Please read this manual thoroughly before using this machine on your network. You can print or view this manual from the CD-ROM at any time, please keep the CD-ROM in a convenient place for quick and easy reference at all times.

The Brother Solutions Center (http://solutions.brother.com) is your one stop resource for all your printing needs. Download the latest drivers and utilities for your machine, read FAQs and troubleshooting tips.
Definitions of warnings, cautions, and notes

We use the following icon throughout this User’s Guide:

Notes tell you how you should respond to a situation that may arise or give tips about how the operation works with other features.

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In Canada 1-877-BROTHER

In Europe Visit http://www.brother.com for contact information on your local Brother office.

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http://solutions.brother.com
(In USA Only) For Brother Accessories & Supplies: http://www.brothermall.com
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Overview

The Brother machine can be shared on a 10/100 MB wired Ethernet network using the internal network print server. The print server supports various functions and methods of connection depending on the operating system you are running on a network supporting TCP/IP. These functions include printing, scanning, PC-FAX send, and Status Monitor. The following chart shows what network features and connections are supported by each operating system.

<table>
<thead>
<tr>
<th>Operating Systems</th>
<th>10/100 BASE-TX Wired Ethernet (TCP/IP)</th>
<th>Printing</th>
<th>Scanning</th>
<th>PC-Fax Send</th>
<th>Status Monitor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Windows® 98/98SE/Me/2000/XP</td>
<td>√</td>
<td>√</td>
<td>√</td>
<td>√</td>
<td>√</td>
</tr>
<tr>
<td>Windows NT® 4.0</td>
<td>√</td>
<td>√</td>
<td></td>
<td>√</td>
<td>√</td>
</tr>
<tr>
<td>Mac OS® X 10.2.4 or greater</td>
<td>√</td>
<td>√</td>
<td></td>
<td>√</td>
<td>√</td>
</tr>
<tr>
<td>Mac OS® 9.1-9.2</td>
<td>√</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

To use the Brother machine through a network, you need to configure the print server, and set up the computers you use.

In this chapter, you will learn the basic concept of the network function, connection and protocols. In Chapter 2, you will read information on network configuration. In Chapter 3, you will learn how to configure the print server using the control panel. Chapter 4 through Chapter 6 describe how to configure your print server with your operating system:

Chapter 2: Configuring your network printer

Chapter 3: Front Panel Setup

Chapter 4: Network printing from Windows® basic TCP/IP Peer-to-Peer printing

Chapter 5: Internet printing for Windows®

Chapter 6: Network printing from a Macintosh®
Network function features

Brother MFC-9420CN has the following basic network function.

Network printing

The print server provides printing services for Windows® 98/98SE/Me/NT®/2000/XP supporting the TCP/IP protocols and Macintosh® supporting TCP/IP (Mac OS® 9.1-9.2 / Mac OS® X 10.2.4 or greater for a wired network).

Network scanning

You can scan documents over the network to your computer (See Chapter 4 for Windows® and Chapter 10 for Macintosh® of the Software User’s Guide on the CD-ROM).

Network PC-FAX

You can directly send a PC file as a PC-FAX on your network (See Chapter 6 for Windows® and Chapter 7 for Macintosh® of the Software User’s Guide on the CD-ROM for complete description).

Management utility

BRAdmin Professional (for Windows®)

The BRAdmin Professional utility provides powerful, easy to use configuration and management of fax and network settings.
Types of Network Connections

Generally speaking, there are two types of network: A Peer-to-Peer network and a shared Network.

Network Connection Example

Peer-to-Peer printing using TCP/IP

In a Peer-to-Peer environment, each computer directly sends and receives data to each device. There is no central server controlling File access or Printer sharing.

- In a smaller network of 2 or 3 computers, we recommend the Peer-to-Peer printing method as it is easier to configure than the Network Shared Printing method described on the following page. See Network Shared Printing on page 1-4.
- Each computer must use the TCP/IP Protocol.
- The Brother machine needs an appropriate IP address configuration.
- If you are using a router, the Gateway address must be configured on the computers and the Brother machine.
Network Shared Printing

In a Network Shared environment, each computer sends data via a centrally controlled computer. This type of computer is often called a “Server” or a “Print Server”. Its job is to control the printing of all print jobs.

- In a larger network, we recommend a Network Shared printing environment.
- The “Server” or the “Print Server” must use the TCP/IP Print Protocol.
- The Brother machine needs an appropriate IP address configuration unless the machine is shared via the parallel port or USB port of the server.
Protocols

TCP/IP Protocols

Protocols are the standardized sets of rules for transmitting data on a network. Protocols allow users to gain access to network-connected resources.

The print server used on this Brother product supports the TCP/IP (Transmission Control Protocol/Internet Protocol) protocols.

TCP/IP is the most popular set of protocols and can be used in almost all operating systems such as Windows®, Macintosh® and Linux.

The following TCP/IP protocols are available on this Brother product.

**DHCP/BOOTP/RARP**

By using the DHCP/BOOTP/RARP protocols, the IP address can be automatically configured.

*Note*

To use the DHCP/BOOTP/RARP protocols, please contact your Network Administrator.

**APIPA**

If you do not assign an IP address manually (using the MFL-Pro Suite Installation or BRAdmin software) or automatically (using a DHCP/BOOTP/RARP server), the Automatic Private IP Addressing (APIPA) protocol will automatically assign an IP address from the range 169.254.1.0 to 169.254.254.255.

**DNS client**

The Brother print server supports the Domain Name Service (DNS) client function. This function allows the print server to communicate with other devices by using its DNS name.

**LPR/LPD**

Commonly used printing protocol on a TCP/IP network.

**Port 9100**

Another commonly used printing protocol on a TCP/IP network.
Introduction

SMTP client

The Simple Mail Transfer Protocol (SMTP) allows the Brother machine to send and receive e-mails.

IPP

The Internet Printing Protocol (IPP Version 1.0) allows you to print documents via the internet.

mDNS

mDNS allows the Brother print server to automatically configure itself to work in a Mac OS® X Simple Network Configured system. (Mac OS® X 10.2.4 or greater).

TELNET

The Brother print server supports TELNET server for command line configuration.

SNMP

Simple Network Management Protocol (SNMP) is used to manage network devices including computers, routers and Brother network ready machines.

Web server (HTTP)

The Brother print server is equipped with a built in web server that allows you to monitor its status or change of its configuration settings.

Note

We recommend Internet Explorer 6.0 (or higher) or Netscape Navigator 7.1 (or higher). If a different web browser is used, make sure it is compatible with HTTP 1.0 and HTTP 1.1.
Configuring your network printer

Overview

Before you can use your Brother machine on your network, you need to install the Brother software and also configure the appropriate TCP/IP network settings on the machine itself. To do this, we recommend that you use the automatic installer on the Brother CD-ROM as this will guide you through the software and network installation.

If you do not wish to use the automatic installer, or you do not understand some of the terms used by the automatic installer, refer to the remainder of this chapter for more information.

Note

If you do not wish to, or are unable to use the automatic installer or any of Brother’s software tools, you can also use the machine’s control panel to change network settings. For more information, see Front Panel Setup on page 3-1.

IP addresses, subnet masks and gateways

To use the machine in a networked TCP/IP environment, you need to configure its IP address and subnet mask. The IP address you assign to the print server must be on the same logical network as your host computers. If it is not, you must properly configure the subnet mask and the gateway address.

IP address

An IP address is a series of numbers that identifies each device connected to a network. An IP address consists of four numbers separated by dots. Each number is between 0 and 255.

Example: In a small network, you would normally change the final number.

192.168.1.1, 192.168.1.2, 192.168.1.3

If you have a DHCP/BOOTP/RARP server in your network (typically a UNIX®/Linux or Windows® 2000/XP network) the print server will automatically obtain its IP address from the DHCP server.

Note

On smaller networks, the DHCP server may be the Router.
Subnet mask

Subnet masks restrict network communication.

Example: PC1 can talk to PC2

PC1 IP Address: 192.168.1.2
Subnet Mask: 255.255.255.0

PC2 IP Address: 192.168.1.3
Subnet Mask: 255.255.255.0

In the above example, we can communicate with anything that has an IP address that begins with 192.168.1.X

For more information on DHCP, BOOTP and RARP, see Using DHCP to configure the IP address on page A-1, Using BOOTP to configure the IP address on page A-2 and Using RARP to configure the IP address on page A-2.

If you do not have a DHCP/BOOTP/RARP server, the Automatic Private IP Addressing (APIPA) protocol will automatically assign an IP address from the range 169.254.1.0 to 169.254.254.255. For more information on APIPA, see Using APIPA to configure the IP address on page A-3.

If the APIPA protocol is disabled, the default IP address of a Brother print server is 192.0.0.192. However, you can easily change this IP address number to match with the IP address details of your network. For information on how to change the IP address, see Setting the IP address and subnet mask on page 2-3.
Setting the IP address and subnet mask

Using the BRAdmin Professional utility and the TCP/IP protocol to configure your network printer (for Windows® only)

BRAdmin Professional utility

The BRAdmin Professional utility is designed to allow you to manage your network connected Brother machines in a TCP/IP environment.

How to configure your machine using the BRAdmin Professional utility

Note

- Please use the BRAdmin Professional utility that was supplied on the CD-ROM of your Brother product. You can also download the latest Brother BRAdmin Professional utility from http://solutions.brother.com. This utility is only available for Windows® users.
- If you are using Personal Firewall software (e.g. the Internet Connection Firewall available in Windows® XP), disable it. Once you are sure that you can print, re-start your Personal Firewall software.
- The default password for Brother print servers is “access”.

1 Start the BRAdmin Professional utility (from Windows® 98/98SE/Me, Windows NT® 4.0 and Windows® 2000/XP), by clicking Start / Programs / Brother Administrator Utilities / Brother BRAdmin Professional Utilities / BRAdmin Professional.

2 Select TCP/IP in the left frame of the main BRAdmin window.

3 Select Search Active Devices from the Devices menu. BRAdmin Professional will search for new devices automatically.
**Note**

- If the print server is set to its factory default settings without using a DHCP/BOOTP/RARP server, the device will appear as an APIPA device in the BRAdmin Professional utility screen.
- You can find the node name and Ethernet address by printing the Network Configuration List. See *Printing the Network Configuration List* on page 3-16 for information on how to print the Network Configuration List on your print server.

4. Double-click the unconfigured device.

5. Enter the **IP address**, **Subnet Mask** and **Gateway** (if needed) of your print server.

6. Click **OK**.

7. With the correctly programmed IP address, you will see the Brother print server in the device list.

### Using a web browser to change the print/scan settings

A standard web browser (we recommend Microsoft Internet Explorer® version 6.0 or later, or Netscape Navigator® version 7.1 or later) can be used to change your print server settings using the HTTP (Hyper Text Transfer Protocol). To use a web browser, you must have assigned an IP address to the print server.

1. Type `http://printer_ip_address/` into your browser. (Where `printer_ip_address` is the IP address or the print server name)

   For example: `http://192.168.1.2/` (if the printer’s IP address is 192.168.1.2.)

   **Note**
   If you have edited the hosts file on your computer or are using Domain Name System, you can also enter the DNS name of the print server. As the print server supports TCP/IP and NetBIOS names, you can also enter the NetBIOS name of the print server. The NetBIOS name can be seen in the Network Configuration List. See *Printing the Network Configuration List* on page 3-16 for information on how to print the Network Configuration List on your print server. The NetBIOS name assigned is the first 15 characters of the node name and by default it will appear as **BRN_xxxxxx** where `xxxxxx` is the last six digits of the Ethernet address.

2. Click **Network Configuration**.

3. Enter a user name and a password. The User Name is “admin” and the default Password is “access”.

4. Click **OK**.

5. Click **Configure TCP/IP**.

6. You can now change the printer server settings.
Front Panel Setup

LAN Main Setup Menu

The control panel LAN menu section can be used to configure network settings.
Press Menu/Set, then press number, 6 for LAN and then proceed to the menu selection you wish to configure.

Please note that the machine is supplied with the BRAdmin Professional Windows® software, which also can be used to configure network settings.

Setup TCP/IP

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

BOOT Method

1. Press Menu/Set, 6, 1, 1.

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 be used. If no DHCP server is available, 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. If a BOOTP server is not available, the machine will scan for a RARP server. If a RARP server also does not answer, the machine will use an APIPA address, see Using APIPA to configure the IP address on page A-3. This whole process can take 2 to 3 minutes so we recommend printing a Network Configuration List to confirm the network settings are set correctly.
RARP mode

Brother print 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 server and the second entry is the name of the print 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 server will get the IP address from the RARP daemon when it is powered on.

BOOTP mode

BOOTP is an alternative to RARP. However, unlike RARP, it is able to configure 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 additional 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
```

Note

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 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: \n 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 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 server automatically obtains its IP address from DHCP server and register its name with any RFC 1001 and 1002-compliant dynamic name services.

**Note**
If you do not want your print server to be configured using DHCP, BOOTP or RARP, you must set the BOOT METHOD to static, this will prevent the print server from trying to obtain an IP address from any of these systems. To change the BOOT METHOD, use the control panel, Web browser or by using the BRAdmin application.

**IP Address**
This field displays the current IP address of the machine. If the BOOT Method is set to 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, RARP 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 the correct IP address settings.

1. Press **Menu/Set**, 6, 1, 2.
2. Select 1 to change. Enter the IP address.
3. Press **Menu/Set**.
4. Press **Stop/Exit**.
**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.

1. Press Menu/Set, 6, 1, 3.
2. Select 1 to change. 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, 6, 1, 4.
2. Enter the Gateway address.
3. Press Menu/Set.
4. Press Stop/Exit.

**Node Name**
You can register the machine name on the Network. This name is often referred to as a NetBIOS name; and is 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, 6, 1, 5.
2. Select 1 to change. Enter the Node Name.
3. Press Menu/Set.
4. Press Stop/Exit.
**WINS Config**
This selection controls how the machine obtains the IP address of the WINS server.

1. Press **Menu/Set**, 6, 1, 6.
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**, 6, 1, 7.
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.

**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 you have a primary WINS server, but no secondary WINS server, simply leave this field blank.
Front Panel Setup

DNS Server

1. Press **Menu/Set, 6, 1, 8**.
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 enabled, the print server will automatically allocate a IP address in the range (169.254.1.0 - 169.254.254.255) when the print server cannot obtain an IP address through the BOOT Method you have set (**Menu/Set, 6, 1, 1**). Selecting Off means the IP address doesn’t change, when the print server cannot obtain an IP address through the BOOT Method you have set.

1. Press **Menu/Set, 6, 1, 9**.
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. As this section requires you to enter a lot of text characters, you may find that it is more convenient to use your favorite web browser to configure these settings. (See Web Based Management on page 7-1. For more details about Internet Fax, see Internet FAX on page 8-1.)

Mail Address

1 Press Menu/Set, 6, 2, 1.

2 Select 1 to change. Enter the mail address. Press Menu/Set.

3 Press Stop/Exit.

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

<table>
<thead>
<tr>
<th>Key</th>
<th>Once</th>
<th>Twice</th>
<th>Three times</th>
<th>Four times</th>
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<td>9</td>
<td>W</td>
<td>X</td>
<td>Y</td>
<td>Z</td>
</tr>
</tbody>
</table>

To switch between upper and lower case, press Shift and 3.

Making corrections:

If you entered a letter incorrectly and want to change it, use ◀ or ▶ to position the cursor under the character you want to change, and then type over it.

If you want to erase the whole number or whole name, press Stop/Exit when the cursor is under the first digit or letter. The characters above and to the right of the cursor will be deleted.
Repeating letters:

If you need to repeat a character, press ▶ move 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.

SMTP Server

This field displays the Node Name or IP address of an SMTP mail server (outgoing E-mail Server) on your network.

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

1 Press Menu/Set, 6, 2, 2.

2 Press ▲ or ▼ to select Name or IP Address.

3 Enter the SMTP SERVER Address.

4 Press Menu/Set.

5 Press Stop/Exit.

POP3 Server

1 Press Menu/Set 6, 2, 3.

2 Press ▲ or ▼ to select Name or IP Address.

3 Enter the POP3 Server Address.

4 Press Menu/Set.

5 Press Stop/Exit.

POP3 Server address

This field displays the Node Name 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)
Mailbox Name

1 Press Menu/Set, 6, 2, 4.
2 Enter the user account name assigned to the Brother machine that will login to the POP3 Server.
3 Press Menu/Set.
4 Press Stop/Exit.

Mailbox Pwd

1 Press Menu/Set, 6, 2, 5.
2 Enter the user password assigned to the machine that will login to the POP3 Server. Please note that this password is case sensitive.
3 Press Menu/Set.
4 Press Menu/Set again to verify the password.
5 Press Stop/Exit.
Setup Mail RX

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

Auto Polling

When set to On the machine automatically checks the POP3 server for new messages. “No Mail” will be displayed if there are no E-mail messages when the POP3 server is polled.

1 Press Menu/Set, 6, 3, 1.
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).

1 Press Menu/Set, 6, 3, 2.
2 Enter the polling frequency.
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).

1 Press Menu/Set, 6, 3, 3.
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 can not receive from the POP server.

1 Press Menu/Set, 6, 3, 4.
2 Press ▲ or ▼ to select On or Off.
3 Press Menu/Set.

4 Press Stop/Exit.

**Notification**

The notification feature allows a confirmation of receipt message to be transmitted to the sending station When the I-Fax has been received.

This feature only works on I-Fax machines that support the “MDN” specification.

1 Press Menu/Set, 6, 3, 5.

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

3 Press Menu/Set.

4 Press Stop/Exit.

**Setup Mail TX**

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, 6, 4, 1.

2 Select 1 to change the Sender Subject—OR—2 to exit.

3 Enter the subject information.

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 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. (For your information, a 42 page document based on the ITU-T Test Chart#1 test chart is approximately 1Mbyte in size).

1 Press Menu/Set, 6, 4, 2.
Front Panel Setup

2 Press ▲ or ▼ to select On or Off.

3 Press Menu/Set.

4 Press Stop/Exit.

Notification

The notification feature allows a confirmation of receipt message to be transmitted to the sending station when the I-Fax has been received.

This feature only works on I-Fax machines that support the “MDN” specification.

1 Press Menu/Set, 6, 4, 3.

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 more information on Relay Broadcast, see Relay Broadcasting on page 8-5 of this User’s Guide.

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

1 Press Menu/Set, 6, 5, 1.

2 Press ▲ or ▼ to select On or Off.

3 Press Menu/Set.

4 Press Stop/Exit.
Front Panel Setup

**Relay Domain**

You can register the Domain Names (Max.10) that are allowed to request a Relay Broadcast.

1. Press **Menu/Set, 6, 5, 2.**
2. Press ▲ or ▼ to select the Relay Domain (01 - 10).
3. Press **Menu/Set.**
4. Enter the Relay Domain name for the Domain that is being allowed to request a Relay Broadcast.
5. Press **Menu/Set.**
6. Press **Stop/Exit.**

**Relay Report**

A Relay Broadcast Report can be printed at the machine that will act as a Relay Station for all Relay Broadcasts. When the machine is used with the Brother Network PC Fax software the machine is also acting as a Relay Station for fax transmissions from the network. This means that 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 any relayed broadcasts that have been sent through the machine. Please note: in order to use this function, you must assign the relay domain in the "Trusted Domains" section of the Relay function settings.

1. Press **Menu/Set, 6, 5, 3.**
2. Press ▲ or ▼ to select On or Off.
3. Press **Menu/Set.**
4. Press **Stop/Exit.**
Setup Misc.

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

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).

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

1 Press Menu/Set, 6, 6, 1.
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 your country time zone. The time shown is the time difference between your country and Greenwich Mean Time. For example, the Time Zone for Eastern Time in the USA and Canada is GMT-05:00.

1 Press Menu/Set, 6, 6, 2.
2 Press ▲ or ▼ to select the time.
3 Press Menu/Set to accept the selection.
4 Press Stop/Exit to exit the configuration menu.

Windows® Time Zone Setting
You can see the time difference for your country 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. Change the date and time. Verify your time zone setting from the pull-down menu (this menu displays the time difference from GMT).
Front Panel Setup

Scan to E-mail (E-mail server)

Black and White File Type for Scan to E-mail (E-mail server)

You can select the default Black and White file type for the Scan to E-mail (E-mail server) function.

1. Press Menu/Set, 6, 7, 1.
2. Press ▲ or ▼ to select PDF or TIFF.
3. Press Menu/Set.
4. Press Stop/Exit.

Color File Type for Scan to E-mail (E-mail server)

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

1. Press Menu/Set, 6, 7, 2.
2. Press ▲ or ▼ to select PDF or JPEG.
3. Press Menu/Set.
4. Press Stop/Exit.

Restoring the network settings to factory default

If you wish to reset the print server back to its default factory settings (resetting all information such as the password and IP address information), please follow these steps:

1. Make sure the machine is not operating, then disconnect all the cables from the machine (except power cable).
2. Press Menu/Set, 6, 0.
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.
Printing the Network Configuration List

Note

Node Name: Node Name appears in the Network Configuration List. The default Node Name is "BRN_xxxxxx" ("xxxxxx" is the last six digits of Ethernet address.).

The Network Configuration List prints a report listing all the current network configuration including the network print server settings.

1. Press Menu/Set, 5, 6.

2. Press Black Start or Color Start.
Network printing from Windows® basic TCP/IP Peer-to-Peer printing

Overview

If you are a Windows® user and want to print using the TCP/IP protocol in a Peer-to-Peer environment, please follow the instructions in this chapter. This chapter explains how to install the network software and the printer driver which you will need to be able to print using your network printer.

Note

- You must configure the IP address on your machine before you proceed with this chapter. If you have not configured the IP address, see Configuring your network printer on page 2-1 first.
- Verify the host computer and print server are either on the same subnet, or that the router is properly configured to pass data between the two devices.
- The default password for Brother print servers is “access”.
- If you are connecting to a Network Print Queue or Share (printing only), see Installation when using a Network Print Queue or Share (printer driver only) on page A-6 for installation details.

For Windows® 2000/XP users

By default, Windows® 2000/XP systems install with all the necessary software required for you to be able to print. This section describes the most commonly used configuration, Standard TCP/IP Port printing. Windows® 2000/XP users can also print via Internet using the IPP protocol. For more information, see Internet printing for Windows® on page 5-1.

If you have already installed the printer driver, jump to Printer driver already installed on page 4-3.
Configuring the standard TCP/IP port

Printer driver not yet installed

1 For Windows® 2000: Go to the Start button, select Settings and then Printers.
   For Windows® XP: Go to the Start button and select Printers and Faxes.

2 For Windows® 2000: Double click the Add Printer icon to get the Add Printer Wizard.
   For Windows® XP: Double-click Add a printer to get the Add Printer Wizard.

3 Click Next when you see the Welcome to the Add Printer Wizard screen.

4 Select Local printer and deselect the Automatically detect and install my Plug and Play printer option.

5 Click Next.

6 You must now select the correct Network printing port. Select Create a new port and select Standard TCP/IP Port port from the pull-down window.

7 Click Next.

8 The Add Standard TCP/IP Printer Port Wizard will now appear. Click Next.

9 Enter the IP address, or the print server name you wish to configure. The Wizard will automatically enter the Port name information for you.

10 Click Next.

11 Windows® 2000/XP will now contact the printer that you specified. If you did not specify the correct IP address or name then you will receive an error message.

12 Click Finish to complete the Wizard.

13 Now that you have configured the port, you must specify which printer driver you wish to use. Select the appropriate driver from the list of supported printers. If you are using a driver supplied with the machine on CD-ROM then select the Have Disk option to browse to the CD-ROM.

14 For example, select the “X:\your language\W2K\Addprt” folder (where X is your drive letter). Click Open, and then OK. Select your printer, then click Next.

15 Specify a name and select Yes or No if you want this driver to be default printer, and then click Next.

16 Now specify if you wish to share the printer, enter the share name and click Next.

17 Select Yes and Next to print a test page.

18 Continue through the Wizard clicking Finish when complete.
Printer driver already installed

If you have already installed the printer driver and wish to configure it for network printing, follow these steps:

1. Select the printer driver you wish to configure.
2. Select **File** and then **Properties**.
3. Click the **Ports** tab of the driver and click **Add Port**.
4. Select the port that you wish to use. Typically this would be **Standard TCP/IP Port**. Then click the **New Port... button**.
5. The **Standard TCP/IP Port Wizard** will start. Follow steps 8 to 12 of *Printer driver not yet installed* on page 4-2.
6. Close **Add Port** and **Properties** dialog box.

For Windows NT® 4.0 users

Windows NT® 4.0 users can send print job using Brother Peer-to-Peer Print software provided on the Brother CD-ROM supplied with the machine.

Installing the TCP/IP protocol

If you did not install the TCP/IP protocol during the installation of your Windows NT® 4.0 system (either workstation or server) follow these steps. If you have already installed the TCP/IP protocol, proceed to the next section, *Installing the Brother Peer-to-Peer software* on page 4-4.

1. Go to the **Start** button, select **Settings**, and then **Control Panel**.
2. Run the **Network** applet by double clicking the **Network** icon and then click the **Protocols** tab.
3. Select **Add**, and double click **TCP/IP Protocol**.
4. Insert the requested disk(s), or CD-ROM, to copy the required files.
5. Click **Close**. The Windows NT® 4.0 system will review protocol bindings and then you will see the **TCP/IP Properties** dialog.
6. Configure the host IP address, subnet mask, and gateway address in that dialog. Consult your system manager for these addresses.
7. Click **OK** to exit (your Windows NT® 4.0 workstation or server will need to be re-booted).
Installing the Brother Peer-to-Peer software

1. Start the CD-ROM installation menu program according to the Quick Setup Guide.

2. Select the model name and your language (if necessary), and then click Install Optional Applications.

3. Click Network Print Software.

4. Click Next in response to the Welcome message. Follow the on-screen instructions.

5. Select Brother Peer-to-Peer Print (LPR).

6. Select the desired directory to install the Brother Peer-to-Peer Print (LPR) files and click Next. The installation program will create the directory for you if it does not already exist on your disk.

7. Enter the Port name that you wish to use and click OK. The default port name is BLP1. Whichever name you choose, it must be unique and it MUST begin with BLP.

8. You must now enter the actual IP address of the print server and the print server name. If you have edited the hosts file on your computer or are using Domain Name System, you can also enter the DNS name of the print server. As the print server supports TCP/IP and NetBIOS names, you can also enter the NetBIOS name of the print server. The NetBIOS name can be seen in the Network Configuration List. The NetBIOS name assigned is the first 15 characters of the node name and by default it will appear as BRN_xxxxxx where xxxxxx is the last six digits of the Ethernet address.

**Note**
- The node name and the NetBIOS name is printed on the Network Configuration List. To learn how to print the Network Configuration List, see Printing the Network Configuration List on page 3-16.
- You can use the Browse button to search for the print server in Step 8. Click Browse and then select the Node Name/IP Address from the list. If you search for the device using the Browse button in Step 8, temporarily disable any Personal Firewall software you may be using. Once you are sure that you can print, re-start your Personal Firewall software.

9. Click OK. When prompted you must re-boot your computer.
Associating to the printer

You must now create a printer on your Windows® system using the standard Windows® printer setup procedure.

1. To do this, go to the Start button, select Settings and then Printers.

2. Double click the Add Printer icon to get the Add Printer Wizard.

3. Select My Computer (not Network Printer) and click Next.

4. Select the Brother LPR Port (the port name you assigned in step 7 of the “Installing Brother Peer-to-Peer Software” section in this chapter) and click Next.

5. Select the desired printer model. If the correct model is not displayed, click the Have Disk option and insert the CD-ROM supplied with your machine.

6. If the driver already exists, select Keep Existing Driver (if it does not exist, this step will be skipped), and then click Next.

7. If desired, change the name of the printer and select Yes or No if you want this driver to be default printer, and then click Next.

8. If desired, make the printer shared (so other user can access it), and select the operating system(s) that these other computers will be running. Click Next.

9. Select Yes when you asked Would you like to print a test page?. Click Finish to complete the installation. You may now print to the printer as if it were a local printer.
Adding a second Brother LPR port

You do not need to re-run the install program to add a new Brother LPR port. Instead, go to the Start button, select Settings, and open the Printers window. Click the icon of the printer that you wish to configure, select File from the menu bar, and then Properties. Click the Ports tab and then the Add Port button. In the Printer Ports dialog, highlight Brother LPR Port. Click the New Port button and enter the port name. The default port name is BLP1. If you have already used this name, you will get an error message if you try to use it again, in which case use BLP2, etc... Once you have specified the port name, click OK. You will then see the Port Settings dialog.

Enter the IP address of the printer that you wish to print to and click OK. And then click Close in the Printer Ports dialog. You should now see the port that you have just created in the Print to the following port(s) setting of the printer driver.

For Windows® 98/Me users

Windows® 98/Me users can send print job using Brother Peer-to-Peer Print software provided on the CD-ROM which we have supplied with the machine.

Installing the Brother Peer-to-Peer software

⚠️ Note
If you already installed the driver from the supplied CD-ROM with the machine Installer and you selected “Brother Peer-to-Peer Network Printer” during the installation then you do not need to install the Brother Network Print Software again.

1. Start the CD-ROM installation menu program according to the Quick Setup Guide.
2. Select the model name and your language (if necessary), and then click Install Optional Applications.
3. Click Network Print Software.
4. Click Next in response to the Welcome message. Follow the on-screen instructions.
5. Select Brother Peer-to-Peer Print (LPR).
6. Select the desired directory to install the Brother Peer-to-Peer Print (LPR) files and click Next. The installation program will create the directory for you if it does not already exist on your disk.
7. Enter the Port name that you wish to use and click OK. The default port name is BLP1. Whichever name you choose, it must be unique and it MUST begin with BLP.
You must now enter the actual IP address of the print server and the print server name. If you have edited the hosts file on your computer or are using Domain Name System, you can also enter the DNS name of the print server. As the print server supports TCP/IP and NetBIOS names, you can also enter the NetBIOS name of the print server. The NetBIOS name can be seen in the Network Configuration List. The NetBIOS name assigned is the first 15 characters of the node name and by default it will appear as BRN_xxxxxxxx where xxxxxxxx is the last six digits of the Ethernet address.

**Note**

- The node name and the NetBIOS name is printed on the Network Configuration List. To learn how to print the Network Configuration List, see *Printing the Network Configuration List* on page 3-16.
- You can use the **Browse** button to search for the print server in Step 8. Click **Browse** and then select the Node Name/IP Address from the list. If you search for the device using the **Browse** button in Step 8, temporarily disable any Personal Firewall software you may be using. Once you are sure that you can print, re-start your Personal Firewall software.

9 Click **OK**. When prompted you must re-boot your computer.

**Associating to the printer**

You must now create a printer on your Windows® system using the standard Windows® printer setup procedure.

1 To do this, go the **Start** button, select **Settings** and then **Printers**.

2 Double click the **Add Printer** icon to get the **Add Printer Wizard**.

3 Click **Next** when you get the **Add Printer Wizard** window.

4 Select **Local Printer** when you are asked how the printers are connected to your computer, and then click **Next**.

5 Select the desired printer model. If the correct model is not displayed, click the **Have Disk** option and insert the CD-ROM supplied with your machine.

6 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 click **Next**.

7 Select the Brother LPR port (the port name you assigned in step 7 of the *Installing the Brother Peer-to-Peer software* on page 4-6) and click **Next**.

8 Enter any desired name for the Brother printer. For example, you could call the printer “Networked Brother Printer”. Select **Yes** or **No** if you want this driver to be default printer, and then click **Next**.

9 Windows® will now ask you if you wish to print out a test page, select **Yes** and then select **Finish**. You have now finished installing the Peer-to-Peer Print (LPR) software.
Adding a second Brother LPR port

You do not re-run the install program to add a new Brother LPR port. Instead, go to the Start button, select Settings, and open the Printers window. Click the icon of the printer that you wish to configure, select File from the menu bar, and then Properties. Click the Details tab and then the Add Port button. In the Add Port dialog, select the Other radio button and then highlight Brother LPR port. Click OK and enter the port name. The default port name is BLP1. If you have already used this name, you will get an error message if you try to use it again, in which case use BLP2, etc... Once you have specified the port name, click OK. You will then see the Port Properties dialog.

Enter the IP address of the printer that you wish to print to and click OK. You should now see the port that you have just created in the Print to the following port setting of the printer driver.

Other sources of information

See Configuring your network printer on page 2-1 to learn how to configure the IP address of the printer.
Internet printing for Windows®

Internet Printing Installation

Overview

Brother’s Brother Internet Print (BIP) software, for Windows® 98/Me and Windows NT® 4.0, 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 their Microsoft Excel application program to a printer in Paris.

Windows® 2000/XP users can also use this BIP software, but are recommended to use the IPP protocol support that is part of the Windows® 2000/XP operating systems. Skip to the “Windows® 2000 IPP Printing” section of this document.

Quick Tips


2. Windows® 98/Me users can send print jobs using the IPP protocol via a Windows® 2000 computer, provided that the Microsoft Internet Print Services software is installed on the client PC, Internet Information Server (IIS) is installed and running on the server and that the client PC is using version 4 or later of Microsoft Internet Explorer.

Brother Internet Print General Information

The BIP software is installed using a standard Windows® 98/Me/2000/XP and Windows NT® 4.0 Installation Wizard. It creates a virtual port on the Windows® 98/Me/2000/XP and Windows NT® 4.0 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 and Windows NT® 4.0 Print Manager to create a printer that uses this port along with a standard Windows® 98/Me/2000/XP and Windows NT® 4.0-compatible printer. Any Windows® 98/Me/2000/XP and Windows NT® 4.0 applications program can therefore print to this printer (and hence to the virtual port) without modification or operational procedure.

When a job is printed to the BIP virtual port, it is actually MIME-encoded (converted to a standard Internet E-mail message) and sent out to a Brother print 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 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 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 printer.

Note

If an E-mail is received that has not been configured to use the BIP virtual port driver, the printer will print the E-mail out as a text document.

Brother Internet Print: Configuring the Brother Print Server

The print server can be configured using BRAdmin Professional utility, the Web BRAdmin software or by using a web browser.

Print Server Configuration Checklist

Note

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 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 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.
Brother Internet Print: Using the BRAdmin Professional utility to Configure the Print Server

Note
Skip this section if you wish to use the Web Browser to configure the print server. Using the BRAdmin Professional utility, you can configure the Brother print server using the TCP/IP protocol.

The steps required to configure the print server to receive print jobs from a Windows® 98/Me/2000/XP and Windows NT® 4.0 PC running the BIP software are as follows.

1. Start the BRAdmin Professional utility.
2. Select the Node Name of the desired Brother print server from the list and double click on it. (the default node name is usually BRN_xxxxxx, where xxxxxx is the last six digits of the Ethernet address (MAC address)). You will be prompted for a password; the default password is “access”.

Note
You can find the node name and MAC address by printing out the machine configuration page. For information on how to print the configuration page on your print server, see Printing the Network Configuration List on page 3-16.

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 POP3 Account Name for the remote Brother print 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.com, then the POP3 Account Name would be emailprinter).
6. Enter the password for the mailbox, if any.
7. The print server is configured by default to poll the POP3 server every 10 minutes. 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 server to receive print jobs.
Brother Internet Print: Using a Web Browser to Configure the Print Server

1 Connect to the printer server IP address using your web browser.

2 When you reach the **Network Configuration** screen, you will be prompted for a User name and a password. The default settings are User name “admin” and the password “access”.

3 Select the **Configure POP3/SMTP** option. Enter the address of the POP3 server (consult your Network Administrator if you do not know this address). For more information, see *Brother Internet Print: Using the BRAdmin Professional utility to Configure the Print Server* on page 5-3.

4 You should see a **Segmented Message Timeout** option. If a print job is separated into multiple E-mail messages using the Partial E-mail Print feature of the BIP, this value indicates how long the print server will wait for all of the segments of the message to arrive.

5 Select **Submit** to save the changes. Exit from the web browser. You have now configured the print server to receive print jobs.

Brother Internet Print: Installing the BIP software on Windows® 98/Me/2000/XP and Windows NT® 4.0

To install the BIP software on a Windows® 98/2000/XP and Windows NT® 4.0 PC, execute the following steps:

**Note**

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 **Install Optional Applications** menu. Then select **Network Print Software** installation program.

3 Click 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 click **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 Press OK to continue.

8 You will then be asked to enter the port settings for the remote print server:

Enter any unique legal Internet E-mail address for the remote print 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.

9 Press OK to continue. You will then be asked to re-start your computer.

10 Once your computer has re-started you must create a printer on your Windows® 98/Me/2000/XP and Windows NT® 4.0 system using the standard Windows® 98/Me/2000/XP and Windows NT® 4.0 printer setup procedure. To do this, go the Start button, select Settings and then Printers (Windows® 98/Me/2000 and Windows NT® 4.0). For Windows® XP users, go to the Start button, select Printers and Faxes.

11 Select Add Printer (or Add a Printer for Windows® XP) to begin the printer installation.

12 Click Next when you get the Add Printer Wizard window.

<For Windows® 98/Me users>

13 Select Local Printer when you are asked how the printers are connected to your computer and click Next.

<For Windows NT® 4.0 users>

13 Select My Computer, and then Click Next.

<For Windows® 2000/XP users>

13 Select Local Printer, and delete the check mark in Plug and Play check box. Then click Next.

<For Windows® 98/Me users>

14 Select the desired model of the remote printer (for example, Brother HL-series). If necessary, click Have Disk to load the driver from the CD-ROM. Click Next when you are done.

15 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.

16 Select the Brother Internet port (BIP...) which you selected in step 6 and press Next.
<For Windows NT® 4.0 and Windows® 2000/XP users>

14 Select the Brother Internet port (BIP...) which you selected in step 6 and press Next.

15 Select the desired model of the remote printer (for example, Brother HL-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 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.

18 Select No when asked if you want to print a test page, unless you have already configured the remote print server to receive BIP print jobs.

You have now finished installing the BIP software. If you need to configure another remote print 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 printer that is using BIP, select File from the menu bar, and then choose Properties. Click on the Details (Ports on Windows® 2000/XP and Windows NT® 4.0) tab and click 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 (New Port on Windows® 2000/XP and Windows NT® 4.0) 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.
Windows® 2000/XP IPP printing

Use the following instructions if you wish to use the IPP printing capabilities of Windows® 2000/XP.

Note
- You must configure the IP address on your machine before you proceed with this section. If you have not configured the IP address, see Configuring your network printer on page 2-1 first.
- Verify the host computer and print server are either on the same subnet, or that the router is properly configured to pass data between the two devices.
- The default password for Brother print servers is "access".

1 For Windows® 2000: Go to the Start button, select Settings and then Printers.
For Windows® XP: Go to the Start button and select Printers and Faxes.

2 For Windows® 2000: Double click the Add Printer icon to get the Add Printer Wizard.
For Windows® XP: Double-click Add a printer to get the Add Printer Wizard.

3 Click Next when you see the Welcome to the Add Printer Wizard screen.

4 Select Local printer or Network printer. For Windows® 2000: Make sure that you select Network Printer.
For Windows® XP: Make sure that you select A network printer, or a printer attached to another computer.

5 Click Next.

6 For Windows® 2000: Select Connect to a printer on the Internet or on your intranet and then enter the following in the URL field: http://printer_ipaddress:631/ipp (Where printer_ipaddress is the IP address or the print server name).

For Windows® XP: Select Connect to a printer on the Internet or on a home or office network and then enter the following in the URL field: http://printer_ipaddress:631/ipp (Where printer_ipaddress is the IP address or the print server name).
If you have edited the hosts file on your computer or are using Domain Name System, you can also enter the DNS name of the print server. As the print server supports TCP/IP and NetBIOS names, you can also enter the NetBIOS name of the print server. The NetBIOS name can be seen in the Network Configuration List. The NetBIOS name assigned is the first 15 characters of the node name and by default it will appear as BRN_xxxxxx where xxxxxx is the last six digits of the Ethernet address.

7 When you click Next, Windows® 2000/XP will make a connection with the URL that you specified.

If the printer driver has already been installed:

If the appropriate printer driver is already installed on your PC, Windows® 2000/XP will automatically use that driver for use. In this case, you will simply be asked if you wish to make the driver the default driver, after which the Driver installation Wizard will complete. You are now ready to print.

If the printer driver has NOT been installed:

One of the benefits of the IPP printing protocol is that it establishes the model name of the printer when you communicate with it. After successful communication you will see the model name of the printer automatically. This means that you do not need to inform Windows® 2000 the type of printer driver to be used.

8 Click OK. You will then see the printer selection screen in the Add Printer Wizard.

9 If your printer is not in the list of supported printers, click Have Disk. You will then be asked to insert the driver disk.

10 Click Browse and select the CD-ROM or network share that contains the appropriate Brother printer driver.

11 Now specify the model name of the printer.

12 If the printer driver that you are installing does not have a Digital Certificate you will see a warning message. Click Yes to continue with the installation. The Add Printer Wizard will then complete.

13 Click the Finish button and the printer is now configured and ready to print. To test the printer connection, print a test page.
Specifying a different URL

Please note that there are several possible entries that you can enter for the URL field.

http://ipaddress:631/ipp

This is the default URL and we recommend that you use this URL. Please note the **Get More Info** option will not display any printer data.

http://ipaddress:631/ipp/port1

This is for HP® Jetdirect® compatibility. Please note the **Get More Info** option will not display any printer data.

http://ipaddress:631/

If you forget the URL details, you can simply enter the above text and the printer will still receive and process data. Please note the **Get More Info** option will not display any printer data.

If you are using the built-in service names that the Brother print server supports, you can also use the following: (However, please note the **Get More Info** option will not display any printer data).

http://ipaddress:631/brn_xxxxxx_p1

http://ipaddress:631/binary_p1

http://ipaddress:631/text_p1

http://ipaddress:631/pcl_p1

http://ipaddress:631/postscript_p1

http://ipaddress:631/brn_xxxxxx_p1_at

Where ipaddress is the IP address or the print server name.

Other sources of information

See *Configuring your network printer* on page 2-1 to learn how to configure the IP address of the printer.
Network printing from a Macintosh®

Overview

This chapter explains how to configure the BR-Script 3 (PostScript® 3™ language emulation) printer driver on a Network. For more information on how to configure the Brother Color Driver on a Network, see the Quick Setup Guide included with the machine.

How to select the print server (TCP/IP) (Mac OS® X 10.2.4 or greater)

1. Switch the machine ON.
2. Open the Applications folder.
3. Open the Utilities folder.
4. Open the Printer Setup Utility Icon. (Mac OS® X 10.2.x users, open the Print Center icon.)
5. Click Add.

(Mac OS®X 10.2.4 - 10.3.x)

(Mac OS®X 10.4)
7 Enter the TCP/IP address of the printer into the **Printer Address** box.

![Network printing from a Macintosh®](image)

The Network Configuration List will allow you to confirm the TCP/IP address. For information on how to print the configuration page, see *Printing the Network Configuration List* on page 3-16.

8 When specifying the **Queue Name**, use the value `brn_xxxxxx_p1_at` where `xxxxxx` are the last 6 digits of the Ethernet address.

9 From the **Printer Model** pull-down list select your model. For example, select *Brother MFC-XXXXXX BR-Script3*.

![Network printing from a Macintosh®](image)

10 Click **Add** and the printer will be available from the **Printer List**.

![Network printing from a Macintosh®](image)
How to select the print server (TCP/IP) (Mac OS® 9.1 - 9.2)

1. Open the Applications (Mac OS® 9) folder.
2. Open the Utilities folder.
3. Open the Desktop Printer Utility icon.
4. Select the Printer (LPR) option and click OK.

5. At this point we must select the correct PPD file for the machine and also configure the correct LPR information. Click Change in the PostScript Printer Description (PPD) File section and select the appropriate PPD file for your model.

6. Now select the Change button below the LPR Printer Selection text.
7 Enter the IP address and service name details of the machine. When specifying the **Queue**, use the value `brn_xxxxxx_p1_at` where `xxxxxx` are the last 6 digits of the Ethernet address.

**Note**
If you do not specify the correct value the machine may not print, or it may not print the data correctly. Please ensure that the value you enter here matches with the Service name of the machine.

8 Click **OK** to go back to the previous screen.

9 You are now ready to create the printer for use. To do that, click **Create** and you will see the following:

10 Enter the name of the printer in the **Save desktop printer As:** option and click **Save**.

11 You can make this the default printer by clicking the printer name once and then select **Printing** and **Set Default Printer**.

Whenever you send a print job, the printer that you just created will be used.
Changing the configuration using a web browser

From a Macintosh®, the easiest way to change the printer or print server parameters is to use a web browser.

Simply connect to the printer using the format: `http://ipaddress` where `ipaddress` is the address of the printer.

See Using a web browser to change the print/scan settings on page 2-4.

Changing the configuration using the BRAdmin Light utility

The Brother BRAdmin Light utility is a Java application that is designed for Mac OS® X 10.2.4 or greater environment. BRAdmin Light allows you to change network settings and update firmware on Brother network ready machines. You can download the BRAdmin Light from the Brother Solutions Center at: http://solutions.brother.com.

Please note that you must install Runtime Environment 1.4.1 of the Java client software on your Macintosh®.

Other sources of information

2. See Configuring your network printer on page 2-1 to learn how to configure the IP address of the printer.
How to use a Web Browser to manage your Device

Overview

A standard Web Browser (we recommend Microsoft Internet Explorer® version 6.0 or later, or Netscape Navigator® version 7.1 or later) can be used to manage your machine using the HTTP (Hyper Text Transfer Protocol). You can get the following information from a printer on your network using a web browser:

- Printer status information.
- Change Fax configuration items, such as General Setup, Quick-Dial settings and Remote Fax.
- You can also change network settings such as TCP/IP information.
- Software version information of the machine and print server.
- Change network and machine configuration details.

You must use the TCP/IP protocol on your network and have a valid IP address programmed into the print server and your computer.

1. To learn how to configure the IP address on your machine, see Configuring your network printer on page 2-1.

2. The default password for Brother print servers is “access”.

3. You can use a web browser on most computing platforms, for example, Macintosh® and UNIX® users are also able to connect to the machine and manage it.

4. You can also use the BRAdmin Professional or the BRAdmin Light utilities to manage the printer and its network configuration.

How to connect to your machine using a Browser

Type http://printer’s IP Address / into your browser (you can also use the NetBIOS name of the print server, if you are in a Microsoft Windows domain/Workgroup environment). Enter the DNS name of the machine if connecting to a network that uses the DNS protocol.

For Macintosh® users, you can have an easy access to Web Based Management System by clicking the machine icon on Status Monitor screen. For more information, see Chapter 7 Status Monitor of the Software User’s Guide on the CD-ROM.

Password Information

Web Based Management offers two levels of password access. Users are able to access to the General Setup, Fax settings and Lists and Reports. The default user name for Users is “user” (case sensitive) and the default password is “access”.

Administrators are able to access all settings. The login name for the Administrator is “admin” (case sensitive) and the default password is “access”.

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 files. This means that PC’s are also able to receive and send documents, providing that the PC has an application that can generate and view TIFF-F files, you can use Microsoft® Imaging or a TIFF-F viewer application. Any documents sent via the machine will automatically be converted into a TIFF-F 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.

Note
I-Fax is available in Black & White only.

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 systems Administrator. For details of how to configure this information, see Web Based Management on page 7-1.
Front Panel Key Functions

**Shift + 1**
Used to change input mode. You can use Dial Pad keys as Standard alphabet character keys.

**Dial Pad**
Used to enter Standard Alpha characters (28 letters), as well as @, space ! # % & ' () + / : ; < > = ? [ ] ^ - $ , * _ and Numbers.

**Shift + 3**
To change between upper case and lower case when entering the e-mail / I-Fax address.

**or ▲**
Moves the LCD cursor to the left or right when you enter text.

**Menu/Set**
Used to store multiple numbers.

**Black Start**
Begins transmitting the document.

**Stop/Exit**
Deletes entered data and stops the scanning or transmitting process.

**Search / Speed-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.

**Shift + Black Start**
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. If you have already programmed the addresses of the destination Internet Fax machines as Speed-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 number and pressing **Black Start** or **Color Start**.

If you wish to manually enter the Internet Fax Address load the document into the machine and press **Shift** and **1** simultaneously to change into the “alphabet” dialling mode.

To manually enter the Internet Fax address, see *Manually Entering Text* on page 8-3.
Manually Entering Text

Press **Shift** 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 keys for 0, #, * don’t 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.

<table>
<thead>
<tr>
<th>Key</th>
<th>Once</th>
<th>Twice</th>
<th>Three times</th>
<th>Four times</th>
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</thead>
<tbody>
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<td>@</td>
<td></td>
<td>/</td>
<td>1</td>
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<tr>
<td>9</td>
<td>W</td>
<td>X</td>
<td>Y</td>
<td>Z</td>
</tr>
</tbody>
</table>

If you want to enter a blank space, press ▶ 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, use ◀ or ▶ to position the cursor under the character you want to change, and then type over it.

If you want to erase the whole number or whole name, press Stop/Exit when the cursor is under the first digit or letter. The characters above and to the right of the cursor will be deleted.

**Repeating letters:**

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

Please note that also you can connect to the machine using a web browser and specify the E-mail address information through Web Based Management. See **Web Based Management** on page 7-1 for more information.
Special characters and symbols

Press * for (space) ! " $ % & ’ ( ) * + , - / £
Press # for : ; < = > ? [ ] ^ _
Press Ø for É ´ È Ï Ç Ô 0 (For US and Canada users)
Ä Ë Ö Ü À Ç È Ð 0 (For other users)

As you enter the Internet Fax address, the address 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.

1. Press Black 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 enable this feature through the Web Management utility or the LAN function mode.

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 + Black 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 + Black Start buttons to manually poll the E-mail server for E-mail print jobs and 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 format, the following error message will be printed: ATTACHED FILE FORMAT NOT SUPPORTED, FILE NAME:XXXXXXX.doc If the received mail is too large, the following error message will be printed: E-MAIL FILE TOO LARGE. If Delete POP Receive 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 has received 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/2000/XP or Windows NT® 4.0 operating system, please inform the PC's owner that they must install some software that can view TIFF-F files.

You can use “Microsoft® Imaging” that is supplied with Windows® 98/Me/2000/XP and Windows NT® 4.0.

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.

The setting can be enabled using the Web browsers or through the machine front panel. The steps for configuring Fax Forward can be found in the User’s Guide supplied with your machine.

Please see the User’s Guide included with the machine to check that this feature is supported. This function is not available for color fax documents.

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 care 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 10 domain names.

Relay Broadcast can support the relay of a document up to a maximum of 48 fax machines through conventional telephone lines.
Relay Broadcast from a machine

FAX@brother.com  UKFAX@brother.co.uk  123456789

In this example, your machine has an E-mail address of FAX@brother.com, 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)
```

The word “fax#” must be included with the phone number inside the parenthesis.

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 Menu/Set.
3. Enter the phone number of the second Fax machine UKFAX@brother.co.uk(Fax#456).
Relay Broadcast from a PC

You can also send E-mail from your PC and have it relayed to a conventional FAX machine. The method of entering the phone number of the conventional FAX machine that will receive the relayed E-mail will vary depending on the mail application you are using. The following are some examples of different mail applications:

Some E-mail applications do not support sending to multiple phone numbers. If your E-mail application cannot support multiple phone numbers you will only be able to relay to one Fax machine at a time.

Enter the address of the relay machine and phone number of the FAX in the “TO” box using the same method used when sending from an machine.

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

Outlook 97/98/2000/2002/2003:

For Outlook 97/98/2000/2002 and 2003 the address information must be entered into the address book as follows:

Name: fax#123456789
E-mail Address: UKFAX@brother.co.uk

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 (Send 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.

**Error mail**

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 mail, an error message will be printed (Example: “The message being sent to the machine was not in a TIFF-F format.”).
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 circuit (such as the internet) 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.
Brother Internet Fax Printing Software

Overview

Depending on your network configuration and application requirements for sending faxes via a network, you can choose between Brother Network PC FAX Software or Brother Internet Fax Printing Software. With either software, viewable document such as web pages, word documents, PDF documents can be sent from the users desktop to any standard Facsimile machines, Internet fax machines and E-mail addresses.

Brother Internet Fax Printing Software (BFP) is a Windows® 98/98SE/Me, Windows NT® 4.0 and Windows® 2000/XP software utility that gives network PC Fax and Internet Fax functionality from the desktop to users on your network or over the Internet.

BFP utilizes SMTP as the transport for sending documents from your PC. This allows any PC supported by a SMTP mail server to send an Internet FAX even if that PC does not have direct access to the networked machine.

Brother Network PC Fax Software utilizes LPR as the transport for sending documents from your PC to the networked machine for transmission. This requires that the sending PC has access to the network that the sending machine is connected.
Installing Brother Internet Fax Printing Driver

Insert the CD-ROM supplied with your Brother machine into your CD-ROM Drive. The installer screen will automatically start.

Note

If the installer screen does not appear automatically, select Start/Run and type X:/setup.exe. (X:/ should be the drive letter of your CD-ROM drive on your PC)

1 Select Install Optional Applications.

2 Select Brother Internet Fax Printing (BFP) Driver.

3 Click Install.

Next you will be presented with the licensing agreement, please carefully read the agreement and make the necessary choice.

During the installation you are presented with the following screen, select the default unless you have previously installed this software. If this is the case use a port number that has not been previously configured. Example BFP2

You also need to enter certain information into the printer driver dialog screen.

It is very important that you enter your own E-mail address. You also need to configure the SMTP mail server IP address or Node Name.

Note

If in any doubt contact your Network Administrator for assistance.
Changing the BFP Port Settings

If you have more than one networked machine with the print server you may want to change the settings of the BFP software to use an alternative machine as the network fax print server.

To alter BFP settings, select **Start/Printers and Faxes** to open the Printers dialogue box. Highlight **Brother Internet Fax** and right click the mouse. From the list presented select **Properties**.

You are now presented with the screen below, which allows you to configure the BFP settings. To change the details of the print server, select the **Ports** tab.
The following screen shows the current configuration to alter this configuration, press the **Configure Port...** key.

From the **Configure Port...** dialogue box you can change the settings.
Relay Broadcast Function

Before you can successfully use the machine as a network fax solution you need to switch the feature **Relay Broadcasting** ON at the machine. In addition you also need to set a **Trusted Domain** at the machine.

The easiest way to achieve this is to logon to the machine using Web Based Management. Open your favorite web browser and enter the IP address of the network machine. Enter the password of the print server to access the configuration settings. Then browse to Internet Settings and Relay Function. For more information, see *Web Based Management* on page 7-1.

**Note**
If you do not know the password contact your Network Administrator.

In order for the machine to receive data from the desktop and then send this information (network fax) to other fax machines the **Relay Broadcast Function** must be switched “ON”. Also you must tell the networked machine which networks can relay faxes through your machine. This is known as setting the **Trusted Domain**. For instance, if a network machine has an E-mail address of fax@brother.com and users of this machine also have E-mail addresses with the same domain name then the machine must be told to allow these users to send network faxes through the machine. This is known as the **Relay Function** and **Trusted Domains**. So we set the trusted domain as brother.com

**Note**
Trusted Domains provide security for your machine. In that only users from a particular domain can send faxes through your network connected machine.
Uninstalling from Windows® 98/98SE/Me/2000/XP and Windows NT® 4.0

Select Start/Control Panel and then double click the Add or Remove programs icon. From the list of installed programs select Brother Internet Fax x.xx then click the Change/Remove button.

**Note**
You also need to remove Brother Internet Fax Driver from the Start/Control Panel/Add or Remove Program properties.
Using the BFP Address Book

This utility can administer the Fax addresses, Internet Fax addresses and E-mail address of all the contacts that you wish to use with the BFP Software. Additionally you can create Groups of contacts that you may wish to broadcast documents to.

From the **Start** menu, select **All Programs, Brother, MFL-Pro Suite MFC-9420CN, PC-FAX Sending** and then click **PC-FAX Address Book**. The **Brother Address Book** dialog box will appear:

Setting Up a Member in the Address Book

In the **Brother Address Book** dialog box you can add, edit and delete stored information for members and groups.

1. In the Address Book dialog box, click the **+** icon to add a member.
   
   The **Brother Address Book Member Setup** dialog box will appear:

   **Note**
   
   When creating the Address Book member please select the method of default delivery.

2. In the **Brother Address Book Member Setup** dialog box, type the member's information.

   **Name** and **Fax** are required fields. You can also enter the an E-mail contact address and machine address for the address book member. Click the **OK** button to save the member's information.
Setting Up a Group for Broadcasting

If you repeatedly send the same PC-FAX to multiple recipients, you can combine members into a Group.

1. In the Brother Address Book dialog box, click the icon to create a group.
   The Brother Address Book Group Setup dialog box appears:

2. Type the name of the new group in the Group Name field.

3. In the Available Names box, select each member to be included in the Group, and then click Add>>.

4. Members you add to the group will be listed in the Group Members box.

5. After all the members have been added, click OK.

Editing Member Information

1. To edit a Member or Group, select the Member or Group you want to edit.

2. Click the Edit icon.

3. Edit the Member or Group information.

4. Click OK to save your changes.

Deleting a Member or Group

1. To delete a Member or Group, select the Member of Group you want to delete.

2. Click the Delete icon.

3. Click OK when the Delete OK? dialog appears.
Exporting the Address Book

You can export the address book to an ASCII text file (*.csv).

1. To export the current telephone book, from the Address Book select **File**, point to **Export**, and then click **Text**—OR—Click **Vcard** and go to Step 5.

2. Select the data fields you wish to Export from the **Available Items** column, and then click **Add>>**.

3. If you are exporting to an ASCII file, select **Divide Character - Tab** or **comma**. This selection inserts a Tab or Comma between each data field when it is Exported.

4. Select the **OK** button to save the data.

5. Type in the name of the file, and then select **Save**.

6. If you are creating a Vcard, you must first select the member.

7. Select items in the order you want them listed.
Sending a Network Fax with BFP

From the application you wish to send the document from select **File/Print**. Ensure that the Brother Internet Fax Driver is selected as shown below.

![Print Dialogue Box]

Click OK to start the BFP dialogue box. From this dialogue box you can either specify an address in the address line or select a location from the address book. If you wish to type more than one location in the address line make sure they are separated by ";".

>Note

When entering a Fax Contact you must first specify the Internet Address of the machine that will send the document followed by the fax number as shown below.

Mailmfc9650@brother.co.uk(fax#2537)
Overview

This chapter describes procedures for troubleshooting problems you may encounter with a Brother print server, it is divided into the following sections:

- General problems
- Network print software installation problems
- Printing problems
- Protocol-specific troubleshooting

General problems

**CD-ROM is inserted, but does not start automatically**

If your computer does not support Autorun, the menu will not start automatically after inserting the CD-ROM. In this case, execute `setup.exe` in the root directory of the CD-ROM.

**How to reset the Brother print server to factory default**

You can reset the print server back to its default factory settings (resetting all information such as the password and IP address information). See *Restoring the network settings to factory default* on page 3-15.

Network print software installation problems

**The Brother print server is not found during setup of the network print software installation or from the printer driver of the Brother machine in Windows®.**

**The Brother print server is not found using the Simple Network Configuration capabilities of Mac OS® X.**

Make sure you have completed the IP address setting of the Brother print server according to *Chapter 2* or *Chapter 3* of this User's Guide before installing the network print software or printer driver. Check the following:

1. Make sure that the machine is powered on, is on-line and ready to print.
2 Check to see if there is any LED activity. Brother print servers have two LEDs on the back panel of the machine. The upper green LED shows Link/Activity (Received/Transmit) status. The lower orange LED shows Speed status.

- No light: If the upper LED is off, then the print server is not connected to the network.
- The upper LED is green: The Link/Activity LED will be green if the print server is connected to a Ethernet network.
- The lower LED is orange: The Speed LED will be orange if the print server is connected to a 100 Base TX Fast Ethernet network.
- The lower LED is off: The Speed LED will be off if the print server is connected to a 10 Base T Ethernet network.

3 Print the Network Configuration List and check if the settings such as IP address settings are correct for your network. The problem may be the result of mismatched or duplicate IP address. Verify that the IP address is correctly loaded into the print server. And make sure that no other nodes on the network have this IP address. For information on how to print the Network Configuration List, see Printing the Network Configuration List on page 3-16.

4 Verify that the print server is on your network as follows:

For Windows®

Try pinging the print server from the host operating system command prompt with the command:

```
ping ipaddress
```

Where `ipaddress` is the print server IP address (note that in some instances it can take up to two minutes for the print server to load its IP address after setting the IP address).

For Macintosh®

For Mac OS® 9.1 to 9.2

(1) From the Apple menu, open the Chooser.

(2) Click the Brother Color (IP) icon, and make sure that your print server name appears in the right frame. If it is visible, then the connection is good. Otherwise, go to Step 5.

For Mac OS® X 10.2.4 or greater

(1) From the Go menu, select Applications.

(2) Open the Utilities folder.

(3) Double-click the Printer Setup Utility icon. (For Mac OS® X 10.2.x users, double click the Print Center icon)

(4) Click Add.
(5) Make the following selection. Make sure that your print server appears. If it is visible, then the connection is good. Otherwise, go to Step 5.

(5) If you have tried 1 to 4 above and it does not work, then reset the print server back to the default factory settings and try from the initial setup again. For information how to reset to the default factory settings, see *Restoring the network settings to factory default* on page 3-15.

6 Check if a personal firewall such as ICF (Internet Connecting Firewall) for Windows XP is running on your computer. If it is running, temporarily turn it off and try again.

Note

If none of the above steps are successful, there is almost certainly a hardware or network problem!
Troubleshooting

Printing problems

Print job is not printed

Make sure the status and configuration of the print server. Check following:

1 Make sure that the machine is powered on, is on-line and ready to print. Print the Network Configuration List of the machine and check if the settings such as IP address settings are correct for your network. See Printing the Network Configuration List on page 3-16 for information on how to print the Network Configuration List on your print server.

2 The problem may be the result of mismatched or duplicate IP address. Verify that the IP address is correctly loaded into the print server. And make sure that no other nodes on the network have this IP address.

3 Verify that the print server is on your network as follows:

For Windows®

(1) Try pinging the print server from the host operating system command prompt with the command:

```
ping ipaddress
```

Where `ipaddress` is the print server IP address (note that in some instances it can take up to two minutes for the print server to load its IP address after setting the IP address).

(2) If a successful response is received, then proceed to Windows® 98/98SE/Me and Windows NT®4.0 Peer-to-Peer print (LPR) troubleshooting on page 10-5, and Windows® 2000/XP IPP troubleshooting on page 10-6. Otherwise, proceed to Step 4.

For Macintosh®

For Mac OS® 9.1 to 9.2

(1) From the Apple menu, open the Chooser.

(2) Click the Brother Color (IP) icon, and make sure that your print server name appears in the right frame. If it is visible, then the connection is good. Otherwise, go to Step 4.

For Mac OS® X 10.2.4 or greater

(1) From the Go menu, select Applications.

(2) Open the Utilities folder.

(3) Double-click the Printer Setup Utility icon. (For Mac OS® X 10.2.x users, double click the Print Center icon)
(4) Click Add.

(5) Make the following selection. Make sure that your print server appears. If it is visible, then the connection is good.

If you have tried 1 to 4 above and it does not work, then reset the print server back to the default factory settings and try from the initial setup again. For information how to reset to the default factory settings, see Restoring the network settings to factory default on page 3-15

Error during printing

If you try to print while other users are printing large amounts of data (e.g. many pages or color pages with high resolution), the printer is unable to accept your print job until the ongoing printing is finished. If the waiting time of your print job exceeds a certain limit, a time out situation occurs, which causes the error message. In such situations, execute the print job again after the other jobs are completed.

Protocol-specific troubleshooting

Windows® 98/98SE/Me and Windows NT®4.0 Peer-to-Peer print (LPR) troubleshooting

If you are having trouble printing on a Windows® 98/98SE/Me, Windows NT® 4.0 or later Peer-to-Peer network (LPR method), check the following:

1 Make sure that the Brother LPR Port driver is correctly installed and configured according to the Windows® 98/98SE/Me or Windows NT® 4.0 Peer-to-Peer chapters.

2 Try to turn the Byte Count on in the Configure port area of printer driver properties.
Troubleshooting

You may find that during the installation of BLP software, the screen that prompts you for a Port name is not displayed. This may happen on some Windows® 98/98SE/Me and Windows NT® 4.0 computers. Press the ALT and TAB keys to make it appear.

Windows® 2000/XP IPP troubleshooting

Want to use a different Port number other than 631.

If you are using Port 631 for IPP printing, you may find that your firewall may not let the print data through. If this is the case, use a different port number (port 80), or configure your Firewall to allow Port 631 data through.

To send a print job using IPP to a printer using Port 80 (the standard HTTP port) enter the following when configuring your Windows® 2000/XP system.

http://ipaddress/ipp

Get More Info option in Windows® 2000 not working

If you are using a URL of:

http://ipaddress:631 or http://ipaddress:631/ipp,

the Get More Info option in Windows® 2000 will not function. If you wish to use the Get More Info option, use the following URL:

http://ipaddress

This will then force Windows® 2000/XP to use Port 80 to communicate with the Brother print server.

Web browser troubleshooting (TCP/IP)

1 If you can not connect to the print server using your web browser it may be worth checking the Proxy Settings of your browser. Look in the Exceptions setting and if necessary, type in the IP address of the print server. This will stop your PC from trying to connect to your ISP or proxy server every time you wish to look at the printer server.

2 Make sure that you are using the proper web browser, we recommend Netscape Navigator® version 7.1 or later/ Microsoft Internet Explorer® version 6.0 or later.
Using services

A service is a resource that can be accessed by computers that wish to print to the Brother print server. The Brother print server provides the following predefined services (do a SHOW SERVICE command in the Brother print server remote console to see a list of available services): Enter HELP at the command prompt for a list of supported commands.

<table>
<thead>
<tr>
<th>Service (Example)</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>BINARY_P1</td>
<td>TCP/IP binary, NetBIOS service</td>
</tr>
<tr>
<td>TEXT_P1</td>
<td>TCP/IP text service (adds carriage return after each line feed)</td>
</tr>
<tr>
<td>PCL_P1</td>
<td>PCL® service (switches PJL-compatible printer to PCL® mode)</td>
</tr>
<tr>
<td>BRN_xxxxxx_P1</td>
<td>TCP/IP binary</td>
</tr>
</tbody>
</table>

Where xxxxxxx is the last six digits of the Ethernet address (for example, BRN_310107_P1).

Other ways to set the IP address (for advanced users and Administrators)

For information on how to configure your network printer using the BRAdmin Professional utility or a web browser, see Setting the IP address and subnet mask on page 2-3.

Using DHCP to configure the IP address

The Dynamic Host Configuration Protocol (DHCP) is one of several automated mechanisms for IP address allocation. If you have a DHCP server in your network, the print server will automatically obtain its IP address from DHCP server and register its name with any RFC 1001 and 1002-compliant dynamic name services.

Note

If you do not want your print server configured via DHCP, BOOTP or RARP, you must set the BOOT METHOD to static so that the print server has a static IP address. This will prevent the print server from trying to obtain an IP address from any of these systems. To change the BOOT METHOD, use the BRAdmin Professional utility.
Using BOOTP to configure the IP address

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”.

Note

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 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 00:80:77:31:01:07 192.168.1.2
```

```
BRN_310107:ht=ethernet:ha=008077310107:
 ip=192.168.1.2:
```

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 server will load its IP address from the BOOTP server when the printer is powered on.

Using RARP to configure the IP address

The Brother print server’s 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 server and the second entry is the name of the print 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 server will get the IP address from the RARP daemon when the printer is powered on.

### Using APIPA to configure the IP address

The Brother print server supports the Automatic Private IP Addressing (APIPA) protocol. With APIPA, DHCP clients automatically configure an IP address and subnet mask when a DHCP server is not available. The device chooses its own IP address in the range 169.254.1.0 through to 169.254.254.255. The subnet mask is automatically set to 255.255.0.0 and the gateway address is set to 0.0.0.0.

By default, the APIPA protocol is enabled. If you want to disable the APIPA protocol, you can disable it using control panel of the machine. For more information, see [APIPA](#) on page 3-6.

If the APIPA protocol is disabled, the default IP address of a Brother print server is 192.0.0.192. However, you can easily change this IP address number to match with the IP address details of your network.

### Using ARP to configure the IP address

If you are unable to use the BRAdmin application and your network does not use a DHCP server, you can also use the ARP command. The ARP command is available on Windows® systems that have TCP/IP installed as well as UNIX® systems. To use `arp` enter the following command at the command prompt:

```
arp -s ipaddress ethernetaddress
```

Where `ethernetaddress` is the Ethernet address (MAC address) of the print server and `ipaddress` is the IP address of the print server. For example:

**Windows® systems**

Windows® systems require the hash "-" character between each digit of the Ethernet address.

```
arp -s 192.168.1.2 00-80-77-31-01-07
```
UNIX®/Linux systems

Typically, UNIX® and Linux systems require the colon "::" character between each digit of the Ethernet address.

```
arp -s 192.168.1.2 00:80:77:31:01:07
```

**Note**

You must be on the same Ethernet segment (that is, there cannot be a router between the print server and operating system) to use the arp -s command.

If there is a router, you may use BOOTP or other methods described in this chapter to enter the IP address. If your Administrator has configured the system to deliver IP addresses using BOOTP, DHCP or RARP your Brother print server can receive an IP address from any one of these IP address allocation systems. In which case, you will not need to use the ARP command. The ARP command only works once. For security reasons, once you have successfully configured the IP address of a Brother print server using the ARP command, you cannot use the ARP command again to change the address. The print server will ignore any attempts to do this. If you wish to change the IP address again, use a web browser, TELNET (using the SET IP ADDRESS command) or factory reset the print server (which will then allow you to use the ARP command again).

To configure the print server and to verify the connection, enter the following command `ping ipaddress` where `ipaddress` is the IP address of the print server. For example, `ping 192.189.207.2`.

**Using the TELNET console to configure the IP address**

You can also use the TELNET command to change the IP address.

Using TELNET is effective way, when you change the IP address. But a valid IP address must already be programmed into the print server.

Type `TELNET ipaddress` at the command prompt of the system prompt, where `ipaddress` is the IP address of the print server. When you are connected, push the Return or Enter key to get the "#" prompt, enter the password "access" (the password will not appear on the screen).

You will be prompted for a user name. Enter anything in response to this prompt.

You will then get the `Local>` prompt. Type `SET IP ADDRESS ipaddress`, where `ipaddress` is the desired IP address you wish to assign to the print server (check with your network manager for the IP address to use). For example:

```
Local> SET IP ADDRESS 192.168.1.3
```

You will now need to set the subnet mask by typing `SET IP SUBNET subnet mask`, where `subnet mask` is the desired subnet mask you wish to assign to the print server (check with your network manager for the subnet mask to use). For example:
Local> SET IP SUBNET 255.255.255.0

If you do not have any subnets, use one of the following default subnet masks:

255.0.0.0 for class A networks
255.255.0.0 for class B networks
255.255.255.0 for class C networks

The leftmost group of digits in your IP address can identify the type of network you have. The value of this group ranges from 1 through 127 for Class A networks (e.g., 13.27.7.1), 128 through 191 for Class B networks (e.g., 128.10.1.30), and 192 through 223 for Class C networks (e.g., 192.168.1.4).

If you have a gateway (router), enter its address with the command SET IP ROUTER routeraddress, where routeraddress is the desired IP address of the gateway you wish to assign to the print server. For example:

Local> SET IP ROUTER 192.168.1.4

Type SET IP METHOD STATIC to set the method of IP access configuration to static.

To verify that you have entered the IP information correctly, type SHOW IP.

Type EXIT or Ctrl-D (i.e., hold down the control key and type “D”) to end the remote console session.

Using the Brother Web BRAdmin server software for IIS* to configure the IP address

The Web BRAdmin server software is designed to manage all LAN/WAN Brother network connected devices. By installing the Web BRAdmin server software on a computer running IIS*, Administrators with a web browser can connect to the Web BRAdmin server, which then communicates with the device itself. Unlike the BRAdmin Professional utility - which is designed for Windows® systems only - the Web BRAdmin server software can be accessed from any client computer with a web browser that supports Java.

Please note this software is not included on the CD-ROM that was supplied with your Brother product.

Please visit http://solutions.brother.com/webbradmin to learn more about this software and to download it.

IIS* = Internet Information Server 4.0, 5.0 or 5.1
Installation when using a Network Print Queue or Share (printer driver only)

Note
- You must configure the IP address on your machine before you proceed with this chapter. If you have not configured the IP address, see Chapter 2 first.
- Verify the host computer and print server are either on the same subnet, or that the router is properly configured to pass data between the two devices.
- Before installation, if you are using Personal Firewall software (e.g. the Internet Connection Firewall available in Windows XP), disable it. Once you are sure that you can print, re-start your Personal Firewall software.

1 Start the CD-ROM installation menu program according to the Quick Setup Guide.
2 Select the model name and your language (if necessary), and then click Install Optional Applications.
3 Click Printer Driver (Only).
4 Click Next in response to the Welcome message. Follow the on-screen instructions.
5 Select Standard Installation and click Next.
6 Select Network Shared Printer, and then click Next.
7 Select your printer’s queue, and then click OK.

Note
Contact your administrator if you are not sure about the location and name of the printer in the network.

8 Click Finish.
# Multi-function Print Server specifications

| Operating system support | Windows® 98/98SE/Me, Windows NT® 4.0, Windows® 2000/XP, Windows® XP Professional x64 Edition  
Mac OS® 9.1 to 9.2, Mac OS® X 10.2.4 or greater |
|--------------------------|--------------------------------------------------------------------------------------------------|
| Protocol support         | TCP/IP  
ARPs, RARPs, BOOTP, DHCP, APIPA (Auto IP), NetBIOS Name Resolution, WINS, DNS Resolver, LPR/LPD, Custom Raw Port/Port9100, SMTP Client, POP3, IPP, FTP Server, mDNS, TELNET, SNMP, HTTP |
| Network type             | 10/100BASE-TX Ethernet network |
| Network printing         | Windows® 98/98SE/Me Peer-to-Peer printing  
Windows NT® 4.0 and Windows® 2000/XP TCP/IP printing  
Macintosh® printing (Mac OS® 9.1-9.2 and Mac OS® 10.2.4 or greater supporting TCP/IP) |
| Computer requirements (for drivers, BRAdmin Professional, Peer-to-Peer software, etc.) | Processor  
Minimum Speed  
Intel® Pentium® II or equivalent for Windows® 98/98SE/Me/2000 Professional/XP and Windows NT® 4.0  
AMD Opteron™, AMD Athlon™ 64, Intel® Xeon™ with Intel® DM64T, Intel® Pentium® 4 with Intel® EM64T for Windows® XP Professional x64 Edition |
|                         | Minimum RAM  
32MB for Windows® 98/98SE/Me  
64MB for Windows® 2000 Professional and Windows NT® 4.0  
128MB for Windows® XP  
256MB for Windows® XP Professional x64 Edition |
|                         | Recommended RAM  
64MB for Windows® 98/98SE/Me  
128MB for Windows® 2000 Professional and Windows NT® 4.0  
256MB for Windows® XP  
512MB for Windows® XP Professional x64 Edition |
| Macintosh® connection    | Computer  
Ethernet ready Power Macintosh® |
|                         | Processor  
Minimum Speed  
All base models meet minimum requirements |
|                         | Minimum RAM  
32MB for Mac OS® 9.1 to 9.2  
128MB for Mac OS® X 10.2.4 or greater |
|                         | Recommended RAM  
64MB for Mac OS® 9.1 to 9.2  
160MB for Mac OS® X 10.2.4 or greater |
| Management utilities     | BRAdmin Professional utility  
Windows® 98/98SE/Me, Windows NT® 4.0, Windows® 2000/XP |
|                         | Web BRAdmin  
Windows® 2000 Professional / Server / Advanced Server, Windows® XP Professional |
# Function Table and Default Factory Settings

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<th>OPTIONS</th>
<th>FACTORY SETTING</th>
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</thead>
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<td>1.Setup</td>
<td>TCP/IP</td>
<td>1. BOOT Method</td>
<td>Auto/ Static/ RARP/ BOOTP/ DHCP</td>
<td>Auto</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>2. IP Address</td>
<td>[000-255].[000-255].[000-255].[000-255]</td>
<td>[169].[254].[001-254]. [000-255] *1</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>3. Subnet Mask</td>
<td>[000-255].[000-255].[000-255].[000-255]</td>
<td>255.255.0.0 *1</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>4. Gateway</td>
<td>[000-255].[000-255].[000-255].[000-255]</td>
<td>000.000.000.000</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>5. Node Name</td>
<td>BRN_XXXXXX=(last 6 figures of Ethernet address) (up to 15 characters)</td>
<td>BRN_XXXXXX</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>6. WINS Config</td>
<td>Auto/ Static</td>
<td>Auto</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>7. WINS Server</td>
<td>(Primary) [000-255].[000-255].[000-255].[000-255]</td>
<td>(Secondary) [000-255].[000-255]. [000-255]. [000-255] 000.000.000.000</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>8. DNS Server</td>
<td>(Primary) [000-255].[000-255].[000-255].[000-255]</td>
<td>(Secondary) [000-255].[000-255]. [000-255]. [000-255] 000.000.000.000</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>9. APIPA</td>
<td>On/ Off</td>
<td>On</td>
</tr>
<tr>
<td>2. Setup Internet</td>
<td>1. Mail Address</td>
<td>(60 characters)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2. SMTP Server</td>
<td>[000-255].[000-255].[000-255].[000-255]</td>
<td>Name (up to 30 characters)</td>
<td>000.000.000.000</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3. POP3 Server</td>
<td>[000-255].[000-255].[000-255].[000-255]</td>
<td>Name (up to 30 characters)</td>
<td>000.000.000.000</td>
<td></td>
</tr>
<tr>
<td></td>
<td>4. Mailbox Name</td>
<td>(up to 20 characters)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>5. Mailbox Pwd</td>
<td>Password:****** Verify:******</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Setup Mail RX</td>
<td>1. Auto Polling</td>
<td>On/ Off</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2. Poll Frequency</td>
<td>xxMin</td>
<td>On/ 10 Min</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>3. Header</td>
<td>All/ Subject+From+To/ None</td>
<td>None</td>
<td>None</td>
<td></td>
</tr>
<tr>
<td></td>
<td>4. Del Error Mail</td>
<td>On/ Off</td>
<td>On</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>5. Notification</td>
<td>On/ MDN/ Off</td>
<td>Off</td>
<td>Off</td>
<td></td>
</tr>
<tr>
<td>4. Setup Mail TX</td>
<td>1. Sender Subject</td>
<td></td>
<td>Internet Fax Job</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2. Size Limit</td>
<td>On/ Off</td>
<td>Off</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>3. Notification</td>
<td>On/ Off</td>
<td>Off</td>
<td>Off</td>
<td></td>
</tr>
<tr>
<td>5. Setup Relay</td>
<td>1. Rly Broadcast</td>
<td>On/ Off</td>
<td>Off</td>
<td>Off</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2. Relay Domain</td>
<td>RelayXX:</td>
<td>Relay01*YYYY</td>
<td>XX=01-10 YYYY=(up to 30 characters)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3. Relay Report</td>
<td>On/ Off</td>
<td>Off</td>
<td>Off</td>
<td></td>
</tr>
<tr>
<td>6. Setup Misc.</td>
<td>1. Ethernet</td>
<td>Auto/ 100B-FD/ 100B-HD/ 10B-FD/ 10B-HD</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2. Time Zone</td>
<td>GMTXXX:XX</td>
<td>GMT-5:00</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
*1: The factory setting for **IP Address** and **Subnet Mask** may be changed by the **APIPA** setting.

<table>
<thead>
<tr>
<th>0. Factory Reset</th>
<th>1. B/W File Type</th>
<th>2. Color File Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>TIFF/PDF</td>
<td>TIFF</td>
<td>JPEG</td>
</tr>
<tr>
<td>TIFF</td>
<td>JPEG</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>7. Scan to E-mail</th>
<th>1. B/W File Type</th>
<th>2. Color File Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>TIFF</td>
<td>TIFF/PDF</td>
<td>PDF/JPEG</td>
</tr>
<tr>
<td>TIFF</td>
<td>TIFF</td>
<td>JPEG</td>
</tr>
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