



Installing the Cisco External Power Supply Chassis

You can set the Cisco external power supply chassis on a desktop or install it in a rack.



Warning

Only trained and qualified personnel should be allowed to install or replace this equipment. To see translations of the warnings that appear in this publication, refer to the *Regulatory Compliance and Safety Information* document that accompanied your equipment.



Warning

Do not work on the system or connect or disconnect cables during periods of lightning activity. To see translations of the warnings that appear in this publication, refer to the *Regulatory Compliance and Safety Information* document that accompanied your equipment.



Warning

Before opening the chassis, disconnect the telephone-network cables to avoid contact with telephone-network voltages. To see translations of the warnings that appear in this publication, refer to the *Regulatory Compliance and Safety Information* document that accompanied your equipment.

**Warning**

This equipment is intended to be grounded. Ensure that the host is connected to earth ground during normal use. To see translations of the warnings that appear in this publication, refer to the *Regulatory Compliance and Safety Information* document that accompanied your equipment.

**Warning**

Never defeat the ground conductor or operate the equipment in the absence of a suitably installed ground conductor. Contact the appropriate electrical inspection authority or an electrician if you are uncertain that suitable grounding is available. To see translations of the warnings that appear in this publication, refer to the *Regulatory Compliance and Safety Information* document that accompanied your equipment.

**Warning**

When installing the unit, the ground connection must always be made first and disconnected last. To see translations of the warnings that appear in this publication, refer to the *Regulatory Compliance and Safety Information* document that accompanied your equipment.

- Do not work alone if potentially hazardous conditions exist.
- Never assume that power is disconnected from a circuit. Always check.

The Cisco external power supply location is extremely important for proper operation. Equipment placed too close together, inadequate ventilation, and inaccessible panels can cause malfunctions and shutdowns and can make maintenance difficult. The following information will help you to plan the location of the chassis.

- Plan for access to both the front and rear panels of the Cisco external power supply.
- Make sure that the room where the Cisco external power supply operates has adequate ventilation. Remember that electrical equipment generates heat. Ambient air temperature might not cool equipment to acceptable operating temperatures without adequate ventilation.

Use the procedure that best meets your needs:

- [“Setting the Cisco External Power Supply on a Desktop” section on page 2-3](#)
- [“Rack-Mounting the Cisco External Power Supply” section on page 2-4](#)

Setting the Cisco External Power Supply on a Desktop

**Warning**

Do not stack the chassis on any other equipment. If the chassis falls, it can cause severe bodily injury and equipment damage. To see translations of the warnings that appear in this publication, refer to the *Regulatory Compliance and Safety Information* document that accompanied your equipment.

**Warning**

This unit is intended for installation in restricted access areas. A restricted access area is where access can only be gained by service personnel through the use of a special tool, lock and key, or other means of security and is controlled by the authority responsible for the location. To see translations of the warnings that appear in this publication, refer to the *Regulatory Compliance and Safety Information* document that accompanied your equipment.

Follow these steps to install your chassis on a desktop:

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- Step 1** Unpack the Cisco external power supply.
 - Step 2** Attach the rubber feet from the accessory kit in the round recesses on the chassis bottom.
 - Step 3** Set the Cisco external power supply chassis on an appropriate desktop.
 - Step 4** Install the AC power cords. If you are just using power modules in slots 1 or 2, plug in just the AC1 cable. If you are just using power modules in slots 3 or 4, plug in just the AC2 cable.
 - Step 5** Turn power on.

**Note**

If you have questions or need assistance, see the [“Obtaining Technical Assistance”](#) section on page xvi.

Rack-Mounting the Cisco External Power Supply

This sections explains how to rack-mount the Cisco external power supply in 19-, 23-, 24-inch, or telco equipment racks. Read the following information before rack-mounting your chassis.

Planning Your Rack-Mount Installation



Warning

To prevent bodily injury when mounting or servicing this unit in a rack, you must take special precautions to ensure that the system remains stable. The following guidelines are provided to ensure your safety:

- **This unit should be mounted at the bottom of the rack if it is the only unit in the rack.**
- **When mounting this unit in a partially filled rack, load the rack from the bottom to the top with the heaviest component at the bottom of the rack.**
- **If the rack is provided with stabilizing devices, install the stabilizers before mounting or servicing the unit in the rack.**

To see translations of the warnings that appear in this publication, refer to the *Regulatory Compliance and Safety Information* document that accompanied your equipment.

The following information will help you plan your equipment rack installation:

- Enclosed racks must have adequate ventilation. Make sure that the rack is not congested because each unit generates heat. Heat generated by equipment near the bottom of the rack can be drawn upward into the intake ports of the equipment above. An enclosed rack should have louvered sides and a fan to provide cooling air.
- When mounting a chassis in an open rack, make sure that the rack frame does not block the intake or exhaust ports. If the chassis is installed on slides, check the position of the chassis when it is seated in the rack.

- Baffles can isolate exhaust air from intake air, which also helps to draw cooling air through the chassis. The best placement of the baffles depends on the airflow patterns in the rack, which can be found by experimenting with different configurations.
- When equipment installed in a rack (particularly in an enclosed rack) fails, try operating the equipment by itself, if possible. Power off other equipment in the rack and in adjacent racks to allow the unit under test a maximum of cooling air and clean power.
- Install the Cisco external power supply and the external device to which it will connect in adjacent shelves in a rack.

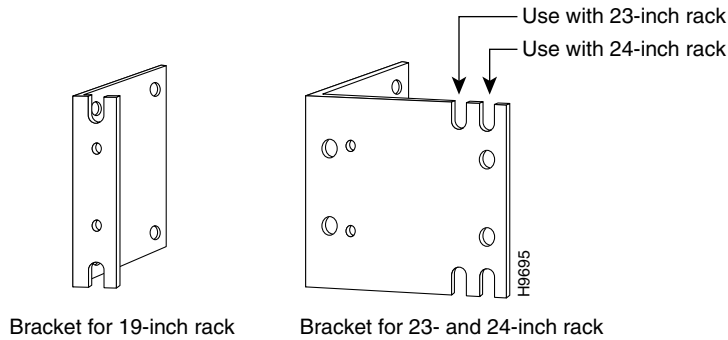
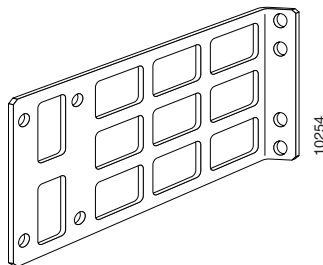
Tools and Equipment Required

You need the following tools and equipment to rack-mount the Cisco external power supply:

- Number 2 Phillips screwdriver (not included)
- Screws for attaching the Cisco external power supply to the rack (not included)
- Rack-mount brackets (see [Figure 2-1](#) and [Figure 2-2](#)):
 - One set of 19-inch brackets ships with the Cisco external power supply.
 - Order 23- or 24-inch brackets as needed.
 - Order telco brackets as needed.

Identifying Rack-Mount Brackets

[Figure 2-1](#) shows the 19-, 23-, and 24-inch brackets and [Figure 2-2](#) shows the telco bracket.

Figure 2-1 19-, 23-, and 24-inch Rack-Mount Brackets**Figure 2-2 Telco Bracket**

Attaching Brackets

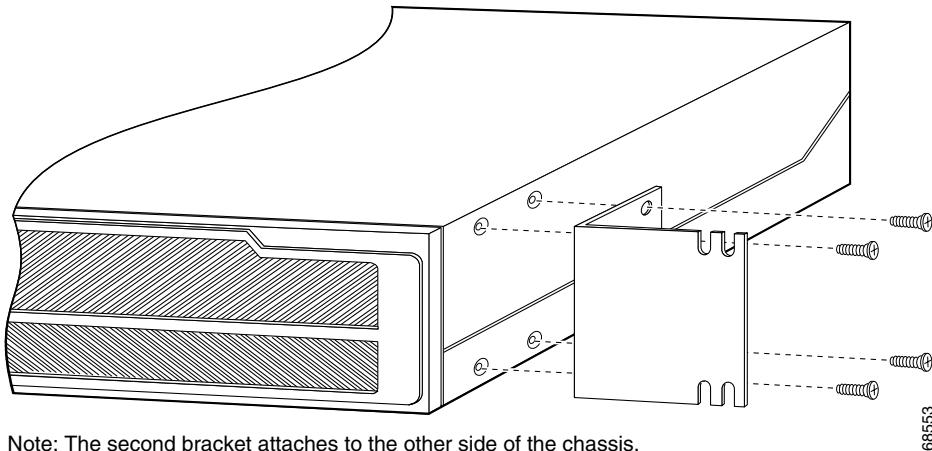
To install the Cisco external power supply in a rack, attach the brackets in one of the following ways:

- With the Cisco external power supply front panel forward (see [Figure 2-3](#))
- With the Cisco external power supply rear panel forward (see [Figure 2-4](#))
- In a center-mount telco rack (see [Figure 2-5](#))



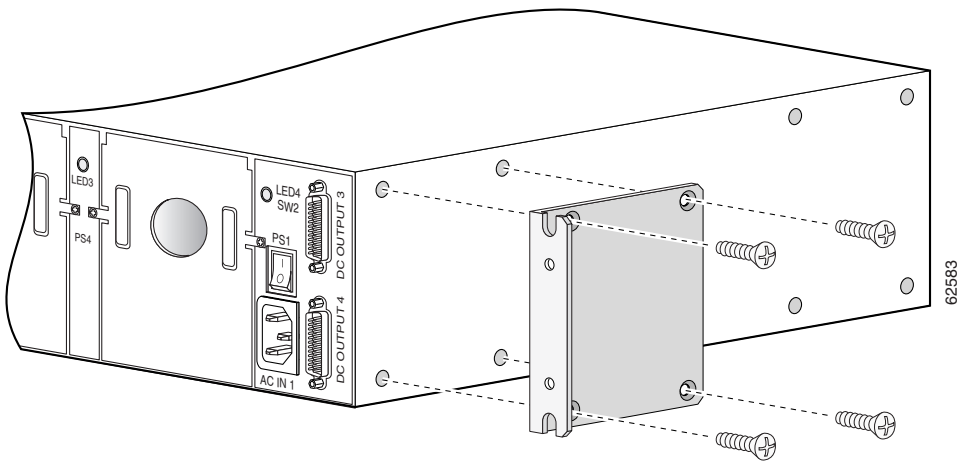
Note Although [Figure 2-3](#) and [Figure 2-4](#) show 19-inch brackets, the procedure is the same for 23-inch, 24-inch, and telco brackets.

Figure 2-3 Bracket Installation—External Power Supply Front Panel Forward



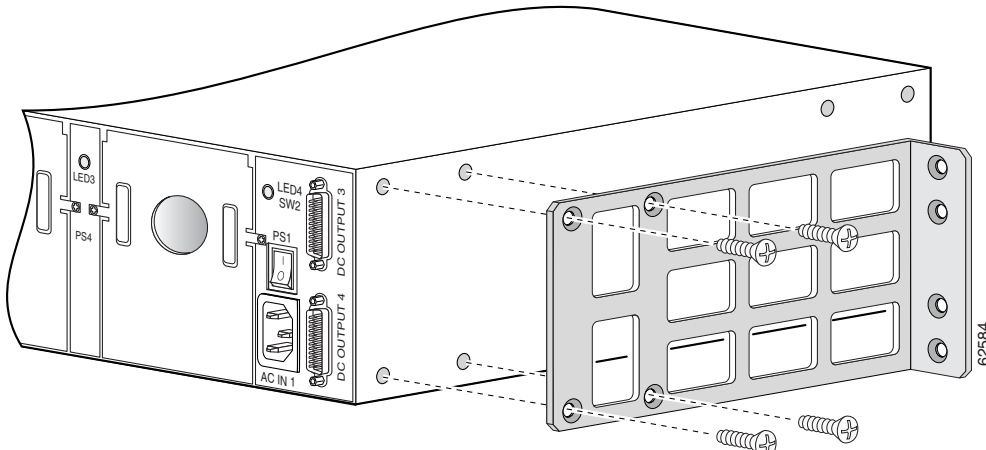
Note: The second bracket attaches to the other side of the chassis.

Figure 2-4 Bracket Installation—External Power Supply Rear Panel Forward



Note: The second bracket attaches to the other side of the chassis.

Figure 2-5 Telco Bracket Installation—External Power Supply Rear Panel Forward

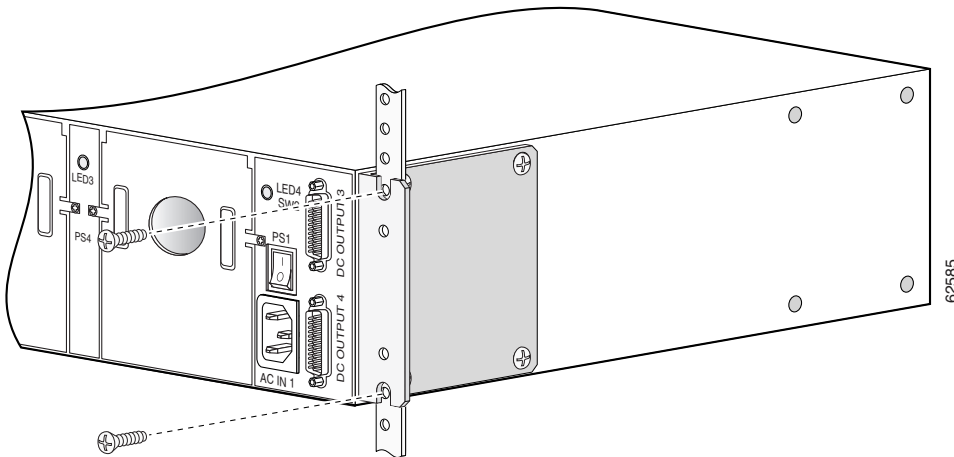


Note: The second bracket attaches to the other side of the chassis.
The brackets can also be installed with the RPS front panel forward.

Mounting the Chassis in a Rack

After the brackets are secured to the chassis, use your own screws to attach the chassis to the rack, as shown in [Figure 2-6](#).

Install the AC power cords. If you are just using power modules in slots 1 or 2, plug in just the AC1 cable. If you are just using power modules in slots 3 or 4, plug in just the AC2 cable.

Figure 2-6 Attaching the Chassis to a Rack—Rear Panel Forward

Note: The second bracket attaches to the rack at the other side of the chassis.

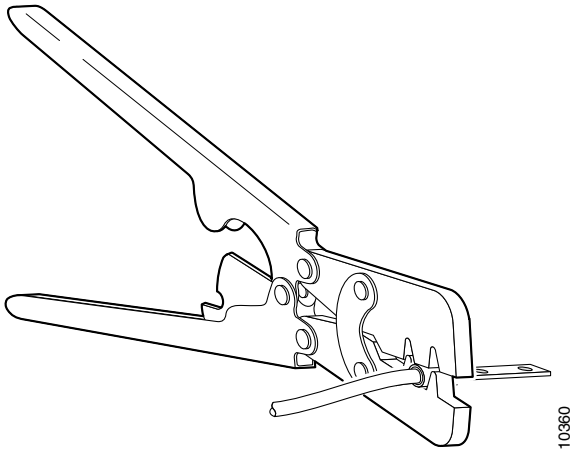
Connecting the Power Grounding Lug

To attach the grounding lug to your chassis, complete the following tasks:

- Step 1** Make sure power is OFF to the chassis. However, to channel ESD voltages to ground, do not unplug the power cable.
- Step 2** Strip one end of the 6-AWG wire to expose approximately 0.75 in. (20 mm).
- Step 3** Crimp the grounding lug around the wire. (See [Figure 2-7](#).)

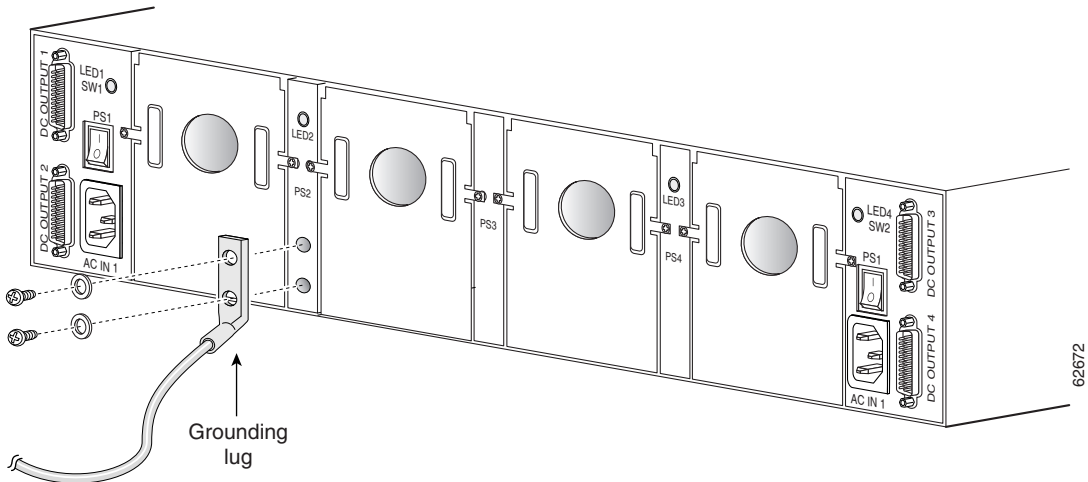
Connecting the Power Grounding Lug

Figure 2-7 Crimping the Lug Around the Wire



- Step 4** Use the no. 2 Phillips screwdriver to fasten the grounding lug to the external power chassis. (See [Figure 2-8](#).)
- Step 5** Connect the other end of the grounding lug wire to a grounding point at your site.

Figure 2-8 Grounding Lug Fastened to External Power Chassis



**Caution****NEBS/ETSI Intrabuilding Lightning Requirement**

This equipment is suitable for connection to intrabuilding or nonexposed wiring or cabling only. This cabling must be shielded.

Step 6

Turn ON power to the chassis.

■ Connecting the Power Grounding Lug