CHAPTER 3

Router Installation

This chapter describes the tasks that should be completed before you connect a Cisco 4000 series router to your network:

- Additional Component Installation
- Cisco Redundant Power Supply (RPS) Installation
- Rack-Mount and Wall-Mount Installation
- DC-Input Power Supply Connection

Additional Component Installation

If you ordered additional memory or Network Processor Modules, install these components before mounting the router. Use installation instructions shipped with the components.

Note For optimum heat dissipation, use the center slot position for the FDDI module if one is present.

Cisco Redundant Power Supply (RPS) Installation

The Cisco 4000 series router supports an RPS in two ways:

- The chassis ships with an RPS adapter plate installed by the factory
- User installs an RPS adapter plate and signal cable (Cisco 4800 only) before mounting the router

If an RPS is part of your installation, install the RPS hardware before mounting the router. Use instructions shipped with the RPS.

Place the router close to the RPS in order to allow for the connecting cable length of 4 feet (1.22 meters).

Reviewers, should 4800 installers connect signal cable here or on page 4-7?

Rack-Mount and Wall-Mount Installation

You can use optional rack-mount and wall-mount kits to install a Cisco 4000 series router in a standard 19-inch rack, a 19-inch telco rack, or on a wall. The procedures for the different installation options involve removing the front panel and component tray from the chassis, fastening mounting brackets to the chassis, and then installing the empty chassis in position. You then reinsert the component tray and replace the front panel.

The optional rack-mount and wall-mount kits ship with their own set of installation instructions. If you are planning to rack-mount or wall-mount the router, do so before making the network and power connections.

DC-Input Power Supply Connection

Before wiring the CD-input power supply, take the following warnings into consideration:

Warning Before performing any of the following procedures, ensure that power is removed from the DC circuit. To ensure that all power is OFF, locate the circuit breaker on the panel board that services the DC circuit, switch the circuit breaker to the OFF position, and tape the switch handle of the circuit breaker in the OFF position.

Warning When stranded wiring is required, use approved wiring terminations, such as closed-loop or spade-type with upturned lugs. These terminations should be the appropriate size for the wires and should clamp both the insulation and conductor.

Warning This unit is intended for installation in restricted access areas.

Warning Only trained and qualified personnel should be allowed to install or replace this equipment.

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

Warning When installing the unit, the ground connection must always be made first and disconnected last.

Warning The illustration shows the DC power supply terminal block. Wire the DC power supply using the appropriate lugs at the wiring end, as illustrated. The proper wiring sequence is ground to ground, positive to positive (line to L), and negative to negative (neutral to N). Note that the ground wire should always be connected first and disconnected last.

Warning After wiring the DC-input power supply, replace the terminal block cover and screw to ensure user safety.

Warning After wiring the DC power supply, remove the tape from the circuit breaker switch handle and reinstate power by moving the handle of the circuit breaker to the ON position.

Note The installation must comply with the 1993 National Electric Code (NEC) and other applicable codes.

For identification purposes, the following drawings show the rear view of a Cisco 4000 series router with an AC power supply (Figure 3-1) followed by a Cisco 4000 series router with a DC-input power supply (Figure 3-2).

Figure 3-1 Rear View of a Cisco 4000 Series Router with an AC-Input Power Supply

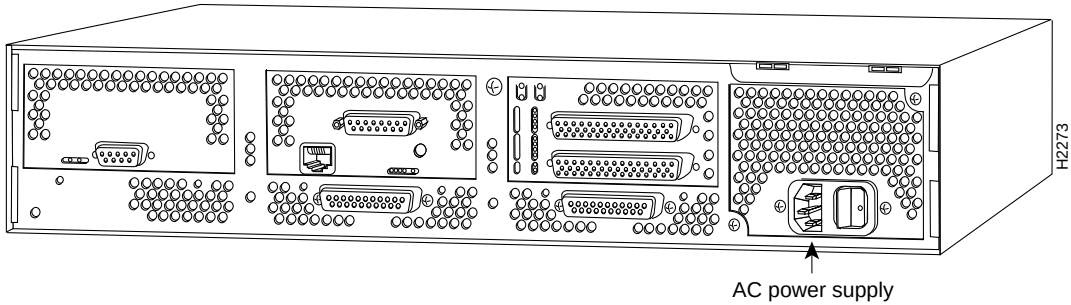
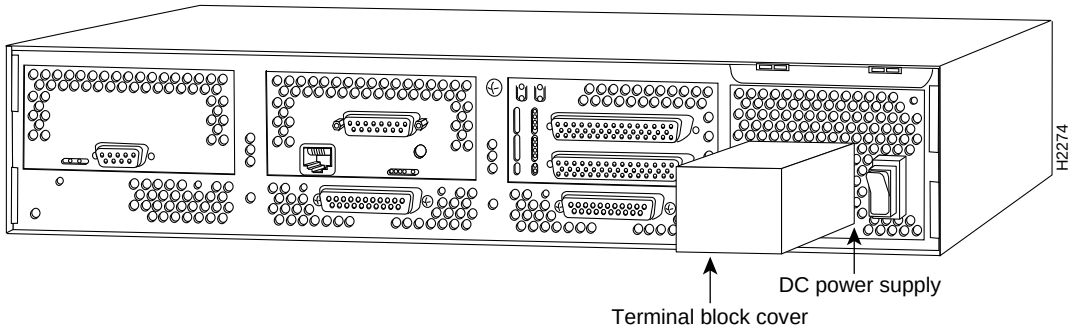


Figure 3-2 Rear View of a Cisco 4000 Series Router with a DC-Input Power Supply



Wire the DC-input power supply terminal block as follows:

Step 1 Feed the wires through the rubber grommet in the terminal block cover.

Step 2 Attach the appropriate lugs at the wire end of the power supply cord.

Step 3 Wire the DC-input power supply to the terminal block as shown in Figure 3-3. The proper wiring sequence is ground to ground, positive to positive, and negative to negative.

Caution Do not overtorque the terminal block captive thumbscrew or terminal block contact screws. The recommended torque is 8.2 ± 0.4 inch-lb.

Step 4 Remove the tape from the circuit breaker switch handle and restore power by moving the circuit breaker handle to the ON position.

Caution To avoid damaging the power supply when returning the chassis to the manufacturer (for example, if a failure occurs), remove the power supply terminal block cover so that it will fit in the shipping container.

Figure 3-3 DC-Input Power Supply Terminal Block