

# Computer Systems

There are two main functions to a computer system; The Hardware and the Software.

The hardware is the name given to the part of the computer that can be touched.

The hardware is the name given to all the devices that makes up the computer system.

Some examples of hardware are:

Input devices

Central processing unit (CUP)

Backing store

Output devices

Hardware is the term used for the parts of the computer you can touch and handle.

Hardware is the name given to the devices that make up a computer system. The

hardware devices are split into two groups; they are input devices and output

devices. Input devices are used to get data into a system. Output devices are used to receive data from the computer.

## Input Devices

Input devices are used to get information or data in to the computer. The ideal input device would be one that would get the information in to the computer accurately with out human intervention; it would also be quite cheap.

Here are the main input devices used today:

\*Keyboard

\*Mouse

\*Tracker ball

\*Joystick

\*Light pen

Output

Output devices provide the results after processing, in a suitable form. In most cases these will be in hard copy (print out) or on a screen.

Here are the main output devices used today

## **\*Central Processing Unit**

The Central Processing Unit (CPU) often known as the processing Unit. The CPU turns the raw data to information. The central processing unit works in a very complicated way.

The three main elements of a CPU are:

The control unit

The arithmetic and logic unit

The immediate access unit

The CPU is also thought to be the 'brain' of the computer.

## **\*Visual Display Unit**

The Visual Display Unit (VDU) (or the monitor as it is also known) is taken for granted. They are ideal for showing the results from enquiries where no print out is needed.

\*Printer-

-Laser

-Ink-jet

-Dot matrix

\*Voice output

## **\*Keyboard**

The Keyboard is the oldest and most familiar of all the input devices. They contain their own chips. Each key acts as a switch, which closes when the key is pressed. Each key has a code, when a key is pressed the code is sent to the central processing unit. The CPU translates this code into an ASCII code (the code that computers use to represent characters on the computer keyboard), which is then used by the computer program.

## **\*Mouse**

A mouse is a device that when it is moved over the desk a cursor on the screen is moved. There is a ball underneath the mouse that rotates when the mouse is moved. Sensors pick up the movement to move the cursor over the screen. A mouse usually has two to three buttons that are used to make selections.

## **\*CD-ROM**

The CD-ROM makes multimedia possible because of its abilities to have a large storage capacity that is needed for photographs and video chips.

CD-ROMs have many useful features, including:

1=they are quite easy to handle and durable

2=they can be used for multimedia presentations

3=600 MB of data can be held on one CD-ROM; hundreds of floppy disks would have normally been needed to store that amount of information.

CD-ROM disks are can be read only disks; you can read all the information but you cannot alter it or save more data on them.

## **\*Printer**

There are three types of printers; ink-jet, laser and Dot matrix.

Ink-jet and laser printers are the best of the three because the dot matrix takes a long time and is not of a high quality.

## **\*Tracker Ball**

Is like an upside down mouse. The user rotates the ball but the 'mouse' stays still.

The tracker ball does not take up as much space as a mouse.

The Comparison of two output devices

The two output devices I have decided to compare are:

A Laser printer and ink-jet printer. I am going to compare these two output devices to see which is the best.

Advantages of a Laser printer

- Because they are page printers they are able to print a page at a time so this means that they are very fast. They can print up to 8 pages per minute
- They produce text and graphics at a high standard. They print at 300 to 600 dots per minute. This improves the quality of the image.
- They are quiet when in operation, compared with a dot matrix; the only sound that a laser printer makes is the noise of the cooling fans and the paper moving.
- They are equip with cooling trays, for both input and output paper, so this means when they are in operation they do not need to be supervised.

## **\*Dot-matrix**

Dot-matrix printer use tiny pins in regular arrangements that are fired out to hit an inked ribbon that produces a pattern of dots on the paper. Dot-matrix printers are able to print in colour and they can display both text and graphics. They are impact printers, which can print through layers of paper. This means they can produce multi-part stationary. They are the cheapest printers to buy and run.

## **Electrical signals**

Electrical signals can be sent from one computer system to a main computer system, which is remote from the terminals. Electrical signals can be used to control devices such as burglar alarms and central heating systems.