In combatting software piracy Barry Fox finds manufacturers may be their own worst enemies.

Copy cats



The record companies tried for 30 years to stop people dubbing discs onto tape. It began with the Beatles, when Magic Alex at Apple claimed he could put a high-frequency tone on Sergeant Pepper that interfered with the HF bias signal of a

tape recorder, and spoil the music with a whistle. It was a non-starter because most gramophones filtered off the tone. But the same daft idea is still being re-invented.

Audio CD, like DAT and Mini Disc, relies on the Serial Copy Management System to limit digital dubbing. A digital recorder won't make a digital copy of material that's already a copy. But SCMS does not stop someone making a series of first generation copies.

All this is academic anyway. A PC CD recorder with software like Adaptec's CD Creator completely ignores SCMS, so will happily make digital dubs. One company now claims to have found a way of spoiling any digital audio dub. The bits copy, but the copy sounds awful. I await the promised demonstration with interest...

Early on, software companies were equally paranoid about home copying. They formatted their program floppies so that vital data was stored in non-standard sectors. When most of the

program was copied to hard disk,

the user still had to insert the floppy to load the software. Psion used this method with the Xchange integration of word processor, database, spreadsheet and graphics packages. If your original master disc became damaged, the program would not run until the company had mailed a replacement disc. By the time Psion had given up on copy protection, WordStar, WordPerfect and Lotus 1-2-3 had knocked Xchange off the shelves.

The industry has since adopted different ploys. Program CD-ROMs often store encrypted or deliberately non-standard data that does not copy accurately onto a blank. But the wealth of pirated ROMs in the Far East proves how ineffectual this is.

The companies also keep on offering new versions at upgrade prices. Customers get a manual and customer support only if they register with an authorised serial number. But if they then charge for online help, they are

simply encouraging piracy. So is Microsoft, by supplying only flimsy manuals as a way of selling expensive books published by the Microsoft Press.

Microsoft obliges the user to 'insert the original Windows disc' when changing settings or recovering from a crash. This is why I would never buy any PC, whether secondhand or new, without a full set of original program discs. Notebooks have been sold with no Windows CD-ROMs and the instruction to celebrate the purchase by backing up the operating system with several dozen formatted floppies!

I recently tried PowerQuest's Lost and Found, as an interesting alternative to Norton's Utilities. L&F comes on two floppies, and does not write to disc while attempting to recover data. So there is no risk of overwriting what you are trying to recover.

The L&F disc carries a serial number which, once entered, locks the program to the PC on which it was first loaded. But I couldn't enter the number. All I got was the error message 'unauthorised duplicate'. Much worse, this left the PC's floppy drive 'invalid' and 'not ready'. So, far from repairing my PC, L&F had put it out of action. Powering down and re-booting from cold got

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the drive working again. I tried again a few times, always with the same result.

PowerQuest was helpful and sent a new disc. That too refused to load, but it worked on my laptop. PQ reckoned my desktop floppy drive might be out of alignment so I bought and fitted a replacement. The original still won't load, and I now have to wait for a fresh disc to try.

I'll report if it works, but I already fear PowerQuest's machine-locked copy protection risks losing more customers than it gains. I tried a third fresh copy of L&F on my Dell desktop, and got exactly the same 'unauthorised duplication' error message, with the a:drive disabled until re-boot. So copy-prevention has become use-prevention.

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