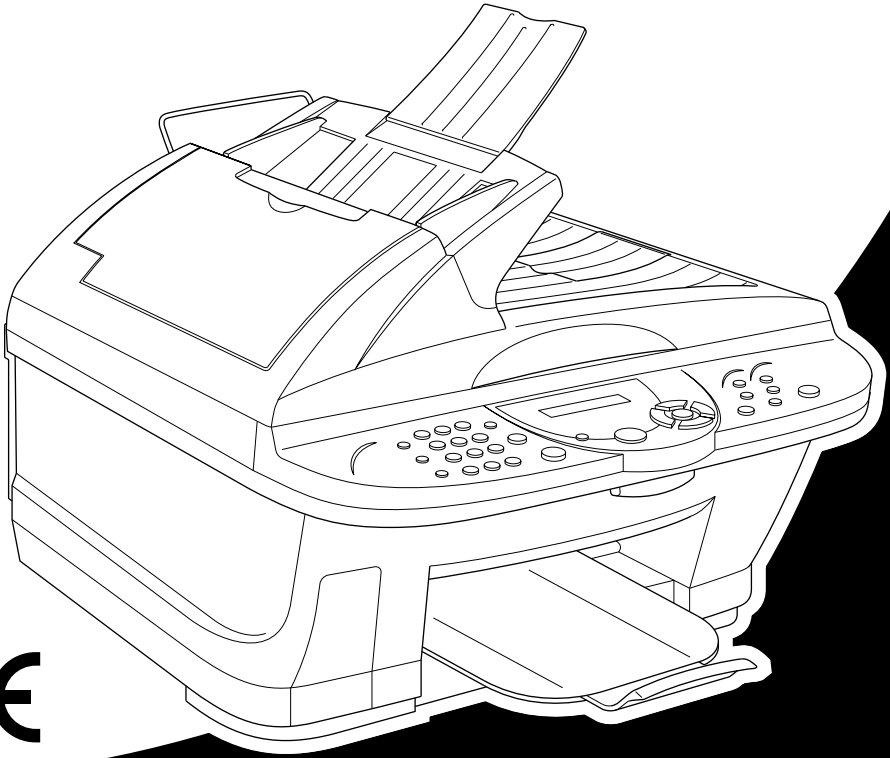# MFC-590

OWNER'S MANUAL

$C\,\epsilon$

THIS EQUIPMENT IS DESIGNED TO WORK WITH A TWO WIRE ANALOGUE PSTN LINE FITTED WITH THE APPROPRIATE CONNECTOR.

APPROVAL INFORMATION

Brother advises that this product may not function correctly in a country other than where it was originally purchased, and does not offer any warranty in the event that this product is used on public telecommunication lines in another country.

brother

EC Declaration of Conformity under the R & TTE Directive

Manufacturer
Brother Industries, Ltd.
15-1, Naeshiro-cho, Mizuho-ku,
Nagoya 467-8561, Japan

Plant
Brother Industries (Johor) Sdn. Bhd., IT Factory
No. 28, Jalan Angkasa Mas Utama,
Kawasan Perindustrian Tebrau II,
Johor Bahru, Johor Darul Takzim, Malaysia

Herewith declare that:

Products description   : Facsimile Machines
Type   : Group 3
Model Name   : MFC-590

Are in conformity with provisions of the R & TTE Directive (1999/5/EC) and we declare compliance with the following standards :

Safety	:	EN60950:2000
EMC	:	EN55022:1998 Class B
		EN55024:1998
		EN61000-3-2:1995 + A1:1998 + A2:1998
		EN61000-3-3:1995

Year in which CE marking was First affixed : 2001

Issued by   : Brother Industries, Ltd.

Date   : 15 June 2001

Place   : Nagoya, Japan

Signature   :

Kazuhiro Dejima
Manager
Quality Audit Group
Customer Satisfaction Dept.
Information & Document Company

Using This Manual

Thank you for purchasing a Brother multifunction centre (MFC).

This MFC has been designed to be simple to use, with LCD screen prompts to guide you through functions. Please refer to the manual for explanation of advanced features.

Additionally, the machine has a **Reports** key. Press **Reports** and **1** to print a help list of basic operational steps and functions.

Finding Information

All chapter headings and subheadings are listed in the Table of Contents. You will also be able to find information about a specific feature or function by checking the Index at the back of this manual. Also, throughout this manual, you will see special symbols alerting you to important information, cross-references, and warnings. Illustrations of some screen displays also help you choose the correct key-presses.

Symbols Used In This Manual

Note or additional information.

The machine may be damaged or may not work correctly if this is not observed.

Warnings detail precautions you must take to avoid possible personal injury.

User-Friendly Programming

We have designed your Multi-Function Centre with on-screen programming. User-friendly programming helps you take full advantage of all the functions the machine has to offer. (See *Using This Manual*, page iii.)
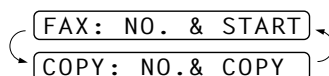
Since your programming is done on the LCD, we have created step-by-step on-screen prompts to help you. All you need to do is follow the prompts as they guide you through the function menu selections, programming options and settings. Additionally, you can program settings more quickly by pressing **Menu/Set** and the menu number using the dial pad.

A complete list of the function selections, options, and settings that are available is provided at the beginning of this manual. (See *Menu Mode & Menu Selection Table*, page 12.)

Alternating Displays

The LCD sometimes alternates between the currently selected option, and a help message giving brief instructions about how to proceed. The display you will probably see most often is shown on the right, showing you that when you place a document in the feeder, you can either dial a number to send it as a fax or press the **Mono Copy** or **Colour Copy** key to make a copy of the document.

```
FAX: NO.  & START
COPY: NO.& COPY
```

Table of Contents

PREPARATION AND SIMPLE USE GUIDE

BASIC FAX USE

ADVANCED FAX USE

COPIER

PRINTER/SCANNER

IMPORTANT INFORMATION

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APPENDIX

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Preparation and Simple Use Guide

Steps to prepare and use the machine simply

Follow the steps below to prepare and use the machine simply.

However, before you perform these steps, see Important Safety Information (page 137), and Advice for Preparation and Simple Use Guide (page 5).

If you need further information, refer to BASIC FAX USE or ADVANCED FAX USE.

1   Read the Quick Setup Guide

Follow the instructions on the Brother Quick Setup Guide to set up the machine.

2   Setting the Document

You can scan the document for faxing and copying from either the ADF (Automatic Document Feeder) or from the glass platen.

Using the ADF (Automatic Document Feeder)

The automatic document feeder (ADF) can hold up to 30 pages, feeding each one individually through the machine. Use standard (75 g/m^2) paper when using the ADF. Always fan the pages well before placing them in the feeder.

Recommended Environment

Temperature: 20-30˚C (68-86˚F)
Humidity: 50%-70%

DO NOT use curled, wrinkled, folded, or ripped paper, or paper with staples, paper clips, paste or tape attached. DO NOT use cardboard, newspaper, or fabric. (To copy or scan this kind of document, see *Using the Glass Platen*, page 3.)

■   Make sure documents written with ink are completely dry.

■   Documents must be from 14.8 to 21.6 cm wide, and from 14.8 to 35.6 cm long.

① Unfold the document tray extension.

② Unfold the document stopper.

Document tray extension

Document Stopper
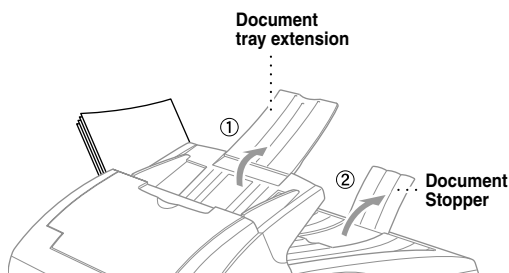
③ Fan the pages and tap them on the desk so they are even.

Insert documents *face up, top edge first* in the ADF until they lightly touch the feed roller.

④ Adjust the paper guides to fit the width of your pages.

Documents are Face Up in the ADF

30˚
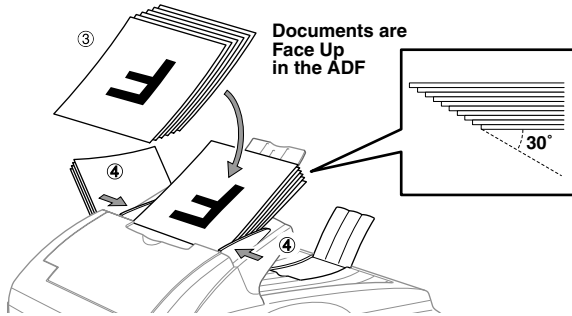
Setting the Special Media Lever

You can use the special media lever to select the Regular Position ( ) or Special Position ( ).

To feed regular types of documents, move the special media lever to the Regular Position ( ). You can feed multiple pages.

To feed special types of documents (such as thin paper, thick paper, coated paper or glossy paper), move the special media lever to the Special Position ( ). Feed the document one by one. It will allow the document to feed through the ADF without slipping or jamming.

> If you want to use thick papers and slippery papers, adjust the thickness lever of paper.

Regular Position

Special Position

Special Media Lever
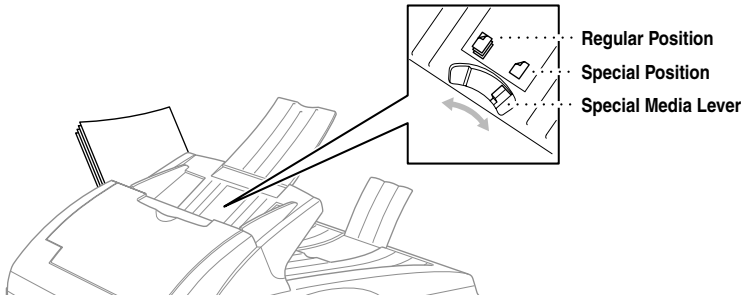
> If the original "double-feeds" try again by inserting a simple sheet of document in the ADF or use glass platen.

Using the Glass Platen

You can use the glass platen to fax one page at a time or pages of a book. Documents can be A4 or letter size (21.6 cm to 29.6 cm).

To use the glass platen, the ADF must be empty.
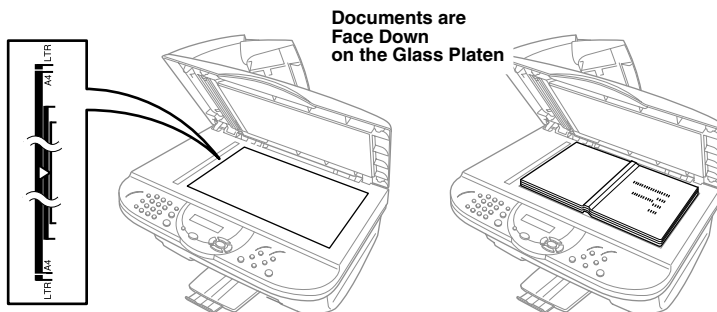
**Documents are
Face Down
on the Glass Platen**

① Lift the document cover.

② Using the document guidelines on the left, centre the document FACE DOWN on the glass platen.

③ Close the document cover.

If the document is a book or is thick, do not slam the cover or press on it, as damage to the glass platen may result.

3 Faxing from the ADF (Automatic Document Feeder)

① Insert the document *face up* in the ADF.

② Dial the fax number, then press **Mono Fax Start**.

4 Faxing from the Glass Platen

① Place the document *face down* on the glass platen.

② Dial the fax number, then press **Mono Fax Start**. The machine starts scanning the first page.

③ To send a single page, go to Step 5—**OR**—To send multiple pages, go to Step 4.

```
MEMORY #001 99%

NEXT:PRESS SET

DIAL:PRESS START
```
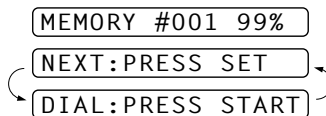
④ Place the next page on the scanner glass and press **Menu/Set**. The machine starts scanning. (Repeat Step 4 for each additional page.)

⑤ Press **Mono Fax Start** to begin dialling.

■Press **Stop/Exit** to cancel.
■If memory is full and you are faxing a single page, it will be sent in real time.
■You can fax a single colour page from glass platen.

5 Making a Single copy

① Insert the document *face up* in the ADF, or *face down* on the glass platen.

② Press **Mono Copy** or **Colour Copy**.

To stop the copy process and release the original, press **Stop/Exit**.

6 Multiple Copies (Using the ADF)

① Insert the document *face up* in the ADF.

② Using the dial pad, enter the number of copies you want (up to 99).
For example, press **3**, **8** for 38 copies.

③ Press **Mono Copy** or **Colour Copy**.

To sort the copies, use **Options** before you press **Mono Copy** or **Colour Copy**. (See *Using the Options Key*, page 54.)

7 Multiple Copies (Using the Glass Platen)

① Place the document *face down* on the glass platen.

② Using the dial pad, enter the number of copies you want (up to 99).
For example, press **3**, **8** for 38 copies.

③ Press **Mono Copy** or **Colour Copy**.

④ Place the next page to be copied on the glass platen, and then press **Mono Copy** or **Colour Copy**.

⑤ Press **Stop/Exit** when you are finished copying.

Advice for Preparation and Simple Use Guide

Choosing a Location

Place the machine on a flat, stable surface, such as a desk. Select a place that is free of vibration and shocks. Locate the machine near a telephone socket and a standard, earthed electrical socket. Choose a location where the temperature remains between 10°C and 35°C (50° – 95°F).

Avoid placing the machine where it may be knocked. Do not place near heaters, air conditioners, water, chemicals, or refrigerators. Do not expose the machine to direct sunlight, excessive heat, moisture, or dust. Do not connect the machine to electrical outlets controlled by wall switches or automatic timers as disruption of power can wipe out information in the unit's memory. Do not connect the machine to electrical outlets on the same circuit as large appliances or other equipment that might disrupt the power supply. Avoid interference sources, such as speakers or the base units of cordless phones.

Keep the machine out of strong light such as direct sunlight.

Installing the Ink Cartridges

If Ink gets in your eyes, flush them with water immediately and seek medical attention if required.

- **DO NOT remove ink cartridges if you do not need to replace them. If you do so, it may reduce the ink quantity and the machine will not know the quantity of ink left in the cartridge.**
- **DO NOT shake the ink cartridges. If you do so, the ink may spill when you take off the sealing tape. If ink stains your body or clothing, wash with soap or detergent immediately.**
- **DO NOT refill the ink cartridges. Attempting to use refilled cartridges and using incompatible inks may cause damage to the print head in this machine and such damage will not be covered by warranty. Warranty coverage does not apply to problems caused by the use of 3rd party ink or 3rd party ink cartridges. We can only recommend the use of genuine Brother consumables.**

■ If you install an ink cartridge in the wrong colour position, you must clean the print heads several times after correcting the cartridge installation and before you start printing because the colours were mixed.

■ Once you open an ink cartridge, install it in the machine and use it up within six months of installation. Use unopened ink cartridge by the expiry date printed on the box.

■ If the **INK EMPTY XXXX** error message is on the screen display after you have installed the ink cartridges, check and make sure that the ink cartridges are installed correctly.

Connecting the Power Cord

⚠️
- **This machine must be fitted with an earthed plug.**
- **Since the machine is earthed via the mains plug, you can protect yourself from potentially hazardous electrical conditions on the telephone network by keeping the power to the machine on when you connect it to a telephone line. Similarly, you can protect yourself when you want to move the machine, by disconnecting the telephone line first, and then the power cord.**

(For U.K.)
If you need to remove the moulded mains plug in order to fit an appropriate type, you must discard the moulded plug immediately having cut it off, in order that it is not inadvertently inserted into a live socket, thus presenting a shock hazard. The wires in the mains lead of this appliance are coloured in accordance with the following code.
- Green-and-yellow: Earth
- Blue: Neutral
- Brown: Live

As the wires in the mains lead of this apparatus may not correspond with the coloured markings identifying the terminals in your plug, proceed as follows:
The wire which is coloured green-and-yellow must be connected to the terminal in the plug which is marked by the letter "E" or by the safety earth symbol ⏚ or coloured green or green-and-yellow.
The wire which is coloured blue must be connected to the terminal which is marked with the letter "N" or coloured black.
The wire which is coloured brown must be connected to the terminal which is marked with the letter "L" or coloured red.

Memory Storage

In the event of a power failure, all settings in the menus are stored permanently except for the settings that are valid for the next fax only (e.g. conraast, overseas mode).

Multi-Line Connections (PABXs)

Most offices use a central telephone system, or PABX. The machine will work with most PABX or key systems that allow a two-wire analogue connection. However, we recommend that you have a separate telephone line for the machine. You can then leave the machine in Fax Only Mode to receive faxes any time of day or night.

If you are installing the machine to work with a PABX:

1 It is not guaranteed that the unit will operate correctly under all circumstances with a PABX. Any cases of difficulty should be reported first to the company that handles your PABX.

2 If all incoming calls will be answered by a switchboard operator, it is recommended that the Receive Mode be set to **MANUAL**. All incoming calls should initially be regarded as telephone calls.

3 The unit may be used with either pulse or tone dialling telephone service.
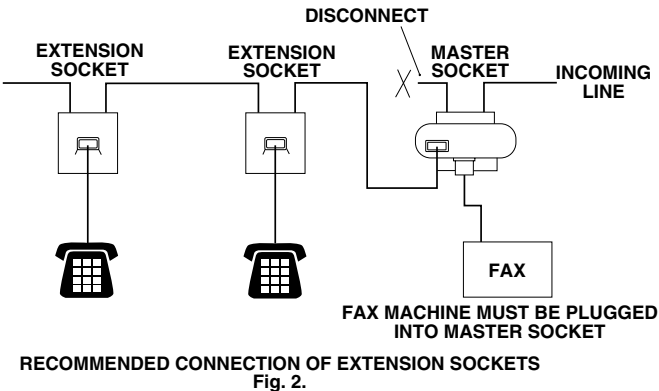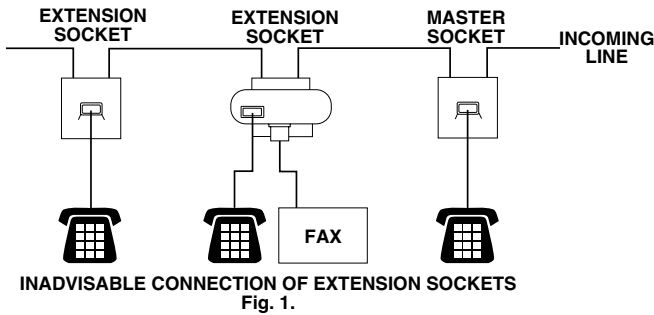
Using Extension Telephones (For U.K. Only)

It may be that your premises are already wired with parallel extension telephones, or you intend to add extension telephones to your line, in addition to your machine. While the simplest arrangement is straightforward parallel connection, there are some reasons as to why this arrangement will cause unsatisfactory service, the most obvious of which is inadvertent interruption of a facsimile transmission by someone picking up an extension telephone in order to make an outgoing call. Additionally, remote activation may not operate reliably in such a simple configuration.

This machine may also be set to make a delayed transmission (i.e. a transmission at a pre-set time). This pre-set job may coincide with someone picking up an extension handset.

Such problems can easily be eliminated however, if you arrange modification of your extension wiring circuit, such that extension devices are connected "downstream" of your machine, in a master/slave configuration. In such a configuration, this machine can always detect whether a telephone is in use, thus it will not attempt to seize the line during that time. This is known as "telephone off-hook detection."

The inadvisable configuration is shown in figure 1 below, and the recommended master/slave configuration is shown in figure 2.

This new connection configuration can be arranged by your contacting BT, Kingston upon Hull Telecommunications, your PABX maintainer or a qualified telephone installation company as appropriate. Simply explained, the extension telephone circuit should be terminated on a normal modular plug (BT 431A style), which in turn should be inserted into the modular socket of the white "T"-shaped connector provided as part of the line cord assembly.

INADVISABLE CONNECTION OF EXTENSION SOCKETS
Fig. 1.

FAX MACHINE MUST BE PLUGGED
INTO MASTER SOCKET

RECOMMENDED CONNECTION OF EXTENSION SOCKETS
Fig. 2.

Connecting an External Telephone Answering Device (TAD)

Sequence

When you have an **external** TAD on the same telephone line as the machine, the TAD answers all calls. The machine "listens" for fax calling (CNG) tones. If it hears them, the machine takes over the call and receives the fax. If it does not hear the CNG tones, the machine will not take over the call, and messages can be left on the TAD by callers in the normal way.

The TAD must answer within a maximum of four rings. However, we recommend two rings as the TAD setting. The machine cannot hear CNG tones until the TAD has answered the call, and with four rings there are only 8 – 10 seconds of CNG tones left for the fax "handshake". Make sure you carefully follow instructions in this manual for recording your outgoing message. We do not recommend using the toll saver feature on your external answering machine if it exceeds 4 rings.

It is important that the TAD is connected via the EXT socket on the machine or on the line jack unit. Do not use a line doubler on the line jack as this can cause answering problems.

Connections

1 You may connect an external TAD to the machine, as shown below.

(Example for UK)
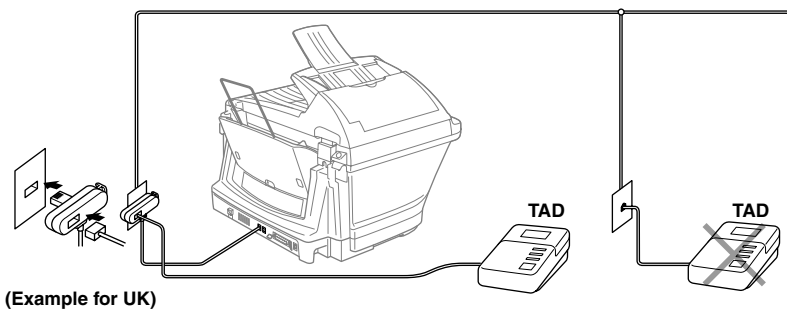
2 Set your external TAD to two rings or less. (The machine's Ring Delay setting does not apply).

3 Record the outgoing message (see next page).

4 Set the TAD to answer calls.

5 Set the Receive Mode to **TAD:ANSWER MACH.**. (See *To Select or Change Your Receive Mode*, page 29.)

Outgoing Message (OGM) of External TAD

Timing is important in recording this message. The message sets up the ways to handle both manual and automatic fax reception.

1 We recommend the outgoing message (OGM) is no longer than 20 seconds.

2 Allow 5 seconds of silence at the beginning of your message.
(This allows the fax to detect the calling tone prior to OGM, so reception can be faster.)

3 We recommend that you end your OGM by giving your Remote Activation Code for people sending manual faxes. For example:
"After the beep, leave a message or send a fax manually by pressing ＊**51** and Start"

Please note that some faxes that are sent manually cannot be received automatically because some fax machines do not send a fax tone if the call is manually dialled. In these cases you must inform callers that they must enter the remote activation code to send a fax.
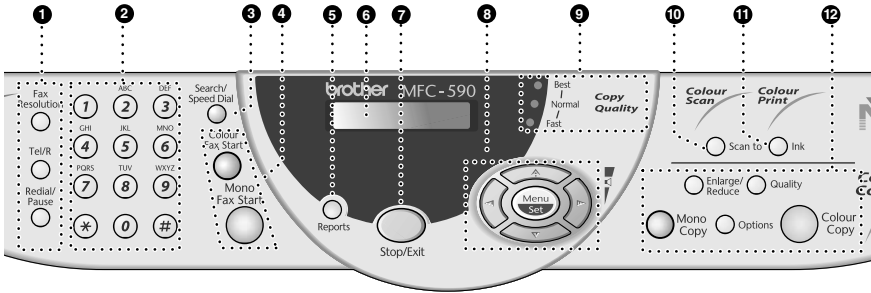
Connecting an External or Extension Telephone

You can connect a separate telephone to the machine, as shown below.

External Telephone

Extension Telephone

(Example for UK)
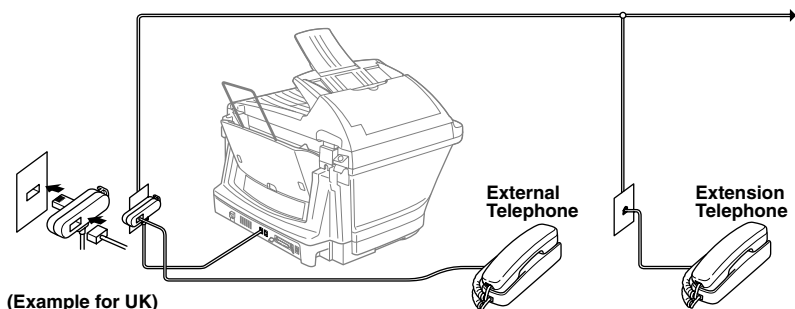
Whenever this external phone (or TAD) is in use, the screen displays **TELEPHONE**.

Control Panel Overview

❶ Fax and Telephone Keys:
Fax Resolution
(For the Next Fax Only)
Sets the resolution when you send a fax.

Tel/R (Telephone/Recall)
This key is used to have a telephone conversation having picked up the external handset in F/T pseudo-ringing etc. Also, use this key to gain access to an outside line and/or to recall the operator or transfer a call to another extension when it is connected to a PABX.

Redial/Pause
Redials the last number called. Also inserts a pause in autodial numbers.

❷ Dial Pad
Dials phone and fax numbers and can be used as a keyboard for entering information into the machine.
key lets you switch the dialling type during a telephone call from "**PULSE**" to "**TONE**".

❸ Search/Speed Dial
Lets you dial stored phone numbers by pressing **#** key and a two digit number. Also lets you look up numbers stored in the dialling memory.

❹ Start Keys:
Colour Fax Start
Starts sending a colour fax.

Mono Fax Start
Starts sending a black and white fax.

❺ Reports
You can access the Reports menu so you can select a report to print: Help, Quick-Dial, Journal, Xmit Verify, System Setup List and Order Form.

❻ Liquid Crystal Display (LCD)
LCD displays messages to help you set and operate the machine.

❼ Stop/Exit
Stops a fax, cancels an operation or exits from function mode.

8 Navigation Keys:

Menu/Set

Lets you access the menu and programming mode and stores your settings in the machine.

$\langle\!\langle$ or $\rangle\!\rangle$

Press to scroll forward or backward to set a menu selection

Also, you can use these keys to do an alphabetical search for the names of stored numbers.

or

Press to scroll through the menus and options.

You can press these keys to adjust the ring volume.

9 Copy Quality Indicator Lights

These lights show the copy quality you selected.

10 Scan to

Lets you scan the next original into your computer and select the type of destination: word processing, graphics or E-mail application.

11 Ink

Use this key to clean the ink print heads and replace an ink cartridge.

12 Colour Copy Keys:

(For the Next Copy Only)

Enlarge/Reduce

Lets you reduce or enlarge copies depending on the ratio you select.

Quality

Use this key to change the quality for Copy.

Mono Copy
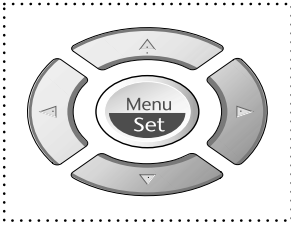
Makes a black-and-white copy.

Options

You can change the setting of Copy.

Colour Copy

Makes a full-colour copy.

Menu Mode & Menu Selection Table

(Menu Set)	- Access the Menu - Go to next menu level - Accept an option
(▲ ▼)	- Scroll through the current menu level
(◄)	- Back to previous menu level
(►)	- Forward to next menu level
(Stop/Exit)	- Exit the Menu

You can access the menu mode by pressing **Menu/Set**.

When you enter the Menu, the LCD scrolls:

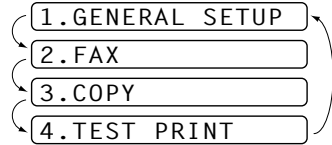SELECT ↑ ↓ & SET

Then press **1** for General Setup Menu

1.GENERAL SETUP

—**OR**—

Press **2** for Fax Menu

2.FAX

—**OR**—

Press **3** for Copy Menu

3.COPY

—**OR**—

Press **4** for Test Print

4.TEST PRINT

—**OR**—

You can scroll more quickly through each menu level by pressing ▲ or ▼ keys, and then set an option by pressing **Menu/Set** when that option appears on the LCD. Then the LCD shows next menu level. Press ▲ or ▼ key to scroll to your next menu selection, and then press **Menu/Set**. When you finish setting an option, the LCD shows **ACCEPTED**.

Use ▲ to scroll backward if you passed your choices or to save keystrokes.

You can also program the machine by pressing **Menu/Set** and then the menu numbers. For example: to set **FAX RESOLUTION** to **FINE**, press **Menu/Set**, **2**, **2**, **2** and ▲ or ▼ to select **FINE**, and then press **Menu/Set**.

To access the menu, press (Menu/Set) **Menu/Set**.

To exit, press (Stop/Exit) **Stop/Exit**.

Main Menu	Submenu	Menu Selections	Options	Descriptions	Page
1. GENERAL SETUP	**1. PAPER TYPE**	—	**PLAIN** INKJET GLOSSY (4-COLOUR/ 3-COLOUR) TRNSPRNCY	Identifies the type of paper in the Multi-purpose sheet feeder.	17
	2. DATE/TIME	—	—	Enter date and time for LCD display and to print on transmissions.	17
	3. STATION ID	—	—	Program the name and fax number to appear on each transmitted page.	18
	4. VOLUME	**1. RING**	OFF HIGH **LOW**	Adjusts ring volume.	19
		2. BEEPER	OFF HIGH **LOW**	Adjusts beeper volume.	19
	5. PBX	—	ON **OFF**	Turn on this function if the machine is connected to PABX (private automatic Branch Exchange.)	20
	6. CLOCK CHANGE	—	—	Adjust the machine's clock by one hour for summer/winter time.	20
	7. POWER SAVE	—	ON **OFF**	Power save mode.	21
	8. TONE/PULSE (Except for the Nordic countries)	—	**TONE** PULSE	Select the dialling mode.	21
	9. LOCAL LANGUAGE (For Czech, Hungarian and Polish)	—	CZECH HUNGARIAN POLISH **ENGLISH**	Allows you to change the LCD language.	See Quick Setup Guide
	9. LOCAL LANGUAGE (For Norwegian, Swedish, Danish and Finnish)	—	NORWEGIAN SWEDISH DANISH FINNISH **ENGLISH**	Allows you to change the LCD language.	See Quick Setup Guide

* The factory setting (option) is shown in bold.

To access the menu, press (Menu) **Menu/Set**.

To exit, press (Stop/Exit) **Stop/Exit**.

Main Menu	Submenu	Menu Selections	Options	Descriptions	Page
2. FAX	**1. SETUP RECEIVE**	**1. RING DELAY**	01-04 (**02**)	Number of rings before the machine answers in Fax/Tel (**F/T**) or Fax Mode.	29
			00-05 (**02**) (Nordic countries only)		
		2. RECEIVE MODE	**FAX ONLY** FAX/TEL TAD:ANSWER MACH. MANUAL	Choose the mode that best suits your needs.	29
		3. F/T RING TIME	70 40 **30** 20	Sets the time for "F/T pseudo-ring" in Fax/Tel (**F/T**) Mode.	29
		4. FAX DETECT	**ON** OFF	Receive fax messages without pressing the **Mono Fax Start** key.	30
		5. REMOTE CODE	ON (✶51, #51) **OFF**	Enter code to activate or deactivate your machine from a remote location.	41
		6. AUTO REDUCTION	**ON** OFF	Reduces size of image.	30
		7. MEM. RECEIVE	**ON** OFF	Automatically stores any incoming faxes in its memory if it runs out of paper.	31
		8. POLLING RX	STANDARD SECURE TIMER	You call another fax machine to receive a fax from it.	43
	2. SETUP SEND	**1. CONTRAST**	**AUTO** LIGHT DARK	Change the lightness or darkness of a fax you are sending.	23
		2. FAX RESOLUTION	**STANDARD** FINE S.FINE PHOTO	Changes the default setting of fax resolution.	23
		3. TIMER	—	Set the machine to send your documents later.	36
		4. BATCH TX	ON **OFF**	Sends all delayed faxes that are to the same fax number and at the same time as one transmission.	36

* The factory setting (option) is shown in bold.

To access the menu, press (Menu) **Menu/Set**.

To exit, press (Stop/Exit) **Stop/Exit**.

Main Menu	Submenu	Menu Selections	Options	Descriptions	Page
2. FAX (Continued)	**2. SETUP SEND (Continued)**	**5. REAL TIME TX**	NEXT FAX ONLY **OFF** ON	When memory is full, you can send faxes in real time.	27
		6. POLLED TX	STANDARD SECURE	Set Polled Transmission for someone to poll the machine to receive a fax from you.	45
		7. OVERSEAS MODE	ON **OFF**	Special setting for international transmissions.	36
	3. SET QUICK-DIAL	**1. SPEED-DIAL**	—	Store speed-dial numbers in memory.	22
		2. SETUP GROUPS	—	Set up a Group number for broadcasting.	38
	4. REPORT SETTING	**1. XMIT REPORT**	ON ON+IMAGE **OFF** OFF+IMAGE	Initial setup for Transmission Verification Report and Journal period.	34
		2. JOURNAL PERIOD	**OFF** 7/4/2 Days 24/12/6/3/1 Hours		34
	5. REMOTE FAX OPT	**1. FAX FWD**	ON **OFF**	Set the machine to forward faxes.	46
		2. FAX STORAGE	ON **OFF**	Store incoming faxes in memory for remote retrieval and fax forward.	46
		3. REMOTE ACCESS	159✱	Set code for retrieving faxes.	47
		4. PRINT DOCUMENT	—	Print incoming faxes stored in the memory.	31
	6. REMAINING JOBS	—	—	Check which jobs are in memory or cancel a job waiting (e.g. a delayed fax (timer) or a polling job).	38

✱ The factory setting (option) is shown in bold.

To access the menu, press ⟨Menu/Set⟩ **Menu/Set**.

To exit, press ⟨Stop/Exit⟩ **Stop/Exit**.

Main Menu	Submenu	Menu Selections	Options	Descriptions	Page
				to accept	
2. FAX **(Continued)**	**0. MISCELLANEOUS**	**1. TX LOCK**	—	Prohibits most functions except receiving faxes.	39
		2. BT CALL SIGN **(For U.K. only)**	ON **OFF**	Use with BT Call Sign.	42
		2. Distinctive **(For Denmark only)**	—	—	See Danish manual included on the CD-ROM
3. COPY	**1. QUALITY**	—	**NORMAL** BEST FAST	Selects copy quality.	57
	2. COLOUR ADJUST	**1. RED**	R:–■■■■■+ R:–■■■■□+ **R:–■■■□□+** R:–■■□□□+ R:–■□□□□+	Adjusts the amount of Red in copies.	57
		2. GREEN	G:–■■■■■+ G:–■■■■□+ **G:–■■■□□+** G:–■■□□□+ G:–■□□□□+	Adjusts the amount of Green in copies.	57
		3. BLUE	B:–■■■■■+ B:–■■■■□+ **B:–■■■□□+** B:–■■□□□+ B:–■□□□□+	Adjusts the amount of Blue in copies.	57
	3. CONTRAST	—	–■■■■■+ –■■■■□+ **–■■■□□+** –■■□□□+ –■□□□□+	Adjusts the contrast.	58
4. TEST PRINT	—	—	—	You can print a test sample page to check print quality and adjust the Vertical Alignment.	127

* The factory setting (option) is shown in bold.

1 **Setup**

Initial Settings

Setting Paper Type

To achieve the best print results you should choose the Paper Type according to the paper you use.

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

2 Press ⌃ or ⌄ to select **PLAIN**, **INK JET**, **GLOSSY** or **TRNSPRNCY** (TRANSPARENCY), and then press **Menu/Set**.

3 If you selected **GLOSSY**, press ⌃ or ⌄ to select **GLOSSY:4-COLOUR** or **GLOSSY:3-COLOUR**, and then press **Menu/Set**.

> The print quality of black ink varies depending on the kind of glossy paper you are using. Black ink is used when you select **GLOSSY:4-COLOUR**. If the glossy paper you are using repels the black ink, select **GLOSSY:3-COLOUR**, which simulates black ink by combining the three ink colours.

4 Press **Stop/Exit**.

> The machine ejects paper with printed surfaces face up onto the paper tray in the front of the machine. When you use transparencies, remove each sheet immediately to prevent a paper jam or curling sheets.

Setting the Date and Time

The machine displays the date and time, and prints it on every fax you send.

In the event of a power failure, the machine maintains date and time information for several hours. All other settings remain unaffected.

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

2 Enter the two digits of the year, and press **Menu/Set**. "02" is registered as 2002 in the machine.

3 Enter two digits for the month and press **Menu/Set**.

4 Enter two digits for the day and press **Menu/Set**.

5 Enter the time in 24 hour format and press **Menu/Set**.

6 Press **Stop/Exit**.

Setting the Station ID

You can store your name and fax number to be printed on all fax pages that you send.

It is important that you enter the fax number in the internationally standardized format, i.e. in accordance with the following strict sequence:

- The "+" (plus) character (press ✳ key)
- Your Country Code (e.g. "44" for the United Kingdom, "41" for Switzerland)
- Your local area code minus any leading "0" ("9" in Spain)
- A space
- Your number on the local exchange, using spaces to aid readability as appropriate.

As an example, the machine is installed in the United Kingdom and your national telephone number is 0161-444 5555, then you must set the fax number of your station ID as: +44 161-444 5555.

1 Press **Menu/Set**, **1**, **3**.

2 Enter your fax number (up to 20 digits) and press **Menu/Set**.

3 Enter your name (up to 20 characters) using the dial pad and the chart. To enter a space press ⟨►⟩ twice.

4 Press **Menu/Set**.

5 Press **Stop/Exit**.

- ■ When you enter your name, see *Entering Text*, page 146.
- ■ If you do not enter a fax number, no additional information can be entered.
- ■ To enter a space, press ⟨►⟩ once between numbers and twice between characters.
- ■ If your Station ID has already been programmed, the screen prompts "1" to make a change, or "2" to exit without changing.

Custom Settings

Volume Settings

Ring Volume

You can select how loud, the machine rings for incoming calls. The ring volume can be turned off for silent reception if required.

1 Press **Menu/Set**, **1**, **4**, **1**.

2 Press ⌢ or ⌣ to select **OFF**, **LOW** or **HIGH**.

3 Press **Menu/Set** when the screen displays your selection.

4 Press **Stop/Exit**.

—**OR**—

You can adjust the ring volume when the machine is idle. You can turn the ring OFF.

Press ⌢ or ⌣ to adjust the volume level. With each key press, the machine rings so you can hear the current setting and the display shows the setting you are choosing. Each key press changes the volume to the next setting.

The new setting will remain until you change it again.

Beeper Volume

You can set the beeper to **LOW**, **HIGH** or **OFF**. The machine comes set to **LOW**. When the beeper is set to **LOW** or **HIGH**, the machine beeps every time you press a key or make an error, and at the end of sending or receiving a fax.

1 Press **Menu/Set**, **1**, **4**, **2**.

2 Press ⌢ or ⌣ to select your setting.

3 When the screen displays the setting you want, press **Menu/Set**.

4 Press **Stop/Exit**.

PABX and TRANSFER

The machine is initially set to be connected with PSTN (Public Switched Telephone Network) lines. However, many offices use a central telephone system or Private Automatic Branch Exchange (PABX). Your fax can be connected to most types of PABX. The recall facility on the machine supports timed break recall only (TBR), PBXS normally can work with this for gaining access to an outside line, or for transferring a call to another extension: The feature works when the **Tel/R** key is pressed.

Setting PABX

If the machine is connected to a PABX system, set **PBX:ON**. If not, set **OFF**.

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

2 Press ⌃ or ⌄ to select **ON** (or **OFF**), and press **Menu/Set** when the screen displays your selection.

3 Press **Stop/Exit**.

> You can program a **Tel/R** keypress as part of a number stored in a Speed Dial location. When programming the Speed dial number (Function menu 2-3-1) press **Tel/R** first (the screen displays "!"), then enter the telephone number. If you do this, you do not need to press **Tel/R** each time before you dial using a Speed Dial location. (See *Storing Numbers for Easy Dialling*, page 22.)
> However, if PBX is set to **OFF**, you can't use the Speed Dial number that a **Tel/R** keypress is programmed into.

Setting the Clock Change

You can easily let the machine's clock gain or lose one hour by using this feature.

1 Press **Menu/Set**, **1**, **6**. The screen displays

TO SUMMER TIME ?

2 Press ⌃ or ⌄ to select Summer Time to gain an hour or Winter time to lose an hour, and press **Menu/Set**.

3 Press **1** to change to Winter Time or Summer Time.
—**OR**—
Press **2** to exit without changing.

TO SUMMER TIME ?
1.CHANGE 2.QUIT

Turning Off the Scanner Lamp

The scanner lamp stays on for 16 hours before switching off to preserve the life of the lamp. You can turn off the scanner lamp manually if you wish by pressing the ◁ and ▷ keys simultaneously. The scanner lamp will remain turned off until the next time you use the scanning feature.

Turning off the scanner lamp will also reduce the power consumption.

> Please note that turning the lamp off regularly will reduce the lamps life.

Power Save

Setting Power Save Mode reduces power consumption by turning off the CPU etc. inside the machine. If Power Save Mode is switched **ON**, when the machine is idle and the scanner lamp is turned off, it drops into power save mode automatically. In the Power Save Mode, you cannot use fax detect function or remote activation.

The machine will not display the date and time in this condition.

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

2 Press ⌒ or ⌒ to select **ON** (or **OFF**).

3 Press **Menu/Set** when the screen displays your selection.

4 Press **Stop/Exit**.

Setting the Dialling Mode (Tone/Pulse) (Except for the Nordic Countries)

The machine is initially set to **TONE**. If you are using a **PULSE** dial line, you can change the setting to **PULSE** by following the steps below.

1 Press **Menu/Set**, **1**, **8**. The screen prompts you to select **TONE** or **PULSE**.

2 Use ⌒ or ⌒ to select the dialling mode.

3 Press **Menu/Set** when the screen displays the dialling mode you want.

4 Press **Stop/Exit**.

Storing Numbers for Easy Dialling

You can set up the machine to do the following types of easy dialling: Speed Dial and Groups for Broadcasting of faxes. (See *Broadcasting (Not Available for Colour Fax)*, page 37.)

Even if you lose electrical power, numbers stored in memory will not be lost.

Storing Speed Dial Numbers

You can store Speed Dial numbers, which you dial by pressing only five keys. There are 100 Speed Dial locations. (See *Speed Dialling*, page 24.)

1 Press **Menu/Set**, **2**, **3**, **1**. The screen prompts you to enter a location.

2 Use the dial pad to enter a two-digit location (00-99), and press **Menu/Set**. The screen displays your entry, then prompts you to enter the number you're storing.

3 Enter the number (up to 20 digits), and press **Menu/Set**.
The screen now prompts you to store a name with this number.

4 Use the dial pad to enter the name (up to 15 characters). (See *Entering Text*, page 146.)—**OR**—
Go to Step 5 to store the number without a name.

5 Press **Menu/Set**. Return to Step 2 to store another Speed Dial number—**OR**—Press **Stop/Exit**.

When you dial a Speed dial number, the screen displays the name you have stored or if you have not stored a name, the number you have stored.

Changing Speed Dial Numbers

If you try to store a Speed Dial number in a location where a number is already stored, the screen displays the current name stored there, then prompts you to either change it or exit.

1 Press **Menu/Set**, **2**, **3**, **1**.
The screen prompts you to enter a location.

2 Use the dial pad to enter a two-digit location (00-99), and press **Menu/Set**.

3 Press **1** to change the number stored, or press **2** to exit without making a change.

4 Enter a new number.
- If you want to erase the number, press **Stop/Exit** when the cursor is to the far left of the digits.
- If you want to change a digit, use ◁ or ▷ to position the cursor under the digit you want to change, then enter the new digit—**OR**—Press **Stop/Exit** to delete all characters above and to the right of the cursor.

5 Follow the directions in Storing Speed Dial Numbers.

You can print a list of all stored numbers. (See *Using the Reports Key, page 35*.)

2 **Sending a Fax**

Scanning Adjustment

Contrast

If your document is very light or very dark, you might want to set the contrast accordingly. Use **LIGHT** to send a light document. Use **DARK** to send a dark document. After sending the document the contrast setting is set to **AUTO** (suitable for most documents) automatically.

1 Insert the document face up in the ADF, or face down on the glass platen. (See *Setting the Document*, page 1.)

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

3 Use ⌄ or ⌄ to select **AUTO**, **LIGHT**, or **DARK**.

4 When the screen displays your selection, press **Menu/Set**.

5 Press **2** if you are finished choosing settings, and go to Step 6—**OR**—Press **1** if you want to select additional settings. The display returns to Setup Send menu.

6 Enter a fax number and press **Mono Fax Start** to send a fax.

Fax Resolution

When you have a document in the feeder or on the glass platen, you can use the **Fax Resolution** key to temporarily change the setting. Press **Fax Resolution** repeatedly until the LCD shows the setting you want.

—**OR**—

You can change the default setting.

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

2 Press ⌄ or ⌄ to select the resolution you want, and then press **Menu/Set**.

3 Press **Stop/Exit**.

STANDARD:	Suitable for most typed documents.
FINE:	Good for small print; transmits a little slower than Standard resolution.
S.FINE:	Good for small print or artwork; transmits slower than Fine resolution. (black and white only)
PHOTO:	Use when document has varying shades of grey; slow transmission time. (black and white only)

Dialling a Number

Speed Dialling

1 Insert the original face up in the ADF, or face down on the glass platen.

2 Press **Search/Speed Dial**, then press **#** and the two-digit Speed Dial number.

3 Press **Mono Fax Start**.

Search

You can search for names you have stored in Speed Dial memories. (See *Storing Speed Dial Numbers*, page 22.)

1 Insert the document face up in the ADF, or face down on the glass platen.

2 Press **Search/Speed Dial**.

3 To search for numbers alphabetically by name, enter the first letter of the name by using the dial pad, and then press ⟨ or ⟩ .

—**OR**—

To search for numbers numerically by Speed-Dial number, press ◁ or ▷.

4 When the screen displays the name you want to call, press **Mono Fax Start**.

Chain Dialling

You can store very long dialling sequences by dividing them and setting them up as Speed Dial numbers. Then while dialling, you can combine two or more Speed Dial numbers and even include manual dialling using the dial pad. You can use these numbers in any combination. The combined number will be dialled, in the order you entered it, as soon as you press **Mono Fax Start**.

For example:

You store "555" on Speed Dial #01 and "7000" on Speed Dial #02. If you press **Search/Speed Dial**, **#**, **0**, **1**, **Search/Speed Dial**, **#**, **0**, **2** and **Mono Fax Start**, you can dial "555-7000". To temporarily change a number, you can substitute part of the number with manual dialling using the dial pad. So, if you press **Search/Speed Dial**, **#**, **0**, **1** and press **7001** using the dial pad, you can dial "555-7001".

Using access codes is easy. Sometimes you may want to choose from the among several long distance carriers when you make a call; rates may vary depending upon the time and destination. To take advantage of low rates, you can store the access codes or long-distance carriers as Speed Dial numbers.

Manual and Automatic Fax Redial

If you're sending a fax manually (with external telephone) and the line is busy, press **Redial/Pause** and then press **Mono Fax Start** to try again. Anytime you want to make a second call to the last number dialled, press **Redial/Pause** and then press **Mono Fax Start** to save time.

If you're sending a fax automatically and the line is busy, the machine will automatically redial up to 4 times.

Pause

Press **Redial/Pause** to insert a pause between digits to be dialled.

> If the machine is connected to a PABX, you may need to insert an additional number prefix (e.g. "9") and a "pause" before each fax or telephone number to gain access to the outside line. When you press **Redial/Pause**, a dash "-" will appear on the display. By storing a pause, you can create a delay of 3.5 seconds.

Sending Operation

Automatic Transmission

This is the easiest way to send a fax.

IMPORTANT: Do not pick up the external telephone's handset.

1 Insert the document face up in the ADF, or face down on the glass platen.

2 Dial the number by using Speed Dial, Search or dial pad.

3 Press **Mono Fax Start**.

Manual Transmission (With an External Telephone)

Manual transmission lets you hear the dial tone, ringing and fax receiving tones before sending a fax.

1 Insert the document face up in the ADF, or face down on the glass platen.

2 Pick up the handset of the external telephone and listen for a dial tone.

3 Enter the fax number you want to call. (See *Dialling a Number*, page 24.)

4 When you hear the fax tone, press **Mono Fax Start**.

5 To hang up, replace the handset of the external phone.

> Manual transmission does not use memory.

Colour Fax transmission

Your Multi-Function Centre allows you to transmit a colour fax.

1 Insert the document face up in the ADF, or face down on the glass platen.

2 Enter the fax number using the dial pad, Speed Dial or Search.

3 Press **Colour Fax Start**.

When you send a colour fax, the machine starts sending the fax without scanning the original into memory.

Dual Access (Not Available for Colour fax)

You can scan up to 50 messages into the fax memory, even while the machine is receiving or sending another fax (from the memory). You can set temporary settings for each fax you're scanning, except Timer and Polling.

If you get an **OUT OF MEMORY** message while scanning the first page of a fax, press **Stop/Exit** to cancel the scan. If you get an **OUT OF MEMORY** message while scanning in a subsequent page, you will have the option to press **Mono Fax Start** to transmit the pages scanned so far, or to press **Stop/Exit** to cancel the operation.

1 Insert the document face up in the ADF, or face down on the glass platen.

2 Enter the fax number.

3 Press **Mono Fax Start**. The machine starts scanning the document and the screen displays the job number (#XXX) of the fax, and how much memory is available. When the machine starts dialling you can immediately repeat Steps 1 through 3 for the next fax.

- Your machine normally operates in Dual Access mode. However, when you send a colour fax, the machine always starts sending the fax without scanning the original into memory (Real Time Transmission).
- The number of pages you can scan into memory varies with the data they contain.

Real Time Transmission

When you are sending a fax, the machine will scan documents into memory before sending. Then, as soon as the phone line is free, the machine will start dialling and sending the fax. If memory becomes full, the machine will send the document in real time (even if **REAL TIME TX** is set to **OFF**).

Sometimes you may want to send an important document immediately, without waiting for memory transmission. You can set **REAL TIME TX** to **ON**.

1 Insert the document face up in the ADF, or face down on the glass platen.

2 Press **Menu/Set**, **2**, **2**, **5**.

3 To change the default setting, press ⬆ or ⬇ to select **ON** (or **OFF**) and press **Menu/Set**. Go to Step 6—**OR**—For the next fax transmission only, press ⬆ or ⬇ to select **NEXT FAX ONLY**.

4 Press **Menu/Set**.

5 For the next fax only, press ⬆ or ⬇ to select **ON** (or **OFF**) and press **Menu/Set**.

6 Press **1** if you want to select additional settings. The display returns to the **SETUP SEND** menu—**OR**—Press **2** if you have finished choosing settings and go to Step 7.

7 If you switched ON Real Time Transmission for the next fax only, enter the fax number and press **Mono Fax Start**.

> This setting has no effect on Colour faxes. Colour faxes are always sent by using Real Time Transmission.

3 Receiving a Fax

Receive Mode Settings

Select Receive Mode

Receive Mode	For
1. **FAX ONLY**	Use this function if you want to receive fax messages only (no telephone calls). The machine should be connected on its own line. The machine automatically answers every call as a fax call. You cannot receive a voice call, but, if you have connected an External telephone, you can still dial out and make voice calls. (This setting is recommended if the machine is on its own dedicated line.)
2. **FAX/TEL** (**F/T**) (with an External Telephone)	Use this function if you expect to receive many fax messages and few phone calls. The machine automatically answers every call. If the call is a fax, it prints the fax. If the call is not a fax, it signals you with an F/T pseudo-ring, different from the phone company ringing, to alert you to pick up the call. Lift the external telephone's handset, and then press **Tel/R** to answer. If you select this setting, you will need to set the Ring Delay and F/T Ring Time features (on the following pages).
3. **TAD:ANSWER MACH.** (with an External Answering Machine)	This is the only setting in which you can use an **external** answering machine. Your telephone answering device answers every call. Once the external telephone answering device (TAD) answers, the machine listens for fax tones. If it detects fax tones, fax messages are printed.

The TAD setting works only with an external telephone answering device (TAD). Ring Delay and F/T Ring Time do not work in this setting.

4. **MANUAL** (with an External Telephone)	Use this function if you receive many telephone calls and few fax messages. You must answer all calls yourself. If you hear fax tones, wait until the machine takes over the call automatically, then hang up (see Fax Detect function).

To Select or Change Your Receive Mode

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

2 Press ⬆ or ⬇ to select **FAX ONLY**, **FAX/TEL**, **TAD:ANSWER MACH.**, **MANUAL** mode, and press **Menu/Set**.
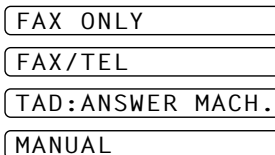
3 Press **Stop/Exit**.

The screen returns to the date and time display, along with your new receive mode setting.

```
FAX ONLY
FAX/TEL
TAD:ANSWER MACH.
MANUAL
```

brother MFC-590

```
09/06 15:25   FAX
```

FAX : **FAX ONLY**
F/T : **FAX/TEL**
TAD : **EXTERNAL ANSWERING DEVICE**
MAN : **MANUAL**

Current Receive Mode · · · ·

Setting the Ring Delay

The Ring Delay setting determines the number of times the machine rings before it answers in **FAX ONLY** or **FAX/TEL** mode. (See *Operation from an External or Extension Telephone*, page 41.)

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

2 Press ⬆ or ⬇ to select how many times the line rings before the machine answers.

3 Press **Menu/Set** when the screen displays your selection.

4 Press **Stop/Exit**.

Setting the F/T (Fax/Tel) Ring Time (Fax/Tel Mode Only)

You need to determine how long the machine will notify you with its special F/T pseudo-ring when you have a voice call. This ringing happens after the initial ringing from the phone company. Only the machine rings, for 20, 30, 40 or 70 seconds; no other phones on the same line ring the special F/T pseudo-ring. However, you can answer the call on any extension phone (in a separate wall socket) on the same line as the machine. (See *Operation from an External or Extension Telephone*, page 41.)

1 Press **Menu/Set**, **2**, **1**, **3**.

2 Press ⬆ or ⬇ to select how long the machine will ring to alert you that you have a voice call, and then press **Menu/Set**.

3 Press **Stop/Exit**.

Now, when a call comes in and the machine is set to Fax/Tel (F/T) Mode, all phones on this line will ring the number of times you selected in Ring Delay.

You can let the machine pick up and detect if it's a fax or voice call. If it's a fax call, the machine prints the fax. If it's a voice call, the machine signals you with an F/T pseudo-ring for the length of time you selected in F/T Ring Time. Lift the external telephone's handset, and then press **Tel/R** to answer.

> Even if the caller hangs up during the F/T pseudo-ringing, the machine continues the F/T pseudo-ringing for the set time.

Fax Detect (with an External or Extension Telephone)

When you use this feature, you don't have to press **Mono Fax Start** or ＊ **5 1** when you answer a fax call with an external or extension telephone and hear calling beeps. Just hold the handset of an external or extension telephone and wait for several seconds. When you see **RECEIVING** on the fax screen or when you hear "chirps" through the handset of an extension phone connected to another wall socket, just replace the handset, and the machine does the rest. Selecting **ON** allows the machine to receive fax calls automatically, even if you lift the handset of an external or extension phone. Selecting **OFF** means you will have to activate the machine yourself, by pressing **Mono Fax Start** or ＊ **5 1** at the external or extension telephone. (You have to set Remote Activation to **ON** in **Menu/Set**, **2**, **1**, **4** to use ＊ **5 1**.) (See *Operation from an External or Extension Telephone*, page 41.)

In case Fax Detect does not work, because of a poor phone line connection, just press the Activation Code ＊ **5 1** at the external or extension telephone.

1 Press **Menu/Set**, **2**, **1**, **4**.

2 Press ⬆ or ⬇ to select **ON** (or **OFF**), and press **Menu/Set**.

3 Press **Stop/Exit**.

Receiving a Fax

Printing a Reduced Incoming Document (Auto Reduction)

If you choose **ON**, the machine reduces an incoming document automatically, so that it fits on one page of A4 recording paper, regardless of the size of the original document.

1 Press **Menu/Set**, **2**, **1**, **6**. The screen displays

> `6.AUTO REDUCTION`

2 Use ⬆ or ⬇ to select **ON** (or **OFF**).

3 Press **Menu/Set** when the screen displays your selection.

4 Press **Stop/Exit**.

If incoming faxes show that information in the left and right margins has been cut off, make sure this Auto Reduction feature is turned on.

- When you use Auto Reduction to reduce incoming documents to fit on one page of recording paper, you can do so only as long as the original document is not longer than 35 cm. If the original is longer than 35 cm, the data will not be reduced and will carry over to print on a second page.
- When you set **AUTO REDUCTION** to **ON**, even if the document size is the same as the recording paper or smaller than it, the data will be slightly reduced.

Reception into Memory (Not Available for Colour fax reception)

As soon as the multi-purpose sheet feeder becomes empty during fax reception, the screen will display "**CHECK PAPER**"; please put some paper in the multi-purpose sheet feeder. (See Quick Setup Guide.)

If the MEMORY RECEPTION switch is ON at this time…

The current fax reception will continue, with the remaining page(s) being stored in memory, subject to available memory. Subsequent incoming faxes will also be stored into memory until the memory is full, following with no further incoming fax calls will be automatically answered. To print all data put fresh paper in the multi-purpose sheet feeder and press **Mono Fax Start**.

If the MEMORY RECEPTION switch is OFF at this time…

The current fax reception will continue, with the remaining page(s) being stored in memory, subject to available memory. Subsequent incoming fax calls will not be automatically answered until fresh paper is put in the multi-purpose sheet feeder. To print the last fax received, put paper in the multi-purpose sheet feeder and press **Mono Fax Start**.

1 Press **Menu/Set**, **2**, **1**, **7**.

2 Use ⬆ or ⬇ to select **ON** (or **OFF**), and press **Menu/Set** when the screen displays your selection.

3 Press **Stop/Exit**.

Printing a Fax from Memory

If you have fax storage ON for remote retrieval or fax forwarding, you can still print a fax from the machine's memory when you are at the machine: (See *Setting Fax Storage*, page 46.)

1 Press **Menu/Set**, **2**, **5**, **4**.

2 Press **Mono Fax Start**.

3 After all the data saved in the memory is printed out, press **Stop/Exit**.

4 **Telephone (Voice) Operation**

Making Voice Calls with an External Telephone

If you connect an external telephone to the machine, the dial pad on the machine can be used to dial a number for normal telephone calls. You can dial numbers, by using Speed Dial memory, or using the dial pad.

> You can also use Chain Dialling or Pause function. (See *Chain Dialling*, page 24 and *Pause*, page 25.)

Manual Dialling with an External Telephone

Manual dialling is simply pressing all of the digits of the phone number.

1 Pick up the external telephone's handset.

2 When you hear a dial tone, dial the number, using the dial pad.

3 To hang up, replace the external telephone's handset.

Search

You can search for names you have stored in Speed Dial memories. (See *Storing Speed Dial Numbers*, page 22.)

1 Pick up the external telephone's handset.

2 Press **Search/Speed Dial**.

3 To search for numbers alphabetically by name, enter the first letter of the name by using the dial pad, and then press ⟨ or ⟩ .

—**OR**—

To search for numbers numerically by Speed-Dial number, press ⟨ or ⟩.

4 When the screen displays the name you want to call, press **Mono Fax Start** to begin dialling.

5 When the call is over, hang up.

Speed Dialling

1 Pick up the external telephone's handset.

2 When you hear a dial tone, press **Search/Speed Dial**, then press **#** and the two-digit Speed Dial number. (See *Storing Speed Dial Numbers*, page 22.)

3 To hang up, replace the external telephone's handset.

Tone/Pulse (Except for the Nordic Countries)

If you have pulse dialling service, but need to send tone signals (for telephone banking, for example), follow the directions below. If you have touch tone service, you do not need this feature to send tone signals.

1 Lift the external telephone's handset and dial the number.

2 When you are asked to enter any number, press **#** on the control panel of the machine. Any digits dialled after this sends tone signals.

3 When you hang up, the machine returns to pulse dialling service.

Fax/Tel (F/T) Mode

When you share one line for your telephone and fax machine, in the Fax/Tel (**F/T**) Mode, the machine can determine whether an incoming call is a fax or a telephone call. (See *Select Receive Mode*, page 28.)

Tel/R Key

This key is used to enter into a telephone conversation having picked up the handset of an external telephone in F/T pseudo-ringing.

5 Printing Reports

Transmission Report and Journal Setting

Two reports require initial setup in the Menu table: Transmission Verification Report and Journal Period. For initial setup:

Press **Menu/Set**, **2**, **4**, **1**.

—**OR**—

Press **Menu/Set**, **2**, **4**, **2**.

> 1.XMIT REPORT

> 2.JOURNAL PERIOD

Customizing the Transmission Verification (Xmit) Report

You can use the Xmit Report as confirmation that you sent a fax. This report lists the name or fax number of the receiving party, the time and date of transmission, and if the transmission was successful.

When the feature is **OFF**, the report is printed automatically only if an error occurred during transmission. If the report indicates ERROR, send the document again. If the report indicates you should check the readability of certain pages, resend those pages.

If you typically send multiple faxes to the same destinations, you may need a reminder to identify each fax transmission. You can select **OFF+IMAGE** or **ON+IMAGE** to print a portion of the first page of the fax message on the report.

1 Press **Menu/Set**, **2**, **4**, **1**.

2 Press ⌃ or ⌄ to select **OFF**, **OFF+IMAGE**, **ON** and **ON+IMAGE**.

3 Press **Menu/Set**.

4 Press **Stop/Exit**.

Setting the Journal Period

You can set the machine to print activity reports at specific intervals (1, 3, 6, 12, 24 hours, 2, 4 or 7 days). If you set the interval to **OFF**, you can print the report by following the steps in the next section.

1 Press **Menu/Set**, **2**, **4**, **2**.

2 Press ⌃ or ⌄ to choose your setting, and then press **Menu/Set**.

3 If you choose 7 days, the screen prompts you to choose a day at which to begin the 7-day countdown. Press ⌃ or ⌄ to choose your setting and press **Menu/Set**.

4 Enter the time to begin printing, in 24-hour format (for example, enter 19:45 for 7:45 PM), and press **Menu/Set**.

5 Press **Stop/Exit**.

Using the Reports Key

Six lists are available.

| 1.HELP | Lists basic operational steps and functions. |

| 2.QUICK-DIAL | Lists names and numbers stored in Speed Dial memory, in numerical order. |

| 3.JOURNAL | Journal lists information about the last 200 incoming and outgoing faxes. TX means Transmit; RX means Receive. |

| 4.XMIT VERIFY | Prints a Transmission Verification Report for your last transmission. |

| 5.SYSTEM SETUP | Lists settings for **GENERAL SETUP**, **SETUP RECEIVE**, **SETUP SEND**, **REPORT SETTING** and **REMOTE FAX OPT**. |

| 6.ORDER FORM | You can print an accessories order form to your Brother dealer for service. |

To Print a Report

1 Press **Reports**.

2 Press ⬆ or ⬇ to select the report you want, and then press **Menu/Set**.
 —**OR**—

Enter the number of the report you want to print. For example, press **1** to print the Help List.

6 **Advanced Sending**

Advanced Operations

Overseas Mode

Sometimes, when sending a fax to overseas numbers, problems can be experienced. This mode makes the machine work better for such calls.

After you send a fax using this feature, the feature turns itself off.

1 Insert the document face up in the ADF, or face down on the glass platen.

2 Press **Menu/Set**, **2**, **2**, **7**.

3 Press ⌄ or ⌄ to select **ON** (or **OFF**), and press **Menu/Set** when the screen displays your selection.

4 Press **1** if you want to select additional settings. The display returns to the **SETUP SEND** menu—**OR**—Press **2** if you are finished choosing settings and go to Step 5.

5 Enter the fax number you're calling, and press **Mono Fax Start**.

Delayed Transmission (Timer) (Not Available for Colour Fax)

You can use this function to send a fax up to 24 hours later.

1 Insert the document face up in the ADF, or face down on the glass platen.

2 Press **Menu/Set**, **2**, **2**, **3**.

3 Enter the time you want the fax to be sent, in 24-hour format (for example, enter 19:45 for 7:45 PM), and press **Menu/Set**.

4 Press **1** if you want to select additional settings. The display returns to the **SETUP SEND** menu—**OR**—Press **2** if you are finished choosing settings and go to Step 5. The screen prompts you to enter the fax number.

5 Enter the fax number, and press **Mono Fax Start**. The machine will wait until the time you have entered to send the fax.

Delayed Batch Transmission

Before sending the delayed faxes, your Brother machine will economize by sorting all the documents in memory by destination and scheduled time. If you set Batch Transmission to **ON**, all delayed faxes scheduled at the same time to the same fax number will be sent as one transmission.

1 Press **Menu/Set**, **2**, **2**, **4**.

2 Press ⌄ or ⌄ to select **ON** (or **OFF**), and press **Menu/Set**.

3 Press **Stop/Exit**.

Broadcasting (Not Available for Colour Fax)

Broadcasting is automatically sending the same fax message to multiple fax numbers. Using the **Menu/Set** key, you can include up to 100 Speed Dial locations, and up to 50 manually dialled numbers (maximum of 150 locations if you did not use up any locations for Groups, access codes or credit card numbers).

However, available memory will vary with the types of jobs in memory and numbers of locations used for broadcasting. If you broadcast to more than the maximum locations available, you will not be able to setup transmissions using dual access and the timer.

The easiest way to broadcast is to first combine frequently used Speed Dial numbers as a Group, which uses up a Speed Dial. (Remember, you can have up to six Groups and Quick-Dial numbers can be included in more than one Group). Then by pressing **Menu/Set** between each location, you can include Speed Dial, Groups, and manual dialling (using the dial pad) in the same broadcast. Use the **Search/Speed Dial** to help you choose the numbers easily.

After the broadcast is completed, a Broadcast Report will be printed automatically to let you know the results.

1 Insert the document face up in the ADF, or face down on the glass platen.

2 Enter a number using Speed Dial, Group number, Search or the dial pad. (See *Setting Up Groups for Broadcasting*, page 38.)
Example: Group number

3 Press **Menu/Set**. You will be prompted to enter the next number.

4 Enter the next number.
Example: Speed Dial

5 Press **Menu/Set**.

6 Enter the next fax number.
Example: Manual dialling, using the dial pad.

7 Press **Mono Fax Start**.

The machine will read the documents into memory and then start sending faxes to all the numbers you entered.

■ Enter the long dialling sequence numbers as you normally would, but keep in mind that each Speed Dial counts as one location, so the number of locations you can call becomes limited.

■ If the line is busy or a connection could not be made for some other reasons while broadcasting, the machine will redial the number automatically.

■ If the memory is full, press **Stop/Exit** to abort the job or press **Mono Fax Start** to send the portion that is in the memory (if more than one page has been scanned).

Setting Up Groups for Broadcasting

Groups allow you to send the same fax message to many fax numbers by pressing only five keys (**Search/Speed Dial**, **#**, the two-digit location, and **Mono Fax Start**). **First**, you will need to store each fax number as a Speed Dial number. (See *Storing Speed Dial Numbers*, page 22.) **Then**, you can combine them into a Group. Each Group uses up a Speed Dial number. Finally, you can have up to 6 small Groups, or you can assign up to 99 numbers to one large Group.

1 Press **Menu/Set**, **2**, **3**, **2**.

`PRESS SPEED-DIAL`

2 Press **Search/Speed Dial**, and then enter the two-digit location where you wish to store the Group number, and then press **Menu/Set**.
(For example, press **Search/Speed Dial**, **07**.)

3 Use the dial pad to enter the Group Number (for example, press **1** for Group 1).

4 Press **Menu/Set**. To include Speed Dial numbers in the Group, enter the Speed Dial locations one after the other by pressing **Search/Speed Dial** and then the two digit Speed Dial number (e.g. 05) on the dial pad. For example, for Speed Dial location 05 and 09, press **Search/Speed Dial**, **0**, **5** and **Search/Speed Dial**, **0**, **9** on the dial pad.

`G01:#05#09_`

5 Press **Menu/Set**. The screen prompts you to enter a name.

6 Use the dial pad to enter a name for the group (up to 15 characters) (for example, NEW CLIENTS) and press **Menu/Set**. (See *Entering Text*, page 146.)

7 Press **Stop/Exit**.

> You can print a list of all Speed Dial numbers. Group numbers will be marked in the column of "**GROUP**". (See *Printing Reports*, page 34.)

Cancelling a Job While Scanning the Document

You can cancel a job while you are scanning it into memory by pressing **Stop/Exit**.

Checking and Cancelling a Scheduled Job in Memory

You can check or cancel a job that is waiting in memory.

1 Press **Menu/Set**, **2**, **6**.
Any waiting jobs appear on the display. If nothing is waiting, the screen displays **NO JOB WAITING**.

2 If you have more than one job waiting, use ⌄ or ⌄ to select the job you want to cancel. Press **Menu/Set** when the screen displays your selection—**OR**—If you have only one job waiting, go to Step 3.

3 Press **1** to cancel—**OR**—Press **2** to exit without cancelling.
To cancel another job, return to Step 2.

4 Press **Stop/Exit**.

TX Lock

This feature allows you to prevent unauthorised access to the machine. When switched ON, TX Lock prohibits most functions. The following functions listed are available while TX Lock is switched ON.

■ Receiving faxes
■ Answering & making telephone calls with an external telephone
■ Scheduled Delayed Transmission*
■ Polling*
■ Fax Forwarding*
■ Remote Retrieval

* Provided it was set before TX Lock was switched ON.

Using TX Lock

You must use a password to switch TX Lock ON and OFF.

Setting Up the TX Lock for the First Time

1 Press **Menu/Set**, **2**, **0**, **1**.

`NEW PASSWD:XXXX`

2 Enter a 4-digit number as a new password.

3 Press **Menu/Set**.
The screen prompts you to re-enter the password.

`VERIFY:XXXX`

4 Re-enter the password and press **Menu/Set**.

5 Press ⬆ or ⬇ to choose **SET TX LOCK**.

6 Press **Menu/Set**. The screen prompts you to enter the password.

`PASSWORD:XXXX`

7 Enter a 4-digit password, followed by **Menu/Set**.
This is the same as the security password of the machine already stored.

The screen displays **ACCEPTED** for 2 seconds, followed by **TX LOCK MODE** - TX Lock is now switched ON.

If the password you enter at Step 7 is incorrect, the screen would display **WRONG PASSWORD**. After 2 seconds the display will then return to normal (displaying the date & time). You must then switch ON TX Lock again. (See *Switching TX Lock ON*, page 40.)

Changing the TX Lock Password

1 Press **Menu/Set**, **2**, **0**, **1**.

2 Press ⌃ or ⌄ to choose **SET PASSWORD**.

3 Press **Menu/Set**.
The screen prompts you to enter the old password.

OLD PASSWD:XXXX

4 Enter the current password.

5 Press **Menu/Set**.

NEW PASSWD:XXXX

6 Enter a 4-digit number as a new password.

7 Press **Menu/Set**.
The screen prompts you to re-enter the new password.

VERIFY:XXXX

8 Enter the new password again and press **Menu/Set**.

9 Press **Stop/Exit**.

Switching TX Lock ON

1 Press **Menu/Set**, **2**, **0**, **1**.

2 Press ⌃ or ⌄ to choose **SET TX LOCK**.

3 Press **Menu/Set**. The screen prompts you to enter the password.

PASSWORD:XXXX

4 Enter a 4-digit password, followed by **Menu/Set**.
This is the same as the security password of the machine already stored.

The screen displays **ACCEPTED** for 2 seconds, followed by **TX LOCK MODE** - TX Lock is now switched ON.

If the password you enter at Step 4 is incorrect, the screen would display **WRONG PASSWORD**. After 2 seconds the display will then return to normal (displaying the date & time). You must then start from Step 1 to set TX Lock.

Switching OFF TX Lock

1 When TX Lock is switched ON, press **Menu/Set**.

PASSWORD:XXXX

2 Enter a 4-digit password and press **Menu/Set**.
The screen displays **ACCEPTED**, then after 2 seconds the display reverts to normal. TX Lock is now switched OFF.

If the password you enter at Step 2 is incorrect, the screen would display **WRONG PASSWORD**. After 2 seconds the display will then return to displaying **TX LOCK MODE**. You must then start from Step 1 to switch OFF TX Lock.

If you forget the TX Lock password, please contact your Brother dealer or Brother for assistance.

7 Advanced Receiving

Operation from an External or Extension Telephone

An external phone is a telephone that is plugged into the machine (either into the machine's EXT socket or into the back of the connector that plugs into the telephone wall socket).

An extension phone is another phone on the same phone number as the machine, but plugged into a different telephone wall socket. For example, the machine may be connected to a phone line in your study, and you may have another phone on the same line (and same phone number) in your kitchen. This feature enables you to answer the phone in the kitchen if it rings while you are making a coffee, knowing that you can transfer the call to the machine if the incoming call is a fax.

If you answer a fax call on an external or extension phone, you can make the machine take over by using the Activation Code. When you press the Activation Code ✱ **5 1**, the machine starts to receive a fax. If you set **FAX DETECT** to **ON**, you don't have to press ✱ **5 1**, just hold the handset and wait for several seconds. (See *Fax Detect (with an External or Extension Telephone)*, page 30.)

If the machine answers a voice call and F/T pseudo-rings for you to take over, use the Deactivation Code **# 5 1** to take the call at an extension phone. The Deactivation Code is used only in Fax/Tel (F/T) Mode. (You have to set Remote Activation to **ON** in **Menu/Set**, **2**, **1**, **5** to use ✱ **5 1** or **# 5 1**.)

If you answer a call, and no one is on the line, assume you're receiving a fax. At an extension phone, press ✱ **5 1**, wait for fax receiving tones (chirps), then hang up. At an external phone, press ✱ **5 1** and wait for the phone to be disconnected (the screen displays **RECEIVING**) before you hang up. (Your caller will have to press Start to send the fax.)

> If you accidentally pick up an extension phone when a fax message is being received, you may disrupt the transmission or render some portions unreadable.

- ◆ ✱ **5 1**—From an extension phone, or an external phone, ✱ **5 1** will set the machine in receive mode.
- ◆ **# 5 1**—From an extension phone, **# 5 1** can stop the machine receiving. This is effective in F/T and Fax Detect modes.

The Remote Activation Code can also be used by your callers. When you are using an external TAD, your outgoing message (OGM) should end with the statement "to send a fax, press ✱ **5 1**". (See *Outgoing Message (OGM) of External TAD*, page 9.)

For Fax/Tel Mode Only

When the machine is in Fax/Tel (F/T) Mode, it will use the F/T Ring Time (F/T pseudo-ringing) to alert you to a voice call. If you're at the machine, you can lift the external telephone's handset and press **Tel/R** to answer.

If you're at an extension phone, you will need to lift the handset during the F/T Ring Time and press **# 5 1** between the F/T pseudo-rings. If no one is on the line, or if someone wants to send you a fax, send the call back to the machine by pressing ✱ **5 1**.

Switching ON Remote Activation and Changing Remote Codes

Remote Codes might not work with some telephone systems. The preset Activation Code is ✱ **5 1**. The preset Deactivation Code is **# 5 1**.

If you are always disconnected when accessing your external TAD remotely, try changing the Activation Code from ✱ **5 1** to **# # #** and the Deactivation Code from **# 5 1** to **1 1 1**. You cannot use the same number for the Activation Code, the Deactivation Code and the Remote Access Code.

To switch Remote Activation ON and change Remote Codes

1 Press **Menu/Set**, **2**, **1**, **5**.

2 Press ⬂ or ⬀ to select **ON** (or **OFF**), and press **Menu/Set** when the screen displays the setting you want.

3 If you want to, enter a new Remote Activation Code, then press **Menu/Set**.

4 If you want to, enter a new Remote Deactivation Code, then press **Menu/Set**.

5 Press **Stop/Exit**.

Telephone Service

BT Call Sign (For U.K. Only)

This machine feature lets you use the BT Call Sign subscriber service which allows you to have at least two separate telephone numbers on one phone line. Each phone number has its own distinctive ringing pattern, so you know which phone number is ringing. This is one way you can have a separate phone number for your machine.

Your machine has a BT Call Sign compatible distinctive ringing function, allowing you to dedicate a second phone number (on the same phone line) just for receiving faxes.

You can switch it off temporarily, then turn it back on. When you get a new fax number, make sure you reset this function.

■ **To have your external TAD answer only the main number, the machine must be in Manual Mode.**

■ **In FAX/TEL (F/T) or FAX ONLY mode, the machine will answer all numbers on the phone line.**

**To enable the machine to work with BT Call Sign
(Only with your external phone)**

1 Set the machine to **MANUAL** mode. (**Menu/Set**, **2**, **1**, **2**)

2 Press **Menu/Set**, **2**, **0**, **2**. The screen displays the current setting of this feature.

3 Press ⬂ or ⬀ to select **ON** (or **OFF**).

4 Press **Menu/Set**.

5 Press **Stop/Exit**.

8 **Polling**

> Polling is the process of retrieving faxes from another machine. You can use the machine to "poll" other machines, or you can have someone poll the machine.

All parties involved in polling need to set up their machines to accommodate polling. When someone polls the machine to receive a fax, they pay for the call; if you poll someone's fax machine to receive a fax, you pay for the call. (See *Polling Transmit (Not Available for Colour Fax)*, page 45.)

> Some machines do not respond to the polling function.

Secure Polling

Secure Polling is a way to keep your documents and others from falling into the wrong hands while the machine is set up for polling. You can use Secure Polling only with another Brother fax machine. Anyone who polls to receive a fax must enter the polling secure code.

Polling Receive

Polling Receive is when you call another fax machine to receive a fax from it.

Setup for Polling Receive (Standard)

1 Press **Menu/Set**, **2**, **1**, **8**.

2 Press ⌄ or ⌃ to choose **STANDARD**, and press **Menu/Set**.

3 Enter the fax number you are polling, and press **Mono Fax Start**.

ENTER FAX NO.

Setup for Polling Receive with Secure Code

You need to make sure you are using the same secure code as the other party.

1 Press **Menu/Set**, **2**, **1**, **8**.

2 Press ⌄ or ⌃ to choose **SECURE**, and press **Menu/Set**.

3 Enter a four-digit secure code.

This is the same as the security code of the fax machine you are polling.

4 Press **Menu/Set**.

ENTER FAX NO.

5 Enter the fax number you are polling.

6 Press **Mono Fax Start**.

Setup Delayed Polling Receive

You can set the machine to begin Polling Receive at a later time.

1 Press **Menu/Set**, **2**, **1**, **8**.

2 Press ⌄ or ⌃ to choose **TIMER**, and press **Menu/Set**.

3 The screen prompts you to enter the time you want to begin polling.

4 Enter the time (in 24-hour format) you want to begin polling.
For example, enter 21:45 for 9:45 PM.

5 Press **Menu/Set**. The screen prompts you to enter the
fax number you are polling and then to press
Mono Fax Start.

```
ENTER FAX NO.
```

6 Enter the fax number, and press **Mono Fax Start**.
The machine makes the polling call at the time you entered.

> You can set up only one Delayed Polling.

Sequential Polling

The machine can request documents from several fax units in a single operation. You just specify several destinations in Step 4. Afterward, a Sequential Polling Report will be printed.

1 Press **Menu/Set**, **2**, **1**, **8**.

2 Press ⌄ or ⌃ to choose **STANDARD**, **SECURE** or **TIMER**, and press **Menu/Set** when the screen displays the setting you want.

3 If you selected **STANDARD**, go to Step 4.
• If you selected **SECURE**, enter a four-digit number and press **Menu/Set**, and then go to Step 4.
• If you selected **TIMER**, enter the time (in 24-hour format) you want to begin polling and press **Menu/Set**, and then go to Step 4.

4 Specify the destination fax machines (up to 150), which you wish to poll by using Speed Dial, Search, a Group (see *Setting Up Groups for Broadcasting*, page 38) or the dial pad. You must press **Menu/Set** between each location.

5 Press **Mono Fax Start**.
The machine polls each number or group in turn for a document.

Polling Transmit (Not Available for Colour Fax)

Polling Transmit is when you set up the machine to wait with a document so another fax machine can retrieve it.

The document will be stored and can be retrieved from any other fax machine until you delete the fax in memory by using the Cancelling a Job function. (See *Checking and Cancelling a Scheduled Job in Memory*, page 38.)

Setup for Polling Transmit (Standard)

1 Insert the document face up in the ADF, or face down on the glass platen.

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

3 Press ⬇ or ⬆ to choose **STANDARD**, and press **Menu/Set**.

4 Press **1** if you want to select additional settings. The display returns to the **SETUP SEND** menu—**OR**—Press **2** if you choosing setting and go to Step 5.

5 Press **Mono Fax Start** and wait for the fax to be polled.

Setup for Polling Transmit with Secure Code

When you choose **POLLING:SECURE**, anyone who polls the machine must enter the polling ID number.

1 Insert the document face up in the ADF, or face down on the glass platen.

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

3 Press ⬇ or ⬆ to choose **SECURE**, and press **Menu/Set**.

4 Enter a four-digit number, and press **Menu/Set**.

5 Press **1** if you want to select additional settings. The display returns to the **SETUP SEND** menu—**OR**—Press **2** if you are finished choosing settings and go to Step 6.

6 Press **Mono Fax Start** and wait for the fax to be polled.

You can use Secure Polling only with another Brother fax machine.

9 **Remote Fax Options** (Not Available for Colour Fax)

Setting Fax Storage

If you set Fax Storage to **ON**, you will be able to retrieve fax messages from another location, using Fax Forwarding or Remote Retrieval functions. The screen will indicate when you have a fax stored in memory. Fax storage only works with black and white fax message. It is not possible to receive colour faxes with fax storage function switched to **ON**.

1 Press **Menu/Set**, **2**, **5**, **2**.

2 Press ⬆ or ⬇ to select **ON** (or **OFF**), and press **Menu/Set** when the screen displays your selection.

3 Press **Stop/Exit**.

> If there are faxes in memory when you turn the Fax Storage **OFF**, the screen prompts you to erase any faxes in memory.
> If you press **1**, all fax data is erased and Fax Storage is turned **OFF**. If the fax data in memory has not been printed before, it will be printed first, and then erased. If you press **2**, data is not erased, and Fax Storage remains **ON**.

Backup Print

If you've set **FAX STORAGE** to **ON**, the machine automatically prints fax messages as they are received into memory. This is a safety feature in case the power goes out so you won't lose the messages.

Fax Forwarding

> You cannot use Fax Forwarding when "Fax Storage" is set to **OFF**.

Programming a Fax Forwarding Number

When Fax Forwarding and Fax Storage are set to **ON**, the machine stores the received fax in memory, then dials the fax machine phone number you've programmed, and forwards the fax message.

1 Press **Menu/Set**, **2**, **5**, **1**.

2 Press ⬆ or ⬇ to select **ON** (or **OFF**), and press **Menu/Set**.
The screen prompts you to enter the number of the fax machine where faxes will be forwarded.

3 Enter the forwarding number (up to 20 digits), and press **Menu/Set**.

4 Press **Stop/Exit**.

> You can also dial into the machine from a remote location to switch this feature on, or to change the number you want your faxes forwarding to. (See *Changing the Fax Forwarding Number*, page 49.)

Changing the Remote Access Code

Enter your Remote Access Code when the machine picks up your call, so you can access features remotely. The access code is preset to **1 5 9** $*$, but you can change this.

1 Press **Menu/Set**, **2**, **5**, **3**.

2 Enter a three-digit number from 000 to 998, and press **Menu/Set**.
The $*$ cannot be changed. Do not use the same digits that appear in your Remote Activation or Deactivation Code.

3 Press **Stop/Exit**.

Remote Retrieval

Using Your Remote Access Code

To receive faxes at your location, you must call from a fax machine using touch tone. For convenience, you can retrieve faxes from a touch tone phone by having them sent to a fax machine. For example, if your hotel room does not have a fax machine, you can enter the number of the fax machine at the hotel's Front Desk.

1 Dial your fax number from a touch tone phone.

2 When the machine answers and beeps, immediately enter your Remote Access Code (the factory setting is **1 5 9** $*$).

3 The machine signals the kinds of messages received:
1 long beep — Fax message(s)
No long beep — No messages

4 The machine prompts you with two short beeps to enter a command. If you wait longer than 30 seconds to enter a command, the machine hangs up. If you enter an invalid command, the machine beeps three times.

5 Press **9 0** to reset the machine when you finish.

6 Hang up.

> If your fax machine is set to Manual Mode, you can access your machine remotely by phoning it and letting it ring for about 100 seconds. Your fax machine will answer the phone after about 100 seconds of ringing, and you then have 30 seconds to enter your Remote Access Code.

Remote Commands

Follow the commands below to access features remotely. When you call the machine and enter your Remote Access Code (the factory setting is **1 5 9** ✳), the system will signal you with two short beeps to enter a remote control command.

Change Fax Forwarding Setting

Press **9 5**

then to

Turn Fax Forwarding OFF—Press **1**.

Turn Fax Forwarding ON—Press **2**.

Program Fax Forward Number—Press **4**. (See *Changing the Fax Forwarding Number*, page 49.) Automatically turns Fax Forwarding **ON**.

Turn Fax Storage ON—Press **6**.

Turn Fax Storage OFF—Press **7**. (This is only possible if there are no faxes stored in the memory, or if all faxes have been erased using Remote Control **9 6 3**).

Retrieve or Erase a Fax

Press **9 6**

then to

Retrieve all faxes—Press **2**, then enter the number of remote fax machine and then press **# #**. After the beep, hang up and wait.

Erase all fax messages—Press **3**. If the data stored in the memory has not been printed before, it will be printed first and then erased.

Check the Receiving Status

Press **9 7**

then Press **1**.

> **1 long beep**—Received fax messages.
> **3 short beeps**—No messages.

Change Receive Mode

Press **9 8**

then for

TAD—Press **1**.

F/T (FAX/TEL)—Press **2**.

FAX—Press **3**.

Exit Remote Operation

Press **9 0**

Retrieving Fax Messages

1 Dial the machine's number.

2 When you hear the beep, immediately enter your Remote Access Code (the factory setting is **1 5 9** $*$).

3 As soon as you hear two short beeps, use the dial pad to press **9 6 2**.

4 Using the dial pad, enter the number (up to 20 digits) of the remote fax machine where you want your fax messages forwarded, and then press **# #**.

> You cannot use $*$ and **#** as dial numbers. However, if you want to store a pause, press **#**.

5 After you hear the machine beep, hang up and wait.
The machine calls the remote fax machine and sends the stored documents. The remote fax machine prints your fax messages.

Changing the Fax Forwarding Number

You can change the default setting of your fax forwarding number from a remote fax machine.

1 Dial the machine's number.

2 When you hear the beep, immediately enter your Remote Access Code (the factory setting is **1 5 9** $*$).

3 When you hear two short beeps, use the dial pad to press **9 5 4**.

4 Enter the new number of the remote fax machine where you want your fax messages forwarded, and then press **# #**.

> You cannot use $*$ and **#** as dial numbers. However, if you want to store a pause, press **#**. Also, if the machine is connected to a PABX, you can press **#** first before the fax machine's number. The **#** works as well as **Tel/R** key.

5 After you hear the machine beep, hang up.

10 **Making Copies**

Basic Copy Operations

Your Multi-Function Centre allows you to make high-quality photocopies and transparencies. Copies can be in black and white, or full colour. Always make sure you have paper in the Multi-purpose Sheet Feeder before making copies.
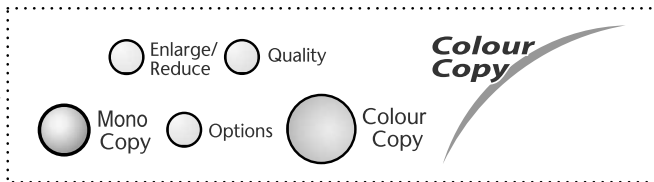
Do NOT pull on the paper while copying is in progress.

■ Incoming faxes cannot be received on paper or into memory while the machine is copying.

Making a Single Copy

1 Insert the document face up in the ADF, or face down on the glass platen.

2 Press **Mono Copy** or **Colour Copy**.

```
COPYING      P.01
```

To stop the copy process and release the original, press **Stop/Exit**.

Making Multiple Copies (Using the ADF)

1 Insert the document face up in the ADF.

2 Using the dial pad, enter the number of copies you want (up to 99). For example, press **3**, **8** for 38 copies.

To sort the copies, use **Options** key. (See *Using the Options Key*, page 54.) Sorting colour copies uses more memory and depends upon the data.

Press **Mono Copy** or **Colour Copy**.

Making Multiple Copies (Using the Glass Platen)

> If you want to sort multiple copies, use the ADF.

1 Lift the Document Cover.
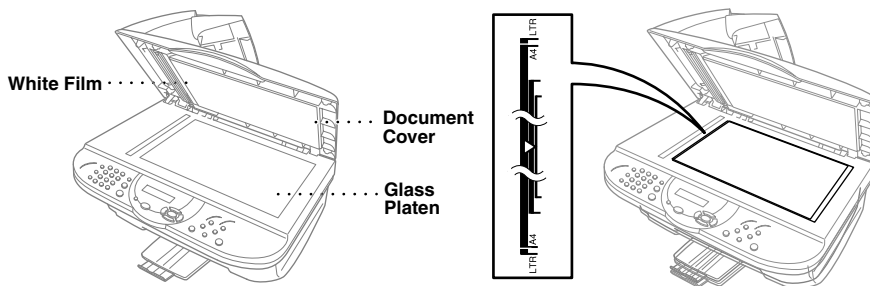
2 Using the document guidelines on the left, centre the document face down on the glass platen.

3 Close the Document Cover.

4 Using the dial pad, enter the number of copies you want (up to 99). *For example*, press **3**, **8** for 38 copies.

5 Press **Mono Copy** or **Colour Copy**. The machine starts scanning the document.

6 Place the next page to be copied on the glass platen, and then press **Mono Copy** or **Colour Copy**.

```
NEXT:PRESS COPY
END:PRESS STOP
```

7 Press **Stop/Exit** when you are finished copying.

Out of Memory

If the memory becomes full while you're making copies, the screen displays

```
OUT OF MEMORY
```

If you were scanning the first page to be copied, press **Stop/Exit** to cancel the operation and restart to make a single copy. If you were scanning a subsequent page, you will have the option to press **Mono Copy** or **Colour Copy** to copy the pages scanned so far—**OR**—Press **Stop/Exit** to cancel.

You will need to clear some fax messages to make some additional memory available before you can continue.

> To gain extra memory, you can turn off Fax Storage (See *Setting Fax Storage*, page 46.)—**OR**—Print fax messages in memory. (See *Printing a Fax from Memory*, page 31.)

COPIER

Temporary Copy Setting

You can improve your copies by using the Copy keys: **Enlarge/Reduce**, **Quality**, and **Options**. These settings are *temporary*, and the machine returns to its default settings 30 seconds after it finishes copying. If you want to use these temporary settings again, place the next document in the ADF or glass platen before 30 seconds expire.
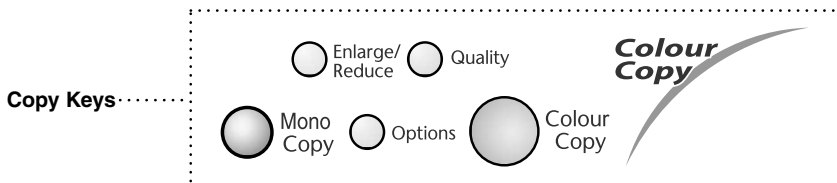
Copying Using Multiple Settings

You can try different combinations of settings for the best results. After you finish your settings using the **Enlarge/Reduce**, **Quality** and **Options** keys.

The LCD shows:

```
PRESS COPY OR
↑↓ FOR NEXT OPT.
```

■ Press ⌃ or ⌄ if you want to select additional settings.
  —OR—
  Press **Mono Copy** or **Colour Copy** if you are finished choosing settings.

Using the Quality Key

The **Quality** key changes the settings for copy quality (**NORMAL**, **BEST** or **FAST**).
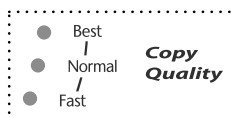
Press **Quality** continuously or press ⌃ or ⌄ after pressing **Quality** until you see the indicator lights change.

Press **Quality** and ⌃ or ⌄	NORMAL	Recommended mode for ordinary printouts. Good copy quality with adequate copy speed.
	BEST	Use this mode to copy precise images such as photographs. **BEST** uses the highest resolution and slowest speed.
	FAST	Fast copy speed and lowest ink consumption. Use **FAST** to save time (documents to be proof-read, large documents, or many copies).

1 Insert the document face up in the ADF, or face down on the glass platen.

2 Press **Quality**.

3 Press ⌃ or ⌄ to select the copy quality resolution, and then press **Menu/Set**.

4 Press **Mono Copy** or **Colour Copy**—OR—Press ⌃ or ⌄ for additional settings.

Making Enlarged or Reduced Copies

MANUAL allows you to enter a ratio from 25% to 400% in 1% increments.

	25%
	50%
	78%
Press	94%
Enlarge/Reduce	100%
and	104%
or	150%
	200%
	400%
	MANUAL

1 Insert the document face up in the ADF, or face down on the glass platen.

2 Using the dial pad, enter the number of copies (up to 99)—**OR**—Keep the default (01).

3 Press **Enlarge/Reduce**. Enlargement or reduction ratios appear.

4 Press ⌃ or ⌄ to choose an enlargement or reduction ratio.

You can reduce to **94%**, **78%**, **50%** or **25%** of the original size.

—**OR**—

You can enlarge to **104%**, **150%**, **200%** or **400%**.

—**OR**—

You can select **MANUAL** and press **Menu/Set**, then use the dial pad to enter an enlargement or reduction ratio between 25% and 400%. For example, press **5**, **3** to enter 53%.

5 Press **Menu/Set**.

6 Press **Mono Copy** or **Colour Copy**—**OR**—Press ⌃ or ⌄ for additional settings.

> Special Copy Options (2 in 1, 4 in 1 or Poster copy) are not available with **Enlarge/Reduce**.

COPIER

Using the Options Key

The **Options** key changes the settings for number of copies, paper type, brightness, stack/sort and special copy options **for the next copy only**. See the explanation below the table.

Press Options	Menu Selections	Options	Factory Setting
Options	NO. OF COPIES	NO.OF COPIES:XX	01
	PAPER TYPE	PLAIN/INK JET/ GLOSSY (**4-COLOUR** or **3-COLOUR**)/ TRANSPARENCY	PLAIN
	BRIGHTNESS	− ■ ■ ■ ■ ■+	− ■ ■ ■ □ □ +
	STACK/SORT	STACK/SORT	STACK
	SPECIAL	2IN1/4IN1/ POSTER/OFF	OFF

Paper Type

You can change the setting of paper type for next copy only.

1 Insert the original face up in the ADF, or face down on the glass platen.

2 Press **Options**.

3 Press ⌃ or ⌄ to select **PAPER TYPE**, and then press **Menu/Set**.

4 Press ⌃ or ⌄ to select the type of paper you are using (**PLAIN**, **INK JET**, **GLOSSY** or **TRANSPARENCY**), and press **Menu/Set**.

5 If you selected **GLOSSY**, press ⌃ or ⌄ to select **4-COLOUR** or **3-COLOUR**, and then press **Menu/Set**.

> The print quality of black ink varies depending on the kind of glossy paper you are using. Black ink is used when you select **4-COLOUR**. If the glossy paper you are using repels the black ink, select **3-COLOUR**, which simulates black ink by combining the three ink colours.

6 Press **Mono Copy** or **Colour Copy**—OR—Press ⌃ or ⌄ for additional settings.

Copy Brightness

1 Insert the document face up in the feeder, or face down on the glass platen.

2 Press **Options** and Press ⌃ or ⌄ to select **BRIGHTNESS**, and then press **Menu/Set**.

$$- ■ ■ ■ □ □ +$$

3 Press ⌃ to make a lighter copy—OR—Press ⌄ to make a darker copy, and then press **Menu/Set**.

4 Press **Mono Copy** or **Colour Copy**—OR—Press ⌃ or ⌄ for additional settings.

Sorting Multiple Copies (Using the ADF)

If you want to sort multiple copies, use the ADF.

1 Insert the document face up in the feeder, or face down on the glass platen.

2 Using the dial pad, enter the number of copies you want (up to 99).

3 Press **Options** and press ⌃ or ⌄ to select **STACK/SORT**, and then press **Menu/Set**.

4 Press ⌃ or ⌄ to choose **SORT** or **STACK**, and then press **Menu/Set**.

5 Press **Mono Copy** or **Colour Copy**—**OR**—Press ⌃ or ⌄ for additional settings.

Special Copy Options (Using the ADF)

You can save paper by copying either two or four pages onto one page.

1 Insert the document face up in the feeder.

2 Press **Options** and ⌃ or ⌄ to select **SPECIAL**, and then press **Menu/Set**.

3 Press ⌃ or ⌄ to select **2IN1**, **4IN1** or **OFF**, and press **Menu/Set**.

4 Press **Mono Copy** or **Colour Copy**—**OR**—Press ⌃ or ⌄ additional settings.

Special Copy Options (Using the Glass Platen)

You can save paper by copying either two or four pages onto one page, or you can create poster size copy.

1 Insert the document face down on the glass platen.

2 Press **Options** and ⌃ or ⌄ to select **SPECIAL**, and then press **Menu/Set**.

3 Press ⌃ or ⌄ to select **2IN1**, **4IN1**, **POSTER** or **OFF**, and press **Menu/Set**.

If you selected **2IN1** or **4IN1** in Step 3, place the next document on the glass platen, and then press **Menu/Set**. After all document have been scanned, go to Step 4.

```
NEXT:PRESS SET
END:PRESS COPY
```

4 Press **Mono Copy** or **Colour Copy**.
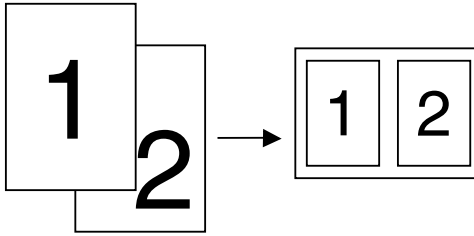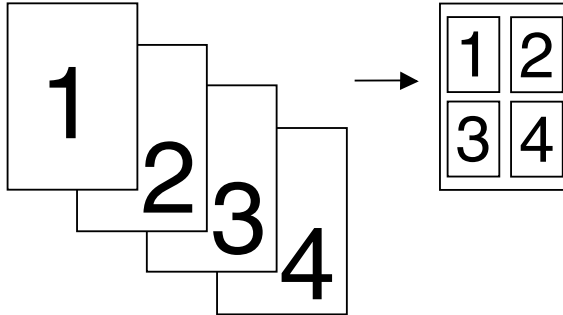
COPIER

2 in 1

4 in 1

Poster

You can create a poster size copy of a photograph.
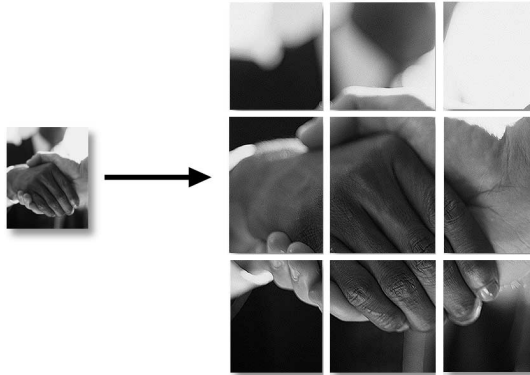
 ■ Poster size copy can be made only by using glass platen. It is not possible with the ADF.

■ Poster is not available for multiple copies.

■ Special Copy Options (2in1, 4in1 or Poster) are not available with **Enlarge/Reduce**.

■ 2in1 or 4in1 copies in colour are not available with multiple copies.

■ If you selected **GLOSSY** in the Paper Type setting, 2in1 or 4in1 copies are not available.

Changing Default Copy Settings

Press **Menu/Set**, **3** to change default settings for Copy mode. These settings will remain until you change them again by pressing **Menu/Set**. Adjust the colours using the Quality, Colour Adjustment, and Contrast settings.

By pressing a number, you can adjust copy settings as shown in the following chart. Press ⌒ or ⌒ to move through the selections for each setting. Press **Menu/Set** to save your selection. Press **Stop/Exit**—**OR**—Press ⌒ to select the next setting you want to change.

Press **Menu/Set**, and **3**.

1.QUALITY	**QUALITY:NORMAL**	
	QUALITY:BEST	
	QUALITY:FAST	
2.COLOUR ADJUST	**1.RED**	R: − ■■■□□ +
	2.GREEN	G: − ■■■□□ +
	3.BLUE	B: − ■■■□□ +
3.CONTRAST	− ■■■□□ +	
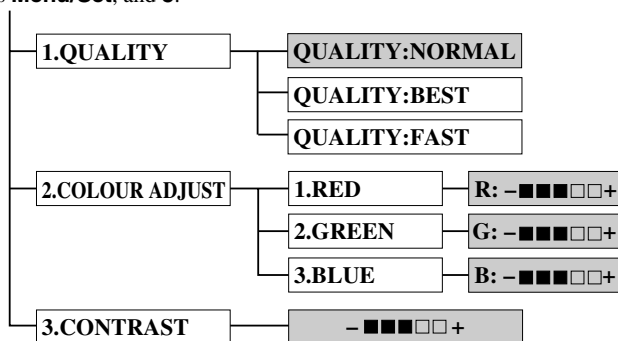
       : is default

Select Copy Quality

1 Press **Menu/Set**, **3**, **1**.

2 Press ⌒ or ⌒ to select copy quality (**NORMAL**, **BEST** or **FAST**) and press **Menu/Set** when the screen displays your selection.

3 Press **Stop/Exit**.

Colour Adjustment

1 Press **Menu/Set**, **3**, **2**.

2 Press ⌒ or ⌒ to select **RED**, **GREEN**, or **BLUE**, and press **Menu/Set**.

3 Press ⌒ or ⌒ to adjust the degree of colour, and press **Menu/Set**.

4 Return to Step 2 to select the next colour—**OR**—Press **Stop/Exit**.

Light   Dark

R : − ■■■□□ +

G : − ■■■□□ +

B : − ■■■□□ +

Copy Contrast

You can choose the contrast setting for a copy. Greater contrast can help an image look sharper and more vivid. This feature is available only for colour copying.

1 Press **Menu/Set**, **3**, **3**.

2 Press ◁ to decrease contrast—**OR**—Press ▷ to increase contrast.
Press **Menu/Set** when the screen displays your setting.

3 Press **Stop/Exit**.

Legal Limitations

Colour reproductions of certain documents are illegal and may result in either criminal or civil liability. This Notice is intended to be a guide rather than a complete listing of every possible prohibition. In case of doubt we suggest that you consult with the legal authorities in your individual country as to the legality of any particular questionable documents.

The following are examples of documents which should not be copied:

Paper money.

Bonds or other certificates of indebtedness.

Certificates of Deposit.

Armed Forces Service or Draft papers.

Passports.

Postage stamps (cancelled or uncancelled).

Immigration papers.

Welfare documents.

Cheques or Drafts drawn by Governmental Agencies.

Identification Documents, badges or insignias.

Licences and Certificates of Title to motor vehicles.

Copyrighted works cannot be copied: however, sections of a copyrighted work can be copied for "personal use". Multiple copies would indicate improper use.

Works of art should be considered the equivalent of copyrighted works.

11 Using the machine as a Printer

Features

The Multi-Function Centre offers you many features you will find in a high quality ink jet printer.

Fast Printing Speed—Using Draft mode, you can print up to 8 pages per minute in full colour, and up to 10 pages per minute in black.

Brilliant High Quality Output—Printing at 2400 x 1200 dpi resolution on glossy paper gives you highest resolution output.

Elaborate Output—You can utilize 2 in 1, watermark printing, Colour Enhance technology and other features for making excellent quality outputs.

Low Running Cost—Whenever you run out of a particular colour ink, you will replace only the cartridge that's empty.

Bi-directional Parallel Interface—The parallel interface allows bi-directional (IEEE 1284 compliant) communication with your computer.

USB—Universal Serial Bus Interface allows for fast communication with your computer.

Straight Paper Path—The machine can use various types of paper: plain paper, Ink Jet Paper, glossy paper, transparencies, and envelopes. Using the appropriate paper reduces the occurrence of paper jams.

Printer Driver

You can change the following printer settings when you print from your computer:

- Quality (Speed) /Media
- Colour Matching
- Halftone
- Colour Enhance
- Fast Draft Mode
- Watermark
- Print Date & Time

Choosing the Right Kind of Paper

To achieve high quality printing using the machine, it's very important to select the right kind of paper. See *Paper*, page 143 before selecting and purchasing paper for the machine.

Multi-Purpose Sheet Feeder

The multi-purpose sheet feeder can feed plain paper, inkjet paper, glossy paper, transparencies and envelopes. When the machine receives data from your computer, it begins the print process by loading paper from the multi-purpose sheet feeder.

1 Select the print command from your PC.

2 Your PC sends a print command and data to the machine. The screen displays **RECEIVING DATA**.

3 If there are more pages, the machine begins to print the next page automatically.

4 When the machine finishes printing all data, it returns to display the date and time.

> You can select paper source, paper size, and orientation in your application software. If your application software does not support your custom paper size, select the next larger paper size. Then adjust the print area by changing the right and left margins in your application software.

Simultaneous Printing/Faxing

The machine can print data from your computer while sending a fax in the memory or while scanning information into the computer. However, when the machine is copying or receiving a fax on paper, it pauses the PC printing operation, and resumes when copying or fax receiving is complete. Fax sending continues during PC printing.

Printer Operation Keys

Stop/Exit Key

If the screen displays **REMAINED DATA**, you can clear data remaining in the printer memory by pressing **Stop/Exit**.

Ink Key

When you press **Ink**, the LCD displays:

If you are having trouble with one of the ink colours, you may need to clean the print heads. (See *Troubleshooting and Maintenance*, page 117.)

```
1.CLEANING
```
```
2.REPLACE INK
```

If you got an error message **NEAR EMPTY** or **INK EMPTY**, you will need to replace the ink cartridge for the appropriate colour. (See *Troubleshooting and Maintenance*, page 117.)

Checking the Print Quality

If you want to check the print quality and find out how to improve it, see *How to Improve Print Quality*, page 127.

Using the Brother MFC-590 Printer Driver

A Printer Driver is software that translates data from the format used by a computer into the format required by a particular printer, using a printer command language or page description language.

The printer drivers are on the supplied CD-ROM. The latest printer driver can also be downloaded from the Brother Solutions Centre at **http://solutions.brother.com**.

> The screens shown in this section are from Windows® 98. The screens on your PC may vary depending on your Windows® Operating System.

For more detailed information, please see the on-line Help in the printer driver.

Paper Tab

The paper tab screen allows you to set up the **Paper Size**, **Paper Source**, **Paper Thickness**, **Orientation**, **Scaling**, and **Copy/Page Order**.

To access the Brother printer driver, select **Print** from the **File** menu. In the **Print** dialog box, select **Brother MFC-590** from the Name drop down list. Click the **Properties** button. The **Brother MFC590 on BRMFC: Properties** dialog box will appear:
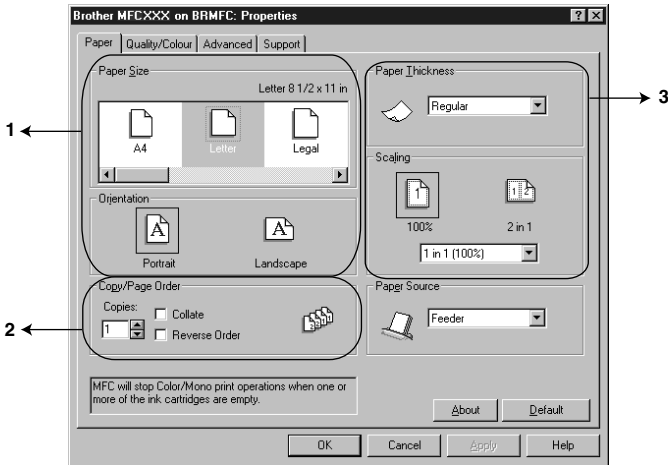
PRINTER/SCANNER

Select the **Apply** button to apply your selected settings. To return to the default settings, click the **Default** button, then click the **Apply** button.

1. Select the **Paper Size** and **Orientation**.
2. Select number of **Copies** and **Page Order**.
3. Select the **Paper Thickness**, **Scaling** and **Paper Source**.

Paper Size

The paper size selection provides a large selection of standard paper sizes or you can even create custom sizes ranging from 3.5 x 5" to 8.5 x 14". To select the paper size you want to use click the icon.

Orientation

Orientation selects the position of how your document will be printed (**Portrait** or **Landscape**).

Copy/Page Order

Copies

The **Copies** selection sets the number of copies that will be printed (1 to 50).

Collate

The collate selection is active if more than one copy is selected. With the collate check box selected, one complete copy of your document will be printed and then repeated for the number of copies you selected. If the collate check box is not selected then each page will be printed for all the copies selected before the next page in the document is printed.

Reverse Order

Reverse Order prints the pages of your document in the opposite order.
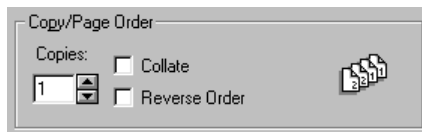
Paper Thickness

Depending on the thickness of the paper you are using, you can improve the quality of your output by selecting the correct thickness. This setting provides the best positioning of the paper for printing. For example if you were printing on thin paper, you would select **Thin** in the **Paper Thickness** selection to achieve the best paper handling and improved output for that paper type.

Regular

Thin

Thick

Thicker
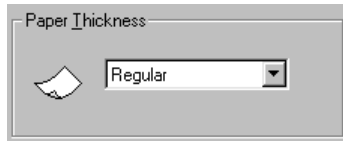
Scaling

The Scaling feature reduces or enlarges your document from 50% to 200%. From the pull-down box you can select from the preset settings or a free setting. You can also select 2 in 1 printing for printing two pages on one sheet of paper.

For Windows NT® Workstation 4.0 and Windows® 2000 Professional, you can also select 4 in 1 printing.
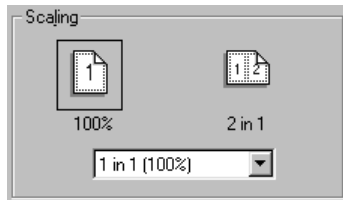
Paper Source

The Paper Source pull-down allows you to choose the source of the media you are using.

Feeder

Manual Feed

PRINTER/SCANNER
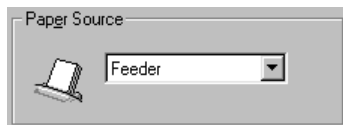
The Quality/Colour Tab

The **Quality/Colour** tab screen provides **Quality**, **Media** type, **Document** type, **Colour/Mono** settings, **Bi-directional Printing** settings and **Fast Draft Mode**. All of these selections are designed to offer the best quality output for your document needs.
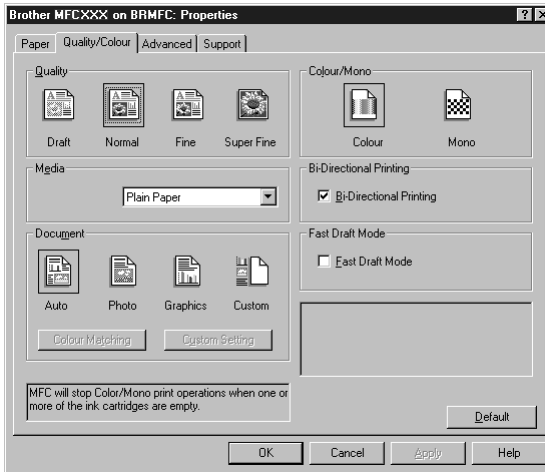
Select the **Apply** button to apply your selected settings.
To return to the default settings, click the **Default** button, then click the **Apply** button.

Quality

The quality selection allows you to choose the print resolution you want to use for your document. Print quality and speed are related. The higher the quality the longer it will take to print the document. The quality selections available vary depending on the media selection.

■ **Draft**
   The fastest print mode and gives lower ink consumption. Use this mode to print large volume documents or a document for proofing.

■ **Normal**
   Recommended mode for ordinary printouts.

■ **Fine**
   Better print quality than normal and faster print speed than Super Fine.

■ **Super Fine**
   Use this mode to print precise images such as photographs. Since the print data is much larger than normal mode, processing time, data transfer time, and printing time will be longer.

Media

To achieve the best print results, the media being printed on should be selected in the driver. The machine changes the way it places dots, depending on the selected media type.

Paper Type	Recommended Print Quality Selection
Plain Paper	Normal
Inkjet Paper	Fine
Glossy Paper (4 colour)	Super Fine
Glossy Paper (3 colour)	Super Fine
Transparencies	Fine
Transparencies (mirror)	Fine

The print quality of black ink varies depending on the kind of glossy paper you are using. Black ink is used when you select **Glossy Paper (4 colour)**. If the glossy paper you are using repels the black ink, select **Glossy Paper (3 colour)**, which simulates black ink by combining the three ink colours.

Document

The printer driver will select the most suitable colour matching method depending on your document type. Generally, text and business graphics are printed vividly and photographic images are printed softly.

- **Auto**

  The printer driver automatically selects the document type.

- **Photo**

  Select this mode for photographic images.

- **Graphics**

  Select this mode for documents that contain text or business graphics (charts or clip art).

- **Custom**

  If you want to select the colour matching method and halftone method, manually select this mode.

Colour Matching

You can select the colour matching method manually. Select the best one for your document.

■ **Match Monitor**

Suitable for photographic images. Colour is adjusted to get the closest colour match to the PC monitor.

■ **Vivid Colour**

Suitable for business graphics such as charts, graphs, and text. The colour is adjusted to give more vivid colour.
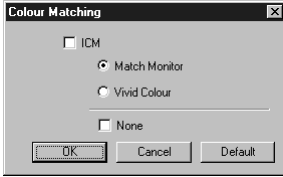
(For Windows® 95/98/98SE/Me user's)

(For Windows® 2000 Professional/ Windows NT® 4.0 user's)

Custom Setting

You can customize your settings by selecting the type of Halftone or Colour Enhance.
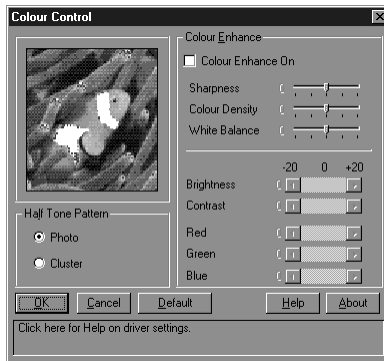
Halftone Pattern

The machine can use several methods to arrange where to place dots to express halftones. There are some predefined patterns used to place dots and you can select which one is used for your document. Select the appropriate method.

■ **Photo**

This method creates smooth halftones so that this is suitable for photographic images. It takes more time to process data, but this can express more levels of halftones and creates more natural images.

■ **Cluster**

This is suitable for business graphics such as charts, graphs and drawings, since this creates more sharp printouts. Moreover, the processing time is shorter.

Colour Enhance

Selecting Colour Enhance ON enables the Colour Enhance feature. This feature analyzes your image to improve quality sharpness, white balance and colour density. This process may take several minutes depending on the size of the image, the speed and RAM memory of your computer.

■ **Colour Enhance ON**

Adjusts the colour in the image for better print quality. Print time will be longer with Colour Enhance set to ON.

■ **Sharpness**

This setting enhances the detail of an image. This is similar to adjusting the fine focus on a camera. If the focus is off a small amount, you can not clearly see the fine details of an image.

■ **Colour Density**

This adjusts the total amount of colour in the image. You can increase or decrease the amount of colour in an image to improve a picture which may appear washed out or weak.

■ **White Balance**

This adjusts the hue of the white sections of an image. Lighting, camera settings and other influences will effect the appearance of white. The white parts of a picture may appear to be slightly pink, yellow or some other colour. By using this adjustment you can correct this effect and bring the white sections back to pure white.

■ **Brightness**

Change the brightness of the whole image lighter or darker. Moving the scroll bar to the left makes your image darker and moving the scroll bar to the right makes your image lighter.

■ **Contrast**

Change the contrast of an image. Darker sections will be more dark and lighter sections will be more light as you increase the contrast. Increase the contrast when you want an image to be clearer. Decrease the contrast when you want an image to be more subdued.

■ **Red**

Increase the intensity of the Red colour to add red to the whole image.

■ **Green**

Increase the intensity of the Green colour to add green to the whole image.

■ **Blue**

Increase the intensity of the Blue colour to add blue to the whole image.

Colour/Mono

This selection allows a colour document to be printed in mono only.
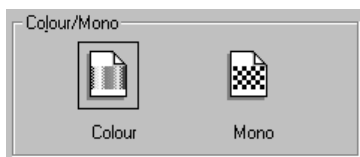
Bi-Directional Printing

When Bi-Directional Printing is selected, the print heads prints in both directions and offers faster print speeds. When not selected the print head prints in one direction only and provides higher print quality.

Fast Draft Mode

You can print much more quickly than mono draft mode, by using only both black and cyan ink.

Advanced Tab
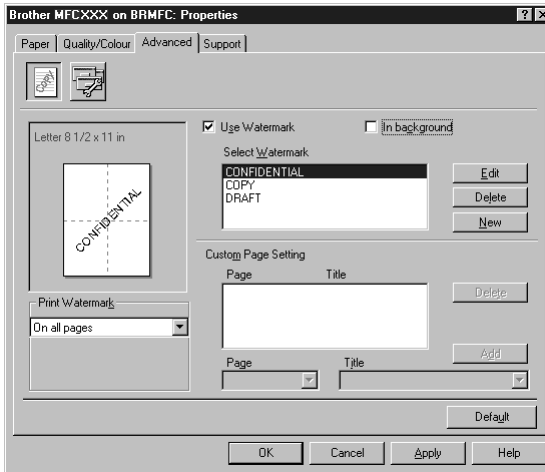
Select the **Apply** button to apply your selected settings.

To return to the default settings, click the **Default** button, then click the **Apply** button.

Change the tab settings by selecting one of the following icons:

- **Watermark**
- **Device Option**

Watermark

To place a logo or text into your document as a Watermark, use a bitmap file or text you created as your source file or select one of the preset Watermarks.

Print Watermark

The **Print Watermark** feature offers printing choices of:

On all pages
On first page only
From second page
Custom

In background

With the **In background** feature checked the Watermark will print behind your document on the page. If this feature is not checked then the Watermark will print on top of your document.

Watermark Style

You can change the size and the **position** of the Watermark on the page by selecting the Watermark and clicking the **Edit** button. If you want to add a new Watermark, click the **New** button and select **Text** or **Bitmap** from the **Watermark Style**.

Watermark Text

Enter your **Watermark Text** into the Text Box and select the **Font**, **Size**, **Colour** and **Style**.

Watermark Bitmap

Enter the file name and location of your bitmap image in the **File** box or **Browse** for the file location. You can also set the scaling size of the image.
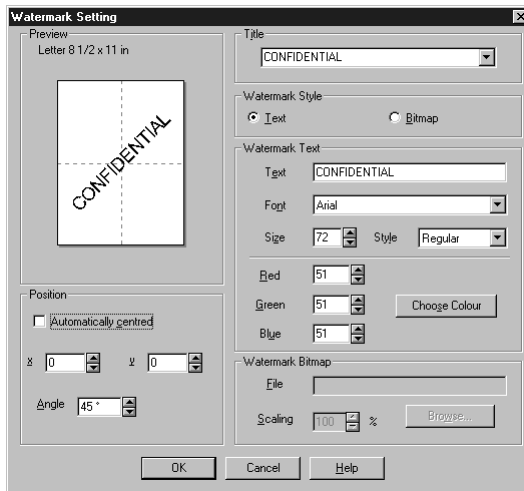
Position

The position settings offer controls on where the Watermark can be positioned on the page.

Device Option

Set the Print Date & Time as the Printer Function:
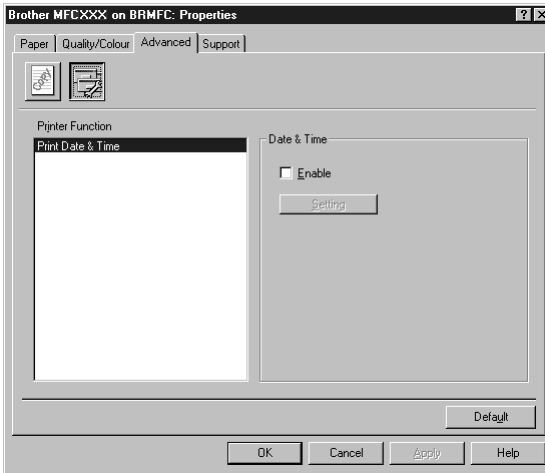
Print Date & Time

When enabled the **Print Date & Time** feature will automatically print the date and time on your document from your computers system clock.
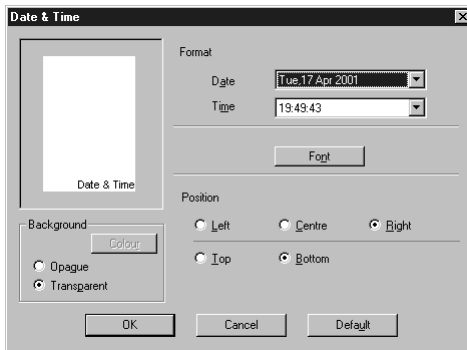
Click the **Setting** button to change the **Date** and **Time** in **Format**, **Position** and **Font**. To include a background with the Date and Time, select **Opaque**. When **Opaque** is selected, you can click on the **Colour** button to change the colour of the Date and Time background.

The Date and Time indicated in the selection box represents the format that will be printed. The actual Date and Time printed on your document is automatically retrieved from the settings of your computer.

Support Tab

The Support Tab provides driver version information. In addition there are links to the Brother Solution Center and Driver Update Web sites.

Click the Support tab to display the following screen:

Select the **Apply** button to apply your selected settings.

Web Update

Web Update checks the Brother web site for updated drivers and automatically downloads and updates the driver on your computer.

Brother Solutions Center

The Brother Solutions Center is a Web site offering information about your Brother product including FAQ's, User Guides, Driver updates and Tips for using the machine.

Brother Control Centre

The Brother Control Centre is a software utility that pops up on the PC screen whenever paper is placed in the ADF. This allows you to access the most frequently used scanning applications only with a few mouse clicks. Using the Control Centre eliminates the need to manually launch the specific applications.

> If you want to scan the document from glass platen, please use **Scan to** key on the control panel (See *Using the Scan Key with Windows PC*, page 73.) or TWAIN driver (See *Scanning a Document*, page 88.).

The Brother Control Centre provides three categories of functions:

1. Scan directly to a file, E-mail, word processor or graphic application of choice
2. Copy functions.
3. PC Faxing using the Brother PC Fax Software.
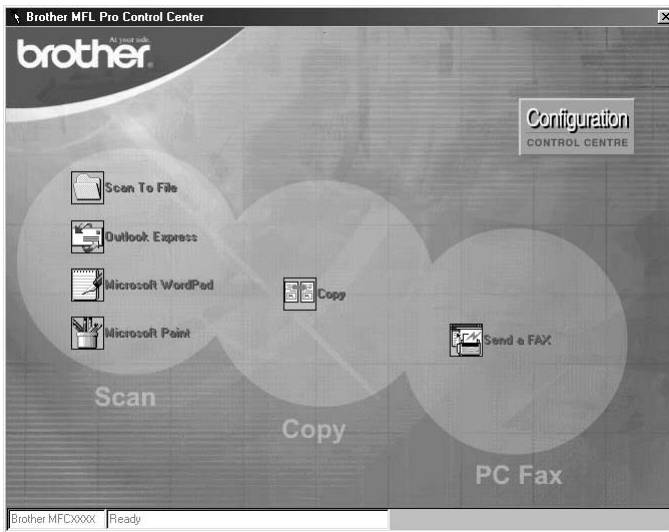
AutoLoad the Brother Control Centre

The Control Centre is initially configured to automatically load each time Windows® is started.

When the Control Centre is loaded, the Control Centre [icon] icon will appear in the task bar. If you don't want the Control Centre to load automatically, you can turn off AutoLoad.

> If the Control Centre [icon] icon does not appear in your taskbar, you will have to launch this software. From the **Start** menu, select **Programs**, **PaperPort**, and then double-click **Brother SmartUI PopUp**.

How to Turn Off AutoLoad

1 Left click the Control Centre [icon] icon and click **Show**.

2 When the Control Centre main screen appears, left click on the **Configuration** [Configuration CONTROL CENTRE] **Control Centre** button. A dialog box with a check box labelled "**AutoLoad Pop-up**" will appear:
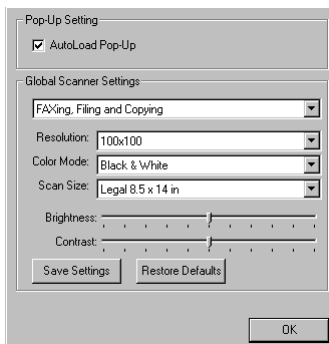
3 Uncheck the **AutoLoad Pop-Up** option.

Using the Scan Key with Windows PC

If you have connected a Macintosh, the **Scan to** key will not work with your computer. (See *Using the Brother MFC with a New Power Macintosh® G3, G4 or iMac™/iBook™*, page 105.)

You can use the **Scan to** key on the control panel to scan documents from the glass platen or ADF into your word processing, graphics or E-mail applications. The advantage of using the **Scan to** key is that you avoid the mouse clicks required to scan from your PC and that you can scan from the glass platen.

Colour Scan

◯ Scan to

Before you can use the **Scan to** key on the control panel, you must have connected the machine to your Windows® based PC and loaded the appropriate Brother Drivers for your version of Windows®. When you are ready to use the **Scan to** key, make sure the Brother Control Centre application is running on your PC.

PRINTER/SCANNER

Scan to Image

You can scan a black and white or a colour picture into your graphics application for viewing and editing.

1 Insert the document face up in the ADF, or face down on the glass platen.

2 Press **Scan to**.

3 Press ⌃ or ⌄ to select **SCAN TO IMAGE**, and then press **Menu/Set**.
The machine will scan the original and send a colour image to your graphics application.

Scan to OCR

If your document is text, you can have it automatically converted by ScanSoft™ TextBridge® to an editable text file and then displayed in your word processing application for further editing.

1 Insert the document face up in the ADF, or face down on the glass platen.

2 Press **Scan to**.

3 Press ⌃ or ⌄ to select **SCAN TO OCR**, and then press **Menu/Set**.
The machine will scan the original perform OCR in ScanSoft™ TextBridge®, and then display the result in your word processing application for viewing and editing.

Scan to E-mail

You can scan either black and white or colour documents into your E-mail application as a file attachment. Although the Brother Control Centre can be configured to send only black and white file or colour attachments at one time, you can easily change this setting. (See *Scan to E-mail*, page 79.)

1 Insert the document face up in the ADF, or face down on the glass platen.

2 Press **Scan to**.

3 Press ⌃ or ⌄ to select **SCAN TO E-MAIL**, and then press **Menu/Set**.
The machine will scan the original, create a file attachment, and launch your E-mail application, displaying the new message waiting to be addressed.

Brother Control Centre Features

Auto Configuration

During the installation process the Control Centre checks your system to determine the default applications for E-mail, word processing and graphics viewer/editor. For example, if you are using Outlook as your default E-mail application, the Control Centre automatically will create a link and a scanning application button for Outlook.

You can change a default application by right clicking on any of the scan buttons in the Control Centre and selecting a different application. For example, you can change a scan button from *MS Word* [W] Microsoft Word 2000 to *MS Word Pad* [Microsoft WordPad] by changing the application that is listed for the **Word Processor**.

Scanning Operations

Scan to File—allows you to scan directly to a file with two mouse clicks. You can change the file type, destination directory and file name, as needed.

Scan to E-mail—enables you, with just two mouse clicks, to scan a picture or text document directly into an E-mail application as a standard attachment. You have the option of selecting the file type and resolution for the attachment.

Scan to Word Processor—enables you to scan a text document, run ScanSoft TextBridge OCR and insert the text original (not graphic image) into a word processing file with just two mouse clicks. You have the option of selecting the destination word processing program, such as Word Pad, MS Word, Word Perfect, etc.

Scan to Graphic Application—allows you to scan an image directly into any graphic viewer/editor application. You can select the destination application, such as MS Paint or Corel PhotoPaint.

Copy Operations

Copy—allows you to use the PC and any Windows® printer driver for enhanced copy functions. You can scan the page on the Brother MFC and print the copies using any of the features of the Brother MFC printer driver—**OR**—You can direct the copy output to any standard Windows® printer driver installed on the PC.

PC Fax Operation

Send a Fax—allows you to scan a picture or text original and automatically send the image as a fax from the PC using the Brother PC Fax software.

Scanner Settings

When the Pop-Up screen is displayed, you can access the **Scanner Settings** window.

Click the **Configuration** [Configuration CONTROL CENTRE] icon at the top right of the Brother Control Centre screen—**OR**— Click the **Modify Settings…** button on any of the Configuration screens.
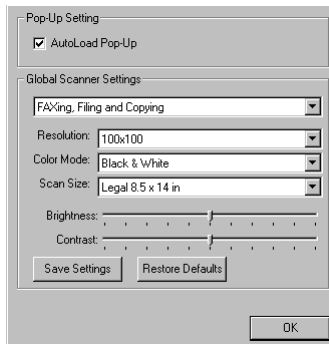
Global Settings

AutoLoad Pop-Up—Click this checkbox if you want Brother Control Centre to load when you boot your computer.

Setting Up the Scanner Configurations

The Pop-Up application stores eight different scanning modes. Each time you scan an original, you will choose the most appropriate scanning mode from the following:

Faxing, Filing and Copying
Text for OCR
Photos
Photos (High Quality)
Photos (Quick Scan)
Custom
Draft Copy
Fine Copy

Each mode has its own set of stored settings. You can keep the factory default settings or change them at any time:

Resolution—Select the scanning resolution you most frequently use.
Colour Mode—From the pull-down list.
Scan Size—From the pull-down list.
Brightness—Slide the adjuster from 0% to 100%
Contrast—Slide the adjuster from 0% to 100%

Click **OK** to save your changes. If you make a mistake or later decide to return to the original default setting, just click the **Restore Defaults** button when the scanning mode is displayed.

To access the Scanner Configurations screen:

1 Insert the document face up in the ADF.

2 Right-click the appropriate **Control Centre** button to display **Configurations**, then click it. The configuration screen for that **Control Centre** button will appear.

3 To save your settings, press the **OK** button—**OR**—To return to the factory default settings, press the **Restore Defaults** button.

You can not access the Scanner Configuration screen by placing the document on the glass platen.

Perform an Operation from the Brother Control Centre Screen

If you see this screen it means you left-clicked a button in the **Brother Control Centre** screen without first placing an document in the ADF.
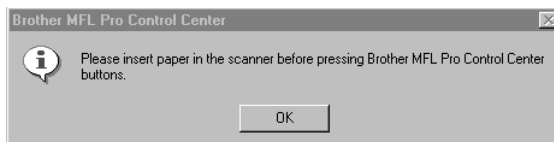
Place the document in the Brother machine's ADF, then click **OK** to return to the **Brother Control Centre** screen.

If you want to scan the document from the glass platen, please use **Scan to** key on the control panel. (See *Using the Scan Key with Windows PC*, page 73.)

Scan to File
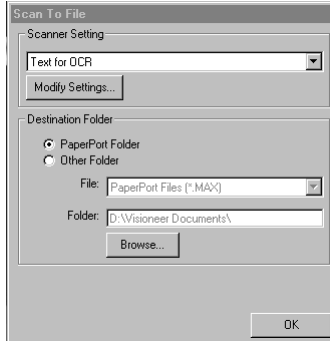
Scanner Setting

From the pull-down list, select the scanning mode that is appropriate for the type of file: *Faxing, Filing and Copying*; *Text for OCR*; *Photos*; *Photos (High Quality)*; *Photos (Quick Scan)*; *Custom*; *Draft Copy* or *Fine Copy*.

To change any of the settings for that mode, click the **Modify Settings...** button.

Destination Folder

PaperPort Folder—Select this checkbox to scan the document into your PaperPort folder.

Other Folder—Select this checkbox, to scan the document as another file type and/or into another directory/folder.

File—If you selected **Other Folder**, from the pull-down list select the type of file:

> *PaperPort Files (*.MAX)*
> *Self Viewing Files (*.EXE)*
> *PaperPort 5.0 Files (*.MAX)*
> *PaperPort 4.0 Files (*.MAX)*
> *PaperPort 3.0 Files (*.MAX)*
> *Windows Bitmap (*.BMP)*
> *PC Paintbrush (*.PCX)*
> *Multi-page PCX (*.DCX)*
> *JPEG Image Files (*.JPG)*
> *TIFF-Uncompressed (*.TIF)*
> *TIFF Group 4 (*.TIF)*
> *TIFF Class F (*.TIF)*
> *Multi-Page TIFF-Uncompressed (*.TIF)*
> *Multi-Page TIFF Group 4 (*.TIF)*
> *Multi-Page TIFF Class F (*.TIF)*
> *PDF Files (*.PDF)*
> *Portable Network Graphics (*.PNG)*
> *FlashPix (*.FPX)*
> *HFX Fax Files (*.HFX)*

To Search your system for the directory and folder you want, click the **Browse...** button. Click **OK** to save your settings.

Scan to E-mail
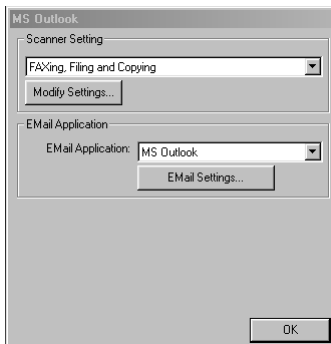
Scanner Setting

From the pull-down list, select the scanning mode that is appropriate for the type of file: *Faxing, Filing and Copying*; *Text for OCR*; *Photos*; *Photos (High Quality)*; *Photos (Quick Scan)*; *Custom*; *Draft Copy* or *Fine Copy*.

To change any of the settings for that mode, click the **Modify Settings…** button.

Email Application

Email Application—From the pull-down list, select your E-mail application.

Email Settings—Click the **EMail Settings…** button to set up links.

The **Link Preferences** window will appear:
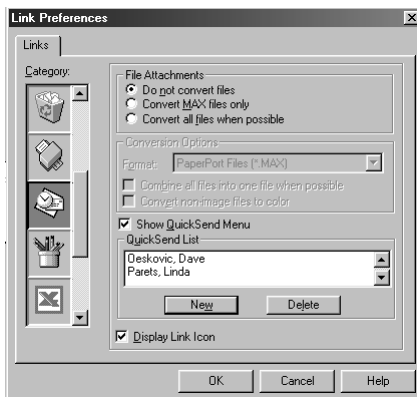
File Attachments

Do not convert files—Click this checkbox if you do not want to change the file type of attachments. The Conversion Options will not be available (greyed).

Convert MAX files only—Click this checkbox if you want to convert only attachments that are PaperPort files.

Convert all files when possible—Click this checkbox if you want to change the file type of all attachments.

Conversion Options

Format

Combine all files into one file when possible—Click this checkbox to combine all files of the same type into one file.

Convert non-image files to colour—Click this checkbox to convert all files that have been processed through OCR to colour.

Show QuickSend Menu

Click this checkbox if you want the **Select QuickSend Recipient** window to be displayed when you choose Scan to E-mail. This feature works only with MAPI type E-mail applications, such as Microsoft Exchange, Microsoft Outlook and Eudora.

QuickSend List

You can create a list of E-mail names and addresses for quick selection.

Click the **New** button to add a name(s) to your **QuickSend List**. Your Email phone book listing is displayed, so you can select stored names or create new ones:
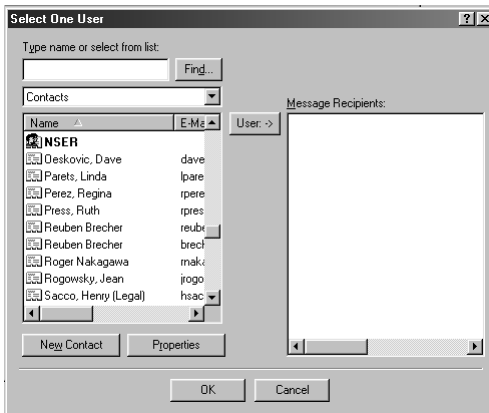
Highlight the name(s) you want to add to your list, click the **User** button, then click **OK** to return to the Link Preferences window.

From the **Link Preferences** window, you can remove a name from the QuickSend list, by highlighting the name and clicking the **Delete** button.

Scan to Word Processor

Scanner Setting

From the pull-down list, select the scanning mode that is appropriate for the type of file: *Faxing, Filing and Copying*; *Text for OCR*; *Photos*; *Photos (High Quality)*; *Photos (Quick Scan)*; *Custom*; *Draft Copy* or *Fine Copy*.

To change any of the settings for that mode, click the **Modify Settings…** button.

Word Processor

Word Processor—From the pull-down list, select the word processor you want to use.

Click the **Link Settings…** button to display a screen to set up a link to the version of OCR and document format that you want to use:
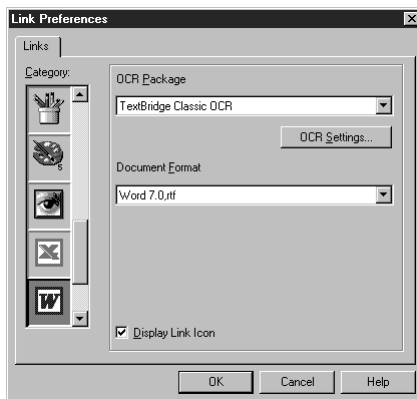
OCR Package—From the pull-down list, select *TextBridge Classic OCR* if you want to use the OCR package that was installed with the Brother MFC Software Suite.

Click the **OCR Settings…** button to choose how the OCR application will read the pages you scan into your word processor application.

The Preferences window will appear:

Select your setting and click **OK**.

◆ **Auto Orientation**—Check this checkbox if you want your word processor application to read the page as it is set up.

◆ **Decolumnized Output**—Check this checkbox if you want your word processor application to read across the entire page from left to right.

Document Format—From the pull-down list, select the file format you want to use for your word processor or text documents.

User Defined Button
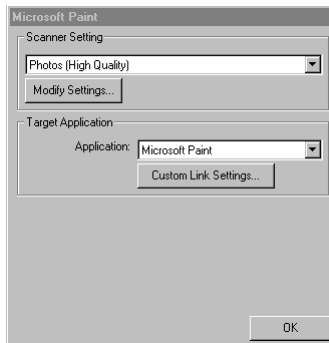
Scanner Settings

From the pull-down list, select the scanning mode that is appropriate for the type of file: *Faxing, Filing and Copying*; *Text for OCR*; *Photos*; *Photos (High Quality)*; *Photos (Quick Scan)*; *Custom*; *Draft Copy* or *Fine Copy*.

To change any of the settings for that mode, click the **Modify Settings…** button.

Target Application

Application—From the pull-down list, select the application you want to add to this Pop-Up screen.

Click the **Custom Link Settings…** button to set up links for your user-defined application.

Copy

Scanner Settings

From the pull-down list, select the scanning mode that is appropriate for the type of file: *Faxing, Filing and Copying*; *Text for OCR*; *Photos*; *Photos (High Quality)*; *Photos (Quick Scan)*; *Custom*; *Draft Copy* or *Fine Copy*.

To change any of the settings for that mode, click the **Modify Settings…** button.

Copy Settings

Copies—Enter the number of copies you want to print.

To change the copy options, click the **Copy Options…** button.

Click the **OK** button to save your **Copy** settings.

Send a Fax

Scanner Setting

FAXing, Filing and Copying

Modify Settings...

FAX Settings
Brother PC-FAX
FAX Resolution: Fine (200x200)

FAX Options...

OK

Scanner Setting

From the pull-down list, select the scanning mode that is appropriate for the type of file: *Faxing, Filing and Copying*; *Text for OCR*; *Photos*; *Photos (High Quality)*; *Photos (Quick Scan)*; *Custom*; *Draft Copy* or *Fine Copy*.

To change any of the settings for that mode, click the **Modify Settings…** button.

FAX Settings

Brother PC-FAX

FAX Resolution—*Fine (200 x 200)*

1 To change the fax options, click the **FAX Options…** button.

The Brother PC FAX Properties screen appears:

Brother PC-FAX on BRMFC: Properties

Device Options

Letter 8 ½ x 11 in

Paper Size
Letter 8 ½ x 11 in

Orientation
• Portrait
○ Landscape

Resolution
• 200x200 dpi
○ 200x100 dpi

Restore Defaults   About

OK   Cancel   Apply   Help
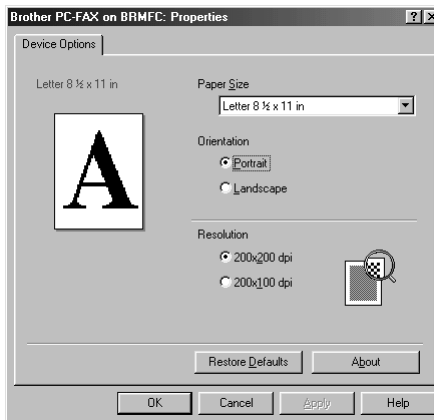
2 Select the **Paper Size** and **Orientation** (**Portrait** or **Landscape**) and click **OK**.

To return to the factory default settings, click the **Restore Defaults** button.

ScanSoft™ Paper Port® for Brother is a document management application. You will use PaperPort® to view scanned documents. PaperPort® has a sophisticated, yet easy-to-use, filing system that will help you organize your documents. It allows you to combine or "stack" documents of different formats for printing or filing. PaperPort® can be accessed through the PaperPort® program group.
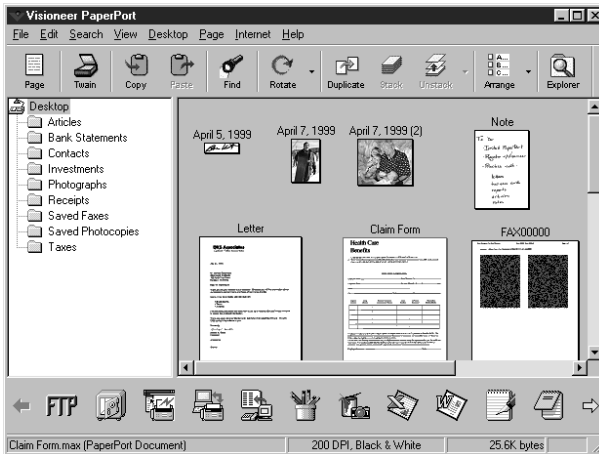
The complete ScanSoft™ PaperPort® Owner's Manual, including ScanSoft™ TextBridge® OCR, is in the Manual on the CD-ROM. This chapter is only an introduction to the basic operations.

When you install MFC Software Suite, ScanSoft™ PaperPort® for Brother and ScanSoft™ TextBridge® OCR are installed with it automatically.

To Uninstall PaperPort® and ScanSoft™ TextBridge®
Select **Start**, **Settings**, **Control Panel**, **Add/Remove Programs** and the **Install/Uninstall** tab. Select PaperPort® from the list and click the **Add/Remove** button.

PRINTER/SCANNER

Viewing Items in ScanSoft™ PaperPort® for Brother

PaperPort® provides several ways to view items: **Desktop View** displays a thumbnail, a small graphic that represents each item in a Desktop or folder. Items in the selected folder appear on the PaperPort® Desktop. You can see PaperPort® items (MAX files) and non-PaperPort® items (files created using other applications). Non-PaperPort® items include an icon that indicates the application that was used to create the item; a non-PaperPort® item is represented by a small rectangular thumbnail and not an actual image.
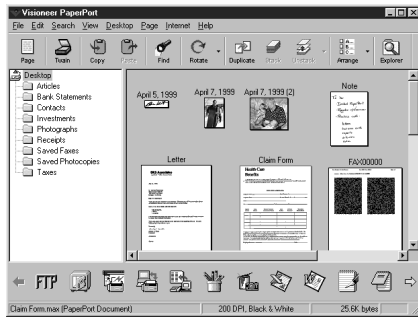
Destop View displays items as thumbnails

Page View displays a close-up of a single page and you can open a PaperPort® item by double-clicking on it. As long as you have the appropriate application on your computer to display it, you can also double-click a non-PaperPort® item to open it.
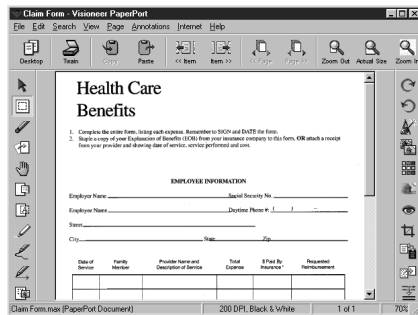
Page View displays each item as a full page

Organizing Your Items in Folders

PaperPort® has an easy-to-use filing system for organizing your items. The filing system consists of folders and items that you select to view in **Desktop View**. An item can be a PaperPort® item or a non-PaperPort® item:

■ Folders are arranged in a "tree" structure in the Folder View. You use this pane to select folders and view their items in **Desktop View**.

■ You can simply drag and drop an item onto a folder. When the folder is highlighted, release the mouse button and the item is stored in that folder.

■ Folders can be "nested"—that is, stored in other folders.

■ When you double-click a folder, its items (both PaperPort® MAX files and other files) appear on the Desktop.

■ You can also use Windows® Explorer to manage the folders and items shown in **Desktop View**.

Links to Many Other Applications

PaperPort® automatically recognizes many other applications on your computer and creates a "working link" to them. The Link Bar at the bottom of **Desktop view** shows icons of those linked applications. To use a link, drag an item onto one of the icons to start the application represented by the icon. This sample Link Bar shows several applications with links to PaperPort®.

If PaperPort® does not automatically recognize one of the applications on your computer, you can manually create a link using the **Create New Link** command. (See PaperPort® Help for more information about creating new links.)

Using ScanSoft™ TextBridge® OCR (Converting Image Text to Text You Can Edit)

Software by: **ScanSoft**™   ScanSoft™

ScanSoft™ TextBridge® OCR is automatically installed when you install PaperPort® on your computer.

PaperPort® can quickly convert the text on a PaperPort® item (which is really just a picture of the text) into text that you can edit with a word processing application. PaperPort® uses the optical character recognition application ScanSoft™ TextBridge®, which comes with PaperPort®—**OR**— PaperPort® uses your application if it is already on your computer. You can convert the entire item, or by using the **Copy As Text** command, you can select only a portion of the text to convert.

Dragging an item onto a word-processing link icon starts PaperPort®'s built-in OCR application, or you can use your own OCR application.

Importing Items from Other Applications

In addition to scanning items, you can bring items into PaperPort® in a variety of ways and convert them to PaperPort® (MAX) files in several different ways:

■ Print to the **Desktop View** from another application, such as Microsoft Excel.
■ Import files saved in other file formats, such as Windows® Bitmap (BMP) or Tag Image File Format (TIFF).

Exporting Items in Other Formats

You can export or save PaperPort® items in several popular file formats. You can export formats BMP, PCX, DCX, JPG, TIF, PDF, PNG, FPX, HFX, or self-viewing. For example, you could create a file for an Internet Web site and export it as a JPEG file. Web pages often use JPEG files for displaying images.

Exporting an Image File

1 Select the **Export** command from the **File** pull-down menu in the PaperPort® window. The Export 'XXXXX' As dialog box will be displayed.

2 Select **the drive and directory** where you want to store the file.

3 Enter the new file name and choose the file type or select a name from the File Name text box. (You can scroll through the Directories and File Name listing for prompting.)

4 Select the **OK** button to save your file, or **Cancel** to return to the PaperPort® without saving it.

Scanning a Document

TWAIN COMPLIANT

The Brother MFC Software Suite includes a TWAIN compliant scanner driver. TWAIN drivers meet the standard universal protocol for communicating between scanners and software applications. This means that not only can you scan images directly into the PaperPort® viewer that Brother included with the machine, but you can also scan images directly into hundreds of other software applications that support TWAIN scanning. These applications include popular programs like Adobe Photoshop, Adobe PageMaker, CorelDraw and many more.

Accessing the Scanner

To choose **TWAIN_32 Brother MFL Pro Colour** as your scanner driver, select it under the "**Select scanner**"—OR—"**Select source**" option in your software.

From the PaperPort® window, select **Acquire** from the File drop-down menu or select the **TWAIN** or **Scan** button. The Scanner Setup dialog box will appear:
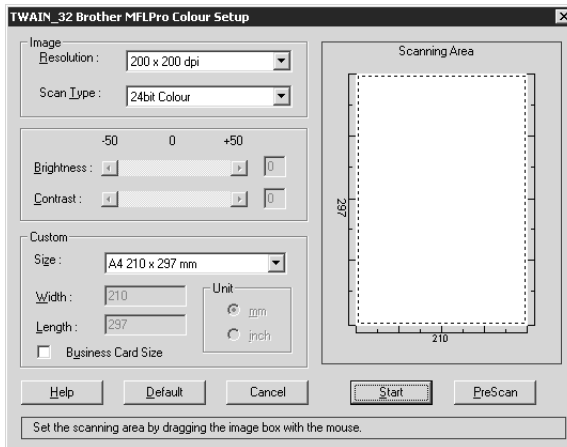
Scanning a Document into your PC

1 Insert the document face up in the ADF, or face down on the glass platen.

2 Adjust the following settings, if needed, in the Scanner Setup window:
- ◆ **Resolution**
- ◆ **Scan Type** (*Black & White*, *Gray [Error Diffusion]*, *True Gray*, *256 Colour*, *24 bit colour*)
- ◆ **Brightness**
- ◆ **Contrast**
- ◆ **Size**

3 Select the **Start** button from the Scanner window.

Settings in the Scanner Window

Image

Resolution

Select the scanning resolution from the Resolution drop down list. Higher resolutions take more memory and transfer time, but can achieve a finer scanned image.

- ◆ *100 x 100 dpi*
- ◆ *150 x 150 dpi*
- ◆ *200 x 200 dpi*
- ◆ *300 x 300 dpi*
- ◆ *400 x 400 dpi*
- ◆ *600 x 600 dpi*
- ◆ *1200 x 1200 dpi* (Black & White, Grey [Error Diffusion]. True Grey and 24-bit colour only)
- ◆ *2400 x 2400 dpi* (Black & White, Grey [Error Diffusion]. True Grey and 24-bit colour only)
- ◆ *4800 x 4800 dpi* (Black & White, Grey [Error Diffusion]. True Grey and 24-bit colour only)
- ◆ *9600 x 9600 dpi* (Black & White, Grey [Error Diffusion]. True Grey and 24-bit colour only)

Scan Type

Black & White: Set the **Scan Type** to *Black & White* for text or line art.

Grey Scale: For photographic images, set the **Scan Type** to *Grey (Error Diffusion)* or *True Grey*.

Colours: Choose either *256 Colour*, which scans up to 256 colours, *24 Bit colour* which scans up to 16.8 million colours. Although using *24 Bit colour* creates an image with the most accurate colours, the image file will be approximately three times larger than a file created with *256 Colour*.

Brightness

Adjusting the brightness settings to obtain the best image. The Brother MFC Software Suite offers 100 brightness settings (-50 to 50). The default value is 0, representing an "average" setting.

You can set the brightness level by dragging the slidebar to the right to lighten the image or to the left to darken the image. You can also type a value in the box to set the settings.

If the scanned image is too light, set a lower brightness value and scan the document again.

If the image is too dark, set a higher brightness value and scan the document again.

Contrast

The contrast setting is adjustable only when you have selected one of the **Scan Type** settings, but it is not available when *Black & White* is selected as the **Scan Type**.

Increasing the contrast level (by dragging the slidebar to the right) emphasizes dark and light areas of the **Image**, while decreasing the contrast level (by dragging the slidebar to the left) reveals more detail in grey areas. Instead of using the slidebar, you can type a value in the box to set the contrast.

Custom

Size

Set the **Size** to one of the following:

- ◆ *Letter (8 1/2 x 11 inches)*
- ◆ *A4 (210 x 297 mm)*
- ◆ *Legal (8 1/2 x 14 inches)*
- ◆ *A5 (148 x 210 mm)*
- ◆ *B5 (182 x 257 mm)*
- ◆ *Executive (7 1/4 x 10 1/2 inches)*
- ◆ *Business Card (60 x 90 mm)*
- ◆ *Custom (User adjustable from 0.35 x 0.35 to 8.5 x 14 inches)*

After you select a custom size, you can adjust the scanning area further by using the left mouse button to drag the dotted outline of the scanning area. This is required when you want to crop an image when scanning.

Business Card Size

To scan business cards, select the **Business Card (60 x 90 mm) size** setting and place the business card at the centre of the glass platen.

When scanning photographs or other images for use in a word processor or other graphics application, you should try different settings for the contrast, mode and resolution to see which settings best suit your needs.

PRINTER/SCANNER

PreScanning an Image

PreScanning allows you to scan an image quickly at a low resolution. A thumbnail version of the image will appear in the **Scanning Area**. This is only a preview of the image so you can see how it will look. The **PreScan** button is used to preview an image for cropping any unwanted portions from the image. When you are satisfied with the preview, select the **Start** button to scan the image.

1 Insert the document face up in the ADF, or face down on the glass platen.

2 In the **TWAIN_32 Brother MFL Pro Colour Setup** dialog box, select the **PreScan** button:
The entire document will be scanned into the PC and will appear in the **Scanning Area** of the Scanner window.

You can crop the prescanned image
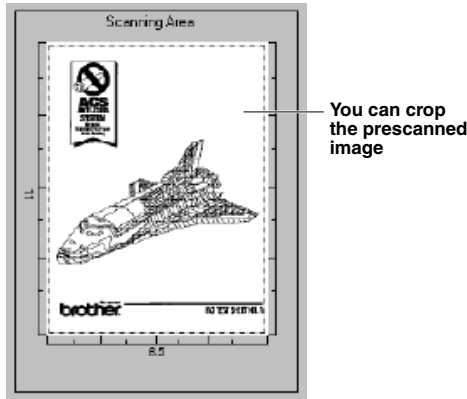
3 To crop a portion of the document to be scanned, drag any side or corner of the dotted outline in the **Scanning Area** with the left mouse button. Adjust the dotted outline until it surrounds only the portion of the document you wish to scan.

4 Insert the document face up in the ADF, again, if you use the ADF in Step 1.

5 Adjust the settings for **Resolution**, **Scan Type**, **Brightness**, **Contrast**, and **Size** in the Scanner Setup window, as needed.

6 Select the **Start** button.
This time only the selected area of the document will appear in the PaperPort® window.

7 In the PaperPort® window, use the options available in the Markups pull-down menu and the Crop option in the Options pull-down menu to refine the image.

Introduction

This chapter outlines the basics of the Brother software, so you can get started using the MFC Software Suite. Detailed installation and setup instructions are in the Manuals section of the Brother CD-ROM that is included with the machine.

MFC Software Suite for the machine includes ScanSoft™ PaperPort® for Brother and ScanSoft™ TextBridge®. (See *Using ScanSoft™ PaperPort® for Brother and ScanSoft™ TextBridge®*, page 85.)

Brother Resource Manager

The Brother Resource Manager application must be running for you to use the machine with your Windows® computer. MFC Software Suite and the Printer Driver automatically load the Resource Manager, as needed. The Resource Manager allows the single bi-directional Parallel port on the machine to simulate a Communications port for faxing and scanning and to simulate a Parallel port for Windows® GDI printing.

MFC Remote Setup

The MFC Remote Setup application allows you to quickly set up the machine by taking advantage of the ease and speed of programming on your PC. When you access this application, the settings on the machine will be downloaded automatically to your PC and displayed on your computer screen. If you change the settings, you can upload them directly to the machine.
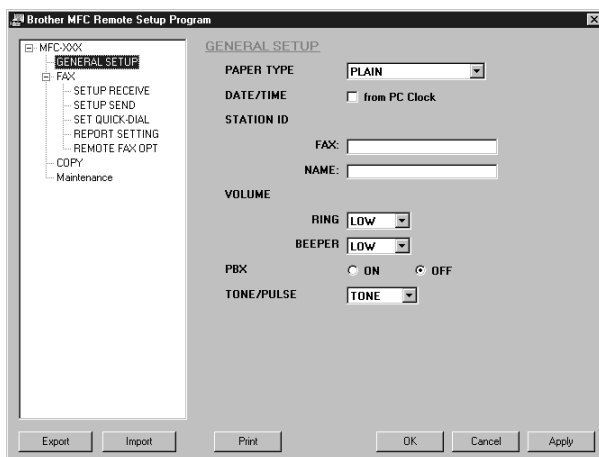
OK

This starts the process of uploading the data to the machine and exiting the remote setup program. If an error message is displayed enter the correct data again, then click **OK**.

Cancel

This exits the remote setup application without uploading the data to the machine.

Apply

This uploads the data to the machine, but does not exit the remote setup application.

Print

This command prints the selected items on the machine. You can not print the data until it is uploaded to the machine. Click **Apply** to upload the new data to the machine and click **Print**.

Export

This command saves the current configuration settings to a file.

Import

This command reads the settings from a file.

> You can check the Ink Status in the **Maintenance** menu.

PC FAX Sending (For Windows® Only)

The Brother PC FAX feature allows you to use your PC to send a file. You can create a file in any application on your PC, and then send it as a PC FAX. You can even attach a cover page. All you have to do is set up the receiving parties as Members or Groups in your PC FAX Address Book. Then you can use the Address Book Search feature to quickly find them to address your fax.

Setting Up User Information

1 From the **Start** menu, select **Programs**, **Brother**, **MFC Software Suite**, and then select **PC-FAX Setting**.

> You can also access the Brother PC-FAX Setup dialog box from the FAX Sending dialog box by clicking [icon]. (See *User interface*, page 95.)

The **Brother PC-FAX Setup** dialog box will appear:

2 Enter the required **User information**. This information is required to create the Fax Header and Cover Page.

3 To save the **User Information**, click **OK**.

Setting Up Sending

To access the Sending tab from the **Brother PC-FAX Setup** dialog box, click the **Sending** tab.
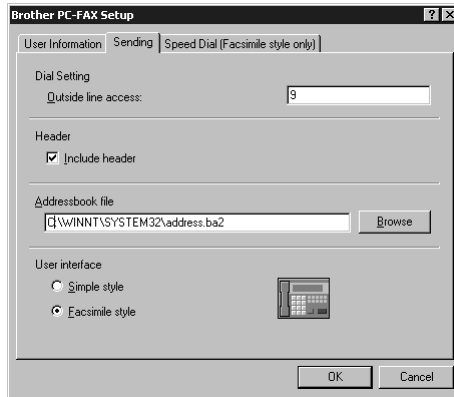
Outside line access

Enter the number needed to access an outside line. This is sometimes required by the local PBX telephone system.

Include header

To add header information to the top of the fax pages being sent, check the **Header** box.

Addressbook file

You can select different database files for use with the address book. You must enter the path and file name of the database file or use the **Browse** button to view the file system to select the file.

User interface

Select the User Interface in the **Sending** tab. You have a choice of the **Simple Style** or the **Facsimile Style**.

<div style="writing-mode: vertical-rl">PRINTER/SCANNER</div>
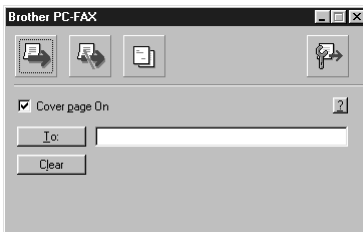
Simple Style　　　　　　　　　　　　　**Facsimile Style**

Setting Up Speed Dial

Access the **Speed Dial** tab from the **Brother PC-FAX Setup** dialog box by clicking the **Speed Dial** tab. (To use the feature you must select the Facsimile Style user interface.)
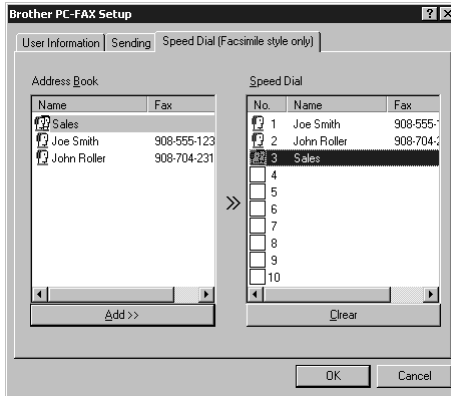
You can register any address or group on one of the ten Speed Dial buttons.

To register an address on a Speed Dial location:

1 Click the Speed Dial location you want to program.

2 Click the address or group you wish to assign to the Speed Dial location.

3 Click the **Add>>** button to program the Speed Dial location.

To clear a Speed Dial location:

1 Click the Speed Dial location you want to clear.

2 Click the **Clear** button.

The Address Book

From the **Start** menu, select **Programs**, **Brother**, **MFC Software Suite**, and then click **Address Book**.

The **Brother Address Book** dialog box will appear:
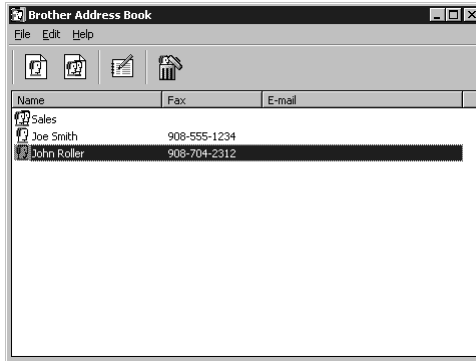
Setting Up a Member in the Address Book

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:

2 In the **Brother Address Book Member Setup** dialog box, type the member's information. **Name** and **Fax** are required fields. 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:
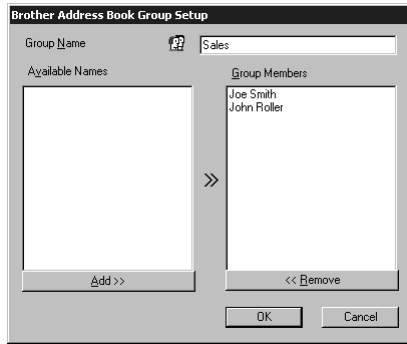
2 Type the name of the new group in the **Group Name** field.

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

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

4 After all the members have been added, click **OK**.

Editing Member Information

To edit a Member or Group:

1 Select the Member or Group you want to edit.

2 Click the icon.

3 Edit the Member or Group information.

4 Click **OK** to save your changes.

Deleting a Member or Group

To delete a Member or Group:

1 Select the Member of Group you want to delete.

2 Click the 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). If you wish, you can create a Vcard for selected members that will be attached to all the sender's outgoing e-mail; a Vcard is an electronic business card that contains the sender's contact information.

To export the current telephone book:

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

1 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>>**.

Select items in the order you want them listed.

3 If you are exporting to an ASCII file (Text), 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.
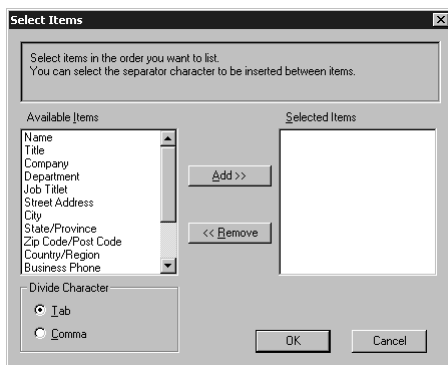
5 Type in the name of the file, and then select **Save**.
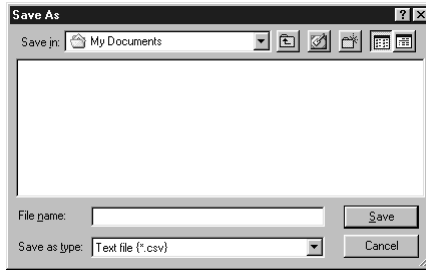
If you selected Vcard in Step 1, the **Save as Type:** will be **Vcard (*.vcf)**.

Importing to the Address Book

You can import ASCII text files (*.csv) or Vcards (electronic business cards) into your Address Book.

To import an ASCII text file:

1 From the Address Book select **File**, point to **Import**, and then click **Text—OR—**Click **Vcard** and go to Step 5.
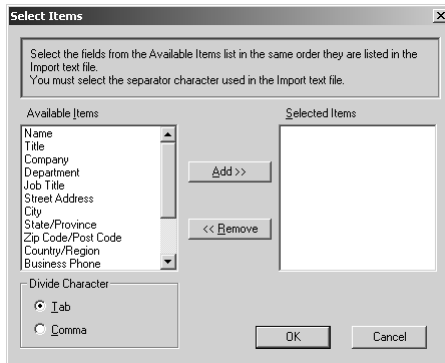
2 Select the data fields you wish to Import from the **Available Items** column and click **Add>>**.

Select the fields from the **Available Items** list in the same order they are listed in the **Import** text file.

3 Select **Divide Character** - **Tab** or **Comma** based on what file format you are importing.

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

5 Type the name of the file and select **Open**.
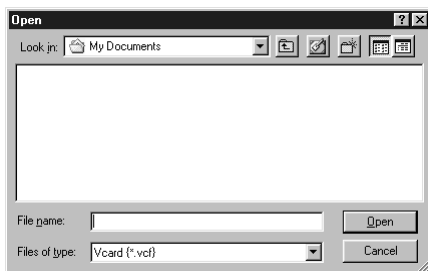
If you selected a text file in Step 1, the **Files of type:** will be **Text file (*.csv)**.

Setting Up Cover Page

Access the Brother PC Fax Cover Page Setting from the FAX Sending dialog box by clicking ![icon]. (See *User interface*, page 95.) The **Brother PC-FAX Cover Page Setup** dialog box will appear:

To

You can enter information in each box.

If you are sending a fax to multiple recipients, the recipient information will not be printed on the Cover Page.

From

You can enter information in each box.

Comment

Type the comment you want to add to the cover page.

Select Cover Page Form

Select the cover page form you want.

Import BMP file

You can insert a bitmap file, such as your company logo, in the cover page.

Select the BMP file by using the **Browse** button, and then select the alignment style.

Count Cover Page

When this box is checked, the Cover Page will be included in the page numbering. When this box is not checked, the Cover Page will not be included.

Sending a File as a PC FAX Using the Simple Style

1 Create a file in Word, Excel, Paint, Draw, or any other application on your PC.

2 From the **File** menu, select **Print**.

The **Print** dialog box will appear:
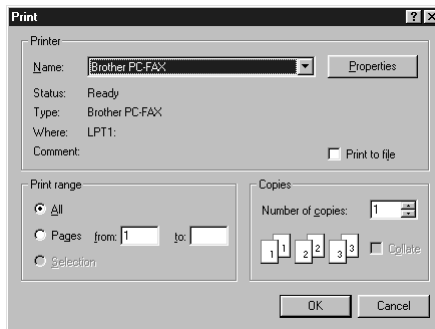
3 Select **Brother PC-FAX** as your printer, and then click **OK**.

The FAX Sending dialog box will appear:
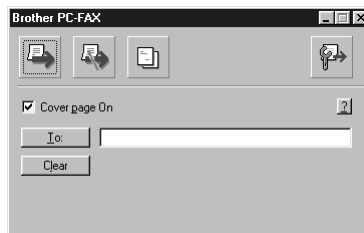
4 In the **To:** field, type the fax number of the receiving party. You can also use the Address Book to select destination fax numbers by clicking **To:** button. If you made a mistake entering a number, click the **Clear** button to clear all entries.

5 To send a Cover Page and note, check the **Cover page On** check box. You can also click the to create or edit an existing cover page.

6 When you are ready to send your fax, click the icon.

7 If you wish to cancel the fax, click the icon.

Sending a File as a PC FAX using the Facsimile Style

1 Create a file in Word, Excel, Paint, Draw, or any other application on your PC.

2 From the **File** menu, select **Print**.
The **Print** dialog box will appear:
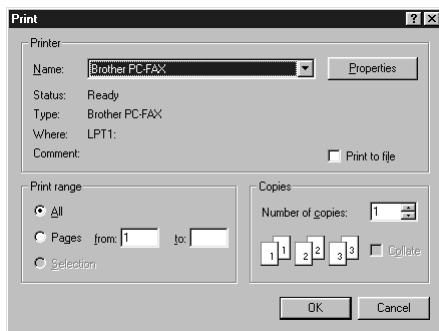
3 Select **Brother PC-FAX** as your printer, and then click **OK**.
The FAX Sending dialog box will appear:

4 Enter a telephone number by using any of the following methods:
   A. Enter the number using the numeric keypad.
   B. Click any of the 10 **Speed Dial** buttons.
   C. Click the **Address Book** button, and then select a Member or Group from the Address Book.

If you make a mistake you can use the **Clear** button to clear all the entries.

5 To include a cover page, check the ○ **Cover Page On**. You can also click the 🗐 icon to create or edit an existing cover page.

6 Click **Start** to send the fax.

If you wish to cancel the fax, click **Stop**.

Redial

If you wish to redial a number, click **Redial** to scroll through the last five fax numbers, and then click **Start**.

Set up Your USB Equipped Apple® Macintosh® G3,G4 or iMac™ with Mac OS 8.5/8.5.1/8.6/9.0/9.0.4/9.1

> Before you can connect the machine to your Macintosh®, you must purchase a USB cable that is no longer than 6 feet (1.8 meters).

To work with the machine, your USB-Equipped Apple® Macintosh® must be set up with Mac OS 8.5/8.5.1/8.6/9.0/9.0.4/9.1. (The Brother Scanner Driver works only with Mac OS 8.6/9.0/9.0.4/9.1.)

Using Brother Printer Driver with your Apple® Macintosh®

To select the Printer:

1 From the Apple menu, open the **Chooser**.
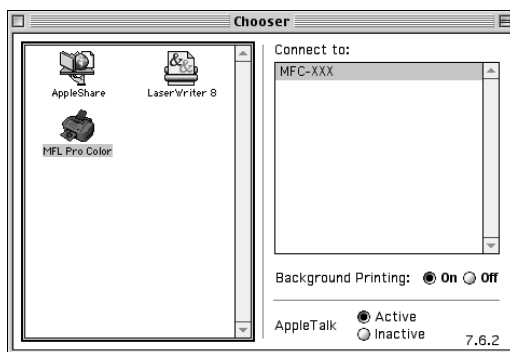
2 Click the **MFL Pro Colour** icon. On the right side of the **Chooser**, click the printer to which you want to print. Close the **Chooser**.

PRINTER/SCANNER

To print the document:

3 From your Macintosh application software, click **File** menu and select **Page Setup**. You can change the settings for **Paper Size**, **Paper Thickness**, **Paper Source**, **Orientation** and **Scaling**, then click **OK**.
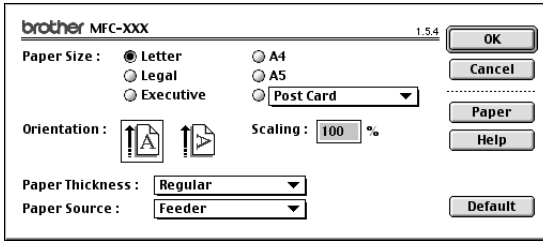
4 From application software, click **File** menu and select **Print**. Click **Print** to start printing.
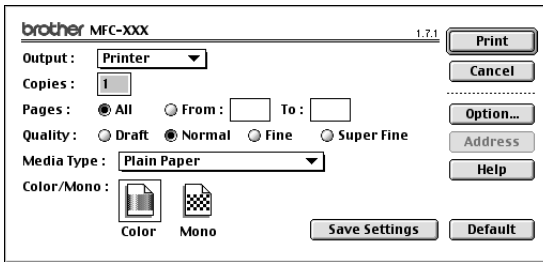
If you want to change **Copies**, **Pages**, **Quality**, **Media Type** and **Colour/Mono**, select your settings before clicking **Print**.
Option Setup allows you to change **Document** and Printing Options.
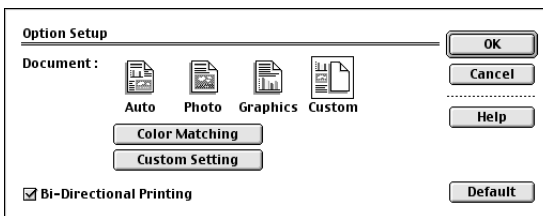
Sending a Fax from your Macintosh Application

You can send a fax directly from your Macintosh application using the following steps:

1 Create a document in a Macintosh application.

2 To begin the fax transmission, select **Print** from the **File** menu.
The **Printer** dialog box appears:
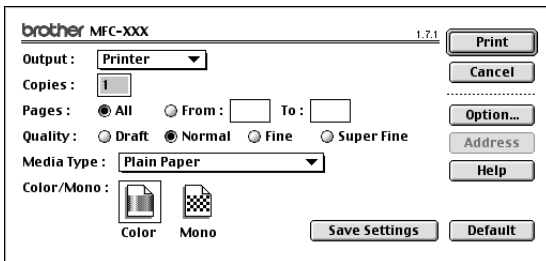
When *Printer* is selected, the top button shows **Print** and the **Address** button is greyed.

3 From the **Output** pull-down menu, select *Facsimile*.
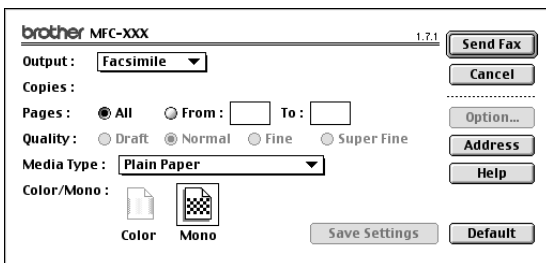
When *Facsimile* is selected, the top button shows **Send Fax** and the **Address** button is available.

To select and send only certain pages of the document, enter the page numbers in the **From:** and **To:** boxes in the Facsimile dialog box.

4 Click **Send Fax**.

The **Send Fax** dialog box appears:

The **Send Fax** dialog box has two list boxes. The left box shows all the previously **Stored Fax Numbers**; the right box will show the **Destination Fax Numbers** as you select them.

5 To address the fax, type a fax number in the **Input Fax Number** box.

—OR—

Select a name/number from the **Stored Fax Numbers** box, and then click **>>**. Your recipient will appear in the **Destination Fax Numbers** box.

> You can select several stored numbers at once by using the Shift and Ctrl keys.

6 If you want to, you can add your new recipients to the **Stored Fax Numbers** at this time by clicking **New**. (See *Adding a New Member*, page 109.)

—OR—

You can add a new group by clicking **Group**. (See *Adding a New Group*, page 110.)

7 If you are finished addressing your fax, click **Send Fax**.

> If you click **Send Fax** without addressing your fax, the following error message appears:
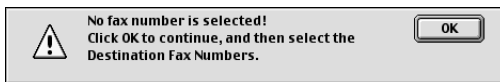
Click **OK** to return to the **Send Fax** dialog box.

Setting Up Your Address Book

You can add new members and groups to your Address Book, even while you are addressing a fax.

Adding a New Member

1 To add a new member to the Address Book, in the Facsimile dialog box click **Address**.

The **Address Book** dialog box appears:

```
Address Book                          ┌─── OK ───┐
Stored Fax Numbers :                  └──────────┘
Barbie              908-477-8888 ▲    ┌─ Cancel ─┐
Bob                 908-869-8888      └──────────┘
Frank               908-236-8888
Tony                908-569-8888      ┌─ Option... ┐
                                      └────────────┘



                                 ▼
┌── New ──┐ ┌─ Group ─┐  ┌─ Edit ─┐  ┌─ Delete ─┐
└─────────┘ └─────────┘  └────────┘  └──────────┘
```
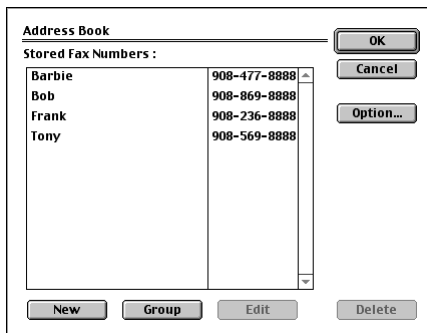
2 Click **New**.

The following dialog box appears:

```
Name : [                ]      ┌─── OK ───┐
Fax# : [                ]      └──────────┘
Memo : [                ]      ┌─ Cancel ─┐
                               └──────────┘
```

3 Type the name and fax number.

4 If you want to, you can store a comment in the Memo field (up to 15 characters).

5 Click **OK** to return to the **Address Book** dialog box.

Adding a New Group

You can set up a group of multiple recipients.

1 Click **Group**.

The **Group Setting** dialog box appears:
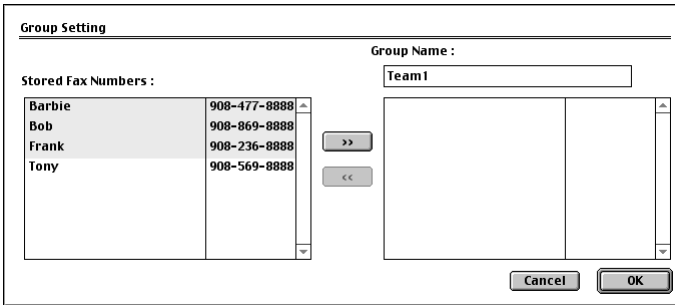
2 In the **Group Name** field, type a name for your Group.

3 From the **Stored Fax Numbers** box select the recipients for your Group, and then click **>>**.
Your selection will appear in the box under the **Group Name** field.

4 Click **OK**.

The **Address Book** dialog box reappears:
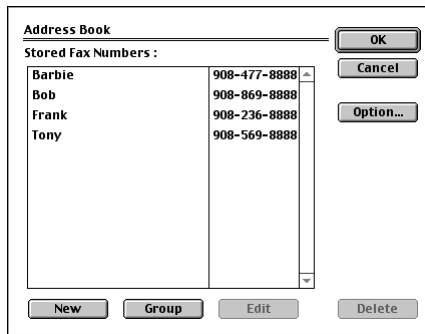
5 Click **OK**.

The **Print/Facsimile** dialog box reappears:
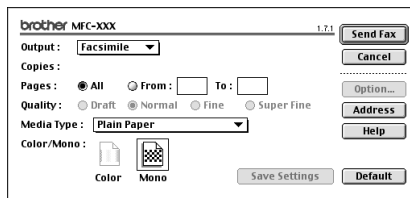
6 If you are ready to send your fax, click **Send Fax**.
(Follow the steps on page 107 for sending a fax.)

Using Brother TWAIN Scanner Driver with Your Apple® Macintosh®

The Brother MFC software suite includes a TWAIN Scanner driver for Macintosh®. This Macintosh® TWAIN Scanner driver can be used with application that supports the TWAIN specification.

Accessing the Scanner

Run your Macintosh TWAIN-compliant application software. The first time you use the Brother Twain driver, set it as default by choosing the **Select Source**. Afterwards, for each document you scan choose **Acquire Image** or select **Scan**. The scanner setup dialog box will appear.
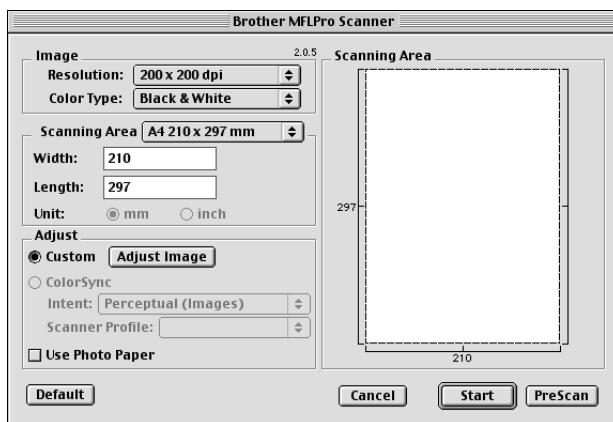
Scanning a Document into Your Macintosh G3, G4 or iMac

1 Insert the document face up in the ADF, or face down on the glass platen, again.

2 Adjust the following settings, if needed, in the scanner setup dialog box:
Resolution
Colour Type
Brightness
Contrast
Scanning Area

3 Click **Start**.

When scanning is finished, the image will appear in your graphics application.

Settings in the Scanner Window

Image

Resolution

Choose the scanning resolution from the **Resolution** pop-up menu. Higher resolutions take more memory and transfer time, but can achieve a finer scanned image.
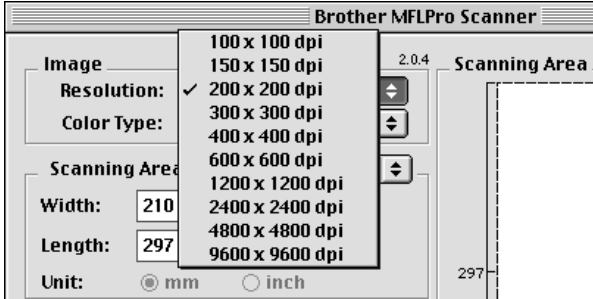
Colour Type

Black & White—Set the image Type to *Black & White* for text or line art. For photographic images, set the image type to *Grey (Error diffusion)* or *True Grey*.

Grey (Error Diffusion)—is used for documents that contain photographic images or graphics. (*Error Diffusion* is a method for creating simulated grey images by placing black dots in a specific matrix instead of true grey dots.)

True Grey—also is used for documents containing photographic images or graphics. This mode is more exact because it uses up to 256 shades of grey. It requires the most memory and longest transfer time.

Colours: Choose either *8 Bit Colour*, which scans up to 256 colours or *24 Bit colour* which scans up to 16.8 million colours. Although using *24 Bit Colour* creates an image with the most accurate colours, the image file will be approximately three times larger than a file created with 8 Bit Colour.
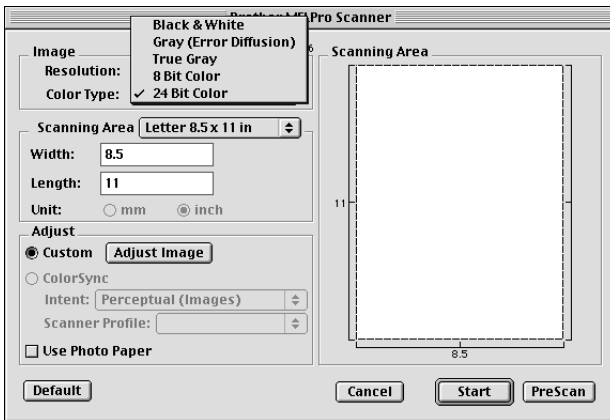
Scanning Area

Set the **Size** to one of the following:

- ◆ *Letter (8.5 x 11 inches)*
- ◆ *A4 (210 x 297 mm)*
- ◆ *Legal (8.5 x 14 inches)*
- ◆ *A5 (148 x 210 mm)*
- ◆ *B5 (182 x 257 mm)*
- ◆ *Executive (7.25 x 10.5 inches)*
- ◆ *Business Card (90 x 60 mm)*
- ◆ *Custom (User adjustable from 0.35 x 0.35 inches to 8.5 x 14 inches)*

After you choose a custom size, you can adjust the scanning area. Click and hold the mouse button as you drag the mouse to crop the image.

Width:	Enter the width of the custom size.
Length:	Enter the length of the custom size.

Business Card Size

To scan business cards, select the Business Card size setting (90 x 60 mm), and then place the business card face down at the center of glass platen.

When scanning photographs or other images for use in a word processor or other graphics application, it is a good idea to try different settings for the Contrast, Mode and Resolution to determine which settings look best.

Adjust Image

Brightness

Adjust the brightness settings to obtain the best image. The Brother TWAIN Scanner driver offers 100 brightness settings (-50 to 50). The default value is 0, representing an "average" setting.

You can set the brightness level by dragging the slidebar to the right to lighten the image or to the left to darken the image. You can also type a value in the box to set the setting. Click **OK**.

If the scanned image is too light, set a lower brightness value and scan the document again.

If the image is too dark, set a higher brightness value and scan the document again.
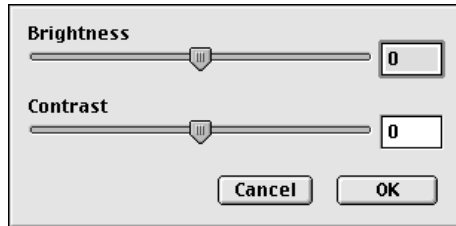
Contrast

The contrast setting is adjustable only when you have selected one of the Color Type settings, but it is not available when Black & White is selected as the Color Type.

Increasing the contrast level (by dragging the slidebar to the right) emphasizes dark and light areas of the Image, while decreasing the contrast level (by dragging the slidebar to the left) reveals more detail in grey areas. Instead of using the slidebar, you can type a value in the box to set the contrast. Click **OK**.

Colour Sync Dialog
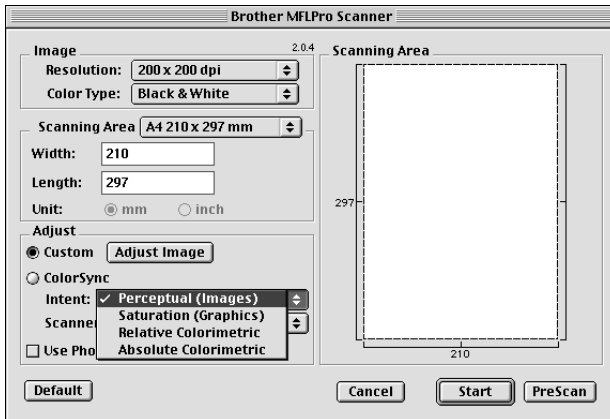
Perceptual Matching—All the colours of a given gamut are scaled proportionally to fit within another gamut. This intent pretty much maintains the balance between the colours in the image. This intent is the best choice for realistic images, such as scanned photographs.

Saturation Matching—The relative saturation of colours is maintained from gamut to gamut. So basically the colours are shifted to the edge of the gamut to get the most saturated colour possible. Rendering the image using this intent gives the strongest colours and is the best choice for bar graphs and pie charts, in which the actual colour displayed is less important than its vividness.

Relative Colourimetric Matching—The colours that fall within the gamuts of both devices are left unchanged. Some colours in both images will be exactly the same, a useful outcome when colours must match quantitatively. What that means is that if the colour is inside the gamut, it will stay the same colour. However, if the colour is outside the gamut, it will be mapped to the edge of the gamut. This intent is best suited for logos or "spot colours" where colour must match.

Absolute Colourimetric Matching—A close appearance match may be achieved over most of the tonal range, but if the minimum density of the idealized image is different from that of the output image, the areas of the image that are left blank will be different. Colours that fall within the gamuts of both devices are left unchanged.

Scanner Profile

Select your Brother MFC.
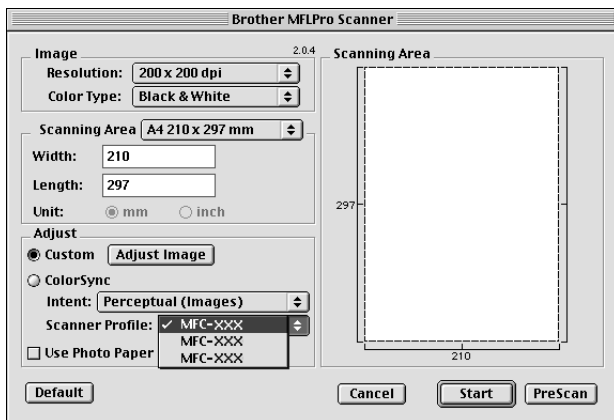
PreScanning an Image

PreScanning allows you to scan an image quickly at a low resolution. A thumbnail version will appear in the **Scanning Area**. This is only a preview of the image, so you can see how it will look. The **PreScan** button is used to preview an image for cropping any unwanted portions from the image. When you are satisfied with the preview, click **Start** to scan the image.

1 Insert the document face up in the ADF, or face down on the glass platen.

2 Click **PreScan**.

The entire document will be scanned into your Macintosh and will appear in the **Scanning Area** of the Scanner dialog box:

3 To scan a portion of the prescanned image, click and drag the mouse to crop it.
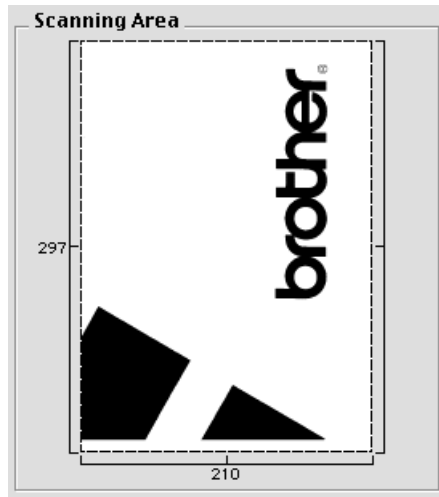
4 Insert document face up in the ADF again, if you use the ADF in Step 1.

5 Adjust the settings for **Resolution**, **Colour Type** (Grey Scale), **Brightness**, **Contrast**, and **Size** in the Scanner Setup dialog box, as needed.

6 Click **Start**.

This time only the selected area of the document will appear in the **Scanning Area**.

7 Use your application, software for editing and refining the image as usual.

17 **Troubleshooting and Maintenance**

Error Messages

As with any sophisticated office product, errors may sometimes occur. If this happens, the machine often identifies the problem and displays an error message. The table below explains the most common error messages.

ERROR MESSAGE	CAUSE	ACTION
CHECK CARTRIDGE	An ink cartridge is not installed properly.	Re-install the ink, seating it properly. (See *Replacing the Ink Cartridges*, page 134.)
CHECK DOCUMENT	Documents were not inserted or fed properly, or document was longer than 90 cm.	See *Document Jams and Paper Jams*, page 119.
CHECK PAPER	MFC is out of paper.	Add recording paper and then press **Mono Fax Start**.
CHECK PAPER SIZE	Your paper is smaller than A4 size. (The machine can not print fax messages, Help list or any other fax reports if the paper isn't A4 size.)	Reload the A4 paper, and then press **Mono Fax Start**.
COMM.ERROR	Poor phone line quality caused communication error.	Try the call again. If problem continues, call Telephone Company to check your phone line.
CONNECTION FAIL	You tried to poll a fax machine that is not in Polled Waiting mode.	Verify the other party's polling setup.
COVER OPEN	Scanner cover is not closed completely.	Open the scanner cover, then close it.
DISCONNECTED	The other party or other party's fax machine terminated the call.	Try to transmit, calling the other party to see what happened or receive again.
DOC. COVER OPEN	The document cover is open when you try to scan a document using the ADF.	Remove any paper from the ADF and close the document cover.
HIGH TEMPERATURE	The print head detects high temperature.	Use the machine at the cool room or cool your room.

ERROR MESSAGE	CAUSE	ACTION
INK EMPTY XXXX	One or more of the ink cartridges are empty. The machine will stop all print operations (such as printing copies, faxes and jobs from the PC). While memory is available, black and white faxes will be received into memory. If a sending machine has a colour fax, the machine's "handshake" will request that the fax be sent as black and white; if the sending machine has the feature to convert it, the colour fax will be received into memory as a black and white fax. The machine connected with a USB cable will be able to perform scan operations; The machine connected with a parallel cable, will not scan. This cleaning process consumes a small amount of ink.	Replace the ink cartridges. (See *Replacing the Ink Cartridges*, page 134.)
LOW TEMPERATURE	The print head detects low temperature.	Use the machine at the warm room or warm your room.
MACHINE ERROR XX	MFC has a mechanical problem.	Unplug the machine, and then call Brother or your dealer for service.
NEAR EMPTY XXXX	One or more of the ink cartridges are running out of ink. The machine will stop receiving color faxes. The machine's "handshake" will request that it be sent in black and white; if the sending machine has the feature to convert it, the color fax will be received into memory as a black and white fax.	Order a new ink cartridge now.
NO RESPONSE/BUSY	The number you dialled does not answer or is busy.	Verify the number and try again.
NOT ASSIGNED	You tried to access a Speed Dial number that is not programmed.	Set up the Speed Dial number. (See *Storing Speed Dial Numbers*, page 22.)
OUT OF MEMORY	The data is too large for the machine's memory.	See *Out of Memory*, page 51.
PAPER JAM	The recording paper is jammed in the machine.	See *Document Jams and Paper Jams*, page 119.

Document Jams and Paper Jams

Based upon where the original document or printed sheet is jammed, follow the appropriate set of instructions to remove it.

Document Jam in the Top of the ADF Unit

1 Remove any paper from the document feeder that is not jammed.

2 Lift the ADF cover.

3 Pull the jammed document out to the right.

4 Close the ADF cover.

5 Press **Stop/Exit**.

ADF Cover
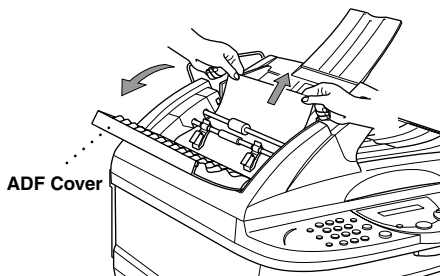
Document Jam inside the ADF Unit

1 Remove any paper from the document feeder that is not jammed.

2 Open the document cover.

3 Pull the jammed document out to the right.

4 Close the document cover.

5 Press **Stop/Exit**.

Document Cover

MAINTENANCE
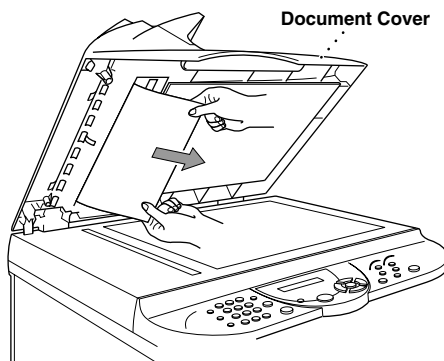
Printer Jam or Paper Jam

Remove the jammed paper depending on where it is jammed in the machine.

Paper is jammed in the multi-purpose sheet feeder.

1 Remove any paper from the multi-purpose sheet feeder that is not jammed.

2 Pull the jammed paper upward and remove it.
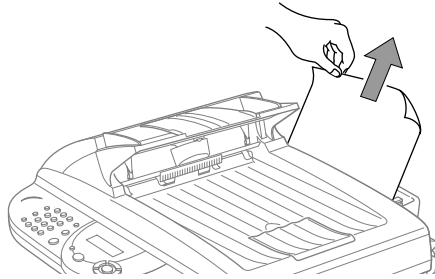
If you have difficulty removing the jammed paper, press and hold the Paper Release Lever as you pull out the page.

Paper Release Lever
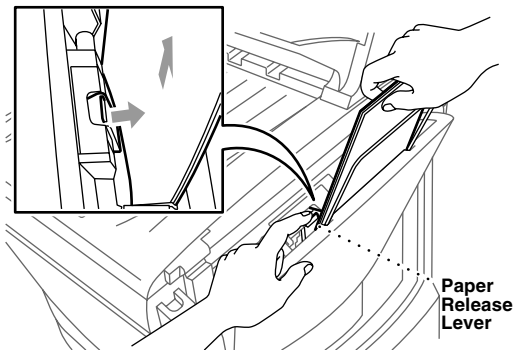
To improve the reliability of paper feeding, turn on Secure Feed mode by pressing the **Ink** and **Scan to** keys simultaneously. The machine will then feed paper more securely, but paper feeding will take a longer time. To turn off the Secure Feed mode, simultaneously press **Ink** and **Scan to** again.

If Paper Jam occurs repeatedly, install the Card Stock Support in the feeder, and then re-load the paper.
Or, reloading the paper upside down.

Paper is jammed inside the machine.

Scanner Cover

Scanner Cover Release Lever
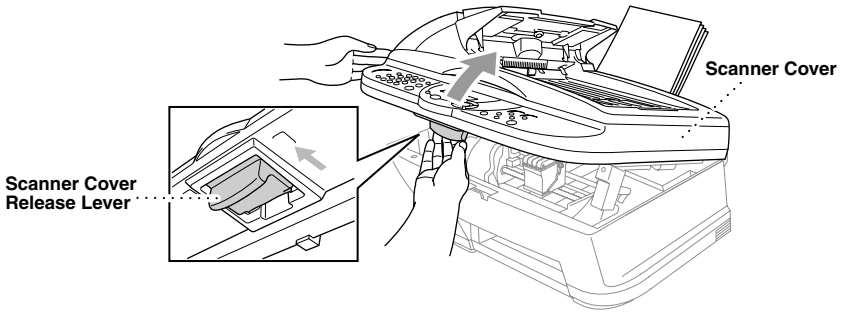
1 Open the Scanner Cover by releasing the Scanner Cover release lever and lifting the Scanner Cover.

2 Remove the jammed paper.
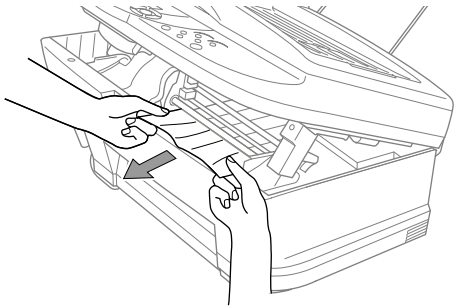
If the jammed paper is under the Print Heads, unplug the machine, and then you can move the Print Heads to remove the paper.

3 Close the Scanner Cover.

Paper is jammed inside the front of the machine.

Pull the paper toward you.

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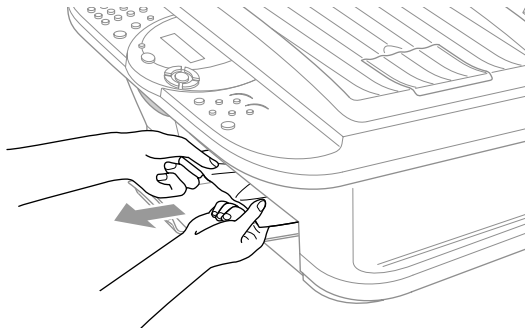
Paper is jammed inside the back of the machine.

If the paper rips, the pieces of paper may get stuck inside the back of the machine.

1 Remove any paper from the multi-purpose sheet feeder that is not jammed.

2 Open the paper jam cover.

3 To loosen the paper, slide the paper width guide to the widest position.

Paper Width Guides
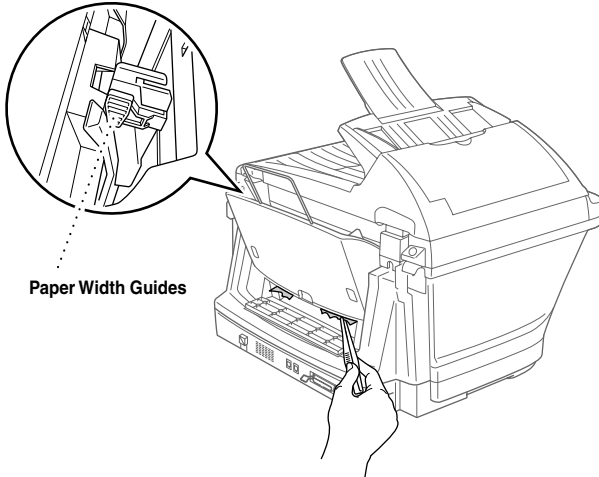
4 Use tweezers to pull out the ripped pieces of paper.

5 Close the paper jam cover.

Difficulty with Operation

If you think there is a problem with the machine, make a copy first. If the copy looks good, the problem is probably not the machine. Check the table below and follow the troubleshooting tips.

If you have any other problems, visit us at: **http://solutions.brother.com**

DIFFICULTY	SUGGESTIONS
Printing and Receiving Faxes	
Condensed Print and Horizontal Streaks / Top and Bottom of Sentences Are Cut Off	This can be caused by static or interference on the telephone line. You can make a copy using the Copy function and see if the same problem occurs. If the copy is also bad, call your Brother dealer for service.
Poor Quality Print	Make sure the Printer Driver matches the type of paper you are using. (See *The Quality/Colour Tab*, page 64.) If you are using plain paper, try using recommended special paper. (See *Paper*, page 143.) Don't handle the paper until the ink is dry. Adjust the Vertical Alignment. (See *Print Quality Check*, page 127.)
Smudged Stain on the top centre of the printed page.	If you are using the machine as a printer, change the paper thickness to Thick in the Paper tab of the Print dialog box in the printer driver setting. If you are copying or receiving a fax message, make sure the thickness of paper you are using matches the specifications. (See *Paper Specifications*, page 144.)
Printing Too Dark or Too Light	Make sure your ink cartridges are fresh and within their expiry dates. Cartridge expiry dates are printed on the package. Make sure the Printer Driver matches the type of paper you are using. (See *The Quality/Colour Tab*, page 64.) Try using recommended special paper. (See *Paper*, page 143.) The recommended environment for the machine is between 20 °C to 33 °C.
Printing Appears Dirty or Ink Seems to Run	Make sure you are using the recommended paper. (See *Paper*, page 143.) Don't handle the paper until the ink is dry. The recommended environment for the machine is between 20 °C to 33 °C.
White Lines in Text or Graphics	Clean the print heads. (See *Print Quality Check*, page 127.)
Stains Appear on the Reverse Side or at the Bottom of the Page	Make sure the Printer Platen is not dirty with ink mist. (See *Regular Maintenance*, page 132.)
Vertical Black Lines When Receiving	The sender's scanner may be dirty. Ask the sender to make a copy to see if the problem is with the sending machine. Try receiving from another fax machine. If the problem continues, call Brother or your dealer for service.
Received colour fax prints only in B & W.	Replace the colour ink cartridges that are empty or nearly empty, and then ask the other party to send the colour fax again. (See *Replacing the Ink Cartridges*, page 134.)

MAINTENANCE

DIFFICULTY	SUGGESTIONS
Left and Right margins are cut off	Turn on Auto Reduction. (See *Printing a Reduced Incoming Document (Auto Reduction)*, page 30.)
Horizontal lines appear in Text or Graphics.	Clean the print heads. (See *Print Quality Check*, page 127.) If you clean the print heads five times and the print has not improved, call Brother or your dealer for service.
Phone Line or Connections	
Dialling does not work	Check for a dial tone. Change **TONE/PULSE** setting. (See *Setting the Dialling Mode (Tone/Pulse)*, page 21.) Check all line cord connections. Check power cord connection. Send a manual fax by lifting the external telephone's handset, and dialling the number. Wait to hear fax receiving tones before pressing **Mono Fax Start**.
The machine Does Not Answer When Called	Make sure the machine is not in MANUAL mode. Check for dial tone. If possible, call the machine to hear it answer. If there is still no answer, check the telephone line cord connection. If there is no ringing when you call the machine, call your Telephone Company to check the line.
No dial tone on the external telephone's handset	Lifting the external phone's handset—**OR**—Press any dial pad key then **Mono Fax Start**. If you hear no dial tone, check telephone line cord connections at the machine and wall socket. Check that the external telephone is connected to the machine correctly. Test the wall socket with another single line telephone. If no dial tone on the wall outlet, call your Telephone Company.
Sending Faxes	
Poor Transmitting Quality	Try changing your resolution to **FINE** or **S.FINE**. Make a copy to verify the machine's scanner operation.
Transmission Verification Report says "Result:NG" again.	There is probably temporary noise or static on the line. Try sending the fax again. If you send a PC FAX message and get "Result:NG" on the Transmission Verification Report, the machine may be out of memory. To gain extra memory, you can turn off Fax Storage (See *Setting Fax Storage*, page 46), print fax message in memory (See *Printing a Fax from Memory*, page 31) or cancel a delayed fax or polling job (See *Checking and Cancelling a Scheduled Job in Memory*, page 38). If the problem continues, call the telephone company to check your phone line.
Vertical Black Lines When Sending	If the copy you made shows the same problem, your scanner is dirty. (See *Cleaning the Scanner*, page 132.)

DIFFICULTY	SUGGESTIONS
Handling Incoming Calls (with external telephone)	
Machine "Hears" Voice as CNG Tone	If the machine is set to Fax Detect ON, it is more sensitive to sounds. The machine may mistakenly interpret certain voices or music on the line as a calling fax machine and respond with fax receiving tones. Deactivate the fax by pressing **#51** if you are at an extension phone or press **Stop/Exit**, if you are at the fax machine or external phone. Try avoiding this problem by turning Fax Detect to OFF. (See *Fax Detect (with an External or Extension Telephone)*, page 30.)
Transferring a fax call to the machine	If you answered at an extension phone, press your Remote Activation Code (default setting is ✳**51**). When the machine answers, hang up.
Custom Features on a Single Line	If you have Call Waiting, Caller ID, Call Waiting/Caller ID, Voice Mail, an answering machine, alarm system or any other custom feature on a single phone line with the machine, it may create a problem sending or receiving fax data. For example: If you are sending or receiving a fax message while a custom feature signal comes through on the line, the signal can temporarily interrupt or disrupt the fax data. Brother's ECM feature should help overcome this problem. This condition is related to the telephone system industry, and is common to all devices that send and receive information on a single, shared line with custom features. If avoiding a slight interruption is crucial to your business, a separate line with no custom features is recommended.
Scanning Difficulties	
TWAIN Errors appear while scanning.	Make sure the Brother TWAIN Driver is selected as the primary source. In PaperPort®, click File Select Source, highlight the Brother TWAIN Driver and click Select.
Software Difficulties	
"MFC Connect Failure"	If the machine is not connected to your PC and you have loaded the Brother software, the PC will show "MFC Connect Failure" each time you restart Windows®. You can ignore this message or you can turn it off by deselect the AutoLoad PopUp check box in the Brother Control Centre chapter. (See *How to Turn Off AutoLoad*, page 73.)
Cannot perform '2 in 1' printing.	Check if the paper size setting in the application and in the printer driver are the same.
Cannot print when using Paint Brush.	Try setting the Display setting to '256 colours'.
Cannot print when using Adobe Illustrator.	Try to reduce the printing resolution.

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DIFFICULTY	SUGGESTIONS
Thick line and thin line appear alternately.	Turn OFF 'Bi-Directional Printing' from the 'Quality/Color' tab in the printer driver.
There are some dense lines.	Turn ON 'Reverse Order' from the 'Paper' tab in the printer driver.
When using ATM fonts, some characters are missing or some are printed in the same place.	If you are using Windows® 95/98, select 'Printer Settings' from the 'Start' menu. Open 'Brother MFC-590' properties. Click 'Spool Setting' on the 'Details' tab. Select 'RAW' from 'Spool Data Format'.
Printing is slow.	In the Quality/Colour tab of the Print dialog box, select Auto in the Document section.
Colour enhance is not working correctly.	If the image data is not full colour (such as 256 colour) in your application, Colour enhance does not function. Please use at least 24 bit colour data with the Colour enhance feature.
"Unable to write to LPT1" or "LPT1 already in use" Error Message appears. "MFC is Busy" or "MFC Connect Failure" Error Message appears.	1. Make sure the machine is on (plugged into the AC outlet) and that it is connected directly to the computer using the IEEE-1284 bi-directional parallel cable. The cable must not go through another peripheral device (such as a Zip Drive, External CD-ROM Drive, or Switch box). 2. Make sure the machine is not displaying an error message on the LCD Display. 3. Make sure no other device drivers, which also communicate through the parallel port, are running automatically when you boot up the computer (such as, drivers for Zip Drivers, External CD-ROM Drive, etc.) Suggested areas to check: (Load=, Run=command lines in the winanl file or the Startup Group). 4. Check with you computer manufacturer to confirm that the computer's parallel port settings in the BIOS are set to support a bi-directional machine, i.e., Parallel Port Mode-ECP.

How to Improve Print Quality

To preserve good quality, the machine periodically cleans the print heads. Also, you can press **Ink** to start the cleaning when needed.

Cleaning the Print Heads

Clean the print heads if you get a horizontal line in the text or graphics on your printed documents. There are two print heads; each contains two print cartridges. You can clean either black and cyan, yellow and magenta or all four colors by using **Ink** key.

⚠ **Do NOT clean the print heads by touching it with your hand or a cloth.**

1 Press **Ink**.

2 Press **1** to choose **1.CLEANING**.

3 Press ⬱ or ⬱ to choose the colour combination you want to clean.

4 Press **Menu/Set** to clean the print head automatically.

When cleaning is finished, the machine will go back online automatically.

💡 If you clean the print heads at least five times and the print has not improved, call your dealer for service.

Print Quality Check

If the print quality is not satisfactory, you can print a Print Quality Check Sheet to help you identify settings you may need to change.

1 Press **Menu/Set**, **4**.

> 4.TEST PRINT

2 Press **Mono Fax Start**.
The machine begins printing the Print Quality Check Sheet.
The LCD shows:

> IS STEP "A" OK?
> 1.YES 2.NO

3 Check the sheet to see if the quality and alignment are OK by following STEPs A and B.

STEP A: Colour Block Quality Check

The LCD shows:

> IS STEP "A" OK?
> 1.YES 2.NO

Check the quality of the four colour blocks in the sheet. (BLACK/CYAN/YELLOW/MAGENTA).
If the quality is OK for all colours, press **1** (**YES**) to go to **STEP B**—OR—
If white horizontal lines appear in some colour blocks below, press **2** (**NO**).

OK   Poor
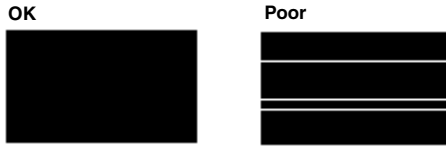
The LCD will ask you if the print quality is OK for each colour.

```
BLACK OK?
1.YES 2.NO
```
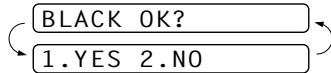
Press **2** (**NO**) for any colour with a problem.
The LCD shows:

```
START CLEANING?
1.YES 2.NO
```
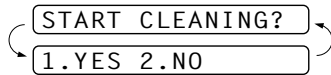
Press **1** (**YES**). The machine will start cleaning the colours.

After cleaning is finished, press **Mono Fax Start**. The machine will start printing the Print Quality Check Sheet again and then return to **STEP A**. If **STEP A** is OK, press **1** to proceed to **STEP B**.

STEP B: Alignment Check

The LCD shows:

```
IS STEP "B" OK?
1.YES 2.NO
```
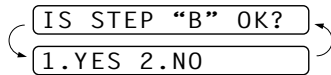
Check the 600 DPI and 1200 DPI test prints to see if number 5 most closely matches number 0. If the number 5 sample of both the 600 DPI and 1200 DPI are the best matches, press **1** (**YES**) to finish **STEP B**

—**OR**—

If another test print number is a better match for either 600 DPI or 1200 DPI, press **2** (**NO**) to select it.

OK sample

Do NOT select
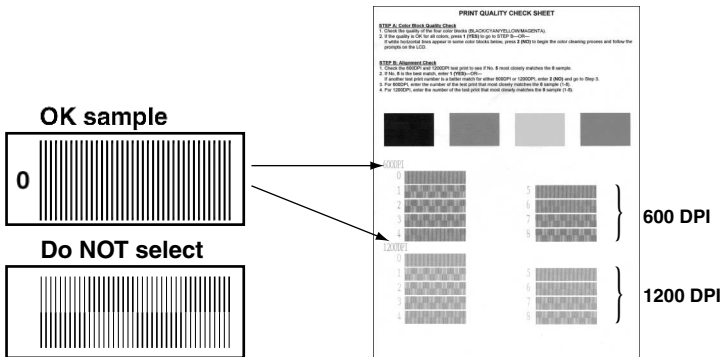
For 600 DPI, press the number of the test print that most closely matches the number 0 sample (1-8).

```
600DPI ADJUST
SELECT BEST #
```

For 1200 DPI, press the number of the test print that most closly matches the number 0 sample (1-8).

```
1200DPI ADJUST
SELECT BEST #
```

4 Repeat Steps 1 and 2 (in *Print Quality Check*) to print another sample Print Quality Check Sheet and then check it.

5 Press **Stop/Exit**.

If you still see missing ink in this Print Quality Check Sheet, repeat the cleaning and test print procedures at least five times. If ink is still missing after the fifth cleaning and test print, replace the ink cartridge for the clogged colour. (Perhaps the ink cartridge was in the machine over six months or the expiration date written on the cartridge package has passed. Or, the ink may not have been stored properly before use.)
After replacing the ink cartridge, check it by printing another Print Quality Check Sheet. If the problem still exists, repeat the cleaning and test print procedures at least five times for the new ink cartridge. If ink is still missing, call your Brother dealer or Brother for Service.

When an ink head nozzle is clogged the printed sample looks like this.

After the ink head nozzle is cleaned, the horizontal lines are gone.

Do NOT touch the print heads. Touching the print heads may cause permanent damage and may void the print head's warranty.

Packing and Shipping the Machine

Whenever you transport the machine, use the packing materials that came with the machine. If you do not pack the machine correctly, you could void your warranty.

Do not unplug the machine until a print job is finished.

1 Remove all the ink cartridges and attach the white shipping cover. (See *Replacing the Ink Cartridges*, page 134.)

To attach the white shipping cover
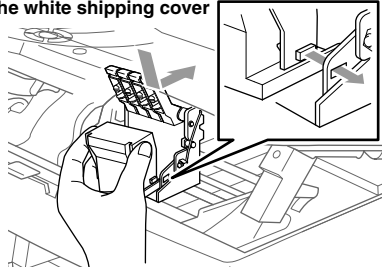
If you are unable to locate the white shipping cover, do not remove the ink cartridges before shipping. It is essential that either the shipping cover or the ink cartridges be in position during shipment. Otherwise, the print heads will be damaged, voiding your warranty.

2 Attach the protective yellow bar.

Protective Yellow Bar
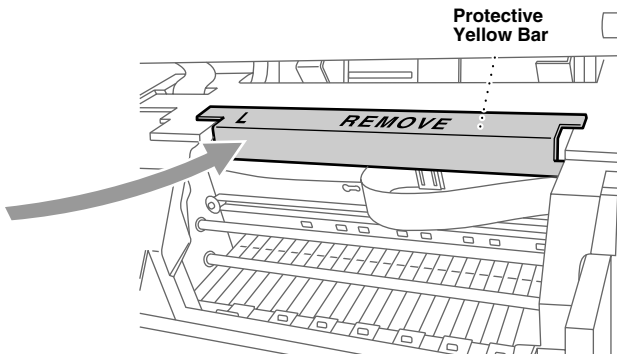
REMOVE

3 Unplug the machine from the telephone wall jack.

4 Unplug the machine from the AC outlet.

5 Unplug the Parallel cable or USB cable from the machine.

6 Remove telephone line cord and, and place them in original packing materials or protective wrapping.

7 Wrap the machine in the plastic bag.
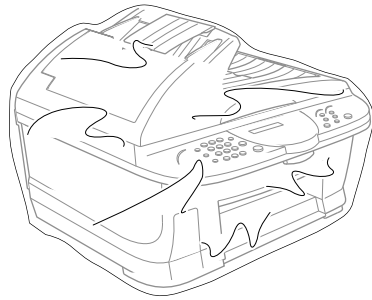
8 Place the machine in the original carton with the original packing material.
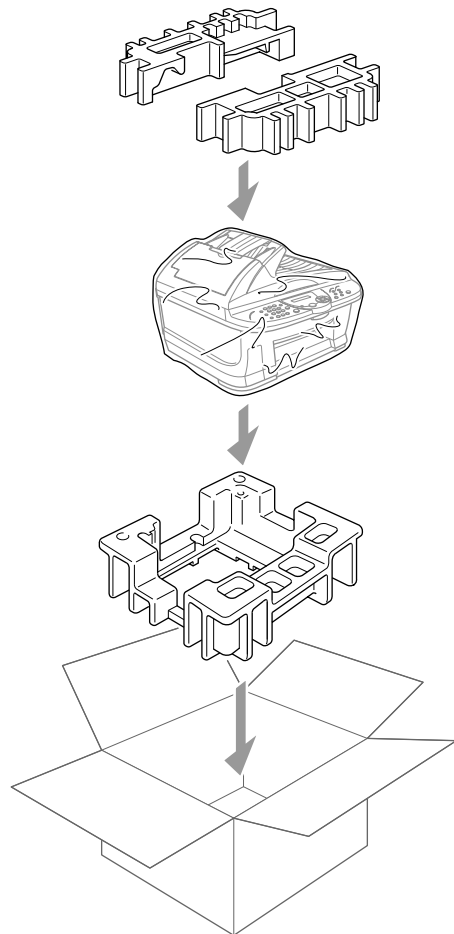
9 Pack additional parts (cord, printed materials) into the carton. Do not pack the used ink cartridges in the carton.
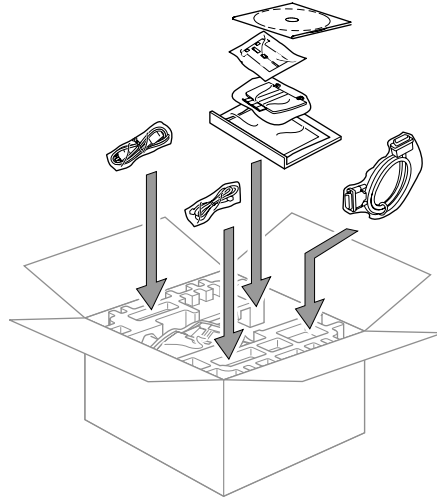
10 Close the carton.

Regular Maintenance

Cleaning the Scanner

Unplug the machine and lift the document cover. Clean the glass platen and white film with isopropyl alcohol on a lint-free cloth.
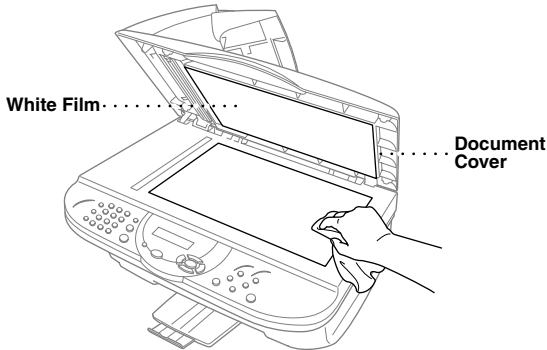
Open the document cover. Clean the white bar and the glass strip under the bar with isopropyl alcohol on a lint-free cloth.

White Bar

Glass Strip
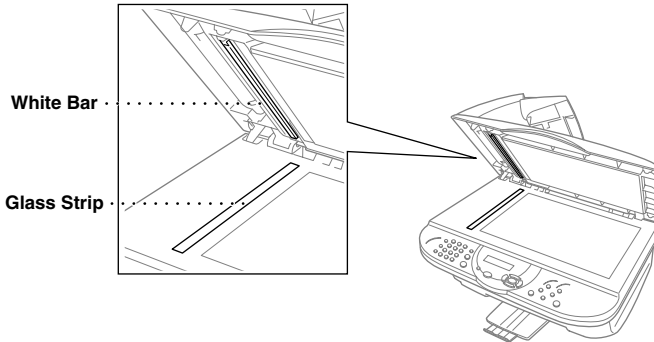
Cleaning the Machine Printer Platen

⚠️
- **Be careful not to touch the paper feed star wheels, flat cable and encode film.**
- **Be sure to unplug the machine from the main power outlet before cleaning the printer platen.**

1 Pull the Scanner Cover release lever and lift the Scanner Cover.

To clean the machine printer platen, wipe it with a lint-free cloth that is dry.

Paper Feed Star Wheel

Do NOT Touch!

Encode Film

Do NOT Touch!

Clean Here

Flat Cable

Do NOT Touch!
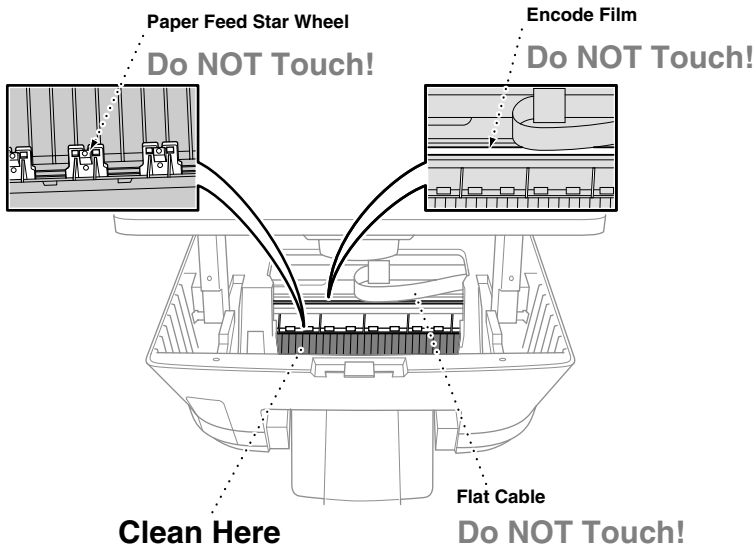
2 Close the scanner cover and connect the power cord.

Replacing the Ink Cartridges

The machine is equipped with an optical sensor that automatically monitors the ink level in each colour cartridge. When the counter detects an ink cartridge is running out of ink, the machine will notify you with a message on the LCD.

The display shows you which colour cartridges are low or empty. Be sure to follow the display prompts so you replace the colour cartridges in the appropriate order.

When the ink cartridges are running low, you must use Ink to begin the cartridge replacement (Steps 1–3). If the ink is empty, skip to Step 3.

1 Press **Ink**.

2 Press **2** to choose **2.REPLACE INK**.

If one or more ink cartridges are empty, for example Black, the screen displays **INK EMPTY BLACK** and **PLS OPEN COVER**.

3 Pull the Scanner Cover release lever and lift the Scanner Cover.

4 Push the appropriate coloured ink cartridge covers and remove the ink cartridge.

Ink Cartridge Covers
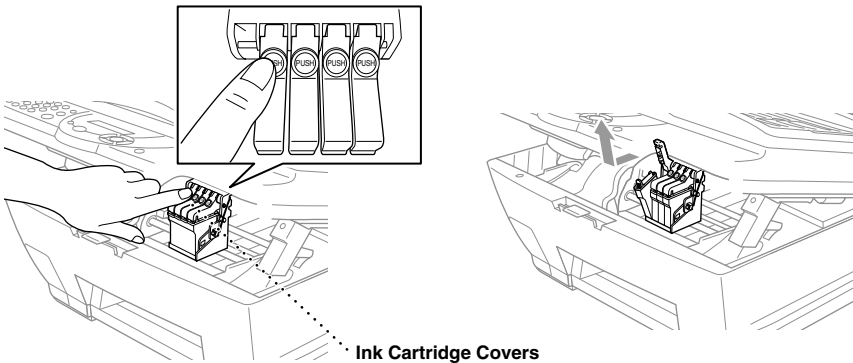
5 Open the new ink cartridge bag for the colour on the display and remove the ink cartridge.

6 Hold the new ink cartridge as shown in the illustration, and remove the sealing tape from the side of the ink cartridge. Carefully peel the tape in the direction away from you.

Peel in the direction away from you!

Opening

 To prevent spilling ink and staining your hands and clothing, remove the sealing tape gently.

7 Each colour has its own correct position. Insert each new ink cartridge into the carriage, and then press the ink cartridge cover until it clicks.

8 After installing the ink cartridges, close the Scanner Cover. The machine prepares for a "head cleaning" and goes online. The display prompts you to verify a new ink cartridge was inserted for each colour you removed. Example: **DID YOU CHANGE BLCK? 1.YES 2.NO**.
If the ink cartridge you installed is not a brand new one, please make sure to select 2.

9 For each new cartridge, press **1** on the dial pad to reset the ink dot counter for that colour automatically. (The ink dot counter enables the machine to notify you when a colour is running low.)
The machine will enter a cleaning cycle for approximately three minutes for each replaced cartridge. The display alternately shows **CLEANING** and **PLEASE WAIT**.
When the machine completes the cleaning cycle, the display returns to Standby mode (date and time).

 If ink gets in your eyes, irrigate them with water immediately and consult a doctor if you are concerned.

MAINTENANCE

- **DO NOT remove ink cartridges if you do not need to replace them. If you do so, it may reduce the ink quantity and the printer will not know the quantity of ink left in the cartridge.**
- **DO NOT shake the ink cartridges, because the ink may spill when you take off the sealing tape.**
- **DO NOT refill the ink cartridges. Attempting to use refilled cartridges and using incompatible inks may cause damage to the print heads in this machine and such damage will not be covered by warranty. Warranty coverage does not apply to problems caused by the use of 3rd party ink of 3rd party ink cartridges. We can only recommend the use of genuine Brother consumables.**

■ If the **INK EMPTY** message is on the display after you have installed ink cartridges, check that the ink cartridges are installed correctly.

■ If ink stains your body or clothing, wash with soap or detergent immediately.

■ If you install an ink cartridge in the wrong colour position, you must clean the print head several times before you start printing, after correcting the cartridge installation, because the colours were mixed.

■ Once you open an ink cartridge, install it in the machine and use it up within six months of installation. Use unopened ink cartridge by the expiry date printed on the box.

18 Important Safety Information

Important Safety Instructions

1 Follow all warnings and instructions marked on the product.

2 Unplug this product from the wall outlet before cleaning. Do not use liquid or aerosol cleaners.

3 Do not place this product on an unstable surface, stand, or table. The product may fall, causing serious damage to the product.

4 Slots and openings in the cabinet and the back or bottom are provided for ventilation; to ensure reliable operation of the product and to protect it from overheating, these openings must not be blocked or covered. The openings should never be blocked by placing the product on a bed, sofa, rug, or other similar surface. This product should never be placed near or over a radiator or heater. This product should not be placed in a built-in installation unless proper ventilation is provided.

5 This product should be operated from the type of power source indicated on the label. If you are not sure of the type of power available, consult with your dealer or local power company.

6 This machine is designed to be used only with a suitable earthed power outlet. This product is equipped with a 3-wire earthed plug. This plug will fit into only an earthed socket. This is a safety feature. If you are unable to insert the plug into the outlet, contact your electrician to replace your obsolete socket. Do not defeat the purpose of an earthed plug.

7 Do not allow anything to rest on the power cord. Do not locate this product where people can walk on the cord.

8 Do not place anything in front of the machine that will block received faxes. Do not place anything in the path of received faxes.

9 Do not touch a document during printing.

10 Never push objects of any kind into this product through cabinet slots, since they may touch dangerous voltage points or short out parts resulting in a risk of fire or electric shock. Never spill liquid of any kind on the product.

11 Do not attempt to service this product yourself, because opening or removing covers may expose you to dangerous voltage points and/or other risks. Refer all servicing to service personnel.

12 This product has no mains ON/OFF switch. It is therefore highly important that access to the mains plug and the mains socket to which the plug is connected, is never obstructed, in case for some reason the mains power to the machine must be quickly disconnected.

13 Unplug this product from the mains power and telephone line sockets, and refer servicing to qualified service personnel under the following conditions:
- ◆ When the power cord is damaged or frayed.
- ◆ If liquid has been spilled into the product.
- ◆ If the product has been exposed to rain or water.
- ◆ If the product does not operate normally when the operating instructions are followed. Adjust only those controls that are covered by the operating instructions. Improper adjustment of other controls may result in damage and will often require extensive work by a qualified technician to restore the product to normal operation.
- ◆ If the product has been dropped or the cabinet has been damaged.
- ◆ If the product exhibits a distinct change in performance, indicating a need for service.

14 We do not advise the use of an extension lead.

IMPORTANT-For Your Safety

To ensure safe operation the three-pin plug supplied must be inserted only into a standard three-pin power point which is effectively grounded through the normal household wiring.

Extension cords used with the equipment must be three-conductor and be correctly wired to provide connection to ground. Use of extension cords is not recommended.

The fact that the equipment operates satisfactorily does not imply that the power is grounded and that the installation is completely safe. For your safety, if in any doubt about the effective grounding of the power, consult a qualified electrician.

IT Power System (For Norway Only)

This product is also designed for IT power distribution system with phase-to-phase voltage 230V.

19 **Specifications**

Fax Specifications

Compatibility	ITU-T Group 3
Coding system	MH/MR/MMR/JPEG
Modem speed	14400/12000/9600/7200/4800/2400; Automatic Fallback
Document input width	148 mm to 216 mm(ADF) Max. 216(Scanner)
Document input length	148 mm to 356 mm(ADF) Max. 297(Scanner)
Scanning width	208 mm
Printing width	203.2 mm
Automatic Document Feeder	Max. 30 sheets (75 g/m^2)
Multi-purpose Sheet Feeder	100 sheets (75 g/m^2)
Printer type	Ink Jet
Grey scale	256 levels (Error Diffusion)
Display	LCD, 16 characters
Polling types	Standard, Secure, Delayed, Sequential
Contrast control	Automatic/Light/Dark (manual setting)

Resolution	• Horizontal 8 dots/mm
	• Vertical Standard —3.85 line/mm (B&W)
	            — 7.7 line/mm (Color)
	    Fine — 7.7 line/mm (B&W/Color)
	    Photo — 7.7 line/mm (B&W)
	    Superfine —15.4 line/mm (B&W)

Memory Capacity	4MB (up to 170 pages*[1])
Speed Dial	100 stations
Automatic redial	4 times at 2 minute intervals (4 times at 3 minute intervals — Nordic countries only)
Auto answer	1, 2, 3 or 4 rings (0, 1, 2, 3, 4 or 5 rings — Nordic countries only)
Communication source	Public switched telephone network
Operating environment	10-35°C (50-95°F)
Best Print Quality	20-33°C (68-91°F)
Power source	220 ~ 240V AC 50/60Hz
Power consumption	Minimum: under 6 watts*[2] Standby: under 13.5 watts Peak: under 40 watts
Dimensions	468 x 467 x 368 mm
Weight	11 kg

*[1] "Pages" refers to the "ITU-T Chart" with MMR cording and Standard Resolution.

*[2] With Power Save mode on and the scan lamp turned off.

Printer Specifications

Printing

Print method	Piezo with 75 x 4 nozzles
Resolution	Monochrome/Colour Printing: 2400 x 1200 dots per inch (DPI), 1200 x 1200 dots per inch (DPI), 600 x 600 dots per inch (DPI), 600 x 300 dots per inch (DPI), 600 x 150 dots per inch (DPI)
Print speed	up to 10 pages / minute (Mono) up to 8 pages / minute (Colour)
Print width	203.2 mm (8 inches)
Disk-based fonts	35

Controller

Interface	Parallel: A shielded cable to IEEE 1284 (bi-directional) specification less than 1.8 m (6 feet) long should be used. USB: A USB (Universal Serial Bus) Interface that is no longer than 1.8 m (6 feet) should be used.

You must attach the bundled filter core and cable tie to the shield parallel cable.

Computer Requirement

For Windows®			
Operating System	**CPU (Pentium)**	**RAM**	**Hard Disk Space**
95, 98, 98SE	75 MHz	24 MB (32 MB recommended)	50 MB
NT Workstation4.0	75 MHz	32 MB (64 MB recommended)	
2000 Professional	133 MHz	64 MB (128 MB recommended)	
Me	150 MHz	32 MB (64 MB recommended)	

For Macintosh®			
Operating System	**CPU**	**RAM**	**Hard Disk Space**
Apple® Macintosh® QuickDraw® G3, G4, iMac or iBook with OS8.5, 8.5.1 (Only Printer) OS8.6/9.0/9.0.4/9.1 (Printer & Scanner)	All base models meet minimum requirements.		50 MB

Print Media

Paper input   Automatic loading from the Multi-Purpose Sheet Feeder

- Paper type:
  Plain paper, coated paper, glossy paper, transparencies and envelopes.
- Paper size:
  A4, A5, B5, Letter, Legal Executive, envelopes (commercial No. 10, DL, C5), Postcard, Index card.
- Paper Width:
  89–216 mm (3.5–8.5")
- Paper Length:
  127–356 mm (5–14")
- Maximum feeder capacity: Approx. 100 sheets of 75 g/m^2 plain paper.

See *Paper Specifications for Multi-Purpose Sheet Feeder*, page 144.

Paper output   Approximately 50 sheets of plain paper
(Face up print delivery to the paper output tray)
It is recommended that printed sheets are taken from the paper output tray immediately after printing.

Consumable Items

Ink   Black and 3 individual color ink cartridges separate from the two print heads.

Service Life of Ink Cartridge   Approximately 950 page/Black cartridge at 5% coverage with 600 x 150 dpi resolution.
Approximately 450 page/Color cartridge at 5% coverage with 600 x 150 dpi resolution.

These numbers are based on consecutive printing; the numbers will vary based on print frequency and number of pages.
The machine periodically cleans the print head to maintain print quality. This process consumes a small amount of ink.

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Ordering Accessories and Supplies

For the best quality results use only genuine Brother accessories. These are available from most Brother dealers or alternatively you can contact our mail order department on telephone number 0161 931 2258 or fax number 0161 931 2218.

Description	Item
Ink Cartridge <black>	LC600BK
Ink Cartridge <cyan>(blue)	LC600C
Ink Cartridge <magenta>(red)	LC600M
Ink Cartridge <yellow>	LC600Y

Paper

The quality of your document can be affected by the kind of paper you use in the machine. You can use plain paper, inkjet paper (coated paper), glossy paper, transparencies and envelopes. We recommend testing various papers before purchasing large quantities. For best results, use the recommended paper.

To ensure the best print quality for the settings you've chosen, always set the Paper Type to match the type of paper you loaded.

> When you print on inkjet paper, glossy paper and transparencies, be sure to select the correct media in the "Quality/Colour" tab in the printer driver. When using inkjet paper, glossy paper or transparencies, avoid stacking by removing each page after copying or printing.

Handling and Using Special Paper

- Store paper in the original bag, and keep it sealed. Keep the paper flat and away from moisture, direct sunlight and heat.
- The coated side of glossy paper is shiny. Do not touch the shiny (coated) side. Load glossy paper with the shiny side facing up toward you.
- Do not touch either side of transparencies, because they absorb water and perspiration easily, and may cause decreased output quality. Transparencies designed for laser printers/copiers may stain your next document. Use only recommended transparencies.

Recommended Paper

The output quality depends on the paper type and paper brand.

Visit us at **http://solutions.brother.com** and check the recommended paper for use with the machine.

Paper Specifications

When used as a printer, the MACHINE can handle paper that has the following specifications:

But please note that you can receive <u>fax messages</u> only on A4 cut sheet.

Paper Capacity of Multi-Purpose Sheet Feeder

Paper Type	Paper Size	Sheet Feeder Capacity
Plain Paper (Cut Sheet)	A4, Letter, Executive	100 Sheets of 75 g/m^2
	Legal	100 Sheets of 75 g/m^2
Inkjet Paper	A4, Letter	20 Sheets
Glossy Paper*	A4, Letter	20
Transparencies	A4, Letter	10
Envelopes*	DL, COM-10, C5, Monarch	10
Post Card*	101.6 x 152.4 (mm)	30
Index Card*	127 x 203.2 (mm)	30

* If you want to load thick paper such as postcards, index cards, envelopes and glossy paper in the multi-purpose sheet feeder, you must first install the Card Stock Support in the feeder.

Paper Specifications for Multi-Purpose Sheet Feeder

Cut Sheet Paper Weight	Plain Paper: 64 to 120 g/m^2 Inkjet Paper: Up to 120 g/m^2 Glossy Paper: Up to 150 g/m^2 Postcard: Up to 170 g/m^2 Index card: Up to 120 g/m^2
Thickness	Plain Paper: 0.08 to 0.15 mm Inkjet Paper: Up to 0.15 mm Glossy Paper: Up to 0.18 mm Envelopes: Up to 0.52 mm Postcard: Up to 0.23 mm Index card: Up to 0.15 mm
Sheet Feeder	Up to 10 mm Approximately 100 sheets of 75 g/m^2
Output Tray	Approximately 50 sheets of 75 g/m^2 (Transparencies and glossy paper must be picked up from the paper tray one page at a time.)

Curled or damaged paper may cause paper jams and misfeeds. If the paper is curled, straighten it as much as possible by rolling it in the opposite direction to the curl.

Print Area

The Print Area depends on the settings in the application you are using. The figures below show the unprintable areas on cut sheets and envelopes.

unprintable area
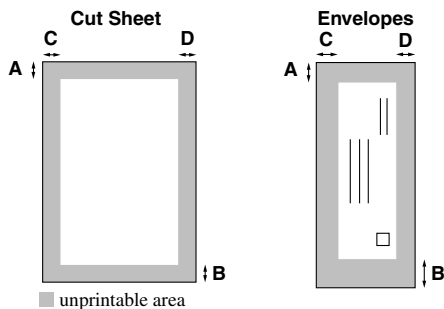
Paper Type	Paper Size		A	B	C	D
Cut Sheet	A4	Fax	3 mm	11 mm	3.4 mm	3.4 mm
		Mono Copy				
		Colour Copy				
		Printer				
	Executive	Printer	3 mm	11 mm	3.4 mm	3.4 mm
Envelopes		Printer	10 mm	20 mm	3.4 mm	3.4 mm

Printer depends on the Printer driver.

The above figures are approximate and the print area may vary depending on the kind of paper you are using.

Do not use the following types of paper and envelopes:
- **Damaged, curled, wrinkled, or irregularly shaped paper and envelopes**
- **Extremely shiny or highly textured paper and envelopes**
- **Envelopes with clasps**
- **Envelopes of baggy construction**
- **Envelopes not sharply creased**
- **Embossed envelopes**
- **Paper and envelopes already printed with a laser printer**
- **Envelopes preprinted on the inside**
- **Paper and envelopes that cannot be arranged uniformly when stacked**

Entering Text

When you are setting certain functions, such as the Station ID, you may need to enter text into the machine. Most keys on the dial pad have three or four letters printed above them. The keys for **0**, **#**, and ✳ don't have printed letters because they are used for special characters.

By pressing the appropriate number on the dial pad the correct number of times, you can access the character you want.

Press Key	one time	two times	three times	four times	five times
2	A	B	C	2	A
3	D	E	F	3	D
4	G	H	I	4	G
5	J	K	L	5	J
6	M	N	O	6	M
7	P	Q	R	S	7
8	T	U	V	8	T
9	W	X	Y	Z	9

Inserting Spaces

To enter a space, press 〉 once between numbers and twice between characters.

Making corrections

If you entered a letter incorrectly and want to change it, press 〈 to move the cursor after the last correct letter. Then press **Stop/Exit**; all letters above and to the right of the cursor are deleted. Re-enter the correct text and/or digits. You can also back up and type over incorrect letters.

Repeating letters

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

Special characters and symbols

Press the ✳ , **#**, or **0** key repeatedly or press 〈 or 〉 to move the cursor under the special character or symbol you want. Then press **Menu/Set** to select it.

0 key	Ä Ë Ö Ü À Ç È É 0
✳ key	(space) ! " # $ % & ' ( ) ✳ + , - . / €
# key	: ; < = > ? @ [ ] ^ _

Glossary

ADF (Automatic Document Feeder Capacity) Refers to the number of pages that can be placed in the document feeder and fed one at a time automatically.

Automatic Fax Transmission Sending a fax without picking up the handset of an external telephone.

Automatic Redial A feature that enables the machine to redial the last fax number if the original fax did not go through because the line was busy or there was no answer.

Auto Reduction Reduces the size of incoming faxes.

Backup Print Sets the machine to print a copy of faxes that are received and stored in memory.

Beeper The sound the keys make when they are pressed, an error occurs or a document has been received or transmitted.

Beeper Volume Volume setting for the beep when you press a key or make an error.

Brightness Changing the Brightness makes the whole image lighter or darker.

Broadcasting The ability to send the same fax message to more than one location.

CNG tones The special tones (beeps) sent by fax machines during automatic transmission to tell the receiving machine that they are from a fax machine.

COMM. ERROR (Communication error) An error during fax sending or receiving, usually caused by line noise or static.

Coding Method Method of coding the information contained in a document. All fax machines must use a minimum standard of Modified Huffman (MH). The machine is capable of greater compression method, Modified Read (MR), Modified Modified Read (MMR) and Joint Photographic Experts Group (JPEG), if the receiving machine has the same capability.

Compatibility Group The ability of one fax unit to communicate with another. Compatibility is assured between ITU-T Group.

Contrast Setting to compensate for dark or light documents, by lightening dark documents or darkening light documents.

Delayed Transmission (Not available for Colour fax) Sends your fax at a later time that day.

Dual Access (Not available for Colour fax) The machine can scan outgoing faxes or scheduled jobs into memory at the same time it is sending a fax or receiving or printing an incoming fax.

ECM (Error Correction Mode) Detects errors during fax transmission and resends the parts of the document that had errors.

Extension Telephone A telephone on the same line and with the same phone number as the machine but plugged into different wall socket (e.g in another room).

External Telephone A telephone that is plugged into the EXT. socket of the machine or into the same wall jack as the MFC.

F/T Ring Time The length of time the machine rings (when the answer mode setting is Fax/Tel) to notify you to pick up a voice call that has been automatically answered.

Fax Detect Enables the machine to respond to CNG tones if you interrupt a fax call by answering it.

Fax/Tel mode You can receive faxes and telephone calls. Do not use Fax/Tel if you are using an external answering machine. (With external telephone only)

Fax Forwarding Sends a fax received in memory to another preprogrammed fax number.

Fax Storage You can store faxes in memory for remote retrieval.

Fax tones The signals sent by sending and receiving fax machines while communicating information.

Fine Mode Resolution is 196 x 203 dpi. It is used for small print and graphs.

Grey scale The shades of grey available for copying and faxing photographs.

Group number A combination of Speed Dial numbers that are stored on Speed Dial # for Broadcasting.

Ink key You can use this key to clean the print heads and replace an ink cartridge.

Journal Lists information about the last 200 incoming and outgoing faxes. TX means Transmit. RX means Receive.

Journal Period The preprogrammed time period between automatically printed Journal Reports. You can print Journal on demand without interrupting this cycle.

LCD (Liquid crystal display) The display screen on the machine that shows interactive messages during On-Screen Programming and defaults to the date and time when the machine is idle.

Manual fax When you lift the external telephone's handset so you can hear the receiving fax machine answer before you press **Mono Fax Start** to begin transmission.

Menu Mode The programming mode for changing the setting of the machine.

OCR (optical character recognition) The bundled ScanSoft™ TextBridge® software application converts an image of text to text you can edit.

Out of Paper Reception Receives faxes into the machine's memory when the machine is out of paper.

Overseas Mode Makes temporary changes to the fax tones to accommodate noise and static on overseas phone lines.

Pause Allows you to place a 3.5 second delay in the dialling sequence stored.

Photo Mode A resolution setting that uses varying shades of grey for the best representation of photographs.

Polling The process of a fax machine calling another fax machine to retrieve waiting fax messages.

Pulse A form of dialling on a telephone line.

Quick-Dial List A listing of names and numbers stored in Speed Dial memory, in numerical order.

Real Time transmission When memory is full, you can send documents in real time.

Remaining Jobs You can check which jobs are waiting in memory and cancel jobs individually.

Remote access The ability to access the machine remotely from a touch tone phone.

Remote activation Allows you to transfer a fax call, answered at an external or extension phone, to the machine.

Remote retrieval access code The four-digit code that allows you to call and access the machine to retrieve fax messages or change fax storage settings.

Resolution The number of vertical and horizontal lines per inch.

Ring Delay The number of telephone rings before the machine answers a call in Fax/Tel (F/T) or Fax Only Mode.

Ring Volume   Volume setting for the machine's ring.

Scanning   The process of sending an electronic image of an original paper document into your computer.

ScanSoft™ PaperPort® for Brother   Document management application where you can view received faxes and scanned image.

Search   You can search for names you have stored in Speed Dial memories.

Speed dial   A preprogrammed number for easy dialling. You must press the **Search/Speed Dial** key and **#**, then two digit code to start the dialling process.

Standard resolution   98 x 203 dpi. It is used for regular size text and quickest transmission.

Station ID   The stored information that appears on the top of faxed pages. It includes the sender's name and fax number.

Super fine resolution   392 x 203 dpi. Best for very small print and line art.

System Setup List   A printed report that shows the current setting of the machine.

Temporary Setting   You can select certain options for each fax transmission or copy without changing the default settings.

Timer (Not available for Colour fax)   A feature that lets you program a fax to go out at a certain time, such as Delayed Fax or Delayed Polling Receive.

Tone   A form of dialling on the telephone line used for Touch Tone telephones.

Transmission   The process of sending documents over the phone lines from the machine to the receiving fax machine.

Xmit Report (Transmission Report)   A listing of each transmission, showing caller ID, date, time, and number of pages.

Index

Change Receive Mode
Press **9 8**
then for   **TAD**, press **1**.
           FAX/TEL, press **2**.
           FAX, press **3**.

Exit Remote Operation
Press **9 0**.

Change Remote Access Code

1 Press **Menu/Set**, **2**, **5**, **3**.
2 Enter the 3-digit number. The ✳ cannot be changed.
3 Press **Menu/Set**.
4 Press **Stop/Exit**.   ❹

REMOTE ACCESS CARD

Using Remote Access Code

1 Dial your MFC phone number from a touch tone phone.
2 Enter your Remote Access Code (159✳) after the beep.
3 Your machine signals the kinds of messages received:
       1 long beep — Fax message(s)
       No beeps — no messages
4 After 2 short beeps, enter a command.
5 Press **9 0** to reset your machine when you finish.
6 Hang up.   ❶

Remote Commands

Change Fax Forwarding Setting

Press **9 5**

then to **Turn Fax Forwarding off** press **1**.
        Turn Fax Forwarding on press **2**.
        Program Fax Forward Number
          press **4**. Enter the new number of
          the remote fax machine where you
          want your fax message forwarded
          and then press **# #**.
        Turn Fax Storage on press **6**.
        Turn Fax Storage off press **7**.

❷

Retrieve Fax

Press **9 6**

then to **Retrieve all faxes** press **2**, then enter
          the number of remote fax machine,
          and then **# #**. After the beep, hang
          up and wait.
        Erase all fax messages press **3**.

Check the Receiving Status

Press **9 7 1**.
    1 long beep — Fax message(s)
    3 short beeps — no messages

❸

brother At your side.

This machine is approved for use in the country of purchase only, local Brother companies or their dealers will only support machines purchased in their own countries.