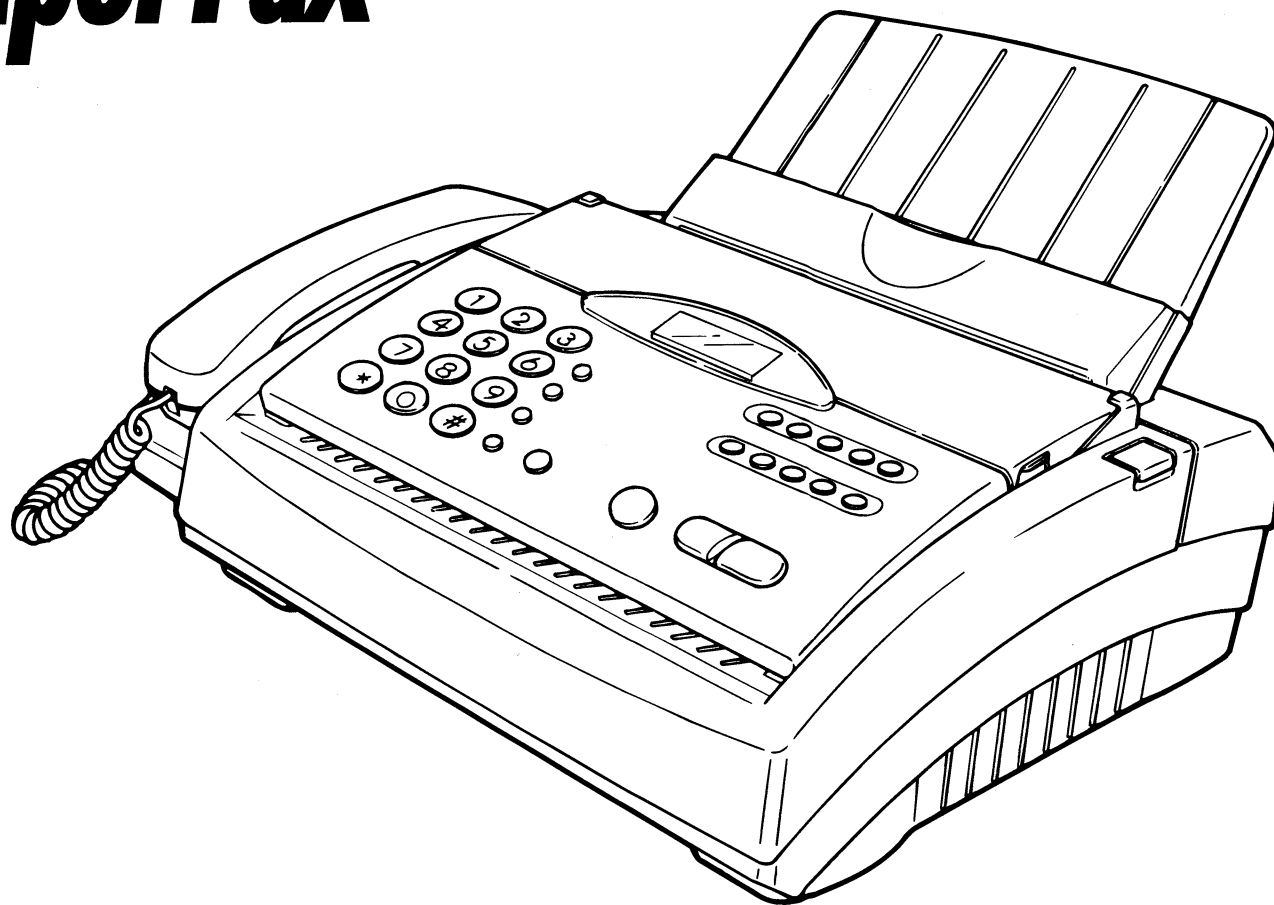


This manual explains how to properly operate your Imagemate MX, CX or F10 fax machine.

# ***Imagemate Plain Paper Fax***



Operating instructions

**muratec™**



Welcome ...





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As an ENERGY STAR<sup>SM</sup> partner, Murata Business Systems 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 fax machine *now*, without first having to climb over a mountain of jargon. So we've divided these instructions into three sections.

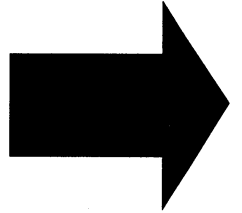
“Getting started” (see page 1.1) covers only what you absolutely *have* to know to use your machine immediately.

“Beyond the basics” (see page 2.1) provides more details. When you have time, look through it to learn more about some of your machine's special 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 it the kind of easy, sensible care that should help keep troubles to a minimum.

Now, just turn the page and we'll begin!  
And thanks for choosing Muratec.

# Getting started



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

# What's inside this section

A quick introduction to fax in general .....	1.1
Make sure it's all out of the box .....	1.2
What are all these parts? .....	1.2
What do the keys do? .....	1.4
Setting up .....	1.6
EasyStart .....	1.11
Sending faxes .....	1.13
Receiving faxes .....	1.16
Making copies .....	1.19

## 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 machine operates on standard phone lines, a *fax number* is just a regular phone number. And, because your fax machine is also a high-quality, full-featured telephone, your fax number can be your regular phone number. Or you can (but this isn't necessary!) dedicate a phone number to your fax machine, 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*. So let's talk about these for a moment.

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

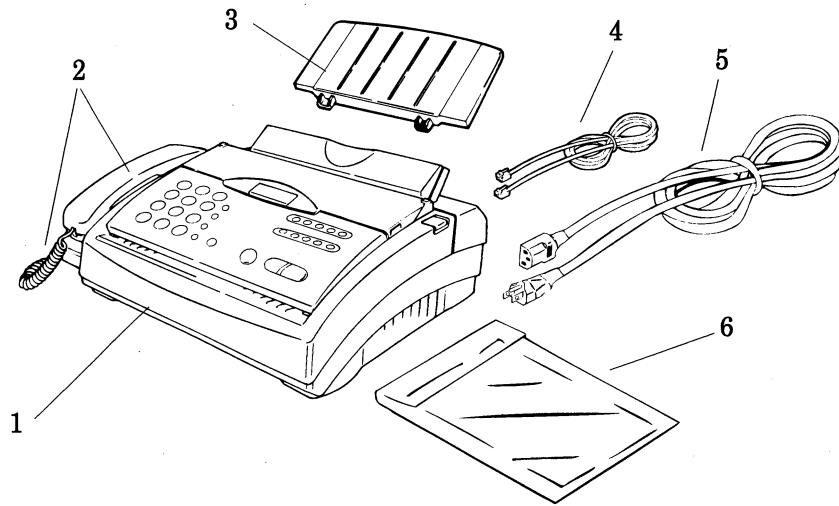
Similarly, one can judge a fax transmission by its number of *grayscale levels*, or shades of gray — really, halftones such as you might see in a newspaper photo. It's likely most of your fax documents will be dark text on white paper. However, when you want to send photographs and other shaded items, you can set your fax machine to transmit in 16-scale 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 box

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



**1 Fax machine** — For your convenience, it comes with a pre-installed *starter roll* of the *donor film* (which is what the machine uses to print received faxes and copies, as we'll discuss shortly). This roll will allow you to begin using your machine, but it's only  $\frac{1}{4}$  the size of a normal roll. Please obtain a full-size replacement roll as soon as possible where you bought your fax machine, or call 1-800-292-2492 toll-free. *For the best results and longest life from your fax machine, please use only Muratec-brand donor film, which is designed specifically for your fax model.*

**2 Handset**, along with its **curl cord**

**3 Paper hopper**

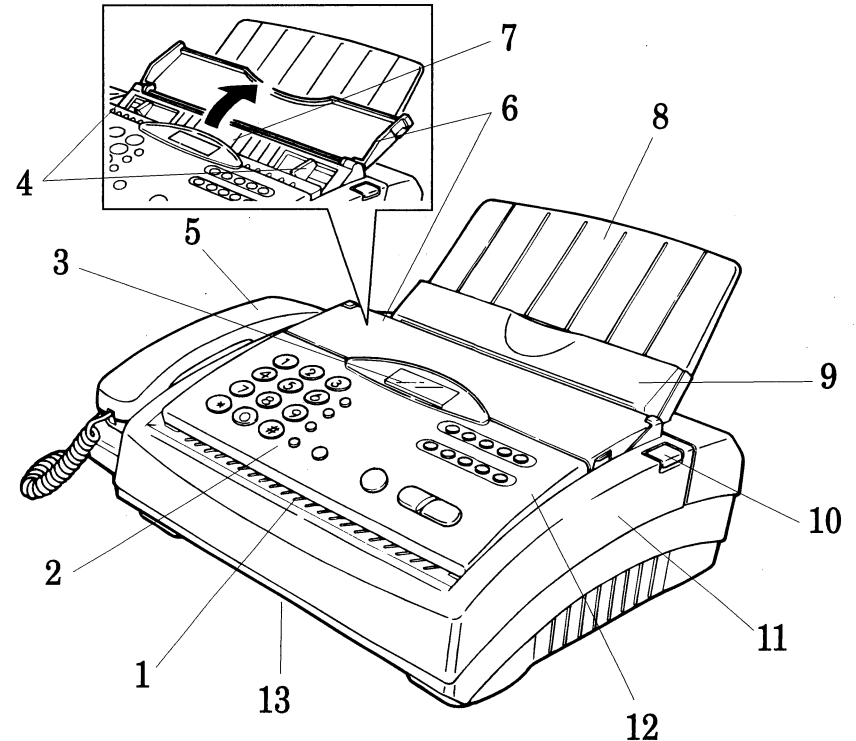
**4 Telephone line cord**

**5 AC power cord**

**6 Additional documents** (including this manual)

# 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.

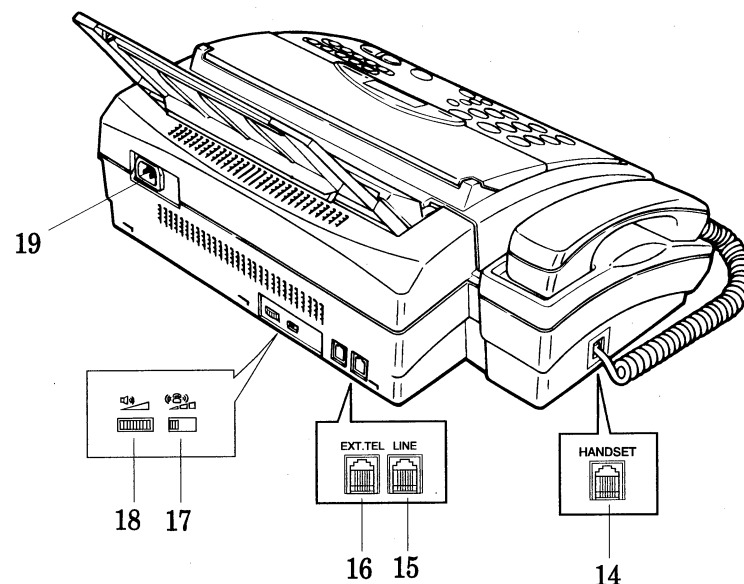


**1 Original document exit** — Where the *original document* (what you put into the machine for faxing or copying) comes out.

**2 Control panel** — The keys you use to operate your machine. (See page 1.4 for more details.)

**3 Liquid crystal display (LCD)** — The display (1-line  $\times$  16-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.)

- 4 Document guides** — You can adjust these to adjust for the width of the original document straight so it will feed properly into the machine.
- 5 Handset** — A regular phone handset, plain and simple.
- 6 Document hopper** — Supports the original document for straighter feeding into the machine. (You can flip it shut if there's no original document loaded.)
- 7 Document feeder** — The slot into which you place your original document for faxing or copying. It holds up to 20 sheets.
- 8 Paper hopper** — Holds up the *recording paper*, which is the plain paper which your machine uses to print incoming faxes and copies.
- 9 Paper cassette** — Where you put the recording paper. Holds up to 110 sheets, either letter- or legal-sized.
- 10 Top cover release** — Push this to open the *top cover* (see next item).
- 11 Top cover** — Opens to provide access to the inside of the machine for replacing the donor film (or, occasionally, fixing printout jams).
- 12 Control panel cover** — Opens to provide access to original document. (When you insert an original document, its first sheet feeds in partially and won't easily come back out — at least, not without risking damage to your machine — unless you open this cover.)
- 13 Printed document exit** — Where the *printout* (fax or copy) emerges.



- 14 HANDSET jack** — Where you plug in your fax machine's handset. (The handset itself has a similar jack. One end of the handset curl cord goes into each of these jacks, connecting the handset to the fax machine.)
- 15 LINE jack** — Where you plug in the *telephone line cord*. (The other end of the cord plugs into a wall telephone jack.)
- 16 EXT. TEL jack** — If you connect a second telephone or an answering machine to your machine, this is where you plug in the cord.
- 17 Ringer volume control** — A three-position switch which adjusts the ringer volume to one of three settings: *high*, *medium* or *low*.
- 18 Monitor speaker volume control** — A dial which adjusts the volume of your fax machine's *monitor speaker* (through which you can listen while dialing "on-hook"; *i. e.*, while the handset is still hung up).
- 19 AC power jack** — Where you plug in the AC power cord.

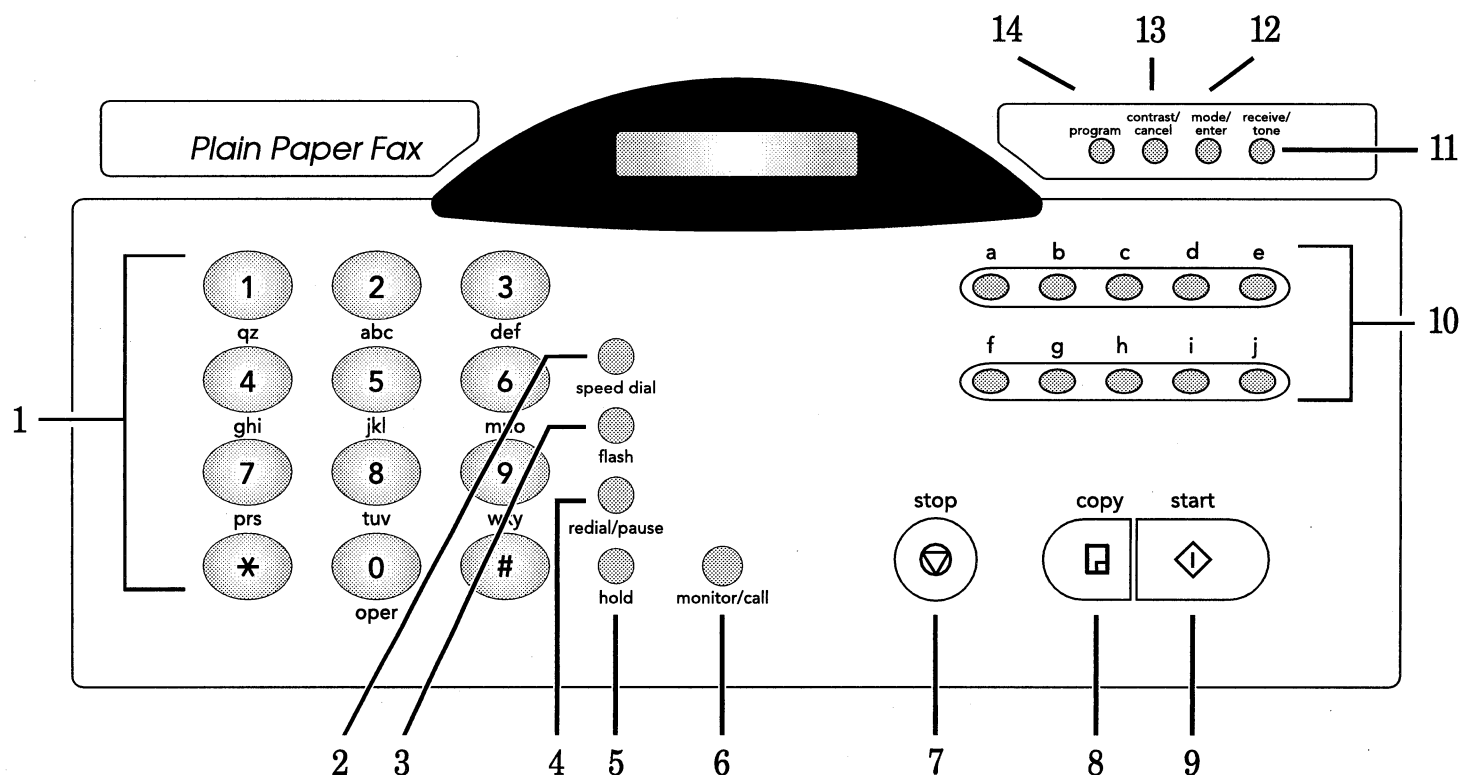
# What do the keys do?

Here's a brief description of the *keys* on your fax machine and what they do.

**Important:** (Some of the functions we'll mention, here, are covered in "Beyond the Basics," which begins on page 2.1.)

- 1 Numeric keypad** — Just like the numeric keys on a regular TouchTone® phone. In addition to dialing phone and fax numbers, they also enter numbers when you're making certain settings.
- 2 speed dial** — Starts a *speed-dialing* operation. You finish that operation by pushing two of the keys on the numeric keypad.
- 3 flash** — Lets you quickly disconnect a call and go right to the next one without having to hang up the handset.

- 4 redial/pause** — Redials the last number you dialed. In certain operations, it also produces a special character during dialing.
- 5 hold** — Either places a call *on hold* or takes it *off hold*. In certain operations, it also produces a special character during dialing.
- 6 monitor/call** — During *on-hook dialing*, it turns the *monitor speaker* off or on. When you're sending a fax, this key activates the *call request* feature.
- 7 stop** — An all-purpose "Whoa!" key. Stops the current operation, ejects a document from the *document feeder* and cancels *alarms*.
- 8 copy** — Copies a document.



- 9 start** — Begins a manual fax transmission or reception.
- 10 One-touch keys** — Each starts a *one-touch dialing* operation.
- 11 receive/tone** — Selects the fax machine's *receive mode*. Also can be used to let you enter *tones* even if you've selected rotary dialing.
- 12 mode/enter** — Much as **stop** is a "Whoa!" key, **mode/enter** is a "Go!" key. It confirms user settings, begins operations and moves through command levels. That's the **enter** part. The **mode** part is that, whenever there's a document in the document feeder, this key *toggles* among the three resolution modes and the grayscale mode.
- 13 contrast/cancel** — When a document is in the document feeder, this toggles among normal, dark or light *contrast* settings. Otherwise, this key deletes characters on the LCD and cancels commands.
- 14 program** — *Scrolls* (moves) through features and command options as displayed on the LCD.

## You're in control!

We've worked hard to make sure your fax machine is easy for you to use. *You control it* — not vice versa. So we've also tried to make these operating instructions just as easy.

In that spirit, let's make sure there's no confusion about letters and numbers.

**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 (such as abc by the 2 key). They are there only for your greater convenience in using your fax machine as a telephone.*

**To press:** a, b, c, d, e, f, g, h, i or j

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

**Tip:** *Note that there is no one-touch key o, so you can't confuse the zero with a letter O.*

Here's an example. If we say "press **program**, 7, **mode/enter**, 0, 8, **mode/enter**," you'd press:

**program**, then 7,  
then **mode/enter**,  
then 0 (the numeric key zero), then 8  
and then, finally, **mode/enter**.



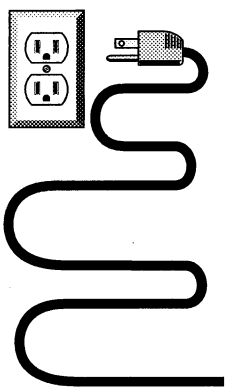
# Setting up

## 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. (However, 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.**
- **Insensitive to heat** — When printing, your fax machine generates a small amount of heat. Over time (especially if the machine regularly prints multi-page faxes or copies), this heat *may* discolor or otherwise damage certain surfaces. So be sure the surface on which you install your machine isn't sensitive to heat.
- **Near a phone jack** — Your fax machine uses a standard ("modular") telephone jack, also known as an *RJ-11*.
- **Near a power outlet.**

Speaking of which ...



- 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.
- If at all possible, 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.

**Note:** "To disconnect your fax machine from the power, it is necessary to unplug the power cord from the wall socket or remove the power cord from the rear of the machine. For convenience, the fax machine must be installed so that easy access to the power outlet is provided."

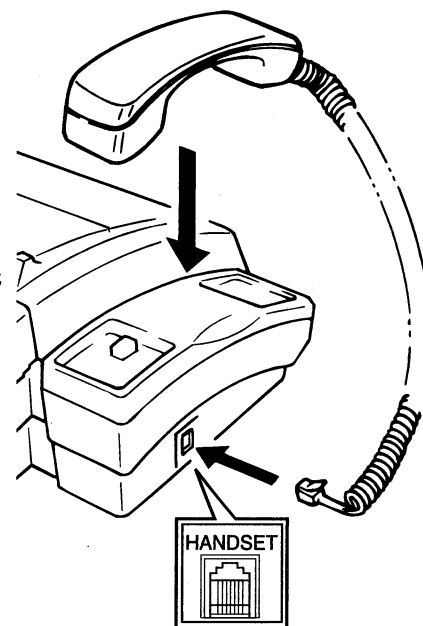
**Avertissement:** "Débrancher le cordon électrique à la fiche au dos de l'appareil ou à la prise murale pour le mettre hors tension. La prise murale doit se trouver près de l'appareil pour un accès facile."

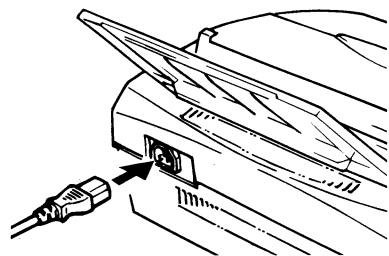
**Voltage requirements:** 120 VAC  $\pm$  10%, 50–60% Hz.

**Power consumption:** *Standby*, 6w; *transmission*, 26w; *reception*, 51w; *copying*, 55w; *maximum*, 220w.

## Plugging in

- 1 Plug one end of the handset cord (it's curled) into the **HANDSET** jack on the left side of your machine.
- 2 Plug the other end of the handset cord into the jack in the handset.
- 3 Place the telephone handset onto the handset cradle.





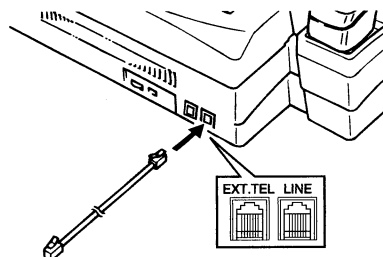
- 4** Plug the flat (non-pronged) end of the AC power cord into the AC power cord jack on the machine's rear.

- 5** 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).

**Note:** This will switch on your machine. Because it doesn't yet have paper loaded, you'll hear a warning beep and see an alert on the display.

- 6** Plug one end of the telephone line cord (it's not curled) into the **LINE** jack, on the lower right rear of the machine, just to the right of the **EXT. TEL** jack.

**Note:** We'll get to the **EXT. TEL** jack shortly (see page 1.10).



- 7** Plug the other end of the telephone line cord into a standard telephone wall jack, just as you would plug in a phone. (After all, your fax machine *is* a phone — just a very special one!)

## Loading paper

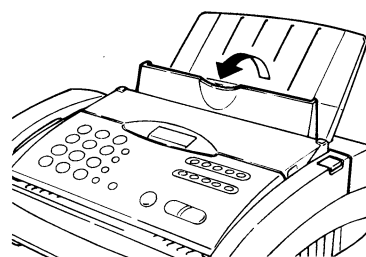
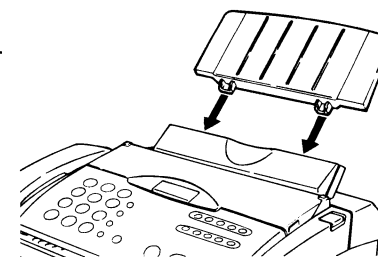
Of course, one of your fax machine's most outstanding features is how it prints faxes and makes copies on plain paper! Now, everything that comes out of your fax machine is ready for distribution or archiving, right from the start.

The following instructions tell you how to load the *recording paper* — the paper on which the fax machine makes its printouts (copies and received faxes). You may use either letter-sized (8½" × 11") or legal-sized (8½" × 14") paper, but not mixed together: it must be either all letter-sized or all legal-sized.

**Note:** Your fax machine's *auto paper-sensing* feature automatically detects which size of paper you have loaded. You don't have to set a thing!

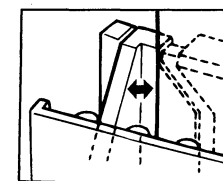
- 1** Insert the paper hopper into the appropriate holes, as shown. Press gently until it won't go in any farther.

**Note:** If you need to detach the paper hopper, simply pull on its top until it pops out.

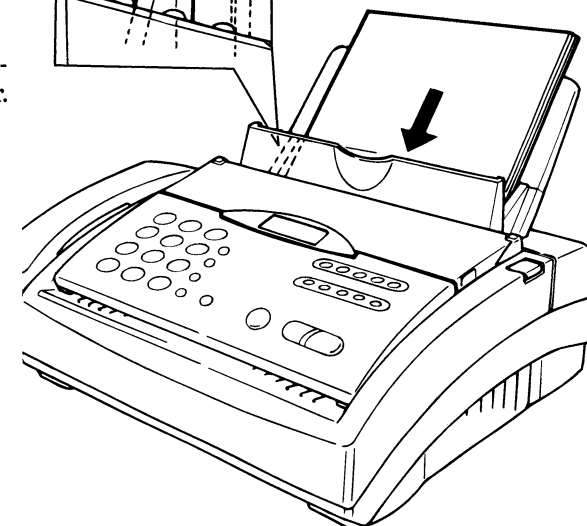


- 2** Pull forward on the paper cassette cover until it "click-locks" into place.

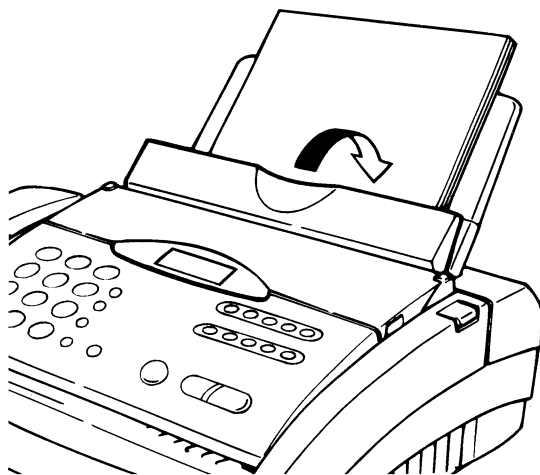
- 3** Insert up to 110 sheets into the paper cassette. Again, you may choose either letter- or legal-sized paper.



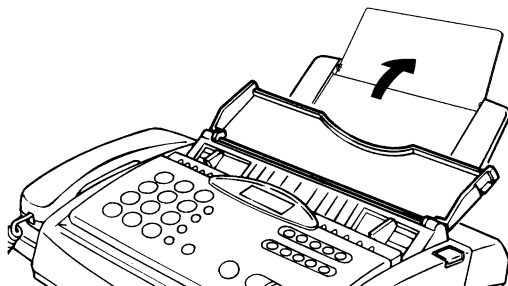
- 4** Adjust the paper guide (on the left side of the paper cassette, as shown in *box* in diagram, *right*) to fit snugly against the paper you're using.



- 5** Push the paper cassette back into its original (closed) position. The cassette's spring-loaded mechanism will return to its normal, locked position; you'll feel a click when it's properly in place.



- 6** If necessary, adjust the paper hopper to keep the paper upright. Simply flip the top up or down.



**Note:** Your machine can't print fax messages when it runs out of paper. When this occurs, the machine beeps and displays:

**Check Rec. Paper**

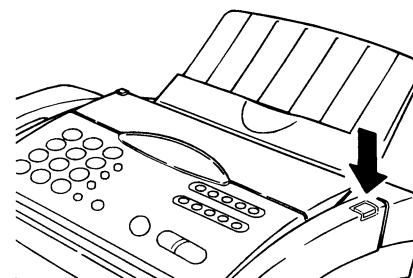
## Changing the donor film

Your fax machine uses Muratec's *Film Imaging* system to provide high-quality fax printouts and copies on plain paper. Film Imaging uses only clean, easy-to-handle and easy-to-load *donor film*, not messy toner or ink cartridges.

**Note:** The pre-installed starter roll of donor film is only  $\frac{1}{8}$  the size of a normal roll. Please obtain a full-size replacement roll as soon as possible where you bought your fax machine, or call 1-800-292-2492 toll-free. *For the best results and longest life from your fax machine, please use only Muratec-brand donor film, which is designed specifically for your fax model.*

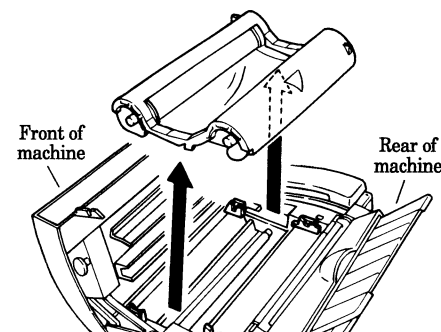
Here's how to change the film:

- 1** Open the top cover of the machine by pressing the top cover release.

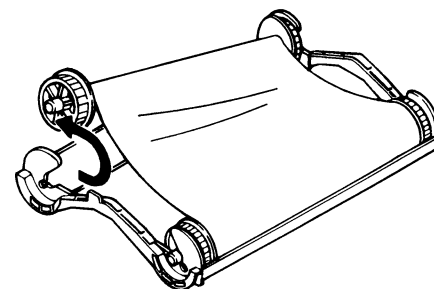


- 2** Grab the handles on each side of the *donor film cartridge*, and lift the cartridge straight up out of the machine.

**Important:** Please note that this diagram shows a view from the right rear side of the machine.



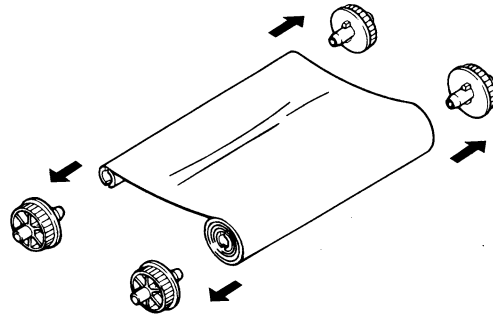
- 3** Turn over the donor film cartridge and rest it upside-down on its handles.



- 4** Firmly grasp the frame of the cartridge and snap the donor film rolls loose from the cartridge.

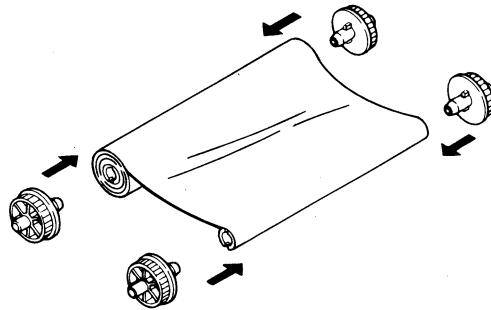
- 5** Remove the gears from the ends of the used rolls.

**Note:** Please dispose of the used rolls in a proper receptacle.

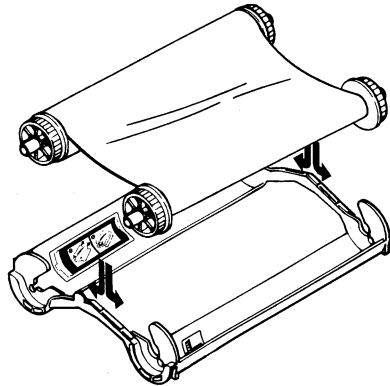


- 6** Remove the new donor film roll from its packaging.

- 7** Insert the gears into the ends of the new film roll. Align the *tabs* on the gears with the *slots* on the ends of the rolls.

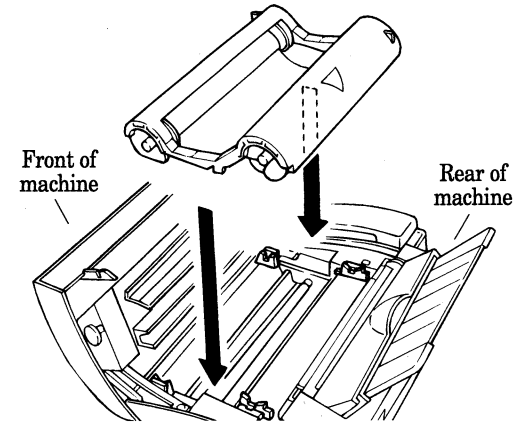


- 8** Snap the new rolls into the donor film cartridge so that the *supply roll* (the full one) goes into the side indicated by the label on the cartridge.



- 9** Turn the cartridge right-side-up again.

- 10** Hold the cartridge over your fax machine. Position the cartridge so that its *blue marks* are over the machine's *blue gear stand*. (The side with the supply roll should be over the front of the machine.)

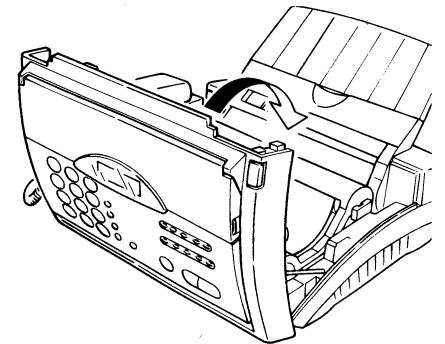


- 11** Gently put the cartridge back into the fax machine. If you've positioned it correctly (see step 10), it will "drop" in smoothly.

**Important:** Your fax machine won't work if the cartridge isn't in the proper position.

- 12** Close the top cover of your fax machine. You'll feel and hear a click when it's closed properly.

**Important:** Your machine won't work if the top cover isn't closed.



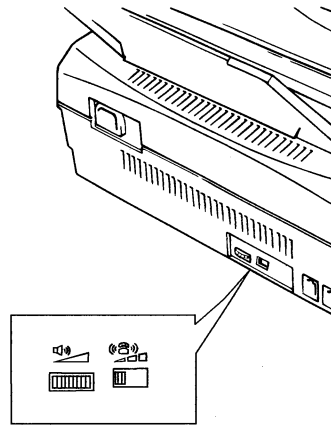
## Adjusting volume settings

You can set how loudly your fax machine will ring when someone calls. Here's how:

- 1 Locate the ringer volume control on the rear of the fax machine. This control is a three-position switch.
- 2 Determine whether you wish to set the ringer for *high*, *medium* or *low* volume.  
**Note:** To turn *off* the ringer, set your fax machine to operate in *silent mode* (see page 2.5).
- 3 Use the volume control to make the setting you've selected.

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

- 1 Locate the monitor speaker volume control on the rear of the fax machine. This control is a dial.
- 2 Press the **monitor/call** key on the control panel. You now should hear a dial tone.  
**Important:** If you don't hear a dial tone, make sure your fax is connected to the phone line. (If necessary, review steps 6 and 7 on page 1.7.)
- 3 Turn the dial until you're satisfied with the volume setting.
- 4 When you've completed making the volume setting, press **monitor/call** again to hang up.



## Attaching a second phone or an answering machine

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

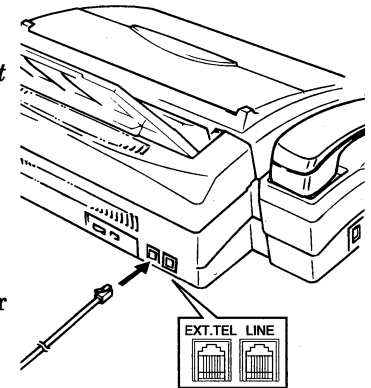
Before we go further, let's explain the idea. You're plugging the phone line of the other device (the phone or the answering machine) into your fax machine, *not* the wall phone jack. In such a setup, only your fax machine connects to the wall. The other device receives phone signals *through* your fax machine.

Now, let's proceed ...

- 1 If your second phone or answering machine 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:** Of course, *don't* unplug either device from its AC power jack! (Some phones also require AC.)

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



For information on how to use either an answering machine or a connected second telephone with your fax machine, see "Receiving faxes," beginning on page 1.16.

*Installation complete!*  
*Now, see how our EasyStart feature will have you up and running — within just 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. (Of course, you can make other settings later or change these 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:

User Data Clear?

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

- 2 If you *are* sure, press **mode/enter** to complete the process.

## What do you want to do?

EasyStart will want you to enter a little information; so, first, please determine:

- 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 wish 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 25 *characters*.

**Note:** Incidentally, the fax industry term for this line of 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

- 1 Press **program**, \*, 4. The LCD will indicate the type of dialing for which the fax machine is set, either tone or pulse. The factory setting is for tone dialing:

Tel Type: Tone

- 2 If the dialing setting is acceptable, skip to step 3. Otherwise, press **program** to change the setting:

Tel Type: Pulse

- 3 Press **mode/enter** to save the dialing setting.

- 4 Now you'll see the current setting of the fax's built-in calendar/clock, with a blinking *cursor* appearing over the first digit.

'96 01 01 00:01

**Important:** Throughout these instructions, we will show the cursor as an *underline*. However, as you can see, it *really* appears on the LCD as a blinking box over the character.

- 5 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, if it's 8:30 PM on September 11, 1996, press **9 6 0 9 1 1 2 0 3 0**, which results in the following:

'96 09 11 20:30

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

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

- 6 Press **mode/enter** to save the clock setting.

- 7 The LCD now asks whether you want to enter the TTI.

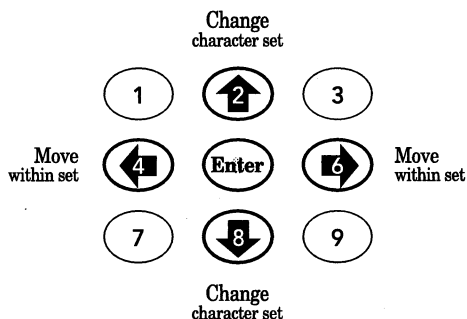
Set Your TTI?

Press **mode/enter** to continue.

- 8 Use the numeric keypad to enter a name up to 25 characters in length. On the LCD, you'll see the *character set* currently available, such as:

\_ ABCDEF >

**Note:** There's a space character on each side of each set.



To find a different character, press **2** or **8** over and over again to scroll through character sets until you see the one you want. For example, pressing **8** several times would show these successive displays:

\_ GHIJKL > → \_ MNOPQR > →

\_ STUVWX > → \_ YZ. > →

\_ abcdef > → ... and so on. (It's OK to explore on your own!)

When you see the character you want:

- Press either **4** or **6** to move the cursor until it's under the desired character.
- Then press **5** to enter the character and move on to the next entry.

**Note:** If you make a mistake, just press **contrast/cancel** to erase leftward. Then enter the character(s) you want.

**Note:** As you enter characters, the LCD will scroll leftward so you can view entries longer than five characters — for example, *Sarah's Fax*:

g h i j k l > Sarah → " # \$ : & ' > arah' →  
 s t u v w x > rah's → \_ s t u v w x > ah's →  
 A B C D E F > h's F → \_ a b c d e f > 's Fa →  
 s t u v w x > s Fax

- 9 When the name is as you want it, press **mode/enter** to save the name.
- 10 Finally, the LCD now asks whether you want to enter the fax number.

Set Fax #?

Press **mode/enter** to continue.

- 11 Use the numeric keypad to enter your fax number as you want it to appear on other fax machines' displays or printouts. To put in a dash for easier reading, press **hold** once. The number can be up to 20 characters in length (counting any dashes).

214-403-3400\_

**Note:** To edit your entry before saving it ...

- Press **a** to move leftward or **b** to move rightward.
- Enter the digit(s) you want (or, just to erase, press **contrast/cancel**).

- 12 When the number is as you want it, press **mode/enter** to save the number.

All done!

Now, your fax machine will print a list of all of its settings (including some we'll cover in "Beyond the Basics").

# Sending faxes

## Some guidelines

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

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

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

SINGLE-SHEET TRANSMISSION	MULTIPLE-SHEET TRANSMISSION
<i>Maximum:</i> 8.5" × 35.4"	<i>Maximum:</i> 8.5" × 14.0"
<i>Minimum:</i> 5.8" × 3.9"	<i>Minimum:</i> 5.8" × 5.8"

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

To help avoid troubles ranging from paper jams to out-and-out 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 LCD) is suitable for most typed documents and simple drawings.
- *Fine resolution* is ideal for maps, moderately complicated drawings, floorplans or handwritten documents.
- *Superfine resolution* ("Sfine" on the LCD) reproduces the detail of extremely complicated drawings or line art.
- *Grayscale mode* ("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.

#### 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* — 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. For now, we'll leave most of this information for later (but, if you're curious, see page 2.6 for more information). *However ...* In the meantime, you may need to know *now* about a particular dialing character: the *pause* character. Some long-distance systems require dialing pauses, and they can be useful 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). Each *standalone* pause you enter lasts five seconds; each *consecutive* pause after that adds another second to the pause. Here are examples:

- Pressing **redial/pause** (after another character) dials a five-second pause.
- Pressing **redial/pause, redial/pause** dials a six-second pause.
- Pressing **redial/pause, 9, redial/pause, 12144032009** dials [5-second pause] 9 [5-second pause] 12144032009.

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

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

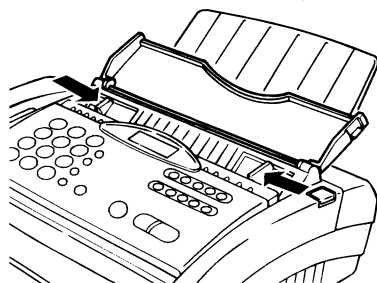
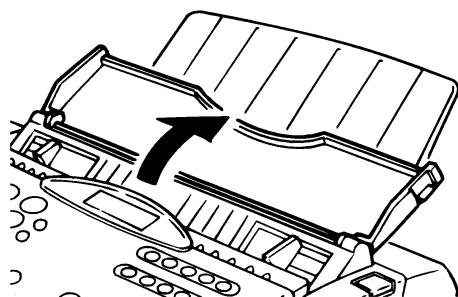
Telephone call-waiting signals can stop fax transmission and reception. And, of course, any service — such as voice mail — which may intercept your calls can keep your fax machine from getting fax calls.

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.



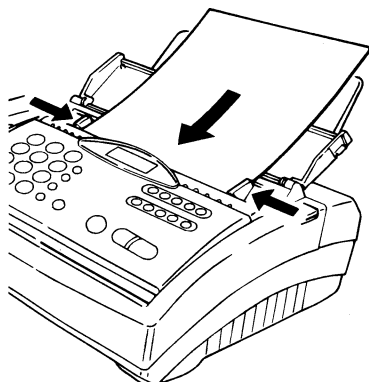
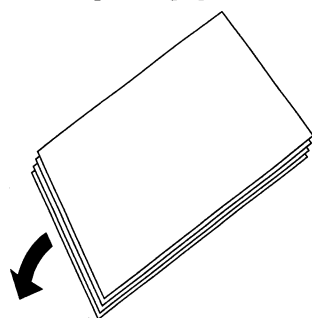
## How to insert a document

- 1 Open the *document hopper* by flipping it open. There's a small tab on its right side which makes this easy.



- 2 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 20 pages.

- 3 If you're sending a multi-page document, "fan" the pages slightly. The first page of the fax should extend just slightly from the other pages.



- 4 Insert the document **face down**. 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 your resolution and contrast settings:

Fax	Norm	Norm
-----	------	------

## Sending

Here's how to fax a document:

- 1 *Insert the document.*
- 2 *Adjust resolution and contrast if necessary.* (If these are OK, skip to step 3.) When a document is in the feeder, the LCD shows the current resolution and contrast settings. For example, the following indicates your machine is set to transmit at *fine resolution* and *normal contrast*.

Fax	Fine	Norm
-----	------	------

To adjust the resolution and contrast:

- Press **mode/enter** to change the resolution.
- Press **contrast/cancel** to change the contrast.

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

912144032009_
---------------

Of course (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.

- 4 *Press start.*

From here on, everything is up to the machines — yours and the one you're dialing.

- 5 Your fax machine dials the other fax. When it makes contact, the display changes to show that your machine is transmitting ("Tx"), and the document feeds through your machine.

Tx	Fine	Norm
----	------	------

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

**Note:** The more "stuff" (or *black coverage*, to use the fax term) your fax machine "sees" on a page, the more slowly the page will feed through. 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*.

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

** Completed **
-----------------

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

You also can fax a document by dialing using either the handset or the monitor speaker (the latter is called “on-hook” dialing). Here’s how:

- 1 *Insert the document.*
- 2 *Adjust resolution and contrast if necessary.* (If these are OK, skip to step 3.)
  - Press **mode/enter** to change the resolution.
  - Press **contrast/cancel** to change the contrast.
- 3 *Obtain a dial tone.* You can do this by *either*:
  - Lifting the handset
  - ... or ...
  - Activating the monitor speaker (by pressing **monitor/call**).

In either case, the LCD shows:

Telephone

- 4 *Enter the fax number.*

912144033400\_

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, tell him or her 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 the handset, hang up (after pressing **start**).
- 7 The LCD changes to show that your machine is transmitting (“Tx”), and the document feeds through your machine.

Tx   Fine   Norm

**Note:** What if the call *doesn’t* go through? See next column.

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

\*\* Completed \*\*

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

If the call fails, your machine’s LCD will show:

Reserved

This means your fax machine is “reserved” for the transmission you just tried. While “reserved,” the machine can *receive* faxes but *can’t transmit*.

If you dialed *without* using either the handset or the monitor speaker, your machine *automatically redials* the number every three minutes until one of these happens first:

- It reaches the remote fax machine.
- It has automatically redialed the number five times.

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

**Note:** If the last try fails, your machine may print (and/or display) error messages. For more information, see “Figuring out communications problems,” page 3.4.

To cancel the redialing, just press **stop**. The document will feed back out and your machine will return to normal operation.

No matter how you dialed, you always can redial manually; and, again, you *must* redial manually if you dialed by using either the handset or the monitor speaker.

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

- 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 handset or monitor speaker:

- 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 by *either* lifting the handset *or* pressing **monitor/call**.
- 3 Press **redial/pause**.
- 4 *When you hear fax tones from the remote unit, press **start**.*

**Note:** If a person answers the phone, tell him or her you’re trying to send a fax. When his/her machine sends you fax tones, *then* press **start**.

To redial a voice call manually:

- 1 Obtain a dial tone by **either** lifting the handset *or* pressing **monitor/call**.
- 2 Press **redial/pause**.

# Receiving faxes

## So what's the big deal, anyway?!?

That may be what you're wondering, upon seeing the title above. After all, telling you how to *send* faxes is one thing, but — as long as the fax machine is running and has paper installed — why spend time on explaining how to *receive* faxes?

Well, you have a point — but there are just a few little niceties you may find helpful to know, especially if you want to connect any other devices to your machine. So ...

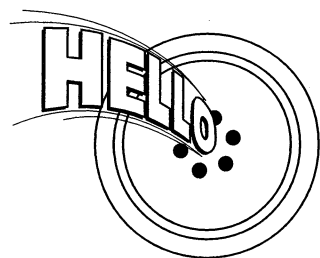
## Different ways to get the job done

### Reception modes

Your fax machine has four different reception modes, each of which we'll explain in a moment — along with giving you an idea of *which* one you should use, depending upon your set-up.

### Answering calls manually — for all reception modes

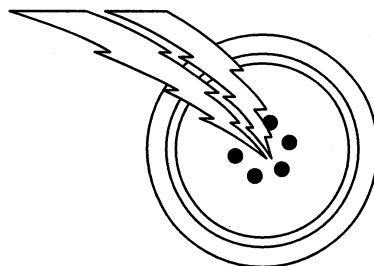
In any reception mode, you always can answer calls manually! Just pick up your fax machine's handset.



If you hear someone speaking to you...  
... go ahead and have a normal phone call.

If you hear distinctive *fax tones* ("beep — beep — beep — beep") ...

... press **start** and hang up the handset. Your fax machine will begin receiving a fax.



## Tel Ready mode

**Use it if:** You intend to use the same line for both fax and phone calls.  
... and ...

You're using, on that line, at least one other phone which is *not* connected to your fax machine.

**In this mode:** Your fax machine never answers calls automatically; you must answer each call and handle it as described, above, in "Answering calls manually — for all reception modes."

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 **receive/tone** repeatedly until the LCD shows:

**Tel Ready 11:05**

## Fax Ready mode

**Use it if:** You have your fax machine installed on a "dedicated" line (one it doesn't share with either an answering machine or second phone).

**In this mode:** Your fax machine answers each incoming call after a certain number of rings (see page 2.3) 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 **receive/tone** repeatedly until the LCD shows:

**Fax Ready 09:25**

## T/F Ready mode

**Use it if:** You're using your fax machine as not only your fax machine but also a telephone. (And, by the way, that's a great idea! See page 2.12 for more information.)

**In this mode:** Your fax machine answers each incoming call *after one ring* and, if you receive a voice call, alerts you with a special ring.

As its name implies, the T/F (tel/fax) Ready reception mode is sort of a hybrid of the Tel Ready and Fax Ready modes.

To select T/F 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 **receive/tone** repeatedly until the LCD shows:

T/F Ready 17:38

## Silent fax operation in T/F Ready mode

Use *silent* T/F Ready operation if you want your fax machine to:

- Receive faxes silently (*i. e.*, without beeping at the end of each reception)  
... *but also* ...
- Alert you when a regular voice call comes in.

If a voice call comes in, your machine detects it and sounds a special ring for about 30 seconds. If you hear it, you'll know you should answer.

To make your fax operate this way:

- 1 Set your fax machine for T/F Ready, as explained above.
- 2 Activate *silent mode* on your machine (see page 2.5).

**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.

## What if you answer a fax call?

With your fax machine in T/F Ready mode, you can easily use your fax machine on the same line as the other telephone(s) already in your home or office.

Now, let's deal with the two possible ways your phone(s) and your fax can live happily together on one line:

- A phone connected directly to your fax machine (see page 1.10)
- A phone, or phones, connected elsewhere in your home or office

### Using a phone connected to your fax machine

If you answer a connected phone and hear fax tones, simply hang up the handset. Your fax machine will go ahead and receive the fax call.

### Using a phone not connected to your fax machine

Let's say you have another telephone connected to the same line ("branch connected") as, but not physically to, your fax machine. If you answer a call on such a phone and hear fax tones, here's what to do to receive the incoming fax:

- 1 *Don't hang up the line!* Instead, either:
  - Put the telephone handset *down* (but — again — *don't* hang it up)  
*or*
  - If the telephone has a "hold" feature, put the phone on hold and *then* hang up the handset.
- 2 Go to your fax machine.
- 3 Lift the fax machine's handset *or* press **monitor/call**.
- 4 Press **start**. If you lifted the fax machine's handset in step 3, hang it up now.
- 5 Return to the telephone. If you didn't put the phone on hold in step 1, hang up its handset.

## Ans Ready mode

**Use it if:** You're using an answering machine which is connected directly to your fax machine.

... or ...

You're using a second telephone which is connected directly to your fax machine.

**In this mode:** Your fax machine waits until the phone has rung a certain number of times (see "Using an answering machine with your fax machine," below) before it attempts fax reception. This gives your answering machine (or you, in the case of using a second phone) a chance to "grab" the line when someone calls.

To select Ans 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 **receive/tone** repeatedly until the LCD shows:

Ans Ready 15:11

## Using an answering machine with your fax machine

Here are a few additional steps you'll need to follow if you're connecting your answering machine to your fax machine:

- 1 On your fax machine, press **receive/tone** (over and over again; don't hold it down) until the LCD shows the machine is in Ans Ready mode:

Ans Ready 12:43

- 2 Press **program, 7, mode/enter, 0, 9**.

Set # of Rings

- 3 Press **mode/enter**. Your machine now shows how many times it's set to ring when someone calls.

# of Rings = 2

- 4 Press **6**.

# of Rings = 6

- 5 Press **mode/enter**. Your fax machine now will wait until the phone has rung six times before it attempts fax reception. This will give your answering machine a bit more time to "grab" the line when someone calls.

- 6 Set your answering machine to answer calls after *no more than* two rings. (Consult the answering machine's instructions if necessary.)

**Note:** Your answering machine may have a "toll-saver" feature, which causes the machine to allow only one ring if it has messages waiting. However, since some versions of this feature allow as many as four rings if there *aren't* messages waiting, using this feature may cause problems. So *please be sure your answering machine is set to allow no more than two rings, regardless of whether it has messages waiting.*

- 7 Finally, use your answering machine to create a new outgoing message. Due to the way fax machines work, your message must be *no longer than* 10 seconds to avoid causing problems.

Here's a suggested message:

*Hello! You've reached [your name or telephone number]. To leave a **voice** message, please wait for the beep. To send a **fax**, press **Start** on your fax machine. Thanks for calling!*

## Detection of "silent" fax machines

Some older fax machines don't send fax tones when transmitting. If you're using your answering machine with your machine, this may cause a problem. Under these circumstances, your fax machine would fail to detect the calling fax machine; as a result, the answering machine would record the call — dead silence.

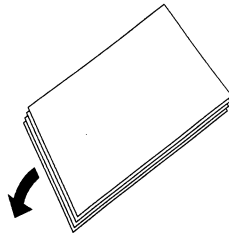
However, your fax machine can accommodate these "silent" machines *without* disrupting your answering machine operation. For more information, see "Allowing silent fax detection," page 2.25.

# Making copies

One of the best things about your fax machine is that it doubles as a *handy copier*. This makes it easy for you to keep copies of your important documents, such as insurance forms, receipts and letters. That's right: no more dashes to the copy shop!

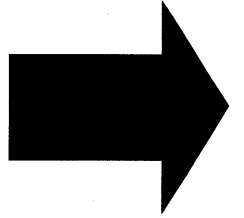
To make a copy with your fax machine:

- 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 1.13.)
  - The document can be up to 20 pages in length.
  - If you're copying a multi-page document, “fan” the pages so that the first extends just slightly from the rest.
  - Adjust your machine's document guides to fit the document.
- 2** Insert the document **face down**. (If necessary, re-adjust the document guides for a correct fit.)
- 3** Press **copy**.



**Note:** You can't start a fax or voice call while copying is going on; however, you *can* receive a *voice* call during copying.

# Beyond the basics



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

# What's inside this section

Getting everything just the way you want it .....	2.2
Autodialer .....	2.6
It's a great phone, too .....	2.12
The time machine: delayed transmission .....	2.13
Special features .....	2.14
ScanPlus: fax/computer connectivity .....	2.22
Custom settings .....	2.24



# 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. First, we’ll show you other ways to handle those “just-gotta” settings, in case you “just gotta” do ‘em again but for some reason don’t want to use EasyStart again.

## Setting the date and time

- 1 Press **program**, **7**, **mode/enter**, **0**, **3**.

Set Clock

- 2 Press **mode/enter**. You’ll see the current date and time setting.

'96 01 01 00:01

- 3 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, if it’s 2:00 PM on May 26, 1996, press **9 6 0 5 2 6 1 4 0 0**, which results in the following:

'96 05 26 14:00

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

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

- 4 Press **mode/enter** to save the clock setting.

## Setting the TTI

Just a reminder: the TTI is the little line of text that appears at the top of every fax you send (*i. e.*, the person *getting* the fax sees it; your machine doesn’t print it out).

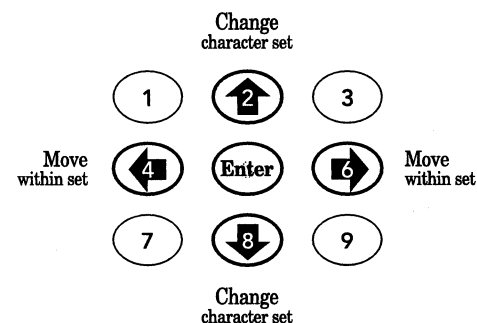
- 1 Press **program**, **7**, **mode/enter**, **0**, **4**.

Enter Your TTI

- 2 Press **mode/enter**, **mode/enter**.

- 3 Use the numeric keypad to enter a name up to 25 characters in length. On the LCD, you’ll see the *character set* currently available, such as:

\_ABCDEF >



**Note:** There’s a space character on each side.

To find a different character, press **2** or **8** over and over again to scroll through character sets until you see the one you want.

When you see the character you want:

- Press either **4** or **6** to move the cursor until it’s under the desired character.
- Then press **5** to enter the character and move on to the next entry.

**Note:** If you make a mistake, just press **contrast/cancel** to erase leftward. Then enter the character(s) you want.

**Note:** As you enter characters, the LCD will scroll leftward so you can view entries longer than five characters.

- 4 When the name is as you want it, press **mode/enter** to save the name.

- 5 Finally, the LCD now asks whether you want to enter the fax number.

Set Fax #?

Press **mode/enter** to continue.

- 6 Use the numeric keypad to enter your fax number as you want it to appear on other fax machines. To put in a dash for easier reading, press **hold** once. The number can be up to 20 characters in length (counting any dashes).

214-403-3400\_

**Note:** To edit your entry before saving it ...

- Press **a** to move leftward or **b** to move rightward.
- Enter the digit(s) you want (or, just to erase, press **contrast/cancel**).

- 7 When the number is as you want it, press **mode/enter** to save the number.

## Setting tone- or pulse-dialing

Your machine lets you choose between tone-dialing and pulse-dialing.

To select your dialing mode:

- 1 Press **program**, **7**, **mode/enter**, **0**, **6**. The LCD will show:

Set Phone Type

- 2 Press **mode/enter**.

Tel Type: Tone

- 3 If the setting you see is acceptable, skip to step 4. To change the setting, press **program** repeatedly until your chosen mode appears. In this example, we've chosen pulse dialing.

Tel Type: Pulse

- 4 Press **mode/enter** to save the setting.

**Note:** If, with your machine set for pulse dialing, you must enter tones during a call, press **receive/tone**. Your machine now will *tone*-dial all subsequent numbers. When you hang up this call, your machine will return to pulse-dialing for the next call.

For more information, see "Special dialing characters," page 2.6.

## Setting the primary transmission mode

Your fax machine gives you four ways to send faxes: in one of the three resolution modes, or in grayscale mode. This setting tells your fax machine which of these transmission modes — normal ("Norm" on the LCD), fine, superfine ("SFine") or grayscale ("Gray") — you use most often.

**Note:** This setting has no effect on the faxes you *receive*. The *sending* fax machine always controls the resolution of the received fax document.

- 1 Press **program**, **7**, **mode/enter**, **0**, **7**. The LCD will show:

Set Fax Resol.

- 2 Press **mode/enter**.

Fax Resol. Norm

- 3 If the setting you see is acceptable, skip to step 4. To change the setting, press **program** repeatedly until your chosen mode appears. In this example, we've chosen fine resolution.

Fax Resol. Fine

- 4 Press **mode/enter** to save the setting.

Of course, you *always* can change the resolution before sending, as we've discussed before. When a document is in the feeder, the LCD shows the current resolution and contrast settings. For example, the following indicates your machine is set to transmit at *fine resolution* and *normal contrast*.

Fax Fine Norm

To adjust the resolution and contrast:

- Press **mode/enter** to change the resolution.
- Press **contrast/cancel** to change the contrast.

**Note:** There is no way to reset the default contrast setting (*normal*).

## 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.

**Note:** If you're using an answering machine with your fax machine and have correctly set your fax machine for that use (see page 1.18), this setting won't matter; the answering machine will answer first.

- 1 Press **program**, **7**, **mode/enter**, **0**, **9**. The LCD will show:

Set # of Rings

- 2 Press **mode/enter**.

# of Rings = 2

- 3 If the setting you see is acceptable, skip to step 4. 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.

# of Rings = 4

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

- 4 Press **mode/enter** to save the setting.

## Print and copy reduction

### Cutting something down to size

Your machine automatically determines what size of paper it's using. But what if someone faxes you a document on a larger sheet when you're not expecting it? For example, you may have letter-sized paper loaded — but someone sends you a legal-sized document.

If you make no changes to any settings, your machine simply will print two pages for each over-sized page you receive. However, that can consume a lot of paper and donor film in a hurry.

That's why your fax machine has *print reduction*. This lets you set the machine to reduce an incoming document to a size which *will* fit on the paper you're using.

The print reduction setting doesn't affect the any *copies* you may make with your fax machine. Fortunately, however, your machine also has similar *copy reduction*.

### Reduction choices

Here are the options, which are the same for both settings:

Setting	What it does
100%	Performs no reduction. (Due to the sender's TTI, this may print <i>two</i> pages when receiving a one-page fax document. See 91%, below.)
97%	Factory setting. Reduces an original so that the final printout of a one-page received fax ( <i>if the original isn't larger than the paper in your machine</i> ) will be only one page long, despite the TTI.
91%	Provides slightly more reduction.
80%	Provides even greater reduction. Helpful for certain international stationery sizes, as well as special applications.
75%	Turns <i>legal-sized</i> originals into <i>letter-sized</i> printed copies.

### But, of course, be sensible ...

While handy, 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, if possible, **load the correct size of paper *before* receiving a fax (or making a copy) of that size.**

## Setting print reduction

To set the *print* reduction rate:

- 1 Press **program, 7, mode/enter, 1, 4**. The LCD will show:  

Set Print Reduct
- 2 Press **mode/enter**.  

Reduct Rate: 97%
- 3 *If the setting you see is acceptable, skip to step 4.*  
 To change the setting, press **program** repeatedly until your chosen mode appears. In this example, we've chosen 75%.  

Reduct Rate: 75%
- 4 Press **mode/enter** to save the setting.

## Setting copy reduction

To set the *copy* reduction rate:

- 1 Press **program, 7, mode/enter, 1, 5**. The LCD will show:  

Set Copy Reduct
- 2 Press **mode/enter**.  

Reduct Rate: 97%
- 3 *If the setting you see is acceptable, skip to step 4.*  
 To change the setting, press **program** repeatedly until your chosen mode appears. In this example, we've again chosen 75%.  

Reduct Rate: 75%
- 4 Press **mode/enter** to save the setting.

## Put a sock on it: 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 mutes both the ringer and the "I'm done!" beep your machine makes after sending or receiving a fax or making a copy.

**Note:** Let's say it again — silent mode mutes the *ringer* as well as the beep. So, if you're using your fax machine as both a fax and phone, you may not wish to 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, 7, mode/enter, 1, 0**. The LCD will show:

Set Silent Mode

**2** Press **mode/enter**.

Silent Mode OFF

**3** If the setting you see is acceptable, skip to step 4.  
To change the setting, press **program** repeatedly until your choice appears.  
In this example, we've selected *ON*.

Silent Mode ON

**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 silent mode, *not* to the *sound*!)

**4** Press **mode/enter** to save the setting.

## Blocking "junk fax"

**Note:** The Imagemate CX doesn't have this feature.

Although various levels of government all over the map have passed laws against it, unauthorized fax traffic — "junk fax" — keeps coming. Until that glad day when it stops, activating your fax machine's *Block Junk Fax* feature gives you the ability to bar the gates ... *but*, first, please take a moment to understand *how* this feature works, so you can determine whether it is right for you.

When you've activated Block Junk Fax and a fax call arrives, your fax machine checks to see if any phone number in your autodialer (see page 2.6) matches the last four digits of the remote fax machine's Subscriber ID — remember, that's the phone number part of the TTI. If it *doesn't* find such a match, your machine then disconnects the call. So, before activating the Block Junk Fax feature, consider:

- *Not all fax machine owners enter their phone numbers in their Subscriber IDs.* — Indeed, some fax machines don't even *have* a Subscriber ID. So, with Block Junk Fax activated, your machine would reject faxes from such machines.
- *Access codes can cause confusion.* — If some of your autodialer entries end with long-distance or other access codes, Block Junk Fax will block out calls from those fax machines. (After all, those other fax users won't put *your* codes at the end of *their* Subscriber IDs.)

If you do decide to go ahead with activating Block Junk Fax, here's how:

**1** Press **program, 7, mode/enter, 1, 6**. The LCD will show:

Block Junk Fax

**2** Press **mode/enter**.

Block Junk OFF

**3** If the setting you see is acceptable, skip to step 4.  
To change the setting, press **program** repeatedly until your choice appears.  
In this example, we've selected *ON*.

Block Junk ON

**4** Press **mode/enter** to save the setting.

## Print 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 are related only to 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, 6, mode/enter, mode/enter**.

# 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 "call them up," so to speak:

- *One-touch* — Pressing one of the keys, marked **a** through **j**, on the right side of the control panel.
- *Speed-dial* — Pressing **speed dial** followed by a two-digit identifier, from **01** to either **30** or **40** (see "How big is the vault?" below).

### How big is the vault?

How many numbers can your fax store? It depends upon which model you have:

- *Imagemate MX* — Up to 10 one-touch numbers and up to 40 speed-dial numbers.
- *Imagemate CX* — Up to 10 one-touch numbers and up to 30 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 command 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 2.10). 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: *912144032009* or *9-1-214-403-2009*?

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. Otherwise, your autodialer won't be so "auto" after all!

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</b>
!	Tells your fax machine to pause until it "hears" a dial tone.	<b>hold, hold</b>
/	(Has no effect in the United States.)	<b>hold, hold, hold</b>
—/	Enters a pause. One pause by itself lasts five seconds; each <i>consecutive</i> pause adds another second to the pause. Each pause uses <i>two</i> of the characters you can store in one phone number.	<b>redial/pause</b> [after entry of at least one other character]
—!	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>receive/tone</b>

## One-touch numbers

### Entering or changing a one-touch number

- 1** Press **program**, **7**, **mode/enter**. The LCD shows:

Set One-Touch

- 2** Press **mode/enter**. (If **a** is the key you want to use, skip to the "Important" note before step 4.)

Select a - j: a

- 3** Press the one-touch key in which you want to store a number or change a previously stored number.

Select a - j: c

**Important:** If you change your mind and wish to select a different one-touch key, just press the desired key before going on to step 4.

- 4** Press **mode/enter**. The fax machine now asks you to give the number a name — a Location ID, remember? — so you'll be able to find it easily in the EasyDial directory (see page 2.10).

Location ID

**Note:** If you want to enter a number *without* entering a Location ID, press **program** and skip to step 8.

- 5** Press **mode/enter**.

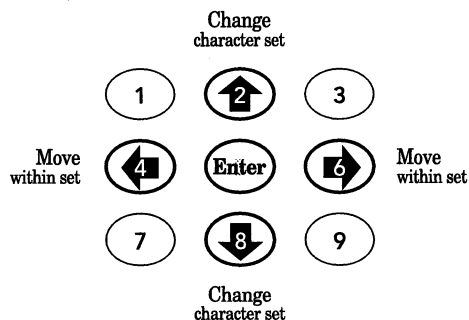
- 6** Use the numeric keypad to enter a name up to 16 characters in length. (Take note: the limit is 16 characters, *not* 25, although the procedure is like that you previously used to enter your own TTL.)

On the LCD, you'll see the *character set* currently available, such as:

\_ABCDEF >

**Note:** There's a space character on each side of each set.

To find a different character, press **2** or **8** over and over again to scroll through character sets until you see the one you want.



When you see the character you want:

- Press either **4** or **6** to move the cursor until it's under the desired character.
- Then press **5** to enter the character and move on to the next entry.

**Note:** If you make a mistake, just press **contrast/cancel** to erase leftward. Then enter the character(s) you want.

**Note:** As you enter characters, the LCD will scroll leftward so you can view entries longer than five characters.

- 7** When the name is as you want it, press **mode/enter** to save the name.

- 8** The LCD now displays only the cursor:

\_

- 9** Use the numeric keypad to enter the fax number *exactly as your machine should dial it*. (You may want to review "Special dialing characters," page 2.6, for information on additional characters you can add if necessary.) The number can be up to 40 characters in length.

9-1-5559292039\_

**Note:** Your display can show only 16 characters at a time. To view characters beyond those 16 (such as with an international long-distance number), press **a** to scroll leftward or **b** to scroll rightward.

**Note:** To change a character you've already entered:

- Press **a** to scroll leftward or **b** to scroll rightward to the character.
- Press **contrast/cancel** to erase the character.
- Enter the digit(s) you want.

- 10** Press **mode/enter**.

### One-touch fax dialing

To dial a *fax* call using a one-touch number:

- 1** Insert the document.
- 2** Adjust resolution and contrast if necessary.
- 3** Press the one-touch key in which you've stored the number. As the fax machine dials, the LCD will show the Location ID:

Katz's Cat Care

**Note:** If the number doesn't have a Location ID, the number appears. The machine will handle the call from here.

## One-touch *phone* dialing

To dial a *phone* call using a one-touch number:

- 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:

9-1-5559292039\_

**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 one-touch number

- 1 Press **program, 7, mode/enter**. The LCD shows:

Set One-Touch

- 2 Press **mode/enter**. (If **a** is the key you want to erase, skip to the "Important" notes before step 4.)

Select a - j: a

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

Select a - j: b

**Important:** If you change your mind and wish to erase a different one-touch number, just press the desired key before going on to step 4.

**Important:** If you want to quit the operation without erasing *any* number at all, press **stop**.

- 4 Press **contrast/cancel**.

Number Erased

To erase another one-touch number, repeat steps 3 and 4. Or press **stop** to return to standby mode.

## Printing a list of your one-touch numbers

Whoops! 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 and the Location ID (if any) and number you've stored in the key.

To print the list, press **program, 6, mode/enter, 2, mode/enter**.

## Speed-dial numbers

As we mentioned before, an Imagemate MX will store up to 40 speed-dial numbers and an Imagemate CX will store up to 30 speed-dial numbers.

**Important:** Because the identifier has to be two digits in length, you must begin the identifier for each of the first nine numbers with a "leading" zero. For example, the first number's identifier must be *01*, not just *1*. If you enter only the second digit, this will "confuse" your machine and it won't dial the speed-dial number you want.

## Entering or changing a speed-dial number

- 1 Press **program, 7, mode/enter, 0, 2**. The LCD shows:

Set Speed-Dial

- 2 Press **mode/enter**. Depending upon which model you have, you'll see one of two displays:

If you have an Imagemate MX, you'll see: Select 1-40 : 01

If you have an Imagemate CX, you'll see: Select 1-30 : 01

(If *01* is the number you want, skip to the "Important" note before step 4.)

- 3 Use the numeric keypad to enter a two-digit speed-dial number identifier, from *01* to either *30* or *40* (again, depending upon the model). In this example, we've entered *09* (on an Imagemate MX):

Select 1-40 : 09

**Important:** If you change your mind and wish to select a different speed-dial number, just enter the other number's identifier before going on to step 4.

- 4 Press **mode/enter**. The fax machine now asks you to give the number a Location ID for easy location in the EasyDial directory (see page 2.10).

Location ID

**Note:** If you want to enter a number *without* entering a Location ID, press **program** and skip to step 8.

- 5 Press **mode/enter**.

- 6 Use the numeric keypad to enter a name up to 16 characters in length.

On the LCD, you'll see the *character set* currently available, such as:

\_ABCDEF >

**Note:** There's a space character on each side.

To find a different character, press 2 or 8 over and over again to scroll through character sets until you see the one you want.

*When you see the character you want:*

- Press either 4 or 6 to move the cursor until it's under the desired character.
- Then press 5 to enter the character and move on to the next entry.

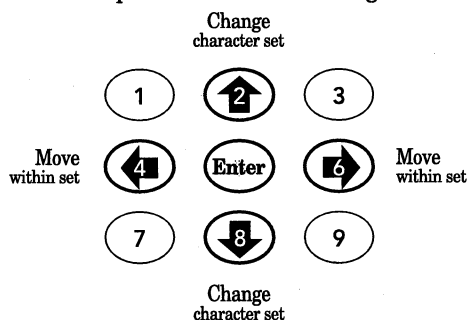
**Note:** If you make a mistake, just press **contrast/cancel** to erase leftward. Then enter the character(s) you want.

**Note:** As you enter characters, the LCD will scroll leftward so you can view entries longer than five characters.

- 7 When the name is as you want it, press **mode/enter** to save the name.

- 8 The LCD now displays only the cursor:

\_



- 9 Use the numeric keypad to enter the fax number *exactly as your machine should dial it*. (You may want to review "Special dialing characters," page 2.6.) The number can be up to 40 characters in length.

9-1-555-929-2039

**Note:** Your display can show only 16 characters at a time. To view characters beyond those 16 (such as with an international long-distance number), press **a** to scroll leftward or **b** to scroll rightward.

**Note:** To change a character you've already entered:

- Press **a** to scroll leftward or **b** to scroll rightward to the character.
- Press **contrast/cancel** to erase the character.
- Enter the digit(s) you want.

- 10 Press **mode/enter**.

## Faxing 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 Press **speed dial**. The LCD will show:

( )

- 4 Use the numeric keypad to enter the two-digit identifier (such as 08) for the number you want to dial. The LCD will display the number:

9-1-293-5551029\_

- 5 Press **start**.

The machine will handle it from here.

## Phoning via speed-dial

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

- 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**. The LCD will show:

( )



- 3** Use the numeric keypad to enter the two-digit identifier (such as **1 6**) for the number you want to dial. As soon as you do, your machine will dial the number, showing it on the LCD:

9-1-328-5556341

**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, 7, mode/enter, 0, 2**. The LCD shows:

Set Speed-Dial

- 2** Press **mode/enter**. Depending upon which model you have, you'll see one of two displays:

If you have an Imagemate MX, you'll see: Select 1-40 : 01

If you have an Imagemate CX, you'll see: Select 1-30 : 01

(If 01 is the number you want to erase, skip to the "Important" note before step 4.)

- 3** Enter the two-digit identifier for the speed-dial number you want to erase.

Select 1-40 : 07

**Important:** If you change your mind and wish to erase a different speed-dial number, just enter the other number's identifier (making sure it's displayed on the LCD) before going on to step 4.

**Important:** To quit the operation without erasing *any* number at all, press **stop**.

- 4** Press **contrast/cancel**.

Number Erased

To erase another speed-dial number, repeat steps 3 and 4. Or press **stop** to return to standby mode.

## Printing a list of your speed-dial numbers

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

To print the list, press **program, 6, mode/enter, 3, mode/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).

**Note:** Your machine's EasyDial directory alphabetizes in the following order: lower-case letters; upper-case letters; and, finally, numbers and symbols.

**Note:** To make a regular phone (not fax) call, *make sure there's no document in the feeder* and then skip to step 3, below.

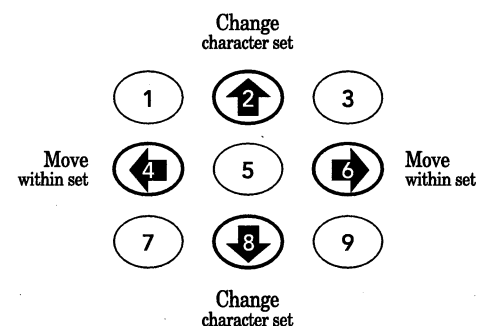
- 1** Insert the document.
- 2** Adjust resolution and contrast if necessary.
- 3** Press **speed dial, speed dial**. The LCD shows the *alphabetically first* listing in your fax machine's EasyDial directory:

ABC Company

(If this listing is the one you want to dial, skip to step 5.)

- 4** 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 find the first character — *s*, for example — of the Location ID.
- **4** or **6** to check different listings — such as *Sarah*, *Shaina* or *Stuart* — beginning with that character.



**Note:** When you're pressing **2** or **8**, the LCD will display only characters with at least one entry.

**Note:** If there is only one listing for a displayed character, pressing **4** or **6** will only cause the fax machine to beep at you briefly.

- 5** 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. 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 three minutes later. 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 five times.

#### *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 dandy little telephone, too! Let's see just *how* dandy by looking briefly at the machine's telephone features.

## 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 phone conversation by pressing **hold**. The LCD will show:

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** again.

## 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, and the LCD will show:

Telephone

- 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; so, be sure to pick up the handset if the other person answers!

**Note:** You also can 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.

## You can EasyDial regular phone calls, too

Just in case you didn't know, the EasyDial directory dialing feature (see page 2.10) is available for regular phone calls as well as fax calls. To EasyDial a regular phone call:

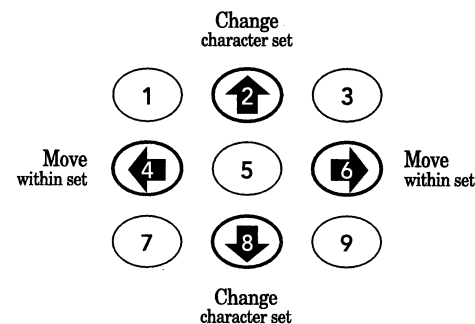
- 1 Make sure there is no document in your fax machine's document feeder.
- 2 Press **speed dial, speed dial**. The LCD shows the *alphabetically first* listing in your fax machine's EasyDial directory:

ABC Company

(If this listing is the one you want to dial, skip to step 4.)

- 3 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 find the first character — *s*, for example — of the Location ID.
- 4 or 6 to check different listings — such as *Sarah*, *Shaina* or *Stuart* — beginning with that character.



**Note:** When you're pressing 2 or 8, the LCD will display only characters with at least one entry.

**Note:** If there is only one listing for a displayed character, pressing 4 or 6 will only cause the fax machine to beep at you briefly.

- 4 When the LCD is showing the name you want to dial, press **start**. Your machine will activate the monitor speaker and dial a regular phone call. 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.

# The time machine: delayed transmission

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

**Important:** The document must be *in the machine's feeder* when the delayed transmission is to occur.

## Setting up a delayed transmission

Your machine remembers only the *day* of the month, and not the month itself, when it's supposed to perform a delayed transmission. So, for example, if it's May 26 and you want your fax machine to do something at 5:05 PM on *June* 26, wait until after 5:05 PM on May 26 to perform the instructions below. Of course, the simplest way around this is to wait until the next day — in this case, May 27 — to do the programming! But, if you must program on the same *day* (of the next month) as your "target" date, keep this information in mind.

To set up a delayed transmission:

- 1 Insert the document.
- 2 Adjust resolution and contrast if necessary.
- 3 Press **program**. The LCD shows:
 

Delayed Trans.
- 4 Press **mode/enter**. The LCD shows the current day of the month, followed by the current time (in 24-hour format, as you'll recall):
 

Time : 11,16:25
- 5 Use the numeric keypad to enter the day of the month and the time when you want the fax to carry out the delayed transmission. (To move the cursor to a specific digit, press **a** to move leftward or **b** to move rightward.) Here, we've set the transmission to occur on the 11th at 11:05 PM:
 

Time : 11,23:05
- 6 When the date and time is as you want it, press **mode/enter** to save the delayed transmission.

- 7 Enter the fax number to which the delayed transmission should go. You may either press a one-touch key, enter a speed-dial number or just use the numeric keypad normally.

**Note:** For more information on one-touch and speed-dial numbers, see pages 2.6–2.11.

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

Reserved

This means your fax machine is "reserved" for the delayed transmission command you just programmed. While "reserved," the machine can *receive* faxes but *can't transmit*. In order to transmit before the delayed transmission happens, you'll need to cancel the command (see "Cancelling a delayed transmission command," below).

## Printing a command list

Can't remember some details about the delayed transmission command you set up? Or, let's say, someone else in your office is the one who set it up, but now he or she has left for the night and you have no idea why the machine is "reserved" and how long it'll stay that way!

Fortunately, your machine can print a *command list* which tells you:

- 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. (A *what* operation? See pages 2.16–2.17 and 2.19.)

To print a command list, press **program**, **6**, **mode/enter**, **4**, **mode/enter**.

## Cancelling a delayed transmission command

So, your machine is "reserved" for a delayed transmission — but you want it back before the transmission is supposed to occur? Just press **stop** to cancel the delayed transmission. Your document will feed back out and you'll be able to use your machine for other transmission purposes. (When you're sure you won't need it again for a while, *then* set your machine for a delayed transmission.)

# Special features

Your fax machine has numerous special features — yes, even more! — to make your communications easier. We'll quickly cover them here.

## Cover page

For your greater 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:

**Fax Message From:**

Sep 11 '96 20:30

Name : And Sew It Goes Co.  
Fax No.: 555-403-2009

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.

If you send to a thermal-paper fax machine, that machine will use only enough thermal paper to print the cover page information box plus top and bottom margins, then proceed to print your faxed document.

## Setting up the cover page

- 1** Press **program**, **7**, **mode/enter**, **1**, **1**.

Set Coverpage

- 2** Press **mode/enter**.

Coverpage    OFF

- 3** To tell the fax machine it *should* send a cover page before each document you transmit, press **program**. (To abort the operation and leave the cover page feature turned off, press **stop**.)

Coverpage    ON

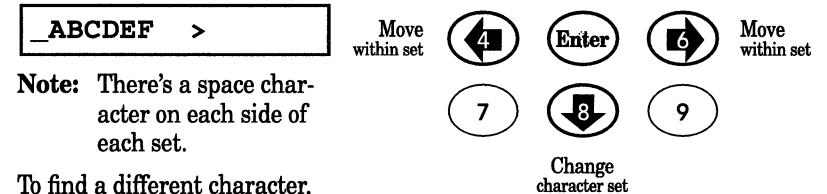
**Note:** If you want to abort the operation so the cover page feature *won't* work, press **program** again so that "OFF" appears and press **stop**.

- 4** Press **mode/enter**.

- 5** Now, use the numeric keypad to enter a message for the cover page. The message can be up to 40 characters in length.

**Note:** If you don't *want* to enter a message for the cover page, press **stop** and skip this step and step 6. The cover page feature will still work, but the message line will be blank except for its opening and closing brackets.

On the LCD, you'll see the *character set* currently available, such as:



**Note:** There's a space character on each side of each set.

To find a different character, press **2** or **8** over and over again to scroll through character sets until you see the one you want.

*When you see the character you want:*

- Press either **4** or **6** to move the cursor until it's under the desired character.
- Then press **5** to enter the character and move on to the next entry.

**Note:** If you make a mistake, just press **contrast/cancel** to erase leftward. Then enter the character(s) you want.

**Note:** As you enter characters, the LCD will scroll leftward so you can view entries longer than five characters.

- 6** When the message is as you want it, press **mode/enter** to save the message.

## Turning off the cover page feature

- 1 Press **program, 7, mode/enter, 1, 1.**

Set Coverpage

- 2 Press **mode/enter.**

Coverpage ON

- 3 Press **program.**

Coverpage OFF

- 4 Press **mode/enter.** Your fax machine will return to its normal standby mode.

## Printing the cover page

To confirm that the cover page is as you wish, it's easy to print a sample cover page from your fax machine. Press **program, 6, mode/enter, 5, mode/enter.**

And, speaking of confirmations ...

## Reports: TCRs and RARs

You can set your fax machine to print *reports*.

There are two different reports: a *transmit confirmation report (TCR)* and a *receive advisory report (RAR)*. When set accordingly, the machine prints a TCR each time it sends a fax and/or an RAR when it receives a fax. The report tells you the following information for each communication:

- *Date and time*
- *"Location,"* which is one of the following:
  - If you're *sending* a fax and you dialed from the numeric keypad, the fax number you dialed
  - If you're *sending* a fax and you used either a one-touch number or a speed-dial number, the name (Location ID) you've stored with that number
  - If you're *receiving* a fax from a Muratec machine, the name (or — if no name is present — the fax number [if any]) stored in the other machine's TTI
  - If you're *receiving* a fax from a *non-Muratec* machine, the fax number (if any) stored in the other machine's TTI
- *Duration*, in minutes and seconds
- *Number of pages* — Incidentally, this count does *not* include the built-in cover page, if you've using that feature
- *Result* — Either "OK" or an error code (see "Errors," page 3.5).

**Note:** In the following instructions, you'll note that your machine uses the terms *Tx* and *Rx*. These are communications industry abbreviations. *Tx* is short for *transmit*. *Rx* is short for *receive*.

To set the printing of either, or both, of these reports:

- 1 Press **program, 7, mode/enter, 0, 8.**

Set Fax Report

- 2 Press **mode/enter.** The machine asks whether you wish to set the printing of the TCR:

Set TX Report ?

**Note:** To skip dealing with the TCR and go directly to the RAR setting, press **program** and skip to step 6.

- 3 Press **mode/enter.**

Report OFF

- 4 Press **program** to "toggle" the setting to ON.

Report ON

- 5 Press **mode/enter.** The machine will print a TCR after each transmission.

- 6 Now, the machine asks whether you wish to set the printing of the RAR.

Set RX Report ?

**Note:** To skip dealing with the RAR, press **stop**.

- 7 Press **mode/enter.**

Report OFF

- 8 Press **program** to "toggle" the setting to ON.

Report ON

- 9 Press **mode/enter.** The machine will print an RAR every time it receives a fax.

## Turning off either or both confirmation reports

To turn off the TCR, or the RAR, or both:

- 1 Press **program, 7, mode/enter, 0, 8.**

Set Fax Report

- 2 Press **mode/enter.**

Set TX Report ?

**Note:** To skip dealing with the TCR and go directly to the RAR setting, press **program** and skip to step 6.

- 3 Press **mode/enter.**

Report            ON

- 4 Press **program** to “toggle” the setting to OFF.

Report            OFF

- 5 Press **mode/enter.** The TCR printing is now turned off.

- 6 Now, the machine asks whether you wish to set the printing of the RAR.

Set RX Report ?

**Note:** To skip dealing with the RAR, press **stop**.

- 7 Press **mode/enter.**

Report            ON

- 8 Press **program** to “toggle” the setting to OFF.

Report            OFF

- 9 Press **mode/enter.** The RAR printing is now turned off.

## 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 either:

- Regular polling — Retrieves a document from the remote fax machine’s feeder.  
... or ...
- Database polling — (Possible only in communication with certain memory-equipped Muratec or Murata fax machines) Retrieves a document stored as a file in the remote fax machine’s memory. Great for getting work assignments, updated price lists, contest standings and other frequently updated documents.

### Regular polling

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

- 1 Make sure that:

- The document is actually in the feeder of the remote fax machine.
- There’s no document in *your* machine’s feeder.

- 2 Press **program, 2.**

Polling

- 3 Press **mode/enter, 2.**

Polling Rx

**Note:** As we mentioned before, *Rx* means *receive*.

- 4 Press **mode/enter.**

—

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

- 6 Press **start.**

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.

**Note:** If the remote fax machine is busy, the LCD will return to the usual display *except* that an asterisk (\*) will appear, as in this example:

Fax Ready \*11:05

This indicates there’s a polling operation still in progress. Your machine will perform automatic redialing as usual (see page 1.15).

## Database polling

To poll a document from a remote fax machine's memory:

- 1 Make sure that:
  - The remote fax machine is a memory-equipped Muratec or Murata fax machine which has a file stored in its memory, ready for polling.
  - You know the one- or two-digit *file number* of each database file you wish to poll. (You can specify only one file per call.)
  - There's no document in *your* machine's feeder.
- 2 Press **program, 2**.  

Polling
- 3 Press **mode/enter, 3**.  

DB Polling

**Note:** DB means *database*.
- 4 Press **mode/enter**.  

File No.
- 5 Enter the database file number for the document you want to poll. Remember, you can specify only one file per call.  

File No.     14
- 6 Press **mode/enter**.  

—
- 7 Enter the remote machine's number by either pressing a one-touch key, entering a speed-dial number or just dialing the number using the numeric keypad.
- 8 Press **start**.

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.

**Note:** If the remote fax machine is busy, the LCD will return to the usual display *except* that an asterisk (\*) will appear, as in this example:

Fax Ready \*11:05

This indicates there's a polling operation still in progress. Your machine will perform automatic redialing as usual (see page 1.15).

## Being polled

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

- 1 If your fax machine is set for Tel Ready reception, press **receive/tone** to change it to another reception mode.  

Tel Ready   11:55

**Important:** Your machine **can't** be polled if it's in Tel Ready mode.
- 2 Insert the document.
- 3 Adjust resolution and contrast if necessary. (Your fax machine will be transmitting to the machine doing the polling.)
- 4 Press **program, 2**.  

Polling
- 5 Press **mode/enter**.  

Polling Doc.Set
- 6 Press **mode/enter**.  

Reserved

Your fax machine now is "reserved" (as if it were waiting to redial a busy signal) for the polling operation by the remote machine. In this condition, your machine can still *receive* faxes (and be used for regular voice calls) but can't *send* faxes until either:

- Someone polls the document in the feeder
- or*
- You press **stop**, which ejects the document and aborts the operation.

**Note:** After the remote machine has finished its polling operation, you may wish to reset your machine to Tel Ready reception mode. If so, repeatedly press **receive/tone** until the LCD again shows Tel Ready as the selection:

Tel Ready   11:55



## Passcode protection for polling

To make sure an unauthorized caller doesn't poll the confidential document in your machine's feeder, your fax machine has a *passcode* system for greater security.

Normally, this four-digit passcode is set to 0000 (four zeroes). This turns off passcode operation so any calling fax machine can communicate freely with yours. But, if you set the passcode to anything besides 0000, your machine will communicate only with Muratec (or Murata) fax machines; other manufacturers' fax machines — even those with protective code systems of their own — can't get through.

**Note:** However, if you're using the Block Junk Fax feature (see page 2.4), even incoming calls which meet the passcode test must come from appropriate phone numbers.

To set your machine's passcode:

**1** Write down the four-digit passcode you want to use and put it in a safe place.

**2** Press **program, 7, mode/enter, 0, 5**.

Set Passcode

**3** Press **mode/enter**. The LCD shows the current passcode:

Passcode: 0000

**4** Use the numeric keypad to enter the four-digit passcode.

Passcode: 5891

**5** Press **mode/enter**.

**Note:** Anytime you want to turn off the passcode and return to normal fax reception operation, change the passcode back to 0000 by following steps 1–5, above, and entering 0000 in step 4.

## PIN mask: a preview

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) when you dial an outside number beginning with 1. For example, after dialing 12145550911, you then might enter a code such as 123 so that the office system would put the call on through to your long-distance provider.

If so, you'll probably wish to keep that PIN confidential so that unauthorized users can't simply read a previous TCR and find your PIN number listed there. Fortunately, your fax machine has a *PIN mask* feature which makes that possible. For information on activating and using this feature, see page 2.26.

## Sending a SecureMail transmission

If you send a confidential fax message, you probably won't want it to be visible to anyone who happens to walk by the other person's machine. That's where your fax machine's *SecureMail transmission* capability comes in handy.

You can use SecureMail transmission if sending to any of certain Muratec fax machines. Such a model can receive a SecureMail transmissions into "*mailboxes*" (in the machine's memory) and delay printing the SecureMail until an authorized user has entered a special passcode.

**Note:** Your fax machine can *send* SecureMail, but cannot receive it.

For you to send SecureMail to a remote fax machine's SecureMail mailbox, three things *must* be true:

- The remote fax machine must be a Muratec fax machine with SecureMail reception capability.
- The SecureMail mailbox must exist on the remote fax machine.
- You must know the mailbox's one-digit SecureMail *mailbox number*.

To send a SecureMail transmission:

**1** Insert the document.

**2** Adjust resolution and contrast if necessary.

**3** Press **program, 4**. The LCD will show:

SecureMail

**4** Press **mode/enter**.

Mail No. 0

**5** Use the numeric keypad to enter the appropriate one-digit SecureMail mailbox number. In this example, the number is 5:

Mail No. 5

**6** Press **mode/enter**.

—

**7** Enter the fax number either by pressing a one-touch key, entering a speed-dial number or dialing from the numeric keypad.

**8** Press **start**. The transmission will begin.

## Relay broadcast initiation

Some fax machines can send the same document to multiple fax numbers in one operation. That capability is called *broadcasting*. Your fax machine doesn't have that feature, but it *does* have *relay broadcast initiation*.

To explain that, let's use this example: when you mail invitations to a party, you're taking part in a *relay operation*. After all, you're not *personally* delivering each invitation to its destination; rather, you're sending *all* of the invitations to *one* central point (the post office) which then actually *does* "broadcast" the invitations.

With relay broadcast initiation, here's what happens:

- You use your fax machine to send a document to a certain type of Muratec fax machine, a "hub" unit.
- As you send, you specify at least one *call group* — a designated group of fax numbers stored in that machine's autodialer.
- The remote machine 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*.

The relay broadcast initiation can occur either immediately or as a delayed command.

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.
- 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.

**2** Adjust resolution and contrast if necessary.

**3** Press **program**, **3**. The LCD will show:

Relay Broadcast

**4** Press **mode/enter**.

Group No. :

**5** Use the numeric keypad to enter the call group's two-digit identifier. You can enter any identifier from *01* through *32* for one specific group number, or *00* for all group numbers on the remote fax machine.

Group No. : 04

**6** If you want, you now can specify an *additional* call group to which the "hub" machine should broadcast the document.

If you *don't* want to specify an additional call group (or you entered *00* to specify all groups), skip to step 7.

To add another call group, press **program** and then return to step 5.

**7** Press **mode/enter**. The LCD now shows the current date and time:

Time : 15,11:07

If you want, you now can set the relay broadcast initiation to occur later, as a delayed transmission. (Of course, like any other delayed transmission, this will "reserve" your fax machine so that it can't perform any other transmissions until it carries out the delayed transmission.)

To perform the relay broadcast initiation now, skip to step 9.

**8** Use the numeric keypad to enter the day of the month and the time when you want the fax to initiate the relay broadcast. (To move the cursor to a specific digit, press **a** to move leftward or **b** to move rightward.)

Here, we've set the transmission to occur on the 26th at 3:15 AM:

Time : 26,03:15

**9** Press **mode/enter**.

**10** 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 normally.

**11** Press **start**. If you set the relay broadcast initiation to begin now, your fax machine will begin to dial the hub machine, and will handle things from here.

If you set the relay broadcast initiation to happen at a later time, your machine will return to its normal standby mode, while displaying:

Reserved

This means your fax machine is "reserved" for the delayed command you just programmed. While "reserved," the machine can *receive* faxes but *can't transmit*. (To transmit before the relay broadcast initiation happens, cancel the command by pressing **stop**.)

## 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, obviously, 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.

### 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**.

**Call Requested**

- 2 At the remote fax machine, the ringer will ring after the printout (either on your machine or the remote machine) of each page.
- 3 If someone answers at the remote fax machine, your fax machine will ring several times. If so, pick up the 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 through, *don't hang up*.
- 2 Insert the document you wish to fax.
- 3 Adjust 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 yours yet!*
- 5 When you hear fax tones, press **start** and — *now!* — hang up your fax machine's 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 through, *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 yours yet!*
- 3 When you hear fax tones, press **start** and — *now!* — hang up your fax machine's handset. Your machine will receive and print out the document.

### Responding to a call request

We've explained how *you* can perform a call request, but what if the shoe is on the other foot? 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 fax machine's 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.

## OneLine + distinctive ring detection

It used to be that, to have two phone numbers, you had to have two phone lines (and the more expensive phone equipment that usually involves). 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 — a real boon in this day of the "SOHO" (small office/home office).

With this service, you physically still have one phone line; but, electronically, you have two phone *numbers*. Each number rings your phone in a different way than the other number does.

This makes it easy for you to have both (for example) 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're smart enough to tell the difference between the distinctive *patterns* of the two rings.

But what if your fax machine, too, could be smart enough? Then it could ignore one of the two numbers, "knowing" that it's supposed to answer only the other one.

Well, as you've probably guessed by now, that's exactly what your fax machine can do. 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 that you may 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, however, your fax machine 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 ms on, 3.0 ms off
<b>E</b>	0.5 on, 0.5 off, 0.5 on, 0.5 off, 1.0 on, 3.5 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 ms on, 0.6 off, 0.4 on, 4.6 off
<b>H</b>	1.5 on, 0.5 off, 0.5 on, 3.5 ms off
<b>I</b>	2.0 on, 4.0 off ( <i>normal phone ring</i> )

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**, **7**, **mode/enter**, **1**, **3**.

Set Ring Detect

- 3 Press **mode/enter**.

Ring Detect OFF

- 4 Press **program** to toggle this item to “ON”:

Ring Detect ON

- 5 Press **mode/enter**.

Ring Pattern A

- 6 If “A” is the pattern you want, skip to step 7.  
If not, press **program** repeatedly until the display shows the desired pattern (in our example here, “C”):

Ring Pattern C

- 7 Press **mode/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 1-214-403-3350; for the number to call from Canada, check your in-box documentation).

**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 machine so it will respond once again to normal rings:

- Repeat steps 3–5 above — except, in step 4, toggle it to “OFF”
- Press **mode/enter**.

The machine now will respond normally.

# ScanPlus: fax/computer connectivity

Thanks to its built-in ScanPlus™ feature, your fax machine isn't only a fax machine — it also can be an image scanner and plain-paper printer for your computer!

## ScanPlus requirements for your computer

For you to use your fax machine's ScanPlus feature with your computer, your computer must meet three simple tests:

- It has a properly installed fax modem, either internal or external.
- It has properly installed fax software.
- Its fax software can perform *manual receive* (for scanning) and *manual transmit* (for printing) operations. (You may wish to consult that software's instructions.)

**Important:** It doesn't matter whether your computer is IBM® PC- or Macintosh®-compatible, or which of those two platforms' various operating systems it runs, so long as it meets these three conditions.

## An important note about compatibility

While ScanPlus works with a variety of fax modems and fax software packages, it doesn't work with *every* fax modem and/or with *every* fax software package.

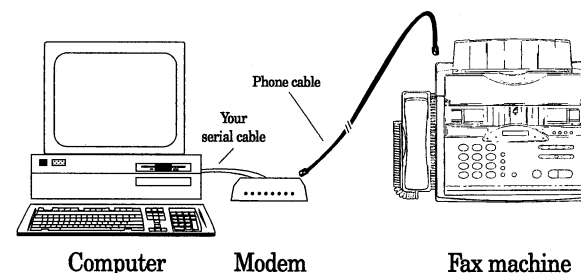
If you experience trouble, try the following (in this order):

- Please confirm that you are following the directions on the next page. (Sometimes, one missed step, or one step out of order, makes all the difference.) Give it several more tries, strictly following our instructions.
- If you still have trouble, please contact the company that made your fax modem.
- If the advice you get from your fax modem's maker doesn't help you, please contact your fax software package's maker.
- If the advice from your fax software package's maker doesn't help you, then, unfortunately, ScanPlus won't work with your computer setup.

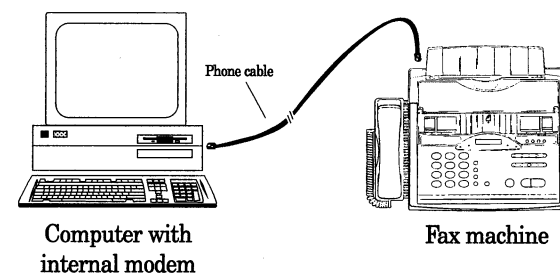
## A preview of the plug-in

We'll give you detailed hook-up steps in a moment, but first, here's a preview ...

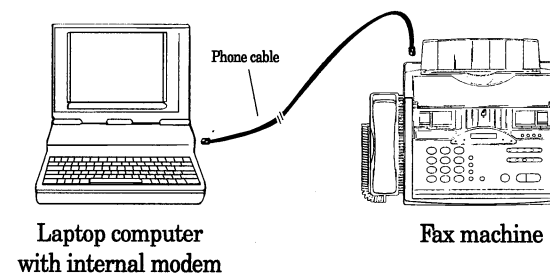
If you're using an *external* fax modem, you'll do it this way:



If you're using an *internal* fax modem, you'll do it this way:



Or, if using a laptop computer with an *internal* fax modem, you'll do it this way:



## Making the ScanPlus connection

Here's how to set up your fax machine and computer for using ScanPlus:

- 1** Find the *line jack* on your computer's fax modem. (If there already is a phone line cable plugged into this jack, unplug it.)
- 2** Confirm that a phone cable is plugged into your fax machine's line jack.
- 3** If your fax machine is plugged into a wall phone jack, follow the phone cable to the jack and unplug the cable from the jack. *Hold onto this plug, for step 4.*  
**Note:** Keep the phone cable plugged into your machine's line jack.  
**Note:** If you've been using your fax for both phone and fax communications, you may wish to plug another phone cable and phone into the wall phone jack so you can continue to receive regular phone calls while using this feature.
- 4** Connect the plug (see step 3) to the line jack in your computer's fax modem.
- 5** If they're not already on, turn on your computer and its fax modem.

**Note:** To resume normal fax communications, reconnect the fax machine to the wall phone jack.

Now you're set to scan and print!

---

## Scanning from your fax machine to your computer

The *exact* procedure for ScanPlus scanning will vary depending upon how your computer's particular fax software works, but here are the essentials.

- 1** Connect your fax machine to your computer's fax modem, as described above.
- 2** *Fax machine:* Insert the document.
- 3** *Fax machine:* Adjust resolution and contrast if necessary.
- 4** *Computer:* Command your fax software to perform a *manual receive* command.  
**Note:** If necessary, please consult your fax software's operating instructions.
- 5** *Fax machine:* Press **monitor/call**.
- 6** *Fax machine:* Press **start**. Your fax software will "receive" the fax (including the TTI, if you've set one) onto your computer.  
**Note:** Please consult your fax software's operating instructions for details on how to view, save and otherwise use received fax images.

## Printing from your computer to your fax machine

Not only can you scan documents *into* your computer, but ScanPlus also lets you *print* documents *from* your computer onto your plain-paper fax machine! (That's the *Plus* part.)

As with ScanPlus scanning, the *exact* procedure for ScanPlus printing will vary depending upon how your computer's particular fax software works. Nonetheless, here are the basics.

- 1** Connect your fax machine to your computer's fax modem, as described in "Making the ScanPlus connection" (left column).
- 2** *Fax machine:* Make sure there is no document in the document feeder.
- 3** *Computer:* Use your application — for example, a word-processing program — to send the document to your fax software, just as if you actually were going to fax the document.  
**Note:** For example, this may involve setting the application to "print to" a *fax driver* which processes and forwards documents to the fax modem.
- 4** *Computer:* When the fax software asks for a fax number to which to send the document, type any number (one digit will do).
- 5** *Fax machine:* Press **monitor/call**.
- 6** *Computer:* Order your fax software to perform a *manual transmit* command.  
**Note:** Please consult your software's operating instructions to confirm what should occur after you give a manual transmit command.
- 7** *Computer:* If your computer is waiting for a "go-ahead" command (such as "OK"), tell it to proceed as your fax software requires.
- 8** *Fax machine:* Press **start**. Printing will begin.

# Custom settings

Your fax machine is controlled by what we call *memory switches* (also sometimes called *DIP switches*, where *DIP* stands for *dual in-line package*). As you can probably guess, these aren't real, physical switches you can feel with a finger. Rather, they're the various settings your fax machine keeps in its memory.

In fact, you've already adjusted many of these settings as you've gone through these instructions. It's just that you've done it through the more usual methods we provide. In the vast majority of cases, you won't have to do any more.

However, you may have some special requirements. That's why, in addition to the more common settings you've already seen, your fax machine offers some special settings to let you customize the machine to your needs. **Still, please use care! It's possible to change — or even *disable* — proper fax operation if you make an incorrect setting.**

**Note:** If you think you've made an incorrect memory switch setting, please call the Muratec Customer Support Center (from the United States, call 1-214-403-3350; for the number to call from Canada, check your in-box documentation).

## A special note about memory switches

As we've said above, each time you make any kind of setting in your fax machine — whether through using the methods described in this section or through the **program**-key method used throughout nearly all of these operating instructions — you're changing the setting of memory switches.

So, don't worry if, while going through any of the following instructions to display a particular memory switch, what you see on your machine's LCD doesn't exactly match what we've shown here. Just follow the instructions to change only the specific number (or numbers) described and ignore the other numbers.

We'll say it once more, however: *please be careful.*

## Cutting document length to allow for the TTI

When you transmit a page, the TTI at its top adds extra length. This isn't a concern with fax machines which print on a (usually thermal-) paper roll; and some plain-paper fax machines automatically reduce incoming fax pages to accommodate this.

However, some plain-paper fax machines will print an extra, blank (or nearly blank) page due to the presence of the sending fax machine's TTI. To prevent this, you can set your fax machine to delete a very small portion of the top of every page transmitted. With this setting, the machine doesn't transmit the top 1/8" of each page but, rather, sends your TTI in its place.

To set your machine to shorten each page you send in order to accommodate the TTI:

- 1 Press **program**, \*, 1.

Dipsw Enter/Clr.

- 2 Press **mode/enter**.

Dipsw00:00010000

- 3 Press **mode/enter** three times.

Dipsw03:11010101

**Note:** If you overshoot, press **contrast/cancel** to back up to "Dipsw03."

- 4 Press **b**.

Dipsw03:11010101

- 5 Press **0**.

Dipsw03:10010101

- 6 To abort the change, skip to step 7.  
To save the change, press **mode/enter**.

- 7 Press **stop** to return to standby.

**Note:** To return to the regular setting, repeat this procedure but press 1 in step 5.

## Sending pages of unlimited length

Normally, your fax machine can send single pages up to 15.7" long; longer pages trigger your machine's paper-jam sensor.

However, if you need to send even longer unbroken pages — such as medical strip charts, or logs from oil or water wells — you can disable the paper-jam sensor.

To set your machine to shorten each page you send in order to accommodate the TTI:

- 1 Press **program**, \*, 1.

Dipsw Enter/Clr.

- 2 Press **mode/enter**.

Dipsw00:00010000

- 3 Press **mode/enter** two times.

Dipsw02:01000010

**Note:** If you overshoot, press **contrast/cancel** to back up to "Dipsw02."

- 4 Press **b**.

Dipsw02:01000010

- 5 Press **0**.

Dipsw02:00000010

- 6 To abort the change, skip to step 7.  
To save the change, press **mode/enter**.

- 7 Press **stop** to return to standby.

**Note:** After sending the extra-long document, be sure to return to the regular setting by repeating this procedure *except* for pressing 1 in step 5.

## Allowing silent fax detection

If you're using your answering machine in connection with your fax machine and expect to receive fax calls from an older, non-standard fax machine (*i. e.*, one which doesn't send out fax tones), you might want to set your fax machine to use its *silent fax detection* feature. This keeps your answering machine from recording silence if a non-standard fax machine calls.

**Important:** If you activate silent fax detection and also make or receive any regular phone calls on the same line, your phone calls may be disrupted; long pauses (including on-hold times) in your conversation will trigger your fax machine to come on-line and attempt fax reception. So activate silent fax detection *only* if:

- You're using an answering machine with your fax machine *and*
- You're sure you'll be receiving calls from a "silent" fax machine.

To activate silent fax detection:

- 1 Press **program**, \*, 1.

Dipsw Enter/Clr.

- 2 Press **mode/enter**.

Dipsw00:00010000

- 3 Press **mode/enter** six times.

Dipsw06:00110101

**Note:** If you overshoot, press **contrast/cancel** to back up to "Dipsw06."

- 4 Press **b**.

Dipsw06:00110101

- 5 Press **1**.

Dipsw06:01110101

- 6 To abort the change, skip to step 7.  
To save the change, press **mode/enter**.

- 7 Press **stop** to return to standby.

**Note:** After receiving the fax transmission from the non-standard fax machine, be sure to return to the regular setting by repeating this procedure *except* for pressing 0 in step 5.



## Setting scanner width

Your fax machine accepts original documents up to 8.5" wide. The factory setting causes your machine to scan the *middle 8.2"* of each 8.5" page. However, if you wish, you can increase the scanning width to the full 8.5".

**Note:** When your fax machine is set to scan the full 8.5" width, certain documents will require longer transmission times.

To change the scanner width setting to 8.5":

- 1 Press **program**, \*, 1.

Dipsw Enter/Clr.

- 2 Press **mode/enter**.

Dipsw00:10010000

- 3 Press **mode/enter** seven times.

Dipsw07:10001100

**Note:** If you overshoot, press **contrast/cancel** to back up to "Dipsw07."

- 4 Press **b** four times.

Dipsw07:10001100

- 5 Press 0.

Dipsw07:10000100

- 6 To abort the change, skip to step 7.  
To save the change, press **mode/enter**.

- 7 Press **stop** to return to standby.

**Note:** To return to the regular setting, repeat this procedure but press 1 in step 5.

## Activating — and using — the PIN mask

As mentioned on page 2.18, your fax machine's PIN mask feature provides an extra measure of security which you may wish to use.

With the PIN mask activated, you can safely use any code number your office phone system may require for long-distance calling: the code number won't appear either on the LCD while you're dialing or on a TCR. This helps keep unauthorized users from seeing the code and thus gaining access to your calling privileges.

To activate the PIN mask feature:

- 1 Press **program**, \*, 1.

Dipsw Enter/Clr.

- 2 Press **mode/enter**.

Dipsw00:10010000

- 3 Press **mode/enter** five times.

Dipsw05:00000000

**Note:** If you overshoot, press **contrast/cancel** to back up to "Dipsw05."

- 4 Press **b** seven times.

Dipsw05:00000000

- 5 Press 1.

Dipsw05:00000001

- 6 To abort the change, skip to step 7.  
To save the change, press **mode/enter**.

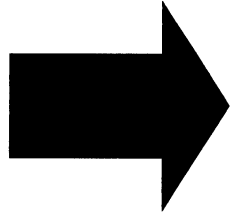
- 7 Press **stop** to return to standby.

**Note:** To return to the regular setting, repeat this procedure but press 0 in step 5. When you have activated the PIN mask feature, you use the \* ("star") key to separate the fax number from the PIN, which always goes last. For example, to dial 12145550911 with a PIN of 123, enter 12145550911\*123. When you press **start**, the PIN disappears on the LCD, and, if your machine is set to print a TCR after each transmission, the PIN will not appear on the TCR.

**Important:** You can use this feature only when dialing **manually** while **not** using either the handset or the monitor speaker. You can't use the PIN mask feature when speed-dialing or one-touch dialing.



# 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
Figuring out communications problems .....	3.4
Caring for your fax machine .....	3.7
Common questions .....	3.9
Glossary .....	3.13

## We're on-line to help you!

Before you try calling our regular support line, first please 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 either picking up the handset or pressing **monitor/call**. (Unless you're in a noisy area, it's easier to use **monitor/call**.)
- 2** Call **1-800-215-1698**.
- 3** Follow the voice instructions you'll receive from the system.

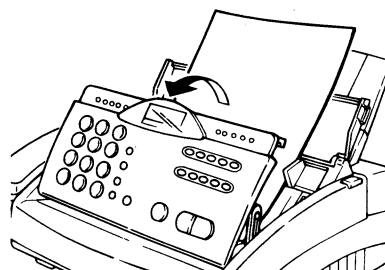
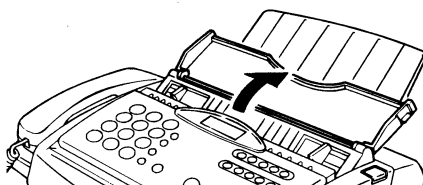
# Clearing paper jams

We designed your fax machine to work reliably for years. However, you may occasionally experience one type or another of paper jam. Here's what to do.

## If the original document jams

To clear an original document jam:

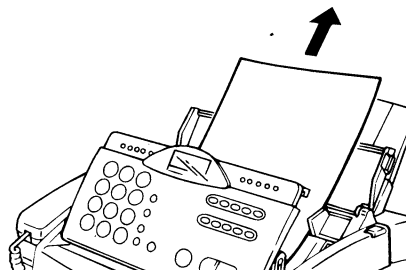
- 1 Open the document hopper by flipping it open. There's a small tab on its right side which makes this easy.



- 2 Open the *control panel cover* by placing your fingers on its upper left and right corners and gently tilting the cover toward you. This will release the original document.

**Important:** Hold the cover open. It won't stay open by itself.

- 3 As you continue to hold open the control panel cover, lift the original document from the machine.



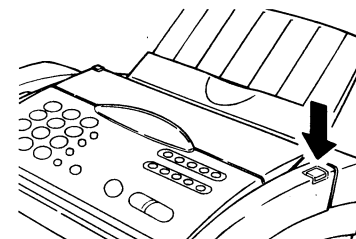
- 4 Gently close the control panel cover, making sure both sides are snapped down securely. Then re-try the transmission.

**Note:** If the original document has become wrinkled or torn, *don't* re-send it.

## If the printout jams

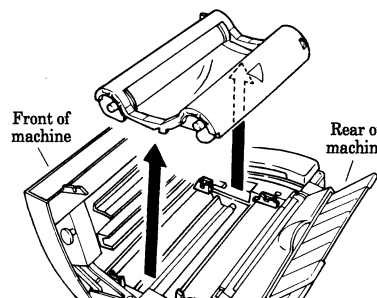
To clear a printout (either a received fax or a copy) jammed inside your fax machine:

- 1 Open your fax machine's top cover by pressing the top cover release button.



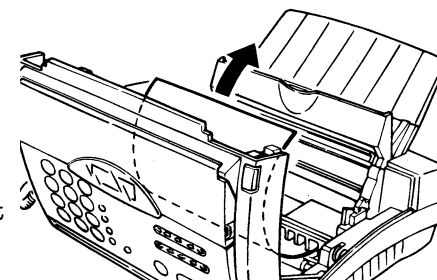
- 2 Remove the donor film cartridge by grabbing the handles on each side of the cartridge and lifting it straight up out of the machine.

**Important:** This diagram (*left*) shows a view from the right rear side of the machine.

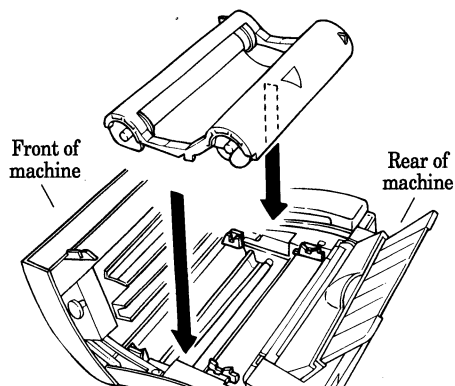


- 3 Gently pull the jammed printout up and out.

**Important:** *Do not* try to pull the document through your fax machine's document exit in front.



- 4** Hold the cartridge over your fax machine. Position the cartridge so that its *blue* marks are over the machine's *blue gear stand*. (The side with the supply roll should be over the front of the machine.)

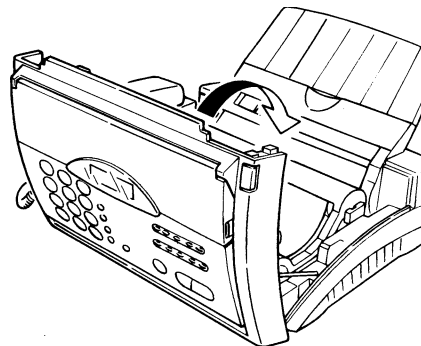


- 5** Gently put the cartridge back into the fax machine. If you've positioned it correctly (see step 4), it will "drop" in smoothly.

**Important:** Your fax machine won't work if the cartridge isn't in the proper position.

- 6** Close the top cover of your fax machine. You'll feel a click when it's closed properly.

**Important:** Your machine won't work if the top cover isn't closed.



# 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.

## 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.

**Note:** To stop the alarm tone before it stops on its own, press **stop**.

## LCD error messages

Your fax machine's LCD messages can help you spot communications problems. If you see one of the following messages, press **stop** to clear the message and follow the directions (if necessary, press **stop** again to return the machine to standby).

What you see on the LCD

Please Set Doc.

Hang Up Phone

Not Stored

What it means/What to do

Your document wasn't inserted correctly, or the machine to which you're sending can't handle your document's page length. *Reset the page and try again to transmit.*

The handset is off-hook. *Hang it up, making sure the upper part of the handset presses down on the "hook" button.*

You selected an autodialer number for which there is no phone number programmed. *Either choose another autodialer number or dial a phone number directly from the numeric keypad.*

What you see on the LCD

Transmit Again

Check Remote Fax

Close Cover

Check Rec. Paper

Set Page Again

Check Donor Film

Clear Paper Jam

What it means/What to do

A communication error disrupted the transmission. *Re-try the transmission.*

Something went wrong at the remote machine with which you're trying to communicate. *Call someone at that location and attempt to determine the problem.*

The fax machine's cover is open. *Close the cover.*

Your machine has run out of printout paper. *Add paper to the paper cassette.*

A paper jam occurred in your fax machine's document feeder. *Remove the jam and try again, unless the document has become wrinkled or torn (if so, **don't** attempt to send it).*

Your fax machine has run out of its Film Imaging donor film. *Change the film roll.*

The printout paper is jammed. *Remove the jammed paper.*

## 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 call doesn't help *and the problem persists regularly*, call the Muratec Customer Support Center (from the United States, call 1-214-403-3350; for the number to call from Canada, check your in-box documentation).

## 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 *date and time* of the attempted transmission
- The *sending location* (if the remote fax stores a Location ID of its own)
- The *number of pages* which got through before the error killed the call
- The *result* — which is a special *error code*.

## 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:

- D.0.0 The remote fax machine is busy.
- 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 3.13) fax communication, the industry standard since the early 1980s.
- R.1.4 Someone pressed **Stop** at the receiving fax machine.
- R.2.1 A compatibility error (junk fax detection) occurred.

- R.2.3 Poor phone line conditions made fax communication impossible. Call someone at the remote machine.
- 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 program 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.4.1 The fax machine is out of paper.
- 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.
- T.1.1 The remote fax machine didn't respond to your machine. Call someone at the remote machine.
- 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. Re-try the call.
- T.2.2 The two fax machines were incompatible. Your fax machine sends and receives only ITU-T Group 3 (see "Glossary," page 3.13) 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 re-try the call later.
- T.3.1 During transmission, your machine's built-in page counter detected a possible error in the document feeder. Carefully put the document back into the feeder and re-try the call.
- T.4.1 The remote fax machine is out of paper. Call that machine's operator.
- T.4.2 After transmission began, poor line conditions developed. Re-try the call.

## "Check Message" printouts

When a fax call goes awry 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 next page)
- The phone number (or, perhaps, TTI) 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:

Error message	Possible meanings
Check condition of remote fax	<ul style="list-style-type: none"><li>• Remote machine malfunctioned</li><li>• No handshake signals from remote machine</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 machine</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 receive documents	<ul style="list-style-type: none"><li>• Receive confirmation signal not received from remote machine</li><li>• Poor line conditions caused a poor image</li></ul>

## Turning on remote diagnostics — if ...

Your fax machine includes a *remote diagnostics* capability. This allows our trained service personnel to test your machine by computer over telephone lines.

**Important:** To use this feature, you must have your fax machine connected to a *working* phone line. If you cannot obtain a dial tone on your fax machine, you cannot use this feature.

If an authorized Muratec representative asks you to activate remote diagnostics:

**1** Press **program, 7, mode/enter, 1, 2**.

Set Remote Diag.

**2** Press **mode/enter**.

Remote Diag. OFF

**3** Press **program** to toggle the setting to ON.

Remote Diag. ON

**4** Press **mode/enter**.

**Note:** To de-activate remote diagnostics, repeat this procedure but, in step 3, press **program** to toggle the setting to OFF.

# 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).

## Cleaning tips

Here are some things to keep in mind about cleaning your fax machine:

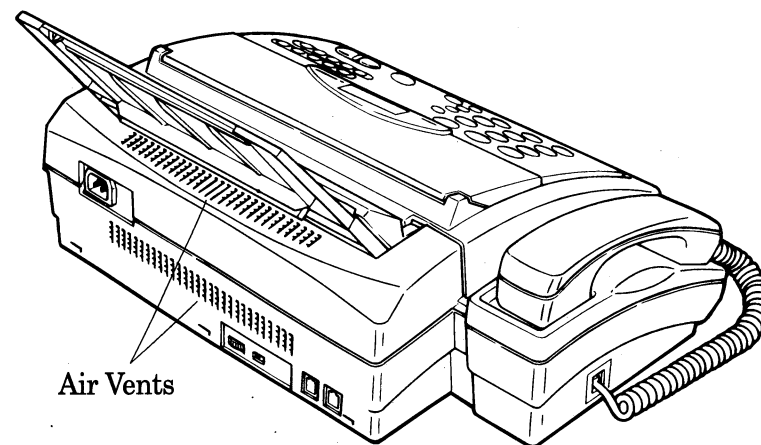
- **Do** clean it! Dust and dirt, especially around the fax machine’s air vents (see right column) can shorten your machine’s life.
- **Always** unplug the fax machine *before* you clean it.
- **Never spray any cleaner DIRECTLY onto your fax machine.** The drifting spray could damage components inside.
- **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 wipe — *gently* — components inside your machine. (See also the next step.)
- 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 machine’s upper rear and lower rear sections:



## Corrective cleaning

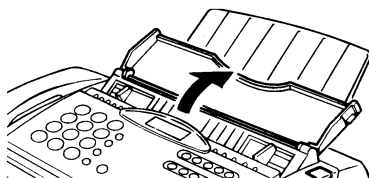
Here are some simple cleaning procedures for keeping your fax machine operating smoothly. Use each as the need arises.

### Curing frequent jams in the document feeder

If you're having trouble with getting your original documents to feed properly, try this procedure:

- 1 Get a soft, lint-free cloth.
- 2 Moisten the cloth with a cleaner that's suitable for platen/rubber rollers.
- 3 Unplug your fax machine.

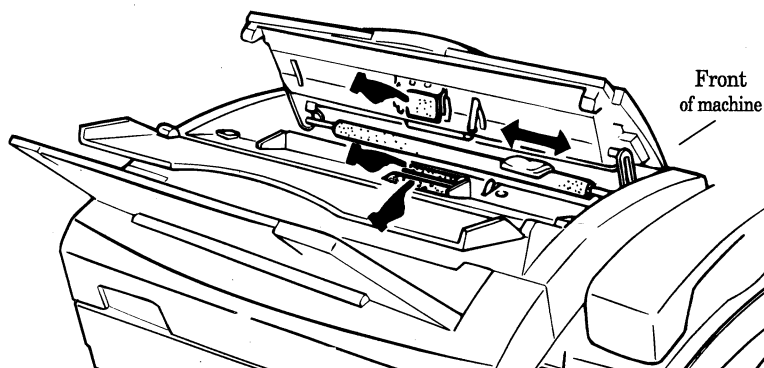
- 4 Flip open the document hopper.



- 5 Open the control panel cover by placing your fingers on its upper left and right corners and gently tilting the cover toward you.

**Important:** Hold the cover open. It won't stay open by itself.

- 6 Use the moistened cloth (see steps 1 and 2) to clean the face of the *separator pad*, *separator roller*, *document feeder roller* and *sensor roller*. Rotate the rollers by hand to allow cleaning of the entire roller surface.



- 7 Gently close the control panel cover, making sure both sides are snapped down securely.

## Fixing unsatisfactory printout quality

If you notice poor printout quality (whether on received faxes or on copies), here's what to do:

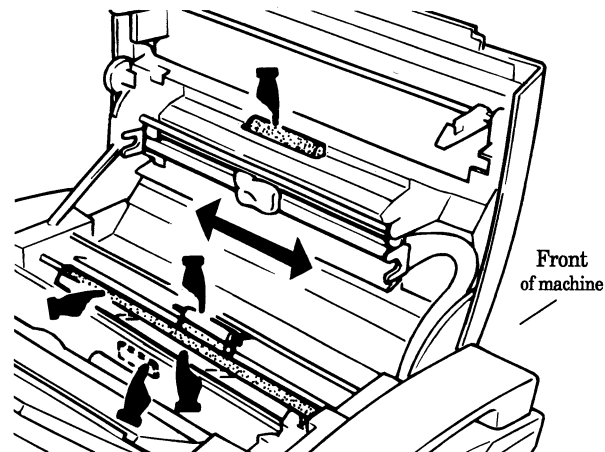
- 1 Unplug your fax machine.
- 2 Get two soft, lint-free cloths.
- 3 Moisten the cloths as follows:
  - One of the two cloths with *isopropyl alcohol*
  - The other cloth with a cleaner suitable for use on platen/rubber rollers (as mentioned in "Curing jams in the document feeder," left column).

- 4 Open the top cover.

- 5 Lift the donor film cartridge straight up out of the machine.

- 6 Use the cloth with isopropyl alcohol (see steps 2 and 3) to clean the *thermal head*.

- 7 Use the cloth with platen/rubber roller cleaner (see steps 2 and 3) to clean the platen roller. Rotate the roller by hand so you can clean the entire surface.



- 8 Hold the donor cartridge over your fax machine. Position the cartridge so that its blue marks are over the machine's blue gear stand.

- 9 Gently put the donor film cartridge back into the fax machine. If you've positioned it correctly, it will "drop" in smoothly.

**Important:** Your fax machine won't work if the cartridge isn't in the proper position.

- 10 Close the top cover of your machine. You'll feel a click when it's closed securely.

# Common questions

## We're on-line to help you!

Before you try calling our regular support line, first please 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 either picking up the handset or pressing **monitor/call**. (Unless you're in a noisy area, it's easier to use **monitor/call**.)
- 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:** Your fax machine doesn't use ink or toner. Instead, it uses a special printing technique called *Film Imaging*, also known as *thermal-transfer printing*. To adjust the darkness of a copy or copies, or of a transmission, insert a document and press **contrast/cancel** 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, while the battery will last for years, 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 over-heat. (See page 1.6 for other guidelines.)
- Q:** Can I re-use the donor film so I can still receive faxes when I run out and can't immediately get more film?
- A:** Yes, as an emergency measure. However, the quality of the printouts will be lowered, because previous printouts will have used parts of the roll. Try always to have at least one replacement roll of donor film, so as to avoid this situation.

## Shushing an error alarm

- Q:** How do I turn off my machine's error alarm?
- A:** Press **stop**. In some cases, your fax machine will print an error report for help in diagnosing the problem. (See pages 3.4–3.6.)

## Sending faxes

- Q:** I just tried to send a fax while using either the handset or the **monitor/call** feature. When the other side answered, I heard a horrible screeching sound, so I hung up. What happened?
- 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 Fax Ready mode). It's by using these tones that fax machines send faxes over ordinary phone lines. So, next time you hear such tones, press **start** (and, if you're using the 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 (perhaps for privacy's sake?) 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 page 2.20) 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 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; however, confirmation reports (see pages 2.15–2.16) aren't available when you transmit without recording paper in your 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 copying machine to make an appropriately sized copy of the material in the newspaper page, then transmit the copy.
- Q:** Can I transmit a page with correction fluid on it?
- A:** Yes, 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 pages 2.15–2.16).
- 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. Either 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 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 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 3.13) 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 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, "Reserved" now appears on my LCD. What does this mean?
- A:** The remote fax machine was busy, so your machine "reserved" in its memory a command to try the call again. The machine will try to redial the call (see "If the call doesn't go through: redialing," page 1.15). To regain control of the machine, press **stop** to cancel the redialing and feed the document out of the feeder.
- 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.

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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 1.6–1.7). If you're using a second device with your machine, make sure *it's* connected properly (page 1.10) and your machine is set to work with it (page 1.18)
- Q:** Sometimes when I answer my machine, 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 message will receive the fax.
- Q:** Does my fax machine has to be plugged in (*i. e.*, into the AC power) 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 + DRD feature (see page 2.21) lets you receive calls on up to two phone numbers if your telephone company has installed the appropriate service, but you can use only one number at a time.

## Polling

- Q:** What's the purpose of polling?
- A:** Polling lets you automatically "pull" a document from another fax machine's document feeder. 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 start to "hear" responding fax tones within somewhat under 45 seconds after the person at that machine presses the **start** key. Consider: that time period includes getting the dial tone, dialing the number, "listening" to the pause before the ringing starts and waiting for the called fax machine to answer the ring. Only after that period of time does your message play — adding even more elapsed time!
- 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 be "satisfied" and go ahead with the transmission. So please make an outgoing message that is no longer than 10 seconds (see page 1.18 for a suggestion).

## 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.
- The remote fax machine prints the representation. Now, the recipient can *use* the document.

... and that's how fax works!

### Just in case ...

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 T/F 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 a machine it calls. It's much like your making a voice call and identifying yourself, "Hello, this is [your name]." 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. Of course, all information is subject to change without notice.

**A4, B4, A3** — Standard stationery sizes defined by the International Standards Organization, an agency of the United Nations. See also *Paper sizes*.

**Analog fax** — This now-obsolete type of fax machine converts each picture element of black or white into an electrical signal. These signals in turn generate constantly changing electrical signal that is transmitted to a receiving fax. Analog fax machines performed extremely slow document transmission (3 or more minutes per page) and, compared to modern digital faxes, were more susceptible to the signal “noise” encountered on standard telephone lines.

**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, when communicating with another fax which is communicating at a slower rate, to slow down (“fall back”) to the other unit's speed.

**Automatic reduction** — Many Muratec fax machines will automatically reduce documents being transmitted to accommodate the effective printing width of the receiving unit. This allows, for example, 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. Contraction of “binary digit.” Some Muratec fax machines, which are themselves computers “dedicated” to telecommunications, allow users to change bits of information to provide or cancel features through software settings.

**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 (such as *e* and *o*). 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 can send 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 identifies when another party is calling while one is already on the phone. Call-waiting signals often cause interruption of fax transmission or reception.

**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); during scanning with a CIS, the bar directly touches the original document, eliminating a need for the LEDs to move throughout the lens.

**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 *RAR* and *TCR*.

**Copy mode** — Lets one use a fax machine as a convenience copier.

**Cover page (automatic)** — A small, user-created message; can be the first page of every transmission.

**Database polling** — See *Polling*.

**Data compression** — Used in digital fax machines to speed transmission. See also *Digital fax*, *MH* and *MSE*, *SMSE*.

**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, such as late at night or on weekends, when telephone costs are lowest.

**Digital** — Using the binary system — i. e., either *0* or *1* — 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.

**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 which 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.

**Film Imaging** — A plain-paper fax printing system used on some Muratec units. With this system, a thermal head heats thermally sensitive film as paper rolls across the film, imprinting an image onto the paper. This clean, dry system has a low fixed cost per copy, regardless of a page's black density — unlike toner-based printing systems, which use much more of their consumables as pages get darker. See also *Thermal-transfer printing*.

**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** — A data interchange 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.

**Ink-jet printing** — A plain-paper printing system. Ink is electrically charged and dispersed selectively, through a specially designed nozzle, onto plain paper. Produces fuzzier-looking printouts, and costs more per copy as black coverage increases, than the Film Imaging printing system your fax machine uses.

**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; its 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; sometimes erroneously called *ITU-T Test Chart 1*. An ITU-T standard document with a known black density which fax makers often use in testing, and subsequently publicizing, the transmission speeds of their fax machines.

**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.

**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 *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 (analog) telephone lines. A modem is included in a fax machine and allows it to be connected directly to a PSTN telephone line.

**Monitor** — A speaker in most Muratec fax machines which can allow one 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, one must use the 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*.

**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 the handset. On most Muratec fax models, one 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"	A3 = 11.7" × 16.5"
B5 = 7.2" × 10.1"	B4 = 10.1" × 17.0"	B3 = 14.3" × 20.3"

**Passcode** — A four-digit code-number. On some Muratec fax machines, the passcode lets the user limit access to a document readied for 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. In database polling, a remote fax polls a document directly from the memory of a Muratec fax. (Regular polling requires the document to be physically in the polled fax's feeder.) 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 same-branded fax machines.

**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*.

**RAR** — Receive advisory report. Some Muratec fax models can print out an RAR after each reception. This report indicates each received document's time and date of arrival and its page length. See also *TCR*.

**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.

**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 (*i. e.*, 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; also saves phone charges for the originating fax machine. Your machine cannot perform relay broadcasting, but it 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 (usually something confidential) to, or receive one into, 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 two-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 1-214-555-3465, one 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** — 203H × 392V 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. One 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 head** — A component which generates heat, usually (in this field) for printing fax images.

**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.

**Thermal-transfer printing** — A type of plain-paper fax printing. A carbon-like ribbon is aligned between a thermal head and the paper. The thermal head heats the ribbon according to how the fax machine has scanned the image, transferring the carbon-like material from the ribbon onto the paper. Some methods of thermal-transfer printing require special paper, but all Muratec thermal-transfer fax machines use plain paper. See also *Film Imaging*.

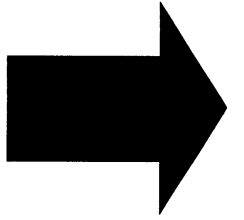
**TTI** — Transmit terminal identifier. A user-programmable line of information sent automatically with every page a fax machine sends; it appears at the top of each page printed by the receiving unit.

**Transmission speed** — How fast a fax machine is sending a fax document. This speed depends upon 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, perhaps significantly.

**White-line skip** — A technique used to speed up fax transmission by bypassing redundant areas, such as white space.



# 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:** 9600 bps with fallback to 7200, 4800 and 2400 bps per ITU-T, v. 29 and v.27 ter.

**Compatibility:** ITU-T Group 3.

**Transmission speed:** 15 seconds per page.\*

**Document feeder capacity:** 20 pages (20-pound bond paper).

**Resolution** (in lpi, horizontal  $\times$  vertical): Normal,  $203 \times 98$ ; fine,  $203 \times 196$ ; superfine,  $203 \times 392$ .

**Grayscale:** 16-level.

**Printing width:** 8.5"

**Scanning width:** 8.2"

**Scanning method:** Solid-state CIS.

**Printing method:** Muratec Film Imaging (thermal-transfer) onto plain paper.

**Donor film roll size** (width  $\times$  length, yield<sup>†</sup>):

*Standard roll* — 8.7"  $\times$  328.1", 310 sheets.

*Starter roll included with machine* — 8.7"  $\times$  65.6", 62 sheets.

**Recording paper capacity:** 110 sheets.

**Original document size** (width  $\times$  height):

*Single sheet* — 8.5"  $\times$  35.4" maximum, 5.8"  $\times$  3.9" minimum.

*Two or more sheets* — 8.5"  $\times$  14.0" maximum, 5.8"  $\times$  5.8" minimum.

**Weight:** 13.6 pounds (excluding donor film).

**Dimensions** (width  $\times$  depth  $\times$  height): 16.1"  $\times$  11.8"  $\times$  4.8" (excluding document hopper and document guide).

**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 always will provide the fastest transmission speeds possible under ITU-T 9600 bps guidelines and phone-line conditions.

† Letter-sized pages (width  $\times$  length, 8.5"  $\times$  11").

# Regulatory information

## United States of America

### Federal Communications Commission (FCC) information

*Ringer Equivalence Number (REN):* 0.8B.

This facsimile machine has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against 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.

### 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. (Your machine's REN is 0.8B.)

**Note:** This equipment is hearing-air-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 "TPI") into your fax machine, see either page 1.11 or page 2.2.

### 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 remote 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 Murata Business Systems, Inc., or an authorized representative of Murata Business Systems, Inc. For information, contact the Muratec Customer Support Center at 214-403-3350 (from the U. S. only).

## Dominion of Canada

### Industry Canada (IC) regulations

*IC Load Number (LN):* 11.

This digital apparatus does not exceed the Class B 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 B 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 of 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 subjects only to the requirement that the total of the load numbers of all the devices doesn't exceed 100. The IC LN for your equipment is 11.

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# Limited warranty

This warranty is made by Murata Business Systems, Inc. (hereafter referred to as "Murata"). 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, Murata or its authorized representative will, during Murata's established service availability hours, make necessary adjustments and repairs, including, at Murata's option, installation of replacement parts. Murata's service availability hours are 8:30 AM to 5:00 PM (Central time) Monday through Friday, excluding Murata-recognized holidays. Murata will complete the necessary adjustments and repairs within a reasonable time period, as dictated by the nature of the problem and by Murata's service schedule. Replacement parts may have been used and/or reconditioned. Parts that have been replaced will remain the property of Murata. This warranty is subject to the OBLIGATIONS and EXCLUSIONS set forth.

## Obligations

1. This warranty will be honored only on presentation of the original dated authorized Murata bill of sale or Murata dealer bill of sale or sales slip to an authorized Murata service representative or service center. For the name of your authorized service center, contact Murata (from the United States, call 1-214-403-3350; from Canada, check your in-box materials for the number to call).
2. During the warranty period, the Customer must notify Murata by telephone of any defective product material and/or workmanship.
3. Transportation (including prepayment of freight and insurance charges) of the product to and from an authorized service center, designated by Murata, is the responsibility of the Customer.
4. If Murata provides maintenance or responds to a call which is outside the scope of this warranty, such maintenance shall be billed to the Customer at Murata's then-current rates for maintenance and parts and shall be due and payable in full upon receipt of invoice.

## Exclusions

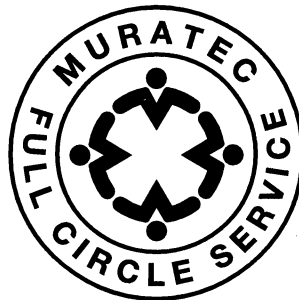
1. This warranty shall not cover a product with missing or altered original identification marks.
2. This warranty applies only to products that the purchaser has properly installed, adjusted and operated in accordance with the instructions set forth in or provided with product literature. This warranty does not apply to any product which has been subjected to tampering, alteration, misuse, abuse, neglect, improper installation or transportation damage. Nor does it apply to costs for any service requested for demonstration or to confirm proper operation of this product.
3. The warranty shall not apply to adjustments, repairs or replacements necessitated by any cause beyond the control of Murata (whether foreseeable or not) including, but not limited to, any malfunction, defects or failure caused by or resulting from any of the following: improper unpacking or installation, unauthorized service or parts, or improper maintenance or cleaning, modification or repair by the Customer, accident (including, without limitation, unavoidable accidents), fire, flood or other Acts of God, improper telephone or electrical power or surges thereof, interconnection with or use of non-compatible equipment or supplies (including paper), or placement of the product in an area which does not conform to Murata space, electrical and/or environmental requirements.
4. Murata will not be required to make adjustments, repairs or replacements if the product is installed or used at a location deemed by Murata to be hazardous to health or safety, or if Murata is not provided with free and reasonable access to the product and a telephone during service availability hours, or if the product location is not accessible by an authorized Murata service vehicle.

EXCEPT AS EXPRESSLY SET FORTH ABOVE, AND EXCEPT TO THE EXTENT PROHIBITED BY APPLICABLE LAW, MURATA MAKES NO OTHER WARRANTIES, EXPRESS OR IMPLIED (INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, AND ANY WARRANTY ARISING FROM COURSE OF DEALING OR USAGE OF TRADE), AND MURATA EXPRESSLY DISCLAIMS ALL WARRANTIES NOT STATED HEREIN. IN THE EVENT THE PRODUCT IS NOT FREE FROM DEFECTS AS WARRANTED ABOVE, THE CUSTOMER'S SOLE REMEDY SHALL BE REPAIR OR REPLACEMENT AS PROVIDED ABOVE. UNDER NO CIRCUMSTANCES SHALL MURATA BE LIABLE TO THE CUSTOMER, OR TO ANY USER, FOR ANY DAMAGES, INCLUDING ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES, EXPENSES, LOST PROFITS, LOST SAVINGS OR ANY OTHER DAMAGES ARISING OUT OF THE USE OR INABILITY TO USE THE MURATA PRODUCT, EVEN IF MURATA OR ITS REPRESENTATIVES HAVE BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

Some States do not allow the exclusion or limitation of incidental or consequential damages, and some States do not allow limitations on how long an implied warranty lasts, so the above limitations or exclusions may not apply to you. This warranty gives you specific legal rights, and you may also have other rights which vary from State to State.

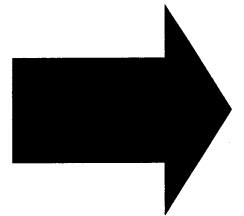
# Save 50%

... on hassle-free care of your fax machine —  
and get Muratec's *toll-free* customer support and  
Full Circle Service<sup>™</sup> coverage for a full year!



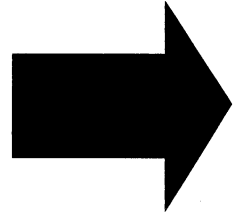
Muratec Express Maintenance Agreement

*Read on ...*



Offer available in the United States only. See next three pages for details.

# Act today to get the fax industry's most complete service package: *The Muratec Express Maintenance Agreement.*



## What you get

- On-site overnight replacement
- Toll-free customer support — Access to Muratec's special *toll-free* customer support line, reserved just for special customers like you!
- Extension of your warranty coverage to a full 12 months

## How it works

- 1** Order a Muratec Express Maintenance Agreement right now, by fax or mail.
- 2** After you're enrolled, call us — *toll-free* — if you ever have a problem.
- 3** We'll rush a replacement fax to you, anywhere in the United States, via FedEx® Standard Overnight Delivery. And we'll handle all the charges.

## A real money-saver

Best of all, Muratec's Express Maintenance Agreement is a *terrific bargain* for Muratec fax owners! **(For up-to-the-minute low pricing, please use the handset or monitor speaker of your fax machine to call the Muratec Information System, toll-free, at 1-800-215-1698.)**


## ... But hurry!

**Important:** *Your fax machine is eligible for this coverage only during its original 90-day limited warranty or 30-day depot repair warranty, so please order right now! Fax your application toll-free to 1-800-347-3773 (or mail it) today!*

All program specifications and pricing are subject to change without notice. FedEx is a registered trademark of Federal Express Corporation.

Just fax this application  
to 1-800-347-3773,  
toll-free!

# Application form

Model number	Serial number	Price* (See below)
		Please add your local sales tax
		Total price



***\* For up-to-the-minute low pricing on your Muratec Express Maintenance Agreement, please use the handset (or monitor speaker) of your fax machine to call the Muratec Information System, toll-free, at 1-800-215-1698.***

☐ Check or Money Order  
Enclosed Payable to: **Murata Business Systems, Inc.**

☐ American Express      ☐ MasterCard      ☐ Visa

Credit card number \_\_\_\_\_ / \_\_\_\_\_  
Expiration date

# X

Customer signature \_\_\_\_\_

[illegible]

Mailing address

City	State	ZIP
/ /	( )	
Date	Phone number	

**This is not an invoice.** Detach form and mail with payment to address above. See reverse for important terms of agreement. Express Maintenance available in U.S. only.

# Here are the terms and conditions of your Muratec Express Maintenance Agreement.

**COVERAGE AND TERM.** During the term of the Agreement, Murata Business Systems ("Murata") will furnish parts and service necessary to maintain the equipment in good working condition, normal wear and tear excepted, at the price stated on the reverse side hereof. If Murata is notified by Customer, during the term of this Agreement, that the equipment is not in good working condition, Murata will, during established service availability hours, exchange the Customer's equipment via FedEx Standard Overnight Delivery for equipment in good working order. The equipment the Customer receives in the exchange will be either new or reconditioned at Murata's option. Murata Business Systems, 5560 Tennyson Parkway, Plano, Texas 75024 is financially and legally obligated to perform service described above.

**SERVICE LIMITATIONS.** This Agreement does not cover the following: (i) equipment owned or operated outside the fifty (50) United States; (ii) installation or reinstallation; (iii) damage or other product failure due to causes beyond Murata's control, such as, but not limited to: abuse, theft, fire, flood, wind, lightning, electrical power failures, or improper power, power reduction, unusual atmospheric conditions, failure of, or improper telephone lines, modified or altered equipment and failures due to incompatible supplies or equipment; (iv) consumable items such as trays, toner, drums, antennas, battery packs, and supplies; (v) service resulting from unauthorized third party or customer repairs.

**CANCELLATION.** Cancellation must be requested in writing to Murata Business Systems, 5560 Tennyson Parkway, Plano, Texas 75024. Customer cancellations of this Agreement prior to the effective date are subject to the following terms and conditions: (1) A full refund will be made for customer cancellation within the first 30 days of the receipt of the contract if no service has been made under this Agreement; (2) If service has been made under this Agreement within the first 30 days of the receipt of the contract, a prorated refund will be made and a Cancellation fee of 10% of the contract price of \$25, whichever is less, will be charged; (3) A prorated refund will be made for customer cancellations after the first 30 days if no service has been made under this Agreement and a Cancellation fee of 10% of the contract price or \$25, whichever is less, will be charged; (4) The above-mentioned terms and conditions for cancellation/refund provisions apply for items sold, lost, stolen or destroyed.

**LIABILITY LIMITATIONS.** Murata's total liability is limited to replacement of the equipment during the term of this Agreement. Murata will not be liable to Customer or any other party for any personal injury or indirect, consequential or incidental damage, including, but not limited to, loss of use, revenue or profit. Murata will not be liable for any delay or failure to perform obligations due to any cause beyond its reasonable control, including without limitation, acts of God or government, labor difficulties, power failures, or failure of improper telephone lines.

**DEFAULT.** Customer shall be in default of this Agreement if Customer: (i) fails to make any payment to Murata within 30 days of the due date; or (ii) breaches any other term or condition of this Agreement and fails to cure such breach within 10 days. In the event of a default, Murata may, in addition to other remedies, declare all sums (including penalties) due under the terms of this Agreement and terminate this Agreement.

**JURISDICTION.** This Agreement shall be interpreted and enforced according to laws of the states of Texas and California.

**muratec™**  
For the real world.™





MBS order number: OMMXCX



**muratec™**  
For the real world.™

Murata Business Systems, Inc.  
5560 Tennyson Parkway  
Plano, Texas 75024  
(214) 403-3300 (voice)  
(214) 403-3400 (fax)

MML item number: D67-90010-60