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Computer Mouse Types

Until recently, developers and ordinary users have used a computer without a computer mouse. Now all PC users cannot imagine working without this little helper. A computer mouse is an input device, it passes the information and computer program performs actions. All computer mice are divided into several types: mechanical, optical, laser, wireless, etc.

Mechanical mice have a rotating ball inside. The ball mouse has two freely rotating rollers located 90 degrees apart. One roller detects the forward–backward motion of the mouse and other the left–right motion. Today, this mouse has been replaced by the optical mouse.

The laser mouse has no moving parts inside. Optical mice make use of one or more light-emitting diodes (LEDs) and an imaging array of photodiodes to detect movement relative to the underlying surface, rather than internal moving parts as does a mechanical mouse. Its benefits include the reliability and the highest resolution. They can operate on glass and mirror surfaces.

Cordless or wireless mice transmit data via infrared radiation or radio (including Bluetooth). The receiver is connected to the computer through a serial or USB port, or can be built in. Modern non-Bluetooth wireless mice use USB receivers. Some of these can be stored inside the mouse for safe transport while not in use, while other, newer mice use newer "Nano" receivers, designed to be small enough to remain plugged into a laptop during transport, while still being large enough to easily remove.

Also, there are inertial and gyroscopic mice. Often called "air mice" since they do not require a surface to operate. Inertial mice detect rotary movement for every axis. They work using 2 degrees of rotational freedom. The user requires only small wrist rotations to move the cursor, reducing user fatigue or "gorilla arm".

3D mice also known as bats, flying mice, or wands, these devices generally function through ultrasound and provide at least three degrees of freedom. The mouse was tracked in three dimensions worn on a ring around a finger, which enabled the thumb to access three buttons.

Ergonomic mice are intended to provide optimum comfort and avoid injuries such as carpal tunnel syndrome, arthritis and other repetitive strain injuries. It is designed to fit natural hand position and movements, to reduce discomfort.

Thus, modern producers present a wide range of computer mice to choose from.