

Internet Fax (IFAX)
Model A-C3V2/Model R-C3
SERVICE MANUAL

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Subject to change

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1. INSTALLATION

1.1 IFAX INSTALLATION

IFAX requires the installation of the Fax Unit and the Printer/Scanner Controllers. For details about installation, please refer to the Fax Unit and the Printer/Scanner option manuals for the machine.

1.2 INITIAL SETTINGS

Users can set the IFAX initial settings. Please refer to the Network Guide Operating Instructions.

Make sure that the following items are registered in the mail server before machine installation.

- IP address
- Host name
- Mail account and the password

CAUTION: The initial settings include items related to user security, such as the login password and IP addresses. So, please ask the user to input the initial settings of the IFAX. If the user asks you to input the initial settings, be sure to keep the settings confidential.

To enable IFAX functions, do the following procedure in the User Tools mode:

User Tools> Facsimile Features> E-Mail Settings> Internet Fax Settings> Internet Fax> OFF → ON

2. TROUBLESHOOTING

2.1 ERROR CODES FOR LAN COMMUNICATION

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

Code	Meaning	Cause	Action
14-00	SMTP Send Error	Error occurred during sending to the SMTP server. Occurs for any error other than 14-01 to 16. For example, the mail address of the system administrator is not registered.	<ul style="list-style-type: none"> Register the address of the system administrator. Set the User Parameter Switch 21 (15[H]) Bit 4 to "Off".
14-01	SMTP Connection Failed	Failed to connect to the SMTP server (timeout) because the server could not be found. <ul style="list-style-type: none"> The IP address for the SMTP server is not stored in the machine. The DNS IP address is not registered. Network not operating correctly. 	<ul style="list-style-type: none"> Check the IP address of the SMTP/DNS server. Check the traffic on the LAN. Check the machine settings such as the SMTP port setting, DNS server setting, and so on.
14-02	No Service by SMTP Service (421)	SMTP server operating incorrectly.	Contact the network administrator. Confirm correct SMTP server settings and operation.
14-03	Access to SMTP Server Denied (450)	SMTP server operating incorrectly	Contact the network administrator. Confirm correct SMTP server settings and operation.
14-04	Access to SMTP Server Denied (550)	SMTP server operating incorrectly	Contact the network administrator. Confirm correct SMTP server settings and operation.
14-05	SMTP Server HDD Full (452)	SMTP Server hard disk full.	Contact the network administrator. Free space on the HDD of the SMTP server.
14-06	User Not Found on SMTP Server (551)	The user does not exist locally.	<ul style="list-style-type: none"> Check that the mail address is correct. Contact the network administrator. Check that the e-mail the user intended to send exists on the SMTP server.
14-07	Data Send to SMTP Server Failed (4XX)	SMTP server operating incorrectly	Contact the network administrator. Confirm correct SMTP server settings and operation.
14-08	Data Send to SMTP Server Failed (5XX)	SMTP server operating incorrectly	Contact the network administrator. Confirm correct SMTP server settings and operation.

Code	Meaning	Cause	Action
14-09	Authorization Failed for Sending to SMTP Server	POP-Before-SMTP or SMTP authorization failed.	POP-Before-SMTP: <ul style="list-style-type: none"> • Check the IFAX user name and password. • Check that POP server is set correctly. • Check the SMTP server settings. SMTP Authorization: <ul style="list-style-type: none"> • Check the SMTP server user name and password. • Check the encryption settings. • Check the SMTP server settings.
14-10	Addresses Exceeded	Number of broadcast addresses exceeded the limit for the SMTP server.	The maximum number of addresses depends on the SMTP server.
14-11	Buffer Full	The send buffer is full so the transmission could not be completed. Buffer is full due to using Scan-to-E-mail while the buffer is being used send mail at the same time.	No action required. The transmission will be recalled and sent as soon as buffer space is available.
14-12	Data Size Too Large	Transmission was cancelled because the detected size of the file was too large.	<ul style="list-style-type: none"> • Divide the original into sections and send as separate files. • Use G3 to send the original. • Reduce the TX mail size.
14-13	Send Cancelled	Processing is interrupted because the user pressed Stop.	No action required.
14-30	MCS File Creation Failed	Failed to create the MCS file because: <ul style="list-style-type: none"> • 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. 	<ul style="list-style-type: none"> • Delete unneeded files from the Document Server. • Initialize the HDD. • If initialization fails to correct the problem, replace the HDD. • Update the software.
14-31	UFS File Creation Failed	UFS file could not be created: <ul style="list-style-type: none"> • Not enough space in UFS area to handle both Scan-to-E-mail and IFAX transmission. • HDD full or not operating correctly. • Software error. 	No action required. Once the job currently using the UFS area is finished sufficient space will become available. If this does not solve the problem: <ul style="list-style-type: none"> • Initialize the HDD. • If initialization fails to correct the problem, replace the HDD. • Update the software.
14-32	Cancelled the Mail Due to Error Detected by NFAX	Error detected with NFAX and send was cancelled due to a software error.	Update the software.
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.	Contact the network administrator. Check that these e-mail addresses are registered correctly.
14-50	Mail Job Task Error	Due to an FCU mail job task error, the send was cancelled: <ul style="list-style-type: none"> • Address book was being edited during creation of the notification mail. • Software error. 	No action required. If the problem persists, update the firmware.

Code	Meaning	Cause	Action
14-51	UCS Destination Download Error	Not even one return notification can be downloaded: <ul style="list-style-type: none"> 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). 	Check the address in the address book.
14-60	Send Cancel Failed	The cancel operation by the user failed to cancel the send operation.	No action required.
14-61	Notification Mail Send Failed for All Destinations	All addresses for return notification mail failed.	<ul style="list-style-type: none"> Correct the mail address for the PC. Contact the network administrator. Check the other error codes to determine if other errors occur at the same time.
15-01	POP3/IMAP4 Server Not Registered	At startup, the system detected that the IP address of the POP3/IMAP4 server has not been registered in the machine.	Register the name of the POP3/IMAP4 server.
15-02	POP3/IMAP4 Mail Account Information Not Registered	The POP3/IMAP4 mail account has not been registered.	Register the e-mail account, user name, and password.
15-03	Mail Address Not Registered	The mail address has not been registered.	Register the e-mail account and e-mail address.
15-10	DCS Mail Receive Error	Error other than 15-11 to 15-18.	Update the firmware, update the server software.
15-11	Connection Error	The DNS or POP3/IMAP4 server could not be found: <ul style="list-style-type: none"> 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. 	Contact the network administrator. <ul style="list-style-type: none"> Check that the DNS address is correct. Check that the POP3/IMAP4 IP addresses are correct. Confirm correct operation of the network.
15-12	Authorization Error	POP3/IMAP4 send authorization failed: <ul style="list-style-type: none"> Incorrect IFAX user name or password. Access was attempted by another device, such as the PC. POP3/IMAP4 settings incorrect. 	Contact the network administrator: <ul style="list-style-type: none"> Check that the IFAX user name and password are correct. Determine whether another device of the same account attempted access at same time. Check that the POP/IMAP4 settings are correct.
15-13	Receive Buffer Full	Occurs only during manual reception. Transmission cannot be received due to insufficient buffer space. The buffer is being used for mail send or Scan-to-Email.	No action required. The next transmission can be received as soon as the other application releases the buffer area.
15-14	Mail Header Format Error	The mail header is not standard format. For example, the Date line description is incorrect.	Advise the sender to send e-mails in the standard format.
15-15	Mail Divide Error	The e-mail is not in standard format. There is no boundary between parts of the e-mail, including the header.	Advise the sender to send e-mails in the standard format.

Code	Meaning	Cause	Action
15-16	Mail Size Receive Error	The mail cannot be received because it is too large.	<ul style="list-style-type: none"> • Increase the setting that limits the size of e-mail that can be received (in the User Tools> System Settings> File Transfer menu). • Ask the sender to break the e-mail into smaller parts and send them separately.
15-17	Receive Timeout	May occur during manual receiving only because the network is not operating correctly.	Contact the network administrator and check that the network is operating correctly.
15-18	Incomplete Mail Received	Only one portion of the mail was received.	Ask the sender to send as one transmission.
15-31	Final Destination for Transfer Request Reception Format Error	The format of the final destination for the transfer request was incorrect.	Ask the sender to check the final destination.
15-39	Send/Delivery Destination Error	The transmission cannot be delivered to the final destination: <ul style="list-style-type: none"> • Destination file format is incorrect. • Could not create the destination for the file transmission. 	<ul style="list-style-type: none"> • Delete the destination file to enable receiving. • Ask the sender to check the transfer destination and final destination.
15-41	SMTP Receive Error	Reception rejected because the transaction exceeded the limit for the "Auth. E-mail RX" setting.	<ul style="list-style-type: none"> • Check the content of the "From" entry in the mail header. • Check the "Auth. E-mail RX" setting.
15-42	Off Ramp Gateway Error	The delivery destination address was specified with Off Ramp Gateway OFF.	<ul style="list-style-type: none"> • Enable the Off Ramp Gateway function. • Ask the sender not to specify the Off Ramp Gateway address.
15-43	Address Format Error	Format error in the address of the Off Ramp Gateway.	Ask the sender to check the mail destination.
15-44	Addresses Over	The number of addresses for the Off Ramp Gateway exceeded the limit of 30.	Ask the sender to check the mail destination.
15-61	Attachment File Format Error	The attached file is not TIFF format.	Try to check the format of the sent mail, then ask the user to use TIFF format.
15-62	TIFF File Compatibility Error	Could not receive transmission due to: <ul style="list-style-type: none"> Resolution error <ul style="list-style-type: none"> • Image of resolution greater than 200 dpi without extended memory. • Resolution is not supported. Page size error <ul style="list-style-type: none"> • The page size was larger than A3. Compression error <ul style="list-style-type: none"> • File was compressed with other than MH, MR, or MMR. 	Ask the sender to check the following: <ul style="list-style-type: none"> • File was sent in TIFF format. • Compatibility of the resolution setting. • Size of the page. • Method used to compress the file.
15-63	TIFF Parameter Error	The TIFF file sent as the attachment could not be received because the TIFF header is incorrect: <ul style="list-style-type: none"> • The TIFF file attachment is a type not supported. • The TIFF file attachment is corrupted. • Software error. 	<ul style="list-style-type: none"> • Ask the sender to check that the attachment was sent in correct TIFF format. • If the problem persists, update the software.

Code	Meaning	Cause	Action
15-64	TIFF Decompression Error	The file received as an attachment caused the TIFF decompression error: <ul style="list-style-type: none"> The TIFF format of the attachment is corrupted. Software error. 	<ul style="list-style-type: none"> Ask the sender to check that the attachment was sent in correct TIFF format. If the problem persists, update the software.
15-71	Not Binary Image Data	The file could not be received because the attachment was not binary image data.	Ask the sender to check the content of the attachment.
15-73	MDN Status Error	Could not find the Disposition line in the header of the Return Receipt, or there is a problem with the firmware.	Ask the sender to resend the mail. If the problem persists, update the firmware.
15-74	MSDN Message ID Error	Could not find the Original Message ID line in the header of the Return Receipt, or there is a problem with the firmware.	Ask the sender to resend the mail. If the problem persists, update the firmware.
15-80	Mail Job Task Read Error	Could not receive the transmission because the 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).	No action required. When destinations are used and a space opens in the buffer, the transmission will be received.
15-81	Repeated Destination Registration Error	Could not repeat receive the transmission because the 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).	No action required. When destinations are used and a space opens in the buffer, the transmission will be received.
15-91	Send Registration Error	Could not receive the file for transfer to the final destination: <ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> As the send to check both the transfer destination and the final destination. When destinations open, the transmission will be received.
15-92	Memory Overflow	Transmission could not be received because memory overflowed during the transaction.	<ul style="list-style-type: none"> Expand SAF memory. Ask the sender to break up the file and send the parts separately.
15-93	Memory Access Error	Transaction could not complete due to a malfunction of SAF memory.	Initialize memory. If the problem persists, replace the MBU.
15-94	Incorrect ID Code	The machine rejected an incoming e-mail for transfer request, because the ID code in the incoming e-mail did not match the ID code registered in the machine.	<ul style="list-style-type: none"> Ask the sender to correct the ID code. Set IFAX SW03 Bit 3 to "1".
15-95	Transfer Station Function	The machine rejected an incoming e-mail for transfer because the transfer function was unavailable.	Inform the transfer requester that this machine does not support the transfer station function.

2.2 TROUBLESHOOTING PROCEDURES



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

Communication Route	Item	Action	Remarks
General LAN	1. Connection with the LAN	<ul style="list-style-type: none"> Check that the LAN cable is connected to the machine. Check that the LEDs on the hub are lit. 	
	2. LAN activity	<ul style="list-style-type: none"> Check that other devices connected to the LAN can communicate through the LAN. 	
Between IFAX and PC	1. Network settings on the PC	<ul style="list-style-type: none"> Check the network settings on the PC. 	<ul style="list-style-type: none"> Is the IP address registered in the TCP/IP properties in the network setup correct? Check the IP address with the administrator of the network.
	2. Check that PC can connect with the machine	<ul style="list-style-type: none"> Use the "ping" command on the PC to contact the machine. 	<ul style="list-style-type: none"> At the MS-DOS prompt, type ping then the IP address of the machine, then press Enter.
	3. LAN settings in the machine	<ul style="list-style-type: none"> Check the LAN parameters Check if there is an IP address conflict with other PCs. 	<ul style="list-style-type: none"> Use the "Network" function in the User Tools. If there is an IP address conflict, inform the administrator.
Between machine and e-mail server	1. LAN settings in the machine	<ul style="list-style-type: none"> Check the LAN parameters Check if there is an IP address conflict with other PCs. 	<ul style="list-style-type: none"> Use the "Network" function in the User Tools. If there is an IP address conflict, inform the administrator.
	2. E-mail account on the server	<ul style="list-style-type: none"> Make sure that the machine can log into the e-mail server. Check that the account and password stored in the server are the same as in the machine. 	<ul style="list-style-type: none"> Ask the administrator to check.
Between machine and e-mail server	3. E-mail server	<ul style="list-style-type: none"> Make sure that the client devices which have an account in the server can send/receive e-mail. 	<ul style="list-style-type: none"> 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 server and internet	1. E-mail account on the Server	<ul style="list-style-type: none"> Make sure that the PC can log into the e-mail server. Check that the account and password stored in the server are the same as in the machine. 	<ul style="list-style-type: none"> Ask the administrator to check.

Communication Route	Item	Action	Remarks
	2. E-mail server	<ul style="list-style-type: none"> Make sure that the client devices which have an account in the server can send/receive e-mail. 	<ul style="list-style-type: none"> 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 address	Make sure that the e-mail address is actually used. 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 send data over the router.	<ul style="list-style-type: none"> Ask the administrator of the server to check.
Between e-mail server and internet	1. Error message by e-mail from the network of the destination.	<ul style="list-style-type: none"> Check whether e-mail can be sent to another address on the same network, using the application e-mail software. Check the error e-mail message. 	<ul style="list-style-type: none"> Inform the administrator of the LAN.

3. SERVICE TABLES AND PROCEDURES

3.1 ACCESSING IFAX BIT SWITCHES

1. Ensure that the machine is in standby mode.
2. Press , enter ① ⑦ ⑦ with the 10-key pad, then hold down  for more than 3 seconds. The SP mode main menu opens.
3. Touch "Fax SPs" on the touch-panel to enter the fax service mode.
4. Use SP1102 1~16 to set the bit switches for IFAX. For details, refer to the Service Tables on the following pages.

WARNING

Never adjust a bit switched marked "DFU" or "Japan Only," 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.

NOTE: Default settings for bit switches are not listed in this manual. Refer to the System Parameter List print out.

3.2 SP1102 IFAX SWITCH

Only one SP number is used to access IFAX bit switches. These bit switches are described in the tables below.

SP	IFAX SW												
1102 1	00												
	Bits 0~6: Original Width of TX Attachment File												
	This setting sets the maximum size of the original that the destination can receive. (Bits 3~7 are reserved for future use or not used.)												
	0: On												
	1: Off												
	Note: 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).												
	Bit 6		Bit 5		Bit 4		Bit 3		Bit 2		Bit 1		Bit 0
Reserved		Reserved		Reserved		Reserved		A3		B4		A4	
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.													
<i>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>													
	Bit 7: Not Used.												

SP	IFAX SW					
1102 2	01					
Bits 0~ 6: Original Line Resolution of TX Attachment File						
This setting sets the maximum resolution of the original that the destination can receive.						
0: Not selected						
1: Selected						
Note: If more than one of these three bits is set to “1”, the higher resolution has priority. For example, if both Bit 3 and Bit 2 are set to “1” then the resolution is set for “300 x 300” (Bit 3).						
Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0
Reserved	Reserved	400 x 400 Super Fine	Reserved	200x400 Fine	200x200 Detail	200x100 Standard
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 (resolution setting) of the receiving machine.						
The resolution selected with this switch is used as the RX machine’s resolution setting, and the original resolution is converted before sending.						
The default is both 200 x 100 and 200 x 200 are selected.						
If the resolution set with this switch is higher than the receiving fax can accept, the machine detects this and this causes an error.						
Bit 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.						
Note: 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.						
Only two choices are available for transmission: inch statements and inch images, or inch statements and mm images.						
When this switch is Off (0):						
<ul style="list-style-type: none">• 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):						
<ul style="list-style-type: none">• Images scanned in inches are sent in inches.• <i>Images scanned in mm are converted to inches.</i>• <i>Images received in inches are transmitted in inches.</i>• <i>Images received in mm are converted to inches.</i>						

SP	IFAX SW
1102 3	02
	Bit 0: RX Text Mail Header Processing This setting determines whether the header information is printed with text e-mails when they are received. 0: Prints only text mail. 1: Prints mail header information attached to text mail. <ul style="list-style-type: none"> 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.
	Bit 1: Output from Attached Document at E-mail TX Error This setting determines whether only the first page 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.
	Bits 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; <u>dispatched</u> 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; <u>displayed</u> The "displayed" string is included in the Subject string. 10: Reserved 11: Reserved Note: 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.
	Bits 4~6: Not Used.
	Bit 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 Note: The "1" setting requires installation of the Function Upgrade Card in order to have enough SAF (Store and Forward) memory to receive images at 400 x 400 resolution.

SP	IFAX SW
1102 4	03
	Bit 0: Original Output at Transfer Station This setting determines whether the original is output at the transfer station when it is received from the sender that initiated the transfer transmission. This feature is the same as for G3 transfer transmissions. 0: Received original not output at the transfer station. 1: Received original output. The original is printed after the transfer station has transferred it to the destinations, so its output confirms that the original has been transferred.
	Bit 1: Transfer Result Report This setting determines when a Transfer Result Report is generated and returned to the transfer requestor. 0: Returns the report after each transfer. 1: Returns the report only if an error occurred during transfer.
	Bit 2: Destination Error Handling for Reception Transfer Request This setting restricts transfer transmission based on whether the final destinations are correct or not. 0: The transfer station transmits to correct destinations only (addresses with no errors in them). 1: If any address has an error in it, the transfer station transfers no transmissions and returns a transfer transmission failure report to the requestor that initiated the transfer. There is no negotiation between the transfer initiator and the transfer station to determine whether the final destination addresses are correct or not. This setting determines whether or not the transfer station transfers the transmissions if there is a mistake in even one of the final destination addresses.
	Bit 3: Polling ID Check for Reception of Transfer Request This setting determines whether the polling IDs of incoming transmissions are checked to ensure that the polling IDs match. 0: Receives and transfers only messages that have matching polling IDs. 1: Receives and transfers all messages, even if the polling IDs do not match.
	Bits 4~7: Not Used

SP	IFAX SW
1102 5	04
	Bit 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.
	Bits 1~7: Not Used

SP	IFAX SW
1102 6	05
	Bit 0: Mail Addresses of SMTP Broadcast Recipients
	Determines whether the e-mail addresses of the 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 destinations. 0: Not recorded 1: Recorded
	Bits 1~7: Not Used

SP	IFAX SW
1102 7	06
	Not Used

SP	IFAX SW
1102 8	07
	Not Used

SP	IFAX SW
1102 9	08
	Bits 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) Note: The hexadecimal number you enter is multiplied by 4 KB to determine the amount of memory.

SP	IFAX SW
1102 10	09
	Bits 0~3: Not Used
	Bits 4~7: Restrict TX Retries
	This setting determines the number of retries when connection and transmission fails due to errors. 01-F (1-15 Hex)

SP	IFAX SW
1102 11	0A
	Not Used.

SP	IFAX SW
1102 12	0B
	Not Used.

SP	IFAX SW
1102 13	0C
	Not Used.

SP	IFAX SW
1102 14	0D
	Not Used

SP	IFAX SW
1102 15	0E
	Not Used

SP	IFAX SW
1102 16	0F
	Bit 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 immediately without delivery.
	1: On. Files received via SMTP are delivered immediately to their destinations.
	Bits 1~7: Not Used

3.3 FIRMWARE UPDATE PROCEDURE

When you need to update the firmware for IFAX, follow the firmware update procedures described in the main machine Service Manual.

3.4 IFAX RAM ADDRESSES

Parameter	Function	Data Format	Address	Comments
Mail Address	Mail address of the fax account.	ASC: 128 bytes	69FEAE	128 x 3 area provided, but only the first is used.
User Name	User name of the fax account.	ASC: 64 bytes	6A002E	64 x 3 area provided, but only the first is used.
Password	Password of the fax account.	ASC: 64 bytes	6A00EE	64 x 3 area provided, but only the first is used.
RX Mail Capacity	---	4 Bytes	6A01AE	64-1024 Kbytes
SMTP RX Permission Address	Address or partial address that is used to limit access to mail delivery (see pg. 4-11, "Auth E-Mail Rx").	ASC: 128 bytes	6A01B2	
Doc. Svr. RX Notification No	Number of RX Notification Mails that have been sent in order to notify receipt of a fax message on the document server.	2 bytes	6A0232	

4. DETAILED SECTION DESCRIPTIONS

4.1 INTERNET FAX

4.1.1 INTERNET FAX FEATURES

The Internet fax produced by Ricoh is also known as IFAX.

An Internet fax converts fax hard copy document data to e-mail format and transmits the data over the Internet. Another IFAX or a PC can receive the e-mail sent by an IFAX. Rather than inputting the telephone number of the destination, the user inputs the applicable e-mail address.

Documents are sent as e-mail messages with an attached TIFF-F image (the scanned original), so a MIME-compatible e-mail reader is required in order to view documents received on a PC. To view an attached image, software capable of displaying TIFF-F formatted images is required.

NOTE: The IFAX must be connected to a LAN and set up correctly in order to use its Internet fax functions.

The main IFAX features are:

- TCP/IP communication protocols that support connection to a LAN with e-mail.
- Easy-to-master operations that are identical to those of a standard fax machine.
- Fax transmission and reception over a telephone line.
- Using a browser (such as Netscape or Internet Explorer) to check the settings and status of an IFAX from a PC This uses the Web Status Monitor application built into the machine.
- Transferring or mailing received faxes directly to a PC.
- Using the Internet to reduce communication costs.
- Reducing paper expenses by eliminating the use of paper for fax transmission and reception.
- The IFAX communicates with a server over a LAN (it does not communicate directly with another party).
- If an error occurs, a mail error report is sent back to the sender.

Some minor restrictions of IFAX are:

- If an Internet related error occurs, the sender might not receive an error report.
- The level of security for Internet communications is low. The use of standard subscriber lines is recommended for confidential communication.
- Voice communications are not supported over a LAN.
- Internet fax delivery might be delayed due to network congestion. Use standard fax communication whenever time is a crucial factor.

The following functions are supported with standard fax transmission, but not with Internet faxing.

These functions are not supported by e-mail transmission:

- Immediate Transmission
- Confidential Transmission
- ID Transmission
- Polling Transmission
- Chain Dial
- Transmission by F-Code (SUB) - e-mail protocol cannot specify an F-Code
- On Hook Dial
- Manual Dial
- JBIG Transmission
- Batch Transmission
- ECM (Error Correction Mode)

These functions are not supported by e-mail reception:

- Confidential Reception
- Memory Lock Reception
- Polling Reception
- F-Code (SUB) Reception using Personal Box (e-mail protocol cannot specify an F-Code)
- Preventing nuisance faxes by destination
- Setting Reception Print by Destination

4.1.2 DNS SERVICE

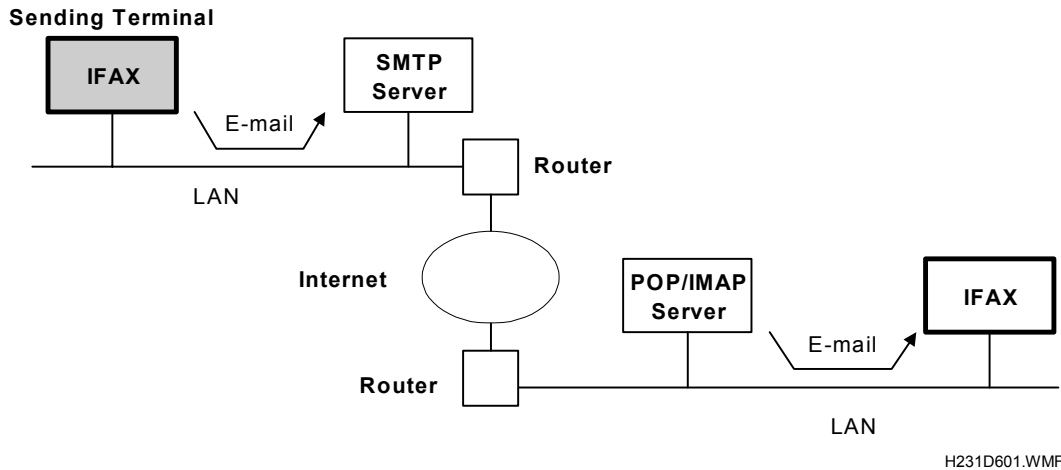
IFAX supports DNS (Domain Name System). See the Core Technology Manual for more details (Facsimile Processes – Faxing From a PC – Internet/LAN Fax Boards – E-mail Basics).

The IFAX can use the Domain Names for the SMTP and POP3/IMAP4 server instead of the actual IP addresses, if there is a DNS server on the same LAN as the SMTP server, POP3/IMAP4 server, and the IFAX.

With models that do not support DNS, the user has to input the actual IP addresses of the SMTP server and the POP3/IMAP4 server.

4.2 INTERNET MAIL COMMUNICATION

4.2.1 MAIL TRANSMISSION



Procedure

Scanned documents are sent as electronic mail (e-mail).

All messages are sent using memory transmission.

All e-mail transmissions are controlled using Simple Mail Transfer Protocol (SMTP) procedures. There must be an SMTP server on the same LAN as the sending machine, or the machine will not be able to send e-mail (it is not necessary to set up an SMTP account).

Data Formats

The scanned data is converted into a TIFF-F formatted file (only MH compression can be used).

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
To	Mail address of the destination
Bcc	Backup mail address
Subject	From CSI or RTI (Fax Message No. xxxx)
Content Type	Multipart/mixed Attached files: image/tiff
Content Transfer Encoding	Base 64, 7-bit, 8-bit, Quoted Printable
Message Body	MIME-converted TIFF-F (MIME standards specify how files are attached to e-mail messages)

Errors

An error report is generated if an error occurs during communication between the machine and the SMTP server. However, it is possible that the sender will not

receive reports of errors that occurred between the SMTP server and the receiving terminal.

The interval between attempts to resend mail to the same destination when an SMTP error occurs is the same as for G3 fax transmission.

To view what happens when an error occurs when the machine is receiving, refer to the Mail Reception section.

Results

The transmission result is listed in the Journal. The file list for e-mail transmissions is created in the same way as for G3 memory transmissions. The TTI for the mail message includes the word "Mail" at the head of the information in the TTI column.

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

Secure Internet Transmission

To transmit e-mail via the Internet more securely, use SMTP authentication, and POP before SMTP for IFAX.

- **SMTP Authentication.** SMTP Authentication requires user authentication before they can access the server. This prevents unauthorized access to the server. To use SMTP authentication, your server must support CRAM-MD5, PLAIN, or LOGIN. The account name and password specified in the “Mail Server” settings are used for SMTP authentication. Other account names and passwords cannot be specified.

To set up SMTP Authentication:

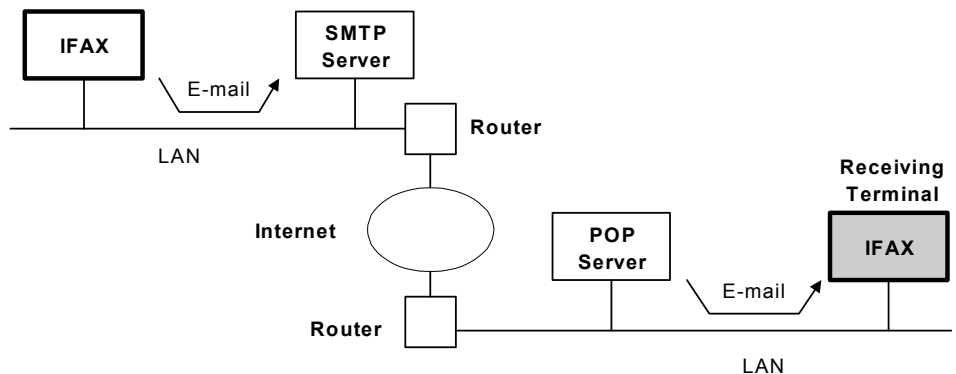
User Tools> System Settings> File Transfer> SMTP Authentication

- **POP Before SMTP.** Prevents unauthorized access to the SMTP server and requires users to access and log onto the POP3 server before sending e-mail.

To set up POP Before SMTP:

User Tools> System Settings> File Transfer> POP Before SMTP

4.2.2 MAIL RECEPTION



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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)

POP3/IMAP4 Mail Reception Procedure

In order for the fax machine to receive e-mail, 1) there must be a POP3/IMAP4 server on the same LAN as the IFAX, and 2) an account must be set up for the fax machine.

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

When the arrival of new e-mail is detected, the IFAX receives the mail.

If the POP3/IMAP4 server is holding several e-mails for the IFAX, the machine picks up the e-mails one at a time, in the order of arrival at the server.

After POP3 has picked up the mail from a POP3 server, it deletes it from the server. IMAP4 also picks up the mail from a server, but it does not delete the mail from the server.

- However, the server setting is given higher priority than the machine setting.

E-mail reception conforms to POP3 (Post Office Protocol version 3.0) procedures or IMAP4 (Internet Message Access Protocol).

Characteristics of POP3/IMAP4 Reception

Here are some general characteristics of POP3/IMAP4 receiving:

- **No MX record registration.** There is no need to register the machine in the MX record of the DNS server.
- **Power can be switched off.** As long as the machine is not receiving mail, mail stored in the mail server is not lost when the power is switched off. With SMTP reception, if the machine is switched off, the SMTP server sends an error report back to the sender, and the machine will not receive the mail unless the sender sends it again after the machine is switched on.
- **Dial-up compliance.** POP3/IMAP4 can be accessed spontaneously, making it ideal for dial-up operation.

SMTP Reception

SMTP Mail Reception Procedure

By registering the IFAX as an SMTP server in the MX record of the DNS server, you can enable direct receiving of mail from the SMTP server.

When mail is sent to the mail address specified for the IFAX, it is received immediately without checking the server for the arrival of new mail (as is done in the POP/IMAP protocol). Also, with SMTP, the received mail can be routed to another fax (this is known as 'delivery').

Detailed
Description

Setting Method

The following settings are required for SMTP receiving:

- 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.
- 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

SMTP Reception Characteristics

- **Expanded RX mail delivery.** The Off Ramp Gateway feature allows expansion for RX mail delivery to a G3 fax. The machine transfers incoming mail is sent to the G3 fax specified by the local part. For example, in a destination address specified as:

`fax=0454778907@c101.dom1.ricoh.co.jp`

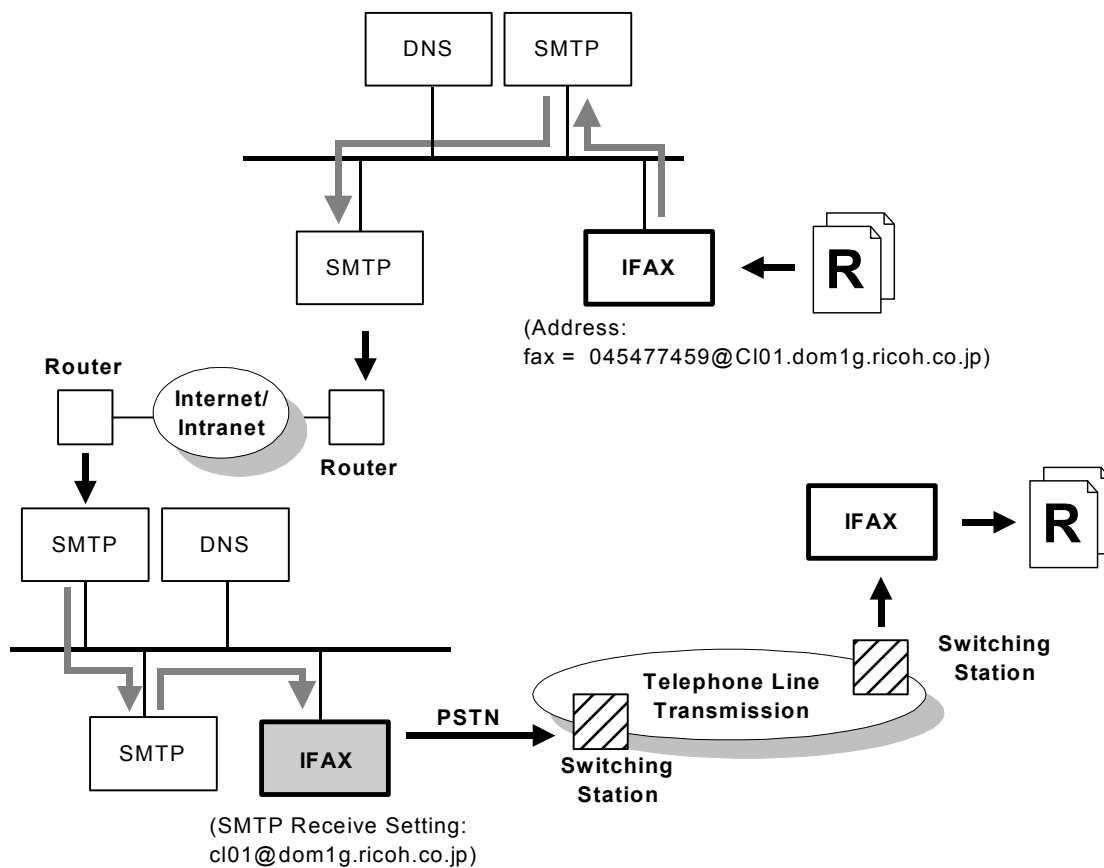
the 'local part' is **0454778907**.

- **A POP3/IMAP4 server is not required.** For example, in an environment where there is only a UNIX server or in an intranet environment where Notes is used for mail, mail received from outside is handled via the SMTP gateway.
- **Immediacy of response is slightly better.** There is no interval in the acquisition of mail as with POP3/IMAP4, thus slightly improving the response time.
- **Easier error handling.** When an error occurs with POP3/IMAP4, the receiving terminal sends an error mail back to the sender in order to inform them that an error has occurred. With SMTP mail reception, however, in almost all cases the SMTP server sends the error mail to the sender.

Delivery: Transferring Mail Received With SMTP (Off Ramp Gateway)**Overview**

If the address of the mail received with SMTP contains the following information, it can be delivered to another G3 fax:

Fax = " Delivery Number"@IFAX Host Name.Domain"



Detailed Description

H231D901.WMF

How to Set Up Mail Delivery

The sender must set the mail address in the following format:

1) When dialing using a fax number

fax=<Delivery Destination Fax Number>@<IFAX Host Name>.<Domain Name>

Example:

fax=0454771459@cl01.dom1g.ricoh.co.jp → Delivers to fax number 0454771459

2) When dialing using a Quick dial destination

fax=<# Quick Dial Number>@<IFAX Host Name>.<Domain Name>

Example:

fax=#001@cl01.dom1g.ricoh.co.jp → Delivers to the number registered for Quick Dial key 001.

3) When dialing using a Group destination

fax=<#Group Dial Number>@<IFAX Host Name>.<Domain Name>**

Example:

fax=#**05@cl01.dom1g.ricoh.co.jp → Delivers to numbers registered for Group dial key 05.

Mail Delivery Conditions

1) The machine must be set up for SMTP mail delivery:

User Tools> Facsimile Features> E-mail Settings> SMTP RX File Delivery Settings

2) 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 selected (User Tools> Facsimile Features> E-mail Settings> SMTP RX File Delivery Settings).

3) If the "SMTP RX File Delivery Setting" is set to 0 to prohibit SMTP receiving, and if there is mail designated for delivery, then the machine responds with an error. (User Tools> Facsimile Features> E-mail Settings> SMTP RX File Delivery Settings)

4) The "fax=" setting does not distinguish between upper and lower case letters.

5) More than one destination cannot be specified in the mail address. A Group counts as 1 destination.

6) 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

Errors during POP3/IMAP4 procedures

When an error of this type occurs, the machine stops receiving and the message stays in the server. An error report is output. After a prescribed interval, the machine calls the server and starts to receive, starting with the interrupted message. If there is an incomplete received message in memory, it will be erased.

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:

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-Encoding	Base 64, 7-bit, 8-bit, Quoted Printable

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).

Printing Received Mail

To print received e-mail:

- The machine detects whether it has received a TIFF-F format image, then prints it.
- Text in US ASCII or ISO 8859 X format can also be printed. When a line of text is longer than the paper width, the excess data will be truncated and lost.

Multi-part Messages

When a multi-part e-mail message contains several text parts and binary files, the message will be divided by boundaries, and each portion will be printed separately. If the machine cannot determine where the boundary is, it will print an error report, and then send error information e-mail back to the sender.

Manual e-mail reception

The manual e-mail reception function can be stored in a Quick Operation Key. When the key is pressed, the machine calls the POP3/IMAP4 server immediately.

The timer for automatic e-mail reception is not reset when the machine calls the POP3/IMAP4 server manually.

Here is an example of the sequence

- Automatic e-mail reception interval: 30 minutes.
- The machine calls the POP3 server (automatic e-mail reception)
- 10 minutes later, the user calls the POP3 server (manual e-mail reception)
- The machine will call the POP3 server again automatically after 20 minutes.

Secure Internet Reception

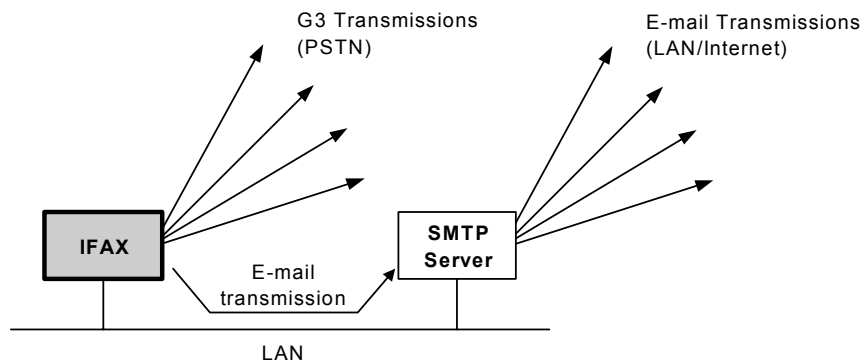
APOP. Passwords are encrypted when e-mail is received, making it safer than POP3 authentication (clear text), which is not encrypted. APOP requires a POP server that supports APOP.

IMAP-AUTH (Mail Reception). If the IMAP Server supports the AUTHENTICATE command (CRAM-MD5, PLAIN, or LOGIN confirmation), then higher-level security confirmation can be implemented for users logging in.

To enable password encryption and higher level security:

User Tools> System Settings> File Transfer> POP3/IMAP4 Settings> Encryption (set to 'On')

4.2.3 MAIL BROADCASTING (E-MAIL AND G3 FAX ARE COMBINED)



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The machine can send the same message to several destinations in one operation. Some destinations can be G3 faxes and others can be e-mail. For the G3 fax transmissions, each address has to be dialed separately. However, all e-mail addresses can be sent with the message to the SMTP server in one transmission. The SMTP server then sends the message to each destination.

The following example for broadcasting to three e-mail destinations and two G3 fax destinations shows how G3 fax messages are each sent individually. However, the e-mail destinations are all sent to the server at the same time.

- Order of inputting the addresses at the operation panel
G3 fax (1) - mail (1) - G3 fax (2) - mail (2) - mail (3)
- Order of transmission
G3 fax (1) - mail (1), (2), (3) - G3 fax (2)

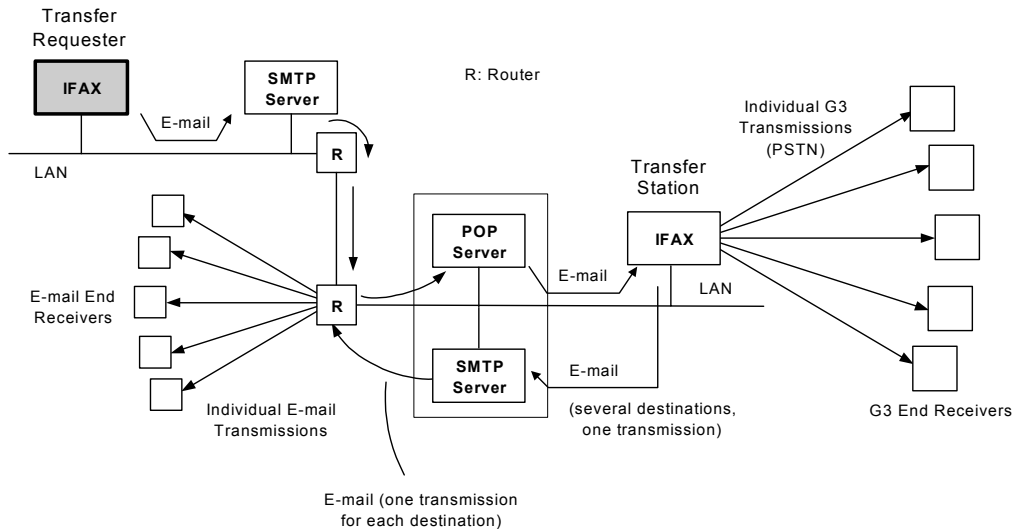
The SMTP server cannot broadcast the message if the message contents included individual information for each terminal in the transmitted data (such as a label insertion). If this type of feature is used, the machine sends the e-mails to the server one by one.

With the default settings, up to 500 destinations (including both e-mail and G3 fax) can be dialed for one broadcast. The maximum number of e-mail destinations in a broadcast depends on the limitations of the mail server.

4.2.4 TRANSFER REQUEST

Operation at the Transfer Requester

Request by Mail



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Detailed Description

The requesting terminal dials the Transfer Station, and requests it to transfer the message to end receivers stored as quick dials, speed dials, and group dials in the Transfer Station.

- A quick dial number is indicated by a “#” and 1 to 5 digits.
- A group dial is indicated by “#**” and 1 to 5 digits.

The machine can request transfer to a maximum of 30 end receivers for each Transfer Station. The end receivers can be a mixture of e-mail and G3 fax addresses.

The transfer request goes to the SMTP server as an e-mail message. The dialing codes (Quick, Speed, Group) and the ID code are included in the mail body field of the e-mail as text. The message arrives at the POP3/IMAP4 server of the Transfer Station.

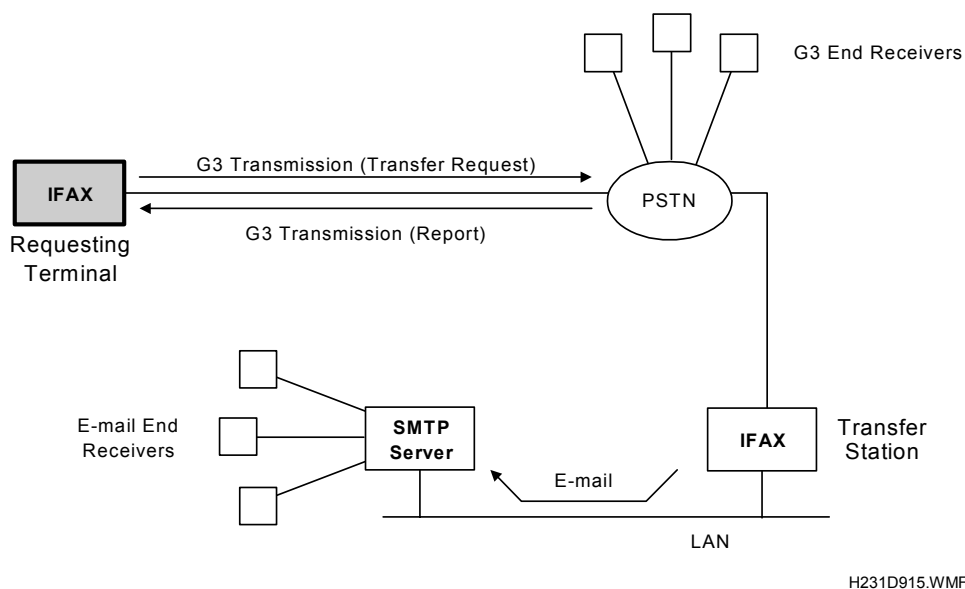
The Transfer Station sends the message to the end receivers.

The Transfer Station sends back a transfer result report. The original may be attached to the transfer result report, depending on the G3 settings of the fax machine. For transmissions to e-mail end receivers, the transfer result report only indicates whether the message was successfully transmitted from the Transfer Station to its SMTP server.

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

Field	Content
From	E-mail address of the requesting terminal
To	Destination address (Transfer Station address)
Bcc	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.

Request by G3 Fax



The procedures are the same as for a normal G3 fax machine.

The requesting terminal dials the Transfer Station, and requests it to transfer the message to end receivers stored as quick dials, speed dials, and group dials in the Transfer Station.

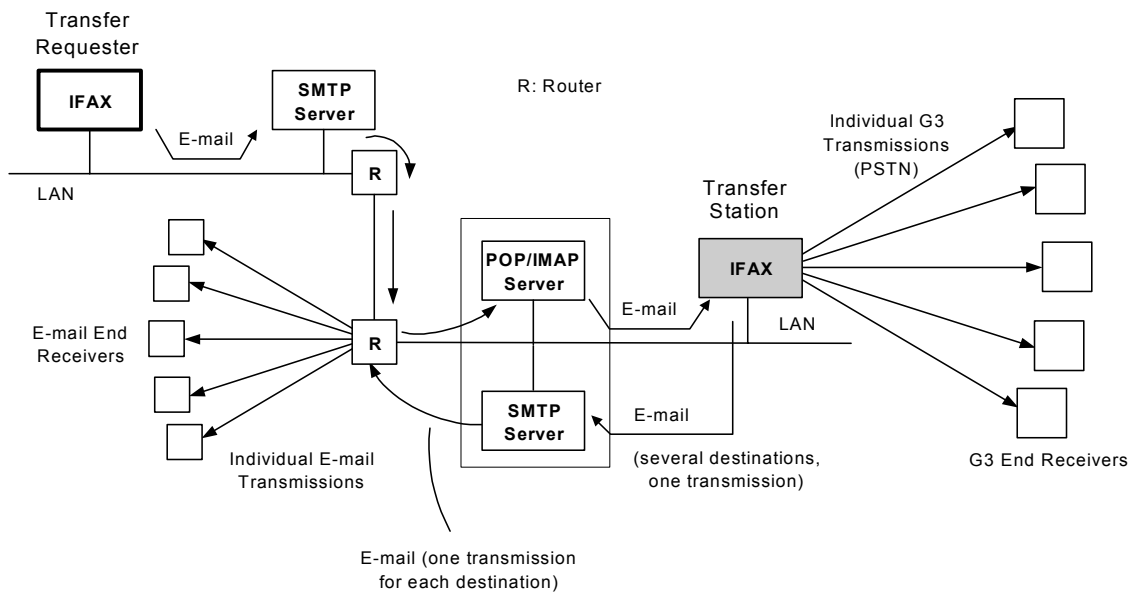
The machine uses NSF to send an ID code and the machine telephone number. Up to 30 end receivers can be requested.

End receiver destinations can also be selected using tone signals, in the same way as for other recent fax models. An e-mail address can also be selected in this way, as end receivers and as the destinations for receiving the transfer result report.

The receiving IFAX machine receives the transfer request on the PSTN connection. It then handles the transfer request in the same way as explained in "Request by Mail".

Operation at the Transfer Station

Request by Mail



H231D605.WMF

Detailed Description

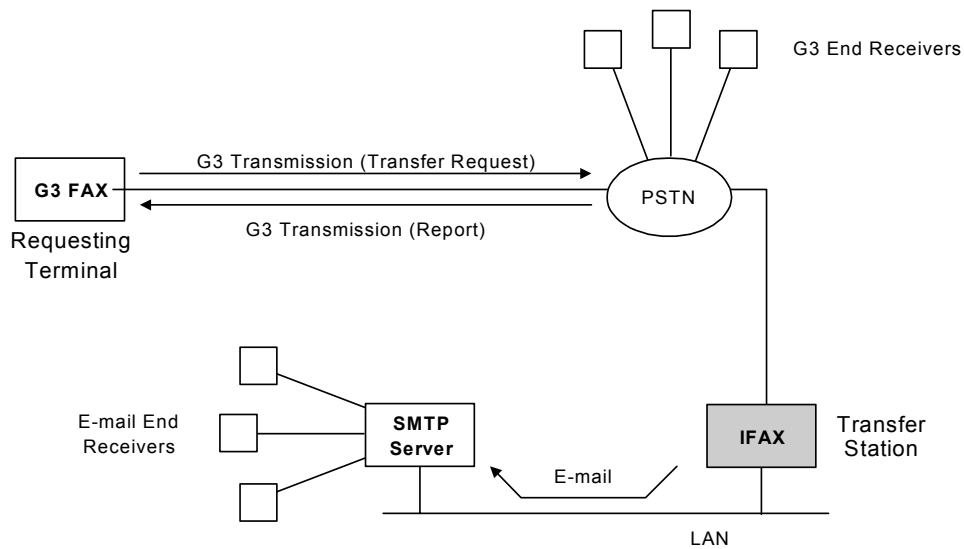
The IFAX polls the POP3/IMAP4 server at regular intervals. If a transfer request has come in, it receives the e-mail from the server, then sends the message to the end receivers by G3 fax or e-mail, depending on the type of end receiver address.

The IFAX sends each G3 fax as an individual transmission. However, for the e-mail, the IFAX sends the message to the SMTP server once, and the server broadcasts the message to the e-mail end receivers one at a time.

The Transfer Station sends back a transfer result report to the address in the "From" field of the received e-mail. If an administrator address is registered, the result report is also sent to that address. The original may also be attached to the transfer result report, depending on the G3 settings of the fax machine.

For transmission to e-mail end receivers, the transfer result report only indicates whether the message was successfully transmitted from the Transfer Station to its SMTP server. The Transfer Station does not know what happens to the messages on the way to the end receivers.

If a communication error occurs between the machine and the SMTP server during result report transmission, the machine prints the result report.

Request by Fax

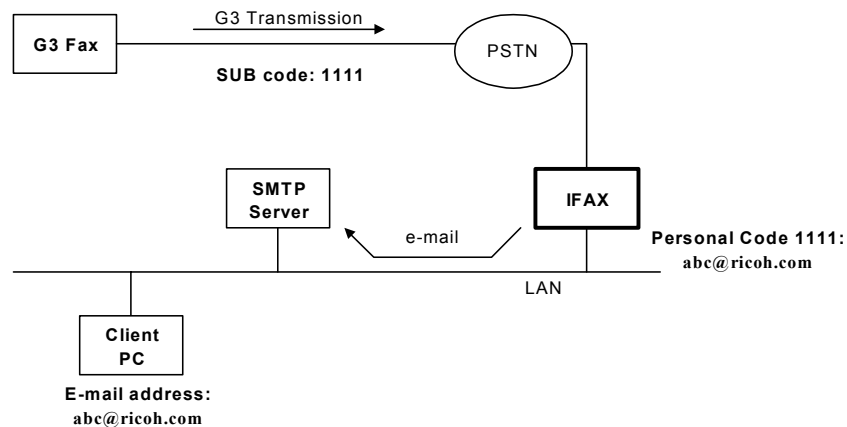
H231D916.WMF

When the machine receives a transfer request by G3 fax, it sends the message to the e-mail and G3 end receivers in the same way as for a request by mail.

The machine sends back the transfer result report to the telephone number of the requesting terminal, which it specified in the NSF signal. The machine prints the result report if it cannot be sent.

The IFAX can accept end receiver destinations and transfer result report destinations that were sent from the requester as DTMF tones. This applies to e-mail or PSTN G3 addresses.

4.2.5 AUTOROUTING



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When a G3 fax message is received with a SUB code (max. 20 digits), the machine compares this SUB code with the Personal Box SUB codes stored in the machine with e-mail addresses. If there is a match, the machine routes the message to that e-mail address by e-mail.

There can be only one destination. If there is no destination attached to the SUB code of the personal box, the incoming message is kept in the fax machine's SAF memory.

A communication failure report will be printed if a transmission error occurs between the machine and the SMTP server.

The RTI or CSI of the forwarding machine is indicated in the subject field of the forwarded e-mail. The format is "From RTI (or CSI) (Fax Message No.xxxx)".

4.2.6 TRANSFER BOX

When a G3 fax message is received with a SUB code, the machine compares this SUB code with the Transfer Box SUB codes stored in the machine with e-mail addresses. If there is a match, the machine uses e-mail to transfer the message to the e-mail addresses specified in the Transfer Box.

Up to 5 destinations, including both e-mail and G3 fax addresses, can be stored in one Transfer Box. There must be at least one destination.

4.3 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.

4.3.1 SUBJECT AND LEVEL OF IMPORTANCE

You can enter a subject message with: Sub TX Mode> E-mail Options

The Subject entry for the mail being sent is limited to 64 characters. The subject can also be prefixed with an "Urgent" or "High" notation.

How the Subject Differs According to Mail Type

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

Items ① ② ③ of the table above are in the Subject.

Subjects Displayed on the PC

Sender	Date	Size	Subject
Substation 2	04/25/2002	1,513	Parts List
Substation 2	04/26/2002	1,147	Specifications
Main Station	05/09/2002	33,551	[Urgent] Memo 2041
21,624,288			

H231D919.WMF

4.3.2 E-MAIL MESSAGES

After entering the subject, you can enter a message with:

Sub TX Mode> E-mail Options

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

4.3.3 MESSAGE DISPOSITION NOTIFICATION (MDN)

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

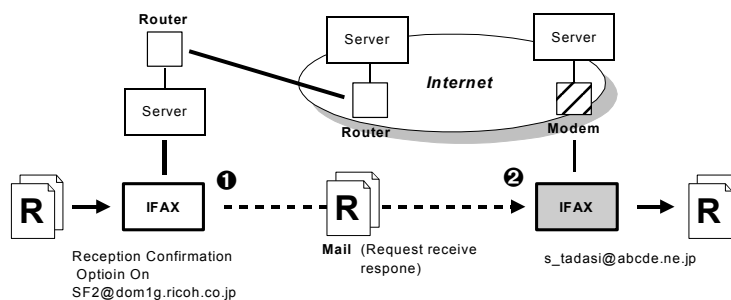
1. Send request for confirmation of mail reception. To enable or disable this request (known as MDN):

Sub TX Mode> E-mail Options

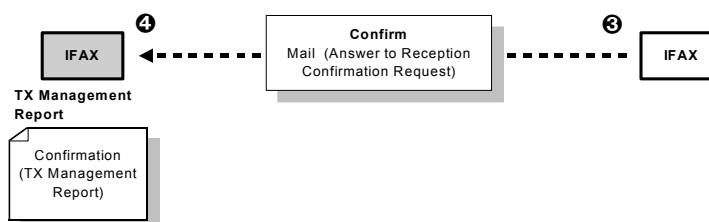
2. Mail reception (receive confirmation request)
3. Send confirmation of mail reception
4. Receive confirmation of mail reception

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).



*** JOURNAL ***					
Time	ADDRESS	Mode	Time	PAGE	RESULT
10:17AM	s_tadasi@abcde.ne.jp	MailSMQ	0'09"	2	--



*** JOURNAL ***					
Time	ADDRESS	Mode	Time	PAGE	RESULT
10:18AM	SF2@dom1g.ricoh	MailSMA	0'09"	2	--

*** JOURNAL ***					
Time	ADDRESS	Mode	Time	PAGE	RESULT
10:17AM	s_tadasi@abcde.ne.jp	MailSMQ	0'09"	2	OK

H231D920.WMF

Handling Mail**Handling Mail on the Send Side**

When mail is sent, a "Disposition Notification To" notation is included in the header as a request for confirmation that the mail was received.

```

X-Mozilla Status      : 0001
X-Mozilla Status2     : 00000000
Message-ID            : <3A23379A.81BE0ABD@domlg.ricoh.co.jp>
Disposition-Notification-To : T.Suzuki <s_tadashi@domlg.ricoh.co.jp>
Date                  : Tue, 28 Nov 2000 13:4203 +0900
From                  : T.Suzuki <s_tadashi@domlg.ricoh.co.jp>
X-Mailer              : Mozilla 4.73 [ja]C-CCK-MCD BDP jm-Sony 3
                        (Win95: U)
X-Accept-Language     : ja
MIME-Version          : 1.0
To                    : fuser_01@domlg.ricoh.co.jp
Subject               : Mail Request for Reception Confirmation
Content-Type          : text/plain: charset=iso-2022-jp
Content-Transfer-Encoding : 7bit

```

Detailed
Description
Handling Mail on the Receive Side

```

Return Path: <>
Received          : From fuser_01 ([133.139.157.20]) by domlg.ricoh.co.jp (post
                        office MTA V1.9.3 ID# 0100110-37392) with SMTP id AAA163
                        for<S_tadasi@domlg.ricoh.co.jp>
Date              : 28 Nov 2000 13:4236 +0900
X-Mailer          : ICFAX Version 1.0
MIME-Version      : 1.0
Content-Type      : multipart/report: report-type=disposition-notification:
                        boundary="--ICFAX_000000EF48--"
To                : T.Suzuki <s_tadashi@domlg.ricoh.co.jp>
Message-ID        : <20001128133423664.ICFAX-XFC9BE-X26986@133.139.157.20>
From              : fuser_01@domlg.ricoh.co.jp
Subject           : From @81454771459" ("RICOH GTS) (Return Receipt) (dispatched)
X-Mozilla-status  : 8001
X-Mozilla-Status2 : 00000000
X-UIDL           : 20001128044713447.AAA163@fuser_01

This is a Return Receipt for the mail that you sent to "fuser_01@domlg.ricoh.co.jp"
Final Receipt: rfc822:fuser_01@domlg.ricoh.co.jp
Original Message ID: <3A23379A.81BE0ABD@domlg.ricoh.co.jp>
Disposition: automatic action/MDN-send-automatically: dispatched      Respond Mail Text

```

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

1. 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.

2. 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.

3. 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.

1 August, 2003

E-MAIL OPTIONS (SUB TX MODE)

Report Sample

DATE	TIME	ADDRESS	MODE	TIME	PAGE	RESULT

MAY. 5	10:15	fuser_01@domlg. ricoh. co.	Mail SM	0'09"	2	--
	10:16	fuser_01@domlg. ricoh. co.	Mail SMQ	0'05"	1	--
	10:17	s_tadashi@domlg. ricoh. co.	Mail SMQ	0'09"	2	OK
	10:19	m_masataka@domlg. ricoh. co.	Mail SMA	0'05"	1	--

H231D921.WMF

Detailed
Description

SPECIFICATIONS

1. IFAX SPECIFICATIONS

Type

Fax Unit and Printer/Scanner Unit

Connectivity

Local area network

Ethernet 100base-Tx/10base-T

Connection

100base-Tx/10base-T direct connection

Resolution

Main scan: 200 dpi

Sub scan: 400 dpi, 200 dpi, 100 dpi

NOTE: To use 400 dpi, IFAX SW01 Bit 4 must be set to "1".

Transmission Time

1 s (through a LAN to the server)

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 message width is A4/LT.

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 Format

Single/multi-part

MIME conversion

Image: TIFF-F (MH) format only

Protocol

(Supported by TCP/IP protocol)

Transmission:

IETF RFC821 SMTP procedure

Reception:

IETF RFC1725 POP3 procedure

IETF RFC2026 IMAP4 procedure

Data rate

100 Mbps(100base-Tx)

10 Mbps (10base-T)

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).