Romeo Attaché
Romeo Attaché Pro
Romeo 25 &
Romeo Pro 50

Braille Embosser User's Manual

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The Restriction of Hazardous Substances Directive (RoHS) became European Law in February 2003. Together with the Waste Electrical and Electronic Equipment Directive (WEEE), which is setting collection, recycling and recovery targets for all types of electrical goods, it is part of a legislative initiative to solve the problem of huge amounts of toxic e-waste.

INTRODUCTION

Even if you're experienced with Braille and computers, our embossers have lots of handy features that take only a few minutes to learn but make your work much easier and faster. That's why we hope to persuade everyone to read the short section called "Setting Up Your Embosser."

If you're new to Braille desktop publishing, "Your First Braille Document" describes the basic process of creating Braille in less than two pages.

To help you get the most out of your embosser both now and in the future, we've enclosed a CD-ROM that includes:

MANUAL.TXT   A text file version of the Romeo Attaché, Romeo Attaché Pro, Romeo 25, and Romeo Pro 50 User's Manual suitable for use with most screen readers.

MANUAL.PDF   An accessible Adobe Acrobat version of the Romeo Attaché, Romeo Attaché Pro, Romeo 25, and Romeo Pro 50 User's Manual.

USERMAN.BRF   A formatted grade 2 Braille file of the Romeo Attaché, Romeo Attaché Pro, Romeo 25, and Romeo Pro 50 User's Manual 40 characters by 25 lines.

Installing the ET Emboss Driver in Microsoft Windows.PDF

This Adobe Acrobat file contains the detailed instructions for installing the ET Emboss driver in Microsoft Windows.

\ETEmboss\   This subdirectory contains the drivers needed by the Microsoft Windows operating system to properly install your embosser.

README.TXT   A text file providing the contents of the CD-ROM. This file may also contain special instructions for the user.

Your First Braille Document

Many people think that a Braille embosser automatically prints "in Braille" from your computer files by substituting Braille letters for print ones. Although publishing in Braille gets easier all the time, it's not quite that simple yet.

The Braille alphabet evolved from a French military code designed for night reading and is based on a six-dot "cell." One "cell" stands for one letter, as you might expect, but not all the time.

More often, words have been shortened and punctuated according to rules unique to Braille. The two main rule systems are uncontracted Braille and contracted Braille. Uncontracted Braille uses official Braille punctuation and capitalization but spells out every text letter of every word. Contracted Braille uses official Braille punctuation, capitalization, and nearly 200 contractions to save space.

Most documents for adult readers, as well as most signs in public buildings, are in contracted Braille. The contractions are understood by Braille readers everywhere and are abbreviations of common words and letter combinations. For example, "you" in contracted Braille is the letter "Y".

Unless you're a Braille reader or a certified Braille transcriber, there is no way you could possibly know these rules. That's why you need a software package called a "translator." Translation software reads your computer files and literally "translates" them into correctly contracted, punctuated, and formatted Braille pages, ready to "print" on your Braille embosser. Newer translators even contain their own word processors so you can create, edit, spell check, print, translate, and emboss your documents inside the translator, just as you would in Microsoft Word or WordPerfect. Others produce Braille by reading common types of word processing files, typically in ASCII text format, and creating new ready-to-emboss Braille files. Translators are very easy to use and typically create the finished Braille computer files (even long ones) in seconds.

Once you're ready to emboss the Braille you've created, you can roughly estimate the finished size of most Braille projects if you keep in mind that even with Braille contractions AND the larger dimensions of standard Braille paper, 1 print page usually equals 2 to 3 Braille pages.

Glossary

Buffer:	Memory reserved to store data entered into the embosser. One page uses about 1K or 1000 characters of the buffer.
Configuration:	A collection of settings for a computer connection.
Default:	What you get if you don't change anything.
Emboss Head:	Mechanical element that makes the Braille dots.
Interface:	Connection.
Menu:	A stored collection of settings in the embosser's memory.
Multi-Copy:	Built-in function copies stored text up to 99 times.
NOV-RAM:	Nonvolatile memory. Stores menu settings while the power is off.
On-Line:	Ready to receive data from a computer's USB, serial or parallel port.
Off-Line:	Ready to receive commands. Not ready to receive data from the computer.
Parallel Port:	Connects the embosser to a computer with a Centronics type interface.
Parameters:	Settings.
ROM:	Read only memory. Contains the embosser "firmware" (permanent programming) of its features and functions.
Sequence:	A series of keystrokes, usually followed by the Enter Key.
Serial Port:	Connects the embosser to a computer with a serial RS-232D Interface.
Top-of-Form Offset:	Top margin of Braille paper during embossing.
Tractor:	Moves the paper through the machine while printing.
Tractor Well:	Recess into which the tractors are installed.
USB Port:	Universal Serial Bus - Connects the embosser to a Computer with this high speed connection.

SETTING UP YOUR EMBOSSER

Unpacking

First, check the embosser and accessories carefully for damage. If any damage is apparent, notify the shipper immediately. Also, check the contents against the packing list and if you find a discrepancy, let us know as soon as possible.

IMPORTANT! **Remove any shipping locks that may be in place and save them, along with the carton and other packing material. You will need them should you ever have to return the embosser for service. Although the embosser is in a very sturdy, shock-resistant case, shipping any electronic equipment without proper packing is not a good idea!**

Romeo Attaché and Romeo Attaché Pro

Place the embosser on a sturdy desk or table with the handle facing you. Plug the power cord first into the embosser's power interlock located on the right side panel, and then into a grounded outlet. (The embosser's power requirements are listed under "Electrical" in the "Technical Specifications" section later in this manual.)

Romeo 25 and Romeo Pro 50

Place the embosser on a sturdy desk or table with the handle of the embosser facing you and remove the lid. Remove the shipping lock according to the directions found in the box. Plug the power cord first into the embosser's power interlock, and then into a grounded outlet. (The embosser's power requirements are listed under "Electrical" in the "Technical Specifications" section later in this manual.)

Installing Paper

Your embosser will produce good quality Braille on paper weights from standard 20-pound computer paper (suitable for rough drafts) to 100-pound traditional Braille paper (recommended for more permanent documents).

Remove the paper from the box by turning the box upside down and stack the paper neatly on the floor in front of the table.

Romeo Attaché and Romeo Attaché Pro

Lift the lid of the embosser by grasping it along the front edge and pulling upward until it latches. Open the embosser's paper tractors by lifting on the inside edge of each tractor door. They will stay open until closed by hand.

Insert the paper into the slot behind the paper tractors. Position the tractors so that the tractor pins line up with the holes on the edges of the paper (making sure the paper is straight).

To move the tractors from side to side, push the small release handles, located near the outside edge of each tractor, toward you. (They may be a little stiff at first.) Although both tractors are able to move, generally it is the right tractor that needs to be moved more often because that is how you adjust for differences in paper width.

Close the tractors to grip the paper and tighten the release handles back down to lock the tractors themselves in position. Check to be sure there is enough room behind the embosser to collect the paper. Close the lid of the embosser to cover the paper tractors.

Turn the power switch on. The embosser will execute a self test and plays an excerpt from Tchaikovsky's "Romeo & Juliet". If you have the Romeo Attaché Pro, ET Speaks will come up talking automatically and tell you that the embosser is ready to run.

Romeo 25 and Romeo Pro 50

Open the embosser's paper tractors by lifting on the inside edge of each tractor door. They will stay open until closed by hand.

Insert the paper into the embosser and make sure that the paper edge can travel easily under the metal bar across the top of the embosser. Position the tractors so that the tractor pins line up with the holes on the edges of the paper (making sure the paper is straight).

To move the tractors from side to side, push the small release handles, located near the outside edge of each tractor, toward you. (They may be a little stiff at first.) Although both tractors are able to move, generally it is the right tractor that needs to be moved more often because that is how you adjust for differences in paper width.

Close the tractors to grip the paper and tighten the release handles back down to lock the tractors themselves in position. Check to be sure there is enough room behind the embosser to collect the paper.

Turn the power switch on. The embosser will execute a self test and plays an excerpt from Tchaikovsky's "Romeo & Juliet". If you have the Romeo Pro 50,

ET Speaks will come up talking automatically and tell you that the embosser is ready to run.

The Keypad

The keypad is a small 16-key keyboard located on the top surface of the embosser. The keypad is how you tell the embosser what to do. The keys are spaced 4 columns down by 4 rows across. The top three rows are laid out in calculator format with 7, 8 and 9 running from left to right on the top row, 4, 5 and 6 just below them, and 1, 2 and 3 next to the bottom. The key at the left of the very bottom row is 0. To the right of zero is the decimal point, and to the right of that, a key labeled E. The keys in the far right column are, from top to bottom, the OL, LF, FF and V key.

OL (On-Line/Off-Line)

The embosser must be on-line to receive and print data from a computer, and it (usually) must be off-line to receive commands from you.

Press OL to take the embosser from on-line (ready to receive and print data) to off-line (ready to respond to your commands). Press it again to return on-line. Note the audible difference in the on-line and off-line tones.

If you press OL while embossing, the embosser will pause. Any data left in the buffer remains, and embossing will resume as soon as you press OL again.

LF (Line-Feed)

On-line, LF makes ET Speaks (if present) repeat its last phrase. Off-line, LF advances the paper one line each time this key is pressed.

FF (Form-Feed)

On-line, FF makes ET Speaks (if present) stop speaking in mid-phrase. Off-line, FF advances the page to the top of the next page and prints the last partial page in the buffer, if necessary.

V (View)

Off-line, V works with ET Speaks (if installed) to verify individual menu settings. Otherwise, pressing V advances the page several lines, allowing you to read the line just embossed. Pressing V once more returns the paper to its original position. This feature is handy when you wish to verify the contents of a document that is currently being embossed.

E (Enter)

E is similar to the "enter" key on your computer keyboard and is used to finish and transmit commands.

Setting Top-of-Form

Top-of-form tells the embosser where the paper starts and where to begin the Braille. You need to tell the embosser to reset top-of-form whenever you change paper or adjust the top margin, which we call the top-of-form offset. Unlike most Braille translators, which allow you to adjust the top margin in one-line increments, you can use the top-of-form offset setting on the embosser to give you more precise control over the distance from the top edge of the page to the first Braille line. The distance from the edge of the paper to where the Braille begins is adjustable in 0.1 inch increments by using the top-of-form offset setting (Parameter 30.NNE) found in each of the machine's 16 menus. For 25 lines embossed on 11 inch paper we generally recommend a top-of-form offset of 4 or 0.4 inches. The default setting is 0. To change it to 4 enter the following:

OL	Takes the embosser off-line
0.3E	Enter menu number 3 (default). If you are using a different menu, substitute the alternate menu number for the 3 in the sequence
30.4E	This will set a top-of-form offset value of 4 or 0.4 inches. This setting will remain until you change it, even after power is turned off
1.1E	This will install the change and reset the embosser

If you have paper loaded in the embosser, check to be sure the tractors are securely holding the paper and that the paper can flow smoothly into the embosser with no obstructions. Turn on the embosser and listen for the "Romeo & Juliet" tune that signifies the embosser is ready to run.

To set top-of-form, enter the following on the embosser's keypad:

OL	Takes the embosser off-line
2E	Set top-of-form

An automatic sensor inside the embosser seeks the edge of the paper, so the paper should begin to move back and forth until the sensor fixes the location of the paper's edge in the embosser's memory. After setting top-of-form, the embosser returns on-line automatically, signified by the two-note on-line tune.

IMPORTANT!	The embosser's sensor *must* find the paper's edge to set top-of-form, which makes pages break in the right places. When you reset top-of-form in the middle of a printing session, remove any finished pages before issuing the 2E command. Every time you install a new batch of paper or clear a paper jam, remember to reset top-of-form with the OL, 2E sequence.

The embosser will remember the top-of-form setting when you move the paper with LF, FF or V.

Changing (and Restoring) Menu Settings

Because Braille embossers need to work with many different kinds of software and computer operating systems, the embosser has a built-in feature that remembers sixteen different groups of settings, exactly as if you were going to use sixteen different computers with one embosser.

Each group of settings is called a "menu." All the menus stay set and ready to use even when the power is off. Eight of the menus are preset at the factory with settings many of our customers have requested. The other eight are yours to create as you need them. You can change, create and save settings in all the menus, even the ones preset at the factory.

When you turn on your embosser for the first time, Menu 3 is the default (which means it has control until you change it). Menu 3 is for a USB connection to an IBM-compatible computer.

Each of the sixteen menus has the same features, many of which will be familiar to most computer users (like right and left margins, word wrap, and page length), while others are unique to Braille environments.

When the embosser is OFF-LINE and in one of the menus, you can make ET Speaks (if installed) tell you what the menu parameter is without changing anything.

> V.NE   Reads menu parameters while in a menu

For example: Should you change the right margin? You think you set it for 30 characters wide yesterday but you're not sure. Enter on the embosser's keypad:

OL	Takes the embosser off-line
0.3E	Enter Menu 3
V.14E	ET Speaks will read the current right margin setting, because 14 is the parameter assigned to the right margin. Now you know if you have to change the margin setting--or not.
1.1E	Exit the menu

How to Change Menu Settings

Each user menu contains over thirty different settings that allow you to select different interface ports, change margin settings, and so forth. Although many of today's Braille translators allow you to select different sizes of paper and change margins in the translator itself, you may also change margin settings through the embosser's keypad if your translator does not have this capability.

For example, let's say you're using Menu 3 because you have an IBM PC-compatible. You want to adjust the right margin for narrower Braille paper. Enter the following on the embosser's keypad:

OL	Takes the embosser off-line
0.3E	Enter Menu 3
14.30E	Set the right margin at 30 Braille characters
1.1E	Return on-line and use this menu as the current configuration

A complete list of the thirty-plus individual menu items is also in the Quick Reference Guide in the back of this manual.

Restoring Factory Settings

If you change too many menu parameters to keep track of, or if you're not the only person to use the embosser, you might want to reset the embosser back to the original factory settings. Although you will lose all changes you've made to the menus, you'll also be starting fresh.

To restore factory settings, turn off the embosser and disconnect the interface cable that connects your embosser to your computer. Then, press and hold the LF & FF Keys while turning on the embosser. Continue to hold LF & FF until a tone is heard, then release them. The embosser will restore factory settings and restart normally. Once the embosser restarts and is ready to run, it is safe to reconnect the interface cable between your computer and embosser.

Connecting To Your Computer

Through the USB Port (default)

Your embosser ships from our factory with the USB port selected by default. If you have made changes to your embosser's settings, or you want to be sure the USB port is selected, enter the following on the embosser's keypad to select Menu 3:

OL   Takes the embosser off-line
0.3E   Enter Menu 3
1.0E   Make this the power-on default
1.1E   Exit menu and reset embosser

Connect a USB cable to the embosser's USB port. Connect the flat end of the USB cable to one of the open USB ports on your computer. It does not matter which USB port you select. The embosser is compatible with either USB 1.1 or 2.0 specifications. Once connected, your Windows XP or higher computer should install the printer as a Virtual Printer Port for USB.

Many Windows applications require that a printer driver be installed. Select START, then CONTROL PANEL, from the Windows desktop. Next, look for an icon labeled PRINTERS, DEVICES AND PRINTERS, or some variation of these, and select it. Select Add Printer from the open window. Select Local Printer, then select the USB virtual printer port with the highest number from the list of available ports. Next, click the radio button labeled Have Disk. Insert the CD provided by Enabling Technologies that contains the ET Emboss printer driver. Follow the prompts displayed for your specific version of Windows. Please note that each version of the Microsoft Windows operating system has a slightly different format for installing printers. For more detailed instructions for installing the ET Emboss driver please refer to the "Installing the ET Emboss Driver" instruction file contained on the distribution disc that came with your embosser.

Next, install your Braille translation software package, such as the Duxbury Braille Translator, on your computer. Then open the program and select Global, Embosser Setup and select your embosser. Then select Windows Device or Send to Printer from the menu and using the scroll down bar, select the ET Emboss printer driver you just installed.

Menu 3 is already set to work with the embosser's USB port and IBM PC-compatible computers. Assuming you have connected the computer and the embosser as described above, selected the correct USB virtual printer port when you installed and configured the ET Emboss printer driver, and fully installed your translation software, you can expect to get Braille out immediately.

If not, check to make sure the cables are tightly attached, the software is transmitting to the ET Emboss printer driver, and the embosser is on-line.

You may also need to select different USB virtual printer ports in the ET Emboss printer driver Properties until you find the correct one and the file embosses.

Through the Parallel Port

Connect a parallel cable from the parallel port on your computer to the parallel port on your embosser. Next, turn on the computer and the embosser, and enter the following on the embosser's keypad to select the parallel port:

OL	Takes the embosser off-line
0.1E	Enter Menu 1
1.0E	Make this the power-on default
1.1E	Exit menu and reset embosser

Many Windows applications require that a printer driver be installed. Select START, then CONTROL PANEL, from the Windows desktop. Next, look for an icon labeled PRINTERS, DEVICES AND PRINTERS, or some variation of these, and select it. Select Add Printer from the open window. Select Local Printer, then select LPT1 from the list of available ports. Next, click the radio button labeled Have Disk. Insert the CD provided by Enabling Technologies that contains the ET Emboss printer driver. Follow the prompts displayed for your specific version of Windows. Please note that each version of the Microsoft Windows operating system has a slightly different format for installing printers. For more detailed instructions for installing the ET Emboss driver please refer to the "Installing the ET Emboss Driver" instruction file contained on the distribution disc that came with your embosser.
Next, install your Braille translation software package, such as the Duxbury Braille Translator, on your computer. Then open the program and select Global, Embosser Setup, click New if necessary, and select your embosser from the list of available embossers. Then select the port your embosser is connected to on your computer. For parallel connections this is usually LPT1. Your Braille translator will automatically send your finished Braille work directly to the embosser.

Menu 1 is already set to work with the embosser's parallel port and IBM PC-compatible computers. Assuming you have connected the computer and the embosser as described above, and fully installed your translation software, you can expect to get Braille out immediately.

If not, check to make sure the cables are tightly attached, the software is transmitting to the correct port, and the embosser is on-line.

Through the Serial Port

If you need to set up a serial connection, first connect a null modem serial cable to the embosser's serial port and to one of the serial ports on your computer. Since computers usually have more than one serial port, make a note of which one the embosser is using. You'll need this information to set up your translation software and adjust your computer's settings, if necessary.

If you are connecting via a serial port to your computer, use Menu 2:

OL	Takes the embosser off-line
0.2E	Enter Menu 2
2.0E	Select the serial port
8.1E	Set the embosser to hardware handshaking
1.0E	Make this the power-on default
1.1E	Exit menu and reset embosser

Set your computer for: 9600 baud, no parity, eight data bits, one stop bit and hardware handshaking.

If you are connecting via the serial port to a Notetaker, first set your Notetaker for: 9600 baud, no parity, eight data bits, one stop bit and software handshaking. Then change the embosser settings to match:

OL	Takes the embosser off-line
0.2E	Enter Menu 2
2.0E	Select the serial port
8.0E	Set the embosser to software handshaking
1.0E	Make this the power-on default
1.1E	Exit Menu 2 and reset embosser

If you already have a clear idea that something else should be changed in the embosser's serial port settings (baud rate, handshaking, etc.), the Quick Reference Guide in the back of this manual has a list of the menu items you can adjust for the serial port.

Assuming you have connected the computer and the embosser as described above, and fully installed your translation software, you can expect to get Braille out immediately. Please proceed to the section titled **Installing Drivers in Microsoft Windows.**

Installing Drivers in Microsoft Windows

Your CD-ROM contains the ET Emboss printer driver, which is compatible with 32-bit versions of Microsoft Windows XP and higher. For installing drivers in Microsoft Windows please see the document titled "Installing the ET Emboss Driver in Microsoft Windows.PDF" included on this CD-ROM.

If you are using a 64-bit version of the Microsoft Windows operating system, please install the generic / text only printer driver in place of ET Emboss. The generic / text only printer driver may be installed through the Add Printer wizard. Simply follow the installation procedure as if you were installing ET Emboss, with just one minor change. When you get to the screen where you would normally select Have Disk, select Generic from the Manufacturers column and Generic / Text Only from the Printers column. Then, follow the prompts to complete the installation.

Advancing Paper

If the test of your USB, parallel or serial port above was successful, you now have some Brailled pages to remove from the embosser.

Enter the following commands on the embosser's keypad to remove the finished document and prepare for the next:

OL	Takes the embosser off-line
FF	Advance a full page. The embosser may finish the last fraction of a page. Tear off the finished pages. Then:
2E	Reset top-of-form and send the embosser back on-line, ready for the next job

If embossing did not start as you expected, first rule out the obvious: Is everything plugged in, turned on, and directed to the port connected to the embosser? Is the embosser on-line? If these all check out, refer to the F.A.Q. section later in the manual. We've included solutions to the most frequent complications our customers encounter.

EMBOSSING GRAPHICS

Braille graphics are made using special software packages. For more information on producing tactile graphics using your embosser, contact your Enabling Technologies representative.

MULTI-COPY

Multi-Copy allows you to download up to 18,000 characters of text (about 18 Braille pages) from your computer into a reserved portion of memory, the Multi-Copy buffer. The embosser will copy whatever is in the Multi-Copy buffer from 1 to 99 times without reloading the text from the computer.

IMPORTANT! Stay ON-LINE while using Multi-Copy.

Run a single test copy of your file first, to be sure margins, paper size, page breaks, etc., are correct. Whatever menu is active when you start Multi-Copy

is the one that continues to control the embosser once you start making multiple copies, so make any necessary adjustments to the menu before starting Multi-Copy.

When your file is ready for multiple copies, remain on-line, and enter the following on the embosser's keypad:

> 3.0E   Turn on Multi-Copy

Go back to your computer and send or copy your file to the embosser. After the file is copied into the embosser's memory, go back to the embosser's keypad and, staying on-line, enter the following:

> 3.1E   Tell the embosser that the file is completely copied

If no data was received from the computer, an error tone will sound, warning you that the buffer is still empty. If the file is too large (over 18 pages) for the embosser, the "Buffer Full" tone will sound and the embosser will also begin printing the text that has exceeded the buffer. This allows you to see where in your file the overflow occurred so you will know where to split your document. Tell the embosser how many copies to make. Enter the following on the embosser's keypad:

> 4.NNE   "NN" stands for "any number up through 99"

For example, if you want 10 copies, you'd enter 4.10E. If you want 99 copies, you'd enter 4.99E. If your embosser is equipped with ET Speaks, it will count off copies as they emboss so you can monitor how the job is progressing. If you'd rather squelch this feature, you can turn it off within the menu you're using with 25.3E.

Other Controls in Multi-Copy

> 3.2E   Stops printing at the end of the current copy
> 3.3E   Cancels Multi-Copy and clears the buffer
> 3.4E   Suspends Multi-Copy at the top of the next sheet of paper

If you don't turn off the power or reset the machine, you can send another short document and resume printing where you left off.

> 3.5E   Resumes Multi-Copy after the 3.4E sequence. Check that the paper is at top-of-form prior to entering this command

OL stops printing temporarily in Multi-Copy. Printing continues when OL is pressed again.

V stops printing and moves the paper out from under the platen, so the Braille which was just printed can be read. Press V again to move the paper back and resume printing.

OL, then LF, FF or pressing 0.1E to 0.16E to enter a User Menu while off-line also exits Multi-Copy. The current copy will not be completed but the buffer remains unchanged. You can continue Multi-Copy by going back on-line and entering the 4.NNE sequence.

ET SPEAKS SPEECH FEEDBACK
(Romeo Attaché Pro & Romeo Pro 50)

As you've noticed if your embosser is equipped with ET Speaks, your embosser automatically voices all the keypad entries you make and all its own status messages with no intervention necessary from you. However, while using ET Speaks as the voice of your embosser, two keys can help you control the speech when the embosser is ON-LINE.

> **The LF key makes ET Speaks repeat its last phrase**
> **The FF key makes ET Speaks stop speaking in mid-phrase**

Turn Speech Off and Change Voices In The Embosser Menus

For embossers equipped with ET Speaks, all sixteen menus have the following additional settings to modify the speech:

25.0E	Turns the speech OFF
25.1E	Turns the speech ON (the default)
25.2E	Speech ON with spoken escape sequences
25.3E	Speech ON but without counting the copies as they emboss in Multi-Copy
36.NE	Chooses a different voice by substituting a number from 0 to 5 for the "N". 0 is the default (i.e., 36.0E)

Example: You use an IBM-compatible computer and have your embosser connected to one of the computer's USB ports. You want to turn the speech off. To do this, turn on the embosser. Then, on the embosser's keypad, enter:

OL	Takes the embosser off-line
0.3E	Enter Menu 3. (Menu 3 is the factory menu preset for the IBM PC connected to the USB port. This is probably the menu you have been using)
25.0E	Turn speech off
1.1E	Save these menu changes and exit to go on-line

The embosser will now work with "speech off" in Menu 3, unless (or until) you change it.

To turn the speech back on, do all the steps above, except instead of 25.0E (which turned the speech off) enter 25.1E to turn speech on.

Check parameters without changing them by entering V.NE to have ET Speaks tell you the current setting. In the above example, suppose you want to check to make sure the speech is really on before resetting the embosser. While anywhere in Menu 3, enter V.25E on the keypad to hear the current speech setting.

SINGLE SHEET MODE
(Romeo Attaché Pro & Romeo Pro 50)

Single Sheet Mode is an option that may have been installed at the factory so that your embosser will emboss Braille on loose sheets of paper or other lightweight material. With Single Sheet Mode, you copy a document into the embosser's memory, then Braille the document by feeding paper through the embosser one sheet at a time. Single sheet mode makes it possible for you to use paper that does not have the tractor edges of standard Braille paper.

IMPORTANT!   In Single Sheet Mode, the maximum number of lines that can fit on a page is 22. Format translated documents for 22 or fewer lines per page for best results.

Entering menus while off-line exits the Single Sheet Mode, as does turning the machine off.

Single Sheet Mode Basic Steps

In your Braille translator's Embosser Setup, set your lines per page to 22 and your top margin to 0. Next, place the first sheet of paper on the tractor rollers, turn on the embosser and set top-of-form by entering the following on the embosser's keypad:

OL   Takes the embosser off-line
2E   Set top-of-form and return on-line

Next, enter 5.1E on the keypad while staying on-line to activate the Single Sheet Mode. Begin embossing by sending your file from your computer. When the printer encounters a form-feed control character or reaches the set number of lines per page, the printer will feed the current sheet out of the rollers. Make sure the first sheet is clear of the rear of the printer, then place the next sheet in the tractor rollers.

Stay on-line. Enter 2E on the keypad to set the top-of-form. (2E works on-line in Single Sheet Mode.) The second page will now emboss. Repeat

this sequence until the entire file has been embossed.

Leave Single Sheet Mode by entering 5.0E on the embosser's keypad. 5.0E ends the Single Sheet Mode and turns the paper-out sensor back on. Reset your Braille translator to your usual number of lines per page.

IMPORTANT! **Single Sheet Mode automatically disables the paper-out sensor, so the printer could continue to emboss even when no material is between the die bars. Since embossing without paper can eventually damage the embosser, close supervision is important in the Single Sheet Mode.**

TECHNICAL SPECIFICATIONS

Printing

Printing method: Impact. Printing speed: (Romeo Attaché & Romeo Attaché Pro) 15 characters per second; 32 characters per line; (Romeo 25) 25 characters per second; 40 characters per line; (Romeo Pro 50) 50 characters per second; 40 characters per line. Actual printing speeds may vary based on paper grade setting, page layout and data format. Paper feed: Sprocket. Line width in Library of Congress spacing: (Romeo Attaché & Romeo Attaché Pro) Alpha 32 characters (maximum); (Romeo 25 & Romeo Pro 50) Alpha 40 characters (maximum). Graphics: (Romeo Attaché & Romeo Attaché Pro) low resolution 48 characters maximum (96 dots or 12.5 dots per inch); high resolution 64 characters maximum (128 dots or 16.7 dots per inch); (Romeo 25 & Romeo Pro 50) low resolution 60 characters maximum (120 dots or 12.5 dots per inch); high resolution 80 characters maximum (160 dots or 16.7 dots per inch). Character matrix: 6 dot or 8 dot. Character set: USA default (8 total). Printing direction: Bidirectional. Paper width: Adjustable (Romeo Attaché &Romeo Attaché Pro: 1.5 to 8.5 inches); (Romeo 25 & Romeo Pro 50: 1.5 to 13.25 inches). Page length: Selectable (3.0 to 14 inches) Paper weight: 20 lb. to 100 lb. Text buffer: 18,000 characters.

Default spacing (Library of Congress): Dot spacing: Alpha 0.090 inch, Graphics 0.080 inch standard, 0.060 inch high. Dot Height: 0.020 inch. Character spacing: 0.240 inch. Line spacing: 6 dot 0.400 inch, 8 dot 0.490 inch. Other spacing formats selectable: Regular (Library of Congress), California sign, Jumbo, Regular with relaxed line spacing, Petite (Japanese), and Petite with relaxed line spacing for interline printing.

Physical Description

Romeo Attaché & Romeo Attaché Pro:

Width: 17 inches (43.18 cm). Depth: 11.25 inches (28.58 cm). Height: 5.75 inches (14.06 cm). Weight: 16.75 pounds (7.6 kg). Case Style: Desktop, with handle. Sound Level: 67 dba average. Sound level may vary with ambient conditions.

Romeo 25 & Romeo Pro 50:

Width: 21.25 inches (53.9 cm). Depth: 13.25 inches (33.6 cm). Height: 8.25 inches (20.9 cm); 6.00 inches (15.2 cm) without lid. Weight: 32 pounds (14.5 kg). Case Style: Plastic carrying case, with handle. Sound Level: 75 dba average. Sound level may vary with ambient conditions.

Environmental
Temperature: Operating or Storage 35 F to 100 F (2 C to 37.8 C). Humidity: Operating or Storage 10% to 95% (noncondensing).

Electrical
Line voltage: 105 to 260 VAC. Fuse size: 250V, 1.6A slow blow.

Interface
Port 1: Centronics compatible parallel. Port 2: Serial EIA-232D (DTE). Port 3: USB.

Service
User maintenance: None required. MTBF (excluding print head): 50,000,000 characters. Print head life: 100,000,000 characters.

Accessories
Standard: Line cord, 3 wire (USA). USB cable.
Optional: Special interface cables. Special line cords.

Special Features

1. Fully configurable print format
2. Fully configurable communications
3. Sixteen independently selectable configuration menus
4. Configuration stored in nonvolatile RAM
5. Graphics capability
6. Computer Braille/uncontracted Braille translation built in
7. Six or eight dot Braille codes
8. Eight Braille character sets
9. User definable Braille codes
10. 18,000 character text buffer (about 18 pages)
11. Multi-Copy makes up to 99 copies in a single command sequence
12. Paper-out detector
13. Special view feature allows reading the current line
14. Word wrap and hot zone formatting
15. Two screen dump modes
16. No user maintenance required
17. All modular construction
18. Dynamic Braille Scaling allows size adjustment in Braille cell size and spacing from Regular Library of Congress (default) to California Sign, Jumbo, Regular with Relaxed Line Spacing, Petite (Japanese), Petite Relaxed (Japanese Interline) and Marburg Medium Braille sizes
19. EPA ENERGY STAR® compliant

FCC Compliance

WARNING: Changes or modifications to this unit not expressly approved by Enabling Technologies Company could void the user's authority to operate the equipment.

This equipment 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 harmful 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 does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

1. Reorient or relocate the receiving antenna.
2. Increase the separation between the equipment and receiver.
3. Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
4. Consult the dealer or an experienced radio/TV technician for help.

QUICK REFERENCE GUIDE

Keys

OL	On-Line/Off-Line (toggle)
LF	Line-Feed
FF	Form-Feed
V	View (toggle)
0-9	Numeric entry
Decimal	Numeric entry
E	Enter

Tones

Various sounds indicate the status of the embosser. Try out the tones (it won't hurt anything) by typing the sequences below on the embosser's keypad while off-line.

1.0E	Romeo & Juliet tune--Power on self test OK
1.1E	Chopin Funeral Dirge--Power on self test failed
1.2E	2 short beeps--OK
1.3E	Buzz--Invalid sequence
1.4E	4 long beeps--Overrun error (serial data)
1.5E	Low to high--On-line
1.6E	High to low--Off-line
1.7E	1 short beep--Console bell
1.8E	Series of low to high--Paper out
1.9E	Series of low beeps--Exit tone
1.10E	Beethoven's 5th--Multi-Copy buffer full

Top-of-Form Reset

Do this after you change menu settings or add paper.

OL	Takes the embosser off-line
2E	Set top-of-form. Embosser resets automatically

Menus

Enter a Menu

OL	Takes the embosser off-line
0.NE	Go to menu N (1 through 16)

Menu Settings & What They Do

1.0E	Make this menu the power-on default
1.1E	Exit and make this menu current
2.0E	Selects serial port
2.1E	Selects parallel port
2.2E	Selects USB port
3.NE	Sets baud rate to N. Available baud rates from 45.5 to 38,400. Example: Change to 9600 by keying 3.9600E
4.NE	Sets the number of data bits to N. Available data bits: 5, 6, 7 and 8
5.NE	Sets the number of stop bits to N. Available stop bits: 1, 1.5 and 2
6.NE	Selects parity (0 = none, 1 = odd, 2 = even)
7.NE	Sets communication code (0 = ASCII, 1 = Baudot)
8.NE	Sets handshaking (0=Xon/Xoff, 1=DTR & CTS, 2=DTR & DSR, 3=RTS & CTS, 4=RTS & DSR)
9.NE	Braille mode (0 = 6 dot, 1 = 8 dot)
10.NE	Word wrap (0 = off, 1 = on)
11.NE	Perf skip (0 = off, 1 = on)
12.NE	Paper-out detector (0 = off, 1 = on)
13.NE	Auto LF mode (0=none, 1=xmit, 2=rcv, 3=xmit & rcv)
14.NNE	Set right margin to N
15.NNE	Set left margin to N
16.NE	Emboss control characters (0 = off, 1 = on)
17.NNE	Set lines per page to N
18.NNE	Set page length to N (1.0 inch increments)
19.NE	Set multi strike count to N. Also, multi strike count can be increased while on-line as well. Stay on-line and enter 9.NE. "N" ranges from 1 (light) to 3 (heavy) strikes. Warning: Multiple strikes dramatically slow (and may eventually damage) embosser when used with light material
20.NE	Enter character N into control character table

21.NE	Remove character N from control character table
22.NE	Hot zone (0 = off, 1 = on)
23.NE	Recognize escape sequences (0 = off, 1 = on) 23.1 required for graphics
24.NE	Set bell position to N
25.NE	ET Speaks Option (0 = off, 1 = on, 2 = on plus escape sequences vocalized, 3 = on, but without the copy countdown in Multi-Copy). Default is ON
26.NE	Local echo (0 = off, 1 = on)
27.NE	Braille format (0 = computer, 1 = uncontracted)
28.NE	Eighty column mode (0=off, 1=80 column, 2=160 column)
29.NNE	Alpha character set (0=none, 1=IBM 437, 2=IBM 850, 3=Spain, 4=France, 5=Italy). (0=USA, 1=Spain, 2=Germany, 3=Swiss, 4=Denmark, 5=Austria, 6=France, 7=Italy)
30.NNE	Top-of-form offset to NN (1/10 inch increments)
31.NE	Eight bit character handling (0=print 8 bit chrs, 1=ignore eighth bit, 2=print space, 3=discard)
32.NNE	Autoprint constant (1 second increments)
33.NE	Reserved
34.NNE	Paper grade setting (0=fastest, 12=slowest)
35.NE	Dynamic Braille Scaling: 0=Regular (Library of Congress), 1=California sign, 2=Jumbo size, 3=Regular size, relaxed line spacing, 4=Petite (Japanese), 5=Petite with relaxed line spacing for interline printing
36.NE	ET Speaks' (optional) voices (0=default, or 1, 2, 3, 4, or 5)

Other Menu Functions

V.NE	Reads, with ET Speaks, parameter N in this menu
V.E	View function while in menu
N.VE	Prints all parameters in menu N
0.VE	Prints all parameters in current configuration

Exit a Menu

E	Exits but remains off-line
1.1E	Exits and makes this menu current

Restore to Factory Defaults

Hold down the LF & FF Keys while turning on the power.

Multi-Copy

Reminder: Stay on-line while using Multi-Copy.

3.0E	Start Multi-Copy
3.1E	Document is fully copied and ready to print
4.NNE	Print "NN" (2 to 99) copies of the document
3.2E	Stop printing at end of current copy
3.3E	Cancel Multi-Copy
3.4E	Suspend Multi-Copy at top of next sheet
3.5E	Resume Multi-Copy following 3.4E

ET Speaks
(Romeo Attaché Pro & Romeo Pro 50)

Two keys control ET Speaks when the embosser is ON-LINE.

The LF key makes ET Speaks repeat its last phrase
The FF key makes ET Speaks stop speaking in mid-phrase

ET Speaks tells you the current setting of menu parameters if you enter V.NE while in the menu.

Single Sheet Mode
(Romeo Attaché Pro & Romeo Pro 50)

Reminder: Translate document to 22 lines per page.

Place the first sheet of paper on the tractor rollers. Turn on the embosser. On the embosser's keypad, set top-of-form:

OL	Takes the embosser off-line
2E	Set top-of-form and return on-line

Enter 5.1E on the keypad while staying on-line. Send your file from your computer. After the first completed sheet ejects, stay on-line. Insert the next sheet. Enter 2E on the keypad to set the top-of-form. (2E works on-line in Single Sheet Mode.) Repeat until the entire file has been embossed. Leave Single Sheet Mode by entering 5.0E on the embosser's keypad.

WARRANTY, SUPPORT & SERVICE

Enabling Technologies Company warrants all parts and workmanship of the embosser to be free of defects for a period of one year (365 days) from date of delivery. This warranty is extended only to the original purchaser who must return such defective part(s) to Enabling Technologies Company immediately upon customer's discovery of the defect in question. Return shipment of such defective part(s) must be pre-paid by customer.

This warranty does not extend to defects resulting from improper use or unauthorized service by purchaser. Also, the warranty is invalid if any of the instructions accompanying the product are not carefully followed.

This limited warranty is made in lieu of all other warranties, expressed or implied, and is limited to the repair or replacement of the product. No warranty, expressed or implied, is extended concerning the completeness, correctness, or suitability of the Enabling Technologies Company equipment for any particular application. There are no warranties which extend beyond those expressly stated herein.

Enabling Technologies Company offers an Extended Warranty Program. For further details, contact:

> Enabling Technologies Company
> Service Contract Administrator
> 1601 Northeast Braille Place
> Jensen Beach, Florida 34957

For support and service within the United States, contact our Customer Support Group toll free at (800) 777 3687 or (772) 225 3687. For customers outside the United States contact your local Enabling Technologies distributor. They may be able to resolve your problem quickly on the phone. You may also contact us via email at: support@brailler.com.

If your problem cannot be resolved on the phone, request a Return Authorization (RA) number from the Customer Support Group. You MUST have an RA number before you can return your embosser to us for service. This number is necessary for us to schedule service time for your embosser.

After you obtain a Return Authorization number from Customer Support, pack your embosser in the original carton and packing material. If the original carton was discarded, use a container that provides at least three inches of packing material around all sides of the embosser or call us to purchase new packing materials.

Include a letter inside the package containing the following information:

1. Your name.
2. Your company name (if applicable).
3. Your shipping address and zip code.
4. Your mail drop code (if applicable).
5. Your RA number.
6. A description of the trouble you are experiencing. Please include as much information as possible about the problem and the conditions under which it occurs.

Please have your RA number printed clearly on the outside of the carton so we can begin work on your embosser as quickly as possible. Address the box containing your embosser to the location below for quickest service:

Enabling Technologies Company
Customer Support
1601 Northeast Braille Place
Jensen Beach, Florida 34957 USA

Finally, before you ship your embosser, insure the package. We are not responsible for shipping damage, and the carrier is not responsible if the package is not properly packaged and insured. You could be charged for shipping damage if the embosser was not properly packed.

FREQUENTLY ASKED QUESTIONS

We get some of the same questions repeatedly, so we've included them below. If you have a problem not covered here, call our Customer Support phone number at 1 (800) 777 3687 or 1 (772) 225 3687. You may also contact Customer Support by e-mail at Support@brailler.com. We will be equally pleased to help you OR to learn from your experience.

Q. I'm having trouble entering menu commands. You refer to the letter "N" when you talk about some of the key sequences, but there is no N key on my keypad.

A. "N" is a general term that represents a user-supplied number in a key sequence. Whenever you see N listed as part of a key sequence--for example, 14.NNE--replace the N(s) with actual numbers (e.g., 14.32E).

For a complete list of menu parameters and their available options, please see the Quick Reference Guide in this manual.

Q. My embosser's margins won't stay set and/or change sporadically. What could be the problem?

A. Some translators, such as the Duxbury Braille Translator, control your embosser's margins remotely by sending out special escape codes each time you emboss a document. If your translator controls your embosser's margins remotely, use your Global and/or Document Embosser Setup to set your characters per line, lines per page, and so on, rather than setting your embosser's margins through the keypad.

Q. Where's my last page? It's missing!

A. This problem occurs when the translator or Notetaker doesn't send out a form-feed at the end of the page. Free your last page by pressing the OL key followed by the FF key.

Q. How do I switch from wide to narrow paper, and vice versa?

A. Leave the left tractor in its current position and move the right tractor to fit the width of your paper. Set the desired line length in your Braille translator. If your Braille translator does not control your embosser's margins, you will need to set your right margin to the appropriate line length. For more information, consult your Braille translator's documentation and see "Changing (and Restoring) Menu Settings" earlier in this manual.

Q. Could I have a bad USB cable? The embosser makes the right tones, the computer sends data--but nothing happens!

A. USB cables don't fail often. If nothing happens when you try to emboss, make sure your translator is set to send your translated documents through the ET Emboss printer driver. Also, make sure that your embosser is on-line and that the ET Emboss printer driver status shows "Ready". If the ET Emboss driver status shows "Offline", right-click on the ET Emboss printer driver and select "Use Printer Online".

Q. When I try to emboss a document, I receive one of these error messages, "Error -1" or "Embossing failed due to an error at line XXXX of the file dxemb_job.c: The system cannot find the file specified."

A. This is a communications error that is specific to the Duxbury Braille Translator. It usually occurs when DBT is not configured to emboss through the correct port. To resolve the problem, check the Global Embosser Setup to be sure that the correct port is selected. For parallel ports, this is usually LPT1; for serial ports, this is usually Com1. For USB connections, you must install and configure the ET Emboss driver according to the separate instruction file included on the CD-ROM that shipped with your embosser. Then, select the Windows Device or Send to Printer option in DBT's Global Embosser Setup and select ET Emboss from the list of available printers.

Q. Could it be that this Braille embosser doesn't understand contracted Braille? The words have no contractions, and the punctuation doesn't look right.

A. The embosser prints exactly what the computer sends. Most Braille translators have both a Print and an Emboss command. Be sure that your file is translated into Braille, and that you are using the translator's Emboss command.

Q. How do I cancel an emboss job?

A. You can abort the print job by taking the embosser off-line. When embossing stops, simply turn off the embosser. Then, check any Windows printer drivers, including ET Emboss, that are mapped to the port to which your embosser is connected. If any jobs are in the print queue, clear these before turning your embosser back on.

Q. What causes the embosser to skip a blank page after each full page?

A. This problem may occur if your Braille translator is set to interpoint mode. Romeo embossers are single-sided embossers, so make sure your translator is set for single-sided mode.

Also, this problem may result if the number of lines per page in your translator's embosser setup is equal to or exceeds the number of lines per page set on your embosser. Leave your embosser set to the default number

of lines per page for your selected page size, and set your translator for the actual number of lines you want to produce on each page.

Q. The Braille starts too high on the page. How can I move it down?

A. For instructions on adjusting the top margin, which we call the top-of-form offset, please see the section titled "Setting Top-of-form" earlier in this manual.

Q. My embosser won't find top-of-form. What could be the problem?

A. In order for your embosser to find top-of-form, the top-of-form sensor must detect the paper. Make sure that your embosser's left tractor is all the way to the left, and the right tractor is properly adjusted for your paper size. (The paper should lie flat--with no bowing--between the two tractors.) Also, before issuing the top-of-form command, make sure that no more than a page is sticking out the back of the embosser.

If all these check out and you are still having problems, please contact our Customer Support Group for assistance.

Q. My embosser stops embossing after half a page and makes a high/low beeping sound. What's happening, and how can I get it to stop?

A. Your embosser has stopped embossing because it is having trouble detecting your paper. If the embosser were to continue to emboss without paper installed, damage to the embosser could occur. If the embosser is having trouble detecting the paper, there may be some reason why the paper sensor is being uncovered during embossing. Check your paper path. The stack of paper should be taken out of the box and stacked on the floor below the embosser. Your embosser's left tractor should be all the way to the left, and the right tractor should be adjusted for the proper paper width, so that the paper lies flat between the two tractors. If your embosser is equipped with a paper holder, make sure the paper is underneath this metal bracket, which is located on the left side of the embosser. Finally, the paper should flow smoothly into and out of the embosser; it should not bunch up.

If all these check out and you are still having problems, please contact our Customer Support Group for assistance.