

Which Mac Now?

THERE'S A NEW CROP OF APPLES, BUT WITH SO MUCH CHOICE, WHAT DO YOU GO FOR? EASY! TONY SMITH CHOMPS THROUGH THE CURRENT MAC RANGE TO HELP YOU PICK THE BOX THAT'S RIGHT FOR YOU

APPLE LOVES changing things – prices, the Macintosh line-up: you name it, Apple will throw the lot up in the air every six months or so. But all for a good reason. The changes allow the Mac to keep up with the developing technology on which it's based.

As Apple engineers continue to push ahead the basic definition of what a personal computer should be – through features like QuickTime, PlainTalk (Apple's System software that recognises spoken commands) and CD-ROM – the Mac range has to change.

But it makes coming to a decision about which machine to buy a darn sight tougher – even if you're a seasoned Mac hand. The Mac may never have been easier to use nor more convenient to buy, but selecting the right model remains a tricky business.

Fortunately, Apple is aware of the problem. Its most recent shake-up, at the end of last month, was an attempt to fix it. In most cases it worked. For serious business users and raw-power fans, the Quadra line is now the place to look – there are no longer any similarly-powered Centris machines to confuse matters.

The LC line has been slimmed, thanks to the loss of the LCII. Its twin, the Performa

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LC or Performa?

MOST WOULD-be Mac owners have a problem – whether to go for an LC or a Performa. Apple's answer is to say, if you've never used a computer before, or at least never used a Mac before, go for a Performa; if you're an old Mac hand or buying for a business, the LC line is for you.

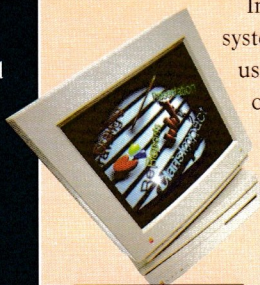
In principle, that's fine advice. The Performas are complete systems, that you can buy, take home and, more or less, start using immediately. The configurations are fixed, as is the type of monitor, which makes buying decisions easier. There's no umming and aching over the merits of 4/80 24-bit colour on a 21in screen over a 5/160 256-colour rig.

LC buyers, on the other hand, have to consider such matters. They have specific tasks they want their computers to perform and need to assemble the best configuration for the job. That involves a flexibility only a specialist dealer can provide.

The 475: but is it Performa or LC?

But you shouldn't rule out buying one line or the other because you don't fit into its 'user profile'. If you're a teacher, it may be better to buy an LC for the educational discount you can claim, even though you may have never used a Mac before and are a typical Performa person. If you feel you need more memory, only a dealer will be able to add the extra Ram. The Performa configuration is set in stone and can't be changed by the shop from which you bought it.

So by all means make your purchasing decision based on Apple's criterion – but don't feel you can't change your mind after considering the 'Performa for buying convenience, LC for configuration flexibility' rule.



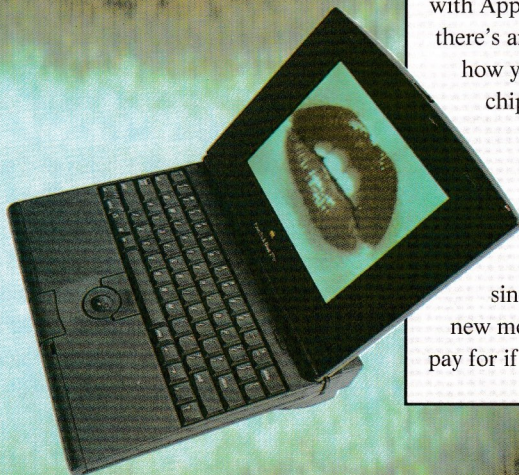
Upgrades

WHENEVER new Macs are launched, it's easy to find yourself wishing you'd hung on in there and been able to buy a better machine for the same price. That usually results in a desire to upgrade. If your current Mac isn't really up to scratch at the applications you're now running, fine. But if it's still working well, you might as well wait until it does cease to be powerful enough. If all you do is word processing, it's quite possible your trusty Performa 400 will keep you satisfied for many years to come.

If you do decide to upgrade, you've a number of options. The first, if you're handy with a screwdriver, is to buy a new motherboard from Apple. The motherboard is the part of a Mac's internal workings that holds the processor, memory and ancillary chippery. You just take the old one out and slot the new one in. Easy, and generally cheaper than buying a new system. Bear in mind that if your Mac's less than a year old, swapping the motherboard yourself will void Apple's warranty – it's best to get a dealer to do it for you.

The LC, LCII and Performa 400 can all be upgraded to Performa 450 standard this way, and an upgrade to 475 level will soon be available too. If you own a different type of Mac, check with Apple (Freephone Apple) to see if there's an appropriate upgrade. This is how you'll upgrade to the PowerPC chip when it becomes available.

If the DIY approach doesn't appeal, you'll have to buy a new box. Go for an LC (or Quadra, depending on your requirements) since you probably won't need a new monitor, which you'll have to pay for if you buy a new Performa.



New Apples

PERFORMA 475

THE FIRST PERFORMA with a 68040 processor – all the others are 68030-based – the 475 runs roughly twice as fast as the 450, for only £100 or so more. That level of performance puts it on a par with the Quadra 610. All that makes it the best slimline retail Mac available.

LC 475

THE BUSINESS-ORIENTED version of the Performa 475, it's about twice as fast as the LCIII and supports all Apple monitors. It's particularly attractive at the moment – Apple is bundling a 4/80 configuration with a 14in colour display for £899.

QUADRA 610

A HALFWAY HOUSE between the other Quodras and the LC range, the 610 has a slim case and LC 475-level power but is still big enough to hold a single internal peripheral, such as a CD-ROM drive or tape back-up system. Like all Quodras it comes with Ethernet built in for connection to fast networks.

QUADRA 650

THE SAME box as the Performa 600, the Quadra 650's 33MHz 68040 leaves the 600 standing. Its three NuBus slots provide plenty of scope for expansion. The entry-level serious business machine, it's more than adequate for all professional needs.

POWERBOOK Duo 250

A SOUPED UP version of the Duo 230, it runs like the PowerBook 180. It has the same high quality greyscale screen, but comes with a much larger, 200Mb hard disk built in. It's also around £200 cheaper. Shame about the rather squidgy keyboard, though.

POWERBOOK Duo 270c

THE FIRST colour Duo, the 270c has the same type of screen as the PowerBook 180c, but is capable (if you don't mind a fractionally smaller display) of showing 32,767 colours. It runs at the same speed as the 180c but has a much larger, 240Mb hard disk.

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400, is still around, but will soon disappear too, as the 450 takes its place, replaced in turn by the new Performa 475.

If it's a portable that you're after, the revamped Duo line now includes models that offer clear advantages over the previous ones – as you go up the line, screen quality and hard disk capacity get better. The same is broadly true of the regular – Apple's calling them 'All-in-ones' – PowerBooks.

And once you've got a broad idea of the tasks you want your new Mac to perform, you'll find, with the help of the following guide, it much easier to pick the right machine.

The Performas

The Performas are aimed exclusively at first-time users and those who want to buy everything in one go. All the components you need come in two boxes – one for the screen, the second for the Mac itself, software, keyboard and mouse. This makes Performas very easy to buy. There's no need to cope with a specialist dealer or work out a configuration beforehand, which makes them ideal for High Street outlets like John Lewis, Dixons and Rymans.

► Performa 400. Apple's most basic Macintosh, it offers a reasonable level of power for most general applications, such as word processing, educational software and games. Put it to more power-intensive tasks like desktop publishing or photo editing and you'll find it wanting. For that reason, it's likely to be phased out at the end of the year.

► Performa 450. Considerably faster than the 400, it's a great all-rounder. Whatever your software needs, the 450 will give you a decent performance.

► Performa 475. **NEW!**

► Performa 600. Much less powerful than the 475, the 600 and its CD-ROM equipped sibling, the 600CD, still are the only Performas to pick if you want to expand the features your Mac offers. Their three NuBus slots will take third-party add-in cards, from performance enhancers to links with video systems. The 600 is the only Performa with space for internal peripherals like tape back-up kit.

The LCs

The LCs are sold separately from monitor and software. They are sold through specialist dealers – so quoted prices will always be for the system box only – and are aimed at users who have a reasonable knowledge of the Mac and need to mix and match memory, hard disk and screen to get the best set-up for the task at hand. That makes them good basic business and education machines.

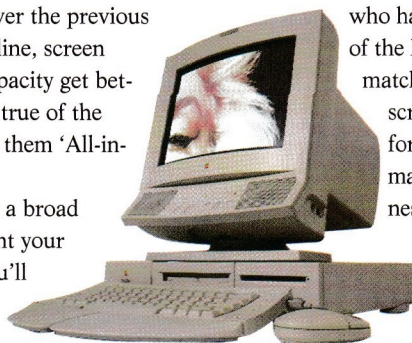
► LCIII. The basic business and education Mac. Its insides are identical to the Performa 450's vitals, and like that machine, the LCIII is a

great general purpose Mac, but one looking less attractive in the face of the...

► LC 475. **NEW!**

The Quodras

With no Centris machines to cloud the issue, the Quadra line is now the mainstream



The Quadra 660AV – multimedia master

Price Versus Performance

EXCLUDING THE Performa 400, all the Macs in Apple's current LC and Performa line-ups offer the power to perform all tasks (except those requiring specialist hardware) well – and that's really an expansion limitation rather than a speed problem. Given that, there's less need to decide what you want your Mac to do before you buy it. That means your decision will be primarily based on how much you can afford.

It's an easy choice to make if you've got a Performa on one hand and a Quadra on the other. If you don't know whether to go for a Performa 450 or a Performa 475, it's less clear cut. In many ways it's harder to decide whether to spend the extra hundred quid for a doubling in performance than it is between two completely different boxes at different prices, particularly if they both offer great performance.

Again, it boils down to what you can afford – opt for the fastest machine that your budget will stretch to, but don't feel you're letting yourself down if you're forced to buy a 450 or LCIII. Besides, even if you buy a 475, there will still be a better Mac a few hundreds pounds above it in a year's time.



business and professional Mac range. In fact, the Centris 610 and 650 have simply been renamed as Quadras and upgraded slightly.

All the Quadras offer the scope to install internal peripherals – their selling point over the LCs – and come with Ethernet, the standard corporate networking system, built in. All Apple screens are supported.

▶ Quadra 610. **NEW!**

▶ Quadra 650. **NEW!**

▶ Quadra 660AV. The first of Apple's multimedia Macs, pulling together stereo sound speakers, CD-ROM technology and telecommunications facilities – it can act as a phone and an answering machine – all in a 610-style box. The 660AV also understands spoken commands and can talk back.

▶ Quadra 800. The first 'tower' system – it stands on its end, in other words – in the Mac line-up, it is considered to be the base model for professional graphics and DTP work.

▶ Quadra 840AV. All the features of the 660AV built into a Quadra 800 box, it's also the fastest Macintosh currently available.

▶ Quadra 950. If the 840AV is the nippiest Mac, the 950 is the biggest and most expandable. It has five NuBus slots and space for four internal peripherals.

The PowerBooks

Since their long-awaited release in 1991, and now at last with a high-quality colour screen option, the PowerBooks have taken the portable computing world by the scruff of the neck. Already there are crowds of PowerBook imitations, all sadly Mac-incompatible. For the price, PowerBooks are every bit as good as their desktop siblings. Indeed, they are increasingly used as main machines rather than secondary systems.

▶ PowerBook 145B. The basic Mac portable, the 145B has a crude black and white – no shades of grey – display and limited memory expansion. That said, it's not a bad budget machine, particularly if you're after a word processing system or an adjunct to a main, desktop Mac.

▶ PowerBook 165. The best balance between price and performance in the

Key Features

Mac	Processor	Speed (MHz)	Coprocessor	Memory	Hard Disk	Screens	Basic Price
Performa 400	68030	16	N/A	4-10Mb	40/80Mb	Performa	£699
Performa 450	68030	25	Optional	4-36Mb	120Mb	Performa	£899
Performa 475	68040	25	Optional	4-36Mb	80/160Mb	Performa Plus	£899
Performa 600	68030	32	Optional	4-68Mb	80Mb	Apple Colour	£1599
Performa 600CD	68030	32	Optional	5-68Mb	80Mb	Apple Colour	£1699
LC III	68030	25	Optional	4-36Mb	80Mb	Not included	£600
LC 475	68040	25	Optional	4-36Mb	80/160Mb	Not included	£800
Quadra 610†	68040	25	Yes	4-68Mb	160/230Mb	Not included	£1000
Quadra 650†	68040	33	Yes	4-136Mb	160/230Mb	Not included	£1300
Quadra 660AV††	68040	25	Yes	8-68Mb	230/500Mb	Not included	£1800
Quadra 800†	68040	33	Yes	8-136Mb	230/500Mb	Not included	£2050
Quadra 840AV††	68040	40	Yes	8-128Mb	500Mb/1Gb	Not included	£3000
Quadra 950†	68040	33	Yes	8-256Mb	1Gb	Not included	£3550
PowerBook 145B	68030	25	Optional	4-8Mb	80/120Mb	Mono S	£999
PowerBook 165	68030	25	Optional	4-14Mb	80/160Mb	16 greys S	£1335
PowerBook 165c	68030	33	Yes	4-14Mb	120Mb	256 colour S	£1445
PowerBook 180	68030	33	Yes	4-14Mb	120Mb	16 grey A	£2445
PowerBook 180c	68030	33	Yes	4-14Mb	160Mb	256 colour A	£2699
Duo 230	68030	33	Optional	4-24Mb	80/120Mb	16 greys S	£1125*
Duo 250	68030	33	Optional	4-24Mb	200Mb	16 greys A	£1675
Duo 270c	68030	33	Yes	4-32Mb	240Mb	256 colour A	£2000

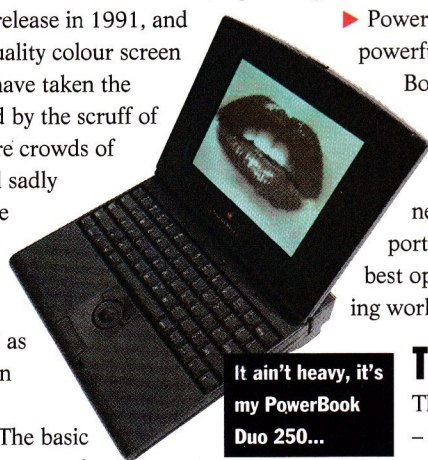
*Includes floppy disk drive and adaptor †Internal CD-ROM drive optional ††Built-in CD-ROM drive included
S=Supertwist (aka passive matrix) A=Active Matrix

PowerBook line-up, the 160 has a 16-greyscale screen and the ability to control a colour external monitor. Most popular applications will fly on it.

▶ PowerBook 165c. It's questionable whether it's worth paying the extra for the 165c's colour screen. The display quality isn't much better than that offered by the 165. If you want colour, the 180c is by far the more sensible option. Only buy this if you must have colour but you're on a very tight budget.

▶ PowerBook 180. The most powerful monochrome PowerBook, the 180 also has the best greyscale screen.

▶ PowerBook 180c. If it's power you need in a colour Mac portable, the 180c is the best option. Even photo editing works well on this one.



It ain't heavy, it's my PowerBook Duo 250...

The Duos

The Duos are a great idea – why buy a portable Mac and a desktop model,

when you can have a machine that doubles up as both? The trouble is, you have to pay a premium for the privilege which, though cheaper than, say, a PowerBook 160 plus LC III, is nevertheless a lot more pricey than the 160 alone. And since most PowerBook users are already desktop Mac owners, they have

been put off the Duos. The lack of a built-in floppy drive hasn't helped.

However, Apple's recent expansion of the line shows that it, for one, doesn't think the Duo idea is dead, and it's hoping that price cuts will attract a new gaggle of customers. But it may take more than that to convince users that Duos aren't just another line of portables.

▶ Duo 230. Equivalent in power to the PowerBook 165, the 230 is nevertheless cheaper, and comes with a bundled external floppy drive.

▶ Duo 250. **NEW!**

▶ Duo 270c. **NEW!**

REST IN PEACE

SO FAREWELL, then, the Centris 610 and 650. Ditto the Colour Classic, Performa 200 and LCII. Au revoir, Duo 210. All these machines have been dropped from the Macintosh range. But that doesn't mean you won't be able to buy them. Dealers will be keen to run down their stocks of these now-defunct computers, and may be willing to offer them at bargain prices to shift them. If you don't mind an 'obsolete' machine, it's well worth watching the ads in *The Mac* for good deals.

