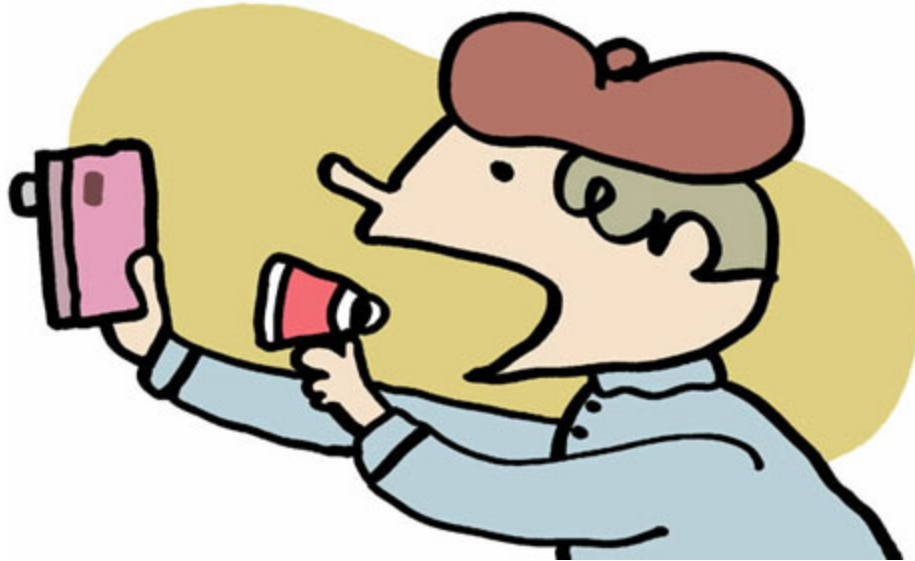


THE NEW YORK TIMES

March 20, 2008

STATE OF THE ART

Camcorder Brings Zen to the Shoot



By DAVID POGUE

Correction Appended

Well, this is a little embarrassing. One of the most significant electronics products of the year slipped into the market, became a mega-hit, changed its industry -- and I haven't reviewed it yet.

Lately, my guilt has deepened every time someone whips this thing out to show off. "Look what my first grader did with it all by herself," one guy told me. "We're using them in schools to teach narrative structure," said a teacher at a conference. "I bought two of 'em: one for my 80-year-old grandmother," said a neighbor, "and one for my 5-year-old."

O.K., wait -- what?

It's [the Flip](#): a tiny, stripped-down video recorder the size of a digital camera (but you hold it vertically). And in the year since its invention, it has taken 13 percent of the camcorder market, according to its maker, Pure Digital. The latest model, called the Flip Ultra, had its debut six months ago with slightly improved video quality, greater capacity, a

tripod mount and better looks (available in white, black, orange, pink and green). It's been the best-selling camcorder on Amazon.com since the day of its debut.

Now, understanding the appeal of this machine will require you not just to open your mind, but to practically empty it. Because on paper, the Flip looks like a cheesy toy that no self-respecting geek would fool with, let alone a technology columnist.

The screen is tiny (1.5 inches) and doesn't swing out for self-portraits. You can't snap still photos. There are no tapes or discs, so you must offload the videos to a computer when the memory is full (30 or 60 minutes of footage, depending on whether you buy the \$150 or \$180 model). There are no menus, no settings, no video light, no optical viewfinder, no special effects, no headphone jack, no high definition, no lens cap, no memory card. And there's no optical zoom -- only a 2X digital zoom that blows up and degrades the picture. Ouch.

Instead, the Flip has been reduced to the purest essence of video capture. You turn it on, and it's ready to start filming in two seconds. You press the red button once to record (press hard -- it's a little balky) and once to stop. You press Play to review the video, and the Trash button to delete a clip.

There it is: the entire user's manual.

But come on -- 13 percent of the camcorder market? This limited little thing? What's going on here? Having finally lived with the Flip, I finally know the answer: it's a blast. It's always ready, always with you, always trustworthy. Instead of crippling this "camcorder," the simplicity elevates it. Comparisons with a real camcorder are nonsensical, because the Flip is something else altogether: it's the video equivalent of a Kodak point-and-shoot camera. It's the very definition of "less is more."

The lesson is one that the electronics industry seems to miss over and over again: that creeping feature-itis often impairs your product instead of improving it. In the Flip's case, the size, shape, ruggedness, low price and one-button simplicity take it places where no real camcorder would go. Purses, coat pockets, beach bags. Skiing, playgrounds, house walk-throughs, museums, casual interviews, YouTube stunts, classrooms, airplanes -- and, with the \$50 acrylic sealed case, even underwater.

(Just about everywhere but live performances and sports; the zoom just isn't good enough.)

The video and audio quality is surprisingly good -- not as sharp as a tape camcorder or even digital still cameras, but far superior to cellphone video. It has TV resolution (640 by 480 pixels, 30 frames per second), with softer images than you'd get with a real camcorder.

The shocker is the Flip's low-light abilities, which trump even \$1,000 camcorders. Not only is the video grain-free, but recorded dim scenes actually look brighter than they looked to your naked eye.

Once you've shot a few scenes, you slide a button and -- sproing! -- a U.S.B. jack pops out at 90 degrees to the camera body. This, too, is part of the Zen of Flip. You're spared the hassle of storing, tracking and finding a U.S.B. cable.

The entire thing, in other words, slips into your computer's U.S.B. jack. At this point, the Flip's icon appears on your screen as though it's a disk. If you open it, you find a folder full of video clips, which you can play, copy to your hard drive or edit in most standard editing programs. All of this requires, unfortunately, a one-time installation of a special codec (a video-format translator).

But you know what else is on that Flip "disk" on your computer screen? An extremely basic video-editing program for Mac or Windows. It lets you shorten scenes, rearrange them, delete them and upload reduced-quality versions to YouTube or AOL Video, or send scaled-down versions by e-mail. A Movie Mix button adds cross fades and music, using its best judgment to produce a fast-cutting MTV-ish edit, but you can't add such elements manually.

The Mac version of this program lets you rearrange your clips for playback, but you can't export the result, as you can on the Windows version. (Then again, you already have iMovie right on your computer; Flip video works great with iMovie 6, although not iMovie '08.)

You can also attach the Flip directly to your TV using a cable that comes with it. The video is not DVD quality, but it's fine standard-TV quality.

Alternatively, you can take your camera to [many major](#) CVS or Rite-Aid drugstores where they'll turn your footage into a DVD for \$13. That's

where you can also pick up a pair of AA batteries for your Flip. (Alkalines last 2 hours; rechargeable AA's manage about 5.)

So why, exactly, does a machine that does so little earn so much love from the people who buy it?

Funny story: years ago, Jeff Hawkins, founder of Palm, decided to develop the Graffiti handwriting-recognition alphabet for the original touch-screen Pilot. Since no technology can recognize everyone's handwriting, he reasoned, he'd design a special block-letter alphabet that gives you 100 percent accuracy -- if you form your letters his way.

His employees thought it was a terrible idea. Make customers relearn the alphabet?

But Hawkins, a brain scientist, knew something about people: if you're successful at something the first time you try, you fall instantly in love with it. And sure enough: people fell in love the first time they wrote on a Pilot with the special alphabet and saw their letters turn into perfectly typed text.

That's how it is with devices like the Flip. They're so simple, mastery is immediate, and so is your sense of pride and happiness.

Already, the Flip has imitators. Audiovox RCA licensed the technology and sells a \$100 enhanced version called the RCA Small Wonder EZ201, with a flip-out screen, 30 minutes of storage and a memory-card expansion slot. Sony's Net Sharing Cam (the \$150 NSC-GC1) is similarly shaped, but has a larger flip-out screen, card slot and rechargeable battery (but no built-in storage at all).

Careful, though; even these enhancements are complications: more moving parts, more things to learn, more elements to track. Each additional feature nibbles away at that sense of mastery, that mental comfort zone. Same with digital cameras, whose movie modes also take good video: anything with modes is necessarily more complicated. If you've ever taken a still when you meant to capture video, or vice versa, you know this all too well.

Somebody at Pure Digital must have sat through countless meetings, steadfastly refusing to cede any ground to the forces of feature creep. A

juicy bonus, if not a lucrative speaking career at management seminars, is definitely in order.

There. It feels good to have finally reviewed this groundbreaking little camera. Next week: My take on the new RCA Victor 8-Track Tape Player.

E-mail: pogue@nytimes.com

This article has been revised to reflect the following correction:

Correction: March 22, 2008

The State of the Art column in Business Day on Thursday, about a new class of inexpensive, easy-to-use camcorders, referred incorrectly to a model made by Thomson. It is the RCA Small Wonder EZ201, not EX201.

http://www.nytimes.com/2008/03/20/technology/personaltech/20pogue.html?_r=1&sq=&oref=slogin