CHAPTER 2

Installing the Access Point

This chapter describes the installation of the access point and includes these sections:

Safety Information

Follow the guidelines in this section to ensure proper operation and safe use of the access point.

FCC Safety Compliance Statement

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. When used with approved Cisco Aironet antennas, Cisco Aironet products meet the uncontrolled environmental limits found in OET-65 and ANSI C95.1, 1991. Proper installation of this radio according to the instructions found in this manual will result in user exposure that is substantially below the FCC recommended limits.

General Safety Guidelines

- Do not hold any component containing a radio so that the antenna is very close to or touching any exposed parts of the body, especially the face or eyes, while transmitting.

Warnings

Translated versions of the following safety warnings are provided in Appendix A, “Translated Safety Warnings.”

Warning **This warning symbol means danger. You are in a situation that could cause bodily injury. Before you work on any equipment, be aware of the hazards involved with electrical circuitry and be familiar with standard practices for preventing accidents. Use the statement number provided at the end of each warning to locate its translation in the translated safety warnings that accompanied this device.** Statement 1071
SAVE THESE INSTRUCTIONS

Warning **Read the installation instructions before you connect the system to its power source.** Statement 1004

Warning **This product must be connected to a power-over-ethernet (PoE) IEEE 802.3af compliant power source or an IEC60950 compliant limited power source.** Statement 353

Warning **This product relies on the building’s installation for short-circuit (overcurrent) protection. Ensure that the protective device is rated not greater than:**
20A Statement 1005

Warning **Do not operate your wireless network device near unshielded blasting caps or in an explosive environment unless the device has been modified to be especially qualified for such use.** Statement 245B

Warning **In order to comply with FCC radio frequency (RF) exposure limits, antennas should be located at a minimum of 7.9 inches (20 cm) or more from the body of all persons.** Statement 332

Unpacking the Access Point

Follow these steps to unpack the access point:

Step 1 Open the shipping container and carefully remove the contents.

Step 2 Return all packing materials to the shipping container and save it.

Step 3 Ensure that all items listed in the "Package Contents" section are included in the shipment. Check each item for damage. If any item is damaged or missing, notify your authorized Cisco sales representative.

Package Contents

Each access point package contains the following items:

- Cisco Aironet 1130AG Series Access Point or Cisco Aironet 1130AG Series Lightweight Access Point
- Cisco Aironet 1130AG Series Power Module (universal power module)–optional
- Mounting hardware kit
  - One mounting plate
  - Two suspended ceiling adjustable T-rail clips (accomodates standard and recessed T-rails)
  - One security hasp adapter
  - Four 6 x 32 x in.flat head Phillips machine screws
  - One 8 x 32 x 3/16 in. pan head Phillips machine screw
  - 2 #8 plastic wall anchors
  - 2 #8 x 32 x 1 in. pan head screws
- Product quick start guide
- Translated safety warnings document
- Cisco product registration and Cisco documentation feedback cards

Basic Installation Guidelines

Because the access point is a radio device, it is susceptible to interference that can reduce throughput and range. Follow these basic guidelines to ensure the best possible performance:

- Ensure a site survey has been performed to determine the optimum placement of access points.
- For lightweight access points, check the latest release notes to ensure that your controller software version supports the access points to be installed. You can find the controller release notes by selecting your controller under **Wireless LAN Controllers** at this URL:

  http://www.cisco.com/en/US/products/hw/wireless/tsd_products_support_category_home.html
- Ensure that access points are not mounted closer than 20 cm (7.9 in) from the body of all persons.
- Do not mount the access point within 3 feet of metal obstructions.
- Install the access point away from microwave ovens. Microwave ovens operate on the same frequency as the access point and can cause signal interference.
- Do not mount the access point outside of buildings.
- Do not mount the access points on building perimeter walls unless outside coverage is desired.

Controller Discovery Process for Lightweight Access Points

The lightweight access point supports these controller discovery processes:

- DHCP server discovery—Uses DHCP Option 43 to provide controller IP addresses to the lightweight access points. Cisco switches support a DHCP server option. For additional information, refer to the "Configuring DHCP Option 43 for Lightweight Access Points" section on page G-1.
- DNS server discovery—The lightweight access point uses the name *CISCO-LWAPP-CONTROLLER.<local domain>* to discover the controller IP addresses from a DNS server. Where *<local domain>* is the access point domain name.
- Locally stored controller IP addresses—If the lightweight access point was previously associated to a controller, the IP addresses of the primary, secondary, and tertiary controllers are stored in the access point non-volitile memory. The process of storing controller IP addresses in access points for later deployment is called priming the lightweight access point. For additional information, refer to the "Priming Lightweight Access Points Prior to Deployment" section on page F-1.

  You can also manually configure controller information using CLI commands on new (out-of-the-box) access points that are not connected to a controller. For additional information refer to the "Manually Configuring Controller Information Using the Access Point CLI" section on page 4-8.

Cisco recommends that you configure a DHCP server with Option 43 to provide the controller IP addresses to your lightweight access points. Cisco switches provide a DHCP server option that is typically used for this purpose.

Deploying the Access Points on the Wireless Network

Prior to beginning the actual access point deployment, perform these tasks:

- Ensure that a site survey has been preformed.
- Ensure that your network infrastructure devices are operational and properly configured.
- For lightweight access points, perform these tasks:
  - Ensure that your controllers are connected to switch trunk ports.
  - Ensure that your switch is configured with untagged access ports for connecting your access points.
  - Ensure that a DHCP server with Option 43 configured is reachable by your access points.

To deploy your access points, follow these steps:

Step 1 Obtain the access point location map created during your building site survey.

Step 2 Review the access point locations and identify the specific mounting methods required for each access point location.

Step 3 For each access point perform these steps:

a. For lightweight access points, record the access point MAC address on the access point location map. When you have completed the access point deployment, return the access point MAC addresses and the access point locations on the access point location maps or floor plans to your network planner or manager. The network operators can use the MAC address and location information to create maps for precise wireless system management.

b. Attach your access point to the mounting plate (see the "Attaching the Access Point to the Mounting Plate" section on page 2-17).

c. Mount the access point at the indicated destination using the specified mounting method. For specific mounting instructions, see these sections:

- Horizontal or vertical surface, such as a ceiling or wall (see the "Mounting the Access Point on a Horizontal or Vertical Surface" section on page 2-12).
- Below a suspended ceiling (see the "Mounting the Access Point Below a Suspended Ceiling" section on page 2-14).
- Above a suspended ceiling (see the "Mounting the Access Point Above a Suspended Ceiling" section on page 2-15).
- On a desktop or shelf (see the "Mounting Access Point on a Desktop or Shelf" section on page 2-17.

d. Optionally secure the access point using a padlock or security cable (see the "Securing the Access Point" section on page 2-19).

e. Connect the access point cables (Ethernet, optional power, optional antennas). For instructions see the "Connecting the Ethernet and Power Cables" section on page 2-22.

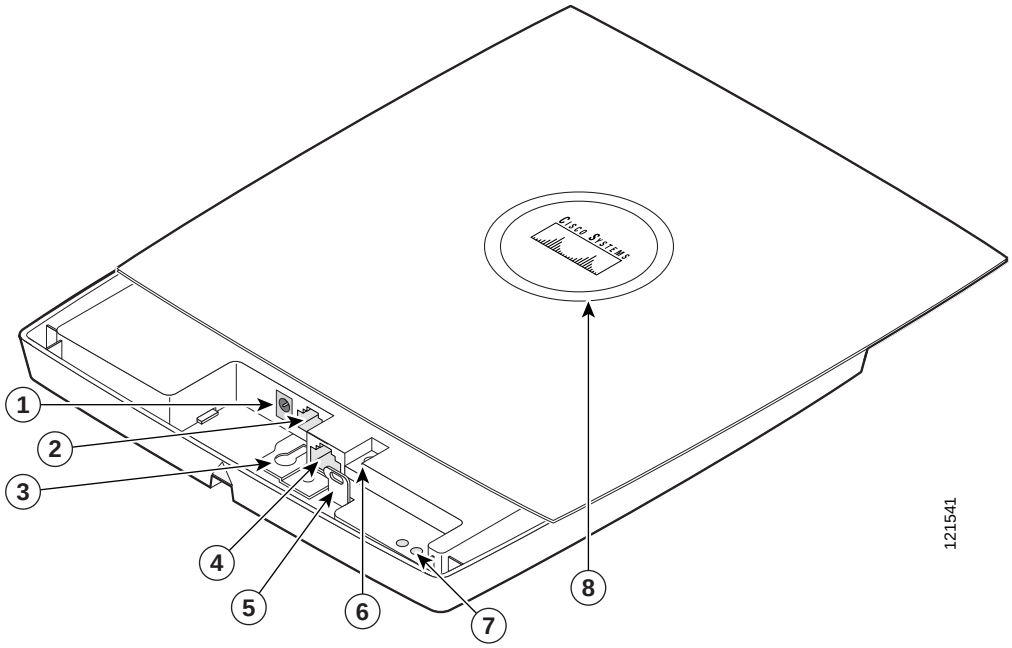
f. On power up, verify that the access point is associated to a controller and operating normally. For additional information, refer to the "Checking the Autonomous Access Point LEDs" section on page 3-2 or the "Checking the Lightweight Access Point LEDs" section on page 4-2.

Step 4 For lightweight access points, after your access points are deployed, ensure that your controller is not configured as a master controller. A master controller should only be used for configuring access points and not in a working network.

Access Point Layout and Connectors

Figure 2-1 identifies the main access point hardware features.

Figure 2-1 Access Point Hardware Features



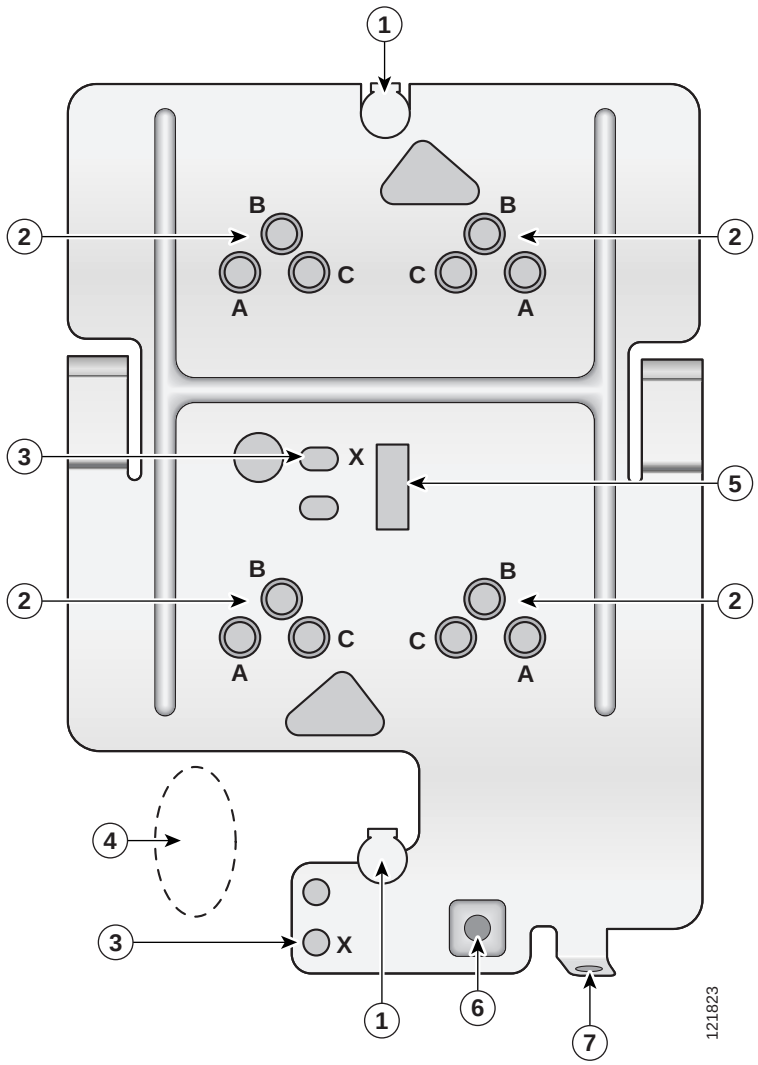
1	48-VDC power port	**5**	Padlock post
2	Ethernet port (RJ-45)	**6**	Mode button
3	Keyhole slot	**7**	Ethernet (E) and radio (R) LEDs
4	Console port (RJ-45)	**8**	Status LED

Note There is a second keyhole slot located on the bottom of the unit near the security slot.

Mounting Plate

The access point mounting plate is designed to accomodate multiple mounting methods. The mounting holes on the plate are marked so that you can easily identify the correct holes for a specific mounting method. You can use the mounting plate as a template to mark the locations for the cable hole and the mounting holes for your wall or ceiling installation. Refer to Figure 2-2 to locate the various mounting holes for the method you intend to use.

Figure 2-2 Mounting Plate



1	Keyhole clips	**5**	T-bar hanger clip hole
2	Screw holes (A, B, C)	**6**	Security screw hole
3	Screw hole (X)	**7**	Padlock hole
4	Location for cable access hole		

The mounting plate features are described below:

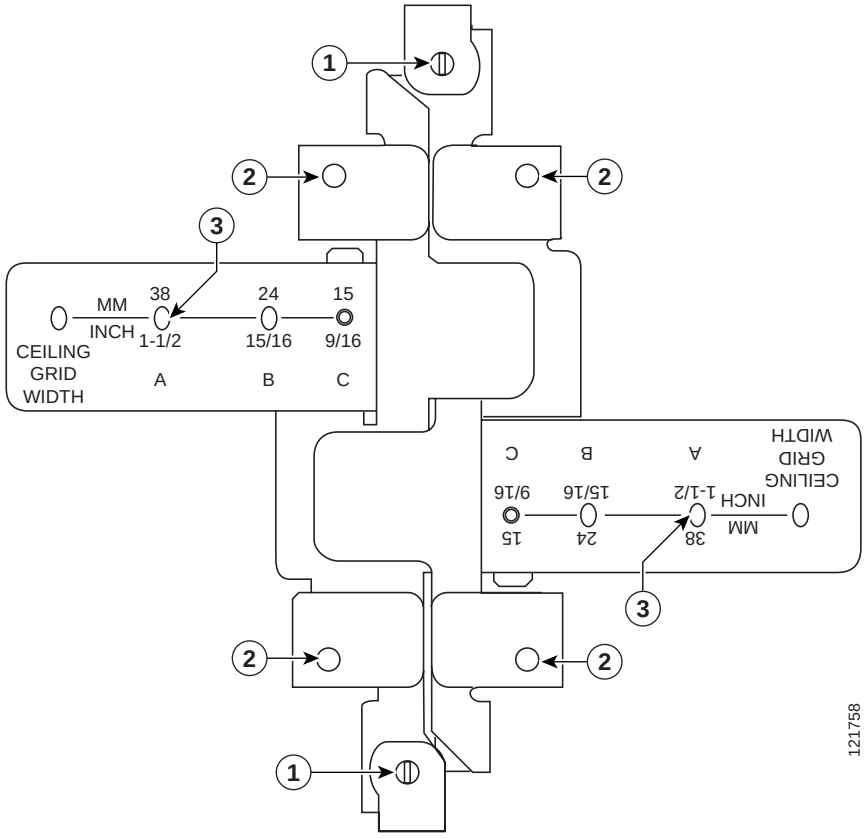
- Keyhole clips—used to attach the access point to the mounting plate. The keyhole clips slide into the keyhole slots on the bottom of the access point.
- Screw holes (A, B, C)—used to attach the suspended ceiling adjustable T-rail clips.
- Screw hole (X)—used to attach the mounting plate to a network cable box, wall, or ceiling. The mounting kit contains two 8 x 32 x 1 inch pan head screws and wall anchors for wall or ceiling mounting.
- T-bar hanger clip hole—used to attach a T-bar hanger clip.
- Security screw hole—used to secure the access point to the mounting plate.
- Padlock hole—used to attach a padlock (user provided) to secure the access point to the mounting plate. Compatible padlocks are Master Lock models 120T and 121T or equivalent. The security hasp adapter can also be used with the padlock for increase security protection.

Note The security hasp covers the cable bay area (including the power port, Ethernet port, console port, and the mode button) to prevent the installation or removal of the cables or the activation of the mode button.

Suspended Ceiling Adjustable T-Rail Clips

The accessory kit contains two suspended ceiling adjustable T-rail clips; one for standard ceiling tile rails and the other for recessed ceiling tile rails. The clips are adjustable to accomodate three standard T-rail widths. Each clip contains detents that are used to adjust the clip to the T-rail. Each detent contains markings that indicate the T-rail width and the hole letter that corresponds to the correct mounting holes on the mounting plate. Figure 2-3 shows the details of the adjustable T-rail clips.

Figure 2-3 T-Rail Clip Features



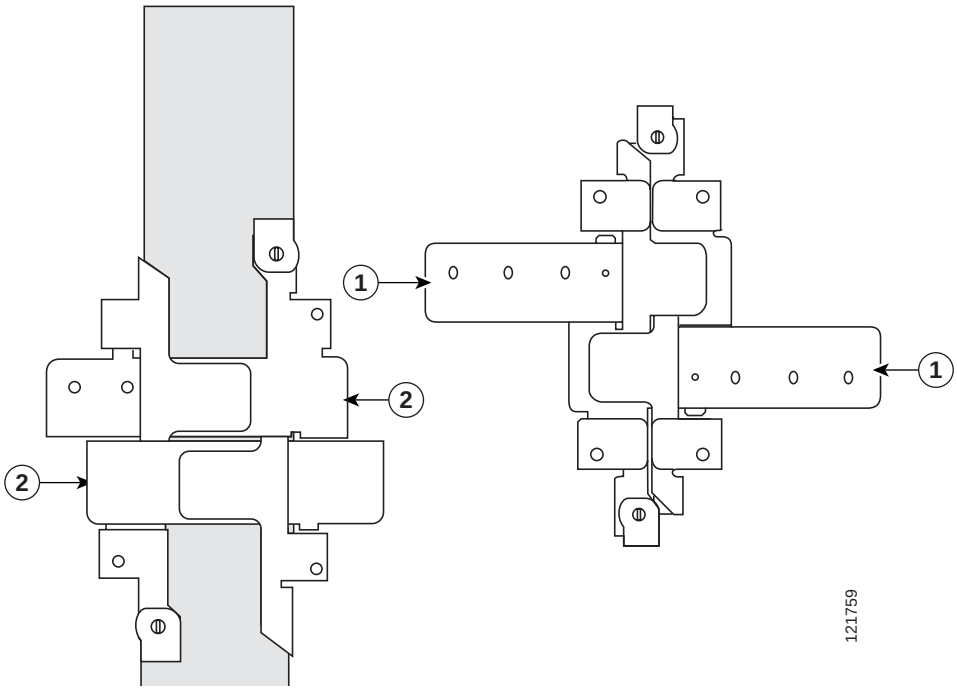
1	T-rail locking screws	**3**	T-rail width adjustment detents (A, B, C) correspond to the A, B, and C holes on the mounting plate
2	Mounting plate screw holes (8 x 32 flat head screw)		

The adjustable T-rail clip attaches to the mounting plate using four 6 x 32 x 1/4 inch flat head screws. The A, B, and C holes on the T-rail clips and the mounting plate correspond to these T-rail widths:

- A holes—used for 1 1/2 in (38 mm) T-rails
- B holes—used for 15/16 in (24 mm) T-rails
- C holes—used for 9/16 in (15 mm) T-rails

Figure 2-4 indicates where you should push to open and close the adjustable T-rail clips.

Figure 2-4 Adjusting the T-Rail Clips



1	Push here to open	**2**	Push here to close

Opening the Access Point Cover

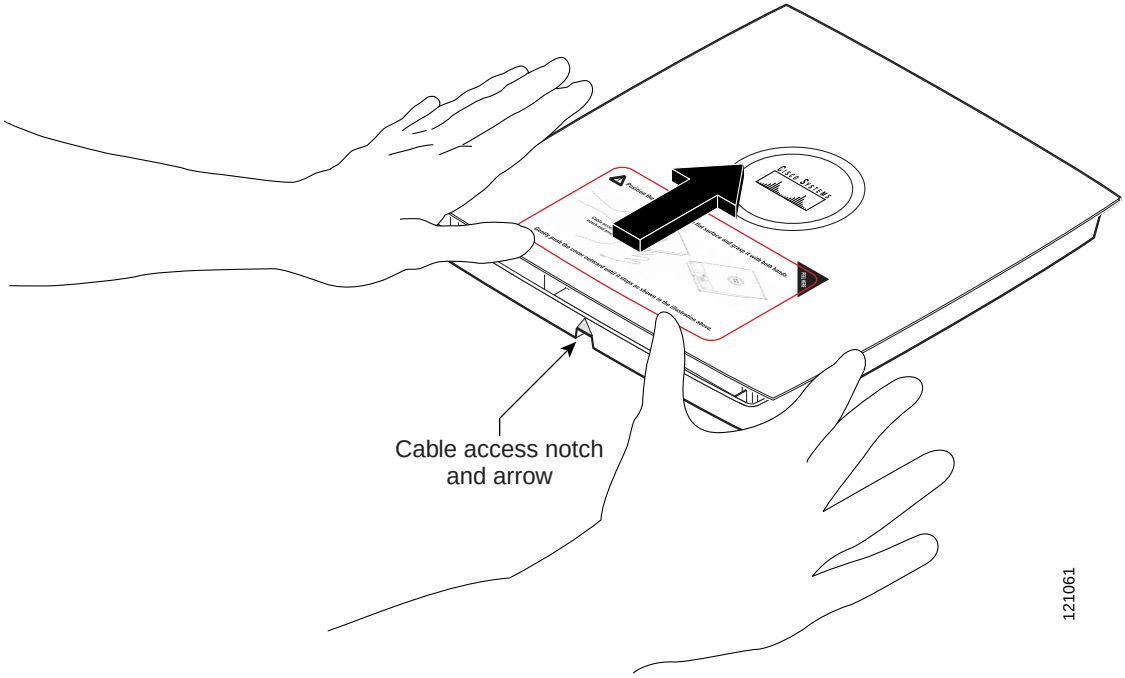
The top cover provides access to the cable bay area containing the power connector, Ethernet port, console serial port, the mode button, and the Ethernet and Radio LEDs.

Caution Do not attempt to pry open or lift the top cover of the access point because you could damage the cover. Carefully read the instructions in this section before attempting to open the access point cover.

The cover is designed to partially open by sliding back from a secured position. Follow these steps to open the top cover:

Step 1 Find the cable access notch on the end of the unit (see Figure 2-5).

Figure 2-5 Opening the Access Point Cover



Step 2 Place your thumbs on the edge of top cover and gently push towards the Status LED.

Step 3 Continue to slowly slide the cover back until you reach the cover stop.

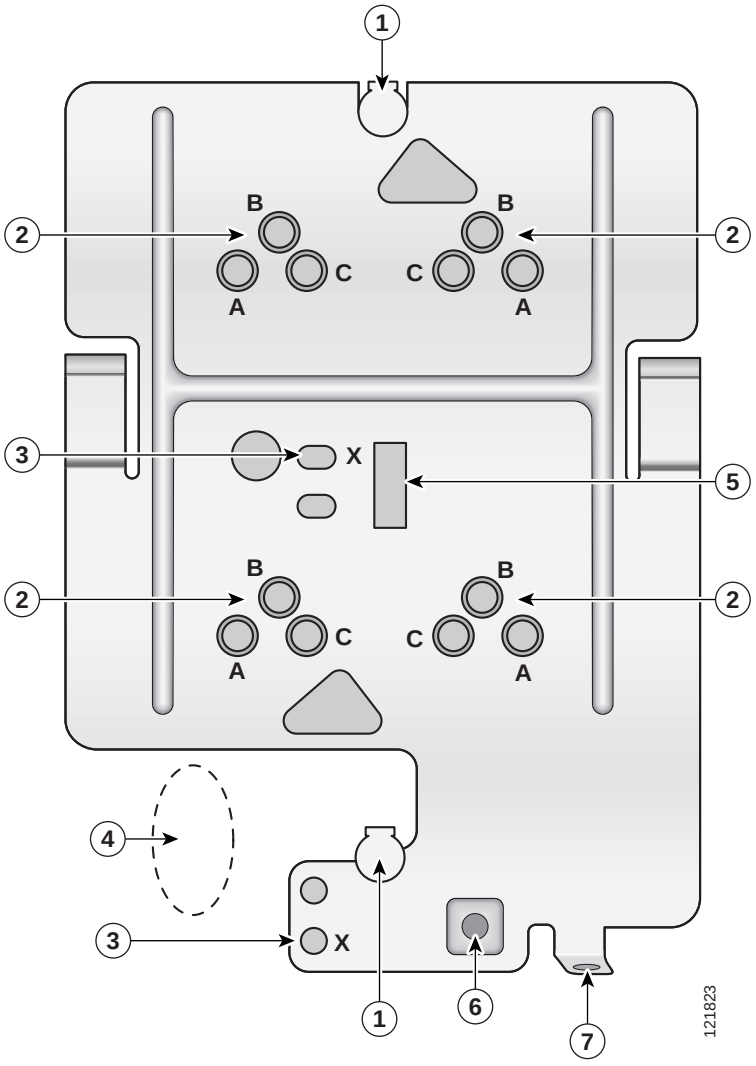
Mounting the Access Point on a Horizontal or Vertical Surface

Follow these steps to mount the access point on a horizontal or vertical surface:

Step 1 Use the mounting plate as a template to mark the locations of the two mounting holes (labled with an X) and the location of the cable access hole (see Figure 2-6).

Note The mounting plate can be installed upside-down on a vertical surface for upper cable entry.

Figure 2-6 Mounting Plate



1	Keyhole clip	**5**	T-bar hanger clip hole
2	Screw holes (A, B, C)	**6**	Security screw hole
3	Screw hole (X)	**7**	Padlock hole
4	Location for cable access hole		

Step 2 Drill a 3/16 in. (4.7 mm) hole at the X mounting hole locations you marked.

Step 3 Insert the wall anchors into the mounting holes.

Step 4 If needed, drill or cut a cable access hole (see Figure 2-6) large enough for the Ethernet and possibly the power cables and pull the cables through the access hole until you have about 1 foot of exposed cables protruding from the hole.

Note You can optionally insert the Ethernet cable and the power cable (if used) through the cable access notch in access point housing (see Figure 2-5).

Step 5 Position the mounting plate over the wall anchors or the drilled holes.

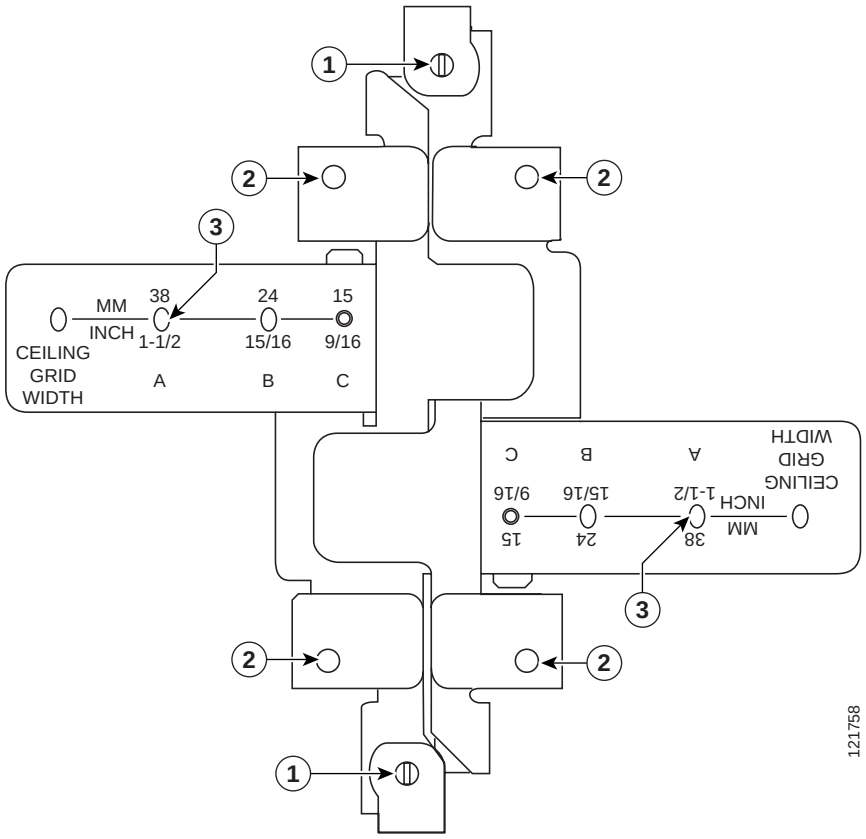
Step 6 Insert two 8 x 32 x 1 inch pan head screws in the X mounting holes and tighten.

To attach the access point to the mounting plate, see "Attaching the Access Point to the Mounting Plate" section on page 2-17.

Mounting the Access Point Below a Suspended Ceiling

You should review Figure 2-7 before beginning the mounting process.

Figure 2-7 Adjustable T-Rail Clips



1	T-rail locking screws	**3**	T-rail width detents (A, B, or C)
2	Mounting plate screw holes		

Follow these steps to mount your access point on a suspended ceiling:

Step 1 Decide where you want to mount the access point on your suspended ceiling.

Step 2 Select the appropriate adjustable T-rail clip for your suspended ceiling and open the clip to the maximum (see Figure 2-4).

Step 3 Place the T-rail clip over the T-rail and close it (see Figure 2-4) to the appropriate (A, B, or C) detent.

Step 4 Tighten the two T-rail locking screws to prevent the T-rail clip from sliding along the T-rail.

Step 5 Observe the T-rail width detent letter (A, B, or C) that corresponds to the T-rail width.

Step 6 Align the corresponding (A, B, or C) holes on the mounting plate over the T-rail mounting plate holes.

Step 7 Hold the mounting plate and insert a 6 x 32 x 1/4 in. flat head screw into each of the four corresponding (A, B, or C) holes and tighten.

Step 8 If needed, drill or cut a cable access hole (see Figure 2-6) large enough for the access point cables and pull the cables through the access hole until you have about 1 foot of exposed cables protruding from the hole.

To attach the access point to the mounting plate, see "Attaching the Access Point to the Mounting Plate" section on page 2-17.

Mounting the Access Point Above a Suspended Ceiling

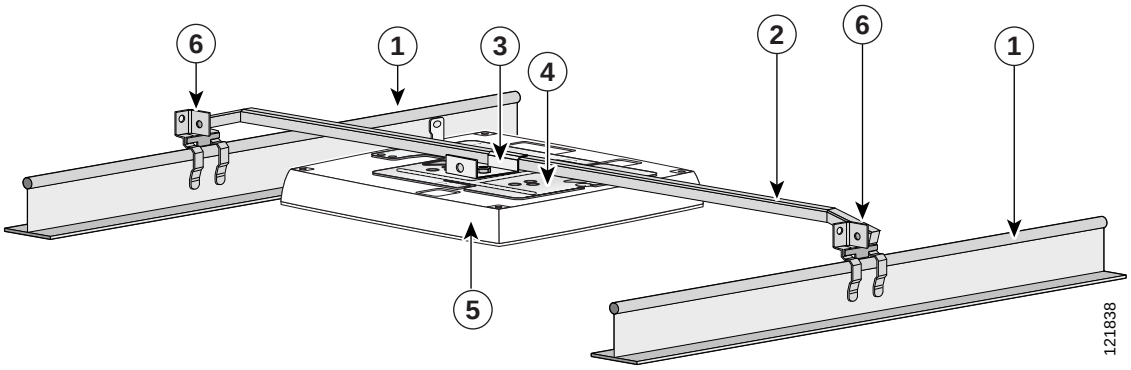
The access point mounting bracket is designed to be integrated into the T-bar grid above the tiles of a suspended ceiling. The access point uses a T-bar box hanger (not supplied) such as the Erico Caddy 512 or B-Line BA12 and should be oriented just above the top surface of a standard 5/8-in. (1.59-cm) ceiling tile. You may need to modify a thicker tile to allow room for the access point.

Caution Only the fiber-optic power injector (AIR-PWRINJ-FIB) has been tested to UL 2043 for operation in a building's environmental air space; the AIR-PWRINJ3 power injector and the power module are not tested to UL 2043 and should not be placed in a building's environmental air space, such as above suspended ceilings.

Caution Cisco does not sell Ethernet cable rated for use in a building environmental air space, such as above suspended ceilings. You must obtain special Ethernet cable with the appropriate rating.

Follow these steps to mount the access point above a suspended ceiling. Refer to Figure 2-8 before proceeding.

Figure 2-8 T-Bar Grid Mounting Bracket Parts

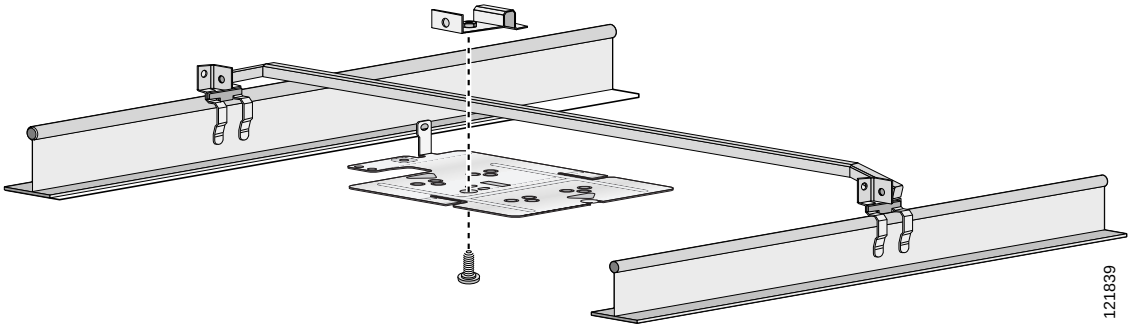


1	Suspended ceiling T-rail	**4**	Access point mounting bracket
2	T-bar box hanger	**5**	Access point
3	Bracket mounting clip	**6**	T-rail clip

Step 1 Insert the bracket mounting clip's tab into the rectangular hole on the access point mounting bracket.

Step 2 Place the clip over the T-bar box hanger (refer to Figure 2-9) and secure it to the access point mounting bracket with the 1/4-20 fastener (supplied with the T-bar hanger).

Figure 2-9 T-Bar and Mounting Bracket



Step 3 Remove a ceiling tile adjacent to the mounting location.

Step 4 Configure the ends of the T-bar box hanger to allow for maximum clearance above the ceiling tile. See the illustration above.

Step 5 Open the access point cover and connect the Ethernet cable to the access point (see the "Connecting to an Ethernet Network with an Inline Power Source" section on page 2-23).

Step 6 Attach the access point to the access point mounting bracket (see the "Attaching the Access Point to the Mounting Plate" section on page 2-17).

Step 7 Attach the T-rail clips on the each end of the T-bar box hanger to the ceiling grid T-rails. Make sure the clips are securely attached to the T-rails.

Step 8 Connect a drop wire to a building structural element and the hole provided in the bracket mounting clip. This additional support is required in order to comply with the U.S. National Electrical Safety Code.

Step 9 If you need additional security, you can secure the access point to a nearby immovable object using a Kensington lock and security cable (see the "Securing the Access Point" section on page 2-19).

Step 10 Verify that the access point is operating before replacing the ceiling tile.

Mounting Access Point on a Network Cable Box

Follow these steps to mount the access point on a network cable box.

Step 1 Position the mounting plate over the network cable box and align the two mounting holes (labled with a X) with the network cable box holes.

Step 2 Hold the mounting plate and insert a 6 x 32 x 1/4 in. pan head screw into each of the two X mounting holes and tighten.

Step 3 Pull the access point cables out of the network box until there is about 1 foot of exposed cables protruding from the box.

To attach the access point to the mounting plate, see the "Attaching the Access Point to the Mounting Plate" section on page 2-17.

Mounting Access Point on a Desktop or Shelf

When placing the access point on a desktop of shelf, you do not need the mounting plate. The access point has four rubber pads on the bottom to help prevent sliding or scratching the surface of your desktop or shelf. For information on connecting the access point cables, see the "Connecting the Ethernet and Power Cables" section on page 2-22.

Attaching the Access Point to the Mounting Plate

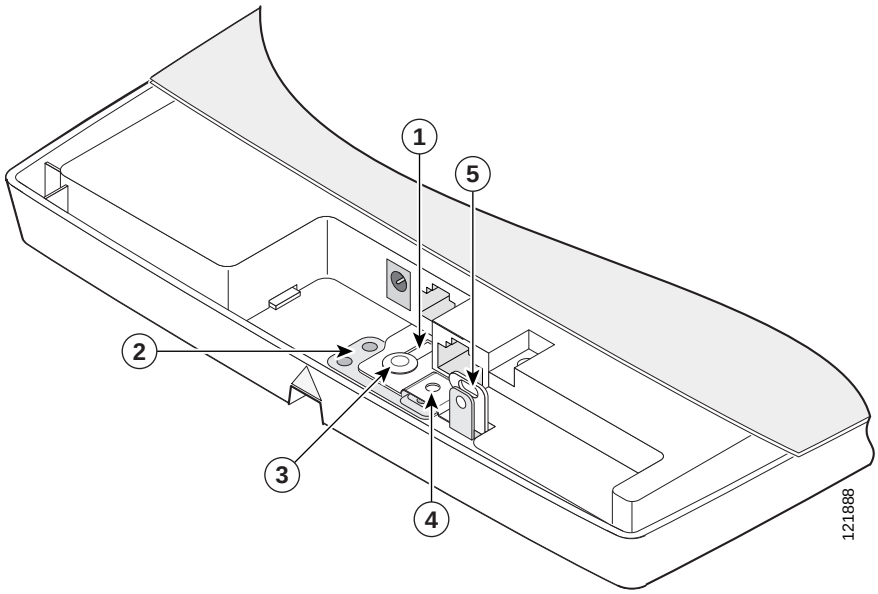
Follow these steps to attach the access point to the mounting plate:

Step 1 Open the access point cover (see the "Opening the Access Point Cover" section on page 2-11).

Step 2 In the cable bay area, pull the cables through the access point cable opening (see Figure 2-5).

Step 3 In the cable bay area, line up the visible access point keyhole with the mounting plate keyhole clip located near the security padlock hole (see Figure 2-10).

Figure 2-10 Aligning the Keyhole Clip to the Access Point Keyhole



1	Access point keyhole	**4**	Security screw hole
2	Mounting plate	**5**	Padlock hole
3	Mounting plate keyhole clip		

Step 4 Insert the keyhole clip into the keyhole and maintain a slight pressure to hold the access point in place.

Step 5 Slightly rotate the access point from side-to-side until you hear the second keyhole clip falling into the other keyhole that is located on the opposite end of the access point and is not visible.

Step 6 Slide the access point back over the keyhole clips. You will hear a click when the locking detent contacts the access point and locks it into place.

For instructions on connecting your cables, refer to the "Connecting the Ethernet and Power Cables" section on page 2-22.

For instructions on securing your access point, refer to the "Securing the Access Point" section on page 2-19.

Securing the Access Point

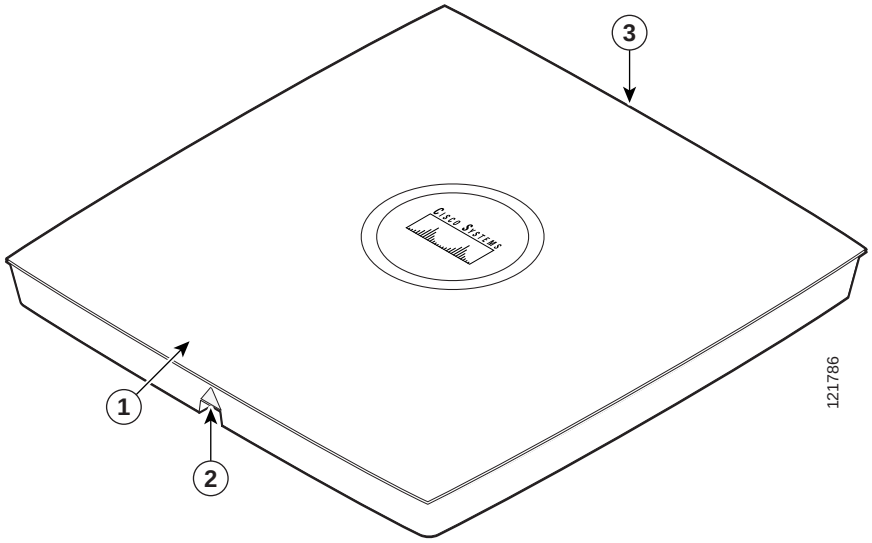
There are two ways to secure your access point:

- Using a security cable
- Securing the access point to the mounting plate

Using a Security Cable

You can secure the access point by installing a standard security cable (such as the Kensington Notebook MicroSaver, model number 64068) into the access point security cable slot (see Figure 2-5). The security cable can be used with any of the mounting methods described in this guide.

Figure 2-11 Security Cable Slot



1	Access point cover	**3**	Security cable slot
2	Cable access notch		

Follow these steps to install the security cable.

Step 1 Loop the security cable around a nearby immovable object.

Step 2 Insert the key into the security cable lock.

Step 3 Insert the security cable latch into the security cable slot on the access point.

Step 4 Rotate the key right or left to secure the security cable lock to the access point.

Step 5 Remove the key.

Securing the Access Point to the Mounting Plate

The mounting plate provides two methods of securing your access point to restrict its removal:

- You can use the security hasp adapter (supplied) and a padlock (that you provide) to secure your access point to the mounting plate (refer to Figure 1-3 on page 1-7). Compatible padlocks are Master Lock models 120T or 121T.

Note The security hasp adapter covers the cable bay area (including the power port, Ethernet port, console port, and the mode button) to prevent the installation or removal of the cables or the activation of the mode button.

- You can use the 8 x 32 x 3/16 in. pan head screw (provided) or a tamper-resistant head screw (that you provide) to attach the access point to the mounting plate using the security screw hole (see Figure 2-10).

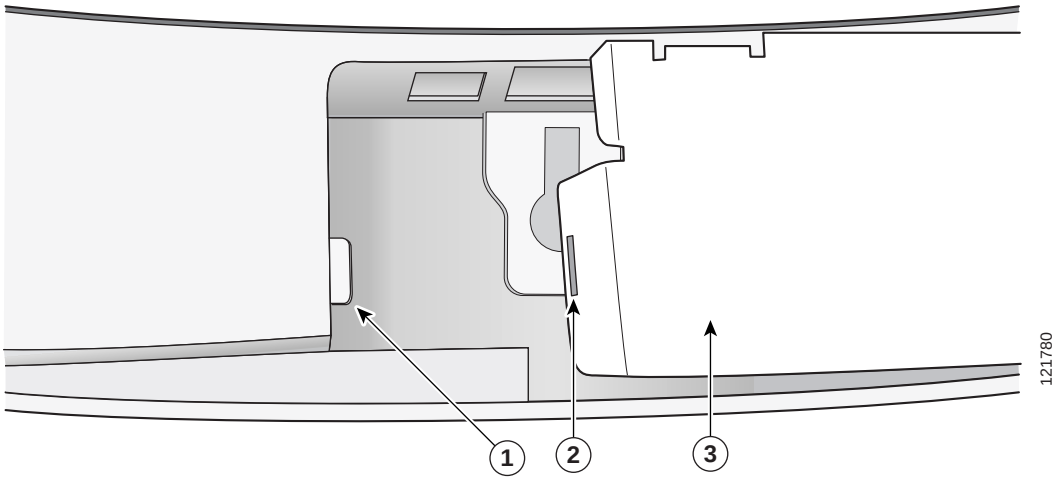
Note Using a tamper-resistant head screw to secure the access point to the mounting plate does not prevent someone from inserting or removing the access point cables or pressing the mode button.

Follow these instructions to install the security hasp adapter:

Step 1 Open the access point cover (see the "Opening the Access Point Cover" section on page 2-11).

Step 2 Carefully tilt the security hasp adapter and insert the access point security hasp tab into the notch on the security hasp adapter (see Figure 2-12).

Figure 2-12 Installing the Security Hasp Adapter



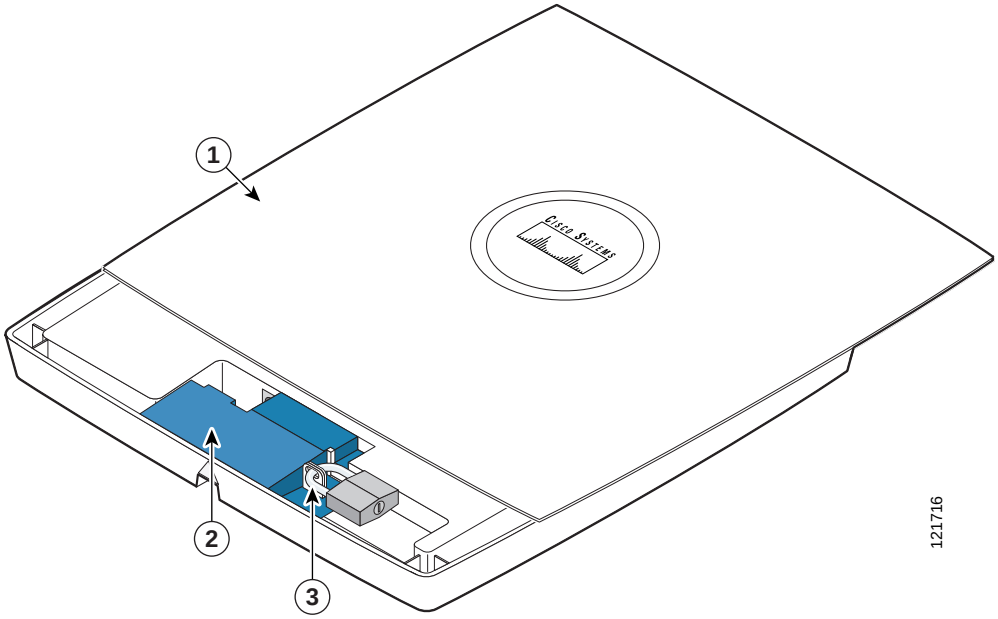
1	Access point security hasp tab	**3**	Security hasp adapter
2	Security hasp notch		

Step 3 Push down on the security hasp adapter to expose the padlock post hole.

Step 4 Insert a padlock into the padlock post hole and lock the padlock.

Step 5 Position the padlock into the padlock area (see Figure 2-13

Figure 2-13 Padlock



1	Access point cover in open position	**3**	Security padlock
2	Security hasp adapter		

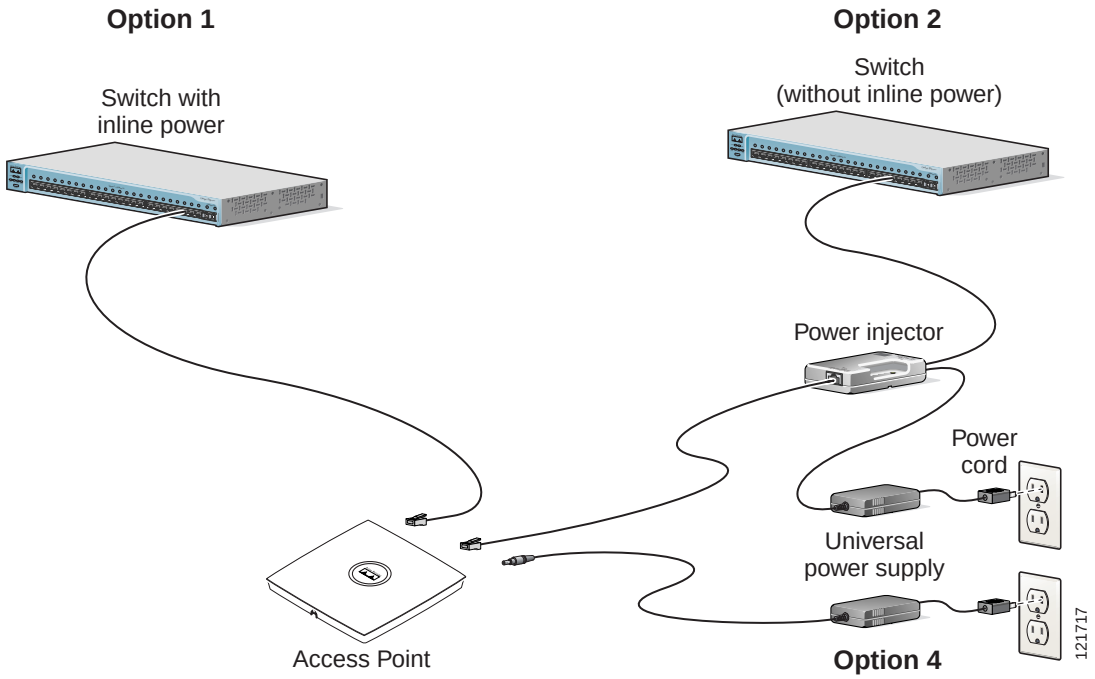
Step 6 Push down on the padlock to ensure the padlock is held by the security hasp adapter clips.

Step 7 Close the access point cover by sliding it over the security hasp adapter until you hear a click.

Connecting the Ethernet and Power Cables

The access point receives power through the Ethernet cable or an external power module. Figure 2-14 shows the power options for the access point.

Figure 2-14 Access Point Power Options



Warning **This product must be connected to a Power over Ethernet (PoE) IEEE 802.3af compliant power source or an IEC60950 compliant limited power source.** Statement 353

The access point supports the following power sources:

- Power module
- Inline power:
  - Cisco Aironet Power Injector (AIR-PWRINJ3 or AIR-PWRINJ-FIB)
  - An inline power capable switch, such as the Cisco Catalyst 3550 PWR XL, 3560-48PS, 3570-48PS, 4500 with 802.3AF PoE module, or the 6500 with 802.3AF PoE module
  - Other inline power switches supporting the IEEE 802.3af inline power standard

Note Some older switches and patch panels might not provide enough power to operate the access point. At power-up, if the access point is unable to determine that the power source can supply sufficient power, the access point automatically deactivates both radios to prevent an over-current condition. The access point also activates a Status LED low power error indication and creates an error log entry (refer to the "Low Power Condition for Autonomous Access Points" section on page 3-6 or the "Low Power Condition for Lightweight Access Points" section on page 4-6).

Connecting to an Ethernet Network with an Inline Power Source

Caution Be careful when handling the access point; the bottom plate might be hot.

Note If your access point is connected to in-line power, do not connect the power module to the access point. Using two power sources on the access point might cause the access point to shut down to protect internal components and might cause the switch to shut down the port to which the access point is connected. If your access point shuts down, you must remove all power and reconnect only a single power source.

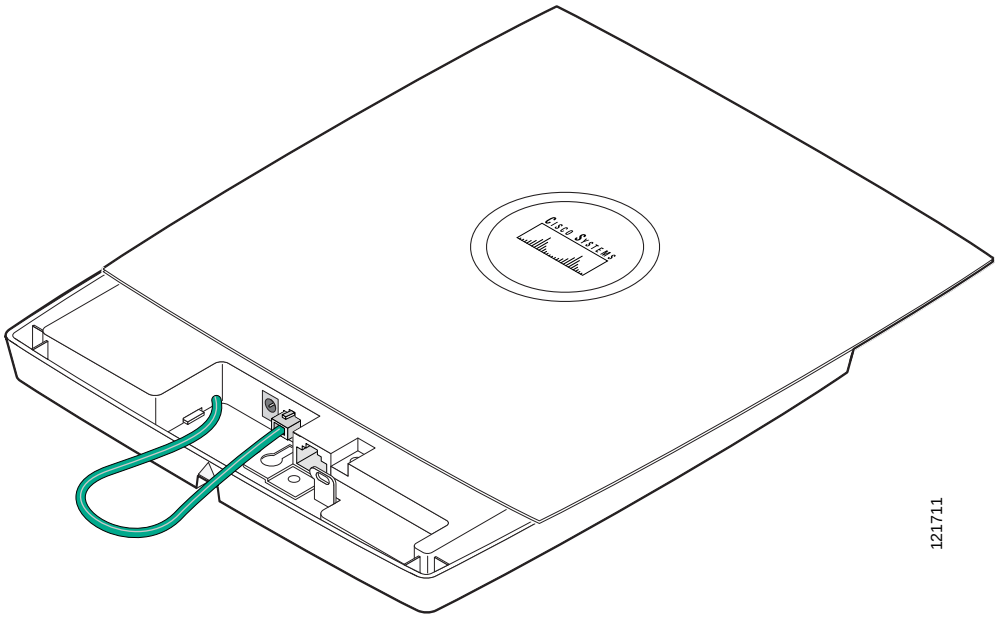
Follow these steps to connect the access point to the Ethernet LAN when you have an inline power source:

Step 1 If necessary, open the access point cover (see the "Opening the Access Point Cover" section on page 2-11).

Step 2 Pull the Category 5 Ethernet cable out of the access point cable bay area approximately 1 foot.

Step 3 Loop the cable back towards the Ethernet connector (see Figure 2-15)

Figure 2-15 Looping the Ethernet Cable



Step 4 Connect the Ethernet cable to the RJ-45 Ethernet connector labeled *Ethernet* on the access point.

Step 5 Push or pull the excess cable length (the loop) back through the access point cable bay area.

Step 6 Close the access point cover by sliding it over the cable bay area until you hear a click.

Step 7 Connect the other end of the Ethernet cable to one of the following:

- A switch with inline power (see the "Connecting the Ethernet and Power Cables" section on page 2-22).
- The end of a Cisco Aironet power injector labeled *To AP/Bridge*. Connect the other end labeled *To Network* to your 10/100 Ethernet LAN.

Connecting to an Ethernet Network with Local Power

Caution Be careful when handling the access point; the bottom plate might be hot.

Note If your access point is connected to in-line power, do not connect the power module to the access point. Using two power sources on the access point might cause the access point to shut down to protect internal components and might cause the switch to shut down the port to which the access point is connected. If your access point shuts down, you must remove all power and reconnect only a single power source.

Follow these steps to connect the access point to an Ethernet LAN when you are using a local power source:

Step 1 If necessary, open the access point cover (see the "Opening the Access Point Cover" section on page 2-11).

Step 2 Pull the Category 5 Ethernet cable and the power module cable out of the access point cable bay area approximately 1 foot.

Step 3 Loop the Ethernet cable back towards the access point Ethernet connector (see Figure 2-15).

Step 4 Connect the Ethernet cable to the RJ-45 Ethernet connector labeled *Ethernet* on the access point (see Figure 2-1).

Step 5 Loop the power cable back towards the access point 48-VDC power port (see Figure 2-1 for the location of the power port).

Step 6 Connect the power module output connector to the access point power port.

Step 7 Push or pull the excess cable lengths (both loops) back through the access point cable bay area.

Step 8 Close the access point cover by sliding it over the cable bay area until you hear a click.

Step 9 Plug the other end of the Ethernet cable into an unpowered Ethernet port on your LAN network.

Step 10 Plug the other end of the power module into an approved 100- to 240-VAC outlet.

For information on securing your access point, see the "Securing the Access Point" section on page 2-19.

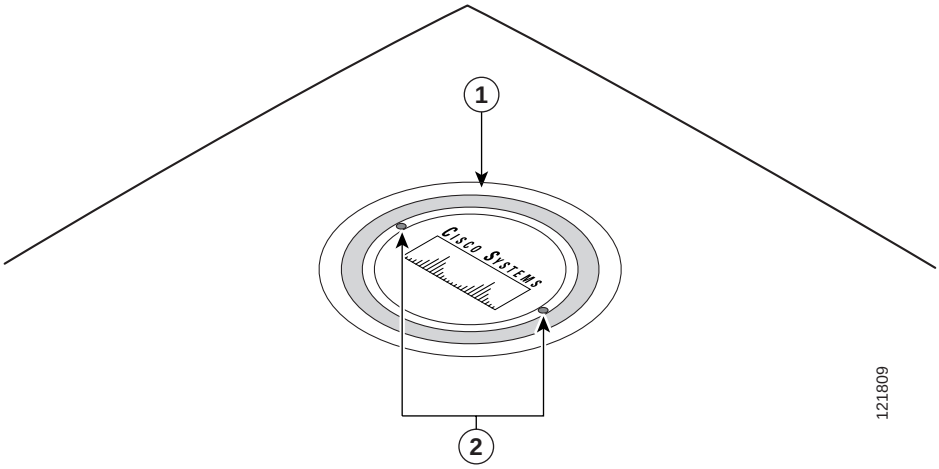
Rotating the Cisco Logo

The Cisco logo on the top of the unit can be rotated to correctly position the logo for any mounting arrangement; for example, when the unit is mounted on a vertical wall. The logo should always be easy to read.

To rotate the Cisco logo, follow these steps:

Step 1 Place the end of an opened paper clip into each of the holes on the logo assembly (see Figure 2-16).

Figure 2-16 Cisco Logo Holes



1	Status LED	**2**	Logo assembly holes

Step 2 Using the paper clips, rotate the logo until you reach the desired orientation. Detents are provided to help you align the logo for 90 degree rotations.

Step 3 Remove the paper clips.