



The **Universal Serial Bus**, or USB, is set to revolutionise I/O.

The bus stops here

Ever wondered why your keyboard, mouse, joystick, modem, speakers and printer all need different plugs? I'm afraid it's been that way for some time. Believe it or not, the array of serial and parallel ports we're faced with has been essentially unchanged since the birth of the PC over 15 years ago. Experienced users may not think twice about this absurd situation, but I pity the first-timer confronted by the wealth of connectors at the back of a modern PC — it makes wiring the hi-fi seem like a walk in the park.

There is an alternative: it's called the Universal Serial Bus, or USB, and it's here today [p130]. All USB devices use the same type of plug, and no fewer than 127 of them can be chained together off a single USB port on a PC — and there's no problem connecting or disconnecting devices while the power's switched on.

USB as a technology has been around for several years, but it's only now that it's starting to catch on. Most PCs built in the past year have featured a pair of

USB ports — indeed, the Apple iMac has little else — but the big push began when Microsoft eventually got round to properly supporting it with the release of Windows 98. USB peripherals,

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including mice, keyboards, cameras and scanners, have already begun to arrive. At PCW we're great believers in USB and its faster, more versatile cousin, 1394, aka FireWire. 1999 promises to be the year both technologies hit the big time, so to whet your appetite we've explained how it all works, rounded up a wealth of devices, and seen what happens when you try to connect them all at the same time: I personally can't wait to dump my PC's prehistoric I/O system.

We're also very excited about the forthcoming Windows NT 5.0, now to be known as Windows 2000 (and unlikely to appear much before that date). In the past, Microsoft has pitched NT at high-end users and 95/98 for those less serious. In around a year's time, however, Windows 2000 will be the only desktop operating system that Microsoft wants you to use. In the run-up we've been testing the latest preview version of Windows 2000 [p144] and assessing its suitability for leisure and business users alike. We've also looked at the sort of processors and memory that are on the way in the next year. In the meantime we've tested four high-end workstations ideally suited to running NT 4.0 today, and Windows 2000 in a year's time.

As it's the tenth anniversary of the world wide web, we've group-tested the software that lets you build your own site [p190]. We've also interviewed Tim Berners-Lee [p122], arguably the man who came up with the idea in the first place. Also in this packed issue we've put 12 notebook computers through their paces [p170], tracked down the virus hunters [p116], looked at how to protect your business from internet intruders [p122] and taken a first look at brand-new budget 400MHz chips from Intel and AMD [p76]. The PC industry has never been more exciting, and you're in the right place to read about what's happening.

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