

Chapter 4

Connecting Items to the Computer

Your computer is built but nothing is connected to it, nor is anything installed in it. At this point the computer can do nothing. Before you can begin to install an operating system and programs onto your computer you will need to connect a keyboard, speakers, monitor and mouse. If you are going to print or scan, you will need to attach these devices.

Materials you will need to set up your computer.

1 computer (that you built in chapter three)

1 keyboard

1 mouse

1 monitor

1 set of speakers

Any other item you choose such as a printer or scanner.

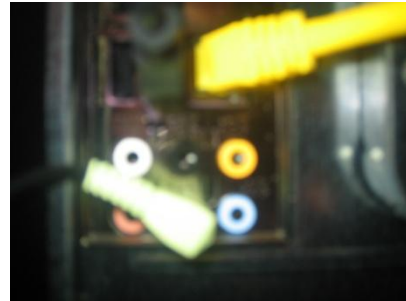
1. Turn the front of the computer case towards you. There is a top area that is flat like a table top. There are left and right sides. The left side if you are facing the front will have an area or areas where there are air vent holes. Do not cover these air vents up. There is a back to the computer. For now, place your hands on the top front of the computer and start moving them down. You should feel your CD ROM drive, with the open and close button at the bottom right. This is a small button so you may have to spend a little time locating it. Further down you will feel a larger and a smaller set of buttons—these are usually the larger button just above the smaller button. There are some computer cases where these buttons are at the point where the top of the case and the front of the case meet. Slide your hands further down the front of the computer and you will fill an area where there are several USB connection points, and several round holes for

items such as mics and headphones. Remember, computer cases are all different, so you will need to explore to find the position of the above items.

2. Turn the computer around so the back is facing you. Place your hands at the top back. Start moving your hands down the back of the computer. You should feel the power supply first. If not, it will be at the very bottom. Notice the power supply has vent holes and a fan area. Make sure to never cover these up! There may be a toggle switch for turning on and off the power. As a general rule, left with button in the on position and only use it when absolutely necessary. Just under the power supply area is where the vent holes where you installed the case fan (if you chose to install one). Make sure to never cover this area up! On some computers this area will be further down the back of the computer. Next you will find on the left side (because you are facing the back) the side panel connection point (remember the metal piece you bent the tabs on?). On this side panel is the monitor connector which is generally called the VGA (Video Graphics Array) port. This connector has three rows of holes and feel like a rectangle with one side slightly shorter than the other. Newer motherboards have other connectors for the monitor, along with the VGA connector. You may have to feel the ends of the cables that come with your monitor and the connectors to determine which cable to use. There are two or three round holes for speakers or headphones, and a microphone. There will be on some side panels two round areas with tiny holes. These are called PS2 connectors and are used for PS2 keyboard and mice. The newer keyboards and mice use USB connections. There should be four or six USB (Universal Serial Bus) connectors. These feel like rectangular holes. Mice, keyboards, USB memory sticks (also called thumb drives or flash drives), some headset mics, external hard drives, printers, scanners, digital recorders, digital readers, cell phones, cameras, and a number of other items can be connected to these USB connectors. It does not matter which USB connector you plug the device into. There will be a hole that feels like a large phone jack. This is the Ethernet port. If you have cable or DSL internet in your home, an Ethernet cable is attached to your modem and the other end into this port on the back side panel of your computer. Remember that the side panel is on the left if you are facing the back of the computer—it will be on the right if you are facing the front of the computer.
3. Unpack your monitor. Many of the monitor boxes have a plastic handle on the top. Remove the tape from the top of the box, open the lid, and you will feel Styrofoam and plastic. Sit on a chair, place the box between your ankles, and grasp the ends of the monitor by the Styrofoam. Gently pull up, keeping the box stable with your ankles. Once the monitor is out of the box feel for a stand. In some cases this has an oval shape, in other cases a “V” shape, and others have a fold out stand. Examine the top of the stand and the bottom of your monitor.

Place the monitor connector for the stand over the stand connector and gently press down. If you cannot get the monitor to go into the stand, turn the stand around and try again. On the back of the monitor will be a number of items, most importantly a connector for the power cable, and a connector for the VGA connector. There may be other types of video connectors. An example of the VGA will be used here. On each end of the VGA cable is a connector that has a rectangular shape with one side slightly shorter than the other. Within the connector are three rows of pins. The VGA connector on the back of the monitor and on the back of the computer have a rectangular shape with one side slightly shorter than the other, and three rows of holes. **When you align the cable connector of the monitor or computer connector, try to line up the sides, then press gently down. If this does not work, turn the connector around a try again. Do not force this cable or you will bend the pins.** Place the end of the power cord into the monitor. Place the other end of the VGA cable (or whatever cable you decide to use) into the connector on the back side panel of the computer. Set the monitor where you want it. Locate the on/off button for the monitor.

4. Unpack your speakers. There will be a power cord and a connector cable coming from the speakers. The speaker connector cable is a small, round plug, like those found on headphones. Plug this into the back side panel of the computer. Position one speaker on either side of the monitor. Locate the on/off button for the speakers.
5. Unpack your keyboard. Place the keyboard in front of your monitor, and attach the end of the cable into either the PS2 or USB port on the back of your computer.
6. Unpack the mouse. Place the mouse to either the left or the right of your keyboard. Plug the end of the mouse connector to either the PS2 or USB connector on the back side panel of your computer.



7. Plug the computer, monitor and speakers into a surge protector (think of a power strip). Turn on the surge protector with the toggle switch located on one end. Turn on your power supply with the toggle switch. Turn on the speakers and monitor.
8. Take out your Windows or Linux CD. You are ready to install your operating system. This will be covered in the next chapter.

Chapter 4 Review

Test Your Knowledge

1. Name the item in this chapter that allows you to see what the computer does.
2. Name the item in this chapter that allows you to command or put information into the computer.
3. Name the item in this computer that makes sound.