

Buying a computer.

So, you are thinking of buying a computer, eh?

Only maybe you are not to sure how to go about it, nor how to make sense of all the pamphlets and advertising material that the retailers thrust in your face.

Well, here is a simple, straight-forward guide to buying computers, written in plain English.

This guide is divided into three main sections:

- [Types of Retailers](#)
- [Rules for Buying a Computer](#)
- [Terms used in advertising](#)

Types of Retailers.

Custom Sellers.

There are two ways to make a computer. One way is to buy all the parts needed, one at a time, and then assemble them into a computer. This is what the Custom Sellers do. These are generally your local technicians and local computer shops. You tell them what you want, and they use their knowledge and experience to make sure you are buying a computer that is just right for your needs.

The advantages of dealing with a custom seller are:

- By drawing on a wide variety of parts suppliers, custom sellers can make the perfect machine for you, no matter how unusual your requirements may be;
- To protect their good reputation, custom sellers have to maintain at least reasonable standards of quality. Some, indeed, specialize in having awesome standards of quality, especially in after-sales service and warranty care.

The disadvantages are:

- Retail prices may be a trifle higher than at the big stores.

Mass Merchandisers.

The second method of making a computer is to buy the parts by the thousands or the millions, and to assemble the computers by the warehouse-full. This is what manufacturers such as Hewlett-Packard, ACER and Dell do (to mention just a few well-known companies). They then either sell them direct to the users (in the case of Dell), or through the major retail chains (Hewlett-Packard and ACER).

The advantages of this are:

- By manufacturing in bulk, costs are kept to a minimum, and you are then buying a computer at the lowest possible prices;
- To protect their good reputation, the manufacturers have to maintain at least reasonable standards of quality.

The disadvantages of this are:

- If you want something different from what the manufacturers think is good for you, tough luck. They make their computers to a formula, and you either like it or lump it;
- Some manufacturers economize by making their computers as small as possible, in the process limiting the possibility of future expansion or upgrading. If you are sure that your needs will never change, this will be no problem, but otherwise it may prove a disadvantage some time in the future.
- When you are purchasing a computer from a mass merchandiser, you may find yourself dealing with sales people with little or no knowledge of computers, and with a company with little or no interest in any after-sales problems you may have. Usually, both the retailer's and the manufacturer's head offices can be far, far away, and, for some companies at least, out of sight is definitely out of mind.

Four rules to follow when buying a computer.

Rule One: Buy for your current needs.

There is no advantage in buying a computer with speed, size or features that you don't currently need, or won't need for a long time to come. Chances are that anything you buy today will be thoroughly out of date by the time that you do need something new!

Here are a few good rules of thumb when buying a computer for home use:

- If you are used to using a particular computer at school or work, consider getting something similar for use at home;
- If you are a total novice at computers, and can afford it, buy a low-priced new computer;
- If you are a total novice, but have limited funds, contact your local computer club. They may be able to help you buying a computer that has been refurbished to a high quality at a low price;

Rule Two: Consider your future needs.

Many people know exactly what their computer has to do, and nothing much changes from one year to the next. For others, however, their computer is a work in progress, with hardware and software constantly needing to be added or upgraded.

If you are one of those people whose needs are likely to change, here are a few questions to ask when you consider buying a computer:

- Does it have "expansion" capacity - that is, is it able to accept additional items of equipment? For instance, will you be able, at some future date, to improve the video display, add a new harddrive, or install an extra printer?
- How much new software is available for this particular model? Some computer models allow very little choice as to new software; what you get when you buy may be all you will ever be able to get. Other models, however, will accept just about any type of software, giving you an almost unlimited supply of new titles.

Rule Three: Consider maintenance and repair.

Like all other kinds of machinery, computers can break down. Sometimes, they can break down quickly, in which case you may be able to get them repaired under warranty; other times, they can break down after many years, leaving you hunting to buy replacement parts.

Here are a few questions to ask before buying:

- If the breakdown is covered by warranty, do you have to pay for the freight when sending it back for repair? Sometimes, this can be very expensive indeed.
- If it breaks down, are there qualified technicians for this particular brand of computer in your neighborhood? If you have a choice of two brands, and one has

no suitable technicians available locally, the other brand may be a better choice. (This is a particularly important question if considering buying an Apple computer.)

- When you consider buying a computer, make sure spare parts are readily available. (This is a particularly important question if considering buying an Apple computer.)

Rule Four: Consider the Internet.

In recent years, two things have happened in the world of computers:

1. The Internet has happened, and turned home computers from hobbies into necessities; and
2. The viruses, spywares and other nasties have multiplied, and turned it into a very dangerous place for the unprotected and unwary.

Here are two questions to ask before buying:

- Does the computer come with a modem? If the computer is brand-new, it almost certainly will; if it is second-hand, however, it may or may not.
- Does it have the right software to protect you, should you venture onto the Internet? Very few computers do, and almost no new ones.

Understanding the Sales Talk.

So, you've just received a leaflet in your letterbox, and it is filled with wonderful computers at amazingly low prices. But what does all the gobblegook in small print mean?

Here is a quick guide to computer sales-talk.

Home vs Business Computers.

Many advertisers label their computers as being for either "home" or "business". If you want a computer mainly for sending and receiving emails, surfing the World Wide Web, and maybe writing the occasional letter, then a home computer is for you. If, however, you want to do more - play games, create high quality graphics or make movies - then you will need to buy something more powerful (and more expensive).

Laptop or Desktop.

Most people own a "desktop" computer. That's the kind you see in libraries and offices, with a box or tower containing the working parts of the computer, and the monitor, keyboard and mouse all sitting separately. By contrast, "laptops" (also called "powerbooks") are the small portable computer popular with business people, students and travellers. Whilst laptops are portable and handy to have, they are more expensive, are more difficult to fix, and can be awkward to type on for some people due to their small size. A desktop is not easily portable but is much cheaper and easier to repair, and with more hardware options available for future upgrades.

Windows, Macintosh or Linux.

In a nutshell, the world is divided into Windows, Mac and Linux computers, each having its own special set of advantages and disadvantages.

- **Windows:** For the past ten years, it has been a Windows world. Most (about 96% by some counts) of personal computers are now Windows machines, so most experienced computer users and technicians are familiar with it. Also, most hardware and software is designed for it;
- **Macintosh:** With about 2% of PC users, Mac is extremely easy to use, very much more stable than Windows (meaning fewer calls to the technician), and often very much safer on the Internet. It is, however, generally more expensive than Windows machines, and finding qualified Mac technicians may be difficult, especially in remote places and small towns;
- **Linux:** Very popular with IT professionals and computer hobbyists, Linux is almost unknown amongst home users. Like Macintosh, it is wonderfully stable, and very resistant to Internet nasties - but it offers very little by way of software. Generally recommended only for very undemanding users, or for users who prefer to be fixing their computers, rather than using them.

Processing Speed.

Processing speed refers to the speed with which a computer carries out its tasks. A slow speed means that everything takes a long time to happen, while a fast speed means exactly the opposite. These days, advertisers usually refer to processing speed in terms of "megahertz" (MHz) or "gigahertz" (GHz). A 100 MHz (0.1 GHz) computer is (by modern standards) unbearably slow, while a 5,000 MHz (5 GHz) computer (for most purposes) is lightening fast. For most home users, any computer made within the last 10 years will be fast enough.

An older way of indicating processing speed was to refer to the model of Pentium chip being used. Pentium is a brand name; the name of the chip manufacturer. Over

the years, Pentium has brought out a variety of models, which are generally known as Pentium 1, Pentium 2, Pentium 3 and Pentium 4. For most home purposes, Pentium 2 or anything above will usually be satisfactory. (There are other brands of chips, including Celeron and AMD, but these do not have a widely recognized coding system.)

Memory.

Broadly speaking, this refers to how many tasks you can ask the computer to do at once. Computers with little memory tend to slow down dramatically - or even stop altogether - once you ask them to do more than one or two things at once.

Memory is often referred to as "RAM", and is measured in either "megabytes" (Mb) or "gigabytes" (Gb).

So how much memory will your new computer need? This depends on the operating system that you choose. If you choose a computer with Windows 98, 64Mb of memory will usually be fine, while , at least 256 Mb is preferred for Windows XP.

Hard disk.

Your computer's hard disk (also called a "hard drive") is where it keeps data for daily use. Harddisk size is measured in either "megabytes" (Mb) or "gigabytes" (Gb). New computers are likely to have at least 40 Gb or 80 Gb harddrives - with more being better than less.

If you are planning to buy a home computer, any size will probably be big enough.

Floppies, CDs and DVDs.

These are different ways of transferring and storing data. Transferring data means being able to transfer data - programs and applications, emails, photos, music or whatever - to and from your computer. Storing data means putting your personal data into some kind of long-term storage. Together, they allow you to share data with other people, and also keep your personal data safe should your computer's hard disk fail.

For normal home use, the absolute minimum requirement is a CD *player*, which allows your computer to get music or programs from a CD. The best choice, however, is to choose a machine with either a CD or DVD *burner*, which allows your computer not only to read CDs or DVDs, but also to burn your data onto them. Apart from that, a floppy drive is desirable, but not essential.

In brief, the choices are:

- **Floppy disks:** They hold 1.4 Mb of data, are very useful for quickly shifting data between computers, and useful for maintenance purposes. Not suitable for long term storage (say, over a few years).
- **CDs** hold up to 700 Mb of data. With care, they should last for many years.

- **CDs** hold up to 4,700 Mb (4.7 Gb) of data. With care, they should last for many years.

Monitors.

Usually, computers are sold together with a monitor, but not always. If a particular cheap deal is on offer, look carefully to see whether or not it comes with a monitor.

Monitors come in two types, CRT or LCD. In both cases, take care to check the size of the screen (anywhere from 14 inches to 21 inches) and the optimum resolution (such as 1024 x 768 pixels).

CRTs are the standard monitor you see on many computers; they look a lot like a normal TV. Large and often heavy, they are not easily portable. They are, however, quite cheap, and usually very reliable, lasting well beyond their warranty. Second-hand CRTs are often excellent value; just be sure to see them working first, though.

LCDs, or TFTs are winning popularity due to their light weight, small footprint and flat screen. They are also easier on your eyes than a CRT if used for long periods. They are, however, more expensive, are more limited in what resolutions they can accurately portray (which is mainly a problem for game machines), and may not last as long as CRTs.