



Powering Up Cisco 3800 Series Routers

This document describes how to power up your Cisco 3800 series integrated services router.



Caution

To ensure adequate cooling, electromagnetic interference (EMI) reduction, and safety, never operate the router unless the cover and all modules and cover plates are installed.



Warning

The plug-socket combination must be accessible at all times because it serves as the main disconnecting device. Statement 1019

This document contains the following sections:

- [Prerequisites, page 33](#)
- [Power-Up Procedure, page 34](#)

Prerequisites

Before you power up the router, make sure you have done the following:

- Securely mounted and grounded the router. See [“Installing Cisco 3800 Series Routers in an Equipment Rack”](#) for instructions.
- Connected power and interface cables. See [“Connecting Cables to Cisco 3800 Series Routers.”](#)
- Connected a PC running HyperTerminal or a similar terminal emulation program to the console port, configured for 9600 bps, 8 data bits, 1 stop bit, no flow control, and no parity. See the [“Connecting a Console or Modem”](#) section on page 29 of [“Connecting Cables to Cisco 3800 Series Routers.”](#)



Note

For initial power-up, a direct console connection is recommended. After the initial configuration is completed, a remote modem connection can be used for router management.

- Chosen passwords for access control.
- Determined IP addresses for Ethernet and serial interfaces.

Power-Up Procedure

To power up your router and verify that it has gone through its initialization and self-test, follow these steps. After you are finished, the router is ready for software configuration.



Note

To view the boot sequence, you must have a console connection to the router before it powers up.

- Step 1** Make sure that your PC is powered up and connected as described in the [“Prerequisites” section on page 33](#).
- Step 2** Turn the router power switch on.
- Step 3** The SYS LED on the front of the router immediately begins blinking green and the fans operate. On the Cisco 3825 router, the SYS PWR LED shows steady green. The SYS PWR1 and SYS PWR2 LEDs on the Cisco 3845 router do not come on yet.
- If these events do not happen, see [“Troubleshooting Cisco 3800 Series Routers.” Table 4](#) describes the behavior of other LEDs during the power-up sequence.
- Step 4** Startup messages appear on your console. When the startup messages end, the SYS LED shows a steady green. The SYS PWR1 or SYS PWR2 LED on the Cisco 3845 router comes on (depending on which power supply is installed).



Caution

Do not press any keys on the keyboard until the messages stop and the SYS LED is steady green. Any keys pressed during this time are interpreted as the first command typed when the messages stop, which might cause the router to reboot. It takes several minutes for the messages to stop.



Note

If the `rommon 1>` prompt appears, your router has booted in ROM monitor mode. For information on the ROM monitor, see [Using the ROM Monitor](#).

Verifying LED Indications

The LEDs described in [Table 4](#) provide power, activity, and status information. For detailed information about LEDs, see the [“LEDs” section on page 41](#) of [“Troubleshooting Cisco 3800 Series Routers.”](#)



Note

The Cisco 3845 router has two SYS PWR and two AUX PWR LEDs. These LEDs do not come on until the router has booted. Each power supply also has its own LED, which shows steady green to indicate normal operation as soon as router power is turned on.

Table 4 LED Indications During Power-up

LED Label	Color and State	Meaning
SYS	Off	Router not receiving power
	Steady green	Normal operation (power-up complete)
	Blinking green	Booting or in ROM monitor mode (immediately after power-up)
	Amber	Powered but malfunctioning
SYS PWR (Cisco 3825)	Off	Router not receiving power
	Steady green	Normal operation (immediately after power-up)
SYS PWR1 or SYS PWR2 (Cisco 3845)	Off	Router not receiving power, power supply not present, or power-up not completed
	Steady green	Normal operation of indicated power supply (power-up completed)
AUX PWR (Cisco 3825) AUX PWR1 AUX PWR2 (Cisco 3845)	Off	IP phone power off or not present, or power-up not completed
	Steady green	Normal operation (power-up completed)
	Amber	Powered but malfunctioning
ACT	Off	No packet activity or power-up not completed
	Steady or blinking green	Packets transmitted or received on any WAN or LAN port, or router is monitoring internal activities (power-up completed)
RPS (Cisco 3825)	Off	Connected to primary power source or power-up not completed
	Steady green	Connected to Cisco Redundant Power System (power-up completed)
CF	Off	CompactFlash memory card not being accessed
	Steady green	CompactFlash memory card being accessed; do not eject
	Blinking green	CompactFlash memory card being accessed; do not eject
GE0: Link	Off	No link
	Green	Ethernet cable present, link established
GE0: Speed	Blinking green	Blink frequency indicates port speed: 1 blink per second: 10 Mbps 2 blinks per second: 100 Mbps 3 blinks per second: 1000 Mbps
GE1: Link	Off	No link
	Green	Ethernet cable present, link established
GE1: Speed	Blinking green	Blink frequency indicates port speed: 1 blink per second: 10 Mbps 2 blinks per second: 100 Mbps 3 blinks per second: 1000 Mbps

Verifying the Hardware Configuration

To display and verify hardware features, enter the following commands:

- **show version**—Displays the system hardware version; the installed software version; the names and sources of configuration files; the boot images; and the amount of installed DRAM, NVRAM, and flash memory.
- **show diag**—Lists and displays diagnostic information about the installed controllers, interface processors, and port adapters; typical examples are network modules, interface cards (VICs, WICs, HWICs), and advanced integration modules (AIMs).

After your router is powered up, you are ready to begin the initial software configuration. For basic configuration procedures, see [Cisco 3800 Series Software Configuration](#).

Setting the Date and Time

If the router has been exposed to nonoperating environmental conditions, its internal real-time clock (RTC) may not display the correct date and time. To set the RTC manually, use one of the forms of the **calendar set** command in EXEC mode:

calendar set *hh:mm:ss day month year*

calendar set *hh:mm:ss month day year*

Syntax Description

<i>hh:mm:ss</i>	Current time in hours (using 24-hour notation), minutes, and seconds.
<i>day</i>	Current day (by date) in the month.
<i>month</i>	Current month (by name).
<i>year</i>	Current year (no abbreviation).

The following example sets the RTC to 1:32 p.m. on November 19, 2004:

```
Router# calendar set 13:32:00 November 19 2004
```