

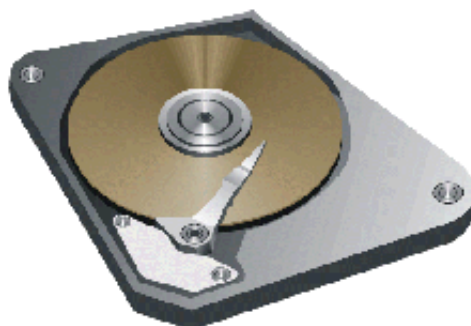
Magnetic Storage Devices

The most common storage devices are Magnetic. A Magnetic Storage Device works by applying electrical charges to iron fillings on revolving media, orienting each filling in one direction or another to represent a 0 or 1. The Magnetic Storage devices are popular because they provide an inexpensive means of recording large amounts of information. Also, the media used by Magnetic devices can be read, erased or rewritten, and can therefore be used over and over. Magnetic Storage devices are popular because they provide an inexpensive means of recording large amounts of data. Because these media are magnetic, thus they should be kept away from magnets, such as those found in telephones, which can wreck havoc with the information stored on them. The main types of magnetic storage media include, [Magnetic Disks](#) and [Magnetic Tape](#).

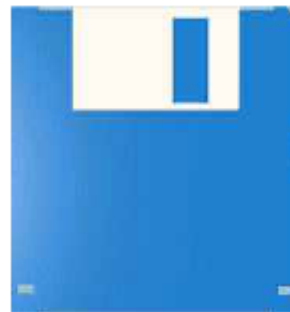
Magnetic Disks

Magnetic Disks are very popular means of Secondary or External Storage. A Magnetic Disk is usually made up of plastic like material Mylar or any metallic platter coated with ferromagnetic materials. The data is stored as polarized magnetic particles. The read/write heads are small electromagnets which are capable to read, write, or even erase data stored as magnetic spots. These heads are fastened to an arm in a disk drive, so that they can move quickly and directly to any location on disk to store or retrieve data. The data can be accessed randomly from the disk.

Some of the examples of Magnetic Disks include:- [Magnetic Hard Disk](#), [Floppy Disk](#), Removable Disks etc.



Hard Disk



Floppy Disk



Magnetic Tape

Magnetic Tape is one of the most popular storage mediums for voluminous data that is sequentially accessed and processed. The tape is a plastic ribbon usually $\frac{1}{2}$ inch wide that is coated on one side with an iron oxide material which can be magnetized. The tape ribbon is stored in reels, tape cartridges or cassette. It is similar to the tape used on Tape recorder except that is of higher quality and more durable. The tape can be erased and reused indefinitely. The old data on tape is automatically erased as the new data is recorded in the same area.

The Information is recorded on the Tape in the form of tiny invisible magnetized and non-magnetized spots representing "0s and 1s" on the iron oxide side of the tape. The tape is divided into vertical columns called Frames and horizontal rows called as Channels or Tracks.

Magnetic Tape Drive is a machine that can either read data from a tape into the CPU or it can write the information being produced by the computer onto a tape.

Some of the examples of Magnetic Tapes include:- [Tape Cartridge](#), [ZIP Drive](#) etc.

