



Thank you for downloading this Muratec M, MX or CX-series operator's manual. Due to a constantly expanding product line, Muratec is no longer able to field service calls on these products. If your machine should need service please contact Cybertest at 1-800-347-3295. Cybertest's team of professional service technicians will field your calls and have your machine up and running quickly.

If you need to order consumables for your Muratec machine please call 1-800-292-2492, or you can shop 24 hours a day at www.muratec.com.



Looking to upgrade your current machine?
Why not give your local Muratec dealer a call. Your authorized Muratec dealer can help you select equipment that will maximize production in your office. To locate a Muratec dealer near you please call 1-800-543-4636.



MURATATM

Murata M1900

(800) 292-2492
to order fax paper,
paper trays, plain-paper
printing supplies and
other supplies or
accessories.

(214) 403-3314
to order operating
instructions for your
Muratec fax.

(214) 417-1053
to order fax parts,
including handsets
and other machine
components.

**PLEASE NOTE
OUR NEW
PHONE NUMBERS**



*For customers in Canada,
please consult your
operating instructions for
the customer assistance
telephone number in your area.*

(800) 215-1698
for toll-free customer
assistance by fax
and for answers to
the most frequently
asked questions.
Please call this
number using the
telephone handset of
your fax machine.

(214) 403-3350
to speak with a
customer support
representative, during
Muratec's standard
business hours.

Operating Instructions

List of Commands

Keep this reference page close to your fax for a convenient list of your Murata fax machine's commands. For more information, see the page shown in your operating instructions.

Command	Press	Page
1. Transmission		
Transmission	Program, Confirm/Enter	41
Broadcast	Program, Confirm/Enter, 2	42
2. Polling		
Polling	Program, 0, 2, Confirm/Enter	47
Sequential Polling	Program, 0, 2, Confirm/Enter, 2	48
Store a Doc. to be Polled	Program, 0, 2, Confirm/Enter, 3	49
Enter command above, plus:		
Store Document	Confirm/Enter	49
Erase Document	Confirm/Enter, 2	50
Print Stored Document	Confirm/Enter, 3	50
3. Call Response		
Set Silent Detect	Program, 0, 3, Confirm/Enter	18
4. One-Touch Settings		
Enter One-Touch	Program, 0, 4, Confirm/Enter	56
Erase One-Touch	Program, 0, 4, Confirm/Enter, 2	57
Print One-Touch	Program, 0, 4, Confirm/Enter, 3	58
5. Speed-Dial Settings		
Set Speed-Dial	Program, 0, 5, Confirm/Enter	53
Erase Speed-Dial	Program, 0, 5, Confirm/Enter, 2	55
Print Speed-Dial	Program, 0, 5, Confirm/Enter, 3	55
6. Print Activity Journal		
.	Program, 0, 6, Copy	73
7. Delayed Commands		
Print Commands	Program, 0, 7, Confirm/Enter	45, 51
Print Stored Doc.	Program, 0, 7, Confirm/Enter, 2	45
Erase Commands	Program, 0, 7, Confirm/Enter, 3	45, 51
8. User Settings		
Set Phone Line Type	Program, 0, 8, Confirm/Enter	19
Second Telephone Hold	Program, 0, 8, Confirm/Enter, 0, 2	19
Hold Melody	Program, 0, 8, Confirm/Enter, 0, 3	20
Set Passcode	Program, 0, 8, Confirm/Enter, 0, 4	20
Set Auto Rx Time	Program, 0, 8, Confirm/Enter, 0, 5	21
Set Number of Rings	Program, 0, 8, Confirm/Enter, 0, 6	22
Select Comm. Result	Program, 0, 8, Confirm/Enter, 0, 7	22
Set Scanner Width	Program, 0, 8, Confirm/Enter, 0, 8	23
Set Primary Mode	Program, 0, 8, Confirm/Enter, 0, 9	23
Set Contrast	Program, 0, 8, Confirm/Enter, 1, 0	24
Set Number of Redials	Program, 0, 8, Confirm/Enter, 1, 1	24
Set Redial Interval	Program, 0, 8, Confirm/Enter, 1, 2	25
Journal Print On/Off	Program, 0, 8, Confirm/Enter, 1, 3	25
Remote Diagnostics	Program, 0, 8, Confirm/Enter, 1, 4	25

Entering Commands

Entering information and commands into your fax is as easy as pressing a few keys.

Throughout the manual, instructions for entering commands are shown as a series of sequential keystrokes. The command for polling, for example, is shown as "**Program, 0, 2, Confirm/Enter**".

To enter this command, press the **Program** key on your fax.

Enter "0" using the numeric keypad. Then press "2" on the numeric keypad. The numeric keypad is in the center of your fax control panel and looks just like the keypad on a phone. Don't try to use the one-touch keypad... only the numeric keypad works for this purpose.

Finally, press **Confirm/Enter** and continue with the information for your command.

Command	Press	Page
Set Date and Time	Program, 0, 8, Confirm/Enter, 1, 5 . . .	26
Set Dialing Pause	Program, 0, 8, Confirm/Enter, 1, 6 . . .	27
Print User Settings	Program, 0, 8, Confirm/Enter, 1, 7 . . .	27
Closed Network	Program, 0, 8, Confirm/Enter, 1, 8 . . .	27
Enter Your TTI	Program, 0, 8, Confirm/Enter, 1, 9 . . .	28
Set Grayscale	Program, 0, 8, Confirm/Enter, 2, 0 . . .	29
 9. Program One-Touch		
Enter a One-Touch Key	Program, 0, 9, Confirm/Enter	63
Enter a Prog. One-Touch	Program, 0, 9, Confirm/Enter, 2	58
Erase a One-Touch Key	Program, 0, 9, Confirm/Enter, 3	64
Erase a Prog. One-Touch	Program, 0, 9, Confirm/Enter, 4	64
Print Prog. One-Touch	Program, 0, 9, Confirm/Enter, 5	65
 10. Error Correction Mode		
Select ECM	Program, 1, 0, Confirm/Enter	31

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Do You Have a Comment?

Your comments and suggestions regarding this manual are welcome. Fax your comments to M1900 Manual, Murata Business Systems, Product Development, (214) 403-3499.

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Specifications

Type: High-speed facsimile transmitter and receiver for office and in-home use. **Compatibility:** CCITT Group 3 and Group 2. **Trans. Speed***: 12 seconds per page average. **Phone Line:** Public switched telephone network or the equivalent. Leased or dedicated telephone line not required. **Modem:** 9600 bps with automatic fall-back to 7200, 4800 and 2400 bps per CCITT V.29 and V.27 ter. **Delayed Commands:** 5. **Doc. Memory**:** 10 pages. **Doc. Feeder:** 10 pages. **Resolution:** Fine 203 H x 196 V lpi; Normal 203 H x 98 V lpi. **Grayscale:** 16 levels. **Printing Width:** 8.5 inches or 10.1 with optional B4 paper roll. **Scanning Width:** 10.1 inches***. **Scanning Method:** Solid-state CCD. **Power:** 115 VAC \pm 10%, 50-60 Hz. **Dimensions:** 13.5 (w) x 11.7 (d) x 3.9 (h) inches. **Weight:** 13.4 pounds. **Orig. Doc. Size:** Maximum: 11 (w) x 35.0 (l) inches; Minimum: 4.7 (w) x 2.9 (l) inches.

*Based on memory-to-memory transmission of CCITT Test Chart 1 to a Murata fax machine. Your transmission times will vary based the size of your document, the complexity of images on the document and the resolution at which your document is scanned.

**Based on storage of CCITT Test Chart 1 in normal resolution.

*** See page 72.

Regulations

FCC Regulations

Ringer Equivalence Number: 2.0B

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures.

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Type of Service

Your fax is designed for use on standard device telephone lines. Your fax connects to the telephone line with a standard jack called the USOC RJ-11C. Connection to telephone company-provided coin service (central office implemented systems) is prohibited. Connection to party line service is subject to State tariffs.

Telephone Company Procedures

The goal of the telephone company is to provide you with the best service it can. In order to do this, it may occasionally be necessary for them to make changes in their equipment, operations, or procedures. If these changes might affect your service or the operation of your equipment, the telephone company will give you notice, in writing, to allow you to make any changes necessary to maintain uninterrupted service.

If you have any questions about your telephone line, such as how many pieces of equipment you can connect to it, the telephone company will provide this information upon request.

In certain circumstances, it may be necessary for the telephone company to request information from you about the equipment which you have connected to your telephone line. Upon request of the telephone company, provide the FCC registration number and the ringer equivalence number (REN) of the equipment which is connected to your line. Both of these numbers are listed on the equipment label attached to your fax machine.

The sum of all RENs on your telephone line should be fewer than five (5) in order to assure proper service from the telephone company. Sometimes, a sum of five (5) may not be usable on a given telephone line.

If Problems Arise

If any of your telephone equipment is not operating properly, you should immediately remove it from your telephone line, as it may cause harm to the telephone network. If the telephone company notes a problem, they may temporarily stop service. When practical, they will notify you before this disconnection. If advance notice is not feasible, you will be notified as soon as possible. When you are notified, you will be given the opportunity to correct the problem and will be informed of your right to file a complaint with the FCC.

In the event repairs are ever needed on your fax, they should be done by Murata Business Systems, Inc., or an authorized representative of Murata Business Systems, Inc. For information, contact the Murata Customer Support Center.

DOC Regulations

DOC Load Number: 20

This digital apparatus does not exceed the Class B limits for radio noise emissions from digital apparatus set out in the Radio Interference Regulation of the Canadian Department of Communications.

Le présent appareil numérique n'émet pas de bruits radioélectriques dépassant les limites applicables aux appareils numériques de la classe B prescrites dans le Règlement sur le brouillage radioélectrique édicté par le ministère des Communications du Canada.

NOTICE: The Canadian Department of Communications label identifies certified equipment. This certification means the equipment meets certain telecommunications network protective, operational and safety requirements. The Department does not guarantee the equipment will operate to the user's satisfaction.

Before installing this equipment, users should ensure that it is permissible to be connected to the facilities of the local telecommunications company. The equipment must also be installed using an acceptable method of connection. Sometimes, the company's inside wiring associated with a single line individual service may be extended with a certified connector assembly (telephone extension cord). The customer should be aware that compliance with these conditions may not prevent degradation of service in some situations.

Repairs to certified equipment should be made by an authorized Canadian maintenance facility designated by the supplier. Any equipment malfunctions or repairs or alterations made by the user to this equipment may give the telecommunications company cause to request the user to disconnect the equipment.

Users should ensure for their own protection that the electrical ground connections of the power utility, telephone lines and internal metallic water pipe system, if present, are connected. This precaution may be particularly important in rural areas.

Caution: Users should not attempt to make such connections themselves, but should contact the appropriate electric inspection authority or electrician.

The Load Number assigned to each terminal device denotes the percentage of the total load to be connected to a telephone loop which is used by the device to prevent overloading. The termination on a loop may consist of any combination of devices subject only to the requirement that the total of the load numbers of all the devices does not exceed 100.

The DOC Load Number for your fax is 20.

Before You Install

Telephone Requirements

Your fax works on standard telephone lines and, with Murata's voice/fax switch and switch-to-fax options (see page 34), can share the line with a telephone answering machine or second telephone.

Your fax connects to the telephone system with a standard modular jack, called a USOC RJ-11C. If you do not have an RJ-11C jack where you want to install your fax, call your telephone company for information on installation.

Do not connect your fax to a private branch exchange (PBX) system without first checking with the system manufacturer or service representative. Some PBX systems are not compatible with facsimile operation.

You may want to connect your fax to a telephone electrical surge protector. A protector can absorb and divert damaging high-voltage surges in your telephone lines caused by static electricity or lightning.

A Note About Call-Waiting Signals

Fax transmission and reception can be stopped by telephone call-waiting signals. If you have requested call-waiting service for the line to which you will connect your fax, you may experience interruptions of facsimile service.

Electrical Requirements

Power your fax from any standard three-pronged 115-volt electrical outlet. Do not plug your fax into an outlet that is turned off at the end of the day: Although your telephone directory and most other user settings are protected against power failure for several days by a rechargeable internal battery, documents stored in memory will be lost if you turn off power to your fax.

Don't install your fax on the same electrical circuit as an air conditioner, copying machine or other high-consumption electrical appliance. These appliances can cause electrical "draw-downs" when they operate—temporarily reducing the power available for other equipment on the circuit—and could damage your fax.

You may want to power your fax from an electrical surge protector connected to your wall outlet. A surge protector protects your fax from high-voltage surges in your electrical lines that may cause damage to your fax.

Voltage Requirements

115 volts AC ± 10%, 50-60 Hz

Power Consumption

Standby	10 W	Transmission	29 W
Copy	64 W	Reception	56 W

Unpacking and Assembly

Stop!

Please do not install your fax where there is a danger of:

DUST

- ◆ Keep your fax in top form: Don't install it where dust can settle and accumulate.

SPLASHES

- ◆ Keep your fax away from sinks, water fountains and other sources of splash and spray.

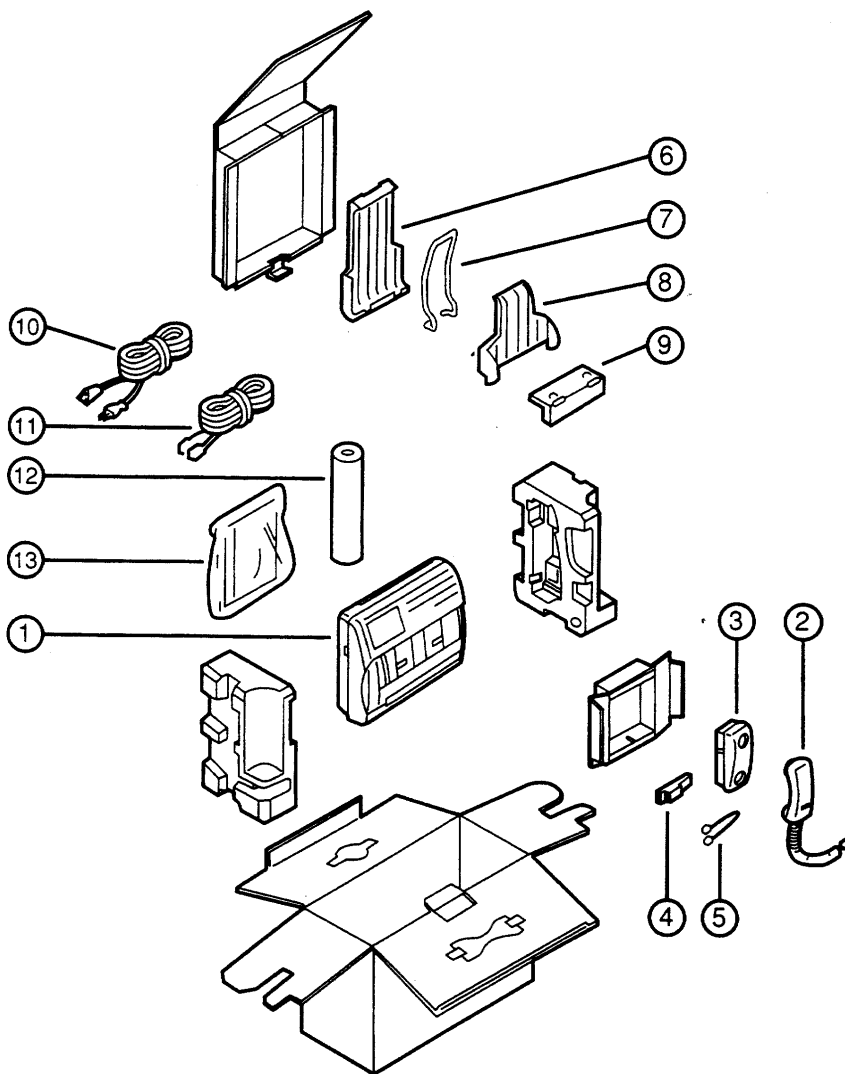
VIBRATION

- ◆ Keep your fax on a level, vibration-free surface to improve performance and system life.

OVERHEATING

- ◆ Allow at least 10 inches clearance from the top and the sides of your fax machine. Don't install your fax machine in direct sunlight and never cover your fax with a cloth or dust cover.

Open your fax machine's shipping carton and take out all components. Lift the fax and its protective foam braces out of the carton. Remove the cushions and protective plastic bag. Keep the bag, braces and carton for reshipment. Discard the silica desiccant shipped with your fax.

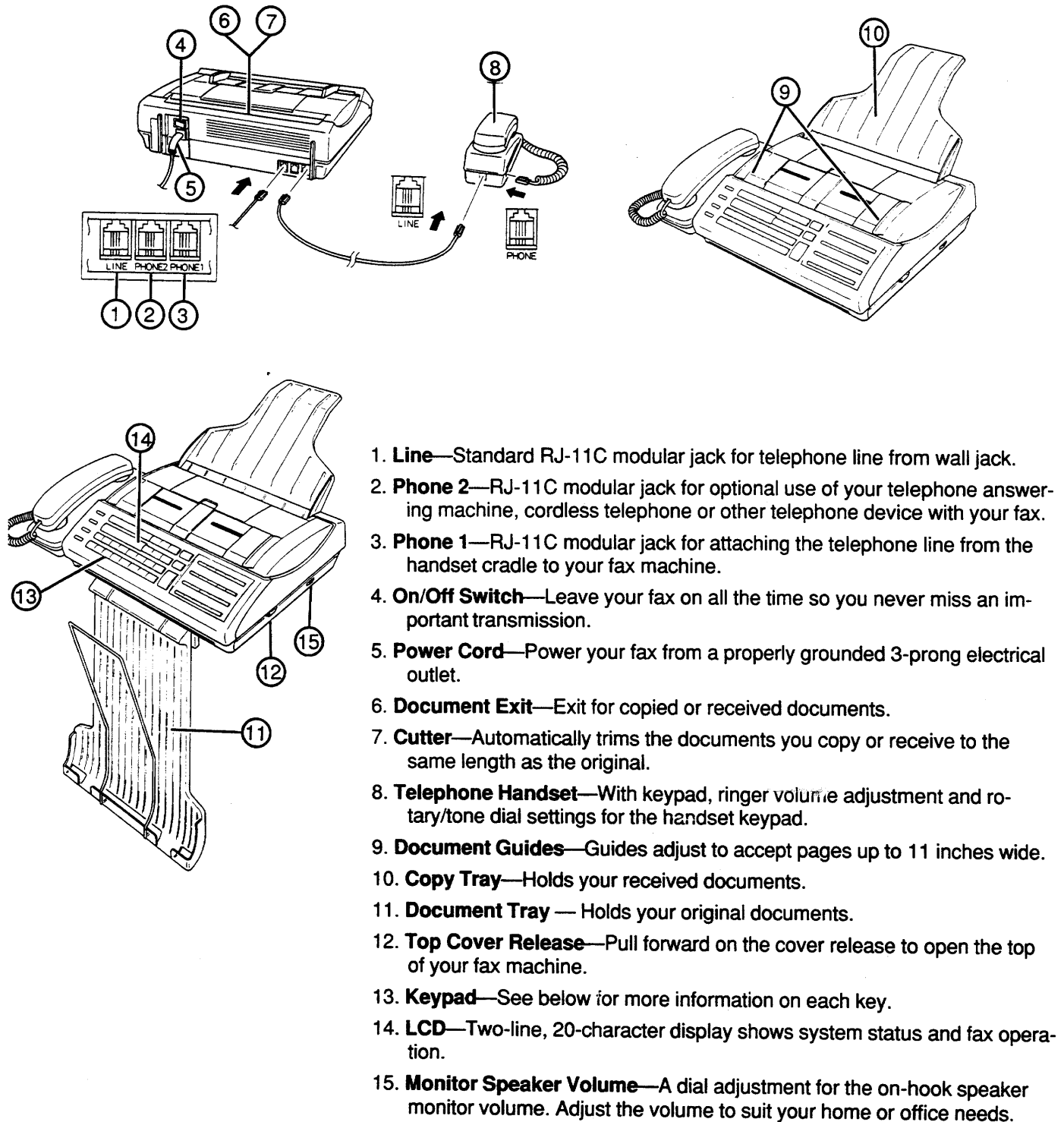


After unpacking, check for the following:

- | | |
|---------------------------------------|---------------------------|
| 1. Your fax | 8. Copy tray |
| 2. Telephone handset and handset cord | 9. Document tray hanger |
| 3. Telephone handset cradle | 10. Power cord |
| 4. Handset cradle attachment | 11. 6-foot telephone line |
| 5. 6-inch modular telephone line | 12. Recording paper |
| 6. Document tray | 13. User documentation |
| 7. Document tray wire | |

Machine Layout

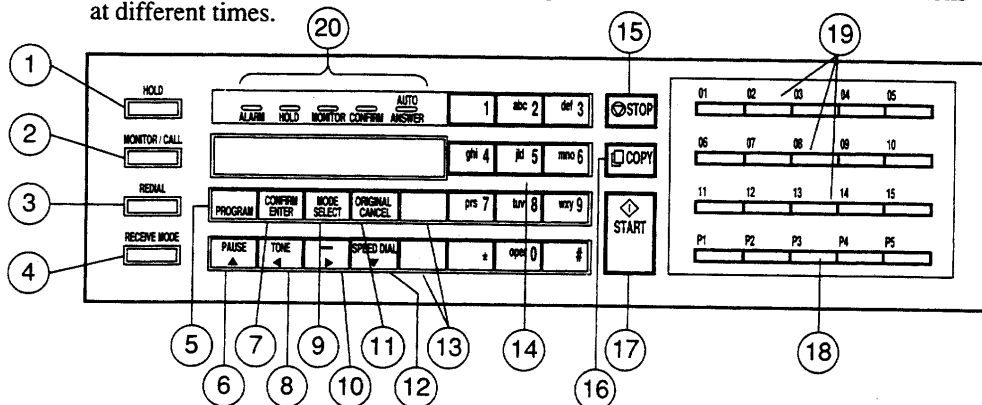
This introduction identifies the components of your fax machine and briefly describes their use. To begin installation, see page 9.



1. **Line**—Standard RJ-11C modular jack for telephone line from wall jack.
2. **Phone 2**—RJ-11C modular jack for optional use of your telephone answering machine, cordless telephone or other telephone device with your fax.
3. **Phone 1**—RJ-11C modular jack for attaching the telephone line from the handset cradle to your fax machine.
4. **On/Off Switch**—Leave your fax on all the time so you never miss an important transmission.
5. **Power Cord**—Power your fax from a properly grounded 3-prong electrical outlet.
6. **Document Exit**—Exit for copied or received documents.
7. **Cutter**—Automatically trims the documents you copy or receive to the same length as the original.
8. **Telephone Handset**—With keypad, ringer volume adjustment and rotary/tone dial settings for the handset keypad.
9. **Document Guides**—Guides adjust to accept pages up to 11 inches wide.
10. **Copy Tray**—Holds your received documents.
11. **Document Tray**— Holds your original documents.
12. **Top Cover Release**—Pull forward on the cover release to open the top of your fax machine.
13. **Keypad**—See below for more information on each key.
14. **LCD**—Two-line, 20-character display shows system status and fax operation.
15. **Monitor Speaker Volume**—A dial adjustment for the on-hook speaker monitor volume. Adjust the volume to suit your home or office needs.

Keypad Layout

The keys on your fax machine are used to enter information into your fax and to control the way your fax machine operates. Some keys, like **Monitor/Call** and **Confirm/Enter**, have two names because they perform two or more different functions at different times.



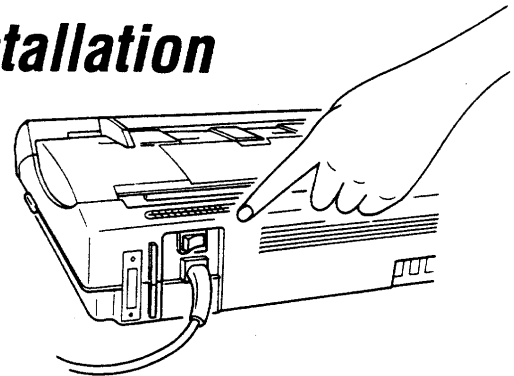
1. **Hold**—Press to place a call on hold. Your fax offers an optional hold melody (see page 20) that lets your callers know they've been put on hold.
2. **Monitor/Call**—While your phone handset is down, press **Monitor/Call** to get a dial tone. During transmission or reception, press **Monitor/Call** to signal that you would like to speak with the remote operator, if one is present (see page 34). To adjust speaker volume, use the monitor speaker volume adjustment dial (see page 7, item 15).
3. **Redial**—Press to redial the last number dialed.
4. **Receive Mode**—Press to select from your fax machine's manual and automatic reception options. See page 15 for more information. The Auto Answer LED will light when an automatic reception option is selected.
5. **Program**—Use the **Program** key enter or "program" information into your fax machine. You can press **Program** repeatedly to view each of the major command categories available in your fax.
6. **Pause**—Use the **Pause** key when storing one-touch or speed-dial telephone numbers and when you transmit by entering a telephone number using the numeric keypad. This key instructs your fax to stop dialing for a few seconds and may be useful if you must dial through some telephone exchanges or when calling overseas. See page 53 for more information. Also serves as an arrow key when entering TTI information and other alphabetical characters.
7. **Confirm/Enter**—Press during transmission to manually request or cancel a confirmation report (see page 22). The Confirm LED will light when a report has been requested. This key is also used while entering information into your fax machine.
8. **Tone**—Used for special dialing requirements on some rotary telephone systems (see page 66). Also serves as an arrow key when entering TTI information and other alphabetical characters.
9. **Mode/Select**—Before you transmit a document or copy it, press **Mode/Select** to choose the resolution needed. This key can also be used with the **Program** key to scroll through the major command categories in your fax.
10. **Dash Key**—Press to enter a dash, "-", in your telephone numbers and Subscriber ID. These dashes aren't needed by your fax, but they make it easier for you to review long telephone numbers in your telephone directories. Also serves as an arrow key when entering TTI information and other alphabetical characters.
11. **Original/Cancel**—Before transmission or copying, use **Original/Cancel** to choose the contrast setting needed. When entering a telephone num-

ber or programming other information in your fax, press **Original/Cancel** to delete the last character entered.

12. **Speed Dial**—For transmission, press **Speed Dial** before entering one of your two-digit speed-dial numbers. While a group transmission or polling operation is underway, press **Speed Dial** to briefly interrupt the group function for a new command (see page 44). Also serves as an arrow key when entering TTI information and other alphabetical characters.
13. These blank keys do not serve a function on your fax.
14. **Numeric Keypad**—Use the numeric keypad to enter data, dialing instructions and speed-dial numbers.
15. **Stop**—Press to stop the facsimile function underway and return your fax to standby mode.
16. **Copy**—Press to copy documents inserted in the document feeder.
17. **Start**—Press to begin manual transmission or reception.
18. **Programmable Keys**—Five keys, **P1** through **P5**, that can be used as one-touch transmission commands to a single remote unit or as multi-step commands for polling, broadcasting and other functions (see page 58).
19. **One-Touch Keys**—One-touch transmission commands, numbered **01** through **15**, for your most-needed fax numbers.
20. **Status Lamps**—**Alarm**: Shows when an error has occurred. Press **Stop** to return your fax to standby. **Hold**: A caller is on hold. **Monitor**: Your fax machine's monitor is in use. **Confirm**: A confirmation report (see page 22) has been requested after the current transmission. **Auto Answer**: When lit, your fax will respond to calls automatically (see page 15).

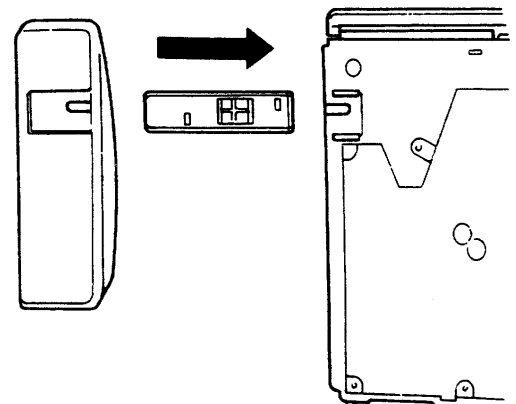
Installation

1. Make sure the on/off switch at the rear of the fax is off.

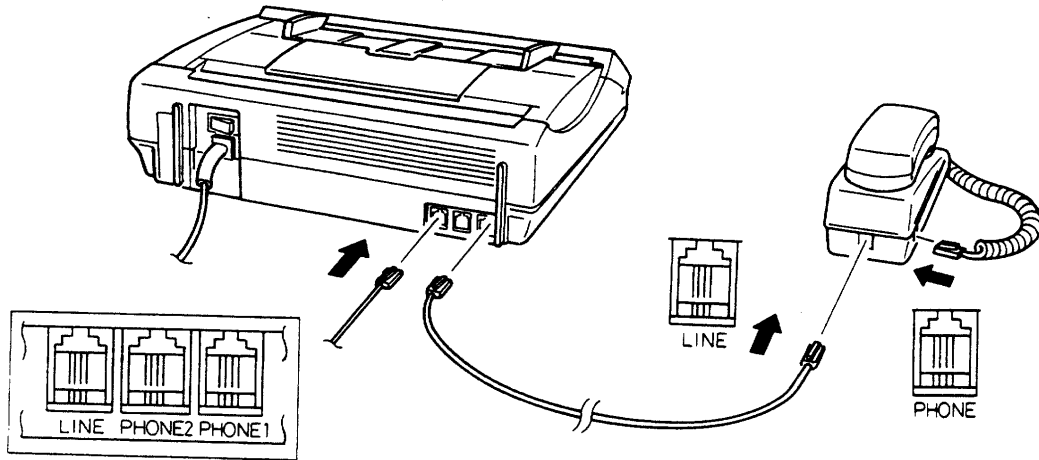


Your fax machine's on/off switch is located at the right rear of the fax.

2. Slide the telephone handset cradle attachment into the left side of your fax until it snaps in place. Then slide the handset cradle onto the attachment until the cradle snaps into place.



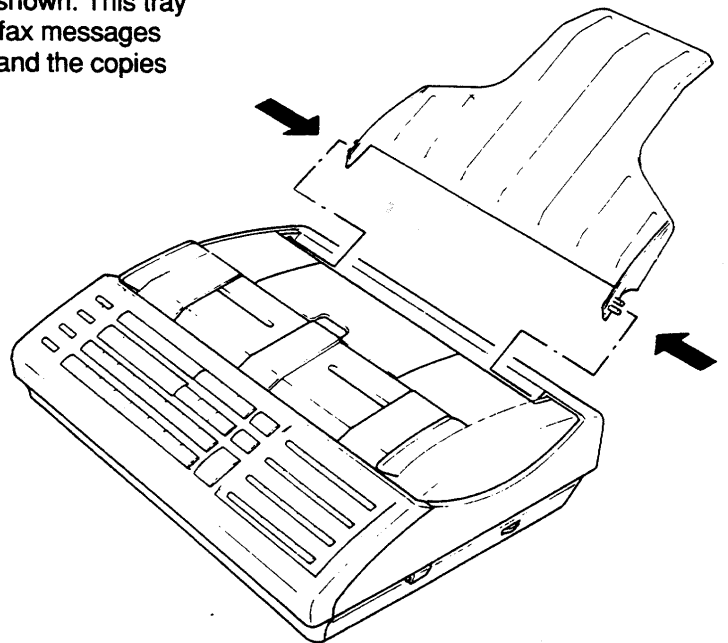
- Next, plug the 6-foot telephone line that came with your fax into the connector marked "Line" at the left rear of your fax. Plug the other end into a telephone wall jack in your home or office.



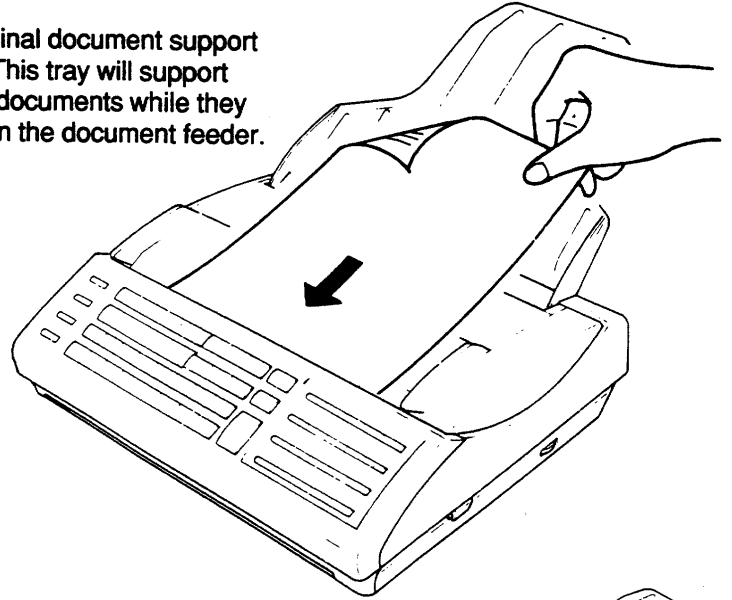
Plug the phone line from your wall jack into the "Line" connector. Attach the handset's curl cord to the jack on the handset cradle, and plug the short phone cord from

the cradle into the "Phone 1" jack. An answering machine or phone used alongside your fax must be connected to the "Phone 2" jack.

- Plug the telephone handset cord into the connector on the handset cradle. Hang the telephone handset on the cradle.
- Plug the 6-inch modular telephone line that came with your fax into the connector on the back of the handset cradle. Plug the other end into the connector marked "Phone 1" at the left rear of your fax machine.
- If you will be using an answering machine or second telephone with your fax machine, connect the phone line from this device to the "Phone 2" connector. **Do not** connect the answering machine or telephone directly into a wall jack: To operate properly with your fax, an answering machine or telephone must be connected to your fax machine's "Phone 2" jack.
- Attach the copy tray to your fax machine as shown. This tray will hold the fax messages you receive and the copies you make.



8. Flip up the original document support on your fax. This tray will support your original documents while they are inserted in the document feeder.

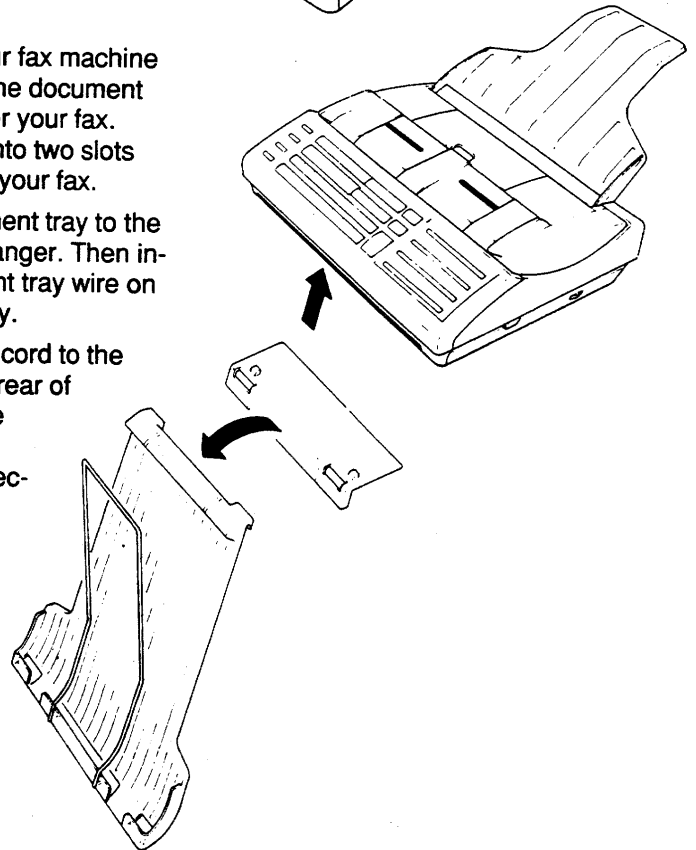


9. Lift the front of your fax machine slightly and put the document tray hanger under your fax. The hanger fits into two slots on the bottom of your fax.

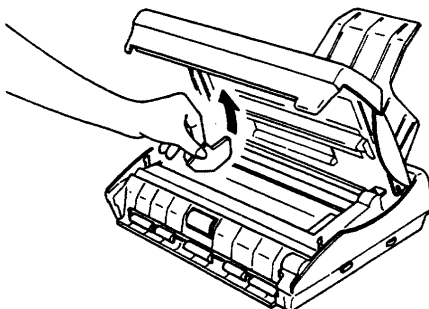
10. Attach the document tray to the document tray hanger. Then install the document tray wire on the document tray.

11. Attach the power cord to the connector at the rear of your fax. Plug the other end into a three-pronged electrical outlet.

12. Turn the on/off switch on.



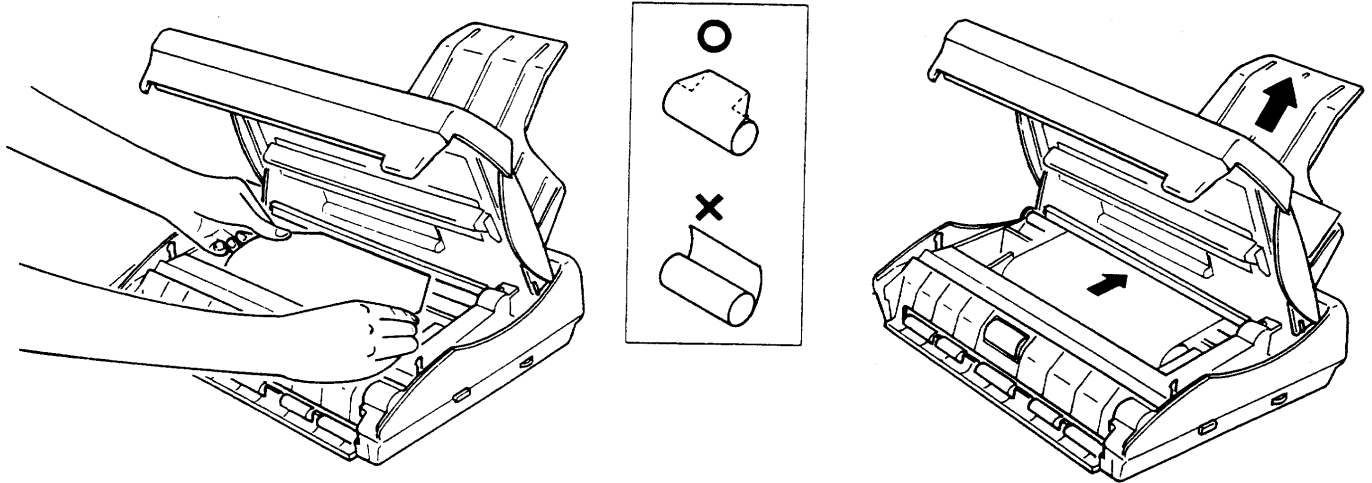
Installing Thermal Recording Paper



To install thermal recording paper in your fax machine:

1. Pull forward on the cover release to your fax and raise the fax cover.
2. Your fax accommodates either 8.5-inch or 10.1-inch-wide thermal recording paper. A small plastic retaining gate snaps into place on the left side of the paper cradle to accept either type of paper roll. The wider 10.1-inch paper can be useful if you often receive over-sized documents, blueprints or drawings. Refer to the diagram to the left, and make sure this gate is in the proper place before you use your fax. Check with your Murata representative for information on ordering wider paper, if desired.

3. Place a roll of Murata recording paper into the fax so it unrolls from the top of the roll.
4. Pull out about 4 inches of paper. You can fold under the corners of the paper to make inserting the paper into your fax easier. Slide the leading edge of the paper below the paper cutter bar at the back of your fax. This bar covers the paper cutter and is designed for your protection. Use care not to touch the cutter blade.



5. You should be able to slide the paper all the way through your fax, so you can see it coming out of the document exit at the back of your unit.
6. Now close your fax, pressing firmly on the front of the cover. Your fax will adjust the paper automatically, then cut it.

Low-Paper Warning

A red warning line will appear on the side of your recording paper when only a few feet of paper remain. It's your signal to replace the roll as soon as possible. The warning line doesn't interfere with continued fax reception, however.

A black end-of-paper line appears just before the roll ends and prevents further printing, protecting your fax thermal printhead. When your fax reaches this end-of-paper line, the LCD on your fax will display "Please Replace Paper". Replace the recording paper roll immediately with a new Murata thermal paper roll.

Out-of-Paper Reception

If your fax runs out of paper at night or while you are out of the office, incoming messages will be stored in your fax machine's memory. These messages will be printed automatically when you replace the recording paper roll.

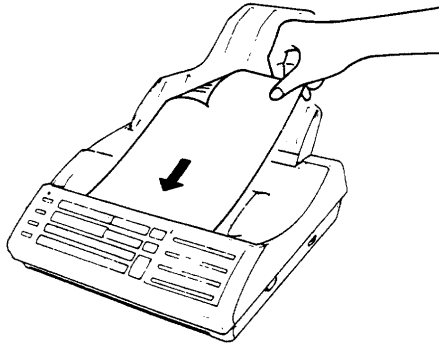
The number of pages your fax can store in memory is determined in part by the page size of the document received and the resolution at which it was transmitted. As a general rule, documents transmitted in fine resolution take twice the memory of a normal-resolution document. See page 30 to check the memory in use in your fax.

With error correction mode (see page 31) off, your fax can store 10 pages of CCITT Test Chart 1 at normal resolution. With ECM on, your fax can store about 8 pages of the same document. Documents that you have stored in memory for transmission or

polling reduce the number of pages your fax can receive into memory when out of paper.

After your fax machine's memory is full, it will ignore later fax calls and cannot receive again until you install a new recording paper roll.

Using Your Fax as a Copier



Use your fax as a convenience copier to duplicate documents without leaving your desk.

Place your document face down into the document feeder. Press **Mode/Select** to choose the copy resolution. Press **Original/Select** to compensate for a dark or light original. Then press **Copy**.

To create multiple copies of the same document, use the numeric keypad to enter the number of copies you want created. Then press **Copy**.

```
Multiple Copies 01/05
** Printing **
```

Murata Fax Paper

For the best results and the longest life from your fax machine, use Murata thermal recording paper.

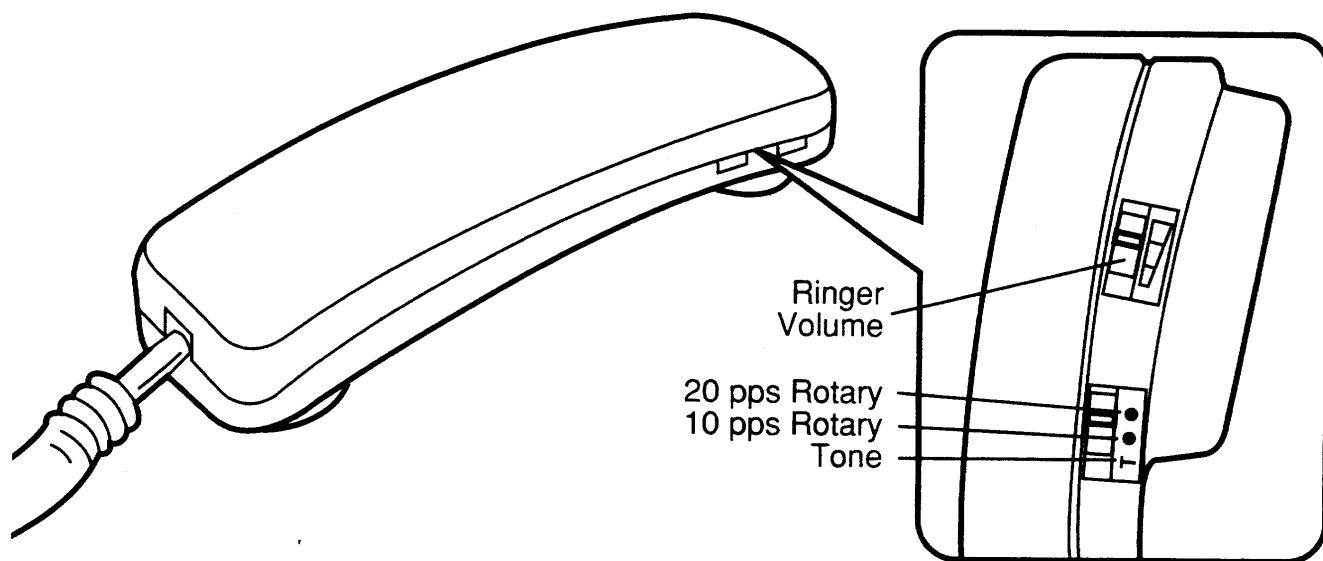
Your fax uses a special thermal printhead to provide sharp, clear documents. Murata's thermal fax paper meets the exacting standards of this sophisticated printhead. Other papers don't meet Murata's specifications and won't provide the document clarity of genuine Murata thermal facsimile recording paper.

Call for Information

Specify Murata thermal fax paper when you order. Ask your Murata representative or your local facsimile dealer for several rolls, or call 1-800-543-4636 for the authorized source nearest to you.

Telephone Features

Your fax machine and telephone handset are set initially for use on tone telephone systems rather than rotary. If your telephone system requires rotary dialing signals, be sure to select rotary dialing when you enter the "Set Phone Line Type" setting in the user settings (see page 19).



A small switch on the side of your fax machine's telephone handset controls the dialing signals produced by the handset keypad. The handset setting controls the dialing signals made by the handset's keypad: It does not change the dialing signals produced by the fax machine's autodialer or numeric keypad.

Refer to the diagram to make sure your handset will provide the dialing signals required by your telephone system.

These other telephone features are built into your fax:

Hold—Just press **Hold** to place a call on hold. Your fax includes an optional melody (see page 20) you can use to let your caller know the line is on hold.

Your fax will beep several times at one-minute intervals to remind you your caller is waiting. The Hold LED will also light while a call is on hold. If you have not picked up the call after five minutes, your fax will disconnect the call automatically.

To return to a call placed on hold, just pick up your machine's built-in handset or a telephone connected to the fax machine's "Phone 2" jack.

Monitor/Call—For hands-free voice or fax dialing, press **Monitor/Call** to get a dial tone while the fax machine's handset remains down. Then enter a telephone number using the numeric keypad, a one-touch key or **Speed Dial** and a two-digit speed-dial number. For voice dialing, pick up the handset when the call is answered. For fax dialing, make sure there is a document in the fax machine's feeder and press **Start** when the remote fax answers.

Redial—Press **Redial** to redial the last number attempted using the numeric keypad, a one-touch key or a speed-dial number. The **Redial** button cannot redial numbers called using the fax machine's handset or a telephone connected to the "Phone 2" jack.

Fax and Telephone

Information and Setup

Properly connecting your fax to your home or office telephone system is probably the most critical part of installing your new fax. Take a few minutes to review the way your fax connects to your telephone or answering machine.

Your Fax, Fax Standards, and the Telephone System

Your fax works on ordinary telephone lines, so it's easy to understand fax operation if you compare it to the way a regular telephone works. Having a fax, in fact, is a lot like having a telephone with bonus features.

All fax standards are closely regulated by the CCITT, an international regulatory agency of the United Nations. These standards ensure the compatibility of your fax machine with the millions of other Group 3 and Group 2 units worldwide, but they also impose a few limits on the way your fax can be used with other telephones or with answering machines.

The way a fax works is really pretty simple:

When a transmitting fax scans in a document, it examines the picture content and converts the lines of information into a binary code of zeros and ones. The fax then compresses this information so it can be sent rapidly over the telephone line. In this regard, the only difference between a fax call and a regular telephone call is the content of the transmission: A fax transmission consists of digital information, while a regular telephone call transmits analog information—your voice.

An incoming fax call will make your telephone ring the same way a voice call would. In fact, there is no way to tell if an incoming call is from a fax or from a person until you or your fax machine answer the line.

During transmission, most fax machines send out very specific calling tones over the telephone line. (Not all units do, however; see page 18 for more information on these non-standard fax machines.) These tones, which sound like a wavering, piercing electronic whistle, identify the call to other fax machines as an attempted transmission. While these tones wouldn't make much sense to you if you heard them, they are the fax equivalent of making a voice call and identifying yourself: "Hello, this is Joe."

The answering fax machine responds to these signals using special receiving tones, which are its way of responding to the other unit's "greeting." This CCITT-controlled acknowledgement—just like a common greeting exchanged between you and your friends—is called "handshaking."

Your Options for Automatic and Manual Fax Reception

Fax machines offer two basic ways to answer incoming telephone calls: You can instruct your fax to ignore calls so you can answer them *manually*, or you can instruct your fax to answer calls *automatically*.

Your fax even offers a half-way point between these options, allowing you to attach a second telephone or answering machine without interrupting your fax machine's operation.

Press the **Receive Mode** key to select from the four receive options explained below. Your LCD will show each option in succession: Tel Ready, Fax Ready, Tel/Fax Ready and Ans/Fax Ready.

Press the **Receive Mode** key to select from these options. Your LCD will show each option in succession:

Choose Tel Ready mode when:

- ◆ Nothing is attached to your fax.
- ◆ Your fax will serve as both a fax and business phone.
- ◆ You will answer every call manually.
- ◆ Your LCD will show:

Tel Ready Feb. 26, 1991 10:45

Choose Fax Ready mode when:

- ◆ Nothing is attached to your fax.
- ◆ A dedicated phone line is used for the fax, or you want the fax to answer all calls.
- ◆ Your fax will answer every call automatically.
- ◆ Your LCD will show:

Fax Ready Feb. 26, 1991 10:45

Choose Tel/Fax Ready mode when:

- ◆ A second phone is attached to the fax's "Phone 2" jack.
- ◆ Your home or office shares the fax line with the telephone.
- ◆ Your fax will answer every call automatically if you do not answer the call manually first.
- ◆ Your LCD will show:

Tel/Fax Ready Feb. 26, 1991 10:45

Reception Options

When your unit is set to the "Tel Ready" mode, answer your fax manually when it rings by picking up the fax handset.

If the call is from a person, talk as you would normally. If the call is from a fax machine, you will hear the characteristic high-pitched fax tones. When you hear these tones, press your machine's **Start** button to return the remote unit's "greeting". Then hang up, and reception will begin.

Your fax machine's manual reception option is ideal if you have one telephone line that must serve double duty for fax and business use. That way, you answer all incoming calls, speaking normally to your voice callers and "greeting" remote fax machines by pressing **Start**. In the "Tel Ready" mode, your fax will never answer incoming calls.

This option is called "Tel Ready" on your fax machine's LCD, because you answer all calls, fax and voice, using the built-in handset—just the same way you would answer a regular telephone.

When your fax is set to "Fax Ready", it assumes the responsibility of answering all calls. The fax will answer calls after a specified number of rings (which you can control), exchange the standard fax "greeting" with the transmitting unit and then attempt reception.

You can choose to answer an incoming call manually before the fax responds. If you do, your options are the same as for manual reception: Pick up the built-in handset before your fax answers automatically and speak with your callers. Press **Start** if you hear fax transmission tones.

Use the Fax Ready setting when you have a dedicated line for the fax and receive your voice calls on a separate line. Because the fax answers automatically, your unit's voice prompt is not played and any voice callers will hear your fax machine's receiving tones.

This option is called "Fax Ready" on your the unit's LCD because the machine is "ready" for fax calls only.

You can connect a second telephone to your fax machine's "Phone 2" jack for added convenience. A second telephone allows several reception options.

First, you can choose to do nothing when your telephone and fax ring, and let the fax answer all calls automatically. If the call is from a remote fax machine, your fax will receive and print the message automatically.

Any voice callers will hear the following voice prompt, informing them they've reached a fax machine.

Hello. If you wish to send a fax, transmit now. If not, check the number and dial again. Thank you.

This prompt is a pre-recorded part of the machine's software and is available in English or Spanish. (See Voice Prompt in the User Settings section for more information.)

Second, some people use the second phone option because they prefer to answer their calls using a conventional telephone handset—or even a cordless phone. When

you connect a second telephone to the "Phone 2" jack and answer incoming calls before the fax responds, your options are the same as for manual reception: Talk to your callers, but press **Start** if you hear fax transmission tones.

What if the telephone connected to the Phone 2 jack is on a long telephone cord—or even in another room?

The switch-to-fax feature lets you transfer these fax calls back to the fax, but remember that the second telephone must be physically attached to the fax machine's "Phone 2" jack. (See the Switch-to-Fax section for more information.)

This feature is called Tel/Fax Ready on your fax machine's LCD because a telephone is used alongside the fax.

Choose Ans/Fax Ready mode when:

- ◆ An answering machine is attached your fax machine's "Phone 2" jack.
- ◆ Your home or office shares the fax line with the telephone.
- ◆ Your answering machine will answer every call automatically if you do not answer the call manually first. Your fax machine will "listen" for the standard fax "greeting" from remote units and will automatically receive fax messages.
- ◆ Your LCD will show:

Ans/Fax Ready Feb. 26, 1991 10:45

You can connect a telephone answering machine to your fax machine's "Phone 2" port for the ultimate in fax/telephone convenience. With a few precautions to accommodate the standards every fax must adhere to, your answering machine and fax can work perfectly side by side.

When fax machines dial automatically—like when you use a one-touch key for transmission or program a delayed command—they use an internal clock to time and control their communication. Transmitting machines wait a fixed period of time after dialing to hear the receiving "greeting" from your fax. If they don't hear the proper reception tones within this limited period, they usually hang up and dial again minutes later.

If a telephone answering machine is used on the same line as your fax, the whole transmission process for a remote unit—dialing your fax, ringing and waiting for your answering machine's outgoing message—can take 40 seconds or more. This exceeds the time limit set by the CCITT and would cause the transmitting fax to hang up.

To ensure smooth operation of your fax and answering machine, follow these guidelines:

1. First, make sure your answering machine's telephone line is connected to your fax machine's "Phone 2" jack. The answering machine's power cord should be plugged into an electrical outlet.
2. Use the **Receive Mode** key to make sure "Ans./Fax Ready" appears on your fax machine's display.
3. Set your answering machine to answer calls after one or two rings. Consult your answering machine's operating manual for instructions.
4. Create a short outgoing message for your answering machine, ideally one that is less than 10 seconds long. (For ideas on modifying your message, see "Modifying your Answering Machine Message" later in this section.)

When you choose the "Ans./Fax Ready" reception option, incoming calls will be answered by your answering machine, since it should be set to respond after one or two rings. While your answering machine's outgoing message is played, your fax will listen quietly on the line. Callers making voice calls will not know the fax is there.

If your fax detects the standard fax transmission tones from a remote unit, however, it will disconnect your answering machine and begin reception.

Modifying Your Outgoing Message

Here is a suggested outgoing message for your answering machine that you can modify to suit your own needs:

Hello. You have reached (your business name or telephone number). We can't come to the phone now, but this line has been answered by a fax and an answering machine. If you would like to send a fax, press Start to transmit. If you would like to leave a message, wait for the beep. Thank you.

Your callers can even leave both a voice and fax message on the same telephone call:

Modify your outgoing message to explain that callers can first leave a brief voice message on your answering machine, then press **Start** to begin their fax transmission. Your fax will detect the switch from voice to fax, and come on the line to print the message.

Silent Detect

Under normal circumstances in the "Ans./Fax Ready" mode, your fax will seize the phone line when it hears transmission tones from a remote unit. You can change your machine's operation to suit a few particular fax-reception needs, however.

A few non-standard fax machines on the market do not emit calling tones when they transmit. Your fax can use a "silent detect" option to accommodate these machines. Unless you turn on the silent-detect feature, it will not effect your fax communication.

When the silent-detect feature is enabled, your fax listens to all incoming calls for one minute. If your fax detects a period of silence of a specific length, determined by you, it will disconnect the telephone handset or answering machine and attempt fax reception. In other words, when your fax detects this period of silence during the first minute of the call, it assumes a "silent" machine is on the line, and your fax will emit receiving tones.

You can set your machine's silent-detect sensor to monitor for silence of from 1 to 15 seconds. The sensor is initially set at 00, which turns the feature off.

Remember that when you activate this feature your fax will monitor for silence anytime during the first minute of *every* call. When this feature is active, try to avoid putting your caller on hold or setting the handset down during the first minute, since the resulting silence could cause your fax to attempt reception.

Also remember that this feature is designed to accommodate a very few non-standard fax machines. Unless you communicate with such units often, you can ignore this setting. To activate the "silent detect" feature:

1. Press **Program, 0, 3, Confirm/Enter**.

```
Silent Time Set
(0-15)          00
```

2. Enter the amount of time desired. You can enter any number between 01 and 15 seconds.

```
Silent Time Set
(0-15)          08
```

3. Press **Confirm/Enter**.

```
Silent Time Set
**Completed**
```

User Settings

Before entering these user settings in your fax, make sure your fax machine is properly installed and connected to your telephone system (see page 9 and 15).

Most user settings can be entered either when you install your fax or later, after you find a need for a particular feature. You can enter the settings below in any order you wish, and you can ignore any settings that do not meet your particular fax needs.

Selecting the Language of Operation

Your fax can display LCD screens, reports and journals in either English or Spanish. The voice prompt (see page 16) is also pre-recorded in English and Spanish.

Your fax is initially set for English-language operation. To select Spanish-language operation, press **Program** followed by the pound key (#). Then press **Stop**. Repeat this process to return LCD screens, reports and the voice prompt to English.

Selecting the Phone Line Type

Your fax works well on either tone or rotary phone lines. Your fax is set initially to use tone dialing signals. If your telephone system requires rotary dialing signals:

Entering Commands

In this manual, instructions are shown as a series of sequential keystrokes. The command for phone line type, for example, starts with "**Program, 0, 8, Confirm/Enter**".

To enter this command, press the **Program** key on your fax.

Then press "0" using the numeric keypad. Then press "8".

Finally, press **Confirm/Enter** and continue with the command as shown.

1. Press **Program, 0, 8, Confirm/Enter**.

1. Set Phone Type 01-20 Enter/Select
--

2. Press **Confirm/Enter**.

Tone Line Enter/Select

3. Press **Mode/Select**.

Rotary Line Enter/Select

4. Press **Confirm/Enter**.

Second Telephone Hold

Your fax allows connection of a second telephone or answering device for added versatility (see page 15). You may choose to answer calls using the handset of the second phone. If you would like to be able to put your callers on hold when talking on the second phone, follow the steps below. (The initial setting for the second telephone hold function is off, so—when your unit is first installed—it won't let you put a call on hold if you are talking on a telephone connected to the "Phone 2" jack.)

1. Press **Program, 0, 8, Confirm/Enter, 0, 2**.

2. 2nd Tel. Hold 01-20 Enter/Select

2. Press **Confirm/Enter**.

```
2nd Tel. Hold: OFF
                Enter/Select
```

3. Press **Mode/Select** to turn the hold feature on.

```
2nd Tel. Hold: ON
                Enter/Select
```

4. Press **Confirm/Enter**.

Select Hold Melody

Your fax includes an optional melody you can use to let callers know they are on hold. The fax is set initially not to play this hold melody.

Use the setting below if you want your callers to hear "When the Saints Go Marching In" while they are on hold.

1. Press **Program, 0, 8, Confirm/Enter, 0, 3**.

```
3. Set Hold Melody
01-20      Enter/Select
```

2. Press **Confirm/Enter**.3. Press **Mode/Select** to turn the melody on.

```
Hold Melody:   On
                Enter/Select
```

4. Press **Confirm/Enter**.

Set Passcode

The optional passcode in your fax can be used to protect documents set for polling, to poll documents from a Murata fax machine with a passcode in place and to operate in a closed network with other Murata fax machines.

The closed network option gives you a way to block "junk fax", or unwanted transmissions from unknown fax machines. When you enter a passcode as shown below and select the closed network option (see page 27), you instruct your fax to hang up on any facsimile machine that calls and fails to present the proper code.

Use the passcode when communicating with Murata-manufactured fax machines only. Fax machines from other manufacturers—even those that offer their own protection codes—aren't compatible with your machine's passcode.

To cancel the passcode, return the code to 0000. This setting allows any fax from any manufacturer to send to or poll from your unit.

1. To enter a passcode, press **Program, 0, 8, Confirm/Enter, 0, 4**.

```
4. Set Passcode
01-20      Enter/Select
```

2. Press **Confirm/Enter**.

```
Set Passcode
Passcode:           0000
```


4. Press **Mode/Select** to turn the automatic print on. This will request a communication report after each transmission.

```
Automatic Print: On
                Enter/Select
```

5. Then press **Confirm/Enter**.

Set Scanner Width

When you transmit wide documents, your fax will automatically reduce the size of the pages sent to accommodate the printing capability of the receiving fax.

If you want to transmit images from wide documents without this automatic reduction, adjust the scanning width of your fax. Your fax is set initially to scan to the B4 (9.9-inch) document width. You can adjust this to the narrower A4 (8.5-inch) width to transmit portions of a large page without reduction.

When you select the narrower width, your fax will ignore any image outside the active scanning area. If you select the A4 scanning width and insert an 11-inch-wide document, for example, your fax will scan the center 8.5 inches and transmit it unreduced. This setting will leave 1.25 inches unscanned on each side of the page.

(You can also expand your fax machine's B4 scanning width slightly, to 10.1 inches, with a special setting. See page 72.)

1. To set the scanner width, press **Program, 0, 8, Confirm/Enter, 0, 8**.

```
8. Set Scanner Width
01-20      Enter/Select
```

2. Press **Confirm/Enter**.

```
Scanning Size:  B4
                Enter/Select
```

3. Press **Mode/Select** to choose the scanning width you need.

```
Scanning Size:  A4
                Enter/Select
```

4. Then press **Confirm/Enter**.

Repeat these steps to return the scanner to B4 after your transmission, so later large documents aren't accidentally cut down by the narrower setting.

Set Primary Resolution

Your fax offers several transmission resolutions, so every document you send arrives looking great. You can select the resolution that is right for each document just before transmission by pressing **Mode/Select**.

If most of your transmissions require the fine transmission mode, use the setting below to save a step in all future transmissions: When you select fine as the primary mode, your fax will send all documents at this higher resolution unless you specifically change it before transmission.

1. To set the primary mode, press **Program, 0, 8, Confirm/Enter, 0, 9**.

```
9. Set Primary Mode
01-20      Enter/Select
```

2. Press **Confirm/Enter**.

Primary Mode: Norm
Enter/Select

3. Press **Mode/Select** to change the setting to fine.

Primary Mode: Fine
Enter/Select

4. Then press **Confirm/Enter**.

Set Original Contrast

Along with an adjustable primary resolution (above), your fax offers a primary contrast setting. If most of the documents you send require the dark or light contrast adjustment, use the setting below to change the primary contrast setting.

1. Press **Program, 0, 8, Confirm/Enter, 1, 0**.

10. Set Contrast
01-20 Enter/Select

2. Press **Confirm/Enter**.

Original: Norm
Enter/Select

3. Press **Mode/Select** to select the contrast setting you need.

Original: Light
Enter/Select

4. Then press **Confirm/Enter**.

Select Number of Redial Attempts

Your fax automatically redials busy fax numbers anytime you attempt transmission using a one-touch key, speed-dial number or a number entered through the fax's numeric keypad. Use this setting to select how many times your fax should try to redial the busy number before sounding its alarm to alert you of the unsuccessful transmission.

1. Press **Program, 0, 8, Confirm/Enter, 1, 1**.

11. Set # of Redials
01-20 Enter/Select

2. Press **Confirm/Enter**.

Set # of Redials
(2-5) 2

3. Use the numeric keypad to select 2, 3, 4 or 5 redial attempts.

Set # of Redials
(2-5) 5

3. Use the numeric keypad to enter your passcode.

```
Set Passcode
Passcode:      1234
```

4. Then press **Confirm/Enter**.

Set Auto Receive Time

Use the Auto Receive setting below to select specific hours for your fax to switch to and from automatic answer mode. This setting switches your fax from the "Tel Ready" manual answer mode to the "Fax Ready" automatic answer mode at the times you choose (see page 15).

Do not use this setting if your fax is used with a telephone answering machine and is in the "Ans/Fax Ready" mode.

1. To enter an Auto Receive Time setting, press **Program, 0, 8, Confirm/Enter, 0, 5**.

```
5. Set Auto Rx Time
01-20      Enter/Select
```

2. Press **Confirm/Enter**.

```
Set Auto Rx Time
Start Time:  00:00
```

3. Enter the hour you want automatic reception to begin. Your fax tracks time in 24-hour or nautical format, where, for example, 11 a.m. is shown as 11:00 and 3 p.m. is shown as 15:00.

```
Set Auto Rx Time
Start Time:  17:00
```

4. Press **Confirm/Enter**. Then enter the minute you want automatic reception to begin.

```
Set Auto Rx Time
Start Time:  17:31
```

5. Press **Confirm/Enter**.

6. Then enter the hour you want automatic reception to end.

```
Set Auto Rx Time
End Time:    07:00
```

7. Press **Confirm/Enter**. Enter the minute you want automatic reception to end.

```
Set Auto Rx Time
End Time:    07:59
```

8. Press **Confirm/Enter**.

To cancel this setting so changes in your fax machine's Auto Receive status are made only by using the **Receive Mode** key, return the start and end settings to 00:00.

Set Number of Rings

Use this setting to select the number of times your fax will ring before it responds to an incoming call. You can select any number of rings between 2 and 6. Your unit is set initially to respond after two rings.

1. To set the number of rings, press **Program, 0, 8, Confirm/Enter, 0, 6.**

```
6. Set Number Rings
01-20      Enter/Select
```

2. Press **Confirm/Enter.**

```
Number of Rings
(2-6)                                2
```

3. Use the numeric keypad to enter the desired number of rings.

```
Number of Rings
(2-6)                                5
```

4. Then press **Confirm/Enter.**

Select Confirmation Report

Your fax offers two kinds of communication reports after a transmission. These reports verify that your document was sent, and are especially useful when you use delayed commands to send documents after hours.

A Transmit Confirmation Report is a signal from your fax that the document you set for transmission was sent to the location shown on the report. A TCR is available for any transmission.

A Receive Confirmation Report is available during transmission to other Murata-manufactured units. An RCR is a message sent back from the remote unit, signalling that the remote fax received and printed the message. If you request an RCR during a transmission with a non-Murata unit, a TCR will be printed automatically instead.

TCRs and RCRs list the transmitting and receiving unit, date, time, number of pages sent and result. The name or telephone number shown in the "Receiver" field may not be the one you entered in your autodialer: The information that appears in this field comes from the remote unit during fax communication (see the Activity Journal section on page 73 for more information).

When you instruct your fax to print a confirmation report as shown below, the "Confirm" LED on your fax machine will become lit and will stay illuminated as long as you have the automatic print function turned on.

1. Press **Program, 0, 8, Confirm/Enter, 0, 7.**

```
7. Set Comm. Result
01-20      Enter/Select
```

2. Press **Confirm/Enter.**

```
TCR
Enter/Select
```

3. Press **Mode/Select** to choose the report. Then press **Confirm/Enter.**

```
Automatic Print: Off
Enter/Select
```

4. Then press **Confirm/Enter**.

Set Redial Interval

When your fax encounters a busy signal, it waits several minutes before redialing. Use this setting to select the interval between redial attempts.

1. Press **Program, 0, 8, Confirm/Enter, 1, 2**.

```
12. Set Redial Inter.
01-20      Enter/Select
```

2. Press **Confirm/Enter**.

```
Set Redial Inter.
(3-5)                      3
```

3. Use the numeric keypad to choose a 3-, 4- or 5-minute redial interval.

```
Set Redial Inter.
(3-5)                      5
```

4. Then press **Confirm/Enter**.

Turn Activity Journal Automatic Print On/Off

The Activity Journal displays information on your 25 most recent transmissions and receptions. You can request an Activity Journal manually at any time (see page 73). This setting instructs your fax to print a journal automatically after every 25 transactions:

1. Press **Program, 0, 8, Confirm/Enter, 1, 3**.

```
13. Journal On/Off
01-20      Enter/Select
```

2. Press **Confirm/Enter**.

```
Automatic Print: Off
                  Enter/Select
```

3. Press **Mode/Select** change the print setting.

```
Automatic Print: On
                  Enter/Select
```

4. Then press **Confirm/Enter**.

Remote Diagnostics

Your fax includes special software that allows Murata's trained service technicians to test your fax by computer over the telephone. When you call the Murata Customer Support Center (see page 87), you may be asked to change this setting.

1. Press **Program, 0, 8, Confirm/Enter, 1, 4**.

```
14. Remote Diagnostic
01-20      Enter/Select
```

2. Press **Confirm/Enter**.

```
Remote Diagnostic: On
Enter/Select
```

3. Press **Mode/Select** to change the diagnostic setting.

```
Remote Diagnostic: Off
Enter/Select
```

4. Then press **Confirm/Enter**.

Set Date and Time

The clock in your fax is protected from power failures for up to several days by a rechargeable internal battery. The LCD displays time in 24-hour format.

1. To set the clock, press **Program, 0, 8, Confirm/Enter, 1, 5**.

```
15. Set Date and Time
01-20 Enter/Select
```

2. Press **Confirm/Enter**.

```
Enter Year
'01 01/01 01:01
```

3. Use the numeric keypad to enter the last two digits of the current year.

```
Enter Year
'91 01/01 01:01
```

4. Press **Confirm/Enter**. Then enter the number of the month.

```
Enter Month
'91 10/01 01:01
```

5. Press **Confirm/Enter**. Enter the day.

```
Enter Date
'91 10/27 01:01
```

6. Press **Confirm/Enter**. Now enter the hour in 24-hour format.

```
Enter Hour
'91 10/27 22:01
```

7. Press **Confirm/Enter**. Enter the minute.

```
Enter Minute
'91 10/27 22:30
```

8. Press **Confirm/Enter**.

Set Dialing Pause

The **Pause** key on your fax lets you insert dialing pauses into numbers stored in your autodialer (see page 53). These pauses may be needed when calling on systems that require "9" to reach an outside line, on branch systems or when calling overseas.

1. To set the number of seconds your fax should wait when it encounters a dial pause, press **Program, 0, 8, Confirm/Enter, 1, 6**.

```
16. Set Dialing Pause
01-20      Enter/Select
```

2. Press **Confirm/Enter**.

```
Set Dialing Pause
(5-99)                05
```

3. Use the numeric keypad to enter the number of seconds delay desired. You can select a pause of from 05 to 99 seconds.

```
Set Dialing Pause
(5-99)                10
```

4. Press **Confirm/Enter**.

Print User Settings

Use this command to check your user settings. The printed report lists the settings or status of most of your fax machine's user settings and is a convenient way to verify a new setting you have entered.

1. To print the user settings, press **Program, 0, 8, Confirm/Enter, 1, 7**.

```
17. Print Settings
01-20      Copy/Select
```

2. Press **Copy** to begin the report.

Turn Closed Network On/Off

You can close your fax to transmissions from unauthorized facsimile machines and eliminate "junk fax" with the closed network feature.

When you turn on the closed network, only Murata-manufactured fax machines presenting the proper passcode (see page 20) can access your fax for transmission or polling. All other facsimile machines will be disconnected before transmission.

1. To begin the closed network, press **Program, 0, 8, Confirm/Enter, 1, 8**.

```
18. Closed Network
01-20      Enter/Select
```

2. Press **Confirm/Enter**.

```
Closed Network  Off
                Enter/Select
```

3. Press **Mode/Select** to turn the network on.

Closed Network On
Enter/Select

4. Then press **Confirm/Enter**.

Enter Your TTI

Your programmable Subscriber ID and Transmit Terminal Identifier are sent automatically at the top of each document you send. The Subscriber ID and TTI appear at the top of each page printed by the receiving fax. The Subscriber ID is your fax machine's telephone number. The TTI can be your name, your business name or any other message up to 22 characters long. You can choose from these characters for your TTI:

(SPACE)	A	B	C	D	E	F	G	H	I	J	.	(SPACE)
(SPACE)	K	L	M	N	O	P	Q	R	S	T	.	(SPACE)
(SPACE)	U	V	W	X	Y	Z	+	,	-	.	/	(SPACE)
(SPACE)	a	b	c	d	e	f	g	h	i	j	.	(SPACE)
(SPACE)	k	l	m	n	o	p	q	r	s	t	.	(SPACE)
(SPACE)	u	v	w	x	y	z	+	,	-	.	/	(SPACE)
(SPACE)	0	1	2	3	4	5	6	7	8	9	-	(SPACE)
(SPACE)	:	;	<	=	>	?	@	[]			(SPACE)
(SPACE)	!	"	#	\$	%	&	'	()	*	.	(SPACE)
(SPACE)	Ç	ü	é	á	ä	à	á	Ç	ê	ë	è	(SPACE)
(SPACE)	ï	î	ì	Ä	Å	É	æ	Æ	ô	ö	ò	(SPACE)
(SPACE)	û	ù	ÿ	ö	Ü	ç	£	¥	₪	ƒ	á	(SPACE)
(SPACE)	í	ó	ú	ñ	Ñ	φ	Ø	ı	β	i	ƒ	(SPACE)

1. Press **Program, 0, 8, Confirm/Enter, 1, 9.**

19. Enter Your TTI
01-20 Enter/Select

2. Press **Confirm/Enter**.

Tel:
Enter/Select

3. Press **Confirm/Enter**. Then use the numeric keypad to enter your telephone number. Although the TTI and Subscriber ID are optional identifiers, make it easy for anyone receiving messages from you to respond: Include your area code in the ID. Use the dash key, "-", to make a dash appear in your number.

Tel:
1-214-403-3499

4. Enter up to 20 numbers. Then press **Confirm/Enter**.

Name:	Enter/Select
-------	--------------

5. Press **Confirm/Enter**.

_ ABCDEFGHIJ.	00
---------------	----

6. Use the up, down, left and right arrow keys to highlight the first character of your TTI. Then press **Confirm/Enter** to enter the character.

KLMNOPQRST.	01
S	

7. Continue using the arrow keys to select letters, numerals and other characters for your TTI. Then press **Confirm/Enter** to enter each character.

uvwxyz+,-./	13
Smith Company	

8. When your TTI has been entered, press **Program**.

Set Grayscale

Your fax includes 16-level grayscale scanning ability, so it can accurately reproduce and transmit halftone images like photographs.

Your fax has two grayscale settings. Setting 1 is ideal when sending halftone images that include some text, like advertising layouts and magazine pages. Setting 2 provides even better transmission quality for halftone images that include no text.

Note:

This setting gives your fax some very important information on the type of grayscale documents you most often send—those with text included, or those without. But remember that you still must select grayscale using the **Mode/Select** key before copying or transmitting a document.

1. To adjust the grayscale setting, press **Program, 0, 8, Confirm/Enter, 2, 0**.

20. Set Grayscale	
01-20	Enter/Select

2. Press **Confirm/Enter**.

Grayscale 1	
	Enter/Select

3. Press **Mode/Select** to choose the grayscale setting needed.

Grayscale 2	
	Enter/Select

4. Then press **Confirm/Enter**.

Checking the Memory in Use

Your fax includes memory to store up to 10 pages for transmission, polling and other commands. The exact number of pages you can store depends on the size of your pages, the amount of text and graphics on each page and the resolution you select.

Your fax includes a handy command to check the amount of memory in use. From the standby screen, just press **Mode/Select**. The number of delayed commands in memory will display on the top line of the LCD. The bottom line will show the same information graphically.

```
Commands in Queue (02)
**---
```

Then press **Mode/Select** again. Your fax will display the amount of memory in use and an approximate graphical representation. Then press **Stop** to return to standby.

```
Memory in Use (013%)
*-----
```

Memory Overflow Error Message

If you try to enter documents requiring more memory than your fax machine has available, your unit will beep several times and display "Memory Overflow" on the LCD.

If it does, press **Confirm/Enter** to save all pages scanned up to the point at which memory overflowed. Or press **Original/Cancel** to remove all pages—even those saved earlier for different commands—from memory.

Clear Memory

This command deletes all user information from your fax and returns all user settings and dip switches to their factory positions.

Do not use this command unless you want to delete all user information—TTI, Subscriber ID, speed-dial numbers, one-touch keys, journal information and all other stored information—from your fax.

1. To clear all user settings and return all dip switches to their factory settings, press **Program**, *****, **3**.

```
All Clear
Enter/Select
```

2. Press **Confirm/Enter**.

```
All Clear
Sure? Enter/Select
```

3. Press **Confirm/Enter** to erase all information. Press **Mode/Select** to return to standby without erasing the information.

Error Correction

Your fax machine offers a CCITT-standard error correction mode for transmissions and receptions, to assure that important documents look clear and sharp.

Use of your fax machine's error correction mode is optional, and can be selected for transmissions only, receptions only, or both transmissions and receptions.

Here's how error correction mode works:

During ECM transmission, your fax sends your document in small high-speed segments. After each segment is sent, your fax waits briefly to receive a signal from the remote unit—which must also have ECM capability—confirming the image was received properly. If telephone line noise damaged some of the image data, your fax will retransmit the block until it is received properly.

ECM reception works the same way: An ECM-equipped fax will transmit to your unit in high-speed blocks of image. Your fax responds after each block is received, indicating whether the block should be sent again or was received error-free.

Using ECM can increase the length of your fax calls: Resending blocks of data adds to the total transmission time and, if you are paying for the phone call, that could add to the cost of sending your document. You can turn ECM on and off whenever needed, and you can select ECM for transmission or reception only, as shown below.

When is ECM Available?

ECM is a feature on many new Group 3 fax machines: Any machine with CCITT-standard ECM can send to or receive from your Murata fax in the ECM mode if the remote operator selects ECM operation.

If you transmit to or receive from a fax that doesn't have ECM, your call will continue like any normal Group 3 fax communication, but will not have the benefit of ECM error checking.

Selecting ECM

Selecting ECM operation reduces the number of pages you can scan and save in memory for delayed transmission and other commands: ECM reserves a portion of your fax machine's memory to store image data during transmission and reception.

Your fax normally has enough memory to store about 10 pages of CCITT Test Chart 1 at normal resolution. When you select ECM operation, that amount is reduced to about 8 pages.

Selecting ECM operation may also slow transmission to and from your fax: Retransmitting damaged image data increases the time needed to send the document.

Your fax lets you select ECM separately for transmission and reception. Select ECM transmission when sending documents that require the ultimate in error correction. You can leave ECM reception on all the time to take advantage of its error correction whenever an ECM-equipped fax calls, or turn ECM transmission and reception off to free internal memory in your fax.

Entering Commands

Throughout the manual, instructions for entering commands are shown as a series of sequential keystrokes. The command for ECM, for example, is shown as "**Program, 1, 0, Confirm/Enter**".

To enter this command, press the **Program** key on your fax.

Enter "**1**" using the numeric keypad. Then press "**0**".

Finally, press **Confirm/Enter** and continue with the information for the command.

To select error correction mode:

1. Press **Program, 1, 0**.

```
10. Error Correction
01-10      Enter/Select
```

2. Press **Confirm/Enter**.

```
ECM Tx:           Off
                Enter/Select
```

3. Press **Mode/Select** to turn ECM transmission on or off as needed.

```
ECM Tx:           On
                Enter/Select
```

4. Press **Confirm/Enter**.

```
ECM Rx:           Off
                Enter/Select
```

5. Press **Mode/Select** to turn ECM reception on or off as needed.

```
ECM Rx:           On
                Enter/Select
```

6. When finished, press **Confirm/Enter**.

```
Error Correction
** Completed **
```

Reception

Your fax offers several ways to answer incoming telephone calls. You can answer calls manually using the fax handset, or let your fax answer calls automatically. Your fax even includes a modular jack to allow your fax to work with a second telephone or with a telephone answering machine. Review the "Telephone Information and Setup" section on page 15 to make sure you have selected the proper settings for your fax use.

Manual Reception

When your fax is set to "Tel Ready", (see page 15) you must answer each call using the fax handset.

Tel Ready Feb 26, 1991 10:30

To answer a call manually:

1. When the phone rings, pick up the handset.
2. If it's a voice call, talk as you would normally.
If you hear the distinctive fax calling tones, press **Start**. Then hang up the handset. Your fax will print out the received message.

What if I answer a call in another room?

Just because your fax machine has a built-in telephone handset, there's no need to race to the fax machine every time your telephone rings. You can use any telephone in your home or office to answer a call once you know how to respond to fax calls:

If the call is from a fax machine, you will hear characteristic fax "greeting" tones. Put the telephone handset down, *but don't hang up*. Walk to the fax machine and pick up its handset. Then press **Start**.

After you press **Start**, you can hang up the fax machine's handset and the telephone's handset. Because remote fax machines will wait several seconds to hear reception tones from your unit (see page 15), you have about 10 seconds to walk to your fax, pick up the handset and press **Start**.

Automatic Reception

You have several choices for automatic fax reception: Review the settings on page 15 and make sure your fax is properly installed.

Fax Ready

Fax Ready Feb. 26, 1991 10:30

In the "Fax Ready" mode, your fax answers each call after a set number of rings and immediately attempts to receive a fax. (See page 22 for information on setting the number of rings before your fax will answer automatically.) If you wish, you may answer calls using the handset before the fax answers.

Tel/Fax Ready

Tel/Fax Ready	
Feb 26, 1991	10:30

A second telephone connected to your fax allows added convenience: You can answer calls from a second telephone physically connected to the fax—the phone may be in the next room—and transfer fax calls back to the fax. Your fax will automatically print out the fax message. (For information, see the section on Switch-to-Fax later in this chapter.)

When you let the fax answer in Tel/Fax Ready mode, callers will hear the following prerecorded voice prompt:

Hello. If you wish to send a fax, transmit now. If not, check the number and dial again. Thank you.

You can also answer calls using the fax machine's built-in handset.

Ans./Fax Ready

Ans/Fax Ready	
Feb 26, 1991	10:30

In the "Ans.Fax Ready" mode, you can answer the calls with the fax machine's built-in handset or allow an answering machine connected to the "Phone 2" jack to respond.

When you or your answering machine answer a call, the fax will listen quietly on the line. People calling will not know the facsimile machine is there. If the call is from a remote fax machine, however, your fax will hear the distinctive transmission tones from the remote unit and will automatically come on the line to print out the message. Your telephone handset or answering machine will be disconnected when your fax comes on the line.

Although this setting normally allows the answering machine to respond to all calls, your fax will answer the line after seven rings if your answering machine breaks or does not answer for some other reason. In these cases, your fax will attempt to begin fax communication immediately and will not play the answering prompt.

For more information on using your fax with an answering machine, see "Telephone Information and Setup."

Special Answering Features

Switch to Fax

If you answer an incoming fax call with the fax machine's handset or with a telephone connected to the "Phone 2" jack, you will hear distinctive fax transmission tones. To receive the call, press **Start** and hang up. If the phone connected to your fax is in another room, press "6" on the telephone keypad two or four times (see page 69) to instruct the fax to come on the line and print the fax message.

Voice Prompt

When you have connected a second telephone to your fax, placed your fax in the "Tel./Fax Ready" mode and allow the fax to answer incoming calls automatically, callers will hear a pre-recorded voice prompt:

Hello. If you wish to send a fax, transmit now. If not, check the number and dial again. Thank you.

While the prompt is being played, a special bell in your fax will ring softly, letting you know your fax has answered the telephone line but has not yet attempted reception. You can pick up the fax handset at any time during the 10-second message to turn off the voice prompt and listen to the incoming call through the handset.

The prompt is part of the software in your fax and is available in English and Spanish (see page 19).

Call Reserve

Your fax machine's call reserve feature allows you to have both telephone and facsimile communication at different times during the same call. Without call reserve, your fax prevents telephone conversations after it begins fax communication.

To use this feature, the remote fax must have a similar call-reserve capability.

To reserve a call during transmission or reception:

1. While the fax is sending or receiving, press **Monitor/Call**.

At the remote fax, the telephone will ring after the transmission of each page.

If someone at the remote fax responds to the call request, your fax will ring several times.

2. When your fax rings, pick up the handset and press **Stop**. In a few seconds, the line will open.
3. Begin your conversation.

Note: To transmit after your conversation, insert a document into your fax before hanging up. At the end of your call, instruct the operator of the remote fax to press **Start** before hanging up. When you hear facsimile tones, press **Start** and hang up the handset.

Responding to a Call Request

1. When a remote operator requests a voice call during fax communication, your fax will ring after each page of the document is received.
2. To answer the call request, pick up the handset and press **Monitor/Call**. When the remote operator responds to your call request response, begin your conversation.

Out-of-Paper Reception

If your fax runs out of paper at night or while you are out of the office, up to 10 incoming documents of up to 10 pages total will be stored in your fax machine's memory. These messages will be printed automatically when you replace the paper.

The number of pages your fax can store in memory is determined in part by the page size of the document received and the resolution at which it was transmitted. After your fax machine's memory is full, it will ignore later fax calls and cannot receive again until you replenish the paper.

Transmission

Page Size

Your fax machine can transmit an incredibly wide range of documents, from those as small as a bank check to as large as computer reports and ledger sheets. Your fax can handle almost any document, in fact, that fits within these maximum and minimum dimensions:

Maximum:	11 (w) x 35 (l) inches
Minimum:	4.7 (w) x 2.7 (l) inches

An optional setting (see page 69) allows you to transmit water well logs, medical strip charts and other special documents that are longer than 35 inches per page.

When transmitting to a fax machine with an 8.5-inch print width, your fax machine will automatically reduce your document to accommodate the receiving unit. To transmit images from documents smaller than the minimum document size or to send newspaper, cardboard, overhead transparencies and other documents that your fax cannot transmit, first copy the document on a copier. Use the copied image for your transmission.

Do not transmit:

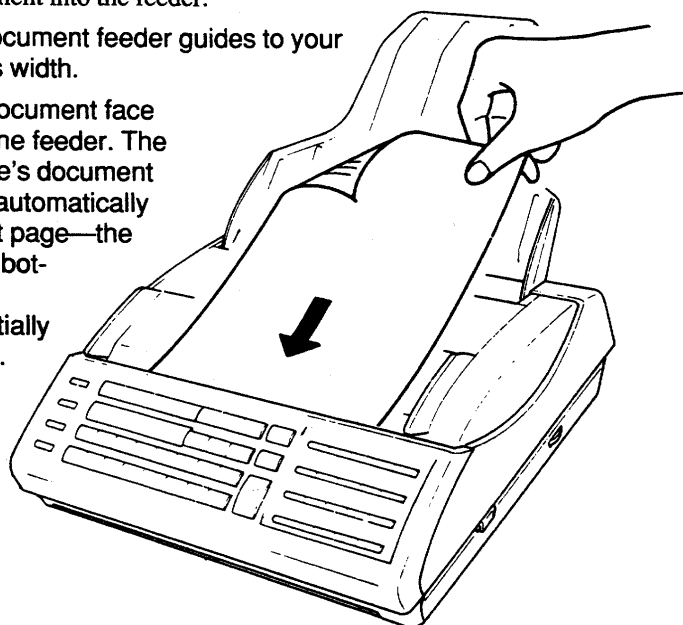
- ◆ Thin or wrinkled pages
- ◆ Documents carrying staples, glue, tape or paper clips
- ◆ Pages with duplicating carbon on one side
- ◆ Newspaper
- ◆ Fabric

Inserting a Document

Your fax will hold up to 10 sheets of normal-weight copier paper. The feeder advances pages through your fax from the bottom of the inserted stack, so you can add more pages to your feeder during transmission.

To insert a document into the feeder:

1. Adjust the document feeder guides to your document's width.
2. Insert your document face down into the feeder. The fax machine's document feeder will automatically pull the first page—the one on the bottom of the stack—partially into the fax.



- Press **Mode/Select** to set the resolution for your transmission. Remember that transmission of documents in fine or grayscale mode takes longer than transmission in normal.

Normal is suited to most typed documents. Fine is ideal for detailed or handwritten documents. Grayscale is used to accurately transmit half-tone images and photographs. Choose G2 when transmitting to a Group 2 fax. If you choose another resolution when sending to a G2 unit, your fax will fall back to G2 automatically. Grayscale is available when transmitting to any Group 3 fax machine—even to those without the grayscale mode.

- Press **Original/Cancel** to select the contrast setting needed. Normal is suited to most documents. Dark compensates for dark documents. Light compensates for weak, "washed-out" images.
- Begin transmission.

Redialing Busy Numbers

When your fax encounters a busy signal, it will automatically attempt to redial the busy number if you tried to transmit:

- ◆ Using a one-touch key
- ◆ Using a speed-dial number
- ◆ Using a number entered through the numeric keypad

User settings control how many times the fax will try to redial a busy number and the amount of time between each attempt (see pages 24 and 25).

Your fax machine cannot automatically redial when you try to transmit using the telephone handset's keypad or when you use the monitor speaker.

Transmission Using the Keypad

- Insert your document.

```
Fax Ready
A4  Norm  Norm
```

- If you want to change the transmission resolution, press **Mode/Select**. If you want to set the contrast, press **Original/Cancel**.

```
Fax Ready
A4  Fine  Light
```

- Use the numeric keypad to enter the telephone number for the remote fax. If you enter a number by mistake, press **Original/Cancel** to delete a character at a time. You can use the dash key to enter dashes in your number. The dash makes long numbers easier to read and does not alter the way your fax machine operates.

```
Fax Ready
1-214-403-3499
```

4. Press **Start**. Your fax will begin dialing.

1-214-403-3499
A4 Fine Light

If your fax encounters a busy signal, the LCD will flash, showing the current time and the time your fax will try to redial the number.

Oct. 27,	10:55
A4 Fine	10:50

Transmission Using a One-Touch Key

1. Insert your document.

Fax Ready
A4 Norm Norm

2. If you want to change the transmission resolution, press **Mode/Select**. If you want to set the contrast, press **Original/Cancel**.

Fax Ready
A4 Fine Light

3. Press the one-touch key programmed for the receiving fax. The Location ID or, if the Location ID is not programmed, the telephone number for the remote fax will be displayed in the LCD while your fax dials.

Murata
A4 Fine Light

If your fax encounters a busy signal, the LCD will flash, showing the current time and the time your fax will try to redial the number.

Oct. 27,	10:55
A4 Fine	10:50

Transmission Using Speed-Dial Numbers

1. Insert your document.

Fax Ready
A4 Norm Norm

2. If you want to change the transmission resolution, press **Mode/Select**. If you want to set the contrast, press **Original/Cancel**.

3. Press **Speed Dial**, then use the numeric keypad to enter the two-digit speed-dial number you need.

Fax Ready
(01)

4. Press **Start**. The Location ID or, if the Location ID is not programmed, the telephone number for the receiving fax will be displayed.

Murata
A4 Fine Light

If your fax encounters a busy signal, the LCD will flash, showing the current time and the time your fax will try to redial the number.

Oct. 27,	10:55
A4 Fine	10:50

Transmission Using the Handset or Monitor Speaker

1. Insert your document.

Fax Ready
A4 Norm Norm

2. If you want to change the transmission resolution, press **Mode/Select**. If you want to set the contrast, press **Original/Cancel**.

Fax Ready
A4 Fine Light

3. Pick up the handset or press **Monitor/Call**.
4. Dial the telephone number for the remote fax with the handset keypad, numeric keypad, one-touch key or by pressing **Speed Dial** and a two-digit speed-dial number entered using the numeric keypad.
5. When the remote fax answers and you hear facsimile tones, press **Start**. Your fax machine cannot automatically redial busy numbers when you try to transmit using the telephone handset or monitor speaker.

Storing Delayed Commands

Your fax can store up to 5 delayed commands, programmed up to 31 days in advance.

Your fax uses a built-in calendar when it plans execution of your delayed commands. So, if on May 25 you set a command to take place on "Date: 03", the command will be executed on June 3.

A Special Note:

When you program a delayed command more than 24 hours in advance, your fax asks you to enter the date for the command, but not the month. Because the month for the delayed command is not programmed, pay special attention when you store a delayed command *for exactly one month in advance* (for example, from May 25 to June 25). If the time you enter for the delayed command is later than the current time shown on your fax machine's LCD, the transmission will occur the same day you enter the command.

In the example below, on May 25 at 7:55 you program a delayed command to take place on Date: 25 at 8:00. In this special case, your fax would try to transmit in just five minutes.

Delay Transmission
Date: 25, 08:00

Because you want the command to take place one month from the current date, you would instead program the command to occur at a time earlier than present, as shown below.

```
Delay Transmission
Date:      25, 07:30
```

Because 7:30 is earlier than the present time (7:55), your fax will hold the command in memory for 30 days month, then execute it as instructed. Remember, this is a special case that applies to delayed commands occurring on a calendar day that's the same as the present calendar day.

Delayed Transmission

Entering Commands

Entering information and commands into your fax is as easy as pressing a few keys.

Throughout this manual, instructions for entering commands are shown as a series of sequential keystrokes. The command for delayed transmission, for example, starts "**Program, Confirm/Enter**".

To enter this command, press the **Program** key on your fax.

Then press **Confirm/Enter** and continue with the information for your command as shown.

Delaying your document transmission until after business hours means there's less chance your fax will contact a machine that's busy, and may also reduce your telephone charges.

1. To delay the transmission of a document, insert the document into the feeder. Press **Mode/Select** to choose the transmission resolution and **Original/Cancel** to set the contrast, if desired.

```
Fax Ready
A4   Fine   Light
```

2. From standby, press **Program, Confirm/Enter**.

```
1. Delay Transmission
1-4 Enter/Select
```

3. Press **Confirm/Enter**.

```
Memory Transmission
Enter/Select
```

4. Press **Confirm/Enter** if you want the transmission to take place from memory or **Mode/Select** if you want the transmission to be from the feeder. Transmitting from memory leaves the feeder free for other transmissions: A delayed command from the feeder ties up the feeder until the command is completed.

```
Delay Transmission
Number of Pages:
```

5. Use the numeric keypad to enter the number of pages in your document. Enter up to 10 pages.

```
Delay Transmission
Number of Pages:      3
```

6. Press **Confirm/Enter**.

```
Delay Transmission
Enter Fax Number
```

7. Select a one-touch key or press **Speed Dial** and use the numeric keypad to enter the two-digit speed-dial number needed. Or enter a complete telephone number as shown below using the machine's keypad.

```
Delay Transmission
1-214-403-3499
```

8. Press **Confirm/Enter**. The current date and time will be displayed. Press **Confirm/Enter** to begin the transmission immediately. Or use the numeric keypad to enter the day you want transmission to take place.

```
Delay Transmission
Date: 02, 10:30
```

9. Press **Confirm/Enter**. Use the numeric keypad to enter the hour you want transmission to take place. Remember to enter the time in 24-hour format.

```
Delay Transmission
Hour: 02, 23:30
```

10. Press **Confirm/Enter**. Then enter the minute you want transmission to take place.

```
Delay Transmission
Minute: 02, 23:55
```

11. Press **Confirm/Enter**.
If you requested transmission from memory, your fax will scan the document into memory, then display the start time of the next delayed command on the LCD's top line.

```
Feb. 02, 91    23:55
Feb. 01, 91    10:30
```

To check the number of delayed commands in memory, press **Mode/Select**. Press **Mode/Select** again to view the fax memory in use. Press **Stop** to return to standby.

Broadcasting

Delayed transmission sends your document to a single remote unit. When you use broadcasting, one command sends your document to up to 50 locations. Broadcasting can be delayed, to take advantage of late-night phone rates, or started immediately. Of the five delayed commands your fax can store, only one of them can be a delayed broadcast command.

1. To broadcast to two or more locations, insert your document into the feeder. Press **Mode/Select** to choose the transmission resolution and **Original/Cancel** to set the contrast, if desired.

```
Fax Ready
A4  Fine  Light
```

2. Press **Program, Confirm/Enter, 2**.

```
2. Delayed Broadcast
1-4 Enter/Select
```

3. Press **Confirm/Enter**.

Delayed Broadcast
Number of Pages:

4. Use the numeric keypad to enter the number of pages in your document.
Enter up to 10 pages.

Delayed Broadcast
Number of Pages: 5

5. Press **Confirm/Enter**.

Delayed Broadcast
Enter Fax Number

6. Now enter the telephone numbers for the broadcast. You can enter up to five different numbers using one-touch keys, speed-dial numbers and fax call group numbers. To enter a call group, press the pound (#) key and the group number needed.
Press **Program** between each number. A comma will appear on the LCD. In the example below, one-touch key 1, call group 3 and speed-dial number 25 are shown. Do not press **Program** after the last number.

Delayed Broadcast
[01],G3,(25)

7. When the autodialer numbers are entered, press **Confirm/Enter**. The current date and time will be displayed. If you want the broadcast to begin immediately, press **Confirm/Enter**. To create a delayed command, enter the day you want the broadcast to take place.

Delayed Broadcast
Date : 02, 14:55

8. Press **Confirm/Enter**. Enter the hour you want the broadcast to take place. Remember to enter the time in 24-hour format.

Delayed Broadcast
Hour: 02, 20:55

9. Press **Confirm/Enter**. Then enter the minute you want the broadcast to take place.

Delayed Broadcast
Minute: 02, 20:30

10. Press **Confirm/Enter**.

Your fax machine will scan the document into memory. If you requested that the broadcast begin immediately, your fax will start dialing the first fax. If you requested delayed broadcasting, the fax will display the start time of the next delayed command on the top line of the LCD.

Feb. 02, 91 20:30
Feb. 01, 91 14:55

To check the number of delayed commands in memory, press **Mode/Select**. Press **Mode/Select** again to view the amount of internal fax memory in use. Then press **Stop** to return to standby.

Broadcast Interrupt

There's no need to wait to send an urgent message just because your fax is in the middle of a broadcast: The interrupt feature lets you briefly halt the broadcast, send your important communication and resume the broadcast at the point you stopped it.

1. To interrupt a broadcast that is underway, press **Speed Dial**.
2. Your fax will complete the telephone call underway. When the call is complete, your fax will beep several times and the LCD will show that the broadcast has been temporarily halted.

** Interrupted **

3. Make sure your document is inserted in the feeder. Then enter a speed-dial number or one-touch key for your transmission. When the fax has completed your command, it will automatically resume the broadcast.

Your fax will beep for about one minute after interrupting the broadcast. If you have not started to enter your new command by the end of that minute, the fax will resume the broadcast automatically.

Call Reserve

Your fax machine's call reserve allows you to have both telephone and facsimile communication at different times during the same call. Without call reserve, your fax prevents telephone conversations after it begins fax communication.

To use this feature, the remote fax must have a similar call-reserve capability.

To reserve a call during transmission or reception:

1. While the fax is sending or receiving, press **Monitor/Call**.
At the remote fax, the telephone will ring after the transmission of each page.
If someone at the remote fax responds to the call request, your fax will ring several times.
2. When your fax rings, pick up the handset and press **Stop**. In a few seconds, the line will open.
3. Begin your conversation.

Note: To transmit after your conversation, insert a document into your fax before hanging up. At the end of your call, instruct the operator of the remote fax to press **Start**. When you hear facsimile tones, press **Start** and hang up the handset.

Responding to a Call Request

1. When a remote operator requests a voice call during fax communication, your fax will ring after each page of the document is received.
2. To answer the call request, pick up the handset and press **Monitor/Call**. When the operator responds, begin your conversation.

Multitasking

Multitasking is a true timesaver for the busy workplace: There's no need to wait for your fax to finish a transaction—such as receiving, broadcasting or group polling—before you program your next command. Just insert your document in the feeder and enter a speed-dial number or one-touch key. Then just walk away. The following LCD message will briefly appear, then your fax will complete the current fax transaction.

Command Reserved

After it has finished, your fax will execute your command.

Delayed Commands

Delayed commands can be reviewed or cancelled at any time. Your fax includes commands to print a list of the delayed commands you have entered, to print out a copy of a document you have stored for a delayed command and to cancel a delayed command and erase any pages stored in your fax for the command.

Print a List of Delayed Commands

To print a list of the delayed commands you have entered:

1. Press **Program, 0, 7.**

7. Delayed Commands
 01-10 Enter/Select

2. Press **Confirm/Enter.**

1. Print Commands
 1-3 Copy/Select

3. To print a list of delayed commands, press **Copy.**

Print a Document Stored for a Delayed Command

To print out a copy of a document you have stored in your fax for a delayed command:

1. Press **Program, 0, 7, Confirm/Enter, 2.**

2. Print Stored Doc.
 1-3 Enter/Select

2. Press **Confirm/Enter.**

Print Stored Doc.
 Command Number:

3. Refer to a printed list of your delayed commands (see above). Enter the number of the command that has the document you want to review.

Print Stored Doc.
 Command Number: 1

4. Press **Confirm/Enter.** Your document will be printed.

Delete a Delayed Command

To cancel a delayed command you have stored and to delete any documents stored in memory for that command:

1. Press **Program, 0, 7, Confirm/Enter, 3.**

```
3. Erase Commands
1-3          Enter/Select
```

2. Press **Confirm/Enter.**

```
Erase Commands
Command Number:
```

3. Refer to a printed list of your delayed commands (see above). Enter the number of the command you want to delete.

```
Erase Commands
Command Number: 1
```

4. Press **Confirm/Enter.** Your command will be deleted.

Polling

Polling lets you store a document in your fax for automatic transmission to a remote fax when that fax calls. Polling also lets you call a remote fax and retrieve a document set to be polled.

Polling is a common Group 3 fax feature and many Group 3 fax machines offer polling as an option. Your Murata fax can poll documents from any fax machine that offers polling operation.

Polling procedures can be protected with a passcode (see page 20). When you enter a passcode into your fax, only Murata-manufactured units presenting the same passcode will be allowed to poll documents from your fax.

Polling

Entering Commands

Entering information and commands into your fax is as easy as pressing a few keys.

Throughout the manual, instructions for entering commands are shown as a series of sequential keystrokes. The command for polling, for example, is shown as "**Program, 0, 2, Confirm/Enter**".

To enter this command, press the **Program** key on your fax.

Enter "0" using the numeric keypad. Then press "2" on the numeric keypad. The numeric keypad is in the center of your fax control panel and looks just like the keypad on a phone. Don't try to use the one-touch keypad... only the numeric keypad works for this purpose.

Finally, press **Confirm/Enter** and continue with the information for your command.

Use polling to retrieve documents stored in other fax machines. Polling can be started immediately, or delayed to take advantage of late-night phone rates.

1. To poll from a remote fax, press **Program, 0, 2, Confirm/Enter**.

```
1. Delayed Polling
1-3 Enter/Select
```

2. Press **Confirm/Enter**.

```
Delayed Polling
Enter Fax Number
```

3. Select a one-touch key or press **Speed Dial** and use the numeric keypad to enter the two-digit speed-dial number needed. Or enter a complete telephone number as shown below using the numeric keypad.

```
Delayed Polling
1-214-403-3499
```

4. Press **Confirm/Enter**. The current time and date will be displayed. Press **Confirm/Enter** to begin polling immediately. Or use the numeric keypad to enter the day you want polling to take place and press **Confirm/Enter**.

```
Delayed Polling
Date:      03, 14:55
```

5. Enter the hour you want delayed polling to take place. Remember to enter the time in 24-hour format.

```
Delayed Polling
Hour:      03, 23:55
```

6. Press **Confirm/Enter**. Enter the minute.

```
Delayed Polling
Minute:    03, 23:30
```

7. Press **Confirm/Enter**.

If you requested that polling begin immediately, your fax will start dialing. If you programmed delayed polling, the fax will display the start time of the next delayed command on the top line of the LCD.

```
Feb 03, 91      23:30
Feb.02, 91      14:55
```

To check the number of delayed commands in memory, press **Mode/Select**. Then press **Stop** to return to standby.

Sequential Polling

Sequential polling is ideal when a central fax must retrieve information from several remote units. A fax in a central sales office, for example, can be used to poll daily sales figures from up to 50 locations using the sequential polling command and a pre-programmed call group.

Of the five delayed commands your fax machine offers, only one can be a delayed sequential polling command.

1. To begin sequential polling, press **Program, 0, 2, Confirm/Enter, 2**.

```
2. Sequential Polling
1-3 Enter/Select
```

2. Press **Confirm/Enter**.

```
Sequential Polling
Enter Fax Number
```

3. Now enter up to five telephone numbers. You can use one-touch keys, speed-dial numbers and call group numbers. To enter a call group, press the pound (#) key and the group number needed. Press **Program** between numbers. In the example below, one-touch key 1, call group 3 and speed-dial number 25 are entered.

```
Sequential Polling
[01],G3,(25)
```

Note: It is not necessary to press **Program** after you've entered the last number.

4. Press **Confirm/Enter**. The current date and time will be displayed. Press **Confirm/Enter** to begin polling immediately. Or use the numeric keypad to enter the day you want polling to take place.

```
Sequential Polling
Date:      03, 14:55
```

5. Press **Confirm/Enter**. Then enter the hour you want polling to take place. Remember to enter the time in 24-hour format.

```
Sequential Polling
Hour:      03, 23:55
```

6. Press **Confirm/Enter**. Enter the minute you want polling to take place.

```
Sequential Polling
Minute: 03, 23:30
```

7. Press **Confirm/Enter**.

If you requested that polling begin immediately, your fax will start dialing. If you requested delayed polling, the fax will display the start time of the next delayed command on the top line of the LCD.

Feb. 03, 91	23:30
Feb. 02, 91	14:55

To check the number of delayed commands in memory, press **Mode/Select**. Then press **Stop** to return to standby.

Store Documents for Polling

Your fax lets you store a document for polling in internal memory or leave it in the feeder to be retrieved by a remote unit. If you store the document in memory, you can print the document out for review at any time without erasing it from memory. After your document is polled from memory by a remote fax, it is erased automatically and cannot be polled by a later caller.

Your fax can store one document—in either the document feeder or internal memory—for polling.

Remember that the optional passcode (see page 20) can be used to protect a document set for polling from unauthorized access.

1. Insert your document into the feeder. Press **Mode/Select** to choose the resolution and **Original/Cancel** to set the contrast, if desired.
2. Then press **Program, 0, 2, Confirm/Enter, 3**.

3. Input Polling Doc 1-3 Enter/Select
--

3. Press **Confirm/Enter**.

1. Input Polling Doc 1-3 Enter/Select
--

4. Press **Confirm/Enter**.

Memory Transmission Enter/Select

5. Press **Confirm/Enter** to store the document in memory. Press **Mode/Select** to leave the document in the feeder. Storing the document in memory leaves the feeder free for other uses. Polling from the feeder ties up the feeder until the document is retrieved by a remote unit.

Input Polling Doc Number of Pages:

6. Use the numeric keypad to enter the number of pages in the document. Enter up to 10 pages.

Input Polling Doc # of Pages: 5

7. Press **Confirm/Enter**. If you decided to store the document in memory, your fax will scan the document and return to standby. If you left the polling document in the feeder, your fax can receive fax messages as usual

and complete delayed commands already in memory, but cannot be used to scan in or copy another document until the polling document has been retrieved.

While the polling document is in the feeder or internal memory, your fax will briefly flash in the standby mode.

```
Poll
A4  Norm      14:55
```

After the document has been polled, your LCD will return to its normal display.

Erase Document

1. To erase a document stored in memory for polling, press **Program, 0, 2, Confirm/Enter, 3**.

```
3. Input Polling Doc
1-3 Enter/Select
```

2. Press **Confirm/Enter, 2**.

```
2. Erase Polling Doc
1-3 Select/Cancel
```

3. Press **Original/Cancel** to erase the document in memory.

```
Erase Polling Doc.
** Erased **
```

To remove a document set for polling in the document feeder, press **Stop**.

Print Document

1. To print a document stored for polling without erasing it from memory, press **Program, 0, 2, Confirm/Enter, 3**.

```
3. Input Polling Doc
1-3 Enter/Select
```

2. Press **Confirm/Enter, 3**.

```
Print Polling Doc
1-3 Copy/Select
```

3. Press **Copy** to print the document in memory.

```
Print Polling Doc
** Printing **
```

Multitasking

Multitasking is a true timesaver for the busy workplace: There's no need to wait for your fax to finish a transaction—such as receiving, broadcasting or group polling—before you program your next command. Just insert your document in the feeder and enter a speed-dial number or one-touch key. Then just walk away. The following

LCD message will briefly appear, then your fax will complete the current fax transaction.

Command Reserved

After it has finished the current command, your fax will execute your new command.

Delayed Commands

Delayed commands can be reviewed or cancelled at any time. Your fax includes commands to print a list of the delayed commands you have entered, to print out a copy of a document you have stored for a delayed command or polling and to cancel a delayed command and erase any pages stored in your fax for the command.

Print a List of Delayed Commands

To print a list of the delayed commands you have entered:

1. Press **Program, 0, 7.**

7. Delayed Commands
01-10 Enter/Select

2. Press **Confirm/Enter.**

1. Print Commands
1-3 Copy/Select

3. To print a list of delayed commands, press **Copy.**

Delete a Delayed Command

To cancel a delayed command you have stored:

1. Press **Program, 0, 7, Confirm/Enter, 3.**

3. Erase Commands
1-3 Enter/Select

2. Press **Confirm/Enter.**

Erase Commands
Command Number:

3. Refer to a printed list of your delayed commands (see above). Enter the number of the command you want to delete.

Erase Commands
Command Number: 1

4. Press **Confirm/Enter.** Your command will be deleted.

Autodialer

Your fax stores up to 50 telephone numbers—30 speed-dial and 20 one-touch—in a battery-protected autodialer. For fax or voice calls, the fax puts your most-needed telephone numbers just a touch away.

Your fax also offers a special **Tone** key needed for some special dialing requirements on rotary telephone systems. If your telephone system requires rotary dialing signals, see page 66.

Enter Speed-Dial Numbers

Entering Commands

Entering information and commands into your fax is as easy as pressing a few keys.

Throughout the manual, instructions for entering commands are shown as a series of sequential keystrokes. The command to store a speed-dial number, for example, is shown as "**Program, 0, 5, Confirm/Enter**".

To enter this command, press the **Program** key on your fax.

Enter "0" using the numeric keypad. Then press "5" on the numeric keypad. The numeric keypad is in the center of your fax control panel and looks just like the keypad on a phone. Don't try to use the one-touch keypad... only the numeric keypad works for this purpose.

Finally, press **Confirm/Enter** and continue with the information for your command.

The 30 speed-dial numbers available for your fax are represented by the two-digit numbers 01 to 30 on your dialing keypad.

1. To enter a speed-dial number, press **Program, 0, 5, Confirm/Enter**.

```
1. Set Speed Dial
1-3 Enter/Select
```

2. Press **Confirm/Enter**.

```
Speed Dial 01 to 30
Select and Press
```

3. Use the numeric keypad to enter the number of the speed-dial number you want to program. Remember to enter speed-dial numbers below 10 in two-digit form: 01, 02, 03, etc.

```
(01)
```

4. Then press **Confirm/Enter**.

```
(01) = No Stored
Enter/Select
```

5. Press **Confirm/Enter** and use the numeric keypad to begin entering the telephone number needed. Your speed-dial number can include up to 40 characters.

```
(01) Tel Number
9-/1-214-403
```

6. To insert a dialing pause in the telephone number, press **Pause**. A hyphen and slash, "-", will appear on the LCD. When your fax finds this combination while dialing, it will pause before completing the number. This pause may be needed on branch telephone systems and on other systems that

require you to dial "9" to reach an outside line. See page 27 for information on controlling the length of the pause.

7. To insert a dash in the speed-dial number, press the dash key on the fax control panel. Adding a dash makes your numbers easier to read on reports and in the printed telephone directories, but does not change the way your unit dials the number.

```
(01) Tel Number
9-/1-214-403-3499
```

8. When the telephone number is entered, press **Confirm/Enter**.

```
(01)=Location ID
Enter/Select
```

9. Press **Confirm/Enter** to enter a Location ID for the number just entered. The Location ID, a word or name up to 12 characters long, appears on the printed telephone directory your unit provides, and makes finding the right number fast and easy.

```
_ ABCDEFGHIJ. 00
```

10. Use the arrow keys to highlight the first character of the Location ID. Then press **Confirm/Enter**.

```
KLMNOPQRST. 01
M
```

11. Continue using arrow keys and **Confirm/Enter** to enter the Location ID. When complete, press **Program**.

```
(01)=Group Number
Enter/Select
```

12. If you do not want to include this speed-dial number in a call group, press **Mode/Select** and go to step 15. To enter the number in a call group, press **Confirm/Enter**. Call groups are used in broadcasting and sequential polling to speed fax communication with many remote units.

```
(01) Group Number
```

13. Use the numeric keypad to enter the call group or groups this speed-dial number should appear in. Your fax offers up to five call groups, numbered 1 to 5. If entering more than one group number, press **Program** between numbers. A comma will appear on the LCD between group numbers.

```
(01) Group Number
1,3,4
```

Note: It is not necessary to press **Program** after you've entered the last group number.

14. When you have selected all the groups this speed-dial number should appear in, press **Confirm/Enter**.

Speed Dial 01 to 30
Select and Press

15. Use the numeric keypad to select the next speed-dial number you want to enter, or press **Stop** to return to standby.

After a speed-dial number has been entered, you can easily modify the telephone number, Location ID or group numbers programmed: Just repeat the steps above. When the information you want to change is displayed on the LCD, press **Original/Cancel**. The information programmed will be deleted and you can enter new information as shown above.

Erase Speed-Dial

Use this feature to delete *all* speed-dial information from your autodialer.

1. To erase all speed-dial numbers from the autodialer, press **Program, 0, 5, Confirm/Enter, 2**.

2. Erase Speed-Dial
1-3 Select/Cancel

2. Press **Original/Cancel**.

Erase Speed-Dial
Sure? Select/Cancel

3. Press **Original/Cancel** to delete the information. Press **Mode/Select** or **Stop** to prevent the deletion and to return to standby with all information intact.

Print Speed-Dial

Keep a printed list of your speed-dial numbers nearby for reference. The printed listing includes the speed-dial number, Location ID, telephone number and group number.

1. To print the telephone directory, press **Program, 0, 5, Confirm/Enter, 3**.

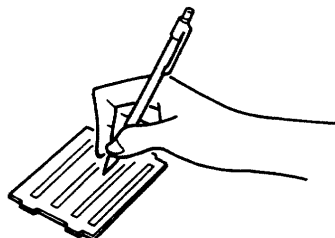
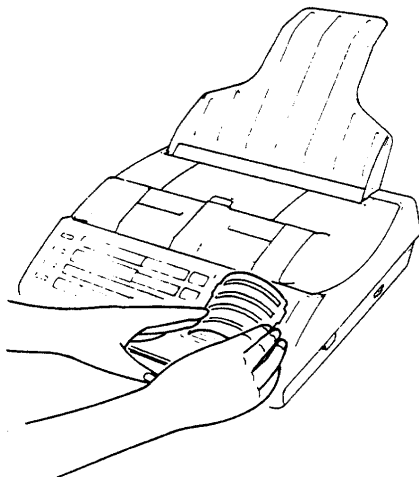
3. Print Speed-Dial
1-3 Copy/Select

2. Press **Copy**.

Print Speed Dial
** Printing **

One-Touch Keys

The 20 one-touch keys available in your fax are labelled **01 to 15** and **P1 to P5**. Use the setting below to enter telephone numbers for one-touch keys **01 to 15**. See the section on programmable one-touch keys (see page 58) for information on entering keys **P1 to P5**.



Your one-touch keypad includes a handy insert you can use to identify the one-touch keys you store.

1. To enter a one-touch number, press **Program, 0, 4, Confirm/Enter**.

1. Enter One-Touch
1-3 Enter/Select

2. Press **Confirm/Enter**.

One-Touch 1 to 15
Select and Press

3. Press the one-touch key you want to program.

[01]= Not Stored
Enter/Select

4. Press **Confirm/Enter** and use the numeric keypad to begin entering the telephone number needed. Your telephone number can include up to 40 characters, including dashes, "-", to simplify viewing the numbers on reports and directories.

[01] Tel Number
9-/1-214-403

5. To insert a dialing pause in the telephone number, press **Pause**. A hyphen and slash, "-", will appear on the LCD. When your fax finds this combination while dialing, it will pause before completing the number. This pause may be needed on branch telephone systems and on other systems that require you to dial "9" to reach an outside line. See page 27 for information on controlling the length of the pause.

[01] Tel Number
9-/1-214-403-3499

7. When the telephone number is completely entered, press **Confirm/Enter**.

[01]=Location ID
Enter/Select

8. Press **Confirm/Enter** to enter a Location ID for the number you just entered. The Location ID, a word or name up to 12 characters long, appears on your printed telephone directory to make finding the right number fast and easy.

_ ABCDEFGHIJ. 00

9. Use the up, down, left and right arrow keys to highlight the first character of the Location ID. Then press **Confirm/Enter**.

```

KLMNOPQRST.   01
M

```

10. Continue using arrow keys and **Confirm/Enter** to enter the Location ID. When complete, press **Program**.

```

[01]=Group Number
Enter/Select

```

11. If you do not want to include this one-touch key in a telephone call group, press **Mode/Select** and go to step 14. To enter the number in a call group, press **Confirm/Enter**. Call groups are used in broadcasting and sequential polling to speed fax communication with many remote units.

```

[01] Group Number

```

12. Use the numeric keypad to enter the call group or groups this one-touch key should appear in. Your fax offers up to five call groups, numbered 1 to 5. If entering more than one group number, press **Program** between numbers. A comma will appear on the LCD between group numbers.

```

[01] Group Number
1,3,4

```

Note: It is not necessary to press **Program** after you've entered the last number.

13. When you have selected all the groups this one-touch key should appear in, press **Confirm/Enter**.

```

One-Touch 1 to 15
Select and Press

```

14. Select the next one-touch key to enter, or press **Stop** to return to standby. After a one-touch key has been entered, you can easily edit or modify the telephone number, Location ID or group numbers you programmed: Just repeat the steps above. When the information you want to change is displayed in the LCD, press **Original/Cancel**. The information programmed will be deleted and you can enter new information as shown above.

Erase One-Touch

Use this setting to delete *all* one-touch telephone numbers from your autodialer and erase the Location ID and group numbers assigned to each number.

1. Press **Program**, **0**, **4**, **Confirm/Enter**, **2**.

```

2. Erase One-Touch
1-3 Select/Cancel

```

2. Press **Original/Cancel**.

```

Erase One-Touch
Sure?      Select/Cancel

```

3. To erase all one-touch information, press **Original/Cancel**. Press **Mode/Select** to prevent the erasure and return to standby.

Print One-Touch

Keep a printed list of your one-touch keys nearby. The printed listing shows each one-touch key, Location ID, telephone number and group number you have stored.

1. To print the directory, press **Program, 0, 4, Confirm/Enter, 3**.

3. Print One-Touch
1-3 Copy/Select

2. Press **Copy**.

Special Programmable Keys

Five of the one-touch keys on your fax, **P1** through **P5**, can be used as standard one-touch keys or as special programmable keys, to put the most powerful multi-step operations just a fingertip away.

These programmable one-touch keys are great when you have a frequent need for special functions. If your office must transmit reports to several locations every day, for example, just program one of your programmable one-touch keys for delayed broadcast to those locations. Then each day just insert your document, press the programmable one-touch and walk away: The fax will remember your instructions and send the report to each location at the time you specified.

You can program delayed transmission, broadcast, polling and sequential polling commands as shown on the following pages. If you don't need these special options, you can use these keys for standard one-touch transmission (see page 63).

Program One-Touch

Use the setting below to reduce multi-step instructions to a single keystroke. The first five steps to program any of these special keys are the same regardless of the command—delayed transmission, broadcast, polling or sequential polling—you need. The remaining steps will vary depending on the particular command you need. The first five steps appear below. Steps 6 and beyond for each command appear on the pages that follow.

1. To enter a programmable function, press **Program, 0, 9, Confirm/Enter, 2**.

2. Program One-Touch
1-5 Enter/Select

2. Press **Confirm/Enter**.

Program Key P1 to P5
Select and Press

3. Use the one-touch keypad to select the programmable key (shown as **P1** through **P5** on the one-touch keypad) you want to modify.

[P1]= Not Stored
Enter/Select

4. Press **Confirm/Enter**.

1. Delay Transmission
1-7 Enter/Select

5. Now press **Mode/Select** to choose the type of command you need. Transmission, broadcast, polling and sequential polling will appear on your LCD as you press **Mode/Select** to scroll through the commands available.

If you select	See page
Transmission	59
Broadcast	60
Polling	61
Sequential polling	62

Transmission

For more information of the uses and benefits of delayed transmission, see page 41. Steps 1 through 5 appear on page 58.

1. Delay Transmission
1-4 Enter/Select

6. Press **Confirm/Enter**.

Memory Transmission
Enter/Select

7. If you want the transmission to take place from the document feeder, press **Mode/Select**. If you want transmission from memory, press **Confirm/Enter**.

Delay Transmission
Number of Pages:

8. If your programmable command will be used to send the same number of pages every time—like a standardized three-page sales report—use the numeric keypad to enter the number of pages you will send. To send a different number of pages each time, just press **Confirm/Enter**. This tells your fax to accept a different number of pages every time.

9. Press **Confirm/Enter**.

Delay Transmission
Enter Fax Number

10. Select a one-touch key or press **Speed Dial** and enter the two-digit

speed-dial number needed. Or enter a complete telephone number as shown below using the numeric keypad.

1-214-403-3499

11. Press **Confirm/Enter**. The current time will be displayed.

Delay Transmission
Hour: 14:55

12. If you want the programmable function to begin whenever you press the one-touch key, press **Confirm/Enter** without changing the time on the LCD. This tells your fax that the programmable function shouldn't be held for a particular time of day.

If you want the programmable function to take place at a specific time, like after business hours when telephone rates are lower, use the numeric keypad to enter a specific hour for the command. Then press **Confirm/Enter** and enter the minute. Remember that your fax tracks time in 24-hour format, so hours after noon are represented by numbers greater than 12. The example below shows 10:30 p.m.

Delay Transmission
Minute: 22:30

13. When the time has been entered, press **Confirm/Enter**.

Delayed Broadcast

For more information on the uses and benefits of delayed broadcasting, see page 42. Steps 1 through 5 appear on page 58.

2. Delayed Broadcast
1-4 Enter/Select

6. Press **Confirm/Enter**.

Delayed Broadcast
Number of Pages:

7. If your programmable command will be used to broadcast the same number of pages every time—like a standard two-page pricing update—use the numeric keypad to enter the number of pages you will send. To send a different number of pages each time, just press **Confirm/Enter**. This tells your fax to accept a different number of pages every time.

Delayed Broadcast
Enter Fax Number

8. Enter the telephone numbers for the locations to which you will broadcast using your pre-programmed one-touch keys, speed dial-numbers and call groups. Press **Speed Dial** and use the numeric keypad to enter a two-digit speed-dial code. Press the pound key (#) and a single-digit number to enter a call group. Or press a one-touch key. You can enter

up to five numbers for the broadcast. Press **Program** between numbers. The sample below shows speed-dial number 1, call group 4 and one-touch key 2.

```
Delayed Broadcast
(01),G4,[02]
```

Note: It is not necessary to press **Program** after you've entered the last number.

9. When you have entered the telephone numbers for the broadcast, press **Confirm/Enter**. The current time will be displayed.

```
Delayed Broadcast
Hour:      14:55
```

10. If you want the programmable function to begin whenever you press the one-touch key, press **Confirm/Enter** without changing the time on the LCD. This tells your fax that the programmable function shouldn't be held for a particular time of day.

If you want the programmable function to take place at a specific time, like after business hours when telephone rates are lower, use the numeric keypad to enter a specific hour for the command. Then press **Confirm/Enter** and enter the minute. Remember that your fax tracks time in 24-hour format, so hours after noon are represented by numbers greater than 12. The example below shows 11:45 p.m.

```
Delayed Broadcast
Minute:    23:45
```

11. When the time has been entered, press **Confirm/Enter**.

Delayed Polling

For more information on the uses and benefits of polling, see page 47.

Steps 1 through 5 appear on page 58.

```
3. Delayed Polling
1-4 Enter/Select
```

6. Press **Confirm/Enter**.

```
Delayed Polling
Enter Fax Number
```

7. Enter one telephone number for the location you will poll. You can press **Speed Dial** and enter a two-digit code or press a one-touch key. You can also enter a complete telephone number using the numeric keypad, as shown below.

```
Delayed Polling
1-214-403-3499
```

8. When the telephone number for the remote unit has been entered, press **Confirm/Enter**. The current time will be displayed.

```
Delayed Polling
Hour: 14:55
```

9. If you want the polling operation to begin whenever you press the one-touch key, press **Confirm/Enter** without changing the time shown on the LCD. This tells your fax that the programmable function shouldn't be held for a particular time of day.

If you want the programmable function to take place at a specific time, like after business hours when telephone rates are lower, use the numeric keypad to enter a specific hour for the command. Then press **Confirm/Enter** and enter the minute. Remember that your fax tracks time in 24-hour format, so hours after noon are represented by numbers greater than 12. The example below shows 10:15 p.m.

```
Delayed Polling
Minute: 22:15
```

10. When the time has been entered, press **Confirm/Enter**.

```
Delayed Polling
** Completed **
```

Sequential Polling

For more information on the uses and benefits of sequential polling, see page 48.

Steps 1 through 5 appear on page 58.

```
4. Sequential Polling
1-4 Enter/Select
```

6. Press **Confirm/Enter**.

```
Sequential Polling
Enter Fax Number
```

7. Enter the telephone numbers for the locations from which you will poll. You can enter up to five different numbers for the polling operation, and can choose from your pre-programmed speed-dial numbers, one-touch keys and call groups. The sample LCD below shows speed-dial number 1, call group 3, and a one-touch key 8.

```
Sequential Polling
(01),G3,[08]
```

Note: It is not necessary to press **Program** after you've entered the last number.

8. When the telephone numbers have been entered, press **Confirm/Enter**. The current time will be displayed.

```
Sequential Polling
Hour: 14:55
```

9. If you want the polling operation to begin whenever you press the one-touch key, press **Confirm/Enter** without changing the time shown on the LCD. This tells your fax that the programmable function shouldn't be held for a particular time of day.

If you want the programmable function to take place at a specific time, like after business hours when telephone rates are lower, use the numeric keypad to enter a specific hour for the command. Then press **Confirm/Enter** and enter the minute. Remember that your fax tracks time in

24-hour format, so hours after noon are represented by numbers greater than 12. The example below shows 9:25 p.m.

```
Sequential Polling
Minute:      21:25
```

10. When the time has been entered, press **Confirm/Enter**.

One-Touch Transmission

If you do not plan to use **P1** through **P5** for special programmable functions, use the setting below to use them as standard one-touch keys for immediate one-touch transmission and telephone dialing.

1. Press **Program, 0, 9, Confirm/Enter**.

```
1. Enter One-Touch
1-5 Enter/Select
```

2. Press **Confirm/Enter**.

```
Program Key P1 to P5
Select and Press
```

3. Press the desired one-touch key.

```
[P1]= Not Stored
Enter/Select
```

4. Press **Confirm/Enter** and use the numeric keypad to begin entering the telephone number you want to store. The telephone number can include up to 40 characters.

```
[P1] Tel Number
9-/1-214-403
```

5. To insert a dialing pause in the telephone number, press **Pause**. A hyphen and slash, "-", will appear on the LCD. When your fax finds this combination while dialing, it will pause before completing the number. See page 27 for information on controlling the length of the pause.

6. To insert a dash in the number, press the dash key on the fax keypad. Adding a dash makes your numbers easier to read in the printed telephone directories, but does not change the way your unit dials the number.

```
[P1] Tel Number
9-/1-214-403-3499
```

7. When the telephone number is entered, press **Confirm/Enter**.

```
[P1]=Location ID
Enter/Select
```

8. Press **Confirm/Enter** to enter a Location ID for the number just entered. The Location ID, a word or name up to 12 characters long, appears on

the printed telephone directory to make finding the right number fast and easy.

```

_ ABCDEFGHIJ.    00
  
```

9. Use the arrow keys to highlight the first character of the Location ID. Then press **Confirm/Enter**.

```

KLMNOPQRST.    01
M
  
```

10. Continue using arrow keys and **Confirm/Enter** to enter the Location ID. When complete, press **Program**.

```

[P1]= Group Number
      Enter/Select
  
```

11. If you do not want to include this key in a call group, press **Mode/Select** and go to step 14. To enter the number in a call group, press **Confirm/Enter**. Call groups are used in broadcasting and sequential polling to speed fax communication with many remote units.

```

[P1] Group Number
  
```

12. Use the numeric keypad to enter the call group or groups this key should appear in. The fax offers up to five call groups, numbered 1 to 5. Press **Program** between numbers. A comma will appear on the LCD between group numbers.

```

[P1] Group Number
1, 3, 4
  
```

Note: It is not necessary to press **Program** after you've entered the last number.

13. When you have selected all the groups this one-touch key should appear in, press **Confirm/Enter**.

```

Program Key P1 to P5
      Select and Press
  
```

14. Select the next one-touch key to enter, or press **Stop** to return to standby.

After a key has been entered, you can modify the telephone number, Location ID or group numbers programmed by repeating these steps. When the information you want to change is displayed, press **Original/Cancel**. The information programmed will be deleted and you can enter new information as shown above.

Erase Programmable One-Touch Keys

Use these settings to erase programmable one-touch keys.

To erase programmable keys being used for standard one-touch transmission:

1. Press **Program, 0, 9, Confirm/Enter, 3**.

```

3. Erase One-Touch
1-5 Enter/Cancel
  
```

2. Press **Original/Cancel**.

```

Erase One-Touch
Sure?      Select/Cancel

```

3. Press **Original/Cancel** to delete one-touch transmission information.
Press **Mode/Select** to return to standby without deleting the information.

To erase programmable keys used for programmable one-touch functions:

1. Press **Program, 0, 9, Confirm/Enter, 4.**

```

4. Erase Pr. One-Touch
1-5 Enter/Cancel

```

2. Press **Original/Cancel**.

```

Erase Pr. One-Touch
Sure?      Select/Cancel

```

3. Press **Original/Cancel** to delete programmable one-touch information.
Press **Mode/Select** to return to standby without deleting the information.

Print Programmable One-Touch Keys

Keep a report of your programmable one-touch keys nearby for handy reference. The printed report lists each key in use and the transmission or programmable one-touch function assigned to it.

1. To print a list of programmable one-touch keys in use, press **Program, 0, 9, Confirm/Enter, 5.**

```

5. Print Pr. One-Touch
1-5 Copy/Select

```

2. Press **Copy** to print the report.

```

Print Pr. One-Touch
** Printing **

```

Tone Key and Rotary-Dial Systems

When you selected the phone line type for your fax (see page 19), you instructed it to use either tone or rotary signals when dialing.

If your local telephone system or phone line requires rotary dialing signals but your long-distance company requires tone access codes, your fax machine's **Tone** key lets you mix both types of signals in your one-touch or speed-dial numbers.

*Use of the **Tone** key is not necessary on tone telephone systems.*

1. To switch from rotary to tone dialing signals, begin entering your telephone number as a one-touch, speed-dial or programmable one-touch key as shown on the pages above. A one-touch key is shown below as an example:

```
[01] Tel. Number  
1-214-403-3499
```

2. When you reach the point at which you must switch to tone signals, enter a dialing pause, "-/". Then press **Tone**. A dash and exclamation point will appear on your screen.

```
[01] Tel. Number  
1-214-403-3499-/-!
```

3. Now enter the numbers that must be dialed using tone signals. Although your LCD displays just 20 characters, you can enter up to 40 characters.

```
[01] Tel. Number  
214-403-3499-/-!1234
```

4. Finish entering the one-touch, speed-dial or programmable one-touch key. In use, your fax will dial the first part of the telephone number (in this example, "1-214-403-3499") with rotary signals, then pause and switch to tone signals for the rest of the number ("1234" in the example above).

Software Switches

Some special features in your fax are available by selecting soft dip switches—on/off switches in the software.

Use care when making these settings, because it is possible to change or prevent proper fax operation with an incorrect switch setting. If you think you made an incorrect setting, call the Murata Customer Support Center (see page 87). You can also use the clear memory command (see page 30) to instantly return all dip switches to their factory settings, but this command deletes all user information—like your TTI, Subscriber ID and autodialer entries—from your unit's memory.

Include TTI Within Document

Entering Commands

Throughout this manual, instructions for entering commands are shown as a series of sequential keystrokes. The command to modify soft dip switches, for example, starts with "**Program, *, 2, Confirm/Enter**".

To enter this command, press the **Program** key on your fax.

Enter an asterisk, "*", using the numeric keypad. The asterisk is at the lower left-hand corner of the keypad, just below the number "7". Then press "2" on the numeric keypad.

Finally, press **Confirm/Enter** and continue with the information for your command.

Many times, when you include a TTI on the pages you transmit, the length of the received pages printed by the remote thermal fax machine will slightly exceed 11 inches. The extra length accommodates your TTI at the top of the page.

If you often transmit to a plain-paper fax machine that uses letter-sized pages, however, you may want to make sure the remote fax doesn't print an extra full page to accommodate the extra page-length caused by your TTI.

When the Include TTI setting below is turned on, your fax cuts 1/8 inch off the top of your pages to ensure an extra page is not printed by remote plain-paper fax machines.

Note: You can use this feature as a courtesy to the owners of the plain-paper fax machines you send to, but remember that any image or writing included on the top 1/8 inch of your page will be deleted.

1. Press **Program, *, 2**.

```
Set Parameter
Enter/Select
```

2. Press **Confirm/Enter**.

```
Set Parameter
SOFT DIP 0 00000000
```

3. Press **Mode/Select** 1 time to reach dip switch 1.

```
Set Parameter
SOFT DIP 1 00000000
```

4. Press the right arrow 1 time.
5. Enter a "1" using the numeric keypad.

```
Set Parameter
SOFT DIP 1 01000000
```

5. Press **Confirm/Enter**.

```
Set Parameter
SOFT DIP 2 10100000
```

6. Press **Stop** to return to standby.

To return to the factory setting, enter a "0" in step 5 above.

Cancel TTI

Your Transmit Terminal Identifier and Subscriber ID normally appear at the top of each document you send. Use the software setting below to transmit documents without these features.

1. Press **Program**, *, 2.

```
Set Parameter
Enter/Select
```

2. Press **Confirm/Enter** 3 times to reach dip switch 2.

```
Set Parameter
SOFT DIP 2 10100000
```

3. Enter a "0" using the numeric keypad.

```
Set Parameter
SOFT DIP 2 00100000
```

5. Press **Confirm/Enter**.

```
Set Parameter
SOFT DIP 3 11010000
```

6. Press **Stop** to return to standby.

To transmit documents with the TTI on, enter a "1" in step 3 above.

Unlimited Page Length: Reception

A sensor in your fax stops reception if it ever detects a single page longer than about 10 feet. This sensor is designed to detect paper jams at remote fax machines that transmit to your unit. These jams could cause you to waste paper and tie up your fax machine's telephone line.

If you must receive very long uncut pages, like medical strip charts or water well logs, use the setting below to disable this sensor.

1. Press **Program**, *, 2.

```
Set Parameter
Enter/Select
```

2. Press **Confirm/Enter** 4 times to reach dip switch 3.

```
Set Parameter
SOFT DIP 3 11010000
```

3. Enter a "0" using the numeric keypad.

```
Set Parameter
SOFT DIP 3 01010000
```


4. Press **Confirm/Enter**.

```

Set Parameter
SOFT DIP 4 00000000

```

5. Press **Stop** to return to standby.

To return to the factory setting, enter a "1" in step 3 above.

Unlimited Page Length: Transmission

Your fax can transmit individual pages up to 35 inches long. If you must transmit very long unbroken pages, like medical strip charts or water well logs, use the setting below to disable your fax machine's paper-jam sensor.

1. Press **Program**, *, 2.

```

Set Parameter
Enter/Select

```

2. Press **Confirm/Enter** 4 times to reach dip switch 3.

```

Set Parameter
SOFT DIP 3 11010000

```

3. Press the right arrow key once.

```

Set Parameter
SOFT DIP 3 11010000

```

4. Enter a "0" using the numeric keypad.

```

Set Parameter
SOFT DIP 3 10010000

```

5. Press **Confirm/Enter**.

```

Set Parameter
SOFT DIP 4 00000000

```

6. Press **Stop** to return to standby.

To return to the factory setting, enter a "1" in step 4 above.

Switch-to-Fax Signals

The switch-to-fax feature lets you transfer an incoming fax call from the phone physically connected to the "Phone 2" jack back to the fax for printing (see page 34). Your unit initially requires you to press "6" two times on the phone handset.

Although it is unlikely, it is possible for the human voice to duplicate the tone signal frequencies of the "6" on your handset. If this happens, your fax could disconnect the line during communication. Changing the setting below requires you to press "6" four times to send a call back to the fax, making accidental disconnection unlikely.

1. Press **Program**, *, 2.

```

Set Parameter
Enter/Select

```

2. Press **Confirm/Enter** 19 times to reach dip switch I.

```
Set Parameter
SOFT DIP I 00001000
```

3. Press the right arrow key 5 times.

```
Set Parameter
SOFT DIP I 00001000
```

4. Enter a "1" using the numeric keypad.

```
Set Parameter
SOFT DIP I 00001100
```

5. Press **Confirm/Enter**.

```
Set Parameter
SOFT DIP J 00000000
```

6. Press **Stop** to return to standby.

To return to the factory setting, enter a "0" in step 5 above.

Select Auto Answer by Telephone

If you forget to set your fax to automatic answer when you leave the office, the feature below lets you call from any telephone in the world and turn the auto receive function on.

To make use of this option, follow the steps below. Then, if you forget to choose automatic answer, just call your fax machine from any phone and let your fax ring 22 or more times. Your fax will switch over so it answers later calls automatically.

1. Press **Program, *, 2**.

```
Set Parameter
Enter/Select
```

2. Press **Confirm/Enter** 26 times to reach dip switch P.

```
Set Parameter
SOFT DIP P 00100110
```

3. Press the right arrow key 3 times.

```
Set Parameter
SOFT DIP P 00100110
```

4. Enter a "1" using the numeric keypad.

```
Set Parameter
SOFT DIP P 00110110
```

5. Press **Confirm/Enter**.

```
Set Parameter
SOFT DIP Q 00000000
```

6. Press **Stop** to return to standby.

To return to the factory setting, enter a "0" in step 4 above.

Print Counter

This setting lets you keep track of the number of documents your fax has printed, scanned, transmitted and copied.

When this feature is turned on, this additional information appears on your journal:

- ◆ An "S" (Scan) appears on your Transmit Journal. This records the number of pages that pass through the scanner, including pages you transmit and pages you scan in for memory transmission.
- ◆ A "T" (Transmit) represents the number of pages you have transmitted.
- ◆ An "R" (Receive) keeps track of received pages.
- ◆ A "P" (Print) will appear on your Receive Journal, and shows the total number of pages printed, including transmissions, copies, Activity Journals and confirmation reports.

These numbers will reset to zero when you clear your machine's memory or when the number 50,000 is reached.

To turn the print counter on:

1. Press **Program**, *, **2**.

Set Parameter
Enter/Select

2. Press **Confirm/Enter** 28 times to reach dip switch R.

Set Parameter
SOFT DIP R 00100000

3. Enter a "1" using the numeric keypad.

Set Parameter
SOFT DIP R 10100000

4. Press **Confirm/Enter**.

Set Parameter
SOFT DIP S 00101010

5. Press **Stop** to return to standby.

To return to the factory setting, enter a "0" in step 3 above.

Rotary Dialing Signals

Your fax machine's autodialer initially produces tone dialing signals. If your phone system requires rotary signals, use the setting on page 19 to select the rotary option.

Your fax initially provides rotary signals at 10 pulses per second. If your telephone system requires 20 pps signals, use the setting below.

1. Press **Program**, *, **1**.

Set Parameter
Enter/Select

2. Press **Confirm/Enter**.

```
Set Parameter
SYS DIP 1 00000000
```

3. Press the right arrow key 3 times.

```
Set Parameter
SYS DIP 1 00000000
```

4. Enter a "1" using the numeric keypad.

```
Set Parameter
SYS DIP 1 00010000
```

5. Press **Confirm/Enter**.

```
Set Parameter
SYS DIP 2 00000000
```

6. Press **Stop** to return to standby. To return to the factory setting, enter a "0" in step 4.

Set Scanner Width

Your fax machine's default setting for B4-width scanning is 9.9 inches.

You can change the B4 default setting from 9.9 to 10.1 inches if you wish. To change the B4 setting from 9.9 to 10.1 inches:

1. Press **Program, *, 1, Confirm/Enter**.

```
Set Parameter
SYS DIP 1 00000000
```

2. Press **Mode/Select** two times.

```
Set Parameter
SYS DIP 3 10001000
```

3. Enter a "0" using the numeric keypad.

```
Set Parameter
SYS DIP 3 00001000
```

4. Press **Confirm/Enter**.

```
Set Parameter
SYS DIP 4 00001100
```

5. Press **Stop** to return to standby.

Activity Journal

Just as a checkbook records your daily financial transactions, your Activity Journal records daily fax activities, allowing you to keep track of your important communications.

Your 25 most recent transmissions and receptions print as two separate journals, either automatically or any time you wish. Information on the Activity Journal includes transmission mode, number of pages sent, result and any error messages encountered.

Entering Commands

Throughout this manual, instructions for entering commands are shown as a series of sequential keystrokes. The command to print your Activity Journal, for example, is shown as "**Program, 0, 6, Copy**".

To enter this command, press the **Program** key on your fax.

Enter "0" using the numeric keypad. Then press "6" on the numeric keypad.

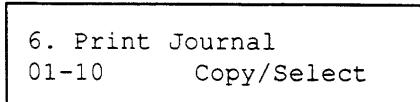
Then press **Copy**. Your journal will begin printing.

You can also choose to print out the number of pages your fax has transmitted and received so you can keep track of fax use. See page 71 for information on including the print counter with your Activity Journal.

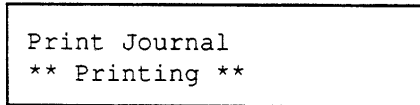
There is no need to erase or "clear" your Activity Journal: The journals show only the 25 most recent transmissions and receptions. When the 26th transmission or reception is recorded, the oldest transaction will be deleted automatically.

To instruct your fax to print an Activity Journal after every 25 transactions, see page 25. To print a journal manually at any time:

1. Press **Program, 0, 6**.



2. Press **Copy**.



Jan 10, ~ Jan 17, 1

Transmit Journal

2	3	4	5	6	7	8	9
No.	Remote Location	Mode	Start	Time	Pages	Result	Note
001	MURATA - CES '90	Fine	10.14:54	03'55	02	OK	Polling
002	MCR F-55	G3	10.16:50	02'36	02	OK	Tx
001	G3	Fine	14.07:57	00'41	01	OK	Manual
002	G3	Fine	14.11:43	00'31	00	T.1.4	Stop
003	G3	Fine	14.11:44	00'37	00	T.1.1	Manual
001	G3	Fine	15.10:36	00'46	01	OK	Manual

Activity Journal

1. Period—Shows the time period covered by the Activity Journal. The Activity Journal is printed manually or after 25 transmissions or receptions, not after a set number of days.

2. No.—Each fax transmission or reception is numbered, with the series beginning at 001 each day. If several transmissions or receptions are numbered "001" on your

journal, they occurred on different days: Look at the Start column (below) to determine which day each transaction took place.

3. Location—Information identifying the sender or receiver is recorded in this space. The information printed in this column is sent to your fax by the remote unit and can be programmed by the remote operator as desired, so it may not be the same telephone number or business name you entered in your autodialer. When communicating with Murata-manufactured fax machines, the remote unit's TTI will be recorded here. When communicating with other fax machines, the Subscriber ID will be printed.

4. Mode—Records the resolution of the transmission or reception.

5. Start—The first number in this column shows the day a fax transaction occurred. For example, 03 means the transaction took place on the third day of the month. Use the Period field at the top of each journal to determine the month (see above).

The entry after the comma is the time the transaction took place. The time is recorded on a 24-hour clock, so an entry of 15:00 means the transmission or reception began at 3:00 p.m.

6. Time—Records the length of each transaction, from the time the phone connection is made to the time the last page finishes transmitting or receiving.

7. Pages—Records the number of pages transmitted or received.

8. Result—Shows the outcome of a transmission or reception. If an error occurs, the error code is listed here.

9. Note—Tells the operator information about special operations. A fax transmission made using the handset, for example, is shown as "Manual".

When "Location" Data is Missing or Wrong

If the Location column does not record the telephone number or business name you expected to see:

1. There may not be one programmed at the remote unit. The telephone number and TTI are optional on most units, and may not have been programmed by the operator of the remote fax. Communication with these units will record a "G3" or "G2" on your journal, showing you were communicating with a Group 3 or Group 2 fax.
2. Since these fields are optional, users can enter any information they want into them—even blank spaces. It is possible the Subscriber ID entered by the remote operator, for example, is not the same number your unit dialed to send the fax.
3. Many new home and small-office fax machines do not offer a programmable telephone number or TTI. Communication with these units will record a "G3" on your journal, showing you were communicating with a Group 3 fax.
4. The transaction may be cut off before the phone number and TTI can be exchanged. In such cases, your Activity Journal will usually show an error message showing the communication was not complete.
5. Poor telephone lines can sometimes block the transmission of the Subscriber ID and TTI.
6. A few fax manufacturers do not follow the CCITT standards for Subscriber ID and TTI data. In these cases, information appearing in your Location column can be garbled and unreadable.

Common Questions

Installation

Q: I don't want to install a dedicated line for my fax, so I've connected my fax to a PBX system. When I get a fax call, all the phones ring. How do I prevent this?

A: Call your telephone company for help. They may be able to convert one of the PBX lines for fax use only.

Q: Can I use a dust cover on my fax?

A: No: A dust cover blocks air circulation and could cause your fax to overheat.

Answering Device

Q: Can I use my fax machine and an answering machine together?

A: Yes. Murata facsimile machines with the automatic voice/fax switch let you connect your answering machine to the fax machine's "Phone 2" jack for perfect side-by-side operation.

When used with an answering machine attached, the Murata fax listens quietly on the line as you or the answering machine answer the call. If the call is from a person, your fax will not interfere and you and your callers won't know it's there. If your fax detects transmission tones from a remote unit, however, it will come on the line—disconnecting the handset or answering machine—and print the incoming message.

Q: How should I modify my answering machine message when I use it with my fax machine?

A: Your fax listens quietly on the line whenever an answering machine connected to the fax machine's "Phone 2" jack answers a call. When your fax detects transmission signals from a remote unit, it immediately disconnects the answering machine and begins fax reception.

When you record your answering machine message, be sure to tell callers that your fax is monitoring the line and that callers with fax messages can begin their transmissions immediately. Keep your outgoing message to fewer than 10 seconds.

Q: Can a caller leave both voice and fax messages on the same call?

A: Yes. Modify your answering machine message to explain that callers can leave a voice message on your answering machine, then press Start to begin their fax transmission. Your Murata fax will detect the switch from voice to fax and will come on the line to print the message.

Q: My fax rings and the LCD shows "CALLED", but a fax message never comes through. What's wrong with my machine?

A: The caller may have dialed the wrong number, then hung up. Also, if you're using an answering device or a second telephone with your fax, make sure it's properly set up to handle incoming calls.

First check to make sure your answering device is connected to the Phone 2 jack and the fax is set in the "Ans/Fax Ready" mode. If your outgoing message is more than 10 seconds long and if you have your answering device set to answer after more than two rings, it's likely the transmitting fax will "time out" before it hears tones from your machine.

Q: I have an answering machine connected to my fax. My fax is set to answer after two rings, but it doesn't answer until after seven rings. What should I do?

A: When your fax is set in the "Ans/Fax Ready" mode, it always waits for the answering machine to answer the call. If the answering machine does not answer, your fax will pick up the call after the seventh ring. Make sure you set your answering machine to answer after one or two rings.

User Settings

Q: I selected Receive Confirmation Report when I set my communication result; however, my fax prints out Transmit Confirmation Reports. What happened?

A: Your machine will print out an RCR only if it is communicating with another Murata-manufactured machine. Your machine prints a TCR when it communicates with a non-Murata fax.

Q: I transmitted an 11-inch-wide document. The remote operator called me and said part of the image was chopped off. What can I do to prevent this?

A. You need to adjust your fax machine's scanning width from 8.5 inches to 9.9 inches.

Serial Number

Q: Where is the serial number on my fax?

A: Look on the back panel of your fax. You will see a label with a bar code printed on it. The last eight numbers form your serial number.

Transmission

Q: Sometimes my fax machine transmits very slowly. Is there any way to speed transmission time?

A: Your fax can transmit at 9600 bps, the fastest transmission possible for a Group 3 fax machine. Sometimes, however, it must slow down to compensate for poor phone lines or an older, slower fax machine.

Q: People I send fax messages to say all my documents are received at a reduced size. Is the problem with my machine or theirs, and what can I do to correct this?

A: Make sure that the guides on your document feeder are adjusted to the width of the pages you send. If you leave the guides adjusted for an 11-inch wide page, for example, any 8.5-inch-wide pages you transmit will be reduced when received.

Q: Do I have to dial a "1" for long distance?

A: Yes. Remember to include any numbers needed for long-distance dialing when you program your one-touch and speed-dial numbers. You can even include a special pause character needed when calling through a telephone system that requires "9-" to reach an outside line.

Q: How do I send to an overseas telephone number?

A: Dialing requirements for overseas calls may vary depending on your local telecommunication company's requirements. For most overseas calls, dial 011, then the appropriate country code, city code and phone number. Country and city codes are sometimes included in the front section of telephone directories.

Q: How do I send to a fax unit that's on a telephone system extension or PBX?

A: Insert your document into the feeder and place your call using your fax machine's handset. When the PBX or system operator answers, ask for the desired extension. When you hear fax tones from the remote unit, press Start, then hang up the handset.

Q: Can I transmit if my fax is out of paper?

A: Yes, however confirmation reports are not available when transmitting without paper in your fax.

Q: Can I transmit pages from a newspaper?

A: No. Newspaper can jam in your document feeder.

Q: Can I transmit a document after using correction fluid on it?

A: Yes, as long as the fluid is completely dry.

Q: I inserted a document in the feeder and dialed the remote fax, but my machine didn't transmit. Now a new time appears on my LCD below the current time. What does this display mean?

A: The remote machine was busy and your LCD displayed the time for the next redial attempt as shown in the example below.

Oct 11, 91 9:34
Oct 11, 91 9:30

For more information on setting the number of redial attempts, see the section on User Settings.

Q: My manual says the average transmission speed for a page is 12 seconds, but when I transmit a page it can take much longer to transmit one page. Why?

A: The average transmission speed stated in your manual is based on transmission of CCITT Test Chart 1 and does not include dialing and handshaking between fax machines. The test chart is a standardized letter used to test fax transmission times.

Some reasons for varying transmission speeds follow:

1. The pages you transmit may contain more information to be scanned than CCITT Test Chart 1.

2. The transmission time measured for test documents does not include handshake time. The handshake is the protocol fax machines use to "introduce" themselves.
3. Transmissions that use Fine or Grayscale take longer to transmit than transmissions using Normal mode.

Reception

Q: I have not been able to receive fax calls manually. I tried pressing Start when I hear fax tones, but the phone line disconnects. What am I doing wrong?

A: When you pick up the handset and hear calling tones from a remote fax, press Start before you hang up the handset. Your machine will begin reception.

Q: My fax rings and the LCD shows "CALLED", but a fax message never comes through. What's wrong with my machine?

A: The caller may have dialed the wrong number, then hung up. Also, if you're using an answering device or a second telephone with your fax, make sure it's properly set up to handle incoming calls.

Q: How can I manually receive a fax while I am talking on the phone?

A: If you want to receive a fax message, tell the operator to insert a document in the remote unit and press Start. After you hear fax tones, press Start. Your fax will take over the line and receive the document. If you wish to reconnect the voice line after the message has been received, press Monitor/Call while the fax is printing. After the transmission is complete, your fax machine will ring. You can then pick up the handset and resume your conversation.

Q: I tried dialing "6,6" from a phone in another room to switch a fax call to my fax, but it doesn't work. Why?

A: The second phone that you use to switch fax calls to your fax must be connected to your fax machine's Phone 2 connection.

Q: Can I transmit and receive at the same time?

A: No, but use the call mode to ask the remote operator if he or she wants to transmit or receive after your transaction is completed.

Q: I have my fax set to answer automatically. Sometimes when I try to answer a call manually, the handset is dead. What's wrong?

A: Your fax answered the call before you could get to it, and disconnected the telephone. Try setting the number of rings to six instead of two (see User Settings).

Polling

Q: Remote operators have tried to poll my fax, but aren't able to retrieve the stored document. What's wrong?

A: You probably entered a passcode restricting access to your fax. Give your passcode to authorized Murata operators only.

Delayed Commands

Q: I tried to enter two delayed broadcast commands, but my fax will only accept one. What's wrong?

A: Your fax allows only one delayed broadcast command and one delayed sequential polling command. You can enter several transmission and non-sequential polling commands, for example, but you can enter only one delayed broadcast and one delayed sequential polling command.

Activity Journal

Q: The telephone number that appeared on my Activity Journal is not the same as the number I dialed. Why not?

A: The Location information that appears on the Activity Journal doesn't come from your fax: It is received from the remote fax during transmission and reception.

Let's say you transmit to a fax at telephone number 1-214-403-3499. It's possible your Activity Journal will just show 403-3499, or even another number altogether, because the information is programmed by the remote operator. (And because your Subscriber ID and TTI appear on the journals of remote units, take a minute to make sure the information is correct and includes your area code. That way, people you communicate with always receive your full name and telephone number.)

Q: What does an asterisk in the Result column of my Activity Journal mean?

A: The fax transaction took place using Error Correction Mode.

Q: Sometimes a phone number appears in the Remote Location column of my Activity Journal, and sometimes a company name appears. Why?

A: When your fax communicates with another Murata-manufactured unit, the TTI or company name for the remote unit is saved in your Activity Journal. When you communicate with non-Murata units, the Subscriber ID or telephone number is saved.

Q: How do I clear my Activity Journal?

A: There is no need to clear your journal: The Activity Journal displays only the 25 most recent transmissions and receptions. When your fax reaches the 25-transaction limit, it will drop the oldest entry and add the most recent to the journal.

Q: Why is the number "001" used more than one time on the Activity Journal?

A: The journal begins numbering at "001" each day. Your Transmit Journal, for example, may have several occurrences of "001" because several days of fax activity were recorded.

Q: When I unplug my machine, will I lose programmed information like my TTI, autodialer numbers and time and date?

A: No. The battery for your fax will protect user settings for an extended period of time if power fails or you decide to move your fax. Remember, however, that battery back-up does not extend to documents and delayed commands in memory, only to user settings.

Q: A line of characters appears just below the table on both my transmit and receive journals. What do these characters mean?

A: The information given after the headings "S" and "T" show you the number of pages scanned and transmitted by your fax; the information given after the headings "P" and "R" show you the number of pages printed and received.

Fax Displays and Lamps

Q: What is the Confirm light and how do I turn it off?

A: The Confirm light lets you know a confirmation report has been requested after transmissions.

Q: What does "Called" mean?

A: Your fax has been called by a remote fax or phone.

Q: What does "Command Reserved" mean?

A: You have entered a command to take place after the present memory transaction is completed.

Autodialer

Q: I have entered dashes when storing numbers in my fax machine's autodialer, but they don't always appear on the LCD. Am I doing something wrong?

A: No. Your LCD shows only what the fax dials, and since dashes aren't dialed, they won't appear on the LCD.

Q: I tried calling the international telephone number 011-234-555-1212, but only a few of the telephone number's digits appear on my TCR. Why didn't the whole number appear, and how can I be sure my document was transmitted to the right location?

A: The numbers you enter using the fax keypad are temporarily stored in a memory "buffer." That means the last part of the phone number is all that the fax machine's buffer remembers. An easy way to avoid getting incomplete telephone numbers on your printouts is to store your most frequently used numbers in the autodialer. Numbers stored in the autodialer will appear in their entirety on your reports.

Glossary

The terms and words below are often used when discussing facsimile machines and fax communication. Not every word or term included below will apply to your Murata fax. Some, like "private line", are included even though they *do not* apply to your unit because you may encounter them during your fax use.

Use these definitions for your reference only. Specifications and technical information are subject to change, so call the Murata Customer Support Center if you have any questions.

A4, B4, A3	Standard stationery sizes defined by the International Standards Organization, an agency of the United Nations. A4 paper is 8.5 inches wide. B4 is 10.1 inches wide and A3 paper is 11.9 inches wide.
Activity Journal	Murata fax machines offer an Activity Journal to help track and account for your transactions. Made up of individual transmit and receive journals, the activity journal includes information on the transmission mode, number of pages sent, result and any errors encountered. You can set the Activity Journal to print automatically or on demand.
Automatic Reduction	Many Murata fax machines will automatically reduce documents being transmitted to accommodate the effective printing width of the receiving unit. For example, a fax machine with a 10-inch scanning width can send an image 10 inches wide to a unit with an 8.5-inch print width. The complete image will be transmitted and reduced in size when printed at the receiving unit.
Broadcast	Some Murata fax machines offer broadcasting, a feature that lets you transmit a single document to dozens of preprogrammed locations in a call group.
BPS	Bits per second. Used to express the speed of transmission. Because fax transmission treats a document as a graphic image rather than as a series of alphabetic and numeric characters, bps does not correspond to the number of characters transmitted per second. Murata fax machines transmit and receive at 9600 bps, with automatic fallback to 7200, 4800 and 2400 bps if required by poor telephone line conditions.
Call Group	A preprogrammed group of fax locations used by Murata units with internal memory to speed broadcasting, polling and other functions.
Call-Waiting Service	Many telephone systems offer an optional call-waiting service that identifies when another party is calling while you are on the phone. Call-waiting signals may cause interruption of facsimile transmission or reception.
CCD	Charged coupled device arrays. The scanning mechanism used in Murata fax machines to convert a document image into digital facsimile information. Fluorescent light reflected off your document is received by the CCD array and is converted into a digital signal for transmission.
CCITT	Abbreviation for the Consultative Committee for International Telegraph and Telephone, a telecommunications forum for member countries of the United Nations. CCITT Study Group XIV established the primary groups for facsimile equipment, covering communication protocol and transmission. Murata's Group 3 fax machines offer the fastest transmissions allowed by CCITT when communicating with other Group 3 units. Some Murata fax machines offer compatibility with older Group 2 and North American FM systems, as well.
CCITT V.29 and V.27 ter.	A standard set of communication procedures allowing fax machines to talk to all other units adhering to those standards.
Closed Network	A network of fax machines that limit access to the network to other units having the same passcode. Some Murata fax machines offer passcode protection and can participate in a closed network.
Copy Mode	You can use your Murata fax as a convenience copier. Many Murata units can copy in two or more levels of resolution.
Data Compression	Used in digital fax machines to speed transmission. See Digital Facsimile, MH, MR and MSE, SMSE.
Delayed Transmission	Some Murata fax machines offer one or more delayed commands, allowing you to load documents into your fax machine during work hours for transmission after hours.
Digital Facsimile	Unlike analog systems that scan every portion of a document, digital fax machines survey a document's total picture content. Digital fax machines scan a line and convert the information into a binary code of zeros and ones. The fax machine can take this information and compress it, providing transmission speeds of less than one minute per page. Murata units offer the standard Group 3 data compression method for rapid transmissions to any other Group 3 fax, and many Murata units offer proprietary transmission speeds for faster transmissions between Murata-manufactured units.

Dip Switches	Dual in-line package switch: A two-position on-off switch. Many Murata fax machines include dip switches to control optional settings or features. Check your operating instructions for more information.
DTMF	For dual tone, multiple frequency. The dialing signals generated by push-button or "touch-tone" telephone systems. DTMF telephone service is an option in most North American telephone systems.
ECM	Error correction mode. A CCITT-approved feature for Group 3 fax machines. ECM transmission sends document image data in blocks, and retransmits each block until received properly by the receiving unit.
Effective Printing Width	The widest image that can be printed on your fax. The effective width can be influenced by the CCITT group of the unit transmitting to your fax machine.
Effective Scanning Width	The maximum width the scanner in your fax can scan during transmission.
Facsimile	Although business fax use has grown rapidly since the advent of fast, powerful Group 3 units, facsimile communication itself has a surprisingly long history. The first facsimile system was introduced in 1842, and wide-spread service was underway before 1910. In the United States, fax units attached to home radios provided facsimile newspaper service in several cities through the late 1940s. Facsimile's growing success for news transmission was halted, however, by the development of commercial television.
Facsimile Interface Processor	An upgrade that allows some Murata fax machines to operate with personal computers, coupling the power of PCs with the scanning and transmission capabilities of fax machines for high-volume communication, graphics input and direct computer-to-fax transmissions.
Fallback	Group 3 fax machines operate at the highest transmission speed possible on a given telephone line. Murata systems offer automatic fallback, so if line quality drops during transmission your fax machine will reduce speed to the fastest possible level.
Fine Resolution	203H x 196V lpi. Also shown as G3F on some units.
FM	Or North American FM. Used to identify CCITT Group 1 units designed for use in North America.
Grayscale	Not a level of resolution, but a method of scanning and transmitting halftone images. Murata fax machines with grayscale abilities interpret photographs in levels of gray between white and black. The transmitting fax machine must have grayscale ability to send a photographic image accurately, but the receiving machine does not need it to print the image.
Group 4	A CCITT standard for capturing, communicating and outputting all forms of data. Group 4 will be used for very high-volume fax communication in coming years, but the expense of leased, dedicated digital telephone lines will continue to make Group 3 fax the best choice for millions of fax owners.
G2	Used on some Murata units to identify Group 2 resolution or to identify when a document is being transmitted to a Group 2 fax machine.
Handshaking	Used by telecommunications and computer equipment to "introduce" two systems to each other. Facsimiles use a handshaking protocol, for example, to identify the CCITT group of each unit and to begin fax communication.
Internal Memory	Some of Murata's most advanced fax machines include internal memory to store documents for transmission or to store incoming messages in SecureMail boxes.
LCD	Liquid crystal display. Used on some Murata units for status displays.
LED	Light emitting diode. Used on some Murata units for displays and lamps.
LPI	Lines per inch.
Location ID	An optional identifier used on Murata fax machines. The Location ID lets you identify by name the telephone numbers programmed in your autodialer.
MH	Modified Huffman, the CCITT Group 3 standard data compression method. A feature of all Murata fax machines, MH assures better than one-page-per-minute transmissions when communicating with other Group 3 units, regardless of manufacturer.
MR	Modified Read, the optional CCITT Group 3 data compression method. Used in some Murata fax machines for high-speed transmission to other MR-compatible machines.
MSE, SMSE	Proprietary data compression methods, allowing transmissions faster than with MH and MR whenever you are communicating with a Murata-manufactured unit. MSE and SMSE are features on many Murata fax machines.
Normal Resolution	Shown as Norm. 203H x 98V lpi. The standard resolution mode for Group 1 and 2 units, and available on all Group 3 units.
Original Document Size	Used when defining the largest (or smallest) document that can be fed safely through your fax machine. Check your unit's operating instructions for more information.
Passcode	A proprietary feature available on some Murata fax machines. The four-digit passcode limits access to in-

formation set to be polled to units with the same passcode. The code also allows several Murata systems to create a closed network, limiting access to the network to systems with the same code.

- PBX** Private branch exchange. Often called PBX, PABX and others. Privately owned telephone equipment serving a particular building, business or area. Many PBX systems use digital transmission lines which, unlike more common PSTN lines, are not compatible with fax machine use. Do not connect your Murata unit to a PBX without first checking with the system manufacturer or service representative.
- Polling** Polling allows you to set a document in your fax machine for automatic transmission to a remote unit when that unit calls, or to call a remote unit and receive a document set to be polled. Polling is convenient whenever a central unit must receive information from one or several remote units. By polling the remote units, the central facility bears all telephone charges and prevents several remote units from calling at the same time. In database polling, remote units can call and request specific files of information stored inside a Murata unit with internal memory.
- PPS** Pulses per second. Used to identify rotary dialing requirements.
- Private Line** Or Leased Line. A service offered by many telephone systems that provides an exclusive phone circuit between two geographic points. Your Murata unit does not require a private line.
- PSTN** Public switched telephone network. PSTNs are the most common type of telephone lines and service in use, and are in contrast to private or leased lines. Murata units provide fast, reliable data transmission over PSTN lines. You do not need a special line or a dedicated telephone line for your Murata unit.
- Relay Broadcasting** Some Murata fax machines can store a scanned image in internal memory, transmit the image to all units in a call group, and instruct those remote units to retransmit the image to each fax machine in the remote unit's call group. This relay broadcasting feature speeds high-volume fax communication and allows a single command to initiate document transmission hundreds of preprogrammed fax locations.
- Resolution** The resolution of documents transmitted or copied by fax machines is measured by the number of horizontal (H) and vertical (V) lines per inch the unit can print. Your Murata unit may offer one or more of these resolution levels:
- | | |
|-----------|-----------------|
| FM | 203H x 98V lpi |
| G2 | 203H x 98V lpi |
| Norm | 203H x 98V lpi |
| Fine | 203H x 196V lpi |
| Superfine | 203H x 392V lpi |
- Some Murata units also offer grayscale transmissions for accurate reproduction of photographs.
- Receive Confirmation Report** A receive confirmation report is your assurance that the document you transmitted was received. The RCR prints out after your transmission. It identifies the receiving unit and records the date, time, transmission mode, number of pages sent and result. The RCR is an exclusive feature of Murata fax machines and is available only when transmitting to another Murata unit.
- RJ-11C** A standard plug-in telephone jack. The RJ-11C is commonly used in North America for telephone line connections, but call your telephone company if you are unsure of the type of jacks in your office.
- Rotary, Tone Dialing** Most telephone systems in the United States offer rotary and touch-tone dialing options. Murata units are compatible with both rotary and tone dialing signal requirements. Check your operating instructions for information on setting your unit for rotary or touch-tone dialing. Murata units also offer two types of rotary dialing signals: 20 pps and 10 pps. Check with your telephone company if you have rotary dialing service.
- SecureMail** A feature on many Murata fax machines. SecureMail allows you to send a document to a memory "mail box" in a Murata unit with internal storage. The transmission is protected at the receiving end by an access code created by the mail box holder.
- Subscriber ID** The Subscriber ID is your unit's telephone number. Part of the TTI, the Subscriber ID is printed at the top of each page received from your unit.
- Surge Protector** A device that protects your telephone or electrical lines. A telephone power surge protector can absorb and divert high-voltage surges caused by lightning or static electricity without interfering with normal telephone operation. An electrical surge protector protects you fax from high-voltage surges in the AC line that may cause damage to your fax and other appliances.
- Touch-Tone** A push-button telephone or the characteristic tones made by such a phone. Also a registered trademark of Western Electric for a brand of telephones.
- Transmit Confirmation Report** Like the RCR, a TCR provides proof that the document you set for transmission was sent. Printed after transmission, the TCR identifies the telephone number to which you programmed the document to be sent.
- Transmit Terminal Identifier** Your programmable TTI is sent automatically with every page you send, and appears at the top of each page printed by the receiving unit. The TTI can be your personal or business name or any other identifier.

Problem Solving

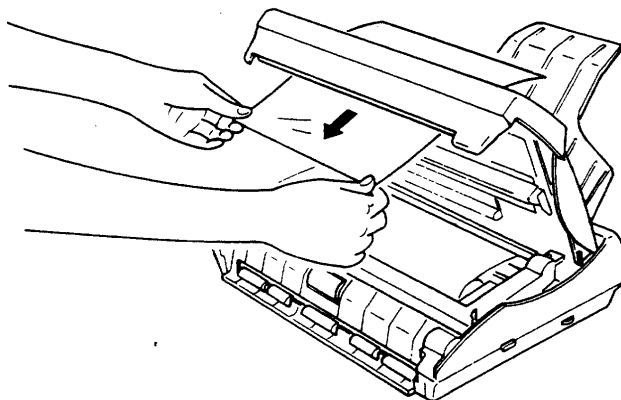
Paper Jams

Your fax is designed for years of reliable use. From time to time, however, you may encounter a problem that causes a document to become jammed inside your fax.

Original Document Paper Jams

To clear an original document that is jammed in your fax:

1. Turn your fax machine off.



2. Pull forward on your fax machine's cover release, located on the right side of your fax. Open the cover to your fax.

3. Carefully pull your original document out of the fax. Do not try to transmit wrinkled or torn documents.

4. Close your fax, pressing firmly on the front of the cover.

5. Turn your fax machine on.

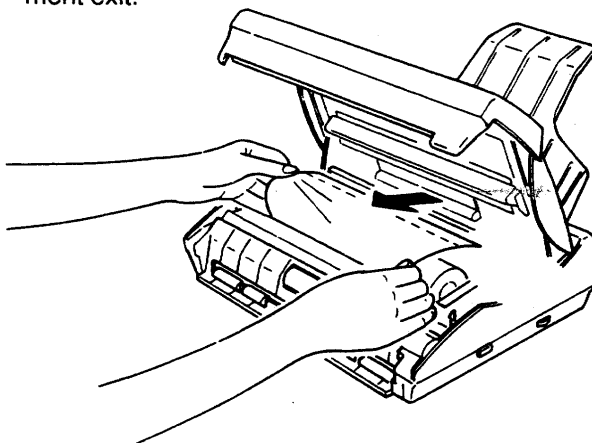
Received Document Paper Jams

To clear a received document that is jammed in your fax:

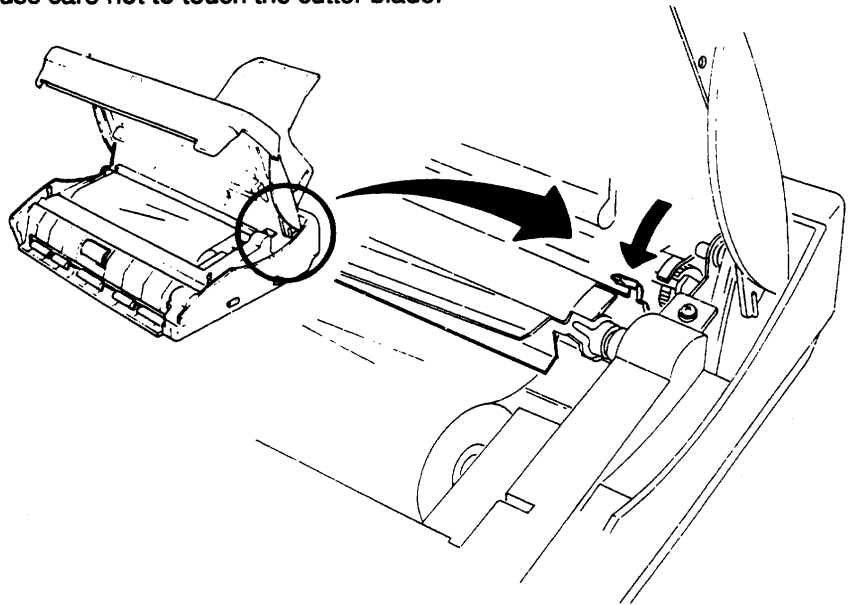
1. Turn your fax machine off.

2. Pull forward on your fax machine's cover release, located on the right side of your fax. Open the cover to your fax.

3. Carefully pull the jammed recording paper out of the front of your fax. Do not try to pull the received document through your fax machine's document exit.



4. It may be necessary to pull forward on the silver paper guide bar at the rear of your fax. This silver bar covers the paper cutter and is designed for your protection. While the silver paper guide bar is moved forward, use care not to touch the cutter blade.



5. Return the silver paper guide bar into place.
6. When the paper has been removed, use a scissors to cut all wrinkled or torn paper from your recording paper roll. Put the recording paper roll back in your fax machine.
7. Pull out about 4 inches of the recording paper and slide the leading edge of the paper below the paper guide bar at the back of your fax machine. You should be able to slide the paper all the way through your fax, so you can see it coming out the document exit at the back of your unit.
8. Close your fax, pressing firmly on the front of the cover.
9. Turn your fax machine on.

Troubleshooting

Occasionally your unit will detect a problem with the telephone line in use or encounter some trouble in transmission or reception. When it does, it will alert you with the lighted Alarm lamp and a beeping alarm tone.

You can further identify the problem with the LCD display messages, Activity Journal check messages and printed error codes. See the following sections for information about these troubleshooting methods.

Alarm

Your fax will alert you with the lighted Alarm lamp and a beeping alarm if the following occurs:

- ◆ Your fax has trouble transmitting
- ◆ Your fax has trouble receiving
- ◆ Your fax is out of paper

Press **Stop** to cancel the Alarm LED and tone.

LCD Messages

Insert Document Again	These error messages appear in your unit's LCD and help in troubleshooting fax communication problems.
Insert Document	Your document was not inserted correctly during transmission. Carefully replace your document in the feeder, adjust the document guides to the proper width and try again.
Please Add Paper	Your unit attempted to carry out a command without a document in its document feeder. Place your document in the feeder and try the command again.
No Command Stored	Your fax is out of paper. Add a new roll of Murata thermal recording paper to your fax.
Please Close Cover	The programmable one-touch key you selected does not have a command programmed.
Hang Up Telephone	The cover to your unit is not closed. Press firmly on the cover to close it.
Memory Overflow	The telephone handset to your unit is off hook after transaction. Return the handset to its cradle.
Polling in Use	The document being scanned into your unit's internal memory requires more memory than your unit has available. Transmit the document from the document feeder.
Memory Not Available	A polling document has already been stored. You cannot store two documents for polling at the same time.
Nothing Stored	The internal memory in your unit was full before you began your transaction. Clear some of your machine's memory by deleting a delayed command, or transmit from the document feeder rather than from internal memory.
Check Lamp	The one-touch, speed-dial or group number selected has not been programmed in the autodialer. Try programming the number again.
Verify Operation of Remote Machine	The lamp in your unit's scanner may be defective, preventing transmission and copying. Call Murata's Customer Support Center or contact your local facsimile dealer for help.
Verify Readability of Transmitted Copy	Communication with the remote machine was not possible. This message can be caused by calling an older Group 1 machine that's not compatible with your fax, reaching a fax machine that is broken or out of paper, or dialing a wrong number. Use the fax telephone handset to call the number manually. Ask the remote operator to check the remote fax.
Please Transmit Again	Poor telephone line conditions may have made the document you received unreadable. If so, call the remote location and request that the document be transmitted again.
Unable to Contact Remote Fax Machine. Call Again	Your transmission may not have been completed. Poor telephone line conditions, a document feeder jam or problems at the remote machine may have been the cause. Try the transmission again.
	Your fax was unable to complete the communication requested. The remote fax may be busy or set to manual reception with no operator nearby. Call the remote unit and ask the operator to check the fax.

Error Codes

These codes are printed on your unit's Activity Journal and can be used with the other messages to identify the cause of an error. Codes prefaced by a "T" occur during transmission. Those with an "R" occur during reception and "D" codes occur while dialing.

- T.1.1.—The remote unit did not respond properly to your facsimile and may not be working. Call the operator of the remote unit.
- T.1.2.—The page counter in your unit detected a possible document feeder error. Carefully re-insert the document into the feeder and try the call again.
- T.1.3.—Handshaking between units was not completed: The remote fax was disconnected. Call the operator of the remote unit.
- T.1.4.—The **Stop** button was pressed at the remote unit in the middle of the handshake. Call the operator of the remote unit.
- T.2.1.—The telephone line disconnected during transmission or facsimile communication became impossible because of poor line conditions. Try the call again.
- T.2.2.—The machine you are attempting to communicate with is not compatible with your fax.
- T.2.3.—Communication was not possible because of poor line conditions. Try the call again.
- T.3.1.—The page counter in your unit detected a document feeder error during trans-

mission. Carefully re-insert the document into the feeder and try the call again.

- T.4.1.—The telephone line disconnected during the transmission of a page because of excessive modem errors or because the receiving unit ran out of paper. Try the call again.
- T.4.2.—Poor line conditions developed after the start of transmission. Try the call again.
- T.4.3.—The remote fax disconnected during the handshake.
- T.5.1., T.5.2. and T.5.3.—Line noise or other problems prevented ECM transmission.
- T.7.1.—Poor line conditions were detected before transmission began. Try again.
- T.7.3.—Poor line conditions were detected after transmission of a page, or the receiving unit was disconnected or ran out of paper. Try the call again.
- R.1.1.—The calling unit did not respond properly to your fax machine. The error can be caused by a wrong number reaching your facsimile or by a calling unit restricting access with a passcode.
- R.1.2.—The calling unit was not compatible.
- R.1.4.—The **Stop** button was pressed in the middle of reception.
- R.1.5.—Handshaking between your machine and the remote fax did not take place. Try the call again.
- R.2.3.—Communication was not possible because of poor line conditions. Call the remote operator.
- R.3.1.—The transmitting facsimile detected too many errors from the receiving unit. This is often caused by an intermittently poor phone line.
- R.3.2.—The phone line in use disconnected just after the handshake but before the first page was transmitted.
- R.3.3.—The transmitter is not compatible or had a document feeder problem.
- R.3.4., R.4.1.—The remote unit is out of paper.
- R.4.2.—The phone line disconnected before confirmation of transmission, or the transmitting unit requires maintenance.
- R.4.4.—The remote machine has reached its memory capacity.
- R.5.1., R.5.2.—Line noise or other problems prevented ECM reception.
- D.0.0.—The remote machine is busy. Try the call again.
- D.0.1.—The remote unit did not respond. Try the call again. If the message is repeated, call the operator of the remote unit to verify the unit's operation.

Note: Reception errors R.2.3 through R.7.2 can occur at the beginning of fax call, before your unit prints the remote machine's TTI or Subscriber ID, or after you've received several pages of a multiple-page document. If you receive the TTI and Subscriber ID, you may be able to fax the remote unit and identify the reception error for the remote operator. Errors R.1.1 and R.1.2 occur before the TTI can be transmitted, and do not allow you to identify the transmitting unit.

Maintenance

With proper installation and very little maintenance, your Murata fax machine should provide dependable fax service for years to come.

Although little day-to-day care is required for your fax, you can take three simple precautions to ensure long system life:

- ◆ Make sure your unit is installed according to Murata's specifications. Proper installation is crucial to the maintenance of your unit. Review the requirements on page 6 before you install your unit. Don't install your fax where it can overheat or in an area that's not properly ventilated. It should be located in a place where it will not gather dust or get splashed by water or other liquids.
- ◆ Clean your fax, if needed.

Murata Fax Care Products

Murata offers a complete FaxCare kit for your fax machine, with cleaning solution, swabs, wipes, compressed air, case and cabinet cleaner and a phone surge protector.

The cleaning components gently and effectively remove fingerprints, dust and lint from your unit—outside and in. The surge protector guards against damaging voltage surges in your facsimile machine's telephone line. Together, the cleaning components and surge protector keep your fax in top shape.

Get a Murata FaxCare kit, Murata item master number MK2034, for your fax. Ask your Murata representative or facsimile retailer for one today. For more information and the closest source of Murata FaxCare products, call Murata Business Systems at 1-800-543-4636.

Cleaning Outside

Use a mild cleaning solution sprayed onto a lint-free towel or cloth to wipe down the fax machine's cover, handset and paper cassette tray.

Never spray cleaner directly on your facsimile machine. The drifting spray could damage components inside your unit.

Cleaning Inside

Use lint-free swabs, a specially formulated cleaning solution and a supply of compressed dust-free air to clean inside your fax.

Use a lint-free cloth moistened with cleaning solution to wipe plastic surfaces inside your unit.

Use the lint-free swabs moistened with cleaning solution to gently wipe components inside your fax.

Use dry, dust-free compressed air to gently blow dust and other material from areas you cannot reach with swabs.

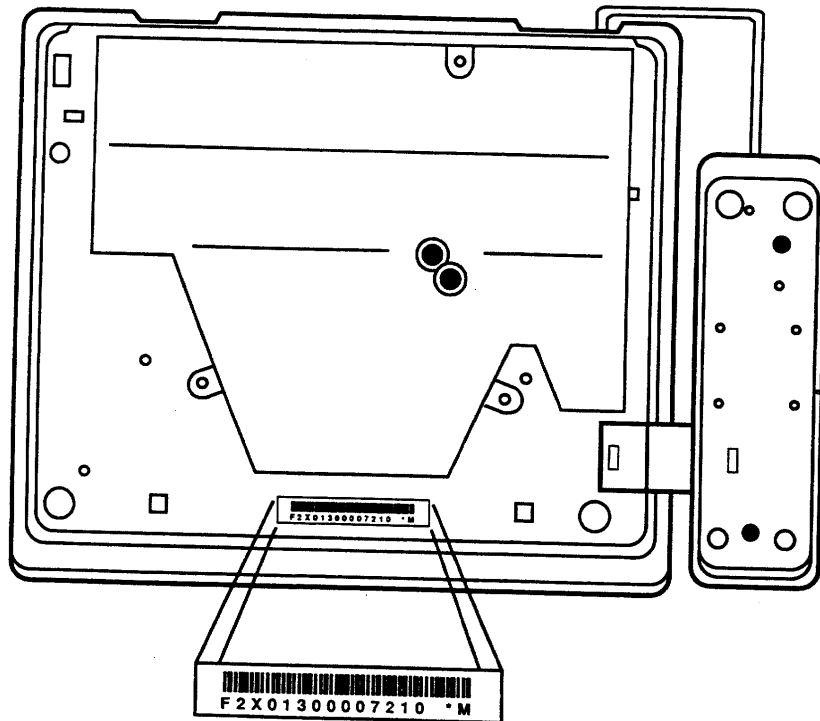
Never attempt to clean inside sealed areas of your unit and never spray cleaning solution directly onto your fax.

Service Questions

If you have questions about your fax or its use, call Murata's Customer Support Center at 1-800-347-3295.

Trained Murata service personnel are available from 8:30 a.m. to 5:30 p.m. Monday through Friday, excluding holidays, to resolve any questions about your fax that are not answered in this manual.

Have your fax machine's serial number ready for the service technician when you call. The serial number is printed on a bar code label on the bottom of your machine. The last eight numbers of the alpha-numeric bar code make up your serial number.



Warranty

This warranty is made by Murata Business Systems, Inc. ("Murata"). This warranty is valid only on Murata products purchased and used in the United States of America. This warranty applies to the product only while owned and used by the original purchaser (hereinafter referred to as the "Customer"). If ownership of the product is transferred, this warranty terminates. This warranty does not apply to any product in use for rental purposes.

This Murata product is warranted against defects in material and workmanship for ninety (90) days commencing the date of original Customer purchase. If the product is defective in material and/or workmanship (normal wear and tear excepted) during the warranty period, Murata or its authorized representative will, during Murata's established service availability hours, make necessary adjustments and repairs, including at Murata's option installation of replacement parts. Murata's service availability hours are 8:30 a.m. to 5 p.m. Monday through Friday, excluding Murata-recognized holidays. Murata will complete the necessary adjustments and repairs within a reasonable time period, as dictated by the nature of the problem and by Murata's service schedule. Replacement parts may have been used and/or reconditioned. Parts that have been replaced will remain the property of Murata. This warranty is subject to the OBLIGATIONS and EXCLUSIONS set forth.

OBLIGATIONS

1. This warranty will be honored only on presentation of the original dated authorized Murata bill of sale or Murata dealer bill of sale or sales slip to an authorized Murata service representative or service center. For the name of your nearest authorized Murata service center, contact Murata Business Systems, Inc., toll-free telephone number 1-800-347-3295.
2. During the warranty period, the Customer must notify Murata by telephone of any defective product material and/or workmanship.
3. Transportation (including prepayment of freight and insurance charges) of the product to and from an authorized Murata service center, designated by Murata, is the responsibility of the Customer.
4. If Murata provides maintenance or responds to a call which is outside the scope of this warranty, such maintenance shall be billed to the Customer at Murata's then current rates for maintenance and parts and shall be due and payable in full upon receipt of invoice.

EXCLUSIONS

1. This warranty shall not cover a product with missing or altered original identification marks.
2. This warranty applies only to products that the purchaser has properly installed, adjusted and operated in accordance with the instructions set forth in or provided with product literature. This warranty does not apply to any product which has been subjected to tampering, alteration, misuse, abuse, neglect, improper installation or transportation damage. Nor does it apply to costs for any service requested for demonstration or to confirm proper operation of this product.
3. This warranty shall not apply to adjustments, repairs or replacements necessitated by any cause beyond the control of Murata (whether foreseeable or not) including, but not limited to, any malfunction, defects or failure caused by or resulting from any of the following: improper unpacking or installation, unauthorized service or parts, or improper maintenance or cleaning, modification or repair by the Customer, accident (including without limitation, unavoidable accidents), fire, flood or other acts of God, improper telephone or electrical power or surges thereof, interconnection with or use of non-compatible equipment or supplies (including paper), or placement of the product in an area which does not conform to Murata space, electrical and/or environmental requirements.
4. Murata will not be required to make adjustments, repairs or replacements if the product is installed or used at a location deemed by Murata to be hazardous to health or safety, or if Murata is not provided with free and reasonable access to the product and a telephone during service availability hours, or if the product location is not accessible by an authorized Murata service vehicle.

EXCEPT AS EXPRESSLY SET FORTH ABOVE, AND EXCEPT TO THE EXTENT PROHIBITED BY APPLICABLE LAW, MURATA MAKES NO OTHER WARRANTIES, EXPRESS OR IMPLIED (INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, AND ANY WARRANTY ARISING FROM COURSE OF DEALING OR USAGE OF TRADE), AND MURATA EXPRESSLY DISCLAIMS ALL WARRANTIES NOT STATED HEREIN. IN THE EVENT THE PRODUCT IS NOT FREE FROM DEFECTS AS WARRANTED ABOVE, THE CUSTOMER'S SOLE REMEDY SHALL BE REPAIR OR REPLACEMENT AS PROVIDED ABOVE. UNDER NO CIRCUMSTANCES SHALL MURATA BE LIABLE TO THE CUSTOMER, OR TO ANY USER, FOR ANY DAMAGES, INCLUDING ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES, EXPENSES, LOST PROFITS, LOST SAVINGS OR ANY OTHER DAMAGES ARISING OUT OF THE USE OR INABILITY TO USE THE MURATA PRODUCT, EVEN IF MURATA OR ITS REPRESENTATIVES HAVE BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

Some States do not allow the exclusion or limitation of incidental or consequential damages, and some States do not allow limitations on how long an implied warranty lasts, so the above limitations or exclusions may not apply to you. This warranty gives you specific legal rights, and you may also have other rights which vary from State to State.



0 31981 92033 6

Murata Business Systems, Inc.
5560 Tennyson Parkway
Plano, Texas 75024
(214) 403-3300
(214) 403-3499 Fax

Reorder Number: OMM1900