



Overview

The Cisco 800 series routers connect small professional offices or telecommuters over Integrated Services Digital Network (ISDN) Basic Rate Interface (BRI) lines to the Corporate LANs and the Internet. The routers offer bridging and multiprotocol routing capability between LAN and WAN ports.


This chapter contains the following topics:

- [Feature Summary](#)
- [Router Ports Summary](#)
- [Front Panels](#)
- [Back Panels](#)
- [LEDs](#)

Feature Summary

Table 1-1 summarizes the features of the Cisco 800 series routers.

Table 1-1 Cisco 800 Series Feature Summary

Feature	Routers	Description
10BASE-T Ethernet port(s)	All	Provides connection to 10BASE-T (10 Mbps) Ethernet networks. Compatible with 10/100-Mbps devices.
ISDN BRI S/T port	Cisco 801 and 803	Provides connection to ISDN S/T network.
ISDN BRI U port	Cisco 802 and 804	Provides connection to ISDN U network.
IDSL port	Cisco 802 IDSL and 804 IDSL	Provides connection to IDSL network.
Telephone ports	Cisco 803 and 804	Provide connection to telephone, fax machine, or modem, which are connected to telephone services through ISDN line.
Internal Network Termination 1 (NT1)	Cisco 802 and 804	Eliminates need for an external NT1 in North America. ¹
Flash memory	All	8 MB of Flash memory. ²
Dynamic RAM (DRAM)	All	4 MB of DRAM. ²
Easily distinguishable ISDN B-channel LEDs	All	ISDN B-channel LEDs in a different color from other LEDs.
Ease of installation	All	Color-coded ports and cables to reduce the chance of error.
Cisco IOS software	All	Supports Cisco IOS software.
Cisco 800 Fast Step application	All	Provides a Windows 95–, Windows 98–, and Windows NT–based software tool for basic configurations.
Console port	All	Provides connection to terminal or PC for software configuration using command-line interface and for troubleshooting.  Note The console port is a service port.
Cable lock	All	Provides a way to physically secure the router.
Locking power connector	All	Locks power connector in place.
Wall-mount feature	All	Brackets on router bottom provide a way to mount router on wall or vertical surface.

1. Although the ISDN U interfaces on the Cisco 802 and Cisco 804 routers provide internal NT1s, the routers themselves do not function as NT1s. You cannot connect S/T devices to Cisco 802 and Cisco 804 routers.
2. An additional 8 MB of Flash memory and 4 or 8 MB of DRAM can be added at the factory or later. You can order upgrade kits and have trained and qualified personnel add the memory. The Cisco product number for the 8-MB Flash memory upgrade kit is MEM800-8F and the numbers for the DRAM upgrade kits are MEM800-4D and MEM800-8D.

Router Ports Summary

Table 1-2 lists the Cisco 800 series routers and ports.

Table 1-2 Router Ports

Router	Ethernet Ports	ISDN Ports	Telephone Ports
Cisco 801	One	ISDN BRI S/T	None
Cisco 802	One	ISDN BRI U	None
Cisco 802 IDSL	One	IDSL	None
Cisco 803	Four	ISDN BRI S/T	Two
Cisco 804	Four	ISDN BRI U	Two
Cisco 804 IDSL	Four	IDSL	None

Front Panels

The figures in this section show the front panel of the Cisco 800 series routers.

Figure 1-1 Cisco 801, Cisco 802, and Cisco 802 IDSL Front Panel

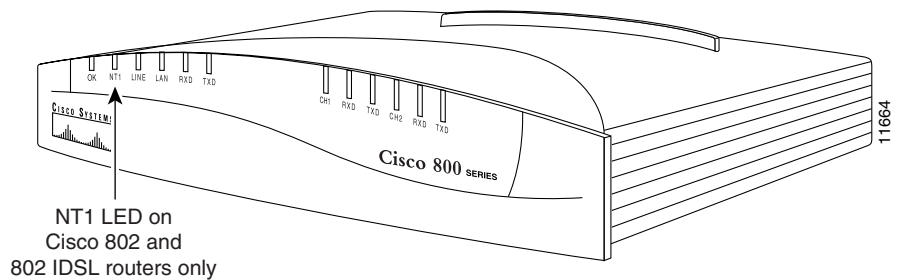


Figure 1-2 Cisco 803 and Cisco 804 Front Panel

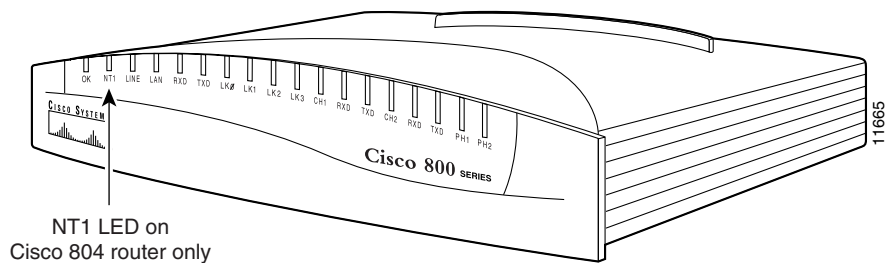
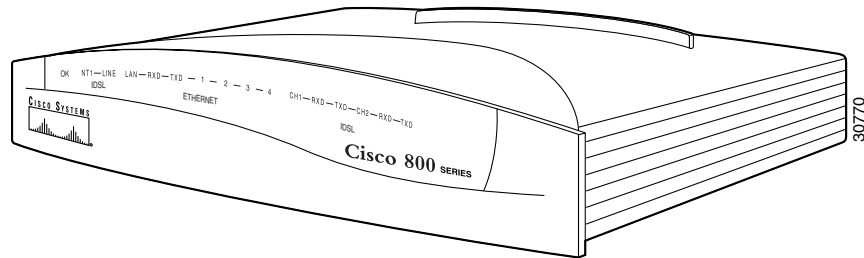


Figure 1-3 Cisco 804 IDSL Front Panel



Back Panels

The figures in this section show the back panel of each of the Cisco 800 series routers.

If the symbol of suitability (☒) appears above a port, you can connect the port directly to a public network that follows the European Union standards.



Warning

If the symbol of suitability with an overlaid cross (☒) appears above a port, you must not connect the port to a public network that follows the European Union standards. Connecting the port to this type of public network can cause severe injury or damage your router.

Figure 1-4 Cisco 801 Router Back Panel

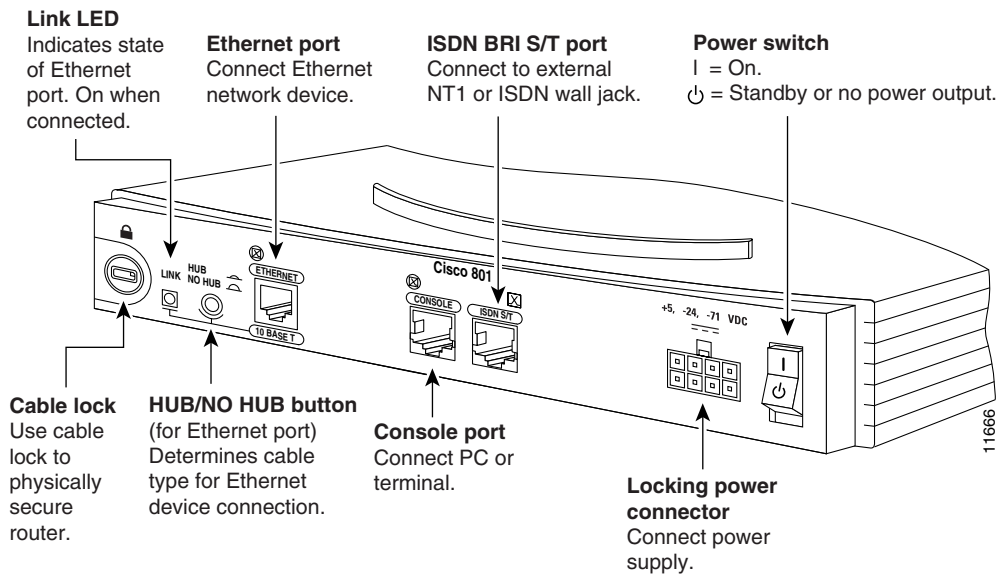


Figure 1-5 Cisco 802 Router Back Panel

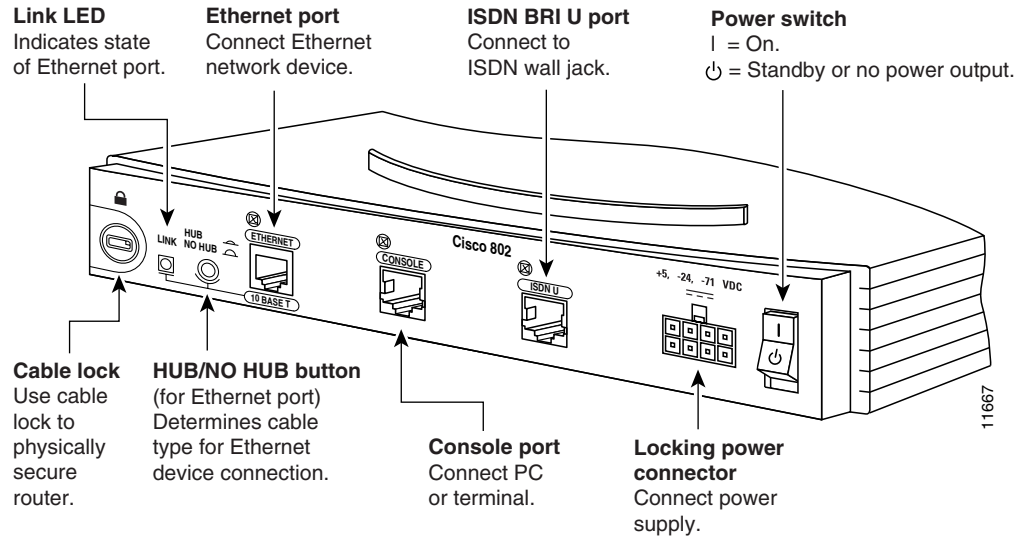


Figure 1-6 Cisco 803 Router Back Panel

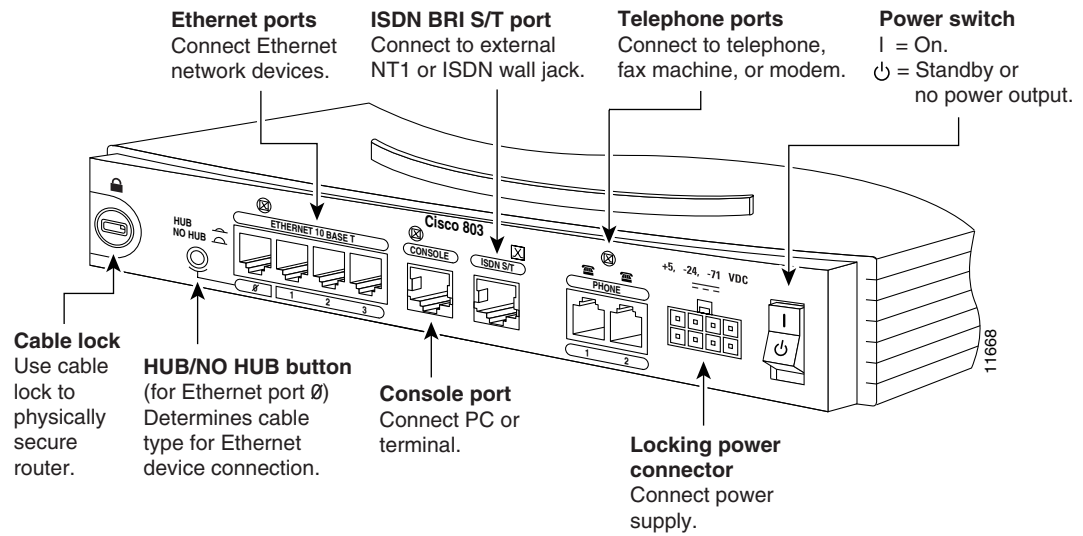


Figure 1-7 Cisco 804 Router Back Panel

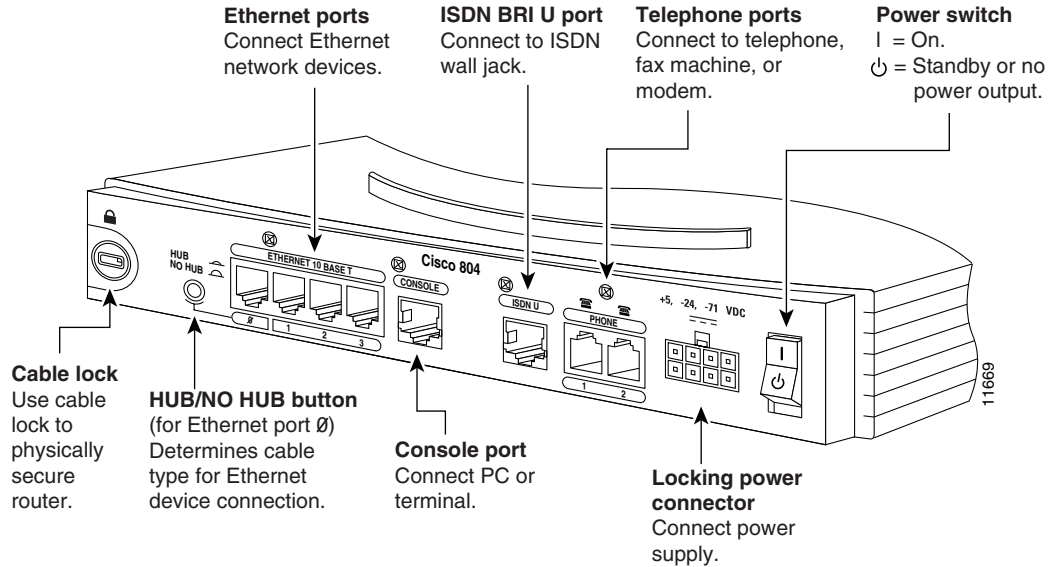


Figure 1-8 Cisco 802 IDSL Router Back Panel

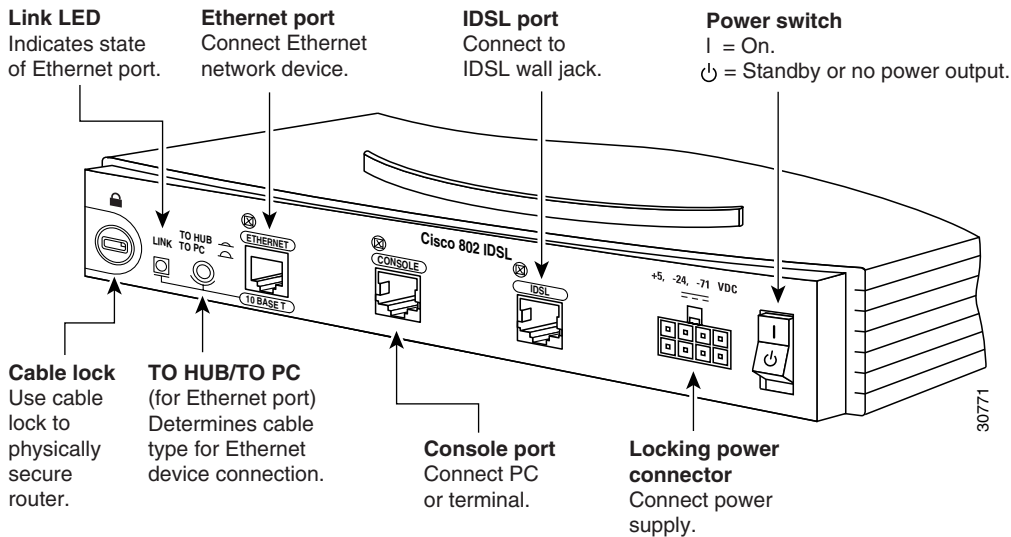
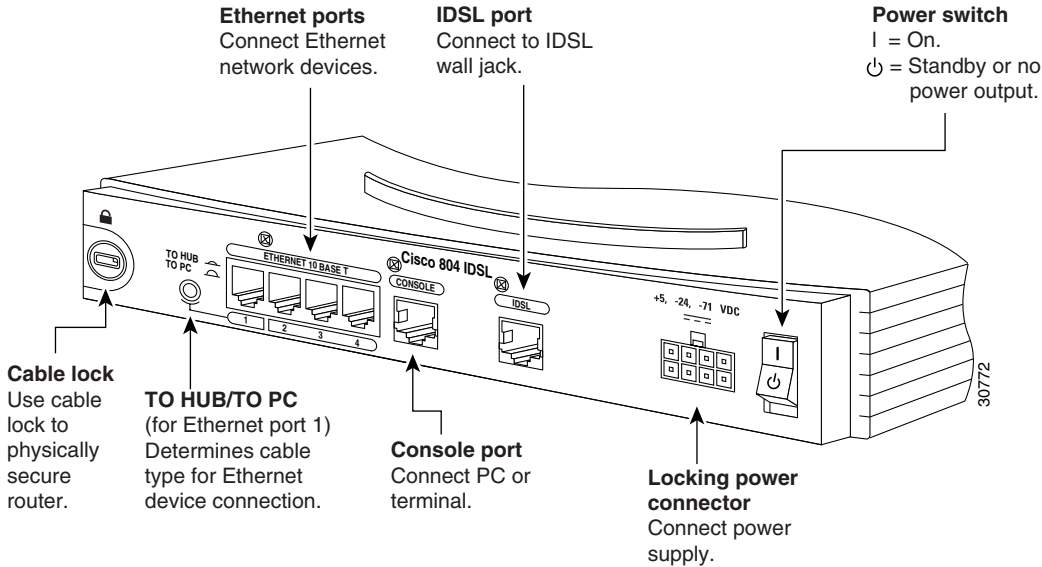


Figure 1-9 Cisco 804 IDSL Router Back Panel



LEDs

Table 1-3 summarizes the function of each LED.

Table 1-3 LED Functions

LED	Color	Function
OK	Green	On when power is supplied to the router and when the router completes the self-test procedure and begins operating.
NT1	Green	Not applicable for Cisco 801 and 803 routers. On when the internal NT1 and the ISDN switch are synchronized. Blinks when the internal NT1 and the ISDN switch are attempting to synchronize.
LINE	Green	On when the ISDN interface and the ISDN terminal device are synchronized.
LAN	Green	On when packets are sent to or received from an Ethernet port.
LAN RXD	Green	The RXD LED to the right of the LAN LED. Blinks when an Ethernet port receives a packet.
LAN TXD	Green	The TXD LED to the right of the LAN LED. Blinks when an Ethernet port sends a packet.
LK0, LK1, LK2, LK3	Green	Cisco 803 and 804 routers only. On when the Ethernet device is connected. Off when the Ethernet device is not connected. Blinks when the connection has a problem. See the “Troubleshooting” chapter.

Table 1-3 LED Functions (continued)

LED	Color	Function
ETHERNET 1, 2, 3, 4	Green	Cisco 804 IDSL routers only. The numbered LEDs above the ETHERNET label On when the Ethernet device is connected. Off when the Ethernet device is not connected. Blinks when the connection has a problem. See the “ Troubleshooting ” chapter.
CH1	Orange	Blinks when placing or receiving a call on the first ISDN B channel. On when a call is connected on the first ISDN B channel. For IDSL routers, see the Note following this table.
CH1 RXD	Orange	The RXD LED to the right of the CH1 LED. Blinks when packets are received from the first ISDN B channel.
CH1 TXD	Orange	The TXD LED to the right of the CH1 LED. Blinks when packets are sent from the first ISDN B channel.
CH2	Orange	Blinks when placing or receiving a call on the second ISDN B channel. On when a call is connected on the second ISDN B channel. For IDSL routers, see the Note following this table.
CH2 RXD	Orange	The RXD LED to the right of the CH2 LED. Blinks when packets are received from the second ISDN B channel.
CH2 TXD	Orange	The TXD LED to the right of the CH2 LED. Blinks when packets are sent from the second ISDN B channel.
PH1,PH2	Green	Cisco 803 and 804 routers only. On when basic telephone service is in use.
LINK	Green	On back panel of Cisco 801, 802, and 802 IDSL routers only. On when Ethernet device is connected. Blinks when the connection has a problem. Refer to the “ Troubleshooting ” chapter.

**Note**

On Cisco 802 IDSL and Cisco 804 IDSL routers, either CH1 or CH2 is on if the router has an active data connection and the line speed is 64 kbps. CH1 and CH2 are both on if the router has an active data connection and the line speed is 128 or 144 kbps.