

INTERNAL PARTS OF THE PC

Last time we talked about the external pieces that make up your home computer system, the case, the monitor, the speakers, keyboard, mouse and accessories. This time we will talk about the parts inside the PC itself, the case, or the tower.

The most overlooked component inside the PC is called the power supply. Your PC will have a power cord connected directly into it at the back of your case. If you were to look inside the case, you would see a pile of yellow, red and black wires coming from this box and plugging into various places around the inside of the case. What it does is convert the 120V AC electricity from your house power into 12V and 5V (and other) DC power, so that your system components can use it. Low voltages and insufficient current can be a real problem, particularly for rural users and people that live in neighbourhoods with a lot of power bumps or sags. Many machines run badly after new hardware has been added because the power supply can't keep up.

The **CPU** is the brain of the PC. The two main competitors in the CPU market are Intel (Pentium and Celeron) and AMD (Athlon and Sempron). Each CPU will have its respective pros and cons. For us, our primary consideration has always been a combination of pricing and reliability. We have never sold the cheapest thing available, because we can generally expect less reliability with lower prices.

The **Memory** or **RAM** is the "thinking space", the place that the CPU uses to think about things. The more RAM you have, the more stuff your PC can think about at one time. There are many kinds of RAM, but the most common type we use right now is called PC3200 DDR.

The main circuit board that everything else plugs into is called the **motherboard**. It has a socket for the CPU, slots for the RAM, slots for other add-in cards like modems, and plug-ins for the other drives. The motherboard is amazingly inexpensive these days, considering the technology that is built into it. Because it is so complex, it can be the source of some amazingly difficult problems to troubleshoot.

The **Hard Drive** is a little bigger than a pack of cigarettes and is what your PC uses to store information. It has the Windows operating system files on it, all of your programs, and all of your data. **It can fail at any time!** Make sure you do backups of your user data on a regular basis.

Optical Drives – These are any of CD (compact disk), DVD (digital video disk), CD-RW (re-writable CD), DVD-RW (re-writable DVD). Normally, these drives are used to read data from, as in when playing a game that needs the CD, or when installing a program for the first time. RW drives can also be used for recording data or audio.

If you have question or comments, I can always be reached via email sean@intrex.ca or join our forums at <http://intrex.ca> for more in-depth conversations.