

## Alienware m9750

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Friday, 27 July 2007

Last Updated Wednesday, 17 October 2007

There's no doubt that Alienware is perhaps the biggest champion of bringing bleeding-edge technology to consumers &ndash; more so than any other high-end PC maker we know of. Sure Dell cleans its clock when it comes to the mainstream and server customer, but Alienware is in a league of its own when it comes to making high-end, custom PCs at the volume it churns out. Because of its history of bringing best-of-class products at high sales figures, there's little to wonder why it has no problems getting ODM (Original Design Manufacturers) lining up at its door in baited-breath hoping for a design win.

Well I can say with a certain level of authority and certainty that the Alienware design team behind its new m9750 notebook has pulled out all the stops and really done a good job building a PC worthy of the Alienware moniker. This laptop &ndash; while a bit on the heavy side &ndash; comes packed to the glorious hilt of technology with the likes of two (Yes, I said two) GeForce Go 7950GTX graphic chips in SLI mode, two Seagate 160G Gigabyte hard drives in a RAID 0, a high-end Intel Core 2 T7600 Mobile processor at 2.3GHz, 2 Gigabytes of RAM, a clear 17" wide-aspect LCD screen, dual-layer DVD and a partridge in a pear-tree (okay, so maybe not that last one).

{mospagebreak title=Layout}

But above and beyond of what lies beneath, is the sheer look and feel of this machine &ndash; it simply screams "Play me" at deafening volumes. Its black, soft-to-the-touch, surface has a feel to it that closely resembles that velvety, rubbery feel of certain Logitech mice, like the Mx510. It's different than what we've seen from the likes of the Dell XPS unit and yet feels durable and makes one almost want to cuddle with it (yes, I am a geek).

Having a full-sized keyboard means you don't have to have midget-sized hands to get the most out of using the m9750 and has a quite comfy feel to it &ndash; even after extended hours of use and game-time. The touch-pad is works well and I sort of dig the one-button look to two-buttons below it (uses one large pad which covers both the left and right buttons) &ndash; makes things look a bit more tidy of sorts.

{mospagebreak title=Layout cont. & CPU}

We like how easily accessible most things are, but aren't huge fans of having the optical drive on the front of the unit as holding it on your lap means you can easily hit the eject button and have the disc popping out during the middle of a movie. Our preference is always a side-mount optical drive.

Of course the backside of the LCD has the now infamous Alien head logo on it, along with the Alienware ribbed-look &ndash; this from a company who loves touting its brand and does one helluva job of it. There are input/output ports galore on this beast &ndash; just about everything a computer user could want on a laptop and then some. In fact our demo unit didn't have it, but there is an optional TV tuner you can get for this unit, but it requires one to order the laptop with it from the factory as Alienware tells us it's a bit of a pain for most users to install after the fact.

The brains of every high-end PC is the CPU and for this Alienware's design team looked to the Intel T7600 Core 2 Mobile processor which has a peak clock rate of 2.33GHz, as it comes from Intel. However, we've seen companies such as Dell enable BIOS tweaks &ndash; as on its current XPS unit &ndash; that allow end-users to overclock the chip up to 2.6GHz. We were highly disappointed that Alienware didn't include a feature like this; especially from a company and brand who has built its reputation on hot-rod gaming PCs. We have been told from Alienware PR that future units will likely include user-controlled BIOS settings for setting faster clock rates on the CPU.

{mospagebreak title=NVIDIA-Powered}

If the CPU is the brains than it can be argued that the GPU is the heart and soul because it creates the visual interpretation of experience-trip developers want to take you on &ndash; one with lush 3D imagery that entices

excitement and moves the soul. To deliver that good experience Alienware includes two NVIDIA GeForce Go 7950GTX GPUs which are mated in SLI. This dual-GPU configuration allows the m9750 to outperform many desktop computers and provide enough frame rates to keep its native screen resolution zipping with graphics.

This mobile version of NVIDIA's 7800 desktop GPU is made using a 90-nanometer process — meaning it packs a lot of transistors in a small package. NVIDIA tells us that it delivers twice the processing power of its predecessor but more importantly to the end-user is its native support for DirectX 9.0L and Shader Model 3.0.

What is Shader Model 3.0 and why should you give a rip? Glad you asked. DirectX 9.0L uses shader algorithms which leading developers code for by utilizing a technique called SM3.0 — it contrasts to Shader Model 2.0 in that it allows game developers to program graphical effects in a much shorter string. The end result is more detailed graphics at faster speeds because the GPU has a shorter program string to calculate through. Most of the top PC-games today utilize this technology to create stunning visuals and it's getting better all the time.

Both of the Go 7950GTX run at a core clock rate of 575MHz and the memory is at 1400MHz (700MHz DDR). You can easily install an add-on such as coolbits to crank these frequencies up a notch or two but you should know that doing so will cut into your battery life.

Another highlight of the Go 7950GTX is its great HD video playback using NVIDIA's PureVideo technology. In a nutshell, it supports full 3:2 and 2:2 pull-down, has hardware acceleration video playback and has built-in features which make the video look its absolute best. So if you opt for the available blu-ray drive, you'll know that your HD content will look stunningly clear and have very little CPU overhead in doing so.

{mospagebreak title=Display & Disk I/O}

One of the most important aspects of any notebook is the clarity of its LCD and to that Alienware uses a glossy screen which has a native resolution of 1920x1440. While we agree that is a high resolution, we feel it may be a bit too high for only a 17" display; as it makes the text rather small and the on-screen icons a bit small. This is compounded by the fact we don't feel the screen has a good enough contrast ratio — even tweaking the units brightness controls didn't achieve quite the desktop clarity we were hoping for in a unit of this stature. Most folks will be okay with it, however, we know there is better out there — we've seen it.

Additionally, Alienware didn't opt to include a Dual-Link DVI output adapter on the GPU which means you can't hook it up to a 30" LCD and have it run any higher than 1280x800. We understand the arguments out there about how the sub-24-inch screens sell the most, but this is a flagship product from a company who's

known for pulling out all the stops.

Its disk I/O system couldn't leave us more impressed. Sure it's a power-hungry two drive RAID but who cares? This is the m9750, the top-of-the-line portable PC so it should go without saying that it sports 320GB of available storage which comes courtesy of two Seagate 7200rpm drive in a RAID 0. While this means if one drive fails your data is hosed, you should be backing up your important documents anyway.

The measured Hard drive performance will impress even the hardest core hardware geek with sustained data rates, random access times and low CPU utilization. I'm a huge advocate of RAID setups and this is one area I feel that Alienware has hit the nail on the head.

{mospagebreak title=Battery Life & Test Setup}

Battery life is rather good for a machine of this caliber – heavy use sported times of about 80 minutes or so while simple movie playback would last closer to the 2-hour mark. If you setup the unit to run in its ultra power-saving mode then you can get a few hours out of it. While the m9750 won't set any records for battery life it is respectable and shouldn't be an issue to those who demand top-notch hardware.

Benchmark Setup:

Intel Core2 T7600 @ 2.3GHz CPU

Two GeForce Go 7950GTX 512MB in SLI

2GB 667MHz DDR2

2 160GB Seagate 7200rpm SATA Drive

Windows XP Professional

NVIDIA ForceWare 98.09

We used the following Software:

Call of Duty 2, SiSoft Sandra 2007, 3DMark 06, PCMark 05, Cinebench 9.5 and Company of Heroes.

{mospagebreak title=3DMark06 and COD2}

{mospagebreak title=COH and Lost Planet}

{mospagebreak title=HDTach and PCMark 05}

{mospagebreak title=Sisoft Sandra 2007}

{mospagebreak title=Conclusion and Rating}

As you can clearly see from the benchmarks, this notebook is a good contender as a desktop replacement and/or an on-the-go LAN-party-lover's dream. It quite easily has enough GPU muscle to power its way through many of today's most demanding PC games as well as excellent CPU might to make it a good mobile workstation. While it's true that mainly gamers want this much machine, so do the folks who demand a top-notch workstation for applications like Photoshop and 3DStudio.

Our unit prices out at around the \$4300 dollar mark, making the m9750 one of the more expensive models fully decked-out. You can, however, get them started at the \$2000 dollar mark if you scrub the SLI, RAID storage and opt for a slightly slower CPU. Even if you do that you should be rewarded with a quality unit that'll provide years of good entertainment. Since there is no support for DX10 graphics we'd highly recommend staying away from Windows Vista as it's more of a resource hog and will start slowing things down to the pace of a two-toed sloth in just a few short months. Windows XP has been around a lot longer, has more mature driver support and quite frankly runs games faster than Vista.

My only caveat with the m9750 is whether or not you jump on one now or wait a bit for DX10 units which are now available on the market &ndash; albeit there are still no announced SLI-enabled DX10 units anywhere. Clearly, DX10 has shown itself to be nothing too exciting yet as the content we have to work with are largely half-baked DX10 implantations that Microsoft has been pushing developers to write in order to help solidify its strong-arm tactics for Vista. We're not yet fans of DX10 and feel most gamers will still get an excellent experience on the m9750. At the rate things are going, by the time DX10 matters this unit would be well on its way to being obsolete anyway.

Rating: 9/10

