

Setting Up the AirPort Base Station



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Introduction to AirPort

AirPort is a simple, fast, affordable way to access the Internet from anywhere in your home, classroom, or small office without cables, additional phone lines, or complicated networking software. AirPort is a wireless local area network (LAN) technology that provides high-performance wireless communication between multiple computers and the Internet. When connected to the Internet, AirPort allows you to share a single Internet connection with more than one computer at the same time and share files between computers.

To use AirPort to access the Internet, you need an account with an Internet service provider (ISP). Fees may apply. In addition, you need a traditional way to access the Internet, through a phone line, cable or DSL modem, or Ethernet network.

About the AirPort Base Station

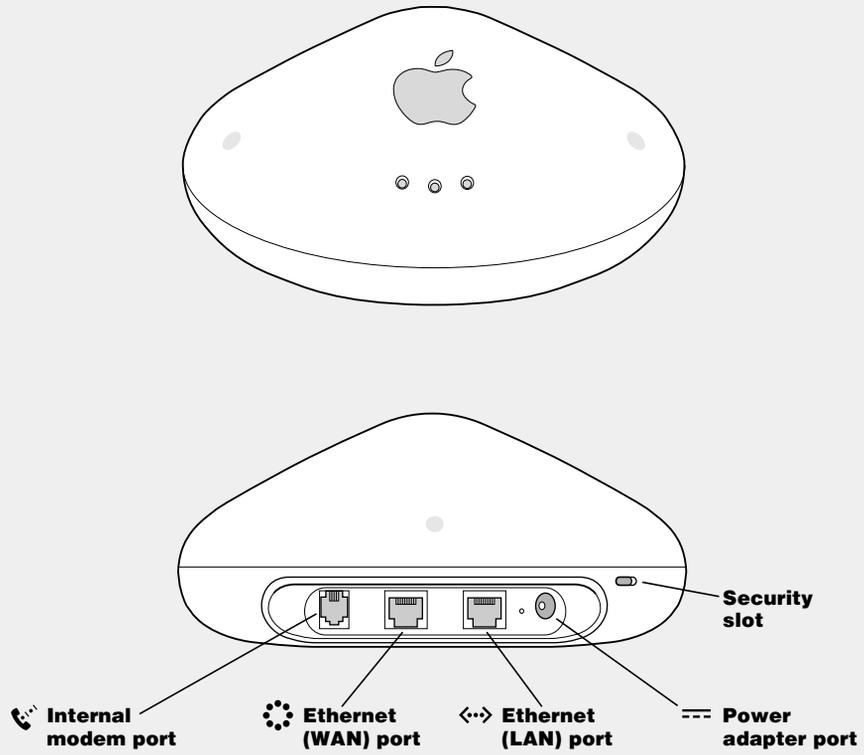
The AirPort Base Station establishes a wired connection to the Internet and wireless connections to AirPort-equipped computers. A 56K modem is built into the base station for dialup (PPP) Internet access. One 10Base-T Ethernet (🌐) connection for cable or DSL modem connections to the Internet or wide area network (WAN) and one 10/100Base-T Ethernet (↔) connection for high-speed access to your local area network (LAN) are built in. The base station manages communications between the Internet and the AirPort-equipped computers.

The AirPort Base Station can connect to the Internet in the following ways:

- Using a standard telephone line to connect to the modem (📞) port
- Using 10Base-T Ethernet to connect a cable or DSL modem or an existing Ethernet network with Internet access to the WAN (🌐) port

Once the base station is connected to the Internet, AirPort-equipped computers can connect to the Internet by joining the AirPort network. Computers connected to the AirPort network by Ethernet can also share the base station's Internet connection. See Chapter 2, "Setting Up Your AirPort Base Station," for instructions on how to set up the base station for Internet access and how to connect computers by Ethernet.

The AirPort Base Station at a Glance



AirPort Base Station Ports

Your AirPort Base Station has four ports:



Internal modem port

Connect one end of the phone cord to the internal modem port and the other end to a standard telephone jack.



10Base-T Ethernet WAN port

Connect a DSL or cable modem or an existing Ethernet network with Internet access to the Ethernet WAN port on the AirPort Base Station.



10/100Base-T Ethernet LAN port

Connect the local Ethernet computers (computers without Internet access) and printers to the Ethernet LAN port on the AirPort Base Station.

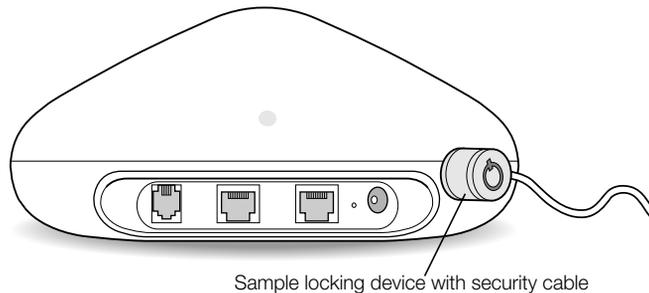


Power adapter port

Plug the AirPort Base Station power adapter into the power adapter port and connect it to an electrical outlet.

Security Slot and Keyboard Lock

You can purchase a security cable and lock, such as the Kensington MicroSaver Security Cable, to secure your AirPort Base Station.



About the AirPort Software

In Mac OS X



AirPort Setup Assistant

Use the AirPort Setup Assistant to configure the AirPort Base Station and to set up your computer to use AirPort.



AirPort Admin Utility

The AirPort Admin Utility, located in the Utilities folder inside the Applications folder, is an advanced tool used to set up and manage the AirPort Base Station. Use the AirPort Admin Utility to adjust network, routing, and security settings and other advanced options.



AirPort status icon in the menu bar

Use the AirPort status icon to switch quickly between AirPort networks, monitor the signal quality of the current network, and turn AirPort on and off.

In Mac OS 9



AirPort Setup Assistant

Use the AirPort Setup Assistant to configure the AirPort Base Station and to set up your computer to use AirPort.



AirPort

Use the AirPort application, located in the Apple () menu, to switch between AirPort networks, set up a Computer-to-Computer network, connect and disconnect your AirPort Base Station from the Internet, and monitor AirPort Base Station modem status.



AirPort Admin Utility

The AirPort Admin Utility, located in the AirPort folder inside the Apple Extras folder, is an advanced tool used to set up and manage the AirPort Base Station. Use the AirPort Admin Utility to adjust network, routing, and security settings and other advanced options.



AirPort Control Strip module

Use the Control Strip to switch quickly between AirPort networks, monitor the signal quality of the current network, and turn AirPort on and off.

Setting Up Your AirPort Base Station

What You Need to Set Up the AirPort Base Station for Internet Access

Before you set up the AirPort Base Station for Internet access, make sure of the following:

- You have a computer with an AirPort Card installed.
- The computer is already configured to access the Internet using its built-in modem or another method such as a cable modem, DSL modem, or Ethernet network. (As part of the setup process, a copy of your computer's active Internet settings will be transferred to the AirPort Base Station.)
- You have an account with an Internet service provider (fees may apply) or you have Internet access through a network.

For more information on using AirPort with your Internet account, contact your Internet service provider (ISP) or go to the AppleCare Knowledge Base at kbase.info.apple.com

If you do not have an AirPort-equipped computer, see the document called "Installation Instructions" on your AirPort software CD for information on other ways to set up your AirPort Base Station.

Before You Begin

- Choose a suitable location for your AirPort Base Station.

You can place your AirPort Base Station on a desk, bookcase, or other flat surface, or you can mount it on a wall. Place your AirPort Base Station in the center of your home or office, away from any source of interference or signal blockage such as a microwave oven or large metal appliances, and close to power and phone outlets (or a network connection).

For more information on mounting the AirPort Base Station, see “Mounting the AirPort Base Station on a Wall” on page 14.

- Make sure your computer has the latest version of the AirPort software installed. For the latest information on AirPort software, check the following Apple Web sites:
 - The Apple AirPort Web site at www.apple.com/airport
 - The Apple Support Web site at www.apple.com/support

Setup Overview

Once you’re ready, you can set up the AirPort Base Station in three steps:

- 1 Test your Internet connection using your computer.
- 2 Plug in the AirPort Base Station.
- 3 Use the AirPort Setup Assistant.

Step 1: Test Your Internet Connection Using Your Computer

- Test your Internet connection and the Internet settings on your computer by connecting to the Internet using your computer’s internal modem or other method.

As part of the setup process, the AirPort Setup Assistant transfers a copy of your computer’s active Internet settings to the AirPort Base Station, so these settings must be accurate.

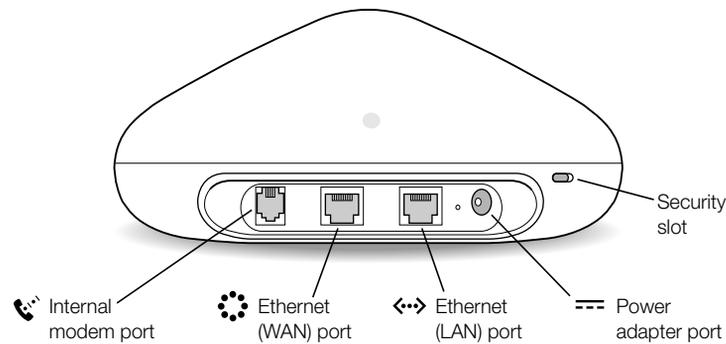
Step 2: Plug in the AirPort Base Station

- 1 Plug the AirPort Base Station power adapter into the power adapter port and connect it to an electrical outlet.

Important Use only the power adapter that came with your AirPort Base Station. Adapters for other electronic devices may look similar, but they may damage the base station.

The AirPort Base Station turns on when the power adapter is plugged in and connected to an electrical outlet. There is no power switch.

When you plug in the base station, all three status lights glow. These lights indicate that the base station is starting up. Only the middle light glows when startup is complete. The startup process takes about 30 seconds. See “Monitoring AirPort Base Station Communication” on page 18 for a complete explanation of the lights on the AirPort Base Station.



- 2 Connect the AirPort Base Station to your standard phone line, DSL or cable modem, or network.
 - If you use a standard modem and analog telephone line (the type of telephone line found in most residences) to access the Internet, connect one end of the phone cord to the internal modem (☎) port and the other end to your telephone jack.

Important Do not plug the base station into a digital telephone line.
 - If you have an Internet account that uses a device such as a DSL or cable modem, connect the device to the 10Base-T Ethernet WAN (⦿) port on the AirPort Base Station.

- If you use an Ethernet LAN for Internet access, such as in a school or office, connect the Ethernet cable to the 10/100Base-T Ethernet LAN (↔) port on the AirPort Base Station.

Important Do not connect an existing Ethernet network that has an Internet connection to the 10/100Base-T Ethernet LAN (↔) port unless you have turned off “Distribute IP addresses” in the Network tab of the AirPort Admin Utility. For more information on the AirPort Admin Utility and using the 10/100Base-T Ethernet LAN (↔) port, see the document “Designing AirPort Networks 2,” located on the AirPort software CD for Mac OS X, and in the AirPort folder in the Apple Extras folder inside the Applications (Mac OS 9) folder on your hard disk.

You can use the AirPort Base Station to provide Internet access to non-AirPort computers that are not otherwise connected to the Internet by connecting them to the 10/100Base-T Ethernet LAN (↔) port on the AirPort Base Station. The base station must be connected to the Internet by the 10Base-T Ethernet WAN (⊛) port or by the modem (☎) port.

Note: If you are connected to the Internet by the internal modem, the base station can provide Internet access to computers connected to both Ethernet ports (WAN ⊛ and LAN ↔).

Step 3: Use the AirPort Setup Assistant

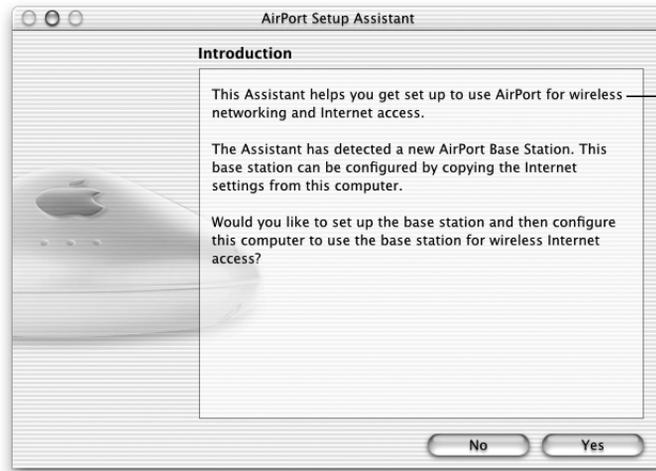
Use the AirPort Setup Assistant to configure the AirPort Base Station.

The AirPort Setup Assistant

- sets up your AirPort network
- transfers the active Internet settings from your computer to the AirPort Base Station
- configures your computer to access the AirPort network created by the AirPort Base Station

In Mac OS X, the setup assistant is located in the Utilities folder in the Applications folder on your hard disk. In Mac OS 9, the setup assistant is located in the AirPort folder, in the Apple Extras folder in the Applications (Mac OS 9) folder on your hard disk.

- 1 Make sure you have plugged in the base station and the middle light glows.
- 2 Open the AirPort Setup Assistant and follow the instructions on the screen.



This AirPort Setup Assistant screen appears if a new AirPort Base Station is detected and the computer has never been set up to use AirPort.

A different screen appears if there are other networks in range or the computer has already been set up to use AirPort.

If you are setting up your base station for the first time and you do not see an option to set up a base station:

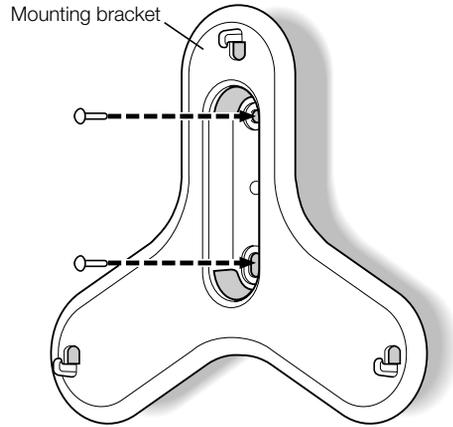
- 1 Quit the AirPort Setup Assistant by choosing Quit from the File menu.
- 2 Make sure that you have plugged in your base station and that the middle light glows.
- 3 Open the AirPort Setup Assistant again and follow the instructions to set up your computer and the AirPort Base Station.

After using the setup assistant to configure your base station, you can connect to the Internet. If you can't connect to the Internet, see Chapter 4, "Troubleshooting."

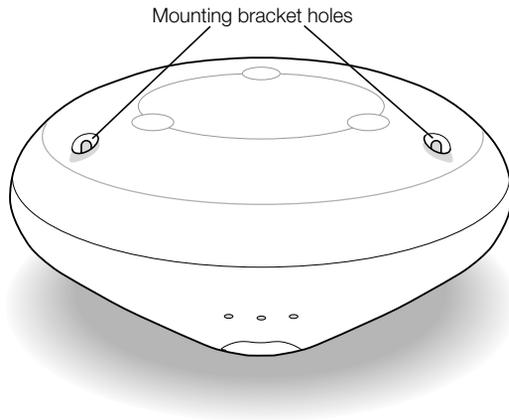
Mounting the AirPort Base Station on a Wall

You can use the mounting bracket provided with your AirPort Base Station to mount it on a wall. Follow these steps:

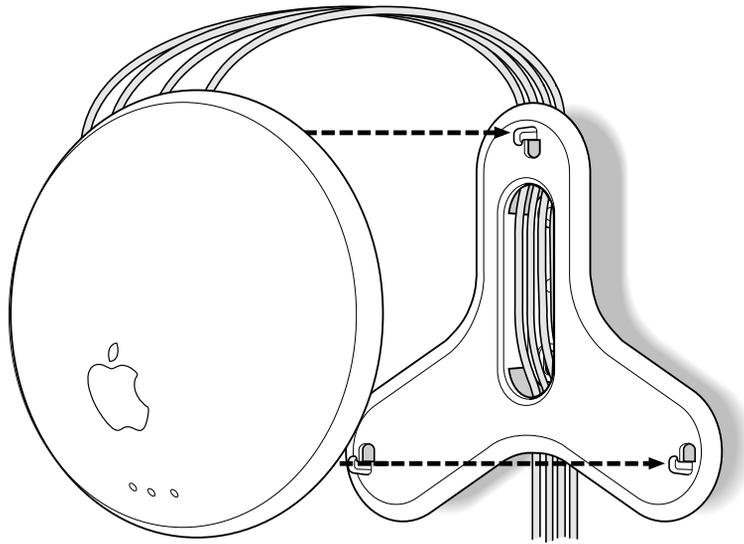
- 1 Select a location close to power and phone outlets (or a network connection).
- 2 Screw the mounting bracket into a wall stud using the two screws that came with the base station.



- 3 Locate the two mounting bracket holes on the bottom of the base station.



- 4 Feed the cables through the mounting bracket and then connect them to the base station.
The unit is designed to mount with the ports on the top (Apple logo right side up), with the cables passing behind the unit through the mounting bracket as shown.



Note: The mounting bracket has enough space for four cables (power, phone, and two Ethernet cables), as shown in the illustration. In most cases, only two cables are used.

- 5 Carefully insert the bottom two prongs on the mounting bracket into the mounting bracket holes on the bottom of the base station. Clip the top prong on the mounting bracket around the bottom lip of the base station.

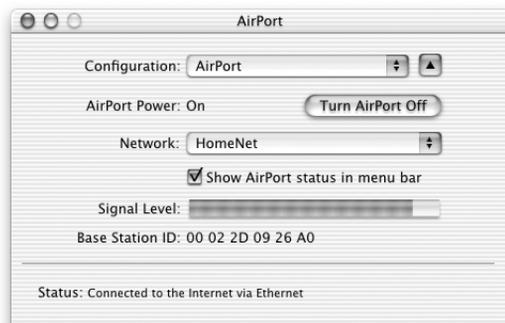
Using Your AirPort Base Station

Use the information provided in this chapter to

- monitor your AirPort Base Station status
- connect to and disconnect from the Internet
- add computers to your AirPort network
- use the AirPort Admin Utility to modify advanced base station settings

Monitoring the AirPort Base Station's Internet Connection Status

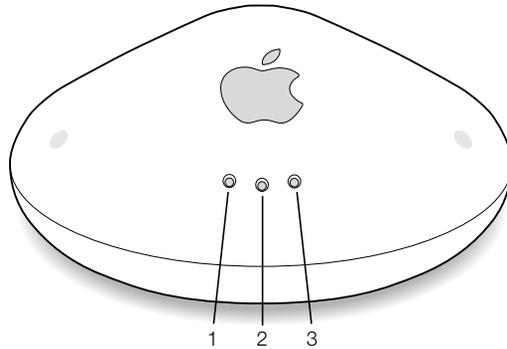
- *In Mac OS X*, use the Internet Connect application to monitor the status of your AirPort Base Station's Internet connection, as shown below.



- *In Mac OS 9*, use the AirPort application to monitor your connection.

Monitoring AirPort Base Station Communication

The following explains what the lights on the AirPort Base Station indicate.



Light number	Indicator	Status
1	Flashing	The AirPort Base Station is communicating via AirPort.
2	Steady glow	The AirPort Base Station is receiving power and in normal operating mode.
3	Flashing	The AirPort Base Station is communicating via the Ethernet and/or modem ports, or the internal modem is dialing your ISP.

The AirPort Base Station does not have an internal speaker, so you do not hear the modem dial when the base station is connecting to the Internet.

Connecting to the Internet

If you use a dialup ISP, the AirPort Base Station establishes an Internet connection automatically when any computer on the AirPort network opens an application that requires an Internet connection. If you are connected to an AirPort network that has continuous Internet access via Ethernet, DSL, or a cable modem, you can connect to the Internet by opening and using any application that requires an Internet connection.

Connecting to the Internet Manually

If you use a dialup ISP and you don't want the AirPort Base Station to connect automatically, open the AirPort Admin Utility, select your base station, and click Configure. Then click the checkbox in the Internet panel to deselect "Automatically dial."

If you use a dialup ISP and you want to connect to the Internet manually, follow these steps:

- *In Mac OS X*

- 1 Open the Internet Connect application, located in the Applications folder on your hard disk.
- 2 Choose AirPort from the Configuration pop-up menu and click Connect.

- *In Mac OS 9*

- 1 Open the AirPort application, located in the AirPort folder in the Apple Extras folder, inside the Applications (Mac OS 9) folder on your hard disk.
- 2 Click Connect.

Disconnecting From the Internet

The AirPort Base Station automatically disconnects from the Internet after a period of inactivity.

If you are using a dialup ISP, you can manually disconnect from the Internet using the Internet Connect application in Mac OS X or the AirPort application in Mac OS 9.

- Open the application and click the Disconnect button.

Connecting Additional Computers to Your AirPort Network

Once you've set up the AirPort Base Station, you can configure any AirPort-equipped computer to access the wireless network you just created.

- Open the AirPort Setup Assistant on the computer you want to use and select the "Set up your computer to join an existing wireless network" option.

Configuring the AirPort Base Station With the AirPort Admin Utility

The AirPort Setup Assistant provides complete configuration options for most AirPort networks. For advanced settings, you can use the AirPort Admin Utility to configure your AirPort Base Station. The AirPort Admin Utility is located in the Utilities folder in the Applications folder in Mac OS X, and in the AirPort folder in the Apple Extras folder inside the Applications (Mac OS 9) folder on your hard disk. The AirPort Admin Utility allows you to do the following:

- Configure your AirPort network, including changing the network name and the password and indicating whether users need a password to join your network.
- Change the AirPort Base Station name and password.
- Enter the TCP/IP settings for your AirPort Base Station.

- Configure ISP information such as telephone number, user name, and password.
- Set up the way Internet access is provided to computers on the AirPort network.
Note: By default, the AirPort Base Station is set to use the Internet Dynamic Host Configuration Protocol (DHCP) to share a single IP address. The base station provides a private address in the range of 10.0.1.2 to 10.0.1.200. You can use the AirPort Admin Utility to configure the base station to distribute a specified range of IP addresses or turn off Internet Sharing and assign fixed IP addresses to all computers on the network instead.

Important If you use the AirPort Admin Utility instead of the setup assistant to configure your base station for the first time, you may be asked for a password. The initial password for the AirPort Base Station is *public*.

More Information About AirPort

You can find more information about AirPort in the following locations:

- AirPort Help
Look in AirPort Help for information on setting up an AirPort network, using an AirPort Base Station, editing base station settings, avoiding sources of interference, locating additional information on the Internet, and more. In Mac OS X, choose Mac Help from the Help menu, click the Help (question mark) button, and choose AirPort Help from the list. In Mac OS 9, choose Help Center from the Help menu and click AirPort Help.
- Balloon Help
For information on specific items in any of the AirPort applications in Mac OS 9, choose Show Balloons from the Help menu. Then point to the item that interests you.
- “Designing AirPort Networks 2”
For in-depth information on configuring AirPort networks, open the “Designing AirPort Networks 2” document, located on the AirPort software CD in Mac OS X, and in the AirPort folder inside the Apple Extras folder in the Applications (Mac OS 9) folder on your hard disk in Mac OS 9.
- World Wide Web
The Apple AirPort Web site at www.apple.com/airport
The Apple Support Web site at www.apple.com/support

Troubleshooting

The AirPort Setup Assistant says that the proper AirPort hardware was not detected.

- Make sure that the computer you are using has an AirPort Card installed. If you recently installed the card, shut down your computer and make sure the card is properly installed. Make sure that the AirPort antenna is securely connected to the card (you should hear a click when the antenna is connected securely). Make sure that the other end of the card is firmly inserted into the connector in the AirPort Card slot.

The “Set up an AirPort Base Station” option is not available, or the AirPort Setup Assistant can’t detect the AirPort network created by the base station.

- Make sure that the AirPort Base Station is plugged into a working electrical outlet.
- Make sure that your computer is in range of the AirPort Base Station, or is connected to the Ethernet LAN (↔) port by an Ethernet cable. The typical range for AirPort communication is 50 meters (168 feet) in any direction.
- Make sure your computer and AirPort Base Station are away from any source of interference, such as metal walls or microwave ovens. Reposition your computer and check to see if the network becomes available. If that does not work, try repositioning the base station. For a complete list of sources of interference, see the document “Designing AirPort Networks 2” on the AirPort CD in Mac OS X, and in the AirPort folder in the Apple Extras folder inside the Applications (Mac OS 9) folder on your hard disk in Mac OS 9.
- Restart your computer.

Your Internet connection has problems.

- Test your Internet connection by connecting to the Internet using your computer's internal modem or another method instead of using the AirPort Base Station.
After you test your Internet connection, make sure to switch your TCP/IP configuration back to AirPort. In Mac OS X, choose AirPort in the Show pop-up menu on the Network pane of System Preferences. In Mac OS 9, open the TCP/IP control panel, choose Configurations from the File menu, and select AirPort.
- Some Internet service providers (ISPs) are not currently compatible with AirPort. For more information on using the AirPort Base Station with your Internet account, contact your ISP or look on the Apple Support Web site at www.apple.com/support
- If there is a microwave oven nearby that is used frequently, it may cause problems with your Internet connection. Use the AirPort Admin Utility to select your base station, click Configure, and click the "Interference robustness" checkbox in the AirPort panel.

Your Internet browser can't load the requested Web page.

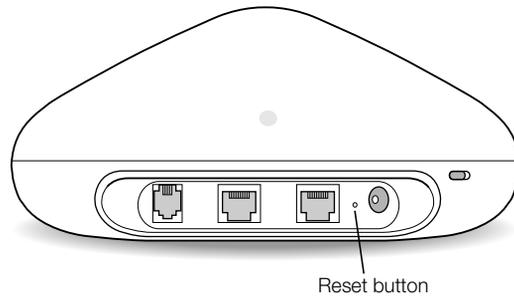
- You may have tried to go to a Web page before the AirPort Base Station was finished connecting to your ISP. Wait until the base station is connected and then go to the Web page again. Monitor your connection in Mac OS X with the Internet Connect application. In Mac OS 9, use the AirPort application to monitor your connection.
- If you are using a dialup connection, your base station may not be configured to dial automatically when you open an application that requires an Internet connection. To configure your base station to dial automatically, open the AirPort Admin Utility, select your base station, and click Configure. Then click the checkbox in the Internet panel to select "Automatically dial." You can also use the Internet Connect application in Mac OS X, or the AirPort application in Mac OS 9, to connect to the Internet, then open your Web browser.

You forget your AirPort network or base station password.

You can clear the AirPort network or base station password by resetting the base station. This is known as a soft reset. Follow these steps:

- 1 Make sure that TCP/IP on your computer is configured in the following way:
 - *In Mac OS X*, set the Show pop-up menu on the Network pane of System Preferences to AirPort and set the Configure pop-up menu to Using DHCP.
 - *In Mac OS 9*, set the "Connect via" pop-up menu of the TCP/IP control panel to AirPort and set the Configure pop-up menu to Using DHCP Server.

- 2 Insert a straightened paperclip into the reset button. Press and hold the reset button for one full second.



The middle light flashes, indicating that the base station is in reset mode. The base station remains in reset mode for five minutes. If you do not make your changes within five minutes of pressing the reset button, you must reset it again.

- 3 Use the AirPort status icon in the menu bar of Mac OS X or the AirPort Control Strip module in Mac OS 9 to select the network created by the base station (the network name does not change).
- 4 Open the AirPort Admin Utility.
- 5 Select your base station and click Configure.

In the dialog box that appears, make the following changes:

- *IP address*: Unless you have been given an IP address by your ISP or system administrator, do not change the IP address.
- Reset the AirPort Base Station password.
- Turn encryption on to activate password protection for your AirPort network. If you turn on encryption, enter a new password for your AirPort network.

- 6 Click OK.

The base station restarts to load the new settings.

You move your AirPort Base Station to a location on your network with a different subnet and lose communication with the base station.

Because your AirPort Base Station may have an invalid IP address, do the following:

- 1** Make sure that your computer is set to access the network from the same location on the network where you are going to move the AirPort Base Station and that it is in range of the base station.
- 2** Make sure that the computer is set to use AirPort.
- 3** Use the AirPort Setup Assistant to reconfigure the base station.

Important You cannot use the setup assistant if you have used the AirPort Admin Utility to turn off Internet Sharing for your base station. If Internet Sharing is turned off, you need to reset your base station as described in the previous section and enter a new IP address.

Additional Information

For more information on using or configuring the AirPort Base Station, see AirPort Help. In Mac OS X, choose Mac Help from the Help menu, click the Help (question mark) button, and choose AirPort Help from the list. In Mac OS 9, choose Help Center from the Help menu and click AirPort Help. There you will find information on editing base station settings, avoiding sources of wireless interference, locating additional information on the Internet, and more.

You can also find more information at the following Apple Web sites:

- The Apple AirPort Web site at www.apple.com/airport
- The Apple Support Web site at www.apple.com/support

For in-depth information about configuring AirPort networks, see the “Designing AirPort Networks 2” document on the AirPort software CD in Mac OS X, or in the AirPort folder in the Apple Extras folder inside the Applications (Mac OS 9) folder on your hard disk in Mac OS 9.

For wireless certification information, see the AirPort Regulatory Certification document that came with your AirPort Base Station.

AirPort Base Station Specifications

AirPort Specifications

- *Wireless Data Rate:* Up to 11 megabits per second (Mbps)
- *Range:* Up to 50 meters (168 feet) in typical use (varies with building)
- *Frequency Band:* 2.4 gigahertz (GHz)
- *Radio Output Power:* 15 dbm (nominal)
- *Standards:* Compliant with 802.11 HR Direct Sequence Spread Spectrum (DSSS) 11 Mbps standard and 802.11 DSSS 1 and 2 Mbps standard

Interfaces

- RJ-11 connector for built-in V.90 56K modem
Note: Download speeds vary with line conditions and your ISP's modem capabilities. FCC regulations limit ISP transmission speeds to 53 Kbps in the United States.
- RJ-45 Ethernet WAN connector for built-in 10Base-T (🌐)
- RJ-45 Ethernet LAN connector for built-in 10/100Base-T (↔)
- AirPort

Environmental Specifications

- *Operating Temperature:* 32° to 95° F (0° C to 35° C)
- *Storage Temperature:* -13° to 140° F (-25° C to 60° C)
- *Relative Humidity (Operational):* 20% to 80% relative humidity
- *Relative Humidity (Storage):* 10% to 90% relative humidity, noncondensing
- *Operating Altitude:* 0 to 10,000 feet (0 to 3048 m)
- *Maximum Storage Altitude:* 15,000 feet (4572 m)

Size and Weight

- *Diameter:* 6.9 inches (175 mm)
- *Height:* 3.2 inches (80 mm)
- *Weight:* 1.25 pounds (565 grams) not including the mounting bracket

Base Station LED Sequences

The following table explains the base station's light sequences and what they indicate.

Left	Center	Right	Status/Description
Off	Off	Off	The base station is unplugged or has failed. If the base station is plugged in and all lights are off, contact your Apple-authorized service provider.
On	Off	On	The base station is in self-check mode.
Sequenced flashing, left-to-right			The base station is starting up.
Flashing	Flashing	Flashing	The base station has failed the power-on self-test. Contact your Apple-authorized service provider.
Off	Flashing slowly	Off	The base station is in Soft Reset mode if you reset the base station while it was plugged in. The base station is in Forced Reload mode if you reset the base station while plugging it in.
Off	Flashing quickly	Off	The base station is being reset, updating either the firmware or the base station configuration.
Off/ Flashing	On	Off/ Flashing	Left and right flashing indicates normal network activity. The left LED flashing indicates AirPort wireless activity and the right LED flashing indicates Ethernet or modem activity.

Communications Regulation Information

FCC Declaration of Conformity

This device complies with part 15 of the FCC rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation. See instructions if interference to radio or television reception is suspected.

Radio and Television Interference

The equipment described in this manual generates, uses, and can radiate radio-frequency energy. If it is not installed and used properly—that is, in strict accordance with Apple’s instructions—it may cause interference with radio and television reception.

This equipment has been tested and found to comply with the limits for a Class B digital device in accordance with the specifications in Part 15 of FCC rules. These specifications are designed to provide reasonable protection against such interference in a residential installation. However, there is no guarantee that interference will not occur in a particular installation.

You can determine whether your computer system is causing interference by turning it off. If the interference stops, it was probably caused by the computer or one of the peripheral devices.

If your computer system does cause interference to radio or television reception, try to correct the interference by using one or more of the following measures:

- Turn the television or radio antenna until the interference stops.
- Move the computer to one side or the other of the television or radio.
- Move the computer farther away from the television or radio.
- Plug the computer into an outlet that is on a different circuit from the television or radio. (That is, make certain the computer and the television or radio are on circuits controlled by different circuit breakers or fuses.)

If necessary, consult an Apple-authorized service provider or Apple. See the service and support information that came with your Apple product. Or, consult an experienced radio/television technician for additional suggestions.

Important Changes or modifications to this product not authorized by Apple Computer, Inc., could void the FCC Certification and negate your authority to operate the product.

This product was tested for FCC compliance under conditions that included the use of Apple peripheral devices and Apple shielded cables and connectors between system components. It is important that you use Apple peripheral devices and shielded cables and connectors between system components to reduce the possibility of causing interference to radios, television sets, and other electronic devices. You can obtain Apple peripheral devices and the proper shielded cables and connectors through an Apple-authorized dealer. For non-Apple peripheral devices, contact the manufacturer or dealer for assistance.

Responsible party (contact for FCC matters only): Apple Computer, Inc., Product Compliance, 1 Infinite Loop M/S 26-A, Cupertino, CA 95014-2084, 408-974-2000.

Exposure to Radio Frequency Energy

The radiated output power of the optional AirPort Card is far below the FCC radio frequency exposure limits. Nevertheless, it is advised to use the wireless equipment in such a manner that the potential for human contact during normal operation is minimized.

Industry Canada Statement

This Class B device meets all requirements of the Canadian interference-causing equipment regulations.

Cet appareil numérique de la Class B respecte toutes les exigences du Règlement sur le matériel brouilleur du Canada.

VCCI Class B Statement

情報処理装置等電波障害自主規制について

この装置は、情報処理装置等電波障害自主規制協議会（VCCI）の基準に基づくクラス B 情報技術装置です。この装置は、家庭環境で使用することを目的としていますが、この装置がラジオやテレビジョン受信機に近接して使用されると、受信障害を引き起こすことがあります。

取扱説明書に従って正しい取り扱いをして下さい。

Europe – EU Declaration of Conformity

This device complies with the specifications ETS 300 328 and ETS 300 826, following the provisions of the EMC Directive 89/336/EEC.

Notify Your Telephone Company

Some telephone companies require that you notify the local business office when you hook up a modem to their lines.

Information You Need in the United States

The internal modem complies with Part 68 of the FCC rules. On the back of this equipment is a label that contains, among other information, the FCC registration number and ringer equivalence number (REN). If requested, provide this information to your telephone company.

- *Ringer equivalence number (REN):* 0.8 The REN is useful to determine the quantity of devices you may connect to your telephone lines and still have all those devices ring when your telephone number is called. In most, but not all areas, the sum of the RENs of all devices connected to one line should not exceed five (5.0). To be certain of the number of devices you may connect to your line, as determined by the REN, you should contact your local telephone company to determine the maximum REN for your calling area.
- *Telephone jack type:* USOC, RJ-11 An FCC-compliant telephone cord and modular plug are provided with this equipment. This equipment is designed to be connected to the telephone network or premises wiring using a compatible modular jack that complies with Part 68 rules. See the installation instructions for details.

Telephone Line Problems

If your telephone doesn't work, there may be a problem with your telephone line. Disconnect the modem to see if the problem goes away. If it doesn't, report the problem either to your local telephone company or to your company's telecommunications people.

If disconnecting the modem eliminates the problem, the modem itself may need service. See the service and support information that came with your Apple product for instructions on how to contact Apple or an Apple-authorized service provider for assistance.

If you do not disconnect your modem when it is adversely affecting the telephone line, the telephone company has the right to disconnect your service temporarily until you correct the problem. The telephone company will notify you as soon as possible. Also, you will be informed of your right to file a complaint with the FCC.

The telephone company may make changes in its facilities, equipment, operations, or procedures that could affect the operation of your equipment. If this happens, the telephone company will provide advance notice in order for you to make the necessary modifications to maintain uninterrupted service.

The optional internal modem will not work with party lines, cannot be connected to a coin-operated telephone, and may not work with a private branch exchange (PBX).

Telephone Consumer Protection Act

The Telephone Consumer Protection Act of 1991 makes it unlawful for any person to use a computer or other electronic device to send any message via a telephone fax machine unless such message clearly contains in a margin at the top or bottom of each transmitted page or on the first page of the transmission, the date and time it was sent and an identification of the business or other entity, or individual sending the message and the telephone number of the sending machine of such business, entity, or individual.

Information You Need in Canada

The Industry Canada (IC) label identifies certified equipment. This certification means that the equipment meets certain telecommunications network protective, operational, and safety requirements. The Department does not guarantee the equipment will operate to a user's satisfaction.

Before installing this equipment, make sure that you are permitted to connect to the facilities of the local telecommunications company. Be sure you use an acceptable method of connection to install the equipment. In some cases, you may extend the company's internal wiring for single-line individual service by means of a certified telephone extension cord. Be aware, however, that compliance with these conditions may not prevent degradation of service in some situations.

Repairs to certified equipment should be made by an authorized Canadian maintenance facility designated by the supplier. Any equipment malfunctions or repairs or alterations that you make to this equipment may cause the telecommunications company to request that you disconnect the equipment.

In Canada, contact Apple at: 7495 Birchmount Road, Markham, Ontario, L3R 5G2, 800-263-3394

Users should ensure for their own protection that the electrical ground connections of the power utility, telephone lines, and internal metallic water pipe system, if present, are connected together. This precaution may be particularly important in rural areas.

Warning Users should not attempt to make such connections themselves, but should contact the appropriate electric inspection authority or electrician.

- *Load number:* 0.3 The load number (LN) assigned to each terminal device denotes the percentage of the total load to be connected to the telephone loop that is used by the device, to prevent overloading. The termination of a loop may consist of any combination of devices, subject only to the requirement that the sum of the load numbers of all devices does not exceed 100.
- *Telephone jack type:* CA-11

Informations Destinées aux Utilisateurs Canadiens

L'étiquette d'Industrie Canada identifie un matériel homologué. Cette étiquette certifie que le matériel est conforme à certaines normes de protection, d'exploitation et de sécurité des réseaux de télécommunications. Le Ministère n'assure toutefois pas que le matériel fonctionnera à la satisfaction de l'utilisateur.

Avant d'installer ce matériel, l'utilisateur doit s'assurer qu'il est permis de le raccorder au réseau de l'entreprise locale de télécommunication. Le matériel doit également être installé en suivant une méthode acceptée de raccordement. Dans certains cas, le câblage appartenant à l'entreprise utilisé pour un service individuel à ligne unique peut être prolongé au moyen d'un dispositif homologué de raccordement (cordon prolongateur téléphonique).

L'abonné ne doit pas oublier qu'il est possible que la conformité aux conditions énoncées ci-dessus n'empêchent pas la dégradation du service dans certaines situations. De fait, les entreprises de télécommunication ne permettent pas que l'on raccorde un matériel aux prises d'abonné, sauf dans les cas précis prévus par les tarifs particuliers de ces entreprises.

Les réparations de matériel homologué doivent être effectuées par un centre d'entretien canadien autorisé désigné par le fournisseur. La compagnie de télécommunications peut demander à l'utilisateur de débrancher un appareil suite à des réparations ou des modifications effectuées par l'utilisateur ou à cause de mauvais fonctionnement.

Veuillez contacter le fournisseur suivant pour des informations supplémentaires :

Apple Canada, Inc.
7495 Birchmount Road
Markham, Ontario
Canada L3R 5G2
Apple Canada Customer Assistance Line: 800-263-3394

Pour sa propre protection, l'utilisateur doit s'assurer que tous les fils de mise à la terre du secteur, des lignes téléphoniques et les canalisations d'eau métalliques, s'il y en a, soient raccordés ensemble. Cette précaution est particulièrement importante dans les régions rurales.

Avertissement L'utilisateur ne doit pas tenter de faire ces raccordements lui-même; il doit avoir recours à un service d'inspection des installations électriques ou à un électricien, selon le cas.

- *Numéro de charge* : 0.3 L'indice de charge (IC) assigné à chaque dispositif terminal indique, pour éviter toute surcharge, le pourcentage de la charge totale qui sera raccordée à un circuit téléphonique bouclé utilisé par ce dispositif. La terminaison du circuit bouclé peut être constituée de n'importe quelle combinaison de dispositifs pourvu que la somme des indices de charge de l'ensemble des dispositifs ne dépasse pas 100.
- *Type de prise téléphonique* : CA-11

Information You Need in the United Kingdom

This terminal equipment is intended for direct connection to the analogue Public Switched Telecommunications Network and is approved for use within the United Kingdom with the following features:

- Modem facility
- Autocalling facility
- Autoanswer facility
- DTMF signaling
- Operation in the absence of proceed indication or upon detection of proceed indication

This product is in conformity with relevant regulatory standards following the provisions of European Council Directives 73/23/EEC (Low Voltage Directive) and 89/336/EEC amended by 92/31/EEC (EMC Directive).

Information You Need in Germany

Diese Modem-Karte ist als Endeinrichtung vorgesehen und muss an ein TAE mit F-Kodierung angeschlossen werden.

Diese Endeinrichtung ist in Konformität gemäss Niederspannungsrichtlinie 73 / 23 / EWG sowie EMC-Richtlinien 89 / 336 / EWG und 92 / 31 / EWG.

Information You Need in France

Ce matériel est conforme aux normes applicables de sécurité électrique d'après la directive 73 / 23 / CEE et aux normes applicables de compatibilité électromagnétique d'après la directive 89 / 336 / CEE, modifié par la directive 92 / 31 / CEE.

Information You Need in Australia

All telecommunications devices are required to be labelled as complying to the Australian telecommunications standards, ensuring the health and safety of the operator and the integrity of the Australian telecommunications network. To provide compliance with the Australian Communications Authority's technical standards, please ensure that the following AT commands are maintained:

- ATB0 (ITU/CCITT operation)
- AT&G0 (no guard tone)
- AT&P1 (33/66 pulse dial make/break ratio)
- ATS0 = 0 or ATS0 = 2 (no answer or answer greater than one ring)
- ATS6 = n (blind dial delay acceptable range of 2–5 seconds)
- ATS11 = 95 (DTMF period between 70–255 ms)

For calls that are automatically generated, a total of three call attempts are allowed to a telephone number, with a minimum period between calls of 2 seconds. If the call does not connect after three attempts, 30 minutes must expire before automatic redialing may be initiated. Failure to set the modem (and any associated communications software) to the above settings may result in the modem being non-compliant with Australian telecommunications standards. Under these circumstances a user could be subject to significant penalties under the Telecommunications Act 1997.

Warning This card must be properly secured in order for you to use it. Telecommunications network voltages exist inside the computer and the telecommunications line connection must be removed before opening the computer.

Information You Need in New Zealand

This modem is fully approved to operate on the New Zealand telecommunications network under Telepermit number PTC 211/99/077. All telecommunications devices are required to hold a Telepermit and be labelled accordingly with the approved Telepermit number to comply with the New Zealand telecommunications standards, ensuring the health and safety of the operator and the integrity of the New Zealand telecommunications network.

To ensure compliance, all calls that are automatically generated should not make more than 10 call attempts to the same number within any 30 minute period with a minimum period between calls of 30 seconds. Failure to adhere to these standards may result in the modem being non-compliant with New Zealand Telecom standards. Under these circumstances a user could be subject to significant penalties.

Important The grant of a Telepermit for any item of terminal equipment indicates only that Telecom has accepted that the item complies with minimum conditions for connection to its network. It indicates no endorsement of the product by Telecom, nor does it provide any sort of warranty. Above all, it provides no assurance that any item will work correctly in all respects with another item of Telepermitted equipment of a different make or model, nor does it imply that any product is compatible with all of Telecom's network services.

