Basic Computer Hardware Tutorial

The term computer hardware refers to the physical components of a computer – basically, the parts and pieces that can be touched or moved, whether inside or outside of the computer. This tutorial will focus on the components that will be used on a day-to-day basis – the parts on the outside. Below is an example of a computer with several common components:

Here are the common components in a little more detail.

**Monitor:**

The monitor looks like a television screen, except instead of watching television programs on it, the monitor allows for viewing of computer programs. It is connected to the main computer box.

There are several types of monitors, but they all function in the same way. The power button is usually located on the front of the monitor, beneath the screen. Often, there will be a small light to indicate if the power is on. Here are two examples of different monitors:
Keyboard:

The keyboard is similar to a typewriter – it has all of the same keys, along with additional keys for different uses. However, instead of typing onto paper, the text and characters appear on the monitor and operate the computer.

There are many types of keyboards, some with many keys and others with fewer keys, but all of them function in the same way. There is no separate power button – once the main computer box is on, the keyboard will also be on.

Below are two examples of different keyboards.

Mouse:

The mouse is a component that functions as a pointing device. It is a small plastic case that fits under your hand. When you slide the mouse across a flat surface, you will see an arrow, or pointer, move across the screen. See below for an example of a pointer, although it will appear smaller on the monitor.

To hold a mouse, place your thumb, ring finger and pinkie finger on the sides. Your index finger and middle finger will be resting on top and your wrist will be on the desk. Make sure the buttons are facing away from you at all times. See below for an example:
To move the mouse, slowly slide the mouse left to right, keeping the mouse on the desk while sliding. Watch the monitor to see what is happening to the pointer – it is also moving left to right. The same will happen when sliding the mouse away from your body and back toward toward your body. There is no need to lift the mouse off of the desk unless you run out of room on the desk and need to reposition the mouse. Do not turn the mouse sideways.

You will see that the mouse has one or more buttons where your index and middle fingers are resting. If the mouse has two or more buttons, make sure you use the button on the left. See below for an example.

Press and release the left button with your index finger – this is called “clicking.” Clicking allows for communication with the computer and gives it instructions. Clicking quickly twice in succession is called “double-clicking.” This is an important skill to master, so practice is recommended.
There is no power button on a mouse. The mouse will be turn on when the main computer box is turned on.

Here are two examples of different mice:

Main Computer Box:

The main computer box is the “brain” of the whole system. The main computer box connects and allows all of the components to work together. It also contains all of the information the computer needs to function, as well programs, which tell the computer what to do. These programs can be very helpful to the user. Programs can store financial information, addresses, phone numbers, photos, recipes, etc. The programs can make it very easy to retrieve this stored information, make changes to the information, or add more information. Programs can also allow for communication with relatives and friends, as well explore the World Wide Web. All of this is just a click away.

All main computer boxes will have an on/off button. It will look similar to this:
There are some additional components on the main computer box you should be familiar with. These include one or more of the following:

- “Floppy” Disk Drive – Uses a “Floppy” Diskette to store information
- CD or DVD ROM Drive – Uses a CD or DVD to store information

Below are illustrations of a Floppy Diskette and a CD/DVD:

To access the information on the floppy diskette or disk, simply slide the disk into the slot. Below is an example of what this slot might look like:

The computer will be able to “read” the information on the disk and display the contents on the screen.
The CD or DVD ROM drive works in much the same way, except that CD’s and DVD’s can hold much more information. To insert a CD or DVD into the computer, first push the button to open the tray, then place the CD or DVD in the tray and press the same button to close it. Below is an example of what the tray might look like:

![CD Tray](image)

CD’s and DVD’s, just like floppy disks, allow access to different programs and content that the computer may not have in its memory. This content is portable – it can be transferred from one computer to another.

In summary, the four main components of a computer system are:

- Monitor
- Keyboard
- Mouse
- Main Computer Box

This concludes the Basic Computer Hardware Tutorial.