

Topic: Output Devices

- Soft Copy: Monitor, Projector, Speakers
- Hard Copy: Printers(impact & non-impact)



Output Devices

Hardcopy Output Devices

Printers: are used to present and store all kinds of information on paper, such as letter, legal documents, scientific data and graphs, photographs and advertising material.



Output Devices

Hardcopy Output Devices

Printers:

- 1. Impact Printers:** refers to a class of printers that work by banging a head or needle against an ink ribbon to make a mark on the paper.
- 2. Non-Impact Printers:** any printer, such as a laser printer, ink-jet printer, LED page printer, that prints without striking the paper, Non-impact printers are quieter than impact printers, and also faster due the lack of moving parts in the print head.

Output Devices

Hardcopy Output Devices

Printers:

1. Impact Printers:



1. Non-Impact Printers:



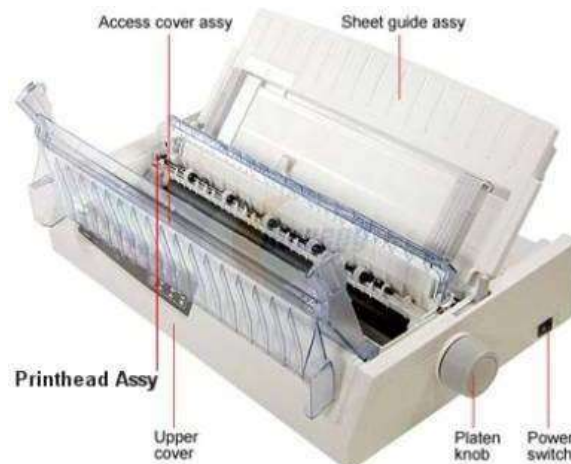
Output Devices

Hardcopy Output Devices

Printers:

1. Impact Printers

Dot Matrix Printer: uses a print head that moves back-and-forth, or in an up-and-down motion, on the page and prints by impact, striking an ink-soaked cloth ribbon against the paper, much like the print mechanism on a typewriter.



Output Devices

Hardcopy Output Devices

Printers:



1. Impact Printers:

A. Dot Matrix Printer

2. Non- Impact Printers:

A. Inkjet Printer

B. LaserJet Printer

C. Thermal Transfer Printer

D. Plotter Printer

Output Devices

Hardcopy Output Devices

Printers:

2. Non- Impact Printers

a. **Inkjet Printer:** produce an image by spraying ink onto the paper in a dot matrix pattern. Color graphics can be produce by spraying cyan, magenta, yellow and black into onto the paper.



Output Devices

Hardcopy Output Devices

Printers:

2. Non- Impact Printers

b. LaserJet Printer: Use a process similar to that of a photocopying machine and are very common in the modern office. A laser beam and dry powdered ink called toner produces a very fine dot matrix pattern.



Output Devices

Hardcopy Output Devices

Printers:

2. Non- Impact Printers

c. **Thermal Transfer Printer:** Process in which material is applied to paper (or some other material) by melting a coating of ribbon so that it stays glued to the material on which the print is applied.



Output Devices

Hardcopy Output Devices

Printers:

2. Non- Impact Printers

d. Plotter Printer: is a printer that interprets commands from a computer to make line drawings on paper with one or more automated pens. Unlike a regular printer , the plotter can draw continuous point-to-point lines directly from vector graphics files or command



Graphics software

There are mainly two types of graphics software:

- General programming package
- Special-purpose application package

General programming package

- A general programming package provides an extensive set of graphics function that can be used in high level programming language such as C or FORTRAN.
- It includes basic drawing element shape like line, curves, polygon, color of element transformation etc.
- Example: - GL (Graphics Library).

Special-purpose application package

- Special-purpose application package are customize for particular application which implement required facility and provides interface so that user need not to very about how it will work (programming).
- User can simply use it by interfacing with application.
- Example: - CAD, medical and business systems

End of Unit 1