

Peripheral Cards

In many respects peripheral cards are much easier to install than drives, but this wasn't always the case. A few years ago, installing a peripheral card meant settings jumpers for various settings found within the card; today the cards are plug-and-play -- you plug them in and then they are ready to go. Peripheral cards add functionality to your computer; they can be for graphics, audio, controllers, network interfaces, etc.

Removing

1. Uninstall Device - This step is, in most cases, unnecessary. The Windows OS will recognize upon the next time that the computer is powered up that there is a change in the hardware configuration and make the necessary modifications. If you want to play everything safe though, you will want to make sure that you not only uninstall all of the device software that came with the device, but also delete the device from the Device Manager (see Control Panel page below for the steps necessary to accomplish these tasks). Note: This step is unnecessary if you plan on plugging in a replacement device that is the exact same device that you previously had installed (the computer will not recognize a change from when you shut it down to when you start it back up).
2. Turn Off Computer - You NEVER want to remove any device from your computer without first turning off your computer, and you especially NEVER want to open your case with the power on. Any sort of electric shock (static electricity included) may render any device, or the whole computer, completely useless. Circuit boards are very sensitive devices, and if handled inappropriately, they can easily be broken.
3. Turn Off/Unplug Power Supply - This step goes hand-in-hand with the previous step. Although it may appear that your computer is off when you turn it off, the power supply is still on, and may still be providing power to many areas of your computer. There should be a switch on the back of your computer next to where the power cord is located; turn it off. Now unplug the power cord from either the outlet or the back of your computer. Your computer is now completely powered down.
4. Open Case - It seems that every computer you encounter has a different method for removing the outer casing; some you have to remove screws, other you merely have to push a button. This, undoubtedly, you will have to look inside your reference manual to accomplish.
5. Attach Static Wrist Band (If Applicable) - Again, circuit boards are sensitive devices, and the static electricity in your fingers can arch to the circuit boards and render them completely useless. In order to prevent this from happening you need to ground your body. The easiest way to do this is to buy a static electricity wrist band (they are cheap), and attach one end to your wrist and the other to any metal surface, including the computer case. The other method is to make sure that you always have one hand placed on a piece of metal at all times; this however means that you would only have one hand to work with.
6. Unplug Any Interface/Power - Although the majority of peripheral cards have no other interfaces or power cords besides the actual ISA/PCI/AGP slot, many high-end or specialized cards may have additional power cords, or interfaces that plug in

directly to other portions of the computer that provide special functions. You will want to remove all of these cords from the device that they connect to before proceeding.

7. Unscrew/Remove Device - In most cases, peripheral cards are held on by a single screw, which is found at the top of the card; you will want to remove this screw in order to remove the card. Once the screw is removed you should be able to just lift the card out of it's slot; make sure the life at both end evenly in order to prevent bending anything. If you are not planning on inserting another card into the slot right away, you will want to screw in a slot cover which prevents dust and dirt from entering the case.
8. Close Case - With everything removed you will want to close the case before powering the machine back up.
9. Turn On Machine - Turn on the machine, your computer should work fine now.

Adding

1. Check Computer's State - It is vital that you computer be in the state in which it was after completing step (5) above. If you are unsure about your computer's state, redo steps (2) through (5) above before proceeding.
2. Insert/Screw In Device - Find a compliant slot in your computer and insert he card into it. You will want to insert the card so that the face plate is flushed against the back of your computer. When pushing the card into place do not be afraid to apply a little pressure, it won't hurt anything, just make sure to apply the pressure evenly across the top of the card.
3. Attach Any Interface/Power - Some cards may have special interfaces or power cords that you will need to plug in in order to get the card's full functionality (e.g. sound cards have audio cables that plug into the back of CD-ROMs, and NIC's often have a cable that can be plugged directly into the bottom of the motherboard for a Wake-On-LAN feature).
4. Close Case - With everything removed you will want to close the case before powering the machine back up.
5. Turn on Computer - The device is now installed. Let's turn on the computer.
6. Install Device In Windows - There are very few devices that are currently on the market that Windows will not recognize and install upon startup, but if you encounter such a device you will have to use the installation disks that came with the device in order to have your computer communicate properly with it. Also, most device CDs come with added programs and utilities that you may find useful to have when working with the device.