



## MACINTOSH INSTALLATION INSTRUCTIONS FOR **MacWireless 4 dBi Ceiling Antenna**

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### Introduction

Thank you for purchasing a MacWireless antenna. Before installing your antenna, we recommend that you test your current signal level using iStumbler. Compare this result to the signal level after installation to see how much your connection has improved. iStumbler is included on the MacWireless CD in the "Extra Software" directory, and is also available for download at: <http://www.istumbler.net/>

### Installation

*The MacWireless Ceiling Antenna can be installed onto sheetrock, wood, suspended tile, metal, and cement ceilings. It can also be mounted on a wall. If you have a sheetrock or wood ceiling, we recommend installing the antenna in a central location that does not have a stud behind it. If you are working with a suspended tile ceiling, we recommend that you remove the panel in which you wish to install the antenna before proceeding with the installation.*

1. Tape the included mounting diagram to the ceiling or wall and drill four small holes with a 1/8" drill bit.
2. If you intend to run the antenna cable into a compartment above the ceiling, drill the center hole on the guide using a 3/8" drill bit, and pass the cable through the hole. If you do not intend to run the antenna cable into a compartment above the ceiling, make sure that the antenna cable is running through the cable lane on the back of the antenna.
3. Fasten the antenna to the ceiling using the appropriate screw or bolt (not included).
4. Connect antenna to access point. If you have a suspended tile ceiling, we recommend that you test the setup before replacing the panel.

### Troubleshooting

#### **I'm not seeing a significant increase in range. What can I do?**

1. Verify the physical connections, and make sure that you power-cycle your wireless device after connecting or disconnecting range extending hardware.
2. Aim the antenna appropriately. For more information on how your antenna radiates energy, see the antenna help section of our website: <http://www.macwireless.com/html/help/antenna.html>
3. If you are connecting your antenna to an AirPort Extreme Base Station with External Antenna Port, use the AirPort Admin Utility to verify that your external connection is recognized. Inside the base station configuration area, go to the View menu and choose "Summary" or "Show Summary." You should see "Antenna: External." If you do not, double check the physical connections and power-cycle the base station. If you still do not see the external connection in your Admin Utility, check the hardware on a different base station, if you have one available.

*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.*

## **Factors Affecting Range and Performance of All Wireless LAN Systems**

Range estimates are typical and require line of sight. Basically, that means you will need a clear unobstructed view of the antenna from the remote point in the link. Keep in mind that walls and obstacles will limit your operating range and could even prevent you from establishing a link. Signals generally will not penetrate metal or concrete walls. Trees and leaves are also obstructions to 802.11 frequencies; they will partially or entirely block the signal. Other factors that will reduce range and affect coverage area include metal studs in walls, concrete fiberboard walls, aluminum siding, foil-backed insulation in the walls or under the siding, pipes and electrical wiring, furniture, and sources of interference. The primary source of interference in the home will be the microwave oven. Other sources include other wireless devices, cordless phones, radio transmitters, and other electrical equipment. These solutions work for the vast majority of our customers. However, due to the numerous factors affecting range and performance, we do not guarantee that you will achieve any specific improvement in range for your specific application.

