





Operating Instructions

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Murata F-50 Introduction

Introduction

Your new Murata F-50 is a time and work-saving powerhouse: A high-volume fax machine with one-touch transmission, from 1 to 4 megabytes of internal memory and special programmable keys to reduce common multi-step instructions to just the touch of a key.

Relay broadcasting, sequential polling, SecureMail transmission and a host of other features are available in your F-50, as well. The F-50's CCITT Group 3 compatibility is the modern standard for international facsimile communication, and the F-50's Group 2 and North American FM compatibility lets you transmit to almost any fax unit ever made.

Despite more than a hundred powerful features and functions, however, using the F-50 is easy. Printed telephone directories provide handy reference to your personalized speed-dial, one-touch and programmable keys. And if you can't find the facsimile command you need, just press **Program**, **0**, **1**, **Enter**: A complete list of commands will be printed. That list also appears on pages 8 and 9.

Service

If you have questions that aren't answered in this manual, or if you need service for your fax, call the Murata Customer Support Center for your time zone:

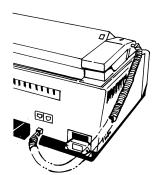
Eastern and Central:

1-800-637-1600 (In Texas, call collect: 1-214-661-8097)

Mountain and Pacific:

1-800-368-6668 (In California, call: 1-800-368-8866)

Trained Murata service technicians are available at these centers to help you. Make sure the person calling for assistance is familiar with your fax machine and can explain in detail the problem encountered. You'll also save time if you keep these operating instructions with you when you call and have this manual opened to the section dealing with the feature or function in question.



Serial Number

If you call Customer Support, have the serial number of your unit ready for the service technician. The serial number is printed on a bar code label fastened to the rear of your unit, just below the handset and telephone line jacks.

How to Use This Manual

When this manual includes messages that you should see on your unit's display, the messages will be set apart from the rest of the text, like this:

** System Ready **
Feb 26,88 10:45

When there are steps for you to complete, the instructions will be numbered and set flush with the left side of the column, like this:

1. From standby, press Program, 0, 1, Enter.

The names of keys on your unit will be shown in bold. When entering data or commands, press the keys one at a time. Your unit should beep once as you press each key. If your unit beeps several times after you press a key, you have tried to enter instructions or data not allowed for the function you are programming.

If you ever need to stop a command you are entering and return to the standby mode, press **Stop**.

FCC Regulations

Call your telephone company if you have any questions about your telephone service, including how many pieces of equipment you may connect to your telephone line.

Warning: This equipment generates, uses and can radiate radio frequency energy. It may cause interference with radio communication if not installed and used in accordance with these operating instructions. It has been tested and found to comply with the limits for a Class A computing device in accordance with Subpart J of Part 15 of FCC Rules. These rules are designed to provide reasonable protection against interference for operation in a commercial environment. Use of this equipment in a residential area is likely to cause interference. If so, the user will be required to bear the expense of correcting the interference.

If Problems Arise

If any of your telephone equipment is malfunctioning, remove it from your telephone line. Malfunctioning equipment may harm the telephone network. If the telephone company notes a problem with your telephone line, they may temporarily discontinue service. When practical, they will notify you in advance of the disconnection. If advance notice is not possible, you will be given the opportunity to correct the problem and be informed of your right to file a complaint with the FCC.

DOC Regulations

for Canadian Operators

Notice: The Canadian Department of Communications label identifies certified equipment. This certification means that 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 the 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. In some cases, the company's inside wiring associated with a single-line individual service may be extended by means of a certified connector assembly (telephone extension cord). The customer should be aware that compliance with the conditions above 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 together. This precaution may be particularly important in rural areas.

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

DOC Load Number for Canadian Operators

The load number assigned to each terminal device denotes the percentage of the total load to be connected to a telephone loop used by the device. Load numbers are assigned 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. An alphabetic suffix is also specified in the load number for the appropriate ringing type (A or B), if applicable.

The load number for your Murata F-50 is 29.

List of Commands

These commands are available in your Murata F-50 facsimile machine.

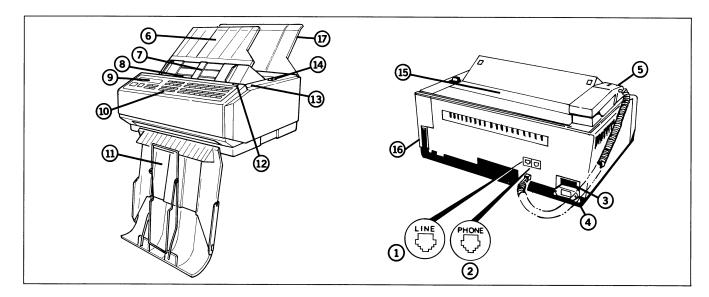
To select a program mode, press the key and numeral sequences shown—**Program**, 4, 0, for example, to set the clock. You can also press **Program** repeatedly to scroll backward through the command list. To scroll forward, press **Program** once and **Select** repeatedly to reach the function you need.

Additional information on these functions and on entering these commands into your unit will be found on the pages indicated.

Function	Command Sequence	For More Information
Print Activity Journal	Program, 0, 0	68
Print Program Mode List	Program, 0, 1	5
Print User Settings	Program, 0, 2	24
Set the Page Count	Program, 0, 3	46
Print Multiple Copies	Program, 0, 4	79
Print Delayed Commands	Program, 0, 5	51
Print a Stored Document	Program, 0, 6	51
Cancel a Delayed Command	Program, 0, 7	52
Delayed Transmission	Program, 1, 1	50
Relay Broadcast	Program, 1, 2	61
SecureMail Transmission	Program, 1, 3	63
Polling	Program, 2, 1	53
Database Polling	Program, 2, 2	56
Receive SecureMail	Program, 2, 3	65
Repeat Polling	Program, 2, 4	60
Input a Document for Polling	Program, 3, 1	53
Print a Document Set for Polling	Program, 3, 2	54
Erase a Document Set for Polling	Program, 3, 3	54
Input a Database File	Program, 3, 4	56
Print a Database File	Program, 3, 5	57
Erase a Database File	Program, 3, 6	57
Set the Calendar and Clock	Program, 4, 0	20
Set the TTI	Program, 4, 1	21
Set the Subscriber ID	Program, 4, 2	22
Set the Pass Code	Program, 4, 3	23
Choose the Confirmation Report	Program, 4, 4	68
Set the Scanning Width	Program, 4, 5	69

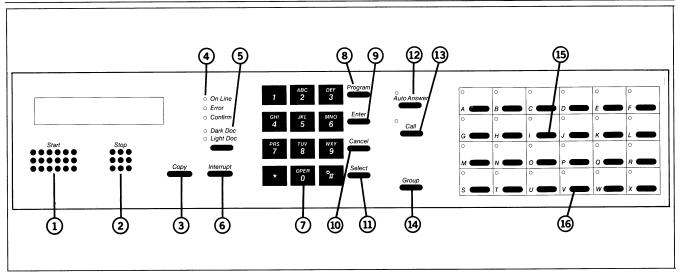
Function	Command Sequence	For More Information
Print the Document Size	Program, 4, 6	70
Turn the TTI On/Off	Program, 4, 7	70
Create a Closed Network	Program, 4, 8	71
Set RS-232C Parameters	Program, 4, 9	77
Program Speed-Dial Numbers	Program, 5, 0	26
Print the Speed-Dial Directory	Program, 5, 1	29
Create Call Groups	Program, 5, 2	33
Print the Call Groups	Program, 5, 3	34
Create a SecureMail Box	Program, 5, 4	63
Print a List of SecureMail Boxes	Program, 5, 5	64
Check Memory in Use	Program, 5, 6	24
Program One-Touch Keys	Program, 6, 0	29
Print the One-Touch Directory	Program, 6, 1	32
Programmable One-Touch Keys	Program, 6, 2	35
Print Prog. One-Touch List	Program, 6, 3	42
Set Auto-Answer Hours	Program, 7, 0	43
Receive through RS-232C Port	Program, 8, 0	78

Machine Layout



- 1. Line Jack Connection for telephone line from wall jack.
- 2. Phone Jack Connection for handset cord.
- 3. On/Off Switch Turns power to the unit on and off.
- 4. AC Plug Connection for power cord.
- 5. Telephone Handset With mute button and ringer volume adjustment.
- 6. Document Hopper Supports documents stacked in feeder.
- 7. Document Guides Adjustable for A4, B4 and A3 document widths.
- 8. Document Feeder Automatically feeds up to 50 sheets through scanner for transmission or copying.
- 9. LCD A 40-character liquid crystal display, showing the date and time or the facsimile function underway.
- 10. Keyboard Touch-sensitive controls (see page 11).
- 11. Document Tray Holds original documents after transmission or copying.
- 12. Front Panel Release Pull forward to open the front panel.
- 13. Paper Indicator Shows the relative amount of recording paper remaining on the paper roll.
- 14. Cover Release Push back to open the cover to load recording paper.
- 15. Ventilation Grills Allow a cooling airflow through your facsimile machine. Do not cover or block.
- 16. RS-232C Port 25-pin RS-232C female connector.
- 17. Copy Tray Holds copied or received documents.

Murata F-50 Machine Layout



- 1. Start Press to begin manual transmission or reception.
- 2. Stop Press to halt the facsimile function underway and return to standby.
- 3. Copy Press to copy documents inserted in the document feeder.
- 4. Status Lamps Show when your unit is on-line, when an error has occurred or when a confirmation report has been requested.
- 5. Contrast Control Press to adjust your unit to transmit or copy a very dark or light original document.
- 6. Interrupt Press to interrupt a group function underway.
- 7. Numeric Keypad Used for entering data, dialing and entering speed-dial numbers for transmission.
- 8. Program Press to enter the program mode.
- 9. Enter Press to enter a command.
- 10. Cancel Used to delete or cancel data and functions.
- 11. Select Press to select the transmission resolution.
- 12. Auto Answer Press to select automatic or manual call reception.
- 13. Call Reserves a voice call during facsimile transmission or reception.
- 14. Group Press to enter a call group number during transmission.
- 15. One-Touch Keys One-touch dialing commands, A through X, for 24 frequently called numbers.
- 16. Programmable Keys Six keys, S through X, that can be programmed as either one-touch dialing commands to a single remote unit or as multistep commands for polling, relay broadcasting and other functions to a hundred or more locations.

Installation

When you are ready to connect your F-50 to the telephone system, give your telephone company the following information:

The **telephone number** of the line to which you will connect the unit. The **FCC registration number** of the unit: DKU79R-17289-FA-E. The **ringer equivalence number** of the unit: 0.8A.

Outside the United States, you may need to provide different information. Ask your telephone company.

Telephone Requirements

The F-50 is designed for use on standard telephone lines. Your unit does not require a dedicated line or a leased telephone line.

Your unit connects to the telephone line with a standard modular jack, called a USOC RJ11C. If you do not have an RJ11C where you want to install your unit, call your telephone company for information on installation.

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 unit, you may experience interruptions of facsimile service.

Your unit is for use on standard device telephone lines. Connection to telephone company coin service is prohibited. Connection to party-line service is subject to state tariffs.

If you decide to permanently disconnect your unit from its present line, notify the telephone company of the change.

Warning: Do not connect your unit to a private branch exchange system without first checking with the system manufacturer or service representative.

Electrical Requirements

Your unit can be powered from a standard three-pronged 115-volt electrical outlet. Do not power your unit from an outlet that is turned off at the end of the business day: Although your telephone directory and most other user settings are protected against power failure by a battery back-up, documents stored in memory will be lost if you turn power to your unit off.

Good fax operation and long system life require a constant power source: Do not install your unit on the same electrical circuit as an air-conditioner, copying machine or other high-consumption electrical appliance.

1. Voltage Requirements

115 volts AC \pm 10%, 50-60 Hz, single phase, 5 amps

Voltage requirements vary for units manufactured for use outside the United States and Canada. A label on your unit will specify the voltage required.

2. Approximate Power Consumption

45 VA Transmission 125 VA Standby 380 VA 95 VA Copy Reception

Site Requirements

Choose a vibration-free spot for your facsimile machine that offers:

- 1. An RJ11C telephone jack within 10 feet.
- 2. A standard 115 VAC, three-pronged electrical outlet within 8 feet.
- 3. An unrestricted airflow around your fax to prevent overheating. (Allow10 inches clearance from all sides. Do not block your unit's ventilation grills.)
- 4. A cool, dark place nearby to store extra recording paper.

Do not install the unit:

In direct sunlight In dusty areas In areas of excessive heat, humidity or moisture Near a radio or TV set

Unpacking

Use care when unpacking and moving your unit: The F-50 weighs approximately 35 pounds.

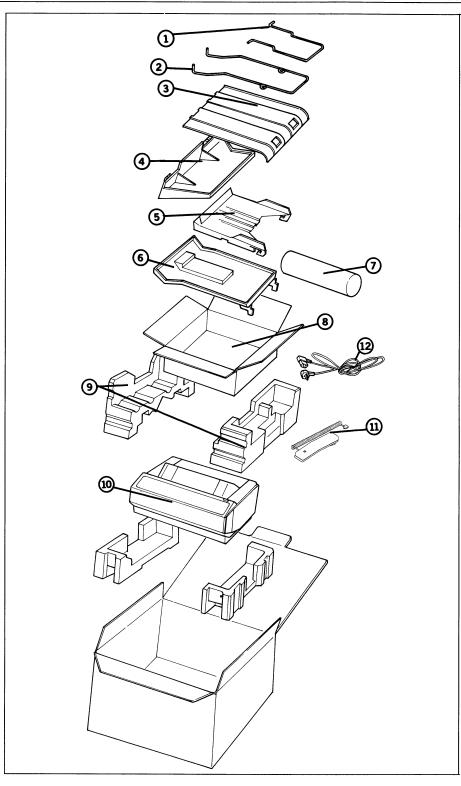
A packing diagram is shown on page 14. To unpack your unit:

- 1. Open the shipping carton.
- 2. Take out the accessory box, containing the document hopper, document trays A and B, copy tray and document guide wires A and B.
- 3. Take out the telephone handset, power cord, telephone line, recording paper roll and product documentation.
- 4. Remove the top foam braces from your unit. Lift the facsimile console out of the carton and place it on a steady shelf or desk. Remove the plastic bag.
- 5. Keep the bag, foam braces and carton for reshipment.
- 6. Discard the silica desiccant shipped with your unit.

After unpacking, check for the following:

Facsimile console Telephone handset Telephone line Power cord Document tray A Document tray B Document hopper Guide wire A Guide wire B Copy tray Paper roll Supply order form

Quality assurance report Warranty registration



In the carton to your F-50 you will find:

- 1. Document wire A
- 2. Document wire B
- 3. Document tray B
- 4. Document hopper
- 5. Document tray A
- 6. Copy tray

- 7. Paper roll
- 8. Accessory box
- 9. Foam braces
- 10. Facsimile console
- 11. Telephone handset
- 12. Power cord

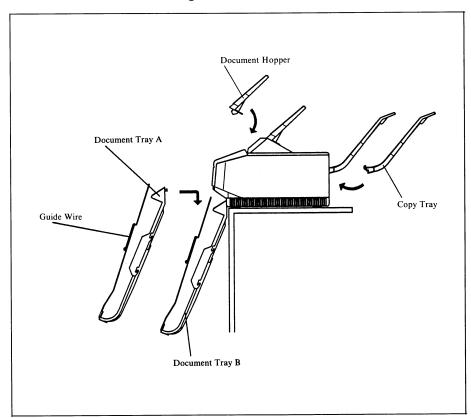
Connections

- 1. Make sure the on/off switch at the back of the unit is off.
- 2. Plug the telephone line into the connector marked Line at the left rear of the console. Plug the other end into the telephone wall jack.
- 3. Plug the handset cord into the connector marked Phone at the left rear of the console. Hang the handset on its cradle.
- 4. Attach the power cord to the connector at the left rear of the console. Plug the other end into a three-pronged electrical outlet.
- 5. If you will be using your unit with a personal computer or other ASCII communication device, connect the device to your F-50's RS-232C port with a standard null modem cable. (Before connecting your unit to such a device, see page 77.)
- 6. Turn the on/off switch on. Until you install a roll of Murata recording paper (see page 17), your unit will display the "Replace Rx Paper" error message in the LCD.

Document Trays

1. Document Hopper

Insert the brackets on the bottom of the document hopper into the holes on the cover above the document guides.



2. Copy Tray

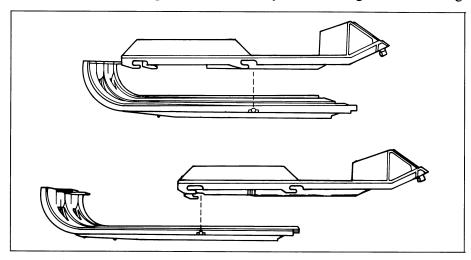
Slide the brackets on the copy tray into the holes at the back of the unit.

3. Document Tray

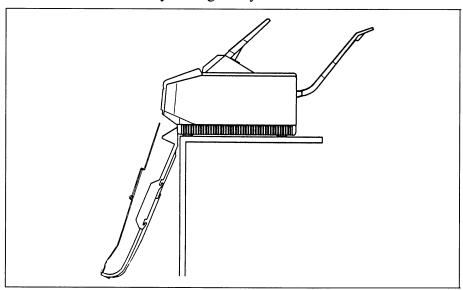
The document trays for your unit allow you to install the F-50 at the edge of a desk, so original documents fall vertically into the document tray, and to select one of two tray lengths to best suit the documents your office transmits.

To install the document trays:

Fasten document trays A and B together to create a single tray. The trays can be joined at either of two points to create a tray 17 inches long or 12 inches long.



Insert the notches on the top of the document tray into the slots on the front of the F-50 to allow the tray to hang from your unit.



Insert document wire B into the slots on the document tray. If you have the tray set to 17 inches, use document wire A to extend the document guide to the full length of your document tray.

Recording Paper

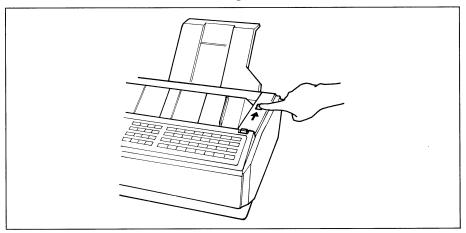
Install and use only Murata thermal facsimile paper in your unit. A new roll includes enough paper for approximately 350 11-inch-long pages.

After about 300 pages have been printed, a red low-paper line will be visible on the side of the recording paper. The red line indicates the recording paper roll is nearly empty and is a reminder to load a new roll soon.

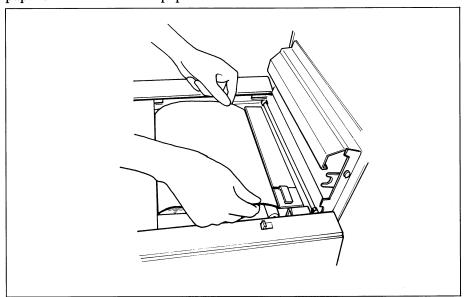
A black end-of-paper line appears just before your unit's paper roll is empty. When it does, your unit's LCD will display the "Replace Rx Paper" error message. This message is accompanied by an alarm tone and lighted Error lamp. To prevent damage to the printer head inside your unit, your unit will not allow you to transmit or receive until you replace the paper supply.

To load a new roll of paper:

1. Push back on the cover release and open the cover.



- 2. Remove the empty roll from the paper cradle and put in a new roll. Load the paper to unroll from the top.
- 3. Pull out about 4 inches of paper and insert the leading edge under the black paper bar at the rear of the paper cradle.



- 4. Close the top, pressing firmly on both sides of the cover.
- 5. Your unit will automatically feed the leading edge of the new roll through the paper cutter and return to standby.

B4 Printing

Your unit was shipped with an 8.5-inch-wide recording paper roll. This A4 paper size is the standard for correspondence stationary in North America.

Your unit can print up to 10 inches wide, however. This B4 paper size is the standard in Japan and may be useful when receiving oversized documents.

Order B4 recording paper rolls from your local Murata sales representative and install the paper roll as shown above. A retaining gate inside the paper cradle can be adjusted to accept A4 or B4 paper rolls.

Your unit detects the width of the paper roll in use and adjusts its printing width automatically.

Check List

Before using your unit:

- 1. Make sure the recording paper is installed and the cover is firmly closed. For instructions, see page 17.
- 2. Make sure the telephone line is attached to the connector marked Line and to the telephone wall jack. For instructions, see page 15.
- 3. Make sure the power cord is securely fitted into the unit and the wall outlet. Make sure the on/off switch is on. For instructions, see page 15.
- 4. Check that the unit's LCD shows the time rather than an error message. Until you set the time and date, the time shown may not be accurate. For instructions, see page 20.
- 5. Pick up the telephone handset and make sure you hear a dial tone. Return the handset to its cradle.
- 6. Place two pages face down into your unit's document feeder and adjust the document guides to the document's width. The automatic feeder will take the bottom page and advance it into the scanner.
- 7. When the automatic feeder has stopped, press Copy.
- 8. Your unit should copy each page, cut the copies and return to standby automatically.

Preparing Your Fax

Standby Mode

All commands for your unit begin from the standby mode. In standby, your unit displays "System Ready" and the date and time in the LCD.

** System Ready *
Feb 26,88 10:45

Make sure your unit is in standby before you begin. If it is not, press **Stop** to cancel the function underway.

Selecting the Language of Operation

Your unit can display LCD screens, reports and journals in one of three languages. Units manufactured for use in the United States and Canada offer English, Spanish and French operation.

Your unit is set initially for English-language operation. To select Spanish or French-language operation:

1. From standby, press Program, #.

PROGRAMA MODULO

- 2. If you want Spanish-language operation, press Enter.
- 3. If you want French-language operation, press #.

MODE PROGRAMME

4. Press Enter to select French-language operation and return to standby.

Setting the Clock

Time is displayed on a 24-hour clock: 11 a.m. is shown as 11:00, for example, and 2 p.m. is shown as 14:00.

To set the clock:

1. From standby, press Program, 4, 0.

Set Clock

PROGRAM MODE 40

2. Press Enter.

Set Clock

'87 01/01 00:00

Your unit will display the time currently set.

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

Set Clock '88 01/01 00:00

- 4. Press Enter.
- 5. Enter the number of the current month.

Set Clock

'88 02/01 00:00

- 6. Press Enter.
- 7. Enter the day.

Set Clock

'88 02/26 00:00

- 8. Press Enter.
- 9. Enter the current hour.

Set Clock

'88 02/26 10:00

- 10. Press Enter.
- 11. Enter the current minute.

Set Clock

`88 02/26 10:45

12. Press **Enter** to return to standby.

Set Clock

*** COMPLETED ***

Setting the Transmit Terminal Identifier

Your programmable TTI is sent automatically with the documents you send and appears at the top of each page printed by the remote unit. The TTI can be your name, your business name or any other identifier up to 24 characters long.

To set the TTI:

1. From standby, press **Program**, 4, 1.

Set TTI

PROGRAM MODE

41

2. Press Enter.

Mode:Alphabet Upper

3. Use the one-touch keys to enter the letters and punctuation for your TTI. Use the numeric keypad to enter numbers into your TTI, if needed.

Τ

Mode: Alphabet Upper

Press **Select** to choose upper case, lower case and symbol characters. The following characters are available:

·	One Touch Button					
Upper	А	В	С	D	E	F
Lower	a	b	С	d	е	f
Symbol	у	z	Y	z	Space	-
Upper	G	Н	ı	J	К	L
Lower	g	h	i	j	k	ı
Symbol	()	•	,	!	"
Upper	М	N	0	Р	Q	R
Lower	m	n	o	р	q	r
Symbol	\$	&	,	/	:	;
Upper	S	Т	U	V	W	Х
Lower	s	t	u	v	w	x
Symbol	<	=	>	?	[]

The Smith Company Mode: Alphabet Lower

- 4. If you enter a character by mistake, press Cancel to delete from the right.
- 5. When your TTI is set, press **Enter** to return to standby.

Note: To change your TTI, press **Cancel** in Step 2 after your TTI appears in the LCD. The old TTI will disappear and you can enter a new identifier as shown.

Setting the Subscriber ID

The Subscriber ID is your unit's telephone number. Appearing with the TTI at the top of each document you send, the Subscriber ID gives the recipients of your transmissions the information they need to respond.

To set the Subscriber ID:

1. From standby, press Program, 4, 2.

Set ID PROGRAM MODE 42 2. Press Enter.

Set ID

3. Now use the numeric keypad to enter the telephone number for your unit. To insert a hyphen, press **Select**. Enter up to 20 digits.

Set ID 1-214-702-9778

- 4. If you enter a number by mistake, press Cancel.
- 5. When your Subscriber ID is set, press Enter.

```
Set ID
*** COMPLETED **
```

Note: To change your Subscriber ID, press **Cancel** in step 2 after your ID appears in the LCD. The old Subscriber ID will disappear and you can enter a new number as shown.

Setting the Pass Code

The optional pass code in your unit allows you to protect a document set to be polled from unauthorized access, and to poll a document from another unit with a pass code in place.

When operating in a closed network (see page 71), the pass code is also used as an authorization number, giving your unit access to the network.

The pass code is used only when communicating with other Murata-manufactured units and only when you want to deny access to all units not presenting the proper pass code.

To set the pass code:

1. From standby, press **Program**, 4, 3.

Set Passcode
PROGRAM MODE 43

2. Press Enter.

Set Passcode Code No. = 0000

3. Enter the pass code using the numeric keypad.

Set Passcode Code No. = 1234

4. When your pass code is set, press Enter.

Set Passcode
*** COMPLETED ***

Note: To cancel the pass code, enter code "0000". This setting allows any unit to access your facsimile machine.

Checking the Memory in Use

The F-50 is equipped with 1 megabyte of memory, to store up to 64 pages for transmission, polling and other commands. Optional 2 and 4-megabyte versions are available as well, for a total possible storage of 256 pages.

To determine the amount of memory in use:

1. From standby, press Program, 5, 6.

Storage in Use PROGRAM MODE 56

2. Press Enter.

Storage in Use 005 Pages / 12 %

Note: The amount of memory required to store a page varies based on the page size, the complexity of the image on the page and the transmission mode at which the document is stored.

Memory Overflow

Always use the check-memory command shown above before storing documents in your unit.

Use caution when storing additional documents as your unit's memory nears 100 percent of its capacity: If you attempt to enter more pages than your unit can store, your fax will alert you with its "Memory Overflow" message and beeping alarm tone. When you encounter this message, you have two options:

1. Press **Enter**. Your unit will store up to the last page entered before memory overflow and will preserve all delayed commands programmed. Pages left unscanned when the memory overflowed cannot be entered into storage.

or

2. Press Cancel. All documents and all delayed commands in your unit's memory—even those entered successfully before the unit's memory over-flowed—will be deleted.

Printing the User Settings

You can check the information you have entered by printing your unit's user settings. In addition to the TTI, Subscriber ID and pass code, the settings list includes information on features discussed elsewhere in this manual.

To print the user settings:

1. From standby, press **Program**, 0, 2.

Print Settings
PROGRAM MODE 02

2. Press Enter.

Print Settings
**** Printing ***

Murata F-50 Autodialer

Autodialer

Your F-50 includes a powerful autodialer to store up to 124 frequently called telephone numbers: 24 as one-touch keys and 100 as speed-dial numbers.

Handy printed directories available from your unit list each of your autodialer entries. Use Location IDs, optional 12-character identifiers, to identify the one-touch keys and speed-dial numbers by name.

You can enter up to 35 digits for each autodialer number, including a special set of characters to generate dialing pauses required for use with some long distance and PBX systems. Two other special dialing characters, * and #, are available and are sometimes used in the private access codes required for some long-distance telephone services.

You can also enter a 35-digit alternate number for up to 10 autodialer locations. If your unit is unable after several attempts to contact the fax machine at the primary number, it will automatically attempt to call the alternate.

Dialing Pauses

The speed-dial numbers and one-touch keys in your F-50 can include a two-character pause command. The command appears as a hyphen and slash character side by side: "-/".

Such a pause may be required when using long-distance services and on certain telephone accessory systems, including branch exchanges.

Your unit is set initially to pause 5 seconds when it encounters the delay command. You can set the delay from 0 to 99 seconds (see page 74).

To enter a pause:

1. While programming an autodialer location, press **Select** at the point you wish to insert a pause. A hyphen will appear on the LCD.

Set Directory
05: 9-

2. Then press Interrupt. An exclamation point will appear on the screen.

Set Directory 05: 9-!

3. Press Interrupt again and the exclamation point will change to a slash.

Set Directory
05: 9-/

4. Continue entering the number as shown in the sections that follow.

Set Directory 05:9-/1-214-702-9778 Two single-character commands offer indefinite pauses. The exclamation point, !, is entered by pressing **Interrupt** once and instructs your unit to await a dial tone from a PBX system. The slash, /, is entered by pressing **Interrupt** twice and tells your unit to wait for a dial tone from a PSTN system. These characters can be used when dialing through a private branch exchange or other telephone networks requiring access codes or lengthy delays to complete a dialing command.

Speed-Dial Numbers

The 100 speed-dial numbers available in your F-50 are represented by the two-digit numbers 00 to 99. To enter a speed-dial number:

1. From standby, press Program, 5, 0.

Set Directory
PROGRAM MODE 50

2. Press Enter. Then press Start to scroll forward or Program to scroll backward to the location you want to enter.

Set Directory
Speed Dial # = 00

3. When the location you want to program is displayed, press Enter.

Set Directory 00:

4. Now use the numeric keypad to enter the telephone number for the speed-dial location displayed.

Set Directory
00: 1-214

5. To enter a hyphen, "-", in your telephone number, press **Select**. The hyphen will appear on your LCD and on printed reports, but does not affect the operation of your unit. To enter a dialing pause, see page 25.

Set Directory
00: 1-214-702-9777

6. If you enter a number by mistake, press **Cancel** to delete from the right. Then enter the correct number.

Set Directory
00: 1-214-702-9778

7. When the telephone number is set, press Enter.

Set Directory
Location ID (00)

If you do not want to enter a Location ID or alternate speed-dial number, press **Stop** to return to standby.

8. If you want to enter a Location ID, press **Enter**.

Mode:Alphabet Upper

9. Use the one-touch keypad to enter up to 12 characters for the Location ID. (For a complete list of characters available, see page 22.)

MBS Dallas

Mode: Alphabet Lower

10. When the Location ID is set, press Enter.

Set Directory
Alternate # (00)

If you do not want to enter an alternate telephone number, press **Stop** to return to standby.

11. To enter an alternate number, press Enter.

Set Directory 00>

12. Use the numeric keypad to enter the alternate number.

Set Directory 00> 1-214-392-1003

13. When the alternate telephone number is set, press Enter.

Set Directory
Speed Dial # = 01

14. Press **Enter** to set the next speed-dial number or **Stop** to return to standby.

** System Ready *
Feb 26.88 10:45

Note: You do not have to program speed-dial numbers in sequential order: Press **Start** or **Program** to scroll forward or backward through the 100 speed-dial locations. When you reach the location you want to program, press **Enter** and continue as shown.

Deleting an Alternate Speed-Dial Number

Your unit can store up to 10 alternate speed-dial and one-touch numbers combined. After you enter the tenth alternate, your unit will no longer prompt you with the "Set Directory Alternate" screen shown in step 10 above.

To delete an alternate telephone number but leave the primary number for that autodialer location unchanged:

1. From standby, press **Program**, 5, 0.

Set Directory
PROGRAM MODE 50

2. Press Enter. Then press Start or Program to scroll to the speed-dial location with the unneeded alternate.

Set Directory 04:1-214-702-9778

3. Press Enter.

If you have a Location ID programmed, press **Enter** to reach the alternate number. If you do not have a Location ID programmed, press **Cancel**.

Set Directory 04>214-392-1003

4. Press Cancel to delete the alternate.

Set Directory
Alternate # (04)

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

Deleting or Changing a Speed-Dial Number

To delete or change a speed-dial number:

1. From standby, press Program, 5, 0.

Set Directory
PROGRAM MODE 50

2. Press Enter.

Set Directory 00:1-214-702-9778

3. Press **Start** to scroll forward or **Program** to scroll backward to the autodialer location you want to modify.

Set Directory 14:1-214-555-1212

4. When the location you want to modify is displayed, press Cancel.

Set Directory
Speed Dial # = 14

- 5. If you want to change the number, go to step 6. If you want to delete the number, press **Stop**. The speed-dial number and the Location ID and alternate number associated with it, if entered, will be deleted.
- 6. To change the number, press **Enter**. Use the numeric keypad to enter the new telephone number.

Set Directory 14:1-214-392-1622

7. Press Enter.

Set Directory
Location ID (14)

- 8. Now enter the Location ID and alternate telephone number, if desired, as shown beginning on page 26.
- 9. When the information for the autodialer location is complete, press **Stop** to return to standby.

Printing the Speed-Dial Numbers

To print a directory of your speed-dial numbers:

1. From standby, press **Program**, 5, 1.

Print Directory PROGRAM MODE 51

2. Press Enter.

Print Directory Printing

One-Touch Keys

One-touch keys are identified by the characters A to X. Keys S through X can be programmed as shown below for use as standard one-touch commands or for use as special programmable commands (see page 35).

To enter a one-touch key:

1. From standby, press Program, 6, 0.

Set One Touch

PROGRAM MODE

60

2. Press Enter.

Set One Touch

One Touch A

3. Press Enter to program one-touch key A. Or press the one-touch key you want to program and press Enter.

Set One Touch

A :

4. Now use the numeric keypad to enter the telephone number for location A.

Set One Touch

A:

1-214

5. To enter a hyphen, "-", in your telephone number, press Select. The hyphen will appear on your screen and on printed reports, but does not affect the operation of your unit. To enter a pause, see page 25.

Set One Touch

A: 1-214-702-9777

6. If you enter a number by mistake, press Cancel to delete from the right. Then enter the correct number.

Set One Touch

1-214-702-9778

7. When your telephone number is set, press **Enter**.

Set One Touch

Location ID (A)

If you do not want to enter a Location ID or alternate one-touch number, press **Stop** to return to standby.

8. If you want to enter a Location ID, press Enter.

Mode: Alphabet Upper

9. Use the one-touch keypad to enter up to 12 characters for the Location ID. (For a complete list of characters available, see page 22.)

MBS Dallas

Mode: Alphabet Lower

10. When the Location ID is set, press **Enter**.

Set One Touch

Alternate # (A)

If you do not want to enter an alternate number, press **Stop** to return to standby.

11. To enter an alternate number, press Enter.

Set One Touch

A >

12. Use the numeric keypad to enter the alternate number.

Set One Touch

A> 1-214-392-1003

13. When the alternate telephone number is set, press **Enter**.

Set One Touch

One Touch

В

14. Press **Enter** to set the next one-touch key or **Stop** to return to standby.

Note: You do not have to program one-touch keys in sequential order: After you press **Enter** in step 2, use the one-touch keypad the enter the key you want to program. Then press **Enter** as shown in step 3 and continue as shown.

Deleting an Alternate One-Touch Key

Your unit can store up to 10 alternate speed-dial and one-touch numbers combined. After you enter the tenth alternate, your unit will no longer prompt you with the "Set One Touch Alternate" screen shown in step 10 above.

To delete an alternate one-touch number:

1. From standby, press **Program**, 6, 0.

Set One Touch

PROGRAM MODE

60

2. Press **Enter**. Then press the one-touch key with the unneeded alternate.

Set One Touch

C:1-214-702-9778

3. Press Enter.

If you have a Location ID programmed, press **Enter** to reach the alternate number. If you do not have a Location ID programmed, press **Cancel**.

Set One Touch C>214-392-1015

4. Press Cancel to delete the alternate.

Set One Touch

Alternate # (C)

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

Deleting or Changing a One-Touch Key

To delete or change a one-touch key:

1. From standby, press Program, 6, 0.

Set One Touch

PROGRAM MODE 60

2. Press Enter.

Set One Touch

A:1-214-702-9778

3. Press the one-touch key you want to change or delete.

Set One Touch

M:1-214-555-1212

4. When the location you want to modify is displayed, press Cancel.

Set One Touch

One Touch = M

- 5. If you want to change the key, go to step 6. If you want to delete the telephone number entered, press **Stop**. The telephone number for that autodialer location and the Location ID and alternate number, if entered, will be deleted.
- 6. To change the number, press **Enter**. Use the numeric keypad to enter the new telephone number.

Set One Touch

M:1-214-702-9778

7. Press Enter.

Set One Touch

Location ID (M)

- 8. Now enter the Location ID and alternate telephone number, if desired, as shown beginning on page 29.
- 9. When the information for the autodialer location is complete, press **Stop** to return to standby.

Printing the One-Touch Keys

To print a directory of your one-touch keys:

1. From standby, press Program, 6, 1.

Print One Touch

PROGRAM MODE

61

2. Press Enter.

Print One Touch

**** Printing ****

Creating Call Groups

Call groups can combine frequently used speed-dial numbers and one-touch keys together under a single easy-to-use group number.

If you frequently transmit to many regional offices, for example, enter the one-touch key or speed-dial number for each remote office into a call group. Then, when you transmit a document, you can enter a single call group number rather than the key or number for each office.

You can program up to 32 call groups, identified by the two-digit codes 01 to 32. You can enter up to all 124 possible autodialer numbers into a group.

To create a call group:

1. From standby, press Program, 5, 2.

Set Call Groups
PROGRAM MODE 52

2. Press Enter.

Set Call Groups
Group No. = 01

3. Press Enter to create call group 1. Or press Start to scroll forward or **Program** to scroll backward through the 32 possible call groups. When the group you want to program is displayed, press Enter.

Set Call Groups 01:

4. To enter a one-touch key into the call group, press the desired key.

As you enter each one-touch key, the small LED in the upper left-hand corner of the key area will light. Press the one-touch key again and the LED will go out, indicating that one-touch key is no longer included in the call group.

One-touch keys entered into the call group **do not** appear on the LCD. Use the LEDs to determine when a one-touch key is entered into the group.

Use the numeric keypad to enter the two-digit speed-dial numbers. Press **Program** between different speed-dial numbers.

Set Call Groups
01: 01 05

5. When the call group is complete, press Enter.

Set Call Groups
Group No. = 0:

6. Press **Stop** to return to standby, or use **Start** or **Program** to reach the next call group you want to program.

Note: Your unit will not allow you to enter a speed-dial number or one-touch key into a call group unless there is a telephone number programmed for that autodialer location. You cannot include one-touch keys S through X in a group if those keys have been set for special programmable functions (see page 35).

Printing the Call Groups

To print a listing of all call groups:

1. From standby, press Program, 5, 3.

Print Group List
PROGRAM MODE 53

2. Press Enter.

Print Group List
**** PRINTING ****

Deleting a Call Group

To delete a call group:

1. From standby, press Program, 5, 2.

Set Call Groups
PROGRAM MODE 52

2. Press **Enter**. The first call group and any autodialer locations assigned to it will be displayed.

Set Call Groups 01: 11 15 17 18 23

3. Press **Start** to scroll forward or **Program** to scroll backward to the call group you want to delete.

Set Call Groups
05: 12 13 14

4. When the group you want to delete is displayed, press Cancel.

Set Call Groups 05:

5. Press **Stop** to delete the group and return to standby.

Special Programmable Keys

Six of the one-touch keys on your F-50, S through X, can be used as special programmable keys, reducing common multi-step instructions to just the touch of a key.

Use these six keys to program your most frequently needed delayed transmission, relay broadcasting, SecureMail transmission, delayed polling and delayed database polling commands.

The first four steps to program the special programmable keys are the same regardless of the special command you want. The remaining steps vary depending on the command you have chosen. The first four steps are shown below. Steps 5 and beyond for each special command appear on the pages that follow.

To enter a special programmable command:

1. From standby, press Program, 6, 2.

Set Prog. One Touch PROGRAM MODE 62

2. Press Enter.

Set Prog.One Touch
One Touch = S

3. Press Enter to program location S. Or press keys T through X to select another location and press Enter.

Set Prog.One Touch S:Delayed Transmit

4. Now press **Select** to choose the command you need. You can choose delayed transmission, relay broadcasting, SecureMail transmission, delayed polling or delayed database polling. Continue as shown on the following pages.

You cannot program keys S through X for use as special programmable keys if they are already programmed for use as one-touch dialing commands (see page 29).

Delayed Transmission

For an explanation of delayed transmissions, see page 50.

Steps 1 through 4 appear on page 35.

Set Prog.One Touch S:Delayed Transmit

5. Press Enter.

Set Prog.One Touch Set Dial Number

6. Now enter up to three dialing commands. Between each command, press **Program**. A space will appear on your LCD.

You can enter:

Complete telephone numbers, entering each digit with the numeric keypad:

3921003 7029778

Speed-dial numbers, entering the two-digit code for each remote unit:

01 15 23

Call group numbers, pressing Group and the number for each call group:

G2 G14 G29

A combination of manually entered numbers, speed-dial numbers and call groups:

7029778 G3 55

You can also use one-touch keys in your dialing command. Unlike manually entered telephone numbers, speed-dial numbers and call groups, however, you do not press **Program** after entering a one-touch key.

As you enter each one-touch key, the small LED in the upper left-hand corner of the key area will light. Press the one-touch key again and the LED will go out, indicating that one-touch key is no longer included in the delayed dialing command.

One-touch keys **do not** appear on the LCD. Use the LEDs to determine when a one-touch key is entered into the command.

Using these options, you can enter up to 126 locations: Up to 124 locations in one call group and two telephone numbers entered with the numeric keypad.

7. When your telephone numbers are entered, press Enter.

Set Prog.One Touch
Dial Time = ■■:■■

8. Press **Enter** to instruct your unit to begin transmission whenever the programmable one-touch key is pressed. Or use the numeric keypad to enter a specific hour and minute for after-hours transmission.

Set Prog.One Touch
Dial Time 23:05

9. When the time is set, press Enter to return to standby.

Relay Broadcast

For an explanation of relay broadcasting, see page 61.

Steps 1 through 4 appear on page 35.

Set Prog.One Touch S:Relay Broadcast

5. Press Enter.

Set Prog.One Touch Set Dial Number

- 6. Now enter up to three dialing commands. You can enter telephone numbers with the numeric keypad, or use speed-dial numbers, call groups or one-touch keys (see page 36).
- 7. When the dialing commands are programmed, press **Enter**.

8. Use the numeric keypad to enter the group number for the relay portion of the broadcast. Remember that F-50 facsimile machines offer call groups from 01 through 32.

(In the example above, your original document would be retransmitted to each telephone number in each remote unit's call group 15.)

9. When the group number is set, press Enter.

10. Press **Enter** to instruct your unit to begin the broadcast whenever the programmable one-touch key is pressed. Or use the numeric keypad to enter a specific hour and minute for after-hours transmission.

11. Press Enter.

Transmit SecureMail

For an explanation of Secure Mail transmissions, see page 63.

Steps 1 through 4 appear on page 35.

Set Prog.One Touch
S:Tx SecureMail

5. Press Enter.

Set Prog.One Touch
Mailbox # =

6. Now enter the number of the remote mailbox to which you will send your message. Remember that F-50 facsimile machines can have up to 10 Secure-Mail boxes, numbered 0 to 9.

Set Prog.One Touch
Mailbox # = 5

7. Press Enter.

Set Prog.One Touch Set Dial Number

- 8. Now enter up to three dialing commands. You can enter telephone numbers with the numeric keypad, or use speed-dial numbers, call groups or one-touch keys (see page 36).
- 9. When the dialing commands are set, press Enter.

Set Prog.One Touch
Dial Time = ■■:■■

10. Press Enter to instruct your unit to begin the SecureMail transmission whenever the programmable one-touch key is pressed. Or use the numeric keypad to enter the specific hour and minute for after-hours transmission.

Set Prog.One Touch
Dial Time = 23:05

11. Press Enter.

Set Prog.One Touch
*** COMPLETED ***

Delayed Polling

For an explanation of polling, see page 53.

Steps 1 through 4 appear on page 35.

Set Prog.One Touch S:Delayed Polling

5. Press Enter.

Set Prog.One Touch Set Dial Number

- 6. Now enter up to three dialing commands. You can enter telephone numbers with the numeric keypad, or use speed-dial numbers, call groups or one-touch keys (see page 36).
- 7. When the dialing commands are programmed, press Enter.

Set Prog.One Touch
Dial Time = ■■:■■

8. Press **Enter** to instruct your unit to begin polling whenever the programmable one-touch key is pressed. Or use the numeric keypad to enter the specific hour and minute for after-hours polling.

Set Prog.One Touch
Dial Time = 23:05

9. Press Enter.

Set Prog.One Touch
*** COMPLETED ***

Delayed Database Polling

For an explanation of database polling, see page 56.

Steps 1 through 4 appear on page 35.

Set Prog.One Touch S:Delayed DB.Polling

5. Press Enter.

Set Prog.One Touch Set Dial Number

- 6. Now enter up to three dialing commands. You can enter telephone numbers with the numeric keypad, or use speed-dial numbers, call groups or one-touch keys (see page 36).
- 7. When the dialing commands are set, press **Enter**.

Set Prog.One Touch
DataBase # =

8. Use the numeric keypad to enter the number of the database file you want to poll. Remember that F-50 facsimile machines allow up to 100 database files, numbered 00 to 99.

Set Prog.One Touch
DataBase # = 83

9. Press Enter.

Set Prog.One Touch
Dial Time = ■■:■■

10. Press **Enter** to instruct your unit to begin database polling whenever the programmable one-touch key is pressed. Or use the numeric keypad to enter the specific hour and minute for after-hours polling.

Set Prog.One Touch
Dial Time = 23:05

11. Press Enter.

Set Prog.One Touch
*** COMPLETED ***

Changing a Special Programmable Key

To change a special programmable command:

1. From standby, press Program, 6, 2.

Set Prog.One Touch

PROGRAM MODE 62

2. Press Enter.

Set Prog.One Touch S=Delayed Polling

3. Now press the one-touch key you want to modify.

Set Prog.One Touch V=Tx SecureMail

4. Press **Select** until the LCD displays the command to which you want to change.

Set Prog.One Touch V=Delayed DB.Polling

5. Press **Enter**. The previous command and the dial time and telephone numbers associated with it will be deleted from memory.

Set Prog.One Touch Set Dial Number

- 6. Now enter the telephone numbers and dial time for the new programmable command as shown on the previous pages.
- 7. When the new command is entered, press **Stop** to return to standby.

Deleting a Special Programmable Key

To delete a special programmable key from your unit's memory:

1. From standby, press Program, 6, 2.

Set Prog.One Touch PROGRAM MODE 62

2. Press Enter.

Set Prog.One Touch
S=Delayed Polling

3. Now press the one-touch key you want to delete.

Set Prog.One Touch
V=Tx SecureMail

4. Press Cancel.

Set Prog.One Touch

V:Clear?

5. Press Enter.

Set Prog.One Touch
One Touch = V

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

Printing the Special Programmable Commands

Keep a listing of your special programmable keys near your F-50 for easy reference. The listing displays each key programmed, the telephone numbers or call groups entered, the start time and the operation selected.

To print a listing of the special programmable keys:

1. From standby, press Program, 6, 3.

Print Prog.One Touch PROGRAM MODE 63

2. Press Enter.

Print Prog.One Touch
**** Printing ****

Reception

Automatic and Manual Reception

Your F-50 lets you choose automatic or manual call reception for flexibility in your business communication.

Automatic answering provides worry-free facsimile reception with no operator involvement. To assure automatic answering:

Press Auto Answer to light the Auto Answer lamp.

The manual answer mode is ideal if your F-50 will be used as both a facsimile machine and a business telephone. To require a manual answer for all incoming calls:

Press Auto Answer to turn off the Auto Answer lamp.

When answering incoming facsimile calls manually, press **Start** and return the handset to its cradle to begin reception.

Set Auto Answer Hours

For even more flexibility, your unit can be instructed to switch from manual to automatic answering at the end of the business day, and to return to manual at the start of the next day.

- 1. Make sure the Auto Answer lamp is not lighted. If it is, press Auto Answer.
- 2. From standby, press Program, 7, 0.

Set Auto Ans. Period PROGRAM MODE 70

3. Press Enter.

Set Auto Ans. Period Start Time =00:00

4. Use the numeric keypad to enter the hour and minute you want automatic answering to begin.

Set Auto Ans. Period Start Time =17:31

5. Press Enter.

Set Auto Ans. Period End Time =00:00 6. Use the numeric keypad to enter the hour and minute you want automatic answering to end.

Set Auto Ans. Period End Time =08:29

7. Press Enter to return to standby.

Note: To cancel, set the starting and ending times at 00:00.

To provide continuous automatic answering over a weekend, press **Auto Answer** before you leave the office and before your unit is set to switch over to auto answering automatically.

When you manually light the Auto Answer lamp, your unit will ignore the programmable auto-answer function. Your unit will provide hands-free reception even during those hours it would normally switch to manual reception.

To cancel the automatic answering upon your return to work and return your unit to the programmable auto answer hours, press **Auto Answer** to turn off the Auto Answer lamp.

Transmission

Acceptable Documents

Your F-50 can transmit images from any normal-weight paper whose dimensions fall within the maximum and minimum width and length requirements:

Maximum: $12.0(w) \times 39.3(l)$ inches Minimum: $5.0(w) \times 3.9(l)$ inches

When transmitting to a unit with an 8.5- or 10-inch print width, larger documents will be reduced automatically to accommodate the receiving unit. To transmit images from documents smaller than the minimum or from heavy paper, cardboard, overhead transparencies or other non-paper originals, first copy the document on a copier. Use the copied image for your transmission.

Your unit includes a paper-jam sensor that also causes an alarm when it detects documents longer than 39.3 inches. You can disable the sensor to transmit longer documents (see page 75), but doing so also eliminates paper-jam detection. Do not leave your unit unattended while transmitting documents with this sensor disabled.

Do not transmit:

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

Document Feeder

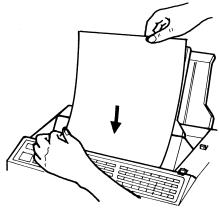
The document feeder on your F-50 will hold up to 50 sheets of normal-weight paper. The feeder advances pages through your unit from the bottom of the inserted stack.

The guides on the feeder adjust to accommodate A4, B4 and A3 paper sizes. The guides also control the automatic reduction of large documents when transmitting to a facsimile machine with an 8.5- or 10-inch print width. For example, if you set the feeder guides to B4 and insert two pages, one 10 inches wide and one 8.5 inches wide, both documents will be reduced when transmitting to a unit with an 8.5-inch printer. To avoid the unnecessary reduction of documents, do not mix pages of varying widths.

Your F-50 allows you to control your unit's scanning width. This setting can be used to cancel the automatic reduction of large documents (see page 69).

To insert a document into the F-50's feeder:

1. Adjust the feeder guides to your document's width.



- 2. Fan the bottom edges of your document's pages so that each page extends slightly farther out than the one on top of it.
- 3. Insert your document face down into the feeder. The feeder will automatically advance the first page—that is, the one on the bottom of the stack—partially into the unit.
- 4. Press Select to set the transmission mode.

Normal is suited to most typed documents. Fine is ideal for detailed or hand-written documents. Superfine reproduces the detail of extremely complicated drawings or line images. Grayscale is used to accurately transmit halftone images and photographs. G2 and FM are used when transmitting to CCITT Group 2 and North American FM units, respectively.

5. Begin transmission as shown below.

Note: Your unit will fall back to the proper mode when transmitting to a Group 2 fax machine. If you select normal, fine, superfine or grayscale when sending to a Group 2 unit, your unit will send at G2 automatically. You must manually select FM whenever you will be transmitting to a North American FM fax machine.

Page Counter

Your F-50 automatically counts and sequentially numbers the pages sent during transmission.

You can use this page counting feature to guard against undetected document feeder errors by instructing your F-50 to alert you if fewer pages than intended were transmitted.

To use the page counter:

1. From standby, insert the document.

** System Ready **
A4 NORM 10:45

2. Press Program, 0, 3.

Set Page Count PROGRAM MODE 03

3. Press Enter.

Set Page Count # of Pages = 00

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

Set Page Count # of Pages = 05

5. Press Enter.

** System Ready ** A4 NORM 10:45 6. Now continue with your transmission as shown in the instructions that follow.

If the number of pages fed through the document feeder is less than the number of pages entered in step 4, your unit will print a check message after transmission and sound its internal alarm to alert you.

If the number of pages loaded into the document feeder is more than the number entered in step 4, your unit will transmit only as many pages as indicated for the page counter.

Note: Some of your unit's functions, like delayed transmission (see page 50), include prompts for this page counting function as a part of their normal operation.

Redialing Busy Numbers

When your unit encounters a busy signal, it will automatically attempt to redial the busy number four more times.

AD01 10:50 A4 NORM 10:45

While waiting to redial, your unit's LCD will display the total number of delayed commands in memory, the current time and the time at which the next redial attempt will take place.

If you have an alternate number programmed for the busy telephone number, your unit will try to dial the alternate after the fifth unsuccessful attempt at the primary number.

If the alternate number is busy, your unit will attempt to redial it four times, as well.

Normally, your unit will wait five minutes between each redial attempt. During a group transmission to many remote units, however, the actual amount of time between each redial attempt may vary.

Transmitting with Numeric Keypad

1. From standby, insert the document.

** System Ready *
A4 NORM 10:45

2. Press Select to choose the transmission mode, if desired.

** System Ready **
A4 FINE 10:45

3. Use the numeric keypad to enter the telephone number for the remote unit. If you enter a number by mistake, press **Cancel** to delete from the right.

** System Ready ** 12147029778

4. Press Start. Transmission will begin.

12147029778 A4 FINE

Transmitting with a One-Touch Key

1. From standby, insert the document.

** System Ready

A4 NORM 10:45

2. Press Select to choose the transmission mode, if desired.

** System Ready *
A4 FINE 10:45

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

Murata

A4 FINE

4. Transmission will begin.

Transmitting with a Speed-Dial Number

1. From standby, insert the document.

** System Ready

A4 NORM 10:45

2. Press Select to choose the transmission mode, if desired.

** System Ready

A4 FINE 10:45

3. Press the two-digit speed-dial number programmed for the remote unit.

* System Ready *

00

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

Murata

A4 FINE

5. Transmission will begin.

Transmitting with the Handset

1. From standby, insert the document.

** System Ready *

A4 NORM 10:45

2. Press Select to choose the transmission mode, if desired.

** System Ready *

A4 FINE 10:45

- 3. Pick up the unit's telephone handset.
- 4. Enter the telephone number for the remote unit with the telephone handset keypad.

Murata F-50 Transmission

5. When the remote unit answers and you hear facsimile tones, press **Start** and return the handset to its cradle. Transmission will begin.

TRANSMIT
A4 FINE

Transmitting from Memory

The four transmission options outlined above—transmission using the numeric keypad, speed-dial numbers, one-touch keys and the telephone hand-set—send your document from the F-50's document feeder to another unit without entering your document into your unit's memory.

Sending your document from your unit's internal memory offers two advantages for some transmissions, however:

First, memory-to-memory transmission to another F-50 dramatically reduces transmission time. When transmitting from memory to another F-50, your unit will send your entire document into the memory of the remote unit and then disconnect the telephone line. The remote unit will wait until after the telephone call is completed to print out the document.

Since your documents can be sent to memory much faster than they can be printed out, memory-to-memory transmissions to other F-50 units can save as much as 40 percent of the time needed for non-memory transmissions.

Your unit can identify other F-50 units during the facsimile "handshake" at the start of each call.

Second, regardless of the model or manufacturer of the receiving Group 3 facsimile machine, transmissions from memory are protected by your unit's Retransmit at Error feature.

After each page of your document is sent from memory, your F-50 waits to receive a signal from the remote unit indicating the page was received properly. If your F-50 does not receive this signal, it will retransmit the last page sent until the remote unit indicates your document was received correctly.

Use the delayed transmission command, **Program**, 1, 1, to transmit from memory (see page 50). You do not have to delay your transmission, however. When your unit asks you to enter the delayed transmit dial time (step 9 in the delayed transmission instructions that follow) just press **Enter** to indicate the current time.

Your unit will scan your document into memory and begin your transmission.

The delayed transmission command has the additional benefit of allowing multiple dialing instructions, so that you can designate up to 126 recipients for your document with a simple command.

Delayed Transmission

Your F-50 can store up to 25 delayed dialing commands, allowing you to send documents from memory without operator involvement up to 24 hours later.

Delaying your document transmission until after business hours reduces the chance that your unit will be unable to contact a busy central facsimile machine, and may also reduce your telephone charges.

To delay the transmission of a document:

1. Insert the document.

** System Ready **
A4 NORM 10:45

2. From standby, press Program, 1, 1.

Delayed Transmit
PROGRAM MODE 11

3. Press Enter.

Delayed Transmit
of Pages = 00

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

Delayed Transmit # of Pages = 03

5. Press Enter.

Delayed Transmit
Xmit Mode = NORM

6. Press Select to set the transmission mode, if desired.

Delayed Transmit

Xmit Mode = FINE

7. Press Enter.

Delayed Transmit Set Dial Number

- 8. Now enter up to three dialing commands for the delayed transmission. You can enter telephone numbers with the numeric keypad, or use speed-dial numbers, call groups or one-touch keys (see page 36).
- 9. When you have entered the dialing instructions, press Enter.

Delayed Transmit
Dial Time: 10:45

10. Press **Enter** to transmit from memory immediately (see page 49). Or use the numeric keypad to enter the hour and minute you want delayed transmission to take place.

Delayed Transmit
Dial Time: 23:05

11. When the time is set, press **Enter**. Your unit will scan the document into memory and return to standby automatically.

AD03 23:05 A4 FINE 10:45

In standby, the top line of your unit's LCD will show the total number of delayed commands in memory (in the example above, 3) and the time scheduled for the next delayed command to begin (23:05 hours or 11:05 p.m.). Included in the number of delayed commands shown will be features other than delayed transmissions, including delayed polling, relay broadcasting and other functions described elsewhere in his manual.

The bottom line will display the paper size of the next document to be transmitted from memory, the transmission mode and the current time.

After your document has been transmitted, the document and the dialing instructions associated with it will be deleted from memory automatically.

Printing the Delayed Commands

To print a list of all delayed commands, including delayed transmissions:

1. From standby, press Program, 0, 5.

Print Commands
PROGRAM MODE 05

2. Press Enter.

Print Commands

**** Printing ****

Printing a Document Stored for Delayed Transmission

You can print out and review documents stored for delayed transmission. Printing copies of stored documents does not change or delete them.

To print a document stored in memory for delayed transmission:

1. From standby, press Program, 0, 6.

Print Stored Doc PROGRAM MODE 06

2. Press Enter.

Print Stored Doc Command No. = 00 3. Refer to the printed list of delayed commands (see page 51) to select the document you want. Use the numeric keypad to enter the number of the delayed command for the document you want to print.

Print Stored Doc Command No. = 03

4. Press Enter. The document will be printed.

Print Stored Doc

**** Printing ****

Cancelling a Delayed Command

To cancel a delayed command and delete the document stored in memory:

1. From standby, press **Program**, 0, 7.

Clear Command
PROGRAM MODE 07

2. Press Enter.

Clear Command
Command No. = 00

3. Refer to the printed list of delayed commands (see page 51) to select the command you want. Use the numeric keypad to enter the number of the delayed command you want to delete.

Clear Command

Command No. = 05

4. When set, press Enter.

Clear Command

Erase No. = 05

5. Press Enter again to erase the command shown.

Clear Command

Erased ****

Polling

Polling allows you to enter a document into your unit's memory 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 fax machine must receive information from one or several remote units. By polling remote units, the central facility bears all telephone charges and prevents several units from calling at the same time. Polling is available between your F-50 and any Group 3 facsimile machine with polling capability.

Your unit can also be used for database polling with other Murata F-50s (see page 56). Database polling lets you store documents in numbered files in your unit's memory. Remote units can then call and request specific files of information. Likewise, your unit can be used to request files stored in another F-50.

Polling procedures can be protected by the use of a pass code (see page 23). When you enter a pass code into your unit, only Murata-manufactured units presenting the same pass code will be allowed to poll documents from your facsimile machine.

To set a document to be polled:

- 1. Insert the document into your document feeder.
- 2. From standby, press **Program**, 3, 1.

Input Polled Doc.
PROGRAM MODE 31

3. Press Enter.

Input Polled Doc.
of Pages = 00

4. Use the numeric keypad to enter the number of pages being stored for polling.

Input Polled Doc.
of Pages = 03

5. Press Enter.

Input Polled Doc.
Xmit mode = NORM

6. Press Select to set the transmission mode, if desired.

Input Polled Doc.
Xmit mode = FINE

7. Press Enter.

001 Pages / 4 % A4 FINE FINE

8. As your document is scanned, the top line of the LCD will display the number of pages currently stored in memory and the percent of available memory in use. The number of pages shown will include pages stored for operations other than polling, including delayed transmission and other functions described elsewhere in this manual.

The bottom line of the LCD will display the paper size of the document being entered and the transmission resolution at which the document will be sent.

9. After your document has been scanned into memory, your unit will briefly update the number of pages stored and return to standby.

004 Pages / 15 %
*** COMPLETED **

Printing a Document to be Polled from Memory

1. From standby, press Program, 3, 2.

Print Polled Doc.
PROGRAM MODE 32

2. Press Enter.

Print Polled Doc.

**** Printing ****

Erasing a Document to be Polled from Memory

1. From standby, press Program, 3, 3.

Erase Polled Doc.
PROGRAM MODE 33

2. Press Enter.

Erase Polled Doc. Are you sure?

3. Press Enter to delete the document or Cancel to return to standby.

Erase Polled Doc.
***** Erased *****

Polling and Delayed Polling

To poll another unit:

1. From standby, press **Program**, 2, 1.

Delayed Polling
PROGRAM MODE 21

2. Press Enter.

- 3. Now enter up to three dialing commands. You can enter telephone numbers with the numeric keypad, or use speed-dial numbers, call groups or one-touch keys (see page 36).
- 4. When you have entered the dialing instructions, press Enter.

5. If you want to poll immediately, go to step 6.

To delay polling, use the numeric keypad to enter the hour and minute you want polling to begin.

6. Press **Enter**. If you have requested immediate polling, your unit will begin to call the remote units you programmed.

Otherwise, your unit will return to standby. The LCD will display the number of delayed dialing commands of all types stored in memory.

To print a list of all delayed dialing commands stored in your unit's memory, see page 51.

Database Polling

Your F-50 can be used to store documents in database files in memory and to retrieve similar files from Murata ImageMaster and F-50 units.

This database feature allows you to tailor the information you set for polling to the different needs of your customers and business associates.

If you are a manufacturer, for example, store sensitive pricing and discount information in database file 1, and lead-time and delivery information in file 2. Tell your distributors to call and request both files; tell your customers to request file 2 only.

Your unit can store up to 100 database files, numbered 00 to 99. Remember, however, that your unit is also limited by the amount of memory available for document storage. (To check the amount of memory available, see page 24.)

Use the pass code (see page 23) for extra security when you create database files of sensitive documents. You may also want to use non-sequential numbering (in the case above, for example, discount information in file 71 and lead-time information in file 33) to discourage sequential "sampling" of your files.

To store a document in a database file:

- 1. Insert the document into your document feeder.
- 2. From standby, press **Program**, 3, 4.

Input Database
PROGRAM MODE 34

3. Press Enter.

Input Database
of Pages = 00

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

Input Database # of Pages = 05

5. Press Enter.

Input Database
Xmit mode = NORM

6. Press Select to set the transmission mode, if desired.

Input Database
Xmit mode = FINE

7. Press Enter.

Input Database
Database # = 00

8. Use the numeric keypad to enter the number of the database file you are creating. You may enter numbers 00 through 99.

Input Database
Database # = 33

9. Press Enter. As your document is scanned, your unit will display the number of pages stored in memory and the percent of memory in use.

003 Pages / 129 A4 FINE FINE

10. After your document is scanned into memory, your unit will briefly update the display of the number of pages stored and memory in use, then return to standby.

008 Pages / 30% A4 FINE FINE

Printing a Database File from Memory

To print a database file from memory:

1. From standby, press Program, 3, 5.

Print Database

PROGRAM MODE 35

2. Press Enter.

Print Database

Database # = 00

3. Use the numeric keypad to enter the number of the database file you want to print.

Print Database
Database # = 33

4. Press Enter.

Print Database

**** Printing ****

Erasing a Database File from Memory

To erase a database file from memory:

1. From standby, press Program, 3, 6.

Erase Database

PROGRAM MODE 36

2. Press Enter.

Erase Database

Database # = 00

Database Polling Murata F-50

3. Use the numeric keypad to enter the number of the database file you want to erase.

Erase Database

Database # = 33

4. Press Enter.

Erase Database

Erase No. = 33

5. Press Stop to stop the erasure. To erase the file shown, press Enter.

Erase Database

***** Erased *****

To Poll a Database File

To request a database file from a Murata unit with internal memory:

1. From standby, press Program, 2, 2.

Delayed DB.Polling PROGRAM MODE 22

2. Press Enter.

Delayed DB.Polling Set Dial Number

- 3. Now enter up to three dialing commands. You can enter telephone numbers with the numeric keypad, or use speed-dial numbers, call groups or one-touch keys (see page 36).
- 4. When you have entered the dialing instructions, press **Enter**.

Delayed DB.Polling

Database # =

5. Use the numeric keypad to enter the number of the database file you want.

Delayed DB.Polling
Database # = 15 31

If you want to poll multiple database files, press **Program** between the file numbers. A space will appear on the LCD. Enter up to 10 file numbers.

When the database file numbers are set, press Enter.

Delayed DB.Polling
Dial Time = 10:45

- 6. If you want to begin database polling immediately, press **Enter**. Your unit will begin database polling.
- 7. If you want to delay database polling, use the numeric keypad to enter the hour and minute you want polling to begin.

Delayed DB.Polling
Dial Time = 23:05

Then press Enter.

Delayed Polling
*** COMPLETED ***

Your unit will return to standby. The LCD will display the number of delayed dialing commands of all types stored in memory.

AD05 23:05

Feb 26,88 10:45

To print out a list of all delayed dialing commands, see page 51.

Repeat Polling

Your F-50's repeat polling command sequentially polls each telephone number entered in your unit's call group 32.

If your office must request daily sales figures, inventory transaction lists, purchase orders or other documents from several remote units, enter the telephone numbers for these units into group 32 (see page 33). Then use the repeat polling command each day to speed and simplify your dialing.

To prepare your unit for repeat polling:

- 1. Make sure the telephone numbers you must poll regularly are entered in call group 32. Unless at least one number is programmed in group 32, you cannot program a dial time for repeat polling.
- 2. From standby, press **Program**, 2, 4.

Repeat Polling Program Mode

24

3. Press Enter.

Repeat Polling Dial Time = 10:45

4. Use the numeric keypad to enter the hour and minute you want to begin polling.

> Repeat Polling Dial Time = 23:05

5. When the time is set, press **Enter**.

Repeat Polling COMPLETED

Your unit will return to standby. While waiting to poll the locations in call group 32, your unit's LCD will display the number of delayed dialing commands of all types stored in memory. To print a list of delayed dialing commands in memory, see page 51.

> AD05 23:05 Feb 26,88 10:45

Murata F-50 Broadcasting

Broadcasting

Broadcasting takes advantage of the powerful autodialer in your F-50, sending a document sequentially to up to 126 remote locations or relaying a single document to as many as 15,000 units.

Sequential Broadcasting

Sequential broadcasting is a function of your F-50's normal delayed transmission command. Enter a group number rather than a single telephone number to instruct your unit to send your document sequentially to each unit in the call group.

For sequential broadcasting, follow the instructions for delayed transmission shown on page 50. When your unit asks you to set the dial number, enter your call group number.

Relay Broadcasting

In a relay broadcast, your unit transmits a document to other F-50s you select. As it sends the document, your unit will also designate a call group number for the remote units.

The remote units will, in turn, retransmit or "relay" your document to all the units in their designated call group.

Relay broadcasting is a faster way to transmit to many locations and could help reduce long distance telephone charges, as well.

For example, a central office could send a document to 10 regional headquarters with instructions to relay the document to 10 local stores each. The 100 stores would receive the document much sooner than if the central unit had attempted to send it to each store sequentially. By using the regional headquarters as "hubs", the central office can also reduce the number of long-distance calls involved in the transmission.

To program a relay broadcast:

- 1. Insert the document to be transmitted into the document feeder.
- 2. From standby, press **Program**, 1, 2.

Relay Broadcast PROGRAM MODE 12

3. Press Enter.

Relay Broadcast
of Pages = 00

4. Use the numeric keypad to enter the number of pages to be transmitted.

Relay Broadcast # of Pages = 05

5. Press Enter.

Relay Broadcast Xmit mode = NORM

6. Press **Select** to set the transmission mode, if desired. When set, press **Enter**.

Relay Broadcast Set Dial Number

- 7. Now enter up to three dialing commands. You can enter telephone numbers with the numeric keypad, or use speed-dial numbers, call groups or one-touch keys (see page 36).
- 8. When the dialing instructions are set, press **Enter**.

Relay Broadcast Group No. =

9. Use the numeric keypad to enter the group number for the relay portion of the broadcast. You can specify up to three groups for the remote unit by pressing **Program** after entering each group number. A space will appear on the LCD between the numbers.

Relay Broadcast Group No. = 15 10

10. Press Enter.

Relay Broadcast
Dial Time = 10:45

- 11. Press Enter to begin relay broadcasting immediately.
- 12. To delay relay broadcasting, use the numeric keypad to enter the hour and minute you want the operation to begin.

Relay Broadcast
Dial Time = 23:05

13. When the dial time is set, press **Enter**.

Your unit will scan the document into memory and return to standby. While your unit is waiting to transmit, the LCD will display the number of delayed dialing commands of all types stored in memory.

AD05 23:05 Feb 26,88 10:45

To print a list of all delayed dialing commands stored in memory, see page 51. To print out a document stored in memory for broadcasting, see page 51.

Secure Mail

SecureMail is an exclusive Murata feature for your most confidential documents: SecureMail transmissions are sent to F-50 memory "mail boxes", where they are protected by a pass code selected by the mail box holder.

When your SecureMail transmission is received at the remote unit, a message will be printed alerting the remote operator of its arrival and of its intended recipient.

SecureMail messages are stored in memory for up to 72 hours. If the message has not been printed within 72 hours, it will be deleted from the remote unit's memory automatically.

Creating a SecureMail Box

You can create up to 10 SecureMail boxes in your F-50's internal memory.

To create a new SecureMail box:

1. From standby, press Program, 5, 4.

Set Mailbox

PROGRAM MODE 54

2. Press Enter.

Set Mailbox
Mailbox # =

3. Use the numeric keypad to choose a mail box. Ten boxes, identified 0 to 9, are available.

Set Mailbox
Mailbox # = 9

4. Press Enter 3 times.

Mode: Alphabet Upper

5. Use the one-touch keypad to enter an identifying name for the mailbox. For a list of characters available, see page 22. Enter up to 16 characters.

Mike's Box

Mode:Alphabet Lower

6. When the mail box identifier is set, press Enter.

Print Mailbox ID
New ID # = 0000

7. Use the numeric keypad to enter the pass code for the mail box. (Remember that you will not be able to access SecureMail messages or change the mail box if you forget the code.)

Print Mailbox ID
New ID # = 1234

8. When the pass code is set, press **Enter** to return to standby.

Printing a Mail Box Listing

To print a list of all mail boxes in use:

1. From standby, press Program, 5, 5.

Print Mailbox ID PROGRAM MODE 55

2. Press Enter.

Print Mailbox ID

**** Printing ***

Transmitting to a SecureMail Box

SecureMail transmission takes place between the internal memories of the sending and receiving F-50 units. The document you send cannot require more memory than is available in either unit.

To transmit a document through Secure Mail:

- 1. Insert the document into the document feeder.
- 2. Press Program, 1, 3.

Tx SecureMail

PROGRAM MODE 13

3. Press Enter.

 ${\tt Tx \ Secure Mail}$

of Pages = 00

4. Use the numeric keypad to enter the number of pages being transmitted.

Tx SecureMail

of Pages = 05

5. Press Enter.

 ${\tt Tx \ Secure Mail}$

Xmit mode = NORM

6. Press Select to set the transmission mode, if desired.

Tx SecureMail

Xmit mode = FINE

7. Press Enter.

Tx SecureMail

Mailbox # =

8. Use the numeric keypad to enter the number of the receiving mailbox.

Tx SecureMail
Mailbox # = 5

9. Press Enter.

Tx SecureMail Set Dial Number

10. Now enter up to three dialing commands. You can enter telephone numbers with the numeric keypad, or use speed-dial numbers, call groups or one-touch keys (see page 36).

Tx SecureMail 3921003 G1 15

11. When the telephone numbers are set, press Enter.

Tx SecureMail
Dial Time = 10:45

- 12. Press Enter to begin SecureMail transmission immediately.
- 13. To delay transmission, use the numeric keypad to enter the hour and minute you want transmission to begin.

Tx SecureMail
Dial Time = 23:05

14. When the transmission time is set, press Enter.

Your unit will scan the document into memory and return to standby. While your unit is waiting to transmit, the LCD will display the number of delayed dialing commands of all types stored in memory.

AD05 23:05 Feb 26,88 10:45

To print a list of all delayed dialing commands stored in memory, see page 51. To protect your sensitive documents, a document stored for SecureMail transmission cannot be printed out for review.

Printing a SecureMail Message

When your F-50 receives a Secure Mail transmission, it will alert you with a printed delivery notice. The notice will indicate the day and time the message was received, the intended recipient, the day and time the message will be erased from memory and the TTI of the transmitting unit.

To print out a SecureMail message:

1. From standby, press **Program**, 2, 3.

Rx SecureMail
Mailbox # =

2. Use the numeric keypad to enter your mail box number.

Rx SecureMail
Mailbox # = 8

3. Press Enter.

Rx SecureMail

Your ID # = 0000

4. Use the numeric keypad to enter your ID number.

Rx SecureMail

Your ID # = 1234

5. Press **Enter**. If you have entered the correct pass code, your message will begin printing.

Changing or Deleting

a SecureMail Box

You must know the pass code for a mail box in use to change or delete it.*

To change or delete a mail box:

1. From standby, press Program, 5, 4.

Set Mailbox

PROGRAM MODE 54

2. Press Enter.

Set Mailbox

Mailbox # =

3. Use the numeric keypad to enter the number of the mailbox you want to change or delete.

Set Mailbox

Mailbox # = 9

4. Press Enter.

Set Mailbox

 $Old\ ID\ \#\ =\ OOOC$

5. Use the numeric keypad to enter the mail box's current pass code.

Set Mailbox

Old ID # = 1234

6. Press **Enter** to display the current mailbox identifier.

Set Mailbox

Mike's Box

- 7. Now press **Cancel**. If you want to delete the mailbox and return to standby, press **Stop**.
- 8. If you want to change the box, use the one-touch keypad to enter a new identifier.

Jim's Box

Mode: Alphabet Lower

9. Press Enter.

- 10. The unit will display the current pass code. If you want to keep the same pass code, press **Enter** to return to standby.
- 11. If you want a new pass code, use the numeric keypad to enter it.

12. When the pass code is set, press Enter.

*You cannot delete an individual mail box unless you know its pass code. However, to delete every mail box in your unit, press **Program**, *, 4, 4. Then press **Enter** twice to delete all mail box information.

Other Features

Printing the Activity Journal

The activity journal in your unit records important information on your 25 most recent transmissions and receptions. The activity journal prints automatically after 25 transactions, and you can request the journal manually at any time.

The activity journal is printed as two separate reports: the receive journal and the transmit journal. Each records the transmission mode, day and hour of the transaction, the transmission length, the number of pages sent, the result and an indication of errors, if any were encountered.

To print the activity journal:

1. From standby, press Program, 0, 0.

Print Journal PROGRAM MODE 00

2. Press Enter.

Print Journal
**** Printing ****

Note: The activity journal will not print if you have just installed your unit and have no communications activity to report or if you have cleared your unit's memory since your last transaction.

Setting the Confirmation Report

A confirmation report is your assurance that the document you set for transmission was actually received by the remote unit.

Two types of confirmation report are available from your unit after transmission: a Receive Confirmation Report and a Transmit Confirmation Report.

Both reports are similar in that they identify the transmitting and receiving unit, the date, number of pages sent, transmission length, mode and result.

The RCR is available when transmitting to another Murata-manufactured unit. If you select an RCR when transmitting to a non-Murata unit, a TCR will be printed instead.

A TCR is available for any transmission, regardless of the brand of the receiving facsimile machine.

You can instruct your unit to print a confirmation report automatically after every transmission or manually select a confirmation report during particular transmissions. Murata F-50 Other Features

To manually request a confirmation report:

- 1. Begin transmitting your document.
- 2. When the flashing On-Line lamp becomes a steady green, press **Start**. The Confirm lamp will light.
- 3. After your document has been transmitted, the confirmation report will be printed and your unit will return to standby.

To request an automatic confirmation report after every transmission:

1. From standby, press Program, 4, 4.

Set Confirmation
PROGRAM MODE 44

2. Press Enter.

Set Confirmation
Select Type = OFF

3. Now press **Select** to choose an RCR or TCR.

Set Confirmation
Select Type = RCR

4. When you have selected the confirmation report, press **Enter**.

Set Confirmation
*** COMPLETED ***

Setting the Scanning Width

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

If you want to transmit images from large documents without this reduction, adjust the scanning width of your unit. In addition to the A3 (11.9-inch) scanning width to which your unit was set when manufactured, you can select B4 (10.1-inch) and A4 (8.5-inch) settings.

When you select a narrower scanning width, your unit will ignore any image outside the active scanning area. If you select the A4 scanning width and insert a 12-inch-wide document, for example, your unit will scan the center 8.5 inches and leave 1.75 inches unscanned on each side of the page.

To determine what portion of a document will be transmitted with a reduced scanner size, refer to the document guides on the document feeder.

To set the scan width:

1. From standby, press Program, 4, 5.

Set Scan Width PROGRAM MODE 45

2. Press Enter.

Set Scan Width
Scan Width = A3

3. Now press **Select** to choose the scan width.

Set Scan Width
Scan Width = A4

4. Press Enter.

Set Scan Width

*** COMPLETED ***

5. When you have transmitted your document, return the width setting to A3 to accommodate the greatest variety of document sizes and transmission requirements.

Printing the Document Size

You can instruct your F-50 to indicate the size of your original document on each copy printed at the receiving unit.

Your unit will print the original paper size and the size at which the document is printed:

In the example above, an A3 document (11.9 inches wide) was printed at the A4 paper width (8.5 inches).

In the second example, a B4 document (10.1 inches wide) was sent unreduced to a B4 printer.

The paper size will appear at the lower right-hand corner of the received page, below your transmitted image.

To indicate the document size:

1. From standby, press Program, 4, 6.

Print Doc Size
PROGRAM MODE 46

2. Press Enter.

Print Doc Size

Size Print = OFF

3. Press **Select** to turn the print function on.

Print Doc Size

Size Print = ON

4. Press Enter.

Print Doc Size

*** COMPLETED ***

Cancelling the TTI

This optional setting instructs your unit to delete your Transmit Terminal Identifier from the documents you send. Normally, the TTI appears at the top of each document printed at the receiving unit and allows the remote operator to identify the sending facsimile machine.

To delete the TTI from the documents you send:

1. From standby, press **Program**, 4, 7.

TTI ON/OFF

PROGRAM MODE 47

2. Press Enter.

TTI ON/OFF

TTI = ON

3. Press **Select** to turn the TTI off.

TTI ON/OFF

TTI = OFF

4. Press Enter.

TTI ON/OFF

*** COMPLETED ***

Creating a Closed Network

You can close your unit to transmissions from unauthorized facsimile machines with the closed network feature.

When you turn the closed network on, only Murata facsimile machines presenting the proper pass code can access your unit for transmissions or polling. All other facsimile machines will be disconnected before transmission.

To activate the closed network feature:

- 1. Create a pass code for your unit (see page 23).
- 2. From standby, press Program, 4, 8.

Closed Network

PROGRAM MODE 48

3. Press Enter.

Closed Network

Closed Net = OFF

4. Press **Select** to close the network.

Closed Network

Closed Net = ON

5. Press **Enter** to return to standby.

Note: The closed network will continue to limit access to your unit so long as you have selected the closed network feature and have a pass code entered. Other than the ringing of the telephone in your unit, there is no indication or record of the telephone calls disconnected while the closed network is in place.

Displaying the Transmission Speed

This optional setting instructs your unit to display the communication speed in the LCD during transmissions and receptions.

The communication speed will be shown as 9600, 7200, 4800 or 2400 bits per second and will be influenced by the quality of the telephone line in use and the CCITT group of the remote unit.

To display the communication speed during transmissions and receptions:

1. From standby, press **Program**, *, 1, 1.

Display Tx Speed PROGRAM MODE 11

2. Press Enter.

Display Tx Speed
Disp.Speed = OFF

3. Press **Select** to set the display speed on.

Display Tx Speed
Disp.Speed = ON

4. Press Enter.

Display Tx Speed
*** COMPLETED ***

Setting the Transmission Speed

Your F-50 is a state-of-the-art Group 3 fax, able to compensate or "fall back" when poor telephone lines prohibit transmission at the fastest Group 3 speeds.

If you regularly send documents over especially poor telephone lines, however, you can instruct your unit to begin transmissions at lower speeds. This manual compensation eliminates the time during transmission needed for your unit to determine the fastest speed possible.

For transmitting overseas, your unit also offers two settings that compensate for the poorer transmission characteristics of these telephone lines.

These settings are available for each one-touch key and speed-dial number programmed in your autodialer:

Setting	Use
G3/G2	The standard for high-speed transmission
O.sea1	Used when transmitting on standard overseas telephone lines
O.sea2	Used when transmitting on extremely poor over- seas telephone lines
7200	Begins long-distance transmission at 7200 bps to compensate for moderate telephone line interference or degradation
4800	. •
2400	Begin long-distance transmission at 4800 or 2400 bps respectively to compensate for severe to extreme telephone line interference or degradation
FM	Begins transmission at the standard rate for North American FM facsimile machines

To set the transmission speed:

1. From standby, press **Program**, *, 1, 2.

Set Tx Speed PROGRAM MODE 12

2. Press Enter.

Set Tx Speed
00: G3/G2

3. Now press Enter to scroll to the autodialer location you want to set.

Set Tx Speed
33: G3/G2

4. Press **Select** to choose the transmission setting.

Set Tx Speed
33: O.seal

5. Press Enter.

Set Tx Speed
34: G3/G2

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

Interrupt

The **Interrupt** key on your F-50 allows you to halt group commands underway, use your unit for a different command, and resume the group command at the point you stopped it.

To interrupt a command underway, press Interrupt once.

Your unit will complete the telephone call underway. When complete, the unit will beep several times and the display will show that the group function has been temporarily halted.

** Interrupted *'
Feb 26,88 10:45

Now enter your command.

When the unit has completed your new command, it will automatically resume the group command.

Multitasking

If your unit is receiving a large document or performing a lengthy group transmission from memory, you don't need to wait until the function is completed to enter a new transmission command. The F-50 will allow you to enter a new transmission command while it completes the first function.

Just insert your document into the document feeder. Then enter dialing instructions using one-touch keys, speed-dial numbers, special programmable keys or telephone numbers entered using the numeric keypad.

After the command has been entered, the LCD will show that a second command has been reserved.

```
** Tx Reserve OK **
```

Your command will be performed after the group function is completed.

Note: This feature can be used only when the F-50 is receiving or is transmitting from memory. Do not insert a new document if there are pages in the feeder being transmitted.

Setting the Dial Pause Timer

The pause characters, "-/", inserted into your speed-dial numbers and one-touch keys instruct your unit to wait before continuing dialing (see page 25).

Initially, your unit is set to pause 5 seconds. You can adjust that pause between 0 and 99 seconds.

To set the pause timer:

1. From standby, press Program, *, 9, 9.

Set Pause Timer
Pause Timer = 05

2. Use the numeric keypad to enter the desired delay.

Set Pause Timer
Pause Timer = 15

3. Press **Enter** to return to standby.

Set Pause Timer

*** COMPLETED ***

Clear Memory

This command deletes all user information from your unit and returns all internal software settings to their factory positions.

Do not use this command unless you want to delete all user information—TTI, Subscriber ID, one-touch keys and all other information—from your unit.

To clear all user settings:

1. From standby, press **Program**, *, 4, 0.

All RAM Clear PROGRAM MODE 40

2. Press Enter.

All RAM Clear Are you sure ?

- 3. To prevent the erasure and return to standby, press Cancel.
- 4. To delete all user information from your unit, press Enter.

All RAM Clear
*** COMPLETED ***

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LED Test

The 31 light emitting diodes on your unit tell you when a particular function or key is in use.

To tests all LEDs on your unit:

1. From standby, press Program, *, 9, 7.

LED Test

PROGRAM MODE

2. Press Enter.

Each of the LEDs on your unit will light sequentially, starting with the On-Line, Error and Confirm lamps and continuing through each of the one-touch keys. When the test is complete, your unit will beep.

If an LED is not working, call the Murata Customer Service Center for your area (see page 5).

Adjust Beeper Volume

The volume of the beeper in your unit can be adjusted to best suit the needs of your office.

The volume is controlled by a small dial inside the front panel on your unit.

To adjust the beeper volume:

- 1. Pull forward on the front panel release, allowing the panel to open.
- 2. The adjustment dial is located inside the front panel almost directly beneath the spot where the **R** one-touch key sits.
- 3. Use a jeweler's screwdriver to adjust the dial. Adjusting counter-clockwise decreases the volume. Adjusting the dial clockwise increases the volume.

Unlimited Document Length Transmission

Disabling the paper-jam sensor on your F-50 allows your unit to transmit documents longer than 39.3 inches. With the sensor disabled, your unit can easily transmit well logs, medical strip-chart records and other long pages.

To disable the paper-jam sensor to transmit documents longer than 39.3 inches:

1. From standby, press Program, *, *.

Set Memory Switch

SW0 11110000

2. Press Enter 3 times.

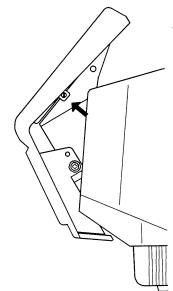
Set Memory Switch

SW3 00000000

3. Press A 6 times

Set Memory Switch

SW3 00000000



4. Enter the numeral 1.

Set Memory Switch SW3 01000000

5. Press **Enter**, then **Stop**.

To reactivate the paper-jam sensor after the transmission of a long document, enter the numeral "0" in step 4 rather than "1".

Manual Contrast Control

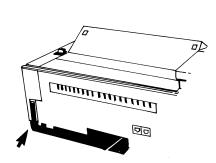
Your F-50 lets you manually compensate for light or dark original documents before copying or transmission.

To make a light original appear darker, press the contrast key once to light the Light Document lamp.

To make a dark original appear lighter, press the contrast key twice to light the Dark Document lamp.

After transmission, the Light or Dark Document lamp will go out and your unit will return to its normal contrast setting.

RS-232C Interface



The RS-232C interface located at the right rear of your unit allows your F-50 to be used as a draft-quality printer for your computer.

To use the F-50 as a printer, the computer—either through its operating system or through applications software running on the computer—must support the X-On/X-Off communications protocol. The F-50 uses X-On/X-Off signals to control the flow of information from the computer to the F-50.

IBM personal computers running the PC-DOS and MS-DOS operating systems do not support X-On/X-Off by themselves, but many software programs for these computers do. Communications software packages, for example, frequently offer X-On/X-Off options in their set-up or configuration menus. These and other software packages can be used to print a file from your computer on the F-50.

The RS-232C parameters you select below will be influenced by the computer software and hardware you are using. Check your computer and software owner's manuals for more information.

Connect the F-50 to your computer using a standard null modem RS-232C cable. To avoid interference with radio and television reception, make sure the RS-232C cable is shielded.

To set the RS-232C parameters:

1. From standby, press **Program**, 4, 9.

RS232C Parameters
PROGRAM MODE 49

2. Press Enter.

RS232C Parameters
Baud Rate = 19200bps

3. Press **Select** to set the communications rate supported by your computer and software. Select 300, 600, 1200, 2400, 4800, 9600 or 19200 bps.

RS232C Parameters
Baud Rate = 9600bps

- 4. Press Enter.
- 5. Press **Select** to set the data length. Select 7 or 8 bit.

RS232C Parameters

Data Length = 8bit

6. Press Enter.

7. Press Select to set the parity. Select even, odd or none.

RS232C Parameters
Parity = None

8. Press Enter.

RS232C Parameters

*** COMPLETED **

Receiving Data Through the RS-232C Port

After you have set the RS-232C parameters as described above, you must select RS-232C reception through a program mode before your F-50 will print out the data sent to it by your computer.

To receive data through the RS-232C port:

1. From standby, press Program, 8, 0.

Receive RS-232C PROGRAM MODE 80

- 2. Press Enter.
- 3. Now send the data file from your computer to the F-50.

Receive RS-232C

**** Printing ****

4. When the file has been printed, press **Stop** to return the F-50 to standby.

Note: Your unit cannot receive or transmit facsimile messages when being used as a computer printer.

RS-232C Error Messages

If you choose the wrong RS-232C parameters, your F-50 will alert you with a status message identifying one of seven conditions:

- 1. Parity error
- 2. Over-run error
- 3. Parity and over-run error
- 4. Framing error
- 5. Parity and framing error
- 6. Over-run and framing error
- 7. Parity, framing and over-run error

Over-run errors are caused by an improper communication rate and framing errors are caused by an incorrect data length setting.

Encryption Interface

Murata offers a field upgrade to your F-50 allowing the RS-232C port to be used as a standard encryption interface.

For more information on this optional upgrade, contact the Murata Customer Support Center for your area (see page 5).

Copier Features

Your F-50 can provide clear, convenient single or multiple copies of documents up to 12 inches wide. Documents wider than the recording paper in use in your F-50 will be reduced to fit automatically.

To produce a single copy:

- 1. Insert the document face down into the document feeder.
- 2. Press **Select** to set the copy quality. Choose fine, superfine or grayscale.
- 3. Press Copy to begin copying.

To produce multiple copies:

- 1. Insert the document face down into the document feeder.
- 2. Press Select to set the copy quality. Choose fine, superfine or grayscale.
- 3. Press Program, 0, 4.

Multiple Copies
PROGRAM MODE 04

4. Press Enter.

Multiple Copies # of Copies = 00

5. Use the numeric keypad to enter the number of copies desired. Enter up to 99 copies.

Multiple Copies # of Copies = 03

6. Press **Enter**. Your unit will scan the document into memory and begin copying it. The copies will be collated when they are printed out.

Note: Because your unit scans the original document into memory before it begins printing, you cannot copy a document requiring more memory than your unit has available. Before you begin copying large documents, check the amount of memory in use (see page 24).

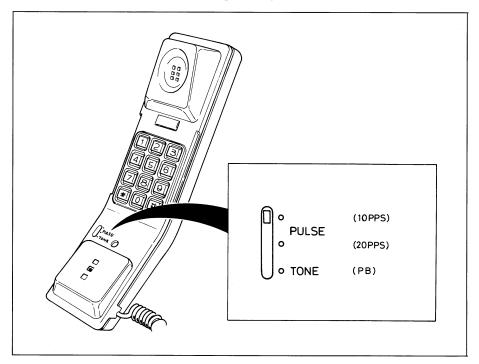
Your unit cannot answer incoming calls while copying.

Telephone Features

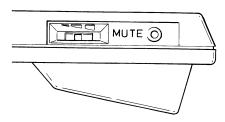
Your facsimile machine is set initially for use on touch-tone telephone systems, called DTMF systems, rather than rotary. If your telephone network requires rotary dialing signals, call the Murata Customer Support Center for your area (see page 5).

A small switch inside the telephone handset on your unit allows you to control the dialing signals produced by the handset's keypad. The handset setting does not change the dialing signals produced by the unit's autodialer or numeric keypad.

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



Handset Controls



The sliding lever near the earpiece on your telephone handset adjusts the ringer volume for your telephone. The button on the handset is a mute. While depressed, the mute disables your telephone mouthpiece while allowing you to hear the other party.

Call Reserve

The F-50's call reserve allows you to have both phone and facsimile communication at different times during the same call.

Without call reserve, your unit prevents telephone conversations after it begins facsimile transmission.

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

To reserve a call during transmission or reception:

1. When the On-Line lamp shows a steady green, press Call.

At the remote unit, the telephone will ring after the transmission of each page. Your unit's Call LED will show that a call has been reserved.

If an operator at the remote unit responds to the call request, your unit will beep several times.

- 2. When your unit beeps, pick up the handset. Then press **Stop**. In a few seconds, the line will open.
- 3. Begin your conversation.

Responding to a Call Request

When a remote operator reserves a call, your unit will beep after each page of the document is received.

To answer the call request, pick up the handset and press Call.

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

Note: To transmit after your conversation, insert a document into your unit before hanging up. At the end of your call, instruct the operator of the remote unit to press **Start** before hanging up. When you hear facsimile tones, press **Start** and return your handset to its cradle. Transmission will begin in about 15 seconds.

Trouble Shooting

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 Error lamp and a beeping alarm tone.

You can further identify the problem with the printed error codes and check messages that accompany the alarm. Press **Stop** to cancel the Error lamp and tone.

Error Codes

These error codes are printed on your unit's activity journal and can be used with the check 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 machine 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.1.4. The **Stop** key was pressed during transmission, halting the transaction. Try the call again.
- 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 units are not compatible.
- 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.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 ran out of recording paper. Try the call again.

T.7.9. - The unit did not detect a confirmation-to-receive signal from the remote unit. The transmission was stopped. Try the call again.

- T.7.11. The unit did not detect a message confirmation signal from the remote unit between pages. The transmission was stopped. Try the call again.
- R.1.1. The calling unit did not respond properly to your unit. The error can be caused by a wrong number reaching your facsimile machine or by a calling unit restricting access with a pass code.
- R.1.2. The calling unit was not compatible.
- R.1.4. The Stop key was pressed during reception, halting the transaction.
- R.2.3. Communication was not possible because of poor line conditions.
- R.3.1. The transmitting facsimile detected too many errors from the receiving unit. This is frequently caused by an intermittently poor phone line.
- R.3.2. Poor telephone line conditions prevented reception.
- R.3.3. The transmitter is not compatible or had a document feeder problem.
- R.3.4. Poor telephone line conditions prevented reception.
- R.4.1. The received documents contained too many errors, possibly due to poor telephone line conditions.
- R.4.2. The phone line disconnected before confirmation of transmission, or the transmitting unit requires maintenance.
- R.7.1. Poor line conditions were detected before reception began.
- R.7.2. Poor line conditions were detected during reception.
- R.7.4. The transmitting unit had a document feeder problem or disconnected during transmission.
- R.7.9. The receiving unit failed to detect the end-of-page signal.
- D.0.0. The remote machine is busy. Try the call again.

Note: Reception errors R.2.3 through R.7.9 can occur at the beginning of fax communication, before your unit prints the remote unit's TTI or Subscriber ID, or after several pages during the transmission of a multiple-page document. You may be able to use the remote unit's Subscriber ID to fax the remote operator and identify the reception error you detected. 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.

Check Messages

Confirm Correct Telephone Number

The remote unit is malfunctioning or an incorrect telephone number was entered in the transmitting unit. Check the telephone number in your unit and try the call again.

Please Try Again

The telephone line was disconnected during transmission or was of such poor quality that fax communication was not possible. Try the call again.

Please Transmit Again

Poor telephone line conditions may have made the received copy unreadable. Try the call again.

Telephone Line Was Busy

The remote unit was busy each time your unit attempted to redial it (see page 47). Try the call again. If the message is repeated, call the remote operator to check the condition of the unit.

Clear Tx Document

Your unit is jammed or the paper being transmitted is too long. Clear the paper jam (see page 85). Do not transmit documents longer than 39.3 inches (see page 75).

Confirm Rx Paper

Your unit is out of recording paper. You cannot transmit or receive until you install a new roll.

Hang Up Phone

Your telephone handset is off its hook. Hang the handset on its cradle.

Please Close Cover

A cover to your unit is open or is not securely closed. Press firmly on both sides of the covers to

close.

Confirm Lamp

The fluorescent lamp in your unit is burned out or is too weak for facsimile transmission. Call the Murata Customer Support Center for your area (see page 5).

Reset Document

The document was set in the feeder incorrectly. Re-insert the document and try the call again.

Insert the Document

The command you programmed requires a document to be in the feeder. Insert your document into the feeder and enter the command again.

Verify Operation of Remote Machine

Your unit could not contact the remote unit. Call the operator of the remote machine to verify that the unit is working. This message can also be caused by the remote unit limiting access with a pass code.

Clearing Paper Jams

When an original document is jammed:

- 1. Pull forward on the front panel release and open the front panel.
- 2. Gently pull the document up out of the document feeder.

When the recording paper is jammed:

- 1. Push back on the cover release and open the cover.
- 2. Pull out and cut off the jammed and wrinkled paper.
- 3. Pull out about 4 inches of the recording paper and insert the leading edge under the black bar at the rear of the paper cradle (see drawing, page 17).
- 4. Close the top, pressing firmly on both sides of the cover.
- 5. Your unit will feed the leading edge of the roll through the paper cutter and return to standby automatically.

Glossary

The terms and words below are frequently used when discussing facsimile machines and facsimile communication.

Not every word or term included below will apply to your Murata fax. Some, like leased line and analog facsimile, are included even though they <u>do not</u> 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 for your area (see page 5) if you have any questions.

A4, B4, A3

Standard stationary 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.

Acoustic Coupler

A device used to convert electrical signals, like those coming from a facsimile machine, into audio signals capable of being transmitted over telephone lines. The acoustic coupler connects directly to the handset of an ordinary telephone and can be used when a telephone jack connection is not available or possible.

Activity Journal

Murata facsimile machines provide an activity journal to help track and account for 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. Murata's activity journal can be set to print automatically or can be printed on demand.

Analog

The description of information through a variable signal or physical form. The human voice is an analog signal.

Analog Facsimile

An analog facsimile machine scans each picture element of black or white and converts it into an electrical signal. These signals in combination produce a continuous electrical waveform that is transmitted to a receiving facsimile machine through a modulating modem. 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. Compare Digital Facsimile.

ASCII

Abbreviation for American Standard Code for Information Interchange, and pronounced "asky". A code established by the American National Standards Institute for compatibility in data transmission.

Asynchronous Transmission

Data transmission in which time intervals between characters is unequal in length. Compare Bisynchronous Transmission, Synchronous Transmission.

Automatic Reduction

Many Murata facsimile machines will automatically reduce documents being transmitted to accommodate the effective printing width of the receiving unit. For example, a facsimile 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.

Bisynchronous Transmission

An IBM-standard communications method that provides synchronized transmission of digital data. See Digital, compare Asynchronous Transmission, Synchronous Transmission.

Bit

The smallest unit of information in a computer. Contraction of "binary digit". Some Murata facsimile 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.

Broadcast

Some Murata high-volume fax machines offer broadcasting, transmission of a single document to a hundred or more pre-programmed locations in a call group. See Call Group. Compare Relay Broadcast.

BPS

Bits per second. Used to express the speed of transmission. Because facsimile 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 facsimile 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 pre-programmed group of fax locations used by Murata units with internal memory to speed broadcasting, polling and other functions.

Call-Waiting Service

Many telephone systems offer an optional call-waiting service that identifies when another party is calling while you are on the phone. Call-waiting signals may cause interruption of facsimile transmission or reception.

CCD

Charged coupled device arrays. The scanning mechanism used in Murata facsimile 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 International Telegraph and Telephone Consultative Committee, 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 facsimile 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 facsimile machines to talk to all other units adhering to those standards.

Closed Network

A network of facsimile machines that limit access to the network to other units having the same pass code. Some Murata facsimile machines offer pass code protection and can participate in a closed network.

Communications Protocol

Standards governing data communication. In facsimile communication, for example, CCITT V.29 and V.27 ter. are protocols which assure compatibility among Group 3 units. See Compatibility, CCITT V.29 and V.27 ter.

Compatibility

The condition in which separate units, including those made by different manufacturers, can operate together properly. Compatible facsimile machines, for example, can transmit and receive documents from one another. Murata facsimile 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. See CCITT.

Copy Mode

Murata facsimile machines can serve as convenience copiers. Many Murata units can copy in two or more levels of resolution. See Normal, Fine, Superfine and Grayscale.

Database Polling

See Polling.

Data Compression

Used in digital facsimile machines to speed transmission. See Digital Facsimile, MH, MR and MSE, SMSE.

Delayed Dialing/Delayed Transmission

Some Murata facsimile machines offer one or more delayed commands, allowing you to load documents into your facsimile 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 facsimile machines convert the graphic image of your document into a series of zeros and ones. See Digital Facsimile.

Digital Facsimile

Unlike analog systems that scan every portion of a document, digital facsimile machines survey a document's picture content. Digital facsimile machines scan a line and convert the information into a binary code of zeros and ones. The facsimile machine can take this information and compress it, providing transmission speeds of less than one minute per page. Modern 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 facsimile 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. See Touch-Tone.

EBCDIC

For Extended Binary Coded Decimal Interchange Code. A character code used in IBM equipment and allowing 256 bit patterns.

Effective Printing Width

The widest image that can be printed on your fax. The effective width can be influenced by the CCITT group of the unit transmitting to your facsimile machine. Compare with Effective Scanning Width, Original Document Size.

Effective Scanning Width

The maximum width the scanner in your fax can scan during transmission. Compare with Effective Printing Width, Original Document Size.

Facsimile

Although business facsimile use has grown rapidly since the advent of fast, powerful Group 3 units, facsimile communication itself has a surprisingly long history. The first facsimile system was introduced in 1842, and wide-spread service was underway before 1910. In the United States, fax units attached to home radios provided facsimile newspaper service in several cities through the late 1940s. Facsimile's growing success for news transmission was halted, however, by the development of commercial television.

Facsimile Interface Processor

An upgrade that allows some Murata facsimile 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.

Fallback

Group 3 facsimile 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 facsimile machine will reduce speed to the fastest possible level. See Bps.

Fine Resolution

203H x 196V lpi. Also shown as G3F on some units. See Resolution.

FIP

See Facsimile Interface Processor.

FM

Or North American FM. Used to identify CCITT Group 1 units designed for use in North America.

Grayscale

Not a level of resolution but a method of scanning and transmitting halftone images. Murata fax machines with grayscale abilities interpret photographs in levels of gray between white and black. The transmitting facsimile machine must have grayscale ability to accurately send a photographic image, but the receiving machine does not need it to print the image. See Resolution.

G2

Used on some Murata units to identify Group 2 resolution or to identify when a document is being transmitted to a Group 2 facsimile machine.

G3, G3F

Used on some Murata facsimile machines to designate normal and fine resolution, respectively. See Resolution.

Groups 3, 2 and 1

See CCITT.

Handshaking

Used by telecommunications and computer equipment to "introduce" two systems. Facsimiles use a handshaking protocol, for example, to identify the CCITT group of each unit and to begin fax communication.

Hz

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 are unsure of the specifications of your office outlets.

Internal Memory

Some of Murata's most advanced high-volume business fax machines include internal memory to store documents for transmission or to store incoming messages in SecureMail boxes. See Database Polling, SecureMail.

LCD

Liquid crystal display. Used on some Murata units for status displays.

LED

Light emitting diode. Used on some Murata units for displays and lamps.

LPI

Lines per inch. See Resolution.

Load Number

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.

Location ID

An optional identifier used on Murata facsimile machines equipped with an autodialer. The Location ID allows you to identify by name the telephone numbers programmed in your autodialer.

MH

Modified Huffman, the CCITT Group 3 standard data compression method. A feature of all Murata facsimile machines, MH assures better than one-page-per-minute transmissions when communicating with other Group 3 units, regardless of manufacturer. See MSE, SMSE.

MR

Modified Read, the optional CCITT Group 3 data compression method. Used in some Murata facsimile machines and in Murata's Facsimile Interface Processor and FIP-PC Application Software.

Modem

Originally an abbreviation of modulator-demodulator, but now a common word in fax and computer use. A modem is a digital device that convents digital data (like the information from your facsimile machine) into an analog signal for transmission over analog lines (like your ordinary telephone line). A modem is included in your facsimile machine and allows your fax to be connected directly to your PSTN telephone line. See Analog, Bps, Digital, PSTN.

MSE, SMSE

Murata's proprietary data compression methods that allow transmissions faster than with MH whenever you are communicating with a Murata-manufactured unit. MSE and SMSE are features on many Murata facsimile machines.

Normal Resolution

Or shown as Norm. 203H x 98V lpi. The standard resolution mode for Group 1 and 2 units. See Resolution.

Original Document Size

Used when defining the largest (or smallest) document that can be fed safely through a fax machine. Compare Effective Scanning Width, Effective Printing Width. Check your unit's operating instructions for more information.

Pass Code

A feature available on some Murata facsimile machines. The four-digit pass code limits access to information set to be polled to units with the same pass code. The code also allows several Murata systems to create a closed network, limiting access to the network to systems with the same code.

PBX

Private branch exchange. Often referred to as CBX, 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 facsimile machine use. Do not connect your Murata unit to a PBX without first checking with the system manufacturer or service representative.

Polling

Polling allows you to set a document in your facsimile 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. See Internal Memory, Pass Code.

PPS

Pulses per second. Used to identify rotary dialing requirements. See Rotary, Tone Dialing.

Primary Mode

The resolution used by your unit during transmission. Murata units are initially set with Norm as the primary resolution mode. You can select other transmission modes manually, or reset the primary resolution mode to the level your office needs most often. Check your operating instructions.

Private Line

Or Leased Line. A service offered by many telephone systems, providing an exclusive phone circuit between two geographic points. Your Murata unit does not require a private line. See PSTN.

Program Modes

Individual commands within your unit that instruct your unit to perform a specific task.

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 facsimile machine in the remote units' call group. This relay broadcasting feature speeds extremely high-volume facsimile communication and allows a single command to initiate document transmission to more than 10,000 preprogrammed facsimile locations.

Reserved

Murata units with automatic redial ability are reserved while waiting to redial a busy number or while waiting to carry out delayed commands, like polling.

Resolution

The resolution of documents transmitted or copied by facsimile 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
G 2	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. See Grayscale.

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 facsimile machines and is available only when transmitting to another Murata unit.

RJ11C

A standard plug-in telephone jack. The RJ11C 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 Murata's high-volume office facsimile 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 a pass code created by the mail box holder. The SecureMail transmission can be printed out by the intended recipient up to 72 hours after it was transmitted.

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. See Rotary, Tone Dialing.

Transmit Confirmation Report

Like the RCR, a TCR provides assurance that the document you set for transmission was sent. Printed after transmission, the TCR identifies the telephone number to which you instructed 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.

X-On/X-Off

A communication protocol controlling the flow of information from a computer to an attached device, like a printer. Some Murata facsimile machines can be used as draft-quality printers for personal computers and other ASCII host devices. To output information from a computer through a Murata fax, the computer must support the X-On/X-Off protocol.

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Specifications

Type: High-speed desktop facsimile transceiver

Compatibility: CCITT Group 3 and Group 2, North American FM

Telephone Line Required: Public switched telephone network or the equivalent

Modem: 9600 bps with automatic fallback to 7200, 4800 and 2400 bps per CCITT V.29 and V.27 ter.

Resolution:

Sfine	203H x 3	92V lpi
Fine	203H x 1	96V lpi
Norm	203H x	98V lpi
G2	203H x	98V lpi
FM	203H x	98V lpi

Original Document Size

Width: 5.0 - 12.0 inches (128 - 306 mm) Length: 3.9 - 39.3* inches (100 - 1000 mm) * Or optional unlimited length setting.

Effective Scanning Width: 11.9 inches (303 mm)

Max. Effective Printing Width: 10.1 inches (256 mm)

Scanning Method: Solid-state CCD

Recording Paper Size:

8.5 inches x 328 feet (216 mm x 100 m), included standard 10.1 inches x 328 feet (256 mm x 100 m), optional

Power Supply: 115 VAC±10%, 50-60 HZ, single phase

Approximate Power Consumption: 380 VA max.

Dimensions: 17.4(w) x 14.9(d) x 8.9(h) inches (443 x 381 x 226 mm)

Weight: 115 VAC version: 33 pounds (15 kg)



MURATA BUSINESS SYSTEMS, INC.