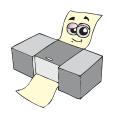


# **SEE IT TRUE**

# **Output Devices**



### **OUTPUT DEVICES**

Output devices are devices used to print, view or display the input and processed data like numbers, symbols, pictures and music.
All of these data are processed in the system unit going to the output devices respectively. Below are the output devices:

### 1. Printer

It is an output device that can create a permanent copy into a paper of the results generated by the program being run on the computer. This printout is sometimes referred to as **hard copy** which can be monochrome (black and white) or a colored one.

# Four main types of printers.

#### A. Dot-Matrix Printer

The characters and lines created in this kind of printer are made up of tiny dots. Dot-matrix printer produces a low - quality output. It is inexpensive, loud sounding and a slow moving printer.



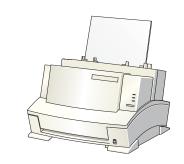
# B. Inkjet/Deskjet Printer

The inkjet/desk jet printer sprays ink on the paper to produce images. This is less expensive and slower than the laser printer. In addition, it is quiet and produces a high-quality output.



### C. Laser Printer

Laser printer uses laser heat to make the powder stick to paper in order to produce images. It works like a photocopy machine and produces high-quality printouts. Laser printer is expensive, quiet and fast.



### D. Graphics Plotter

It is a printer for big paper. This printer uses colored pens that move over the surface of the paper according to the instruction that the computer has programmed. Computer Aided Design (CAD) programs use graphics plotter to print big printouts.



## 2. Speakers and Headphone

These devices are used to hear audibly the sounds from your computer. They are attached to the CPU.



Output devices translate the data processed by the computer into a format that people can understand, appreciate and work with.

### 3. Monitor

The monitor lets you see what you are doing while working on the computer. It shows a temporary result (softcopy) generated by the program being run on the computer. It can display output in color or in monochrome (black and white).

# Three types of monitor

- **A. CRT** (Cathode Ray Tube) **Monitors** were the only choice of monitors that the consumers had for many years.
- B. LCD (Liquid Crystal Display)/ Flat Panel Monitors - display colored images sharper than the CRT but the technology is expensive. LCD monitors are backlit by a single light source and use a liquid crystal display to produce the image.
- C. LED (Light Emitting Diode) Monitors are used extensively in the computer manufacturing industry, providing crisp images of fast moving objects and darker blacks. LED monitors also use a liquid crystal display, but utilize a large number of LED to backlight the display. LED displays can produce images which are of a higher quality than LCD displays.





