



CHAPTER 2

Preinstallation Information

This chapter provides information about safety, unpacking the router, and preparing the Cisco Secure Router 520 Series router for installation. It contains the following sections:

- [Safety Warnings and Guidelines, page 2-1](#)
- [Preventing Damage to the Router, page 2-3](#)
- [Unpacking the Box, page 2-4](#)
- [Preparing for Installation, page 2-5](#)
- [What to Do Next, page 2-5](#)

Safety Warnings and Guidelines

This section provides the safety warnings and guidelines for working with wireless and nonwireless routers. Before installing the router, read the following warnings:



Warning

Read the installation instructions before connecting the system to the power source. Statement 1004



Warning

No user-serviceable parts inside. Do not open. Statement 1073



Warning

Installation of the equipment must comply with local and national electrical codes. Statement 1074



Warning

This product relies on the building's installation for short-circuit (overcurrent) protection. Ensure that the protective device is rated not greater than: 120 VAC, 15A U.S. (240 VAC, 10A international)
Statement 1005



Warning

To avoid electric shock, do not connect safety extra-low voltage (SELV) circuits to telephone-network voltage (TNV) circuits. LAN ports contain SELV circuits, and WAN ports contain TNV circuits. Some LAN and WAN ports both use RJ-45 connectors. Use caution when connecting cables. Statement 1021

**Warning****Do not work on the system or connect or disconnect cables during periods of lightning activity.**

Statement 1001

**Warning****Ultimate disposal of this product should be handled according to all national laws and regulations.**

Statement 1040

**Warning****To reduce the risk of fire, use only No. 26 AWG or larger telecommunication line cord.** Statement 1023**Warning****Before working on a chassis or working near power supplies, unplug the power cord on AC units; disconnect the power at the circuit breaker on DC units.** Statement 12**Warning****During this procedure, wear grounding wrist straps to avoid ESD damage to the card. Do not directly touch the backplane with your hand or any metal tool, or you could shock yourself.** Statement 94**Warning****Before working on equipment that is connected to power lines, remove jewelry (including rings, necklaces, and watches). Metal objects will heat up when connected to power and ground and can cause serious burns or weld the metal object to the terminals.** Statement 43**Warning****This equipment is not designed for making emergency telephony calls when the power fails. Alternative arrangements should be made for access to emergency services. Access to emergency services can be affected by any call-barring function of this equipment.** Statement 199**Caution**

Inline power circuits provide current through the communication cable. Use the cable provided by Cisco Systems or a communication cable with a minimum of 24 AWG.

Additional Warnings for Wireless Routers

**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**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

General Safety Guidelines for Wireless Routers

Use the following guidelines for wireless routers:

- Do not touch or move the antenna while the unit is transmitting or receiving data.
- 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.
- The use of wireless devices in hazardous locations is limited to the constraints posed by the local codes, national codes, and safety directors of such environments.

Preventing Electrostatic Discharge Damage

Electrostatic discharge (ESD) is a transfer of electrostatic charge between bodies of different electrostatic potentials, such as an operator and a piece of electrical equipment. It occurs when electronic components are improperly handled, and it can damage equipment and impair electrical circuitry. Electrostatic discharge is more likely to occur in the presence of synthetic fibers and dry atmosphere.

Always use the following ESD-prevention procedures when removing and replacing components:

Step 1 Wear an ESD-preventive wrist strap that you provide, ensuring that it makes good skin contact.



Caution

To properly guard against ESD damage and shocks, the wrist strap and cord must operate effectively. Always follow the warnings and guidelines in this section.

Step 2 Do not touch any exposed contact pins or connector shells of interface ports that do not have a cable attached.

If cables are connected at one end only, do not touch the exposed pins at the unconnected end of the cable. This device is intended for use in residential and commercial environments only.



Caution

Periodically check the resistance value of the antistatic strap, which should be between 1 and 10 megohms (Mohm).

Preventing Damage to the Router

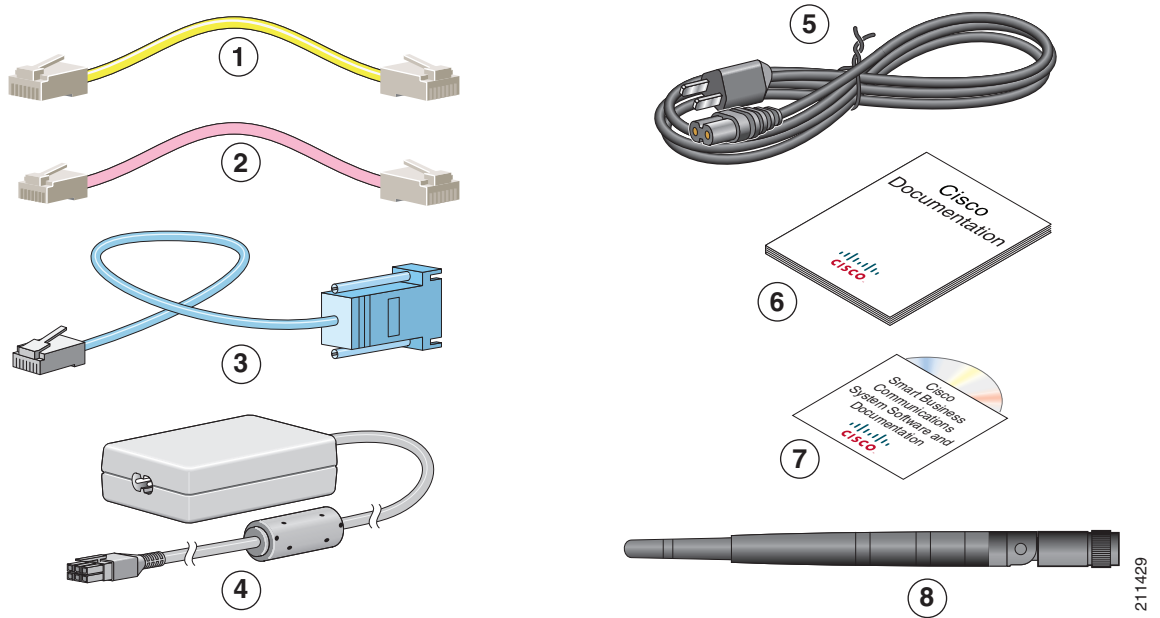
Follow these guidelines when connecting devices to your router:

- Connect the color-coded cables supplied by Cisco Systems to the color-coded ports on the front panel.
- If you must supply your own cable, see the cabling specifications in [Appendix A, “Specifications.”](#) If this appendix does not provide specifications for a particular cable, we strongly recommend that you order the cable from Cisco Systems.

Unpacking the Box

Figure 2-1 shows the items included with the Cisco Secure Router 520 Series routers.

Figure 2-1 Items Included with the Cisco Secure Router 520 Series Routers



1	Yellow Ethernet cable	2	Lavender DSL cable (optional)
3	Light blue console cable	4	AC adapter
5	Black power cord for adapter	6	Product documentation
7	Cisco Smart Business Communications System CD—Includes Cisco Configuration Assistant software and documentation and an evaluation version of the Cisco Monitor Manager Director	8	Swivel-mount dipole antenna (wireless router only)
Note Might not be included with all routers.			

Table 2-1 lists the quantity of each item that is shipped with the Cisco Secure Router 520 Series routers. Make sure that you have received all of the items. If any items are missing or damaged, contact your customer service representative.

Table 2-1 Items Shipped with the Cisco Secure Router 520 Series Routers

Item	Cisco Secure Router 520 Ethernet-to-Ethernet	Cisco Secure Router 520 ADSL-over-POTS	Cisco Secure Router 520 ADSL-over-ISDN
Ethernet cable(s)	1	1	1
DSL ¹ cable	—	1 ²	1 ³
Console cable	1	1	1
Console-auxiliary ⁴ cable	Optional	Optional	Optional

Table 2-1 Items Shipped with the Cisco Secure Router 520 Series Routers (continued)

Item	Cisco Secure Router 520 Ethernet-to-Ethernet	Cisco Secure Router 520 ADSL-over-POTS	Cisco Secure Router 520 ADSL-over-ISDN
Power adapter	1	1	1
Power cord ⁵	1	1	1
Cisco documentation ⁶	1	1	1
Swivel-mount dipole antenna (wireless routers only)	1	1	1

1. DSL = digital subscriber line. Used for an asynchronous digital subscriber line (ADSL).
2. An RJ-11—to—RJ-11 straight-through cable is shipped, unless you have requested an RJ-11—to—RJ-11 crossover cable.
3. An RJ-11—to—RJ-11 straight-through cable is shipped, unless you have requested an RJ-11—to—RJ-11 crossover cable or an RJ-11—to—RJ-45 cable.
4. The console-auxiliary cable is used to connect the router console port to an async modem for dial backup or remote management.
5. Power cords are ordered as applicable to country or geographic region.
6. Includes the *Cisco Regulatory Compliance and Safety Information Roadmap* and the *Readme First for Cisco Secure Router 520 Series* documents.

Preparing for Installation

Before installing the router and connecting devices to it, follow these steps:

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- Step 1** Obtain a broadband or Ethernet connection from your service provider.
 - Step 2** Remove the cables and product documentation from the plastic bag. Remove the router power adapter and the black power cord from the accessory kit.
 - Step 3** If you ordered a wireless router, remove the antenna from the box.
 - Step 4** Gather the Ethernet devices to be connected to the router: servers, workstations, or PCs. Make sure that there is a network interface card (NIC) in each device for connecting to the Ethernet ports.
 - Step 5** If you plan to configure the software by using Cisco IOS commands and the console port, provide an ASCII terminal or a PC that is running terminal emulation software to connect to the console port.
 - Step 6** If you plan to connect a modem, provide the modem and modem cable.
 - Step 7** If you plan to use the cable-lock feature, provide a Kensington or equivalent locking cable.
 - Step 8** Read the safety warnings (see the [“Safety Warnings and Guidelines”](#) section on page 2-1) and information about preventing damage to the router (see the [“Preventing Damage to the Router”](#) section on page 2-3).
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What to Do Next

Mount the router by following the instructions in [Chapter 3, “Router Mounting Procedures.”](#)

