

TECHNOLOGY/ELECTRONICS

SETTING UP A HOME WIRELESS NETWORK CHECKLIST

Minimum Hardware needs:

- NOTE: Choose equipment that supports wireless technology (802.11a, 802.11b, or 802.11g). 802.11g is recommended for compatibility and performance.
- Wireless Network Adaptor (or NIC card) for your computer.** Many new laptops include this, but desktops (towers) usually do not. Each computer connected to your network will require a Wireless Network Adaptor. Also if you purchase network adaptors, select one with a USB connection and chose the same vendor or manufacturer that you select for your router.
- Wireless Router or a Wireless Access Point** (aka: Base station). A Wireless Router is recommended since it includes an Access Point and a firewall.
- Newer wireless routers and access points support a handy security feature called **MAC** address filtering. This feature allows you to register wireless adapters with your access point (or router), and force the unit to reject communications from any wireless device that isn't on your list. MAC address filtering combined with WEP encryption affords very good security protection.
- Broadband Internet connection** (cable modem or DSL modem). . If you need dial-up support, be sure to purchase a router having an **RS-232 serial port**.
- Optional:** Wireless Antenna, signal booster

To Start:

- Power off your cable modem and your PC. Disconnect the Ethernet cable from the cable modem and connect it to your Wireless Router. The other end should be connected to your computer. Follow your manufacturer's instructions.
- Connect a second Ethernet cable from your cable modem to the WAN port on your router.
- Power up the cable modem and let it go through its diagnostics which might take a minute or two.
- Now plug in the router. Lights will indicate its status. Now power up your PC. You may be required to configure the router using your internet browser on your PC. Check your manufacturer's instructions. Write down any passwords or keys that you are required to enter so that you can connect to the network or reconfigure the router if needed! Do not accept the default network name or the default administrator's password for security purposes.

To configure the router you will do the following:

- Establish a network name (aka: SSID). Change the default name for security reasons. All computers connecting to your wireless network will use this network name. Try to pick a name that will be different than a neighbor's network name.
- Enable either WEP or WPA security .
- Configure the firewall or any other features provided by your router.

Install the Wireless Network Adaptor:

- If your computer does not have built-in Wireless Network Adaptor, you will now install your new Wireless Network Adaptor . Power off your computer. Now connect the external Wireless Network Adaptor to your computer's USB port. Windows XP will detect the new hardware and may prompt you for the CD that came with the adaptor. Once connected and configured, you will see a prompt in the lower right of your screen that tells you Wireless Network Connection now Connected.

Connect:

- Click on the icon for the network connection (in the lower right of your screen) and select View available networks.
- If you encounter interference from a neighboring network you can change the channel in the Wireless Router or Access Point. In the US, you can select channels 1-11.

Troubleshooting:

- See you router manufacturer's website or printed instructions for troubleshooting. Most issues arise from either a firewall or security issue.