



MACINTOSH INSTALLATION INSTRUCTIONS FOR

MacWireless High Power 11g Ethernet Bridge 200mW

Introduction

The MacWireless High Power 11g Ethernet Bridge can be configured in two different modes: Bridge mode and Access Point mode. Follow the instructions below to configure your device as a Bridge. To configure the device as an Access Point, please refer to the Access Point instruction sheet.

Pre-Configuration

OS 9

1. Attach the Bridge to the provided power supply and plug it into the wall.
2. Using the supplied Crossover Ethernet cable, connect one end of the cable to your computer's Ethernet port and the other end to the Ethernet port on the Bridge.
3. Open the TCP/IP Control Panel.
4. Create a new preset:
 - a. Choose File > Configurations...
 - b. Click "Duplicate..."; type in "High Power Bridge Configuration".
 - c. Click "Make Active".
 - d. Choose Connect via: Ethernet Built-in.
 - e. Choose Configure: Manually.
 - f. In the IP address text field, type: "**192.168.1.10**"
 - g. In the Subnet Mask text field, type: "**255.255.255.0**"
 - h. Close the TCP/IP window and choose "Save".

OS X

1. Attach the Bridge to the provided power supply and plug it into the wall.
2. Using the supplied Crossover Ethernet cable, connect one end of the cable to your computer's Ethernet port and the other end to the Ethernet port on the Bridge.
3. Open the Network preference panel from the Apple menu > System Preferences.
4. Create a new location:
 - a. Choose Location: New Location.
 - b. Name the new location "High Power Bridge Configuration".
 - c. Choose Show: Network Port Configurations.
 - d. Check the Built-in Ethernet box. Drag Built-in Ethernet to the top of the list.
 - e. Choose Show: Built-in Ethernet.
 - f. Choose Configure: Manually.
 - g. In the IP address text field, type: "**192.168.1.10**"
 - h. In the subnet mask field, type: "**255.255.255.0**"
 - i. Click "Apply Now".

MacWireless 11g High Power Ethernet Bridge Configuration

If you are unsure of your encryption settings, check with your network administrator or contact the manufacturer of your base station.

If the network you are connecting to is not using encryption:

1. Open a web browser to <http://192.168.1.1/> Internet Explorer will not display the web page correctly. In OS 9, use Mozilla 1.2.1, Opera 6.03, or Netscape 7.0. In OS X, use Safari or Firefox.
2. Log in leaving user and password fields blank, and click "Log In" or "OK".
3. Scroll down to the bottom of the page to see a list of available Access Points.
4. Make a note of which channel the desired Access Point is using, then click the BSSID of the Access Point.
5. Select the correct channel for your Access Point and click "Save".
6. Click "Reboot" to restart the Bridge.
7. After reboot, wait 10-15 seconds, or until WLAN light comes on, then click "Home" to refresh status.

If the network you are connecting to is already using encryption:

1. Open a web browser to <http://192.168.1.1/> Internet Explorer will not display the web page correctly. In

- OS 9, use Mozilla 1.2.1, Opera 6.03, or Netscape 7.0. In OS X, use Safari or Firefox.
2. Log in leaving user and password fields blank, and click "Log In" or "OK".
 3. Scroll down to the bottom of the page to see a list of available Access Points.
 4. Make a note of which channel the desired Access Point is using, then click the BSSID of the Access Point.
 5. Select the correct channel for your Access Point and click "Save", but do not reboot yet.
 6. Choose "Wireless" from the menu on the left side of the screen.
 7. Configure your encryption settings to match those of your network. Click "Save". If you are unsure of your encryption settings, check with your network administrator or contact the manufacturer of your base station.
 8. Click "Reboot" to restart the Bridge.
 9. After reboot, wait 10-15 seconds, or until WLAN indicator on the front of the Bridge is lit, then click "Home" to refresh status. Under Access Point Information you should now see "State: Associated." If you do not, repeat configuration. If the problem persists, see troubleshooting section.

Post-Configuration

OS 9

1. Open the TCP/IP Control Panel.
2. Create a new preset:
 - a. Choose File > Configurations...
 - b. Click "Duplicate..."; type in "High Power Bridge Using DHCP."
 - c. Click "Make Active".
 - d. Choose Connect via: Ethernet Built-in.
 - e. Choose Configure: Using DHCP Server. (Note: Here we are configuring to connect to your Access Point, which in most situations will be using DHCP. If you know that your network uses different settings, then use those.)
3. Close the TCP/IP Control Panel and choose "Save."

OS X

1. Open the Network preference panel.
2. Create a new location:
 - a. Choose Location > New Location...
 - b. Name the new location "High Power Bridge Using DHCP"
 - c. Choose Show: Network Port Configurations.
 - d. Check the Built-in Ethernet box. Drag Built-in Ethernet to the top of the list.
 - e. Choose Show: Built-in Ethernet.
 - f. Choose Configure: Using DHCP.
3. Click "Apply Now".

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.



MACINTOSH INSTALLATION INSTRUCTIONS FOR **MacWireless High Power 11g Access Point**

Introduction

The MacWireless High Power 11g Access Point can be configured in two different modes: Access Point mode and Bridge mode. Follow the instructions below to configure your device as an Access Point. Please note that if you intend to share an Internet connection, you will also need a router, either wired or wireless, in the path between your modem and your Access Point. To configure your device as a Bridge, please refer to the Bridge instruction sheet.

Pre-Configuration

OS 9

1. Attach the Access Point to the provided power supply and plug it into the wall.
2. Using the supplied Crossover Ethernet cable, connect one end of the cable to your computer's Ethernet port and the other end to the Ethernet port on the Access Point.
3. Open the TCP/IP Control Panel.
4. Create a new preset:
 - a. Choose File > Configurations...
 - b. Click "Duplicate..." type in "High Power Access Point Configuration".
 - c. Click "Make Active".
 - d. Choose Connect via: Ethernet Built-in.
 - e. Choose Configure: Manually.
 - f. In the IP address text field, type: "**192.168.1.10**"
 - g. In the Subnet Mask text field, type: "**255.255.255.0**"
 - h. Close the TCP/IP window and choose "Save".

OS X

1. Attach the Access Point to the provided power supply and plug it into the wall.
2. Using the supplied Crossover Ethernet cable, connect one end of the cable to your computer's Ethernet port and the other end to the Ethernet port on the Access Point.
3. Open the Network preference panel from the Apple menu > System Preferences.
4. Create a new location:
 - a. Choose Location > New Location...
 - b. Name the new location "High Power Access Point Configuration".
 - c. Choose Show: Network Port Configurations.
 - d. Check the Built-in Ethernet box. Drag Built-in Ethernet to the top of the list.
 - e. Choose Show: Built-in Ethernet.
 - f. Choose Configure: Manually.
 - g. In the IP address text field, type: "**192.168.1.10**"
 - h. In the subnet mask field, type: "**255.255.255.0**"
 - i. Click "Apply Now".

MacWireless High Power 11g Access Point Configuration

The High Power 11g Access Point is by default configured as an Ethernet Bridge. In the first step here, we will change it to an Access Point.

1. Open a web browser to <http://192.168.1.1/>. Internet Explorer will not display the setup utility correctly. In OS 9, use Mozilla 1.2.1, Opera 6.03, or Netscape 7.0. In OS X, use Safari or Firefox. Note: The device may already be set to function as an access point, in which case skip to step 5. If the page does not load with the noted address, then it is likely that this is the case.
2. Leaving user and password fields blank. Click "Log In" or "OK".
3. Click "System" and then click "Operation".
4. Click the "Access Point" check box and then click "Apply", when asked "Are You Sure?", click "OK".
5. Wait for 10-15 seconds then direct your browser to <http://192.168.1.2/>.
6. Click "Wireless" then click "General".
7. Enter a name for your wireless network in the "SSID" text field. Click "Save".
8. Click "Reboot". When asked "Are You Sure?", click "OK".

9. Click "LAN" then click "LAN Settings". In the field labeled "Default Gateway", enter your router's IP address. In the field labeled "Default IP Address" it is recommended that you enter an address that is on the same subnet as your router. For example, if your router's IP address is 192.168.0.1, and your subnet mask is 255.255.255.0, then this address could be set to 192.168.0.2. Or if your router's IP address is 10.0.1.1, and your subnet mask is 255.255.255.0, then this address could be set to 10.0.1.20. The last number here can be any number between 1 and 255 that is not used by your router or any other device on your network. Write this new "Default IP Address" down because this is the address you will need to point your browser to in order to get to the access point's configuration pages from now on. See troubleshooting section for more information.
10. Click "Save". Click "Reboot". When asked "Are You Sure?", click "OK".
11. Direct your web browser to the "Default IP Address" that you set the access point to in step 9.
12. For password protection:
(Note: We strongly recommend that you configure the Access Point without encryption first, and then apply encryption once the Network is stable.)
 - a. Click "Wireless" then click "WEP".
 - b. Choose "WEP Mode: Enable".
 - c. Choose "WEP Key Lengths: 64-bit" or "128-bit" depending on how strong you want the protection. 128-bit is stronger.
 - d. Choose a WEP Key using numbers and letters A through F. A 64-bit key must be 10 characters long, and for 128-bit the key must be 26 characters long. Enter the key in the "WEP Key" text field.
 - e. Choose "Authentication: Shared Key".
 - f. Click "Save" and then click "Reboot". When asked "Are You Sure?" click "OK".

Post-Configuration

OS 9

2. Open the TCP/IP Control Panel.
3. Return to your previous configuration in File Menu -> Configurations.
4. Close the TCP/IP Control Panel and choose "Save".
5. Connect your Internet access line (an Ethernet cable from your DSL, cable modem, or router) to the Access Point's Ethernet port using a regular (non-crossover) Ethernet cable. Skip this step if you are installing a MacWireless Outdoor Complete kit.

OS X

1. Open the Network preference panel.
2. Return to your previous location.
3. Click "Apply Now".
4. Connect your Internet access line (an Ethernet cable from your DSL, cable modem, or router) to the Access Point's Ethernet port using a regular (non-crossover) Ethernet cable. Skip this step if you are installing a MacWireless Outdoor Complete kit.

WDS Mode

It is possible to connect several MacWireless High Power Access Points together wirelessly. This 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.

1. Set all devices to Access Point mode and disable encryption.
2. Go to Wireless > General. Set all Access Points to the same network name and the same channel.
3. Go to Wireless > WDS. Enable WDS mode and enter the MAC addresses of all of the other Access Points.
4. Go to LAN > DHCP Settings. Disable DHCP server on all units except for one.
5. Restart all units. Once you have established a stable system, you may apply encryption. Be sure to use the same encryption settings for all units.

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.

Troubleshooting in Access Point Mode

When I type in the address for the web-based configuration utility, my browser cannot find the page.

The address you enter into the address bar of your browser should be the "Default IP Address" that you defined during configuration. The computer that you are using to connect to the Access Point should be on the same subnet as the Access Point. If the page still does not load, reset the Access Point to factory settings by holding down the reset button on the back of the Access Point until the lights change on the front of the device. Reconfigure your Access Point using the above instructions.

My device is currently configured as an Access Point. How do I change my device to Bridge mode?

Make sure that your computer is using the "High Power Bridge Configuration" setting as defined in the instructions above. OS 9 users can find this setting in Apple Menu -> Control Panels -> TCP/IP -> File Menu -> Configurations. OS X users in Apple Menu -> System Preferences -> Network -> Location. Once your configuration setting is correct, open your browser and type 192.168.1.2 into the address bar. Leaving user and password fields blank, click "Log In" or "OK". Click "System" and then click "Operation". Click the "Bridge" check box and then click "Apply". When asked "Are You Sure?", click "OK". Wait for 10-15 seconds then direct your browser to <http://192.168.1.1/>. Your device is now in Bridge mode, and may be configured using the Bridge instruction sheet.

Troubleshooting in Bridge Mode

We strongly recommend that you disable encryption on your network before configuring the Bridge. Once the connection is working, then reapply encryption and reconfigure the bridge according the instructions above.

When I type in the address for the web-based configuration utility, my browser cannot find the page.

Make sure that your computer is using the "High Power Bridge Configuration" setting as defined in the instructions above. OS 9 users can find this setting in Apple Menu -> Control Panels -> TCP/IP -> File Menu -> Configurations. OS X users in Apple Menu -> System Preferences -> Network -> Location. Once your configuration setting is correct, type 192.168.1.1 into the address bar. If the page still does not load, reset the Bridge to factory defaults by holding down the reset button on the back of the Bridge until the lights change on the front of the device. Reconfigure your Bridge using the above instructions. If the page still does not load, and you have previously configured your Bridge as an Access Point, please see the next topic in this section.

My device is currently configured as a Bridge. How do I change my device to Access Point mode?

Make sure that your computer is using the "High Power Bridge Configuration" setting as defined in the Bridge Configuration instructions above. OS 9 users can find this setting in Apple Menu -> Control Panels -> TCP/IP -> File Menu -> Configurations. OS X users in Apple Menu -> System Preferences -> Network -> Location. Once your configuration setting is correct, open your browser and type 192.168.1.1 into the address bar. Leaving user and password fields blank, click "Log In" or "OK." Click "System" and then click "Operation." Click the "Access Point" check box and then click "Apply." When asked "Are You Sure?", click "OK." Wait for 10-15 seconds then direct your browser to <http://192.168.1.2/>. Your device is now in Access Point mode, and may be configured using the Access Point instruction sheet.

I can see a list of available access points, but I cannot connect to any of them.

Reset the Bridge to factory defaults by holding down the reset button on the back of the Bridge until the lights change on the front of the device. Unplug the Bridge and plug it back in. Empty your browser's cache, and then quit and restart your browser. Continue from step one of the Configuration section of this document.

My network uses WPA encryption. After configuration, the WLAN light comes on for a few seconds, and then goes out.

Change the encryption settings on your wireless router to WPA using TKIP only. If the situation does not improve, change the encryption settings on your router to use WEP, and reconfigure the Bridge accordingly.