Quick Start FOR THE CISCO 677 ADSL DMT ROUTER, CISCO 677i AND CISCO 677i-DIR ADSL OVER ISDN ROUTERS



The Cisco 677 is an asymmetric digital subscriber line (ADSL) Discrete Multi-Tone (DMT) router that provides home connectivity to an ADSL service provider network over an ADSL/Asynchronous Transfer Mode (ATM) physical layer.

The Cisco 677i and Cisco 677i-DIR (677i direct) ADSL over Integrated Services Digital Network (ISDN) routers provide home connectivity to an ADSL service provider network over an ISDN connection. The Cisco 677i is used on a line with ISDN traffic, while the Cisco 677i-DIR is used on a dedicated line without ISDN traffic.

The Cisco 677, Cisco 677i, and Cisco 677i-DIR receive adaptive rates up to 8.032 Mbps downstream and transmit .832 Mbps upstream.





This section provides basic information necessary to install the Cisco 677, Cisco 677i, and Cisco 677i-DIR customer premises equipment (CPE).

Connecting the Power and Ethernet Cables

To connect the cables:

- Step 1 Plug the power connector into the back of the unit.
- **Step 2** Connect the Ethernet cable to the ENET connector.
- Step 3 If the computer at the customer premises has only a single Ethernet-equipped computer, attach the CPE to the computer's Ethernet adapter with the crossover cable provided. Otherwise, connect the CPE's Ethernet port to an Ethernet hub using a straight-through cable.

Connecting the Telephone Cable

Connect the provided telephone cable to the CPE's WALL connector, then connect the other end of the cable as described in the following sections.

Cisco 677 - POTS Splitter Configuration

A POTS splitter separates data signals from voice signals on your telephone line. The POTS splitter works by running a separate data line from the voice line, so that the Cisco 677 has a dedicated cable for data transmission.

If you are using an external POTS splitter, connect the provided telephone cable to the wall connector that is labeled as going to the external POTS splitter. Note: Contact your service provider if you have questions regarding your configuration.

Cisco 677 - EZ-DSL™ (Splitterless) Configuration

In the EZ-DSL configuration, your telephone equipment is not connected to a POTS splitter. Without a POTS splitter and under certain circumstances, transient noise from the telephone can interfere with the operation of the Cisco 677, and the Cisco 677 can cause noise on the telephone line. To prevent this from happening, connect small microfilters to the telephone lines. Make sure that there is a microfilter connected to the line of each telephone that connects to your network.

Cisco 677i

The Cisco 677i connects to a CPE splitter that separates DSL data signals from ISDN voice signals on your ISDN line.

Connect the provided telephone cable to the CPE splitter, as described in the splitter documentation.

Cisco 677i-DIR

Connect the provided telephone cable to the wall jack.

Installing the EZ-DSL Microfilter (Cisco 677 Only)

Use EZ-DSL microfilters to connect telephones at the customer premises to the premises telephone wiring. The microfilters are designed to prevent interference between the CPE and the telephone set, as well as to reduce the effect of POTS-generated noise on the ADSL transceiver.

Step 1 Identify all home telephones plugged in and in service. Install an EZ-DSL microfilter at each home telephone.

- Step 2 Unplug the telephone from the wall. Plug the telephone cord into the end of the EZ-DSL microfilter marked PHONE.
- Step 3 Using the 3-inch telephone cord provided, plug one end of the cord into the microfilter marked WALL. Plug the other end of the cord into the telephone wall receptacle.
- Step 4 After you complete the installation, verify that your telephone service works. If your telephone service does not work, disconnect the EZ-DSL microfilter and contact your local telephone company or Cisco Systems.

Note: The microfilters do not function if connected incorrectly. To ensure that the microfilters function, connect the wall side of the microfilter to the wall jack and the telephone side of the microfilter to the telephone.



This section provides troubleshooting tips. If the suggested course of action does not resolve your issue, contact your service provider (SP).

 If the WAN LNK LED blinks continuously and fails to achieve a solid state within a minute, your CPE configuration may not be compatible with the SP's server configuration.

Solution: Remove power from the CPE by removing the power cord from the router's rear panel. Reconnect the power cord and check all cables, especially the WALL cable. If your router still does not connect to the SP, call your SP. Your SP can assist you to correct your configuration.

If the WAN LNK LED goes off after the CPE has successfully been transferring data between your personal computer and your SP, the CPE or the SP's server may have a timeout set.

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Solution: Call your SP and provide an estimate of the time (be as accurate as possible) that you remain connected before the CPE disconnects from the Internet.

• If the WAN LNK LED stays on or blinks continuously for approximately 12 seconds, stays on for 5 seconds, then goes off, this may indicate a user authentication failure. Either your CPE or your SP's server may contain incorrect user authentication information.

Solution: Call your SP with the amount of time it took before the WAN LNK LED went off.



If you purchased your equipment through an outside or third-party vendor, please contact the vendor who supplied your equipment, or contact your service provider for technical support information.

If you purchased your equipment directly from Cisco, contact the Cisco Technical Assistance Center, 24 hours a day, 7 days a week, at 800 553-2447 and at tac@cisco.com.

Documentation CD-ROM

Cisco documentation and additional literature are available in a CD-ROM package, which ships with your product. The Documentation CD-ROM is updated monthly. Therefore, it is probably more current than printed documentation. The CD-ROM package is available as a single unit or as an annual subscription.

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