

# Operating **M2000** Instructions

(800) 292-2492 to order paper and other supplies

(972) 364-3314 to order operating instructions

(972) 364-1053 to order fax parts

(972) 364-3350 to speak with customer support



## **Inside:**

- ▲ Tear-out reference card
- ▲ Special Question and Answer section
- ▲ Tell/Fax/Ans instructions
- ▲ Detailed descriptions for your transmission, reception and polling operations



# List of Commands

Keep this reference page close to your fax for a convenient list of the M2000's commands. For more information, see the page shown in your operating instructions.

Command	Press	Page
<b>1. Transmission</b>		
Transmission . . . . .	Program, Confirm/Enter . . . . .	35
SecureMail Transmission . . . . .	Program, Confirm/Enter, 2 . . . . .	37
<b>2. Polling</b>		
Polling . . . . .	Program, 2, Confirm/Enter . . . . .	39
Database Polling . . . . .	Program, 2, Confirm/Enter, 2 . . . . .	40
Sequential Polling . . . . .	Program, 2, Confirm/Enter, 3 . . . . .	41
Input Polling Doc. . . . .	Program, 2, Confirm/Enter, 4 . . . . .	42
<b>3. Call Response</b>		
Set 2nd Telephone . . . . .	Program, 3, Confirm/Enter . . . . .	15
Select Tel/Fax/Ans . . . . .	Program, 3, Confirm/Enter, 2 . . . . .	15
<b>4. One-Touch Settings</b>		
Enter One-Touch . . . . .	Program, 4, Confirm/Enter . . . . .	45
Erase One-Touch . . . . .	Program, 4, Confirm/Enter, 2 . . . . .	47
Print One-Touch . . . . .	Program, 4, Confirm/Enter, 3 . . . . .	47
<b>5. Speed-Dial Settings</b>		
Set Speed-Dial . . . . .	Program, 5, Confirm/Enter . . . . .	43
Erase Speed-Dial . . . . .	Program, 5, Confirm/Enter, 2 . . . . .	45
Print Speed-Dial . . . . .	Program, 5, Confirm/Enter, 3 . . . . .	45
<b>6. Print Activity Journal</b>		
. . . . .	Program, 6, Copy . . . . .	55
<b>7. Delayed Command</b>		
Print Command . . . . .	Program, 7, Confirm/Enter . . . . .	29
Erase Command . . . . .	Program, 7, Confirm/Enter, 2 . . . . .	30
<b>8. User Settings</b>		
Set Phone Line Type . . . . .	Program, 8, Confirm/Enter . . . . .	17
Set Passcode . . . . .	Program, 8, Confirm/Enter, 02 . . . . .	18
Set Auto Rx Time . . . . .	Program, 8, Confirm/Enter, 03 . . . . .	19
Set Number of Rings . . . . .	Program, 8, Confirm/Enter, 04 . . . . .	20
Select Comm. Result . . . . .	Program, 8, Confirm/Enter, 05 . . . . .	20
Set Scanner Width . . . . .	Program, 8, Confirm/Enter, 06 . . . . .	21
Set Primary Resolution . . . . .	Program, 8, Confirm/Enter, 07 . . . . .	22
Set Primary Contrast . . . . .	Program, 8, Confirm/Enter, 08 . . . . .	22
Set Number of Redials . . . . .	Program, 8, Confirm/Enter, 09 . . . . .	23
Set Redial Interval . . . . .	Program, 8, Confirm/Enter, 10 . . . . .	23
Journal Print On/Off . . . . .	Program, 8, Confirm/Enter, 11 . . . . .	24
Remote Diagnostics . . . . .	Program, 8, Confirm/Enter, 12 . . . . .	24
Set Date and Time . . . . .	Program, 8, Confirm/Enter, 13 . . . . .	25
Set Dialing Pause . . . . .	Program, 8, Confirm/Enter, 14 . . . . .	25
Print User Settings . . . . .	Program, 8, Confirm/Enter, 15 . . . . .	26
Closed Network . . . . .	Program, 8, Confirm/Enter, 16 . . . . .	26

## To select a command:

Press the keys shown in the list of commands. To enter a one-touch key in the autodialer, for example, press **Program**. Use the numeric keypad to enter 4. Then press **Confirm/Enter**.

**8. User Settings, continued...**

Enter Your TTI . . . . .	<b>Program, 8, Confirm/Enter, 17 . . . 27</b>
Print Your TTI . . . . .	<b>Program, 8, Confirm/Enter, 18 . . . 28</b>
Set Grayscale . . . . .	<b>Program, 8, Confirm/Enter, 19 . . . 28</b>

**Reception**

Press **Auto/Man Answer** to select automatic or manual fax reception. In automatic, your fax will respond to all calls automatically after a set number of rings. You can answer the line manually before your fax responds.

The manual setting tells your unit not to answer incoming calls so you can answer every call manually.

If you answer an incoming fax call, you will hear distinctive fax transmission tones from the remote unit. When you do, press **Start** to begin reception. Then hang up the telephone.

**Important Note:** Your fax can work perfectly alongside a telephone answering machine or a second telephone—even a cordless. To find out more about reception in these cases, see page 31 in your operating instructions.

**Transmission**

1. Insert your document face down into the feeder. Press **Mode/Select** to set the resolution and **Original/Cancel** to set the contrast.

2. Use the numeric keypad to enter the telephone number for the remote fax. If you enter a number by mistake, press **Original/Cancel**. You can use the dash key to make long numbers easier to read.

<p>Fax Ready 1-214-403-3499</p>
-------------------------------------

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

<p>1-214-403-3499 A4 FINE LIGHT</p>
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You can also use the telephone handset to dial fax calls: Insert the document face down into the feeder. Pick up the fax handset and dial the remote unit. When it answers, press **Start** to begin transmission. Then hang up the handset.

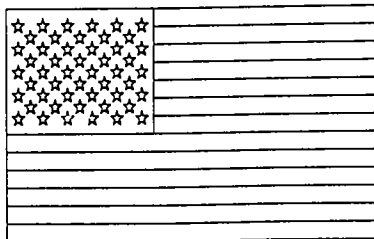
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# Regulations

## FCC Regulations



**Ringer Equivalence Number: 1.9B**

**Warning:** This equipment generates and uses radio frequency energy and if not installed and used properly, that is, in strict accordance with the manufacturer's instructions, may cause interference to radio and television reception. This facsimile machine has been type tested and found to comply with the limits for a Class B computing device in accordance with the specifications in Subpart J of Part 15 of FCC Rules, which are designed to provide reasonable protection against such interference in a residential installation. However, there is no guarantee that radio and television interference will not occur in a particular installation.

If this equipment causes 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 the receiving antenna; Relocate the facsimile machine with respect to the receiver with which it interferes; Move the facsimile machine away from the receiver; Plug the facsimile machine into a different AC receptacle so that the facsimile machine and the receiver with which it interferes are on different branch electrical circuits.

If necessary, the user should consult the dealer or an experienced radio/television technician for additional suggestions. The user may find the following booklet prepared by the Federal Communications Commission helpful: "How to Identify and Resolve Radio-TV Interference Problems." This booklet is available from the U.S. Government Printing Office, Washington, D.C., 20402, Stock Number 004-000-00345-4.

### Type of Service

Your M2000 is designed for use on standard device telephone lines. The M2000 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.

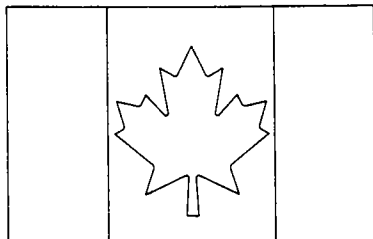
The sum of all RENs on your telephone line should be fewer than five (5) in order to assure proper service from the telephone company. Sometimes, a sum of five (5) may not be usable on a given telephone line.

### 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 M2000, 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 (see page 5).

## DOC Regulations



**DOC Load Number: 13**

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 M2000 is 13.

# Specifications

<b>Type:</b>	High-speed facsimile transmitter and receiver for office and in-home use	
<b>Compatibility:</b>	CCITT Group 3 and Group 2	
<b>Trans. Speed*:</b>	18 seconds per page average	
<b>Phone Line:</b>	Public switched telephone network or the equivalent. Leased or dedicated telephone line not required	
<b>Modem:</b>	9600 bps with automatic fall-back to 7200, 4800 and 2400 bps per CCITT V.29 and V.27 ter.	
<b>Delayed Commands:</b>	1	
<b>Doc. Feeder:</b>	30 pages	
<b>Resolution:</b>	Superfine <sup>†</sup>	203 H x 392 V lpi
	Fine	203 H x 196 V lpi
	Normal	203 H x 98 V lpi
<b>Grayscale:</b>	16-level	
<b>Printing Width:</b>	8.5 inches	
<b>Scanning Width:</b>	9.9 inches	
<b>Scanning Method:</b>	Solid-state CCD	
<b>Recording Paper:</b>	8.5 inches x 328 feet	
<b>Power:</b>	115 VAC ± 10%, 50-60 Hz	
<b>Dimensions:</b>	17.8(w) x 12.0(d) x 7.0(h) inches (453 x 307 x 179 mm)	
<b>Weight:</b>	16.7 pounds	
<b>Orig. Doc. Size:</b>	Maximum:	11 (w) x 15.7 (l) inches
	Minimum:	4.7 (w) x 2.7 (l) inches

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

<sup>†</sup> Available during transmission to another Murata fax machine with superfine.

### Service Questions

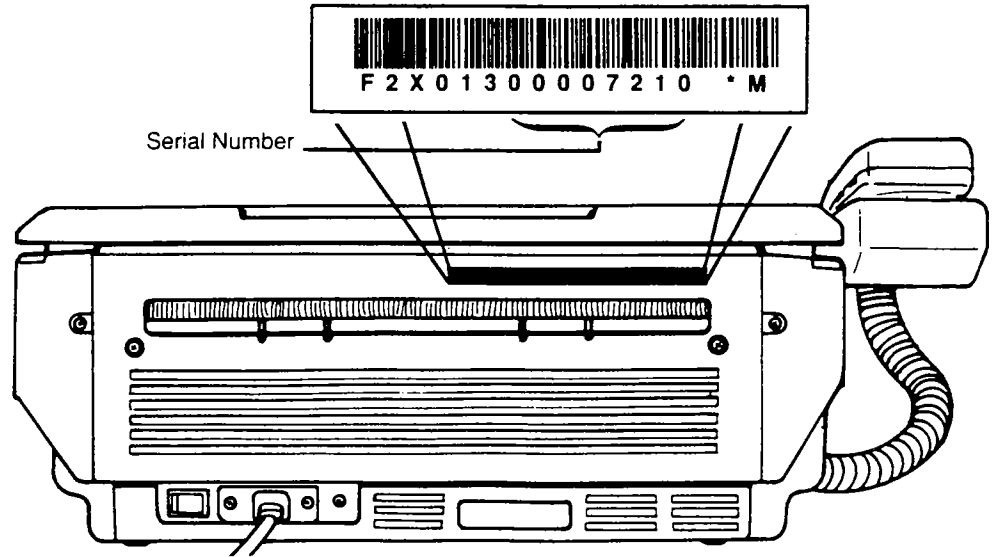
If you have questions about your fax or its use, call Murata's Customer Support Center:

**1-800-347-3295**

Trained Murata service technicians are available from 7:30 a.m. to 7:30 p.m. Monday through Friday Central time, excluding holidays, to resolve any questions not answered in this manual.

Have your fax's serial number ready for the service technician when you call. The serial number is printed on a bar code label on the back of your machine.

The last eight numbers of the alpha-numeric bar code make up your serial number.



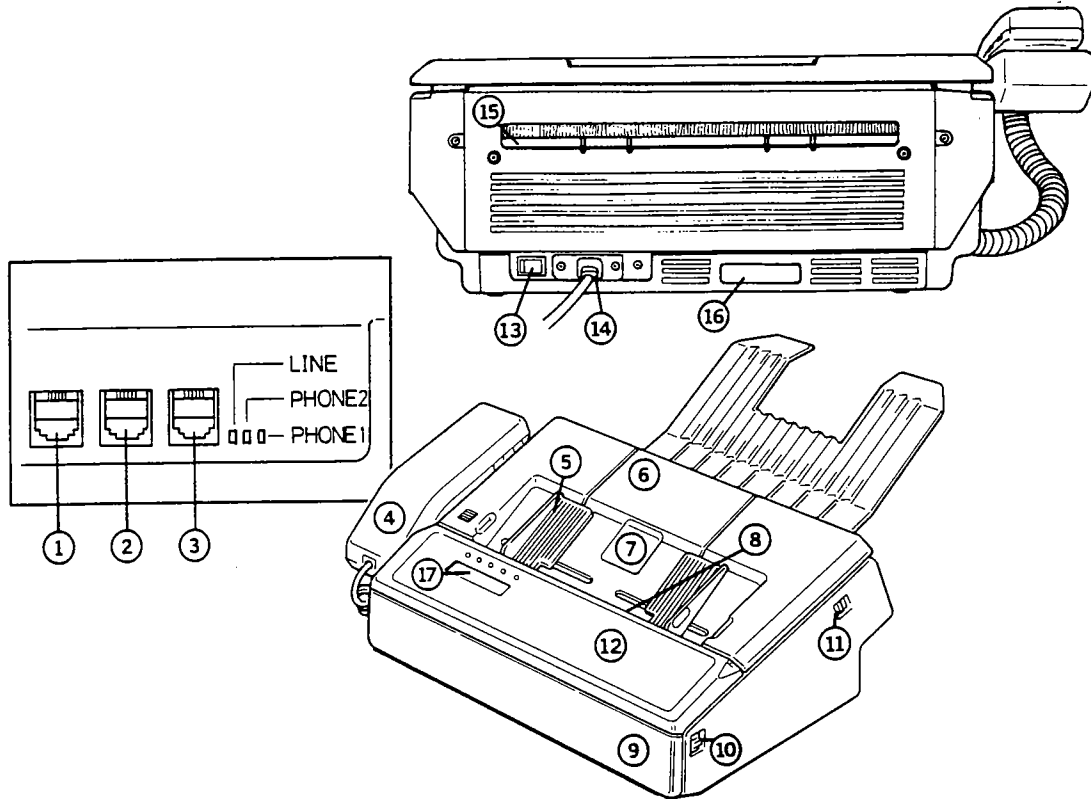
### Do You Have a Comment?

Your comments on the content and quality of these operating instructions are welcome. Fax your comments and suggestions about this manual to: M2000 Manual, Product Development, MBS, 214-403-3499.

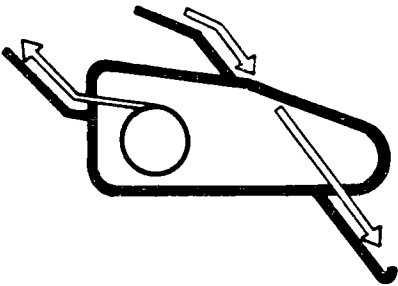




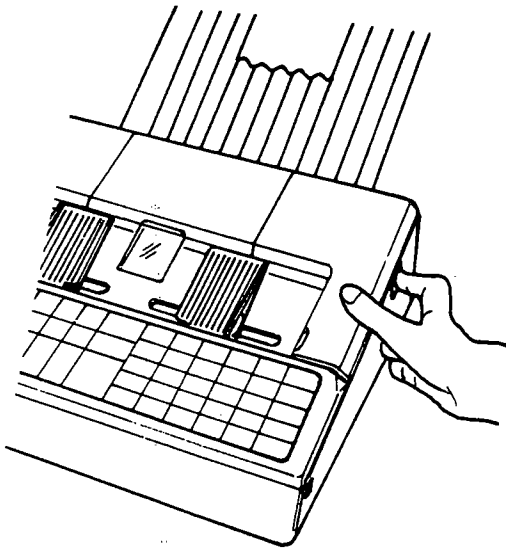
# Installation



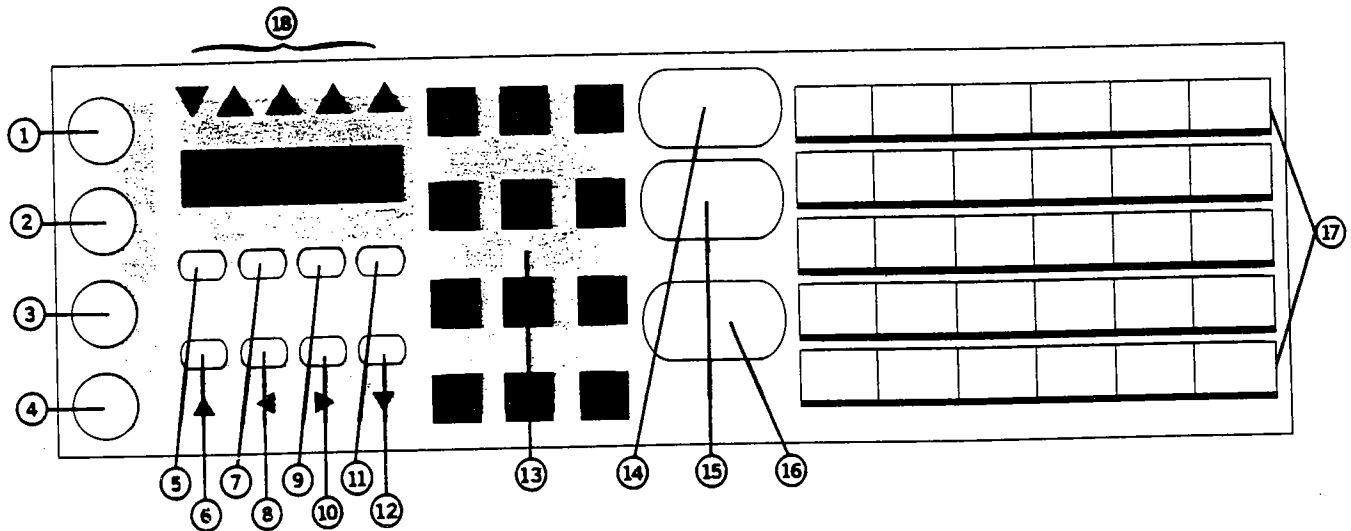
## Fax Layout



1. **Line**—Standard RJ-11C modular jack for telephone line from wall jack.
2. **Phone 2**—RJ-11C modular jack for telephone answering machine, cordless telephone or other telephone device used with the M2000.
3. **Phone 1**—RJ-11C modular jack for M2000's telephone handset.
4. **Telephone Handset**—With keypad, ringer volume adjustment and rotary/tone dial settings.
5. **Document Guide**—Adjustable document guide to accept pages up to 11 inches wide.
6. **Document Support**—Extend sliding plastic support fully before using fax machine.
7. **Paper Window**—Use the window to check the paper supply at a glance.
8. **Document Feeder**—Automatically feeds pages through scanner for transmission or copying.
9. **Document Feeder Cover**—Open feeder cover if document jams during transmission.



10. **Document Feeder Cover Release**— Press down to open document feeder cover.
11. **Paper Cover Release**— Pull forward to open paper cover. To close, press firmly on the center of the cover.
12. **Keypad**— See below for more information on each key.
13. **On/Off Switch**— Your fax consumes far less electricity in standby mode than a table lamp: Leave it turned on all the time so you never miss an important transmission.
14. **AC Power Cord Connection**— Firmly attach power cord. Then plug the cord into a grounded 115-volt AC outlet.
15. **Document Exit and Cutter**— Exit for copied or received documents. Documents are cut into individual pages automatically.
16. **LCD**— Two-line by 20-character display, showing system status and fax operation.



### Keypad Layout

1. **Hold**— Press to place a call on hold. The M2000 offers an optional hold melody (see page 49).
2. **Monitor/Call**— While the telephone handset is down, press **Monitor/Call** to get a dial tone. During fax transmission or reception, press to signal that you would like to speak with the remote fax operator, if one is present (see page 32).
3. **Redial**— Press to redial the last number dialed.
4. **Auto/Man Answer**— Press to select automatic or manual call reception. The Auto Answer LED will light when automatic reception is selected.

5. **Program**—Press to enter the program mode. Use **Program** to scroll through the command categories available in your M2000.
6. **Pause**—Use when storing a one-touch or speed-dial telephone number. Generates a dialing pause useful when dialing through some telephone exchanges or when calling overseas.
7. **Confirm/Enter**—Press during transmission to manually request or cancel a confirmation report (see page 20). The Confirm LED will light when a report has been requested. Also used when programming information into your facsimile machine.
8. **Tone**—Used for special dialing requirements on some rotary telephone systems (see page 48).
9. **Mode/Select**—Before transmission or copying, use **Mode/Select** to choose the resolution needed. Also used when programming information into your facsimile machine.
10. **Dash Key**—Press to enter a dash, "-", into your autodialer numbers and Subscriber ID.
11. **Original/Cancel**—Before transmission or copying, use **Original/Cancel** to choose the contrast setting needed. When entering a telephone number or programming other information in your fax, press **Original/Cancel** to delete the last character entered. Also used when programming information into your fax.
12. **Speed Dialer**—Press before entering a two-digit speed-dial number. While a group polling operation is underway, press **Speed Dialer** to briefly interrupt the function for a new command.
13. **Numeric Keypad**—Use to enter data, dialing instructions and speed-dial numbers.
14. **Stop**—Press to stop the facsimile function underway and return your M2000 to standby mode.
15. **Copy**—Press to copy documents inserted in the document feeder.
16. **Start**—Press to begin manual transmission or reception.
17. **One-Touch Keys**—One-touch transmission commands, numbered 01 through 30, for your frequently called numbers.
18. **Status Lamps**—Alarm: Shows when an error has occurred. Hold: A caller is on hold. Monitor: The M2000's monitor is in use. Confirm: A confirmation report (see page 20) has been requested after the current transmission. Auto Answer: The M2000 is set to respond to incoming calls automatically.

# Phone, Electrical and Unpacking Information

## Telephone Requirements

Your M2000 works on standard telephone lines and, with Murata's voice/fax switch and switch-to-fax features (see page 32), operates perfectly on the same line as 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.



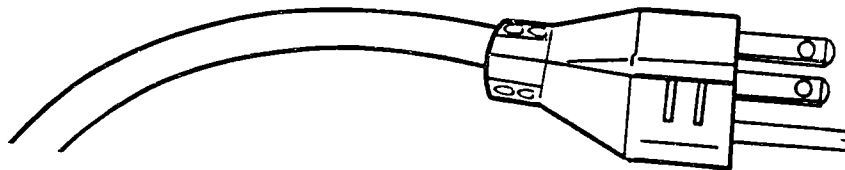
## A Note About Call-Waiting Signals

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 M2000, you may experience interruptions of facsimile service.

## Electrical Requirements

Power your M2000 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, your fax cannot receive incoming messages or complete a delayed command if it is turned off.

Don't install your M2000 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.



## Voltage Requirements

115 volts AC  $\pm$  10%, 50-60 Hz, single phase

## Power Consumption

Standby	15 W	Transmission	45 W
Copy	115 W	Reception	85 W

### Unpacking and Assembly



*Please!*

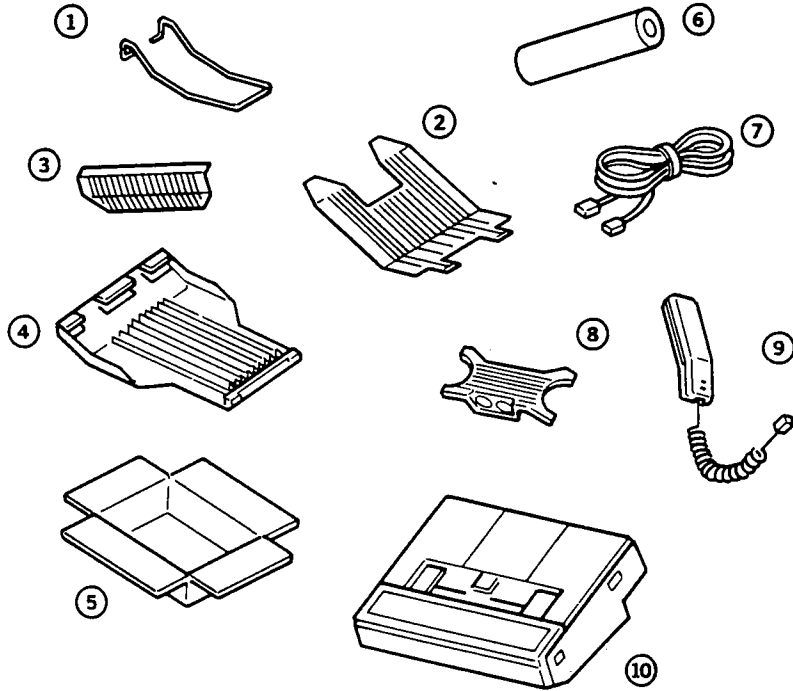
Do not install your facsimile machine where there is a danger of:

- **Overheating**  
Allow at least 10 inches clearance from the top and the sides of your M2000. Don't install your fax machine in direct sunlight.
- **Dust**  
Keep your M2000 in top form: Don't install it where dust can settle and accumulate.
- **Splashes**  
Keep your M2000 away from sinks, water fountains and other sources of splash and spray.
- **Vibration**  
Keep your M2000 on a level, vibration-free surface to improve performance and system life.

Open the M2000 shipping carton and take out the accessory box, telephone handset, telephone cradle, telephone line, power cord, recording paper roll and product documentation.

Carefully lift the M2000 and its protective foam braces out of the carton. Remove the foam braces and protective plastic bag.

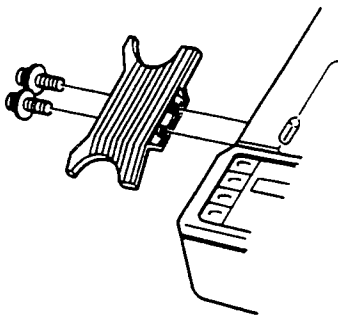
Keep the bag, braces and carton for reshipment. Discard the silica desiccant shipped with your fax.



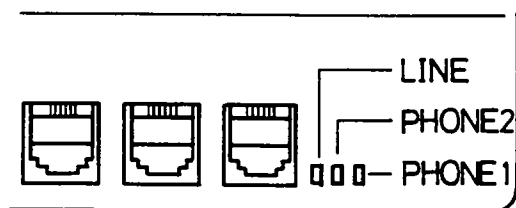
After unpacking, check for the following:

- |                        |                               |
|------------------------|-------------------------------|
| 1. Document guide wire | 6. Starter paper roll         |
| 2. Receive tray        | 7. Telephone line             |
| 3. Document tray A     | 8. Handset cradle             |
| 4. Document tray B     | 9. Telephone handset and cord |
| 5. Accessory box       | 10. Fax console               |

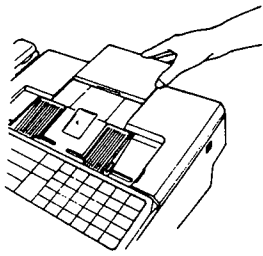
### Installation



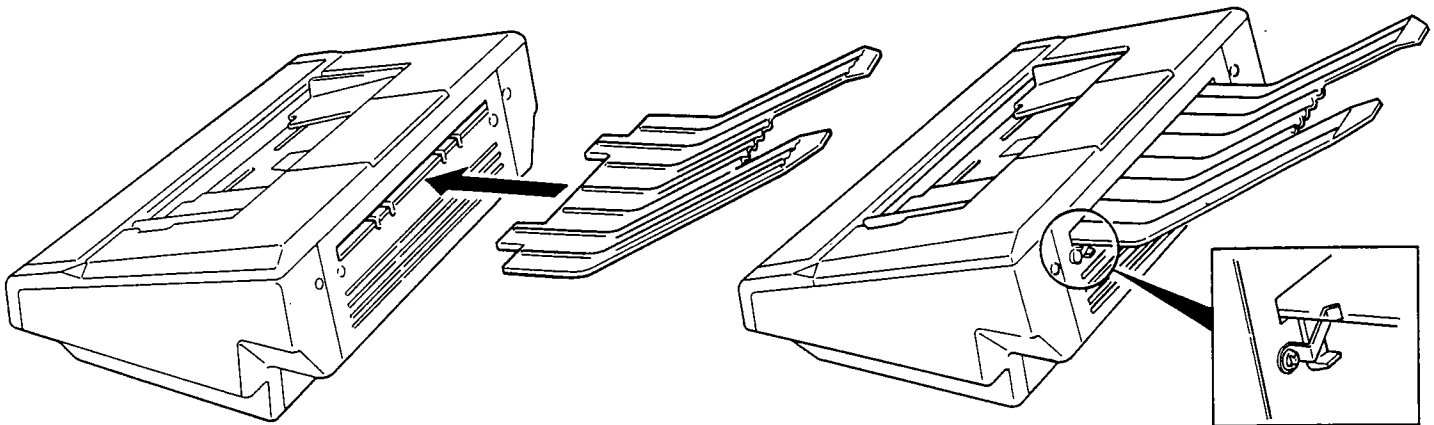
1. Make sure the On/Off switch at the back of the M2000 is off.
2. Next, plug the telephone line into the connector marked "Line" on the left side of your fax. Plug the other end into the telephone wall jack.



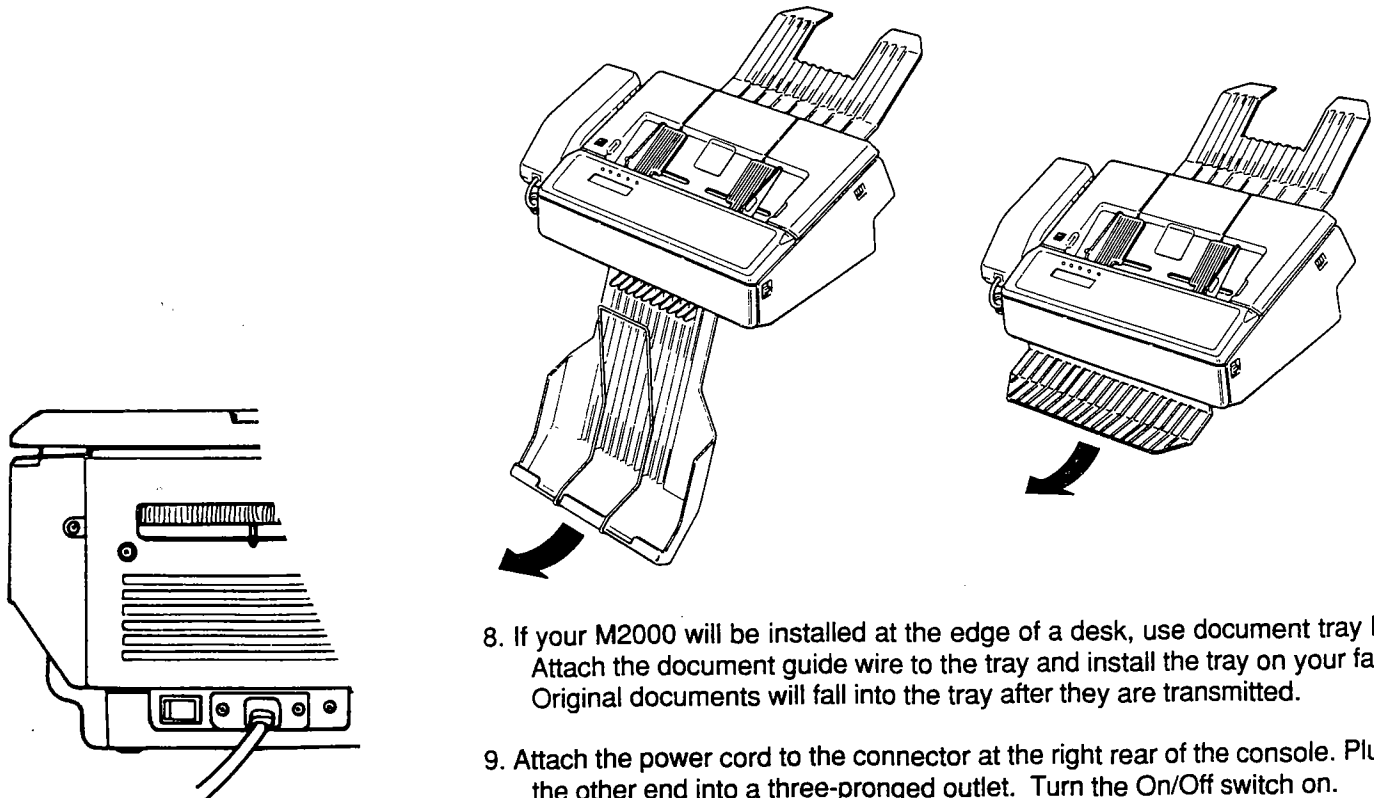
3. Use the handset cradle screws to attach the cradle to the left side of your M2000. Plug the M2000's handset cord into the connector marked "Phone 1" on the left side of the fax. Then hang the handset on its cradle.



4. If you will be using an answering machine or second telephone with your fax machine, connect the telephone line from this device to the "Phone 2" connector. **Do not** connect the answering machine directly into a wall jack: To operate properly with the M2000's voice/fax switch, the answering machine must be connected to the "Phone 2" jack.
5. Extend the document support to support pages inserted into the document feeder.
6. Slide the receive tray into place at the back of the M-2000. Use a screw driver to attach the tray retaining clips included in the accessory box. Position the clips to hold the receive tray in place as shown, then tighten the screws.



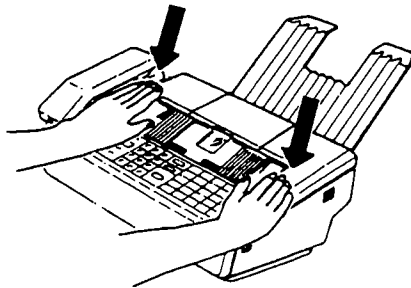
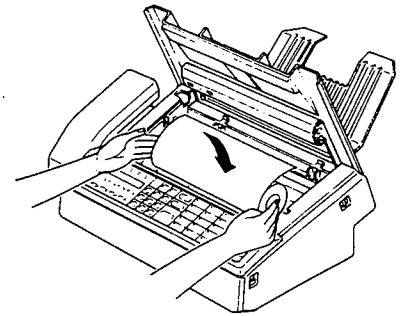
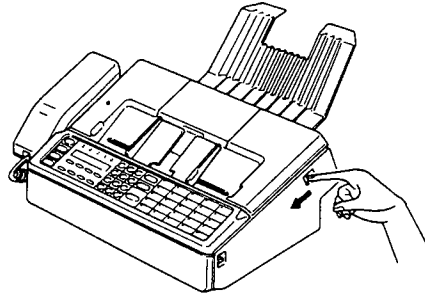
7. If your M2000 will be installed away from the edge of a desk, install document tray A on the front of your fax. Your original documents will be stacked face down in front of your fax after they are transmitted.



8. If your M2000 will be installed at the edge of a desk, use document tray B. Attach the document guide wire to the tray and install the tray on your fax. Original documents will fall into the tray after they are transmitted.
9. Attach the power cord to the connector at the right rear of the console. Plug the other end into a three-pronged outlet. Turn the On/Off switch on.

## Installing Fax Recording Paper

To install fax recording paper in your Murata M2000:



1. Pull forward on the paper cover release.
2. Place the paper roll into the paper cradle so it unrolls from the top and is fed out through the back of your fax.
3. Feed the leading edge of the fax paper beneath the black arrows at the rear of the paper cradle. A label inside the M2000's paper cradle will help you position the paper correctly.
4. Close your fax, pressing firmly on the front of the cover. Then press **Start**. The M2000 will feed about four inches of paper out through the back of the fax and cut it automatically.

## Low-Paper Warning

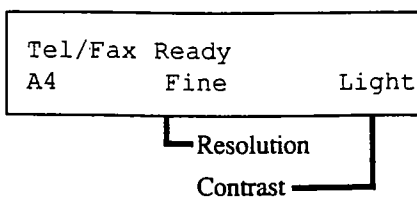
A red warning line will appear on your recording paper when fewer than 25 feet of paper remain. Replace the roll as soon as possible.

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 will display "Confirm Paper Supply". Replace the roll immediately.

## Using Your Fax as a Copier

Use your M2000 as a convenience copier to duplicate documents without leaving your desk.

1. Place your document face down into the M2000's document feeder.
2. Press **Mode/Select** to choose the copy resolution. Press **Original/Cancel** to compensate for a dark or light original.
3. Then press **Copy**.



You can add pages face down into the feeder as the M2000 copies your document. Never place more than 30 pages in the feeder at one time.

Your M2000 cannot respond to incoming telephone calls while being used as a copier.



## Murata Fax Paper

For the best results and longest system life, use Murata thermal recording paper in your new M2000 facsimile machine.

Your M2000 uses a special thermal printhead to provide sharp, clear documents. Murata's M2000 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 M2000 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 you.

## Telephone Features

Your fax and telephone handset are set initially for use on touch-tone telephone systems rather than rotary. If your telephone network 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 17).

A small switch on the side of the M2000's telephone handset controls the dialing signals produced by the handset keypad. The handset setting does not change the dialing signals produced by the fax'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 the M2000:

**Hold**—Just press **Hold** to place a call on hold. The M2000 includes an optional melody (see page 49) you can use to let your caller know the line is on hold.

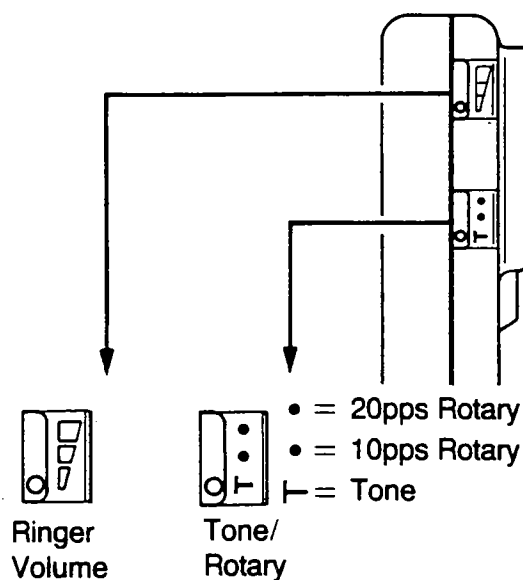
Your fax will beep several times at one-minute intervals to remind you your caller

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, the M2000 will disconnect the call automatically.

To return to a call placed on hold, just pick up the M2000's built-in handset or a telephone connected to the M2000's "Phone 2" jack.

**Monitor/Call**—For hands-free voice or fax dialing, press **Monitor/Call** to get a dial tone while the M2000's handset remains down. Then enter a telephone number using the numeric keypad, a one-touch key or **Speed Dialer** 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 M2000'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 M2000's handset or a telephone connected to the M2000's "Phone 2" jack.



# User Settings

Most user settings for your M2000 can be entered either when you install your fax or later, after you find a need for a particular feature. To assure proper operation of your fax with a telephone or answering machine connected to the "Phone 2" jack, however, take a few moments to complete the two steps below. Decide if your M2000 will be used alone, with a telephone or with an answering machine.

## Set Second Telephone

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

```
1. Set 2nd Telephone
1-2          Enter/Select
```

2. Press **Confirm/Enter.**

```
Remote Tel:      Off
                Enter/Select
```

3. If you do not have a telephone, answering machine or similar device attached to the M2000's "Phone 2" connector, press **Confirm/Enter.**

4. If you have a phone or other device attached to the "Phone 2" jack, press **Mode/Select** to turn the remote telephone setting on.

```
Remote Tel:      On
                Enter/Select
```

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

```
Set 2nd Telephone
** Completed **
```

## Select Tel/Fax/Ans

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

```
2. Select Tel/Fax/Ans
1-2          Enter/Select
```

2. Press **Confirm/Enter.**

```
Fax Ready
                Enter/Select
```

3. Press **Mode/Select** to choose the status needed. You can choose Fax Ready, Tel./Fax Ready, or Ans./Fax Ready. See the next page if you can't decide the setting that's right for you.

```
Ans./Fax Ready
                Enter/Select
```

4. When you have selected Fax Ready, Tel./Fax Ready or Ans./Fax Ready, press **Confirm/Enter** to save your selection.

Select Tel/Fax/Ans  
\*\* Completed \*\*

### Which Settings Are Right for Your Office?

If You Have **Nothing** Connected to "Phone 2", Choose:

2nd Telephone: Off

Tel/Fax/Ans: Fax Ready

These settings are ideal for the office that has a dedicated fax telephone line or that for other reasons has nothing connected to the "Phone 2" jack.

Use **Auto/Man Answer** to select how your fax will respond to incoming calls.

When you select automatic reception, your M2000 will pick up the line after two or six rings (see page 20) and attempt to begin fax reception. It will not play the pre-recorded voice prompt before attempting fax communication. When you select manual reception, pick up the fax handset to answer incoming calls. Press **Start** to begin reception if the call is from a fax machine. See page 31 for more information.

If You Have a **Telephone** Connected to "Phone 2", Choose:

2nd Telephone: On

Tel/Fax/Ans: Tel./Fax

These settings are perfect for the office that shares the fax line with a business telephone.

Use the **Auto/Man Answer** key to select how your fax will respond to incoming calls.

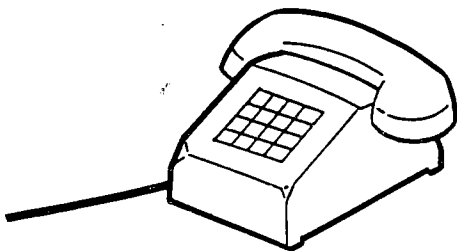
When you select automatic reception, your M2000 will pick up the line after two or six rings (see page 20). You can use the built-in handset or the telephone connected to the "Phone 2" jack to answer the line manually before the M2000 answers.

If the M2000 answers the line, it will play the pre-recorded answering voice prompt before attempting fax communication:

*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 software in your M2000 and is available in English or Spanish (see page 17).

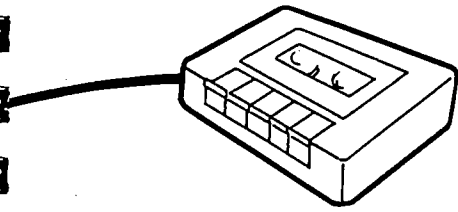
When you select manual reception, use the built-in handset or the telephone connected to the "Phone 2" jack to answer incoming calls. If the call is from a person, talk as you would normally. If the call is from a fax, press **Start** to begin reception. Then hang up the telephone. (If the telephone connected to the "Phone 2" jack is in another room, you can use the M2000's switch-to-fax feature—see page 32—to print the incoming message on the fax.)



If You Have an **Answering Machine** Connected to "Phone 2", Choose:

2nd Telephone: On

Tel/Fax/Ans: Ans./Fax



These settings are right for the office that shares the fax line with an answering machine. Use **Auto/Man Answer** to turn the Auto Answer LED on. To assure proper operation with your answering machine, make sure the Auto Answer LED is always on.

When you select the Ans./Fax Ready setting, your M2000 will not answer incoming calls. You can answer the calls with the built-in handset or allow the answering machine connected to the "Phone 2" jack to respond.

When you or your answering machine answer a call, the M2000 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, the M2000 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 the M2000 comes on the line. (See page 57 for ideas on how to modify your answering machine message to make best use of the M2000.)

Although the Ans./Fax 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.

Finally, it is possible for callers to leave both a voice and fax message on the same telephone call (see page 57).

## Other User Settings

You can enter the settings below in any order you wish, and ignore those that do not pertain to your fax use.

### 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.

The M2000 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.

### Set Phone Line Type

Your M2000 works well on telephone lines requiring either tone or rotary dialing signals. The M2000 is set initially to use tone dialing signals. To change to rotary dialing signals:

1. From standby, press **Program, 8, Confirm/Enter**.

1. Set Phone Type  
01-19            Enter/Select

2. Press **Confirm/Enter**.

```
Tone Line
Enter/Select
```

3. Press **Mode/Select** once.

```
Rotary Line
Enter/Select
```

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

```
Set Phone Type
** Completed **
```

The M2000 initially provides rotary dialing signals at 10 pulses per second when you select the rotary dialing option. If your telephone system requires 20 pps signals, see page 53. If you are unsure of the dialing signals required on your telephone system, call your telecommunication company for help.

## Set Passcode

The optional passcode in your M2000 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 26), you instruct your M2000 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 M2000'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, 8, Confirm/Enter, 02**.

```
2. Set Passcode
01-19      Enter/Select
```

2. Press **Confirm/Enter**.

```
Set Passcode
Passcode:      0000
```

3. Use the numeric keypad to enter your passcode.

```
Set Passcode
Passcode:      1234
```

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

```
Set Passcode
** Completed **
```

### 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.

Remember that you can also control reception with the **Auto/Man** key and that some settings for Call Response (see page 15) require the M2000 be set for auto answer all the time.

1. To enter an auto receive time setting, press **Program, 8, Confirm/Enter, 03.**

```
3. Set Auto Rx Time
01-19      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.**

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

6. Enter the hour you want automatic reception to end.

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

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

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

8. Press **Confirm/Enter.**

```
Set Auto Rx Time
** Completed **
```

To cancel this setting, return the start and end settings to 00:00.

## Set Number of Rings

Use this setting to select the number of times your M2000 will ring before it responds to an incoming call. You can select two or six rings. Your unit is set initially to respond after two rings.

1. To set the number of rings, press **Program, 8, Confirm/Enter, 04.**

```
4. Set Number Rings
01-19      Enter/Select
```

2. Press **Confirm/Enter.**

```
Number of Rings: Two
                Enter/Select
```

3. Press **Mode/Select** to change to six rings.

```
Number of Rings: Six
                Enter/Select
```

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

```
Set Number Rings
** Complete **
```

## Set Comm. Result

Your M2000 offers two kinds of communication reports after a transmission. These reports verify that your document was sent, and are especially useful when you use the M2000's delayed command to send a document after hours.

A Transmit Confirmation Report is a signal from your M2000 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 correctly printed the message you sent.

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 page 55).

If you request an RCR during a transmission with a non-Murata unit, a TCR will be printed automatically instead.

1. To select the communication report, press **Program, 8, Confirm/Enter, 05.**

```
5. Select Comm. Result
01-19      Enter/Select
```

2. Press **Confirm/Enter.**

```
TCR
                Enter/Select
```

3. Press **Mode/Select** to choose the type of report you want after each transmission. Then press **Confirm/Enter**.

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

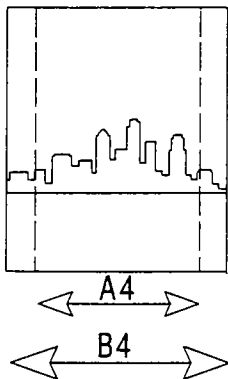
4. Press **Mode/Select** to turn the automatic print on. This will request a communication report after each transmission.

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

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

```
Select Comm. Result
** Completed **
```

### Set Scanner Width



When you transmit wide documents, your M2000 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. The M2000 is set initially to scan to the B4 (9.9-inch) document width. You can adjust this to the A4 (8.5-inch) width.

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.

1. To set the scanner width, press **Program, 8, Confirm/Enter, 06**.

```
6. Set Scanner Width
01-19      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**.

```
Set Scanner Width
** Completed **
```

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



## Set Primary Resolution

Your M2000 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 Primary Mode setting below to save a step in all future transmissions: When you select fine as the primary mode, your M2000 will send all documents at this higher resolution unless you specifically change it before transmission.

1. To set the primary mode, press **Program, 8, Confirm/Enter, 07**.

```
7. Set Primary Mode
01-19      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 Primary Mode
** Completed **
```

## Set Original Contrast

Along with an adjustable primary resolution (above), the M2000 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. To choose the primary contrast setting, press **Program, 8, Confirm/Enter, 08**.

```
8. Set Contrast
01-19      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**.

```
Set Contrast
** Completed **
```

## Set Redial Attempts

Your M2000 will automatically redial a busy fax number anytime you attempt transmission using a one-touch key, speed-dial number or a telephone number entered through the fax's numeric keypad.

Use this setting to determine how many times your fax should redial the busy number before sounding its alarm to alert you of the unsuccessful transmission.

1. To set the number of attempts, press **Program, 8, Confirm/Enter, 09**.

```
9. Set # of Redials
01-19      Enter/Select
```

2. Press **Confirm/Enter**.

```
Redial Attempts:      2
                    Enter/Select
```

3. Press **Mode/Select** to choose 2, 3, 4 or 5 redial attempts.

```
Redial Attempts:      5
                    Enter/Select
```

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

```
Set # of Redials
** Completed **
```

## 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. To set the redial interval, press **Program, 8, Confirm/Enter, 10**.

```
10. Set Redial Inter.
01-19      Enter/Select
```

2. Press **Confirm/Enter**.

```
Redial Interval:      3
                    Enter/Select
```

3. Press **Mode/Select** to set the interval in minutes. You can choose a 3-, 4- or 5-minute interval.

```
Redial Interval:      5
                    Enter/Select
```

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

```
Set Redial Inter.
** Completed **
```

## Journal Print On/Off

The M2000's Activity Journal displays information on your 25 most recent transmissions and receptions. You can request an Activity Journal at any time (see page 55). Use this setting to instruct your M2000 to print a journal after every 25 transactions.

1. To select the journal print setting, press **Program, 8, Confirm/Enter, 11**.

```
11. Journal On/Off
01-19      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**.

```
Journal On/Off
** Completed **
```

## Remote Diagnostics

Your M2000 includes special software that allows Murata's trained service technicians to test your fax by computer over the telephone.

To take advantage of Murata's remote diagnostic service when you encounter a problem, call the Murata Customer Support Center at 1-800-347-3295. Before you call, make sure the remote diagnostic setting described below is **Off**.

1. To change the diagnostic setting, press **Program, 8, Confirm/Enter, 12**.

```
12. Deny Diagnostic
01-19      Enter/Select
```

2. Press **Confirm/Enter**.

```
Deny Diagnostic   On
                  Enter/Select
```

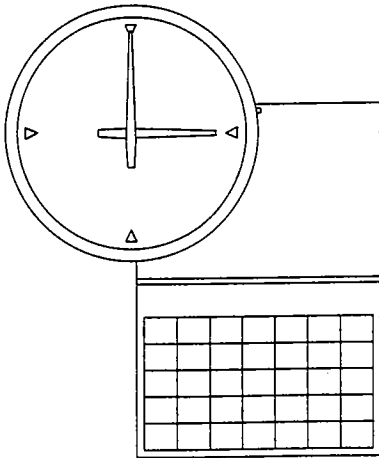
3. Press **Mode/Select** to change the diagnostic setting.

```
Deny Diagnostic   Off
                  Enter/Select
```

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

```
Deny Diagnostic
** Completed **
```

### Set Date and Time



The clock and other user settings in your fax are protected from power failures for up to several days by a rechargeable internal battery. The LCD on the M2000 displays time in 24-hour format.

1. To set the clock, press **Program, 8, Confirm/Enter, 13.**

```
13. Set Date and Time
01-19      Enter/Select
```

2. Press **Confirm/Enter.**

```
Set Date and Time
'01 01/01 01:01
```

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

```
Set Date and Time
'89 01/01 01:01
```

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

```
Set Date and Time
'89 02/01 01:01
```

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

```
Set Date and Time
'89 02/26 01:01
```

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

```
Set Date and Time
'89 02/26 14:01
```

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

```
Set Date and Time
'89 02/26 14:55
```

8. Press **Confirm/Enter.**

```
Set Date and Time
** Completed **
```

### Set Dialing Pause

The **Pause** key on the M2000 lets you insert dialing pauses into numbers stored in your autodialer (see page 43). 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 M2000 should wait when it encounters a dial pause, press **Program, 8, Confirm/Enter, 14.**

```
14. Set Dialing Pause
01-19      Enter/Select
```

2. Press **Confirm/Enter**.

```
Set Dialing Pause
Pause Duration:   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
Pause Duration:   10
```

4. Press **Confirm/Enter**.

```
Set Dialing Pause
** Completed **
```

### Print User Settings

\*\*\* MACHINE SETTING \*\*\*

Subscriber ID	00000000
Transmit Terminal Identifier	00000000
Passcode	0000
Dialing Pause	05
Redial Attempts	00
Redial Interval	00
Auto Receive Time	00
Phone Line Setting	00
Number of Rings	00
Communication Result	00
Scan Width	00
Primary Mode	00
Original Contrast	00
Automatic Journal Print	00
Remote Diagnostics	00
Closed Network	00
Grayscale	00

Use this command to print a list of your user settings. The printed report lists the settings or status of: Subscriber ID, Transmit Terminal Identifier, passcode, dialing pause, redial attempts, redial interval, auto receive time, phone line setting, number of rings, communication result, scan width, primary mode, original contrast, automatic journal print, remote diagnostics, closed network and grayscale.

1. To print the user settings, press **Program, 8, Confirm/Enter, 15**.

```
15. Print User Settings
01-19      Copy/Select
```

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

```
Print Settings
** Printing **
```

### Closed Network

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 18) can access your M2000 for transmission or polling. All other facsimile machines will be disconnected before transmission.

1. To begin the closed network, press **Program, 8, Confirm/Enter, 16**.

```
16. Closed Network
01-19      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. Enter up to 20 numbers. When the Subscriber ID has been entered, 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**.

Enter Your TTI
** Completed **

## Print Your TTI

Use this setting to print out your TTI and Subscriber ID.

1. Press **Program, 8, Confirm/Enter, 18**.

18. Print Your TTI
01-19      Copy/Select

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

Print Your TTI
** Printing **

## Set Grayscale

The M2000 includes 16-level grayscale scanning ability, so it can accurately reproduce and transmit halftone images like photographs.

The M2000 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 grayscale transmission quality for halftone images that include no text.

Use **Copy** before transmission to test the grayscale setting that's best for the documents you send.

1. To adjust the grayscale setting, press **Program, 8, Confirm/Enter, 19**.

19. Set Grayscale
01-19      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**.

```
Set Grayscale
** Completed **
```

### Clear Settings

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.

### Print Delayed Command

1. To print a list of the delayed command programmed in your M2000, press **Program, 7, Confirm/Enter**.

```
1. Print Command
1-2 Copy/Select
```

2. Press **Copy**. Your fax will print the delayed command you have programmed, showing the remote location, start time and type of command scheduled.

```
Print Command
** Printing **
```



## Erase Command

1. To erase the delayed command, press **Program, 7, Confirm/Enter, 2.**

```
2. Erase Command
1-2      Select/Cancel
```

2. Press **Original/Cancel.**

```
Erase Command
** Erased **
```

# Reception

## Automatic and Manual

The M2000 offers two ways to answer incoming telephone calls:

- An automatic setting instructing your unit to respond after a set number of rings if you haven't manually answered the line. To select this setting, press **Auto/Man Answer** to light the Auto Answer LED.
- A manual setting telling your unit to ignore all incoming calls. To select this setting, press **Auto/Man Answer** to turn off the Auto Answer LED.

Your M2000 lets you choose between these settings for flexibility in your business communication. You can even use a programmable setting (see page 19) to switch the fax to and from automatic reception during the day.

The M2000 includes a modular jack to allow your fax to work perfectly with a second telephone or with a telephone answering machine. Review page 15 and make sure you have selected the proper settings for your fax use.

### If You Have an **Answering Machine** Connected to Your M2000:

Ans./Fax Ready Feb 26, 89 14:55
------------------------------------

If you are using your fax with an answering machine, the setting described on page 15 instructs your M2000 not to answer incoming calls. You can answer the calls manually using the M2000's handset or let your answering machine respond. (Although your fax will not actually answer incoming calls, the Auto Answer LED must always be on. If the Auto Answer LED is off, your fax machine cannot listen on the telephone line for fax transmissions and will not receive incoming fax messages. See page 17.)

When you or the answering machine answer the call, the M2000 will listen quietly on the telephone line. If the M2000 detects transmission tones from a remote fax, it will disconnect the handset or answering machine and print the incoming fax messages. If the call is from a person, the M2000 will remain in the background so your conversation or your answering machine's message isn't disrupted.

### If You Have A **Second Telephone** Connected to Your M2000 or Use the Fax By Itself:

Tel./Fax Ready Feb 26, 89 14:55
------------------------------------

or

Fax Ready Feb 26, 89 14:55
-------------------------------

If your fax is installed with a second telephone connected to the "Phone 2" jack or with nothing connected to the "Phone 2" jack, use the **Auto/Man Answer** key to control the way your M2000 responds to incoming calls.

When your M2000 answers calls in the Tel./Fax Ready mode, it will play the pre-recorded voice prompt then attempt to begin fax reception. In the Fax Ready mode, your M2000 will attempt to begin fax reception immediately.

## Switch to Fax

If you answer an incoming fax call with the M2000 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 the M2000 is in another room, press "6" on the telephone keypad two or four times (see page 52) to instruct the M2000 to come on the line and print the fax message.

## Voice Prompt

---

When you have selected the Tel./Fax Ready mode and allow the M2000 to answer incoming calls automatically, callers to your fax 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 M2000 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 M2000 and is available in English and Spanish (see page 17).

## Call Reserve

---

The M2000'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 an operator at 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 return your handset to its cradle.

## Responding to a Call Request

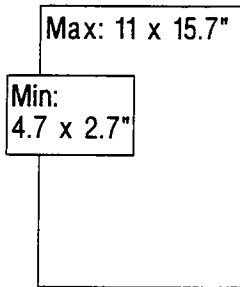
- 
1. When a remote operator requests a voice call during fax communication, your fax will ring after each page of the document is received.

2. To answer the call request, pick up the handset and press **Monitor/Call**.

3. When the remote operator responds to your call request response, begin your conversation.

# Transmission

## Page Size



Each page inserted into your M2000's feeder must fall within these page-size requirements:

- Maximum: 11 (w) x 15.7 (l) inches
- Minimum: 4.7 (w) x 2.7 (l) inches

An optional setting (see page 51) allows you to transmit water well logs, medical strip charts and other pages longer than 15.7 inches.

When transmitting to a fax machine with an 8.5-inch print width, wider documents will be reduced automatically to accommodate the receiving unit. To transmit images from documents smaller than the minimum or from newspaper, cardboard or overhead transparencies, first copy the document on a copier. Use the copied image for your transmission.

**Do not transmit:**

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

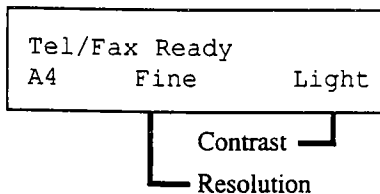
## Inserting a Document

Your M2000 will hold up to 30 sheets of normal-weight 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 M2000's feeder:

1. Adjust the feeder guides to your document's width.
2. Insert your document face down into the feeder. The feeder will automatically advance the first page—the one on the bottom of the stack—partially into the fax.
3. Press **Mode/Select** to set the resolution.

## Resolution and Contrast



Normal is suited to most typed documents. Fine is ideal for detailed or handwritten documents. Superfine reproduces the detail of extremely complicated drawings or line images. Grayscale is used to accurately transmit halftone 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. Superfine is available when transmitting to other Murata fax machines with superfine. All other fax machines will receive superfine transmissions in fine mode. Grayscale is available when transmitting to any Group 3 fax machine—even to those without the grayscale mode.

4. 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.

5. Begin transmission.

## Redialing Busy Numbers

When your fax encounters a busy signal, it will automatically attempt to redial the busy number. User settings control how many times the M2000 will redial a busy number and the amount of time between each attempt (see page 23).

This redial feature is not available for transmissions made using the monitor or telephone handset.

## Using the Keypad

1. Insert your document.

```
Fax Ready
A4  Norm  Norm
```

2. Press **Mode/Select** to choose the transmission resolution and **Original/Cancel** to set the contrast, if desired.

```
Fax Ready
A4  Fine  Light
```

3. 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
```

## Using a One-Touch Key

1. Insert your document.

```
Fax Ready
A4  Norm  Norm
```

2. Press **Mode/Select** to choose the transmission resolution and **Original/Cancel** to set the contrast, if desired.

```
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 the remote unit.

```
Murata
A4  Fine  Light
```

## Using a Speed-Dial Number

1. Insert your document.

```
Fax Ready
A4  Norm  Norm
```

2. Press **Mode/Select** to choose the transmission resolution and **Original/Cancel** to set the contrast, if desired.

```
Fax Ready
A4  Fine  Light
```

3. Press **Speed Dialer** followed by the two-digit speed-dial number programmed for the remote fax.

```
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
```

---

## Using the Handset

1. Insert your document.

```
Fax Ready
A4  Norm  Norm
```

2. Press **Mode/Select** to choose the transmission resolution and **Original/Cancel** to set the contrast, if desired.

```
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 Dialer** and a two-digit code.
5. When the remote fax answers and you hear facsimile tones, press **Start**.

---

## Delayed Transmission

You can instruct your M2000 to send a document up to 24 hours in advance. Delaying your transmission until after business hours reduces the chance that your fax will be unable to contact a busy fax machine 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**.

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

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

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

5. Press **Confirm/Enter**.

```
Delay Transmission
Enter Fax Number
```

6. Enter a one-touch key or press **Speed Dialer** and the two-digit speed-dial number needed.

```
Delay Transmission
[01]
```

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

```
Delay Transmission
Start Time: 14:55
```

8. 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
Start Time: 23:55
```

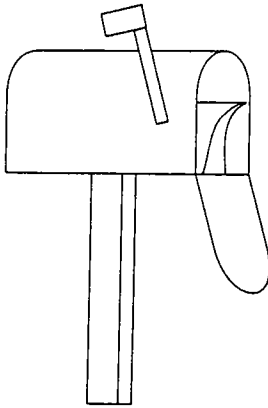
9. Press **Confirm/Enter**. Then enter the minute you want transmission to take place and press **Confirm/Enter**.

```
Delay Transmission
Start Time: 23:30
```

The M2000 will display the start time of the delayed command on the top line of the LCD.

```
Fax Ready 23:30
Feb.26,89 14:55
```

## Transmit SecureMail



SecureMail is an exclusive Murata feature for confidential documents: SecureMail transmissions are sent to memory "mail boxes", where they are protected by an access code selected by the mail box holder. If the box holder does not retrieve the message within a set period of time, the message is erased from memory automatically.

Documents sent to F-45, F-25, M1800 and M1750 facsimile machines are stored in SecureMail for 24 hours. SecureMail messages sent to Murata F-50 facsimile machines are stored for 72 hours.

1. To send a SecureMail transmission, 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. Trans. SecureMail
1-2 Enter/Select
```

3. Press **Confirm/Enter**.

```
Trans. SecureMail
Mailbox Number:
```

4. Use the numeric keypad to enter the mail box number for the remote unit.

```
Trans. SecureMail
Mailbox Number: 7
```

5. Press **Confirm/Enter**.

```
Trans. SecureMail
Number of Pages:
```

6. Use the numeric keypad to enter the number of pages in your document.

```
Trans. SecureMail
Number of Pages: 3
```

7. Press **Confirm/Enter**.

```
Trans. SecureMail
Enter Fax Number
```

8. Enter a one-touch key or press **Speed Dialer** and the number needed.

```
Trans. SecureMail
[01]
```

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

```
Trans. SecureMail
Start Time: 14:55
```

10. Press **Confirm/Enter** to begin the transmission immediately. Or use the



numeric keypad to enter the hour you want the SecureMail transmission to take place. Remember to enter the time in 24-hour format.

Trans. SecureMail	
Start Time:	23:55

12. Press **Confirm/Enter**. Then enter the minute you want the SecureMail transmission to take place and press **Confirm/Enter**.

Trans. SecureMail	
Start Time:	23:30

The M2000 will display the start time of the delayed command on the top line of the LCD.

Fax Ready	23:30
Feb.26,89	14:55

# Polling

Polling lets you to place 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.

Your fax can also be used for database polling from Murata's high-volume office fax machines, like the Murata F-50. Database polling lets you retrieve documents from numbered files in the central fax's memory.

Polling procedures can be protected with a passcode (see page 18). When you enter a passcode into your fax, only Murata-manufactured units presenting the same passcode will be allowed to poll documents from your M2000.

## Polling

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, 2, Confirm/Enter.**

1. Delayed Polling  
1-4 Enter/Select

- 2. Press **Confirm/Enter.**

Delayed Polling  
Enter Fax Number

- 3. Enter the one-touch or speed-dial number for the remote unit.

Delayed Polling  
[01]

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

Delayed Polling  
Start Time: 14:55

- 5. Press **Confirm/Enter** to begin polling immediately. Or use the numeric keypad to enter the hour you want polling to take place.

Delayed Polling  
Start Time: 23:55

- 6. Press **Confirm/Enter.** Enter the minute and press **Confirm/Enter.**

Delayed Polling  
Start Time: 23:30

If you requested that polling begin immediately, your M2000 will start dialing. If you

programmed delayed polling, the M2000 will display the start time of the delayed command on the top line of the LCD.

Fax Ready	23:30
Feb.26,89	14:55

## Database Polling

Use database polling to retrieve up to six specific files of information on a single call to a Murata high-volume fax machine, like the Murata F-50.

- To begin database polling, press **Program, 2, Confirm/Enter, 2.**

2. Delayed DB Polling
1-4 Enter/Select

- Press **Confirm/Enter.**

Delayed DB Polling
Enter Fax Number

- Enter the one-touch or speed-dial number for the remote unit.

Delayed DB Polling
[01]

- Press **Confirm/Enter.** Use the numeric keypad to enter the number of the database files needed. If retrieving more than one file, press **Program** between file numbers. You can request up to six files on each call.

Delayed DB Polling
DataBase Number: 1,4

- When you have entered all file numbers needed, press **Confirm/Enter.** The current time will be displayed.

Delayed DB Polling
Start Time: 14:55

- Press **Confirm/Enter** to begin database polling immediately. Or use the numeric keypad to enter the hour you want database polling to take place. Remember to enter the time in 24-hour format.

Delayed DB Polling
Start Time: 23:55

- Press **Confirm/Enter.** Then enter the minute you want database polling to take place and press **Confirm/Enter.**

Delayed DB Polling
Start Time: 23:30

If you requested that database polling begin immediately, your M2000 will start dial-

ing. If you programmed delayed database polling, the M2000 will display the start time of the delayed command on the top line of the LCD.

Fax Ready	23:30
Feb.26,89	14:55

### Sequential Polling

Sequential polling is ideal when a central fax must retrieve information from several remote units. An M2000 in a central sales office, for example, can be used to poll daily sales figures from up to 100 locations using the sequential polling command and a pre-programmed call group.

1. To begin sequential polling, press **Program, 2, Confirm/Enter, 3.**

3. Sequential Polling	
1-4	Enter/Select

2. Press **Confirm/Enter.**

Sequential Polling	
Enter Fax Number	

3. Now enter up to five one-touch, speed-dial or 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, group 3 and speed-dial number 25 are entered.

Sequential Polling	
[01],G3,(25)	

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

Sequential Polling	
Start Time:	14:55

5. Press **Confirm/Enter** to begin polling immediately. Or use the numeric keypad to enter the hour you want polling to take place. Remember to enter the time in 24-hour format.

Sequential Polling	
Start Time:	23:55

6. Press **Confirm/Enter.** Then enter the minute you want polling to take place and press **Confirm/Enter.**

Sequential Polling	
Start Time:	23:30

If you requested that polling begin immediately, your M2000 will start dialing. If you requested delayed polling, the M2000 will display the start time of the delayed command on the top line of the LCD.

Fax Ready	23:30
Feb.26,89	14:55

## Polling Interrupt

To briefly halt a sequential polling operation so you can send an important message, press **Speed Dialer**.

Your fax will complete the telephone call underway. When the call is complete, the M2000 will beep several times and the LCD will show that group polling has been temporarily halted.

\*\* Interrupted \*\*

Insert your document and enter a speed-dial number or one-touch key. When the fax has completed your command, it will automatically resume the group polling operation.

Your fax will beep for about one minute after interrupting the group poll. If you have not started to enter your new command by the end of that minute, the M2000 will resume polling automatically.

---

## Polling Documents

The M2000 lets leave a document in the feeder to be retrieved by a remote unit through polling. Remember that the M2000's optional passcode (see page 18) 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, 2, Confirm/Enter, 4.**

4. Input Polling Doc  
1-4                      Enter/Select

3. Press **Confirm/Enter**.

Input Polling Doc  
Number of Pages:

4. Use the numeric keypad to enter the number of pages in the document.

Input Polling Doc  
# of Pages:                      5

5. Press **Confirm/Enter**.

Input Polling Doc  
\*\* Completed \*\*

# Autodialer

Your M2000 stores up to 100 telephone numbers in a battery-protected autodialer. Thirty numbers are available through one-touch keys. Another 70 are stored as two-digit speed-dial numbers.

Your fax also offers a special **Tone** key needed for some rotary telephone systems. If your telephone system requires rotary dialing signals, see page 48.

## Set Speed-Dial Numbers

The 70 speed-dial numbers available in your M2000 are represented by the two-digit numbers 01 to 70.

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

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

2. Press **Confirm/Enter**.

```
Speed Dial 01 to 70
Select and Press
```

3. Use the numeric keypad to enter the number of the speed-dial number needed. 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 telephone number can include up to 40 characters.

```
(01) Phone 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 M2000 finds this combination while dialing, it will pause before completing the number. See page 25 for information on controlling the length of the pause.

7. To insert a dash in the number, press the dash key on the M2000 keypad. 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 entered.

(01) Phone 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, up to 12 characters long, appears on the printed telephone directory to make 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 to speed polling 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. The M2000 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

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

Speed Dial 01 to 70  
Select and Press

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

After a speed-dial number 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 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, 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**. Press **Mode/Select** to prevent the erasure and 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, 5, Confirm/Enter, 3**.

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

2. Press **Copy**.

```
Print Speed Dial
** Printing **
```

## One-Touch Keys

The 30 one-touch keys available in your M2000 put transmission to your most frequently called numbers just a fingertip away.

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

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



2. Press **Confirm/Enter**.

One-Touch 01 to 24  
Select and Press

3. Press the one-touch key needed.

[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.

[01] Phone 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 M2000 finds this combination while dialing, it will pause before completing the number. See page 25 for information on controlling the length of the pause.
6. To insert a dash in the number, press the dash key on the M2000 keypad. 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 entered.

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

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

[01]=Location ID  
Enter/Select

8. Press **Confirm/Enter** to enter a Location ID for the number just entered. The Location ID, 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**.

[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 to speed polling 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. The M2000 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

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

One-Touch 01 to 24  
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 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 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, 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 includes the one-touch key, Location ID, telephone number and group number.

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

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

2. Press **Copy**.

```
Print One-Touch
** Printing **
```

## Tone Key and Rotary-Dial Systems

When you selected the phone line type for the M2000 (see page 17), you instructed your fax 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, the M2000'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 touch-tone telephone systems.

1. To switch from rotary to tone dialing signals, begin entering your telephone number as a one-touch or speed-dial number 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, "-", as shown on page 43. 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-/-!123
```

4. Finish entering the number. In use, your M2000 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 ("123" in the example above).

# Software Switches

Some special features in your M2000 are available by selecting soft dip switches—on/off switches in the M2000's 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 5). You can also use the clear memory command (see page 29) to instantly return all dip switches to their factory settings, but this command deletes all user information—like TTI, Subscriber ID and autodialer entries—from your unit's memory.

## Set Hold Melody

Your M2000 includes an optional melody you can use to let callers know they are on hold. The M2000 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**, \*, 2.

```
Set Parameter
Enter/Select
```

2. Press **Confirm/Enter**.

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

3. Press **Mode/Select** 7 times to reach dip switch 7.

```
Set Parameter
SOFT DIP 7 00000000
```

4. Press the right arrow key 7 times.

```
Set Parameter
SOFT DIP 7 00000000
```

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

```
Set Parameter
SOFT DIP 7 00000001
```

6. Press **Confirm/Enter**.

```
Set Parameter
SOFT DIP 8 00000101
```

7. Press **Stop** to return to standby.

To stop the hold music, 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**.

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

3. Press **Mode/Select** 2 times to reach dip switch 2.

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

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

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

5. Press **Confirm/Enter**.

```
Set Parameter
SOFT DIP 3 1101000
```

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

To add the TTI to your transmissions, enter a "1" in step 4 above.

## Unlimited Page Length: Reception

A sensor in your fax stops reception if it ever detects a single page longer than about 10 feet.

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**.

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

3. Press **Mode/Select** 3 times to reach dip switch 3.

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

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

Set Parameter  
SOFT DIP 3 01010000

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.

### Unlimited Page Length: Transmission

Your fax transmits pages up to 15.7 inches long. This length limit applies only to **individual pages**: Documents you send can include an unlimited number of individual pages.

If you must transmit very long unbroken 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**.

Set Parameter  
SOFT DIP 0 00000000

3. Press **Mode/Select** 3 times to reach dip switch 3.

Set Parameter  
SOFT DIP 3 11010000

4. Press the right arrow key once.

Set Parameter  
SOFT DIP 3 11010000

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

Set Parameter  
SOFT DIP 3 10010000

6. Press **Confirm/Enter**.

Set Parameter  
SOFT DIP 4 00000000

7. Press **Stop** to return to standby.

To return to the factory setting, enter a "1" in step 5 above.

## Switch to Fax Signals

The switch-to-fax feature lets you transfer an incoming fax call from the phone connected to the "Phone 2" jack back to the fax for printing (see page 32).

Your unit initially requires you to press "6" two times on the phone handset to send the call back. Use the setting below to change that setting to four times.

Although it is unlikely, it is possible for the human voice to duplicate the 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 even more unlikely.

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

```
Set Parameter
Enter/Select
```

2. Press **Confirm/Enter**.

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

3. Press **Mode/Select** 18 times to reach dip switch I.

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

4. Press the right arrow key 5 times.

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

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

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

6. Press **Confirm/Enter**.

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

7. Press **Stop** to return to standby.

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

## Voice Prompt Delay

The voice prompt is played when you have your M2000 set to the Tel./Fax Ready mode (see page 15) and allow the fax machine to answer an incoming call. Most automatic fax machines calling your M2000 will not be hampered by this voice prompt.

If callers tell you their faxes are unable to send messages when you have the voice prompt in use, use the setting below to add a delay before your fax begins the prompt. This delay makes it easier for these units to send messages to your M2000.

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

```
Set Parameter
Enter/Select
```

2. Press **Confirm/Enter**.

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

3. Press **Mode/Select** 30 times to reach dip switch U.

```
Set Parameter
SOFT DIP U 11000000
```

4. Press the right arrow key 3 times.

```
Set Parameter
SOFT DIP U 11000000
```

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

```
Set Parameter
SOFT DIP U 11010000
```

6. Press **Confirm/Enter**.

```
Set Parameter
SOFT DIP V 11010000
```

7. Press **Stop** to return to standby.

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

### Rotary Dialing Signals

Your M2000's autodialer initially produces tone dialing signals. If your telephone system requires rotary signals, use the setting on page 17 to select the rotary option.

Your M2000 initially provides rotary signals at 10 pulses per second. If your telephone system requires 20 pps signals, use the setting below. If you do not know the dialing signals required by your phone system, call your telecommunications company.

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

```
Set Parameter
Enter/Select
```

2. Press **Confirm/Enter**.

```
Set Parameter
SYS DIP 1 00001000
```

3. Press the right arrow key 3 times.

```
Set Parameter
SYS DIP 1 00001000
```

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

```
Set Parameter
SYS DIP 1 00011000
```



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.

# 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.

Because the Activity Journal breaks down your fax communication, it can help you with recordkeeping: With it you can track fax calls, evaluate patterns of fax use, and identify communication billable to clients or vendors.

To instruct your M2000 to print an Activity Journal after every 25 transactions, see page 24. To print a journal at any time:

1. Press **Program, 6**.

```

6. Print Journal
1-8 Copy/Select
  
```

2. Press **Copy**.

```

Print Journal
** Printing **
  
```

Your TTI: Product Development

Your Subscriber ID: 1-214-403-3499

Feb 26,89 14:55

①

Transmit Journal

② No.	③ Remote Location	④ Mode	⑤ Start	⑥ Time	⑦ Pages	⑧ Result	⑨ Note
Receive Journal							
No.	Remote Location	Mode	Start	Time	Pages	Result	Note

## Activity Journal

1. **Period**—Records the start and end of 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.
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 two-digit 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. This entry helps you keep track of phone costs.
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 standard for Subscriber ID and TTI data. In these cases, information appearing in your Location column can be garbled and unreadable.

# Common Questions

**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 (see page 5).

**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 (see page 15).

**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.

The only time your fax will answer the line before your answering machine is when your answering machine is broken or for some other reason cannot respond: After seven rings, your fax machine will answer the call and attempt to begin fax communication.

**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'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.

Here is a suggested message you can modify to your own need:

*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 facsimile machine and an answering machine. If you would like to send a fax, press Start to begin your transmission now. If you would like to leave a message, wait for the beep. Thank you.*

**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:** 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:** 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 (see page 27) in 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 bottom of 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 my programmed information (TTI, autodialer numbers, time and date, etc.)?

**A:** No. The battery for your fax is charged fully after the first two or three days of uninterrupted use. Thereafter, it protects user settings for several days if power fails or you decide to move your fax.

**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 with theirs, and what can I do to correct this problem?

**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 page, for example, any 8.5-inch-wide pages you transmit will be reduced when printed at the remote machine.

**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 (see page 43).

**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 frequently included in the front section of telephone directories.

**Q:** How do I send to a fax unit that's on a telephone system extension?

**A:** Insert your document into the feeder and place your call using your fax machine's handset. When the 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 (see page 20) are not available when transmitting without recording 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 before the document passes through the machine.

**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:** Can I transmit and receive at the same time?

**A:** No, but use the call mode (see page 32) to ask the remote operator if he or she wants to transmit or receive after your transaction is completed.

**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 (see page 20).

**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.

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# 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" and "analog facsimile", 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 (see page 5) 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.
- Analog Facsimile** An analog facsimile machine converts each picture element of black or white into an electrical signal. These signals in turn generate constantly changing electrical signal that is transmitted to a receiving fax. Analog facsimile machines are characterized by extremely slow document transmission, 3 minutes per page or more, and are more susceptible to the signal "noise" encountered on standard telephone lines.
- 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.
- Bit** The smallest unit of information in a computer. Contraction of "binary digit". Some Murata fax machines, which are themselves computers used for telecommunications, allow you to change bits of information to provide or cancel features through software settings. Check your operating instructions.
- 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.
- Byte** A group of digital elements, usually sent as eight bits to the byte.
- Call Group** A preprogrammed group of fax locations used by Murata units with internal memory to speed 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.

**Compatibility**

The term "compatible" describes the ability of separate things to function together. Murata fax machines offer CCITT Group 3 compatibility, the modern standard for worldwide communication. Many Murata units offer Group 2 and North American FM compatibility, as well.

**Copy Mode**

You can use your Murata fax as a convenience copier. Many Murata units can copy in two or more levels of resolution.

**Database Polling**

See Polling.

**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**

The description of information using a series of two characters or signals. Morse code, for example, represents each character of the alphabet with a unique series of dashes and dots. Digital fax machines convert the graphic image of your document into a series of zeros and ones.

**Digital Facsimile**

Unlike analog systems that scan every portion of a document, digital fax machines survey a document's overall 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.

<b>Effective Printing Width</b>	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.
<b>Effective Scanning Width</b>	The maximum width the scanner in your fax can scan during transmission.
<b>Encryption Device</b>	This device adds security to your fax messages by "scrambling" the fax signal during transmission. The message is unscrambled by a similar encryption device at the receiving end.
<b>Facsimile</b>	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.
<b>Facsimile Interface Processor</b>	An upgrade that allows some Murata fax machines to operate with asynchronous ASCII host devices, coupling the power of computers with the scanning and transmission capabilities of fax machines for high-volume communication, graphics input and direct computer-to-fax transmissions.
<b>Fallback</b>	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.
<b>Fine Resolution</b>	203H x 196V lpi. Also shown as G3F on some units.
<b>FM</b>	Or North American FM. Used to identify CCITT Group 1 units designed for use in North America.
<b>Grayscale</b>	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.
<b>Group 4</b>	A CCITT standard for capturing, processing, communicating and outputting all forms of data. Group 4 will be used for extremely 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.
<b>G2</b>	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.
<b>Handshaking</b>	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.
<b>Hz</b>	Or hertz. A measure of frequency equal to one cycle per second. Used in the specifications for your fax, it identifies the AC power your unit requires. Call your electrician if you don't know the specifications of your office outlets.
<b>Internal Memory</b>	Some of Murata's most advanced fax machines include internal memory to store documents for transmission or to store incoming messages in SecureMail boxes.
<b>LCD</b>	Liquid crystal display. Used on some Murata units for status displays.
<b>LED</b>	Light emitting diode. Used on some Murata units for displays and lamps.

<b>Laser Printer Interface</b>	Murata's Laser Printer Interface is an upgrade available for some high-volume fax machines, interfacing your laser printer with your fax for plain-paper fax messages.
<b>LPI</b>	Lines per inch.
<b>Load Number</b>	A number assigned to telecommunications equipment used in Canada and designed to prevent overloading on a telephone circuit. Read the Canadian Department of Communications information in your operating instructions or call your local telecommunications company for more information.
<b>Location ID</b>	An optional identifier used on Murata fax machines. The Location ID lets you identify by name the telephone numbers programmed in your autodialer.
<b>MH</b>	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.
<b>MR</b>	Modified Read, the optional CCITT Group 3 data compression method. Used in some Murata fax machines and in Murata's Facsimile Interface Processor and FIP-PC Application Software.
<b>Modem</b>	Originally an abbreviation of modulator-demodulator, but now a common word in fax and computer use. A modem is a digital device that converts digital data (like the information from your fax machine) into an analog signal for transmission over analog lines (like your ordinary telephone line). A modem is included in your fax machine and allows it to be connected directly to your PSTN telephone line.
<b>MSE, SMSE</b>	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.
<b>Normal Resolution</b>	Shown as Norm. 203H x 98V lpi. The standard resolution mode for Group 1 and 2 units, and available on all Group 3 units.
<b>Original Document Size</b>	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.
<b>Passcode</b>	A proprietary feature available on some Murata fax machines. The four-digit passcode limits access to information 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.
<b>PBX</b>	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.
<b>PCAS</b>	Personal Computer Applications Software. Used with FIP, PCAS is a computer-fax interface for Murata's high-volume fax machines. Allows you to send documents automatically from your computer, store fax transmissions onto your hard disk for viewing and editing, and create fax phone groups of more than 1,000 locations.
<b>Polling</b>	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 extremely 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.

**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

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. Press **Stop** to cancel the Alarm LED and tone.

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## LCD Messages

These error messages appear in your unit's LCD and help in troubleshooting fax communication problems.

### Insert Document Again

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.

### Insert Document

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.

### Please Close Covers

One or both of the covers to your unit is not closed. Press firmly on the covers to close them.

### Hang Up Telephone

The telephone handset to your unit is off hook after transaction. Return the handset to its cradle.

### Nothing Stored

The one-touch, speed-dial or group number selected has not been programmed in the autodialer. Try programming the number again.

### Confirm Paper Supply

Your unit's recording paper has reached the black end-of-paper line. Install a new roll of recording paper immediately.

### Check Lamp

The lamp in your unit's scanner may be defective, preventing transmission and copying. Call Murata's Customer Support Center (see page 5) or contact your local facsimile dealer for help.

### Verify Operation of Remote Machine

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.

### Verify Readability of Transmitted Copy

Poor telephone line conditions have made the document you received unreadable. If so, call the remote location and request that the document be transmitted again.

### Please Transmit 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.

### Unable to Contact Remote Fax Machine. Call 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 transmission. 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.7.1—Poor line conditions were detected before transmission began. Try the call again.

T.7.3—Poor line conditions were detected after transmission of a page, or the receiving unit was disconnected or ran out of recording 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.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. and

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.

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 com-

munication, before your unit prints the remote unit's TTI or Subscriber ID, or after several pages during the transmission of a multiple-page document. If you receive the TTI and Subscriber ID, you may be able to fax the remote unit in these instances and identify the reception error you detected 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.

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## Service Call Checklist

If you are experiencing problems with your Murata fax, please review the following checklist before you call a service representative:

1. Is the power cable connected?
2. Are the phone lines connected? Do you hear a dial tone when you press **Monitor/Call** or pick up the handset?
3. Is the telephone handset connected?
4. Is the recording paper properly inserted?
5. Is the cover closed?





# Maintenance

With proper installation and a 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 11 before you install your unit. Don't install your fax where it can overheat, gather dust or get splashed by water or other liquids.
- Use Murata thermal facsimile paper.  
Murata's facsimile paper is designed specifically for the sophisticated thermal printhead in your unit (see page 13). Other paper won't provide the high-quality fax reproductions you get with Murata paper and could damage your unit.
- Clean your fax, if needed.

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## 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 tray.

Never spray cleaner directly on your facsimile machine. The drifting spray could damage components inside your unit.

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## Cleaning Inside

**Always unplug your unit before cleaning.**

- 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 the paper box and other 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.

## Murata Fax Care Products



Murata offers a complete FaxCare kit for your facsimile machine, with cleaning solution, swabs, wipes, compressed air, case and cabinet cleaner and a telephone 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.









# Limited 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, authorized dealer 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-comparable 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.



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