

Network Layout

The Dual-Band Wireless A + G Access Point has been designed for use with 802.11g and 802.11b products. With 802.11g products communicating with the 802.11b standard, products using these standards can communicate with each other. The Access point is compatible with 802.11g and 802.11b adapters, such as the PC Cards for your laptop computers, PCI Card for your desktop PC, and USB Adapters for when you want to enjoy USB connectivity. These wireless products can also communicate with a 802.11g or 802.11b wireless PrintServer.

When you wish to connect your wired network with your wireless network, the Access Point's network port can be used to connect to any of Linksys's switches or routers.

With these, and many other, Linksys products, your networking options are limitless. Go to the Linksys website at www.linksys.com for more information about wireless products.

Chapter 3: Getting to Know the Dual-Band Wireless A + G Access Point

Access Point

The Back Panel

The Access Point's ports, where the power cord and network cable are connected, are located on the back panel.

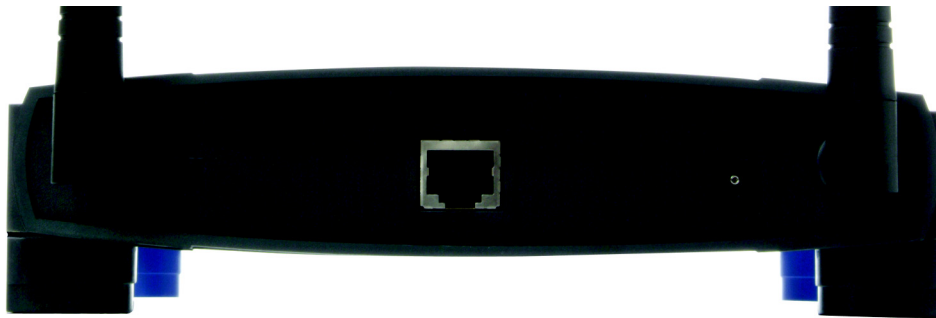


Figure 3-1: The Access Point's Back Panel

port: the connection point on a computer or networking device used for plugging in cables or adapters

- | | |
|---------------------|---|
| Ethernet | The Ethernet port connects to Ethernet network devices, such as a switch or router. |
| Power | The Power port is where you will connect the power adapter. |
| Reset Button | There are two ways to Reset the Access Point's factory defaults. Either press the Reset Button, for approximately ten seconds, or restore the defaults from the Administration tab in the Access Point's Web-Based Utility. |



Important: Resetting the Access Point will erase all of your settings (Wireless Security, Wireless and LAN settings, etc.) and replace them with the factory defaults. Do not reset the Access Point if you want to retain these settings.

With these, and many other, Linksys products, your networking options are limitless. Go to the Linksys website at www.linksys.com for more information about products that work with the Access Point.

The Front Panel

The Access Point's LEDs, where information about network activity is displayed, are located on the front panel.



Figure 3-2: Front Panel

Power Green. The Power LED lights up when the Access Point is powered on.

Wireless-A WLAN Green. When the WLAN LED is blinking, the Wireless-A network is operating.

Wireless-G WLAN Green. When the WLAN LED is blinking, the Wireless-G network is operating.

Ethernet Green. The Ethernet LED serves two purposes. If the LED is continuously lit, the Access Point is successfully connected to a device through the Ethernet port. If the LED is flickering, it is an indication of any network activity.

Chapter 4: Connecting the Dual-Band Wireless A + G Access Point

Hardware Installation

1. Locate an optimum location for the Access Point. The best place for the Access Point is usually at the center of your wireless network, with line of sight to all of your PCs and wireless accessories.
2. Fix the direction of the antenna. Try to place it in a position that will best cover your wireless network. Normally, the higher you place the antenna, the better the performance will be. The antenna's position enhances the receiving sensitivity.
3. Connect a standard Ethernet network cable to the Access Point. Then, connect the other end of the Ethernet cable to a switch or router. The Access Point will then be connected to your wired Network.
4. Connect the AC Power Adapter to the Access Point's Power port and to an electrical outlet. Only use the power adapter supplied with the Access Point. Use of a different adapter may result in product damage.

Now that the hardware installation is complete, proceed to Chapter 5: Setting Up the Dual-Band Wireless A + G Access Point, for directions on how to set up the Access Point.

***hardware:** the physical aspect of computers, telecommunications, and other information technology devices*



HAVE YOU: Enabled TCP/IP on your PCs? PCs communicate over the network with this protocol. Refer to Appendix D: Windows Help for more information on TCP/IP.

***tcp/ip:** a set of instructions PCs use to communicate over a network.*



NOTE: If you are setting up an Infrastructure Network, all of your wireless devices must be in Infrastructure mode in order to function within the network. Similarly, if your network is an Ad-Hoc Network, all of your wireless devices must operate in Ad-hoc mode in order for all other wireless devices to communicate.

Chapter 5: Setting Up the Dual-Band Wireless A + G Access Point

Setup Wizard

This Setup Wizard will take you through all the steps necessary to set up and configure the Access Point.

1. Insert the Setup Wizard CD into your PC's CD-ROM drive. Your PC must be on your wired network to set up the Access Point.
2. The Setup Wizard's Welcome screen should appear on your monitor. If it does not, this means the Setup Wizard is not automatically running as it should. Start the Setup Wizard manually by clicking the Start button, selecting Run, and typing `d:\setup.exe` (where "D" is your PC's CD-ROM drive). Click the Click Here to Start button to continue this Setup Wizard. Clicking the User Guide button opened this User Guide. To exit this Setup Wizard, click the Exit button.
3. The next screen shows how to start connecting the Access Point. Optimally, you should perform this setup through a PC on your wired network. Connect one end of the network cable to your network switch or router.

Click the Next button to continue or Exit to exit the Setup Wizard.



Note: The Access Point will be set up in the Setup Wizard through a wired network connection. You may refer to Chapter 4: Connecting the Dual-Band Wireless A + G Access Point.



Figure 5-1: The Setup Wizard's Welcome Screen

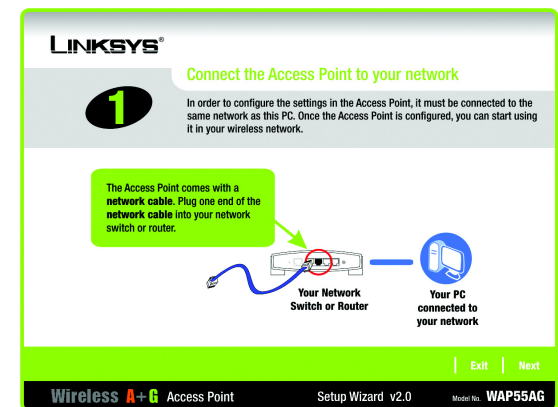


Figure 5-2: Connect to the Router

4. Connect the other end of the network cable to the Ethernet port on the back of the Access Point.

Click the Next button to continue, or the Back button to return to a previous screen.

5. Connect the power adapter to the Access Point's Power port. Then connect the other end to an electrical outlet. Only use the power adapter supplied with the Access Point. Use of a different adapter can cause product damage.



IMPORTANT: Make sure that you use the power adapter that is supplied with the Access Point. Use of a different power adapter could damage the Access Point.

Click the Next button to continue, or the Back button to return to a previous screen.

6. The Access Point's LEDs should be lit. If not, re-check the connections.

Click the Next button to continue or Exit to exit the Setup Wizard.

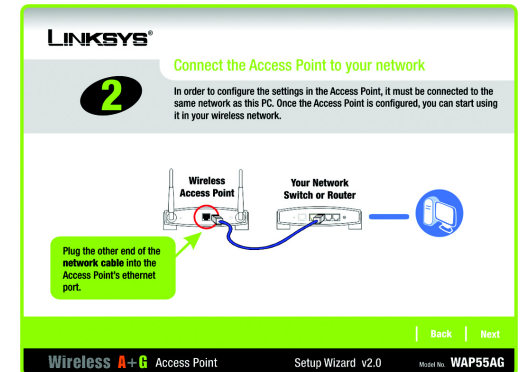


Figure 5-3: Connect to the Ethernet Port

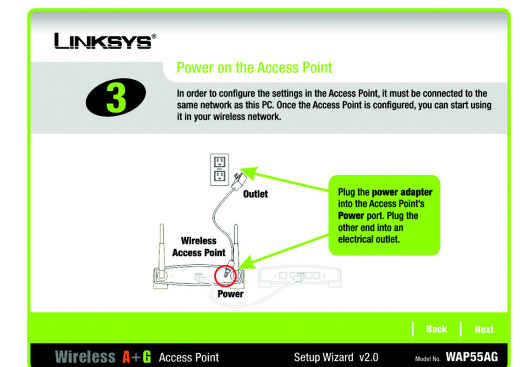


Figure 5-4: Connect to the Power

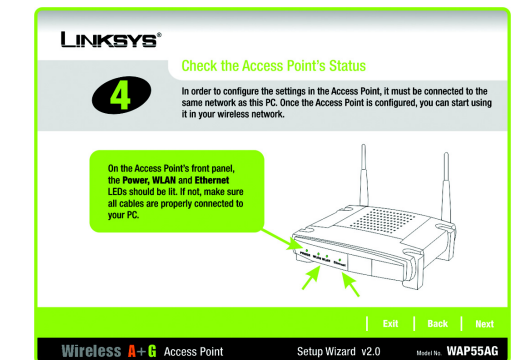


Figure 5-5: Check the LEDs

- The Setup Wizard will run a search for the Access Point within your network and then display a list along with the status information for each access point. If there are more than one displayed, select the Access Point by clicking on it and click the Next button to continue, the Back button to return to a previous screen, or Exit to exit the Setup Wizard.

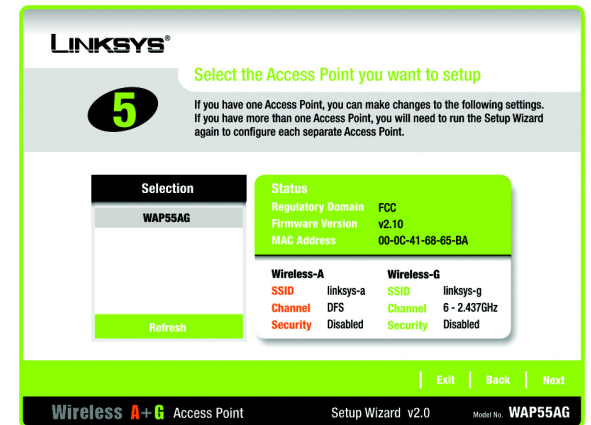


Figure 5-6: Select the Access Point

- You will be asked to sign onto the Access Point you've selected. Enter the Password you've assigned. If none has been assigned, enter the default password: admin. Then, click the Enter button. (This password can be changed on the next screen.)

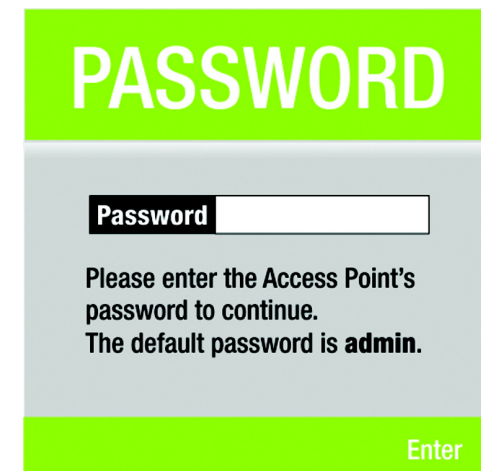


Figure 5-7: Enter the Password

9. The Basic Settings screen will appear next. Enter the Device Name and new Password. Then, click the Next button to continue or Back to return to the previous page.

- **Device Name.** The Device Name is a unique name given to the Access Point to prevent confusion when using multiple Access Points.
- **Password.** Enter a new password that will be used to access the web-based utility or Setup Wizard.
- **Network.** Select **Automatically** if your network has a router or DHCP server. Select **Static IP** if your network requires a static IP address.
- **IP Address.** This IP address must be unique to your network. (The default IP address is 192.168.1.246) Leave the default IP address, unless you know your network's IP address is different.
- **Subnet Mask.** The Access Point's Subnet Mask must be the same as your Ethernet network. Leave the default Subnet Mask, unless you know your network's subnet mask is different.
- **Default Gateway.** This IP address should be the IP address of the gateway device that allows for contact between the Internet and the local network. Leave the default Default Gateway blank, unless you know your network's default gateway.

10. The Wireless-A Settings screen should now appear. Enter your wireless 802.11a network's SSID, select the channel at which the network broadcasts its wireless signal, and select the security. Then, click the Next button to continue or Back to return to the previous page.

- **SSID.** The SSID is the unique name shared among all points in a wireless network. The SSID must be identical for all points in the wireless network. It is case sensitive and must not exceed 32 characters, which may be any keyboard character. Make sure this setting is the same for all points in your wireless network.
- **Channel.** Select the appropriate channel from the list provided to correspond with your network settings. All devices in your wireless network must broadcast on the same channel in order to communicate. If you want the Router to automatically scan for a clear channel, then select Auto (DFS)
- **SSID Broadcast.** When wireless clients survey the local area for wireless networks to associate with, they will detect the SSID broadcast by the Access Point. To broadcast the Access Point's SSID, keep the default setting, Enabled. If you do not want to broadcast the Access Point's SSID, then select Disabled.
- **Security.** Two wireless security methods are available: WEP (Wired Equivalent Privacy) and PSK (Pre-Shared Key), which is the stronger security method. Select WEP or PSK from the drop-down menu. All devices in your wireless network must use the same security method.

LINKSYS® Basic Settings

6 These are basic settings for the Access Point. Please enter a new password to help secure your Access Point when accessing the Setup Wizard or Web-based utility.

Device Name WAP55AG

Password

Network Static IP

IP Address 192.168.1.250

Subnet Mask 255.255.255.0

Default Gateway 192.168.1.1

The **Device Name** is a unique name given to the Access Point to prevent confusion when using multiple Access Points.

Please enter a new **password** for the Access Point. You will need this **password** to access the Web-based utility or Setup Wizard.

Select **Automatically** if your network has a router (or DHCP server). Select **Static IP** if your network requires a static IP address for the Access Point.

Enter the **IP Address, Subnet Mask, and Default Gateway** if you know your network's settings, otherwise leave the default settings. An IP address must be specified in order to manage the Access Point from the network.

Back Next

Wireless A+G Access Point Setup Wizard v2.0 Model No. WAP55AG

Figure 5-8: Basic Settings

ip address: the address used to identify a computer or device on a network

gateway: a device that interconnects networks with different, incompatible communications protocols

LINKSYS® Wireless-A Settings

7 Make sure you write these settings down. They will be needed when setting up your wireless computers. The wireless security settings must be the same on all devices on your wireless network, or they will not be able to communicate.

SSID linksys-a

Channel Auto (DFS)

SSID Broadcast Enabled

Security Disabled

The **SSID** is the network name shared by all devices within your wireless network. The **SSID** is case sensitive.

The **Channel** is a unique number shared among all devices within your wireless network.

When a wireless client surveys the local area for a wireless network to associate with, they will detect the SSID broadcast by the Access Point.

You may choose from two wireless security methods: **WEP** (Wired Equivalent Privacy), **PSK** (Pre-Shared Key). PSK is the stronger of the two encryption methods.

5GHz 802.11a

Back Next

Wireless A+G Access Point Setup Wizard v2.0 Model No. WAP55AG

Figure 5-9: Wireless-A Settings