



INSTALLATION INSTRUCTIONS FOR

MacWireless Antenna

For 17" Aluminum PowerBooks with an AirPort Extreme Card

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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

1. Shut down your PowerBook, disconnect the power, and fold the screen closed.
2. Turn the computer over and remove the battery.
3. Remove the eight screws from the sides of the PowerBook, four on each side, as in Figure 1.
4. Remove the five screws on the bottom back of the PowerBook.
5. Remove the three screws on the memory compartment cover and remove it, as shown in Figure 2.



Figure 1

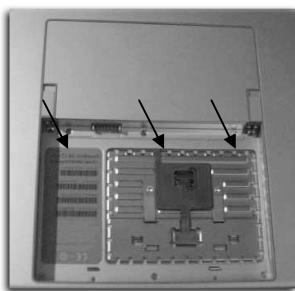


Figure 2

6. Remove the three screws on the front edge of the battery compartment.
7. If you have a memory card installed in the slot nearest to the battery compartment, remove it.
8. Using a Torx T8 driver, remove the two screws from the memory area.
9. Remove the flex cable from the memory area. Please note that the connector is fragile. Be careful not to apply too much pressure when removing the cable.
10. Turn the computer over and fold the screen open.
11. Pull up on the front and sides of the case until the keyboard and case lift up.
12. Find your AirPort Extreme card and trace the path of its antenna cable until you find a gold connector as shown in Figure 3. Pull this connector apart.

13. From outside the machine, pass the smaller end of the MacWireless antenna cable adapter through the PC Card slot. Connect this cable to the portion of the internal AirPort antenna cable that is still connected to the AirPort Extreme Card itself.
14. Replace the case and keyboard. Fold down the screen and turn the machine over.
15. Replace the flex cable in the memory area, then replace the two Torx screws in the memory area.

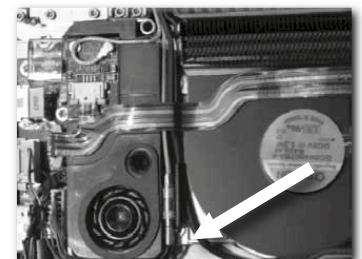


Figure 3

Installation, cont.

16. Replace the memory card in the slot nearest to the battery compartment.
17. Replace the screws on the front edge of the battery compartment.
18. Replace the memory compartment cover and screws.
19. Replace the remaining screws on the back and sides of the PowerBook.
20. Replace the battery and turn the machine over.
21. Connect the MacWireless antenna to the MacWireless antenna adapter cable.
22. Power on your computer and position the antenna for optimal performance.

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>

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 obstructions to 802.11 frequencies so 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 equipment, cordless phones, radio transmitters, and other electrical equipment. Due to the increased gain, installing range extender antennas in the presence of interference could actually yield equal or worse range. 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.

This modification may void your warranty. MacWireless accepts no responsibility or liability for any modification. Although MacWireless products have been tested and verified, MacWireless does not accept responsibility for loss or damage to any equipment or device. Use at your own risk.