

How to Identify the Components Inside Your Computer

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A guide to the components inside my computer. Hello and welcome to VideoJug. We're going to show you what the major components inside your computer are, and tell you a little about what each of them do. Guiding us on this tour will be Phil Bourton, of Vista Technology Support in Brighton.

Step 1: The major components: The major components of a computer are: the motherboard; the CPU, or central processing unit; RAM or the random access memory; the graphics card; the power supply; the hard disk or hard drive; the optical drive, also known as a CD or DVD drive.

Step 2: Hardware and software: All of these components are usually found within the tower of a desktop computer. They are referred to as hardware. Hardware can be thought of as the actual physical components that go into the computer. Software refers to the programs and systems that operate within the hardware

Step 3: The motherboard: the motherboard is the heart of the computer. It is the largest and most fundamental component of a PC, and every other component is attached to it in some way. This is because all the different components use the mother board to communicate and work with each other. The motherboard has a series of slots, sockets, and connectors for attaching the components of a PC. In most cases, the memory, accessory cards, and CPU are installed directly onto the motherboard. The drives and peripherals communicate with the motherboard through wired connections. There are a wide range of motherboards to choose from. They differ in features, speed, capacity, and the CPU supported. They also differ in size, shape, and layout. This is commonly referred to as the form factor

Step 4: the CPU: CPU stands for central processing unit. This is the brain of the computer, and is often referred to as the processor, or the chip. It is found under a heatsink and fan, and sits directly on the motherboard. The CPU directs, coordinates, and communicates with the other components, and performs all of the thinking. It is not really thinking. What a CPU actually does is perform mathematical calculations. It is the software that people write that translates these calculations into useful functions for us

Step 5: RAM: RAM stands for random access memory, and comes as modules and predefined amounts. It is also found directly on the motherboard, and usually in one, two or four slots. The memory chip stores information temporarily, for short term use by the CPU. RAM is used to store information for files that are actually being used by the CPU at any given time. The computer's RAM memory is an entirely different thing from the hard disk memory. The hard disk stores information permanently for long-term use.

Step 6: the graphics card: The graphics card or video card translates information into the graphics and text that appear on the monitor screen. Most motherboards now include a slot specifically

designed for the graphics adapter, called the AGP slot. This stands for advanced graphics port. Modern graphics adapters usually incorporate some memory write on the card, to improve their performance.

Step 7: the power supply. This supplies power to the other components, which is why it has so many wires coming out of it. It is usually positioned at the back top corner of the computer case; the power supply has a fan built into it, to keep itself and the computer cool

Step 8: the hard disk. A hard disk, which is also called a hard drive, is much like a filing cabinet. The programs and data is stored on the hard disk, and the computer accesses them as they are needed. When the computer accesses the hard drive, it is reading and moving the stored information into the RAM memory. That memory is the temporary workspace. However, the original file is still on the hard disk, and is left undisturbed until the file is saved when the computer stores, or saves information; it writes the data to the hard disk. That process results in the old file being replaced or modified with the new information. If you save data to a new file, or install new software, the information is written to the disc in an available, unused portion of the disk.

Step 9: The optical drive: The optical drive is often called a DVD drive or a CD drive. It sits at the front of the computer for ease of access, and uses a laser to read and write information to CDs and DVDs. Done.