



ARE YOU BEING WATCHED?



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Wiring The Office

There are a great many places where listening devices can be concealed, ranging from the obvious to the obscure. In this executive's office, the following places could be concealing 'bugs':

- 1) The telephone. The bug could be in the mouthpiece or in the body of the phone, or in the lamp, which is placed very near.
- 2) Potted Plant. In the earth, under the pot, or even disguised as a real bug!
- 3) The wall. Bugs have been known to be embedded in the wall as 'studs', or behind cork panelling.
- 4) Hanging picture. Disguised as a support hook or concealed behind.
- 5) In the desk. Underneath the desk-top or in any of the drawers

While the world's law enforcement agencies swoop on teenage 'hackers' for cracking computer codes, those same agencies, and those without the backing of the law, are involved in similar surreptitious activities. In this article we look at the latest developments in computer surveillance techniques.

The official use of computer surveillance is constantly expanding into more and more areas of everyday life, and the odds are that we have all found our way into some system at some time.

Some of the surveillance is innocent enough and of vital importance to government agencies, such as the records of cars and licences held on the DVLC computers at Swansea or the DHSS's computer-based social security records. The possibility has now been raised of linking these various systems together, to correlate the files from the DVLC and DHSS systems with the files on, say, the Police National Computer at Hendon. That gives the authorities much more power to monitor the activities of the entire population.

The Data Protection Act was introduced in an

attempt to stop abuses of this kind of power. But there are those who believe it to be outdated, in the light of the rapid advances in computer technology since its introduction.

A lot of the techniques used in computer surveillance and security systems involve pattern recognition, a technique whereby the computer compares what it 'sees' with patterns already stored in memory. The drawback to pattern recognition is that it requires large amounts of memory space and vast amounts of computer processing power. Now both of those are available, and cheap, which has enabled significant advances to be made.

An example is the new fingerprinting system that Logica has installed for the Metropolitan Police at London's New Scotland Yard. It has taken 15 years of development to create the system, which can store 650,000 fingerprints and 100,000 'marks' — partial prints found at the scene of a crime. The system simply compares the marks with all of the stored prints, to see if they match with anything on file. This application needs the computer power of Prime minicomputers, in conjunction with highly efficient array processors and high-performance television monitors and cameras. Even so, it can only check 200 or 300 marks against the 650,000