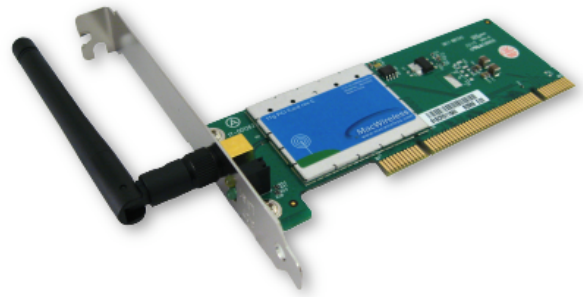




## MACINTOSH INSTALLATION INSTRUCTIONS FOR **MacWireless 11g PCI Card**

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### Introduction

Thank you for purchasing the MacWireless 11g PCI Card! The 11g PCI Card requires OS 10.3.3 or higher. We have provided configuration instructions for OS 10.3.x, OS 10.4.x, and OS 10.5.x. When following the instructions below, be sure to choose the correct configuration section for your operating system.

Please uninstall any drivers or software from previous wireless networking devices before proceeding with the installation. If you experience a problem during the installation, refer to the troubleshooting guide at the end of this document. We also recommend updating your operating system to the latest version. Free updates are available using Apple menu > Software Update and at [www.apple.com](http://www.apple.com).

### Installation

1. Turn your computer off.
2. If there is an AirPort card in the computer, remove it.
3. Open the tower of your computer and locate an available PCI slot, as shown in Figure 1 below.
4. Locate the metal plate at the end of the slot and remove it, as shown in Figure 2 below.
5. Handling the PCI card by its edges, insert it completely into the PCI slot so that the antenna port is on the outside of the machine. Please note that the slot may be longer than the card.

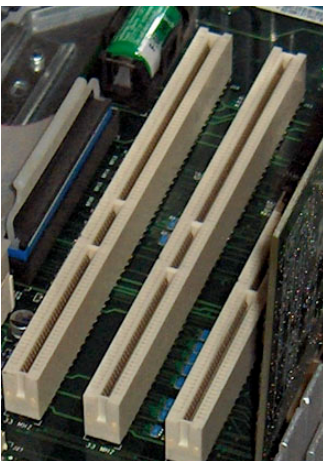


Figure 1 - PCI Slots

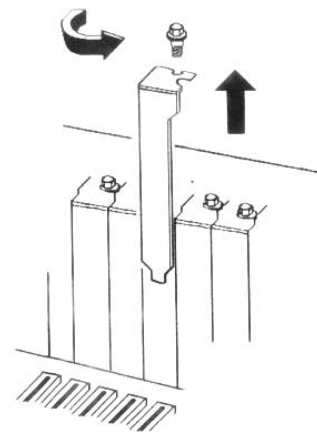



Figure 2 - Removal of Metal Plate

## Installation, cont.

6. Secure the card in place using the original screw.
7. Attach antenna to PCI card.
8. Power on the computer.
9. Installation is complete! Move on to the configuration section below.

## Configuration

### OS 10.3.x and 10.4.x

1. Go to the Apple menu and choose System Preferences.
2. In the Internet and Network category, click once on Network.
3. At the top of the window, pull down the Location menu and choose new location.
4. Name the new location "MacWireless 11g PCI Card".
5. Pull down the Show menu and choose Network Port Configurations.
6. Drag "AirPort" to the top of the list.
7. Click in the "on" column to disable all options except "AirPort".
8. Click "Apply Now".
9. Pull down the Show menu and choose AirPort.
10. In the bottom of the window, place a check mark in the box labeled "Show AirPort Status in Menu Bar."
11. In the upper right-hand corner of the screen, near the clock, find the AirPort icon (  ).
12. Click on the AirPort icon. A list of available wireless networks will appear.
13. Choose a wireless network to join. Please note that your network may require a password. If you are unsure of the password for your network, consult your network administrator.
14. Configuration is complete!

### OS 10.5.x

1. Go to the Apple menu and choose System Preferences.
2. In the Internet and Network category, click once on Network.
3. In the column on the left, click once on AirPort.
4. In the right side of the window, click the "Turn AirPort On" button. If the button says "Turn AirPort Off," then AirPort is already on.
5. Open the "Network Name" menu and choose the network you'd like to join. Please note that your network may require a password. If you are unsure of the password for your network, consult your network administrator.
6. Click "Apply".
7. Configuration is complete!

## Troubleshooting Guide

*We have compiled a list of common issues and solutions. If you experience problems during the installation, please take a look through this section and find your issue. The issues are underlined. Listed below each issue are the appropriate steps to solve your problem. Try the steps in order until the problem is solved.*

### "AirPort" does not appear as an option in the Network Preferences window.

#### **Update your system software.**

Connect your computer to the Internet using an Ethernet cable. Go to Apple menu > Location and choose Automatic. Go to the Apple menu again and choose Software Update. Install all updates. You will be prompted to restart.

#### **Update your AirPort driver.**

Follow the AirPort Software Update procedure in the section below, then start again from step one of the installation section above.

### No wireless networks are detected in the AirPort menu.

#### **Move closer to the source.**

You may be out of range. Try moving your computer closer to the source of the wireless network.

#### **Verify that your network is visible.**

Check on another wireless computer to see if the network appears. If it does not, the problem is with your wireless router – contact the manufacturer of your router for assistance. If the network does appear on the other computer, move on to the next step.

## **Troubleshooting Guide, cont.**

### **Update your system software.**

Connect your computer to the Internet using an Ethernet cable. Go to Apple menu > Location and choose Automatic. Go to the Apple menu again and choose Software Update. Install all updates. You will be prompted to restart.

### **Update your AirPort driver.**

Follow the AirPort Software Update procedure in the section below, then start again from step one of the installation section above.

### **The wireless network I would like to join is not listed in the AirPort menu.**

#### **Move closer to the source.**

You may be out of range. Try moving your computer closer to the source of the wireless network.

#### **Verify that your network is visible.**

Check on another wireless computer to see if the network appears. If it does not, the problem is with your wireless router – contact the manufacturer of your router for assistance. If the network does appear on the other computer, move on to the next step.

#### **Update your system software.**

Connect your computer to the Internet using an Ethernet cable. Go to Apple menu > Location and choose Automatic. Go to the Apple menu again and choose Software Update. Install all updates. You will be prompted to restart.

### **My wireless network appears as an option, but I cannot connect to it.**

#### **Verify the encryption.**

If your wireless network requires a password, then it is encrypted. Temporarily disable the encryption, then attempt to connect again. If you are unsure about how to disable encryption, contact the manufacturer of your wireless router for assistance. Once you have disabled it, if you can connect successfully, then we know it is an encryption problem. Reconfigure the encryption, verify your password, and try to connect again. If you are still having trouble, move on to the next step.

#### **Change the encryption type.**

If you are using WEP, try WPA, or vice versa. For most situations, we recommend using WPA2 Personal or WPA2-PSK. When using an 11g Airport Extreme Base Station or 11g AirPort Express, we recommend using WPA Personal with TKIP. If you are using an Apple base station and don't see WPA as an option, hold down the option button on the keyboard while clicking the Wireless Security menu in the AirPort Utility.

### **I can connect to my wireless network, but I cannot access the Internet.**

#### **Verify your network settings.**

Go to Apple menu > System Preferences > Network. In OS 10.3.x or 10.4.x, go to Show > AirPort. In 10.5.x, click on AirPort in the column on the left. Make sure you are set to Configure: Using DHCP. Also, take a look at the IP address field. If no IP address is shown, or the address starts with 169, move on to the next troubleshooting step. If the IP address does not start with 169, try the Internet again. If you still cannot connect, there is likely a problem with your router. Contact the manufacturer of your router for further assistance.

#### **Move closer to the source.**

You may be almost out of range. Try moving your computer closer to the source of the wireless network.

#### **Verify the encryption.**

If your wireless network requires a password, then it is encrypted. Temporarily disable the encryption, then attempt to connect again. If you are unsure about how to disable your encryption, contact the manufacturer of your wireless router for assistance. Once you have disabled it, if you can connect successfully, then we know it is an encryption problem. Reconfigure the encryption, verify your password, and try to connect again. If you are still having trouble, move on to the next step.

#### **Change the encryption type.**

If you are using WEP, try WPA, or vice versa. For most situations, we recommend using WPA2 Personal or WPA2-PSK. When using an 11g Airport Extreme Base Station or 11g AirPort Express, we recommend using WPA Personal with TKIP. If you are using an Apple base station and don't see WPA as an option, hold down the option button on the keyboard while clicking the Wireless Security menu in the AirPort Utility.

## AirPort Software Update Guide

While the AirPort software necessary to use the PCI Card is bundled with OS X, you may not have the latest version, which can sometimes prevent the card from working correctly. The software is available for free from the Apple site. Follow the instructions below to update your software.

### AirPort Software Update Procedure for Computers Using OS 10.3.x

1. Download the two files at the links below. There are two ways you can do this. You can either connect your computer to the Internet with an Ethernet cable to complete the downloads, or you can download the two files on a different computer, then burn a CD and bring it over to the machine that is having the trouble. If you use the CD method, copy the files to the desktop of the machine that is having trouble, then skip step 2 and move on to step 3. If you use the Ethernet cable method, move on to step 2.
  - a. <http://wsidecar.apple.com/cgi-bin/nph-reg3rdpty2.pl/product=07307&cat=1&platform=osx&method=sa/AirPortSW42.dmg>
  - b. <http://wsidecar.apple.com/cgi-bin/nph-reg3rdpty2.pl/product=08749&cat=1&platform=osx&method=sa/AirPortPan2005-001.dmg>
2. When each download is complete, you will see a dialog box saying "This package contains a program that determines if the software can be installed. Are you sure you want to continue?" Click cancel in both boxes.
3. Shut down your computer and remove the wireless card.
4. Power the computer on, go to Macintosh HD > System > Library > Extensions and move these four files to the trash: AppleAirPort.kext, AppleAirPort2.kext, AppleAirPortFW.kext, and AppleAirPortFWAP.kext. If you don't have all of them, that's ok, trash as many of them as you do have.
5. Restart the computer.
6. Open Finder. Type AirPortSW42.dmg in the search field (indicated by a magnifying glass) on the right side of the window.
7. When the file AirPortSW42.dmg appears, double click it.
8. A window will open with a package inside. Double click the package.
9. Follow the instructions onscreen until the installation is complete. Restart your computer.
10. After the computer has restarted, open Finder and type AirPortPan2005-001.dmg into the search field.
11. When the file AirPortPan2005-001.dmg appears, double click it.
12. A window will open with a package inside. Double click the package.
13. Follow the instructions onscreen until the installation is complete. Restart your computer.
14. After the computer restarts, shut it down and reinstall the wireless card.
15. AirPort Software Update is complete!

### AirPort Software Update Procedure for Computers Using OS 10.4.x

1. Connect your computer to the Internet with an ethernet cable and run apple menu > software update. Install all available updates.
2. Shut down your computer and remove the wireless card.
3. Power the computer on, go to Macintosh HD > System > Library > Extensions and move these four files to the trash: AppleAirPort.kext, AppleAirPort2.kext, AppleAirPortFW.kext, and AppleAirPortFWAP.kext. If you don't have all of them, that's ok, trash as many of them as you do have.
4. Restart the computer.
5. Download the 10.4.9 combo update using one of the links below. Please note that users of 10.4.10 will still need to download this older file. We won't be reverting your operating system to an earlier version, we're only taking the AirPort driver from this combo update and installing it into your current system.
  - a. PowerPC: <http://www.apple.com/support/downloads/macosx1049combouppdateppc.html>
  - b. Intel: <http://www.apple.com/support/downloads/macosx1049combouppdateintel.html>

Note: After following one of the above links, click the blue underlined file size on the right hand side of the screen to initiate the download.

6. When the download is complete, a window will open prompting you to install the update. Close the window without installing the update.
7. Download Pacifist: <http://www.charlessoft.com/Pacifist.dmg>
8. Drag Pacifist to your Applications folder.
9. Open Pacifist, wait 15 seconds, and click not yet.

## AirPort Software Update Guide, cont.

10. In Pacifist, click the open package button.
11. A new window will open. In the far left column, click once on the item called "Mac OS X 10.4.9 Combined Update (PowerPC) or (Intel)".
12. In the second column from the left, click once on the file "MacOSXUpdCombo10.4.9..." and choose open.
13. Click the triangle next to the file ending in ".pkg"
14. Click the triangle next to the folder called "System"
15. Click the triangle next to the folder called "Library"
16. Click the triangle next to the folder called "Extensions"
17. Click once on called "AppleAirPort2.kext" and then click "Extract To..." in the upper left corner of the window.
18. A new window will open. In the far left column, click once on your main hard drive. By default this is called "Macintosh HD" but the name may have been changed.
19. In the second column, click on the "System" folder.
20. In the second column, click on the "Library" folder.
21. In the second column, click on the "Extensions" folder, then click choose.
22. You will receive a window saying "The file will be extracted to the following location: /System/Library/Extensions". Check the "Use Administrator Privileges" box and then click extract.
23. Type your administrator password. You will receive a message saying that the extraction is in progress.
24. When the extraction is complete, restart your computer.
25. After the computer restarts, shut it down and reinstall the wireless card.
26. AirPort Software Update is complete!

*Disclaimer: Although this product has been tested and verified, MacWireless does not accept responsibility for loss or damage to any equipment or device. Use at your own risk.*