



## CHAPTER 3

# Port and Cable Information

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This document provides information about cables needed to install your Cisco IAD2801. It includes the following sections:

- [Console and Auxiliary Port Considerations, page 3-1](#)
- [Preparing to Connect to a Network, page 3-2](#)

## Console and Auxiliary Port Considerations

The router includes an console port and an auxiliary port. The console and auxiliary ports provide access to the router either locally using a console terminal connected to the console port, or remotely using a modem connected to the auxiliary port. This section discusses important cabling information to consider before connecting the router to a console terminal or modem.

The main difference between the console and auxiliary ports is that the auxiliary port supports hardware flow control and the console port does not. Flow control paces the transmission of data between a sending device and a receiving device. Flow control ensures that the receiving device can absorb the data sent to it before the sending device sends more. When the buffers on the receiving device are full, a message is sent to the sending device to suspend transmission until the data in the buffers has been processed. Because the auxiliary port supports flow control, it is ideally suited for use with the high-speed transmissions of a modem. Console terminals send data at slower speeds than modems; therefore, the console port is ideally suited for use with console terminals.

## Console Port Connections

For connection to a PC running terminal emulation software, your router is provided with an RJ-45 to DB-9 adapter cable.

To connect the router to an ASCII terminal, use the RJ-45-to-DB-9 cable and a DB-9-to-DB-25 adapter.

The default parameters for the console port are 9600 baud, 8 data bits, 1 stop bit, and no parity. The console port does not support hardware flow control. For detailed information about installing a console terminal, see the [“Connecting to a Console Terminal or Modem”](#) section on page 5-3.

For cable and port pinouts, refer to the online document [Cisco Modular Access Router Cable Specifications](#). This document is located on Cisco.com.

## Auxiliary Port Connections

For connection to a modem, your router is provided with an RJ-45-to-DB-25 adapter cable. (A DB-9-to-DB-25 adapter is also included with the Cisco IAD2801.)

For detailed information about connecting devices to the auxiliary port, see the “[Connecting to a Console Terminal or Modem](#)” section on page 5-3 of the “[Cable Connection Procedures](#)” online document.

For cable and port pinouts, refer to the [Cisco Modular Access Router Cable Specifications](#) online document on Cisco.com.

## Preparing to Connect to a Network

When setting up your router, consider distance limitations and potential electromagnetic interference (EMI) as defined by the applicable local and international regulations.

Refer to the following online documents for more information about network connections and interfaces:

- [Cisco Network Modules Hardware Installation Guide](#)
- [Cisco Interface Cards Installation Guide](#)
- [Cisco Modular Access Router Cable Specifications](#)

**Note**

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For information about connecting DSL interface cards, see the Cisco Interface Cards Hardware Installation Guide at the following URL:

[http://www.cisco.com/en/US/products/hw/modules/ps2641/prod\\_installation\\_guides\\_list.html](http://www.cisco.com/en/US/products/hw/modules/ps2641/prod_installation_guides_list.html)

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**Warning**

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**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.** Statement 1021

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## Ethernet Connections

The IEEE has established Ethernet as standard IEEE 802.3. Cisco IAD2801 series integrated access devices support the following Ethernet implementations:

- 100BASE-T—100 Mbps full-duplex transmission over a Category 5 or better unshielded twisted-pair (UTP) cable. Supports the Ethernet maximum length of 328 feet (100 meters).
- 10BASE-T—10 Mbps full-duplex transmission over a Category 5 or better unshielded twisted-pair (UTP) cable. Supports the Ethernet maximum length of 328 feet (100 meters).

Refer to the [Cisco Modular Access Router Cable Specifications](#) online document for information about Ethernet cables, connectors, and pinouts.