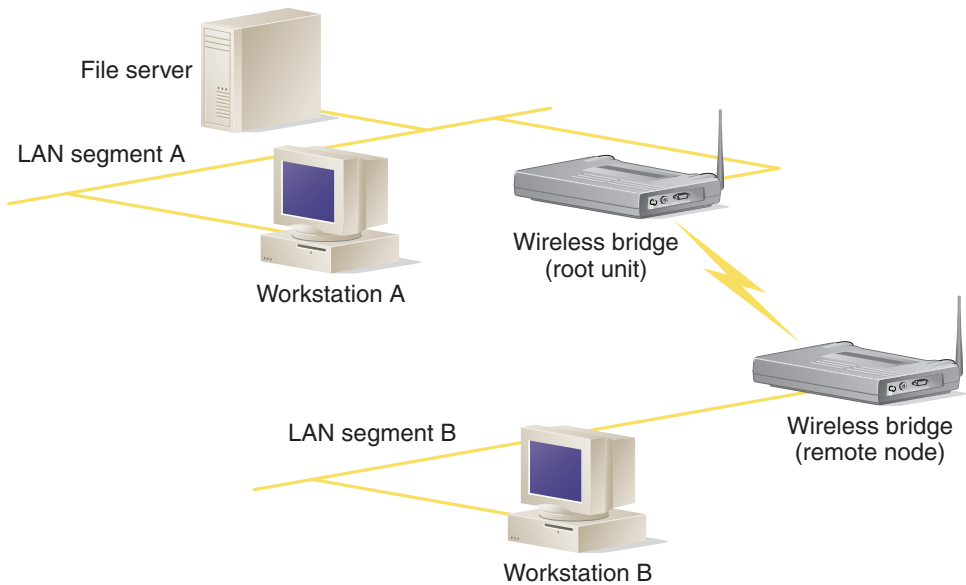


# Quick Start Guide

## CISCO AIRONET 340 SERIES

### WIRELESS BRIDGES



1

TAKE OUT WHAT YOU NEED

2

CONNECT AND POWER UP THE BRIDGE

3

CONFIGURE THE BRIDGE



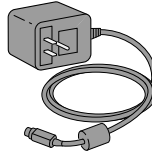


# 1 Take Out What You Need

Cisco Aironet 340 Series Wireless Bridge



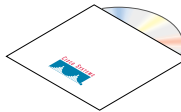
Bridge power pack



2.2 dBi dipole antenna



Cisco Aironet 340 Series Wireless Bridge CD  
with product documentation



If any item is missing or damaged, contact your Cisco representative or reseller for support.

## Before You Begin

Before beginning installation, determine bridge location. Because the unit is a radio device, unit and antenna location are important to ensure optimum radio range and throughput:

- To maximize the range of a building-to-building connection, install the antenna as high as possible.
- Maintain a clear line of sight between wireless bridge antennas. Obstructions may impede performance or limit bridge ability to transmit and receive data.
- Place directional antennas at both ends with maximum path clearance.

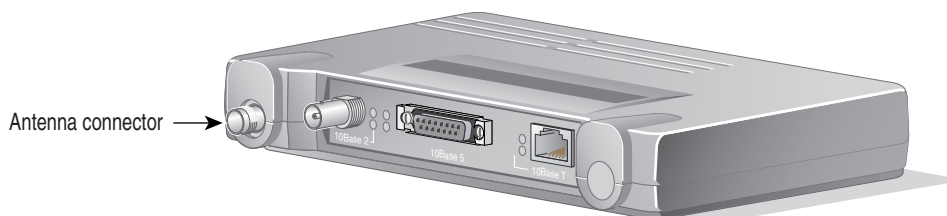
## 2 Connect and Power Up the Bridge

*Note: Before you install the bridge system, we recommend that you test the bridge using the 2.2 dBi antenna included in the package. Then install the wireless bridge with the appropriate antenna for your application. A lightning arrestor and low-loss antenna cable are included in the optional antenna kits or can be ordered separately.*

### Installing the Antenna

- 1 If applicable, with the unit powered off, attach a lightning arrestor to the antenna connector.

*Note: The lightning arrestor provides surge protection to the bridge in the event of a lightning strike and is highly recommended if the antenna will be located outdoors.*



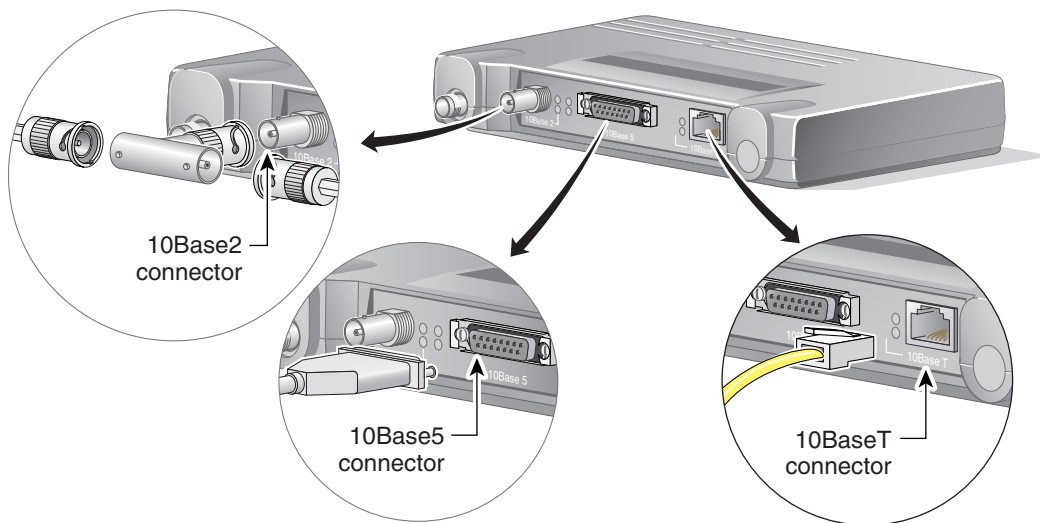
- 2 Connect one end of the low-loss antenna cable to the lightning arrestor connected to the bridge antenna connector.

*Note: Because of FCC and DOC regulations, the antenna connector on the Aironet bridge is of reverse polarity to the standard TNC connectors.*

- 3 Connect the other end of the antenna cable to the 2.2 dBi antenna or to an external high-gain antenna.
- 4 Mount the bridge antenna at an appropriate elevation to ensure maximum path clearance and line-of-sight to the other bridge or device.

### Installing the Ethernet Connection

The Aironet wireless Ethernet bridge supports three connection types: 10Base2 (Thinnet), 10Base5 (Thicknet), or 10BaseT (twisted pair). Connect only one Ethernet cable to each bridge. With the power off, connect the appropriate cable from your network to the bridge.



## Attaching 10Base2 Cabling

- 1** Attach the 10Base2 (Thinnet) cabling to a BNC T-connector.
- 2** Attach the T-connector to the 10Base2 connector on the bridge.
- 3** If the unit is at the end of the Ethernet cable, install a 50-ohm terminator on the open end of the T-connector.



**Caution** Removing a terminator to install extra cable or breaking an existing cable to install a T-connector will cause a disruption in Ethernet traffic. Consult your LAN administrator before you change any Ethernet cable connections.

## Attaching 10Base5 Cabling

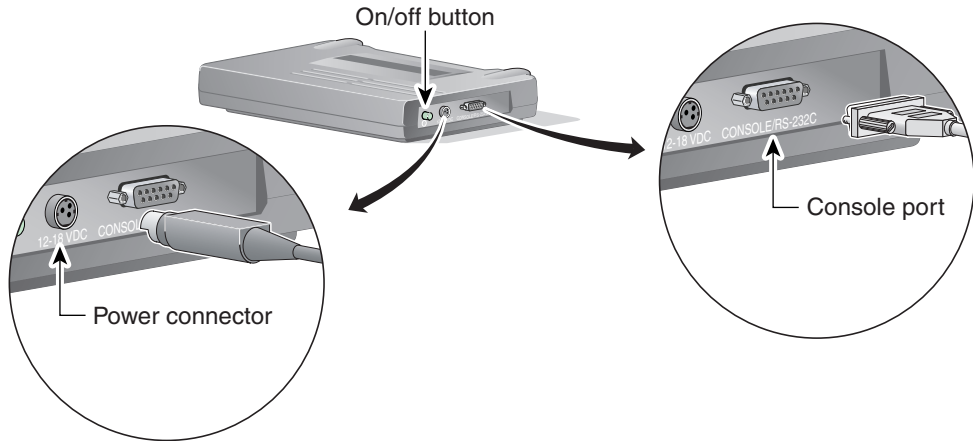
- 1** Attach the transceiver connector to the 10Base5 (Thicknet) port.
- 2** Slide the locking mechanism into place.
- 3** Attach the other end of the transceiver drop cabling to an external transceiver.

## Attaching 10BaseT Cabling

- 1** Plug the RJ-45 connector into the 10BaseT (twisted pair) port.
- 2** Connect the other end of the twisted pair cabling to the 10BaseT Ethernet LAN connection.

## Installing the Console Port and Powering Up the Bridge

The console port and power connections are on the side of the bridge. The console connection is required for setting up initial configuration information. After configuration is complete, you may remove this cable unless or until additional configuration is required via the serial port.



### Installing the Console Port Cable

*Note: Use a straight-through cable with 9-pin male to 9-pin female connectors.*

- 1 Attach the console port cable to the console port on the bridge.
- 2 Attach the other end of the console cable to the serial port on a terminal or PC running a terminal emulation program.
- 3 Set the terminal to 9600 baud, 8 data bits, No parity, 1 stop bit, and Xon/Xoff flow control.

### Connecting Power to the Bridge

- 1 Connect the small plug on the end of the power pack cord into the bridge power port.
- 2 Plug the power pack into an electrical outlet (120VAC/60 Hz or 90–264VAC/47–63 Hz, as appropriate).
- 3 Push the on/off button to power on the bridge.

When power is initially applied to the bridge, all three indicators on the top panel will flash in sequence to test the functionality of the indicators.

## 3 Configure the Bridge

### Assigning the SSID

Use the console port to set the Service Set Identifier (SSID) that allows the wireless bridge to communicate with other nodes. The SSID is a unique, case-sensitive identifier that is attached to selected packets sent out over the radio network. Nodes associating to the bridge must use the same SSID or their association requests will be ignored.

Determine a unique SSID for the bridges and make sure that all bridges in the network use the same SSID.

- 1 On the terminal connected to the console port, select **Configuration** from the Main menu.
- 2 From the Configuration menu, select **Radio**.
- 3 From the Radio menu, select **SSID**.
- 4 Enter a value for the SSID option. The SSID can have up to 32 characters. All devices in the same radio network must use the same SSID. This value is case sensitive.

### Assigning IP Information

To enable remote access to the bridge using Telnet, HTTP, or SNMP, you must assign an IP address to the bridge.

*Note: You can also assign other detailed internet addressing options, such as gateway address, subnet mask, or SNMP configuration. Refer to the user guide on the product CD for more information.*

- 1 On the terminal connected to the console port, select **Configuration** from the Main menu.
- 2 From the Configuration menu, select **Ident**.
- 3 Use the **INADDR** option to assign an IP address. Be sure to assign a unique IP address to each bridge.
- 4 Use the **INMASK** option to define the internet subnet mask, if appropriate.
- 5 Use the **GATEWAY** option to define the gateway address, if appropriate.

## Setting Root Configuration

Before performing detailed configuration, you should determine whether the bridge will be a root bridge or a non-root bridge. Refer to the Aironet 340 Series Wireless Bridge User Guide on the product CD for configuration examples. The default setting for a bridge is as a root unit. Use the following steps to change this setting.

- 1** Access the Configuration Radio menu.
  - If you are using a terminal emulator, select **Configuration > Radio** from the Main menu.
  - If you are using a browser, click **Radio** under the Configuration heading.
- 2** At the Configuration Radio menu, select **on** or **off** for the Enable root mode setting.
  - If you are using a terminal emulator, enter a **2** to select the Root setting. The prompt will ask if you are sure you want to change the setting. Enter **y** to toggle the setting from on to off, or from off to on.
  - If you are using a browser, click **Allow Config Changes** and then click **On** to set the bridge as a root unit, or click **Off** to set the bridge as a non-root unit.

Once the bridge is configured as a root or non-root unit, you can quit the terminal emulator or browser, disconnect the console port cable, and install the bridge in its desired location before proceeding with remote configuration.

Refer to the Aironet 340 Series Wireless Bridge User Guide on the product CD for details on configuration.

## Safety Information for the Cisco Aironet 340 Series Wireless Bridge

The FCC with its action in ET Docket 96-8 has adopted a safety standard for human exposure to radio frequency (RF) electromagnetic energy emitted by FCC certified equipment. Cisco Aironet 340 Series products meet the uncontrolled environmental limits found in OET-65 and ANSI C95.1, 1991. Proper operation of this radio according to the instructions found in this manual and the users guide on the Cisco Aironet 340 Series Wireless Bridge product CD will result in user exposure that is substantially below the FCC recommended limits.

- Do not touch or move antenna(s) while the unit is transmitting or receiving.
- Do not hold any component containing the radio such that the antenna is very close or touching any exposed parts of the body, especially the face or eyes, while transmitting.
- Do not operate a portable transmitter near unshielded blasting caps or in an explosive environment unless it is a type especially qualified for such use.
- Do not operate the radio or attempt to transmit data unless the antenna is connected; if not, the radio may be damaged.
- Antenna use:
  - Always orient a di-pole antenna such that it is at least 6 inches (15 cm) away from your body.
  - High-gain, wall-mount or mast-mount antennas are designed to be professionally installed and should be located at a minimum distance of 12 inches (30 cm) or more from your body. Please contact your professional installer, VAR, or antenna manufacturer for proper installation requirements.
  - Warning for laptop users: In order to comply with the FCC RF exposure limits, it is recommended when using a laptop with a PC client adapter, that the adapter's integrated antenna should not be positioned closer than 2 inches (5 cm) from your body or nearby persons for extended periods of time while it is transmitting (or operating). If the antenna is positioned less than 2 inches (5 cm) from the user, it is recommended that the user limit exposure time.

# Compliance Information for the Cisco Aironet 340 Series Wireless Bridge

## Federal Communication Commission Declaration of Conformity Statement

This device complies with Part 15 rules. Operation is subject to the following two conditions:

- 1 This device may not cause harmful interference, and
- 2 This device must accept any interference received, including interference that may cause undesired operation.

This equipment has been tested and found to comply with the limits of a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a residential environment. This equipment generates, uses, and radiates radio frequency energy, and if not installed and used in accordance with the instructions, may cause harmful interference.

However, there is no guarantee that interference will not occur. If this equipment does cause interference to radio or television reception, which can be determined by turning the equipment on and off, the user is encouraged to correct the interference by one of the following measures:

- Reorient or relocate the receiving antenna.
- Increase separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician.

**Warning** The Part 15 radio device operates on a non-interference basis with the other devices operating at this frequency. Any changes of modification to said product not expressly approved by Cisco could void the user's authority to operate this device.

## Professional Installation

Per the recommendation of the FCC, the installation of high gain directional antennas to the system, which are intended to operate solely as a point-to-point system and whose total power exceeds the +36 dBm EIRP, require professional installation. It is the responsibility of the installer and the end user that the high power systems are operated strictly as a point-to-point system.

Systems operating as a point-to-multipoint system or using non-directional antennas cannot exceed +36 dBm EIRP power requirement under any circumstances and do not require professional installation.

## **Department of Communications—Canada**

### **Canadian Compliance Statement**

This class B Digital apparatus meets all the requirements of the Canadian Interference-Causing Equipment Regulations.

Cet appareil numérique de la classe B respecte les exigences du Règlement sur le matériel brouilleur du Canada.

This device complies with RSS-210 of Industry Canada. Operation is subject to the following two conditions: 1) this device may not cause harmful interference, and 2) this device must accept any interference received, including interference that may cause undesired operation.

The device is certified to the requirements of RSS-139-1 for 2.4 GHz spread spectrum devices. The use of this device in a system operating either partially or completely outdoors may require the user to obtain a license for the system according to the Canadian regulations. For further information, contact your local Industry Canada office.

## **European Telecommunications Standards Institute**

### **Statement of Compliance**

#### **Information to User**

This equipment has been tested and found to comply with the European Telecommunications Standard ETS 300.328. This standard covers Wideband Data Transmission Systems referred to in CEPT recommendation T/R 10.01.

This type accepted equipment is designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy, and if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications.



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