computer mouse

The computer mouse is an input device that helps one operate the computer. People naturally point at things with their index finger, and the mouse uses the same concept. When you want to activate something in the computer, you simply move the cursor over the item you want to activate and click

the button on top of the mouse. The mouse is designed to sit under one hand of the user and detect movement relative to its two-dimensional supporting surface. The mouse senses our motion and clicks and sends a signal to the computer so it can respond appropriately.

wikipedia.com

First Mouse
Dr. Douglas Engelbart invented the first mouse in 1963. It was called the mouse because the early models had a cord attached to the rear part of the device.

presence-pc.xom

Logitech V200 Wireless Optical Mouse
Popular cordless notebook mouse features 2.4 GHz for five times greater range and viturally no interference.

flickr.com

*Apple
ADB Mouse*

flickr.com

*Apple
USB Mouse*

microsoft.com

*Microsoft Basic
Optical Mouse*

logitech.com

*Logitech Basic
Optical Mouse*

accellcables.com

*Mini
USB mouse*

microsoft.com

*Microsoft
IntelliMouse Explorer*

Douglas Engelbart of Stanford Research Institute invented the computer mouse in 1963 after extensive usability testing; however, the mouse was ahead of its time. The mouse did not become a success until the introduction of the Apple Macintosh computer and the success of Microsoft's Windows operating system. The first mouse, a bulky device used two gear-wheels perpendicular to each other: the rotation of each wheel translated into motion along one axis. Engelbart received a patent for the wooden shell with two metal wheels (computer mouse U.S. patent #3,541,541) in 1970, describing it as an "X-Y position indicator for the display system."

Mechanical Mouse

Bill English invented the so-called "ball mouse" in the early 1970s while working for Xerox PARC. The ball mouse replaced the external wheels with a single ball that could rotate in any direction. The ball's motion, in turn, was detected using perpendicular wheels housed inside the mouse's body. This variant of the mouse resembled an inverted trackball and was the predominant form used with personal computers throughout the 1980s and 1990s.
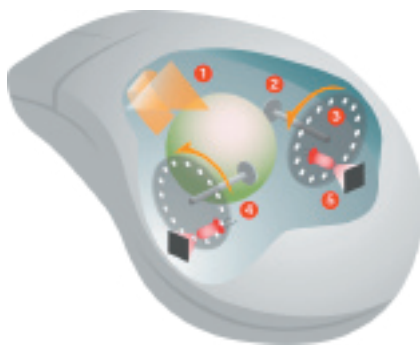

Diagram of a Mechanical Mouse

Wikipedia.com

Operating a Mechanical Mouse

1 Moving the mouse turns the ball
2 X and Y rollers grip the ball and transfer movement.
3 Optical encoding disks include light holes.
4 Infrared LEDs shine through the disks
5 Sensors gather light pulses to convert to X and Y velocities.

Logitech MX610 Wireless Mouse

flcikr.com

Optical Mouse

Developed by **Agilent Technologies** and introduced to the world in late 1999, the optical mouse actually uses a tiny camera to take thousands of pictures every second. The optical mouse uses a small, red light-emitting diode (LED) that bounces light off that surface onto a complementary metal-oxide semiconductor (CMOS) sensor. The CMOS sensor sends each image to a digital signal processor (DSP) for analysis. The DSP detects patterns in the images and determines how far the mouse has moved and sends the corresponding coordinates to the computer. The computer moves the cursor on the screen based on the coordinates received from the mouse. Unlike the mechanical mice which requires a mouse pad, the optical mouse can operate on almost any surface. It also runs smoother, and requires no cleaning.

Wireless Mouse

Most wireless mice use radio frequency (RF) technology to communicate information to your computer. Being radio-based, RF devices require two main components: a transmitter and a receiver. The transmitter is housed in the mouse. It sends a electromagnetic signal that encodes the movement of the mouse and the buttons you click. The receiver, which is connected to the computer, accepts the signal, decodes it and passes it on to the mouse driver software and your computer.

Graphics tablet

This is an alternate type of input device that can be used in place of, or in conjunction with, a mouse, trackball, or other pointing device. It allows one to hand-draw images and graphics, similar to the way one draws images with a pencil and paper. Graphic tablets consist of a flat surface upon which the user may "draw" an image using an attached stylus, a pen-like drawing apparatus. The image generally does not appear on the tablet itself but, rather, is displayed on the computer monitor. Graphics tablet is great for graphic artist because it has pressure-sensitivity. This means the flat surface can sense the pressure one draws on the tablet, so it is great for creating computer graphics.

NISIS USB Graphics Tablet

nisis.com

UC-Logic 6"x4" USB Graphics Tablet

uc-logic.com

Wacom Graphite Bluetooth Graphics Tablet

dpnow.com

References
www.en.wikipedia.org/wiki/Computer_mouse
www.computer.howstuffworks.com/mouse.htm
www.graphicssoft.about.com