

Difference Between Input and Output Devices

Input devices solely function to provide data to the system, whereas output devices take data that other devices have processed. Knowing the difference between input and output devices is an important part of the [GATE CSE syllabus](#). Further, we will discuss the difference between input and output devices. The following table summarises the significant differences between the two.

Key Difference Between Input and Output Devices

Input Devices	Output Devices
Input Device accepts the user's data and transmits it to the processor for processing.	The output Device receives the data from the processor and returns it to the user.
Input Device can send data to another device, but not the other way around.	Output Devices can collect data from another device and use it to generate output. However, you won't be able to transfer data to another device.
Examples of Input Devices are a keyboard, an image scanner, a microphone, a pointer, a graphics tablet, and a joystick.	Examples of Output Device monitors, printers, plotters, projectors, and speakers.
The user controls the Input Device.	The computer controls the Output Device.
Input Device translates user-friendly instructions into machine-friendly instructions.	Output Device translates machine instructions into understandable language for the user.

What is an Input Device?

Input devices are the parts of a computer system that take data and instructions from the user and turn them into a pattern of electrical signals in binary code that a digital computer can interpret. Examples of input devices include a keyboard, a mouse, and so on.

These are used to input commands as well as information and data directly. The user can utilize these devices to enter commands/ instructions and data into the computer. While an input device is capable of sending data, it is not capable of receiving data from another device. These are user-controlled and have complex coding.

What is an Output Device?

Output devices are the parts of a computer system that transform digital signals into user-friendly formats. In general, output devices are the inverse of input devices. Data is

also sent from one computer system to another using output devices. Examples of output devices include a printer, a monitor, and speakers.

The data processing findings are reproduced, interpreted, or shown on the output devices. An output device can take data from another device and produce output. Because the computer controls the output devices, the user simply needs to view the outcomes and is not required to learn the complete process.

Main Difference between Input and Output Devices

The main difference between input and output devices is that an input device is attached to a computer that transmits data. In contrast, an output device is attached to a computer that receives data. The output device reproduces or displays the data sent by the input device to the computer for processing. While most devices can just accept input or output, few can also accept input and show output. This article has provided the detailed difference between input and output devices.

