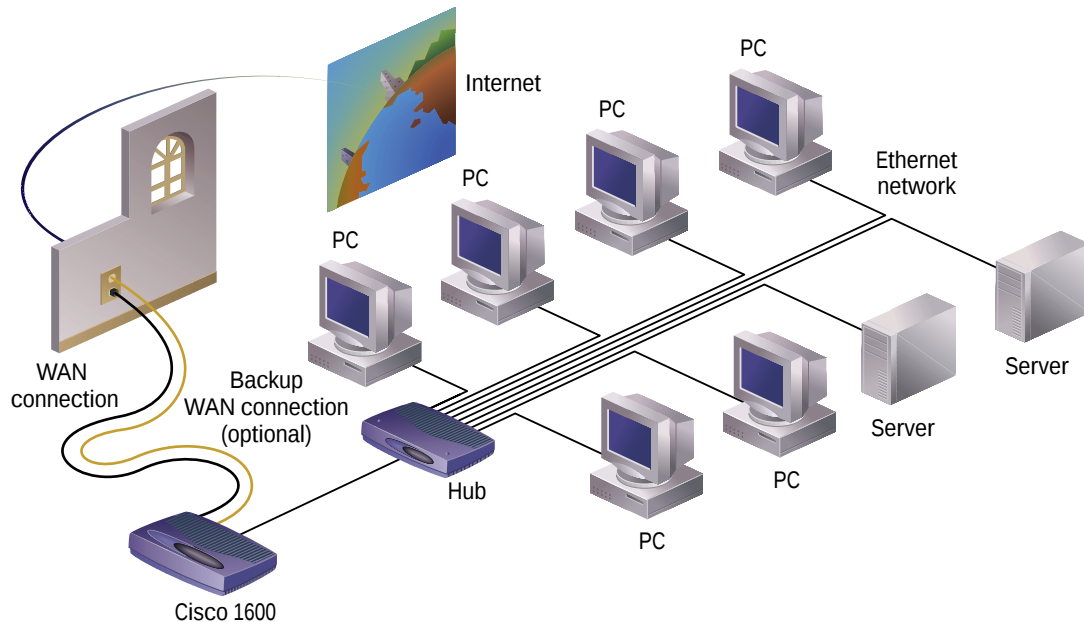


Quick Start Guide

INSTALLING YOUR CISCO 1600 SERIES ROUTER



1

UNPACK THE BOX

2

INSTALL THE ROUTER

3

VERIFY YOUR INSTALLATION

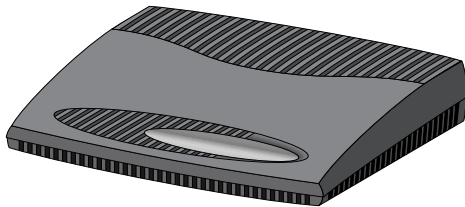


1 Unpack the Box.

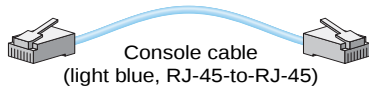
Note: For Items That You Provide—You need only the items required to install your specific Cisco 1600 model. Cables ordered from Cisco are colored as shown below.

Note: The Cisco 1600 series routers are either of run-from-flash (RFF) or run-from-RAM (RFR) models. In this document, model names without an R refer to both models. The “Router Memory” section in the hardware installation guide that came with your router describes the differences between RFF and RFR models.

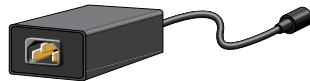
Cisco 1600 Router



Accessory Kit Items



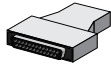
Console cable
(light blue, RJ-45-to-RJ-45)



Power supply



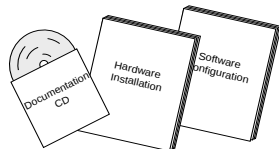
Power cord (black)



DB-25-to-RJ-45 console
adapter (light gray)



DB-9-to-RJ-45 console
adapter (light gray)



Product documentation

Items That You Provide



Serial cable (Cisco 1601)
(blue if ordered from Cisco)



Ethernet AUI cable



10BaseT Ethernet cable



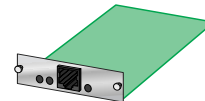
RJ-48S-to-RJ-48S (Cisco 1602)
(blue, if ordered from Cisco)



RJ-45-to-RJ-45
(red if ordered from Cisco for Cisco 1603)
(orange if ordered from Cisco for Cisco 1604)



Ethernet AUI transceiver or Ethernet 10BaseT hub



WAN interface card
(optional, might already be installed)



Phillips screwdriver
(if installing a WAN interface card)

2

Install the Router.

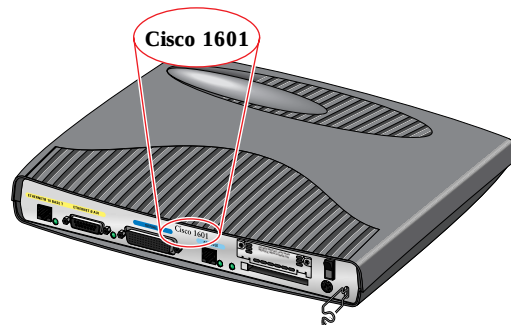
There are four steps to installing your router:



Warning Hazardous network voltages are present in WAN interface card ports regardless of whether power to the router is OFF or ON. To avoid electric shock, use caution when working near WAN ports. When detaching cables, detach the end away from the router first.

- A. Connect the router to your Ethernet network.**
- B. Install a WAN interface card in the router (optional).** If the card is not already installed, and you want to use a card with the router, you must install it.
- C. Connect the router to the WAN line.** This is the telephone line (Frame Relay, serial, 56-kbps, or ISDN) that is supplied by the telephone company.
- D. Connect the router to the power supply.** After you connect the power, you can confirm proper installation by checking that certain LEDs are on.

Note: If you're not sure what Cisco 1600 router model you are using, look on the rear panel.



2 Install the Router (continued).

A. Connect the router to the local network.

Connect the router to your local Ethernet network in one of three ways:

Option 1: Connect the ETHERNET Ø 10BASET port to an Ethernet hub or switch.

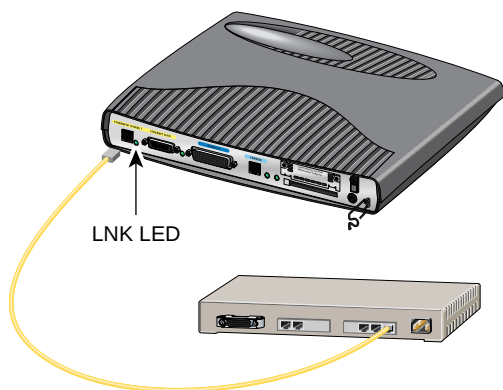
Option 2: Connect the ETHERNET Ø AUI port to an Ethernet transceiver.

Option 3: Connect the ETHERNET Ø 10BASET port to your PC.

Option 1

You must provide the Ethernet hub or switch and the RJ-45-to-RJ-45 cable required for this connection.

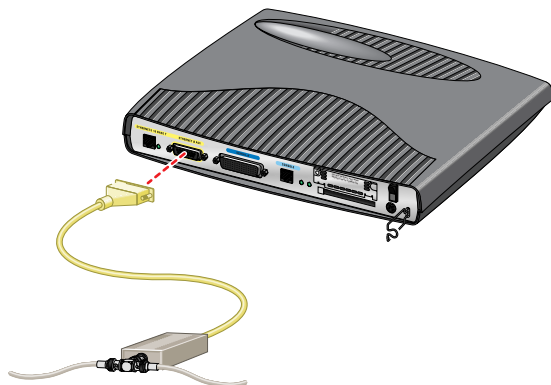
Connect one end of the cable to the yellow ETHERNET Ø 10BASET port and the other end to a network port on the 10BaseT hub or switch.



Option 2

You must provide the transceiver and AUI cable for this connection. If the transceiver that you are using connects directly to the router, you do not need the cable.

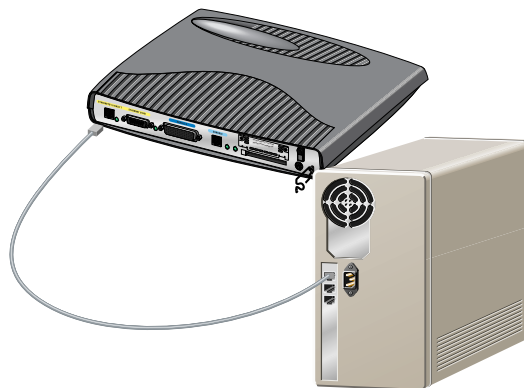
Connect one end of the Ethernet transceiver to the yellow ETHERNET Ø AUI port and the other end to the Ethernet network.



Option 3

You must provide an Ethernet crossover cable for this connection.

Connect one end of the crossover cable to the yellow ETHERNET Ø 10BASET port and the other end to the Ethernet connector on the back of your computer.



2

Install the Router (continued).

B. Install the WAN interface card.

Look for a WAN interface card in the slot on the right-rear of the router, just above the slot labeled FLASH PC CARD. (There is no WAN interface card installed if there is a metal plate over the slot.) If the card is already installed, connect the card to your WAN line according to the instructions that came with the card. To install a card, follow the instructions below.

Note: You must provide a Phillips screwdriver for this step.

Step 1 Turn the power OFF by putting the power switch in the O position.

Step 2 Remove the thumbscrews that hold the slot cover in place.

Step 3 Remove the metal plate that covers the card slot.

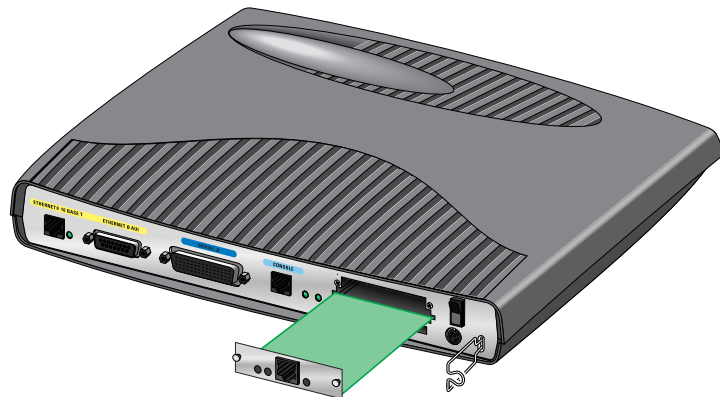
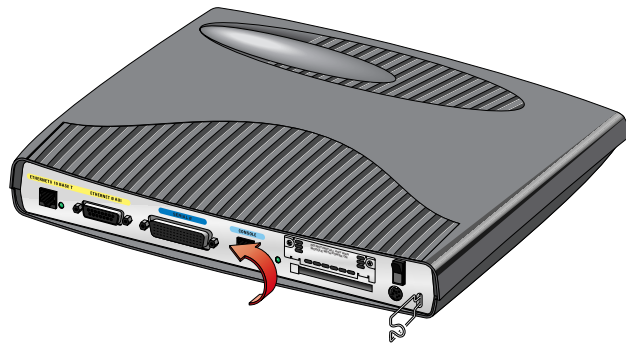
Step 4 Hold the card by the edges and line it up with the guide on the card slot.

Step 5 Insert the card into the slot and push in until it is firmly seated in the connector and the card front panel is flush with the router rear panel.

Step 6 Use the Phillips screwdriver to tighten the screws that are in the card.

Step 7 Connect the correct cable to the card according to the instructions that came with the card.

Step 8 Turn the power ON by putting the power switch in the | position.



C. Connect the router to the wide-area network.

Each of the Cisco 1600 routers supports a different type of wide-area network (WAN) connection. This section describes how to make these connections. The model number of your router is on the rear panel.

- Cisco 1601—This page
- Cisco 1602—Page 7
- Cisco 1603—Page 8
- Cisco 1604—Page 9

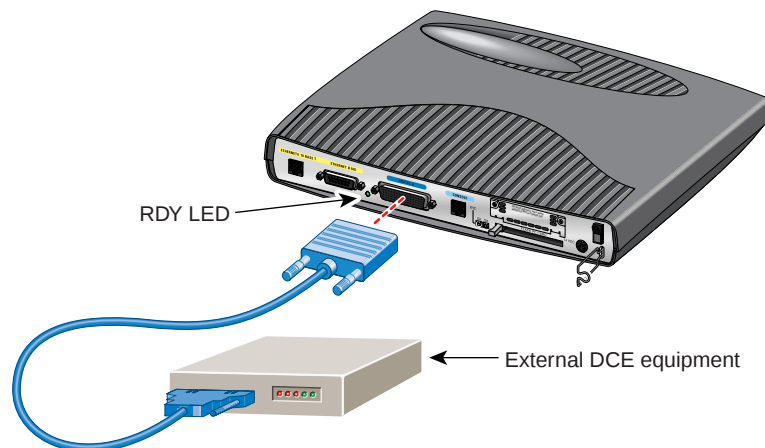
Cisco 1601 Serial Connection

Note: For this step, you must order a standard serial cable from Cisco. When you order the cable, specify the type of serial line you are using.

Step 1 Connect one end of the serial cable to the blue SERIAL Ø port on the rear panel.

Step 2 Depending on what is required by your telephone company, do *one* of the following:

- Connect the other end of the cable to an external device such as an asynchronous modem, a synchronous modem, or other DCE equipment (as shown in this illustration).
- Connect the other end of the cable directly to the wall jack.



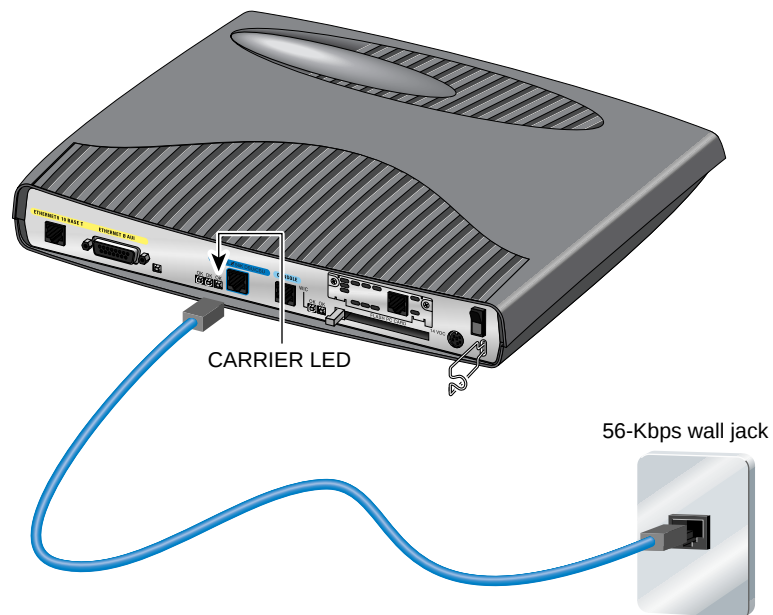
C. Connect the router to the wide-area network (continued).

Cisco 1602 56-Kbps Connection

Note: You must provide an RJ-45-to-RJ-45 cable for this step.

Step 1 Connect one end of the cable to the blue SERIAL Ø 56K DSU/CSU port on the rear panel.

Step 2 Connect the other end of the cable to the 56-Kbps wall jack.



C. Connect the router to the wide-area network (continued).

Cisco 1603 ISDN BRI S/T Connection

Note: You must provide a straight-through RJ-45-to-RJ-45 cable and (if required for your site) a network termination (NT1) device for this connection.

Step 1 Connect one end of the cable to the orange ISDN BRI Ø S/T port on the rear panel.

Step 2 Depending on what is required by your telephone company, do one of the following:

- Connect the other end of the cable to an external NT1, then connect the NT1 to the ISDN wall jack.
- Connect the other end of the cable to the ISDN wall jack (as shown in this illustration).



C. Connect the router to the wide-area network (continued).

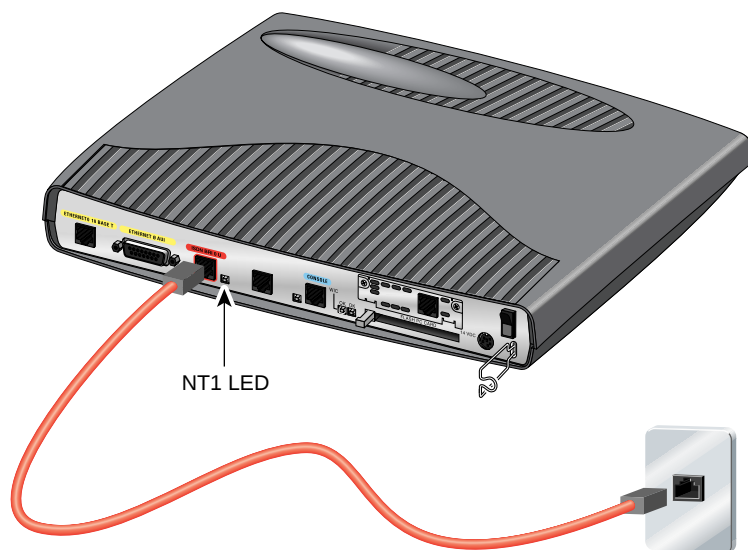
Cisco 1604 ISDN BRI U Connection

Note: You must provide a straight-through cable, either RJ-11-to-RJ-11 (standard telephone cable) or RJ-45-to-RJ-45, for this connection.

Step 1 Connect one end of the cable to the red ISDN BRI Ø port on the rear panel.

Step 2 Connect the other end directly to the ISDN wall jack.

For instructions on connecting another ISDN device such as a fax or telephone to the ISDN PHONE port, refer to the hardware installation guide that came with your router.



2 Install the Router (continued).

D. Connect the power supply.

After connecting the router to power and turning it on, you can confirm that you have installed the router correctly by checking certain LEDs. Connect the router to the power supply as shown below. Depending on where you install the router, your power supply and power outlet could be different from those in the picture.

Step 1 Connect the power supply cord to the power socket on the rear panel.

Step 2 Connect the power supply to a power outlet.

Confirm that the router has power by checking that the SYSTEM PWR LED on the front panel is on.

Step 3 Confirm that the router has power by checking that the SYSTEM PWR LED on the front panel is on.



3 Verify Your Installation.

After the router is powered on, the following LEDs confirm that you have correctly installed your router.

Cisco 1600 Model	LED Label	LED Location	What to Look For
All models	LNK	Rear	When the LED is on, the router is connected to your local Ethernet network through the ETHERNET 10BASET port. If you connected the router to the network through the ETHERNET AUI port, this LED should be off. See Page 4 for the LNK LED location.
All models	SYSTEM OK	Front	On means that the router software is functional. Blinking means that the software is being loaded into the router memory.
All models	OK	Rear, to the left of the Flash PC card slot	On means that the Flash PC card is correctly installed. If the LED is off, refer to the hardware installation guide that came with the router for instructions on how to re-install the card.
All models	LAN ACT	Front	Blinking means that there is network traffic on your local Ethernet network.
Cisco 1601	RDY	Rear	On means that the router is correctly connected to the external modem or other DCE equipment. See Page 6 for the RDY LED location. If the LED is off, refer to the troubleshooting appendix in the hardware installation guide that came with your router.
Cisco 1602	CARRIER	Rear	On means that the cable is correctly connected and the router can communicate across the WAN line to the telephone company. See Page 7 for the CARRIER LED location.
Cisco 1603	OK	Rear	On means that the cable is correctly connected to the ISDN port and the router can communicate across the ISDN line to the telephone company. See Page 8 for the OK LED location.
Cisco 1604	NT1	Rear	On means that the cable is correctly connected to the ISDN port and the router can communicate across the ISDN line to the telephone company. See Page 9 for the NT1 LED location.

For More Information

For more information about installing and configuring your Cisco 1605 router, see the following documents:

- *Cisco 1600 Fast Step Software Quick Start Guide* that is in the accessory kit.
- *Cisco 1600 Series Router Hardware Installation Guide* that is in the accessory kit.
- *Cisco 1600 Series Software Configuration Guide* that is in the accessory kit.
- The Cisco Connection Online card that is in the accessory kit, which lists telephone numbers, e-mail addresses, and World Wide Web URLs for getting information directly from Cisco Systems.

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