



## MACINTOSH INSTALLATION INSTRUCTIONS FOR **MacWireless 11g Access Point**

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### **Introduction**

Thank you for purchasing the MacWireless 11g Access Point! Configuration of the 11g Access Point requires OS 9 or higher. Once the access point is configured, any wireless computer can connect to it, regardless of operating system. The pre-configuration and post-configuration sections provide instructions for OS 9, OS 10.2.x – 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. Attach the access point to the provided power supply and plug it into the wall.
2. Connect one end of an Ethernet cable to the Ethernet port on the access point.
3. Connect the other end of the Ethernet cable to an Ethernet port on your computer.
4. Move on to the pre-configuration section below.

### **Pre-Configuration**

#### **OS 9**

1. Open the TCP/IP Control Panel.
2. Go to the file menu at the top of the screen and choose configurations.
3. Click "Duplicate..."
4. Type in "MW Access Point Configuration".
5. Click "Make Active".
6. In the TCP/IP window, choose connect via: Ethernet Built-in.
7. Choose Configure: Manually.
8. In the IP address text field, type: "192.168.1.5"
9. In the Subnet Mask text field, type: "255.255.255.0"

## Pre-Configuration, cont.

10. Close the TCP/IP window.
11. A window will appear asking if you would like to save your changes. Choose "Save".
12. Pre-configuration is complete. Move on the configuration section below.

### OS 10.2.x - 10.4.x

1. Go to the Apple menu and choose System Preferences.
2. Click Network.
3. Go to the "Location" menu near the top of the window and choose "New Location."
4. Name the new location "MacWireless AP Configuration" or something similar.
5. When you are finished entering the name, click ok.
6. Beneath the "Location" menu, there is a menu called "Show". Pull this menu down and choose Network Port Configurations.
7. In the port configurations area, check the box next to Built-in Ethernet. Uncheck the boxes next to all other options.
8. Drag Built-in Ethernet to the top of the list.
9. Go back to the show menu and choose Built-in Ethernet.
10. Look for the menu that is called Configure IPv4. Open the menu and choose "Manually."
11. Below the Configure IPv4 menu, in the IP address text field, type: **192.168.1.5**
12. Below the IP address text field, in the subnet mask field, type: **255.255.255.0**
13. In the lower-right corner of the window, click Apply Now.
14. Pre-configuration is complete. Move on the configuration section below.

### 10.5.x

1. Go to the Apple menu and choose System Preferences.
2. In the Internet and Network section, click Network.
3. Go to the "Location" menu near the top of the window and choose "Edit Locations."
4. A small window will appear. Click the plus sign at the bottom of the window to add a new location.
5. Name the new location "MacWireless AP Configuration" or something similar.
6. When you are finished entering the name, click done.
7. Pull down the Location menu again and choose "MacWireless 11n PCI Card" if it is not already selected.
8. On the left side of the window, click once on Ethernet. On some computers this will be called Ethernet 1.
9. On the right side of the window, find the menu called Configure. Open the menu and choose "Manually."
10. Below the Configure menu, in the IP address text field, type: **192.168.1.5**
11. Below the IP address text field, in the subnet mask field, type: **255.255.255.0**
12. In the lower-right corner of the window, click Apply.
13. Pre-configuration is complete. Move on the configuration section below.

## MacWireless High Power 11g Access Point Configuration

1. Open a web browser, type **192.168.1.100** into the address bar, and hit return. We are connecting to a configuration page that is built into the adapter. Internet access is not necessary for this step.
2. You will be prompted to log in. Enter "admin" into both fields and click log in.
3. On the left-hand side of the screen, click basic setting.
4. For mode, choose access point.
5. Using the SSID field, you can assign a name to your wireless network. We recommend that you change it to something easy to recognize.
6. If you would like to place a password on your wireless network so that only users with your permission can join, move on to step 7. If you would like to leave your network open to everyone, click apply and skip ahead to the post-configuration section.
7. Choose the authentication type you would like. We recommend using WPA-PSK, as it is the strongest option, but some older machines (running OS X 10.2.8 or earlier) may not be able to connect using WPA-PSK. For networks that include these older models, we recommend choosing shared key authentication with WEP encryption.
  - a. If you have chosen WPA-PSK, you will be prompted to choose a cipher type and passphrase. We recommend using AES because it is the strongest available, but again, some machines may have difficulty connecting using AES. If computers on your network have trouble establishing a wireless connection, try using TKIP instead. Enter a passphrase between 8 and 64 characters (spaces are allowed), enter it a second time to confirm, and then click apply. The settings will be updated and you will be given a blank screen with the option to go back to the previous page. You need not go back. Instead, move on to the post-configuration section.
  - b. If you have chosen shared key authentication with WEP, enable the WEP key, choose WEP type 64bits, and key mode hex. In the key 1 field, enter 10 characters. You are limited to the numbers 0-9 and the letters A-F. If you are having difficulty, we recommend using your area code and phone number, as it's a 10 digit sequence that will be easy for you to remember. Once you have chosen a key, write it down. You'll need it when you join the wireless network for the first time, and you'll need to give it to any guests who may like to use your network in the future. When you are finished, click apply. The settings will be updated and you will be given a blank screen with the option to go back to the previous page. You need not go back. Instead, move on to the post-configuration section.

## Post-Configuration

### OS 9

1. Open the TCP/IP Control Panel.
2. Go to the file menu at the top of the screen and choose configurations.
3. Choose the name of your default configuration and click "Make Active".
4. Disconnect the Ethernet cable from your computer and connect it to a router or switch on your network.
5. Congratulations, MacWireless 11g Access Point installation is complete! You can now connect to the access point from any wireless computer.

### OS 10.2.x – 10.4.x

1. Go to the Apple menu and choose System Preferences.
2. Click Network.
3. Go to the "Location" menu near the top of the window and choose your default location.
4. Click Apply Now.
5. Disconnect the Ethernet cable from your computer and connect it to a router or switch on your network.
6. Congratulations, MacWireless 11g Access Point installation is complete! You can now connect to the access point from any wireless computer.

### OS 10.5.x

1. Go to the Apple menu and choose System Preferences.
2. Click Network.
3. Go to the "Location" menu near the top of the window and choose your default location.
4. Click Apply.
5. Disconnect the Ethernet cable from your computer and connect it to a router or switch on your network.
6. Congratulations, MacWireless 11g Access Point installation is complete! You can now connect to the access point from any wireless computer.

## Troubleshooting

### Hardware Reset Procedure

If the device becomes unresponsive, or if you would like to reconfigure the unit but do not have the LAN IP address you configured during the original installation, you can reset the unit to factory defaults using the small reset button on the back of the device. Using a paper clip or pen, hold down the button 10 seconds. Default settings will be restored, and you can reconfigure the device starting from the beginning of this document.

## WDS Mode

It is possible to connect several MacWireless 11g Access Points together wirelessly. This is called WDS (Wireless Distribution System) mode, and will allow you to cover a wider area with a single wireless network. In this mode, portable computers can enjoy uninterrupted service while roaming freely from access point to access point. To set up WDS, follow the instructions below. The unit connected to the router will be the master unit. All other units will be slaves. Set all units up in the same room at first and verify the connection between them before moving the slave units to their final destinations.

### Master Unit Configuration

1. Following the pre-configuration steps, and steps 1-3 of the configuration section, as outlined in the installation instructions.
2. You should be in the basic setting area. For mode, choose AP+WDS.
3. Set a channel. Any channel will do. The important thing is that all units, master and slave, be set to the same channel.
4. Choose a name for your network and enter it into the SSID field. The name should be the same on the master and slave units.
5. For authentication, choose open system.
6. Choose WEP key - disabled.
7. Enter the MAC addresses of all slave units in the Remote AP MAC fields. The MAC address can be found on the bottom of each unit. It is not necessary to enter the master's MAC address.
8. Choose WDS security - none.
9. Click apply. The settings will be updated and you will be given a blank screen with the option to go back. Click back.
10. On the left side, choose the IP setting section. Choose Fixed IP.
11. Set an IP address on the same subnet as your router. For example, if your router's IP address is 192.168.0.1, then set your master AP to 192.168.0.240. The last number can be any number between 0 and 255 that is not already in use by another device on the network. We recommend using 240, as is it out of the DHCP range of most routers. Also, make a note of this address. You will need to direct your browser to this address in order to reach the configuration area for this unit (ie 192.168.0.240).

## WDS Mode, cont.

12. Leave subnet mask set to 255.255.255.0.
13. Enter your router's IP address in the gateway field.
14. Turn DHCP server off.
15. Click apply. The settings will be updated and you will be given a blank screen with the option to go back to the previous page. You need not go back. Instead, move on to the slave unit configuration section on the reverse side of this sheet.

### Slave Unit Configuration

1. Remove the ethernet cable from your computer to the master, and plug it from your computer to a slave unit.
2. Direct your browser to 192.168.1.100.
3. Log in using admin for name and password.
4. Go to the basic setting area. For mode, choose AP+WDS.
5. Set a channel. Any channel will do. The important thing is that all units, master and slave, be set to the same channel.
6. Choose a name for your network and enter it into the SSID field. The name should be the same on the master and slave units.
7. For authentication, choose open system.
8. Choose WEP key - disabled.
9. Enter only the MAC address of the master unit in the Remote AP MAC field. You need not enter the MAC addresses of the other slaves. The MAC address can be found on the bottom of the master unit.
10. Choose WDS security - none.
11. Click apply. The settings will be updated and you will be given a blank screen with the option to go back. Click back.
12. On the left side, choose the IP setting section. Choose Fixed IP.
13. Set an IP address on the same subnet as your router. For example, if your router's IP address is 192.168.0.1, then set your IP address to 192.168.0.x, where x is a number between 241 and 254. X can actually be any number between 0 and 255 that is not already in use by another device on the network. We recommend using 241-254, as is it out of the DHCP range of most routers. Also, make a note of this address. You will need to direct your browser to this address in order to reach the configuration area for this unit.
14. Leave subnet mask set to 255.255.255.0.
15. Leave 0.0.0.0 in the gateway field.
16. Turn DHCP server off.
17. Click apply. The settings will be updated and you will be given a blank screen with the option to go back to the previous page. You need not go back. Instead, move on to the next step.
18. Repeat the slave unit configuration on each slave. When all units have been configured, power all units off, including the router. Power on the router first, then the master, and then the slave units.
19. Connect wirelessly to the network. You can verify a successful interconnection by browsing to the IP addresses defined in the IP settings above. If you can browse to all units, then the WDS connection has been established.
20. If you would like to add encryption, go to the basic setting area in the configuration page of the master unit. Set authentication and WDS security mode to the same encryption type, and choose a password. Repeat for all slave units. When encryption has been set, restart all units as in the sequence above - router, master, slave.
21. Congratulations, WDS configuration 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.*