

## Inspiring Technolust

Several years ago I traded up my aging PowerBook 160 for a brand-new PowerBook 190cs. At the time, it seemed like a great machine: color screen, fast 68LC040 processor, huge 500 MB hard drive, innovative removable floppy drive, infrared port, dual PC Card slots, trackpad, and PowerPC upgradeability. All for a mere two grand.

The 190cs has served me well, but lately it's been showing its age. It's slow, the 640x480 screen is restrictive for anything but word processing, the 500 MB hard drive now seems tiny, and more and more software is PowerPC-only. I thought about Apple's recent PowerPC laptops: the 1400 series, the ultralight 2400, or the 3400, but all of them came up short. For their performance, they are expensive. Even the pricey 3400/240 is slower than my 200 MHz 604e 8500 desktop Mac.

## Enter the G3

Last November Apple released the PowerBook G3 to rave reviews and covetous Mac fans. Sure, it was awesomely fast—but it was also awesomely expensive. We're talking the price of a good used car! And it still had the boxy, rather clunky 3400-style case, not to mention a slower bus, video, and other limitations. I looked fondly at my 190cs and decided I could live with it a while longer—especially when I heard rumors about the upcoming Wall Street.

Wall Street was the code name for Apple's 3 PowerBooks, rumored to be an incredible value. After months of anticipation, Apple put the rumors to rest and on May 6, 1998, with great fanfare, revealed the incredible PowerBook G3 Series to the world. Within the first 12 hours of the announcement, Apple's website had taken nearly \$2 million in orders.

The PowerBook G3 Series—note that the "Series" part of the name distinguishes them from the short-lived PowerBook G3—are all based on the same sleek case and motherboard. Apple cleverly swaps components and screens to build several standard configurations, and via the Apple Store on the web, you can have yours custom-built with a dizzying array of choices. Getting yours built-to-order takes a little longer, and with demand so high for these machines, expect to wait. If you can live with one of the standard configurations, you might find stock at a local dealer or via mail-order.

I had been studying the pre-release specs of the G3 line for some time, and as soon as Apple officially announced features and pricing, I carefully made my decision. The low-end 233-MHz model was my initial direction, simply because of budget constraints. But regrets of my low-end 190cs purchase made me cautious, especially considering that that \$2200 computer was now worth \$600, just two years later! Would I really be happy with a basic G3 in a year or two? Unless I win the lottery (or sell my screenplay), this is going to be my last computer purchase for a long while. I decided to examine all the models carefully.

The new G3 PowerBooks have two main areas of distinction: CPU speed and LCD screen size. Apple offers three speeds: 233-, 250-, and 292-MHz. For screens it's a choice between 12", 13.3", and 14.1". The 12" screen is passive matrix (colors tend to look washed out and movement is blurry), while the larger ones are active matrix (brighter, more vivid colors). The 233-MHz CPU includes a slower 66-MHz system bus (the speed of the logic board, not the internal speed of the CPU chip) and no backside cache. The 250-MHz and 292-MHz machines both include 1MB backside caches and blazingly fast 85-MHz buses (faster than any desktop machine Apple makes). ZDNet's MacBench 4.0 puts the models at 445, 850, 1092 respectively. (A PowerMac 6100 rates a score of 100 in the test.)

With the Apple Store's build-to-order system, you can combine any of the above into your dream laptop. You can also specify a 2 GB, 4 GB, or 8 GB hard drive, the amount of RAM you'd like (standard is 32 MB with a maximum of 192MB), whether you want an internal 56K modem, etc. The array of choices, and prices, can be bewildering. Apple estimates there are over 20,000 configurations of their popular G3 desktop series!

## How I Made My Choice

Speed, I decided, was not crucial for my needs. I use my laptop for writing, occasional design work, and of course, games. It makes a great adjunct to my digital camera, and it's handy when I meet with clients on location. In short, a laptop is not essential to what I do—it's just convenient.

The 233-MHz model tests out at 35% faster than my 8500 (whose performance I find exceptional, even for high-end Photoshop work), so I knew even the low-end model would be fine. The only question was the future. Apple has not stated that the PowerBook G3 Series are CPU-upgradeable, for legal reasons. Apple was stung by a lawsuit for Performa models it advertised as upgradeable, but never produced an upgrade for. Therefore, Apple is hesitant to "officially" certify the PowerBooks as upgradeable. But since the new PowerBooks are built around the same motherboard with only the CPU daughtercard the major difference, upgrades are certainly a possibility, if Apple will sell them. In addition, Apple has placed some critical PowerBook ROMs on the daughtercards—meaning that third-party upgrades are unlikely, as they'd have to obtain those proprietary ROMs from Apple. So don't count on Newer Technology or others to develop upgrades to the G3 series.

Looking at other factors, I quickly saw that the bigger screens offer a great deal more than the basic 12" model. For one, they ship with 4 MB of video RAM, versus 2 MB in the 12" model, allowing millions of colors on the screen. They also have more pixels: 1024x768 versus 800x600. Both the 13" and 14" models include an S-Video Out port, allowing you to use a television for display—ideal for presentations.

I don't travel that much so a modem wasn't essential, at least not in my initial order. I figure I can always add a cheap PC Card modem later.

I reflected that the standard 2 GB hard drive should be more than enough hard drive space. I have an external Zip drive I used to backup my 190cs with—that will still work fine for occasional file transfers to my desktop machine and backup. If I were considering a G3 Series as my main or only Mac, I'd definitely get a larger drive: at least 4 GB, preferably more.

Lots of RAM is important to me, but Apple's Web prices are high. I could save a lot of money buying third-party RAM and installing it myself. In fact, I wouldn't even have to do that immediately. I could probably live a few months with the standard 32 MB configuration and save up for a whopping 128 MB upgrade.

The main question was price. I had been planning on spending \$2,500. With the cheapest G3 selling for \$2,299—not including the optional \$80 floppy drive—that suddenly seemed like a minimal amount. If I really dug into my savings and didn't eat for a week, I figured I could come up with \$3,000. What could I get for that extra sacrifice?

Looking at Apple's standard configurations, I saw the cheapest 250-MHz model cost around \$3000 (with the 12" screen). But for the same money I could get the 233-MHz CPU with the massive 13.3" LCD.

I instantly made my decision, opting for the bigger screen. I figured there's a chance that I might be able to upgrade the processor someday, but upgrading the screen is probably never going to be an option. Since I had money for one or the other—going for both would have cost an additional \$600—I chose the screen. Resale value on the bigger screen models would be much higher than the passive matrix, and besides, the bigger screens are one of

the main features of the new 'Books.

Another advantage was that since I wanted a standard configuration I wouldn't need build-to-order—meaning I could buy it from any dealer or mail order company (saving me sales tax in addition to getting it faster).

Checking the net, I discovered online vendor Cyberian Outpost had the 233/13.3 model for a mere \$2,797. On May 8th I placed my order and waited with bated breath. While I waited I advertised my 190cs on the Web and managed to sell it for a decent amount. Less than three weeks later, on May 27th, I had my new PowerBook.

## First Impressions

Just seeing the box got me smiling. Printed with large solid areas of green metallic ink, it looked high-tech. I loved the integrated handle. I haven't seen that since my Epson RX-80 dot matrix printer back in the 80s, a box I kept long after the printer was gone.

Opening the box I discovered the ingenious engineers used an air-filled plastic cushion to wrap around and protect the laptop during transit. Light, secure, and inexpensive. A great sign.

Opening the supply box, I discovered two beautiful manuals printed in metallic ink covers: an "Owner's Manual" and an "Emergency Troubleshooting Guide." Inside the manuals were elegantly crafted illustrations and clear explanations of all the hardware.

Looking further, I found the Lithium Ion battery and the AC adapter. The adapter “brick” drew my eye because it was much smaller than the petite box I had with my 190cs. Even the power cable itself was thinner. I noticed one drawback, however: the power cable that connects to the brick uses a compact plug, most likely non-standard. One of the things I liked about my 190cs brick was that any standard power cord worked with it. I bought a couple extra and left them at work and various other places where I travel, saving me lugging an extra cord. Still, that was a minor gripe.

I was delightfully surprised to find an S-Video-to-Composite adapter included. I don't have S-Video equipment, so the adapter meant I could easily use my S-Video out port with my standard VCR. There was also a VGA-to-Mac adapter for connecting standard Mac monitors to the PowerBook's VGA video out port. Nice touch. Apple has a history of charging extra for niggling items—let's hope this is a change in attitude.

Next, I browsed through the included CD-ROM disks. The Mac OS 8 CD was expected, but not the Now Up-to-Date and STF Fax software.

But that's enough exploring the pieces. Let's get the 'Book up and running!

I undo the plastic airwrap and my jaw drops open. This thing is huge! It's heavy, but not awkward. The weight seems well-balanced. It doesn't seem too thick, but the overall size appears to be much larger than my 190cs. I start to wonder if this thing's a laptop. Perhaps it doubles as a coffee table?

Once I flip it open, however, all is forgiven. The screen is monstrous! We're talking acres of space. I can't believe it. A creepy feeling goes down my spine. The screen just seems too big—almost indecent. I begin to wonder if I splurged a bit too much. Perhaps the 12" model would have been fine. After all, the 190cs I was used to was a mere 10.5".

I studied the keyboard. Gorgeous layout. Large backspace key. Lovely inverted T arrow keys... finally! Integrated light on the Caps Lock key. I'm a bit disappointed that there's only one Command key (on the left side of the space bar), but that's minor. Speaking of the space bar, it's remarkably short: about the size of three return keys put together.

he integrated numeric keypad is interesting. It is activated by holding down a new “FN” key to the left of the Control key. Pressing FN-F5 (FN key plus function key 5) enters Num Lock mode. There’s a little light between the F4 and F5 function keys that glows when Num Lock is active. I used this in a game that required the numeric number keys for movement and it worked great until I went to press a command key combination and discovered that the command key was disabled. Further research revealed that all non-keypad keys, such as letters, are disabled—but holding down the FN modifier lets you type any of them, including command key combinations. Apple thought of everything.

I’m especially impressed that when you hold down FN the up and down arrows become Page Up and Page Down—keys I use all the time on desktop keyboards.

The keyboard proves to be one of the best I’ve ever used. It’s light but has a solid feel. The keys feel spring-loaded, popping back up nicely after you press them down. I don’t know how they’ll hold up to intense gaming, but my initial reaction is extremely positive. I’m not a touch typist by any means, but I write a great deal, and a good keyboard is important. In fact, this entire article was written and edited on my new PowerBook. I edited all the photographs on it as well.

The positioning of a few of the keys had me worried that I’d require a long adjustment period, but it took me just a few minutes to get used to typing on it. The only time I notice anything different is when I immediately go from my desktop keyboard to the laptop, or vice versa.

The texture and styling of the case is nice. It’s not quite as dramatic in real life as it is in the photographs you might have seen. In fact, in some ways I like it better—it’s subtle and more functional. For all the talk of this being an “alien,” “X-Files,” or “space-age” PowerBook, the fact is that it is simply sleek and well-designed. There’s nothing here that would frighten Grandma.

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Tune in next issue when Marc actually turns on his new PowerBook, and we find out what he discovers!

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