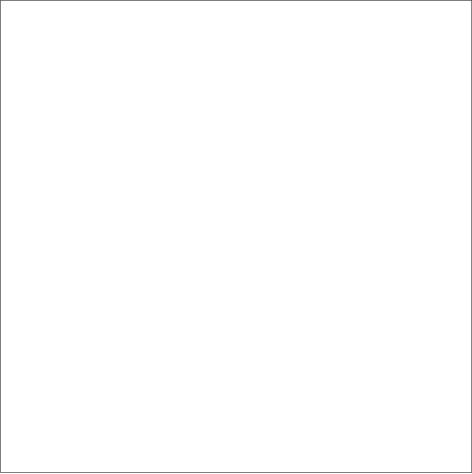


## AirPort Express Setup Guide



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### **Getting Started**

# Congratulations on purchasing AirPort Express. Read this guide to get started using it.

You can use AirPort Express to share your broadband Internet access with wireless computers on your network, play iTunes music on your home stereo, and much more.

Your AirPort Express comes with AirTunes, a way to play iTunes music through remote speakers.

### With AirPort Express, you can:

- Create a wireless network in your home, then connect to the Internet and share the connection with up to ten computers simultaneously. An entire family can be connected to the Internet at the same time.
- Connect AirPort Express to your home stereo or powered speakers and use AirTunes
  to play your iTunes music on your home stereo from a Macintosh with an AirPort or
  AirPort Extreme Card, or a compatible Windows XP or 2000 wireless computer.

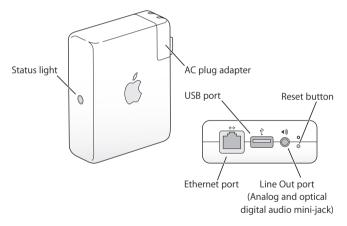
- Set up a wireless connection to your Ethernet network. AirPort and AirPort Extremeequipped Macintosh computers or Windows XP or 2000 computers can then have access to an entire network without being connected with a cable.
- Extend the range of your network by adding AirPort Express to your existing AirPort Extreme or AirPort Express wireless network (this is called a Wireless Distribution System, or WDS).
- Connect a USB printer to your AirPort Express. All of the compatible computers on the AirPort network, both wireless and wired, can print to it.
- Create custom profiles so you can store settings for up to five different locations.

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### **About AirPort Express**

AirPort Express has three ports, located on the bottom side:

- Ethernet port ( ( ) for connecting a DSL or cable modem, or for connecting to an existing Ethernet network
- Analog and optical digital audio stereo mini-jack (4)) for connecting AirPort Express to a home stereo or powered speakers
- USB port (◊) for connecting a compatible printer to AirPort Express



Next to the ports is a reset button, which is used for troubleshooting your AirPort Express. The status light on the side of AirPort Express shows the current status.

### About the AirPort Software

AirPort Express works with the AirPort software included on the AirPort Express CD.



#### AirPort Setup Assistant

Use the AirPort Setup Assistant (or the AirPort Express Assistant if you are using Windows XP) to set up your AirPort Express to connect to the Internet, play iTunes music on your home stereo or powered speakers, and share a printer. You can also bridge your AirPort Express to your existing AirPort Extreme or AirPort Express wireless network to extend the range of your network (WDS).



#### AirPort Admin Utility

AirPort Admin Utility is an advanced tool for setting up and managing AirPort Extreme and AirPort Express base stations. Use AirPort Admin Utility to adjust network, routing, and security settings and other advanced options.



### AirPort status menu in the menu bar

Use the AirPort status menu to switch quickly between AirPort networks, monitor the signal quality of the current network, create a Computer-to-Computer network, and turn AirPort on and off. The status menu is available on computers using Mac OS X.

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### What You Need to Get Started

### To set up AirPort Express using a Macintosh, you must have the following:

- A Macintosh computer with an AirPort or AirPort Extreme Card installed
- Mac OS X v10.3 or later
- iTunes 4.7 (included on the AirPort Express CD) or later

### To set up AirPort Express using a Windows PC, you must have the following:

- A Windows PC with 300 MHz or higher processor speed
- Windows XP Home or Professional
- iTunes 4.7 for Windows (included on the AirPort Express CD) or later

You need iTunes 4.6 or later to play audio from your computer to a stereo connected to AirPort Express. To be sure you have the latest version of iTunes, go to www.apple.com/itunes.

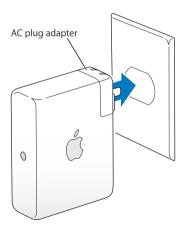
You can use AirPort Express with any wireless-enabled computer that is compliant with the IEEE 802.11b or 802.11g standards. To set up AirPort Express, your computer must meet the requirements listed above.

*Note:* If you are using Windows 2000, use AirPort Admin Utility for Windows to set up your AirPort Express. The AirPort Express Assistant is not compatible with Windows 2000.

### Plugging In AirPort Express

Before you plug in your AirPort Express, first connect the appropriate cables to the ports you want to use, including the Ethernet cable connected to your DSL or cable modem (if you will connect to the Internet), the audio cable connected to your stereo (if you will use AirTunes to play music from iTunes) and a USB cable connected to a compatible USB printer (if you will print to a USB printer).

Once you have connected the cables for all the devices you plan to use, connect the AC plug adapter if necessary. Plug AirPort Express into the wall. There is no on switch.



Getting Started

When you plug AirPort Express into the wall, the status light flashes green and then glows amber while it starts up. Once it has started up completely, the status light glows solid green.

### **AirPort Express Status Lights**

The following table explains AirPort Express light sequences and what they indicate.

Light	Status/description
Off	AirPort Express is unplugged.
Flashing green	AirPort Express is starting up.  Note: If you choose Flash On Activity from the Status Light popup menu in the Base Station pane of AirPort Admin Utility, the status light may flash green to indicate normal activity.
Solid green	AirPort Express is on and working properly. If you choose Flash On Activity from the Status Light pop-up menu in the Base Station pane of AirPort Admin Utility, the status light may flash green to indicate normal activity.
Flashing amber	AirPort Express cannot establish a connection to the network or the Internet. See "Your AirPort Express Status Light Flashes Amber" on page 38.
Solid amber	AirPort Express is completing its startup sequence.
Flashing amber and green	There may be a problem starting up. AirPort Express will restart and try again.

#### What's Next

After you plug in AirPort Express, you use the AirPort Setup Assistant on a Macintosh computer to set it up to work with your Internet connection, stereo, USB printer, or existing network. If you are using a computer with Windows XP, use the AirPort Express Assistant to set up AirPort Express. If you are using a computer with Windows 2000, use AirPort Admin Utility.

See "Using AirPort Express" on page 12 for examples of all the ways you can use AirPort Express, and information about how to set them up.

Then see "Setting Up AirPort Express" on page 26 to find out more about the setup process.

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### **Using AirPort Express**

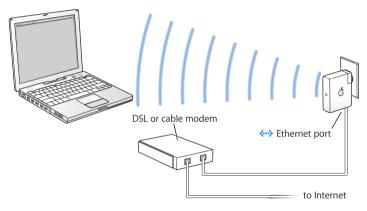
# In this chapter you'll find explanations of the different ways you can use AirPort Express.

This chapter gives examples of how your setup might look, depending on how you use AirPort Express. It also gives a brief explanation of what you need to do to get your AirPort Express network up and running guickly.

### Using AirPort Express With Your Broadband Internet Service

When you set up AirPort Express to provide network and Internet access, Macintosh computers with AirPort and AirPort Extreme Cards and 802.11b and 802.11g wireless-equipped computers can access the wireless AirPort network to share files, play games, and use Internet applications like web browsers and email applications.

#### What It Looks Like



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### How to Set It Up

- 1 Connect your DSL or cable modem to your AirPort Express using the Ethernet port (↔).
- 2 Use the AirPort Setup Assistant on a computer using Max OS X, or the AirPort Express Assistant if you are using a computer with Windows XP, to create a new network. (See page 26 for more information.)

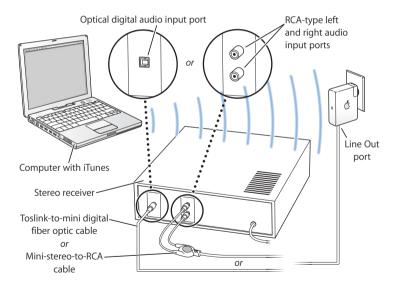
Computers using AirPort and computers using other wireless cards or adapters connect to the Internet through AirPort Express.

Wireless computers communicate with one another through AirPort Express.

# Using AirPort Express With AirTunes to Play iTunes Music on Your Stereo

You can connect your AirPort Express to your stereo with a Toslink-to-mini digital fiber optic cable or a mini-stereo-to-dual-RCA cable, and use AirTunes to wirelessly play music from iTunes.

### What It Looks Like



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### How to Set It Up

1 Connect your AirPort Express to your home stereo or powered speakers using a digital fiber optic cable or analog mini-stereo-to-dual-RCA connected to the stereo mini-jack (4%).

**Note:** You cannot use powered USB speakers with AirPort Express. Use only powered speakers with a stereo mini-jack connector.

- 2 Use the AirPort Setup Assistant for Mac OS X or the AirPort Express Assistant for Windows XP to create a new network. (See page 26 for more information.)
- 3 Open iTunes on your computer and choose your stereo or speakers from the speakers pop-up menu in the lower right of the iTunes window.

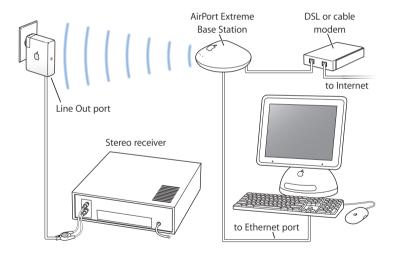
Wireless computers within range of AirPort Express can wirelessly stream music to it using iTunes 4.6 or later. Only one computer at a time can stream music to AirPort Express. You cannot stream music to more than one AirPort Express at a time.

*Note:* Do not connect AirPort Express to the phono jack on your stereo.

## Using AirPort Express on an Existing Wireless Network to Stream Music to Your Home Stereo

You can also connect AirPort Express to a wireless network and use AirTunes to play music on your stereo from iTunes. Connecting AirPort Express to your existing network allows you to place AirPort Express in another room, within range of your network.

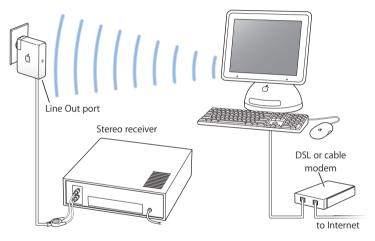
### What It Looks Like



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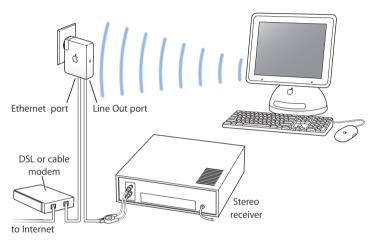
To join the wireless network, use the AirPort status menu in the menu bar on a Macintosh. On a computer using Windows XP or Windows 2000, hold the pointer over the wireless connection icon until you see your AirPort network name (SSID), and choose it from the list if there are multiple networks available.

There are also other ways you can connect your AirPort Express to your home stereo.



If your computer has an AirPort Extreme Card installed, you can use AirTunes to play iTunes music on a stereo connected to your AirPort Express.

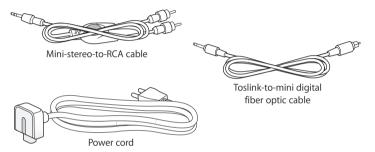
You can also connect your AirPort Express to the Internet and provide Internet access to computers that join the network. Connect your AirPort Express to your home stereo, and computers on the network with AirPort Extreme Cards or computers with compatible 802.11g cards can use iTunes to play music on the stereo.



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### **Optional Audio Cable and Power Cord**

You can purchase the optional AirPort Express Stereo Connection Kit with Monster Cables to connect your AirPort Express to your home stereo or powered speakers. The kit includes analog mini-stereo-to-dual-RCA connectors, a Toslink digital fiber optic cable, and a power cord.

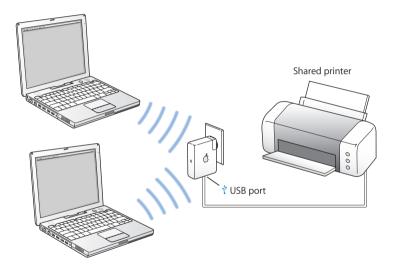


- Connect the analog cable to your home stereo if it uses standard analog cables.
- Connect the digital fiber optic cable if your stereo has a digital Toslink port.
- Connect the power cord if you are setting up your AirPort Express away from a power outlet.

### Using AirPort Express to Share a USB Printer

When you connect a USB printer to your AirPort Express, all of the computers on the wireless network can print to it.

### What It Looks Like



### How to Set It Up

- 1 Connect the printer to the AirPort Express USB port ( $\psi$ ) using a USB cable.
- 2 Use the AirPort Setup Assistant for Mac OS X or the AirPort Express Assistant for Windows XP to create a new network or join an existing one.

Wireless computers can print to the printer using Mac OS X v10.2.7 or later, or Windows 2000 or Windows XP.

### To use the printer from a computer using Mac OS X:

- 1 Open Printer Setup Utility (located in Applications/Utilities).
- 2 Select the printer from the list.

If the printer is not in the list, click Add and choose Rendezvous from the pop-up menu, then select the printer from the list.

### To use the printer from a computer using Windows:

- 1 Open "Printers and Faxes" from the Start menu.
- 2 Click Add Printer and then follow the onscreen instructions.
- 3 Select "Local printer attached to this computer" and deselect "Automatically detect and install my Plug and Play printer."
- 4 In the "Select the Printer Port" screen, click "Create a new port" and choose Standard TCP/IP Port from the pop-up menu.
- 5 Click Next and follow the onscreen instructions.
- 6 In "Printer Name or IP Address," enter 10.0.1.1. "IP\_10.0.1.1" is generated as the port name.

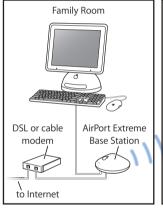
**Note:** If you gave your AirPort Express a different IP address, use it instead of 10.0.1.1. The port will be named with the address you enter.

7 Select Standard for Device Type and select your printer in the list.

# Extending the Range of an Existing AirPort Extreme or AirPort Express Network

You can connect an additional AirPort Express to extend the range of your existing AirPort Extreme or AirPort Express network. Adding a base station or AirPort Express to an existing network creates what is known as a Wireless Distribution System (WDS).

### What It Looks Like







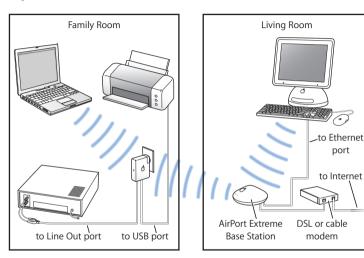
Using AirPort Express 23

### How to Set It Up

- 1 You need to have an existing AirPort network created by an AirPort Extreme Base Station or an AirPort Express connected to the Internet. This base station is called the *main base station* and shares its Internet connection with your AirPort Express.
- 2 Use the AirPort Setup Assistant for Mac OS X or the AirPort Express Assistant for Windows XP to create a new network. (See page 26 for more information.)
  Both base stations share the Internet connection with client computers wirelessly, or using Ethernet if the client computers are connected by Ethernet.

### Using AirPort Express With Your AirPort Extreme Network

The illustration below shows a wireless network with all of the above examples in a single wireless network.



### How to Set It Up

 Use the AirPort Setup Assistant for Mac OS X or the AirPort Express Assistant for Windows XP to create a new network and take advantage of all the AirPort Express features

Using AirPort Express 25

### **Setting Up AirPort Express**

# This chapter provides information and instructions for using the AirPort Express software to set up your AirPort Express.

Use the diagrams in the previous chapter to help you decide where you want to use your AirPort Express, and what features you want to set up on your AirPort network. Then use the instructions in this chapter to easily configure AirPort Express and set up your AirPort network.

### AirPort Express software lets you:

- Set up a new network that wireless computers can use to communicate with each other. If you set up your AirPort Express as a base station and connect it to the Internet, wireless computers can also share the Internet connection.
- Connect your AirPort Express to your existing wireless network and use AirTunes to
  play iTunes music on your home stereo or powered speakers, and connect a USB
  printer to share.
- Connect your AirPort Express to your existing AirPort Extreme or AirPort Express
  network and extend the range of your wireless network using the AirPort Express as a
  wireless bridge. This is known as a WDS (Wireless Distribution System).

You can use AirTunes to play music from iTunes and share a USB printer in any type of network you set up, whether it is a new network or you are joining an existing network.

If you have more than one AirPort Express, you can connect one to the stereo in your living room and connect another to the powered speakers in your den. Using AirTunes, you can stream your iTunes music to either AirPort Express, depending on where you are in your house. Choose the name of the AirPort Express you want to use from the speakers pop-up menu in iTunes.

This chapter provides an overview for using the AirPort Express Assistant to set up your network and other features of your AirPort Express. For more detailed wireless networking information, and for information about the advanced features of AirPort, refer to the document "Designing AirPort Networks," or "AirPort Networks for Windows," located on the AirPort Express CD, and at www.apple.com/airportextreme.

You can do most of your network setup and configuration tasks with the AirPort Setup Assistant for Mac OS X and the AirPort Express Assistant for Windows XP. To set advanced options, you need to use AirPort Admin Utility. See "Setting Advanced Options" on page 32.

**Note:** If you are using Windows 2000, use AirPort Admin Utility for Windows to set up your AirPort Express. The AirPort Express Assistant is not compatible with Windows 2000.

### Using the AirPort Setup Assistant or the AirPort Express Assistant

To set up and configure your AirPort Express to use AirPort for wireless networking and Internet access, use the AirPort Setup Assistant for Mac OS X, or the AirPort Express Assistant for Windows XP. (The assistant is installed on your computer when you install the software on the AirPort Express CD.)

### On a Macintosh computer using Mac OS X v10.3 or later:

 Open the AirPort Setup Assistant, located in Applications/Utilities, and follow the onscreen instructions.

### On a computer using Windows XP:

 Open the AirPort Express Assistant, located in Start > All Programs > AirPort Express Assistant.



You will be asked a series of questions about the type of network you want to use and the services you want to set up. The AirPort Setup Assistant or AirPort Express Assistant helps you enter the appropriate settings for the network you are setting up.

If you are using AirPort Express to connect to the Internet, you need a broadband (DSL or cable modem) account with an Internet service provider. Fees may apply. If you received specific information from your ISP (such as a static IP address or a DHCP client ID), you may need to enter it in the AirPort Setup Assistant or the AirPort Express Assistant. Have this information available before you set up your AirPort Express.

### **Creating a New Wireless Network**

You can use the AirPort Setup Assistant for Mac OS X or the AirPort Express Assistant for Windows XP to create a new wireless network. The AirPort Setup Assistant or AirPort Express Assistant guides you through the steps necessary to name your network, protect your network with a password, and set other options.

If you plan to use AirTunes to play music on your stereo from iTunes, connect a Toslink digital fiber optic cable or a mini-stereo-to-dual-RCA cable to the AirPort Express Line Out port (4)) and to your stereo.

If you plan to share a USB printer on your network, connect the printer to the AirPort Express USB port  $(\psi)$ .

After you connect the audio cable and the USB printer cable:

 Open the AirPort Setup Assistant, located in Applications/Utilities on a Macintosh, or the AirPort Express Assistant, located in Start > All Programs > AirPort on a computer using Windows XP. Follow the onscreen instructions to create a new network.

### **Configuring and Sharing Internet Access**

If you plan to share your Internet connection with computers on your network, you need to set up your AirPort Express as an AirPort base station. Once it is set up, computers access the Internet via the AirPort network. The base station connects to the Internet and transmits information to the computers over the AirPort network.

Before you use the AirPort Setup Assistant or AirPort Express Assistant to set up your base station, connect your DSL or cable modem to the AirPort Express Ethernet port ( ). If you are using an existing Ethernet network with Internet access to connect to the Internet, you can connect the AirPort Express to the Ethernet network instead. If you plan to use AirTunes to play music on your stereo from iTunes, connect an audio cable to the analog and optical digital audio mini-jack ( ) and to your stereo.

Use the AirPort Setup Assistant or AirPort Express Assistant to enter your ISP settings and provide and configure how AirPort Express shares the settings with other computers.

 Open the AirPort Setup Assistant, located in Applications/Utilities on a Macintosh, or the AirPort Express Assistant, located in Start > All Programs > AirPort on a computer using Windows XP. Follow the onscreen instructions to configure and share Internet access on your AirPort Express.

### **Connecting to an Existing Wireless Network**

You can use the AirPort Express Assistant to join an existing wireless network. When you connect your AirPort Express to your home stereo, computers on your wireless network can use AirTunes to play music on the stereo from iTunes. If you connect a USB printer to your AirPort Express, all of the computers on the network can print to it.

Be sure to connect the audio cable to your stereo and the USB cable to your printer before you use the AirPort Express Assistant.

 Open the AirPort Setup Assistant, located in Applications/Utilities on a Macintosh, or the AirPort Express Assistant, located in Start > All Programs > AirPort on a computer using Windows XP. Follow the onscreen instructions to connect your AirPort Express to your wireless network.

# Extending the Range of an Existing AirPort Extreme or AirPort Express Network

You can extend the range of an existing AirPort Extreme or AirPort Express wireless network by setting it up in a WDS. Wireless computers can connect to the network and share the Internet connection, share files, and play network games. If you connect your AirPort Express to your home stereo, computers on your wireless network can use AirTunes to play music on the stereo from iTunes. If you connect a USB printer to your AirPort Express, all of the computers on the network can print to it.

 Open the AirPort Setup Assistant on a Macintosh, or the AirPort Express Assistant on a computer using Windows XP. Follow the onscreen instructions to extend the range of your AirPort Extreme or AirPort Express network.

**Note:** Extending the range of a network using WDS may reduce overall network performance.

### **Setting Advanced Options**

To set advanced options, use AirPort Admin Utility.

You can use AirPort Admin Utility to configure advanced base station settings, such as advanced security options, closed networks, DHCP lease time, access control, WAN privacy, power controls, renaming a USB printer, setting up port mapping, and more.

### To set advanced options:

- 1 Choose the wireless network you want to change. On a Macintosh, use the AirPort status menu in the menu bar. On a computer using Windows XP or Windows 2000, hold the pointer over the wireless connection icon until you see your AirPort network name (SSID), and choose it from the list if there are multiple networks available.
- 2 Open AirPort Admin Utility, located in Applications/Utilities on a Macintosh, and in Start > All Programs > AirPort on a computer using Windows XP or Windows 2000.
- 3 If there is more than one base station in the list, select the base station you want to configure. If you don't see the base station you want to configure, click Rescan to scan for available base stations, then select the base station.
- 4 If you are prompted for a password, enter it, then click Configure.

For more information and instructions for using AirPort Admin Utility, see the document "Designing AirPort Networks" or "AirPort Networks for Windows," located on your AirPort Express CD and at www.apple.com/airport.

### AirPort Express on the Road

# AirPort Express can store settings for different locations so you can easily move it from place to place.

AirPort Express can store up to 5 different configurations, known as *profiles*. A profile contains settings for your AirPort Express, such as the iTunes speaker name and password, and network information, such as network name and password.

Profiles may be useful if you move your AirPort Express from one location to another. For example, you might have one profile for your AirPort Express at home, where you use AirTunes to play music on your home stereo from iTunes and connect to the Internet using PPPoE. You might have another profile for using AirPort Express in a hotel, where you connect to the Internet using DHCP.

Use AirPort Admin Utility, located in Applications/Utilities on a Macintosh, and in Start > All Programs > AirPort on a computer using Windows XP or Windows 2000, to create, edit, rename, and delete profiles.



### To create a new profile:

- 1 Open AirPort Admin Utility, select your AirPort Express in the list, and click Configure.
- 2 Click the Profiles icon in the toolbar.
- 3 Click Add to create a new profile, give the profile a name, then click OK.
- 4 Set options, such as network name, remote speaker name, passwords, and the Internet connection method
- 5 When you are finished setting the options, click Update.

### To edit an existing profile:

- 1 Open AirPort Admin Utility, select your AirPort Express in the list, and click Configure.
- 2 Click the Profiles icon in the toolbar.
- 3 Select a profile in the list and click OK.
- 4 Edit options for the profile. When you are finished editing the options, click Update to save the profile and make it active on your AirPort Express.

### **Tips and Troubleshooting**

# You can quickly solve most problems with AirPort Express by following the advice in this chapter.

### The AirPort Express Software Can't Detect the Proper AirPort Hardware

Make sure that the computer you are using has an AirPort Card or an AirPort Extreme 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.

If you are using a computer with Windows 2000 or Windows XP, make sure the wireless card or adapter is installed correctly. See the documentation that came with your computer to check the connection.

### You Can't Play Music on Your Stereo From iTunes

Make sure your AirPort Express is plugged in to a power outlet, is in range of your computer, and that you have connected the appropriate cables. You may need to join the AirPort Express network.

Make sure to choose your AirPort Express from the speakers pop-up menu in iTunes. Make sure you are using iTunes 4.6 or later.

### You Can't Hear Music Playing

If music is playing (the progress bar at the top of the iTunes window is moving) but you can't hear anything, check the following:

If you're trying to play music through speakers connected to an AirPort Express, and
you've selected the "Disable iTunes volume control for remote speakers" checkbox in
the Audio pane of iTunes Preferences, make sure your remote speakers are selected
in the pop-up menu at the bottom of the iTunes window and the volume control on
the remote speakers isn't turned down.

### You Forgot Your Network or AirPort Express Password

You can clear the AirPort network or AirPort Express password by resetting AirPort Express. Follow these steps:

- 1 Use the end of a straightened paper clip to press and hold the reset button for one second.
- 2 Select your AirPort network.
  - On a Macintosh, use the AirPort status menu in the menu bar to select the network created by AirPort Express (the network name does not change).

- On a computer using Windows 2000 or Windows XP, hold the pointer over the wireless connection icon until you see your AirPort Network Name (SSID), and choose it from the list if there are multiple networks available.
- 3 Open AirPort Admin Utility (in Applications/Utilities on a Macintosh, and in Start > All Programs > AirPort on a computer using Windows XP or Windows 2000).
- 4 Select your AirPort Express and click Configure.
- 5 In the dialog that appears, make the following changes:
  - Reset the AirPort Express 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.

AirPort Express restarts to load the new settings.

#### Your AirPort Express Isn't Responding

Try unplugging it and plugging it back in to a power outlet.

If your AirPort Express stops responding completely, you may need to reset it to the factory default settings. This erases all of the settings you've made and resets them to the settings that came with the AirPort Express.

#### Your AirPort Express Status Light Flashes Amber

The Ethernet cable may not be connected properly, AirPort Express may be out of range of an AirPort network, or there may be a problem with your Internet service provider. If you are connected to the Internet with a DSL or cable modem, the modem may have lost its connection to the network or the Internet. Even if the modem seems to be working properly, try disconnecting the modem from its power supply, waiting a few seconds, and then reconnecting it. Make sure AirPort Express is connected directly to the modem via Ethernet before reconnecting power to the modem.

If your AirPort Express is set up in a WDS, the WDS link may be interrupted.

*Note:* If AirPort Express is set up as a wireless client and the network it's joining is protected by an access control list (ACL), AirPort Express must be in the ACL to connect to the network

### To return AirPort Express to the factory settings:

 Use the end of a straightened paper clip to press and hold the reset button for ten seconds

AirPort Express restarts with the following settings:

- AirPort Express receives its IP address using DHCP.
- The network name reverts to Apple Network XXXXXX (where X is a letter or number).
- The AirPort Express password returns to public.

If you used AirPort Admin Utility to create profiles for your AirPort Express, they are preserved when you reset your AirPort Express.

If you need to return your AirPort Express to the factory settings and remove any profiles you have set up:

- 1 Unplug AirPort Express.
- 2 Use the end of a straightened paper clip to hold the reset button while you plug in AirPort Express.

#### Your Printer Isn't Responding

If you connected a printer to the USB port on AirPort Express and the computers on the AirPort network can't print, try doing the following:

- 1 Make sure the printer is plugged in and turned on.
- 2 Make sure the cables are securely connected to the printer and to the AirPort Express USB port.
- 3 Make sure the printer is selected in the Printer List on client computers. To do this on a Macintosh using Mac OS X v10.3 or later:
  - Open Printer Setup Utility, located in Applications/Utilities.
  - If the printer is not in the list, click Add.
  - Choose Rendezvous from the pop-up menu.
  - Select the printer and click Add.

To select your printer on a computer using Windows XP or Windows 2000:

- Open "Printers and Faxes" from the Start menu.
- Select the printer. If the printer is not in the list, click Add Printer and then follow the onscreen instructions.
- 4 Turn the printer off, wait a few seconds, then turn it back on.

For more information about setting up a printer on a computer using Windows, see "To use the printer from a computer using Windows:" on page 22.

# I Want to Update My AirPort Software

Apple periodically updates AirPort software to improve performance or add features. It is recommended that you update your AirPort Express to use the latest software. To download the latest version of AirPort Express software, go to www.apple.com/airport.

# **AirPort Express Placement Considerations**

The following recommendations can help your AirPort Express achieve maximum wireless range and optimal network coverage.

- Place your AirPort Express in an open area where there are few obstructions, such as large pieces of furniture or walls. Try to place it away from metallic surfaces.
- If you place your AirPort Express behind furniture, keep at least an inch of space between the AirPort Express and the edge of the furniture.
- Avoid placing your AirPort Express in areas surrounded by metal surfaces on three or more sides.
- If you place your AirPort Express in an entertainment center with your stereo
  equipment, avoid completely surrounding AirPort Express with audio, video, or
  power cables. Place your AirPort Express so the cables are to one side. Maintain as
  much space as possible between AirPort Express and the cables.
- If you place your AirPort Express behind your stereo equipment, place it on one side or the other. Avoid centering it behind your stereo.
- Try to place your AirPort Express at least 25 feet from a microwave oven and a 2.4 GHz cordless phone, or other sources of interference.

#### Items That Can Cause Interference With AirPort

The farther away the interference source, the less likely it is to cause a problem. The following items can cause interference with AirPort communication:

- · Microwave ovens
- DSS (Direct Satellite Service) radio frequency leakage
- The original coaxial cable that came with certain types of satellite dishes. Contact the device manufacturer and obtain newer cables.
- Certain electrical devices such as power lines, electrical railroad tracks, and power stations
- Cordless telephones that operate in the 2.4 gigahertz (GHz) range. If you have problems with your phone or AirPort communication, change the channel your base station or AirPort Express uses.
- Adjacent base stations using nearby channels. For example, if base station A is set to channel 1, base station B should be set to channel 4 or higher.

# Learning More, Service, and Support

You can find more information about using AirPort Express on your hard disk, on the web, and in onscreen help.

#### **Online Resources**

For the latest information on AirPort Express, go to www.apple.com/airport.

To register AirPort Express (if you didn't do it when you installed the software on the AirPort Express CD), go to www.apple.com/register.

For AirPort service and support information, a variety of forums with product-specific information and feedback, and the latest Apple software downloads, go to www.apple.com/support/airport.

For support outside of the United States, go to www.apple.com/support and choose your country from the pop-up menu.

# **Onscreen Help**

 To learn more about using AirPort, open AirPort Admin Utility and choose Help > AirPort Help.

# **Obtaining Warranty Service**

If the product appears to be damaged or does not function properly, please follow the advice in this booklet, the onscreen help, and the online resources.

If the unit still does not function, go to www.apple.com/support for instructions on how to obtain warranty service.

# Finding the Serial Number of Your AirPort Express

The serial number is printed on the back of your AirPort Express.

# **AirPort Express Specifications**

#### **AirPort Specifications**

- Wireless Data Rate: Up to 54 megabits per second (Mbps)
- Range: Up to 150 feet (45 meters) in typical use (varies with environment)
- Frequency Band: 2.4 gigahertz (GHz)
- Radio Output Power: 15 dBm (nominal)
- Standards: 802.11 DSSS 1 and 2 Mbps standard, 802.11b, and 802.11g specification

#### **Interfaces**

- RJ-45 Ethernet LAN connector for built-in 10/100Base-T ( >> )
- Universal Serial Bus (USB) printing (♥)
- Analog/digital optical 3.5mm mini-jack
- · AirPort Extreme

#### **Environmental Specifications**

- Operating Temperature: 32° F to 95° F (0° C to 35° C)
- Storage Temperature: -13° F 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

• Height: 3.7 inches (94 mm)

• Width: 2.9 inches (75 mm)

• Thickness: 1.12 inches (28.5 mm)

• Weight: 6.63 ounces (188 grams)

#### **Hardware Addresses**

The AirPort has two hardware addresses printed on the side of the case:

- AirPort ID: The address used to identify AirPort Express on a wireless network.
- Ethernet ID: This also known as the MAC address. You may need to provide this address to your ISP to connect AirPort Express to the Internet.

# **Using AirPort Express**

- The only way to shut off power completely to your AirPort Express is to disconnect it from the power source.
- When connecting or disconnecting your AirPort Express, always hold it by its sides.
   Keep fingers away from the metal part of the plug.
- Your AirPort Express is a high-voltage component and should not be opened for any reason, even when the AirPort Express is unplugged. If your AirPort Express needs service, see "Learning More, Service, and Support" on page 42.
- Never force a connector into the ports. If the connector and port do not join with reasonable ease, they probably don't match. Make sure that the connector matches the port and that you have positioned the connector correctly in relation to the port.
- If you are using the optional power cord, avoid dangling AirPort Express from the power cord.

# **About Operating and Storage Temperatures**

When you are using your AirPort Express, it is normal for the case to get warm. The
AirPort Express case functions as a cooling surface that transfers heat from inside the
unit to the cooler air outside.

#### **Avoid Wet Locations**

*Warning* To reduce the chance of shock or injury, do not use your AirPort Express in or near water or wet locations.

- Keep AirPort Express away from sources of liquids, such as drinks, washbasins, bathtubs, shower stalls, and so on.
- Protect AirPort Express from direct sunlight and rain or other moisture.
- Take care not to spill any food or liquid on your AirPort Express. If you do, unplug AirPort Express before cleaning up the spill.

In case of a spill, you may have to send your equipment to Apple for service. See "Learning More, Service, and Support" on page 42.

# Do Not Make Repairs Yourself

*Warning* Do not attempt to open your AirPort Express or disassemble it. You run the risk of electric shock and voiding the limited warranty. No user-serviceable parts are inside.

# **About Handling**

Your AirPort Express may be damaged by improper storage or handling. Be careful not to drop your AirPort Express when transporting the device.

#### **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

This computer equipment 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 EMC compliance 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 950142084. 408-974-2000.

# www.apple.com/airport www.apple.com/support/airport

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# 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され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扱をしてください。

# Europe — EU Declaration of Conformity

Complies with European Directives 72/23/EEC, 89/336/EEC, 1999/5/EC. For more information, see www.apple.com/euro/compliance.

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