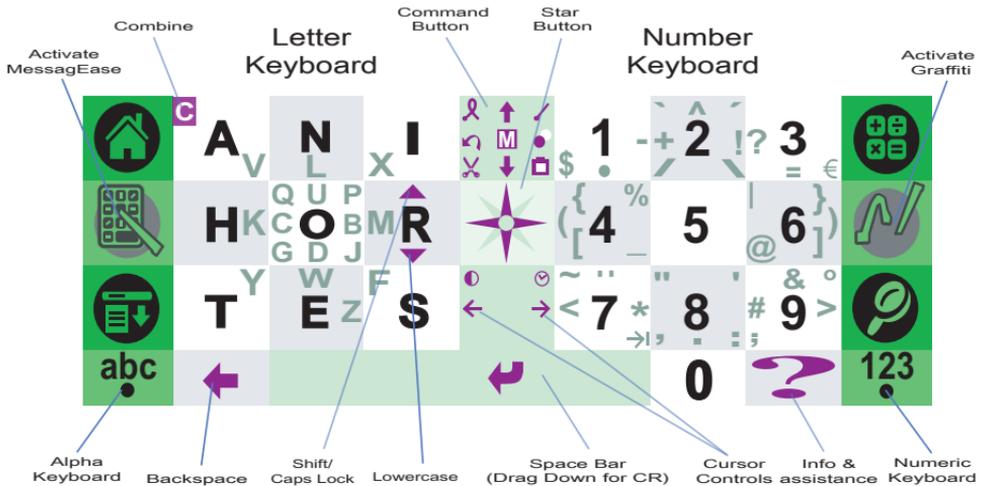


In a Nutshell!

What is MessageEaseST?

MessageEaseST (stamp) runs on any Palm OS PDA. It transform your PDA's Graffiti area into a powerful keyboard, allowing you to enter letters, numbers, characters, common editing functions, and even editing scripts of your own design.



How do I install it?

You install the program and the keyboard. For PDAs with virtual Graffiti MessageEaseST provides a virtual, on-screen keyboard. For other PDAs, MessageEaseST supports a thin overlay (stamp) placed over the Graffiti area. You can either print your own stamp (we provide the graphics) or purchase ours; they are professionally printed, laminated, and have removable adhesive.

How do I enter text?

You either tap or drag (slide) to enter text or commands.

Why does it work?

MessageEaseST is based on the innovative MessageEase technology, making text entry on small electronic devices faster and more intuitive. Combining taps and drags and our optimal letter assignment reduce the number of keys required for a FULL keyboard; larger keys and smaller distances make MessageEase faster.

Can I still use Graffiti?

Yes! A simple tap switches your keyboard to Graffiti, and another tap switches you back.

Can I try it first?

Yes! You can freely try MessageEaseST for a month. If you wish, you can download and use MessageEase (application) and MessageEaseKB. They provide on screen keyboards and are free! Both based on the same MessageEase keyboard technology.

MessageEaseST

User's Manual

Version 1.3.a

For
MessageEaseST Version 1.3.0
and higher
(Includes Palm OS 5.0 Support)

February 21, 2003

EXideas, Inc.

<http://www.exideas.com>

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This manual is provided as a support material and documentation for MessagEaseST. Its content is subject to change without notice. The information contained herein does not represent a commitment on the part of EXideas, nor does it constitute an obligation. The MessagEaseST software described in this manual is provided to you under the license agreement detailed in this document. You may use and copy MessagEaseST only in accordance with the terms of the license agreement.

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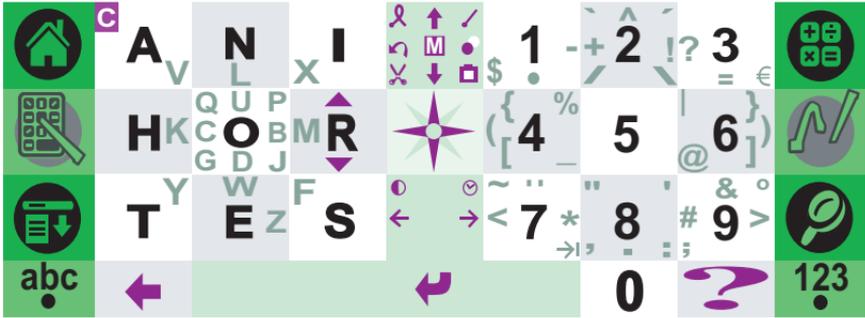
with assistance from:

Cooperative Computing

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Welcome!

Thank you for registering MessagEaseST! Built upon EXideas' MessagEase's innovative technology, MessagEaseST provides you with a fast, easy, and accurate text entry system for your Palm OS device.



Quick Start

If you have your stamp and are just looking for quick steps to start using it, here they are:

Quick Start Steps

1. Stick the stamp on your PDA's Graffiti area*.
2. Install MessagEaseST.prc and X-Master.
3. Run X-Master and check MessagEaseST.
5. Tap on "Configure" (or on .
6. Calibrate your stamp as directed*.
7. You are done! Run any application and enjoy using MessagEaseST to enter text!

* You may skip these steps if your PDA has a virtual Graffiti area where the stamp can be displayed right on the screen.

1. First Things First

To make MessagEaseST work on your PDA, you need to install the program. You also need to install the physical label (stamp) on your PDA's Graffiti area, unless you have a device capable of displaying a high resolution virtual keyboard on its Graffiti area.

Step-by-Step Installation Guide

Installing the Stamp Software:

You can download MessagEaseST from www.exideas.com/ME/downloads/MessagEaseST.zip. You can also download it from many Internet sites. Just make sure you have the latest version. Once you download the zip files, you need to unzip them and save the files to a directory of your choice. Then if you double-click on the MessagEaseST.prc file, it will be lined up for installation on your PDA next time you HotSync.

Activating MessagEaseST

For PDAs with Palm OS earlier than OS 5.0 to activate MessagEaseST you need an extension manager. Install X-master (included in MessagEaseST files) if you are not sure, or if you know you have none installed. After installing both MessagEaseST.prc and X-Master, tap on the extension manager's icon to see MessagEaseST listed. Activate MessagEaseST by checking the box next to it. For Palm OS 5.0, simply install MEST5-1.x.x, tap on its icon to activate and configure MessagEaseST



Installing the stamp

If your PDA cannot show the image of MessagEaseST right on your Graffiti area, you need to install MessagEase Stamp's physical overlay. You can either print this stamp yourself, using the graphics and guidelines provided to you at www.exideas.com, or purchase our professionally printed stamps. Either way, follow one of the following methods to affix your stamp. No matter which method you choose, the goal is to install the stamp so that the top of your stamp covers the five pixels between the bottom of your screen and the top of the Graffiti area.

Method 1: Using a Piece of Tape

1. Place your stamp on a flat surface.
2. Align the stamp with a piece of tape 2-3 times its length.
3. Bring them into contact with the top edge of the tape and the top edge of the stamp aligned.
4. Lift the tape with the stamp stuck to it and remove the stamp's backing.
5. Holding the tape's ends, align the top of stamp with the Graffiti area of your PDA.
6. Bring the stamp into contact with your PDA, placing it just below the screen, a few pixels above the top of the Graffiti area. Gently peel and remove the tape, pressing the stamp down.

Method 2: Peeling Half of the Backing

1. Peel off the top half of the backing from the stamp.
2. Hold the stamp by the edges of its lower half, aligning its top edge with the top of the Graffiti area.
3. Place the top of the stamp just below the screen and slightly above the top of your Graffiti area. It is best if the top of your stamp covers the five pixels between the bottom of your screen and the top of the Graffiti area.
4. Gently press the stamp down, making sure that it is aligned horizontally and the sides are placed symmetrically.
5. If it is not aligned or centered, remove it gently and re-apply.
6. Once positioned properly, gently rub your finger over the stamp to ensure cohesion and to remove any trapped air pockets.

You only need to calibrate if you are using a physical stamp. If your PDA can show the stamp image on its Graffiti area, you don't need to calibrate!

Configuring and Calibrating Your Stamp

Before you use your stamp, you need to configure and calibrate your software. The calibration process corrects and compensates for any misalignment or mis-positioning of your stamp.

Using Your Stamp for the First Time

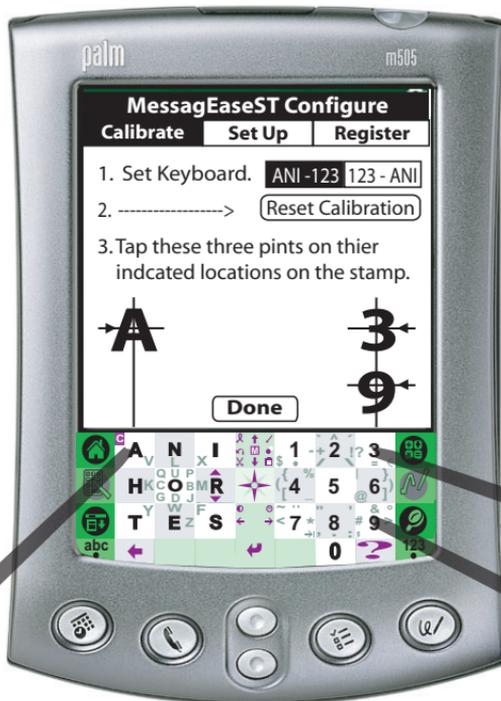
After you install and activate the software, attach the physical stamp, and calibrate it, you are ready to use your stamp. You can use your stamp with any Palm OS application that needs text input. As an example, press on the memo pad to start Palm's Memo Pad program. Then tap a few taps on the letter keyboard of your stamp. You should see corresponding letters appear on the screen. Tap a few taps on the number side and you'll see numbers appear on screen. (Please see the troubleshooting section if you see numbers appear instead of letters, or vice versa).

Calibration Steps

1. Calibrate your palm using Palm's welcome program.
2. Run your extension manager application, e.g., X-Master.
3. Activate MessageEaseST by checking the box next to it.
4. Tap on "Configure" (or on ) then select "Calibrate".
5. Tap on ANI-123 or 123-ANI, whichever matches your stamp orientation.
6. Tap on "Reset Calibration".
7. Tap on the stamp in the center of the three indicated buttons.

Switching Between MessagEaseST and Graffiti

MessagEaseST is designed to replace your Graffiti. But even with your stamp on and your MessagEaseST software enabled, you can easily switch back and forth between the two. Simply tap on the Graffiti button (👉 located on the stamp, between the calculator and the find buttons) and Graffiti will become active. A tap on the MessagEase button (👉 located between the home and menu soft buttons) will make it active again. When Graffiti is active, the right side of the green middle buttons works as the line dividing the Graffiti's letter and the number areas. In this case, since Palm's actual soft buttons (home, menu, etc.) are somewhat bigger than those on the stamp, remember to keep your Graffiti strokes closer to the middle, and away from the edges.



To completely deactivate MessagEaseST, you need to run your extension manager and un-check the box next to it. Should you ever wish to delete it, you must first deactivate it, and then delete it. (Be warned that some Palm OS PDAs require you to perform a soft reset before you can delete an extension.)

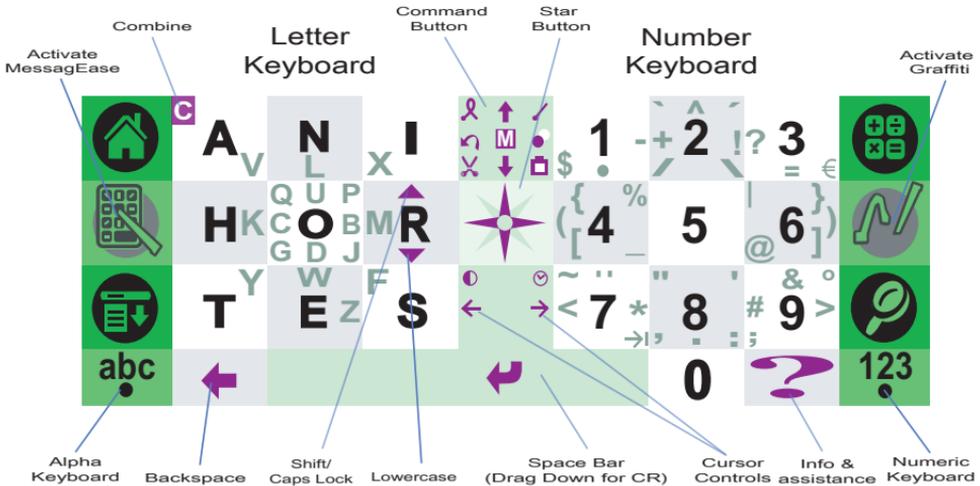
2. The Essential MessagEase

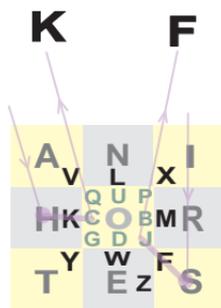
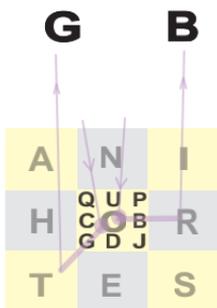
MessagEase is built on several years of research on user interface technology. This revolutionary idea was designed and optimized using exhaustive simulation of the letter combinations subject to Fitts' law of user interface. The result is a remarkably fast and intuitive text entry system applicable to many small devices. Given even a very small area, MessagEase provides full text entry, using the smallest number of soft or hard buttons.

This implementation of MessagEase for Palm OS PDAs takes advantage of the touch-sensitive area originally designed for Graffiti input. MessagEaseST transforms the Graffiti area into a very efficient keyboard, allowing you not only to enter text, but perform many text-related tasks quickly and efficiently.

The Anatomy of MessagEase Stamp

In its most basic form MessagEase's keyboard has only nine keys. You can enter text and punctuation by tapping or dragging on these keys. A tap is used to enter one of nine most frequent letters and a drag enters all other letters and punctuation marks. (See page 26, to configure MessagEaseST for entering numbers on the same nine keys.) The source of MessagEase's power and speed is a combination of a small number of keys and entering the most frequent letters with fast taps. Given the very small area these nine keys need, the ability to enter all letters, numbers, and special characters is a remarkable feat!





Entering Letters

Entering the Nine Most Frequent Letters

The most frequent letters (ANIHORTES) are given their own special place. Each is placed at the center of each of the nine buttons. To enter any of these letters, just tap anywhere on its button. Tap on these buttons a few times and see how the corresponding letters show up. These simple taps are a first method of harnessing the power of MessagEase.

Entering Less Frequent Letters: QUPCBGDJ

A group of eight less frequent letters are placed around the center button "O". To enter any of these letters, just bring your stylus down anywhere on the "O" button, and drag your stylus in the direction defined by that letter. For example, to enter "B" drag the stylus to the right, as shown in the diagram. Or to enter "G" drag your stylus down-left. These simple drags are a second method of harnessing the power of MessagEase.

Entering Less Frequent Letters: VLXKMYWF and Z

Another group of eight less frequent letters are placed upon the eight buttons that surround the center "O". To enter any of these, bring your stylus down anywhere on the relevant button and drag it toward "O" and in the direction indicated by that letter. For example, to enter "K", bring your stylus down on "H" and drag-right. The last letter of the alphabet "Z", is located to the right of "E". To enter "Z" you therefore need to drag-right on that button.

To drag for a letter you must start from somewhere on the button where the letter is marked. You do not have to start on that letter itself. For example, to drag for a "B", you can start anywhere on the "O" button, as long as the drag is to the right.

You can repeatedly enter a character by holding the stylus down at the end of a stroke, a tap, drag, etc. Use this feature to enter a stream of spaces, dashes, stars, or periods. You can also backspace over a portion of your text; move the cursor forward or backward; or repeatedly recall a memory. See the “Configuration/Set Up” page to either adjust the repeat speed or turn it off.

Space, Linefeed, Backspace, Delete

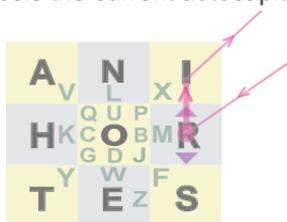
The spacebar is the enlarged horizontal button located on the lower edge of the keyboard marked with (↵). Tap anywhere on the spacebar to enter a space. Drag downward anywhere on the spacebar (⇩) to enter a linefeed. To enter a backspace either tap on the backspace button (←) or drag-left on the space bar. To delete the character to the right of the cursor, drag right on the backspace button (⇨).

Entering Uppercase Letters

By default MessageEaseST will automatically capitalize your input by following the Palm OS capitalization convention. According to this convention the first letter after a period (.), a question mark (?), or an exclamation mark (!) when followed by a space will be capitalized. Also the first letter of a text field will be entered in uppercase. You may choose to turn off this automatic capitalization by unchecking the “Auto Cap” box in “Set Up”. (See Chapter 6 Registration and Set Up.)

1. Changing the Case Mode

Drag up on “R̂” for “Shift” mode (⇧). In this mode, your very next letter will be entered in uppercase. Drag up on “R̂” twice for “Caps Lock” mode (⇨). In this mode all your letters will be entered in uppercase. At any time, drag down on button R̂, or enter a backspace, to change the mode to lowercase. A backspace also cancels the current autocapitalized arrow.



Shift, Caps Lock



On-Spot Capitalization

A “circle” or “drag-and-return” stroke must start on the button where the letter is indicated. Once it starts, it can cross button boundaries and even end on a different button, as long as it more or less traces a circle or returns to the proximity of its starting point.

2. Using On-Spot Capitalization:

You can also at any time enter an uppercase letter by dragging a circle for the nine most frequent letters or by doing a drag-and-return for less frequent ones. For example to enter an uppercase “A” bring your stylus down anywhere on the button A, trace a circle, and bring the stylus back relatively close to where you started. To enter an uppercase “Z”, bring the stylus down anywhere on button E, drag right, and then drag back again without lifting your stylus to about where you started. On spot capitalization is a very useful facility for entering isolated uppercase letters. These circles and drag-and-returns are also the third and fourth methods of harnessing the power of MessageEase.

Numbers and Special Characters

You can enter numbers and all the special characters found on a full computer keyboard by just a tap or a drag. Tap on a number button to enter that number. For special characters, drag on the relevant number button in the direction indicated. For example, to enter “(”, drag-left on button number 4.

You can enter all special characters using the letter keyboard as well. In fact if you drag in equivalent positions on either the letter or the number keyboards you will enter the same letter or character. For example, if you drag left on “H”, you will enter “(”, and if you drag right on “4” you will enter “K”. The only difference between the letter and the number keyboards rests in their taps and circles. Drags and drag-and-returns in equivalent positions on either keyboard produce the same results. Therefore all special characters are equally accessible from either keyboard. The two keyboards are provided simply for clarity and convenience. Please see Page 26, “Set Up and Registration” for further details.

By default, a clockwise or a counter clockwise circle on main letters (A, N, I, H, O, R, T, E, S) will enter that letter in uppercase. However on “Set Up” page (drag up on the ? button to go to it) you can distinguish between the two circles and define either of the directions to enter the corresponding digit (1-9).

Additional Characters: © ™ Â å ® ñ ø † é ç

MessageEase enables you to easily enter even those characters not normally found on a regular computer keyboard, making all 220 printable ASCII characters available. While 137 of these are directly accessible with a drag, a drag-and-return, or a circle, you can produce all of them and make those you use more frequently easily available on MessageEase keyboard. There are four ways to produce the additional symbols or characters you need.

1. Using Drag-and-Return on Character Locations

A drag-and-return on any special character's location enters an alternate and often related character. For example, drag-and-return on the position for "?" enters "¿". Although MessageEaseST comes pre-loaded with a pair of related characters in each location, you can program your own if you wish (See Chapter 5: Reprogramming Chapter Locations).

2. Combining Two Characters (⌘)

You can combine two characters to create a third. For example, you can combine "c" and "o" to create ©, the copyright character. Or you can combine "e" and "A" to create "ë". Simply enter the two characters, then drag on the combine location (⌘, up-left from A). The two characters will be replaced by their combined version. While most of the pair combinations are intuitive, you can refer to Appendix A for a complete list of combined letter pairs.

3. Combining One Character

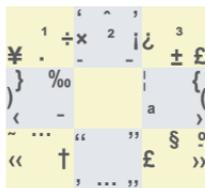
If you enter a single character and then drag on ⌘, MessageEaseST will replace that character with one of its combined or accented forms. For example, if you enter "E" and then drag on ⌘, it will change to "É". Drag once again and you will get "È". Repeated drags on ⌘ will cycle that character through "É", "È", "Ê", and back to E.

4. Reprogramming Your Character Locations

You can reprogram all your special character locations, personalizing your keyboard and putting all your frequently used characters at your fingertips. Please see Chapter 5: Reprogramming Character Locations for more information on this feature.



Drag Characters



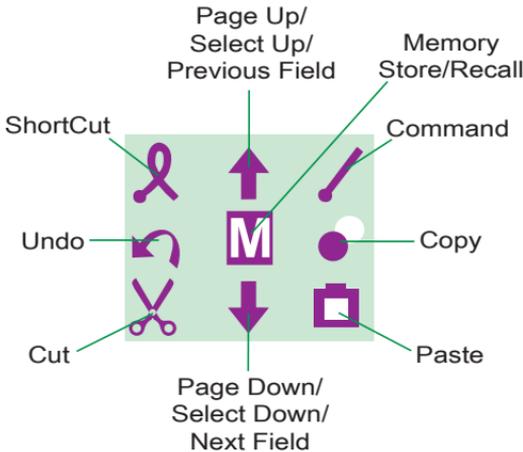
Drag-and-Return Characters

3. The Command Button

MsgEaseST's Command button is located in between the number and alphabet keyboards. It makes entering frequently used Palm OS commands easy. These include editing and text processing commands as well commands meant for the Palm OS, or for MsgEaseST. The Command button also facilitates the entry of the special Palm OS prefixes (✓ and ⓧ) that issue commands (such as "Beam" or "Phone Lookup") or to fetch useful information (such as date or time) from the system, thus enabling MsgEaseST to act as a true controller for the handheld.

You can use the Command button for issuing frequently used text-editing commands such as Copy (●), Cut (✂), Paste (□), Select All, or Undo (↶). You simply drag your stylus in the direction of the required icon. You can Select All by doing a circle on the Command button. Although these commands are often accessible in an application's menu, they require you to first tap on the Menu button, then tap on the Edit Menu, and then tap on the desired command. By contrast, a simple drag on the Command buttons avoids these three taps. For example, a circle, drag-right, then drag-down-right on the Command button will instantly Select All text, Copy it, and then Paste it to the desired location.

The up/down arrows (↑/↓) on the command button provide you with additional commands. Drag up/down on them to issue a Page Up/Down command. You can also configure them as Previous/Next Field, or Select-to-Start/End commands. See Chapter 6: Setting Up your MsgEaseST for details.



As mentioned earlier, you can also use the Command button to enter Palm OS's Shortcut (⌘) or Command (⌘) prefixes. The shortcut prefix is entered by a drag-up-left on the command button, while the command prefix is entered by a drag-up-right.

The Shortcut Prefix (⌘)

Shortcut is a powerful Palm OS utility that allows you to enter an entire word or phrase by entering a shortcut prefix (⌘) followed by its abbreviation. For example ⌘*me* can be expanded to "meeting". You can also use the shortcut prefix (⌘) to fetch the current date or time. For example ⌘*ds* will be expanded to the current date (e.g., 9/20/02), and ⌘*ts* will expand to the current time. You define the abbreviation and the full word or phrase using Palm OS's prefs program. Then you can use MessagEaseST to create these shortcut commands to enrich your compositions with ease.

The Command Prefix (⌘)

You can use the command prefix (⌘) for issuing commands to the Palm OS, your application, or MessagEaseST. For example, you can issue ⌘*L* (Phone Lookup), ⌘*B* (Beam), or ⌘*N* (New Record), using MessagEase's keyboard. To do so, drag-up-right to enter the command prefix, and then enter the letter associated with the command. Check an application's menu for the commands it accepts. Then, instead of using the menu, you can simply issue commands by entering a command prefix and a single letter.

If you use a menu command frequently, instead of issuing that command directly you can store it in a memory location. Then you'll be able to issue that command by recalling it from memory. See the next chapter, and the box on page 20, for how to store commands in memory locations.

You can even move the location for the command prefix (⌘) or shortcut prefix (⌘) by storing these characters in memory locations of your choice.

4. Memory Store/Recall

MessageEaseST enables you to store and recall frequently used text quickly and effortlessly. You can store your letter greetings, your email signature, bits of programming code, or even the whole chapter of a book in any one of MessageEase's 180 memory locations, and then recall that memory, no matter how long or complex, with one or two simple drags or taps.

Storing Text in Memory

1. Enter "As soon as possible" in your PDA's Memo Pad.
2. Highlight all of that text.
3. Tap on the Command button (M). "Recall from..." will be displayed.
4. Tap on the Command button (M) a second time. "Store at ..." will be displayed. (If your audio is enabled, you will also hear two rapid alarm sounds.)
5. Tap on "A", for example, to store your highlighted text at that location. "Stored" will be displayed.

Now "As soon as possible" is stored in memory location "A".

Recalling Text from Memory

1. Place your cursor at the location where you would like your memorized text to be recalled.
2. Tap on the Command button (M). "Recall from..." will be displayed.
3. Tap on A. Your stored text, "As soon as possible" appears.

You can store any text at almost any tap or drag location. For example, you can store text at A, at N, or at "+" (left-drag on N). You can also store text at any of the circle or drag-and-return locations recognized by MessageEase. It is like having many clipboards at your disposal. You can store and recall text to and from all of these locations independently.

Besides storing text, you can also store single characters at many keyboard locations thereby customizing your keyboard. This topic is covered in Chapter 5.

Dynamic memory

Memory That Changes When You Recall It

MessageEaseST allows you to embed special instructions within your basic text strings. When such text strings are recalled, these instructions will be communicated to the Palm OS, to other applications, or to MessageEaseST.

In general, there are three different uses for this facility. First, you can include command or shortcut sequences within your basic text strings (see Chapter 3: The Command Button). Upon recall, the commands or shortcut sequences will be received by the Palm OS (or other applications) and acted upon. Consult Palm's manual or application menus for the command sequences they accept.

Storing a Shortcut or Command Sequences

Use drag-and-return for entering λ and \swarrow ; enter and store the following at any memory location:

```
Today's date is  $\lambda$ ds; the time now is  $\lambda$ ts
```

When you recall this text, it will be expanded to:

```
Today's date is 9/20/02; the time now is 10:26 PM
```

Store the following at any memory location:

```
 $\swarrow$ LSmith
```

When recalled in an application accepting phone book look up (e.g., Memo Pad) your Palm will look up "Smith" in your phone book.

You can also embed specific instructions for other applications. Place such instructions between "<*" and "*>" to ensure that they are communicated to those other applications. For example, you could embed the command sequence `<*/UEvery good boy/U*>` within a stored text. Then if you recall this text inside a word-processing program that recognizes `/U` as a command to

A drag-and-return on any of the eight directions of the Command button enters its corresponding command but prevents the OS from evaluating it. This is necessary when creating commands to be stored. For example, drag-and-return on λ will only enter λ but will not activate the shortcut facility. In fact you can produce the command sequence for any command by a drag-and-return on its location. For example drag-and-return on cursor left location enters its storable command sequence `\swarrow 028`. If you wish however, you can enter these commands directly. See Appendices A & B for the list of all such command sequences.

switch the underline mode on and off, the words `Every good boy` will be underlined.

In addition to Palm OS and application commands, you can include many command sequences specific to `MessageEaseST` that allow you to produce richer and more powerful stored memories.

Command Sequences

System or application commands: (See program menus for detail.)

/C	Copy	Drag-&-return on Copy 
/V	Paste	Drag-&-return on Paste 
/U	Undo	Drag-&-return on Undo 
/X	Cut	Drag-&-return on Cut 
/S	Select All	Drag-&-return on / then tap S
/L	Look up Phone	Drag-&-return on / then tap L
/B	Beam record	Drag-&-return on / then tap B
/N	New Record	Drag-&-return on / then tap N
/D	Delete Record	Drag-&-return on / then tap D

MessageEaseST commands: (See appendices A & B for a complete list.)

/008	backspace	Drag-&-return on Backspace 
/010	Line Feed	Down-drag-&-return on space bar 
/011	Page Up	Drag-&-return on Page Up arrow 
/012	Page Down	Drag-&-return on Page Down arrow 
/028	Move Cursor Left	Drag-&-return on Cursor Left 
/029	Move Cursor Right	Drag-&-return on Cursor Right 
/268	Prev. Field	Drag-&-return on Prev Field arrow 
/259	Next Field	Drag-&-return on Next Field arrow 
/903	Select to Start	Drag-&-return on Sel. to Start arrow 
/904	Select to End	Drag-&-return on Sel. to End arrow 
/901	Shift down	Drag-&-return on Shift Down ()
/902	Shift Up	Drag-&-return on Shift Up ()
/907	Keyboard Click Off	Drag-&-return on / then tap D
/909	Delete Right	Right-drag-&-return on backspace 
/916	Sentence Case	Drag-&-return on / then tap 916

Besides the three uses described above, you can include any ASCII character inside a stored memory by entering a / followed by that character's three-digit decimal ASCII code. For example, you can incorporate a "†" in your intended text string by storing /134; or you can perform a <backspace> by storing /008. (See Appendices A and B for a complete list of character codes you can incorporate in your memory locations.)

Instant Memory Recall: the Star

To recall a stored memory it is usually necessary to first tap on the command button (**M**). But for your convenience MessageEaseST provides you with 19 additional memory locations from which you can instantly recall your text without tapping on the command button first. These locations are accessed through the star button located in the center, under the Command button.



Storing text in any of these instant memory locations is similar to storing text in any other memory location. After highlighting your text, you tap on the command button twice, then tap or drag on one of the memory locations on the star. See the box below for how to address these locations.

As with keyboard memory locations, you can include command (**/**), shortcut (**⌘**), or other special characters within your text stored at these instant memory locations.

Instant Memory Locations (Star)

- Location 1: Tap anywhere on the Star button.
- Location 2: Drag a clockwise circle on the Star button.
- Location 3: Drag a counter-clockwise circle on the Star button.
- Locations 4-11: Drag outward starting anywhere on the Command button, toward one of the eight main directions.
- Locations 12-19: Drag & return on the star button using any of the eight main directions.

How to Decipher Memory Listing.

Listing

Star-Memory List:

***Tap:**A Star is ...

***E:**just two

Memory List:

(11):**A:**content 11...

(56):**B°:**Beeee

What it means

Header for Instant memory (Star) List

Star tap location: the first ten characters are listed

Star East direction: completely listed (no ellipses)

Header for memory list

(location code):char addressed:content

(only the first 10 characters are listed)

(location code):char addressed:content

(° indicates a circle or drag-and-return)

The ? Button: The Versatile Information Provider

The ? button is design to provide easy access to MessagEaseST's configuration page, memory content, and command sequence information.



Accessing the Configuration Page

Drag up on the ? button to go to the configuration page.

Inspecting the Contents of Memory Locations

To inspect the text you have stored in any your memory locations tap on the ? and then drag, tap, circle, or drag-and return on any memory location. The text you have stored in that location will be displayed. drag-right on the ? button lists the first few characters of each Instant memory location. A drag-left on the ? button lists the first few characters of each memory location.

Getting Information About Commands

Use the ? button to learn more about MessagEaseST's commands and codes. To do so enter and highlight a MessagEaseST command, a word, or a phrase which you guess is part of the explanation of the command. Then tap on the ? button, repeatedly if necessary, to see information related to what you have highlighted.

For example if you enter and highlight `/909`, the command for "Delete Right", and then tap on the ? button, the phrase "Delete Right" will appear on the lower right side of the screen. If you highlight "Delete Right", and then tap on the ? button, `/909` will show up. Even if you only highlight the word "Right" and then tap on the ? button, first `Cursor Right:/029` will appear. With another tap on the ? button `Delete Right:/909` will show.

You can also use the ? button to learn more about the characters and their ASCII code values. If you highlight a single character and tap on the ? button, then the command character (`/`) followed by the ASCII code of that character will show on the screen. For example if you highlight `@` and then tap on the ? button `/064` will appear. This is the sequence you would store to reproduce any character if you did not have direct access to it. Conversely if you enter and highlight `/064` and then tap on the ? button, its ASCII character equivalent `@` will appear on the screen.

5. Reprogramming Character Locations

All but the main characters of the MessagEaseST keyboard can be reprogrammed so that a single movement can enter any character specified. This powerful feature allows the MessagEaseST to be personalized for your particular use.

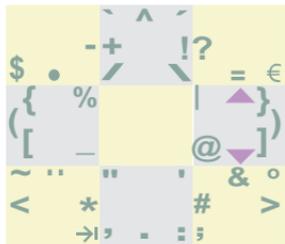
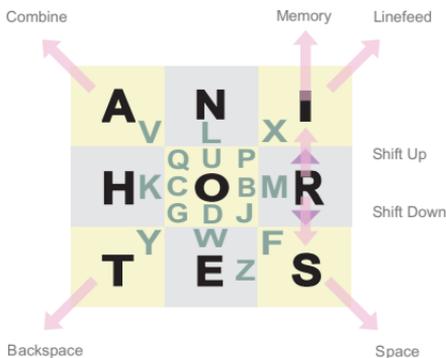
This ability to reprogram the keyboard can be very useful to you if you frequently use accented characters, for example, or if you need symbols or characters not found on a regular computer keyboard; or if you want to redefine special characters to better fit your personal preferences.

You will usually use MessagEaseST's default character set. This default character set does still enable you to produce all possible ASCII characters. But if there are some that you use frequently, you can reprogram your keyboard and make such characters directly accessible instead of having to use either the combine feature or a special ASCII code.

To reprogram your keyboard you need to set your "Special Char" setting on the MessagEaseST "Set Up" page (drag up on the ? button to go to it) to "You Define" and then also select "Storable". (See Chapter 6: Set Up and Registration for further details). Any single character you store in a programmable memory location will then become a part of your own special keyboard.

Programming Your Own Character Set

1. In "Set Up", make sure that your "Special Chars" setting is set to "You Define" and that the "Storable" button under it is selected.
2. Enter the special character you want to store and highlight it.
You can enter this character directly, use combine, copy it from another application, or specify it using its ASCII code. For example, to produce and store ©, the copyright character, you can combine CO or you can store its command sequence: /169. See Appendix A for a full list of combine characters and their corresponding command sequences.
3. Tap twice on the Command Button (M).
4. Drag on the location where you want the character to be stored.
If that location is available for reprogramming and your settings are correct, "Stored Single Char" will flash on the lower-right part of the screen. (If "Stored" flashes instead, then the character you highlighted is being stored in a memory location and not as part of the reprogrammed keyboard.)
5. Test your entry by dragging on the location you just programmed.



Once you have programmed your own set of characters, it is a good idea to “lock” your programmed set so that it cannot be accidentally changed.

Even after you reprogram the keyboard, you can at any time switch back to using MessageEaseST’s default character set, and your reprogrammed set will be preserved. You will in effect have two sets of special characters available—your own and the default set. You can also use the “Restore” button on the Set Up page to overwrite your own character set with the default set.

On-spot capitalization works for all stored letters. If you store a letter of the alphabet in any available location, then regardless of its case at the time of storage, dragging on that location will enter the lowercase form of that letter, and a drag-and-return on that location will enter its uppercase form. Therefore, a letter of the alphabet requires both the drag and the drag-and-return locations to be stored.

Programmable Character Locations

Out of the 180 possible character locations on the two main 9x9 keyboards, 101 are available for reprogramming.

Programmable:

1. All special characters and their drag-and-return locations. (96)
2. Circle on numbers. (9)

Not Programmable:

1. Letters either lowercase or uppercase. (52)
2. Digits 1-9. (9)
3. Nine special MessageEase locations and their drag-and-return locations—Combine, Memory, Linefeed, Shift Up/Down, Cursor Left/Right, and Backspace (18). See the diagram above.

6. Registration and Set Up

To register your copy of MessagEaseST go to the configuration screen. It is accessible from your extension manager (e.g. Hackmaster or X-Master), or for OS 5.0 run MEST5-1.x.x. You can also use this screen to personalize MessagEaseST's behavior.

Registering Your Software:

Unless you register, your copy of MessagEaseST will expire in about 60 days. To register, please visit our web site: www.exideas.com and tap on the MessagEaseST registration link. In addition to the registration fee, we will need your Palm OS's user name to email you your personalized registration code. Once you receive your code, you can enter it on this page in the space provided and so register your MessagEaseST.

Setting up Your MessagEaseST

Drag up on the ? button to go to the configuration page, and then tap on the "Set Up" tab. You will have the following choices.

Drag Size:

...
-----	-------	-------

You can change the minimum size of a drag. Specifying the drag length you prefer improves MessagEaseST's drag recognition. If your taps sometimes get interpreted as drags, perhaps because they slip, specify a longer minimum drag size. On the other hand, if your drags are very short and are sometimes taken for taps, specify a shorter drag size.

Circle ANI:

cw:#	ccw:#	:Cap
------	-------	------

By default, a circle starting on a main letter (ANIHORTES) produces the uppercase form of that letter (on-spot capitalization). You may, however, choose to have either a circle in the clockwise direction (cw:#) or a circle in the counter-clockwise direction (ccw:#) enter the corresponding number. For example setting this option to "cw:#" will let you enter the numeral "1" by drawing a clockwise circle on the "A" button. A counter-clockwise circle on that button will then produce an uppercase.

Drag on Arrows (↓):

Page	Select	Field
------	--------	-------

This option configures the Up/Down arrow on the Command button to perform one of three functions: 1) Page: If you select this option, then a drag on the Up/Down arrow enters a Page Up/Page Down command. 2) Select: This option will change a drag on the Up/Down arrow to the select-to-start/end functions. 3) Field:

The setting of the drag on Up/Down arrows also affects the code you produce by drag-and-return on them. For example, if you set this option to “Page” and then drag-and-return on the Down arrow, the code for page down (\swarrow_{012}) will be produced. If you change that option and set it to “Select”, then drag-and-return on the Down arrow, the code for select-to-end (\swarrow_{904}) will be produced.

If you select this option, a drag on the up/down arrow enters a previous/next field command.

Special Characters:

Default You Define

You can select MessageEaseST’s default character set (“Default”), or define and use your own (“You Define”). (See the chapter on Programming Character

Locked
Storable
Restore

Locations.) If you want to select your own character set, then you must select “Storable” so that you can program your own character set. Once done, it is prudent to lock your keyboard so that it is does not get accidentally overwritten. This can happen if, for example, you try to store a single character in a memory location while still in storable mode. At any time, you can tap on the Restore button. This will reset your character set to the default setting.

KB Low Edge:



Check this box if after careful calibration taps on the last two rows of your keyboard produce erroneous results.

Key Click:



You can uncheck this box to turn MessageEase’s keyboard click sound off. You can also use the command sequence provided in the Command and Control chapter to program one of your memories to turn your keyboard click on or off.

Auto Cap:



By default MessageEaseST capitalizes your input by following the Palm OS capitalization convention. Unchecking this box will turn off automatic capitalization (Please note: this disabling feature is currently not supported for Palm OS 5.0).

7. Looking Further

In addition to MessagEaseST, we have successfully incorporated MessagEase technology in three other products, two of them Palm OS applications. But the potentials of MessagEase far surpass the realm of PDAs. Although it requires a very small area or relatively few buttons, MessagEase provides full text entry capability for any small mobile device. Our technology is ideal for cell phones, tablet computers, TV remote controllers, wearable computers, or even smart credit cards.

Current Implementations

MessagEase Application

MessagEase application runs under Palm OS and demonstrates the fundamental capabilities of our technology. This application includes a learning game to help you learn the keyboard pattern. It also includes Japanese Katakana support to exhibit the language independence of MessagEase and the fact that this technology applies to any alphabet. Although it is a demonstration program, MessagEase is provided complete and unhindered. It includes a very large buffer, making it an ideal program for writing sizable notes. Like MessagEaseST, MessagEase application provides you with all ASCII characters and memory facility for saving and recalling your frequently used text..

MessagEaseKB, Replacing Palm's Keyboard

Our second MessagEase product, MessagEaseKB is a keyboard extension. It optionally replaces your Palm's QWERTY keyboard with enabling you to invoke a MessagEase keyboard from any application. After you complete entering text using this keyboard, the text you entered will appear on the buffer of the calling program.

Motorola Phone Demo

Currently available for Motorola cell phones, the hard-key version of MessagEase uses an ingenious two-key combination for entering every letter or special character. This strategy is provably faster than the current multi-tap in use in cell phones



today. Using this strategy renders one-handed text entry fast, intuitive and efficient, making it ideal for cell phone text messaging and instant messaging. The same easy-to-learn pattern of letters and characters used for Palm OS programs is used to implement the cell phone (hard-key) text entry. Therefore the skill developed for soft key PDAs is actually leveraged and reused for the hard-key version. Furthermore, this hard-key version is also adaptable to any language and alphabet. Although MessagEase does not itself require the use of predictive techniques, word-completion and other predictive technologies can be fused with MessagEase, to provide you with a powerful language-specific text entry system.

Future Directions

As smaller electronic devices become ubiquitous, the need for accurate text entry everywhere becomes more pressing and pervasive. MessagEase provides an optimized, resizable, and powerful text keyboard for any application in any environment, including those running on Pocket PC or Tablet PC. By optionally making MessagEase's virtual keyboard larger, you can enter text using your fingers. Or, you can shrink it to the size of a penny and still reliably use it with a stylus.

Although cell phones are in widespread use today, their potential for sending and receiving text messages has been stymied by their esoteric and archaic text entry system. MessagEase can transform a cell phone into a powerful text entry machine.

As the TV set becomes the information conduit of home, MessagEase can provide an adaptable text entry system, using the already existing numeric pad on the TV's remote control.

Finally, the emerging wearable computers will require an easy to use and scalable text entry system. Practical even on an area the size of a penny, MessagEase provides the solution for many applications requiring text entry on any small device.

Imagine typing a note or a text message on your credit card of the future!



Appendix A: Table of ASCII Codes and Combination of Special Characters

ASCII	Name	Comb.	/Seq	ASCII	Name	Comb.	/Seq
000	null		/000	064	@ at sign		/064
001	start of heading		/001	065	A upper case a		/065
002	start of text		/002	066	B upper case b		/066
003	end of text		/003	067	C upper case c		/067
004	end of xmit		/004	068	D upper case d		/068
005	enquiry		/005	069	E upper case e		/069
006	acknowledge		/006	070	F upper case f		/070
007	bell		/007	071	G upper case g		/071
008	backspace		/008	072	H upper case h		/072
009	horizontal tab		/009	073	I upper case i		/073
010	line feed		/010	074	J upper case j		/074
011	vertical tab		/011	075	K upper case k		/075
012	form feed		/012	076	L upper case l		/076
013	carriage return		/013	077	M upper case m		/077
014	shift out		/014	078	N upper case n		/078
015	shift in		/015	079	O upper case o		/079
016	data line escape		/016	080	P upper case p		/080
017	device control 1		/017	081	Q upper case q		/081
018	device control 2		/018	082	R upper case r		/082
019	device control 3		/019	083	S upper case s		/083
020	device control 4		/020	084	T upper case t		/084
021	neg acknowledge		/021	085	U upper case u		/085
022	∕ Palm OS's command char		/022	086	V upper case v		/086
023	⌘ Palm OS's shortcut char		/023	087	W upper case w		/087
024	cancel		/024	088	X upper case x		/088
025	end of medium		/025	089	Y upper case y		/089
026	substitute		/026	090	Z upper case z		/090
027	escape		/027	091	[left square bracket		/091
028	cursor left (file separator)		/028	092	\ backslash		/092
029	cursor right (group separator)		/029	093] right square bracket		/093
030	record separator		/030	094	^ hat, circumflex		/094
031	unit separator		/031	095	_ underscore		/095
032	space		/032	096	` grave		/096
033	! bang, exclamation		/033	097	a lower case a		/097
034	" quote		/034	098	b lower case b		/098
035	# sharp, number sign		/035	099	c lower case c		/099
036	\$ dollar sign		/036	100	d lower case d		/100
037	% percent		/037	101	e lower case e		/101
038	& ampersand		/038	102	f lower case f		/102
039	' apostrophe		/039	103	g lower case g		/103
040	(left parenthesis		/040	104	h lower case h		/104
041) right parenthesis		/041	105	i lower case i		/105
042	* star, asterisk		/042	106	j lower case j		/106
043	+ plus		/043	107	k lower case k		/107
044	, comma		/044	108	l lower case l		/108
045	- minus		/045	109	m lower case m		/109
046	. period		/046	110	n lower case n		/110
047	/ slash		/047	111	o lower case o		/111
048	0 digit 0		/048	112	p lower case p		/112
049	1 digit 1		/049	113	q lower case q		/113
050	2 digit 2		/050	114	r lower case r		/114
051	3 digit 3		/051	115	s lower case s		/115
052	4 digit 4		/052	116	t lower case t		/116
053	5 digit 5		/053	117	u lower case u		/117
054	6 digit 6		/054	118	v lower case v		/118
055	7 digit 7		/055	119	w lower case w		/119
056	8 digit 8		/056	120	x lower case x		/120
057	9 digit 9		/057	121	y lower case y		/121
058	: colon		/058	122	z lower case z		/122
059	; semicolon		/059	123	{ left curly brace		/123
060	< less than		/060	124	vertical bar		/124
061	= equals		/061	125	} right curly brace		/125
062	> greater than		/062	126	~ tilde		/126
063	? question mark		/063	127	del delete		/127

ASCII	Name	Comb.	/Seq	ASCII	Name	Comb.	/Seq
128	€ Euro		/128	192	À capital a, grave accent	A`	/192
129			/129	193	Á capital a, acute accent	A´	/193
130	, low snl comma quote		/130	194	Â capital a, circumflex	A^	/194
131	f script f	f/	/131	195	Ã capital a, tilde	A~	/195
132	" low dble comma quote	"	/132	196	Ä capital a, dieresis/umlaut	A¨	/196
133	... horizontal ellipsis	..	/133	197	Å capital a, ring	A°	/197
134	† dagger	+	/134	198	Æ capital ae diphthong	AE	/198
135	‡ double dagger	++	/135	199	Ç capital c, cedilla	CC	/199
136	ˆ circumflex		/136	200	É capital e, grave accent	E`	/200
137	‰ per mille	%	/137	201	Ê capital e, acute accent	E´	/201
138	Š upper s hacek	S^	/138	202	Ë capital e, circumflex	E^	/202
139	‹ left snl guillemet		/139	203	Ë capital e, dieresis/umlaut	E¨	/203
140	Œ uppercase oe	OE	/140	204	Ì capital i, grave accent	I`	/204
141			/141	205	Í capital i, acute accent	I´	/205
142			/142	206	Î capital i, circumflex	I^	/206
143			/143	207	Ï capital i, dieresis/umlaut	I¨	/207
144			/144	208	Ð capital eth, icelandic	D-	/208
145	‘ snl open comma quote	<‘	/145	209	Ñ capital n, tilde	N~	/209
146	’ snl close comma quote	>’	/146	210	Ò capital o, grave accent	O`	/210
147	“ dble open comma quote	“	/147	211	Ó capital o, acute accent	O´	/211
148	” close comma quote	”	/148	212	Ô capital o, circumflex	O^	/212
149	• bullet		/149	213	Õ capital o, tilde	O~	/213
150	– en dash	n-	/150	214	Ö capital o, dieresis/umlaut	O¨	/214
151	— em dash	m-	/151	215	× multiply sign	xx	/215
152	~ spacing tilde	~	/152	216	Ø capital o, slash	O/	/216
153	™ trademark	TM	/153	217	Ù capital u, grave accent	U`	/217
154	š lowercase s hacek	s^	/154	218	Ú capital u, acute accent	U´	/218
155	› right single guillemet		/155	219	Û capital u, circumflex	U^	/219
156	œ lowercase oe chr	oe	/156	220	Ü capital u, dieresis/umlaut	U¨	/220
157			/157	221	Ý capital y, acute accent	Y´	/221
158			/158	222	Þ capital thorn, icelandic	IP	/222
159	ÿ upydiaeresischr	Y~	/159	223	ß small sharp s, german sz	ss	/223
160	non-breaking space		/160	224	à small a, grave accent	a`	/224
161	¡ inverted exclamation	!/	/161	225	á small a, acute accent	a´	/225
162	¢ cent sign	c/	/162	226	â small a, circumflex	a^	/226
163	£ pound sterling	L-	/163	227	ã small a, tilde	a~	/227
164	¤ general currency sign	=	/164	228	ä small a, dieresis/umlaut	a¨	/228
165	¥ yen sign	Y=	/165	229	å small a, ring	a°	/229
166	‡ broken vertical bar	-	/166	230	æ small ae diphthong	ae	/230
167	§ section sign	S/	/167	231	ç small c, cedilla	cc	/231
168	¨ umlaut (dieresis)		/168	232	è small e, grave accent	e`	/232
169	© copyright	co	/169	233	é small e, acute accent	e´	/233
170	ª feminine ordinal		/170	234	ê small e, circumflex	e^	/234
171	« left angle quote	<<	/171	235	ë small e, dieresis/umlaut	e¨	/235
172	¬ not sign	-	/172	236	ì small i, grave accent	i`	/236
173	– soft hyphen	-	/173	237	í small i, acute accent	i´	/237
174	® registered trademark	ro	/174	238	î small i, circumflex accent	i^	/238
175	ˆ macron accent	-^	/175	239	ï small i, dieresis/umlaut	i¨	/239
176	˚ degree sign		/176	240	ð small eth, icelandic	d-	/240
177	± plus or minus	+-	/177	241	ñ small n, tilde	n~	/241
178	² superscript two	2^	/178	242	ò small o, grave accent	o`	/242
179	³ superscript three	3^	/179	243	ó small o, acute accent	o´	/243
180	ˆ acute accent	oo	/180	244	ô small o, circumflex accent	o^	/244
181	μ micro sign	mu	/181	245	õ small o, tilde	o~	/245
182	¶ paragraph sign	pp	/182	246	ö small o, dieresis/umlaut	o¨	/246
183	· middle dot		/183	247	+ division sign	-:	/247
184	¸ cedilla		/184	248	ø small o, slash	o/	/248
185	¹ superscript one	1^	/185	249	ú small u, grave accent	u`	/249
186	º masculine ordinal		/186	250	û small u, acute accent	u´	/250
187	» right angle quote	>>	/187	251	ü small u, circumflex accent	u^	/251
188	¼ fraction one-fourth	14	/188	252	ü small u, dieresis/umlaut	u¨	/252
189	½ fraction one-half	12	/189	253	ÿ small y, acute accent	y´	/253
190	¾ fraction three-fourths	34	/190	254	þ small thorn, icelandic	ip	/254
191	¿ inverted question mark	?/	/191	255	ÿ small y, dieresis/umlaut	y¨	/255

Appendix B: MessagEaseST's Command Sequences

Seq.	Description	How to create it
/259	Next Filed	Drag-&-return on Next Field ↓
/268	Previous Field	Drag-&-return on Previous Field ↑
/901	Shift down	Drag-&-return on Shift Down (R)
/902	Shift Up	Drag-&-return on Shift Up (R̂)
/903	Select to Start	Drag-&-return on Sel. to Start arrow ↑
/904	Select to End	Drag-&-return on Sel. to End arrow ↓
/909	Delete Right	Drag-right-&-return on backspace ←
/905	Keyboard Click Toggle	Drag-&-return on / then enter 905
/906	Keyboard ClickOn	Drag-&-return on / then enter 906
/907	Keyboard Click Off	Drag-&-return on / then enter 907
/909	Delete Right	Right-Drag-&-return on backspace ←
/910	Go To Beginning	Drag-&-return on / then enter 910
/911	Go To End	Drag-&-return on / then enter 911
/912	Calculator Num Keys	Drag-&-return on / then enter 912
/913	Cell Phone Num Keys	Drag-&-return on / then enter 913
/914	Toggle Num Key Style	Drag-&-return on / then enter 914
/915	Extend to Words	Drag-&-return on / then enter 915
/916	Sentence Case	Drag-&-return on / then enter 916
/917	Lowercase	Drag-&-return on / then enter 917
/918	Uppercase	Drag-&-return on / then enter 918
/919	Title Case	Drag-&-return on / then enter 919
/920	Toggle Case	Drag-&-return on / then enter 920
/921	Generic Cut	Drag-&-return on / then enter 921
/922	Generic Copy	Drag-&-return on / then enter 922
/923	Generic Paste	Drag-&-return on / then enter 923
/924	Generic Undo	Drag-&-return on / then enter 924
/925	Generic Select All	Drag-&-return on / then enter 925
/926	Next stroke 2 Graffiti	Drag-&-return on / then enter 926
/927	Cursor 2 Begin Line	Drag-&-return on / then enter 927
/928	Cursor 2 End Line	Drag-&-return on / then enter 928
/929	Select 2 Begin Line	Drag-&-return on / then enter 929
/930	Select 2 End Line	Drag-&-return on / then enter 930

To get information about these codes on your PDA, simply enter and highlight a phrase or a keyword related to them, then tap (repeatedly if needed) on the “?” button until the information about the phrase appears on the lower right hand side. For example, enter and highlight “Cursor” and then tap on “?” to see all cursor related codes and their explanations.

Appendix C: Printing and Preparing Your Own Stamp.

As an alternative to purchasing and using our stamp overlays, you can print and install your own, using the artwork we provide for your PDA. By doing this you can truly test drive the stamp.

Here's how:

1. Visit our web site and locate the folder for your PDA .
2. Double click on either the .jpg or .pdf file¹ to download it.
3. Use a color printer to print one of these images:
If you use the .jpg file print it at 25% or at 288 dpi;
If you use the .pdf file, use your printer's set up to print it at 25%;
4. If the image you printed does not fit your PDA's Graffiti area, double check your printer's setting.

(There are two images per file, each corresponding to the side of the keyboard you want your alphabets to be placed. You need to print only the one you'd like to use.)

We suggest printing the stamp image on a regular label with adhesive on its back Avery standard address label 5160 works fine; you may want to weaken its adhesive a bit by affixing it and removing it from a clean surface a few times prior to installation. Otherwise, you can print on regular paper and use double-stick tape. First roughly trim the image. Then stick it to one side of the tape. Trim the taped image to its borders and apply it.

For better stylus traction and protection, some users advocate putting wide transparent packaging tape on the stamp.

Once trimmed, apply it so that its top is aligned with the bottom of your screen, a few pixels above the top of your Graffiti area.

You are in business now. Load and calibrate MessagEaseST, Go to any application, and tap on the keys to enter your text.

¹The .pdf and .jpg files essentially contain the same images, and you can use either one to print your stamp: If you have access to a high quality printer (better than 300 DPI) then you may want to use the .pdf files. It's a vector-based, resolution-independent file, giving you the best quality. Otherwise you can use the .jpg file. It is necessary to **uncheck** the option to "Fit to page, which seems to be checked by default, to get a reliable 100% print out of Acrobat.

Appendix D: Installing on PDAs with Virtual Graffiti

PDAs with virtual Graffiti can display MessageEaseST Keyboard

I. Clie NR Series:

1. Download the file "MessageEaseSTFiles4ClieNR70.zip" from:
<http://www.exideas.com/ME/downloads/MessageEaseSTFiles4ClieNR70.zip>
2. Unzip and HotSync the following files:
MessageEaseST: This is the stamp program;
Skin Manger: This program helps you change your Graffiti's skins;
And one or all of these skin files:
 MessageEaseSkinANI002
 MessageEaseSkin002ANI
3. If you don't already have an extension manager, install X-Master.
4. Run SkinManager to install any one of the above skin files.
5. Run X-Master (or your extension manager) to activate MessageEaseST program. You do not need to calibrate.

Uninstalling or changing the Skin:

Run SkinManager to install a new skin or to revert to system's skin.

II. Clie NX/NZ Series (Palm OS 5.0)

1. Download the file "MessageEaseST4OS5.zip" from:
<http://www.exideas.com/ME/downloads/MessageEase4OS5.zip>
2. Unzip and HotSync the following files:
MEST5-1.x.x: This is the stamp program;
One or more of: MestSkin4Sony5ANI001, MestSkin4Sony5001ANI
3. Install one of the skins by tapping on the Graffiti exchange manager (on the bottom strip, between the battery and the Magnifier).
4. Tap and run MEST5-1.x.x to activate it.

III. Hnadera 330

1. Download the file "MessageEaseST4Handera330.zip" from:
<http://www.exideas.com/ME/downloads/MessageEaseST4Handera330.zip>
2. Unzip and HotSync the following files:
MessageEaseST: This is the stamp program;
MestSkin.prc, MestSkin1.prc, and MestSkin2.prc ;
3. If you don't already have an extension manager, install X-Master.
4. Run MestSkin to install the stamp picture.
5. Run X-Master (or your extension manager) to activate MessageEaseST program. You do not need to calibrate.

Appendix E: Troubleshooting and Calibration

Problem: Can't see MessagEaseST's icon on the screen .

You can't see an icon for For Palm OS before 5.0. You must install and use an extension manager, like X-Master, to activate it.

Problem: Tapping on the keyboard does not calibrate.

Make sure you activate MessagEaseST it in X-Master.

Problem: Can't find a good point for calibration.

Your stamp is probably placed too low. Install it higher and calibrate again.

Problem: Numbers appear when I tap on letters.

Select your keyboard orientation in Set Up.

Problem: Character positions are shifted; tapping on one enters the next one.

Soft Reset; calibrate your Palm using the Welcome program; then calibrate again.

Problem: Taps are interpreted as drags or drags are interpreted as taps.

Adjust the drag length in Set Up.

Problem: Can't store my characters:

Make sure that in Set Up you have selected "You Define" and "Storable" for Special Chars.

Problem: Can't enter any special character:

In Set Up, set Special Chars to Default, or tap on Restore.

Problem: Can't delete MessagEaseST.

Deactivate it in X-Master and soft reset.

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