex) 6808D1 to 6808D4(H) - ISDN G3 sub address registered information 6808D5 to 6808D8(H) - G4 sub address registered information 6808DE to 6808E2 – Option G3 board (G3-2) ROM information (Read only) 6808DE(H) - Suffix (BCD) 6808DF(H) - Version (BCD) 6808E0(H) - Year (BCD) 6808E1(H) - Month (BCD) 6808E2(H) - Day (BCD) 6808E3 to 6808E7 - Option G3 board (G3-3) ROM information (Read only) 6808E3(H) - Suffix (BCD) 6808E4(H) - Version (BCD) 6808E5(H) - Year (BCD) 6808E6(H) - Month (BCD)

6808E7(H) - Day (BCD)

6808E8(H) - G3-1 Modem ROM version (Read only)

6808EA(H) - G3-2 Modem ROM version (Read only) **6808EC(H)** - G3-3 Modem ROM version (Read only) **6808F8(H)** - Number of multiple sets print (Read only) **68094E(H)** - Time for economy transmission (Not used) 68094F(H) - Dial-in (Not used) **68096A(H)** - Transmission monitor volume 00 - 07(H) 68096B(H) - Reception monitor volume 00 - 07(H) **68096C(H)** - On-hook monitor volume 00 - 07(H) **68096D(H)** - Dialing monitor volume 00 - 07(H) 68096E(H) - Buzzer volume 00 - 07(H) **68096F(H)** - Beeper volume 00 - 07(H) 680980(H) - Machine code (Check ram 4) 6809AA(H) - Machine serial number (ASCII) 68717A to 68717D(H) - Transmission counter (Max.24 characters - ASCII) 68717E to 687181(H) - Reception counter (Max.24 characters - ASCII) 6871EA to 6871ED(H) - Mail transmission counter (Max.24 characters - ASCII) 6871EE to 6871F1(H) - Mai reception counter (Max.24 characters - ASCII) 6A6DEE(H) to 6A70ED(H) - SIP server address (Read only) 6A6DEE(H) - Proxy server - Main (Max. 128 characters - ASCII) 6A6E6E(H) - Proxy server - Sub (Max. 128 characters - ASCII) 6A6EEE(H) - Redirect server - Main (Max. 128 characters - ASCII) 6A6F6E(H) - Redirect server - Sub (Max. 128 characters - ASCII) 6A6FEE(H) - Registrar server - Main (Max. 128 characters - ASCII) 6A706E(H) - Registrar server - Sub (Max. 128 characters - ASCII) 6A70EE(H) - Gatekeeper server address - Main (Max. 128 characters - ASCII) 6A716E(H) - Gatekeeper server address - Sub (Max. 128 characters - ASCII) 6A71EE(H) - Alias Number (Max. 128 characters - ASCII) 6A726E(H) - SIP user name (Max. 128 characters - ASCII) 6A72EE(H) - SIP digest authentication password (Max. 128 characters - ASCII) 6A736E(H) - Gateway address information (Max. 7100 characters - ASCII) 6A8F2A(H) - NGN initial setting method 0: Simple, 1: Manual 6A8F2B(H) - SIP digest authentication user name (Max. 128 characters - ASCII) 6A8FAB(H) - NGN-SIP domain name (Max. 64 characters - ASCII) 6A8FEB(H) - NGN-home gateway address (Max. 128 characters - ASCII) 6A906C(H) - Stand-by port number for H.323 connection 6A906E(H) - Stand-by port number for SIP connection 6A9070(H) - RAS port number 6A9072(H) - Gatekeeper port number 6A9074(H) - Port number of data waiting for T.38 152

6A9076(H) - Port number of SIP server

6A9078(H) - Priority for SIP and H.323 0: H.323, 1: SIP

6A9079(H) - SIP function 0: Disabled, 1: Enabled

6A907A(H) - H.323 function 0: Disabled, 1: Enabled

6A907B(H) - SIP digest authentication function 0: Disabled, 1: Enabled

6B3AE4(H) - 6B3B04 (H) - Dial tone detection parameter (Max. 11 x 3 lines)

This initializes following order. [0x04, 0x40, 0x03, 0x60, 0x64, 0xf4, 0x01, 0x64, 0x04, 0xc8, 0x00]

6B3AE4(H) – Dial tone detection frequency – Upper limit (High)

Defaults: NA: 06, EU: 06, ASIA: 06

6B3AE5(H) – Dial tone detection frequency – Upper Limit (Low)

Defaults: NA: 50, EU: 50, ASIA: 50

6B3AE6(H) – Dial tone detection frequency – Lower Limit (High)

Defaults: NA: 03, EU: 02, ASIA: 02

6B3AE7(H) – Dial tone detection frequency – Lower Limit (Low)

Defaults: NA: 60, EU: 90, ASIA: 90

6B3AE8(H) – Dial tone detection waiting time (20 ms)

Defaults: NA: 64, EU 64, ASIA: 64

6B3AE9 to 6B3AEA – Dial tone detection monitoring time (20 ms)

Defaults

Area	6B35A9	6B35AA
NA	F4	01
EU	F4	01
ASIA	F4	01

6B3AEB(H) – Dial tone detect judge time (20 ms)

Defaults: NA: 64, EU: 1B, ASIA: 32

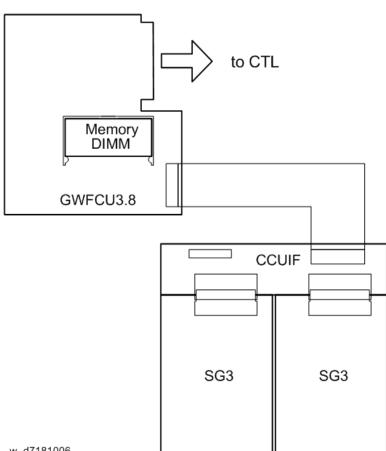
6B3AEC(H) – Dial tone disconnect permission time (20 ms)

Defaults: NA: 11, EU: 0F, ASIA: 11

5. Detailed Section Descriptions

Overview

Overview



w_d7181006

Together with the controller board, the FCU controls all the fax communications and fax features. The FCU also contains the ROM, SRAM and NCU circuits.

Fax Options

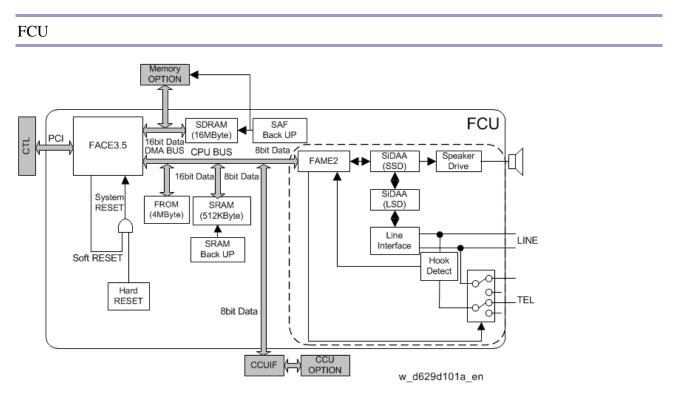
Extra G3 Interface option ٠

This provides one more analog line interface. This allows full dual access. Two extra G3 interface options can be installed.

Memory Expansion •

This expands the SAF memory and the page memory (used for image rotation); without this expansion, the page memory is not big enough for image rotation at 400 dpi, so transmission at 400 dpi is not possible.

Boards



The FCU (Facsimile Control Unit) controls fax communications, the video interface to the base copier's engine, and all the fax options.

FACE3.5 (Fax Application Control Engine)

- CPU
- Data compression and reconstruction (DCR)
- DMA control
- Clock generation
- DRAM backup control

Modem (FAME2)

• V.34, V33, V17, V.29, V.27ter, V.21, and V.8

DRAM

- The 16 MB of DRAM is shared as follows.
 - SAF memory: 4MB
 - Working memory: 4MB
 - Page memory: 8MB
 - The SAF memory is backed up by a rechargeable battery.

ROM

• 4MB flash ROMs for system software storage

SRAM

• The 512 KB SRAM for system and user parameter storage is backed up by a lithium battery.

Memory Back-up

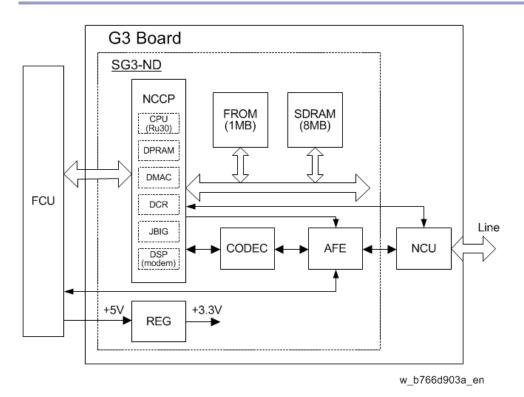
5.Detailed Section Descriptions

- A rechargeable battery backs up the SAF memory (DRAM) for 12 hours.
- A lithium battery backs up the system parameters and programmed items in the SRAM, in case the base copier's main switch is turned off.

Switches

Item	Description
SW1	Switches the SRAM backup battery on/off.

SG3 Board



The SG3 board allows up to three simultaneous communications when used in combination with the FCU and optional G3 boards. The NCU is on the same board as the common SG-3 board. This makes the total board structure smaller. But, the specifications of the SG3 board do not change.

NCCP (New Communication Control Processor)

- Controls the SG3 board.
 - CPU (RU30)
 - DPRAM (Dual Port RAM): Handshaking with the FCU is done through this block.
 - DMA controller
 - JBIG
 - DSP V34 modem (RL5T892): Includes the DTMF Receiver function
- DCR for MH, MR, MMR, and JBIG compression and decompression

FROM

• 1Mbyte flash ROM for SG3 software storage and modem software storage

SDRAM

• 4Mbyte DRAM shared between ECM buffer, line buffer, and working memory

AFE (Analog Front End)

• Analog processing

CODEC (COder-DECoder)

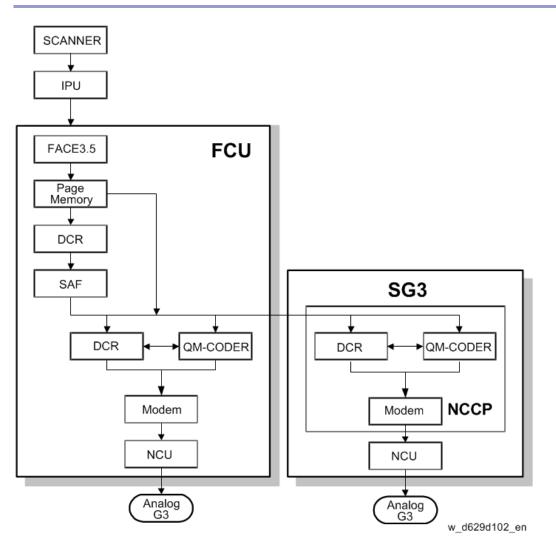
• A/D & D/A conversions for modem

REG

• Generates +3.3 V from the +5V from the FCU

Video Data Path

Transmission



Memory Transmission and Parallel Memory Transmission

The base copier's scanner scans the original at the selected resolution in inch format. The IPU processes the data and transfers it to the FCU.

Vote

• When scanning a fax original, the IPU uses the MTF, independent dot erase and thresholding parameter settings programmed in the fax unit's scanner bit switches, not the copier's SP modes.

Then, the FCU converts the data to mm format, and compresses the data in MMR or raw format to store it in the SAF memory. If image rotation will be done, the image is rotated in page memory before compression.

At the time of transmission, the FCU decompresses the stored data, then re-compresses and/or reduces the data if necessary for transmission. The NCU transmits the data to the line.

Immediate Transmission

The base copier's scanner scans the original at the resolution agreed with the receiving terminal. The IPU video

processes the data and transfers it to the FCU.

Vote

• When scanning a fax original, the IPU uses the MTF, independent dot erase and thresholding parameter settings programmed in the fax unit's scanner bit switches, not the copier's SP modes.

Then the FCU stores the data in page memory, and compresses the data for transmission. The NCU transmits the data to the line.

JBIG Transmission

Memory transmission

If the receiver has JBIG compression, the data goes from the DCR to the QM-Coder. Then the NCU transmits the data to the line. When an optional G3 unit (SG3) is installed and PSTN2 is selected as the line type, JBIG compression is available, but only for the PSTN-2 line.

Immediate transmission

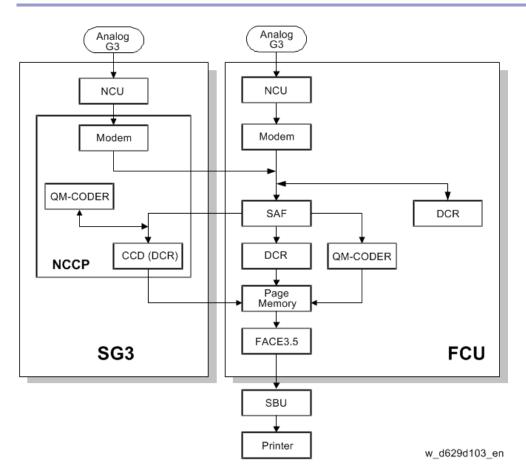
If the receiver has JBIG compression, the data goes from the page memory to the QM-Coder. Then the NCU transmits the data to the line. When an optional G3 unit (SG3) is installed and PSTN2 is selected as the line type, JBIG compression is available, but only for the PSTN-2 line.

Adjustments

• Priority for the line used for G3 transmissions (PSTN 1/PSTN 2 or 3): System switch 16 bit 1

5.Detailed Section Descriptions

Reception



First, the FCU stores the incoming data from either an analog line to the SAF memory. (The data goes to the FACE3 at the same time, and is checked for error lines/frames.)

The FCU then decompresses the data and transfers it to page memory. If image rotation will be done, the image is rotated in the page memory. The data is transferred to the IPU.

If the optional G3 unit is installed, the line that the message comes in on depends on the telephone number dialed by the other party (the optional G3 unit has a different telephone number from the main fax board).

JBIG Reception

When data compressed with JBIG comes in on PSTN-1 (the standard analog line), the data is sent to the QM-CODER for decompression. Then the data is stored in the page memory, and transferred to the IPU. When data compressed with JBIG comes in on PSTN-2 (optional extra analog line), the data is sent to the QM-CODER on the SG3 board for decompression.

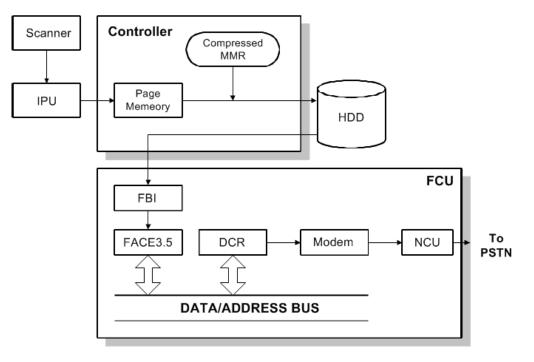
Fax Communication Features

Multi-port

When the optional extra G3 Interface Unit is installed, communication can take place at the same time through the two or three lines at once.

Option	Available Line Type	Available protocol Combinations	
Standard only	PSTN	G3	
Extra G3 Interface Unit (single)	PSTN + PSTN	G3 + G3	
Extra G3 Interface Unit (double)	PSTN + PSTN +PSTN	G3 + G3 +G3	

Document Server



w_d629d104_en

The base copier's scanner scans the original at the selected resolution. The IPU video processes the data and transfers it to the controller board.

Then the controller stores the data in the page memory for the copier function, and compresses the data in MMR (by software) to store it in the HDD. If image rotation will be done, the image is rotated in the page memory before compression.

For transmission, the stored image data is transferred to the FCU. The FCU decompresses the image data, then recompresses and/or reduces the data if necessary for transmission. The NCU transmits the data to the line. The documents can be stored in the HDD (Document Server) from the fax application. The stored documents in the document sever can be used for the fax transmission in many times. More than one document and the scanned document can be combined into one file and then the file can be transmitted.

• When using the document server, the SAF memory is not used.

5.Detailed Section Descriptions

- The document is compressed with MMR and stored.
- Up to 9,000 pages can be stored (1 file: Up to 1,000 pages) from the fax application.
- Only stored documents from the fax application can be transmitted.
- Scanned documents are given a name automatically, such as "FAX001". But it is possible to change the file name, user name and password.
- Up to 30 files can be selected at once.

Vote

- The compression method of the fax application is different from the copy application. The storing time is longer than the copier storing.
- When selecting "Print 1st page", the stored document will be reduced to A4 size.

Internet Mail Communication

Mail Transmission

T.37 simple and full modes

This machine supports T.37 full mode. (ITU-T Recommendation, RFC2532). The difference between T.37 simple mode and full mode is as follows.

Function	T.37 Simple Mode	T.37 Full Mode
Resolution	200 x 100	200 x100
	200 x 200	200 x 200
		200 x 400
		400 x 400 (if available)
RX Paper Width	A4	A4, B4, A3
RX Data	MH	MH (default), MR, MMR,
Compression		
Method		
Signals	Image data	Image data transmission, exchange of capability information
	transmission only	between the two terminals, and acknowledgement of receipt of fax
		messages

Data Formats

The scanned data is converted into a TIFF-F formatted file.

The fields of the e-mail and their contents are as follows:

Field	Content
From	Mail address of the sender
Reply To	Destination requested for reply
То	Mail address of the destination
Bcc	Backup mail address
Subject	From CSI or RTI (Fax Message No. xxxx)

Field	Content
Content Type	Multipart/mixed
	Attached files: image/tiff
Content Transfer	Base 64, 7-bit, 8-bit, Quoted Printable
Encoding	
Message Body	MIME-converted TIFF-F (MIME standards specify how files are attached to e-mail
	messages)

Direct SMTP Transmission

Internet Fax documents can be sent directly to their destinations without going through the SMTP server. (Internet Faxes normally transmit via the SMTP server.)

For example:

e-mail address:	gts@ricoh.co.jp	
SMTP server address:	gts.abcd.com	

In this case, this feature destination e-mail address (gts@ricoh.co.jp) is read as the SMTP server address

"gts.abcd.com", and the transmissions bypass the SMTP server. This leads to decrease the server load and to reduce the time lag during transferring the mail.

- Requirements for destination server:
 - Supports with Internet FAX (as a destination of Internet FAX)
 - Can receive mails (as a destination of mail)
 - Is installed in the same LAN as this machine
 - Supports with the SMTP mail reception, and the reception protocol is set to SMTP

Vote

- Set the port number for [SMTP server] to "25" to enable this feature.
- If the sender server sends an Internet FAX or a mail using this feature, the SMTP authentication is disabled even if the server sets it.
- Using this feature, error notification mail will not be sent even if the mail is not properly received.
- Also, error mail will not be sent even if the mail is not sent properly.
- This feature refers to A records (not supported with MX records).

Selectable Options

These options are available for selection:

- With the default settings, the scan resolution can be either standard or detail. Inch-mm conversion before TX depends on IFAX SW01 Bit 7. Detail resolution will be used if Super Fine resolution is selected, unless Fine resolution is enabled with IFAX SW01.
- The requirements for originals (document size, scan width, and memory capacity) are the same as for G3 fax memory TX.
- The default compression is TIFF-F format.
- IFAX SW00: Acceptable paper widths for sending

5.Detailed Section Descriptions

• IFAX SW09: Maximum number of attempts to the same destination

Secure Internet Transmission

- SMTP Authentication:
 - User Tools> System Settings> File Transfer> SMTP Authentication
- POP Before SMTP: User Tools> System Settings> File Transfer> POP Before SMTP

Mail Reception

Three Types

This machine supports three types of e-mail reception:

- POP3 (Post Office Protocol Ver. 3.)
- IMAP4 (Internet Messaging Access Protocol)
- SMTP (Simple Mail Transfer Protocol)

Vote

 For details: Core Technology Manual – Facsimile Processes – Faxing from a PC – Internet/LAN Fax Boards – Mail Reception

POP3/IMAP4 Mail Reception Procedure

The machine automatically picks up e-mail from the server at an interval which is adjustable in the range 2 to 1440 min. in 1-minute steps:

• User Tools> System Settings> File Transfer> E-mail Reception Interval

SMTP Reception

- 1. The IFAX must be registered as an SMTP server in the MX record of the DNS server, and the address of the received mail must specify the IFAX.
- 2. To enable SMTP reception: User Tools> System Settings> File Transfer> Reception Protocol
 - Even if the MX record on the DNS server includes the IFAX, mail cannot be received with SMTP until SMTP reception is enabled:
 - However, if SMTP reception is selected and the machine is not registered in the MX record of the DNS server, then either IMAP4 or POP3 is used, depending on the setting: User Tools> System Settings> File Transfer> Reception Protocol

Vote

- An error will be issued and error mail will be sent to the mail source when the reception protocol is not set to SMTP even If you configure to enable SMTP reception in the DNS server.
- If the received mail contains error, the reception operation is stopped, the mail is discarded and error report is output. Error mail is also sent to the mail source.
- When a mail is received from SMTP server during sending a mail in the machine, the SMTP server will give a "Busy" response. The SMTP server will usually try to send the mail again later until the time-out is reached.

• This feature cannot be used with the POP server.

Mail Delivery Conditions: Transferring Mail Received With SMTP

- 1. The machine must be set up for SMTP mail delivery:
 - User Tools> Facsimile Features> Reception Settings> SMTP RX File Delivery Settings
- If the user wishes to limit this feature so that the machine will only deliver mail from designated senders, the machine's "Auth. E-mail RX" feature must be set (User Tools> Facsimile Features> Reception Settings> SMTP RX File Delivery Settings).
- If the "SMTP RX File Delivery Setting" is set to "Off" to prohibit SMTP receiving, and if there is mail designated for delivery, then the machine responds with an error. (User Tools> Facsimile Features> Reception Settings> SMTP RX File Delivery Settings)
- 4. If the quick dial, speed dial, or group dial entry is incorrect, the mail transmission is lost, and the IFAX issues an error to the SMTP server and outputs an error report.

Auth. E-mail RX

In order to limit access to mail delivery with IFAX, the addresses of senders must be limited using the Access Limit Entry. Only one entry can be registered.

1. Access Limit Entry

For example, to limit access to @IFAX.ricoh.co.jp:

gts@IFAX.ricoh.co.jp	Matches and is delivered.
gts@IFAX.abcde.co.jp	Does not match and is not delivered.
IFAX@ricoh.co.jp	Does not match and is not delivered.

- 2. Conditions
 - The length of the Access Limit Entry is limited to 127 characters.
 - If the Access Limit Entry address and the mail address of the incoming mail do not match, the incoming mail is discarded and not delivered, and the SMTP server responds with an error. However, in this case an error report is not output.
 - If the Access Limit Entry address is not registered, and if the incoming mail specifies a delivery destination, then the mail is delivered unconditionally.

Handling Mail Reception Errors

Abnormal files

When an error of this type occurs, the machine stops receiving and commands the server to erase the message. Then the machine prints an error report and sends information about the error by e-mail to the sender address (specified in the "From" or "Reply-to" field of the message). If there is an incomplete received message in the machine memory, it will be erased.

The machine prints an error message when it fails to send the receive error notification after a certain number of attempts.

The following types of files are judged to be abnormal if one or more of the following are detected:

5.Detailed Section Descriptions

- 1. Unsupported MIME headers.
 - Supported types of MIME header

Header	Supported Types
Content-Type	Multipart/mixed, text/plain, message/rfc822 Image/tiff
Charset	US-ASCII, ISO 8859 X. Other types cannot be handled, and some garbage may
	appear in the data.
Content-Transfer-	Base 64, 7-bit, 8-bit, Quoted Printable
Encoding	

- 2. MIME decoding errors
- 3. File format not recognized as TIFF-F format
- 4. Resolution, document size, or compression type cannot be accepted

Remaining SAF capacity error

The machine calls the server but does not receive e-mail if the remaining SAF capacity is less than a certain value (the value depends on IFAX Switch 08. The e-mail will be received when the SAF capacity increases (for example, after substitute reception files have been printed). The error handling method for this type of error is the same as for "Abnormal files".

If the capacity of the SAF memory drops to zero during reception, the machine operates in the same way as when receiving an abnormal file (refer to "Abnormal files" above).

Secure Internet Reception

To enable password encryption and higher level security: User Tools> System Settings> File Transfer> POP3/IMAP4 Settings> Encryption (set to "On")

Transfer Request: Request By Mail

For details: Core Technology Manual - Facsimile Processes - Faxing from a PC - Internet/LAN Fax Boards -

Transfer Request

The fields of the e-mail and their contents are as follows:

Field	Content		
From	E-mail address of the requesting terminal		
То	Destination address (Transfer Station address)		
Всс	Backup mail address		
Subject	From TSI (Fax Message No. xxxx)		
Content-Type	Multipart/mixed		
	Text/Plain (for a text part), image/tiff (for attached files)		
Content-Transfer-Encoding	Base 64, 7-Bit, 8-bit, Quoted Printable		
Mail body (text part)	RELAY-ID-: xxxx (xxxx: 4 digits for an ID code)		
	RELAY: #01#*X#**01		
Message body	MIME-converted TIFF-F.		

E-Mail Options (Sub TX Mode)

The following features are available as options for mail sending: entering a subject, designating the level of importance, confirming reception of the mail.

Subject and Level of Importance

You can enter a subject message with: TX Mode> Subject

The Subject entry for the mail being sent is limited to 128 characters. The subject can also be prefixed with a "Confidential", "Urgent", "Please phone" or "Copy to corres. Section" notation.

- How the Subject Differs According to Mail Type -

Mail Type	Item	Ite	m 2	Item 3
Subject Entry		Entry Condition		Fax Message No.
No Subject Entry		1. "CSI" ("RTI")		+
		2. "RTI"	CSI not registered	File No.
		3. "CSI"	RTI not registered	
		4. None	CSI, RTI not	
			registered	
Confirmation of	From	1. "CSI" ("RTI")	-	Normal:
Reception		2. "RTI"	CSI not registered	Return Receipt
				(dispatched).
				You can select "displayed"
				with IFAX SW02 Bits 2
				and 3.
		3. "CSI"	RTI not registered	Error:
		4. None	CSI, RTI not	Return Receipt
			registered	(processed/error)
Mail delivery, memory	From	RTI or CSI of the	Mail delivery	Fax Message No. + File
transfer, SMTP receiving		station designated		Number
and delivery		for delivery		
		RTI or CSI of	Mail sending from	
		sender	G3 memory	
		Mail address of	Memory sending	
		sender		
		Mail address of	SMTP receiving and	
		sender	delivery (Off Ramp	
			Gateway)	
Mail error notification		Error Message No. xxxx From CSI (RTI)		

Items 1, 2, and 3 in the table above are in the Subject.

- Subjects Displayed on the PC -

5.Detailed Section Descriptions

Sender		Date	-	Size	•	Subject		
Substation 2	2	04/25/2002		1,51	13	Parts List		
Substation 2	2	04/26/2002		1,14	47	Specifications		- 1
A Main Station		05/09/2002	_	33,55	51	🗟 [Urgent] Memo 2041		
			2	624,2	88			
							h76	- 6d007

E-mail Messages

After entering the subject, you can enter a message with: TX Mode> Text

An e-mail message (up to 5 lines) can be pre-registered with: User Tools> System Settings> File Transfer>

Program/Change/Delete E-mail Message

- Limitations on Entries -

Item	Maximum
Number of Lines	5 lines
Line Length	80 characters
Name Length	20 characters

Message Disposition Notification (MDN)

For details: Core Technology Manual – Facsimile Processes – Faxing from a PC – Internet/LAN Fax Boards – Email Options

The network system administrator can confirm whether a sent mail has been received correctly or not. This confirmation is done in four steps.

- Send request for confirmation of mail reception. To enable or disable this request (known as MDN): TX Mode> Reception Notice
- 2. Mail reception (receive confirmation request)
- 3. Send confirmation of mail reception
- 4. Receive confirmation of mail reception

The other party's machine will not respond to the request unless the two conditions below are met:

- The other party's machine must be set up to respond to the confirmation request.
- The other party's machine must support MDN (Message Disposition Notification).
- Setting up the Receiving Party -

The receiving party will respond to the confirmation request if:

- 1. The "Disposition Notification To" field is in the received mail header (automatically inserted in the 4th line in the upper table on the previous page, if MDN is enabled), and
- 2. Sending the disposition notification must be enabled (User Parameter Setting SW21 (15 [H]) Bit 1 for this model). The content of the response is as follows:

Normal reception:	"Return Receipt (dispatched)" in the Subject line		
IFAX SW02 (Bit 2, 3)	"Return Receipt (displayed)" in the Subject line		
Error:	"Return Receipt (processed/error)" in the Subject line		

Handling Reports

- Sending a Request for a Return Receipt by Mail -

After the mail sender transmits a request for a return receipt, the mail sender's journal is annotated with two hyphens (--) in the Result column and a "Q" in the Mode column.

- Mail Receipt (Request for Receipt Confirmation) and Sending Mail Receipt Response -

After the mail receiver sends a response to the request for a return receipt, the mail receiver's journal is annotated with two hyphens (--) in the Result column and an "A" in the Mode column.

- Receiving the Return Receipt Mail -

- After the mail sender receives a return receipt, the information in the mail sender's journal about the receipt request is replaced, i.e. the journal is annotated with "OK" in the Result column.
- When the return receipt reports an error, the journal is annotated with an "E" in the Result column.
- The arrival of the return receipt is not recorded in the journal as a separate communication. Its arrival is only reported by the presence of "OK" or "E" in the Result column.
- If the mail address used by the sender specifies a mailing list (i.e., a Group destination; the machine sends the mail to more than one location. See "How to set up Mail Delivery"), the Result column of the Journal is updated every time a return receipt is received. For example, if the mailing list was to 5 destinations, the Result column indicates the result of the communication with the 5th destination only. The results of the communications to the first 4 destinations are not shown.

Exceptions:

If one of the communications had an error, the Result column will indicate E, even if subsequent communications were OK.

If two of the communications had an error, the Journal will indicate the destination for the first error only.

- Report Sample -

		MODE	TIME	PAGE RE	SULT
MAY. 5 10:15 f	fuser_01@dom1g. ricoh. co.	Mail SM ('09"	2	
10:16 :	fuser_01@dom1g. ricoh. co.	Mail SMQ (05"	1	
10:17 8	s_tadashi@domlg. ricoh. co.	Mail SMQ (09"	2	OK
10:19 r	m_masataka@dom1g. ricoh. co.	Mail SMA	0'05"	1	

b771d506

IP-Fax

What is IP-FAX?

For details: Core Technology Manual – Facsimile Processes – Faxing from a PC – Internet/LAN Fax Boards – IP-FAX

T.38 Packet Format

TCP is selected by default for this machine, but you can change this to UDP with IPFAX SW 00 Bit 1.

UDP Related Switches

	IP-Fax Switch 01								
No.	Function					Comments			
0-3	Selec	t IP FA	AX De	lay Le	vel	Raise the level by selecting a higher setting if too many transmission			
	Bit	Bit	Bit	Bit	Level	errors are occurring on the network.			
	3	2	1	0		If TCP/UDP is enabled on the network, raise this setting on the T.30			
	0	0	0	0	0	machine. Increasing the delay time allows the recovery of more lost			
	0	0	0	1	1	packets.			
	0	0	1	0	2	If only UDP is enabled, increase the number of redundant packets.			
	0	0	1	1	3	Level 1~2: 3 Redundant packets			
						Level 3: 4 Redundant packets			

Settings

User parameter switch 34 (22[H]), bit 0

IP-Fax Gate Keeper usage, 0: No, 1: Yes

IP Fax Switches: Various IP-FAX settings (see the bit switch table)

6. Specifications

General Specifications

FCU

Туре:	Desktop type transceiver
Circuit:	PSTN (max. 3ch.)
	PABX
Connection:	Direct couple
Original Size:	Book (Face down)
	Maximum Length: 432 mm [17 ins]
	Maximum Width: 297 mm [11.7 ins]
	ARDF (Face up)
	(Single-sided document)
	Length: 105 - 1200 mm [4.1 - 47.2 ins]
	Width: 105 - 297 mm [4.1 - 11.7 inch]
	(Double-sided document)
	Length: 128 - 432 mm [5.0 - 17 inch]
	Width: 128 - 297 mm [5.0 - 11.7 inch]
Scanning	CMOS Image Sensor
Method:	
Resolution:	8 x 3.85 lines/mm (Standard)
	8 x 7.7 lines/mm (Detail)
	8 x 15.4 line/mm (Fine) (Optional Expansion Memory required)
	16 x15.4 line/mm (Super Fine) (Optional Expansion Memory required)
	200 x 100 dpi (Standard)
	200 x 200 dpi (Detail)
	400 x 400 dpi (Super Fine) (Optional Expansion Memory required)
Transmission	G3: 3 s at 28800 bps; Measured with G3 ECM using memory for an ITU-T #1 test
Time:	document (Slerexe letter) at standard resolution
Data	MH, MR, MMR, JBIG
Compression:	
Protocol:	Group 3 with ECM
Modulation:	V.34, V.33, V.17 (TCM), V.29 (QAM),
	V.27ter (PHM), V.8, V.21 (FSK)
Data Rate:	G3: 33600/31200/28800/26400/24000/21600/
	19200/16800/14400/12000/9600/7200/4800/2400 bps

	Automatic fallback
I/O Rate:	With ECM: 0 ms/line
	Without ECM: 2.5, 5, 10, 20, or 40 ms/line
Memory	SAF
Capacity:	Standard: 4 MB
With optional Expansion Memory: 60 MB (4 MB+ 56 MB)	
Page Memory	
	Standard: 8 MB (Print: 4 MB + Scanner: 4 MB)
	With optional Expansion Memory: 16 MB (8 MB + 8 MB)
	(Print 8 MB + Scanner: 8 MB)

Capabilities of Programmable Items

Capabilities of Programmable Items

The following table shows the capabilities of each programmable items.

Item	Standard
Quick Dial	2000
Groups	100
Destination per Group	500
Destinations dialed from the ten-key pad overall	500
Programs	100
Communication records for Journal stored in the memory	200
Special Senders	250

The following table shows how the capabilities of the document memory will change after the Expansion Memory are installed.

	Without the Expansion	With the Expansion
	Memory	Memory
Memory Transmission file	800	800
Memory capacity for memory	320	4800
transmission		
(Note1)		

Note

• Measured using an ITU-T #1 test document (Slerexe letter) at the standard resolution, the auto image density mode and the Text mode.

IFAX Specifications

IFAX Specifications

Connectivity:	
Connectivity.	Local area network
	Ethernet 100base-Tx/10base-T
	Gigabit Ethernet 1000 Base-T
	IEEE802.11a/b/g/n (wireless LAN)
Resolution:	200 × 100 dpi (Standard resolution), 200 × 200 dpi (Detail resolution), 200 × 400 dpi
	(Fine resolution)*1, 400×400 dpi (Super Fine resolution)*1
	Note
	• To use 200 × 400 dpi and 400 × 400 dpi, IFAX SW01 Bit 2 and/or bit 4 must
	be set to "1".
Transmission	1 s (through a LAN to the server)
Time:	Condition: ITU-T #1 test document (Selerexe Letter)
	MTF correction: OFF
	TTI: None
	Resolution: 200 x 100 dpi
	Communication speed: 10 Mbps
	Correspondent device: E-mail server
	Line conditions: No terminal access
Document Size:	Maximum Original Size: A3/DLT.
	♦ Note
	• To use B4 and A3 width, IFAX SW00 Bit 1 (B4) and/or Bit 2 (A3) must be set
	to "1".
E-mail File	Single/multi-part
Format:	MIME conversion
	Image: TIFF-F (MH, MR, MMR)
Protocol:	Transmission:
	SMTP, TCP/IP
	Reception:
	POP3, SMTP, IMAP4, TCP/IP
Data Rate:	1000 Mbps (1000 Base-T)
	100 Mbps (100base-Tx)
	10 Mbps (10base-T)
Authentication	SMTP-AUTH
Method:	POP before SMTP
	A-POP
Remark:	The machine must be set up as an e-mail client before installation. Any client PCs

connected to the machine through a LAN must also be e-mail clients, or some features
will not work (e.g. Autorouting).

IP-FAX Specifications

IP-FAX Specifications

Network:	Local Area Network
	Ethernet/10base-T, 100base-TX
	Gigabit Ethernet/1000 Base-T
	IEEE802.11a/b/g/n (wireless LAN)
Scan line density:	8 x 3.85 lines/mm, 200x100dpi (standard character),
	8 x 7.7lines/mm, 200x200dpi (detail character),
	8 x 15.4lines/mm (fine character: optional expansion memory required),
	16 x 15.4lines/mm, 400x400dpi (super fine character: optional expansion memory
	required)
Maximum Original size:	A3 or 11" x 17" (DLT)
	Custom: 297mm x 1200mm (11.7" x 47.3")
Maximum scanning size:	297mm x 1200mm (11.7" x 47.3")
Transmission protocol:	Recommended: T.38, TCP, UDP/IP communication, SIP (RFC 3261 compliant),
	H.323 v2
Compatible machines:	IP-Fax compatible machines
IP-Fax transmission	Specify IP address and send faxes to an IP-Fax compatible fax through a network.
function:	Also capable of sending faxes from a G3 fax connected to a telephone line via a
	VoIP gateway.
IP-Fax reception function:	Receive faxes sent from an IP-Fax compatible fax through a network.
	Also capable of receiving faxes from a G3 fax connected to a telephone line via a
	VoIP gateway.

Fax Unit Configuration

