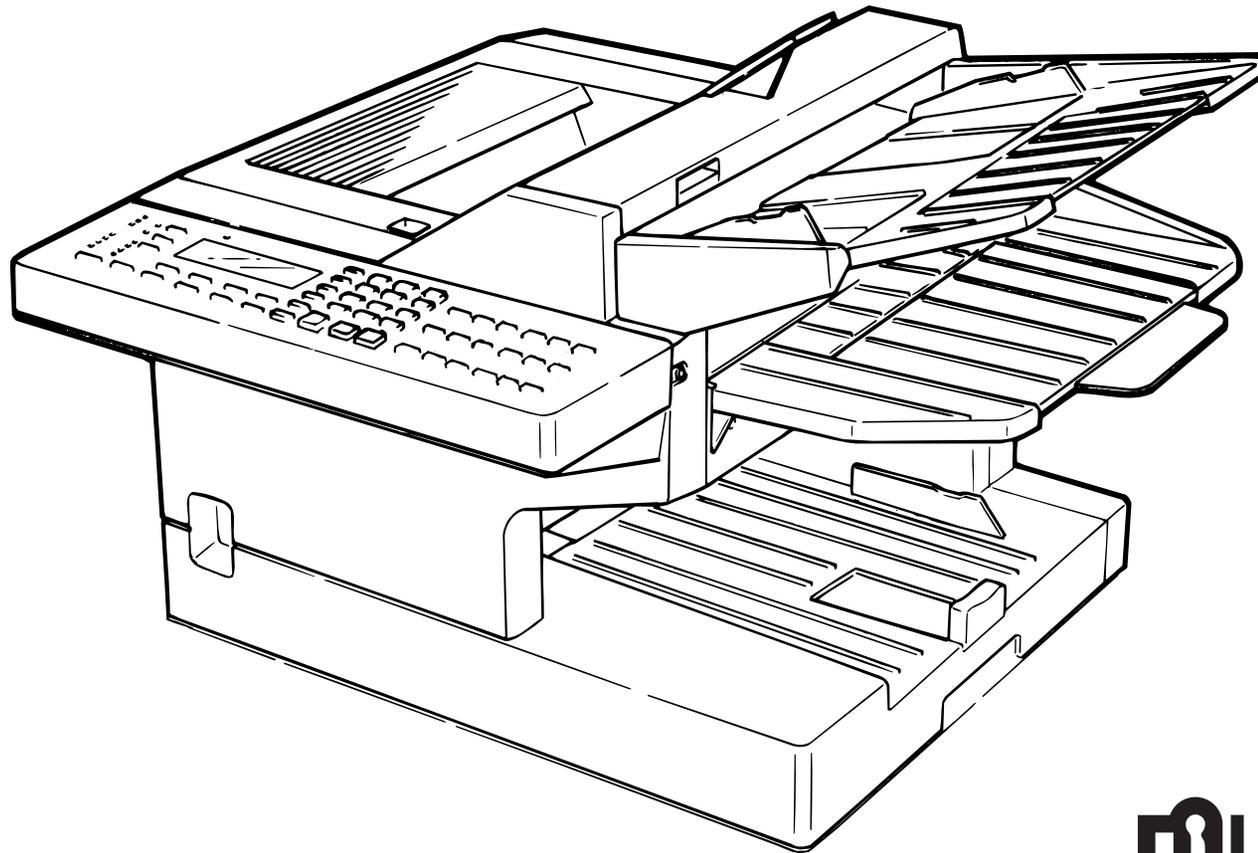


# Operating Instructions

*For Muratec's F-98 plain-paper fax machines*



**muratec**<sup>™</sup>  
The Fax Specialists.

# Muratec F-98 Quick Reference Guide

## One-Touch Keys

<b>Press</b>				<b>To:</b>	
Program	<b>A</b>	<b>1</b>	<b>Enter</b>	Enter a one-touch key	
"	"	<b>2</b>	<b>Enter</b>	Erase a one-touch key	
"	"	<b>3</b>	<b>Enter</b>	Print a list of one-touch keys	

## Speed-Dial Numbers

<b>Press</b>				<b>To:</b>	
Program	<b>B</b>	<b>1</b>	<b>Enter</b>	Program a speed dial number	
"	"	<b>2</b>	<b>Enter</b>	Erase a speed dial number	
"	"	<b>3</b>	<b>Enter</b>	Print a list of speed dial numbers	

## Programmable One-Touch Keys

<b>Press</b>				<b>To:</b>	
Program	<b>C</b>	<b>1</b>	<b>Enter</b>	Enter a programmable key	
"	"	<b>2</b>	<b>Enter</b>	Erase a programmable key	
"	"	<b>3</b>	<b>Enter</b>	Print a list of programmable keys	

## Polling Documents

<b>Press</b>				<b>To:</b>	
Program	<b>D</b>	<b>1</b>	<b>Enter</b>	Store a polling document	
"	"	<b>2</b>	<b>Enter</b>	Erase a polling document	
"	"	<b>3</b>	<b>Enter</b>	Print a polling document	

## F-Code Features

<b>Press</b>				<b>To:</b>	
Program	<b>E</b>	<b>1</b>	<b>Enter</b>	Set up an F-Code box	
"	"	<b>2</b>	<b>Enter</b>	Print a list of F-Code boxes	
"	"	<b>3</b>	<b>Enter</b>	Print an F-Code document	
"	"	<b>4</b>	<b>Enter</b>	Erase an F-Code box	

## Delayed Commands

<b>Press</b>				<b>To:</b>	
Program	<b>F</b>	<b>1</b>	<b>Enter</b>	Print a list of delayed commands	
"	"	<b>2</b>	<b>Enter</b>	Print a document in memory	

## Activity Journal and Reports

<b>Press</b>				<b>To:</b>	
Program	<b>G</b>	<b>1</b>	<b>Enter</b>	Turn the journal printout on or off	
"	"	<b>2</b>	<b>Enter</b>	Print a journal of activity	
"	"	<b>3</b>	<b>Enter</b>	Set up the TCR	

## Cover Page

<b>Press</b>				<b>To:</b>	
Program	<b>H</b>	<b>1</b>	<b>Enter</b>	Set up a cover page	
"	"	<b>2</b>	<b>Enter</b>	Enter a cover page	
"	"	<b>3</b>	<b>Enter</b>	Print a cover page	

## User Settings

<b>Press</b>				<b>To:</b>	
Program	<b>J</b>	<b>01</b>	<b>Enter</b>	Review / change your fax settings	
"	"	<b>02</b>	<b>Enter</b>	Print your fax settings	
"	"	<b>03</b>	<b>Enter</b>	Review / change your copy settings	
"	"	<b>04</b>	<b>Enter</b>	Set paper size	
"	"	<b>05</b>	<b>Enter</b>	Set the dialing pause	
"	"	<b>06</b>	<b>Enter</b>	Set # of rings before auto answer	
"	"	<b>07</b>	<b>Enter</b>	Set the redial	
"	"	<b>08</b>	<b>Enter</b>	Select ECM mode	
"	"	<b>09</b>	<b>Enter</b>	Set a passcode	
"	"	<b>10</b>	<b>Enter</b>	Create a Closed network	
"	"	<b>11</b>	<b>Enter</b>	Block junk fax	
"	"	<b>12</b>	<b>Enter</b>	Set service mode	
"	"	<b>13</b>	<b>Enter</b>	Select memory transmission	
"	"	<b>14</b>	<b>Enter</b>	Set silent mode	
"	"	<b>15</b>	<b>Enter</b>	Protect passcode	
"	"	<b>16</b>	<b>Enter</b>	Set operation protection	
"	"	<b>17</b>	<b>Enter</b>	Set PIN mode	
"	"	<b>18</b>	<b>Enter</b>	Set DRD operation	
"	"	<b>19</b>	<b>Enter</b>	Select stamp operation	
"	"	<b>20</b>	<b>Enter</b>	Reset drum life	
"	"	<b>21</b>	<b>Enter</b>	Print Caller ID	
"	"	<b>22</b>	<b>Enter</b>	Print settings	

## Security Operations

<b>Press</b>				<b>To:</b>	
Program	<b>K</b>	<b>1</b>	<b>Enter</b>	Set security reception	
"	"	<b>2</b>	<b>Enter</b>	Print memory reception document	

## PC-to-Fax Operations

<b>Press</b>				<b>To:</b>	
Program	<b>L</b>	<b>1</b>	<b>Enter</b>	Begin a PC-to-Fax scan	
"	"	<b>2</b>	<b>Enter</b>	Set RS-232C	

(PC-to-fax functions require optional serial cable and software. See inside for details.)



OMF98 Operating Instructions

MML item number: D81-90020-60  
109801

**Welcome ...**

This manual and any updates to it can be found online at  
**www.muratec.com**  
Go to the "Products" section of this site, then click on "F-98"



*As an ENERGY STAR® partner, Muratec America, Inc.,  
has determined that this product meets  
the ENERGY STAR guidelines for energy efficiency.*

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# Welcome to your Muratec fax machine!

We know you want to use your machine *now*, without first having to climb over a mountain of jargon.

So we've divided these instructions into three sections.

- **“Getting started”** (see page 1.1) covers only what you absolutely *have* to know to use your machine immediately.
- **“Beyond the basics”** (see page 2.1) provides more details. When you have time, look through it to learn more about your machine's many features, as well as fax in general.
- Finally, **“Just in case ...”** (see page 3.1) will help you decide what to do if you ever have a problem with your machine. It also tells you how to give your machine the kind of easy, sensible care that should help keep troubles to a minimum.

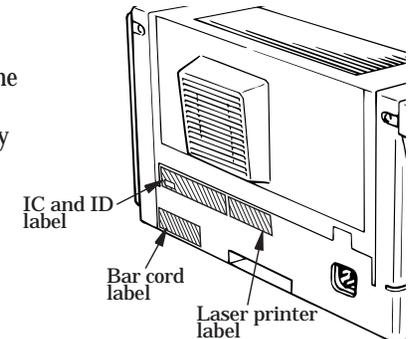
The next two pages show the entire contents of these instructions. Skim through them now if you'd like (they'll prove more helpful as time passes), or just go on past them to “Getting started” and, well, get started!

And thanks for choosing Muratec.

## Find your serial number and write it down

Before you go any further, please note that your machine's *serial number* is located on the *bar code label* as shown on the drawing at right. It's probably a good idea for you to copy this down *before* you set up your machine. Use the blank at the bottom of this column.

**Note:** The *IC label* and *ID label*, required by government regulations, *do not* contain serial number information.



Close up, the bar code label looks something like this:



**Important:** This is *not* the exact number which appears on your machine's label. This is only gives you an *idea* of how your label will look.

Now, please copy down your machine's serial number below for future reference, and note the machine's model number:

My machine's serial number: \_\_\_\_\_

My machine's model number: F-98

# What's in these operating instructions

**Note:** Each section also contains its *own* (more abbreviated) table of contents, as well.

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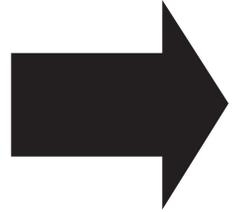
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# Getting started



*A quick and friendly trip  
through the basics  
of your Muratec fax machine*

# What's inside this section

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## A quick introduction to fax in general

### What's a fax document?

Simply put, a *fax document* is anything a fax user wants to fax to someone else. It can be just one page or as many pages as you need. That's up to you. It can be text, a photograph or even your child's latest drawing!

### What's a fax number?

Because your fax operates on standard phone lines, a *fax number* is just a regular phone number. And, because your fax is also a high-quality, full-featured telephone, your fax number can be your regular phone number — just add an optional handset to your fax. Or you can dedicate a phone number to your fax, letting you use one number just for ordinary voice calls and one just for fax.

### What are resolution and grayscale?

Just as cars are measured by engine size, and stereo systems are measured by watts per channel, so fax machines are measured by *resolution* and *grayscale*.

*Resolution* refers to the sharpness of a fax transmission. It's expressed in *lines per inch (lpi)*. An international agency has defined three specific levels of resolution:

- *Normal* (203 × 98 vertical lpi)
- *Fine* (203 × 196 lpi)
- *Superfine* (203 × 392 lpi).

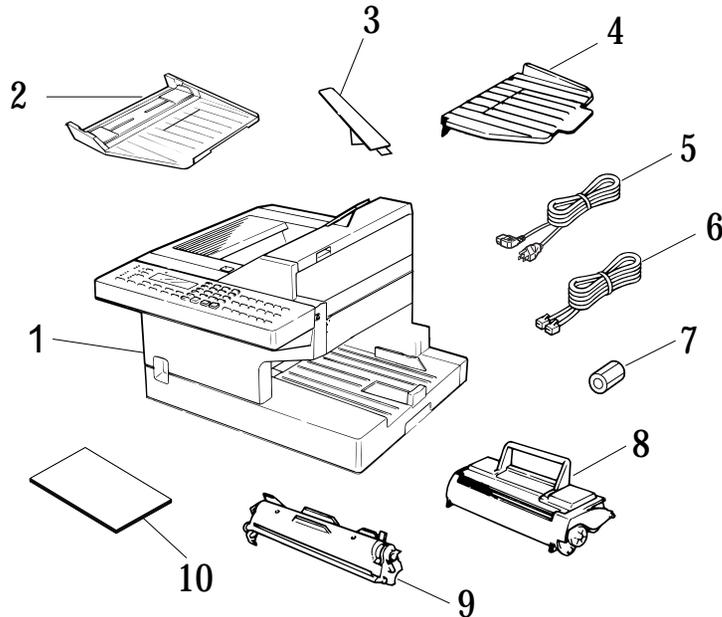
Similarly, one can judge a fax transmission by its number of *grayscale levels*, or shades of gray — really, halftones such as you might see in a newspaper photo. It's likely most of your fax documents will be dark text on white paper. However, when you want to send photographs and other shaded items, you can set your fax machine to transmit in 64-level grayscale.

### So why not *always* set your fax machine for superfine, or for grayscale?

Because these settings make your machine send more information, making transmissions last longer and (on long-distance calls) driving up your phone bills. That's why, as you'll see, we've made it easy for you to set your fax machine for the most efficient, and truest, transmission of the types of documents *you* send!

# Make sure it's all out of the packaging

The drawing, below, shows what *should* be included in the packaging:

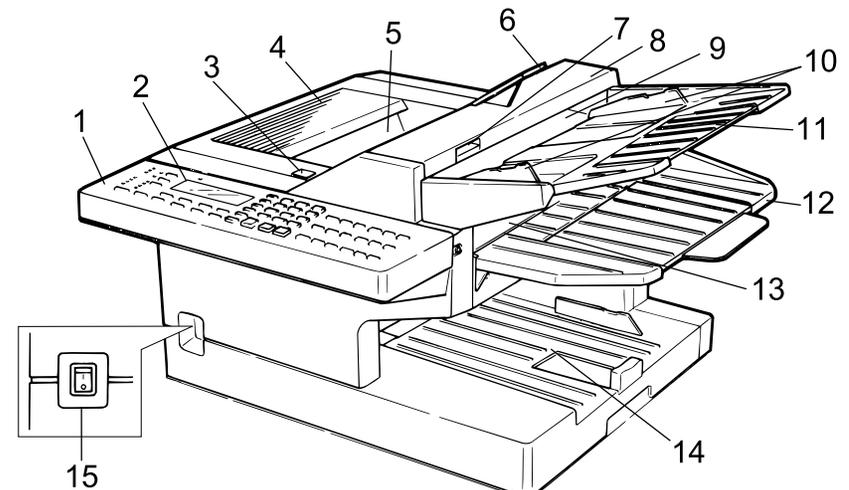


- |                          |                                       |
|--------------------------|---------------------------------------|
| <b>1</b> Fax machine     | <b>6</b> Telephone line cord          |
| <b>2</b> Document hopper | <b>7</b> Ferrite core                 |
| <b>3</b> Paper hopper    | <b>8</b> Toner cartridge              |
| <b>4</b> Document tray   | <b>9</b> Drum cartridge               |
| <b>5</b> AC power cord   | <b>10</b> Operating manual (this one) |

Be sure to save the box (or boxes) and packing materials for reshipment.

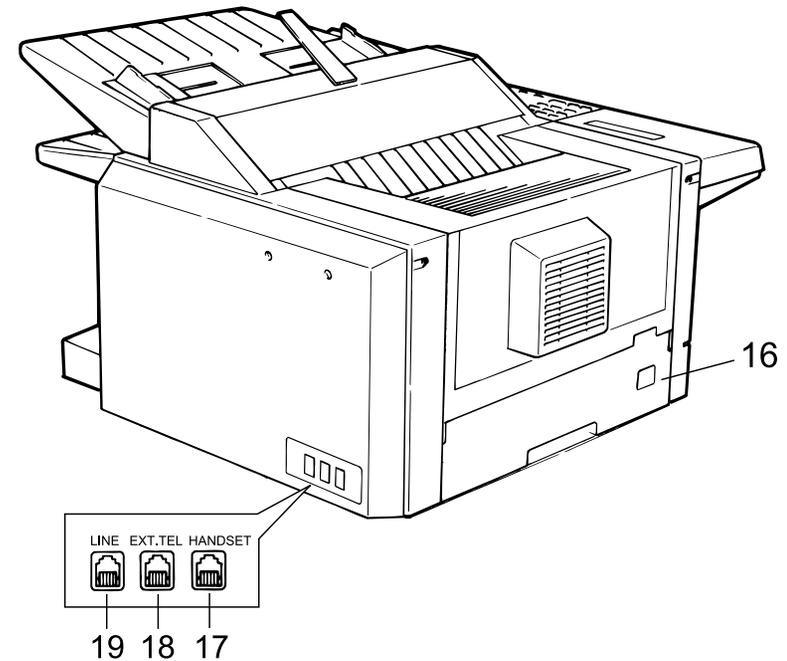
# What are all the parts?

**Note:** Don't worry if some of the terms used here are unclear to you right now. We'll explain everything fully. Once you're more familiar with these terms, this page will be an even handier reference to your fax machine.



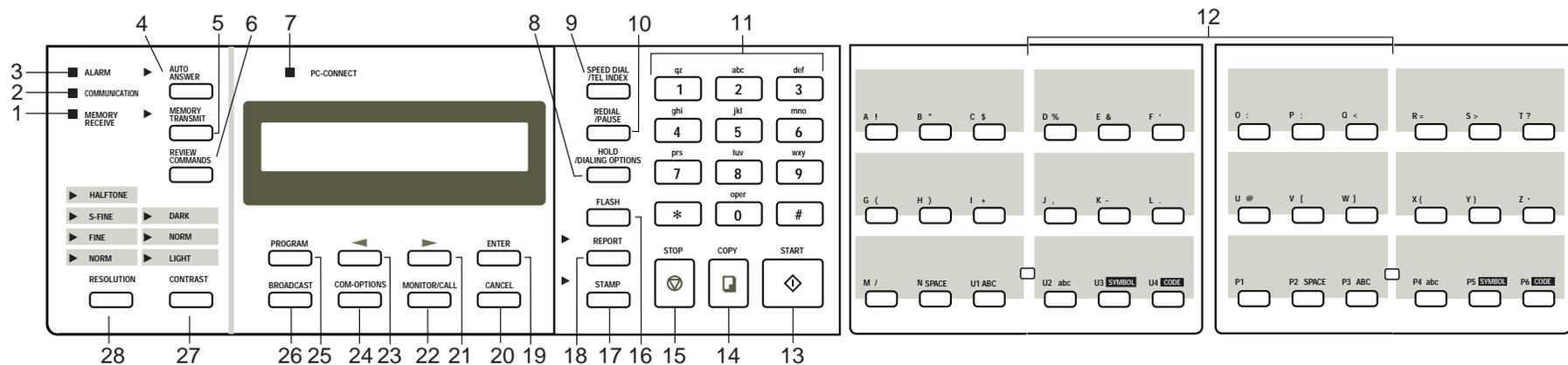
- 1 Control panel** — The keys you use to operate your machine. (See page 1.4 for more details.)
- 2 Liquid crystal display (LCD)** — The display (2-line × 20-character) which shows the machine's status and lets you see what you're entering during various operations. (If the LCD is blank, the machine is off.)
- 3 Printer cover release** — Push this to open the *printer cover*.
- 4 Printer cover** — Opens to provide access for changing the toner and drum cartridges (or, occasionally, fixing printout jams).
- 5 Printed document exit** — Where the *printout* (fax or copy) emerges.
- 6 Paper hopper** — Holds up the printout (fax or copy) after it emerges.

- 7 Scanner cover release** — Pull up on this to open the *scanner cover*.
- 8 Scanner cover** — Open this (by using the scanner cover release) to provide access to the *original document* (what you put into the machine for faxing or copying) during occasional jams.
- 9 Document feeder** — The slot into which you place your original document for faxing or copying. It holds up to 30 sheets.
- 10 Document guides** — You can move these to adjust for the width of the original document so it will feed properly into the machine.
- 11 Document hopper** — Supports the original document for straighter feeding into the machine. (You can flip it shut if there's no original document loaded.)
- 12 Document tray** — Supports documents discharged from the original document exit.
- 13 Original document exit** — Where the original document comes out.
- 14 Multipurpose tray** — Where you put the recording paper. Holds up to 150 sheets, either letter- or legal-sized. (The *optional paper cassette* holds up to 500 letter-sized sheets.)
- 15 AC power switch** — Turns your fax machine on and off.



- 16 AC power jack** — Where you plug in the AC power cord.
- 17 HANDSET jack** — Where you plug in the optional handset.
- 18 EXT. TEL jack** — If you connect a second telephone to your machine, this is where you plug in the cord.
- 19 LINE jack** — Where you plug in the *telephone line cord*. (The other end of the cord plugs into a wall telephone jack.)

# What do the keys do?



Here's a brief description of the *keys* on your fax machine and what they do, as well as a look at your machine's indicator lights and their meanings.

**Important:** Some of the functions we'll mention here are covered in the "Beyond the Basics" section.

- 1 MEMORY RECEIVE light** — If glowing, indicates your fax machine is receiving an incoming fax document into the machine's electronic *memory*.
- 2 COMMUNICATION light** — If glowing, advises you the fax machine is communicating with another machine.
- 3 ALARM light** — If glowing, indicates a problem has occurred during fax communication, printing or scanning. (It's also accompanied by several beeps immediately after the problem occurs.) The light stays lit until the machine prints a *Check Message* report.
- 4 AUTO ANSWER** — Selects which *mode* your fax machine uses to handle incoming calls: answering automatically as a fax machine (*auto-answer mode*) or waiting for the user to pick up an optional, connected handset (*manual-answer mode*). The **AUTO ANSWER light** next to this key will glow when auto-answer mode is the current choice.
- 5 MEMORY TRANSMIT** — Selects which transmission mode your fax machine uses, whether from memory or from the document feeder. If the **MEMORY TRANSMIT light** next to this key is glowing, your machine will *scan* documents into memory before trying to send them. Otherwise, your fax machine will send straight from the feeder, which is slower and also prevents others in your office from using the fax until your communication is absolutely complete.

- 6 REVIEW COMMANDS** — Push this to *review* pending fax commands, view a brief description of delayed commands.
- 7 PC-CONNECT light** — Glows when your fax machine is ready to communicate using the PC-FAX feature (see page 2.42).
- 8 HOLD/DIALING OPTIONS** — Either places a call *on hold* or takes it *off hold*. It also produces a special character during dialing and inserts special symbols into telephone numbers (see page 2.8).
- 9 SPEED DIAL/TEL INDEX** — Starts a *speed-dialing* operation, which you finish by pushing three of the keys on the *numeric keypad*. Also displays *one-touch* and speed-dial entries sorted alphanumerically, as in a telephone directory.
- 10 REDIAL/PAUSE** — *Redials* the last number you dialed. In certain operations, it also produces a special *pause* character which can be useful during the dialing of long-distance numbers.
- 11 Numeric keypad** — Just like the numeric keys on a regular tone-dialing phone. In addition to dialing phone and fax numbers, they also enter numbers when you're making certain settings.
- 12 One-touch keys** — The keys labeled A-Z and U1-U4 offer one-touch dialing convenience. You also can use the keys labeled P1-P6 for *programmable functions*: this lets you teach your machine an advanced multi-step function just once, then recall the function at any time by pressing one of these keys. Finally, you can use these keys to type in letters and symbols for your user settings.

- 13 START** — Begins a manual fax transmission or reception.
- 14 COPY** — Press this key to make one copy, or multiple copies of a document.
- 15 STOP** — An all-purpose “Whoa!” key. Stops the current operation, ejects a document from the document feeder and cancels *alarms*.
- 16 FLASH** — Lets you quickly disconnect a call and go right to the next one without having to hang up the handset.
- 17 STAMP** — Press this key to set the machine to *stamp* each page of the original document automatically when the machine transmits it. The **STAMP light** next to this key glows when this operation is activated.
- 18 REPORT** — Press this key to turn on (or off) the confirmation report feature for the next fax transmission. If the **REPORT light** next to this key is glowing, your machine will print the confirmation report for the next fax transmission only. Otherwise, your machine will disable the printing.
- 19 ENTER** — Much as **STOP** is a “Whoa!” key, **ENTER** is a “Go!” key. It confirms user settings, begins operations and moves through command levels.
- 20 CANCEL** — Press this key to delete characters on the LCD and cancel commands you have entered into the machine.
- 21 ►** — The right arrow button scrolls (moves) through features and command options displayed on the LCD.
- 22 MONITOR/CALL** — During on-hook dialing, it turns the monitor speaker off or on. When it’s on, it allows you to hear the call you’re making. When using this feature, you can only hear the communication taking place. You cannot be heard unless you are using a handset (optional). When you’re sending a fax, this key also activates the *call request* feature.
- 23 ◀** — The left arrow button scrolls through features and command options displayed on the LCD.
- 24 COM-OPTIONS** — Chooses from among five fax options: *delayed transmission*, *relay broadcast*, *polling*, *F-code transmission* or *F-code polling*.
- 25 PROGRAM** — Any function can be started by first pressing this key and then entering the function number.
- 26 BROADCAST** — Helps you send a broadcast fax (sending the same document to more than one location).
- 27 CONTRAST** — When a document is in the document feeder, press this key to toggle among normal, dark or light *contrast* settings.
- 28 RESOLUTION** — When a document is in the document feeder, press this key to toggle among the three resolution modes and the *halftone (grayscale)* mode.

## You’re in control!

We’ve worked hard to make sure your fax machine is easy for you to use. Let’s make sure there’s no confusion about how to operate it. Below are simple operating tips:

*To press:* **0** (zero), **1**, **2**, **3**, **4**, **5**, **6**, **7**, **8**, **9**, **#** or **\***

*Use:* The numeric keypad.

*Tip:* *At no other time within this manual will we refer to the letters printed below the numeric keys and their uses (such as accessing abc by pressing the 2 key.) These letters are there only for your convenience in using your fax machine as a telephone.*

*To press:* **A**, **B**, **C**, **D** or any other letter key

*Use:* The one-touch key by that name.

*Tip:* *Please don’t confuse the zero (0) with the letter o.*

Here’s an example. If we say “press **PROGRAM**, **7**, **ENTER**, **0**, **8**, **ENTER**” ...

```

... you’d press  PROGRAM
... then      7
... then     ENTER
... then     0 (the numeric key zero)
... then     8
... and then, finally  ENTER

```

**Important:** Although our example above includes commas, do not enter them into the fax machine. Those characters appear in our instructions to separate one number from the other, and are *not* intended for actual entry by using your control panel.

There is a function (broadcasting) which requires the entry of commas, but there is a special way to enter them. We will explain this process when the time comes.

# Setting up

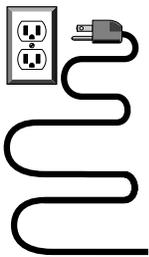
## Pick an installation spot *before* going ahead

Where should you install your fax machine? The location should be:

- **Clean** — Dust buildup can damage your machine. (Still, do *not* use a cover! See next item.)
- **In the open** — Allow at least 12" of clearance around your machine. Be sure that you *never* cover the machine. Its vents must be able to "breathe."
- **Away from direct sunlight** — This helps avoid overheating.
- **Dry** — Avoid any location where splatters or sprays (such as from a water fountain) could reach your fax machine.
- **Level, and vibration-free.**
- **Near a phone jack** — Your fax machine uses a standard ("modular") telephone jack, also known as an *RJ-11*.
- **Near an AC power outlet** — The AC power cord is about 5' long when stretched to its limit (and that's *not* the way to handle a power cord).

Speaking of which ...

## Powerful tips



- **Use a standard *three-pronged* 120 VAC outlet.**
- **Make sure the outlet *isn't* controlled by a wall switch.** If it is, you'll risk inadvertent shutoffs of your machine, causing you to lose fax messages.
- **Don't use an outlet which also is supplying power to a large appliance,** such a refrigerator or air conditioner. Such high-consumption appliances can cause "draw-downs" (temporary drops in the power available for other equipment on the circuit) which could damage your fax machine.
- **Use an *electrical surge suppressor*,** preferably one which guards *both* telephone *and* electrical lines. This device helps to shield your fax machine from damaging high-voltage electrical surges.

**Voltage requirements:** 120 VAC  $\pm$  10 %, 50–60 Hz

**Power consumption:**

	Standby	Transmission	Reception	Copying	Maximum
	12w	37w	373w	372w	396w

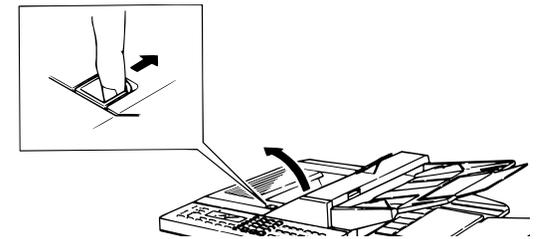
## Install the printing supplies

Your fax machine prints incoming faxes and copies with a *laser print engine*. The engine requires two types of *printing supplies* (sometimes also called *consumables*):

- The *drum cartridge* — It yields 20,000 normal letter-sized printouts (see "Specifications," page AI.1). By "normal," we're referring to the amount of text and/or graphics on each page. This is based on an industry-standard test document.
  - The *toner cartridge* — It yields 5,500 "normal", letter-sized printouts (see "Specifications," page AI.1).
- Note:** The toner cartridge included with your machine is a *starter* cartridge which yields 3,600 printouts (see "Specifications," page AI.1). Please purchase regular, full-yield toner cartridges from your authorized Muratec dealer.

Here's how to install these supplies.

- 1 Swing open the printer cover by pressing the *printer cover release*.

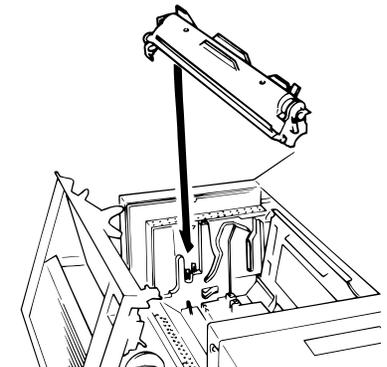


- 2 Unpack the drum cartridge from its box.

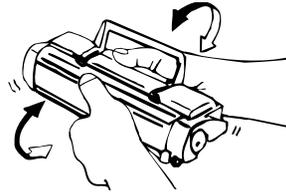
**Important:** **Shield the drum cartridge from light, especially strong light.** Later, if you have to remove the cartridge from the fax, immediately wrap it in a thick cloth to protect it from light.

- 3 Put the drum cartridge into the *printer* by aligning the cartridge's *protrusions* with the *slits* inside the *printer frame*.

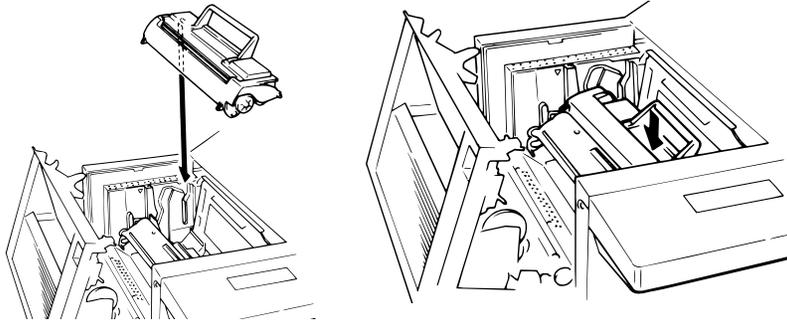
**Important:** You must also reset the drum counter. See "When you install a new drum cartridge ..." (page 1.7).



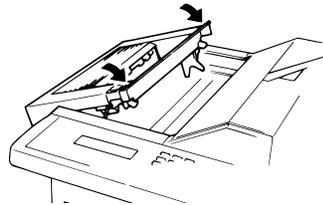
- 4** Unpack the toner cartridge from its carton. Then, holding the toner cartridge with both hands, shake it well as shown (note the arrows).



- 5** Install the toner cartridge in the printer, making sure that the cartridge's four *pins* (two each at the front and rear sides) fit in the *slits* inside the printer frame.



- 6** Swing the printer cover back down. Push down on a portion of the cover to lock the cover into its normal position.
- Note:** The fax machine will not work if the cover isn't closed properly.



## When you install a new drum cartridge

**Important:** Use this setting *only* when you are installing a new drum cartridge. Your fax machine keeps track of how many pages go through the drum cartridge to let you know when the drum needs to be replaced. So, whenever you install a new drum cartridge, you must “notify” the machine by *resetting the drum counter*. (Before resetting it the *very* first time, you'll have to finish installing the machine and then turn it on [see page 1.8].) Here's how to reset the drum counter:

- 1** Press PROGRAM, J, 2, 0. The LCD will show:

J20 Reset Drum Life  
Program/Enter

- 2** Press ENTER to reset the drum counter.

## Loading paper

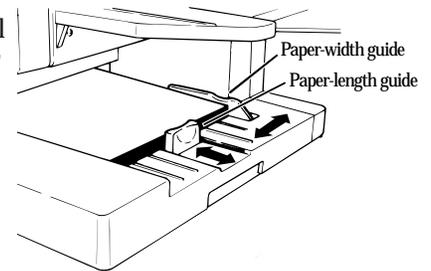
Your fax machine can hold up to 150 sheets of plain paper in the multipurpose tray, and your machine will use it to print received faxes and make copies. You can also attach an optional paper cassette, which holds up to 500 additional sheets of plain paper. Contact your authorized Muratec dealer for more information on the optional paper cassette.

The following instructions tell you how to load the paper correctly, which will help to prevent paper jams and other problems.

### Loading the multipurpose tray

You may use *either* letter- or legal-sized paper in the multipurpose tray, but not *both* at the same time. Do not mix paper sizes in one tray.

- 1** Adjust the *multipurpose tray* for the length of paper you plan to load. Pull slightly upward on the *paper-length guide* in the tray, then slide the guide to the slot (either *LTR* or *LGL*) for the paper size you'll be loading.

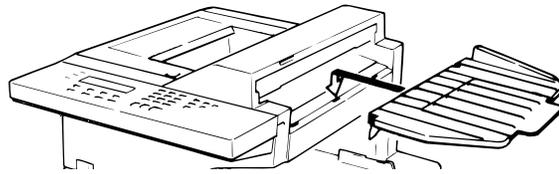


**Important:** You must set your machine to recognize the size of paper you've loaded (see page 1.8 for details).

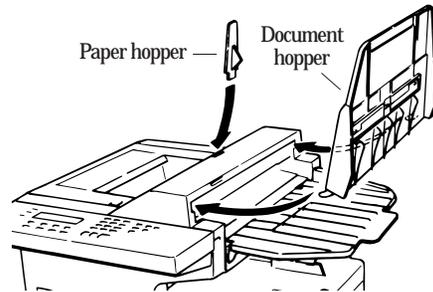
- 2** Slightly “fan” the paper you will be loading, to help ensure smooth feeding.
- 3** Insert up to 150 sheets of paper into the tray. Make sure the paper-length guide and the *paper width guide* now fit against the paper's edges.
- Important:** To avoid paper jams, do not refill this tray without first removing *all* of the paper in it. Do not add sheets to an already-loaded stack.

## Attach the paper-handling parts

- 1 Attach the *document tray* by inserting it into the appropriate holes, as shown.



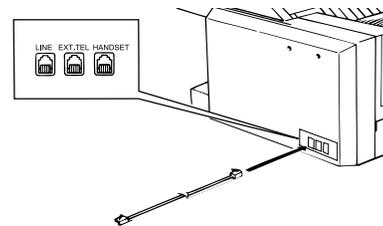
- 2 Attach the *paper hopper* into the appropriate hole, as shown. Press *gently* until the hopper won't go any farther.



- 3 Attach the *document hopper* by inserting its two *pegs* at a slightly upward angle into the appropriate holes, as shown.

## Plug in and power up

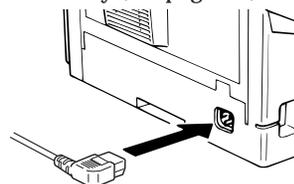
- 1 Plug one end of the telephone line cord into the **LINE** jack on the machine's rear side. Plug the other end of the cord into a standard telephone wall jack, just as you would plug in a phone.



**Note:** If you have purchased an optional handset, do not confuse its *curled* handset cord with the *uncurled* telephone line cord.

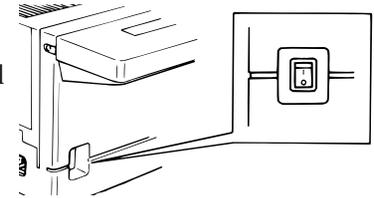
**Note:** We'll get to the **HANDSET** and **EXT.TEL** jacks shortly (see page 1.9).

- 2 Plug the *non-pronged* end of the *AC power cord* into the *AC power cord jack* on the left side of the machine (as viewed from the machine's front).



- 3 Plug the *pronged* end of the *AC power cord* into a 120 VAC electrical outlet (preferably on a surge suppressor, as mentioned on page 1.6).

- 4 Use the *AC power switch* to turn on your machine. The markings are international standards: **I** means *on*, **O** means *off*.



## Setting the paper size for the multipurpose tray

The multipurpose tray can hold either letter- or legal-sized paper for your machine. All you have to do is tell the machine which size the tray is using.

**Important:** If you use a different size from the size you set here, the machine won't print. Be sure to change this setting whenever you load another paper size.

**Note:** The *optional paper cassette* uses only letter-sized paper.

- 1 Press **PROGRAM, J, 0, 4, ENTER**. The LCD shows the tray's current setting:

```
Paper Size: Letter
Program/Enter
```

If the setting you see is acceptable, skip to step 3. Otherwise, proceed to step 2.

- 2 To change the setting, press **PROGRAM** once or twice until your chosen paper size appears. In this example, we've chosen legal-sized paper:

```
Paper Size: Legal
Program/Enter
```

- 3 Press **ENTER** to save the setting.

## Adjust the monitor speaker's volume

You can set the volume of the monitor speaker, assuring that on-hook dialing will be as loud (or as soft) as you require.

- 1 Press **MONITOR/CALL** on the control panel. You now should hear a dial tone, and the display will show:

```
** Tel Mode **
```

**Important:** If you don't hear a dial tone, make sure your fax machine is plugged into a working phone line.

**2** If the volume you hear is satisfactory, skip to step 4. Otherwise, go on to step 3.

**3** Adjust the volume as you like:  
To turn the volume up, press ►. To turn the volume down, press ◀. The display, or *LCD*, indicates the volume. Here are the possible settings:

** Tel Mode ** Volume:■■■■■■■	= Loudest setting.
----------------------------------	--------------------

** Tel Mode ** Volume:■■■■■	= Medium setting.
--------------------------------	-------------------

** Tel Mode ** Volume:■■■	= Low setting.
------------------------------	----------------

**4** Press MONITOR/CALL again to hang up.

## Attaching a second phone

Want to attach a second phone (even a cordless model!) to your fax machine, so they can share the same phone jack? No problem.

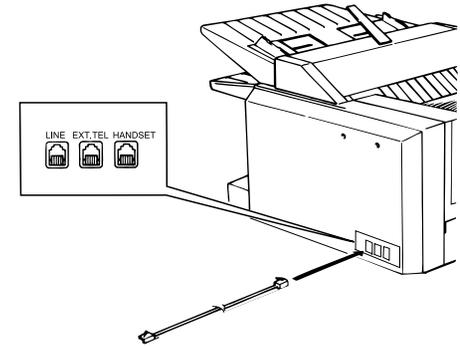
Before we go further, let's explain the idea. You're plugging the second phone's phone line into your fax machine's **EXT. TEL** jack, *not* the wall phone jack. In such a setup, only your fax machine connects to the wall. The second phone receives phone signals *through* your fax machine.

Now, let's proceed ...

**1** If your second phone is already plugged into a wall phone jack, disconnect it from that jack, *at the jack*. *Hold onto the phone plug: you'll need it in step 2.*

**Note:** If your telephone is a model which also requires AC power, as is true for the base of a cordless phone, *don't* unplug it from its AC power jack!

**2** Using the plug mentioned in step 1, plug the phone cable from your second phone into the **EXT.TEL** jack on the rear of your fax machine.



For information on how to use a connected second phone with your fax machine, see "Receiving faxes," beginning on page 1.17.

## Attaching an optional handset

If you purchase an optional *handset* for your fax machine, it comes with installation instructions. However, here is a summary of how to attach the handset.

**Important:** Do *not* connect the handset directly to a telephone wall jack. Connect the handset only to your fax machine as the instructions describe.

**1** Using a small Phillips-head screwdriver, attach the *handset cradle* to the side of your fax machine using the screws included with the cradle.

**2** Plug one end of the *handset cord* (it's curled) into the **HANDSET** jack on the rear of your fax machine.



**3** Plug the other end of the handset cord into the jack on the handset. If connected to a phone line, your fax machine is now "off-hook."

**Note:** The handset has a small "flash" button which you can press while holding the handset, putting the fax machine back "on-hook" until you can hang up the handset properly in step 4.

**4** Place the telephone handset onto the handset cradle. The cradle will press the handset's "flash" button, hanging up the handset.

*Installation complete!*

*Now, see how our EasyStart feature will have you up and running within minutes.*

# EasyStart

Your Muratec fax machine comes with *EasyStart*. It guides you in entering the bare-bones settings required for normal operation — so it's *easy* for you to *start* using your machine quickly. (You can enter other settings later or change settings. We'll explain in "Beyond the basics," beginning on page 2.1.)

**Important:** At the end of EasyStart, your machine will print a list of its settings. So first, please be sure you've correctly installed your machine and loaded recording paper into it (see "Setting up," beginning on page 1.6).

---

## Clearing settings before beginning

Before using EasyStart, clear your machine's built-in *user data memory*, which stores settings. This insures the memory will hold only *your* settings.

**Important:** After you use EasyStart, please *do not* clear the memory again *unless* an authorized technician asks you to do so.

To clear the machine's memory:

- 1 Press **PROGRAM**, **\***, **2**. The LCD now asks whether you're sure about clearing the memory:

```
Clear User Settings
Check Program/Enter
```

**Note:** If you *don't* want to proceed, just press **PROGRAM**.

- 2 If you *are* sure, press **ENTER** to complete the process by cancelling the existing user data memory settings.

---

## What do you want to do?

EasyStart will want you to enter a little information, so first, please determine the following before you begin:

- 1 **The type of dialing** your telephone system requires — You may select either *tone* or *pulse* (rotary) dialing.

- 2 **The name and fax number you want to appear on your faxes** — Every fax page you send will arrive at the receiving machine with a single line of text at the very top of the page. Among other things, this text will list a *name* and a *fax number*. The name must not be longer than *22 characters*.

**Note:** Incidentally, the fax industry term for this text is *Transmit Terminal Identifier (TTI)*. (Another term, *Subscriber ID*, refers to just the fax number in the TTI.)

---

## Using EasyStart to enter initial settings

**Important:** Be sure your fax machine has paper before you begin EasyStart, since this feature can print a list of settings at the conclusion.

**Important:** If you press **STOP** during EasyStart, your fax machine will return to *standby mode* (its normal condition) but will retain what settings you saved by pressing **ENTER** as described in these instructions.

- 1 Press **PROGRAM**, **1**, **ENTER**.  
The LCD will display the current setting of the fax's built-in calendar/clock, with a *cursor* appearing under the first digit.

```
Enter Time
'99 01/01 00:00
```

- 2 Use the numeric keypad to enter the *correct date and time*, using a *YYMMDD* format for the *date* and *24-hour* ("military") format for the *time*. For instance, to set 8:30 PM on December 11, 1998, press **9 8 12 1 1 2 0 3 0**, which results in:

```
Enter Time
'98 12/11 20:30
```

**Note:** Your fax machine automatically inserts the spaces and date-slash. All you have to do is enter the digits.

*To change only one digit*, press ◀ to move the cursor leftward, or ▶ to move it rightward, to that digit. Then, enter the correct digit.

- 3 Press **ENTER** to save the clock setting and continue EasyStart.

- 4** The LCD now asks you to enter your fax number as you want it to appear on other fax machines' displays or printouts. The fax industry term for this number is *Subscriber ID*.

Your Fax Number  
\_

- 5** Use the numeric keypad to enter the desired number. To put in a dash for easier reading, as shown here, press **HOLD/DIALING OPTIONS** once. The number may contain up to 20 characters (numbers and dashes).

Your Fax Number  
972-555-5525\_

**Note:** If you make a mistake, press **CANCEL** to erase leftward. Or, if you want to change just one character in the number, press **◀** to move the cursor leftward, or **▶**, to move it rightward, to that character and press **CANCEL** to erase it. Then re-enter until the fax number is just as you want it.

- 6** Press **ENTER** to save the number.

- 7** The LCD now asks you to enter the name you want to appear at the top of faxes you send. The name may be up to 22 characters in length.

**Important:** You enter letters and other non-numeric characters through the one-touch keys.

Your Name :Upper  
\_

The word "Upper" means the machine is currently set for entering only upper-case letters. If you press **R**, the machine will see it as an *R* (not an *r*).

To change it so that pressing a one-touch key will produce a lower-case letter rather than an upper-case letter, press **U2/abc**. The display will change to:

Your Name :Lower  
\_

This means pressing one-touch keys will enter lower-case letters: pressing **R** will produce an *r* (not an *R*) on the display.

To switch back for upper-case entries, press **U1/ABC**.

To enter spaces, punctuation and symbols, press **U3/SYMBOL**. This lets you enter the blue characters shown on the one-touch keypad.

In "Beyond the Basics," we'll show you how to use the **CODE** function to enter a wide variety of characters (see page 2.3). For now, however, become familiar with the **ABC**, **abc** and **SYMBOL** keys.

**Note:** If you make a mistake, press **CANCEL** to erase leftward. Or, if you want to change just one character in the name, press **◀** to move the cursor leftward, or **▶**, to move it rightward, to that character and press **CANCEL** to erase it. Then re-enter until the name is just as you want it.

- 8** Press **ENTER** to save the setting and continue.

- 9** The LCD now indicates the type of dialing, *tone* or *pulse*, for which your fax machine is set:

Phone Type: Tone  
Program/Enter

If the setting you see is acceptable, skip to step 11. Otherwise, proceed to step 10.

- 10** To change the setting, press **PROGRAM** once or twice until your choice appears (here, we've changed the setting to *Pulse* mode):

Phone Type: Pulse  
Program/Enter

- 11** Press **ENTER** to save the setting.

You're all done!

## Year 2000 compliance

Muratec's entire current line, as well as every Muratec fax machine introduced in the last decade, is fully tested and Year 2000 ready.

Year 2000 compliance means that all programming or other actions needed to support the correct processing of date-related fields prior to, during and beyond the turn of the century are completed have been tested and validated for the accurate and correct processing of date fields and related logic for Muratec products.

# Sending faxes

## Some guidelines

### How big — and small — your pages can be

While you'll probably be sending normal-sized documents most of the time, you *can* fax a piece of paper as small as a notepad sheet or one nearly 3 feet long!

To be precise, the acceptable dimensions (width × length) are:

SINGLE-SHEET TRANSMISSION	MULTIPLE-SHEET TRANSMISSION
<i>Maximum:</i> 11.0" × 35.4"	<i>Maximum:</i> 10.1" × 14.4"
<i>Minimum:</i> 5.8" × 4.1"	<i>Minimum:</i> 5.8" × 4.1"

### Things *not* to put in your fax

To avoid paper jams and damage to your machine, please ***don't insert:***

- Folded, curled, torn, wrinkled or very thin pages
- Documents with staples, glue, tape, paper clips or still-wet correction fluid
- "Sticky notes" (or documents with "sticky notes" attached)
- Cardboard, newspaper or fabric
- Pages with duplicating carbon on either side
- Credit cards or similar small, thick items

## Some thoughts on resolution, grayscale and contrast

### *Reviewing resolution and grayscale:*

- *Normal resolution* ("NORM" on the control panel) is suitable for most typed documents and simple drawings.
- *Fine resolution* ("FINE" on the control panel) is ideal for maps, moderately complicated drawings, floorplans or handwritten documents.
- *Superfine resolution* ("S-FINE" on the control panel; "S Fine" on the LCD) reproduces the detail of extremely complicated drawings or line art.
- *Grayscale mode* ("HALFTONE" on the control panel; "Gray" on the LCD) captures shades in photos and drawings.

**Note:** If you send a fax in superfine, certain fax models (especially older, non-Muratec models) will receive it only in fine mode. However, you can send a fax in grayscale mode to virtually *any* fax machine currently in use.

### *Reviewing Contrast:*

The *rightmost* item appearing on the LCD (when there's a document in the feeder) is the *contrast* setting. You have three choices:

- *Normal* ("NORM" on the control panel) — Suited to most documents.
- *Light* — Lightens up overly dark, "muddy" original documents.
- *Dark* — Darkens weak, "washed-out" images.

**Note:** Until you become accustomed to using the Light and Dark settings, you might tend to confuse them. Just remember what we say above — "Light lightens" and "Dark darkens" — to keep it straight!

## Entering a pause character when dialing

Your fax machine provides *special dialing characters* which you may find useful. We'll discuss most of them later (see page 2.8), but you may need to know *now* about the *pause* character. Some long-distance systems require dialing pauses, and pauses can be useful also when you're dialing through special telephone exchanges.

To insert a *pause* character, just press **REDIAL/PAUSE** (after you've dialed at least one other character). -/ (the pause character) will appear on the display.

Each pause you enter lasts for a factory-set five seconds (see "Changing the pause length," next page, for how to change this setting).

For example, assuming the pause is at the factory setting, pressing **9, REDIAL/PAUSE, 1972552009** dials 9 [5-second pause] 1 9 7 2 5 5 2 0 0 9.

**Important:** Each pause uses *two* of the characters you're allowed in a number.

### Changing the pause length

The pause is set by the factory to last five seconds, but you can set it to last as long as ten seconds if necessary. If you find the five-second pause is satisfactory when you use it with your phone system, do not make this change. But, if you must:

- 1 Press **PROGRAM, J, 0, 5, ENTER**.

```
Set Dialing Pause
Time (05-10): 05
```

If the setting you see is acceptable, skip to step 3. Otherwise, proceed to step 2.

- 2 Use the numeric keypad to enter the desired length of the dialing pause. Here, we've chosen nine seconds.

```
Set Dialing Pause
Time (05-10): 09
```

**Note:** The length setting requires two digits, so there always must be a leading zero for lengths other than 10 seconds.

- 3 Press **ENTER** to save the setting.

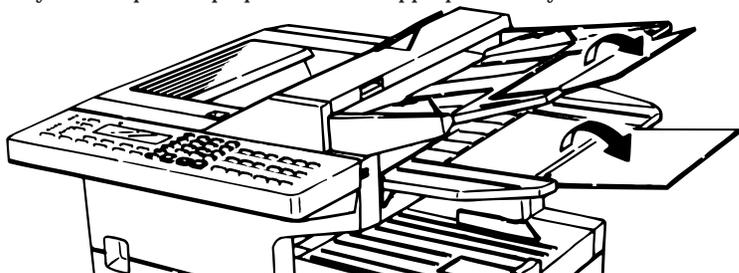
### Potential problems with call-waiting and voice mail

Telephone call-waiting signals can stop fax transmission and reception. And, of course, any service — such as voice mail — which may intercept your calls can keep your fax machine from getting fax calls.

If you must use only one phone line, please consult your telephone company for information on how you can temporarily disable call-waiting or voice mail while using the fax machine.

### Adjusting the machine for larger documents

If you're using larger documents, you can adjust the document hopper and the document tray. Just flip the top up or down, as appropriate for your documents' sizes.



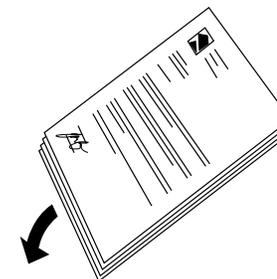
### How to insert a document

- 1 Adjust the document guides — by sliding either of them to the left or right — to fit the page (s) you'll be faxing. Your fax machine's *automatic document feeder* will hold up to 30 pages.

**Note:** Your machine's *scanning width* is 8.2". When you insert a letter-sized document, your machine scans the center 8.2" and sends it unreduced (see pages 2.3–2.4 for more on reduction). This means that there will be a 0.15" margin on each side of the page that your fax machine will *not* scan.

- 2 If you're sending a multi-page document, "fan" the pages slightly. The *bottom* sheet should extend just slightly from the others.

- 3 Insert the document **face up**. The fax machine will "grab" the first page of the document and position it for faxing. (If need be, readjust the document guides for the best fit.)



The LCD will now show the scanning width setting and the amount of memory available:

```
Document Ready
A4           Memory100%
```

Speaking of memory . . .

### Using memory transmission

Your fax machine has a great memory! Take advantage of it, and you *could*:

**Save Time.** By using your fax machine's memory, you won't have to wait for your machine while it completes the transmission. Simply scan your document into your fax machine's memory, and you can walk away with your original in hand.

**Save Money.** Here's a real money-saver on long-distance fax calls: if you're transmitting to another memory-equipped Muratec fax machine, your machine will send the document directly into the other machine's memory and hang up! (The receiving machine then prints out your message from *its* memory after the call has ended.) This cuts your actual on-line time to a minimum.

**Save Even More Money.** Set up a *delayed command* (see pages 2.19–2.20) to send your document to that other Muratec fax machine after hours, and you can save more money, because the line charges will be cheaper.

You can set your fax to always transmit from memory as a default.

## Getting started

**Note:** Whether you decide to send your documents from memory or through the document feeder, you can override that choice one transmission at a time by pressing **MEMORY TRANSMIT** before you send your document. After completing the communication, your fax will return to the default setting.

**Note:** Although it's *probably* best to transmit from memory, please note there are some documents that use up memory more quickly than others. They include documents with many pages and documents with a lot of dark areas, since darker pages create more data for your fax machine to "remember" and send. *When the machine's memory supply is full, it can transmit only through the document feeder.*

To make memory transmission the default:

- 1 Press **PROGRAM, J, 1, 3, ENTER**.

<b>Memory Tx:</b> <b>On</b> <b>Program/Enter</b>
---

If the setting you see is acceptable, skip to step 3. Otherwise, proceed to step 2.

- 2 To change the setting, press **PROGRAM** once or twice until your chosen mode appears. In this example, we've chosen *Off*.

<b>Memory Tx:</b> <b>Off</b> <b>Program/Enter</b>
--

- 3 Press **ENTER** to save the setting.

---

## Sending

Here's how to fax a document:

- 1 *Insert the document.*

When a document is in the feeder, the LCD shows the scanning width setting and the amount of memory available:

<b>Document Ready</b> <b>A4</b> <b>Memory100%</b>
--

- 2 *Adjust resolution and contrast if necessary.* If these are **OK**, skip to step 3. Otherwise, press **RESOLUTION** to change the resolution and/or press **CONTRAST** to change the contrast.
- 3 *"Toggle" (switch on or off) memory transmission if necessary.* If you want to use your default setting, skip to step 4. Otherwise, press **MEMORY TRANSMIT** once to "toggle" memory transmission.

- 4 *Enter the fax number.*  
(In fax terms, you're calling the *remote fax*, on its *remote fax number*.)

<b>Press Start</b> <b>919725552009_</b>
--

As you can see, you also enter any access codes (such as a *9* for "dialing out" from an office telephone system, or *1* for long-distance) along with the number, just as you would for a regular phone call.

- 5 Press **START**.

- 6 Now, everything is up to the machines — yours and the one you're dialing.
  - If you have set the fax to transmit from memory, your machine will first scan the document into memory, then dial the other fax. When it makes contact, your machine transmits the stored document from memory.
  - If the fax is set for non-memory transmission, your machine simply dials the other fax. When it makes contact, your machine feeds the document through, scanning and transmitting it as it goes.

**Note:** The more "stuff" (or *black coverage*, to use the fax term) your machine "sees" on a page, the more slowly the page will feed through as the fax scans it — especially when you transmit in non-memory mode. Even if the page itself is relatively clean, sending it in grayscale mode or certain resolution settings makes your machine "see" more "stuff." The same is true if you set the contrast to **Dark**.

**Note:** What if the call fails for some reason? See "If the call doesn't go through — redialing," next page.

**Important:** If you wish to *cancel* a transmission while it is in progress, you will need to use the *Review Commands* function. See "An introduction to Review Commands," page 1.16.

- 7 At the end of the operation, your fax machine beeps and displays:

<b>972-555-2009</b> <b>** Complete **</b>
--

**Important:** Whenever you transmit, whether this way or in the numerous ways we'll describe throughout this manual, what actually appears on the top line of the display will depend upon information stored in the remote fax. The line may even be blank.

## Sending a fax with on-hook dialing or a handset

You also can fax a document by dialing using either the monitor speaker (called “on-hook” dialing) or the optional handset.

- 1 *Insert the document.*
- 2 *Adjust resolution and contrast if necessary.* If these are OK, skip to step 3. Otherwise, press **RESOLUTION** to change the resolution and/or press **CONTRAST** to change the contrast.
- 3 *Obtain a dial tone.* You can do this by *either*:
  - Activating the monitor speaker (by pressing **MONITOR/CALL**)
  - ... or ...
  - Lifting an optional handset.

In either case, the LCD shows:

```

** Tel Mode **
_
```

- 4 *Enter the fax number by using the numeric keypad.*

**Note:** For information on entering one-touch and speed-dial numbers, see pages 2.8–2.14.

```

** Tel Mode **
919725552009_
```

Enter access codes along with the number, just as for a regular phone call.

- 5 *When you hear fax tones from the remote unit, press **START**.*

**Note:** If a person answers the phone, use the optional handset to tell that person that you’re trying to send a fax. When his/her machine sends you fax tones, *then* press **START**.
- 6 *If you’re using the monitor speaker, skip to step 7.* If you’re using an optional handset, hang up (after pressing **START**).
 

**Note:** What if the call fails for some reason? See “If the call doesn’t go through — redialing,” next column.
- 7 At the end of the operation, your fax machine beeps and displays:

```

972-555-2009
** Complete **
```

## If the call doesn’t go through – redialing

If your call fails, and you dialed *without* using either the monitor speaker or an optional handset, your machine will automatically *redial* the fax call you just tried. While in this *Auto Redial mode*, the machine can receive faxes and make as many as 50 fax transmissions.

In this *Auto Redial mode*, your fax *automatically redials* the number every few minutes (See “Making redial settings,” next page) until one of the following happens:

- It reaches the remote fax machine.
- It has automatically redialed the number for the last try (again, see “Making redial settings,” next page).

**Note:** If you used either the speaker or a handset, redial manually (see below).

**Note:** If the last try fails, your machine may print (and/or display) error messages. For more information, see pages 3.6–3.10.

### Redialing manually

You can always redial calls manually. And remember you *must* redial manually if you used either the monitor speaker or an optional handset to dial and the call fails.

To redial a fax call manually *without* using the monitor speaker or an handset:

- 1 Confirm that the document is still in the feeder and that your desired resolution and contrast settings are still correct.
- 2 Press **REDIAL/PAUSE, START**.

To redial a fax call manually by using the monitor speaker or an optional handset:

- 1 Confirm that the document is still in the feeder and that your desired resolution and contrast settings are still correct.
- 2 Obtain a dial tone: either press **MONITOR/CALL** or lift the optional handset.
- 3 Press **REDIAL/PAUSE**.
- 4 *When you hear fax tones from the remote unit, press **START**.*

**Note:** If a person answers the phone, use the optional handset to tell that person you’re trying to send a fax. When his/her machine sends you fax tones, *then* press **START**.

To redial a voice call (using the optional handset) manually:

- 1 Obtain a dial tone: either press **MONITOR/CALL** or lift the optional handset.
- 2 Press **REDIAL/PAUSE**. When the other person answers, use the optional handset to speak to that person.

## Making redial settings

It's up to you how many times the fax redials a number and how long it waits between redials (that length of time between calls is the *redial interval*). Here's how to program the redial settings:

- 1 Press **PROGRAM**, **J**, **0**, **7**, **ENTER**.

```
Set # Of Redials
# (02-15): 02
```

If the number of redialings you see is acceptable, skip to step 3. Otherwise, proceed to step 2.

- 2 To change the setting, use the numeric keypad to enter the desired number of redialings, as few as two or as many as 15. In this example, we've entered *03*, for three.

```
Set # Of Redials
# (02-15): 03
```

**Important:** Notice that you must enter a leading zero when setting a quantity lower than 10.

- 3 Press **ENTER** to save the setting.

- 4 The LCD now shows:

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

If the redial interval (in minutes) you see is acceptable, skip to step 6. Otherwise, proceed to step 5.

- 5 To change the setting, use the numeric keypad to enter the desired length (in minutes). You may enter *3*, *4* or *5*. In this example, we've chosen *4*.

```
Set Redial Interval
Inter. (3-5): 4
```

- 6 Press **ENTER** to save the setting.

## An introduction to Review Commands

To cancel either a transmission in progress, an automatic redial or a delayed command, you'll use the *Review Commands* function. First, a short explanation . . .

- Because your fax machine can store multiple commands in memory, it keeps track of each command by assigning it a *command number*, like "C01."
- Delayed commands, redial attempts and current fax transmissions are all stored in your fax machine's memory and given a command number.

The Review Commands function gives you the power not only to *check on* (review) each command currently in your machine's memory but also to *delete* a command if you decide not to send the document.

**Note:** Press **STOP** to cancel a transmission in progress when you are transmitting from the document feeder. (You cannot use the **REVIEW COMMANDS** key.)

- 1 Press **REVIEW COMMANDS**.

The LCD shows the *first* command, indicated by its command number and the phone number the command will dial. If a command is in progress, that will be the first command the LCD shows:

```
C01:5552009
Program/Cancel
```

- 2 If this *is* the command you want to cancel, skip to step 4. If this is *not* the command you want to cancel, proceed to step 3.

- 3 Press **PROGRAM** to continue on to the next command in the *command queue*, then go back to step 2.

- 4 Press **CANCEL**. The LCD shows:

```
C01:5552009
Check Program/Cancel
```

- 5 If you *do* want to cancel this command, press **CANCEL** again.

- 6 The LCD now shows the next command.

If you want to cancel it, too, go back to step 4.

If you want to *avoid* cancelling this command but *do* want to review *other* commands in the queue, press **PROGRAM** and go back to step 2.

If you want to stop reviewing the stored commands, press **STOP** to return the machine to standby mode.

This function gives you enormous control over your machine's most powerful features. For more information on the Review Commands function, please see page 2.20.

# Receiving faxes

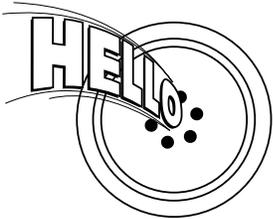
## Different ways to get the job done

### Reception modes

Your fax machine has two different reception modes — *Tel Ready* and *Fax Ready* — each of which we'll explain in a moment. We'll also give you an idea of which one you should use, depending upon your setup.

### Answering calls manually — for both reception modes

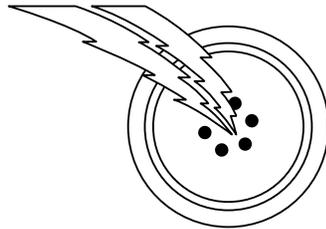
In either reception mode, you can always answer calls manually *if you have an optional handset installed*. Just pick it up, as you would if using a normal phone.



If you hear someone speaking to you, use your optional handset to have a normal phone call.

If you hear distinctive *fax tones* (“beep — beep — beep — beep”), press **START** and hang up the optional handset. Your fax machine will begin receiving a fax.

**Note:** Don't try to answer a call by pressing **MONITOR/CALL**. The monitor function is for on-hook dialing only.



### Answering fax calls using another phone, not the fax machine

If you have one phone line ringing to several phones in your office and *you have an optional handset attached to your fax*, there's no need to run to the fax machine to answer every call. If you happen to answer a fax call while you're at another extension within the same office, put the handset down, but don't hang up. Walk to the fax machine and pick up the optional handset. Then press **START**.

After you press **START**, you must hang up both the fax machine's handset and the second telephone's handset. Because remote fax machines will wait several seconds to hear reception tones from your unit, you have about 30 seconds to walk to your fax, pick up the handset, and press **START**.

## Tel Ready mode — when Auto Answer is off

- Use it if:**
- You intend to use the same line for both fax and phone calls *and*
  - On that line, you're using at least one other phone which is *not* connected to your fax machine *and*
  - You have installed an optional handset on your fax machine.

**In this mode:** Your fax machine never answers calls automatically. You must answer each call as described in “Answering calls manually — for both reception modes” (this page, left column).

To select Tel Ready:

- 1** *If there isn't a document in the feeder, skip to step 2.*  
If there's a document in the feeder, press **STOP** so it will feed out.
- 2** Press **AUTO ANSWER** once or twice until the Auto Answer light is off and the LCD shows:

<p><b>Tel Ready</b> Dec 11 1998 20:30</p>
---

### It's easy to make the switch

To toggle between Tel Ready and Fax Ready (see page 1.18), turn off Auto Answer. (To *maintain* Tel Ready as your default mode, just leave Auto Answer off.)

## Fax Ready mode

**Use it if:** You have your fax machine installed on a “dedicated” line (one it doesn’t share with a second phone).

**In this mode:** Your fax machine answers each incoming call after a certain number of rings (see page 2.5) and attempts fax reception.

To select Fax Ready:

- 1** *If there isn’t a document in the feeder, skip to step 2.*  
If there’s a document in the feeder, press **STOP** so it will feed out.
- 2** Press **AUTO ANSWER** once or twice until the light is lit. The display shows:

<b>Fax Ready</b> Dec 11 1998 20:30
---------------------------------------

## When the paper runs out

### Getting the word from your machine

When the multipurpose tray in your fax machine runs out of paper, the machine beeps, the **ALARM** light glows and the LCD indicates the multipurpose tray has run out of paper.

<b>Fax Ready</b> <b>Check Tray Paper</b>
---

Of course, your fax machine cannot *print* fax messages or copies without paper. However ...

### Receiving when out of paper

If your machine runs out of paper while you’re away, it will store up to 50 fax *receptions* (see the note, below) in its memory. This is called *out-of-paper reception*. Then, when you refill the paper supply, the fax machine will print the stored messages automatically. This is a useful feature, especially for overnight and weekend sessions.

**Note:** How many *pages* (not *receptions*) your fax machine can store for out-of-paper reception will vary. It depends on your machine’s memory capacity and it also depends on the types of documents being sent to your machine and the documents’ resolution settings. (See Specifications, page AI.1)

# Making copies

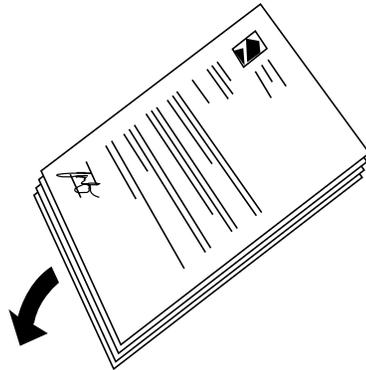
One of the best things about your fax machine is that it doubles as a *copier*. This makes it easy for you to keep copies of your important documents, such as insurance forms, receipts and letters.

To make a copy with your fax machine:

- 1** Prepare the document just as you would for a fax transmission.  
Remember:
  - There are certain types of documents you never should insert into your fax machine. (You might wish to review “Things *not* to put in your fax,” page 1.12.)
  - The document can be up to 30 pages in length.
  - If you’re copying a multi-page document, “fan” the pages so that the bottom page extends just slightly from the rest.
  - Adjust your machine’s document guides to fit the document.
- 2** Insert the document **face up**. (If necessary, re-adjust the document guides for a correct fit.)
- 3** Press **COPY**. The LCD shows:

# of pgs. to copy 01  
Copy/Stop

If you want to make one copy of each page of the document, skip to step 5. Otherwise, proceed to step 4.



- 4** Use the numeric keypad to enter the desired number of copies for each page in the document. You may choose one (“01”) to 99 copies. Here, we’ve chosen three copies.

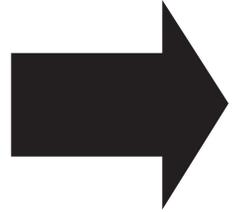
# of pgs. to copy 03  
Copy/Stop

**Note:** The setting requires two digits, so there always must be a leading zero for quantities below 10 copies.

- 5** Press **COPY** to begin the copying process.

**Note:** The fax machine offers dual-access performance, and can carry out a fax transmission already programmed in memory while it is copying. However, the fax cannot send a document from the feeder nor scan a document into memory while copying/printing.

# Beyond the basics



*We've covered  
the "musts."  
Now, let's explore  
the goodies.*

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# Getting everything just the way you want it

The EasyStart feature guided you through the “just-gotta” settings on your machine. In the next few pages, we’ll cover other settings.

## Setting up for scans

You can set parameters regarding how your fax machine scans documents for either faxing or copying:

- **Primary transmission mode** — Gives you four ways to send faxes, either one of the three resolution modes — normal, fine or superfine (“S Fine” on the LCD) — or in grayscale mode (“Gray”).
- **Primary contrast mode** — Sets how light or dark you want faxed documents to be when they arrive at their destinations.

**1** Press **PROGRAM**, **J**, **0**, **1**, **ENTER**. The LCD asks which *resolution* you select:

```
Primary:   Normal
          Program/Enter
```

If the setting you see is acceptable, skip to step 3.  
Otherwise, proceed to step 2.

**2** To change the setting, press **PROGRAM** repeatedly until your chosen mode appears. In this example, we’ve chosen fine resolution.

```
Primary:   Fine
          Program/Enter
```

**3** Press **ENTER** to save the setting. The LCD asks which *contrast setting* you select:

```
Contrast:  Normal
          Program/Enter
```

If the setting you see is acceptable, skip to step 5.  
Otherwise, proceed to step 4.

**4** To change the setting, press **PROGRAM** repeatedly until your chosen setting appears. In this example, we’ve chosen light contrast.

```
Contrast:  Light
          Program/Enter
```

**5** Press **ENTER** to save the setting.

Of course, you *always* can change the resolution and contrast before sending.

To adjust the resolution and contrast:

- Press **RESOLUTION** to change the resolution.
- Press **CONTRAST** to change the contrast.

## Using CODE to enter characters

Certain settings give you a chance to enter some kind of identifying name. As explained earlier (page 1.11), you can do this with the one-touch keys. But you may also use the **CODE** key in combination with other keys to produce a wide variety of characters, as well as regular letters and numbers. Here's how to do it:

- 1 When the machine prompts you to enter a name, press **CODE**. The display will change to:

```
Your Name :Code
_
```

- 2 Consult the chart below and find the character you wish to enter.

*First keypress*

		2	3	4	5	6	7	A	B	C	D	E	F
Second keypress	0		0	@	P	`	p	Ç	É		↑	α	p
	1	!	1	A	Q	a	q	ü	æ	°	↓	ä	q
	2	"	2	B	R	b	r	é	Æ	Γ	á	β	θ
	3	#	3	C	S	c	s	â	ô	┘	í	ε	∞
	4	\$	4	D	T	d	t	ä	ö	·	ó	μ	Ω
	5	%	5	E	U	e	u	à	ò	·	ú	σ	ü
	6	&	6	F	V	f	v	á	û	⌘	ñ	ρ	Σ
	7	'	7	G	W	g	w	ç	ù	⌘	Ñ	ð	π
	8	(	8	H	X	h	x	ê	ÿ	\	á	÷	¯
	9	)	9	I	Y	i	y	ë	Ö	"	ó	±	ƒ
	A	*	:	J	Z	j	z	è	Ü	Φ	¿	j	™
	B	+	;	K		k	{	ï	ç	ø	Γ	×	■
	C	,	<	L	¥	l		î	£	<	∩	c	↓
D	-	=	M		m	}	ì	¥	▷	j	£	÷	
E	.	>	N	^	n	→	Ä	Pt	"	«	ñ	↔	
F	/	?	O	_	o	←	Å	f	°	»	¶	■	

The legends in the black border just outside the box indicate which key you press, and in which order, to get a given character. For example, to get a backslash (\) character, you'd press **C, 8**. (The blank areas for **2, 0** and **C, 0** indicate where spaces occur.)

- 3 To enter each character, press the indicated keys.

**Important:** Remember that you also can enter numbers through the numeric keypad and letters and other non-numeric characters through the one-touch keys in combination with the **U1/ABC**, **U2/abc** and **U3/SYMBOL** keys.

**Note:** If you make a mistake, press **CANCEL** to erase leftward. Or, if you want to change just one character in the name, press **◀** to move the cursor leftward, or **▶** to move it rightward, to that character and press **CANCEL** to erase it. Then re-enter until the name is just as you want it.

- 4 Press **ENTER** to save the name.

## Making settings for printing faxes

You can set two parameters for printing received fax messages:

- Print reduction rate
- Reduction margin

You set all two in the same operation (see next page), but each deserves its own brief explanation.

### Print reduction rate

*Print reduction* lets you set the machine to reduce a large incoming document to a size which will fit on your paper. This setting doesn't affect *copies* you may make with your machine. To do this, use the *copy reduction* function (see page 2.4).

Here are the options for both print reduction and copy reduction settings:

Setting	What it does
<b>Auto</b>	Automatically reduces printouts at variable rates down to a minimum of 75%. Tries to reduce printout to fit on one sheet of your selected paper size; if can't, prints the image at 100% size on two or more pages.
<b>100%</b>	Performs no reduction. (Due to the sender's TTI, this may print <i>two</i> pages when receiving a one-page fax document. See <i>97%</i> , below.)
<b>97%</b>	Reduces an original so that the final printout of a one-page document ( <i>if the original isn't larger than the paper in your machine</i> ) will be only one page long, despite the TTI.
<b>91%</b>	Provides slightly more reduction.
<b>81%</b>	Provides even greater reduction. Helpful for certain international stationery sizes, as well as special applications.
<b>75%</b>	Turns <i>legal-sized</i> originals into <i>letter-sized</i> printed copies.

### For best results ...

Although it's convenient, the reduction feature can't solve *every* situation. (Also, the printout may omit a small bit of the image at the page break if the machine tries to reduce a legal-sized page onto letter-sized paper at any setting other than 75%.) So, whenever possible, **load the correct size of paper before receiving a fax (or making a copy) of that size.**

## Reduction margin

Your fax machine's *reduction margin* is measured in millimeters (mm). We'll define it by explaining how it's used:

When a fax message enters your machine's electronic brain, the machine measures the message's length and compares it to **(a)** the length of your selected paper **plus (b)** the reduction margin you set. If the length of the incoming message is shorter than the sum of **(a)** and **(b)**, your machine prints the message on just one sheet; otherwise, it prints the message on more than one sheet.

**Note:** An *Auto* reduction setting and a reduction margin setting of *40mm* will print most incoming faxes as single pages. Try this combination first and then, only if you have problems with it, select different settings.

## Adjusting the print settings

- 1 Press **PROGRAM**, **J**, **0**, **2**, **ENTER**. The LCD shows the currently set print reduction rate:

```
Prnt Reduc Rate:Auto
Program/Enter
```

If the setting you see is acceptable, skip to step 3. Otherwise, proceed to step 2.

- 2 To change the setting, press **PROGRAM** repeatedly until your chosen reduction setting appears. In this example, we've chosen *91%*.

```
Prnt Reduc Rate: 91%
Program/Enter
```

- 3 Press **ENTER** to save the setting. The LCD shows the current setting for the reduction margin:

```
Prnt Reduc Rate: 91%
Margin(0-85mm): 40
```

If the setting you see is acceptable, skip to step 5. Otherwise, proceed to step 4.

- 4 To change the setting, use the numeric keypad to enter the reduction margin you want. If necessary, press **◀** or **▶** to move the cursor if you need. In this example, we've chosen *38mm*.

```
Prnt Reduc Rate: 91%
Margin(0-85mm): 38
```

- 5 Press **ENTER** to save the setting.

## Making settings for copying

You can set three parameters for copying:

- Copy sort/stack — Your fax machine can either sort or stack multiple copies of a document. If it stacks them, it will make four copies of a two-page document as: 1, 1, 1, 1 — 2, 2, 2, 2. If it sorts them, it will make four copies of the same two-page documents as: 1, 2 — 1, 2 — 1, 2 — 1, 2. (If the sorting copy is "Off", the fax machine will stack.)
- Copy reduction rate — Works the same way as the print reduction rate (see page 2.3 for more details).
- Reduction margin — Serves the same purpose as the reduction margin for printing (see earlier information on this page).

You set both in the same operation, as with the printing settings.

**Note:** The same options, in terms of both reduction settings and reduction margins, are available for copy reduction as for print reduction. (If necessary, review the preceding discussion, "Making settings for printing faxes," beginning on page 2.3.) The difference, here, is that you probably are better off with a setting of *00* on the reduction margin.

- 1 Press **PROGRAM**, **J**, **0**, **3**, **ENTER**. The LCD shows the current setting for sorting copy:

```
Sorting Copy: On
Program/Enter
```

If the setting you see is acceptable, skip to step 3. Otherwise, proceed to step 2.

- 2 To change the setting, press **PROGRAM** once or twice until your chosen setting appears. In this example, we've chosen *Off*.

```
Sorting Copy: Off
Program/Enter
```

- 3 Press **ENTER** to save the setting. The LCD shows the current copy reduction rate:

```
Copy Reduc Rate:100%
Program/Enter
```

If the setting you see is acceptable, skip to step 5. Otherwise, proceed to step 4.

- 4 To change the setting, press **PROGRAM** repeatedly until your chosen reduction setting appears. In this example, we've chosen *75%*.

```
Copy Reduc Rate: 75%
Program/Enter
```

- 5** Press ENTER to save the setting. The LCD shows the current setting for the reduction margin:

```
Copy Reduc Rate: 75%
Margin(0-85mm): 24
```

If the setting you see is acceptable, skip to step 7. Otherwise, proceed to step 6.

- 6** To change the setting, use the numeric keypad to enter the reduction margin you want. If necessary, press ◀ or ▶ to move the cursor if you need. In this example, we've chosen 00mm.

```
Copy Reduc Rate: 75%
Margin(0-85mm): 00
```

- 7** Press ENTER to save the setting.

## Setting the number of rings

You can set how many times your fax machine will ring before answering a call. You may choose one to nine rings.

- 1** Press PROGRAM, J, 0, 6, ENTER. The LCD will show:

```
Set # Of Rings
# (1-9): 2
```

If the setting you see is acceptable, skip to step 3. Otherwise, proceed to step 2.

- 2** To change the setting, use the numeric keypad to enter the desired number of rings, from one to nine. Here, we've chosen four rings.

```
Set # Of Rings
# (1-9): 4
```

**Note:** If you enter 0 (zero), the machine will beep briefly to warn you that it can't accept that setting.

- 3** Press ENTER to save the setting.

## Setting ECM

Ever hear static on the line during a phone call? It's a real nuisance — but, worse, it may ruin your attempts to communicate via fax. This is because “line noise” can easily disrupt the flow of data from one fax machine to another.

That's why your fax machine gives you the chance of operating in *Error Correction Mode (ECM)*. When two fax machines communicate while running in ECM, the sending machine automatically *checks* the data, “block” by “block,” as it sends. If the receiving fax machine can't verify the transmission, the first machine will re-send as necessary. (Essentially, the sending machine asks, “Did you ‘hear’ that segment?” and the other machine answers either “Yeah; go on” or “No; try it again.”)

**Note:** While using ECM gives you a better chance of getting a fax document through a troublesome phone line, it also could slow down the transmission time — and increasingly so in proportion to how bad the phone line is. That's why we let you turn ECM on or off as you require.

**Note:** Not all fax machines have ECM. If you've activated ECM and then transmit to a fax machine not currently using ECM, there will no change in the fax transmission from a usual, non-ECM transmission.

- 1** Press PROGRAM, J, 0, 8, ENTER. The LCD shows the current ECM setting:

```
ECM Mode: On
Program/Enter
```

If the setting you see is acceptable, skip to step 3. Otherwise, proceed to step 2.

- 2** To change the setting, press PROGRAM once or twice until your chosen setting appears. In this example, we've chosen *Off*.

```
ECM Mode: Off
Program/Enter
```

- 3** Press ENTER to save the setting.

## Setting silent mode

If you and your fax machine share a quiet place, you'll really appreciate being able to put the machine into *silent mode*. This setting mutes the ringer, the alarm and the key-touch tone.

- **Ringer** — This mutes the ringer and a special ring alerts you if you receive a voice call and a call request call.
- **Alarm** — This mutes the alarm your machine makes when an error has occurred, the "I'm done!" beep your machine makes after sending or receiving a fax or making a copy, and the beep your machine makes at one-minute intervals to remind you your caller is waiting.
- **Key-touch tone** — This mutes the tones your machine makes when pressing the button on the control panel.

**Note:** Let's say it again — silent mode mutes the *ringer* as well as the beep and the key-touch tone. So, if you're using your fax machine as both a fax and phone (with the optional handset), you may not wish to use this feature.

**Note:** Of course, turning on the silent mode on your fax machine won't turn off ringers on other telephones in your house or office. Similarly, other phones won't distinguish between fax and voice calls.

- 1** Press **PROGRAM**, **J**, **1**, **4**, **ENTER**. The LCD shows your fax's current setting:

```
Silent Mode:  Off
              Program/Enter
```

If the setting is "Off" and it is acceptable, skip to step 9. Otherwise, proceed to step 2.

- 2** To change the setting, press **PROGRAM** once or twice until your chosen setting appears. In this example, we've chosen *On*.

```
Silent Mode:  On
              Program/Enter
```

**Note:** Don't be confused. If silent mode is On, the machine will be quiet. If silent mode is Off, the machine will ring and beep as usual. (In other words, the Off/On refers to the silent mode setting, *not* to the sound itself!)

- 3** Press **ENTER** to save the setting. The LCD now asks whether you want the ringer to be off or on:

```
Ringer Silent: Off
              Program/Enter
```

If the setting you see is acceptable, skip to step 5. Otherwise, proceed to step 4.

- 4** To change the setting, press **PROGRAM** once or twice until your chosen setting appears.

If you want the ringer to be off, set to "On" and the machine will be quiet. Otherwise, the machine will ring.

- 5** Press **ENTER** to save the setting. The LCD now asks whether you want to be off the alarm:

```
Alarm Silent:  Off
              Program/Enter
```

If the setting you see is "Off" and it is acceptable, skip to step 7. Otherwise, proceed to step 6.

- 6** To change the setting, press **PROGRAM** once or twice until your chosen setting appears.

If you want the alarm to be off, set to "On" and the machine will be quiet. Otherwise, the machine will beep.

- 7** Press **ENTER** to save the setting. The LCD now asks whether you want to be off the key-touch tone

```
Key Buz.Silent: Off
              Program/Enter
```

If the setting you see is "Off" and it is acceptable, skip to step 9. Otherwise, proceed to step 8.

- 8** To change the setting, press **PROGRAM** once or twice until your chosen setting appears.

If you want the key-touch tone to be off, select "On" and the machine will be quiet.

Otherwise, the machine will sound.

- 9** Press **ENTER** to save the setting.

## Setting the transmission confirmation stamp

You can set your fax machine so that it will automatically place a small *stamp* mark on the front of each *original* document that it successfully scans.

**Important:** Be sure that this feature is turned off if you are sending original documents you don't want the fax to stamp.

- 1 Press **PROGRAM, J, 1, 9, ENTER**. The LCD shows your fax's current setting:

```
Stamp:           Off
Program/Enter
```

If the setting you see is acceptable, skip to step 3. Otherwise, proceed to step 2.

- 2 To change the setting, press **PROGRAM** once or twice until your chosen setting appears. In this example, we've chosen *On*.

```
Stamp:           On
Program/Enter
```

- 3 Press **ENTER** to save the setting.

## Setting the language

While English is the language in which your machine initially is set to display messages and print reports, you can set it to "speak" French or Spanish, too! As you give the order for the machine to change languages, it "rolls" from English to French to Spanish and then back to English.

To make the change from one language to the next, press **PROGRAM, #**.

### ¿Qué es? — *or*, What is it?

If, after making a language change, you're not sure *which* language is showing, press **PROGRAM** once and decide based on what results on the LCD:

```
A Num. Une-Touche
Program./Val.
```

is French.

```
A Núm. Una-Tecla
Program./Sel.
```

is Spanish.

If the language you see is the one you want, press **STOP** to return to standby mode.

If you want to change languages, press **STOP** to return to standby mode and then press **PROGRAM, #** again to go to the next language in the cycle.

## Printing your settings

After you have your machine set as you want, have it print a *settings list*. We recommend this particularly if you'll be sharing the machine with other users, who might change the settings for one reason or another.

With this list, you can quickly confirm that all settings are as you want, without having to go back and check them on the machine. Or, if you *do* need to undo someone else's unauthorized (or even authorized) changes, this list guides you in returning the machine to your preferred settings.

**Note:** Some settings on the list affect only certain operations we'll explain later. Please refer to the index at the end of these instructions to locate any setting you don't recognize or understand.

To print the settings list, press **PROGRAM, J, 2, 2, ENTER**.

## Printing a program list

You also can have your machine print a *program list*. This list gives a brief summary of the various instructions available on your fax machine, organized in a "program tree" so you can see which key combinations produce which instructions.

**Note:** Some settings on the list affect only certain operations we'll explain later. Please refer to the index at the end of these instructions to locate any setting you don't recognize or understand.

To print a program list, press **PROGRAM, \*, 8**. Your machine will print the list.

**Note:** If you have certain options installed on your machine, the list will be two pages in length.

# Autodialer

Your fax machine's *autodialer* is one of its most versatile features. It stores your most frequently called phone and fax numbers for instant recall so you don't have to remember them. Now, it's easy to dial even the most complicated *international* calls!

## Autodialer basics

### How do you autodial?

There are two kinds of autodialer numbers. The difference between the two is how you access them:

- *One-touch* — Pressing one of the keys, marked **A–Z** and **U1–U4**, on the right side of the control panel.
- *Speed-dial* — Pressing **SPEED DIAL/TEL INDEX** followed by a three-digit identifier, from *001* to *100*.

### How big is the vault?

How many numbers can your fax store? A total of 130 — up to 30 one-touch numbers and up to 100 speed-dial numbers.

### Which number is which?

Your fax machine's autodialer will hold more than just fax numbers: you can store Mom's phone number along with your warehouse's fax number.

How? Because, when you use the autodialer to dial a number, the fax checks to see whether there's a document in the feeder. If there is, the machine dials as a fax machine (*i. e.*, dials while sending fax tones). If there isn't, it dials as a phone.

### EasyDial directory: A preview

— *or*, What the heck's a Location ID?

Your machine also features a built-in *EasyDial directory* (see page 2.14). This lets you enter your fax/phone numbers along with descriptive names. (Your machine calls this name a *Location ID*.) The autodialer sorts these listings alphabetically so, with EasyDial, you can look them up *by name* as if you were using a phone book!

As you store the numbers — we'll get to that shortly — you'll see how to enter the names so you can use this extremely handy feature.

## Special dialing characters

Which number do you find easier to read: *919725552009* or *9-1-972-555-2009*?

Obviously, it's the second one. The hyphen (or dash) character (“-”) separates the number into its various parts — in this example, a *9* for outside-line access, a *1* for long-distance access, the area code and the phone number.

Imagine how much more important this can be if you also have to use special long-distance access codes, country codes for international calling, etc.

Also, certain calls require special symbols *besides* just numerals to get through. If you make calls to other countries — or just have your fax machine on an unusual phone system — you'll want to be able to put the appropriate characters in the numbers you store.

That's why your fax machine allows you to enter *special dialing characters*. Here's a brief description of these characters, as well as how you can put them in the numbers you store in the autodialer:

Char.	What it does	Keystroke(s)
—	Makes long numbers easier to read. Doesn't change fax machine operation.	<b>HOLD/DIALING OPTIONS</b> ( <i>once</i> )
/	( <i>Has no effect in the United States.</i> )	<b>HOLD/DIALING OPTIONS</b> ( <i>twice</i> )
!	Tells your fax machine to pause until it “hears” a dial tone.	<b>HOLD/DIALING OPTIONS</b> ( <i>3 times</i> )
— /	Enters a pause. Each pause lasts five seconds (or whatever length you set; see pages 1.12–1.13). Each pause uses <i>two</i> of the characters you can store in one phone number.	<b>REDIAL/PAUSE</b> [ <i>after entry of at least one other character</i> ]
— !	If your fax machine is on a pulse ( <i>not</i> tone-dialing) line, switches from pulse-dialing to tone (“DTMF”)—dialing. Use after the actual phone number but before any characters (such as a long-distance carrier's access code) which must be in DTMF tone. <i>Do not</i> use on a tone line.	<b>HOLD/DIALING OPTIONS</b> ( <i>once</i> ), then ► ( <i>once</i> ), then <b>HOLD/DIALING OPTIONS</b> ( <i>3 times</i> ), then ► ( <i>once</i> )

## Using One-touch numbers

As indicated previously, your fax machine will store up to 30 one-touch numbers by using the keys marked A–Z and U1–U4 (fliptab a).

### Entering or changing a one-touch number

**Important:** To *erase* a number, see “Erasing a one-touch number” (page 2.11).

- 1 Press **PROGRAM**, **A**, **1**, **ENTER**. Depending on whether you already have a number entered for one-touch number **A**, the LCD shows:

Select One-Touch A :No Number Stored	or	Select One-Touch A :9-1-555-345-6789
---	----	---

If **A** is the key you want to set, skip to step 3. (However, our sample displays from here on will say “**B**” rather than “**A**.”)

- 2 Press the one-touch key in which you want to store a number or change a previously stored number. Here, we’ve selected **B** and the LCD shows either:

Select One-Touch B :No Number Stored	or	Select One-Touch B :9-1-555-987-6543
---	----	---

- 3 If you change your mind and wish to select a different one-touch key, just press that key before going on step 4.
- 4 Press **ENTER**. Depending on whether you already have a number entered for this one-touch number, the LCD now shows either:

B :Fax Number _	or	B :Fax Number 9-1-555-987-6543_
--------------------	----	------------------------------------

- 5 Use the numeric keypad to enter the number *exactly* as your machine should dial it, including whatever access codes your phone system may require. (You may want to review “Special dialing characters,” page 2.8.) The number can be up to 40 characters in length:

B :Fax Number 9-1-5559292039_
----------------------------------

Your display can show only 20 characters at a time. To view characters beyond those 20 (such as with an international long-distance number), press ◀ to scroll leftward or ▶ to scroll rightward.

**Note:** If you make a mistake or want to erase characters entered in a previous setting, press **CANCEL** to erase leftward. Or, if you want to change just one character in the number, press ◀ to move the cursor leftward, or ▶ to move it rightward, to that character and press **CANCEL** to erase it. Then re-enter until the number is just as you want it.

- 6 When the number is as you want it, press **ENTER** to store it.

- 7 The LCD now displays:

B :Name :Upper _	or	B :Name :Upper S. W. Region Office_
---------------------	----	--

The machine now is prompting you for a name — a Location ID, remember? — so you’ll be able to find it easily in the EasyDial directory (see page 2.14).

If you *do not* wish to enter or change this number’s Location ID, skip to step 9. If you *do* wish to enter or change this number’s Location ID, proceed to step 8.

- 8 A number’s Location ID may be up to 16 characters in length. You enter the Location ID the same way you entered your fax name during EasyStart. We’ll review the process, here. (If you’re changing a previously entered Location ID, see the note at the end of this step.)

**Important:** As in EasyStart, you enter letters and other non-numeric characters through the one-touch keys.

B :Name :Upper _
---------------------

The word “Upper” means the machine is currently set for entering only upper-case letters. If you press **R**, the machine will see it as an *R* (not an *r*).

To change it so that pressing a one-touch key will produce a lower-case letter rather than an upper-case letter, press **U2/abc**. The display will change to:

B :Name :Lower _
---------------------

This means pressing one-touch keys will enter lower-case letters: pressing **R** will produce an *r* (not an *R*) on the display.

To switch back for upper-case entries, press **U1/ABC**.

To enter spaces, punctuation and symbols, press **U3/SYMBOL**. This lets you enter the blue characters shown on the one-touch keypad.

To enter a wide variety of characters, use the **CODE** function. (Review the explanation on page 2.3.) The vast majority of the time, you will probably find the **ABC**, **abc** and **SYMBOL** keys to be sufficient.

**Note:** If you make a mistake or want to erase characters entered in a previous setting, press **CANCEL** to erase leftward. Or, if you want to change just one character in the name, press ◀ to move the cursor leftward, or ▶ to move it rightward, to that character and press **CANCEL** to erase it. Then re-enter until the name is just as you want it.

- 9** Press **ENTER**.  
The LCD will display the next one-touch number.  
If you *do not* want to enter any more one-touch numbers, press **STOP** to finish.  
If you *do not* want to enter the *currently displayed* one-touch number but *do* want to enter *another* one-touch number, go back to step 2.  
If you *do* want to enter this one-touch number, go back to step 4.

### One-touch *fax* dialing

Now that you've stored a one-touch number or two, let's discuss the ease of using one-touch keys to make calls. You'll probably use one-touch numbers to dial fax calls, not voice calls, most of the time. We'll show you a bit later (this page, right column) how to dial a one-touch *voice* call. But, first, here's how to dial a *fax* call using a one-touch number:

- 1** Insert the document.
- 2** Adjust resolution and contrast if necessary.
- 3** Toggle between transmission from the feeder or from memory if necessary, by pressing **MEMORY TRANSMIT**.
- 4** Press the one-touch key in which you've stored the number.

The machine will handle the call from here, although the exact sequence of events will vary depending upon whether you specified transmission from memory or transmission from the feeder:

*If you specified transmission from memory:*

- Your fax machine scans your document into memory first, then dials the other fax machine.
- The LCD shows the Location ID and the document's width and resolution settings:

```
Katz's Cat Care
A4           Normal
```

**Note:** If the number doesn't have a Location ID, the number appears.

- When the other machine answers, your fax will transmit the document directly from memory. (To review memory transmission, see pages 1.13–1.14.)

*If you specified transmission from the feeder:*

- Your fax machine dials the other fax machine.
- When the other machine answers, your fax feeds the document through its scanner, transmitting as it goes.
- The LCD shows the Location ID and the document's width and resolution settings:

```
Katz's Cat Care
A4           Normal
```

**Note:** If the number doesn't have a Location ID, the number appears.

### One-touch *phone* dialing

To dial a *phone* call using a one-touch number, you *must* have an optional handset attached to your machine. (Contact your authorized Muratec dealer for more information on this optional item.)

Here's how to make the call:

- 1** Obtain a dial tone by doing one of the following:
  - Lifting the handset
  - Press **MONITOR/CALL** to use the monitor speaker.
- 2** Press the one-touch key in which you've stored the number. As the machine dials, it will show the number on the LCD:

```
** Tel Mode **
9-555-2842_
```

**Note:** Remember that your fax machine's monitor speaker is *not* a speakerphone; so, if you dialed by using the monitor speaker, be sure to pick up the handset and speak to the other person when he/she answers!

**Note:** You also can use this method to dial a fax call when, for some reason, you want to hear the other fax's answering fax tones. (Make sure there's a document in the feeder.) When you do hear those tones, press **START** to send the document in the feeder; if you'd lifted the handset, hang it up at this point.

## Erasing a one-touch number

- 1** Press **PROGRAM**, **A**, **2**, **ENTER**. The LCD shows:

Select One-Touch A :No Number Stored	or	Select One-Touch A :9-1-555-345-6789
---	----	---

If A is the key you want to erase, skip to step 3. (However, our examples from here will say "B" rather than "A.")

- 2** Press the key for the one-touch number you want to erase. Here, we've selected **B**:

Select One-Touch B :9-1-555-987-6543
---

- 3** If you change your mind and wish to erase the number stored in a different one-touch key, just press that key before going on step 4.

- 4** Press **ENTER**. The LCD shows:

Erase One-Touch Check Program/Enter
--

**Important:** If you want to quit without erasing the one-touch number you've selected, press **PROGRAM**. The fax will return to step 2.

- 5** Press **ENTER** to erase the number.

Erase One-Touch ** Complete **
-----------------------------------

To erase another one-touch number, repeat steps 2–5. Or press **STOP** to return to standby mode.

## Printing a list of your one-touch numbers

Forgot which number is "in" which one-touch key? Don't worry, just print a list of your one-touch numbers. The list includes each key's letter, the Location ID (if any) and number you've stored in the key.

To print the list, press **PROGRAM**, **A**, **3**, **ENTER**.

## Using speed-dial numbers

As we mentioned before, your fax machine will store up to 100 speed-dial numbers, designated by three-digit identifier codes from *001* (the first number) through *100*.

**Important:** When entering the identifier code for a speed-dial number, you must enter leading zeroes, if necessary, to make three digits (e. g., *001* or *027*). Speed-dial number *100* doesn't require leading zeroes.

## Entering or changing a speed-dial number

**Important:** To *erase* a number, see "Erasing a speed-dial number" (page 2.13).

- 1** Press **PROGRAM**, **B**, **1**, **ENTER**. Depending on whether you already have a number entered for speed-dial number *001*, the LCD shows:

Enter Speed-Dial No. 001:No Number Stored	or	Enter Speed-Dial No. 001:9-555-584-6950
--	----	--

If *001* is the speed-dial number you want to set, skip to step 3. (However, our examples from here will say "*005*" rather than "*001*.")

- 2** Use the numeric keypad to enter the desired speed-dial number's three-digit identifier code. Here, we've entered *005* and the LCD shows either:

Enter Speed-Dial No. 005:No Number Stored	or	Enter Speed-Dial No. 005:9-555-397-0123
--	----	--

- 3** If you change your mind and want to select a different speed-dial number, just repeat step 2 until the desired number appears, then go on to step 4.

- 4** Press **ENTER**. Depending on whether you already have a number entered for this speed-dial number, the LCD now shows either:

005:Fax Number _	or	005:Fax Number 9-555-397-0123_
---------------------	----	-----------------------------------

- 5** Use the numeric keypad to enter the speed-dial number *exactly* as your machine should dial it, including whatever access codes your phone system may require. (You may want to review "Special dialing characters," page 2.8.) The number can be up to 40 characters in length:

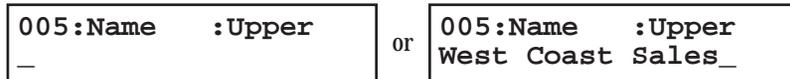
005:Fax Number 9-1-555-567-1234_
-------------------------------------

Your display can show only 20 characters at a time. To view characters beyond those 20 (such as with an international long-distance number), press ◀ to scroll leftward or ▶ to scroll rightward.

**Note:** If you make a mistake or want to erase characters entered in a previous setting, press **CANCEL** to erase leftward. Or, if you want to change just one character in the number, press **◀** to move the cursor leftward, or **▶** to move it rightward, to that character and press **CANCEL** to erase it. Then re-enter until the number is just as you want it.

**6** When the number is as you want it, press **ENTER** to store it.

**7** The LCD now displays:

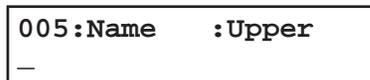


The machine now is prompting you for a name — a Location ID, remember? — so you'll be able to find it easily in the EasyDial directory (see page 2.14).

If you *do not* wish to enter or change this number's Location ID, skip to step 9. If you *do* wish to enter or change this number's Location ID, proceed to step 8.

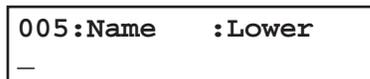
**8** A number's Location ID may be up to 16 characters in length. You enter the Location ID the same way you entered your fax name during EasyStart. We'll review the process, here. (If you're changing a previously entered Location ID, see the note at the end of this step.)

**Important:** As in EasyStart, you enter letters and other non-numeric characters through using the one-touch keys.



The word "Upper" means the machine is currently set for entering only upper-case letters. If you press **R**, the machine will see it as an *R* (not an *r*).

To change it so that pressing a one-touch key will produce a lower-case letter rather than an upper-case letter, press **U2/abc**. The display will change to:



This means pressing one-touch keys will enter lower-case letters: pressing **R** will produce an *r* (not an *R*) on the display.

To switch back for upper-case entries, press **U1/ABC**.

To enter spaces, punctuation and symbols, press **U3/SYMBOL**. This lets you enter the blue characters shown on the one-touch keypad.

To enter a wide variety of characters, use the **CODE** function. (Review the explanation on page 2.3.) Most of the time, you will probably find the **ABC**, **abc** and **SYMBOL** keys to be sufficient.

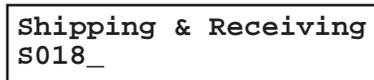
**Note:** If you make a mistake or want to erase characters entered in a previous setting, press **CANCEL** to erase leftward. Or, if you want to change just one character in the name, press **◀** to move the cursor leftward, or **▶** to move it rightward, to that character and press **CANCEL** to erase it. Then re-enter until the name is just as you want it.

**9** Press **ENTER**.  
The LCD will display the next speed-dial number.  
If you *do not* wish to enter any more speed-dial numbers, press **STOP** to finish. If you *do not* wish to enter the *currently displayed* speed-dial number but *do* want to enter *another* speed-dial number, go back to step 2. If you *do* wish to enter this speed-dial number, go back to step 4.

### Fax dialing via speed-dial

To dial a *fax* call using a speed-dial number:

- 1** Insert the document.
- 2** Adjust resolution and contrast if necessary.
- 3** Toggle between transmission from the feeder or from memory if necessary, by pressing **MEMORY TRANSMIT**.
- 4** Press **SPEED DIAL/TEL INDEX**. The LCD will show:  

- 5** Use the numeric keypad to enter the three-digit identifier (such as *018*, in this example) for the speed-dial number you want to dial. The LCD will show:  

- 6** Press **START**.

The machine will handle the call from here. The sequence will vary depending upon whether you specified transmission from memory or transmission from the feeder.

If you specified transmission from memory:

- Your fax scans your document into memory first, then dials the other machine.
- The LCD shows the Location ID and the document's width and resolution settings:

```
Shipping & Receiving
A4           Normal
```

**Note:** If the speed-dial number doesn't have a Location ID, the number appears.

- When the other machine answers, your fax will transmit the document directly from memory. (To review memory transmission, see pages 1.13–1.14.)

If you specified transmission from the feeder:

- Your fax machine dials the other fax machine.
- When the other machine answers, your fax feeds the document through its scanner, transmitting as it goes.
- The LCD shows the Location ID and the document's width and resolution settings:

```
Shipping & Receiving
A4           Normal
```

**Note:** If the speed-dial number doesn't have a Location ID, the number appears.

## Phoning via speed-dial

To dial a *phone* call using a speed-dial number, you *must* have an optional handset attached to your machine. Here's how to make the call:

- 1 Obtain a dial tone by doing one of the following:
  - Lifting the handset
  - Press **MONITOR/CALL** to use the monitor speaker

- 2 Press **SPEED DIAL/TEL INDEX**. The LCD will show:

```
** Tel Mode **
S_
```

- 3 Use the numeric keypad to enter the three-digit identifier (such as *018*, in this example) for the speed-dial number you want to dial. The LCD will show:

```
** Tel Mode **
9-555-5783_
```

**Note:** Remember that your fax machine's monitor speaker is *not* a speakerphone; so, if you dialed by using the monitor speaker, be sure to pick up the handset and speak to the other person when he/she answers!

**Note:** You also can use this method to dial a fax call when, for some reason, you want to hear the other fax machine's answering fax tones. (Make sure there's a document in the feeder.) When you do hear those tones over either your handset or the monitor speaker, press **START** to send the document in the feeder. If you're using your handset, hang it up at this point.

## Erasing a speed-dial number

- 1 Press **PROGRAM, B, 2, ENTER**. The LCD shows:

```
Enter Speed-Dial No. 001:No Number Stored or Enter Speed-Dial No. 001:9-555-584-6950
```

If *001* is the speed-dial number you want to erase, skip to step 3. (However, our examples from here will say "005" rather than "001.")

- 2 Use the numeric keypad to enter the three-digit identifier for the speed-dial number you want to erase. Here, we've selected *005*:

```
Enter Speed-Dial No. 005:9-1-555-987-6543
```

- 3 If you change your mind and wish to erase a different speed-dial number, just go back to step 2 and perform it before going on step 4.

- 4 Press **ENTER**. The LCD shows:

```
Erase Speed-Dial
Check Program/Enter
```

**Important:** If you want to quit without erasing the speed-dial number you've selected, press **PROGRAM**. The fax will return to step 2.

- 5 Press **ENTER** to erase the number.

```
Erase Speed-Dial
** Complete **
```

To erase another speed-dial number, repeat steps 2–5. Or press **STOP** to return to standby mode.

## Printing a list of your speed-dial numbers

You can easily print a list of your speed-dial numbers. The list includes each number's three-digit identifier, the Location ID (if any) and fax number or phone number you've stored.

To print the list, press **PROGRAM, B, 3, ENTER**.

## EasyDial directory dialing

The *EasyDial directory dialing* feature makes your autodialer even more like an electronic phone book. EasyDial sorts and displays numbers alphabetically according to their Location IDs, so you can easily find them and dial them. When the name you want appears, you just press **START** to begin a call (either phone or fax). Your machine's EasyDial directory alphabetizes in the following order: alphabet, numbers and, finally, symbols.

- 1 If you want to use EasyDial to make a regular phone call, *make sure there's no document in the feeder* and then skip to step 4. If you want to use EasyDial to send a fax, insert the document.
- 2 Adjust resolution and contrast if necessary.
- 3 If you want to toggle between transmission from memory and transmission from the feeder, press **MEMORY TRANSMIT**.
- 4 Press **SPEED DIAL/TEL INDEX** twice. The LCD shows the *alphabetically first* listing in your fax machine's EasyDial directory:

Telephone Index [A] ABC Company :A
---------------------------------------

**Note:** If your machine is currently holding any caller-IDs, it will show the caller-ID directory (see pagea 2.26-2.27) on the LCD. If you wish to avoid the caller-ID directory, press any key of **2**, **4**, **6** or **8** on the numeric keypad.

**Note:** Here, the [A] indicates this listing begins with its initial in the alphabet; if it began with a symbol, this would instead be [!]; or, if it began with a number, this would instead be a [0].

(If this listing is the one you want to dial, skip to step 6.)

- 5 Scroll through the listings to find the one you want. You do this by pressing certain keys on the numeric keypad:
    - **2** or **8** to select the character set — alphabet, number or symbol — for the *first* character of the Location ID.
    - **4** or **6** to check different listings within that character set.
- Note:** The scrolling is “open-ended.” For example, when you run out of listings beginning with alphabet “A”, pressing **4** or **6** automatically moves you into listings beginning with other characters.

- 6 When the LCD is showing the name you want to dial, press **START**.
  - If there *is* a document in the feeder, your machine will dial a *fax call* to the selected autodialer number.
  - If there *isn't* a document in the feeder, your machine will activate the monitor speaker and dial a regular phone call. (Remember that, to make a regular phone call from your machine, you must have attached an optional handset.) At this point, you may either:
    - Lift the handset now
    - or*
    - Listen to the monitor speaker until you hear the other person answer, and then lift the handset.

### What if an EasyDial call doesn't go through?

If an EasyDial call fails (for example, because of a busy signal), what happens next depends upon the kind of call it was.

*If it was a fax call ...*

... Your fax machine automatically redials the number after the redial interval (see page 1.16). It keeps trying until either of the following occurs first:

- It successfully reaches the other number (and, if it's a fax call, makes contact with the machine on the other end).
- It has automatically redialed the number the last try (see page 1.15).

*If it was a regular phone call ...*

... You'll have to redial manually:

- 1 Obtain a dial tone by **either** lifting the handset or pressing **MONITOR/CALL**.
- 2 Press **REDIAL/PAUSE**.

# It's a great phone, too

As you've probably guessed by now, your fax machine is a great phone, too! Let's see just *how* good it is by looking briefly at the machine's telephone features.

**Important:** All of the instructions on this page assume you have attached an optional handset to your fax machine.

---

## Redial

Press **REDIAL/PAUSE** to — you guessed it! — redial the last number you dialed. (Be sure *that* attempt, too, was also a regular phone call. In a multi-user setting, someone else may have quickly sent a fax without your knowing it.)

---

## Hold

You can put a call on hold during a conversation by pressing **HOLD/DIALING OPTIONS**. The LCD will show:

\*\* On Hold \*\*

At this point, you can either hang up the handset or leave it off the hook. To return to your conversation:

- If you hung up the handset, pick it up.
- If you didn't hang up the handset, press **HOLD/DIALING OPTIONS** again.

---

## You can EasyDial regular phone calls, too

Just in case you didn't notice, the EasyDial directory dialing feature is available for regular phone calls as well as fax calls. Review the EasyDial instructions on page 2.14 for more information.

## On-hook dialing

Because your machine has a monitor speaker, you can dial without picking up the handset. For hands-free dialing:

- 1 Press **MONITOR/CALL**. You'll hear a dial tone (unless you have set your speaker volume to *Off*; see page 1.8–1.9), and the LCD will show:

\*\* Tel Mode \*\*

- 2 Dial the number you want. You may use either the numeric keypad, a one-touch key or a speed-dial number.

**Note:** Remember, your fax machine's monitor speaker is *not* a speakerphone. Be sure to pick up the handset if the other person answers!

**Note:** You can also dial a fax call this way if, for some reason, you want to hear the other machine's answering fax tones. (Make sure there's a document in the feeder.) When you do hear those tones, press **START** to send the document.

---

## Changing the dialing type

If your fax machine is on a pulse (not tone-dialing) line, switch from pulse dialing to tone (DTMF) dialing. Use the # (pound) key on the numeric keypad (the LCD will show) after the actual phone number but before any characters (such as a long-distance carrier's access code) which must be in DTMF tone.

**Note:** Do not use on a tone line.

**Note:** When you hang up the handset, your machine will return to "pulse" dialing for the next call.

---

## Dialing in the event of a power failure

Your fax machine can receive a telephone call using your handset even in the event of a power failure, *but it cannot* send or receive a fax document.

# Broadcasting

## The basics of broadcasting

The fastest way to fax one document to *many* recipients is by *broadcasting* — and your fax machine has very powerful broadcasting capabilities. **You can use broadcasting from *any* function requiring the entry of a fax number!** That means you can perform *delayed* broadcasting (see pages 2.19–2.20), *polling* broadcasting (see pages 2.23–2.24) and even broadcasting to “hub” units for *relay broadcast initiation* (see pages 2.17–2.18).

In an ordinary broadcast, you send the fax as you normally would, except for one change: you just add more fax numbers! You can enter up to 150 numbers (20 normally dialed numbers, plus 130 autodialer numbers).

We'll assume you've become familiar with regular fax transmission, and we'll shorten the instructions a bit below.

- 1 Insert the document and make any necessary adjustments as usual.
- 2 Press **BROADCAST**.
- 3 Enter the *first* fax number — a one-touch number, a speed-dial number or just a regular number dialed from the numeric keypad as usual.
- 4 To add each *successive* fax number, press **BROADCAST** between each one to insert a *comma*, then enter the number as in step 3. You can specify up to 150 numbers (see first paragraph, above) for a broadcast.

```
Press Start  
C,S098,J,9-5551204
```

**Important:** Do **not** insert a comma after the *last* fax number.

**Note:** If you enter characters by mistake, just press **CANCEL** to clear them before proceeding.

- 5 Press **START**. Your fax machine will scan the document into memory and then send it to each number you've entered.

The main idea is: when it's time to enter the fax number for your document, you enter multiple numbers until you've either reached 150 numbers or finished dialing all the numbers you want to dial for this document.

Or to save time, you can dial many numbers at once by using the machine's Programmable keys. For more information, see “Programming a broadcast / Group” on page 2.35.

## Delayed broadcasting

What if you want the broadcast to happen later? That's the purpose of setting up a *delayed broadcast*.

**Note:** The *main* discussion of delayed commands comes up in the “Delayed transmission” section (pages 2.19–2.20). You may want to read that material before proceeding.

- 1 Follow steps 1–4 of “The basics of broadcasting” (left column).
- 2 Press **COM-OPTIONS**, **ENTER**.
- 3 Use the numeric keypad to enter the day of the month and time when you want the fax to perform the broadcast. Here, we've set it to occur at 10:15 PM on the 30th.

```
Delayed  
Enter Time: 30/22:15
```

When finished, press **ENTER** to save the setting.

- 4 Now, press **START**. Your machine will return to its normal standby mode, while showing this on the LCD:

```
** Reserved **  
Dec 29 1998 17:17
```

This means your fax machine is “reserved” for the delayed broadcast you just programmed, but it can still be used by others to send and receive faxes if your document is stored in memory.

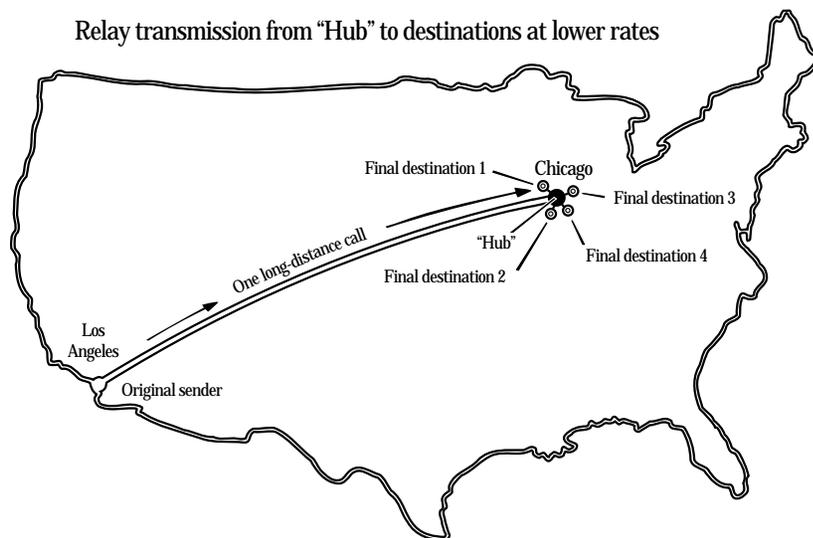
## Relay broadcasting and relay broadcast initiation

*Relay broadcasting* is a powerful function that takes advantage of a remote Muratec “hub” fax machine’s memory to reduce your total communication costs.

A “hub” fax machine is one to which you send a document, so the “hub” can *relay* it to other machines which you don’t actually call. The “hub” performs a *relay broadcast*, and the machine which sends the original document to the “hub” has performed a *relay broadcast initiation*. Your fax machine can only *send to* a “hub” unit (it cannot be a “hub” unit).

### How it works

Let’s say you’re in Los Angeles and need to fax the same document to four locations in the Chicago area. You could send four normal fax transmissions, but that would be four long-distance calls. But with relay broadcast initiation, you send the document *once* to your Chicago office’s “hub” fax, which then sends it on to each of the four locations.



Now, let’s be a little more specific about what happens when you perform relay broadcast initiation:

- You use your fax machine to send a document to at least one call group in a remote “hub” machine’s autodialer. This can occur either immediately or as a delayed command (see pages 2.19–2.20).
- The remote “hub” unit receives your document and stores it in memory.
- The remote machine retransmits — *relays* — the document to each fax number in each call group you specified. This is the *relay broadcast* you *initiated*.

## Setting up a relay broadcast initiation

For you to perform relay broadcast initiation, three things must be true:

- The remote fax machine must be a Muratec fax machine with “hub” capability.
  - Note:** If you’re not sure whether the unit you want to transmit to is a true “hub” unit, please consult your authorized Muratec dealer.
- The call group(s) must exist on the remote fax machine.
- You must know each call group’s two-digit identifier number.

To set up a relay broadcast initiation:

- 1** Insert the document and make any necessary adjustments as usual.
- 2** Press **COM-OPTIONS** *two times* and then press **ENTER**. The LCD will show:
 

Relay Tx  
 Group No.            \_
- 3** Use the numeric keypad to enter the two-digit identifier of each applicable call group in the remote “hub” fax machine you’ll be calling. You may specify up to 10 groups for each relay broadcast initiation. **Do not press START**. To add each group after the first one, press **COM-OPTIONS** to add a comma. Below, we’ve entered **2, COM-OPTIONS, 4**.

Relay Tx  
 Group No.            2, 4\_

**Important:** Do **not** insert a comma after the *last* group number.

**Note:** If you enter characters by mistake, just press **CANCEL** to clear them before proceeding.

- 4** Press **ENTER**. The LCD will show:

Enter Fax Number  
 \_

- 5** Enter the fax number for the remote “hub” unit. You may either press a one-touch key, enter a speed-dial number or just use the numeric keypad as usual. **Do not press START**.

- 6** What you do now depends upon when you wish to begin initiating the relay broadcast.

- If you want it to begin *now*, skip to step 8.
- If you want to *delay* it, press **COM-OPTIONS, ENTER**.

**Note:** For more information on delayed transmission, see pages 2.19–2.20.

## Beyond the basics

- 7** Use the numeric keypad to enter the day of the month and time when you want to begin initiating the relay broadcast.

```
Delayed
Enter Time: 14/14:00
```

When the entry is complete, press **ENTER**.

- 8** Press **START**.

If, in step 6, you chose an immediate relay broadcast initiation, your fax machine will begin dialing the remote "hub" machine. However, if you requested a delayed command, the machine will display "Reserved" on the LCD's top line. This means the command is in memory.

# Delayed transmission

Take advantage of lower evening and weekend long-distance rates with *delayed transmission*. Your fax machine can store up to 50 delayed commands, each of which you can program up to 31 days in advance.

**Important:** If you program a full 50 delayed transmission commands, no further *memory* transmission is possible until the machine performs at least one of the delayed commands. (To review memory transmission, see pages 1.13–1.14.) However, you always can transmit from the feeder by using on-hook dialing or an optional handset (see page 1.15).

## Setting up a delayed transmission

**Important:** Your machine remembers only the *day* of the month, not the month itself, when it's supposed to perform a delayed transmission. So for example, if you want your fax to do something at 5:05 PM on **June 26**, don't make that setting sooner than 5:06 PM on **May 26**.

To set up a delayed transmission:

**1** Insert the document and make any necessary adjustments as usual.

**2** Press **COM-OPTIONS**. The LCD will show:

```
1.Delayed
  Com-Options/Enter
```

**3** Press **ENTER**. The LCD shows the current day of the month, followed by the current time (in 24-hour format, as you'll recall):

```
Delayed
Enter Time: 06/17:16
```

**4** Use the numeric keypad to enter the day of the month and the time when you want the fax to perform the delayed transmission.

**Note:** To move the cursor to a specific digit, press **◀** to move the cursor leftward, or **▶** to move it rightward, to that digit.

Here, we've set the transmission to occur on the 11th at 11:05 PM:

```
Delayed
Enter Time: 11/23:05
```

**5** When the date and time entry is set as you want, press **ENTER** to save the delayed transmission. The LCD shows:

```
Enter Fax Number
```

**6** Enter the fax number for the delayed transmission document. You may either press a one-touch key, enter a speed-dial number or just use the numeric keypad to enter the fax number.

**Note:** If you make a mistake or want to erase characters entered in a previous setting, press **CANCEL** to erase leftward. Or, if you want to change just one character in the number, press **◀** to move the cursor leftward, or **▶** to move it rightward, to that character and press **CANCEL** to erase it. Then re-enter until the number is just as you want it.

**7** Press **START**. Your machine will return to its normal standby mode, while showing this on the LCD:

```
** Reserved **
Dec 06 1998 17:17
```

This means your fax machine is “reserved” for the delayed transmission command you just programmed.

If you had set the machine for transmission from memory, it will scan the document into memory, after which you can use the machine normally.

If you had set the machine for transmission from the feeder, the machine can *receive* faxes but can't *transmit* until your document has been saved.

**Important:** If you've stored too much information in your machine's memory, a “Memory Overflow” message may appear on the LCD. This appears because 1) too many pages have been stored in the memory, **or** 2) the pages that are stored have too much information on them for your fax machine to remember.

If this message appears, press **START** to tell your fax to keep as many pages in memory as possible, or press **CANCEL** to delete from memory all pages stored during this operation (but not previous operations).

## Reviewing or cancelling delayed commands

If you've stored a delayed command in your fax machine, it will hold it in memory until it either completes the command successfully or reaches its maximum number of redial attempts (see pages 1.15–1.16). Your machine can store up to 50 delayed commands. It identifies each by a two-digit *command number* ranging from 01 to 50.

The same procedure lets you display your machine's stored commands and gives you a chance to cancel them, if necessary:

### 1 Press REVIEW COMMANDS.

- **If your machine is currently holding *no* delayed commands** — It will beep briefly and display "No Command" on the LCD and then return to its standby mode.
- But if there *are* commands in your machine's memory, the LCD will show:

```
C01:9-5552311
Program/Cancel
```

Here, you see *command 01*, followed by the phone number it is set to dial. If the command is to perform a *broadcast*, "Broadcast" will appear instead of the phone number. (See "Broadcasting," pages 2.16–2.18.)

**Note:** If your machine is attempting to perform a command *now*, it will appear on the display.

To cancel this command, skip to step 3.

To review a different command, proceed to step 2.

### 2 If necessary, press PROGRAM repeatedly to scroll through currently stored commands.

**Note:** You may stop this operation any time you want by pressing STOP.

### 3 If you want to cancel the currently shown command, press CANCEL. The LCD will show:

```
C01:9-5552311
Check Program/Cancel
```

### 4 To *keep* this command but to continue reviewing stored commands, press PROGRAM.

To *keep* this command *and* stop reviewing commands, press STOP to return your machine to standby mode.

To go ahead with cancelling the command, press CANCEL again. Go back to step 2 to view other delayed commands.

## Printing a delayed command list

Can't remember some details about a delayed transmission command you set up? Or has someone else in your office set up a delayed command, and now you have no idea why the machine is "reserved" and how long it'll stay that way?

For situations like these, your machine can print a *command list* which tells you:

- The command's identification number
- The phone number, or "remote location"
- The start time (which appears in the same *DD,HH:MM* format you saw in the previous instructions for actually setting up a delayed transmission command)
- A "note" telling if the command is a *polling* or *relay broadcast initiation* operation (see pages 2.23–2.24 for more on *polling* and 2.17–2.18 for more on *relay broadcast initiation*).
- Any selected call groups for relay broadcast initiation

To print a delayed command list, press PROGRAM, F, 1, ENTER.

---

## Printing a stored document

Your fax machine can produce a printout of each document stored for delayed transmission. You'll need to know the document's command number, which you can confirm by either reviewing the commands (this page, left column) or printing a delayed command list (see above).

### 1 Press PROGRAM, F, 2, ENTER. The LCD shows:

```
Print Stored Doc.
Command No.: _
```

### 2 Use the numeric keypad to enter the command's identification number, 01–50. For example, we could enter the following for the very first command, 01:

```
Print Stored Doc.
Command No.: 01_
```

### 3 Press ENTER. Your fax machine will print a copy of the stored document.

# Special features

Your fax machine has a number of special features to make your communications easier. We'll cover them here.

## Cover page

For your convenience, your fax machine can store a *cover page* to send at the beginning of each outgoing fax. This page includes the current date and time, your Location ID and your fax number (as stored in the TTI) and a message of up to 40 characters in length. The information appears in a box similar to this:

<b>Fax Message From:</b>	
Dec 19 1998 14:00	
<u>Name:</u>	<u>And Sew It Goes Co.</u>
<u>Fax Number:</u>	<u>972-555-2009</u>
We appreciate your business. Thank you!	

**Note:** If you send to another plain-paper fax machine, that machine will print this cover page as a full-sized page with the information box at the top, followed by the actual document you're faxing.

How large a bottom margin will result when a *thermal*-paper fax machine prints the cover page varies from one model to the next. The only way to tell for sure is to send a transmission — with the cover page feature activated (see right column) — to the specific thermal-paper machine in question and see what happens.

## Toggling the cover page

**1** Press **PROGRAM**, **H**, **1**, **ENTER**. The LCD shows:

Cover Page:      Off Program/Enter
---------------------------------------

**2** To tell the fax machine it *should* send a cover page before each document you transmit, press **PROGRAM** once or twice until your desired choice appears.

Cover Page:      On Program/Enter
--------------------------------------

**Note:** If you want to abort the operation so the cover page feature *won't* work, press **PROGRAM** again (so that "Off" appears) and press **STOP**.

**3** Press **ENTER** to save the setting.

Now the cover page feature is working but your message line (shown in the example, *left*, as "We appreciate your business. Thank you!") is blank. To enter that message, see "Entering the cover page message," next page.

## Entering the cover page message

**1** Press **PROGRAM, H, 2, ENTER**.

**2** Now, use the one-touch keypad to enter a message for the cover page. The message can be up to 40 characters in length. You enter the message the same way you entered your fax name during EasyStart. We'll review the process here. (If you're changing a previously entered message, see the note at the end of this step.)

**Important:** As in EasyStart, you enter letters and other non-numeric characters through the one-touch keys.

Cover Page :Upper

The word "Upper" means the machine is currently set for entering only upper-case letters. If you press **R**, the machine will see it as an *R* (not an *r*).

To change it so that pressing a one-touch key will produce a lower-case letter rather than an upper-case letter, press **u2/abc**. The display will change to:

Cover Page :Lower

This means pressing one-touch keys will enter lower-case letters: pressing **R** will produce an *r* (not an *R*) on the display.

To switch back for upper-case entries, press **u1/ABC**.

To enter spaces, punctuation and symbols, press **u3/SYMBOL**. This lets you enter the blue characters shown on the one-touch keypad.

To use the **CODE** function to enter a wide variety of characters, please review the explanation on page 2.3. Most of the time, you will probably find the **ABC**, **abc** and **SYMBOL** keys to be sufficient.

**Note:** If you make a mistake or want to erase characters entered in a previous setting, press **CANCEL** to erase leftward. Or, if you want to change just one character in the message, press **◀** to move the cursor leftward, or **▶** to move it rightward, to that character and press **CANCEL** to erase it. Then re-enter until the message is just as you want it.

**3** When the message is as you want it, press **ENTER** to save it.

## Printing the cover page

To confirm that the cover page is as you want, it's easy to print a sample cover page from your fax machine. Press **PROGRAM, H, 3, ENTER**.

## Managing your fax with its journal and reports

### Setting the activity journal

Just as a checkbook records your daily financial transactions, your fax machine keeps an *activity journal* which records the machine's 50 most recent fax transactions. The activity journal lists the following information for each fax transaction:

- *Assigned number*, starting anew each day at 1
- *Remote location* called
- *Resolution mode*
- *Starting date and time*
- *Duration*, in minutes and seconds
- *Length*, in number of pages
- *Result of the call* — If preceded by an asterisk (\*), this signifies an ECM communication (see page 2.5)
- *Any special operations* — For example, a fax call made using an optional handset will appear as "Manual"

If you wish, your fax machine will print the activity journal automatically after 50 transactions. To toggle this automatic printing on or off:

**1** Press **PROGRAM, G, 1, ENTER**. The LCD will show:

Auto Print: Off  
Program/Enter

If this setting you see is acceptable, skip to step 3. Otherwise, proceed to step 2.

**2** To change the setting, press **PROGRAM** once or twice until your desired choice appears. Here, we've chosen *On*.

Auto Print: On  
Program/Enter

**3** Press **ENTER** to save the setting.

### Printing an activity journal manually

To see an activity journal *immediately* without waiting, just print the journal manually at any time by pressing **PROGRAM, G, 2, ENTER**.

## Setting the reports: TCRs

You can set your fax machine to print a *transmit confirmation report (TCR)*. You can receive a TCR after sending a fax to *any* Group 3 fax machine.

The TCR gives you the following information for each communication:

- *Remote location* called
- *Resolution mode*
- *Starting date and time*
- *Duration*, in minutes and seconds
- *Length*, in number of pages
- *Result* of the call
- *Any special operations* — For example, a fax call made using an optional handset will appear as “Manual”
- *Sample of the document* — An image of the first page of the document

If an error occurs, the TCR tells you the remote location called and the *error code* and *error message* (see pages 3.8–3.10).

To set the printing for a TCR:

- 1 Press **PROGRAM**, **G**, **3**, **ENTER**. The LCD will show:

```
TCR:           Off
          Program/Enter
```

If the setting you see is acceptable, skip to step 3. Otherwise, proceed to step 2.

- 2 To toggle the setting, press **PROGRAM** once or twice until your desired choice appears. Here, we've chosen *On*.

```
TCR:           On
          Program/Enter
```

- 3 Press **ENTER** to save the setting.

To turn on (or off) the TCR feature for *only* the next fax transmission, press **REPORT**.

What happens when pressing this key will vary depending upon the setting you specified previously:

- If the setting is on (the light next to the key glows), the fax machine disables the printing of the TCR (the light doesn't glow).
- If the setting is off (the light doesn't glow), the fax machine activates automatic printing of a TCR (the light glows).

If you're scanning or transmitting a document and you want to turn on (or off) the TCR feature for this fax transmission only:

- If you specified transmission from memory, press **REPORT** while the fax scans your document into memory.
- If you specified transmission from the feeder, press **REPORT** while the fax machine communicates with the other fax machine.

after your current transmission, your machine will return to the setting you specified previously (step 2, left column).

## Polling

*Polling* allows someone to fax a document to you *without* the other person having to make (and pay for) the call. Your machine can perform:

- *Regular polling* — Retrieves a document from the remote fax machine.
- *F-Code polling* — Retrieves a document stored as a file in the remote F-Code compatible fax. This is possible in communications with Muratec fax machines, as well as other manufacturers' F-Code compatible fax machines. For more information on the F-Code polling feature, see “F-Code communication” (pages 2.28-2.33).

### Regular polling

To perform regular polling of a document from any remote fax machine:

- 1 Make sure that the document is actually sitting in the remote fax machine.
- 2 Press **COM-OPTIONS** *three* times and then press **ENTER**. The LCD will show:

```
Enter Fax Number
```

- 3 Enter the remote fax machine's number by either pressing a one-touch key, entering a speed-dial number or just dialing the number normally by using the numeric keypad.

**4** To perform the regular polling *now*, skip to step 8.  
To perform *delayed* regular polling, proceed to step 5.

**5** Press COM-OPTIONS, ENTER. The LCD will show:

```
Delayed
Enter Time: 15/17:05
```

**6** Use the numeric keypad to enter the date and time when your machine should perform the delayed regular polling.

**7** Press ENTER.

**8** Press START.

When it performs the polling command, your machine will dial the number and, upon making contact with the other machine, begin receiving the document as if the other machine had placed the call.

### The other side of the coin: *being* polled

Not only can you poll, you can also *be* polled. To set up a document for regular polling:

**1** If your fax machine is set for Tel Ready reception, press AUTO ANSWER to change it to the Auto Answer mode, causing the Auto Answer light to glow.

**Important:** Your machine **can't** be polled if it's in Tel Ready mode.

**2** Insert the document.

**3** Adjust the resolution and contrast if necessary. (Your fax machine will be transmitting to the machine doing the polling.)

**4** Press PROGRAM, D, 1, ENTER.  
Your fax will scan the document into memory and return to standby mode.

**Note:** If you want to return to the "Tel Ready" mode after the remote machine has polled your document, press AUTO ANSWER. This will cause the Auto Answer light on the control panel to turn off.

**But do this *only* after you are sure the remote machine has polled your document.**

### Erasing a stored polling document

To erase a document you've stored for regular polling from your machine's memory, press PROGRAM, D, 2, ENTER.

### Printing a stored polling document

To print, *without erasing*, a document you've stored for regular polling, press PROGRAM, D, 3, ENTER.

### Limiting polling access to your fax machine

Your machine's *closed network* setting (see page 2.49) works for polling, as well. If a calling fax doesn't "present" the proper passcode, it cannot poll from your fax.

**Note:** However, if you're using the Block Junk Fax feature (see pages 2.49–2.50), even incoming calls which meet the passcode test must come from appropriate phone numbers.

---

## OneLine + distinctive ring detection

It used to be that, to have two phone numbers, you had to have two phone lines, along with the expensive phone equipment that goes with it. But many phone companies now offer their customers a special service which makes it possible for one phone line to do the work of two.

With this service, you physically still have one phone line, but electronically, you have two phone *numbers*. Your phone recognizes these different numbers and rings differently for each one.

For example, this makes it easy for you to have both a business number and a home number on one phone line, so you can answer one with "Jane Doe Consulting," and the other with "Hello." You get the idea. This works because you can tell the difference between the distinctive *patterns* of the two rings.

Your fax machine, too, is smart enough to tell the difference between two different numbers that is ringing it. All you have to do is give it a little help at the beginning and begin to enjoy the benefits of its *OneLine + distinctive ring detection (DRD) feature*.

In order to use OneLine + DRD, your phone company must set up your distinctive ring service. When it does, it will assign a *ring pattern*, expressed in time. For example, the standard telephone ring is 2 seconds "on" (ringing) and 4 seconds "off" (silent), after which it repeats itself (hence the term, *ring pattern*).

Some telephone companies provide only a very general description — for example, “short-short-long” — of their DRD ring patterns. Fortunately, though, your fax has eight possible distinctive ring patterns for use with OneLine + DRD. One of them should work with your phone company’s DRD service. This chart lists the patterns:

Pattern	One complete ring pattern (seconds)
<b>A</b>	0.8 on, 0.4 off, 0.8 on, 4.0 off
<b>B</b>	0.4 on, 0.2 off, 0.4 on, 0.2 off, 0.8 on, 4.0 off
<b>C</b>	0.3 on, 0.2 off, 1.0 on, 0.2 off, 0.3 on, 4.0 off
<b>D</b>	1.0 on, 0.5 off, 1.0 on, 3.5 off
<b>E</b>	0.5 on, 0.5 off, 0.5 on, 0.5 off, 1.0 on, 3.0 off
<b>F</b>	0.5 on, 0.5 off, 1.0 on, 0.5 off, 0.5 on, 3.0 off
<b>G</b>	0.4 on, 0.6 off, 0.4 on, 4.6 off
<b>H</b>	1.5 on, 0.5 off, 0.5 on, 3.5 off
<b>I</b>	2.0 on, 4.0 off, 2.0 on, 4.0 off

For example: pattern C is 0.3 seconds ringing, 0.2 seconds silent, 1 second ringing, 0.2 seconds silent, 0.3 seconds ringing and 4 seconds silent; then it goes back to the first 0.3-second ring and starts over.

To use DRD on your fax machine:

**1** Contact your phone company and confirm that the phone company has set up DRD service for you. If possible, also find out which distinctive ring pattern the phone company has assigned you.

**2** Press **PROGRAM**, **J**, **1**, **8**, **ENTER**. The LCD will show:

```
DRD:           Off
           Program/Enter
```

If you see the setting you wish, skip to step 4. Otherwise, proceed to step 3.

**3** To change the setting, press **PROGRAM** once or twice until your desired choice appears. Here, we’ve chosen *On*.

```
DRD:           On
           Program/Enter
```

**4** Press **ENTER**.

```
Ring Pattern:  A
           Program/Enter
```

**5** If “A” is the pattern you want, skip to step 7. If not, proceed to step 6.

**6** Press **PROGRAM** repeatedly until your desired pattern appears (in our example here, “C”):

```
Ring Pattern:  C
           Program/Enter
```

**7** Press **ENTER** to set your machine to the displayed ring pattern.

**Important:** If your telephone company gives you only very general ring pattern specifications, *or* if you otherwise encounter a problem while trying to use your machine’s DRD feature, **please try ALL of the listed ring patterns**. (If you still have a problem after trying **all** of the patterns, please call the Muratec Customer Support Center (from the United States, call 972 364-3350; for the number to call from Canada, check your documentation found inside your fax machine’s box).

**Important:** With your machine set for using DRD, it won’t respond to any ring pattern other than the one you’ve selected, above. To reset the fax so it will respond once again to normal rings, repeat steps 2–4, above — *except*, in step 3, toggle it to “Off.” Your fax now will respond normally.

## Call request

Wondering why your monitor speaker’s activation key is called **MONITOR/CALL**? Now, we’ll explain the *CALL* part of the name. It may be hard to believe, but you actually can send or receive a fax message *and* have a regular phone conversation *on the same call* (although not at the same time). This is called a *call request*. It doesn’t matter whether you’re sending the fax or receiving it. You may fax first and then talk, or talk first and then fax.

**Important:** For this feature to work, the remote fax machine must have a similar call-request capability. Your machine must also have an optional handset attached.

## Faxing/receiving first, then talking

To send or receive a fax first and then talk:

- 1** While your fax machine is sending or receiving the fax, press **MONITOR/CALL**.
- 2** At the remote fax machine, the ringer will ring after that machine receives each page.

- 3 If someone answers at the remote fax machine, your fax machine will ring several times. If so, pick up the optional handset. In a few seconds, the line will open and you can begin your conversation.

### Talking first, then *sending* a fax

To talk first and then send a fax:

- 1 When your phone conversation is finished, *don't hang up*.
- 2 Insert the document you want to fax.
- 3 Adjust the resolution and contrast if necessary.
- 4 Tell the person at the other fax machine to press **START** and to hang up his/her handset. *Don't hang up **your** handset yet!*
- 5 When you hear fax tones, press **START** and hang up your fax machine's optional handset. Your fax machine will send the document.

### Talking first, then *receiving* a fax

To talk first and then receive a fax:

- 1 When your phone conversation is finished, *don't hang up*.
- 2 Tell the person at the other fax machine to press **START** and to hang up his/her handset. *Don't hang up your handset yet!*
- 3 When you hear fax tones, press **START** and hang up your machine's optional handset. Your machine will receive and print out the document.

### Responding to a call request

If someone requests a call *from* you during a fax communication, you'll hear a long ring after the receiving machine has received each page. To answer the call request:

- 1 Lift your machine's optional handset, and listen for a few seconds. You may hear a brief series of fax tones.
- 2 Shortly, the line will open and the person at the other end of the line will answer. You and the other person now can have a normal phone conversation.

## Caller-ID

Caller-ID is your local telephone company's service that allows you to see a display of the caller's phone (or fax) number or name before *either* your fax machine automatically receives the call *or* you pick up the optional handset.

If you order caller-ID service from your local telephone company, the following information will show on the LCD while your machine is ringing:

- The first 16 characters of the caller's phone number or name on the LCD — If both the caller's phone number and name are received, only the name will appear on the LCD.  
... *or* ...
- "Private," meaning that the caller intentionally blocked the transmission of his/her ID.  
... *or* ...
- "Out of area," meaning that the call came from outside your caller-ID service area.

**Note:** Your fax machine cannot receive the caller-ID in the following cases:

- While *either* the fax machine is communicating *or* you are making a telephone call.
- The number of rings (see page 2.5) is set to one ring. Please set the number of rings to two or more rings to receive the caller-ID.
- The line condition is poor.

**Note:** For more information about caller-ID service, please contact your local telephone company.

### Caller -ID directory dialing

In its memory, your fax machine keeps the 10 most recent incoming caller-IDs. When the 11th call is received, the oldest caller-ID will be erased automatically.

**Note:** To use the caller-ID directory, at least one caller-ID must be received.

- 1 If you want to use caller-ID directory to make a regular phone call, *make sure there is no document in the feeder* and then skip to step 4. If you want to use caller-ID directory to send a fax, insert the document.
- 2 Adjust the resolution and contrast if necessary.
- 3 If you want to toggle between transmission from memory and transmission from the feeder, press **MEMORY TRANSMIT**.

- 4** Press **SPEED DIAL/TEL INDEX** twice. The LCD shows the latest caller-IDs.  
**Note:** If your machine is currently holding no caller-IDs, it will show the EasyDial directory (see page 2.14) on the LCD.
- 5** Scroll through the listings to find the one you want. You do this by pressing **SPEED DIAL/TEL INDEX**.  
**Note:** Do not press **2, 4, 6** or **8** on the numeric keypad. If you press **2, 4, 6** or **8**, the fax machine will change to the EasyDial directory.
- 6** When the LCD is showing the caller-ID you want to dial, press **START**.
  - If there *is* a document in the feeder, your machine will dial a *fax call* to the selected number.
  - If there *isn't* a document in the feeder, your machine will activate the monitor speaker and dial a regular phone call. (Remember that, to make a regular phone call from your machine, you must have an optional handset attached.) At this point, you may either:
    - Lift the handset now
    - or*
    - Listen to the monitor speaker until you hear the other person answer, and then lift the handset to begin your conversation.

## Printing the caller-ID List

You can print a list of the caller-IDs for the 10 most recent receptions. The list includes the caller's name (if any), phone number and reception time.

To print the caller-ID list, press **PROGRAM, J, 2, 1, ENTER**.

# F-Code communication

## F-Code: an introduction

The ITU-T, part of the United Nations agency that maintains international telecommunications standards (see the Glossary that begins on page 3.17), has now created a fax industry standard for using sub-addressing and password-based communications with not only other Muratec fax machines but also other manufacturers' machines. One name for this standard is F-Code, and that is what we'll call it in these instructions and on your machine's display.

### How sub-addressing works: think of a mailroom

If you are new to the concept of sub-addressing, think about how someone receives mail addressed to a department within that person's company. For example, mail for Accounting gets to the mailroom for the entire company. The Mail Department then routes the mail to Accounting.

That's the idea behind sub-addressing. Once your fax and another F-Code-compatible fax begin their communication, they exchange special F-Code signals to indicate just where the fax really should go. It's as if the sending fax were saying, "Take this one and deliver it to room 48" and the receiving fax were replying, "48? OK, will do."

For greater security, you can set up an ITU-T-compatible sub-address and password with F-Code, which lets you use secure transmission and polling in communication with any other fax machine, so long as it, too, uses the F-Code standard from ITU-T.

To use ITU-T sub-addressing and password features, you must create F-Code boxes in your machine. Your machine can use up to 10 of these boxes. You can store up to 30 documents (not pages) into each F-Code box.

---

## Creating or modifying an F-Code box

The first step to using the F-Code box is to create F-Code boxes in your fax machine. This procedure also lets you modify existing F-Code boxes.

**Important:** To erase an F-Code box, see "Erasing an empty F-Code box" (page 2.30).

To create or modify an F-Code box:

- 1 Keep pen and paper with you as you follow this procedure. As you decide on a sub-address and enter it (and, if applicable, a password or I.D. code), write it down. Remember to write down which box goes with which sub-address (and passcode, if applicable). When you've completed this procedure, keep the printed record in a safe place.
- 2 Press **PROGRAM, E, 1, ENTER**. Depending on whether you already have a name entered for F-Code box 01, the LCD shows:

```
Select F-Code Box
01:No Number Stored
```

or

```
Select F-Code Box
01:NY Branch Office
```

If this is the F-Code box you want to set, skip to step 4. (However, our sample displays from this point forward will refer to F-Code box 03, rather than F-Code box 01.)

- 3 Use the numeric keypad to enter the two-digit number (01-10) of the F-Code box you want to create or modify. Here, we've entered 0, 3 and see either:

```
Select F-Code Box
03:No Number Stored
```

or

```
Select F-Code Box
03:Muratec America
```

- 4 If you change your mind and want to select a different F-Code box, just use the numeric keypad to enter the correct two-digit F-Code box number before going on to step 5.
- 5 Press **ENTER**. Your next move depends on whether you're creating or modifying the F-Code box:
  - If creating — skip to step 7.
  - If modifying — the LCD asks you to enter the proper I.D. code. Proceed to step 6. The LCD shows:

```
03:Set F-Code Box
Enter I.D. Code:****
```

- 6 Use the numeric keypad to enter the proper I.D. code (not the ITU-T sub-address and not the ITU-T password) and then press **ENTER**.

**Note:** If you enter an invalid I.D. code, the fax machine will reject the attempt and abort this operation.

- 7** The machine now is prompting you for a name for this F-Code box. The LCD shows:

03:Box Name:Upper  
\_ or 03:Box Name:Upper  
Muratec America\_

If you do not want to enter or change this F-Code box's name, skip to step 9. If you do want to enter or change this F-Code box's name, proceed to step 8.

- 8** An F-Code box's name may be up to 16 characters in length. You enter the name the same way you entered your fax name during EasyStart. We'll review the process here. (If you're changing a previously entered name, see the note at the end of this step.)

**Important:** As in EasyStart, you enter letters and other non-numeric characters through the one-touch keys.

03:Box Name:Upper  
\_

The word "Upper" means the machine is currently set for entering only upper-case letters. If you press R, the machine will see it as an *R* (not an *r*).

To change it so that pressing a one-touch key will produce a lower-case letter rather than an upper-case letter, press **u2/abc**. The display will change to:

03:Box Name:Lower  
\_

This means pressing one-touch keys will enter lower-case letters. For example, pressing *r*, will produce an *r* (not an *R*) on the display.

To switch back for upper-case entries, press **u1/ABC**.

To enter space, punctuation and symbols, press **u3/SYMBOL**. This lets you enter the blue characters shown on the one-touch keypad.

To use the **CODE** function to enter a wide variety of characters, please review the explanation on page 2.3. Most of the time, you will probably find the **ABC**, **abc** and **SYMBOL** keys to be sufficient.

**Note:** If you make a mistake or want to erase characters entered in a previous setting, press **CANCEL** to erase leftward. Or, if you want to change just one character in the name, press **◀** to move the cursor leftward, or **▶** to move it rightward, to that character and press **CANCEL** to erase it. Then re-enter until the name is just as you want it.

- 9** Press **ENTER** to save the box's name and continue. The LCD shows:

03:Sub-Address No.  
\_ or 03:Sub-Address No.  
123456\_

The fax machine now asks for this F-Code box's sub-address. This is the essential ITU-T-standard, all-numerical identifier which you must enter in order to communicate with any remote F-Code compatible fax.

If you do not wish to change an existing sub-address, skip to step 11. If you do wish to enter or change the sub-address, proceed to step 10.

- 10** Use the numeric keypad to enter the sub-address to identify this F-Code box. The sub-address can be up to 20 characters in length and include any combination of numbers and the \* and # characters (but no other non-numerical characters). (If you're changing a previously entered sub-address, see the note at the end of this step.)

03:Sub-Address No.  
654321\_

**Note:** The sub-address must be unique to this F-Code box. No other F-Code box in this fax machine can have the same sub-address.

**Note:** If you make a mistake or want to erase characters in a previous setting, press **CANCEL** to erase leftward. Or if you want to change just one character in the number, press **◀** to move the cursor leftward, or **▶** to move it rightward, to that character and press **CANCEL** to erase it. Then re-enter until the number is just as you want it.

- 11** Press **ENTER** to save the sub-address.

**Note:** If you entered a sub-address already being used by another F-Code box, the machine will beep and briefly display the following:

03:Sub-Address No.  
Sub-Address In Use

The machine now returns you to step 10. Please enter a different number for your F-Code box's sub-address.

- 12** Next, the machine asks for your F-Code box's password. This is the password for ITU-T-compatible F-Code fax transactions. The LCD shows:

03:Password  
\_ or 03:Password  
123456789\*#\_

**Note:** You don't need to have a password for the F-Code box. However, using a password will make your F-Code communication much more secure.

If you do not want to enter or change this box's password, skip to step 14.  
If you do want to enter or change this box's password, proceed to step 13.

- 13** Use the numeric keypad to enter this box's ITU-T-compatible password. This password can be up to 20 characters in length and include any combination of numbers and the \* and # characters (but no other non-numerical characters). Here, we've entered *135\*7#9*.

```
03:Password
135*7#9_
```

**Note:** If you make a mistake or want to erase previously entered characters, press CANCEL to erase leftward. Or if you want to change just one character in the password, press ◀ to move the cursor leftward, or ▶ to move it rightward, to that character and press CANCEL to erase it. Then re-enter until the password is just as you want it.

- 14** Press ENTER to save the password. The machine asks for F-Code receiving document storage time. The LCD shows:

```
F-Code Doc Hold Time
Hold Time(0-31): 00
```

If you do not want to set or change the storage time, skip to step 16.  
If you do want to set or change the storage time, proceed to step 15.

- 15** Use the numeric keypad to enter a two-digit number indicating how long, in number of days (00-31), you want your fax machine to keep received documents in this F-Code box. Here, we've entered *09*, for nine days:

```
F-Code Doc Hold Time
Hold Time(0-31) :09
```

**Note:** Your fax machine can store incoming documents in F-Code boxes (up to 30 documents) as long as 31 days, after which it automatically erases the documents. However, if your machine has plenty of memory, you may want to override the 31-day limit in order to keep the documents indefinitely (for you to delete manually when you choose). If so, enter *00*. (You may wish to contact your authorized Muratec dealer regarding optional memory expansion.)

- 16** Press ENTER to save the settings. The LCD now shows:

```
03:Set F-Code Box
Enter I.D. Code:0000
```

The machine asks for your F-Code box's four-digit security I.D. code. This is the I.D. code for the box's security, which you use to (1) print a document any remote F-Code-compatible fax sends to this F-Code box or (2) you enter before you can make any changes to this F-Code box.

If you do not want to change the I.D. code, skip to step 19.  
If you do want to enter or change the I.D. code, proceed to step 17.

- 17** Decide on a four-digit I.D. code (*0001-9999*) for this F-Code box. **Write it down**, and put it in a safe place.

**Important:** After you proceed with step 18, you must know this code to print documents sent to this F-Code box.

**Important:** Do not use *0000* as an I.D. code.

- 18** Use the numeric keypad to enter the four-digit I.D. code for this F-Code box.

- 19** Press ENTER to save the F-Code box information.

To create or modify another F-Code box, repeat steps 3-19.  
To finish, press STOP.

## Erasing an empty F-Code box

You can erase an empty F-Code box (if a box has document received in it, you cannot erase it. See the first "Important" note after step 4, on the next page).

To erase an empty F-Code box:

- 1** Press PROGRAM, E, 4, ENTER. The LCD shows:

```
Select F-Code Box
01:No Number Stored
```

or

```
Select F-Code Box
01:Murata Machinery
```

If this is the F-Code box you want to erase, skip to step 3. (However, our examples from here will refer to F-Code box *03* rather than F-Code box *01*.)

- 2** Use the numeric keypad to enter the two-digit identifier number (*01-10*) of the F-Code box you want to erase. Here, we've entered **0, 3** and see:

```
Select F-Code Box
03:Muratec America
```

- 3** If you change your mind and want to erase a different F-Code box, just go back to step 2 and finish it before going on to step 4.

**4** Press **ENTER**. If the F-Code box is empty, the LCD shows:

```
03: Erase F-Code Box
Enter I.D. Code: ****
```

**Important:** If you select an F-Code box which is *not* empty, the machine beeps and, before returning to step 3, briefly displays:

```
Select F-Code Box
Box In Use
```

Print any documents received in the F-Code box, then repeat this procedure from the beginning to erase the box. Otherwise, select another F-Code box.

**5** Use the numeric keypad to enter the proper four-digit I.D. code. Here, we've entered *2345*:

```
03: Erased F-Code Box
Enter I.D. Code: 2345
```

**6** Press **ENTER**. If you've entered an incorrect I.D. code, your fax machine will reject the attempt and abort this operation. If you've entered the correct I.D. code, the display will show:

```
03: Erase F-Code Box
Check Program/Enter
```

**Note:** If you want to quit without erasing the F-Code box you've selected, press **PROGRAM**. The fax will return to step 2.

**Note:** If you want to quit without erasing *any* F-Code box, press **STOP**. The machine will return to standby mode.

**7** Press **ENTER** to erase the F-Code box.

```
03: Erase F-Code Box
** Complete **
```

To erase another F-Code box, repeat steps 2-7. To finish, press **STOP**.

## Printing a list of your F-Code boxes

You can easily print a list of your F-Code boxes. The list includes each box's identifier number, the box name (if any), sub-address, password and document storage time.

To print the list, press **PROGRAM**, **E**, **2**, **ENTER**.

## Printing a document you receive

When your fax machine receives a document via ITU-T sub-addressing from another fax machine, your machine will print a message alerting the person for whom the document is intended. Then the person has a certain number of days (see page 2.30) in which to print out the message before your machine automatically erases it.

**Note:** For this operation to work, two things must be true:

- You must know the F-Code box's two-digit number.
- You must know the F-Code box's four-digit I.D. code.

To print a received message:

**1** Press **PROGRAM**, **E**, **3**, **ENTER**. The LCD shows:

```
Select F-Code Box
01: Murata Machinery
```

If this box holds the document you want to print, skip to step 3. Otherwise, proceed to step 2.

**2** Use the numeric keypad to enter the two-digit number (*01-10*) of the F-Code box whose contents you wish to print. We've entered *03*:

```
Select F-Code Box
03: Muratec America
```

**3** Press **ENTER**. The LCD shows:

```
03: Print F-Code Doc.
Enter I.D. Code: ****
```

**Note:** If the F-Code box is holding no documents at this time, the machine will briefly display the following before returning to step 2:

```
Select F-Code Doc.
No Document Stored
```

In step 2, be sure to select an F-Code box that is holding at least one document.

- 4 Use the numeric keypad to enter your F-Code box's four-digit I.D. code. Here we've entered *2345*:

```
03:Print F-Code Doc.  
Enter I.D. Code:2345
```

- 5 Press **ENTER**.
  - If you've entered the correct I.D. code, your fax machine will print all documents in — and then erase them from — the F-Code box.
  - If you've entered an incorrect I.D. code, your fax machine will refuse to print the document.

## F-Code transmission and polling

With F-Code, your machine can send secure transmissions to, and perform polling from Muratec fax machines as well as other manufacturers' machines.

You may accomplish such transmissions in either of two ways:

- Programmable one-touch key (see pages 2.34-2.41)
- Direct entry of the ITU-T sub-address and password, which is what we will now describe.

Whether you are sending to or polling from another machine, you have to know the correct sub-address on the receiving machine, as well as the password if that sub-address has one.

**Note:** For F-Code communication to work, three things must be true:

- The remote fax machine must support ITU-T sub-addressing (and password) capabilities.
- A mailbox with an ITU-T sub-address must exist on the remote fax. (It doesn't need to have a password.)
- You must know the ITU-T sub-address and password (if any) information for the mailbox on the remote machine.

### F-Code transmission

- 1 Insert the document.
- 2 Adjust the resolution and contrast if necessary.
- 3 If you want to toggle between transmission from the feeder and transmission from memory, press **MEMORY TRANSMIT**.

- 4 Press **COM-OPTIONS** four times and then press **ENTER**.

```
Enter Sub-Address  
_
```

- 5 Use the numeric keypad to enter the appropriate sub-address in the remote machine. In this example, we've entered *123456*.

```
Enter Sub-Address  
123456_
```

**Note:** If you make a mistake, press **CANCEL** to back up, then enter the correct number.

- 6 Press **ENTER**. The LCD will show:

```
Enter Password  
_
```

**Note:** If you know that this sub-address does not have a password, skip to step 8.

- 7 Use the numeric keypad to enter the appropriate password. In this example, we've entered *654321*.

```
Enter Password  
654321_
```

**Note:** If you make a mistake, press **CANCEL** to back up, then enter the correct number.

- 8 Press **ENTER**. The LCD will show:

```
Enter Fax Number  
_
```

- 9 Enter the fax number either by pressing a one-touch key, entering a speedial number or dialing from the numeric keypad. Do **not** press **START**.

- 10 What you do now depends upon when you wish the transmission to begin.
  - To have it begin *now*, skip to step 13.
  - To delay it, proceed to step 11.

- 11 Press **COM-OPTIONS**, **ENTER**. The LCD will show:

```
Delayed  
Enter Time: 15/17:05
```

**12** Use the numeric keypad to enter the day and time when the transmission should begin, then press **ENTER**.

**13** Press **START**.

If in step 10 you chose an immediate transmission, your fax machine will begin dialing. If you chose a delayed command, the machine will display "Reserved" on the top line of the display, indicating that the machine has stored the command in memory and will perform it later.

## F-Code polling

**1** Press **COM-OPTIONS** five times and then press **ENTER**.

```
Enter Sub-Address
_
```

**2** Use the numeric keypad to enter the appropriate sub-address. In this example, we've entered *123456*.

```
Enter Sub-Address
123456_
```

**Note:** If you make a mistake, press **CANCEL** to back up, then enter the correct number.

**3** Press **ENTER**. The LCD will show:

```
Enter Password
_
```

**Note:** If you know that this sub-address does not have a password, skip to step 5.

**4** Use the numeric keypad to enter the appropriate password. In this example, we've entered *654321*.

```
Enter Password
654321_
```

**5** Press **ENTER**. The LCD will show:

```
Enter Fax Number
_
```

**6** Enter the fax number either by pressing a one-touch key, entering a speed-dial number or dialing from the numeric keypad. Do **not** press **START**.

**7** What you do now depends upon when you want the polling to begin.

- To have it begin *now*, skip to step 10.
- To delay it, proceed to step 8.

**8** Press **COM-OPTIONS**, **ENTER**. The LCD will show:

```
Delayed
Enter Time: 15/17:05
```

**9** Use the numeric keypad to enter the day and time when the polling should begin, then press **ENTER**.

**10** Press **START**.

If in step 7 you chose an immediate polling, your fax machine will begin dialing. If you chose a delayed command, the machine will display "Reserved" on the top line of the display, indicating that the machine has stored the command in memory and will perform it later.

# Programmable one-touch keys

## Using the power of programmable one-touch keys

The *programmable one-touch keys P1-P6* (fliptab **b**) simplify complex fax operations, letting you really tap into your machine's power.

You can “teach” these keys the following multi-step operations for one-keypress convenience (the pages shown contain instructions for the specific operations):

- Delayed transmission (pages 2.19–2.20)
- Broadcasting (page 2.16)
- Relay broadcast initiation (pages 2.17–2.18)
- Regular polling (pages 2.23–2.24)
- F-Code transmission (pages 2.32–2.33)
- F-Code polling (page 2.33)

The actions for setting up these operations is very similar for each one. For your convenience, we'll give you full instructions on setting each operation. First, though, we'll summarize by saying that each time you tell the machine four simple things:

- **How** — The key you're programming
- **Who** — The number(s) the machine should dial
- **What** — The operation it should perform
- **When** — The date(s) and time(s) when you want it to perform the operation.

## Programming a delayed transmission

**Note:** To *erase* a programmable one-touch key, refer to page 2.41.

To program a delayed transmission into a programmable one-touch key:

- 1 Press **PROGRAM, C, 1, ENTER**. The LCD either shows:

```
Select Program No.
P1:No Number Stored
```

... or indicates a command is already programmed into this key.

If **P1** is the key you want to program, skip to step 3. (However, our examples from here will say “*P3*” rather than “*P1*.”)

- 2 Select the key in which you want to program a command or change a previously stored command and then press it. Here, we've selected **P3**.

```
Select Program No.
P3:No Number Stored
```

- 3 If you change your mind and want to select a different programmable one-touch key, go back to step 2 *before* going on to step 4.

- 4 Press **ENTER**. The LCD now shows either

```
P3:Fax Number
_
```

or

```
P3:Fax Number
9-5558743_
```

- 5 Use the numeric keypad to enter the number *exactly* as your machine should dial it, including whatever codes your phone system may require. The number can be up to 40 characters in length:

```
P3:Fax Number
9-5550629_
```

Your display can show only 20 characters at a time. To view characters beyond those 20 (such as with an international long-distance number), press **◀** to scroll leftward or **▶** to scroll rightward.

**Important:** Do **not** press **ENTER**.

**Note:** If you make a mistake or want to erase characters entered in a previous setting, press **CANCEL** to erase leftward. Or, if you want to change just one character in the number, press **◀** to move the cursor leftward, or **▶** to move it rightward, to that character and press **CANCEL** to erase it. Then re-enter until the number is just as you want it.

- 6 Now, *while you still can see the fax number on the LCD*, press **COM-OPTIONS, ENTER**. The LCD shows:

```
Delayed
Enter Time: 11/20:30
```

**7** There's a choice to make. Instruct your fax to carry out this delayed command in *one* of the following ways:

**Option 1:** Perform the command *once* at a certain time on a certain day of the month. (For example, "Do this at 5:05 PM on the 30th.") To select this option, use the numeric keypad to enter the date and time when the fax should perform the command:

```
Delayed
Enter Time: 30/17:05
```

**Option 2:** Perform the command at a certain time *each day you press the key*. (For example, "Do this at 5:05 PM today.") To select this option, use the numeric keypad to enter **0, 0** (*i. e.*, *00*), and then the time when the fax could perform the command:

```
Delayed
Enter Time: 00/17:05
```

**8** Press ENTER, ENTER.

**9** The LCD now displays the next programmable one-touch key. If you *do not* want to enter or change *any other* key's programming, press STOP to return your machine to its usual standby mode. If you *do* want to enter or change this key's programming, go back to step 3. If you wish to enter or change *another* key's programming, go back to step 2.

## Programming a broadcast / group

**Note:** To *erase* a programmable one-touch key, refer to page 2.41.

Programming a broadcast is very similar to programming a delayed transmission except that, rather than specifying just one phone number, you set up multiple numbers to which the transmission should go.

To program a broadcast / group into a programmable one-touch key:

**1** Press PROGRAM, C, 1, ENTER. The LCD either shows:

```
Select Program No.
P1:No Number Stored
```

... or indicates a command is already programmed into this key.

If **P1** is the key you want to program, skip to step 3. (However, our examples from here will say "P4" rather than "P1.")

**2** Select the key in which you want to program a command or change a previously stored command and then press it. Here, we've selected **P4**.

```
Select Program No.
P4:No Number Stored
```

**3** If you change your mind and want to select a different programmable one-touch key, go back to step 2 *before* going on to step 4.

**4** Press ENTER. The LCD now shows either

```
P4:Fax Number
_
```

or

```
P4:Fax Number
9-5558743_
```

**5** Use the numeric keypad to enter up to 150 fax numbers — any combination of one-touch keys, speed-dial numbers and numbers you enter with only the numeric keypad.

**Important:** Do not press ENTER.

Between each number, press BROADCAST to enter a comma.

**Important:** Do not insert a comma after the **last** number.

To enter a speed-dial number, press SPEED DIAL/TEL INDEX and the number's three-digit identifier.

```
P4:Fax Number
A,S006,9-5552400
```

Your display can show only 20 characters at a time. To view characters beyond those 20 (such as with an international long-distance number), press ◀ to scroll leftward or ▶ to scroll rightward.

**Note:** If you make a mistake or want to erase characters entered in a previous setting, press CANCEL to erase leftward. Or, if you want to change just one character in the number, press ◀ to move the cursor leftward, or ▶ to move it rightward, to that character and press CANCEL to erase it. Then re-enter until the number is just as you want it.

**6** If you want the broadcast to begin *immediately* every time you press this group key, press ENTER and skip to step 9. If you want to *delay* the broadcast (perhaps to take advantage of lower phone rates), press COM-OPTIONS, ENTER.

**7** There's a choice to make. Instruct your fax to carry out this delayed command in *one* of the following ways:

**Option 1:** Perform the command *once* at a certain time on a certain day of the month. (For example, "Do this at 5:05 PM on the 30th.") To select this option, use the numeric keypad to enter the date and time when the fax should perform the command:

```
Delayed
Enter Time: 30/17:05
```

**Option 2:** Perform the command at a certain time *each day you press the key*. (For example, "Do this at 5:05 PM today.") To select this option, use the numeric keypad to enter **0, 0** (*i. e.*, *00*), and then the time when the fax could perform the command:

```
Delayed
Enter Time: 00/17:05
```

**8** Press ENTER, ENTER.

**9** The LCD now displays the next programmable one-touch key. If you *do not* want to enter or change *any other* key's programming, press STOP to return your machine to its usual standby mode. If you *do* want to enter or change this key's programming, go back to step 3. If you want to enter or change *another* key's programming, go back to step 2.

## Programming a relay broadcast initiation

**Note:** To *erase* a programmable one-touch key, refer to page 2.41.

**Note:** For this operation to work, three things must be true:

- The remote fax machine must be a Muratec fax machine with "hub" capability.
- The call group(s) you are faxing must exist on the remote machine.
- You must know the two-digit number for each call group you're faxing.

To program a relay broadcast initiation into a programmable one-touch key:

**1** Press PROGRAM, c, 1, ENTER. The LCD either shows:

```
Select Program No.
P1:No Number Stored
```

... or indicates a command already is programmed into this key.

If **P1** is the key you want to program, skip to step 3. (However, our examples from here will say "P5" rather than "P1.")

**2** Select the key in which you want to program a command or change a previously stored command and then press it. Here, we've selected **P5**.

```
Select Program No.
P5:No Number Stored
```

**3** If you change your mind and wish to select a different programmable one-touch key, go back to step 2 *before* going on to step 4.

**4** Press ENTER. The LCD now shows either

```
P5:Fax Number
_
```

or

```
P5:Fax Number
9-5558743
```

**5** Use the numeric keypad to enter the "hub" machine's number *exactly* as your machine should dial it, including whatever codes your phone system may require. The number can be up to 40 characters in length:

```
P5:Fax Number
9-5550629
```

Your display can show only 20 characters at a time. To view characters beyond those 20 (such as with an international long-distance number), press ◀ to scroll leftward or ▶ to scroll rightward.

**Important:** Do **not** press ENTER.

**Note:** If you make a mistake or want to erase characters entered in a previous setting, press CANCEL to erase leftward. Or, if you want to change just one character in the number, press ◀ to move the cursor leftward, or ▶ to move it rightward, to that character and press CANCEL to erase it. Then re-enter until the number is just as you want it.

**6** Now, *while you still can see the fax number on the LCD*, press COM-OPTIONS *two times* and then press ENTER. The LCD shows:

```
Relay Tx
Group No.  _
```

- 7** Use the numeric keypad to enter the two-digit identifier (01–32) for the first call group. You can specify up to 10 separate groups for each relay broadcast initiation. Between the entry of each new group, press **COM-OPTIONS** to insert a comma **but** do not insert a comma after the *last* group number. For example, here, we've entered **0, 4, COM-OPTIONS, 1, 1, GROUP DIAL, 2, 4:**

```
Relay Tx
Group No.    1,24_
```

**Note:** The LCD shows only four characters of the group numbers.

**Important:** Again, **do not** insert a comma after the last group number.

When finished, press **ENTER**.

- 8** If you want the transmission to begin *immediately* every time you press the key, press **ENTER** and skip to step 11. If you want to *delay* the transmission (perhaps to take advantage of lower phone rates), press **COM-OPTIONS, ENTER**.
- 9** There's a choice to make. Instruct your fax to carry out this delayed command in *one* of the following ways:

**Option 1:** Perform the command *once* at a certain time on a certain day of the month. (For example, "Do this at 5:05 PM on the 30th.") To select this option, use the numeric keypad to enter the date and time when the fax should perform the command:

```
Delayed
Enter Time: 30/17:05
```

**Option 2:** Perform the command at a certain time *each day you press the key*. (For example, "Do this at 5:05 PM today.") To select this option, use the numeric keypad to enter **0, 0** (*i. e.*, *00*), and then the time when the fax could perform the command:

```
Delayed
Enter Time: 00/17:05
```

- 10** Press **ENTER, ENTER**.

- 11** The LCD now displays the next programmable one-touch key. If you *do not* want to enter or change *any other* key's programming, press **STOP** to return your machine to its usual standby mode. If you *do* want to enter or change this key's programming, go back to step 3. If you wish to enter or change *another* key's programming, go back to step 2.

## Programming regular polling

**Note:** To *erase* a programmable one-touch key, refer to page 2.41.

To program a regular polling operation into a programmable one-touch key:

- 1** Press **PROGRAM, C, 1, ENTER**. The LCD either shows:

```
Select Program No.
P1:No Number Stored
```

... or indicates a command is already programmed into this key.

If **P1** is the key you want to program, skip to step 3. (However, our examples from here will say "P2" rather than "P1.")

- 2** Select the key in which you want to program a command or change a previously stored command and then press it. Here, we've selected **P2**.

```
Select Program No.
P2:No Number Stored
```

- 3** If you change your mind and wish to select a different programmable one-touch key, go back to step 2 *before* going on to step 4.

- 4** Press **ENTER**. The LCD now shows either

```
P2:Fax Number
_
```

or

```
P2:Fax Number
9-5557312_
```

- 5** Use the numeric keypad to enter the number *exactly* as your machine should dial it, including whatever codes your phone system may require. The number can be up to 40 characters in length:

```
P2:Fax Number
9-5550696
```

Your display can show only 20 characters at a time. To view characters beyond those 20 (such as with an international long-distance number), press **◀** to scroll leftward or **▶** to scroll rightward.

**Important:** Do **not** press **ENTER**.

**Note:** If you make a mistake or want to erase characters entered in a previous setting, press **CANCEL** to erase leftward. Or, if you want to change just one character in the number, press **◀** to move the cursor leftward, or **▶** to move it rightward, to that character and press **CANCEL** to erase it. Then re-enter until the number is just as you want it.

- 6 Now, while you can still see the fax number on the LCD, press **COM-OPTIONS** three times and then press **ENTER**.
- 7 If you want the polling to begin *immediately* every time you press the key, press **ENTER** and skip to step 10. If you want to *delay* the polling (perhaps to take advantage of lower phone rates), press **COM-OPTIONS**, **ENTER**.
- 8 There's a choice to make. Instruct your fax to carry out this delayed command in *one* of the following ways:
  - Option 1:** Perform the command *once* at a certain time on a certain day of the month. (For example, "Do this at 5:05 PM on the 30th.") To select this option, use the numeric keypad to enter the date and time when the fax should perform the command:
 

Delayed  
Enter Time: 30/17:05
  - Option 2:** Perform the command at a certain time *each day* you press the key. (For example, "Do this at 5:05 PM today.") To select this option, use the numeric keypad to enter **0, 0** (*i. e.*, *00*), and then the time when the fax could perform the command:
 

Delayed  
Enter Time: 00/17:05
- 9 Press **ENTER**, **ENTER**.
- 10 The LCD now displays the next programmable one-touch key. If you *do not* want to enter or change *any other* key's programming, press **STOP** to return your machine to its usual standby mode. If you *do* want to enter or change this key's programming, go back to step 3. If you want to enter or change *another* key's programming, go back to step 2.

## Programming a F-Code transmission

**Note:** To *erase* a programmable one-touch key, refer to page 2.41.

**Note:** For this operation to work, two things must be true:

- You must know how the remote fax is using each F-Code (ITU-T-standard sub-addressing/password) box to which you're transmitting — for example, as a security box (different makers may use slightly different terms, but the concepts are the same).
- You must know the remote fax's ITU-T sub-address and password number for each box to which you want to transmit.

To program an F-Code transmission into a programmable one-touch key:

- 1 Press **PROGRAM**, **C**, **1**, **ENTER**. The LCD either shows:
 

Select Program No.  
P1:No Number Stored

... or indicates a command is already programmed into this key.

If **P1** is the key you want to program, skip to step 3. (However, our examples from here will say "P3" rather than "P1.")
- 2 Select the key in which you want to program a command or change a previously stored command and then press it. Here, we've selected **P3**.
 

Select Program No.  
P3:No Number Stored
- 3 If you change your mind and want to select a different programmable one-touch key, go back to step 2 *before* going on to step 4.
- 4 Press **ENTER**. The LCD now shows either
 

P3:Fax Number  
\_

or

P3:Fax Number  
9-5552208\_
- 5 Use the numeric keypad to enter the number *exactly* as your machine should dial it, including whatever codes your phone system may require. The number can be up to 40 characters in length:
 

P3:Fax Number  
9-5558422\_

Your display can show only 20 characters at a time. To view characters beyond those 20 (such as with an international long-distance number), press ◀ to scroll leftward or ▶ to scroll rightward.

**Important:** Do **not** press **ENTER**.

**Note:** If you make a mistake or want to erase characters entered in a previous setting, press **CANCEL** to erase leftward. Or, if you want to change just one character in the number, press ◀ to move the cursor leftward, or ▶ to move it rightward, to that character and press **CANCEL** to erase it. Then re-enter until the number is just as you want it.

- 6 Now, while you still can see the fax number on the LCD, press **COM-OPTIONS** four times and then press **ENTER**. The LCD shows:

Enter Sub-Address  
\_

- 7** Use the numeric keypad to enter the ITU-T sub-address for the box to which you want to send the document. Here, we've entered *123456*:

```
Enter Sub-Address
123456_
```

- 8** Press **ENTER**. The LCD shows:

```
Enter Password
_
```

**Note:** If the password for the box is not entered, press **ENTER** and then skip to step 10.

- 9** Use the numeric keypad to enter the appropriate ITU-T password for the box. Here, we've entered *654321*:

```
Enter Password
654321_
```

When finished, press **ENTER**.

- 10** If you want the transmission to begin *immediately* every time you press the key, press **ENTER** and skip to step 13.  
If you want to *delay* the transmission (to take advantage of lower phone rates, for example), press **COM-OPTIONS**, **ENTER**.
- 11** There's a choice to make. Instruct your fax to carry out this delayed command in *one* of the following ways:
- Option 1:** Perform the command *once* at a certain time on a certain day of the month. (For example, "Do this at 5:05 PM on the 30th.")  
To select this option, use the numeric keypad to enter the date and time when the fax should perform the command:
- ```
Delayed
Enter Time: 30/17:05
```
- Option 2:** Perform the command at a certain time *each day you press the key*. (For example, "Do this at 5:05 PM today.")  
To select this option, use the numeric keypad to enter **0, 0** (*i. e.*, *00*), and then the time when the fax could perform the command:
- ```
Delayed
Enter Time: 00/17:05
```
- 12** Press **ENTER**, **ENTER**.

- 13** The LCD now displays the next programmable one-touch key.  
If you *do not* want to enter or change *any other* key's programming, press **STOP** to return your machine to its usual standby mode.  
If you *do* want to enter or change this key's programming, go back to step 3.  
If you want to enter or change *another* key's programming, go back to step 2.

## Programming a F-Code polling

**Note:** To *erase* a programmable one-touch key, refer to page 2.41.

**Note:** For this operation to work, three things must be true:

- The document which you're polling must exist on the remote fax's F-Code (ITU-T-standard sub-addressing/password) box.
- You must know the remote fax's ITU-T sub-address and password (if any) for each box you wish to poll.

To program an F-Code polling into a programmable one-touch key:

- 1** Press **PROGRAM**, **C**, **1**, **ENTER**. The LCD either shows:

```
Select Program No.
P1:No Number Stored
```

... or indicates a command is already programmed into this key.

If **P1** is the key you want to program, skip to step 3. (However, our examples from here will say "*P4*" rather than "*P1*.")

- 2** Select the key in which you want to program a command or change a previously stored command and then press it. Here, we've selected **P4**.

```
Select Program No.
P4:No Number Stored
```

- 3** If you change your mind and want to select a different programmable one-touch key, go back to step 2 *before* going on to step 4.

- 4** Press **ENTER**. The LCD now shows either

```
P4:Fax Number
_
```

or

```
P4:Fax Number
9-5552208_
```

- 5** Use the numeric keypad to enter the number *exactly* as your machine should dial it, including whatever codes your phone system may require. The number can be up to 40 characters in length:

```
P4:Fax Number
9-5558422_
```

Your display can show only 20 characters at a time. To view characters beyond those 20 (such as with an international long-distance number), press ◀ to scroll leftward or ▶ to scroll rightward.

**Important:** Do **not** press ENTER.

**Note:** If you make a mistake or want to erase characters entered in a previous setting, press CANCEL to erase leftward. Or, if you want to change just one character in the number, press ◀ to move the cursor leftward, or ▶ to move it rightward, to that character and press CANCEL to erase it. Then re-enter until the number is just as you want it.

- 6** Now, while you can still see the fax number on the LCD, press COM-OPTIONS five times and then press ENTER. The LCD shows:

```
Enter Sub-Address
_
```

- 7** Use the numeric keypad to enter the ITU-T sub-address for the box you want to poll. Here, we've entered 123456:

```
Enter Sub-Address
123456_
```

- 8** Press ENTER. The LCD shows:

```
Enter Password
_
```

**Note:** If the password for the box is not entered, press ENTER and then skip to step 10.

- 9** Use the numeric keypad to enter the appropriate ITU-T password for the box. Here, we've entered 654321:

```
Enter Password
654321_
```

When finished, press ENTER.

- 10** If you want the transmission to begin *immediately* every time you press the key, press ENTER and skip to step 13. If you want to *delay* the transmission (perhaps to take advantage of lower phone rates), press COM-OPTIONS, ENTER.
- 11** There's a choice to make. Instruct your fax to carry out this delayed command in *one* of the following ways:

**Option 1:** Perform the command *once* at a certain time on a certain day of the month. (For example, "Do this at 5:05 PM on the 30th.") To select this option, use the numeric keypad to enter the date and time when the fax should perform the command:

```
Delayed
Enter Time: 30/17:05
```

**Option 2:** Perform the command at a certain time *each day you press the key*. (For example, "Do this at 5:05 PM today.") To select this option, use the numeric keypad to enter 0, 0 (*i. e.*, 00), and then the time when the fax could perform the command:

```
Delayed
Enter Time: 00/17:05
```

- 12** Press ENTER, ENTER.

- 13** The LCD now displays the next programmable one-touch key. If you *do not* want to enter or change *any other* key's programming, press STOP to return your machine to its usual standby mode. If you *do* want to enter or change this key's programming, go back to step 3. If you want to enter or change *another* key's programming, go back to step 2.

## Programmable one-touch fax dialing

To dial a fax call using a programmable one-touch number:

- 1 Insert the document.
- 2 Adjust the resolution and contrast if necessary.
- 3 Toggle between transmission from the feeder or from memory if necessary, by pressing **MEMORY TRANSMIT**.
- 4 Press the programmable one-touch key in which you've stored the number.

Your fax will perform the operation either now or at whatever time you set.

**Note:** To review each available operation's details, please review its appropriate instructions. See page 2.34 for a list of where you may find each operation.

If you programmed this key to delay its operation, the LCD will show:

```

** Reserved **
A4           Memory 95%
  
```

If you programmed this key to perform the operation immediately after the key-press, the LCD will show the number:

```

9-1-972-555-4335
A4           Normal
  
```

---

## Erasing a programmable one-touch key

- 1 Press **PROGRAM**, **C**, **2**, **ENTER**. The LCD shows something like:

```

Select Program No.
P1:Delayed
  
```

If **P1** is the key you want to erase, skip to step 3. (However, our examples from here will say "P3" rather than "P1.")

- 2 Press the programmable one-touch key you want to erase. Here, we've selected **P3**:

```

Select Program No.
P3:Polling
  
```

- 3 If you change your mind and want to erase a different programmable one-touch key, just press that key before going on step 4.

- 4 Press **ENTER**. The LCD shows:

```

Erase P One-Touch
Check Program/Enter
  
```

**Important:** If you want to quit without erasing the programmable one-touch key you've selected, press **PROGRAM**. The fax will return to step 2.

- 5 Press **ENTER** to erase the number.

```

Erase P One-Touch
** Complete **
  
```

To erase another programmable one-touch key, repeat steps 2-5. Or press **STOP** to return to standby mode.

---

## Printing a list of your programmable one-touch keys

Your fax machine can print a list of the commands you've stored in your programmable one-touch keys. The list includes each key's one-touch letter, the telephone number, when the command should start, which command you've selected and — if applicable — the selected call group(s) for the broadcast initiation you've stored in the key.

To print the list, press **PROGRAM**, **C**, **3**, **ENTER**.

# PC-FAX connectivity

Thanks to its built-in PC-FAX feature, your fax machine isn't only a fax machine — it also can be an image scanner and printer for your computer.

**Note:** If there is no fax software (see “Requirements for your computer”, below) installed on your computer, this interface serves no function. So, you must have installed such software on your computer before you connect the RS-232C interface cable between your computer and your fax machine.

## Requirements for your computer

To use your fax's PC-FAX feature with your computer, you must have properly installed fax software on the computer.

We have tested this interface with the following software:

- BitWare™ Ver. 3.30
- BitWare™ plus Ver. 4.0
- HydraFax™ Ver. 3.5 (34) [U.S. and Canada]
- LaserFax™ Ver. 3.5 [Except North America]
- WinFaxPRO™ Ver. 4 for Windows 3.1 and Ver. 7 for Windows 95®

*BitWare* is a trademark of Cheyenne Software, Inc., a division of Computer Associates International, Inc.

*WinFax* is a trademark of Symantec Corporation.

*Windows* and *Windows 95* are registered trademarks of Microsoft Corporation.

*HydraFax* is a trademark of Wordcraft International Ltd.

### An important note about compatibility

While PC-FAX feature should work with most fax software, there may be some fax packages with which it may not work:

If you experience trouble, try the following (*in this order*):

- Please confirm that you are following all instructions and following them in the correct order.
- If you still have trouble, contact the manufacturer of your fax software.
- If the advice from your fax software manufacturer doesn't help, then the PC-FAX feature may not work with your computer setup.

## Making the PC-FAX connection

To connect your fax machine and your computer, you need an extra RS-232C interface cable.

### RS-232C interface cable

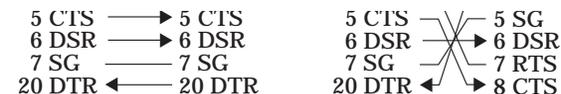
The RS-232C interface port on your fax has a *DB-25* (standard 25-pin serial) *female receptacle* which accepts a *male DB-25 cable plug*. Your computer's serial port may have either a *DB-25* or *DB-9* (9-pin) receptacle. Please consult the interface's *PIN assignment* on the following table:

**Note:** Please see your computer's operating instructions about the serial interface port of your computer.

#### PIN assignment

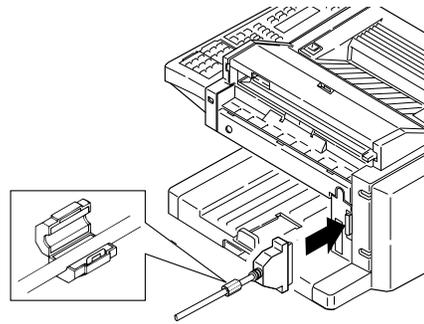
Pin No.	Signal code	Signal name	Contents
2	TXD	Transmitted data	Data signal sent from the computer to your fax.
3	RXD	Received data	The data sent to computer by your fax.
4	RTS	Request to send	Signal for request to send data.
5	CTS	Clear to send	Data Enable signal for data transmission from the fax to computer.
6	DSR	DCE ready	Always turned on — signals that the modem is ready to send data.
7	SG	Signal ground	Ground for signal.
20	DTR	DTE ready	Data Terminal Enable — ready to communicate.

#### Signal direction



## Connecting the RS-232C interface cable

- 1 Make sure to turn off your fax machine and your computer before proceeding.
- 2 Attach the ferrite core to your RS-232C interface cable.
- 3 Connect one end of the RS-232C interface cable to the RS-232C interface port on your fax machine.
- 4 Connect the other end of the RS-232C interface cable to your computer's RS-232C port.



**Note:** If you don't know where your computer's RS-232C port is, check your computer's operating instructions.

## Entering the RS-232C settings

**Note:** If you choose the wrong RS-232C parameters, your fax machine cannot communicate with your computer. Consult your fax software for listings of the following information, if needed.

- 1 Press **PROGRAM**, **L**, **2**, **ENTER**. The LCD shows the fax's RS-232C transmission speed (baud rate) in bps (bits per second):

```
Baud Rate: Variable
Program/Enter
```

**Note:** This setting is just for the RS-232C port. It does not change the speed at which your machine sends faxes.

- 2 If necessary, press **PROGRAM** to choose the appropriate baud rate for your computer and software. The settings are: Variable; or 600, 1200, 2400, 4800, 9600 or 19200 bps. When you see your desired setting, press **ENTER**.

**Note:** If using any of the Muratec-tested packages other than HydraFax or LaserFax, select the Variable setting.

- 3 If necessary, press **PROGRAM** to choose the data parity — None, Odd, or Even — and press **ENTER**.

```
Parity: None
Program/Enter
```

- 4 If necessary, press **PROGRAM** to toggle the stop bit between 1 bit or 2 bit. When you see your desired setting, press **ENTER**.

```
Stop Bit: 1 bit
Program/Enter
```

- 5 If necessary, press **PROGRAM** to toggle the data length between 7 bit or 8 bit.

```
Data Length: 8 bit
Program/Enter
```

- 6 When you see your desired setting, press **ENTER**.

## Using your fax's new PC connection

### Scanning from your fax to your computer

You can store logos, signatures, line art or even photographs onto your computer by using the fax machine to *scan* to your computer.

Here's how to use the *scanning* feature:

- 1 Make sure your fax is connected to your computer (see left column).
- 2 *Fax machine:* Insert the document. Adjust resolution and contrast if necessary.
- 3 *Computer:* Instruct your fax software to *receive*.  
**Note:** If necessary, consult your fax software's instructions.
- 4 *Fax machine:* Press **PROGRAM**, **L**, **1**, **ENTER**.

```
PC-FAX Scan
A4 Memory 99%
```

Your fax software will "receive" the fax (including the TTI, if you've set one) onto your computer.

To cancel the scanning operation while it's in progress, just press **STOP**. (To cancel the command after scanning the document, consult your software's operating instructions.)

## Printing from your computer to your fax

With the RS-232C interface installed, you can now use your fax machine to print letters, reports, graphics and other business correspondence directly from your computer.

Here's how to use the printing feature:

- 1 Make sure your fax is connected to your computer (see page 2.43).
- 2 *Computer:* Use your application — for example, a word-processing program — to send the document to your fax software, just as if you were actually going to fax the document.
- 3 *Fax machine:* Make sure that you have stored your *subscriber ID* (see page 1.11) on your machine.
- 4 *Computer:* When the fax software asks you to enter a fax number for sending the document, enter your subscriber ID.
- 5 *Computer:* Instruct your fax software to *transmit*. The fax machine will begin to print.

## Sending/receiving faxes with your computer

You can also receive documents from another fax onto your computer, as well as transmit documents from your computer to other faxes. As with scanning, the exact procedure for sending/receiving will depend on how your computer's particular fax software works.

**Note:** Please consult your software's operating instructions for more details.

Still, here are the basics:

- 1 Make sure your fax is connected to your computer (see page 2.43).
- 2 *Computer:* If your fax software allows it, turn off Error Correction Mode (ECM).
- 3 *Computer:* Instruct your fax software to send or receive. The fax machine will begin either transmitting or receiving.

## “AT” commands

**Note:** This is a list of standard “AT” commands, which control your modem. For more information, please consult the instructions for your fax software.

Command	Parameter	Description	Default value
A	none	Call answer	
D	0-9, *, #	Dial number	
	P	Pulse dial	
	T	Tone dial	
	,	Pause	
E	0	Not echo command character	E0
	1	Echo command character	
H	0	On Hook (Disconnect line)	
	1	Off Hook (Connect line)	
M	0	Monitor speaker is always off	M1
	1	Monitor speaker is on until carrier is detected	
	2	Monitor speaker is always on	
P	none	Set pulse dial mode	
T	none	Set tone dial mode	
V	0	Short formed response code	V1
	1	Long formed response code	
Z	none	Reset modem	
&F	none	Initialize to factory setting	
\Q	1	XON/XOFF flow control	\Q2
	2	RS/CS flow control	
+FCCLASS?	none	Indicate current service class	
+FCLASS=?	none	Indicate service class capability	
+FCLASS=n	none	Set service class	
+FRH=n	none	Receive HDLC frame (n=3:300bps)	
+FLO=n	none	XON/XOFF flow control (n=1)	+FLO=2
	none	RS/CS flow control (n=2)	
+FRM=n	none	Facsimile receive message (14400/12000/9600/7200/4800/2400bps)	
+FRS=n	none	Detect silence for n × 10ms	
+FTH=n	none	Transmit HDLC frame (n=3:300bps)	
+FTM=n	none	Facsimile transmit message (14400/12000/9600/7200/4800/2400bps)	
+FTS=n	none	Wait for n × 10ms	

# Keeping things secure

Your machine has a number of features to enhance the security of your fax communications. These security features can help you keep your private fax documents private, avoid unwanted outside communication and even protect against unauthorized use of your machine.

## The key to it all – the passcode

Your machine has a *protection passcode* system which is central to the machine's security capabilities. Normally, this four-digit passcode is set to *0000* (four zeroes). This turns off passcode operation. But, if you set the passcode to anything besides *0000*, this passcode provides access to a number of other security options, which we'll describe in the following pages.

To set your machine's passcode:

- 1 Decide upon, and then *write down* the four-digit passcode (*0001–9999*) you want to use and *put it in a safe place*.

**Important:** Do *not* use *0000*. This turns off passcode protection.

- 2 Press PROGRAM, J, 1, 5, ENTER. The LCD will show:

```
Protect Passcode
Old Passcode   :****
```

- 3 If you are *creating* the passcode, use the numeric keypad to enter *0000*. If you are *modifying* an *existing* passcode, enter the existing passcode.

- 4 Press ENTER.

- 5 Enter the desired four-digit passcode. Here, we've entered *6296*:

```
Protect Passcode
New Passcode   :6296
```

- 6 Press ENTER to save the passcode.

**Note:** Any time you want to turn off the passcode, change the passcode back to *0000* by repeating steps 2–6 and entering *0000* in step 5.

## Locking up tight – operation protection

**Important:** For this feature to work, you must have set the passcode, as described in the left column.

Because this is a powerful machine you have here — and, besides, you're paying for its phone calls — you may not want just anybody to use it. That's why we've provided *operation protection*. When this feature is activated, only users who enter the correct passcode (see "The key to it all: the password," left column) can send faxes from the machine or change the machine's settings.

### Activating operation protection

- 1 Press PROGRAM, J, 1, 6, ENTER. The LCD shows:

```
Set Opr. Protect
Enter Passcode :****
```

- 2 Use the numeric keypad to enter the passcode. Here, we've entered *6296*:

```
Set Opr. Protect
Enter Passcode :6296
```

- 3 Press ENTER. The LCD shows:

```
Opr. Protect:   Off
                Program/Enter
```

- 4 If the setting you see is acceptable, skip to step 6. Otherwise, proceed to step 5.

- 5 To change the setting, press PROGRAM once or twice until your desired setting appears. In this example, we've chosen "On."

```
Opr. Protect:   On
                Program/Enter
```

- 6 Press ENTER to save the setting.

## Using your fax machine during operation protection

- 1 When you press any key on your machine, the LCD will show:

```
Operation Protected
Enter Passcode :****
```

- 2 Use the numeric keypad to enter the four-digit passcode (here, we've entered the passcode we set previously; see page 2.45).

```
Operation Protected
Enter Passcode :6296
```

When you enter correct passcode, the machine will let you go on to the next step in the fax operation.

**Note:** If you start another operation while the first is still underway, the machine will require the passcode from you one more time before proceeding with your new request. However, the first operation will not be affected, even if you fail to enter the correct passcode for the second entry.

---

## Print it later, when it's safe – security reception

Your fax machine has a *security reception* capability. This means that you can tell the machine to keep *all* received faxes in memory (but not print them) after a certain time. Then, later, you instruct it to go ahead and print out the saved faxes. This is great if, for example, you are concerned about workers reading documents intended for *your eyes only!*

**Important:** For this feature to work, you must have preset the passcode (see page 2.45) to something besides *0000*; and you must *know* the passcode.

**Note:** In the following instructions, your machine's LCD shortens the word *Transmission* to *Tx* and the word *Receive* to *Rx*.

## Activating security reception

- 1 Press PROGRAM, K, 1, ENTER. The LCD shows:

```
Set Security Rx
Enter Passcode :****
```

- 2 Use the numeric keypad to enter the passcode. Here, we've entered *6296*:

```
Set Security Rx
Enter Passcode :6296
```

- 3 Press ENTER. The LCD shows:

```
Security Rx: Off
Program/Enter
```

- 4 If the setting you see is acceptable, skip to step 6. Otherwise, proceed to step 5.

- 5 To change the setting, press PROGRAM once or twice until your desired setting appears. In this example, we've chosen "On."

```
Security Rx: On
Program/Enter
```

- 6 Press ENTER. The LCD shows the machine's current clock setting:

```
Set Security Rx
Enter Time: 15:42
```

- 7 If you want security reception to begin *now* (and at this same time every day), skip to step 9. Otherwise, proceed to step 8.

- 8 Use the numeric keypad to enter the time (24-hour format) when security reception should begin every day. "Type over" the numerals displayed. Here, we've entered *17:35* (5:35 PM):

```
Set Security Rx
Enter Time: 17:35
```

To change a digit, press ◀ to move leftward, or ▶ to move rightward, to that digit. Then, enter the correct digit.

- 9 Press ENTER to save the setting.

## Printing from (and turning off) security reception

When security reception is active, an incoming fax goes directly into your machine's memory (but is *not* printed), and the MEMORY RECEIVE light comes on.

To retrieve the faxes received during this security reception (and to return your machine to normal reception until the next time):

**1** Press **PROGRAM**, **K**, **2**, **ENTER**. The LCD shows:

```
Print Mem Rx Doc.
Enter Passcode :****
```

**2** Use the numeric keypad to enter the passcode. Here, we've entered *6296*:

```
Print Mem Rx Doc.
Enter Passcode :6296
```

**3** Press **ENTER**.

- If you've entered the correct passcode, your fax machine will print all documents in its memory and then erase them. Then it will turn security reception back off until the next time your machine is set to secure receive.
- If you've entered an incorrect code, your fax machine will refuse to print, and security reception remains active.

## Masking the PIN

To prevent unauthorized long-distance calls, some office telephone systems require you to enter not only the phone number but also a *personal identification number (PIN)* whenever you dial an outside number beginning with *1*.

If that's true for you, you'll probably want to keep that PIN confidential, so unauthorized persons can't use it. Fortunately, your fax's *PIN mask feature* makes such confidentiality possible. With the PIN mask activated, you can dial a fax number plus a PIN, but the PIN will not appear in a journal, error message printout, delayed command list or even TCR, where an unauthorized user might see it. The PIN may be up to eight characters in length (it can include the \* or # symbols, if necessary), and can be entered from the numeric keypad.

**Important:** For this feature to work, the passcode (see page 2.45) must be something besides *0000*, and you must *know* the passcode.

There are three possible settings for the PIN MASK feature:

- *Off*— The feature isn't working. Any PIN you enter will appear on any display or printout which shows what you dial.
- *Mode 1*— Each *remote fax unit* has a departmental PIN access code.
- *Mode 2*— Each *fax user* has a departmental PIN access code.

**Note:** If you select Mode 1 and you will use a one-touch or speed-dial number, you must store the remote unit's PIN access code within that number. However, if you select Mode 2, this isn't necessary. (See "Autodialing while using the PIN mask," this page, right column for further details.)

## Activating the PIN mask

**Important:** For this feature to work, you must have preset the passcode to something besides *0000*. If necessary, review "The key to it all—the passcode," page 2.45.

**1** Press **PROGRAM**, **J**, **1**, **7**, **ENTER**. The LCD shows:

```
Set PIN Mode
Enter Passcode :****
```

**2** Use the numeric keypad to enter the four-digit passcode. In our example here, we've entered *2099*.

```
Set PIN Mode
Enter Passcode :2099
```

**Note:** If you enter an invalid passcode, the machine's security feature will reject the attempt and abort the operation.

**3** Press **ENTER**.

```
PIN Mode:          Off
Program/Enter
```

**4** If the setting you see is acceptable, skip to step 6. Otherwise, proceed to step 5.

**5** To change the setting, press **PROGRAM** repeatedly until your desired setting appears. In this example, we've chosen "Mode1."

```
PIN Mode:          Mode1
Program/Enter
```

**6** Press **ENTER**.

## Autodialing while using the PIN mask

**Note:** The following instructions presume you understand how to set and use your machine's autodialer. If you need to review, see pages 2.8–2.13.

**Note:** If the PIN mask feature is off, you use the autodialer normally.

*If you've specified "Mode 1" — the PIN goes in*

In Mode 1, before autodialing a number for the first time, you must add the PIN to its stored one-touch key or speed-dial number. Here's how:

- 1 Make a normal autodialer entry through the entry of the name.  
The LCD will show:

```
Set PIN Number
Enter Passcode :_****
```

- 2 Use the numeric keypad to enter the four-digit passcode. Here, we'll use our sample passcode again.

```
Set PIN Number
Enter Passcode :_6296
```

- 3 Press ENTER. In our example, we're setting speed-dial number 001:

```
001:PIN Number
_
```

- 4 Use the numeric keypad (including either \* or #, if necessary) to enter the desired PIN, up to eight characters in length.

```
001:PIN Number
1057_
```

- 5 Press ENTER to save the PIN.

**Note:** If you press ENTER without entering the PIN, the fax machine beeps, indicates "Invalid Number" on the LCD and then returns you to step 3.

Now you may autodial the number as usual.

**Important:** While in PIN Mode 1, every autodialer number you use must include the PIN. This also applies to autodialer numbers used with programmable one-touch keys (see pages 2.34–2.41).

*If you've specified "Mode 2" — as you autodial, load the code*

In this mode, you *don't* have to add the PIN to the autodialer setting. Instead, you enter the PIN manually each time you autodial:

- 1 Perform the usual autodialing procedure for the number. Here, we've pushed one-touch key A. The machine now asks for the PIN:

```
Enter PIN Number
_
```

- 2 Use the numeric keypad to enter the PIN.

```
Enter PIN Number
1057_
```

- 3 Press START. Your machine will dial the number.

### Dialing from the numeric keypad while using the PIN mask

**Note:** If the PIN mask feature is off, you dial normally.

*If you've specified Mode 1 — use "star" power*

- 1 Enter the phone number, then press the \* ("star") key and enter the PIN. *The PIN always goes last.* For example, to dial 19725550911 with a PIN of "123456", enter 19725550911\*123456:

```
Press Start
19725550911*123456
```

- 2 Press START. The PIN disappears from the display, and your machine dials the desired phone number.

*If you've specified Mode 2 — the machine guides you*

- 1 Enter the phone number as usual.

```
Press Start
19725550911_
```

- 2 Press START. The LCD now shows:

```
Enter PIN Number
_
```

- 3 Use the numeric keypad to enter the PIN.

```
Enter PIN Number
123456_
```

- 4 Press START. Your machine will dial the number.

## Settings for use with a closed network

For maximum communications security, use a *closed network*. This limits your machine to only communicating with other Muratec fax machines which can “present” the proper passcode.

**Important:** The passcode you use for closed network operation (and limiting polling access; see page 2.24) is **not** the same as the protection passcode.

Once your machine is set up this way, your machine will disconnect calls coming in from fax machines other Muratec fax machines.

To set your fax machine's closed network password:

**1** Decide on the four-digit closed network passcode (0001-9999) you want to use. **Write it down**, and *put it in a safe place*.

**2** Press PROGRAM, J, 0, 9, ENTER. The LCD shows the current code:

```
Set Passcode
Passcode      : 0000
```

If the setting you see is acceptable, skip to step 4. Otherwise, proceed to step 3.

**3** Use the numeric keypad to enter the desired four-digit *closed network passcode*.

```
Set Passcode
Passcode      : 5627
```

**4** Press ENTER to save the setting.

**Note:** To turn off the closed network passcode and return to normal fax reception, change the code to 0000 by repeating steps 1-4 and entering 0000 in step 3.

To set your fax machine to operate in a closed network:

**1** Press PROGRAM, J, 1, 0, ENTER. The LCD shows your fax's current setting:

```
Closed Net.: Off
Program/Enter
```

If the setting you see is acceptable, skip to step 3. Otherwise, proceed to step 2.

**2** To change the setting, press PROGRAM once or twice until your chosen setting appears. In this example, we've chosen *On*.

```
Closed Net.: On
Program/Enter
```

**3** Press ENTER to save the setting.

## Setting Block Junk Fax

Your fax machine's *Block Junk Fax* feature lets you bar the gates against unauthorized incoming faxes (“junk fax”) ... **But** before you block junk fax, first please understand *how* this feature works, to determine whether it's right for you. There are four possible settings:

- *Off* — The feature isn't activated.
- *Mode 1* — Your fax machine checks whether the last four digits of any phone number in your autodialer matches the last four digits of the remote fax's subscriber ID (remember, that's the phone number part of the TTI). If it doesn't find a match, your machine disconnects the call.
- *Mode 2* — This mode rejects any call from a number whose last eight digits match any number in the *blocked numbers list* (we'll explain). Your machine can hold up to 30 blocked numbers.
- *Mode 3* — This rejects numbers that are *not* in the autodialer and also rejects numbers that *are* in the blocked numbers list. This lets you keep a number on your autodialer for transmission to it, while still blocking its incoming calls by putting it in the blocked numbers list.

So, before you activate the Block Junk Fax feature, please consider:

- *Not all fax machine owners enter their phone numbers in their Subscriber IDs.* — With this feature activated, your machine would reject faxes from such machines.
- *Access codes can cause confusion.* — If an autodialer entry ends with extra codes, such as long-distance codes, Block Junk Fax will block out calls from those faxes (those other fax users won't put *your* codes at the end of *their* Subscriber IDs).

If you decide to go ahead with activating Block Junk Fax, here's how:

**1** Press PROGRAM, J, 1, 1, ENTER. The LCD shows your fax's current setting:

```
Block Junk Fax:Off
Program/Enter
```

If the setting you see is acceptable, skip to step 3. Otherwise, proceed to step 2.

**2** To change the setting, press PROGRAM once or twice until your chosen setting appears. In this example, we've chosen *Mode2*.

```
Block Junk Fax:Mode2
Program/Enter
```

**3** Press ENTER to save the setting. What you do next depends on what you selected in step 1 or 2:

- If you selected *Off* or *Mode1*, your machine will return to standby mode.
- If you selected either *Mode2* or *Mode3*, proceed to step 4.

- 4** The LCD now asks whether you want to enter a number:

```
Set BlockJunk Dial
Program/Enter
```

If you want to enter or modify a number, press **ENTER** and proceed to step 5. Otherwise, press **PROGRAM** and skip to step 10.

- 5** Depending on whether you have already entered at least one number into the blocked numbers list, the display shows one of the following:

```
Enter Fax Number      or      Select BlockJunk No.
01: _                 01:555-2971
```

If you have *not* entered any numbers in the blocked numbers list, skip to step 7. Otherwise, proceed to step 6.

- 6** If you want to modify an existing entry in the blocked numbers list, press **PROGRAM** repeatedly until you see the number you want to modify.

... or ...

If you want to enter a new number in an already-started blocked numbers list, press **PROGRAM** repeatedly until you find an empty position in the list (as in the first display in step 5).

**Note:** To *clear* a number from the list, see “Clearing a number from the blocked numbers list,” right column.

- 7** Use the numeric keypad to enter *the last eight characters* of a fax number you want to block. For example, if you want to block a fax from someone with a Subscriber ID of *972-555-3038*, you should enter **5, 5, 5, -, 3, 0, 3, 8:**

```
Enter Fax Number
01:555-3038
```

To change only a specific digit of an entry, press **◀** to move leftward or **▶** to move rightward until the cursor is under the digit, then use the numeric keypad to enter the correct digit.

- 8** Press **ENTER** to save the setting. The display will show the next “slot” in the blocked numbers list.  
If you *do not* want to enter or change a number for this slot, proceed to step 9. If you *do* want to enter or change a number for this slot, repeat steps 5–8.

- 9** Press **STOP**. The display now asks whether you want to print the list.

```
Print BlockJunk Dial
Enter/Stop
```

- 10** If you *do* want to print the list, press **ENTER** and your machine will print it. If you *don't* want to print it, press **STOP** and your machine will return to its normal standby mode.

## Clearing a number from the blocked numbers list

To *clear* a number from the list:

- 1** Press **PROGRAM, J, 1, 1, ENTER**.  
If your Block Junk Fax setting is either *Mode2* or *Mode3*, skip to step 3.

```
Block Junk Fax:Off
Program/Enter
```

- 2** Press **PROGRAM** until you see your preference, *Mode2* or *Mode3*.

```
Block Junk Fax:Mode2
Program/Enter
```

- 3** Press **ENTER, ENTER**. The display shows:

```
Select BlockJunk No.
01:555-2971
```

If this is the number you want to clear, skip to step 5. Otherwise, proceed to step 4.

- 4** Press **PROGRAM** repeatedly until you see the number you want to clear.

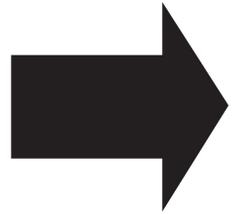
- 5** Press **CANCEL** to clear the number.  
To clear another number from the blocked numbers list, repeat steps 4–5. Otherwise, proceed to step 6.

- 6** Press **STOP**. The display now asks whether you want to print the blocked numbers list.

```
Print BlockJunk Dial
Enter/Stop
```

If you *do* want to print the list, press **ENTER** and your machine will print it. Otherwise, press **STOP** to return your machine to its normal standby mode.

# Just in case ...



*Now, here's how  
to care for  
your machine.  
Also, we'll suggest  
procedures to try  
in case of trouble.*

*Finally, the Glossary  
will explain fax terms  
you may encounter.*

# What's inside this section

Clearing paper jams .....	3.2
Print quality problems .....	3.4
Figuring out communications problems .....	3.6
Caring for your fax machine .....	3.11
Common questions .....	3.13
Glossary .....	3.17

## We're online to help you!

Before you try calling for help, please first give the *Muratec Information System* a try.

The Muratec Information System is available to you 24 hours a day, 7 days a week. You can use your fax machine to call this "fax-on-demand" system and receive printouts of information, such as the most common questions asked about your machine. Often, *this* is the fastest way to find out the answer to any question you may have. And it's a free call!

To use the Muratec Information System:

- 1** On your fax machine, obtain a dial tone by pressing **MONITOR/CALL**. (If you're in a noisy area and have an optional handset attached to your machine, you may want simply to lift the handset instead.)
- 2** Call **1-800-215-1698**.
- 3** Follow the voice instructions you'll receive from the system.

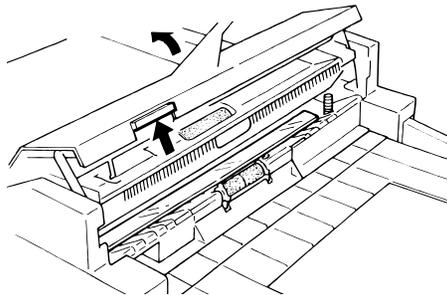
# Clearing paper jams

We designed your fax machine to work reliably for years. However, you may occasionally experience one type of paper jam or another. Here's what to do.

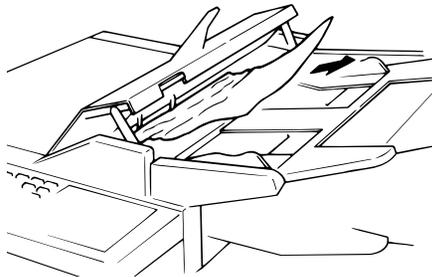
## If an original document jams

- 1 Open the scanner cover by holding the scanner cover release.

**Important:** Hold the cover open. It won't stay open by itself.



- 2 Lift the original document from your fax machine.



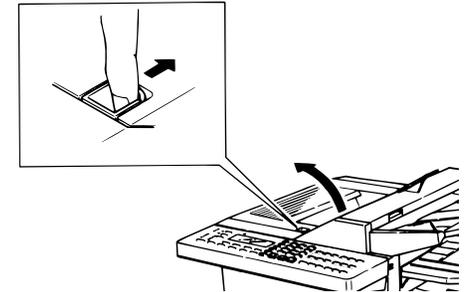
- 3 Gently close the scanner cover, making sure both sides are snapped down securely. Then re-try the transmission.

**Note:** If the original document has become wrinkled or torn, *don't* re-send it.

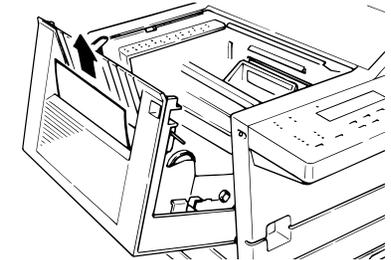
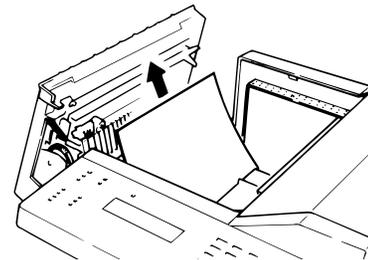
## If a printout jams

To clear a printout (either a received fax or a copy) jammed *inside* your fax machine:

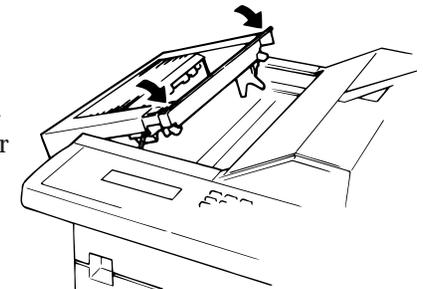
- 1 Open your fax machine's printer cover by pressing the printer cover release button.



- 2 Gently pull the jammed printout *up and out*. The printout may be jammed either within the fax (*left, below*), or in the output tray (*right, below*).



- 3 Gently close the printer cover, pressing firmly on both sides of the printer cover until you hear it click.



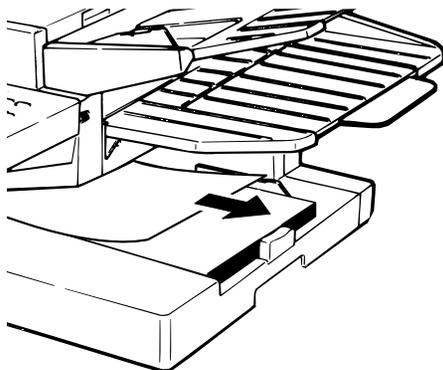
To clear a printout jammed at the *multipurpose tray*:

**1** Remove the paper stack from the tray.

**2** Carefully remove the jammed paper from the machine, as shown.

**3** Reload the paper stack into the tray.

**Note:** Be sure *not* to reload any sheets which may have become crinkled or torn during either the jam itself or your removal of the jammed paper.

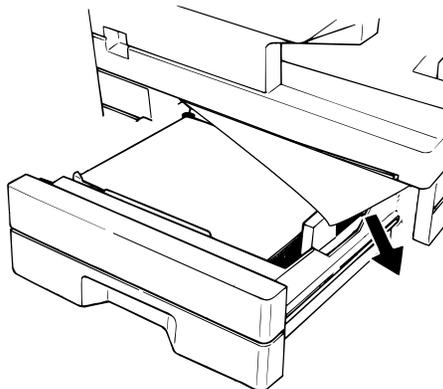


To clear a printout jammed at the *optional paper cassette*:

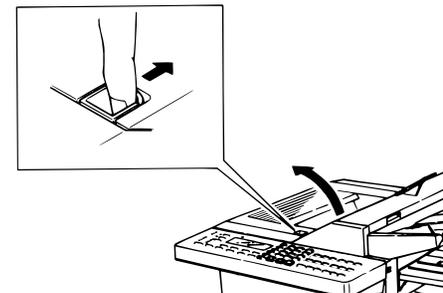
**1** Pull forward on the paper cassette to open it.

**2** Carefully remove the jammed paper(s) from the machine's rollers, as shown.

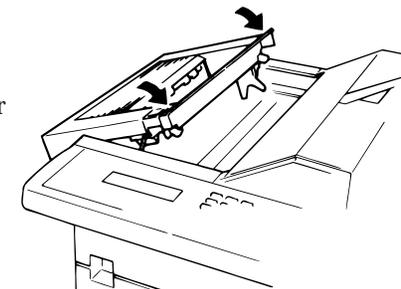
**3** Push the paper cassette back into its normal position within the machine.



**4** Open your fax machine's printer cover by pressing the printer cover release button.

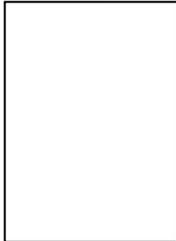


**5** Gently close the printer cover, pressing firmly on both sides of the printer cover until you hear it click.



# Print quality problems

If your machine's printouts (received faxes or copies) develop quality problems, check the following descriptions. When you find one which is like yours, try the suggested solutions. If they don't work, please contact your authorized Muratec dealer.



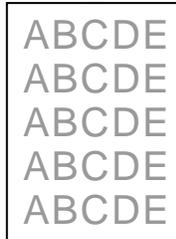
## Pages are blank

- The drum cartridge or toner cartridge may not be installed correctly.  
*Install each cartridge correctly.*
- The toner cartridge may be out of toner, or the toner may be very low.  
*Remove the toner cartridge and shake it a few times to redistribute the toner inside.*  
*If the problem persists, replace the toner cartridge.*
- The toner cartridge may be defective.  
*Remove and check the toner cartridge for damage.*  
*If the problem persists, replace the toner cartridge.*



## Pages are black

- The toner cartridge may be defective.  
*Remove and check the toner cartridge for damage.*  
*If the problem persists, replace the toner cartridge.*
- Your fax machine's printer may be due for a service check.  
*Call your dealer.*



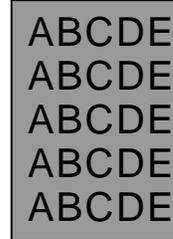
## Printouts are too light

- The toner cartridge may be out of toner, or the toner may be very low.  
*Remove the toner cartridge and shake it a few times to redistribute the toner inside.*  
*If the problem persists, replace the toner cartridge.*
- The toner cartridge may be defective.  
*Remove and check the toner cartridge for damage.*  
*If the problem persists, replace the toner cartridge.*



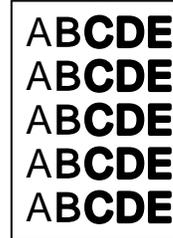
## Printouts are too dark

- The toner cartridge may be defective.  
*Remove the toner cartridge and check it for damage.*  
*If the problem persists, replace the toner cartridge.*



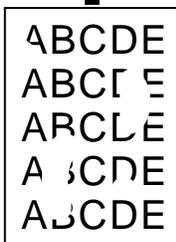
## Printouts have a blurred background

- The toner cartridge may be defective.  
*Remove the toner cartridge and check it for damage.*  
*If the problem persists, replace the toner cartridge.*



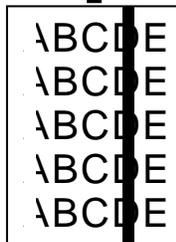
## Printouts are of uneven density

- The toner may be unevenly distributed inside the toner cartridge.  
*Remove the toner cartridge and shake it a few times to redistribute the toner inside.*
- The drum cartridge may be defective.  
*Remove and check the drum cartridge for damage.*  
*If the problem persists, replace the drum cartridge.*



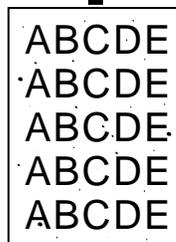
### Printouts have irregularities

- The paper you're using may have absorbed moisture, perhaps due either to high humidity or water having been spilled on the paper supply at some point. Toner will not adhere well to paper at the locations where the paper has been wet.  
*Replace the paper with dry paper and try printing again.*



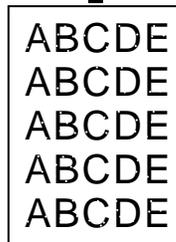
### Printouts have white and/or black lines

- The toner cartridge or drum cartridge may be defective.  
*Remove the cartridges and check them for damage. If the problem persists, replace either or both of the cartridges as indicated.*
- The charger may be dirty.  
*Your machine normally cleans the charger automatically. If other solutions fail, please contact your authorized Muratec dealer.*



### Printouts have toner smudges

- The toner may be unevenly distributed inside the toner cartridge.  
*Remove the toner cartridge and shake it a few times to redistribute the toner inside. If the problem persists, replace the cartridge.*
- The toner cartridge or drum cartridge may be defective.  
*Remove the cartridges and check them for damage. If the problem persists, replace either or both of the cartridges as indicated.*
- If you find smudges on the back of the printouts, the transport roller may be dirty.  
*Your machine normally cleans the transport roller automatically. If other solutions fail, please contact your authorized Muratec dealer.*



### Printouts have white spots

- The charger may be dirty.  
*Your machine normally cleans the charger automatically. If other solutions fail, please contact your authorized Muratec dealer.*

# Figuring out communications problems

Occasionally during transmissions, your fax machine will detect a problem with the phone line or will encounter some other trouble in transmission or reception. When it does, it will alert you with an alarm. You can further identify the problem with LCD messages, printed *check messages* and *error reports*. In the next few pages, we'll tell you more about these troubleshooting methods.

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## Alarm

Your fax machine will sound the alarm tone — a series of short beeps — if it suffers either of these two problems:

- It has trouble transmitting or receiving.
- It runs out of paper.

---

## LCD error messages

<i>What you see on the LCD</i>	<i>What it means/What to do</i>
<b>All Commands In Use</b>	Your fax machine has all of its 50 possible delayed commands (automatic redialing counts as one) stored in memory and cannot accept another. <i>Delete an existing command by using REVIEW COMMANDS, or wait until your fax has completed one of the delayed commands.</i>
<b>Already Stored</b>	You tried to enter a blocked number which is already entered in the blocked numbers list. <i>Enter a different blocked number.</i>
<b>Box In Use</b>	You tried to erase an F-Code box which has received at least one document. <i>Print the document(s), then try again.</i>

<i>What you see on the LCD</i>	<i>What it means/What to do</i>
<b>Check Cassette Paper</b>	The optional paper cassette is out of paper. <i>Add paper to the cassette.</i> ... <b>or</b> ... The optional paper cassette is open. <i>Close it.</i>
<b>Check Paper Size</b>	The multipurpose tray's paper size setting (see page 1.8) doesn't conform to the paper actually in the tray. <i>Either change the setting or change the paper so that they are the same.</i>
<b>Check Rx Paper</b>	Both the multipurpose tray and the optional paper cassette are out of paper. <i>Add paper to the tray and/or the cassette.</i>
<b>Check Tray Paper</b>	The multipurpose tray is out of paper. <i>Add paper to the tray.</i>
<b>Close Scanner Cover</b>	The scanner cover is open. <i>Close it.</i>
<b>Close Top Cover</b>	The printer cover is open. <i>Close it.</i>
<b>Communication Error</b>	A communication error disrupted the reception or transmission. <i>If you were transmitting, press ENTER to clear the error message and then re-try the transmission. If you were receiving a fax, try to contact the other person and have him/her re-try the transmission. (The problem may be entirely with his/her machine, phone line, etc.)</i>
<b>Enter No. (0-32)</b>	You tried to enter a call group number greater than 32. Your machine can maintain 32 call groups, numbered 1-32 (call group 0 covers all the groups). <i>Determine the correct call group and re-enter its identifier number.</i>
<b>Enter No. (1-99)</b>	You tried to request "0" copies from your fax, which can create 1-99 copies of a document. <i>Select the correct quantity and re-enter it.</i>

<i>What you see on the LCD</i>	<i>What it means/What to do</i>	<i>What you see on the LCD</i>	<i>What it means/What to do</i>
<b>Hang Up Phone</b>	The optional handset is off the hook. <i>Hang it up, making sure the upper part of the handset presses down on the "hook" button.</i>	<b>No Passcode</b>	You tried to protect an operation but there's no protection passcode stored in your fax machine. <i>Store a protection passcode in your machine, then try protecting the operation again.</i>
<b>Insert Document</b>	There was no document in the document feeder when you tried to send a fax or make a copy. <i>Place a document in the feeder and try again.</i>	<b>No PIN Number</b>	You selected "Mode1" in the PIN mask feature and tried to call an autodialer number in which no PIN has been entered. <i>Enter a PIN, then try again.</i>
<b>Invalid I.D. Code</b>	The F-Code box passcode you entered isn't valid. <i>Try re-entering your F-Code box passcode.</i>	<b>No Report</b>	You requested an activity journal, but your machine has no record of any fax jobs that have occurred.
<b>Invalid Number</b>	You pressed a key which has no function during the current operation.	<b>PC-FAX In Use</b>	While a PC-FAX feature is in use, you tried to use a fax feature. <i>Wait for the PC to complete the operation, then try again.</i>
<b>Invalid Passcode</b>	The protection passcode you entered isn't valid. <i>Repeat the operation, entering the correct protection passcode.</i>	<b>Please Call Service</b>	The printer unit of your machine has become inoperable. <i>Call your authorized Muratec dealer.</i>
<b>Line Busy</b>	You tried to scan a document while the machine is using the PC for fax communication. <i>Wait for the PC to complete the fax communication, then try again.</i>	<b>Please Remove Paper</b>	A paper jam has occurred. <i>Remove the jammed paper (review pages 3.2-3.3 if necessary).</i>
<b>Memory Full</b>	You tried to store the document into memory, but your fax machine doesn't have enough memory to complete the operation. <i>Wait until your fax has enough memory to store the document. Also, consider contacting your authorized Muratec dealer for a memory upgrade.</i>	<b>Please Replace Drum</b>	Your drum cartridge no longer functions. <i>Please replace it, being sure to reset the drum counter when you do so (see page 1.7).</i>
<b>Memory Overflow</b>	During transmission (or copying), you tried to enter more pages into memory than your fax could store. <i>Press START (or COPY) to tell your fax to keep as many pages in memory as possible, or press CANCEL to delete from memory all pages stored during this operation (but not previous operations).</i>	<b>Please Supply Toner</b>	The toner cartridge is empty. <i>Replace it.</i>
<b>No Command</b>	You pressed <b>REVIEW COMMANDS</b> to review upcoming commands, but your fax machine had none stored.	<b>Please Wait</b>	Wait until the fax machine warms up.
<b>No Document Stored</b>	You tried to print a document from memory, but your fax machine had none stored.	<b>Polling In Use</b>	You tried to store the polling document in your fax, where one already had been stored. <i>Wait for the fax to complete the polling operation, then try again.</i>
<b>No Number Stored</b>	You selected an autodialer number for which there is no phone number programmed. <i>Either choose another autodialer number or dial a phone number directly from the numeric keypad.</i>	<b>Printer In Use</b>	The command you're trying to enter requires the use of the printer, which is already in use. <i>Wait for the fax to finish printing, then try again.</i>
		<b>Protect Doc. Stored</b>	A received document was in your fax's memory when you tried to turn off security reception or erase the protection passcode. <i>Print the received document from your fax's memory, then re-try the desired operation.</i>

## Just in case ...

<i>What you see on the LCD</i>	<i>What it means/What to do</i>
<b>Reset Document</b>	Your document wasn't inserted correctly, or the fax to which you're sending can't handle the document's page length. <i>Reset the page and try again.</i>
<b>Scanner In Use</b>	The command you're trying to enter requires the use of the scanner, which is already in use. <i>Wait for the fax to complete the scan, then try again.</i>
<b>Sub-Address In Use</b>	You tried to enter a sub-address identical to one already being used in another F-Code box. <i>Enter a different sub-address.</i>
<b>Too Many Characters</b>	You attempted to enter too many numbers or other characters in the current operation. <i>Press CANCEL to delete the extra characters, then try again. You may want to review the operation's instructions.</i>
<b>Too Many Locations</b>	You tried to enter too many numbers for a broadcast initiation. You can enter up to 10 groups. <i>Press CANCEL to delete the extra numbers and try again.</i>

## Errors

When sending faxes, your machine occasionally will run into *communications errors*. These can be caused by anything from lightning to telephone line interference. (These same factors cause the static, or *line noise*, you sometimes hear on phone calls.) They also can be caused by problems with the fax machine at the other end of the line.

Often, simply trying your call again is all that's necessary. However, *if the problem persists regularly*, call your local telephone company for help. If that doesn't help *and the problem persists regularly*, call your authorized Muratec dealer.

## Error reports

When an error occurs, your fax machine prints an *error report*. Each fax error report lists an *error message* which includes:

- A possible *solution* to the problem
- The *sending location* (if the remote fax stores a Location ID of its own)
- The *result* — which is a special *error code*.
- A *sample* of the document's first page.

## Kinds of error codes

The error code listed in the "Result" column of the error report indicates the specific problem encountered:

- "D" codes — Occur while *dialing*
- "R" codes — Occur during *reception*
- "T" codes — Occur during *transmission*

## Specific errors

Let's quickly summarize the error codes you may see on an error report:

### Dialing errors

- D.0.3, D.0.8 The remote unit didn't respond, the call couldn't be completed or **STOP** was pressed during dialing. *Re-try the call. If your machine repeats the message, call the remote fax unit's operator and verify that unit is operating properly.*
- D.0.2 The remote unit is busy. *Try the call again.*
- D.0.6, D.0.7 Either the remote unit didn't respond, the call somehow didn't go through or **STOP** was pressed during dialing. *Try the call again.*

### Reception errors

- R.1.1 The calling fax machine didn't respond to your fax machine. This can happen if someone dials a wrong number or if the remote machine restricts access through use of a passcode.
- R.1.2 The two fax machines were incompatible. Your fax machine sends and receives only ITU-T Group 3 (see Glossary, pages 3.17–3.20) fax communication, the industry standard since the early 1980s.
- R.1.4 Someone pressed **STOP** at the receiving fax machine.
- R.2.3 Poor phone line conditions made fax communication impossible. *Call someone at the remote machine's location.*
- R.3.1 The sending fax machine detected too many errors from the receiving fax machine.
- R.3.3 The sending fax machine is incompatible or had a document feeder problem during transmission.
- R.3.4 Poor phone line conditions may have prevented your fax machine from properly printing some or all of the pages it received.
- R.4.2 Either the line disconnected before transmission or the transmitting fax machine needs maintenance.
- R.4.4 The fax machine has reached its memory capacity.
- R.5.1, R.5.2 ECM reception failed (perhaps due to line noise).

### Transmission errors

- T.1.1 The remote fax machine didn't respond to your machine. *Call someone at the remote machine's location.*
- T.1.4 Someone pressed **STOP** at the remote unit in the middle of the *handshake* (the very first part of the fax communication, when the two units "agree" on the settings they'll share).
- T.2.1 Either the phone line disconnected during transmission or fax communication became impossible due to bad phone line conditions. *Try the call again.*
- T.2.2 The two fax machines were incompatible. Your fax machine sends and receives only ITU-T Group 3 (see "Glossary," page 3.17) fax communication, the industry standard since the early 1980s.
- T.2.3 Bad phone line conditions made fax communication impossible. *Conditions can change rapidly, so try the call again later.*
- T.3.1 The page counter in your fax machine detected a document feeder error during transmission. *Carefully re-insert the document into the feeder and re-try the call.*
- T.4.1 The telephone line disconnected during the transmission of a page because of excessive modem errors or because the remote unit ran out of paper. *Try the call again.*
- T.4.2 After transmission began, poor line conditions developed. *Try the call again.*
- T.4.4 Poor line conditions prevented transmission. *Re-try the call.*
- T.5.1, T.5.2, T.5.3 ECM transmission failed (perhaps due to line noise). *Conditions can change rapidly, so try the call again later.*

## “Check Message” printouts

When there’s a problem with a fax call and your machine detects an error, it produces an error printout headed by the words “Check Message.” This printout lists the following information about the transmission:

- The resulting error code
- A communications error message (see “What error messages can mean,” below)
- The phone number (or TTI, if programmed) of the fax machine with which your machine had attempted to communicate.

### *What error messages can mean*

The error messages on Check Message printouts can mean a variety of things. Here’s a brief summary:

<b>Error message</b>	<b>Possible meanings</b>
Check condition of remote Fax.	<ul style="list-style-type: none"><li>• Remote machine malfunctioned</li><li>• No “handshake” signals from remote fax</li><li>• Wrong phone number reached</li></ul>
Repeat transmission.	<ul style="list-style-type: none"><li>• Poor phone line conditions</li><li>• No “handshake” signals from remote fax</li><li>• Document misfeed or miscount</li><li>• Unable to reach remote machine after attempting specified number of redial tries</li></ul>
Line is busy.	<ul style="list-style-type: none"><li>• Remote machine’s line was busy</li><li>• Remote machine’s line didn’t answer</li></ul>
Check received documents.	<ul style="list-style-type: none"><li>• Remote confirmation signal not received from remote fax</li><li>• Poor line conditions caused a poor image</li></ul>
Memory full.	<ul style="list-style-type: none"><li>• Remote fax’s memory is full</li></ul>
Dialing Number is not set.	<ul style="list-style-type: none"><li>• Stored phone number failed to dial properly</li></ul>
Stopped.	<ul style="list-style-type: none"><li>• Someone pressed <b>STOP</b> at the remote fax in the middle of the “handshake”</li></ul>

# Caring for your fax machine

With proper installation and a little maintenance, your fax machine should give you dependable service for years to come.

Although it requires little day-to-day care, you can take these simple precautions to keep it in top form:

- **Always** make sure your fax machine is installed according to our specifications, including using an electrical surge suppressor. (If necessary, review “Pick an installation spot *before* going ahead,” page 1.6.)
- **Always** use good, copier-quality paper.
- **Always** clean your fax machine as needed (see “Cleaning tips,” below).
- **Never** install your fax machine where it can overheat, gather dust or get splashed by *any* liquids (even water).

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## Cleaning tips

Here are some things to keep in mind about cleaning your fax machine:

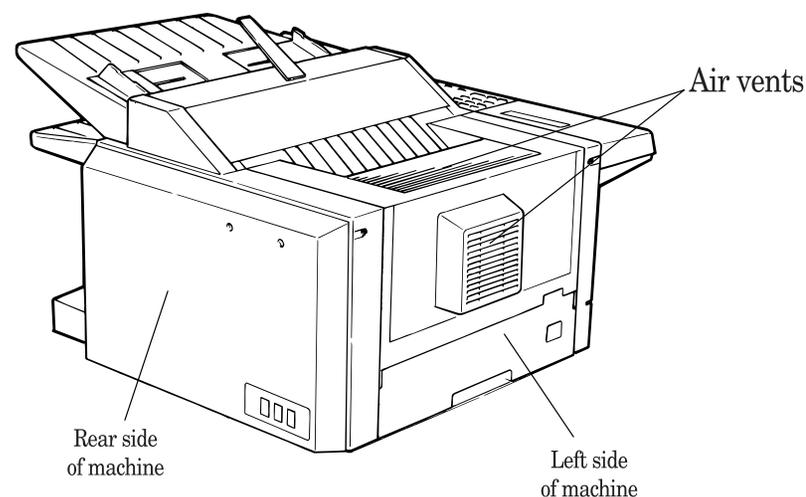
- **Do** clean it! Dust and dirt, especially around the fax machine’s air vents (see right column) can shorten your machine’s life.
- **Always** unplug the fax machine *before* you clean it.
- **Never spray any cleaner DIRECTLY onto your fax machine.** The drifting spray could damage components inside.
- **Never try to clean SEALED areas inside your fax machine.** They’re sealed for a purpose: to protect your safety and the machine!
- This tip applies *only* to cleaning *external* surfaces, such as the cover and handset — use a mild cleaning solution sprayed onto a lint-free towel or cloth.
- **Always** use a lint-free cloth (or swabs) moistened with alcohol to *gently* wipe components inside your machine. (See the next step also.)
- In areas you can’t reach with swabs, **always** use dry, dust-free compressed air to *gently* blow away dust and other material.

## Keep the air vents clean

As you’ll recall from page 1.6, you shouldn’t cover your machine or it may overheat. However, dust can build up and *become* a sort of “cover.” You already know not to locate your machine in a dusty area, but, any object out in the open obviously will gather dust as time passes.

So, be sure to **clean your machine’s air vents periodically.** When you do, use a vacuum cleaner or brush. (**Do not** wipe the air vents with a damp cloth!)

The air vents are located on the left side of the machine (as viewed from in front; the drawing below is a view from the machine’s left *rear*):



## Corrective cleaning

Here are some simple cleaning procedures for keeping your fax machine operating smoothly. Use each as the need arises.

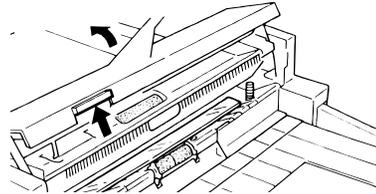
### Curing frequent jams in the document feeder

If you're having trouble with getting your original documents to feed properly, try this procedure:

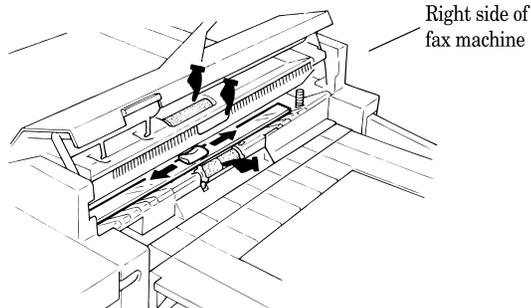
- 1 Turn off your fax machine.
- 2 Get two soft, lint-free cloths and moisten them as follows:
  - One with a cleaner suitable for use on platen/rubber rollers
  - The other with *isopropyl alcohol*

- 3 Open the scanner cover by *holding* the scanner cover release.

**Important:** You must hold the cover open. It won't stay open by itself.



- 4 Use the cloth with the roller cleaner to clean the *face* of the *rollers*. Rotate the rollers by hand to allow cleaning of the entire roller surface.



- 5 Use the cloth with the isopropyl alcohol to clean the *contact glass*.

- 6 Gently close the scanner cover, making sure both sides are snapped down securely.

### If you have unsatisfactory printout quality

Your machine automatically cleans its *charger* and *transport roller*, two items which are very important to printout quality. So, if you notice poor printout quality (whether on received faxes or on copies), it may mean that your machine requires service. Review "Print quality problems" (pages 3.4–3.5), and see whether any of the proposed solutions helps your machine. If these don't help, please call your authorized Muratec dealer.

# Common questions

## We're on-line to help you!

Before you try calling for help, please give the *Muratec Information System* a try first.

The Muratec Information System is available to you 24 hours a day, 7 days a week. You can use your fax machine to call this "fax-on-demand" system and receive printouts of information, such as the most common questions asked about your machine. Often, *this* is the fastest way to find out the answer to any question you may have. And it's a free call!

To use the Muratec Information System:

- 1** On your fax machine, obtain a dial tone by pressing **MONITOR/CALL**. (If you're in a noisy area and have an optional handset attached to your machine, you may want to simply lift the handset instead.)
- 2** Call **1-800-215-1698**.
- 3** Follow the voice instructions you'll receive from the system.

## General questions

- Q:** Where do I add ink or toner to make my fax machine's printouts darker?
- A:** You can't adjust the darkness of an incoming fax printout, but you *can* adjust the darkness of a copy (or copies) or of a transmission. Insert a document and press **CONTRAST** repeatedly to adjust the contrast setting. "Dark" prints at the darkest setting. The machine will reset automatically to normal contrast after the copying or sending.
- Note:** You can't adjust the darkness of an incoming fax printout.
- Q:** When I unplug my machine or if the power goes off, will I lose the information I've stored — such as my TTI, autodialer entries, the time and date, etc. — and have to re-enter them?
- A:** No. There's a special battery built into your fax machine which protects user settings for several days if power fails or if you decide to move your machine. However, we do advise you to restore power to the machine as soon as possible.

- Q:** Can I use a dust cover on my fax machine?
- A:** No! A dust cover blocks air circulation, which could cause your machine to overheat. (See page 1.6 for other guidelines.)

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## Sending faxes

- Q:** Sometimes, I try to send a fax while using either the (optional) handset or the **MONITOR/CALL** feature. But, when the other side answers, I hear a horrible screeching sound, so I hang up. What's happening?
- A:** That was the other fax machine trying to say "Hello" to your machine! You'll hear sounds like that any time you call a fax machine which is set to answer automatically (as when you set your machine to Auto Answer mode). It's by using these tones that fax machines are able to send faxes over ordinary phone lines. So, next time you hear such tones, press **START** (and, if you're using an optional handset, hang up) to send a fax.
- Q:** I just sent a fax. However, the number that appeared in my machine's display during the transmission wasn't the number I dialed. Why?
- A:** That number you saw is programmed into the remote fax machine by the user. Some users prefer different numbers to appear than the ones they're really using. And frankly, some people take over other's already-programmed fax machines and don't *know* how to change the originally set number!
- Q:** Can I transmit and receive at the same time?
- A:** No. Use the call request feature (see pages 2.25–2.26) to ask the person at the remote fax machine if he or she wants to transmit or receive after your fax communication is complete.
- Q:** Do I have to dial a *1* for a long-distance call?
- A:** Yes. Dialing a fax number is just like dialing any other phone number, so be sure to include any special long-distance codes or dialing pauses when dialing. Also, remember to include them when you set your autodialer numbers.

- Q:** How do I send a fax to an overseas telephone number?
- A:** Dialing requirements for international calls may vary depending on your local telephone company's requirements. For most international calls, call *011*, then dial the appropriate country code, city code and phone number. (You may find country and city codes in the front section of your telephone directory.)
- Q:** Can I transmit if my fax machine runs out of paper?
- A:** Yes, but confirmation reports (see page 2.23) aren't available when you transmit without recording paper in your fax machine.
- Q:** Can I transmit a document that's extra long?
- A:** Yes, *if* the receiving fax machine is equipped to handle long documents. Many machines have a special setting which allows them to receive documents that exceed the normal length.
- Q:** Can I transmit a page from a newspaper?
- A:** No. A newspaper page can jam in your document feeder. First, use a copy machine to make an appropriately sized copy of the newspaper page, then transmit the copy.
- Q:** Can I transmit a page with correction fluid on it?
- A:** Yes, but only if the fluid is *completely dry* before you begin transmission.
- Q:** How can I be sure my fax was received?
- A:** Set your machine to print a confirmation report after each transmission (see page 2.23).
- Q:** I don't want to install a dedicated phone line for my fax machine, so I've connected the machine to a PBX phone system. When I get a fax call, *all* the phones ring! How do I prevent this?
- A:** Call your PBX manufacturer or telephone company for assistance. They may be able to convert one of the PBX lines for use only by your fax machine.
- Q:** Sometimes when I dial a fax call by using either the (optional) handset or **MONITOR/CALL**, I don't hear the fax receiving tones from the other machine. Am I doing something wrong?
- A:** When this happens, try pressing **START** (and then hanging up the optional handset if you're using it), as usual. It's possible you're calling an older, non-standard fax machine that *doesn't* emit answering tones. Even a few Group 3 faxes (see "Glossary," page 3.17) on the market sound a *sending* tone but don't sound a *receiving* tone. After you transmit, call the person at the other fax machine's location to see if he/she got your document.

- Q:** I inserted a document in the feeder and dialed a fax number, but my machine didn't transmit the document; instead, "**\*\* Auto Redial \*\***" now appears on my LCD. What does this mean?
- A:** The remote fax machine was busy, so your machine will try the call again, automatically. As long as it hasn't stored more than 50 delayed commands (counting automatic redials), your machine should still accept commands from you. If it has exceeded this quantity and will accept no more commands, try cancelling one of the delayed commands (see pages 2.19–2.20). If the machine *still* won't cooperate, keep cancelling commands until it does.
- Q:** The specifications (page A1.1) list an average per-page transmission time, but when I transmit a page it can take much longer. Why?
- A:** We base this specification on transmission of an industry-standard test document called *ITU-T Test Document 1* (sometimes also called the "Slerexe letter"). Fax manufacturers use this method to test transmission speeds. However:
- The pages you send may be darker, or otherwise contain more information, than ITU-T Test Document 1.
  - The transmission time measured for test documents doesn't include *handshake time* — the time during which two fax machines "introduce" themselves to each other and "agree on" the parameters of the call.
  - The specification time is based on the use of normal resolution mode. You may be using fine, superfine or grayscale transmission, each of which takes longer than normal mode.
- Q:** What's a *default*?
- A:** A default is a setting that your machine will always refer to if nothing else is programmed. For example, you can set the default for this machine to send a fax by using its memory. If you set this action as the default, that's how your machine will always send a fax, until you tell it to do differently.

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## Reports

- Q:** I called the number *011-555-555-1212*, but not all of the digits appear on my transmit confirmation report (TCR). Why didn't the whole number appear? How can I be sure my document went to the right location?
- A:** The numbers you enter using the fax keypad are temporarily stored in a memory "buffer", and it's only the last part of the phone number that the buffer "remembers." An easy way to avoid getting incomplete telephone numbers on your printouts is to store your most frequently used numbers as one-touch keys or speed-dial numbers. These autodialer numbers will appear in their entirety on your TCR.

## Receiving faxes

- Q:** My fax never answers. What's wrong?
- A:** Check to make sure your fax machine is properly connected to a working AC power outlet and phone jack (see pages 1.6–1.8). If you're using a second phone with your machine, make sure *it's* connected properly (page 1.9).
- Q:** Sometimes when I answer my machine with the optional handset, I hear a beeping sound that repeats every few seconds. Is this a fax?
- A:** Yes. When you hear such *fax tones*, someone is trying to send you a fax. Next time, press **START** and hang up the handset. Your fax will receive the message.
- Q:** Does my fax machine have to be plugged in to the AC power jack just to receive a message?
- A:** Yes. Your phone will ring if the phone line is connected, but you can't receive a fax unless your fax machine is plugged into both the phone jack and the AC power jack. Make sure your fax machine is always plugged in so you never miss an important fax message.
- Q:** Can I receive a fax if I'm using the phone on my machine?
- A:** You can receive a fax from the person to whom you're talking. When that person has a document ready in his/her machine's feeder, press **START**. However, like any regular one-line phone, your fax machine can handle only one call at a time. The OneLine + feature (see pages 2.24-2.25) lets you receive calls on up to two phone numbers if your telephone company has installed the appropriate DRD service, but you can use only one number at a time.

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## Polling

- Q:** What's the purpose of polling?
- A:** Polling lets you automatically "pull" a document which is set in another fax machine. You can poll whenever you need to retrieve information and don't want the source to pay for the phone call. With polling, you pay for the call and get the information you need.

## Working with your answering machine

- Q:** People have complained that they call my fax machine and hear my answering machine's message, but are cut off before they can send a fax. What happened?
- A:** Any remote fax machine attempting to send a fax must "hear" responding fax tones within somewhat under 40 seconds after the person at that machine presses the start key. That 40 seconds includes getting the dial tone, dialing the number, "listening" to the pause before the ringing starts and the remote fax machine answering the ring. Only after that time does your message play. That's why we urge you to make a short outgoing message. The shorter the overall waiting period, the more likely it is that the remote fax machine will proceed with the transmission. Please make an outgoing message that is no longer than 10 seconds (see page 1.20 for a suggestion).

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## How your fax machine works

The concept of how a fax machine works is simple. Here's a simple analogy. Let's say you want to mail a gift to a friend:

- You *take* the item, *wrap* it and *send* it.
- Days later, your friend *receives* the package, *unwraps* it and *uses* it.

Now, let's apply that to fax communication.

You put a page into your fax machine's feeder and call a fax number. Your machine makes a satisfactory connection with the other machine, and then ...

- An image scanner in your fax machine examines the information on the page. That's how your machine *takes* the document.
- Your fax machine translates the scanned information into a numeric code and compresses the code for the fastest possible transmission speed. That's how your machine *wraps* the document.
- Finally, your fax machine sends the compressed code. That's how your machine *sends* the document.

On the other end of the line ...

- The remote fax machine *receives* the code.
- The remote fax machine uncompresses and deciphers the code, turning it into a representation of the scan your machine made. That's how your machine *unwraps* the document.

### Just in case ...

- The remote fax machine prints the representation.  
Now, the recipient can *use* the document.

... and that's how fax works!

The only difference between a regular telephone call and a fax call is the *content* of the transmission:

- On a regular call, your telephone sends your voice.
- On a fax call, your fax machine sends a coded image.

If your fax machine is in Tel/Fax Ready mode and you have other telephone extensions on the same line, all the other phones will ring. In fact, there's no way to tell if an incoming call is from a fax machine or from a person until you answer, or your fax machine answers.

You'll know it's a fax call if, upon answering, you hear a beeping sound that repeats every few seconds. This sound is each fax machine's way of identifying itself to the machine it calls.

When you press **START**, your fax machine responds to these signals using other special tones (to us humans, they sound a bit like screeches) which are its way of responding to the other machine's "greeting". This acknowledgement — just like greetings you might exchange with a friend — is called *handshaking*.

The way fax machines work is regulated closely by international standards applied by the International Telecommunications Union (ITU), an agency of the United Nations. These standards ensure the compatibility of your fax machine with millions of other fax machines worldwide. However, they also limit the way you can use your machine with other devices, such as telephones and answering machines.

Nonetheless, this is a small price to pay for the ability to send documents just about anywhere on earth!

# Glossary

This glossary contains terms and words you may encounter when discussing or reading about fax machines and fax communications. Please use these definitions for reference only.

**A4, B4, A3** — Standard stationery sizes defined by the International Standards Organization, an agency of the United Nations. See also *Paper sizes*.

**Answering machine** — See *TAD*.

**Autodialing** — Enables user to store preprogrammed telephone numbers in the unit's memory. Storage capability varies from unit to unit.

**Automatic fallback** — The ability of a fax machine to slow down ("fall back"), when communicating with another fax which is communicating at a slower rate.

**Automatic reduction** — Many Muratec fax machines will automatically reduce the size of documents being transmitted to accommodate the effective printing width of the receiving unit. For example, this allows a fax machine with a 10" scanning width to send an image 10" wide to a unit with an 8.5" print width. The receiving fax machine will receive a reduced-size printout of the complete image.

**Bit** — The smallest unit of information in a computer. Some Muratec fax machines, which are actually computers "dedicated" to telecommunications, allow users to change bits of information to provide or cancel features through software settings. The word "bit" is a contraction of the two words "binary digit."

**Bits per second** — See *bps*.

**Black density** — Also called *black coverage*. The amount of non-white area on a page. For example, most regular office correspondence has a black density well under 10% due to the presence of margins, spaces between words, spaces between lines and paragraphs and even spaces within letters. However, drawings and photographs have a much higher black density, sometimes approaching 100%. The higher a page's black density, the more slowly a fax machine sends it.

**bps** — Bits per second. Used to express the speed of transmission of data. Because fax transmission treats a document as a graphic image rather than as a series of alphabetic and numeric characters, bps does not correspond to the number of characters transmitted per second.

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

**Call reserve** — Also called *call request*. An ITU-T standard fax feature which allows a user to request voice communication prior to, during or after transmission.

**Call-waiting service** — An optional telephone company service that alerts you to another incoming call when the phone is already in use. Call-waiting signals often cause interruption of fax transmission or reception.

**Caller ID** — Optional service provided by your local telephone company that allows you to see a display of the number (phone or fax) that is calling.

**CCITT** — See *ITU-T*.

**CCD, CIS** — Charged coupled device, contact image sensor. Two types of scanning mechanisms used in some Muratec fax machines. The CCD "reads" fluorescent light bouncing off a document. The CIS uses a flat bar of light-emitting diodes (LEDs).

**Compatibility** — The term "compatible" describes the ability of separate things to function together. Your Muratec fax machine features ITU-T Group 3 compatibility, the modern standard for worldwide communication.

**Confidential transmission** — See *SecureMail*.

**Confirmation report** — See *TCR*.

**Copy mode** — Allows your fax machine to be used as a convenience copier.

**Cover page (automatic)** — A small, user-created message which can be the first page of every transmission.

**Data compression** — Used in digital fax machines to speed transmission. See also *Digital fax, MH* and *MSE, SMSE*.

**Default** — The setting your machine will always refer to if no other action has been programmed. For example, you can set the default for this machine to send a fax by using its memory. If you set this action as the default, that's how your machine will always send a fax, until you tell it to do differently.

**Delayed command** — Transmission or polling operation set by the user to occur later, automatically, at a predetermined time. Great for reducing costs by making fax calls during times when telephone costs are lowest, such as late at night or on weekends.

**Digital** — Using the binary system (which uses a combination of *0s* or *1s*) to describe everything, so that *0* means *off* and *1* means *on*; digital fax machines convert the graphic image of your document into a series of zeros and ones by using the binary system of transmission to encode black and white occurrences. This increases transmission speed by passing over white spaces. See also *White-line skip*.

**Digital fax** — Unlike analog systems that scan every portion of a document, digital fax machines survey a document's overall picture content. Digital fax machines scan a line and convert the information into a binary code of zeros and ones. The fax machine takes this information and compresses it, providing high transmission speeds. Many Muratec units offer proprietary methods for faster transmissions between Muratec-manufactured units (see also *MSE*, *SMSE*).

**DIP switches** — Dual in-line package switch; a two-position on/off switch. Many Muratec fax machines include DIP switches to control optional settings or features.

**Effective printing width** — The widest image that can be printed on a fax.

**Effective scan width** — The maximum width the scanner in a fax can scan during transmission.

**F-Code** — The ITU-T has created a fax industry standard for using sub-addressing/password-based communications with not only Muratec fax machines but also other manufacturers' fax machines.

**Facsimile** (or **fax**) — A form of communication involving the scanning and decoding of a document into electrical signals and transmitting of the document, over telephone lines to another device. This device then reconstructs the signals to produce an exact duplicate of the document. Also, a machine that performs such communication.

**Fallback** — Group 3 fax machines operate at the highest transmission speed possible on a given telephone line. Muratec systems offer automatic fallback; if line quality drops during transmission, the fax machine will reduce speed to the fastest possible level.

**Fine resolution** — 203H × 196V lpi. Also shown as *G3F* ("Group 3 fine") on some fax units.

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

**Group 3** — Refers to fax machines that use digital encoding. These units transmit one page in less than one minute and produce resolution of 203 × 98, 203 × 196, or 203 × 392 lpi.

**Halftone** — See *Grayscale*.

**Handshaking** — An exchange of data between telecommunications and/or computer equipment that "introduces" two systems to each other. For example, faxes use a handshaking protocol to identify the ITU-T group of each unit and to begin fax communication.

**Hub** — See *Relay broadcasting*.

**Hz** (or **Hertz**) — A measure of frequency equal to one cycle per second. Used in the specifications for a fax machine, it identifies the AC power the unit requires.

**ITU-T** — International Telecommunications Union – Telecommunications Sector. (Formerly known as *CCITT*, for *Consultative Committee for International Telegraph and Telephone*.) A telecommunications forum for member countries of the United Nations, whose Study Group XIV established the primary groups for fax equipment, covering communication protocol and transmission. Muratec Group 3 fax machines offer the fastest transmissions allowed by the ITU-T when communicating with other Group 3 units.

**ITU-T Test Document 1** — Also called the *Slerexe* ("slehr-rehks") letter; An ITU-T standard document with a known black density which fax makers often use to test transmission speeds of their fax machines. Published transmission speeds are also based on this document.

**ITU-T v.29 and v.27 ter.** — A standard set of communication procedures allowing fax machines to talk to all other units adhering to those standards.

**Laser printing** — A plain-paper printing system. Toner is attached to a charged drum and an image is transferred onto plain paper through electrical currents, then fused with heat and pressure to produce a dry, permanent printout.

**LCD** — Liquid crystal display. Used on some Muratec units for status displays.

**Leased line** — See *Private line*.

**Load number** — A number assigned to telecommunications equipment used in Canada; designed to help prevent overloading on a telephone circuit. See also *Ringer equivalence number*.

**Location ID** — See *Station ID*.

**lpi** — Lines per inch. The way fax image resolution is measured. (For example, see *Normal resolution*.)

**MH** — Modified Huffman, the standard ITU-T Group 3 data compression method. A one-dimensional coding scheme that compresses data in a horizontal direction only. A feature of all Muratec fax machines, MH assures transmissions faster than one page per minute when communicating with other Group 3 units, regardless of manufacturer. See also *MR*, *MMR*, *MSE*, *SMSE*.

**Modem** — Modulator-demodulator. A device that converts digital data, like information from a fax machine, into an analog signal for transmission over ordinary telephone lines. A modem is included in a fax machine and allows it to be connected directly to a PSTN telephone line.

**MR** — Modified Read, an ITU-T Group 3 standard data compression method. A two-dimensional coding scheme that compresses data in both horizontal and vertical directions and allows for faster transmission when communicating with other Group 3 units, regardless of manufacturer. See also *MH*, *MMR*, *MSE*, *SMSE*.

**MMR** — Modified Modified Read, an ITU-T Group 3 standard data compression method. A two-dimensional coding scheme that compresses data in both horizontal and vertical directions and allows for faster transmission when communicating with other Group 3 units, regardless of manufacturer. See also *MH*, *MR*, *MSE*, *SMSE*.

**Monitor** — A speaker in most Muratec fax machines which allows the user to hear the dialing process. This is not a speakerphone, because it has no microphone for speaking to the person being called. For regular two-way voice communication, users must use the optional handset. See also *On-hook dialing*.

**MSE, SMSE** — Muratec's proprietary data compression methods, allowing a Muratec-manufactured fax machine to transmit more quickly when communicating with another Muratec-manufactured unit. MSE and SMSE are features on many Muratec fax machines. See also *MH, MR, MMR*.

**Normal resolution** — Shown as “norm”; 203H × 98v lpi. The default resolution mode for all Muratec fax machines.

**One-touch dialing** — Allows the fax user to store frequently used fax numbers for dialing with the touch of one key. See also *Autodialing* and *Speed-dialing*.

**On-hook dialing** — Dialing numbers by using the keypad on the fax unit without lifting a handset. On most Muratec fax models, the user can do this either silently or by using the monitor. See also *Monitor*.

**Original document size** — The largest (or smallest) document that can be fed safely through a fax machine.

**Paper sizes** — All are width × length:

Letter-sized = 8.5" × 11.0"	Legal-sized = 8.5" × 14.0"
A5 = 5.8" × 8.3"	A4 = 8.3" × 11.7"
B5 = 7.2" × 10.1"	B4 = 10.1" × 14.3"
	B3 = 14.3" × 20.3"

**Passcode** — A four-digit code-number. On your fax machine, the protection passcode lets the user limit access to fax operations, as well as certain settings and even documents readied for polling (in the case of polling, only calling machines whose users enter the proper passcode will be able to poll the document.)

**PBX (or PABX)** — Private branch exchange; privately-owned telephone equipment serving a particular building, business or area. Many PBX systems use digital transmission lines which, unlike more common PSTN lines, are not compatible with fax machine use. The user should not connect a fax unit to a PBX without first checking with the system manufacturer or service representative.

**Polling** — Automatic transmission to a calling remote fax, or reception of a document from a remote fax set for this operation. Polling is convenient whenever a central unit must receive information from one or several remote faxes. The caller bears all telephone charges and prevents several remote units from calling at the same time. See also *Secure polling*.

**Private line** — (Or *leased line*.) A service offered by many telephone systems; provides an exclusive phone circuit between two geographic points. A Muratec fax does not require a private line. See also *PSTN*.

**Proprietary** — Non-standard. In fax, refers to a fax feature which works only in communications between fax machines that are the same brand.

**PSTN** — Public switched telephone network; the most common type of telephone lines and service in use, in contrast to private or leased lines. A Muratec fax provides fast, reliable data transmission over a PSTN line, and does not need a special or dedicated telephone line. See also *Private line*.

**Receiver ID** — See *Station ID*.

**Redialing** — The dialing again, either manually or automatically controlled, of the most recently dialed fax or phone number. Automatic redialing follows an unsuccessful dialing attempt and can be done manually or automatically.

**Relay broadcasting** — Lets some Muratec fax machines store a document in internal memory, transmit the document to the memory of a remote “hub” fax and then instruct that unit to relay (re-transmit) the document to each fax in a call group in the “hub” unit. This feature speeds extremely high-volume fax communication and allows a single command to initiate document transmission to hundreds of preprogrammed fax locations. It also saves phone charges for the originating machine. Your machine can initiate a relay broadcast.

**Remote fax machine** — The machine on the other “end” of a fax communication.

**REN** — See *Ringer equivalence number*.

**Resolution** — The resolution of documents transmitted or copied by fax machines is measured by the number of horizontal (H) and vertical (V) lines per inch (lpi) the unit can print. A Muratec unit may offer one or more of these resolution levels:

Normal	203H × 98v lpi
Fine	203H × 196v lpi
Superfine	203H × 392v lpi

Some Muratec units also offer grayscale transmission (see also *Grayscale*) for accurate reproduction of photographs and other shaded originals.

**Ringer equivalence number** — Also called *REN*. A number assigned to telecommunications equipment used in the United States; designed to prevent overloading on a telephone circuit. See also *Load number*.

**Scanning width** — See *Effective scanning width*.

**SecureMail** — Allows a Muratec fax user to send a document to or receive one into (usually something confidential) an “electronic mail box.” The transmission is protected at the receiving Muratec fax by an access code; the receiving fax prints the document only when an authorized user enters the code.

**Secure polling** — Polling in which preset passcodes are checked between two machines before polling is allowed to take place.

**Speed-dialing** — Allows the fax user to store frequently used fax numbers for dialing with the touch of three keys — an identifier key (either \* or #) and then a three-digit code — for each number. See also *Autodialing* and *One-touch dialing*.

**Station ID** — (Also called *Location ID* or *Receiver ID*.) An autodialer feature which lets the fax user enter a descriptive name to correspond with the number in an autodialer entry. For example, rather than entering only *1-972-555-3465*, the user can enter that number and a name, such as *Dallas Branch Office*. (Many Muratec models with this feature allow entry of both upper-case and lower-case letters, for greater ease of reading.)

**Subscriber ID** — A fax machine's telephone number, as identified by a user setting. See *TTI*.

**Superfine resolution** — 203<sub>H</sub> × 392<sub>V</sub> lpi. Your Muratec fax machine's superfine transmission mode is Group-3-compatible, not the more limited proprietary version.

**TAD** — Telephone answering device, or answering machine. Records incoming voice messages for playback. You can connect a TAD to a Muratec fax machine and use the two on one phone line.

**TCR** — Transmit confirmation report; this provides proof that your Muratec fax did send the document you set for transmission. Printed after transmission, the TCR also identifies the telephone number to which the fax sent the document, plus the actual time of transmission and how many pages the unit transmitted.

**Thermal (paper) printing** — A thermal head heats chemically treated, thermally sensitive paper in patterns conforming to the image the machine has scanned, creating a printed image. Thermal paper's tendency to discolor and fade, in addition to its curliness and the usual difficulty in writing on it, have made this method considerably less popular than plain-paper fax printing — particularly as plain-paper fax machines have dropped sharply in price.

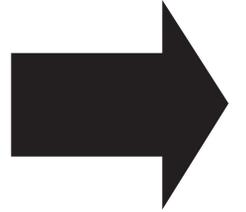
**TTI** — Transmit terminal identifier. A user-programmable line of information sent automatically with every page a fax machine sends; it appears at the top of each page printed by the receiving unit.

**Transmission speed** — How fast a fax machine is sending a fax document. This speed depends on the modem speed of each unit, the resolution setting, the content of the document, the encoding technique and the condition of the phone line (clean, noisy, etc.) Any change in any one of these five conditions will affect the speed, sometimes significantly.

**White-line skip** — A technique used to speed up fax transmission by bypassing redundant areas, such as white space.

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# Appendix and index



# Specifications

**Type:** High-speed facsimile transmitter and receiver for home and office use.

**Phone line:** Normal Public Switched Telephone Line (PSTN) or equivalent.

**Modem:** 14,400 bps with fallback to 12,000, 9,600, 7,200, 4,800 and 2,400 bps per ITU-T, v.17, v.29 and v.27 ter.

**Compatibility:** ITU-T Group 3.

**Data compression method:** ITU-T-standard MH, MR, MMR; Murata-proprietary MSE.

**Transmission speed:** 6 seconds per page.\*

**Document feeder capacity:** 30 pages (20-pound bond paper).

**Resolution** (horizontal in dots/mm  $\times$  vertical in lines/mm): Normal, 203  $\times$  98; fine, 203  $\times$  196; superfine, 203  $\times$  392.

**Grayscale:** 64-level.

**Printing width:** 8.2".

**Scanning width:** 8.2".

**Scanning method:** Flatbed CCD.

**Printing method:** Dry, electrophotographic (laser) process.

**Consumables yield:** Drum cartridge, 20,000 pages; regular toner cartridge, 5,500 pages; starter toner cartridge, 3,600 pages.\*\*

**Recording paper capacity:** Multipurpose tray, 150 letter- or legal-sized sheets.

**Acceptable document size** (width  $\times$  height):

*Single sheet* — 11.0"  $\times$  35.4" maximum, 5.8"  $\times$  4.1" minimum.

*Two or more sheets* — 10.1"  $\times$  14.4" maximum, 5.8"  $\times$  4.1" minimum.

**Weight:** 31 pounds.

**Dimensions** (width  $\times$  depth  $\times$  height): 19.2"  $\times$  20.3"  $\times$  10.6".

**Power:** 120V  $\pm$  10%, 50–60 Hz.

\* Based on transmission of ITU-T Test Document 1 to a Muratec fax machine. Your transmission times will vary, but your Muratec fax machine will always provide the fastest transmission speeds possible under ITU-T guidelines and phone-line conditions.

\*\* Based on letter-sized sheets, 4% document coverage and continuous printing.

# Regulatory information

## United States of America

### Federal Communications Commission (FCC) information

*Ringer Equivalence Number (RENS):* AC REN, 3.2B; DC REN, 0.3.

This facsimile machine has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against such interference in a residential installation.

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

If this equipment causes interference in radio or television reception (which can be determined by turning the equipment off and on), the user is encouraged to try to correct the interference by one or more of the following measures:

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

This equipment complies with Part 68 of the FCC rules. On the bottom of this equipment is a label that contains, among other information, the FCC registration number and REN for this equipment. If so requested, you must provide this information to the telephone company.

An FCC-compliant telephone cord and modular plug are provided with this equipment. This equipment is designed to be connected to the telephone network or premises wiring using a compatible modular jack which is Part-68-compliant.

### Telephone company procedures

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

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

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

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

**Note:** This equipment is hearing-aid-compatible (HAC).

**Notice:** The Telephone Consumer Protection Act of 1991 makes it unlawful for any person to use a computer or other electronic device to send any message via a telephone fax machine unless such message clearly contains, either in a margin at the top or bottom of each transmitted page or on the first page of the transmission, the date and time it was sent and an identification of the business or other identity, or other individual sending the message and the telephone number of the sending machine or such business, entity or individual. For instructions on programming this information (the "TTT") into your fax machine, see pages 1.10-1.11.

### Type of service

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

### If problems arise

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

In the event repairs are ever needed on your fax machine, they should be done by Muratec America, Inc., or an authorized representative of Muratec America, Inc. For information, contact the Muratec Customer Support Center at 972-364-3350 (from the U. S. only).

## Canada

### Industry Canada (IC) regulations

*IC Load Number (LN):* 18.

This digital apparatus does not exceed the Class A limits for radio noise emissions from digital apparatus as set out in the interference-causing equipment standard entitled "Digital Apparatus," ICES-003 of the Department of Communications.

*Cet appareil numérique respecte les limites de bruits radioélectriques applicables aux appareils numériques de Classe A prescrites dans la norme sur le matériel brouilleur: "Appareils Numériques," NMB-003 édictée par le Ministre des Communications.*

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

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

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

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

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

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

The IC LN for the F-98 is 18.

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# Limited warranty

This warranty is made by Muratec America, Inc. (hereafter referred to as "Muratec"). This warranty is valid only on Muratec 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 ("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 Muratec 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, Muratec or its authorized representative will, during Muratec's established service availability hours, make necessary adjustments and repairs, including, at Muratec's option, installation of replacement parts. Muratec's service availability hours are 8:30 AM to 5:00 PM (Central time) Monday through Friday, excluding Muratec-recognized holidays. Muratec will complete the necessary adjustments and repairs within a reasonable time period, as dictated by the nature of the problem and by Muratec's service schedule. Replacement parts may have been used and/or reconditioned. Parts that have been replaced will remain the property of Muratec. 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 Muratec bill of sale or Muratec dealer bill of sale or sales slip to an authorized Muratec service representative or service center. For the name of your authorized service center, contact Muratec (from the United States, call 1-972-364-3350; from Canada, check your in-box materials for the number to call).
2. During the warranty period, the Customer must notify Muratec 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 service center, designated by Muratec, is the responsibility of the Customer.
4. If Muratec provides maintenance or responds to a call which is outside the scope of this warranty, such maintenance shall be billed to the Customer at Muratec's then-current rates for maintenance and parts and shall be due and payable in full upon receipt of invoice.

## Exclusions

1. This warranty shall not cover a product with missing or altered original identification marks.
2. This warranty applies only to products that the purchaser has properly installed, adjusted and operated in accordance with the instructions set forth in or provided with product literature. This warranty does not apply to any product which has been subjected to tampering, alteration, misuse, abuse, neglect, improper installation or transportation damage. Nor does it apply to costs for any service requested for demonstration or to confirm proper operation of this product.
3. The warranty shall not apply to adjustments, repairs or replacements necessitated by any cause beyond the control of Muratec (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 Muratec space, electrical and/or environmental requirements.
4. Muratec will not be required to make adjustments, repairs or replacements if the product is installed or used at a location deemed by Muratec to be hazardous to health or safety, or if Muratec 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 Muratec service vehicle.

EXCEPT AS EXPRESSLY SET FORTH ABOVE, AND EXCEPT TO THE EXTENT PROHIBITED BY APPLICABLE LAW, MURATEC MAKES NO OTHER WARRANTIES, EXPRESS OR IMPLIED (INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, AND ANY WARRANTY ARISING FROM COURSE OF DEALING OR USAGE OF TRADE), AND MURATEC EXPRESSLY DISCLAIMS ALL WARRANTIES NOT STATED HEREIN. IN THE EVENT THE PRODUCT IS NOT FREE FROM DEFECTS AS WARRANTED ABOVE, THE CUSTOMER'S SOLE REMEDY SHALL BE REPAIR OR REPLACEMENT AS PROVIDED ABOVE. UNDER NO CIRCUMSTANCES SHALL MURATEC BE LIABLE TO THE CUSTOMER, OR TO ANY USER, FOR ANY DAMAGES, INCLUDING ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES, EXPENSES, LOST PROFITS, LOST SAVINGS OR ANY OTHER DAMAGES ARISING OUT OF THE USE OR INABILITY TO USE THE MURATEC PRODUCT, EVEN IF MURATEC OR ITS REPRESENTATIVES HAVE BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

Some States do not allow the exclusion or limitation of incidental or consequential damages, and some States do not allow limitations on how long an implied warranty lasts, so the above limitations or exclusions may not apply to you. This warranty gives you specific legal rights, and you may also have other rights which vary from State to State.

# Safety information

## Laser safety

This fax machine contains a page printer which operates by means of a laser. There is no possibility of danger from the laser, provided the fax machine is operated according to the instructions provided in this manual.

Since radiation emitted by the laser is completely confined with a protective housing, the laser beam cannot escape from the machine during any phase of user operation.

## Internal laser radiation information

### For all users

*Maximum radiation power:*  $5.0 \times 10^{-4}$  (w)      *Wavelength:* 770–810 (nm)

This is a Class IIIb laser diode assembly that has an invisible laser beam. The printer head unit is NOT A FIELD SERVICE ITEM. Therefore, the printer head unit should not be opened under any circumstances.

### For United States users

#### Laser safety

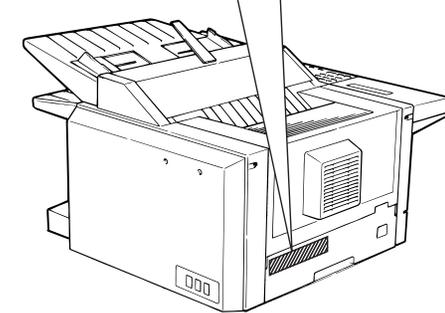
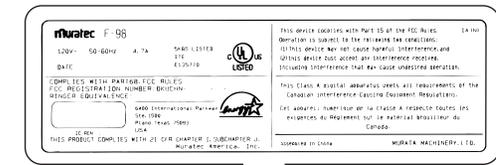
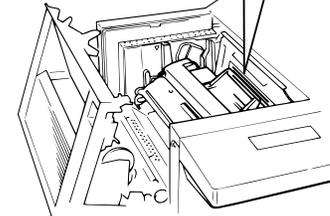
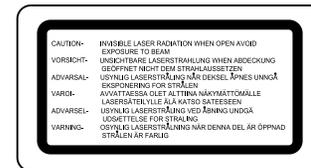
This fax is certified as a **Class 1** laser product under the **U. S. Department of Health and Human Services** (DHHS) Radiation Performance Standard according to the Food, Drug and Cosmetic Act of 1990. This means that the fax machine does not produce hazardous laser radiation.

#### CDRH regulations

The **Center for Devices and Radiological Health** (CDRH) of the U. S. Food and Drug Administration implemented regulations for laser products on August 2, 1976. Compliance is mandatory for products marketed in the United States. The labels shown in the graphic (see right column) indicates compliance with the CDRH regulations and must be attached to laser products marketed in the United States.

**Warning:** Use of controls, adjustments or performance of procedures other than those specified in this manual may result in hazardous radiation exposure.

## Warning labels



# Installing the optional cassette

The optional cassette holds an additional 500 sheets. When properly installed, the fax machine will automatically detect the presence of the cassette.

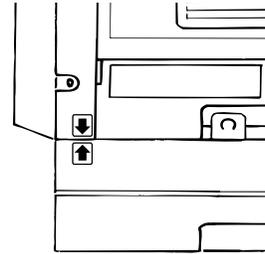
To install the optional cassette:

- 1** Make sure your fax machine is turned off.
- 2** Unpack the optional cassette and place it on a flat, level surface.

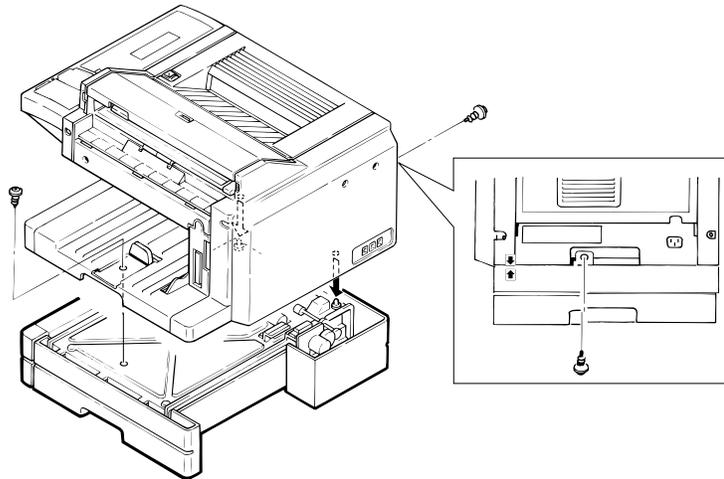
**Note:** Installation should be performed at the fax machine's permanent location to avoid moving it once installation is complete.

- 3** Position the fax machine over the paper cassette.

**Note:** Align the arrows on the left side of the fax machine.



- 4** Use the two paper cassette mounting screws to attach the paper cassette to the fax machine.

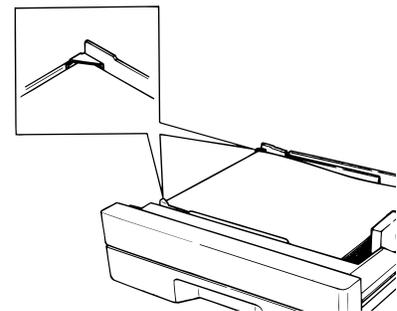


- 5** Pull forward on the paper cassette to slide it out.

- 6** Insert up to 500 sheets into the cassette, placing the edges of the top sheet under the metal tabs on the left side of the cassette (viewed from the cassette's front, as shown).

- 7** Push the paper cassette back into its original (closed) position. You'll feel a click when it's properly in place.

- 8** Turn on the fax machine.



The fax machine is now ready to use.