Konica T.37 Internet **FAX**

User's Guide

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First Edition: September, 2000 Manual Part Number: OP-IFAX-01

Please address any comments on this publication by mail to:

Konica Business Technologies, Inc.

Corporate Publications

500 Day Hill Road

Windsor, CT 06095

Please visit Konica's web site at:

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T.37 Internet Fax

Overview

T.37 Internet Fax is an easy-to-use feature.

This overview has several sections to help you understand T.37 Internet Fax.

- Operation Overview (End User)
- Information Provided
- Components of an Internet Fax
- What Your T.37 Internet Fax Machine Can Do

Operation Overview (End User)

This section should be used as a quick-reference for using the your T.37 Internet Fax.

This section does not provide detailed explanations of features or settings. Other sections provide these details.

Information Provided

The following items provide the information you will need to use your fax machine.

- User's Guide
- Warranty Document
- T.37 Internet FAX User's Guide
- Software Utilities CD-ROM

General Conditions

To use Internet Fax,

- a Network Card must be installed in the machine
- the machine must be connected to a LAN

The Network Card for this machine can be connected to a

- 10 BaseT or
- 10/100baseTX LAN.

To make a LAN connection, the following information must be configured on this machine. Ask your network administrator about these settings.

- an IP Address
- SubnetMask
- Default Gateway

If the LAN uses a DHCP server, it is not necessary to configure these settings as the server will do it automatically.

Internet Fax settings can be configured either by using the network tool or on the machine itself, but DHCP settings are supported by the network tool only.

After setting the correct IP Address, SubnetMask and Default Gateway, configure the machine for Internet Fax transmission/reception.

Internet Fax Transmission

General Information

To send an Internet Fax message, you need a mail server from which to send e-mail.

Please consult your network administrator about the settings listed below, which are required in order to make a connection to the mail server.

- SMTP Server Address / Name
- DNS Server's IP Address
- Host Name
- e-mail Address

These settings are similar to those of popular mail clients such as Netscape Messenger, Outlook and Eudora.

You can start transmission when these settings have been configured.

To send a fax, place a document on the machine and press the one-touch button on which the e-mail address of the recipient has been registered; the document will be scanned into memory and before transmission.

The data will be converted into a TIFF file and sent to the recipient.

SMTP Server Address / Name

Enter the SMTP server name or IP Address.

If entering the server's IP Address, be sure to type the dots (full-stops) dividing the numbers.

Example: 192.168.1.1

You may enter a server name only if a DNS server has been configured.

DNS Server's IP ADDRESS

This setting is not required if the SMTP server has been specified by its IPADDRESS.

A DNS server can convert a server name into an IP ADDRESS.

Host Name

Enter the host name of this machine.

If you do not know the host name, enter the e-mail address of this machine instead.

E-mail Address

Enter the e-mail address assigned to this machine.

Internet Fax Reception

General Information

To receive an Internet Fax message, you need a mail server for sending e-mail.

Please consult your network administrator about the settings listed below, which are required in order to make a connection to the mail server.

- POP Server Address / Name
- DNS Server's IPAddress
- POP Server User Name
- POP Server Password

The machine is ready to receive Internet Fax messages when these settings have been configured.

To receive a fax message, the machine will access the server automatically at regular intervals according to the POP Interval Time setting.

If there is mail, the machine will print it out automatically.

This machine only receives TIFF files and text-format mail. It cannot receive files in other formats (such as Word, Excel, and certain formats of TIFF files).

POP Server Address / Name

Enter the POP server name or IPAddress.

When entering the server's IP Address, be sure to enter the dots (full-stops) dividing the numbers.

Example: 192.168.1.1

You may enter a server name only if a DNS server has been configured.

DNS Server's IP Address

This setting is not required if the POP server has been specified by its IPADDRESS.

A DNS server can convert a server name into an IPADDRESS.

POP Server User Name

Enter the user name assigned to this machine for accessing the POP server.

POP Server Password

Enter the password assigned to this machine for accessing the POP server.

Accessing Network Settings

From the Fax Machine Front Panel

- 1 Press Menu/Exit to enter the menu.
- 2 Using the numeric keypad, enter the User Function Number (see the following list).
- 3 Press Ä or¶ until the desired setting is selected.
- 4 Press **Enter** to access the selections for the setting.
- 5 Key in or select the desired information.
- 6 Press Menu/Exit to enter the menu.

List of Settings	User Function 93	Network Settings
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User Function 80 User Function 81 User Function 82 User Function 83 User Function 84 User Function 85 User Function 86 User Function 87 User Function 88 User Function 89 User Function 90 User Function 91	Auto Tray Switch Paper Size Check LAN Print T.O. POP Interval Delete POP Message Time Between GMT Text Print Header Print Coding Mode Extra Fine Mode IFAX Sender ID Domain Name	1: IPADDRESS 2: SUBNETMASK 3: DEFAULT GATEWAY 4: SMTP SERVER NAME 5: POP SERVER NAME 6: POP USER ID 7: POP PASSWORD 8: DNS P.SRV ADDRESS 9: DNS S.SRV ADDRESS 10: HOST NAME 11: FAX E-mail Address 12: DSN 13: NIC INITIALIZE
User Function 92	Message Disposition Notification	

Information Provided

The following items provide the information you will need to use your fax machine.

- 9930 User's Manual
- T.37 User's Guide
- Software Utilities CD-ROM

Each item is explained below.

User's Guide

The User's Guide provides the information common to all configurations.

T.37 Internet Fax

This section provides the information unique to the T.37 Internet Fax configuration of the product series.

Software Utilities CD-ROM

The Software Utilities CD-ROM includes the following software:

Network Print Driver

Network Print Driver

The Network Print Driver enables network printing from your fax machine.

- The Network Print Driver supports only network
- printing. Network faxing is not supported. You can print and fax locally through the parallel port using a print driver supplied with JetSuite Pro.

Components of an Internet Fax

A fax sent over the Internet has three components.

- Header
- e-mail
- TIFF attachment(s)

Your ability to receive, view, or print these components will vary according to the settings of different functions.

Header

The header includes all routing information for the path your Internet Fax followed from the time it was sent to the time it was received.

The header is automatically generated as part of the Internet Faxing process.

E-mail

The e-mail includes the To, From, and Date information. It may include RE: (Subject) and body text (e-mail message). The To, From, and Date information are automatically

The To, From, and Date information are automatically generated as part of the Internet Faxing process. However, they are based on information programmed by the user.

The subject and message (if used) can be determined by the user.

TIFF attachment(s)

The TIFF attachment(s) are the "fax" part of the Internet Fax. The content of the TIFF attachments is determined by the end user. The conversion to TIFF and file handling are part of the Internet Faxing process.

What Your T.37 Internet Fax Machine Can Do

T.37 Internet Fax is a feature with many capabilities.

This unit can

- send and receive faxes via a Public Switched Telephone Network (PSTN)
- send and receive faxes via the Internet
- print via a Local Area Network (LAN)
- act as a network scanner
- act as a Gateway service
- act as a convenience copier

Important!

Internet faxes differ from traditional faxes in these ways:

Although your fax has security features, faxes sent over the Internet are more vulnerable to interception than faxes sent over the PSTN.

There is no way to verify that a message has been received by the machine to which it was addressed.

Helpful Hints (T.37)

Your fax machine has many features and capabilities that will help you

- operate the machine
- save money
- save time

"Help and Helpful Hints" in the User's Guide summarizes the features and capabilities directly connected to saving money and time.

"Helpful Hints (T.37)" provides tips that help you use your T.37 Internet Fax to its fullest.

PSTN Faxing vs. Internet Faxing

PSTN Faxing is fax communication conducted via telephone lines. You are probably familiar with PSTN faxing. PSTN Faxing requires telephone numbers and telephone lines.

Internet Faxing is fax communication conducted via the Internet. It resembles e-mail communications more than it does PSTN faxing. Internet Faxing requires e-mail addresses, mail servers, Internet connections, and fax machines capable of Internet Faxing.

Internet Fax

Internet Fax is a term with several meanings, depending on context.

Internet Fax can mean

- fax communication conducted via the Internet.
- a fax machine capable of Internet Faxing.
- the document (fax) sent via the Internet.

E-mail Addresses vs. PSTN (Phone) Numbers

You cannot combine e-mail addresses and telephone numbers in one communication session.

What does this mean?

You can send a fax to several e-mail addresses or several telephone numbers, but not a combination of e-mail addresses and telephone numbers.

Status of Server

Internet Faxing is conducted over the Internet via network servers.

If the servers are down, running slowly, or experiencing other problems, Internet Faxing will be adversely affected.

Backup / Archive (Network Scan)

You can use your fax machine to create digital versions of documents you only have in hardcopy form.

To do this, send the document as an Internet Fax to your e-mail address. When the document is scanned, a TIFF version of the document is created. By sending it to yourself, you will have a digital version of the hardcopy document. You can then use various software packages to work with the digital (TIFF) version. One possible software package is an Optical Character Recognition (OCR) package

Operation Overview

Before the machine is used, three processes must be completed.

- Installation
- Setup
- Customization

Installation and setup requirements may vary from system to system.

Installation

Installation covers the physical procedures, such as removing the unit from the shipping packaging, connecting the power, telephone, and network lines, installing consumables.

Installation may be performed by anyone.

Refer to "Installation" in the User's Guide for more information.

Setup

Setup covers the network installation procedures, such as establishing the IP Addresses and configuring the network card.

A network administrator will perform setup.

Customization

Customization covers the programming procedures, such as One-Touch keys, machine settings, and network settings.

You can perform some of the customization procedures.

Others must be performed by a network administrator.

LAN Topologies and Operating Systems

Listed below are the LAN topologies and operating systems supported by your fax machine.

LAN

10base-T Ethernet

100base-TX Ethernet (Fast Ethernet)

Operating systems supported by the printer driver:

Windows 3.1

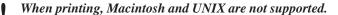
Windows 95

Windows NT 4.0

Windows 2000

NetWare 3.x

NetWare 4.x



Network Print Protocols

TCP/IP

IPX/SPX

NetBEUI

Internet Fax Protocols

TCP/IP

SMTP

POP3

DNS

Management Protocols

SNMP

MIB

Set Up (on a Network)

Identifying Current Settings

When your fax machine is setup on a network, settings for the machine are located in two places.

- settings stored on the fax machine
- settings recorded on the network card

Settings Stored on the Fax Machine

The Configuration Report lists the current settings of the facsimile machine.

Printing the Configuration Report

- 1 Press Menu/Exit to enter the menu.
- 2 Press ¶ to select Report Print, press Enter.
- 3 Press Ä or¶ until the report you want appears on the display. Press Enter.
- 4 Print all the reports you want, then press **Menu/Exit** to return to standby mode.

Settings Recorded on the Network Card

There are two ways to print a report of the settings recorded on the network card.

- using the fax machine's menu: print the NIC Configuration Report or the NIC Information Report
- pressing a button on the network card

Using the Fax Machine's Menu

The Configuration Report lists the current settings of the facsimile machine.

Printing the NIC Configuration Report or the NIC Information Report

- 1 Press Menu/Exit to enter the menu.
- 2 Press ¶ to select Report Print, press Enter.
- **3** Press Ä or¶ until the report you want appears on the display. Press **Enter**.
- 4 Print all the reports you want, then press **Menu/Exit** to return to standby mode.

Using the Button on the Network Card

- Some Network Cards may not have a black button.
 - If yours does not, refer to the previous section, "Using the Fax Machine's Menu."
- 1 Press the black button on the network card for three seconds.
- 2 Release the button.
- 3 Two reports print.
 one report is similar to the NIC Information Report
 (generated through the menu)
 one report is the network card self-diagnostic report
- If you turn the power on while pressing this button down, the Network Card will initialize its settings.

Settings Stored on the Fax Machine

General Information

User Functions 80 to 93 are reserved for network settings.

User Functions 80 to 82 are for network printing.

User Functions 83 to 93 are for faxing using the Internet.

User Function 93, Network Settings, is used to configure the network card. Network settings can also be changed over a network, using various tools.

- If your network card cannot fax using the Internet,User Functions 83 to 93 will not display.
- You must work with your network administrator to determine the correct information for many of the settings.

Accessing Settings

- 1 Press Menu/Exit to enter the menu.
- 2 Press Ä or¶ until Setup appears on the display. Press Enter.
- 3 Press Ä or¶ until LANOPTIONS appears on the display. Press Enter.
- **4** Press Ä or¶ until the desired setting (user function) appears on the display.

List of User Functions (Network Settings)

Explanations of each user function follow this list.

User Function 80	Auto Tray Switch	User Function 93	Network Settings
User Function 81	Paper Size Check	1: IPADDRESS	
User Function 82	LAN Print T.O.	2: SUBNETMAS	SK
User Function 83	POP Interval	3: DEFAULT GA	TEWAY
User Function 84	Delete POP Message	4: SMTP SERVI	ER NAME
User Function 85	Time Between GMT	5: POP SERVER	NAME
User Function 86	Text Print	6: POP USER ID)
User Function 87	Header Print	7: POP PASSWO	ORD
User Function 88	Coding Mode	8: DNS P.SRV	ADDRESS
User Function 89	Extra Fine Mode	9: DNS S.SRV	ADDRESS
User Function 90	IFAX Sender ID	10: HOST NAM	E
User Function 91	Domain Name	11: FAX E-mail	Address
User Function 92	Message Disposition Notification	12: DSN	
		13: NIC INITIAI	LIZE

Auto Tray Switch

User Function 80

Settings are: ON or OFF

Default is: OFF.

When Auto Tray Switch is set to ON, your fax machine will use paper from another tray when paper runs out in one tray.

The optional second tray must be installed for this to function.

The same size paper must be installed in both trays.

Paper Size Check

User Function 81

Settings are: ON or OFF

Default is: ON.

Set to ON

If Paper Size Check is set to ON, an alarm displays when the paper size specified from the PC does not match the paper size specified for the tray of the fax machine.

When this alarm is displayed, put the correct size of paper in the specified tray. Printing begins when the tray is closed.

After printing,

- set the same paper as configured for the tray or
- change the tray configuration to the correct paper size.

Set to OFF

If Paper Size Check is set to OFF, printing occurs even if the PC-specified and Paper Tray paper sizes don't match.

LAN Print T.O.

User Function 82

It is impossible to judge whether printing data is not being transmitted due to network delay or the end of the data stream. This time-out configuration allows the device to cancel a print job when no printing data can be found after a specified time has elapsed since the last data was submitted.

Do not change the default configuration unless it is absolutely necessary.

Settings are: 5 sec., 30 sec., 5 min.

Default Setting is: 30 sec.

POP Interval

User Function 83

Use this to set the interval between POP receptions.

If the interval is set to 0, no automatic receptions occur. All receptions are generated manually.

Available settings are 0 to 60 minutes, adjustable by the minute.

The default setting is 5 minutes.

Delete POP Message

User Function 84

Use this to determine how the received e-mails are deleted from the mail server.

If this user function is set to OFF, received e-mails remain on the POP server until the Network Administrator deletes them.

Available settings are:

OFF: Do not delete mail

TYPE1: Delete only the mail your fax machine can print

TYPE2: Delete all mail
The default setting is Type 2.

50 Communications Limit

Your fax machine maintains a log of up to 50 communications.

This log prevents repeat receptions of any messages that have already been read.

However, if there are more than 50 messages on the server, you may experience errors.

Your fax machine will receive and print e-mails, but the log will not be correct.

To correct this error

Have the network administrator delete the received e-mails (mail data) on the mail server.

Make sure there is no mail.

Activate the POP reception on your fax machine.

This procedure will erase the log of the 50 previous communications.

To prevent this error

If automatic POP reception is carried out while there is no mail, the log will also be erased.

Regularly delete the received e-mails from the mail server, keeping the number of records on the log below 50.

Time Between GMT User Function 85

GMT is Greenwich Mean Time.

Use this function to set the difference between your machine's local time and GMT.

This value must be entered correctly, or e-mail headers will be wrong.

If you need help in determining the difference between your time and GMT, a good reference website may be found at

http://greenwichmeantime.com

Available settings are: 12 to -12, in one-hour increments. The default setting is 0.

In the United States, the difference is always a negative value.

Example: East Coast Standard Time is -5.

Text Print

User Function 86

This function determines if the body text of an e-mail is printed.

If this function is set to ON, the text in e-mail is printed.

Available settings are: ON and OFF

The default setting is OFF.

Only US-ASCII characters will print.

Any characters that cannot be printed are shown as spaces.

Text may not be printed or come out garbled, depending on the mail client used.

Header Print

User Function 87

This function determines how the e-mail header is printed.

Text Print (User Function 86) must be ON for this setting (Header Print) to be valid.

Available settings are: OFF, TYPE1, and TYPE2

OFF: Header does not print. The message and any TIFF attachments print.

TYPE1: SUBJECT/FROM/TO information prints.

TYPE2: All header information prints. This information includes all routing and server information.

The default setting is OFF.

Coding Mode

User Function 88

This function determines the coding mode for the TIFF file images sent by Internet Facsimile.

Available settings are: MH, MR, MMR.

Compression Rates:

MH low

MR medium

MMR high

The default setting is MH.

Often, other manufacturers' Internet Fax products support only MH.

Extra Fine Mode User Function 89

This function determines the scan resolution of the EX.FINE mode for Internet Faxing.

Available settings are: 300 dpi or 600 dpi.

The default setting is 300.

IFAX Sender ID User Function 90

This function determines if the sender ID is included with images scanned by the Internet Fax.

Available settings are: ON or OFF.

The default setting is ON.

The setting for this function always applies when using Internet Fax.

IFAX Sender ID (User Function 89) is independent from Sender ID On/Off (User Function 23).

If you are using your fax as a scanner, turn this setting off. This prevents the sender ID data from appearing in scanned images.

Domain Name User Function 91

This function is only used when setting up your fax machine as a gateway for relay fax. This is also known as an off-ramp.

This setting is required when forwarding e-mail received by SMTP to PSTN/ISDN.

Data is received only from the registered (programmed) domain names.

Example

If you register *network.com*, only the e-mail from domain *network.com* or its sub-domain will be received and forwarded.

Domain Name (User Function 91), is only used when setting up your fax machine as a gateway for relay fax.

Domain Name Restrictions

- Up to five (5) domain names may be registered.
- Each domain name may be up to 64-characters long.
- When a SMTP reception request is received, the e-mail will be received *only* if the sender's domain name matches one of the registered domain names. If there is no match, your fax machine assumes that the e-mail cannot be received. Reception does not occur.
- You may use Latin letters, numbers and symbols while registering the domain name.

To enter symbols, use either one-touch key 20 or key "0" of the numeric ten-key pad.

The symbols that can be used are:

The "~" (tilde) symbol will appear on the display as "-1".

Both uppercase and lowercase letters can be used.

To change the case, press the CAPS key (one-touch key 31).

Message Disposition Notification (MDN) User Function 92

Some mail clients and Internet Fax products currently on the market cannot receive this MDN format correctly.

MDN vs. DSN

MDN: you receive a confirmation that your message was received by the destination mail server.

DSN: you receive a confirmation that your message was opened by the person you sent it to (the recipient).

All systems involved in the communication must support MDN and DSN.

When User Function 92, Message Disposition
Notification (MDN) is set to ON, you will receive a
notification when the recipient of your message opens it.

The recipient MUST HAVE a mail program that uses the Message Disposition Notification (MDN) standard.

Netscape Messenger, Eudora Pro, and the Konica FAX 9930 Facsimile Machine support sM DN.

When User Function 93, Network Settings, Item 12, Delivery Service Notification (DSN) is set to ON, you will receive a notification when your message arrives at the recipient's inbox on the mail server.

The recipient's server must support the Delivery Service Notification (DSN) standard.

Your machine always returns an MDN to anyone sending mail with an MDN request, regardless of the setting for User Function 92: MDN.

The setting for User Function 92: MDN does not affect the Error MDN message.

An Error MDN will be returned to the sender if

• a file other than the TIFF formats compatible with

this Internet Fax is received and

- User Function 73: ERR. REPORT (MCF) is set to ON
- When User Function 92: MDN is set to ON, anyone who receives a transmission from your machine will return an MDN confirmation. To print the confirmation, you must set User Function 86: Text Print to ON.

User Function 92: MDN determines if the Message Disposition Notification (MDN) is added to transmissions.

MDN (Message Disposition Notification) is a request for confirmation on whether or not the message has been read.

If MDN is set to ON, a confirmation is returned if the recipient is

- an Internet Fax machine or
- a mail client that supports MDN

The format of the confirmation depends on the type of the receiving Internet Fax or mail client. If the recipient has the same Internet Fax machine as yours, a notification in the RFC-compliant format (shown in the example below) will be transmitted.

Example MDN Message

Subject: Automatic Disposition Notification (processed) - hello!

The message you sent on Wed, 19 Jan 2000 15:28:28 +0900 regarding "hello!" has been processed by abc@network.com.

Final-Recipient: rfc822; abc@network.com

Original-Message-ID:

<3885598C.E47DF614@fax.nework.com>

 $Disposition: \ automatic-action/MDN-sent-Automatically;\\$

processed

Network Settings

User Function 93

This function modifies these network settings.

- 1: IPADDRESS
- 2: SUBNETMASK
- 3: DEFAULT GATEWAY
- 4: SMTP SERVER NAME
- 5: POP SERVER NAME
- 6: POP USER ID
- 7: POP PASSWORD
- 8: DNS P.SRV ADDRESS

Domain Name Service Primary Server

9: DNS S.SRV ADDRESS

Domain Name Service Secondary Server

10: HOST NAME

11: FAX E-mail Address

12: DSN

Delivery Status Notification

13: NIC INITIALIZE

After changing the network settings under User Function 93, press MENU.

The machine goes into standby mode.

After a few seconds' pause, the display shows that the Network Card is being initialized. The data on the Network Card is updated when this message disappears.

Do not press MENU again while the initialization message is on display (after changing the settings); if you do, the settings will not update correctly.

DHCP Server

If you are working with a DHCP (Dynamic Host Configuration Protocol) server, the following items are set automatically.

- 1: IPADDRESS
- 2: SUBNETMASK
- 3: DEFAULT GATEWAY
- 8: DNS P.SRVADDRESS

Domain Name Service Primary Server

9: DNS S.SRVADDRESS

Domain Name Service Secondary Server

Use permanent IP addresses from DHCP.

After changing the network settings under User Function 93, press MENU.

The machine goes into standby mode.

After a few seconds' pause, the display shows that the Network Card is being initialized. The data on the Network Card is updated when this message disappears.

Do not press MENU again while the initialization message is on display (after changing the settings); if you do, the settings will not update correctly.

Explanation of Settings

1: IPADDRESS

Sets the IP address.

2: SUBNETMASK

Sets the subnet mask.

3: DEFAULT GATEWAY

Sets the default gateway address.

4: SMTP SERVER NAME

Enter either the IP address or the host name of the SMTP mail server.

If the DNS name of the SMTP server does not work,try entering the IP address of the SMTP server.

Restrictions

- If DNS has been set, use the host name (e.g., mail.network.com).
- If DNS has not been set, enter the IP address of the server. The address must include the "." (period) dividers (e.g., 192.168.4.123).
- up to 64 characters may be entered.

You may use Latin letters, numbers and symbols To enter symbols, use either one-touch key 20 or key "0" of the numeric ten-key pad.

The symbols that can be used are: $!\#\& '()*+,-./:;=?\cdot@?$ " $\%\sim$

The "~" (tilde) symbol shows on the display as "1". Both uppercase and lowercase letters can be used. To change the case, press the CAPS key (one-touch key 31).

5: POP SERVER NAME

Enter either the IP address or the host name of the POP mail server.

If the DNS name of the SMTP server does not work,

try entering the IP address of the SMTP server.

Restrictions

- If DNS has been set, use the host name (e.g., mail.network.com).
- If DNS has not been set, enter the IP address of the server. The address must include the ":" (period) dividers (e.g., 192.168.4.123).
- up to 64 characters may be entered.
 You may use Latin letters, numbers and symbols.

To enter symbols, use either one-touch key 20 or key "0" of the numeric ten-key pad.

The symbols that can be used are: $!\#\& '()*+,-./:;=?\cdot@?"_\%\sim$

The "~" (tilde) symbol shows on the display as "-!". Both uppercase and lowercase letters can be used. To change the case, press the CAPS key (one-touch key 31).

6: POP USER ID

Enter the user ID registered on the POP3 server.

Restrictions

up to 16 characters may be entered.

You may use Latin letters, numbers and symbols.

To enter symbols, use either one-touch key 20 or key "0" of the numeric ten-key pad.

The symbols that can be used are: $!\#\& '()*+,-./:;=?\cdot@?"$ % ~

The "~" (tilde) symbol shows on the display as "-1".

Both uppercase and lowercase letters can be used.

To change the case, press the CAPS key (one-touch key 31).

7: POP PASSWORD

Enter the password registered on the POP3 server.

Restrictions

• up to 16 characters may be entered.

You may use Latin letters, numbers and symbols.

To enter symbols, use either one-touch key 20 or key "0" of the numeric ten-key pad.

The symbols that can be used are: $!\#\& '()*+,-./:;=?\cdot @?" \% \sim$

The "~" (tilde) symbol shows on the display as "-!". Both uppercase and lowercase letters can be used. To change

the case, press the CAPS key (one-touch key 31).

8: DNS P.SRVADDRESS

DNS means Domain Name Service.

P.SRV means Primary Server.

Sets the IP address of the DNS primary server.

You do not have to change this setting if the server is connected directly using its IP address.

9: DNS S.SRVADDRESS

DNS means Domain Name Service.

S.Serv means Secondary Server.

Sets the IP address of the DNS secondary server.

You change this setting only when a secondary server has been set up.

10: HOST NAME

Enter the host name defined on this machine.

Restrictions

- up to 64 characters may be entered.
 - You may use Latin letters, numbers and symbols.

To enter symbols, use either one-touch key 20 or key "0" of the numeric ten-key pad.

The symbols that can be used are:

The "~" (tilde) symbol shows on the display as "-1".

Both uppercase and lowercase letters can be used. To change the case, press the CAPS key (one-touch key 31).

11: FAX E-mail Address

Enter the e-mail address assigned to your machine.

Restrictions

up to 64 characters may be entered.

You may use Latin letters, numbers and symbols. To enter symbols, use either one-touch key 20 or key "0" of the numeric ten-key pad.

The symbols that can be used are:

The "~" (tilde) symbol shows on the display as "-1".

Both uppercase and lowercase letters can be used.

To change the case, press the CAPS key (one-touch key 31).

12: DSN (Delivery Status Notification)

MDN vs. DSN

MDN: you receive a confirmation that your message was received by the destination mail server.

DSN: you receive a confirmation that your message was opened by the person you sent it to (the recipient).

All systems involved in the communication must support MDN and DSN.

When a mail server with DSN receives a message, it sends a delivery confirmation to the sender of the message.

Change this setting to OFF, if you are sending a message to a mail server that does not support DSN.

If you do not change this setting to OFF, the server may not be able to handle the message correctly and a communication error may occur.

Some servers can send mail to servers without DSN. In this case, no delivery notification will be sent.

User Function 86, TEXT PRINT must be ON for your machine to receive and print delivery notifications.

When User Function 93, Network Settings, DSN is ON, your machine receives confirmations (MDN) from the mail server of anyone sent a message by your machine.

13: NIC INITIALIZE

Resets the Network Card to its original factory settings.

You may also reset the card to factory settings by pressing and holding the button on the card (if your network card has a button).

Make sure that you want to do this before proceeding.

When you reset the Network Card to factory settings, all current settings are lost.

The message "ARE YOU SURE?" will show on the display. You must confirm your choice before the unit will reset to factory defaults.

Changing Settings

There are four ways to change the network settings for your machine.

- 1 menu of the machine
- 2 web page of the network card
- 3 Telnet

Some settings can be accessed with any method.

Other settings are only accessed by one method.

This section lists the settings. The lists are organized by the method used to access the settings. After the lists, each access method is discussed.

Settings Changed Only by Using the Web Page

Printer Status

Network Status

TCP/IP

NetWare

NetBEUI

EtherTalk

SNMP

Printer Menu

Internet Fax

SMTP Transmit

SMTP Receive

POP3

SMTP Port Number

POP Port Number

UseAPO

You can use the Web Page, Internet Fax, to adjust the settings for User Function 93, Network Settings.

Settings Changed by Using the Web Page or the Menu

User Function 93, Network Settings

- 1: IPADDRESS
- 2: SUBNETMASK
- 3: DEFAULT GATEWAY
- 4: SMTP SERVER NAME
- 5: POP SERVER NAME
- 6: POP USER ID
- 7: POP PASSWORD
- 8: DNS P.SRVADDRESS
- 9: DNS S .SRV ADDRESS
- 10: HOST NAME
- 11: FAX E-mailAddress
- 12: DSN
- 13: NIC INITIALIZE

Using the Konica FAX 9930 Web Page

You can use the Web page of the network card to change the network settings for your machine.

To access the Web page of the network card, use a web browser such as Internet Explorer or Netscape Navigator.

You can use the Web page of the network card to change

- the items listed below
- User Function 93, Network Settings

Changing Settings Using the Web Page

Printer Status

This is the main web access screen.

Shows the message(s) currently displayed by your fax machine.

Network Status

Shows the status of TCP/IP, NetWare and NetBEUI.

TCP/IP

NetWare

NetBEUI

EtherTalk

Not supported by this machine.

Do not change this setting.

SNMP

The items listed here are only accessed via the web page.

You can also use the web page to adjust the settings for User Function 93, Network Settings.

SMTPTransmit

Enables or disables the SMTP transmission protocol For normal operations, set this to Enable.

SMTP Receive

Enables or disables the SMTP reception protocol

For normal operations, set this to Enable.

If you do not wish to receive by SMTP, set this to Disable

SMTP reception forwards incoming Fax mail.

POP3

Enables or disables the POP reception protocol.

For normal operations, set this to Enable.

SMTP Port Number

Sets the SMTP protocol port number.

Do not change this unless it is necessary.

The default setting is 25.

POP Port Number

Sets the POP protocol port number.

Do not change this unless it is necessary.

The default setting is 110.

Use APOP

This setting is available when you are using a POP server that supports APOP.

With APOP, the POP password will be encrypted before it is sent.

A communication error will occur if this setting is turned on when using a server which does not support APOP.

Printer Menu

The Printer Menu provides information about Paper, Trays, Timers and Alarms, and Emulations.

This menu should not be displayed for this machine.

If it does display, you will not be able to change its settings.

Telnet

Your fax machine is Telnet capable.

You can use Telnet (via the network) to change the network settings for your machine.

The differences are explained in this section.

Customization

Programming e-mail Addresses

You can program (store) e-mail addresses into your machine, just as you do telephone numbers. You can create a group of e-mail addresses, just as you can create a group of telephone numbers.

For more information about groups, see the User's Manual, "Sending a Fax to Multiple Locations."

Procedure

Print the Telephone Directory before you begin programming. This provides a reference of the speed dial numbers already programmed.

See the User's Guide, "Reports, Telephone Directory." Be sure to write the name for any Speed Dial numbers you program on the One Touch Sheet(s).

The One Touch Sheet(s) provide space for a limited number of Speed Dial numbers, depending on the model of your fax machine.

Konica FAX 9930 1 through 80.

See the User's Guide, "Reports, Telephone Directory."

- 1 Press Menu/Exit to enter the menu.
- 2 Press Ä to select Location Program. Press Enter.
- 3 The cursor will be at Speed Dial. Press Enter.
- **4** Input the speed dial number you want to program, then press **Enter**.
- E-mail addresses can ONLY be programmed in One-Touch keys 1 40.
- 5 Press Ä to select e-mail Address. Press Enter.
- 6 Input the e-mail address. Press Enter.
- One-Touch Key 32 is the @ symbol.
 - Use One-Touch Key 31 (Caps) to switch between upper and lowercase letters, if necessary.
- 7 Repeat the above process from Step 3 until you have finished programming.
- 8 Press Menu/Exit to return the machine to standby mode.
- 9 When finished with the programming of One Touch keys, lift off the plastic cover. Use a pencil to write the name of the One Touch key you have programmed.
- Print the Telephone Directory when you finish
 programming. This provides a reference of the Speed
 Dial numbers already programmed.

See the User's Guide, "Reports, Telephone Directory."

Be sure to write the name for any Speed Dial numbers you program on the One Touch Sheet(s).

Confirming e-mail Address Programming

If you want to check / verify an e-mail address you have programmed, print the Telephone Directory.

See the User's Guide, "Reports, Telephone Directory."

E-mail Address Restrictions

up to 64 characters may be entered.

You may use Latin letters, numbers and symbols.

To enter symbols, use either one-touch key 20 or key "0" of the numeric ten-key pad.

The symbols that can be used are:

The "~" (tilde) symbol shows on the display as "-1".

Both uppercase and lowercase letters can be used.

To change the case, press the CAPS key (one-touch key 31).

- Must be programmed / assigned to one-touch keys 01~40.
- Groups cannot combine e-mail addresses and telephone numbers.

Using Internet Fax

Sending a Document

General Information

Sending a document from the document feeder of the machine using the Internet Fax feature is very similar to sending a document using the Public Switched Telephone Network (PSTN / regular phone line).

See the User's Guide, "Basic Faxing, Sending a Fax."

Important!

Internet faxes differ from traditional faxes in these ways:

Although your fax has security features, faxes sent over the Internet are more vulnerable to interception than faxes sent over the PSTN.

There is no way to verify that a message has been received by the machine to which it was addressed.

Differences

- Internet Fax data is scanned into memory before transmission.
- Your machine must establish a server connection before the document is sent.

Stopping a Transmission

- Press **Stop** to end a transmission.
- The transmission ends immediately.
 - You do not confirm your request before it takes effect.

How to Send a Document

- 1 Load your documents.
- 2 Select the entry method.

For more information on entry methods, refer to the User's Guide, "Basic Faxing, Sending a Fax."

Entry methods are:

- One-Touch
- Search

You must know the first letter of the e-mail address to search for an e-mail address.

Non-programmed e-mail

also known as a Numeric Keypad or walk-up

You must send the document as an Internet Transmission.

See the following section ("Sending to a Non-Programmed E-mail") for more information.

- 3 Press Start.
- 4 The machine scans the document and stores the document's image data into memory.
- 5 Next, the machine establishes a server connection.
 - "Sending" appears on the display when the server connection is established.
- 6 At the end of the transmission, the result shows on the display and a buzzer sounds.

Sending to a Non-Programmed E-mail

Also known as Numeric Keypad (Walk-up) e-mail faxing

If you want to send an Internet Fax, but you do not want to program the e-mail address as a One-Touch, you must make sure that it is sent as an Internet Transmission.

- Load the document.
- 2 Press the e-mail key.
- 3 Input the e-mail address.
- One-Touch Key 32 is the @ symbol.

Use One-Touch Key 31 (Caps) to switch between upper and lowercase letters.

4 Press Start.

Limitations and Suggestions

- If you need a digital copy of a fax transmission for your records, send the fax to the destination and your e-mail address. Your email address will receive a digital copy (.TIFF format) of whatever you send.
- You cannot combine e-mail addresses and telephone numbers in one fax transmission.
- If you select the same e-mail address twice, the document will be sent to it only once.
- To stop transmission, press STOP.

The transmission terminates immediately, without asking for confirmation.

 Internet Fax data is scanned into memory before transmission. If the document is too long to fit into memory, divide it and make two or more transmissions.

If you frequently divide documents, consider installing additional memory.

TIFF Format

When functioning as an Internet Fax, your machine converts scanned documents into a single TIFF-format file and sends it by e-mail.

The transmit resolutions are:

- 200 x 100 dpi in STD mode
- 200 x 200 dpi in FINE mode
- 300 x 300 dpi or 600 x 600 dpi * in EX-FINE
- 200 x 200 dpi in PHOTO mode

The images are compressed using one of the standard formats used on faxes:

- MH
- MR
- MMR *
 - * This setting can be changed
- Other manufacturer's Internet Fax products may receive only in the STD and FINE resolutions and in MH compression mode.
 - Remember this if you are sending a document to an Internet Fax made by a different manufacturer.

This is not an issue when you send to a machine identical to yours or if you send to a PC.

Your machine attaches the following text to fax document e-mails.

There is a TIFF file in this mail, which has been sent from an Internet Facsimile.

You can see the TIFF file by using "Imaging" of Windows NT4.0/Windows 95(OSR2)/Windows98/Windows 2000.

#

"Imaging", Windows NT4.0, Windows 95 (OS/2, Windows 98, Windows 2000 are registered trademarks of US Microsoft Corporation.

Viewing TIFF Files

To view TIFF files, you must have a TIFF viewer installed on your PC.

Microsoft Windows 95, 98, NT 4.0 and 2000 have a viewer called Imaging, which you can use to view TIFF files.

Before printing a TIFF file from Imaging, go to

OPTIONS in either the Print screen or in Properties and set the Print format to "Fit to Page."

If it is set at "Actual size", part of the fax image may be cut off from the printout.

Receiving Internet Faxes

Your machine can receive Internet Faxes two ways.

- Automatic Reception
- Manual Reception

During automatic reception, your Internet Fax machine automatically connects to the server and receives mail at the time interval set in User Function 83, the POP INTERVAL TIME setting.

If your machine performs an automatic reception, but no messages (mail) are on the server, no record of the session is made.

If your machine performs a manual reception, but no messages (mail) are on the server, service code F941 is used as the record of the session.

- **Internet Faxes are received into memory.**
- Make sure that your machine has enough free memory to receive fax messages.

If too little memory is available, reception may be terminated before the complete message is received.

Install an optional memory expansion kit if your Internet Fax receptions frequently terminate before completion.

- If User Function 86, Text Print is set to ON, your
- machine cannot receive Internet Faxes while a print alarm (e.g., no paper, cover open, paper jam) exists.

Automatic Reception

If your machine performs an automatic reception, but no messages (mail) are on the server, no record of the session is made.

Single Message

If one message is on the server, your machine receives the message and prints it.

Multiple Messages

If more than one mail message is on the server, your machine receives all of the messages and prints them.

Text Print ON

If User Function 86, TEXT PRINT, is set to ON, your machine receives only one message during each reception.

If User Function 86, Text Print is set to ON, your
 machine will not receive Internet Faxes while a print alarm (e.g., no paper, cover open, paper jam) exists.

If there is more than one mail message, your machine prints one message at a time.

Your machine receives multiple mail messages one at a time and prints them one at a time.

Manual Reception

Your machine can manually receive mail.

If your machine performs a manual reception, but no messages (mail) are on the server, service code F941 is used as the record of the session.

- 1 Press **Menu/Exit** to enter the menu.
- 2 Press Ä or ¶ to select Internet Fax. Press Enter.
- 3 Press Ä or ¶ to select at Internet Rx. Press Enter.
- 4 Press Start.

If your machine performs a manual reception, but no messages (mail) are on the server, the record of the session shows service code F941.

Receiving TIFF files

Your machine receives mail messages with TIFF attachments from the mail server and prints out the attached files.

Restrictions

TIFF

Your machine can print out TIFFs in the Simple Mode defined in ITU-T T.37.

It cannot print any other TIFF format.

If your machine receives any other TIFF format, a communication error occurs and an error report prints.

Resolution

Your machine can receive files with the following resolutions.

- 300 x 300 dpi or 600 x 600 dpi
- 200 x 400 dpi

Compression

Your machine can receive files with the following compression formats.

- MH
- MR
- MMR *
 - * This setting can be changed

Receiving e-mails (Body Text)

A fax sent over the Internet has three components.

- Header
- e-mail
- TIFF attachment(s)

The e-mail includes the To, From, and Date information.

It may include RE: (Subject) and body text (e-mail message). The e-mail of an Internet Fax often comes with added messages (text) before and after the TIFFs.

You can select how (or whether) these components print.

Printing e-mails

When User Function 86, Text Print set to ON, the following components print

- header
- e-mail (Body Text)
- any messages (text) that appear before or after the TIFFs

Limitations

Your fax machine can print

ASCII text
Latin letters and numbers
Symbols !#& '()*+,-./:;=?:@?" %~

Your fax machine cannot print

Base 64 encoded text

Your fax machine may not be able to print

- messages from an e-mail client
- messages with text-file attachments

Gateway Services (Forwarding)

Faxes to an e-mail Address

Your fax machine can forward incoming faxes from an F-Code fax machine to an e-mail address.

| Important!

Be aware that although your fax has security features (password protection, access restricted to certain domain names), any system is vulnerable to attack. If you set up your fax for this feature, it may be possible for unauthorized faxes to be sent to other machines through your fax machine.

Relay Print, User Function 27, must be ON for you to
 use Gateway Services (Forwarding).

The default setting for Relay Print, User Function 27, is OFF, to help protect against unauthorized faxes being sent through your machine.

Procedure

- 1 Create a personal mailbox as a relay mailbox.
- 2 Register a one-touch key, with an e-mail address assigned to it, in the relay mailbox.

Any fax image sent to this Personal Box is then forwarded to the assigned e-mail address.

See the User's Guide, "Advanced Operations, Confidential Faxes, Programming Personal (Confidential) Mailboxes."

See the User's Guide, "Advanced Operations, Relay Faxing."

How it works

- 1 An F-Code fax machine sends the fax message to your Internet Fax machine.
- 2 Your Internet Fax machine then converts the message to an e-mail and forwards it to a mail server.
- **3** The mail server then sends the e-mail to a computer or another Internet Fax.

E-mails to a Fax Number

Your machine can forward images received via e-mail to another fax machine.

Your fax machine uses SMTP reception to do this.

This function is not supported for POP.

Use the format FAX=[telephone number] @ {domain name} to indicate the forwarding number.

The Internet Fax forwards the received TIFF file to the number given after "FAX=" by normal fax transmission.

The items listed below have certain restrictions when used as part of this feature.

- Image Restrictions
- Telephone Number Restrictions
- Mail Address Format
- Domain Names

Example

The e-mail address of your fax machine is:

5950@somedomain.com

To use the Gateway Service, the sender would use:

FAX=5551212@5950.somedomain.com

This follows the format

FAX=[telephone number]@{domain name}.

Image Restrictions

- Only TIFFs can be forwarded TIFFs must be the type of file your machine can receive.
- Text files cannot be forwarded.
- Files in formats not supported by this machine cannot be forwarded.

Telephone Number Restrictions

- Characters that can be used Numbers 0-9
 Symbols *, #, -, P (for pause) and +. The machine does not receive the message if anything else is entered.
- The telephone number cannot be more than 40 digits long.

Mail Address Format

The exact mail address format required for e-mail-to-fax forwarding varies from one network to another.

Consult with your network administrator for the correct format to use.

Example

Host name

intfax

Domain name

network.com

e-mail Address

FAX=[telephone number]@intfax.network.com

Both the mail server and your fax machine use this e-mail address for forwarding the message.

Domain Name Restrictions

You must register the domain names that your machine will communicate with (receive data from) when forwarding e-mail-to-fax.

This is intended to prevent unauthorized access of the e-mail forwarding function.

- up to five (5) domain names may be registered.
- each domain name may be up to 64 characters long.

Your machine will only accept data from a sender when

- the sender's domain name matches one of the registered domain names or
- the sender's domain name is a sub-domain of one of the registered domain names.

You can make a broadcast transmission to up to 10 recipients by specifying each telephone number in the above mail address format.

How it Works

- 1 The client sends a message to the mail server using the address format FAX=123@fax.abc.com.
 - A client can be a computer or an Internet Fax.
- 2 The mail server makes an enquiry to the DNS server about fax.abc.com
- **3** The DNS server replies to the mail server with the IP address of fax.abc.com.
- 4 The mail server forwards the message to the Internet Fax.
- 5 The Internet Fax then forwards the message to an F-Code fax machine with the telephone number of 123.

It is also possible for an e-mail client to communicate directly with this machine. To do this, specify the IP address of this Internet Fax instead of the e-mail client's SMTP server address. Specify a recipient using the above address format and attach a TIFF file in a format supported by this Internet Fax, and you can have the TIFF file forwarded by fax on reception.

Please note that it may not be possible to establish a connection between this Internet Fax and some types of email clients.

Mail Server Settings for E-mail-to-FAX Gateway Service

The setting changes explained here can only be made by a network administrator.

To use gateway service 1 (e-mail-to-KonicaFAX-to-G3 FAX), the mail server and the DNS server must be configured to forward e-mail to the your fax machine.

Here are some examples of settings for forwarding mail to the your fax machine.

The settings given here are only examples. Servers do not have to be configured as shown in order to use the gateway service.

The domain name, host names and IP addresses given in this text are for example only. You must set these values according to your own network setup.

You will need to adjust settings in these categories.

- DNS Server
- Mail Server

DNS Server

First, register your fax machine onto the DNS server.

In this example, the settings for a type of DNS server called BIND run on UNIX are explained.

You will need to know or set the following items.

- Network Setup
- Install the fax machine as a device on the network
- Add a record to the zone file
- Add a PTR record to the reverse zone file
- Restart the Server

Network Setup

The network in our example has this setup.

Network domain name:

abc.com

Host name of the mail server in this domain:

mail.abc.com

IP address of this mail server:

192.168.1.100

Host name of the DNS server in this domain:

dns.abc.com

IP address of this DNS server:

192.168.1.101

40

IP address of the client PC:

192.168.1.50

Host name of the client PC:

user.abc.com

Install the Fax Machine

Now, install your fax machine on this network.

Host name of the fax machine: fax.abc.com

IP address of the fax machine: 192.168.1.105

Add a Record

Add a record of the fax machine on the zone file of the DNS server (dns.abc.com).

Address (A) record

.

mail.abc.com.	IN	A	192.168.1.100
dns.abc.com.	IN	A	192.168.1.101
user.abc.com.	IN	A	192.168.1.50
fax.abc.com.	IN	A	192.168.1.105

Add a PTR Record

Add a PTR record of the fax machine to the reverse zone file.

Pointer (PTR) Record

.....

100.1.168.192.in-addr.arp	a. IN	PTR	mail.abc.com
101.1.168.192.in-addr.arp	a. IN	PTR	dns.abc.com.
50.1.168.192.in-addr.arpa	. IN	PTR	user.abc.com.
105.1.168.192.in-addr.arp	a. IN	PTR	fax.abc.com.

Restart the Server

When all the records have been updated, restart the DNS server.

After the above configuration has been made, all mail addressed to <xxxx@fax.abc.com> will be forwarded to the fax machine.

Mail Server

Most of the time, the DNS server configuration explained in the DNS Server section will allow you to use the e-mail-to-FAX relay service.

The DNS server configuration is not always used.

Some mail servers are configured to process all mail addressed to hosts belonging to their domain as mail to themselves. If mail server mail.abc.com has been set up in this way, it will regard mail to xxxx@fax.abc.com as mail to one of its users and will not forward it to your fax machine.

To prevent this, configure the mail server so it does not process mail addressed to host fax.abc.com.

The example assumes that

- The OS of mail.abc.com is FreeBSD.
- The mail server is sendmail.
- Configuration file sendmail.cf is generated using utility "CF."

You will have to edit sendmail.cf directly if no utility of this kind is available. For help, see Konica's Web sit at www.konicabt.com and click Support.

To configure the mail server, you will

- 1 insert strings into sendmail.def
- 2 add strings specifying email-to-FAX relay
- 3 create a new sendmail.cf
- 4 overwrite the original sendmail.cf
- 5 restart the mail server
- 1 Insert the following strings to file sendmail.def.

......ACCEPT_LOWER=yes

LOWER_MATCH_STYLE=!lw-file

.

.

- ACCEPT, etc. tells the server to receive mail to hosts
- located within its domain.

LOWER, etc. tells the server to receive mail to hosts located within its domain, EXCEPT mail to hosts listed in sendmail.lw.

2 Add a string (specifying e-mail-to-FAX relay) to /etc/sendmail.lw.

.....

fax

- With "fax", the server DOES NOT receive mail to
- fax.abc.com.
- 3 Create sendmail.cf
- 4 overwrite the original sendmail.cf with it.
- **5** Restart the mail server.

After the above changes, sendmail will forward mail addressed to xxxx@fax.abc.com to your fax machine instead of processing it itself.

Mail Forwarding Process

- 1 Client sends mail to mail server (To: fax=123@fax.abc.com)
- 2 Mail server makes enquiry to DNS server regarding fax.abc.com
- 3 DNS replies to mail server (returns the IP address of fax.abc.com)
- 4 Mail server forwards mail to fax machine
- 5 FAX communication to FAX number 123

Network Scanner

Your fax machine can be used as a network scanner.

Remember the following when using your fax machine as a network scanner:

- you can adjust the resolution of the scanned images
- turn off the IFAX Sender ID (User Function 90), or it will appear on your scanned images

Example

Here is an example of using your fax machine as a network scanner.

You have a hard copy document that you would like to have on file as a digital copy.

You can use your fax machine to scan the document and send the scan version (digital copy) to your e-mail address.

The scan version of the document is a TIFF file.

How it Works

The document is scanned as if it were being sent as an Internet Fax, but the document is actually sent to an e-mail address on the network.

The recipient (destination e-mail address) receives the document on their PC as a TIFF file.

Image Resolution

The setting for User Function 89: Ex.Fine Mode adjusts the resolution of the scanned image.

The resolution may be set between 300 and 600 dpi.

IFAX Sender ID

User Function 90: IFAX Sender ID must be set to ON when you are using your fax machine for faxing using the Internet. This places the IFAX Sender ID on the top of any documents you send.

However, when you are using your fax machine as a network scanner, you do not want this information to appear on your scanned documents.

Set User Function 90: IFAX SENDER ID to OFF while using your fax machine as a network scanner.

The IFAX Sender ID will not appear at the top of scanned documents.

Be sure to set IFAX Sender ID to ON when sending faxes.

Network Printing

Printing Documents

To use your fax machine to print documents via the LAN, you need to install the appropriate software from the supplied CD-ROM and make the correct settings for your environment.

A brief description of each of the supported operating systems and the suggested installation procedure appears in this section.

When installing network card utilities, select the Quick Setup option where it is available.

The printer driver provided on the CD-ROM supports only network printing.

Printing via the parallel port is not supported.

Local printing through the parallel port requires a different driver (provided with the optional MFP Kit).

For further details, please contact your authorized supplier.

Printing on Transparencies

When printing on transparencies,

- set the Media Type to Light
- use manual feed
- set the machine for face-up stacking
- recommended transparency type is 3M CG2300

Change the settings through the printer driver, (provided with the optional MFP Kit).

Operating Systems

NetWare

Recommended procedure:

- 1 Install the printer driver.
- 2 Configure the network card.

The NetWare server has two modes.

- printer server mode and
- remote printer mode

The Network Card supports either mode.

To use NetWare, the fax machine should be attached as a printer under NetWare control.

For more details, see the information on the supplied CD-ROM.

Windows NT 4.0 and Windows 2000

Recommended procedure:

- 1 Install the printer driver.
- 3 Configure the network card.

When printing directly from Windows NT 4.0 or 2000, use LPR (Microsoft TCP/IP Printing), included in Windows NT 4.0 and 2000.

Add the LPR port as the driver output port and assign it the IP Address configured for Network Card.

TCP/IP should be added to Windows NT 4.0, 2000 because it is used for LPR.

While installing the driver on Windows 2000, you may encounter a warning message about authentication.

Ignore this message if it appears.

It will not cause any problems with the installation of the driver.

For more details, see the information on the supplied CD-ROM.

Windows 95/98

Recommended procedure:

- 1 Install the printer driver.
- 3 Install the Konica Print Monitor (LPR Utility).
- 4 Configure the network card.

When printing directly from Windows 95/98, the Konica print Monitor (LPR Utility) should be installed from the supplied CD-ROM.

TCP/IP must be installed in Windows 95/98 in order to use Konica Print Monitor (LPR Utility).

For more details, see the information on the supplied CD-ROM.

Windows 3.1

Recommended procedure:

- 1 Install the printer driver.
- 2 Run SETUP.EXE from the Win31 directory on the supplied CD-ROM.
- 3 Configure the network card.

When printing from Windows 3.1, a NetWare Server is required, since Windows 3.1 is not a network operating system.

Printing via LPR, from Windows 3.1 connected to the network with other commercial TCP/IP protocols, is not assured.

Other Operating Systems

Other operating systems, such as Macintosh or UNIX, are not supported.

Configuring from Network Utilities (also known as CD Setup Utilities)

The network card configurations may be altered from a PC via the network, using the utilities on the CD-ROM. The configuration settings can be accessed from the installer. With these utilities, TCP/IP and NetWare parameters may be configured.

For more details, see the information on the supplied CD-ROM.

- When using the above utilities, the setup screen for
- EtherTalk, which the fax machine does not support, will be displayed.

Set EtherTalk "Disable" to prevent it from being used.

Configuration

Network settings can be modified through the front panel (menu) of your fax machine via User Function 93: Network Settings.

- 1 Press Menu/Exit to enter the menu.
- 2 Press ¶ to select Setup, press Enter.
- **3** Press Ä or¶ until LANOPTIONS appears on the display. Press **Enter**.
- 4 Press Ä or ¶ until **User Function 93:** NETWORK SETTINGS appears on the display.

To print from Windows using LPR, it is necessary to set the IP ADDRESS (User Function 93, Setting 1). This is not required if printing from NetWare only. It is necessary for using Internet Fax functions.

Settings

1: IPADDRESS

Sets the IP address.

2: SUBNETMASK

Sets the subnet mask.

3: DEFAULT GATEWAY

Sets the default gateway address.

User Functions

These three user functions are specific to Network Printing.

- Auto Tray Switch (User Function 80)
- Paper Size Check (User Function 81)
- LAN Print T.O. (User Function 82)

Auto Tray Switch

User Function 80

Settings are: ON or OFF

Default is: OFF.

When Auto Tray Switch is set to ON, your fax machine will use paper from another tray when paper runs out in one tray.

The optional second tray must be installed for this to

function.

The same size paper must be installed in both trays.

Paper Size Check

User Function 81

Settings are: ON or OFF

Default is: ON.

Set to ON

If Paper Size Check is set to ON, an alarm displays when the paper size specified from the PC does not match the paper size specified for the tray of the fax machine.

When this alarm is displayed, put the correct size of paper in the specified tray. Printing begins when the tray is closed.

After printing,

- set the same paper as configured for the tray or
- change the tray configuration to the correct paper size.

Set to OFF

If Paper Size Check is set to OFF, printing occurs even if the PC-specified and Paper Tray paper sizes don't match.

LAN Print T.O.

User Function 82

It is impossible to judge whether printing data is not being transmitted due to network delay or the end of the data stream. This time-out configuration allows the device to cancel a print job when no printing data can be found after a specified time has elapsed since the last data was submitted.

Do not change the default configuration unless it is absolutely necessary.

Settings are: 5 sec., 30 sec., 5 min.

Default Setting is: 30 sec.

Banner Output

Your fax machine supports TEXT-style Banner of NetWare 3.x and NetWare 4.x.

Only US-ASCII characters will print.

Any characters that cannot be printed are shown as spaces.

If a NetWare banner cannot be printed, alter the configuration

- at your PC to "No Banner Used" or
- at NetWare Server to "No Banner Sent".

Contact your NetWare Network Administrator for assistance.

When a problem occurs with banner printing, change the banner settings to "NO" with the correct utilities. Do this even though the Network Card supports FTP and LPR banners.

Problem Solving

There are two areas of Problem Solving.

- End User
- Network Administrator

End User

Option Board Error

If your fax machine displays the message, OPTION BOARD ERROR, an error may have occurred at the interface between the fax machine and the network card.

Turn off the fax machine. Verify that the network card is correctly installed. Turn the machine on.

LAN Data Error

When LAN Data Error is shown on the fax display, there may be a problem in the printing data transmitted via the network.

The printing data will be cancelled.

Re-send the print job.

If this error occurs while printing documents, the error may be a paper jam. Clear the jam.

♦ When the print job was cancelled from a PC, LAN DATA

• ERROR may be displayed. This is because defective data may have been transmitted to the fax machine.

Network Problem

If any printing problems occur (other than the errors mentioned in this section), see the information on the supplied CD-ROM.

Network Administrator

Service Codes

When a communication error occurs, print the Activity Report. Use the report to find the service code for the error.

There are two types of service codes.

- SMTP
- POP3

SMTP Error Codes

Here is the format for SMTP communication service codes.

E123

E = SMTP communication

123 = three-digit SMTP error code defined by RFC.

RFC is an Internet "standards" term meaning "Request For Comment". RFCs are documents that define standards or proposed standard-definitions for network and Internet operation. Individual RFCs define specific aspects of network or Internet operation.

Numbers 900 and above are codes defined specifically for this Internet Fax.

Codes

E001	Text print
	When E001 occurs, the "Number of Pages" column in the Activity Report will be blank.
E002	Text received but not printed
	When E002 occurs, the "Number of Pages" column in the Activity Report will be blank.
E900	Network Card I/F error
E910	TCP/IP or SMTP/POP not supported or allowed by Network Card
E920	Network Card not ready; transmission request received while Network Card is initializing
E930	No match for domain received; invalid user name
E931	E-mail cannot be received (invalid TIFF)
E932	E-mail cannot be received (other than invalid TIFF)
E940	Memory full
E942	Command time-out
E950	Server communication error
E980	Aborted

SMTP Protocol Error Codes

The following are SMTP protocol error codes given in RFC821.

RFC is an Internet "standards" term meaning "Request For Comment." RFCs are documents that define standards or proposed standard-definitions for network and Internet operation. Individual RFCs define specific aspects of network or Internet operation.

When these occur, contact your network administrator.

E421 <domain> Service not available, closing transmission channel.This may be a reply to any command if the service knows it must shut down.

E450 Requested mail action not taken: mailbox unavailable.Example: the mailbox is busy.

E451 Requested action aborted: local error in processing

E452 Requested action not taken: insufficient system storage

E500 Syntax error, command unrecognized.

This may include errors such as command line too long.

E501	Syntax error in parameters or arguments
E502	Command not implemented
E503	Bad sequence of commands
E504	Command parameter not implemented
E550	Requested action not taken:
	mailbox unavailable.
	Example: mailbox not found, no access
E551	User not local; please try <forward-path></forward-path>
E552	Requested mail action aborted:
	exceeded storage allocation
E553	Requested action not taken:
	mailbox name not allowed
	Example: Mailbox syntax incorrect
E554	Transaction failed

POP3 Communication Errors

There are no standard error code definitions for the POP3 protocol.

Here is the format for POP3 Communication Errors.

F123

F = POP3 Communication Errors

123 = three-digit SMTP error code defined by RFC.

RFC is an Internet "standards" term meaning "Request For Comment". RFCs are documents that define standards or proposed standard-definitions for network and Internet operation. Individual RFCs define specific aspects of network or Internet operation.

Codes

F001	Text print
	When F001 occurs, the Number of Pages column in the Activity Report is blank.
F002	Text received but not printed
	When F002 occurs, the Number of Pages column in the Activity Report is blank.
F010	POP protocol USER command error
F020	POP protocol PASS command error
F030	POP protocol RETR command error

F040	POP protocol DELE command error
F050	POP protocol TOP command error
F900	Network Card I/F error
F910	TCP/IP or SMTP/POP not supported or allowed by Network Card
F920	Network Card not ready; transmission request received while Network Card is initializing (redial)
F931	E-mail cannot be received (invalid TIFF)
F932	E-mail cannot be received (other than invalid TIFF)
F940	Memory full
F941	No new mail found in manual reception
F942	Command time-out
F950	Server communication error
F980	Aborted

Transmission Troubleshooting

Transmission fails; a communication error occurs.

See if the server is down.

Are the IPADDRESS, SubNetMask and Default Gateway settings correct?

Has the SMTP server been configured correctly?

Has the host name been registered?

If using DNS, is the DNS server address correct?

If DNS is ON, some servers may cause an error.

Display shows message "OPTION BOARD ERROR."

An error may have occurred at the interface between the fax machine and the network card.

Turn off the fax machine. Verify that the network card is correctly installed. Turn the machine on.

I have turned MDN (or DSN) ON, but no confirmation has been returned.

Both MDN and DSN are sent as text-format messages. If the TEXT PRINT setting is OFF, the confirmations will not be print.

MDN: If the receiving Internet Fax/e-mail client is not capable of receiving MDN, you may not get a receipt.

DSN: If the receiving server does not support DSN, you may not receive any confirmation.

The TIFF file I sent does not print out at the receiver.

Resend the file, making sure to use Standard resolution and MH coding.

If you sent the file using Ex-fine resolution or any coding mode other than MH, the receiving machine may not be able to work with the file.

T.37 simple mode Internet Fax products support only the STD and FINE resolution settings and MH coding mode.

Reception Troubleshooting

Reception fails; a communication error occurs.

Are the IPADDRESS, SubNetMask and Default Gateway settings correct?

Has the POP server been configured correctly?

If using DNS, is the DNS server address correct?

Have you set the USER ID correctly as registered on the POP server?

Have you set the password correctly as registered on the POP server?

If APOP is on, it will cause a communication error on a POP server that does not support APOP.

Reception does not start.

Has the POP interval been set at 0?

If the TEXT PRINT setting is ON, you cannot receive messages while a print alarm (no paper, cover open, paper jam, etc.) is on.

Is there sufficient free memory space? Images are stored in memory first, and cannot be received if there is not enough space.

When I try to receive data manually, a warning message appears on the display.

Have you registered a POP server and a USER ID?

The display shows message "OPTION BOARD ERROR."

An error may have occurred at the interface between the fax machine and the network card.

Turn off the fax machine. Verify that the network card is correctly installed. Turn the machine on.

A communication error occurs during reception, and a report is printed out.

Your machine does not support the format of the received file.

The same mail prints repeatedly.

Is the User Function 84: DELETE POP MSG set to TYPE2?

Do not use other settings unless you receive mail on a PC as well as on your fax machine.

With the TYPE1 or OFF setting, you will get the same mail repeatedly if the number of messages received exceeds the maximum number that can be logged by this Internet Fax (50).

If this happens, access the mail server from your PC and delete all the mail. With the mail server empty, carry out a manual reception on the Internet Fax to delete the current log stored on it.

I have sent data from an e-mail client on a PC to the Internet Fax, but the reception has failed.

Have you used a TIFF format supported by this Internet Fax?

If only a text message has been sent, it will not print out unless the User Function 86: TEXT PRINT is set to ON.

Some e-mail clients send e-mail using unusual formats which this machine cannot receive.

The fax machine prints out a large number of meaningless characters.

It may be printing out Base64-encoded data.

If this frequently occurs, change the User Function 86: TEXT PRINT setting to OFF.

Communication errors occur, and service code F020 is given each time.

The POP server password may be wrong, causing the server to return authentication errors.

E-mail-to-Fax Troubleshooting

I have sent data using the format "FAX=[telephone number]@[domain name], but it has not been delivered to the Internet Fax.

You may have set the domain name (the part after @) incorrectly. Consult your Network Administrator about the correct domain entry.

The Internet Fax refuses to receive data.

Check the entered telephone number.

Characters that can be used are: numbers, +, #, *, P or –

If you have entered a telephone number longer than 40 digits, the Internet Fax will not receive the transmission.

Have you registered the recipient's domain name onto the Internet Fax?

Is the format of the TIFF file you are sending supported by this Internet Fax?

I have sent a text to the Internet Fax, but it does not forward it.

This machine does not forward text.

I have tried to forward data by FAX, but communication cannot be established.

Are the fax's telephone line settings correct?

Received e-mails are not deleting from the server the way I want them to.

Check the setting of User Function 84: Delete POP Message.

This setting determines how the received e-mails are deleted from the mail server.

If this user function is set to OFF, received e-mails remain on the POP until the Network Administrator deletes them.

Available settings are:

OFF: Do not delete mail

TYPE1: Delete only the mail your fax machine can print

out

TYPE2: Delete all mail

The default setting is TYPE2.

The communication logs (records) for the messages received by my fax machine are not correct.

Your fax machine maintains a log of up to 50 communications.

This log prevents repeat receptions of any messages that have already been read.

However, if there are more than 50 messages on the server, you may experience errors.

Your fax machine will receive and print e-mails, but the log will not be correct.

To correct this error

Have the network administrator delete the received emails (mail data) on the mail server.

Make sure there is no mail.

Activate the POP reception on your fax machine.

This procedure will erase the log of the 50 previous communications.

To prevent this error

If automatic POP reception is carried out while there is no mail, the log will also be erased.

Regularly delete the received e-mails from the mail server. Keep the number of records on the log below 50.

The headers of my Internet Faxes are not printing the way I want them to.

Text Print (User Function 86) must be ON for this setting (Header Print) to be valid.

Check the setting for User Function 87: Header Print.

This function determines how the e-mail header is printed.

Available settings are: OFF, TYPE1, and TYPE2

OFF: Header does not print. The message and any TIFF attachments print.

TYPE1: SUBJECT/FROM/TO information prints.

TYPE2: All header information prints. This information includes all routing and server information.

The default setting is OFF.

When I scan documents, my fax machine sender ID is included.

Check the setting for User Function 90: IFAX Sender ID.

Make sure it is OFF.

This function determines if the sender ID is included with images scanned by the Internet Fax.

Available settings are: ON or OFF.

The default setting is ON.

The setting for this function always applies when using Internet Fax.

IFAX Sender ID (User Function 89) is independent from Sender ID On/Off (User Function 23).

If you are using your fax as a scanner, turn this setting off. This prevents the sender ID data from appearing in scanned images.

My fax machine sender ID is not included in documents I am sending.

Check the setting for User Function 90: IFAX Sender ID.

Make sure it is ON.

This function determines if the sender ID is included with images scanned by the Internet Fax.

Available settings are: ON or OFF.

The default setting is ON.

The setting for this function always applies when using Internet Fax.

IFAX Sender ID (User Function 89) is independent from Sender ID On/Off (User Function 23).

If you are using your fax as a scanner, turn this setting off. This prevents the sender ID data from appearing in scanned images.

I've entered the DNS name of the SMTP server, but it doesn't work.

Try entering the IP address.

I've changed the settings for the network card (User Function 93), but the changes are not being implemented.

Press MENU while the initialization message was displayed?

Pressing MENU while the initialization message is on display (after changing the settings) will cause the machine to "lose" the setting changes and the settings will not update correctly.

My server does not support APOP, and my fax machine is experiencing communication errors

Make sure the Setting, Use APOP, is set to OFF.

This setting is available when you are using a POP server that supports APOP.

With APOP, the POP password will be encrypted before it is sent.

A communication error will occur if this setting is turned on when using a server which does not support APOP.

Printing Troubleshooting

I want to use my fax machine as a printer. When I try to install the printer driver on my Windows 2000 system, I get a warning message about authentication.

Ignore this message if it appears. It will not cause any problems with the installation of the driver.

I have the optional second paper tray installed. Why won't my machine automatically pull paper from the other tray when one runs out?

Verify that User Function 80, Auto Tray Switch is ON.

Verify that the same size paper is installed in both trays.

Verify that the second tray is properly installed.

When printing over the network, my fax machine sometimes won't print the last page.

It is possible to judge whether printig data is not being transmitted due to network delay or the end of the data stream.

You can try to adjust the setting of User Function 82: LAN Print T.O. to a longer interval

This time-out configuration allows the device to cancel a print job when no printing data can be found after a specified time has elapsed since the last data was submitted.