

Computer Basics Part 2 – Sound

In these instructions we will cover the following:

- Different types of speakers
- Why are the speakers important?

Different Types of Speakers

Actually, using a computer does not require any sound at all. With that said, you gotta know that if you are using no sound, or low-quality sound, you are missing half of the fun of owning a computer!

You may have heard of stereo, surround sound, or 5.1 speakers, but what does this actually mean? And what do you need?

Again, you don't need any sound on the computer, but in order to play games, music, movies, and much more with the computer then sound is necessary and the better the sound the more you can feel part of the action!

The most basic type of speakers for a computer is a single internal speaker. Not all computers have a basic internal speaker for sound output by the sound card. Most people, even if they have an internal speaker, will still use external speakers for the computer. Some computers come with speakers, but if it does it usually is only 2.0 speakers.

Let's first start with Speaker types

The basic **2.0** speakers are stereo speakers. You have a left and a right channel.



Illustration 2: 2.0 Speakers



Illustration 1: 2.0 Speakers

2.0 speakers consist of two physical speakers. One is placed on the left of the monitor and one on the right side of the monitor. You can have good sound with these types of speakers and the quality of the speakers will determine how good the 2.0 speakers sound. (Cheap speakers won't sound near as good).

To have a better sound with a bass then you would want to have **2.1** speakers. The .1 will tell you that a **sub woofer** (for bass sound) is included. So, 2.0 speakers are two speakers total, but a 2.1 speaker set will have three speakers (left, right, and sub woofer). 2.1 speakers are sometimes called **stereophonic** sound. (stereo = 2)



Illustration 3: 2.1 Speakers

A little bit better sound is **4.1** surround sound. 4.1 is five speakers total (left channel, right channel, left rear channel, and right rear channel, and of course the sub woofer). The rear channels are great for playing games. 4.1 surround is sometimes called **quadraphonic** sound. (quad = 4)

For even more life-like sound the next step up is 5.1 surround sound. 5.1 surround sound has... guess how many speakers... six! Remember the .1 means it has a sub woofer added).

The 5.1 surround sound speakers will have a left and right channel and sub woofer, with the left rear and right rear channels along with a front center channel. The front center channel will provide most of the sound and everything else will fill in. The sound is very, very good.



Illustration 4: 5.1 Surround Sound

5.1 surround sound is very, very good, but it isn't the best. **7.1** is even better! With 7.1 surround sound you have eight speakers (seven speakers plus the sub woofer).

With 7.1 surround sound, is currently about the best you can get and in my opinion is overkill for a computer system. The 7.1 surround sound system consists of the sub woofer, front left, front right, rear left, rear right, center channel, and an additional left center and right center channel.



Illustration 5: 7.1 Surround Sound

Which sound is better?

Of course, the best sound of these shown would be 7.1 Surround sound. However, as previously mentioned, I believe for a computer that 7.1 is overkill. 5.1 is a very good option if you can afford it. With 5.1 (or 4.1 for that matter) you can tell when someone is coming behind you in a game or you can hear things fly past you in a movie. You get a true directional sound which envelopes you better into the game or movie that you are playing.

Can My computer use 5.1 or 7.1 Surround Sound speakers?

Possibly, but not necessarily. Your sound card will determine what type of speakers you can use on your computer.

The Sound Card

The **sound card** is the hardware that sends the sound out of the computer to the speakers. The sound card determines what kind of speakers you can use. If the sound card can support 5.1 speakers then you can use 5.1 speakers or anything lower than 5.1. If your sound card supports 7.1 then you can use 7.1 or anything lower than 7.1. If your sound card only support 2.0 speakers (no plug for sub woofer) then 2.0 are the only type of speakers you can use.

If your sound card is built into the system board of your computer, and many of them are, then look at the manual that came with your computer (system board manual) and see what it will support. If you are adding a sound card to the computer then you can purchase what type of card you want to use.

Why are the speakers important?

So why are the speakers important? You only get part of the computing experience without sound and with speakers such as 2.0 stereo speakers will not draw you into the game or movie like 5.1 surround sound speakers. Of course, if you are purchasing a new computer or upgrading your current computer then go with what you can afford, but go with the highest level you can afford. Sound does make a difference.

I hope this information has been helpful to you.

You may print this information if needed.

Check www.scottfam.us for additional information!