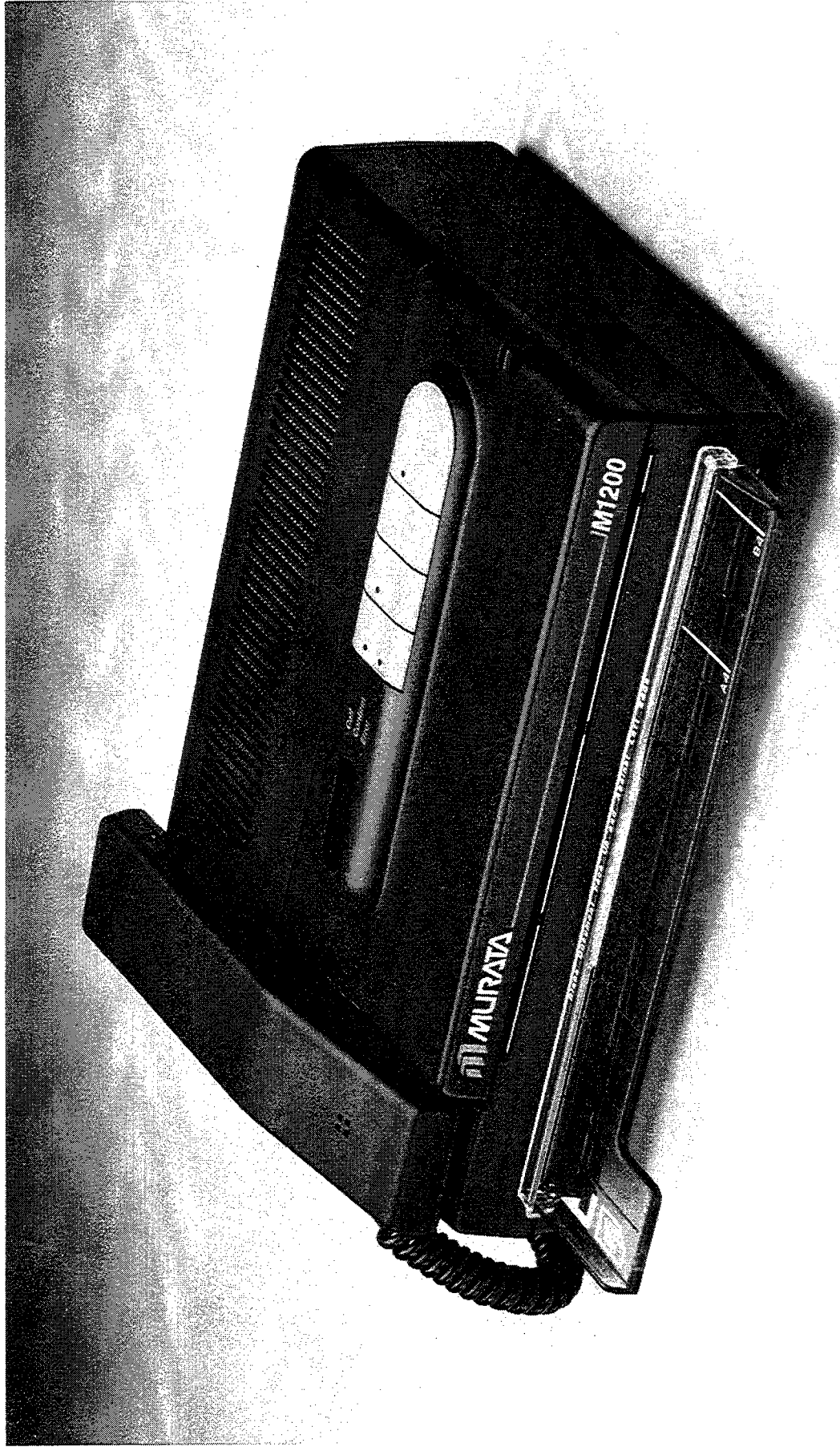


OPERATING INSTRUCTIONS



Murata MT200TM

MURATA BUSINESS SYSTEMS, INC.

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Introduction

Your Murata M1200 is the small-office facsimile machine that's big on features and performance, sending documents from desk top to points across town or around the world for just pennies per page. And at less than 10 pounds, the M1200's high-speed fax capability, built-in telephone handset and convenient copier mode make it a powerful, portable communications system you will want to have wherever business takes you.

The M1200 provides CCITT Group 3 and Group 2 compatibility, the international standards that let you send documents to nearly every facsimile machine in use worldwide.

Despite its small size, the M1200 also includes popular features like polling, a programmable Transmit Terminal Identifier and an activity journal. But with just four console buttons, the M1200 is easy enough for everyone in your office to use. To begin, pay special attention to these sections:

Installation Preparing Your Fax Basic Operations

These sections provide the fundamentals. With them, you can begin worldwide facsimile communication today.

Service

If you have any questions or need service for your unit, call the Murata Customer Support Center at 1-800-TALKFAX (1-800-825-5329).

Serial Number

If you call, have your unit's serial number ready for the customer support technician. The serial number appears on a bar code label on the bottom of your unit.

Extended Coverage

Murata extended service plans are available for your facsimile machine. For more information on one- and two-year service plans, call Murata's Customer Support Center.

FCC Regulations

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

Warning: This equipment generates, uses and can radiate radio frequency energy. It may cause interference with radio communications 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 installation, users should ensure that it is permissible to connect the equipment 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.

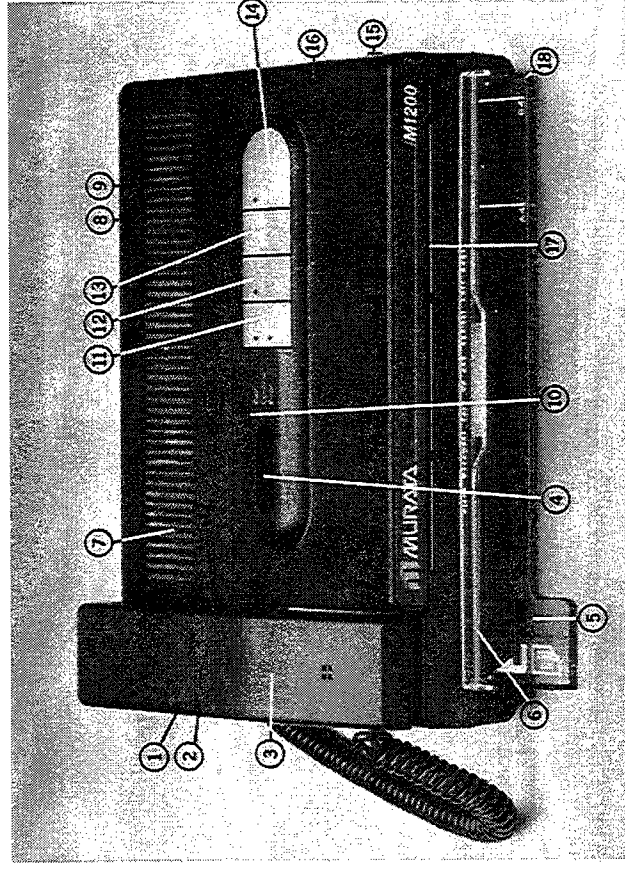
Users should ensure for their own protection that the electrical ground connections of the power utility, telephone lines and internal metallic water pipe system, if present, are connected together. This precaution may be particularly important in rural areas.

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

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 unit is 43.

Machine Layout



1. Line Jack - Connection for telephone line from wall jack.
2. Phone Jack - Connection for telephone handset cord.
3. Telephone Handset - Telephone with mute and ringer adjust, for rotary or touch-tone dialing.
4. LED Display - Shows the time or facsimile function underway.
5. Document Tray and Cover - Guide page into unit for copying or transmission.
6. Document Feeder - Automatically feeds document past scanner.
7. Ventilation Grills - Allow a cooling airflow through your unit. Do not cover or block.
8. AC Plug - Connection for power cord.
9. On/Off Switch - Turns power to unit on and off.

10. Status Lamps - Show when a call or confirmation report has been requested or when an error has occurred.
11. Auto/Manual - Press to select automatic or manual reception.
12. Select - Press to select transmission mode.
13. Stop - Press to halt function underway.
14. Start/Copy - Press to begin transmission or reception or to copy a document.
15. Document Knob - Disengages document feeder to clear paper jams.
16. Printer Knob - Opens cover to load recording paper.
17. Paper Exit - Exit for copied or received documents, with tear bar.
18. Document Exit - Exit for original documents.

Installation

When you are ready to install your unit and connect it to the telephone system, call your telephone company and give them the following information:

- The telephone number of the line to which you will connect the unit.
- The FCC registration number of the unit.
- The ringer equivalent number of the unit: 2.4B.

You can find the FCC registration number on a label on the bottom of your facsimile console.

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

Telephone Requirements

Your unit connects to the telephone line with a standard plug-in jack. Telephone companies refer to this type of jack as a USOC RJ11C. If you do not have this jack where you want to install your unit, call your telephone company for information on installation.

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

Facsimile transmission 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.

Electrical Requirements

Your unit can be powered from a standard three-pronged electrical outlet and consumes far less electricity than a table lamp. Because your unit is so economical to operate, leave your unit turned on all the time. That way, there is no chance you will accidentally miss an important transmission.

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

Units for use outside the United States and Canada require either:

220 VAC $\pm 10\%$ or 240 VAC $\pm 10\%$
50-60 Hz, single phase

A label on the bottom of your unit will specify the voltage required.

2. Approximate Power Consumption

Standby	15 watts	Transmission	40 watts
Copy	100 watts	Reception	70 watts

Site Requirements

Choose a vibration-free spot for your unit that offers:

1. An RJ11C telephone jack within 10 feet.
2. A standard 115 VAC three-pronged electrical outlet within 5 feet.
3. An unrestricted airflow around your fax to prevent overheating. (Do not put your unit in a drawer or cabinet, and allow at least 10 inches clearance from all sides and the top. Do not block the ventilation grills on your unit.)
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 or humidity
- Where water splashes are possible
- Near a radio or TV set

Unpacking

To unpack your unit:

1. Open the shipping carton.
2. Take out the paper roll, handset, document tray and cover, power cord, telephone line and documentation.

3. Lift the unit out of the carton and remove the foam braces from either side of the facsimile console.

4. Place the unit on a steady shelf or desk, and remove the plastic bag.

5. Keep the bag, foam braces and carton for reshipping.

After unpacking, make sure you received the following:

- Facsimile console
- Telephone handset
- Document tray and cover
- Paper roll
- Power cord
- Telephone line
- Supply order form
- Quality assurance report
- Operating instructions
- Warranty registration and questionnaire

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 on the left side of the console. Plug the other end into the telephone wall jack.
3. Plug the handset cord into the connector marked Phone on the left side of the console.
4. Attach the power cord to the connector on the back of the console. Plug the other end into a three-pronged electrical outlet.
5. Turn the on/off switch on.

Document Tray

The tray and cover for your unit help guide documents during transmission and prevent recording paper from curling into the document feeder. Always keep the document tray and cover in place when using your unit.

1. Insert the tab on the left side of the document tray into the small hole on the left side of the document feeder.



2. Press gently against the tab on the right side of the tray. Slide the tray into the document feeder and release the tab to secure the tray in place.
3. Snap the tray cover into place on top of the document tray.

Recording Paper

Put in a new roll of Murata recording paper when you install your unit and whenever the red low-paper line is visible on the side of the recording paper. The red line indicates less than 5 feet of paper remain and is a reminder to load a new roll as soon as possible.

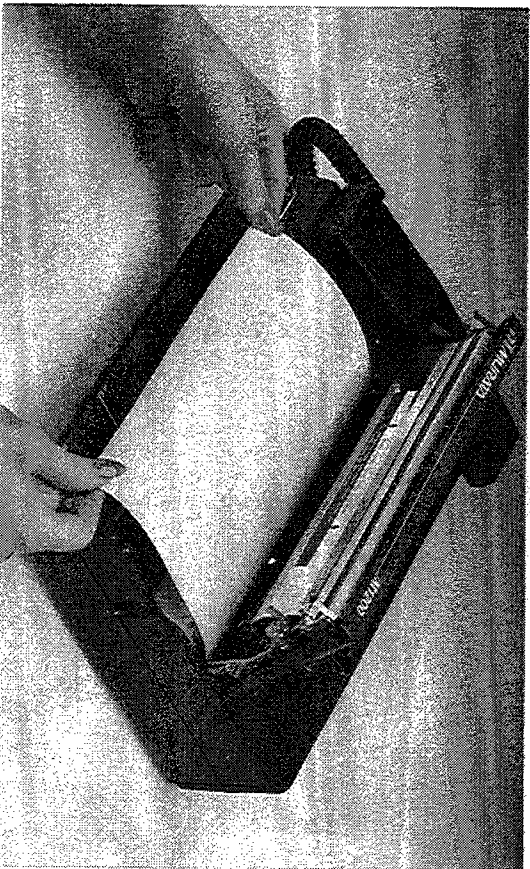
When your unit's display shows the E 06 add-paper error message, your recording paper has reached the black end-of-paper line. This message is accompanied by an alarm tone and lighted Error lamp. You cannot transmit or receive until you replace the paper supply.

To load a new roll of paper:

1. Push back on the printer knob and open the cover.

Installation

2. Remove the empty roll from the paper cradle and put in a new roll. Load the paper to unroll from the top. Pull the paper out about 4 inches.



3. Close the top, pressing firmly on both sides of the cover.

4. Tear off the excess paper, pulling up and to the right to tear the sheet cleanly against the cover.

Check List

After you have installed your unit, check its operation:

1. Make sure the recording paper is installed and the cover is closed.
2. Make sure the telephone line is attached to the connector marked Line and to the telephone wall jack.
3. Make sure the power cord is securely fitted into the unit and the wall outlet. Make sure the on/off switch is on.
4. Check that the unit's LED display shows the time rather than an error message. Until you set the time and date (see page 7), the time shown may not be accurate.
5. Pick up the telephone handset and make sure you hear a dial tone. Return the handset to its cradle.
6. Position a document face up and flush with the left side of the document tray.
7. Insert the document into the tray until the automatic feeder takes it.
8. When the automatic feeder has stopped, press **Start/Copy** to make a copy of your document.
9. When the copy is completed and the tone sounds, tear off the copy and remove your original.

Preparing Your Fax

Standby Mode

All commands for your unit begin from the standby mode. In standby, your unit displays the current time in the LED panel.
10:45

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

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:

Five settings for your unit's clock appear sequentially in the LED display:

Setting	Enter
1	Year
2	Month
3	Day
4	Hour
5	Minute

1. From standby, press and hold down **Select** until the unit beeps several times. Release **Select**.

1 87

2. Press **Start/Copy** to advance to the last two digits of the current year.

1 88

3. When set, press **Auto/Manual**.

2 01

4. Press **Start/Copy** to advance to the current month.

2 02

5. When set, press **Auto/Manual**.

3 01

6. Press **Start/Copy** to advance to the current day.

3 26

7. When set, press **Auto/Manual**.

4 00

8. Press **Start/Copy** to advance to the current hour.

4 10

9. When set, press **Auto/Manual**.

5 00

10. Press **Start/Copy** to advance to the current minute.

5 45

11. When set, press **Auto/Manual**.

10:45

If you make a mistake while setting the clock, press **Stop** to begin again from Step 1.

Special Functions

Six special functions are numbered and available through a menu on your unit's LED display:

F 01	Print Journal
F 02	Set Number of Rings
F 03	Set Primary Mode
F 04	Set Subscriber ID
F 05	Set TTI
F 06	Print Mode List

F 01 Print Activity Journal

The activity journal records important information on your 20 most recent transmissions and receptions and provides information when a transmission or reception attempt is unsuccessful. The activity journal, printed as individual transmit and receive journals, can be an important audit trail or cost accounting tool for your business.

Preparing Your Fax

1. From standby, press and hold down **Stop**. The time will disappear from the LED display and, after a few seconds, the unit will beep several times. Release **Stop**.

F 01

2. Press **Auto/Manual**. The activity journal will begin printing.

F 02

3. Press **Stop** to return to the standby mode.

10:45

Note: The activity journal will not print if you have just installed your unit and have no communication activity to report or if you have erased your unit's memory since your last transmission or reception.

F 02 Setting the Number of Rings

When the Auto lamp is lighted, your unit automatically answers incoming telephone calls as a facsimile machine, preventing conversation, after two rings. Setting the number of rings from two to six allows an operator more time to answer before the unit answers the line.

1. From standby, press and hold down **Stop**. The time will disappear from the LED display and, after a few seconds, the unit will beep several times. Release **Stop**.

F 01

2. Press **Start/Copy** once to advance the menu.

F 02

3. Press **Auto/Manual**.

2

4. Now use **Start/Copy** to select 2 or 6 rings.

6

5. When you have selected the number of rings, press **Auto/Manual**.

F 03

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

10:45

F 03 Set Primary Mode

Your unit's primary transmission resolution is initially set at the G3 mode, 203 x 98 lines per inch. If you only occasionally transmit detailed or handwritten documents, you can manually select the G3F mode, 203 x 196 lines per inch. (For instructions on manual selection, see page 11.) If most of your documents require the finer resolution, however, you can change the primary mode to G3F and save the manual process when transmitting.

1. From standby, press and hold down **Stop**. The time will disappear from the LED display and, after a few seconds, the unit will beep several times. Release **Stop**.

F 01

2. Press **Start/Copy** 2 times to advance the menu.

F 03

3. Press **Auto/Manual**. Now press **Start/Copy** to change the display from 0, for G3 resolution, to 1, for G3F.

1

4. When the resolution is set, press **Auto/Manual**.

F 04

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

10:45

F 04 Set the Subscriber ID

The Subscriber ID is your unit's telephone number. Appearing as a part of your TTI, the Subscriber ID gives recipients of your fax transmissions the information they need to respond.

1. From standby, press and hold down **Stop**. The time will disappear from the LED display and, after a few seconds, the unit will beep several times. Release **Stop**.

F 01

2. Press **Start/Copy** 3 times to advance the menu.

F 04

3. Press **Auto/Manual**. The LED display will show four zeros.

0000

4. Now press **Start/Copy** to advance the digit at the right. When the first digit of your telephone number is displayed, press **Auto/Manual**.

01 2

The two digits on the left of the display record the total number of digits entered. Enter up to 20.

Continue to use **Start/Copy** and **Auto/Manual** to enter each digit of your telephone number. To enter a dash, enter "10".

04 10

If you enter a number by mistake, press **Select**. The last digit entered will be erased.

5. When your telephone number is entered, press **Stop**.

F 05

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

10:45

F 05 Set TTI

Like the Subscriber ID, the Transmit Terminal Identifier is sent automatically with every document you send. The TTI can be your personal or business name or any other identifier up to 22 characters long.

1. From standby, press and hold down **Stop**. The time will disappear from the LED display and, after a few seconds, the unit will beep several times. Release **Stop**.

F 01

2. Press **Start/Copy** 4 times to advance the menu.

F 05

3. Press **Auto/Manual**. The LED display will show four zeros.

0000

4. Press **Start/Copy** to advance the two digits on the right of the display to the two-digit number corresponding to the first character in your TTI.

Each character, numeral and symbol is entered as a two-digit number as shown below.

SECOND DIGIT										
	0	1	2	3	4	5	6	7	8	9
F	0	0	1	2	3	4	5	6	7	8
I	1	—	A	B	C	D	E	F	G	H
R	2	J	K	L	M	N	O	P	Q	R
S	3	T	U	V	W	X	Y	Z	[	¥
T	4	^	—	^	a	b	c	d	e	f
D	5	h	i	j	k	l	m	n	o	p
I	6	r	s	t	u	v	w	x	y	z
G	7		}	→	←		!	"	#	\$
I	8	&	'	(	)	*	+	,	@	.
T	9	:	;	<	=	>	?			/

5. When the number you want is in the LED display, press **Auto/Manual**.

01 29

6. Continue to use **Start/Copy** and **Auto/Manual** to enter each character of your TTI.

02 55

The TTI "Smith Company", for example, would be entered as "29 55 51 62 50 99 13 57 55 58 43 56 67", pressing **Auto/Manual** after each two-digit number.

03 51

The two digits on the left of the display will record the total number of characters entered. Enter up to 22.

Preparing Your Fax

If you enter a character by mistake, press **Select** to delete the most recent character entered.

If you are not sure which rotary signal your telephone system requires, call your telephone company.

7. When your TTI is entered, press **Stop**.

F 06

8. Press **Stop** again to return to standby.

F 06 Print Function Settings

Use this function to print a list of the settings you have entered.

1. From standby, press and hold down **Stop**. The time will disappear from the LED display and, after a few seconds, the unit will beep several times. Release **Stop**.

F 01

2. Press **Start/Copy** 5 times to advance the menu.

F 06

3. Press **Auto/Manual**. The function setting list will begin to print.

4. Press **Stop** to return to standby.

Tone or Rotary Dialing

Your unit can operate in telephone systems requiring either tone or rotary dialing signals. A small switch recessed inside the telephone handset allows you to choose the dialing signals your unit will generate.

To choose the dialing signal:

1. Pick up the handset. You will find the switch just above the handset mouthpiece, directly below the asterisk on the handset keypad.

2. Use a toothpick to move the switch inside the handset. The bottom setting instructs your unit to provide touch-tone dialing signals. The middle setting produces rotary dialing signals at 20 pulses per second. The top setting produces 10 pps rotary signals.

Basic Operations

Acceptable Documents

In general, your unit can transmit images from any normal weight paper whose dimensions fall within the maximum and minimum width and length requirements:

Maximum: 10(W) x 15.8(L) inches

Minimum: 3.9(W) x 3.1(L) inches

When transmitting to a unit with an 8.5-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 unit.

Do not transmit:

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

Transmitting

1. From standby, position the document face up and flush with the left side of the document tray.

10:45

2. Insert the document into the tray until the automatic feeder takes it.

G3

3. Press **Select** to set the transmission mode. G3 is suited to most documents. G3F provides finer resolution for detailed or handwritten documents. G2 is used when transmitting to CCITT Group 2 units.

G3 F

4. Pick up the telephone handset and dial the receiving unit.

5. When the receiving unit answers the call and begins sending fax tones, press **Start/Copy** and return the handset to its cradle. Transmission will begin.

6. After the page is transmitted, your unit will beep for six seconds, holding the telephone line open. (You can increase the line hold to 12 seconds. See page 14.) While the unit beeps, you can insert another page to transmit to the remote unit.

7. When you have transmitted your last page, do nothing: Your unit will complete the call and return to standby automatically.

Note: Your unit will automatically compensate when transmitting to a Group 2 unit. If you select G3 or G3F when transmitting to such a unit, your unit will fall back automatically. If you know you will be transmitting to a G2 unit, selecting G2 manually saves the time needed for your unit to fall back from G3 or G3F.

Receiving

1. If the Auto lamp is lighted, your unit will automatically answer incoming calls for facsimile reception after two or six rings (see page 8).

2. If the Manual lamp is lighted, pick up the handset to answer an incoming call. If you hear fax tones, press **Start/Copy** and return the handset to its cradle. Reception will begin.

Polling

Polling allows you to set a document in your unit for automatic transmission to a remote unit when that unit calls, or to call a remote unit and receive a document set in its tray to be polled.

Polling is convenient whenever a central unit must receive information from one or several remote units. By polling remote units, the central facility bears all telephone charges and prevents several remote units from calling at the same time.

Some facsimile machines include a pass code that may be used in their polling function. Your unit cannot poll a document from a unit that has a pass code set.

To set a document to be polled:

1. From standby, position the document face up and flush with the left side of the document tray.

Basic Operations

2. Insert the document into the tray until the automatic feeder takes it.
G3
 3. Press **Select** to set the transmission mode. G3 is suited to most documents. G3F provides finer resolution for detailed or handwritten documents. Polling is not possible with G2 units.
G3 F
 4. Your unit is now set to be polled. While waiting to be polled, your unit can receive facsimile transmissions as usual.
- To poll another unit:
1. Pick up the handset and dial the number for the unit set to be polled.
 2. When you hear the remote unit answer your call and begin sending fax tones, press **Select**, then **Start**.
 3. Return the handset to its cradle. The polled document will begin printing.
 4. When the document has been received, your unit will sound a tone and return to standby.

Printing a Receive Confirmation Report

A receive confirmation report is your assurance that the document you transmitted was received. The RCR identifies the receiving unit and records the date, time, mode, number of pages sent and result.

An RCR is possible only when transmitting to another Murata-manufactured unit.

To print an RCR:

1. While a document is being fed through your unit during transmission, press **Start/Copy**.

The Confirm lamp will light. To cancel an RCR, press **Start/Copy** again before your document is finished transmitting.

2. The RCR will print out, the Confirm lamp will go out and the unit will return to standby automatically at the end of the transmission.

Call Reserve

Your unit is an integrated facsimile machine and telephone. The call reserve function on it allows you to have both telephone and facsimile communication at different times during the same call.

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

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

To reserve a call:

1. During transmission or reception, press **Auto/Manual**. Your Call lamp will light.

At the remote unit, a tone will sound after each page is transmitted.

If an operator at the unit responds to the call, your telephone will ring.

2. When your telephone rings, pick up the handset. Then press **Stop**.
3. Begin your conversation.

Note: To transmit after your conversation, insert a document into your unit before you hang up. At the end of your call, instruct the operator of the remote unit to press **Start/Copy** before hanging up. When you hear facsimile tones from the remote unit, press **Start/Copy** and return the handset to its cradle. Transmission will now begin. You can reserve another call during each succeeding transmission.

To respond to an incoming call request:

1. When a remote facsimile operator reserves a call, your unit's telephone will ring three times after each page is received.
2. To answer the call request, pick up the handset and press **Stop**.
3. When the remote operator responds to your call request response, you can begin your conversation.

Software Settings

Five special software settings are available in your unit.

The first prints a listing of your unit's current software settings. The next three modify particular settings, allowing you to further customize the operation of your unit. The final command erases any information you have entered into your unit's memory and returns all optional software settings to their factory positions.

Note: Use care when changing software settings: Changing other than the settings shown could alter or prevent facsimile operation. If the operation of your unit is changed by an incorrect software setting, use the chart below to correct the setting or use the erase-memory command to return all settings to their factory positions. The erase-memory command will also erase all information programmed in your unit. If you have any questions, call the Murata Customer Support Center before you begin (see page 2).

Original Factory Settings

The software in your unit was initially set as follows:

		Bit								
Sw.	8	7	6	5	4	3	2	1		
SF-1	0	0	0	0	0	0	0	0		
SF-2	1	0	1	0	0	0	0	0		
SF-3	0	0	0	1	0	0	0	0		
SF-4	1	0	0	0	0	0	0	0		
SF-5	0	0	0	0	0	0	0	0		
SF-6	0	0	0	0	0	0	0	0		
SF-7	0	0	0	0	0	0	0	0		
SF-8	0	0	0	0	0	0	0	0		
SF-9	0	0	0	0	0	0	0	0		

Print Software Settings

Use this command after you have changed a software setting to verify the accuracy of your action. You can also use this printed list to compare your current settings with the original factory settings shown above.

To print:

1. Use the on/off switch to turn your unit off. While off, press and hold down **Stop**.

2. With **Stop** depressed, turn your unit on. After a few seconds, your unit will beep several times. Release **Stop**.
SF P
3. Press **Auto/Manual**. The software settings list will begin printing.
4. Press **Stop** to return to the standby mode.

Send 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 every page printed by the receiving unit.

To cancel the TTI:

1. Use the on/off switch to turn your unit off. While off, press and hold down **Stop**.

2. With **Stop** depressed, turn your unit on. After a few seconds, your unit will beep several times. Release **Stop**.
SF P

3. Press **Start/Copy** 2 times to advance to dip switch SF-2.

SF 2

4. Press **Auto/Manual**. The number of the dip switch being modified appears on the left. It should read "2".
21 0

21 0

The number of the bit currently displayed appears second to left. Initially, it will read "1".

The bit, appearing as a 0 or 1 to turn a function off or on, appears on the right.

5. Press **Auto/Manual** 7 times to display bit 8.
28 1

6. Press **Start/Copy** to change bit 8 from 1 to 0.
28 0

Software Settings

7. When set, press **Auto/Manual**.
SF 3

8. Press **Stop** to return to standby.

Note: To cancel this command and include your TTI with each document you send, enter a 1 rather than a 0 in Step 6.

Display Communication Speed

This optional setting instructs your unit to display the current modem communication speed during transmissions or receptions. 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 used and the CCITT group of the remote unit.

1. Use the on/off switch to turn your unit off. While off, press and hold down **Stop**.
2. With **Stop** depressed, turn your unit on. After a few seconds, your unit will beep several times. Release **Stop**.

SF P

3. Press **Start/Copy** 2 times to advance to dip switch SF-2.

SF 2

4. Press **Auto/Manual**. The number of the dip switch being modified appears on the left. It should read "2".

21 0

The number of the bit currently displayed appears second to left. Initially, it will read "1".

The bit, appearing as a 0 or 1 to turn a function off or on, appears on the right.

5. Press **Auto/Manual** 3 times to display bit 4.

24 0

6. Press **Start/Copy** once to change bit 4 from 0 to 1.

24 1

7. When set, press **Auto/Manual**.

25 0

8. Press **Stop**.

SF 3

9. Press **Stop** again to return to standby.

Note: To cancel the modem speed display, enter a 0 for bit 4 in Step 6.

Set Line Hold Time

Your unit holds the telephone line open and beeps for six seconds after a page is transmitted, giving you time to insert and transmit another page before the line is disconnected. You can increase the line hold time from six to 12 seconds to allow even more time to insert another page.

To set the line hold:

1. Use the on/off switch to turn your unit off. While off, press and hold down **Stop**.
2. With **Stop** depressed, turn your unit on. After a few seconds, your unit will beep several times. Release **Stop**.

SF P

3. Press **Start/Copy** 5 times to advance to dip switch SF-5.

SF 5

4. Press **Auto/Manual**. The number of the dip switch being modified appears on the left. It should read "5".

51 0

The number of the bit currently displayed appears second to left. Initially, it will read "1".

The bit, appearing as a 0 or 1 to turn a function off or on, appears on the right.

5. Press **Auto/Manual** once to display bit 2.

52 0

6. Press **Start/Copy** once to change bit 2 from 0 to 1.

52 1

7. When set, press **Auto/Manual**.

53 0

8. Press **Stop**.

SF 6

9. Press **Stop** again to return to standby.

Note: To cancel this command and return to a six-second line hold, enter a 0 for bit 2 in Step 6.

Erase Memory

This optional command instructs your unit to erase all information—including TTI, Subscriber ID and primary mode—in its memory and to return all software settings to their factory positions. Do not use this command unless you want to erase all the information you have programmed in your unit's memory.

To erase your system's memory:

1. Use the on/off switch to turn your unit off. While off, press and hold down **Stop**.
2. With **Stop** depressed, turn your unit on. After a few seconds, your unit will beep several times. Release **Stop**.
3. Press **Start/Copy** 10 times to advance to dip switch SF-C.
4. Press **Auto/Manual**. Your unit's memory will be erased.
SF P
5. Press **Stop** to return to standby.

Telephone Features

The telephone handset on your unit can be used like any other personal telephone to make calls whenever you want.

Your telephone can provide touch-tone or rotary dialing signals (see page 10). Make sure your handset is set for the type of dialing signals required by your telephone system.

To make a call:

1. Pick up the handset and dial the number desired.
2. When your call is answered, begin your conversation.

To receive a call:

1. If the Manual lamp is lighted, you can receive a call in the same way as with a standard telephone: Pick up the handset and begin your conversation.
2. If the Auto lamp is lighted, your unit will answer the telephone for facsimile reception after two or six rings (see page 8), preventing conversation. Pick up the handset before the final ring.

To adjust ringer volume:

The knob on your unit's telephone handset slides to allow three ringer volume settings, from loud to quiet.

To use the handset mute:

The mute button on your telephone handset disables the handset mouthpiece for as long as the button is depressed. While your mouthpiece is muted, you will be able to hear the other party.

Copier Features

Your unit can provide clear, convenient copies of documents up to 10 inches wide and 15.8 inches long. Images on documents wider than 8.5 inches will be reduced automatically to fit your unit's recording paper.

To copy a document:

1. Position the document face up and flush with the left side of the document tray.
2. Insert the document into the tray until the automatic feeder takes it.
3. When the automatic feeder has stopped, press **Start/Copy**.
4. When the copy is completed and the tone sounds, tear off the copy and remove your original from the document exit.

Trouble Shooting

Check Messages

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 identify the problem with the check message shown in the LED display. Press **Stop** to cancel the Error lamp and tone.

- E 01** The receiving unit is not working. Call the operator of the remote unit.
- E 02** The telephone line was either disconnected during transmission or became so poor fax transmission was not possible. Try the call again.
- E 03** The facsimile printout may be unreadable because of poor telephone line conditions. Either call the operator of the remote unit to check the condition of the printout or try the call again.
- E 05** The document being transmitted is either jammed or is too long for your unit to transmit. If the document is jammed, press and hold back the document knob while gently pulling the document toward you. Do not transmit documents longer than 15.8 inches.
- E 06** There is no recording paper in your unit. You cannot transmit or receive until you replace the recording paper roll (see page 5).
- E 07** The handset to your unit is off its cradle at the end of facsimile communication. Hang the handset on its cradle.
- E 08** The cover to your unit is open. Press firmly on both sides of the cover to close.
- E 09** The fluorescent lamp in your unit is either burned out or is too weak for facsimile transmission. Contact the Murata Customer Support Center (see page 2).

Error Codes

These 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.

- T.1.1.** The remote unit did not respond properly to your unit and may not be working. Call the operator of the remote unit.
- T.2.1.** The telephone line disconnected during transmission or facsimile communication became impossible because of poor line conditions. Try the call again.
- T.2.3.** Communications was not possible because of poor line conditions. 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.
- R.1.1.** The calling unit did not respond properly to your unit. The error can be caused by a wrong number reaching your unit or by a calling unit restricting access with a pass code.
- R.1.2.** The calling unit was not compatible.
- R.2.3.** Communication was not possible because of poor line conditions.
- R.3.1.** The transmitting unit detected too many errors from the receiving unit. This is frequently caused by an intermittently poor phone line.
- R.3.3.** The transmitter is not compatible or had a document feeder problem.
- R.4.1.** The received document contained too many errors, usually as a result of poor phone lines.
- 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.

Note: Reception errors R.2.3 through R.7.4 can occur at the beginning of fax communication, before your unit prints the remote unit's TTI or Sub-scriber ID, or after several pages during the transmission of a multiple-page document. You may be able to fax the remote unit in these instances and request the document again from the remote operator. Errors R.1.1 and R.1.2 occur before the TTI can be transmitted, and do not allow you to identify the transmitting unit.

Clearing Paper Jams

When a document is jammed:

1. Push and hold back the document knob.
2. Gently pull the document toward you from the document feeder.

When the recording paper is jammed:

1. Push back the printer knob and open the cover.
2. Pull out all jammed and wrinkled paper.
3. Close the top firmly, pressing both sides of the cover.
4. Tear off the excess recording paper.

When the unit won't scan a document:

1. Push and hold back the document knob.
2. Insert the document into the document feeder. Release the document knob.
3. Press **Start/Copy**.

Specifications

Type: High-speed portable desktop facsimile transceiver

Compatibility: CCITT Group 3 and Group 2

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:

G3F	203H x 196V lpi
G3	203H x 98V lpi
G2	203H x 98V lpi

Original Document Size

Width: 3.94–10.1 inches (100–256mm)
Length: 3.15–15.8 inches (80–400mm)
Effective Scanning Width: 10 inches (254mm)
Effective Printing Width: 8.5 inches (216mm)

Scanning Method: Solid-state CCD

Recording Paper Size: 8.5 inches x 98 feet (216mm x 30m)

Power Supply: 115 VAC $\pm$ 10%, 50-60 Hz, single phase

Approximate Power Consumption: 100 watts max.

Dimensions: 11.9(W) x 8.5(D) x 3.4(H) inches (302x215x85mm)

Weight: 115 VAC version: 9.2 pounds (4.2kg)

Glossary

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

Your unit may not have every feature or capability listed in this glossary. Some features listed, like broadcasting, are found on Murata's highest-volume office facsimile machines. Other terms, like leased line and analog facsimile, are included—even though they do not apply to your Murata facsimile machine—because you may encounter them during facsimile communication or operation.

Use these definitions for your reference only. Specifications and technical information are subject to change, so call Murata's Customer Support Center at 1-800-825-5329 if you have any questions.

A4, B4 — Standard stationary sizes defined by the International Standards Organization and representing the most common dimensions for correspondence stationary in North America and Japan, respectively. A4 paper is 8.5 x 11 inches. B4 is 10.1 x 15.8 inches.

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 transmissions. 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.

ANALOG — The description of information through a variable signal or physical form. The human voice, with its variety of sounds and emphases, 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 the time intervals between characters is of unequal length. Compare Bisynchronous Transmission. Synchronous Transmission.

AUTOMATIC REDUCTION — 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 image will be 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 optional features. Check your operating instructions.

BROADCAST — Some Murata high-volume units offer transmission 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 between two units. 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. Bps is interchangeable with the term "baud".

BYTE — A group of digital elements, usually sent as eight bits to the byte.

CALL GROUP — A pre-programmed group of facsimile locations, used by Murata units with internal memory for broadcasting and relay broadcasting.

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 is reflected off your document onto the CCD array as the document is advanced through the document feeder.

CITT — 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 one-minute-per-page transmissions possible when communicating with other Group 3 units. Some Murata facsimile machines offer compatibility with older, slower Group 2 or Group 1 systems, as well.

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CCITT V.24 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 the elements of data communication. In facsimile communication, for example, CCITT V.24 and V.27 ter. are protocols which assure compatibility among Group 3 units. See Compatibility, CCITT V.24 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 Group 1 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.

DATA BASE 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 some particular 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 transmissions speeds for still 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. "Software dip switches" are on-off commands available in the program mode of some Murata units. Although they perform much the same function as true dip switches, software settings differ in that they may be changed by a power failure or a clear-memory command.

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 which can be printed out on your facsimile machine. 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 facsimile machine can scan during document transmission or reception. 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 telecommunication 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, combining the power of mainframe computers with the scanning and transmission capabilities of fax machines for high-volume communication, graphics input and rapid 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.

GRAYSCALE — A method of scanning and transmitting photographs. Murata facsimile 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 1, 2 AND 3 — 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 power requirement specifications for your facsimile machine, it identifies the type of AC power your unit is designed to operate on. Most standard electrical outlets in North America provide approximately 115 volts AC at about 60 Hz. Call your electrician or electrical company if you are unsure.

INTERNAL MEMORY — Some of Murata's most advanced high-volume business facsimile machines include internal memory. This memory can be used to store documents for transmission or to store incoming messages in SecureMail boxes. See Data Base Polling, SecureMail.

LCD — Liquid crystal display. Used on some Murata facsimile machines for status displays.

LED — Light emitting diode. Used on some Murata facsimile machines for displays and status lamps.

LPI — Lines per inch. See Resolution.

LOAD NUMBER — A number assigned to telecommunications equipment intended for use in Canada. Load numbers are assigned 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.

MURATA IMAGE INTERFACE — A hardware and software package that allows some Murata facsimile machines to operate with IBM PC and compatible personal computers, providing high-volume communication, graphics input ability and computer-to-facsimile transmissions.

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

MII — See Murata Image Interface.

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 Murata Image Interface.

MODEM — Originally an abbreviation of modulator-demodulator, but now a common word in facsimile and computer use. A modem is a digital device that converts digital data (like the information coming 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 which can be fed safely through a facsimile machine. Compare Effective Scanning Width, Effective Printing Width. Check your unit's operating instructions for additional 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, SP-PBX and others. Privately owned telephone equipment serving a particular building, business or

Glossary

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 data base 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 telephone lines. You do not need a special line or a dedicated telephone line for your Murata unit.

RELAY BROADCASTING — Some Murata facsimile machines can store a scanned image in internal memory, transmit the image to all units in its call group, and instruct those remote units to retransmit the image to each facsimile machine in the remote units' call groups. 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 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

G2	203H x 98V lpi
Norm	203H x 98V lpi
Fine	203H x 196V lpi
Superfine	203H x 392V lpi

R — 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-manufactured 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.

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. A feature on many Murata units.

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.

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Limited Warranty

This warranty is made by Murata Business Systems, Inc. ("Murata"). This warranty is valid only on Murata products purchased and used in the United States of America. This warranty applies to the product only while owned and used by the original purchaser (hereinafter referred to as the "Customer"). If ownership of the product is transferred, this warranty terminates. This warranty does not apply to any product in use for rental purposes.

This Murata product is warranted against defects in material and workmanship for ninety (90) days commencing the date of original Customer purchase. If the product is defective in material and/or workmanship (normal wear and tear excepted) during the warranty period, Murata or its authorized representative will, during Murata's established service availability hours, make necessary adjustments and repairs, including at Murata's option installation of replacement parts. Murata's service availability hours are 8:30 a.m. to 5 p.m. Monday through Friday, excluding Murata-recognized holidays. Murata will complete the necessary adjustments and repairs within a reasonable time period, as dictated by the nature of the problem and by Murata's service schedule. Replacement parts may have been used and/or reconditioned. Parts that have been replaced will remain the property of Murata. This warranty is subject to the OBLIGATIONS and EXCLUSIONS set forth.

OBLIGATIONS

1. This warranty will be honored only on presentation of the original dated authorized Murata bill of sale or Murata dealer bill of sale or sales slip to an authorized Murata service representative or service center. For the name of your nearest authorized Murata service center, contact Murata Business Systems, Inc., toll-free telephone number 1-800-825-5329.
2. During the warranty period, the Customer must notify Murata by telephone of any defective product material and/or workmanship.
3. Transportation (including prepayment of freight and insurance charges) of the product to and from an authorized Murata service center, designated by Murata, is the responsibility of the Customer.
4. If Murata provides maintenance or responds to a call which is outside the scope of this warranty, such maintenance shall be billed to the Customer at Murata's then current rates for maintenance and parts and shall be due and payable in full upon receipt of invoice.

EXCLUSIONS

1. This warranty shall not cover a product with missing or altered original identification marks.
2. This warranty applies only to products that the purchaser has properly installed, adjusted and operated in accordance with instructions set forth in or provided with product literature. This warranty does not apply to any product which

has been subjected to tampering, alteration, misuse, abuse, neglect, improper installation or transportation damage. Nor does it apply to costs for any service requested for demonstration or to confirm proper operation of this product.

3. This warranty shall not apply to adjustments, repairs or replacements necessitated by any cause beyond the control of Murata (whether foreseeable or not) including, but not limited to, any malfunction, defects or failure caused by or resulting from any of the following: improper unpacking or installation, unauthorized service or parts, or improper maintenance or cleaning, modification or repair by the Customer, accident (including without limitation, unavoidable accidents), fire, flood or other acts of God, improper telephone or electrical power or surges thereof, interconnection with or use of non-compatible equipment or supplies (including paper), or placement of the product in an area which does not conform to Murata space, electrical and/or environmental requirements.

4. Murata will not be required to make adjustments, repairs or replacements if the product is installed or used at a location deemed by Murata to be hazardous to health or safety, or if Murata is not provided with free and reasonable access to the product and a telephone during service availability hours, or if the product location is not accessible by an authorized Murata service vehicle.

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M1200 OPERATING INSTRUCTIONS

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