

July 3, 2008

STATE OF THE ART

## Digital Pens to Write on Any Paper

By DAVID POGUE

In gadget-head circles, one of this summer's most buzzworthy new products is the Pulse pen: a ballpoint that simultaneously records both your handwriting and the sound of the words you are transcribing. Both are transferred to a Windows PC when you return home — seemingly perfect for lecture-hall students, journalists and note-takers of any kind.

Well, perfect except for one thing: the Pulse pen doesn't work unless you write on special paper. Thousands of tiny micro- speckles tell the pen's tiny camera where it is on the page as you write, but limits you to writing in notebooks that you buy from the Pulse company. No back-of-the-envelope brainstorm, no legal pads, no using your own letterhead.

Pity, then, the two entirely buzz-impaired cordless digital pens from other companies that can write on any paper at all. The Mobile Digital Scribe (from Iogear) and the ZPen (from Dane-Elec), each about \$95 online, can capture your notes no matter what you're writing on. The notes appear on your Windows PC as a digital image, which you can convert into typed text for copying or e-mailing.

To be fair, these pens are not as sophisticated or ambitious as the Pulse pen; they don't have microphones, cameras or little screens. They don't record audio and don't accept add-on programs. But if you just want to capture notes and drawings in the field and then transfer them to your PC when you get home, the "any paper, any time" feature might sound attractive indeed.

Now you can venture forth to meetings or classes without having to fool around with the heft and fragility of a laptop — and still wind up with your notes safely ensconced on the computer.

You also, in effect, create a safety copy of everything you write. If you lose your class notes, or if a brilliant business plan for the next dot-com sensation is stolen from you at gunpoint, you won't care — you've got the whole thing digitally backed up in the receiver in your pocket.

Now, even these digital pens need some fixed point of reference so they know where on the

page you're making each stroke. That's why each comes with a tiny receiver that attaches to the top of the page. It's a small plastic clip, like the clamp at the top of a clipboard, that exchanges acoustic and infrared signals with the pen as it moves. The Digital Scribe's receiver has a little screen with a digital page counter; the ZPen's slightly bulkier receiver has a power button, a pause button and three illuminated indicators.

Both receivers bear a tiny pen icon that flickers to confirm that it's receiving and storing your scribbles. Each contains a battery that recharges from your computer's U.S.B. jack. (The pens, which are slim and attractive, contain hearing-aid batteries that are supposed to last for 40 hours to 80 hours of writing.)

After your day in the field, you connect the receiver unit to your PC's U.S.B. jack. Software retrieves the written images, neatly organizing them by date and time. At this point, you can export a page as a JPEG or PDF graphic.

Alternatively, you can click a convert button to perform handwriting analysis — the kind that turns the handwriting into typed text that you can edit.

By a curious coincidence, both pens come with exactly the same software, called Vision My Script Notes. It's easy to use, but the recognition accuracy is a disaster. Even if you specify the kind of writing your sample contains — block letters, print or cursive — it usually mangles quite a few of your words and places them in weird paragraph clusters.

As similar as these pens are in concept, their execution is radically different. The Dane-Elec ZPen makes the Iogear Scribe look like an amateur.

For starters, the ZPen's receiver has a spring-loaded, clipboard-style clip that snaps easily and firmly onto just about anything: legal pad, notebook, bar coaster, whatever. The Digital Scribe's receiver has three clips, one intended for each possible place on the page where you might fasten it (top left, middle, top right). Unfortunately, each is the size of a confetti flake, capable of opening wide enough to take only a feeble bite of a page. Fussy is the operative word here.

The ZPen has another advantage. It doubles as a 1-gigabyte flash drive, so you can use it for carrying or transferring any kind of file between computers.

Better yet, the notes-viewing software is right there on that flash drive. That means you can view your notes on anybody's computer instantly without having to install anything first. With the Scribe pen, you must install special software from a CD before you can use it.

If you want to do more than view the notes — that is, if you want to export them as converted text — you do have to install the MyNotes software on a PC, no matter which pen you buy. But the ZPen's version wins here as well. First, the installer is right there on the flash drive, so you don't have to carry around a CD. Second, you get the full version of MyNotes, capable of recognizing multiple languages and mixed text and graphics on a page. The Digital Scribe pen, on the other hand, comes with the more limited Lite version.

Nor is the self-contained software the ZPen's only travel-friendly feature. Turns out there's a U.S.B. jack hidden under its rounded end cap; you can plug the whole receiver directly into your computer so you don't have to pack and track a separate U.S.B. cable, as you do with the Scribe.

But wait, there's more: all that flash memory means that the ZPen can store about 1,000 pages of handwriting. The Scribe holds a paltry 50.

Finally, you can get into real trouble with the Scribe when you need to turn a page. If you forget to press the Page button on the receiver, you wind up invisibly overwriting the previous page, turning the whole thing into a superimposed, unreadable mess. The ZPen more or less takes care of that problem, because simply squeezing to open the clip as you remove or turn the page automatically tells the receiver that you're starting a fresh sheet.

The Scribe isn't a total loser, however. It performs one nifty trick that the ZPen does not: its U.S.B. cable permits you to use the pen while it's tethered to the computer. As you write or doodle, your writings appear on the screen.

Then, with one tap of the pen directly in front of the receiver, you turn the pen into a mouse. Now you can move the computer's cursor by moving the pen just above the paper surface (or insert the inkless tip), click by tapping the pen down, and so on. The Tablet PC features of Windows Vista are all at your disposal at this point, too, converting your 50-cent legal pad into a \$100 graphics tablet that uses Microsoft's much superior handwriting recognition software. Neat trick.

It's too bad these pens come with such terrible handwriting-conversion software, and too bad they both work only with Windows. But the price is fair, the pens themselves are beautifully designed, and the basic writing-capture feature works flawlessly.

The ZPen, doubling as a flash drive, is far easier to travel with; the Digital Scribe, doubling as a mouse, enables you to draw freehand on a PC. They may not be perfect, but they deserve a little buzz all their own.

[Copyright 2008 The New York Times Company](#)

[Privacy Policy](#) | [Search](#) | [Corrections](#) | [RSS](#) | [First Look](#) | [Help](#) | [Contact Us](#) | [Work for Us](#) | [Site Map](#)

---