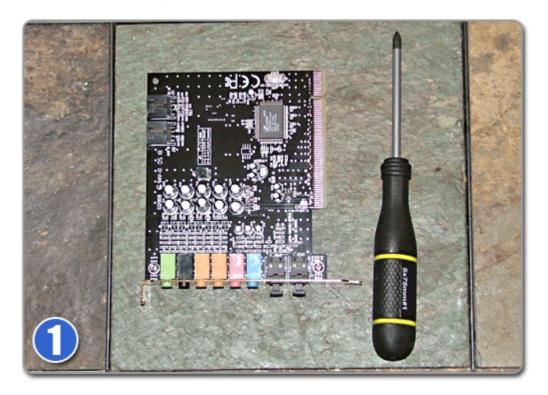
INSTALLING A PCI SOUND CARD

It doesn't take long for most gamers and movie buffs to realize that the on-board sound card on most mainboards is not that great. Many built-in mainboard sound cards are also not able to support full surround sound, which brings much added realism and immersion to both movies and games. Much like installing your graphics card, the installation of a PCI sound card is a very straightforward and easy process, once you have the general idea of what to do.

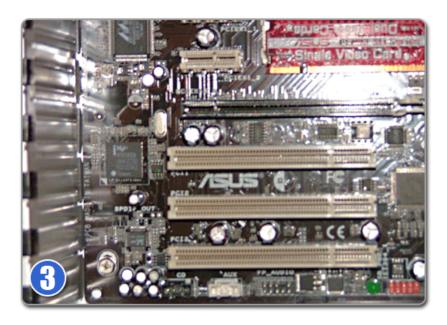
1. First, you will want to gather your required supplies and equipment, such as your screwdriver and sound card. Be sure to power your computer down and unplug it from the wall and unplug any peripherals that might be attached to your computer.



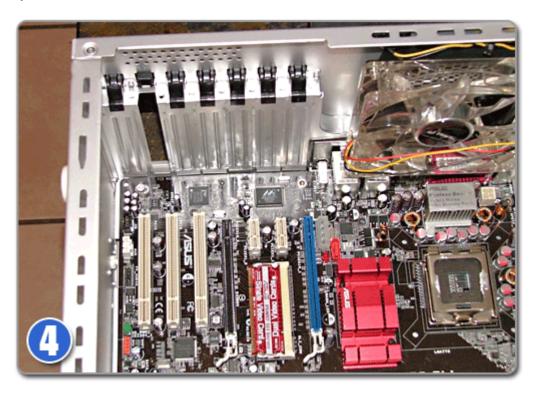
2. After getting your new sound card and your screwdriver gathered up, you are ready to use the screwdriver and remove the right side panel from your computer case. The case in my image below is just a mock up that does not have the normal components inside of it so you can see the parts we are working with better. Inside your computer, there will be a wealth of wires and other cards you need to beware of.



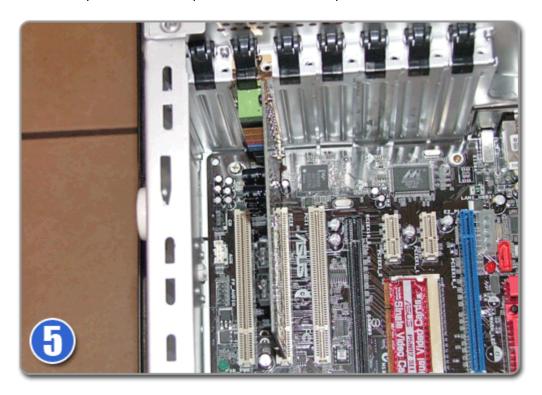
3. Once you have the side panel off your computer, lay it on its side so you can get better access to the internal components of the system. You will now need to verify that you have a vacant PCI slot. The PCI slot will be white, and you can see an example in the image below. Different motherboards will have different numbers of PCI slots. If all of your PCI slots are taken, you will need to decide what's more important: the card taking up the PCI slot currently, or your new sound card. In most cases, you will remove the sound card you are replacing. If the current sound card is an ISA card, you will need to remove it and free up a PCI slot. If your system has integrated (on-board) audio, you will need to disable it, either by placing or removing a jumper in the motherboard or, more likely, by changing a setting on the system's setup (BIOS). Consult your system or mainboard documentation.



4. Once you locate the PCI slot you want to use for your new sound card, you will want to either remove the PCI slot cover from your case or, if you are replacing an existing PCI card, remove it from the PCI slot. Different cases use different types of PCI slot covers. Some require no tools, while some will require a screwdriver and some you simply twist off. Refer to your case manual or the manufacturer of your computer if you are not sure how to remove the PCI slot cover on your system.



5. Once you have chosen your PCI slot and removed the cover or existing PCI card, you are ready to install your new sound card into the PCI slot. Installing the card is very simple to do and requires you to gently, but firmly press the sound card into the PCI slot. Be sure that you have the sound card aligned with the PCI slot so that it will snap into place as easily as possible. Beware that you don't damage your sound card during this process by placing your fingers on sensitive and easily damaged components. Always grasp your sound card by the edge of the board as far from the capacitors and components of the card as possible.



6. Once you place your new sound card into the PCI slot, you will need to secure the sound card to the computer chassis by some means. As with the PCI slot covers, each computer case uses a different type of retention system to keep the PCI cards in place. Some use screws while others use a tool-less retention system. So long as you secure the sound card in some method to the case, you will be fine. The sound card will not be stable enough to stay in place if you don't secure it to the chassis somehow. Again, refer to your computer case Owner's Manual or your computer manufacturer for help at this point if you can't figure out how to secure the PCI card.



7. Once you have secured your new sound card to the computer case, you are ready for the final step of the installation process. For the final step, you will need to refer to the sound card's Owner's Manual and follow the installation process for the sound card drivers. There should be a disc with your sound card drivers included with your sound card, or you can download the most recent drivers from the sound card manufacturer's website. First, uninstall the current sound card or "audio system" drivers, then run the setup program for your new audio card. Once you have the drivers installed on your computer, you are finished installing your sound card and you are ready to plug in your speakers and enjoy your new audio experience

Source : http://www.geeks.com/techtips/2006/techtips-08jun06.htm