



CHAPTER 5

Cable Connection Procedures for Cisco 1805 DOCSIS Cable Router

This chapter describes how to connect your Cisco 1805 DOCSIS cable router to a power source and to networks and external devices. It includes the following sections:

- [Power Connections, page 5-1](#)
- [Connecting WAN and LAN Cables, page 5-2](#)
- [Connecting to a Console Terminal or Modem, page 5-3](#)

For cable information and specifications, see the “[Cable Information and Specifications for Cisco 1805 DOCSIS Cable Routers](#)” chapter.



Note

Before you install, operate, or service the system, read the [Regulatory Compliance and Safety Information for Cisco 1840 Routers](#) for important safety information and translations of the warnings that appear in this guide.

Power Connections



Warning

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



Note

The installation must comply with all required electrical codes applicable at the installation site.

Connect your router to a 15A, 120 VAC (10A, 240 VAC) circuit with overcurrent protection.



Note

The input voltage tolerance limits for AC power are 85 and 264 VAC.



Warning

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

Connecting WAN and LAN Cables

This section describes how to connect the WAN and LAN interface cables. It covers the following topics:

- [Ports and Cabling, page 5-2](#)
- [Connection Procedures and Precautions, page 5-2](#)



Note

One or two Ethernet cables are typically provided with the router. You can order additional network connection cables and transceivers from Cisco. For ordering information, contact Cisco customer service. For cable pinouts, see the [Cisco Modular Access Router Cable Specifications](#) document, which is available online.



Warning

Do not work on the system, or connect or disconnect cables during periods of lightning activity.
Statement 1001

Ports and Cabling

[Table 5-1](#) summarizes some typical WAN and LAN connections for the Cisco 1805 DOCSIS cable router.

Table 5-1 WAN and LAN Connections

| Port or Connection | Port Type, Color ¹ | Connected to: | Cable |
|--------------------|-------------------------------|-----------------------|--|
| Fast Ethernet (FE) | RJ-45, yellow | Ethernet hub | Crossover to connect to a router Straight-through to connect to a switch |
| E1 WAN | RJ-48C | E1 network or CSU/DSU | RJ-48 E1 straight-through (Crossover to connect to a PBX or any other equipment) |
| 56/64-kbps CSU/DSU | 8-pin modular | RJ-48S interface | RJ-48 straight-through |

1. The color codes are specific to cables shipped by Cisco

Connection Procedures and Precautions

Connect each WAN and LAN cable to the appropriate connector on the chassis or interface card.

- Position the cables carefully, so that they do not put strain on the connectors.
- Organize the cables in bundles so that cables do not intertwine.
- Inspect the cables to make sure that the routing and bend radius are satisfactory. Reposition the cables, if necessary.
- Install cable ties in accordance with your site requirements.

For cable pinouts, see the [Cisco Modular Access Router Cable Specifications](#) document.

Connecting to a Console Terminal or Modem

Your router has asynchronous serial console and auxiliary ports. These ports provide administrative access to your router either locally (with a console terminal or PC) or remotely (with a modem).

Cisco provides the following cables and adapters for connecting your router to a console terminal, PC, or modem:

- One console cable (RJ-45-to-DB-9, blue)
- One modem adapter (DB-9-to-DB-25)

This section describes how to connect a console terminal or PC to the console port and how to connect a modem to the auxiliary port.

For information about cable pinouts, see the [Cisco Modular Access Router Cable Specifications](#).

Connecting to the Console Port

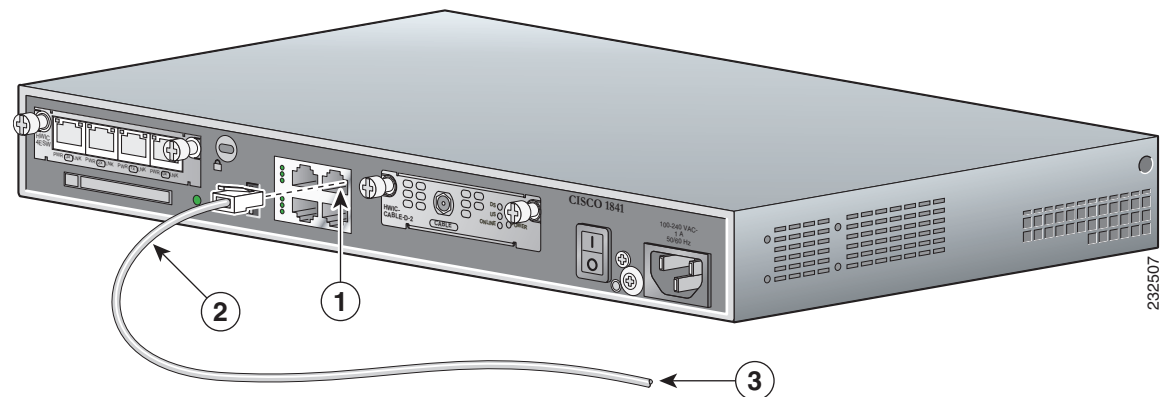
To configure the router through the Cisco IOS command-line interface (CLI), you must connect the router console port to a terminal or PC. The cable required for this connection is included with the router.

The PC must have HyperTerminal or similar terminal emulation software installed. The software should be configured with the following parameters: 9600 baud, 8 data bits, no parity, 1 stop bit, and no mode control. See the Cisco 1800 series router software configuration documents for detailed information about using Cisco IOS software for configuring the router.

To connect the router to a terminal or PC, follow these steps:

- Step 1** Connect the end of the light blue console cable with the RJ-45 connector to the light blue console port on the router. (See [Figure 5-1](#).)

Figure 5-1 Connecting the Console Cable to the Router



| | | | |
|---|--------------------------|---|-------------------|
| 1 | Light blue console port | 3 | To PC or terminal |
| 2 | Light blue console cable | | |

- Step 2** Connect the end of the cable with the DB-9 connector to the terminal or PC. If your terminal or PC has a console port that does not accommodate a DB-9 connector, you must provide an appropriate adapter for that port. (A DB-9-to-DB-25 adapter is provided with your router.)

**Note**

Because mode control is not possible on the console port, we do not recommend connecting modems to the console port. Modems should always be connected to the auxiliary port.

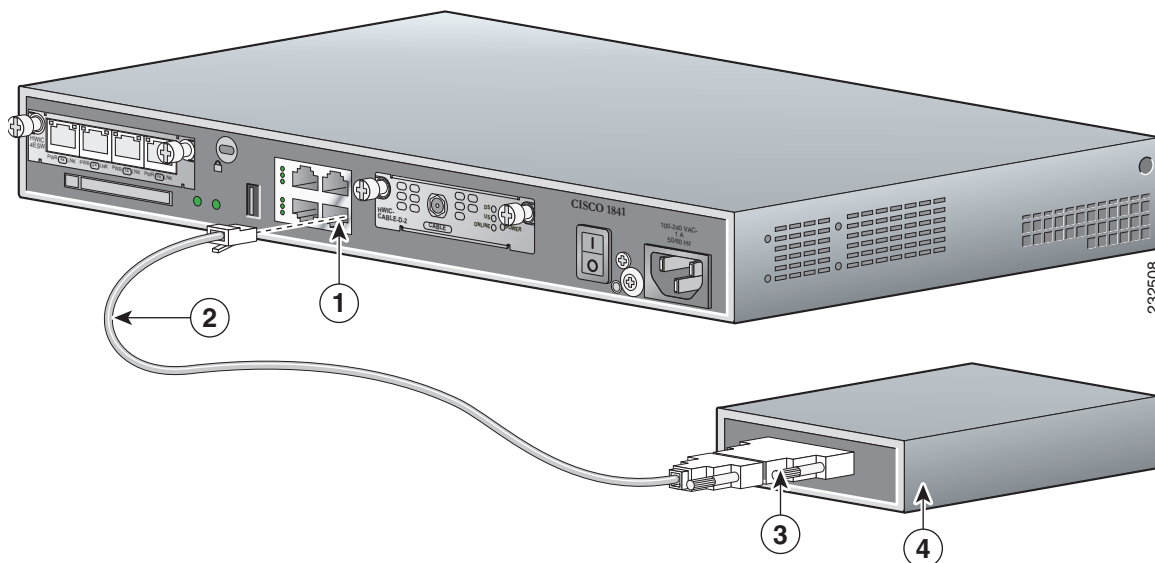
Connecting to the Auxiliary Port

When a modem is connected to the auxiliary port, a remote user can dial in to the router and configure it. Use the light blue console cable and the DB-9-to-DB-25 connector adapter that came in the router accessory kit.

To connect a modem to the router, follow these steps:

- Step 1** Connect the RJ-45 end of the adapter cable to the black AUX port on the router. (See [Figure 5-2](#).)

Figure 5-2 Connecting a Modem to the Router



| | | | |
|---|--------------------------|---|-----------------------------|
| 1 | Auxiliary port (RJ-45) | 3 | DB-9-to-DB-25 modem adapter |
| 2 | Light blue console cable | 4 | Modem |

- Step 2** Connect the DB-9 end of the console cable to the DB-9 end of the modem adapter.
- Step 3** Connect the DB-25 end of the modem adapter to the modem.

- Step 4** Make sure that your modem and the router auxiliary port are configured for the same transmission speed (up to 115200 bps is supported) and for mode control with data carrier detect (DCD) and data terminal ready (DTR) operations.
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■ Connecting to a Console Terminal or Modem