

Computer Basics Part 2 – Wireless Network

In these instructions we will cover the following:

- What is a Wireless Network?
- Wireless Networks: The Good and the Bad
- What is needed to have a Wireless Network?
- Setting up a Wireless Network

What is a Wireless Network?

A Wireless Network is just like a wired network, except that instead of connecting with patch cables you connect without wires.

For information about what a Network is please read my instructions [Network Computer](#).

Wireless Networks: The Good and the Bad

A wireless network, once setup and configured is very easy to use. You can use your laptop computer, for example, in any room of your house! The problem is that your signal goes past your walls! So, your neighbor could use your network too! Before you think this is ok remember that if you have files on your computer, such as a checkbook, etc. that you do not want someone to see then remember that a wireless network does put it at risk.

There are ways of locking down the wireless network, however it is not 100%. The only way to be 100% safe it to use a wired network with patch cables. Most people would not be able to hack in (or gain access to your network without permission), but there might be one that can.

If you are confident that your data is secure and you have no way to run wires for a wired network then wireless is the way to go!

What is needed to have a Wireless Network?

To have a wireless network you need a wireless router (see Illustration 1).



Illustration 1:
Wireless Router



Illustration 2: PCI
Wireless Network
Card



Illustration 3: USB
Wireless Network Card

Many different companies make many different models of wireless routers so the one you buy may look different than the one shown here.

A Wireless Router allows each computer to be connected to it without wires.

The next thing you need is a wireless network card. There are many different types of wireless network cards. There are PCI wireless network cards which go inside a desktop computer (Illustration 2) and USB Wireless Network Cards which plug into a USB port on your desktop or laptop computer (Illustration 3), among others.

Wireless Routers and Wireless Network cards must be the same speed to work. There are 802.11, 802.11a, 802.11b, 802.11g (most common). Normally now days you will see 802.11b (b network), or 802.11g (g network).

802.11g is the newest and fastest. If you have a wireless network card that is 802.11b and a wireless router that is 802.11g then they won't work together.

Some laptops today now come with a wireless card built-in. Or it may be an add-on item when you purchase your laptop. Today, most desktops do not come with a wireless card.

Setting up a Wireless Network

Setting up a wireless network can be hard. I do not recommend doing this yourself if you are new to computers.

First, you need to setup the wireless router. The easiest way to setup the router is to simply plug the power in. It should work, however it will be open to the world. No security at all. I recommend setting the SSID at the very least. Think of the SSID as a password that your computer and your wireless router knows, but no one else is to know it.

Second, you need your computers setup to communicate just like a wired network. Read my instructions on wired networks if you need info.

Third, you need to install the wireless cards into the computer and set them up. Usually the software that comes with the wireless card will walk you through setting it up.

Again, a wireless network isn't always easy to setup and to do it right (locking it down) is even harder. Look for a good computer tech to assist you with this and remember that even locked-down the wireless network is vulnerable.

I hope this information has been helpful to you.

You may print this information if needed.

Check www.scottfam.us for additional information!