Airespace AP 802.11a Radio Card Quick Installation Guide

System Release 1.1

Overview

This guide is designed to provide professional installers with the information needed to install an Airespace AP 802.11a Radio Card in a 1200B Airespace Access Point to create a 1200AB Airespace Access Point.

🚫 **WARNING**: DO NOT attempt to install the Airespace AP 802.11a Radio Card if you are not a professional installer certified by Airespace, Inc. to perform this installation. If you perform this installation without Airespace, Inc. certification, you will void the FCC certification for the resulting 1200AB Airespace AP, and will be in violation of FCC regulations. (See *FCC Statements for Airespace AP* in the *Airespace Product Guide* for additional information.)

The following figure shows a typical 802.11a Radio Card.

Figure - Typical Airespace AP 802.11a Radio Card

Continue with *Step 1: Collecting Required Tools and Materials*.

Step 1: Collecting Required Tools and Materials

- Airespace AP 802.11a Radio Card kit -- includes 802.11a Radio Card and replacement FCC label.

- Correct Security Torx screwdriver (exact size to be determined).

- 1200B Airespace Access Point to be upgraded to a 1200AB Access Point. See *Airespace AP Models* for more information.

- A power source for the Airespace AP:

    - Either an *Airespace AP External Power Converter*, or

    - A connection from an 802.3af-compliant *Power Over Ethernet* device.

- A separate WiFi-approved device (such as Air Magnet) used to detect and verify 802.11a transmissions.

Continue with *Step 2: Setting up an ESD Workspace*.

Step 2: Setting up an ESD Workspace

You need an Electrostatic Discharge (ESD) workspace to complete this installation. Because the 802.11a Radio Card is very sensitive to electrostatic discharge, you can destroy it by not following ESD procedures.

> ⚠️ **Caution**: DO NOT attempt to install the Airespace AP 802.11a Radio Card if you do not have an ESD workplace, or you may destroy the 802.11a Radio Card.

Continue with *Step 3: Opening the Airespace AP Case*.

Step 3: Opening the Airespace AP Case

- If necessary, remove any brackets and/or mounting bases from the bottom of the Airespace AP.

- Use your Security Torx screwdriver to remove the two screws securing the Airespace AP door.

  Save the two screws for later reuse.

Figure - Airespace AP Screw Locations

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- Remove the Airespace AP door.

  Note that the 1200B has two RF cable ends taped to the inside of the case, one labeled "1" and the other labeled "2".

- Remove the tape to release the two RF cable ends.

Figure - Airespace AP with Door Removed

Continue with *Step 4: Installing the 802.11a Radio Card*.

Step 4: Installing the 802.11a Radio Card

- Take a moment to ensure that your ESD workspace is secure: wrist strap, desktop mat, floormat and/or heel strap properly grounded.

⚠️ **Caution:** Even if you are working at an ESD workspace, you can still damage the 802.11a Radio Card. Make sure you pick up the 802.11a Radio Card by the edges as shown in the following figure, and do not touch the connector fingers.

Figure - Holding the 802.11 Radio Card by the Edges

- Remove the 802.11a Radio Card from its kit and position the card on the edge of the Airespace AP case as shown in the previous figure.

- While holding the 802.11a Radio Card on the edge of the Airespace AP, gently snap the RF cable labeled "1" onto the RF connector nearest the corner of the 802.11a Radio Card.

  When you are done, the assembly should look as follows:

Figure - 802.11a Radio Card with RF Cable "1" Attached

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- Rotate the AP 802.11a Radio Card and position the card on the middle of the Airespace AP case as shown in the next figure.

- While holding the 802.11a Radio Card on the middle of the Airespace AP, gently snap the RF cable labeled "2" onto the RF connector nearest the center of the 802.11a Radio Card.

- When you are done, the assembly should look as follows:

Figure - 802.11a Radio Card with RF Cables "1" and "2" Attached

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- Carefully rotate the 802.11a Radio Card as shown in the following figure.

- Make sure the RF cables are not pinched under the 802.11a Radio Card (small arrow).

- Position the 802.11a Radio Card against its mating connector at a shallow angle (large arrow).

- Gently press the 802.11a Radio Card all the way into its mating connector until it bottoms out in the connector (large arrow).
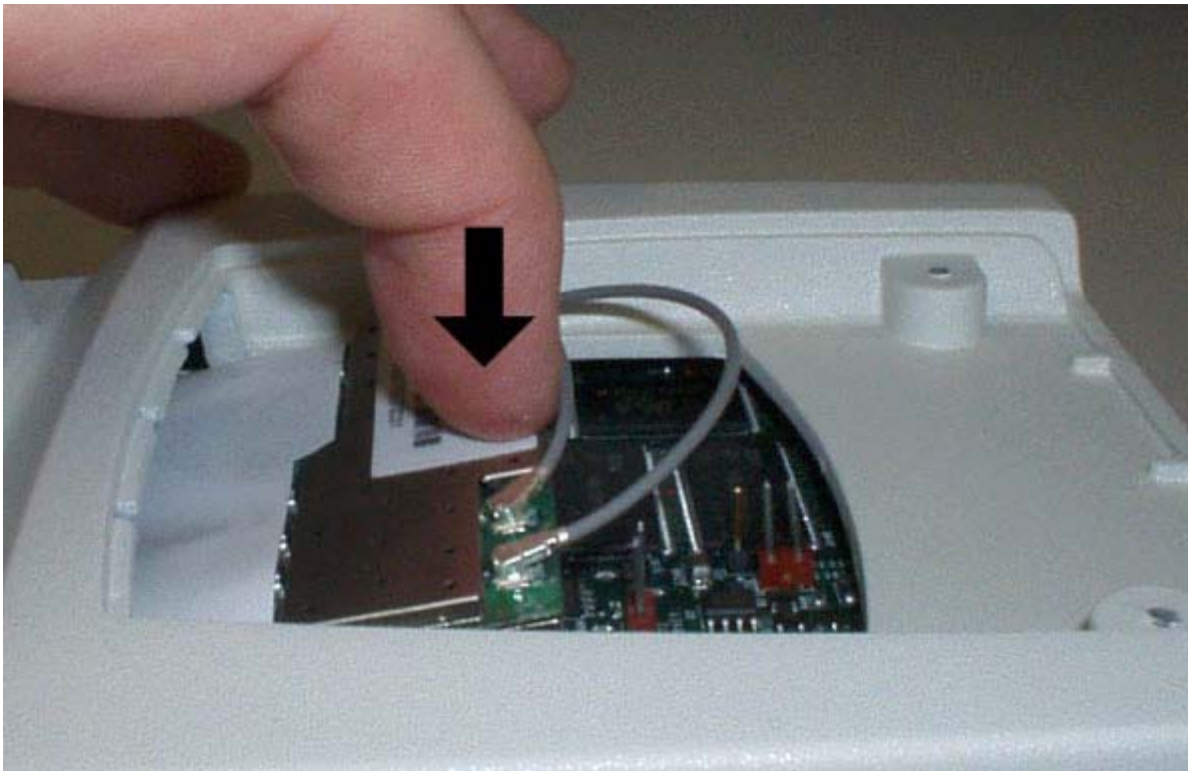
Figure - Positioning the 802.11a Radio Card in the Airespace AP Case
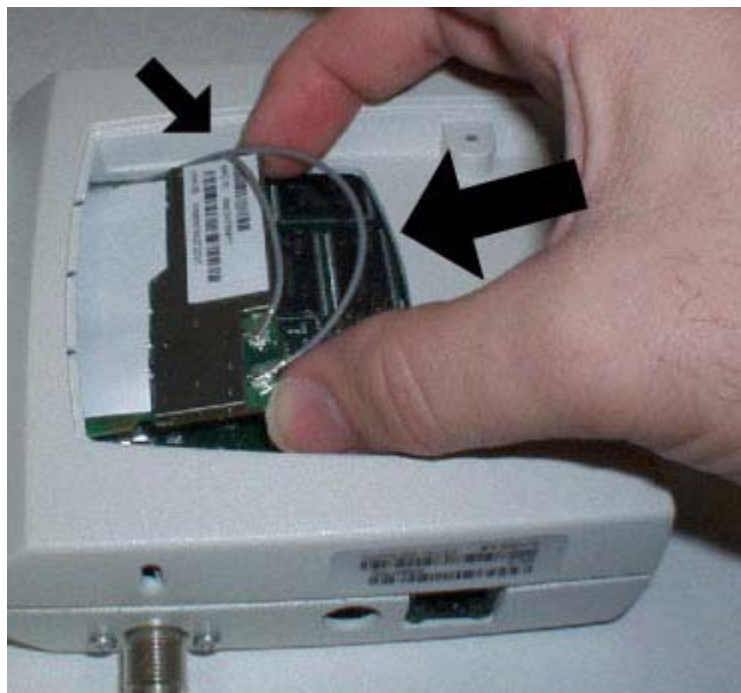
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- When you are done, make sure the RF cables are not pinched, and gently snap the 802.11a Radio Card into its retaining detents as shown in the next figure.

Figure - Gently Snapping the 802.11a Radio Card into its Retaining Detents

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- When you are done, the 802.11a Radio Card is secured in its retaining detents as shown in the following figure.

Figure - 802.11a Radio Card Installed in the Airespace AP Case

You have installed the 802.11a Radio Card in the Airspace AP. Continue with *Step 5: Verifying 802.11a Operation*.

Step 5: Verifying 802.11a Operation

You have added 802.11a functionality to a 1200B Airespace AP. Perform the following to verify correct 802.11a operation.

- Enable the Site Survey function by placing the factory-supplied jumper across both of the Site Survey header pins on the Airespace AP mother-board as shown in the following figure.

Figure - 802.11a Site Survey Jumper in the Airespace AP

A. Site Survey Jumper Not Installed   B. Site Survey Jumper Installed

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- Put the door back on the Airespace AP case, and use one of the door screws to temporarily hold the door closed while you apply power to the Airespace AP.

- Use either an *Airespace AP External Power Converter*, or a connection from an 802.3af-compliant *Power Over Ethernet* device to power up the Airespace AP.

  The red Fault LED should light for about one minute, and then the AP should begin an up-and-down LED flashing sequence, indicating that the Airespace AP is receiving power, is not talking to an Airespace

Wireless Switch, and that its radios are transmitting their beacon SSIDs.

- Using your 802.11a WiFi-approved device, verify that you can detect the SSID "Airespace" and the MAC address from the label in the 802.11a Radio Card kit.

    - If you detect the correct SSID and Mac address, the 802.11a Radio Card is working properly; continue with the next procedure.

    - If you cannot detect the correct SSID and Mac address, the 802.11a card is not working properly; contact Airspace Technical Support at 1-408-635-2000 for assistance.

- When you have verified that the 802.11a Radio Card is working properly, remove power from the Airespace AP.

- Open the Airespace AP door.

- Move the Site Survey jumper onto either pin for future use.

You have successfully converted the 1200B into a 1200AB. Continue with *Step 6: Closing the Airespace AP Case*.

Step 6: Closing the Airespace AP Case

- Place the door on the Airespace AP.

- Using your Security Torx screwdriver and the saved screws, secure the door to the Airespace AP case.

▶ **Note**: Do not use any other screws to secure the door to Airespace AP. If you use other screws, you will violate FCC regulations as described in *FCC Statements for Airespace AP*.

Continue with *Step 6: Updating the Airespace AP FCC Label*.

Step 6: Updating the Airespace AP FCC Label

Because you have changed a 1200B Airespace AP into a 1200AB Airespace AP, the FCC certification number has changed. To comply with the FCC regulations described in *FCC Statements for Airespace AP*, place the correct FCC label over the existing FCC label.

You have successfully converted the 1200B into a 1200AB Airespace Access Point.