

*Wyygeston & Queen Elizabeth I College
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Introduction to Universal Serial Bus (USB) Drives
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What is a USB drive and why should I care about a review of them?



USB drives are known by many names: USB memory stick, pen drives, thumb drives, and USB flash drives are the most common.

They are small, lightweight portable storage devices that connect to, and are powered by, a computer or laptop via a USB port or hub. As well as being smaller than CDs or floppy disks, they can store much more data – making them ideal for large multi media files. And according to some manufacturers – they can maintain data for up to 10 years.

Typically, USB drives are **plug and play**. This means that you connect the drive to your computers USB port and if you are running Windows ME, Windows 2000 or Windows XP, the drive will automatically be detected and appear when you select 'My Computer' as a drive (usually as 'Removable Disk'). Just Double click on it to access files you've already stored, or save files to it by selecting it from the drop down menu on your save box.

Buying a new drive? Keep in mind:

1. Storage Size

The typical storage sizes range from 64MB to 2GB. Don't bother buying anything less than 128 MB, and remember that more memory = more money, but buying memory in bulk, like groceries, is usually cheaper. Prices are coming down all the time, and by shopping around you can save yourself money.



Size	Approximate price	= To about how many floppy disks?	Best For...
128 MB	£10 - £35	89	People with a lot of text files and some image files. If you're only storing word documents and PowerPoint's, 128 MB will go a long, long way.
256 MB	£20- £45	178	People with a lot of text files and a large galley of image files. If you want to store a large amount of word documents and image files, 256 should be adequate.
1GB	£60- £150	711	People with multiple image galleries, and audio and video files. If you need space for predominantly multi media files – video clips, huge image galleys, audio files and web pages, 1 GB is the capacity you should be thinking of investing in.

2. Data transfer speeds

Look for the words Hi-Speed USB or USB 2.0. These are the latest and fastest models.

3. Data Backup

Always keep more than one copy of important data. If your flash drive gets lost or stolen, or ceases to work, you must have backup files.

4. Operating System Requirements

In order to work with Windows 98, a USB flash drive typically requires a driver (a software programme) that you obtain from the manufacturer, usually from a download on their web site or from a CD that comes with the drive. I've found these are generally unreliable, and can crash your computer. If you don't have Windows 2000 or a later version at home, stick to CD's, DVD's and floppies for now. The best drive is one that doesn't need any additional software, although there are specialist secure drives available (for example with finger print protection) for sensitive and critical information. These need additional software installing on your network if you want to use them at work, so make sure you talk to your IT services manager before investing!



5. Design Issues

Remember that the whole point of the drive is that it can stand up to everyday handling - don't buy models with thin key ring attachments, and if at all possible avoid models with clips on the lids - these break. Watch out for overly 'fat' models - you may have problems inserting them into your USB port, especially if you have a thin laptop. If your USB port is right at the back of your computer, invest in a USB extension lead (these are not expensive & often come free with USB devices). New computers should have USB ports on the front face.



6. File Sharing

Unlike a CD or Disk, these drives are designed to be thrown in the bottom of your bag, round your neck, on your keyring, or in a pocket. Get into the habit of keeping them with you at all times! They're especially handy for sharing files - for example, if you attend a meeting or workshop you can ask to make a quick copy of the presenters' files for sharing with your colleagues or putting on your web pages.

7. Recommendations:

1. Best Value:



[Dane-elec USB 2.0 Pen Drive](#)

On the minus side it's got a flimsy lid and the lanyard attaches to the drive. On the plus side it's thin and it's around £20 for 256MB, which is as cheap as it's going to get at the moment.

To be honest there isn't a lot to choose from the bargain end of the market. See if you can get a USB extension cord thrown in for the price.

2. Best Design:

[Imation USB 2.0 Swivel Flash Drive](#)

Currently available in 128MB (£25 approximately) 256 (£45 approx.) and 512MB (£65) and soon available (in the same design) in 1 and 2 GB sizes, this isn't the cheapest model on the market. It is, however, the best designed. The only drive with an integral, swivel cap, so you'll never lose it. This could significantly prolong the life and usefulness of your drive. You also get a lanyard which attaches to the cap top



with a quick release mechanism, and a USB extension cable. The Imation model is attractive, small, thin and lightweight.

3. Best for serious people with wallets:



[Freecom USB Card](#)



Unlike most designs on the market, this model has the dimensions of a credit card and is designed to be used by people who always have their wallets with them, or as the company puts it, people "who value their data as much as their money"! While a lanyard is probably the best option if you are a woman and generally have to put up with pocketless clothes, if you are the kind of person who always has a filofax, PDA or wallet to hand then this may be a good solution for you.

4. Best for large amounts of data:

[Apple iPod Shuffle](#)



While you can get (slightly) cheaper USB storage devices, the new iPod shuffle is the current hands down winner when it comes to multimedia file storage. It comes with two lids, one of which is attached to a lanyard, and a pair of Apple earphones. You can use it to listen to your sound files (music, lectures, and audio notes). Compared to similar devices on the market, Apple for once is offering an extremely competitive product, with the advantage of being able to use the free iTunes software (which you can install on your home computer or laptop, but not on the College network). 512 MB is available for just £69 and 1GB for £99. Some people will like the clean, simple styling; others will think it's a bit medical looking.

If this round up has whet your appetite for USB drive technology, and you'd like to know more about technical and security issues, check out the [Wikipedia entry on Keydrives](#). For information on everything to do with USB head over to the excellent [USB.org](#)

