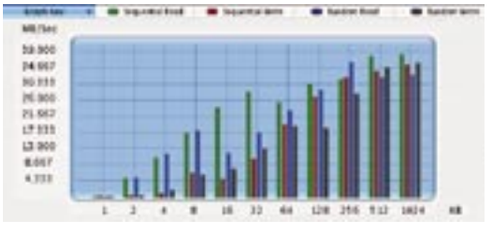
Avastor HDX-800

The importance of disk drives for professional audio has never been more apparent to NIGEL JOPSON, having recently experienced the failure of an internal PC drive and a 70Gb FireWire backup on the same day *(Personally, I would have rushed out and bought a lottery ticket. Ed)*. He tests a drive with pro aspirations.

WITH INCREASING TRACK counts in DAWs, the days of tunes arriving on CD-R are long gone and productions inevitably arrive on FireWire drives, usually commonplace consumer models. This brings into question not only the robustness of the medium, but also identification for future archival storage. As Grammy-winning mix engineer Joe Chiccarelli told me: 'I can name a dozen major albums I've worked on in the last few years that were done digitally and no one knows where the original hard drives are -- they'll just never be found!' Avastor aims to step into the breach with a range of professionally packaged portable drives.

The 250Gb Avastor HDX-800 (UK£228.92 + VAT) is supplied in a very nice lockable, anti-shock carrying container with drive labels, cables and a stand for vertical use. The drive case is made from hard plastic material, top and bottom halves of which can be rapidly removed for maintenance by sliding out two grey side inserts (which also make fine surfaces for labelling). It looks able to withstand a small impact far better than most consumer devices. An alloy internal chassis houses a PSU, PCB, and a Western Digital Caviar EIDE WD2500JB hard drive. These high-spec drives are available as bare units from component suppliers for around UK£70 street price.



There's a triple FireWire 800/400 and USB 2.0 interface via the respected Oxford 912 chipset. The disk has thin strips of neoprene set above and below as cushions -- certainly better than the postage-stamp sized piece of foam used in most consumer portable drives -- but hardly mil-spec. Avastor claims the HDX is the 'smallest full-sized portable hard disk available with an on-board power supply and fan.' This may well be the case, and good riddance to wall-warts, but the installed fan was an unfortunate choice for use in a music control room environment. Its whirring was noticeable to the ear of a critical listener, and became more obvious when vertically mounted.

There was no thermally variable speed control and the fan continued on full even after the drive was unmounted. If computer graphics card manufacturers can substitute heat sinks for fans on their MFLOPS-capable slivers of silicon, I'm sure this type of fan could be eliminated from a pro-quality disk drive.

The only way to really test a drive is to use benchmark software to assess relative performance versus comparable products. I compared the Avastor to a Maxtor One Touch II 300Gb drive, a 7200rpm unit that also uses the Oxford FireWire chipset with a triple interface and, despite the slightly higher capacity and a 16Mb cache, costs a little less at a typical street price of UK£175. It's exactly the sort of consumer drive Avastor is aiming to replace. Performance for up to 1Mb read/writes was very similar for the two, although the Avastor was nearly twice as fast for sequential reads under 64Kb, the Maxstor had the edge for random writes under 500Kb. To put this into perspective, random reads of this size for both drives were nearly twice as fast as that measured for a Lacie 7200rpm portable drive.

With larger file sizes of between 20Mb and 100Mb, the Avastor was consistently a very small amount faster than the Maxtor for writing, with read performance varying between the two according to file size. For example, for 100Mb the relative performance Avastor Maxtor was: Read 39.075—39.378Mb/sec, Write 37.674—37.214 Mb/sec. This is about one third faster than a Lacie portable for these file sizes. Reading and writing large files across the entire surface of a drive generally leads to a degradation in performance as the final 10% of the disk is reached. Testing the Avastor with 250Mb files, performance averaged 38.4—36.9 Mb/sec (read-write) dropping to a still respectable 33.3—34.2Mb/sec for the last 5% of the disk. The consumer Maxtor turned in a similar score except for the last 10% of the disk, which performed worse at 32.3-—30.6 Mb/sec (read-write).

The Avastor is a good performing drive packaged in a very sympathetic manner for professional audio use. The device is let down by some fan noise, but would be quite happy stacked up via its rubber feet/recessed top cover indents in a machine room.

PROS	**Performance; robust construction; packaging.**
CONS	**Fan.**

Contact

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