

Internet FAX User's Guide

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Version 0

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1 Control Panel Setup

LAN Main Setup Menu

You can use the Internet FAX feature after downloading the software, to use this function, you must set up your machine using the control panel LAN menu.

The LAN menu selections allow you to setup the Brother machine for your network and Internet Fax configuration. Press **Menu/Set** then press the appropriate number, **5** for LAN (**MFC-3340CN/MFC-5840CN**) or **4** for LAN (**FAX-1940CN/MFC-5440CN**). In the LAN Main Setup menu, there are eight main selections: **Setup TCP/IP**, **Setup Internet**, **Setup Mail RX**, **Setup Mail TX**, **Setup Relay**, **Setup Misc, Setup I-Fax**, and **Factory Reset**. If you already have the TCP/IP settings configured for your network then proceed to **Setup Internet** on page 1-9. Proceed to the menu selection you wish to configure.

The machine is supplied with the BRAdmin Professional Windows[®] software, which can be used to configure many aspects of the network.

Setup TCP/IP

This menu has nine sections: **Boot Method**, **IP Address**, **Subnet Mask**, **Gateway**, **Host Name**, **WINS Config**, **WINS Server**, **DNS Server** and **APIPA**.

BOOT Method

- 1 Press Menu/Set, 5, 1, 1 for MFC-3340CN/MFC-5840CN. (4, 1, 1 for FAX-1940CN/MFC-5440CN)
- **2** Press ▲ or ▼ to select Auto, Static, RARP, BOOTP or DHCP.
- 3 Press Menu/Set.
- 4 Press Stop/Exit.

Static mode

In this mode the machine's IP address must be manually assigned. Once entered the IP address is locked to the assigned address.

Auto mode

In this mode, the machine will scan the network for a DHCP server, if it can find one, and if the DHCP server is configured to allocate an IP address to the machine, then the IP address supplied by the DHCP server will used. If no DHCP server is available, then the machine will scan for a BOOTP server. If a BOOTP server is available, and it is configured correctly, the machine will take its IP address from the BOOTP server. After it is initially powered ON, it may take a few minutes for the machine to scan the network for a server.

RARP mode

Brother Print / Fax server IP address can be configured using the Reverse ARP (RARP) facility on your host computer. This is done by editing the /etc/ethers file (if this file does not exist, you can create it) with an entry similar to the following:

00:80:77:31:01:07 BRN 310107

Where the first entry is the Ethernet address of the Print / Fax server and the second entry is the name of the Print / Fax server (the name must be the same as the one you put in the /etc/hosts file).

If the rarp daemon is not already running, start it (depending on the system the command can be rarpd, rarpd -a, in.rarpd -a or something else; type man rarpd or refer to your system documentation for additional information). To verify that the rarp daemon is running on a Berkeley UNIX-based system, type the following command:

ps -ax | grep -v grep | grep rarpd

For AT&T UNIX-based systems, type:

ps -ef | grep -v grep | grep rarpd

The Brother Print / Fax server will get the IP address from the rarp daemon when it is powered on.

BOOTP mode

BOOTP is an alternative to rarp that has the advantage of allowing configuration of the subnet mask and gateway. In order to use BOOTP to configure the IP address make sure that BOOTP is installed and running on your host computer (it should appear in the /etc/services file on your host as a real service; type man bootpd or refer to your system documentation for information). BOOTP is usually started up via the /etc/inetd.conf file, so you may need to enable it by removing the "#" in front of the bootp entry in that file. For example, a typical bootp entry in the /etc/inetd.conf file would be:

#bootp dgram udp wait /usr/etc/bootpd bootpd -i



Depending on the system, this entry might be called "bootps" instead of "bootp".

In order to enable BOOTP, simply use an editor to delete the "#" (if there is no "#", then BOOTP is already enabled). Then edit the BOOTP configuration file (usually/etc/bootptab) and enter the name, network type (1 for Ethernet), Ethernet address and the IP address, subnet mask and gateway of the Print / Fax server. Unfortunately, the exact format for doing this is not standardized, so you will need to refer to your system documentation to determine how to enter this information (many UNIX systems also have template examples in the bootptab file that you can use for reference). Some examples of typical /etc/bootptab entries include:

BRN 310107 1 00:80:77:31:01:07 192.189.207.3

and:

BRN 310107:ht=ethernet:ha=008077310107:\ ip=192.189.207.3:

Certain BOOTP host software implementations will not respond to BOOTP requests if you have not included a download filename in the configuration file; if this is the case, simply create a null file on the host and specify the name of this file and its path in the configuration file.

As with rarp, the Print / Fax server will load its IP address from the BOOTP server when the printer is powered on.

DHCP mode

Dynamic Host Configuration Protocol (DHCP) is one of several automated mechanisms for IP address allocation. If you have DHCP Server in your network (typically a Unix, Windows[®] 2000/XP network) the Print / Fax server will automatically obtains its IP address from DHCP server and register its name with any RFC 1001 and 1002-compliant dynamic name services.

If you do not want your Print / Fax server configured via DHCP, BOOTP or RARP, you must set the Boot Method to Static, this will prevent the Print / Fax server from trying to obtain an IP address from any of these systems. To change the Boot Method, you can use the control panel or the BRAdmin application.

IP Address

This field displays the current IP address of the machine. If you have selected a BOOT Method of Static, enter the IP address that you wish to assign to the machine (check with your network manager for the IP address to use). If you have selected a method other than Static, the machine will attempt to determine its IP address using the DHCP or BOOTP protocols. The default IP address of your machine will probably be incompatible with the IP address numbering scheme of your network. We recommend that you contact your network manager for an IP address for the network the unit will be connected on.

- 1 Press Menu/Set, 5, 1, 2 for MFC-3340CN/MFC-5840CN. (4, 1, 2 for FAX-1940CN/MFC-5440CN)
- 2 Select 1. Change and enter the IP address.
- 3 Press Menu/Set.
- 4 Press Stop/Exit.
- When the Boot Method is set to "Auto", the machine cannot receive IP address from a BOOTP server in Windows[®] 2000. So please ensure that you use DHCP for Windows[®] 2000 server.

Subnet Mask

This field displays the current subnet mask used by the machine. If you are not using DHCP or BOOTP to obtain the subnet mask, enter the desired subnet mask. Check with your network manager for the subnet mask to use.

- Press Menu/Set, 5, 1, 3 for MFC-3340CN/MFC-5840CN. (4, 1, 3 for FAX-1940CN/MFC-5440CN)
- 2 Select 1. Change and enter the Subnet Mask address.
- 3 Press Menu/Set.
- 4 Press Stop/Exit.

Gateway

This field displays the current gateway or router address used by the machine. If you are not using DHCP or BOOTP to obtain the gateway or router address, enter the address you wish to assign. If you do not have a gateway or router, leave this field blank. Check with your network manager if you are unsure.

- 1 Press Menu/Set, 5, 1, 4 for MFC-3340CN/MFC-5840CN. (4, 1, 4 for FAX-1940CN/MFC-5440CN)
- Enter the Gateway address.
 ---OR-- Select 1.Change and enter the Gateway address.
- 3 Press Menu/Set.
- 4 Press Stop/Exit.

Host Name

You can register the machine name on the Network. This name is often referred to as a NetBIOS name; it will be the name that is registered by the WINS server on your network. Brother recommends the name BRN_XXXXXX (where XXXXXX is the last six digits of the Ethernet address) (up to 15 characters).

- 1 Press Menu/Set, 5, 1, 5 for MFC-3340CN/MFC-5840CN. (4, 1, 5 for FAX-1940CN/MFC-5440CN)
- **2** Select 1. Change and enter the Host Name.
- 3 Press Menu/Set.
- 4 Press Stop/Exit.

WINS Config

This selection controls how the machine obtains the IP address for the WINS Server.

1 Press Menu/Set, 5, 1, 6 for MFC-3340CN/MFC-5840CN. (4, 1, 6 for FAX-1940CN/MFC-5440CN)

- **2** Press ▲ or ▼ to select Auto or Static.
- 3 Press Menu/Set.
- 4 Press Stop/Exit.

Auto

Automatically uses a DHCP request to determine the IP addresses for the primary and secondary WINS servers. You must set the BOOT Method to Auto for this feature to work.

Static

Uses a specified IP address for the primary and secondary WINS servers.

WINS Server

- 1 Press Menu/Set, 5, 1, 7 for MFC-3340CN/MFC-5840CN. (4, 1, 7 for FAX-1940CN/MFC-5440CN)
- 2 Press ▲ or ▼ to select Primary or Secondary.
- 3 Press Menu/Set.
- 4 Enter the WINS Server address.
- 5 Press Menu/Set.
- 6 Press Stop/Exit.

Primary WINS Server IP Address

This field specifies the IP address of the primary WINS (Windows[®] Internet Naming Service) server. If set to a non-zero value, the machine will contact this server to register its name with the Windows[®] Internet Name Service.

Secondary WINS Server IP Address

This field specifies the IP address of the secondary WINS server. It is used as a backup to the Primary WINS server address. If the Primary server is unavailable, the machine still can register itself with a secondary server. If set to a non-zero value, the machine will contact this server to register its name with the Windows[®] Internet Name Service. If you have a primary WINS server, but no secondary WINS server, simply leave this field blank.

1 - 7 CONTROL PANEL SETUP

DNS Server

- 1 Press Menu/Set, 5, 1, 8 for MFC-3340CN/MFC-5840CN. (4, 1, 8 for FAX-1940CN/MFC-5440CN)
- **2** Press ▲ or ▼ to select Primary or Secondary.
- 3 Press Menu/Set.
- 4 Enter the DNS Server address.
- 5 Press Menu/Set.
- 6 Press Stop/Exit.

Primary DNS Server IP Address

This field specifies the IP address of the primary DNS (Domain Name Service) server.

Secondary DNS Server IP Address

This field specifies the IP address of the secondary DNS server. It is used as a backup to the Primary DNS server address. If the Primary server is unavailable, the machine will contact the Secondary DNS server.

APIPA

When this (default) setting is On the print server will automatically allocate a Link-Local IP address in the range (169.254.1.0 - 169.254.254.255) when the print/fax server cannot obtain an IP address through the BOOT Method you have set (**Menu/Set**, **5**, **1**, **1** for **MFC-3340CN/MFC-5440CN** or **4**,**1**,**1** for **FAX-1940CN/MFC-5840CN**). When this setting is Off the IP address will not change, when the print/fax server cannot obtain an IP address through the BOOT Method you have set

- 1 Press Menu/Set, 5, 1, 9 for MFC-3340CN/MFC-5840CN. (4, 1, 9 for FAX-1940CN/MFC-5440CN)
- 2 Press ▲ or ▼ to select On or Off.
- 3 Press Menu/Set.
- 4 Press Stop/Exit.

Setup Internet

This menu has five selections: Mail Address, SMTP Server, POP3 Server, Mailbox Name and Mailbox Pwd.

E-Mail Address

This field specifies the E-mail address of the device. For example: "brotherMFC@yourdomainname.com".

- Press Menu/Set, 5, 2, 1 for MFC-3340CN/MFC-5840CN. (4, 2, 1 for FAX-1940CN/MFC-5440CN)
- 2 Select 1. Change and enter the mail address. Press Menu/ Set. (See Entering text on page 1-11.)
- 3 Press Stop/Exit.

SMTP Server

This field displays the Host Name (up to 30 characters) or IP address of an SMTP mail server (outgoing E-mail Server) on your network. (Ex, mailhost.brothermail.net -or- 192.000.000.001)

- Press Menu/Set, 5, 2, 2 for MFC-3340CN/MFC-5840CN. (4, 2, 2 for FAX-1940CN/MFC-5440CN)
- **2** Press \blacktriangle or \forall to select Name or IP Address.
- 3 Enter the host name or IP address for SMTP Server. (See *Entering text* on page 1-11.)
- 4 Press Menu/Set.
- 5 Press Stop/Exit.

POP3 Server

This field displays the Host Name (up to 30 characters) or IP address of the POP3 server (incoming E-mail server) used by the Brother machine. This address is necessary for the Internet Fax features to function correctly.

(Ex, mailhost.brothermail.net -or- 192.000.000.001)

1 - 9 CONTROL PANEL SETUP

Press Menu/Set, 5, 2, 3 for MFC-3340CN/MFC-5840CN. (4, 2, 3 for FAX-1940CN/MFC-5440CN)

- **2** Press \blacktriangle or \triangledown to select Name or IP Address.
- 3 Enter the host name or IP address for POP3 Server. (See *Entering text* on page 1-11.)
- 4 Press Menu/Set.
- 5 Press Stop/Exit.

Mailbox Name

- Press Menu/Set, 5, 2, 4 for MFC-3340CN/MFC-5840CN. (4, 2, 4 for FAX-1940CN/MFC-5440CN)
- Enter the user account name (up to 20 characters) assigned to the Brother machine to login to the POP3 Server. (See *Entering text* on page 1-11.)



- This is the portion of e-mail address before the @. For example: If the e-mail address is jsmith@brother.uk, the mailbox name is jsmith.
- 3 Press Menu/Set.
- 4 Press Stop/Exit.

Mailbox Pwd

- Press Menu/Set, 5, 2, 5 for MFC-3340CN/MFC-5840CN. (4, 2, 5 for FAX-1940CN/MFC-5440CN)
- 2 Enter the user password assigned to the machine to login to the POP3 Server. Please note that this password is case sensitive. (See *Entering text* on page 1-11.)
- 3 Press Menu/Set.
- 4 Press **Menu/Set** again to verify the password.
- 5 Press Stop/Exit.

Entering text

You can access the character you want by pressing the appropriate number key repeatedly.

Key	Once	Twice	Three times	Four times
1	@		/	1
2	А	В	С	2
3	D	E	F	3
4	G	н	I	4
5	J	К	L	5
6	М	Ν	0	6
7	Р	Q	R	S
8	т	U	V	8
9	W	Х	Y	Z

To change the mode between upper case and lower case for entering the E-mail / I-Fax address press **Shift** (FAX-1940CN/MFC-3340CN) or **Search/Speed Dial** (MFC-5440CN/MFC-5840CN) and 3.

Making corrections:

If you entered a letter incorrectly and want to change it, press () to move the cursor under the incorrect character. Then press **Stop/Exit**. The letter above the cursor will be deleted. Re-enter the correct character.

Repeating letters:

If you need to enter a character assigned to the same key as the previous character, press nove the cursor to the right.

As you enter the E-mail address, it will appear character by character on the LCD panel.

If you specify more than 16 characters, the LCD panel will scroll the name to the left, character by character. You can enter up to 60 characters.

Setup Mail RX (Receive)

This menu has five selections: Auto Polling, Poll Frequency, Header, Del Error Mail and Notification.

Auto Polling

When set to On the machine automatically will check the POP3 server for new messages (default is On). "No Mail" will be displayed if there are no E-mail messages when the POP3 server is polled.

- 1 Press Menu/Set, 5, 3, 1 for MFC-3340CN/MFC-5840CN. (4, 3, 1 for FAX-1940CN/MFC-5440CN)
- 2 Press ▲ or ▼ to select On or Off.
- 3 Press Menu/Set.
- 4 Press Stop/Exit.

Poll Frequency

Sets the interval for checking for new messages on the POP3 server (default is 10Min).

- Press Menu/Set, 5, 3, 2 for MFC-3340CN/MFC-5840CN. (4, 3, 2 for FAX-1940CN/MFC-5440CN)
- 2 Enter the polling frequency. (01 to 60 Min)
- 3 Press Menu/Set.
- 4 Press Stop/Exit.

Header

This selection allows the contents of the mail header to be printed when the received message is printed (Subject+From+To Or All or None). The default is None, the text mail is not printed at all.

- 1 Press Menu/Set, 5, 3, 3 for MFC-3340CN/MFC-5840CN. (4, 3, 3 for FAX-1940CN/MFC-5440CN)
- 2 Press ▲ or ▼ to select All or Subject+From+To or None.
- 3 Press Menu/Set.
- 4 Press Stop/Exit.

Del Error Mail

When set to On, the machine automatically deletes error mails that the machine cannot receive from the POP server (default is On).

- Press Menu/Set, 5, 3, 4 for MFC-3340CN/MFC-5840CN. (4, 3, 4 for FAX-1940CN/MFC-5440CN)
- 2 Press ▲ or ▼ to select On or Off.
- 3 Press Menu/Set.
- 4 Press Stop/Exit.

Notification

Notification feature allows a receive notification message to be transmitted to the sending station to indicate successful reception of the I-Fax.

When set to On, the machine sends notification mail to all I-Fax machines. With the setting of MDN, the machine only sends an E-mail to I-Fax that supports the "MDN" specification (default is Off).

Press Menu/Set, 5, 3, 5 for MFC-3340CN/MFC-5840CN. (4, 3, 5 for FAX-1940CN/MFC-5440CN)

2 Press ▲ or ▼ to select On or MDN or Off.

- 3 Press Menu/Set.
- 4 Press Stop/Exit.

This menu has three selections: **Sender Subject**, **Size Limit** and **Notification**.

Sender Subject

This field displays the subject that is attached to the Internet Fax data being sent from the Brother machine to a PC (default is "Internet Fax Job").

- 1 Press Menu/Set, 5, 4, 1 for MFC-3340CN/MFC-5840CN. (4, 4, 1 for FAX-1940CN/MFC-5440CN)
- 2 Select 1 to change the Sender Subject—OR—2 to exit.
- 3 Enter the subject information (up to 40 characters).
- 4 Press Menu/Set.
- 5 Press Stop/Exit.

Size Limit

Some E-mail servers do not allow you to send large E-mail documents. The machine may display Out of Memory when trying to send E-mail documents (the System Administrator will often place a limit on the maximum E-mail size). With this function enabled, the machine will display Out of Memory when trying to send E-mail documents over 1Mbyte in size. The document will not be sent and an error report will be printed. The document you are sending should be separated into smaller documents that will be accepted by the mail server (default is Off). (Ex. A 42 page document of the ITU-T Test Chart#1 test chart is approximately 1Mbyte in size).

1 Press Menu/Set, 5, 4, 2 for MFC-3340CN/MFC-5840CN. (4, 4, 2 for FAX-1940CN/MFC-5440CN)

- 2 Press ▲ or ▼ to select On or Off.
- 3 Press Menu/Set.
- 4 Press Stop/Exit.

Notification

Notification feature when switched to On sends two fields of data in addition to the image data which requests a notification from the receiving station for successful reception. The receiving I-Fax station must support the MDN standard in order to be able to understand the request and consequently submit a notification message confirming successful receipt of the I-Fax (default is Off).

- 1 Press Menu/Set, 5, 4, 3 for MFC-3340CN/MFC-5840CN. (4, 4, 3 for FAX-1940CN/MFC-5440CN)
- 2 Press ▲ or ▼ to select On or Off.
- 3 Press Menu/Set.
- 4 Press Stop/Exit.

Setup Relay

This menu has three selections: **Rly Broadcast**, **Relay Domain** and **Relay Report**. For details on Relay Broadcasting refer to 2-7.

Rly Broadcast

This function allows the machine to receive a document over the Internet, and then relay it to other fax machines through conventional analog landlines (default is Off).

- 1 Press Menu/Set, 5, 5, 1 for MFC-3340CN/MFC-5840CN. (4, 5, 1 for FAX-1940CN/MFC-5440CN)
- 2 Press ▲ or ▼ to select On or Off.
- 3 Press Menu/Set.
- 4 Press Stop/Exit.

Relay Domain

You can register the Domain Names (Max.5) that are allowed to request a Relay Broadcast.

- 1 Press Menu/Set, 5, 5, 2 for MFC-3340CN/MFC-5840CN. (4, 5, 2 for FAX-1940CN/MFC-5440CN)
- 2 Press \blacktriangle or \checkmark to select the Relay Domain (01 05).
- 3 Press Menu/Set.
- 4 Enter the Relay Domain name for the Domain that is being allowed to request a Relay Broadcast (up to 30 characters).
- 5 Press Menu/Set.
- 6 Press Stop/Exit.

Relay Report

A Relay Broadcast Report can be printed by the machine used as the Relay Station for all Relay Broadcasts. Also, when the machine is used with the Brother Internet Fax Printing Software (BFP), the machine is acting as a Relay Station for fax transmissions from the network so a Relay Report can also be printed for confirmation of sent network faxes. (For US / Canada only)

Its primary function is to print reports of Relay Broadcasts from external sources through the machine. Please note that Relay Broadcast is not possible without the Relaying Station providing permission in the form of a Relay Domain.

- 1 Press Menu/Set, 5, 5, 3 for MFC-3340CN/MFC-5840CN. (4, 5, 3 for FAX-1940CN/MFC-5440CN)
- **2** Press \blacktriangle or \lor to select On or Off.
- 3 Press Menu/Set.
- 4 Press Stop/Exit.

Ethernet

Ethernet link mode. Auto allows the print server to operate in 100BaseTX full or half duplex, or in 10BaseT half duplex mode by auto negotiation.

100BaseTX Full Duplex (100B-FD) or Half Duplex (100B-HD) and 10BaseT Full Duplex (10B-FD) or Half Duplex (10B-HD) fix the print server link mode. This change is valid after the print server has been reset (default is Auto).



If you incorrectly set this value, you may not be able to communicate with your print server.

- Press Menu/Set, 5, 6, 1 for MFC-3340CN/MFC-5840CN. (4, 6, 1 for FAX-1940CN/MFC-5440CN)
- 2 Press ▲ or ▼ to select Auto/100B-FD/100B-HD/ 10B-FD/10B-HD.
- 3 Press Menu/Set.
- 4 Press Stop/Exit.

Time Zone

This field displays the time zone you can set for your country. The time is the difference between your location and Greenwich Mean Time. This time will be shown on documents received via the Internet. For example the Time Zone for Eastern Time in the USA and Canada is GMT-05:00.

- 1 Press Menu/Set, 5, 6, 2 for MFC-3340CN/MFC-5840CN. (4, 6, 2 for FAX-1940CN/MFC-5440CN)
- 2 Press \blacktriangle or \blacktriangledown to enter the time.
- 3 Press Menu/Set.
- 4 Press Stop/Exit.

Windows[®] Time Zone Setting

You can determine the time difference for you location by using the Time Zone setting in Windows[®].

- 1 Click on Start.
- 2 Select Settings / Control Panel.
- 3 Double click on Date/Time.
- 4 Select Time Zone.

Verify your time zone setting from the pull-down menu (this menu displays the time difference from GMT).

Setup I-FAX

Black and White File Type

You can select the default black and white file type for Scan to E-mail (E-mail server) function (default is TIFF).

- Press Menu/Set, 5, 7, 1 for MFC-3340CN/MFC-5840CN. (4, 7, 1 for FAX-1940CN/MFC-5440CN)
- **2** Press \blacktriangle or \triangledown to select TIFF or PDF.
- 3 Press Menu/Set.
- 4 Press Stop/Exit.

Color File Type

You can select the default color file type for Scan to E-mail (E-mail server) function (default is JPEG).

- Press Menu/Set, 5, 7, 2 for MFC-3340CN/MFC-5840CN. (4, 7, 2 for FAX-1940CN/MFC-5440CN)
- **2** Press \blacktriangle or \checkmark to select PDF or JPEG.
- 3 Press Menu/Set.
- 4 Press Stop/Exit.

This feature prints a report listing all the current network Print / Fax Server Settings.

- 1 Press Menu/Set, 6, 6 for MFC-3340CN/MFC-5840CN. Press Report, press ▲ or ▼, select Network Config, press Menu/Set for FAX-1940CN/MFC-5440CN.
- 2 Press Black Start or Color Start.

Restoring the Network Settings to Factory Default

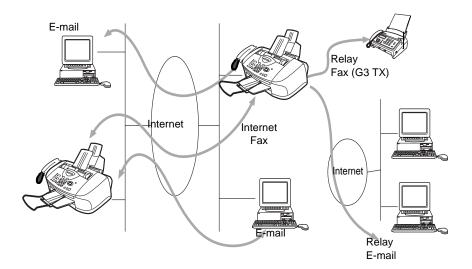
To restore all network settings of the internal Print/Scan server to factory default, please follow the steps below.

- 1 Make sure the machine is not operating, then disconnect all the cables from the machine (except power cable).
- 2 Press Menu/Set, 5, 0 for MFC-3340CN/MFC-5840CN. (4, 0 for FAX-1940CN/MFC-5440CN)
- **3** Press 1 to select Reset.
- 4 Press 1 to select Yes.
- **5** The machine will re-start, re-connect cables once this is complete.



Overview

Internet Faxing (I-FAX) allows you to send and receive FAX documents using the Internet as the transport mechanism. Documents are transmitted in E-mail messages as attached TIFF-F or JPEG files. This means that PC's are also able to receive and send documents, providing that the PC has as an application that can generate and view TIFF-F or JPEG files, you can use Microsoft[®] Imaging or a TIFF-F or JPEG viewer application. Any documents sent via the machine will automatically be converted into a TIFF-F or JPEG format. If you wish to send and receive messages to and from your machine, your mail application on the PC must be able to support the MIME format.



Getting Connected

Before sending or receiving an Internet Fax you must configure your Brother machine to communicate with your network and mail server. You must ensure the following: a correctly configured IP address for your machine, an E-mail address for your machine, the mail server(s) IP address, mailbox name and password for your Brother machine. If you are unsure of any of these items, please contact your network administrator.

Control Panel Key Functions

Shift + 1 (For FAX-1940CN/MFC-3340CN) Search/Speed Dial + 1 (For MFC-5440CN/MFC-5840CN)

Used to change input mode, so you can use the Dial Pad keys as Standard alphabet character keys.

Dial Pad

Used to enter Standard Alpha characters (26 letters), as well as @ . space ! " # % & ' () + / : ; < > = ? [] ^ - \$, *, _ and Numbers.

Shift + 3 (For FAX-1940CN/MFC-3340CN) Search/Speed Dial + 3 (For MFC-5440CN/MFC-5840CN)

To change between upper case and lower case for entering the Email / I-Fax address.



Moves the LCD cursor to the left or right when you enter texts.

Menu/Set

Used to store numbers and addresses.

Black Start or Color Start

Begins transmitting the document.

Stop/Exit

Deletes entered data and stops the scanning or transmitting process.

One-Touch (FAX-1940CN/MFC-3340CN only) / Speed-Dial / Group Dial

These functions work the same way as with conventional machine's.

However, please note that you cannot use chain dialling for E-mail addresses.

2 - 2 INTERNET FAX

Shift + Black Start or Color Start (For FAX-1940CN/MFC-3340CN) Search/Speed Dial + Black Start or Color Start (For MFC-5440CN/MFC-5840CN) Used to receive E-mail from the POP3 server manually.

Sending an Internet Fax

Sending an Internet Fax is the same as sending a normal Fax only using the Internet instead of phonelines.

If you have already programmed the addresses of the Internet Fax receivers into the machine as Speed-Dial or One-Touch dial locations, you can send the Internet Fax by loading the document into the machine, use the Fax Resolution key to set the preferred resolution and select a Speed-Dial or One-Touch dial number and pressing Black Start or Color Start.

This will differ depending on the whether your machine contains Speed-Dial or One-Touch dial keys or includes Navigator Keys.

If you wish to manually enter the Internet Fax Address load the document into the machine and press **Shift** (For **FAX-1940CN**/ **MFC-3340CN**) or **Search/Speed Dial** (For **MFC-5440CN/MFC-5840CN**) and **1** simultaneously to change into the "alphabet" dialling mode.

Please refer to the following section on how to manually enter the Internet Fax address.

If you specify more than 16 characters, the LCD panel will scroll the name to the left character by character. You can enter up to 60 characters.

1 Press Black Start or Color Start to send the document.

After the document is scanned, it is transmitted to the Recipient Internet Fax Machine automatically via your SMTP server. You can cancel the send operation by pressing the **Stop/Exit** button during scanning. After the transmission is finished, the machine will return to standby mode.

Some E-mail servers do not allow you to send large E-mail documents (the System Administrator will often place a limit on the maximum E-mail size). You can enable the Limit Size of the Sent Mail feature. The machine will display Out of Memory when trying to send E-mail documents over 1Mbyte in size. The document will not be sent and an error report will be printed. The document you are sending should be separated into smaller documents that will be accepted by the mail server. You can turn on this feature through the LAN function menu. (See *chapter 1* for details)

Manually Entering Text

Press Shift (For FAX-1940CN/MFC-3340CN) or Search/Speed Dial (For MFC-5440CN/MFC-5840CN) and 1 simultaneously to change into the "alphabet" dialling mode.

You can now use the Dial Pad to dial the E-mail address. Refer to the following table: Most number keys have three or four letters printed above them. The 0, #, * keys do not have printed letters because they are used for special characters.

By pressing the appropriate number key the correct number of times, you can access the character you want.

Key	Once	Twice	Three times	Four times
1	@		/	1
2	А	В	С	2
3	D	E	F	3
4	G	н	I	4
5	J	К	L	5
6	М	Ν	0	6
7	Р	Q	R	S
8	Т	U	V	8
9	W	Х	Y	Z

2 - 4 INTERNET FAX

To change the mode between upper case and lower case, press Shift (FAX-1940CN/MFC-3340CN) or Search/Speed Dial (MFC-5440CN/MFC-5840CN) and 3.

If you want to enter a blank space, press \bigcirc twice.

If you specify more than 16 characters, the LCD panel will scroll the name to the left character by character. You can enter up to 60 characters.

Making corrections:

If you entered a letter incorrectly and want to change it, press () to move the cursor under the incorrect character. Then press **Stop/Exit.** The letter above the cursor will be deleted. Re-enter the correct character.

Repeating letters:

If you need to enter a character assigned to the same key as the previous character, press b to move the cursor to the right.

Special characters and symbols

Press * for	(space) ! " # \$ % & ' () * + , / €
Press # for	:;<=>?@[]^_
Press Ø for	ÉÀÈÊÎÇËÖ0 (For US and Canada users)
	Ä Ë Ö Ü À Ç È E 0 (For other users)

As you enter the Internet Fax address, it will appear character by character on the LCD panel.

Receiving E-mail or Internet Fax

There are 2 ways you can receive E-mail messages:

POP3 receiving at regular intervals

POP3 receiving (manually initiated)

Using POP3 receiving the machine must poll the E-mail server to receive the print jobs. This polling can occur at set intervals (for example, you can configure the machine to poll the E-mail server at 10 minute intervals) or you can manually poll the server by pressing the Shift (FAX-1940CN/MFC-3340CN) or Search/Speed Dial (MFC-5440CN/MFC-5840CN) + Black Start or Color Start button.

If your machine starts to receive E-mail print jobs, the LCD panel will reflect this activity. For example, you will see Receiving on the LCD panel followed by "xx E-mail(s)". If you press the Shift (FAX-1940CN/MFC-3340CN) or Search/Speed Dial (MFC-5440CN/MFC-5840CN) + Black Start or Color Start buttons to manually poll the E-mail server for E-mail print jobs. If there are no mail documents waiting to be printed, the machine will display No Mail on the LCD panel for two seconds.

If your machine is out of paper when receiving data, the received data will be held in the machine's memory. This data will be printed automatically after paper is re-inserted into the machine. (For European, Asian and Oceanian machines, Memory receive must be switched "ON".)

If the received mail is not in a plain text format or an attached file is not in the TIFF-F or JPEG format, the following error message will be printed: "ATTACHED FILE FORMAT NOT SUPPORTED. FILE NAME:XXXXX.doc" If the received mail is too large, the following error message will be printed: "E-MAIL FILE TOO LARGE." If "Del Error Mail" is "ON" (default) then error mail is automatically deleted from the E-mail Server.

Receiving an Internet Fax to a PC

When a PC receives an Internet Fax document, the document is attached to a mail message that informs the PC that it is receiving a document from an Internet Fax. This is notified in the Subject field of the received mail message. If the PC to which you wish to send a document is not running Windows[®] 98/98SE/Me or Windows[®] 2000/XP operating system, please inform the PC's owner that software must be downloaded for documents in the TIFF-F or JPEG format to be viewed.

You can use "Microsoft[®] Imaging" that is supplied with Windows[®] 98/Me or Windows[®] 2000/XP.

Forwarding Received E-mail and Fax Messages

You can forward received E-mail or standard fax messages to another E-mail address or fax machine. Received messages can be forwarded via E-mail to a PC or Internet Fax. They can also be forwarded via standard phone lines to another machine.

Please see your machine's User's Guide to check that this feature is supported. This function is not available for color fax documents.

This can be done through the control panel. The steps for configuring Fax Forward can be found in the User's Guide supplied with your machine.

Relay Broadcasting

This function allows the Brother machine to receive a document over the Internet, and then relay it to other fax machines through conventional telephone lines.

If you wish to use your machine as a relay broadcast device, you must specify the domain name that you trust at the machine, in other words, the portion of the domain after the '@' sign.

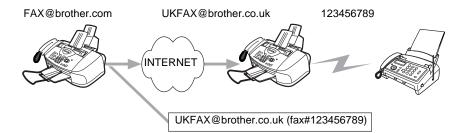
A trusted domain refers to the E-mail address. For example, if the other party's address is bob@brother.com, then we identify the domain as brother.com. If the E-mail address is jack@brother.co.uk, then we identify the domain as brother.co.uk.

Use carefully in selecting a trusted domain since any user on a trusted domain will be able to send a Relay Broadcast. You can register up to 5 domain names.

Relay Broadcast can support the relay of a document up to a maximum of 48 fax machines through conventional telephone lines. If you try to send a document to over 48 machines, the following error message will be printed: "Relay Error".

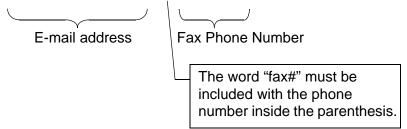
Relay Broadcasting does not support the relay of color files types.

Relay Broadcast from a machine



Your machine has an E-mail address of FAX@brother.com, when you wish to send a document from this machine to another machine in England with an E-mail address of UKFAX@brother.co.uk, this machine will then forward the document to a standard fax machine using a conventional telephone line. If your E-mail address is FAX@brother.com, you must configure a trusted domain name of brother.com on the machine in England that will broadcast the document to the conventional fax machine. If you do not enter the domain name information, then the machine in the middle (the machine that will broadcast the document) will not trust any internet jobs that it receives from the machine in the @brother.com domain. After the trusted domain is set you can send the document from your machine [I.E. FAX@brother.com] by entering the E-mail address of the machine [I.E. UKFAX@brother.co.uk] that will forward the document followed by the phone number of the fax that will receive the document. The following is an example of how to enter the E-mail address and phone number.

UKFAX@brother.co.uk(fax#123456789)



Sending to multiple phone numbers:

If you want to have the document relayed to more than one standard fax machine the address can be entered using the following method:

- 1 Enter the phone number of the first Fax machine UKFAX@brother.co.uk(Fax#123).
- 2 Press the "Set" key.
- 3 Enter the phone number of the second Fax machine UKFAX@brother.co.uk(Fax#456).
- 4 Press Black Start.

TX Verification Mail

Transmission Verification Mail supports two separate functions. Verification Mail for sending allows you request notification from the receiving station that the I-Fax or E-mail was received and processed. Verification Mail for receiving allows you to transmit a default report back to the sending station after successfully receiving and processing an I-Fax or E-mail.

To use this feature you must set the "Notification" option within the "Setup Mail RX" and "Setup Mail TX" options.

Setup Mail (TX)

You can set the "Notification" option in the "Setup Mail TX" option to either On or Off. When switched to On an additional field of information is sent with the image data. This field is named "MDN".

MDN

Mail Disposition Notification - This field requests the status of the I-Fax / E-mail message after delivery through the SMTP (simple mail transfer protocol) transport system. Once the message has arrived at the Receiving station this data is used when the machine or user reads or prints the received I-Fax or E-mail. For example, if the message is opened for reading or is printed the receiving station sends back a notification to the original sending machine or user.

The receiving station must support the MDN field in order to be able to send a notification report, otherwise the request will be ignored.

Setup Mail (RX)

There are three possible settings for this option On/MDN/Off. **Receive Notification "On"**

When switched to "On" a fixed message is sent back to the sending station to indicate successful reception and processing of the message. These fixed messages depend on the operation requested by the sending station.

Report messages consist of

SUCCESS : Received From <mail address>

Receive Notification "MDN"

When switched to "MDN" a report as described above is sent back to the sending station if the originating station sent the "MDN" field to request confirmation.

Receive Notification "Off"

Off - Switches all forms of receive notification Off, no messages are send back to the sending station regardless of the request.

If there is a mail delivery error while sending an Internet Fax, the mail server will send an error message back to the machine and the error message will be printed. If there is an error while receiving a mail attachment, an error message will be printed (Example: ATTACHED FILE FORMAT NOT SUPPORTED.").

Important information on Internet Fax

Internet Fax Communication on a LAN system is basically the same as communication via E-mail; however, it is different from Fax communication using standard phone lines. The following is important information for using Internet Fax:

- Factors such as the receiver's location, structure of the LAN system, and how busy the network is, may cause the system to take a long time to send back an error mail. (normally 20 sec to 30 sec).
- In the case of transmission through the Internet, due to its low level of security, we recommend that you use standard phone lines to send confidential documents.
- If the receiver's mail system is not compatible with the MIME format, you cannot transmit a document to the receiver. Depending on receiver's server, there may be some cases in which the error mail will not be sent back.
- If the size of a document's image data is huge, there is a possibility of unsuccessful transmission.
- You cannot change font and character size of Internet mail that you received.

3 Configuring Internet

Printing for Windows[®] Internet Printing Installation

Overview

Our Brother Internet Print (BIP) software, for Windows[®] 98/Me, allows a PC user at one location to send a print job to a Brother Printer at a remote location via the Internet. For example, a user on a PC in New York could print a document directly from his Microsoft Excel application program to a printer in Paris.

Quick Tips:

- 1 The Automatic Private IP Addressing (APIPA) protocol automatically assigns an IP address from the range: 169.254.1.0 to 169.254.254.255. If you want to disable the APIPA protocol, set APIPA to Off using control panel. For more information see page 1-8. If the APIPA protocol is disabled, the default IP address of a Brother Print/Fax server is 192.0.0.192. To change it, use the machine's control panel, the BRAdmin Professional utility software or let your DHCP server allocate an IP address to the machine.
- 2 Refer to *chapter 1* of this user guide to learn how to configure the IP address on your machine.
- 3 The default password for Brother Print/Fax servers is access.
- 4 Windows[®] 2000/XP users can print using TCP/IP using the standard Network Printing software.

Brother Internet Print General Information

The BIP software is installed using a standard Windows[®] 98/Me/ 2000/XP Installation Wizard. It creates a virtual port on the Windows[®] 98/Me/2000/XP PC that operates in a similar way to the standard LPT1 printer port from the application program point of view. The user can use the Windows[®] 98/Me/2000/XP Print Manager to create a printer that uses this port along with a standard Windows[®] 98/Me, 2000/XP-compatible machine. Any Windows[®] 98/Me/2000/ XP applications program can therefore print to this machine (and hence to the virtual port) without modification or operational procedure.

When a job is printed to the BIP virtual port, it is actually MIMEencoded (converted to a standard Internet E-mail message) and sent out to a Brother Print/Fax server at the remote location. This means that BIP is compatible with most common E-mail software packages. The only requirement is that the E-mail server be capable of sending E-mail message over the Internet.

In more detail, the procedure works in the following way:

- If you are connected to a Local Area Network, the E-mail message is passed to the E-mail server, which in turn transmits the message out over the Internet using the SMTP protocol (Simple Mail Transport Protocol) to the remote Print/Fax server.
- If you are connecting via a modem directly to an Internet Service Provider (ISP), the ISP handles the routing of the E-mail to the remote Print/Fax server.
- At the remote site, an E-mail server receives the E-mail message. The remote Print/Fax server, which has its own E-mail address, uses the POP3 protocol (Post Office Protocol 3) to download the E-mail message from the E-mail server. It then decodes the attachment and prints it out on the machine.



If an E-mail is received that has not been configured to use the BIP virtual port driver, the machine will print the E-mail out as a text document. The Print/Fax server can be configured using BRAdmin Professional utility.

Print Server Configuration Checklist

- Before configuring the print server to receive BIP jobs, be sure that the E-mail server at the remote site (the receiving end) is configured to handle the TCP/IP POP3, and SMTP protocols (SMTP is only required if the notification feature is enabled).
 - 1 Configure the POP3 server on the E-mail server at the remote site with a mail account (Mailbox name) and password for the Brother Print/Fax server (generally, the mail account name will be the first part of the Email address; for example, if you assign the E-mail address emailprinter@xyz.com, then the mail account name would be emailprinter).
- 2 Make sure that the Print/Fax server is installed and running with TCP/IP enabled and has a valid IP address assigned to it.

Because access to the E-mail server on most networks is usually restricted, you may need to have your network administrator check the configuration and add the mail account.



Using the BRAdmin Professional utility, you can configure the Brother print server using the TCP/IP protocol.

The steps required to configure the Print/Fax server to receive print jobs from a Windows[®] 98/Me/2000/XP. PC running the BIP software is as follows:

- 1 Start BRAdmin Professional utility.
- 2 Select the node name of the desired Brother Print/Fax server from the list and double click on it. (the default node name is usually BRN_XXXXX, where XXXXX is the last six digits of the Ethernet address (MAC address)). You will be prompted for a password; the default password is access.
- You can find the node name and MAC address by printing out the machine configuration page. Refer to this user's guide *chapter 3* for information on how to print the configuration page on your Print/Fax server.
 - 3 Click on the **POP3/SMTP** tab.
 - 4 Enter the address of the POP3 server (consult your network administrator if you do not know this address).
 - 5 Enter the mailbox name for the remote Brother Print/Fax server. Usually this will be the first part of the E-mail address (for example, if the E-mail address of the print server is emailprinter@xyz, then the mailbox name would be emailprinter).
- 6 Enter the password for the mailbox, if any.
- 7 The Print/Fax server is configured by default to poll the POP3 server every 30 seconds. You may change this value, if desired.

- 8 If you have enabled notification, enter the address of your SMTP server (consult your network administrator if you do not know this address).
- 9 Press the OK button and save the changes. Now exit the BRAdmin Professional utility. You have now configured the Print/Fax server to receive print jobs.

Brother Internet Print Installing the BIP software on Windows[®] 98/Me/2000/XP

To install the BIP software on a Windows[®] 98/Me/2000/XP PC, execute the following steps:



- Be sure that the PC is running an E-mail program (for example, Microsoft Outlook) that is capable of sending E-mail message using Winsock.
 - Be sure that your E-mail server is capable of sending messages across the Internet.

Setup from CD-ROM

- 1 Start the CD-ROM installation menu program according to the Quick Setup Guide.
- 2 Select the proper model and Software Installation menu. Then select the Network Print Software menu to start the Brother Network Print Software installation program.
- 3 Push the **Next** button in response to the Welcome message.
- 4 Select the Brother Internet Print button.
- 5 Select the desired directory to install the BIP files and then push Next. The installation program will create the directory for you if it does not already exist.
- 6 You will then be asked for a port name. Enter the name of the port. The port name must begin with the BIP and end with a number, for example, BIP1.

- 7 You will then see a message about **Partial E-mail Print**. Partial E-mail Print is the ability of the Brother Internet Print software to break down E-mail Print jobs into smaller sections to prevent a mail file size limitation problem for the mail server.
- 8 Press **OK** to continue.
- 9 You will then be asked to enter the port settings for the remote Print/Fax server:

Enter any unique legal Internet E-mail address for the remote Print/Fax server (for example emailprinter@xyz.com). Note that Internet E-mail addresses cannot have spaces in them.

Enter your E-mail address and the IP address of your SMTP E-mail server (consult your network administrator if you do not know this address). Also specify if you are going to use the **Partial E-mail Print** option and the **Notification** type.

- 10 Press **OK** to continue. You will then be asked to re-start your computer.
- 11 Once your computer has re-started you must create a printer on your Windows[®] 98/Me/2000/XP system using the standard Windows[®] 98/Me/2000/XP printer setup procedure. To do this, go the Start button, select Settings and then Printers (Windows[®] 98/Me/2000/XP). To do this, go to the Control Panel, select Printers and Other Hardware and then Printers and Faxes (or Add a printer)(Windows[®] XP)
- 12 Select Add Printer to begin the printer installation.
- 13 Click Next when you get the Add Printer Wizard window.

<For Windows[®] 98/Me users>

14 Select Local Printer when you are asked how the printers are connected to your computer and push **Next**.

<For Windows[®] 2000/XP users>

14 Select Local Printer, and then delete the check mark in Plug and Play check box.

<For Windows[®] XP users>

14 Select Local Printer attached to this computer.

<For Windows[®] 98/Me users>

- 15 Select the desired model of the remote printer or MFC (for example, Brother MFC-series). If necessary, click Have Disk to load the driver from the CD-ROM. Click Next when you are done.
- 16 If you have selected a printer driver that is already being used, you have the option of either keeping the existing driver (recommended) or replacing it. Select the desired option and press Next.
- 17 Select the Brother Internet port (BIP...) which you selected in step 6 and press Next.

<For Windows[®] 2000/XP users>

- **15** Select the **Brother Internet port** (BIP...) which you selected in step 6 and press **Next**.
- 16 Select the desired model of the remote printer or MFC (for example, Brother MFC-series). If necessary, click Have Disk to load the driver from the CD-ROM. Click Next when you are done.
- 17 If you have selected a printer driver that is already being used, you have the option of either keeping the existing driver (recommended) or replacing it. Select the desired option and press **Next**.
- 18 Enter any desired name for the BIP remote printer and press Next. Note that this name does not need to match the port name that you assigned in step 6, or E-mail address that you assigned in step 9.
- 19 Select No when asked if you want to print a test page, unless you have already configured the remote Print/Fax server to receive BIP print jobs.

You have now finished installing the BIP software. If you need to configure another remote Print/Fax server, go to the next section, "Adding a Second Brother Internet Port".

Adding a Second Brother Internet Port

You should not re-run the install program to add a new Brother Internet Port. Instead, press the **Start** button, select **Settings**, and open the **Printers** window. Click on the icon of a machine that is using BIP, select **File** from the menu bar, and then choose **Properties**. Click on the **Details** tab and push the **Add Port** button.

In the **Add Port** dialog, select the **Other** radio button (Windows[®] 98/ Me only) and then **Brother Internet Port**. Click **OK** and it will give you the **Port Name** text box. Any unique name can be given here as long as it starts with "BIP" and another port does not already exist with the same name.

Other Sources of Information

Visit Microsoft's web site for the "Microsoft Internet Print Services" software for Windows[®] 98/Me.

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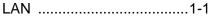
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