

Writing in the palm of your hand

If you're on the road and need to get that important letter or memo written ASAP, consider one of many text-recognition solutions for Palm and Pocket PC devices.

John Luo, MD

Assistant clinical professor and director of psychiatric informatics Department of psychiatry University of California-Davis, Sacramento

[Editing on Pocket PC](#)

[Editing on Palm OS](#)

Numerous text-entry innovations in recent years have made it possible to use a handheld computer to write and edit documents. You no longer have to be in the office to write that urgent memo or letter.

Use of personal digital assistants (PDAs) for editing does have drawbacks. For one, the small screen size (2.5 inches by 3.5 inches at most) can make editing difficult. Although you can modify the display by zooming in and out, handhelds often shrink the text or display too little text at one time. Also, PDAs are not ideal for displaying tables, columns, and other specialized text options.

But a PDA's portability is also its strength. For example, using a handheld during a 1-hour flight prevents the passenger in front of you from crashing the back of his or her seat onto your computer screen. Also, a PDA takes only 2 seconds to boot, while a Macintosh or PC may take as much as 1 minute. Finally, most text-entry solutions for PDA are affordable, ranging in price between \$20 and \$100.

EDITING ON POCKET PC

Document editing on Pocket PC devices is relatively simple because Pocket Word is a standard feature of all Pocket PC handhelds.

To convert a document onto your handheld, simply place a copy of the file in the 'Pocket PC My Documents' folder on your desktop. On the next synchronization, that file will be in the handheld's 'My Document' folder for editing or viewing.

Two caveats to file conversion:

- Fancy formatting (eg, columns, embedded tables) does not translate well to the handheld version, so just edit text on the handheld and do specialized formatting on the desktop.
- Changes on the handheld will be uploaded back to the "Pocket PC My Documents" desktop file. Also, changes made separately to the handheld and desktop files will not be combined; the handheld file will override the desktop file.

Text on Pocket PC is entered either by tapping the on-screen keyboard, by using a block lettering program similar to Palm OS Graffiti, or by using handwriting recognition software.

Handwriting recognition programs included with Pocket PC devices are limited. [CalliGrapher](#) improves upon this by adding natural handwriting recognition capability with advanced fuzzy logic and neural net techniques. It interprets all handwriting styles and offers a comprehensive spell-checker for all applications. The new version also includes a PenCommander utility

that lets you create and execute command scripts by simply writing a word command and drawing a circle around it.

[Quikwriting](#) is a shorthand system that divides the writing area into eight zones around a central resting spot. To form a character, drag the stylus from the center to an outside zone, which contains three to five possible characters. Characters are formed by dragging the stylus from zone to zone. This method may be faster than handwriting recognition because the user never has to lift the stylus; however, learning how to use it takes 1 hour on average. [KeyStroke CE](#) is based on this method, but the layout is different.

On-screen keyboards are another option. The Fitaly on-screen keyboard is operated by finger or stylus tapping by placing keys based on frequency of use and letter-to-letter transitions. If typing on a full screen-sized keyboard using your thumbs appeals to you, consider [Spb](#), [Previsionary](#), and [Kilmist](#).

[WordLogic](#), which employs the familiar QWERTY keyboard layout, provides a list of possible words as you tap letters and attempts to predict the word and the next likely letter to speed up selection. Although the Pocket PC already includes a word completion feature, it only suggests one word.

Hardware keyboards. Attaching a hardware keyboard to the handheld can speed up text entry. Because each handheld model has a different serial port, it must connect with a keyboard made for that model. Many types of keyboards are available, ranging from thumb entry to collapsible full-sized. [Flexible keyboards](#) can be rolled up, but they may not be suited to touch-typing.

If you tend to switch from Palm to Pocket PC or to devices from different manufacturers, [Pocketop](#) offers a keyboard that connects via the infrared port of most handhelds, making it compatible with many devices. Pocketop's software keyboard driver also allows users to rotate the screen to facilitate infrared port access. The one downside is that using the infrared port will significantly decrease battery life.

EDITING ON PALM OS

Editing documents on Palm OS has usually been done in 'doc' files, which offer unlimited capacity compared with Palm OS Memo files. [MemoWare](#) keeps considerable medical content in 'doc' format. Many of the Microsoft Word editing programs also are capable of editing Palm OS 'doc' files.

Microsoft Word documents need to be converted for editing on Palm OS. [Documents to Go](#), [iambic Office](#), [Quickoffice](#), and [WordSmith](#) utilize a desktop-based conversion program that installs a Palm version of the file after synchronization. These programs offer different features and interfaces, so users should try out demo programs before purchasing one. Most of these programs cost around \$30, but Palm includes Documents to Go with its handhelds, whereas Handspring includes WordSmith.

Palm OS text entry is done via its Grafitti block character recognition system or by tapping the on-screen keyboard. Hardware keyboards are specific to each manufacturer and device. For example, the Palm IIIxe, Palm 5x, and Palm m500 series all have different serial port adapters, so each requires a different keyboard.

Alternative text-entry solutions for Palm OS include the [Fitaly keyboard](#), Quikwriting, and [MessageEase](#).

Software keyboard enhancements. [FatFinger](#) produces a full-screen keyboard for tapping by stylus or finger. [Silkyboard](#) uses a QWERTY keyboard overlay on top of the Grafitti area, which provides a larger tapping area and reduces the interference produced by the virtual on-screen keyboard. [TapPad](#) remaps the Grafitti area for specialized functions and utilizes a numeric keypad.

If Grafitti is too difficult or cumbersome to use, [Jot](#) lets you use your own handwriting style and displays the character written anywhere on the screen. [TealScript](#) and [MyScript](#) work a bit differently, recognizing block lettering strokes.

[WordComplete](#) provides a pop-up list of words while you enter letters via Grafitti or the keyboard. Words can be added and deleted from its dictionary, and the SmartScan utility will check memos for new words. WordComplete is not Palm OS 5 compatible, however. [TextPlus](#) is OS 5 compatible, and suggests phrases as well as words.

PRINTING SOFTWARE

Printing software that works via the PDA's infrared port or Bluetooth wireless allows you to use the handheld to print documents. For Pocket PC devices, [Print PocketCE](#) and [PrintBoy CE](#) allow you to print Microsoft Excel and Word documents. For Palm devices, PrintBoy, [IRPrint](#), and [PalmPrint](#) allow you to print memos, to-do lists and address contacts, as well as documents from Documents to Go, Wordsmith, and QuickOffice via infrared or Bluetooth. Make sure that the printing program is compatible with your document editing software.

VOICE TECHNOLOGIES

Dictation on the handheld is yet another text-entry option (see [Psyber Psychiatry, February](#)). A few voice command programs also are available for Pocket PC devices [ARTrecognition](#), [VoiceLookup](#), [PDsay](#), and [VoiceContact](#) allow you to use voice commands to lookup information and launch tasks.

If you have any questions about these products or comments about Psyber Psychiatry, click here to contact Dr. Luo or send an e-mail to Current.Psychiatry@dowdenhealth.com.

Disclosure:

Dr. Luo reports no financial relationship with any company whose products are mentioned in this article. The opinions expressed by Dr. Luo in this column are his own and do not necessarily reflect those of CURRENT PSYCHIATRY.