Some people might think HD stands for high definition. Well, some people are right. But earlier this year, when I dived into the dark digital waters that is home HD video editing, I found out that H and D can also stand for the four-letter words you are uttering when all those pixel details are bringing your seasoned computer into a digital grind.

How can a pretty picture be not so pretty all at the same time?

Before I thrill you with the tales of details and despair, let me give the Reader’s Digest condensed version of what HD is. It all started one day at a meeting in the executive boardroom of a large electronics conglomerate with the chief executive, chief engineer, and chief marketing guy in attendance. (The following is a dramatization.)

Chief executive: Everyone has two TVs in every room of their house. We’ve reached market saturation. What can we do to sell more TVs?

Chief marketing guy: I know. Let’s sell TVs that have higher picture quality than the crap we sell now! More is better.

Chief engineer: We have the technology. We can build it—but it will be expensive.

Chief executive (rubbing hands together): Excellent!

And then, before you knew it, there was high definition, or HD. Soon there was HDTV and HDV cameras, ESPN HD, HD flat screens, HD projectors, HD receivers—and soon we will even have HD-DVDs. There was HD here and there; there was HD everywhere. There was HD on the box. You could find HD on FOX. OK, you get the idea.

How High Is High?

So, how high definition is high definition? It’s actually quite a nice picture when compared to standard-definition (SD) television. HD actually comes in two flavors: 1080i and 720p. The number stands for the number of lines or pixels the image displays vertically. Both formats are presented in a 16:9 aspect ratio, which makes HD a great format for viewing movies, etc.

Most of the HD equipment today is 720p native and plays back 1080i source material by scaling the image. I assume that someday 1080i TVs will be commonplace, and some chief executive will be busy trying to figure out how to sell us Super HD or XHD or HD-Extreme, with so much resolution you can see the pores on Brad Pitt’s face.

Speaking of Brad’s face, my wife and I had our first child this year, Maximus William, and so for Christmas we decided to get a “family gift” for everyone: a video camera, to capture the first-year moments of Max forever on video. Of course, seeing baby’s first steps in standard definition just isn’t good enough anymore, so we decided to plunk down the big bucks to get an HD camera—one that shoots in true 1080i format. The fact that neither Max’s parents nor grandparents had a TV—or even a computer screen—with a high enough resolution to display 1080i HD was not a deterrent. We knew that 20 years from now we were all going to be glad that we had shot...
Maximus’ drooling in pristine HD and not in that sorry looking SD.

In many ways, HD is to standard definition video what CDs were to cassette tape audio recording. Once you see pictures in high definition, you’ll never see SD TV the same way again.

We settled on a Sony consumer-grade video camera, which cost us about $1,600. Like all electronics, prices continue to fall, and so by the time you read this, I’ll bet you can pick up an HD video camera for about $10 and change—with tons of new features. Seriously, if you are thinking about getting a new video camera, I recommend visiting a Web site like CNET (www.cnet.com) to see reviews and prices of the latest video cameras.

Showtime/Pain Time

With our brand-spanking-new Sony HD video camera in hand, and a very cute 3-month-old son, we set to work capturing lots of footage of the baby cooing, drooling and crying. Baby Maximus was born to be on camera, and we are expecting he’ll at least get nominated for a Best Actor Oscar based on the wide range of facial expressions he could do at such a young age.

Now, you may have seen HD in your friendly local mom-and-pop electronics shop, or perhaps you’ve watched an HD broadcast of a sports program. But there is nothing that makes HD come alive as much as seeing beautiful, sharp and detailed pictures of your family.

Being a card-carrying member of the bleeding-edge technology club, the first thing I wanted to do with all that beautiful HD footage was to upload it to my computer and edit it into a great-looking DVD to send to the grandparents.

Besides the pain of the high price of the video camera itself, most of the techno-pain I dealt with in converting my home movie editing process from SD to HD involved getting the footage onto my computer.

First of all, you need to have an application that can edit HD source video. I’m using a Mac, so that means I need to upgrade to iLife ’05 or iLife ’06 (www.apple.com/ilife), which includes the entry-level editing application iMovie HD. (New Macs will ship with iLife ’06 for free). That’s another $79 to my cost.

Since most of you are using Windows machines, you’ll want to look at an application like the entry-level Avid Pinnacle Studio Plus (www.pinnaclesys.com) for $99, or the more professional Adobe Premiere Pro (www.adobe.com/products/premiere/main.html) for around $850. Somewhere in the middle is the Ulead Media Studio Pro (www.ulead.com) for $399. Ulead also has a downloadable free trial version.

One final warning: If you take bad footage in SD, it only gets worse. My shaky footage of our vacation was even more nauseating in HD. In many ways, HD magnifies the extremes of video. Your good footage looks great, and your bad footage makes you want to blow chunks.

If you are willing to go through all the pain of HD, however, the superb image quality does help you capture reality better than any medium or format available to consumers before now. But no matter what kind of equipment you use, there is no way your baby will come out even half as cute as Max.