USB storage devices (Type A - known as memory sticks or flash drives)

For the purpose of this article we are referring to the `**USB Type A**` port – these are one of the most commonly used USB port types and are rectangular in shape and come with either 4 or 9 internal pins and in a variety of colours and are generally fitted to most computers and other devices.

USB storage devices also known as a USB memory stick, flash drive and various other names, have now been around for over 20 years now and can be used to store files and data – they are most commonly used to transfer simple files and data from one computer to another or used for short term data backup for a wide range of electronic devices; they can also be used to install applications & operating systems and may also be used to boot (start up) computers too.

USB storage drives are often measured by their capacity and the rate at which they transfer data. Storage is now measured in GB or TB. Transfer rates may be given in megabytes per second (MB/s) or megabits per second (Mbit/s). File transfer rates vary considerably among devices and are something that many people seem to ignore when considering a purchase of a new USB memory stick.

Approximate speeds of early USB devices were: **USB 0.8** ran at 1.5 Mbit/s, **USB 1.0** ran at 1.5 - 12 Mbit/s and **USB 1.1** ran at 12 Mbit/s. All of these devices are now obsolete.

Approximate speeds of current USB devices are: **USB 2.0** run at 480 Mbit/s, **USB 3.0** run at 5 Gbit/s, **USB 3.1** run at 10 Gbit/s and **USB 3.2** run at 20 Gbit/s. All of these devices are still available.

So, as you can see from the approximate figures above that USB 3.2 can run at 2x USB 3.1, 3.1 devices can run at 2x the speed of USB 3.0, USB 3.0 can run at over 10x the speed of USB 2.0. **Devices are also backwards compatible, but will only run at the slower speeds.**

The capacity of USB memory stick storage devices vary considerably – originally they were all pretty small in storage capacity, but now you can find them with a storage capacity of over 1TB.

You can **normally** identify the USB 3.2 ports with a red fitting, USB 3.1 and 3.0 ports with a teal/blue fitting, USB 2.0 ports with a black fitting and the older obsolete USB fittings were often white in colour. You can also find other USB port colours, but we are concentrating on the most common USB ports colours. The faster USB 3.2, 3.1 and 3.0 **should** also be marked with `**SS**` or the faster `**SS 10**` which means **Super Speed or Super Speed 10 Gbit/s** – the `**SS**` **symbol may or may not be written on some devices** and beware that some USB port colours do not conform to the correct standards – if in doubt, check with the manufacturer.

USB memory stick purchases should not just be all about capacity and price, but also it is very important to consider the data transfer speeds, as this will dramatically either increase or decrease the time it takes to either back up or transfer large amounts of data. Also note that if your device doesn't have the faster USB ports, any faster USB device that you insert will only work at the slower speeds – so, consider your purchases carefully.

Information provided by Dibtech Computers in Devizes.
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