

Digital voice interface hardware connects a router or access server to a line from a circuit-switched telephony device in a PBX or the public switched telephone network (PSTN).

Guide Contents
Troubleshooting Cisco IOS Voice Overview
Debug Command Output on Cisco IOS Voice Gateways
Filtering Troubleshooting Output
Cisco VoIP Internal Error Codes
Troubleshooting Cisco IOS Voice Telephony
Troubleshooting Cisco IOS Voice Protocols
Troubleshooting Cisco IOS Telephony Applications
Monitoring the Cisco IOS Voice Network
Cause Codes and Debug Values

Contents

- [1 Software Compatibility](#)
- [2 Cabling](#)
 - ◆ [2.1 T1/E1 Trunk and Digital Voice Port Pinouts \(RJ-48\)](#)
 - ◇ [2.1.1 Figure: RJ-48-to-RJ-48 T1/E1 Cable Wiring](#)
 - ◇ [2.1.2 Table: Pinouts for T1/E1 Trunk and Digital Voice Port \(RJ-48\)](#)
 - ◆ [2.2 T1/E1 Trunk and Digital Voice Port Pinouts \(RJ-45\)](#)
 - ◇ [2.2.1 Table: T1 or E1 Port Pinouts \(RJ-45\)](#)
- [3 Shutdown Port](#)

Software Compatibility

To ensure that your card is compatible with your software, check the following:

- For network modules inserted into Cisco modular access routers, refer to the compatibility tables in [Overview of Cisco Network Modules for Cisco Access Routers](#).
- For interface cards inserted into Cisco modular access routers, refer to the compatibility tables in [Voice Interface Cards](#).

Cabling

Cabling for the digital ports varies by platform:

- Cisco 1600 series, Cisco 1700 series, Cisco 2600 series, Cisco 3600 series, Cisco 3700 series, and Cisco ICS 7750 platforms that use the Multiflex Trunk Interface card use an RJ-48C cable. Refer to the [Voice Interface Cards](#) document for information about digital Cisco interface cards.
- Cisco 7200 VXR platforms use RJ-48C cables for the port adapter. See the [MIX-Multichannel T1/E1 Port Adapter Installation and Configuration Guide](#) for more information.
- Cisco AS5300 universal access servers use RJ-45 cables for the T1 or E1 interface. A VoIP feature is also required for voice traffic. See the [Cisco AS5300 Module Installation Guide](#).
- Cisco AS5350 and 5400 universal gateways use RJ-45 cables for the four-port card and a 36-pin cable to RJ-45 interface for the eight-port card. For more information about cabling these platforms, see the ["Cabling Specifications" chapter of the Cisco AS5350 and AS5400 Universal Gateway Card Installation Guide](#).

T1/E1 Trunk and Digital Voice Port Pinouts (RJ-48)

Figure: RJ-48-to-RJ-48 T1/E1 Cable Wiring shows the RJ-48 connector wiring for the T1/E1 trunk cable and the digital voice port cable; Table: Pinouts for T1/E1 Trunk and Digital Voice Port (RJ-48) lists the pinouts.

Figure: RJ-48-to-RJ-48 T1/E1 Cable Wiring

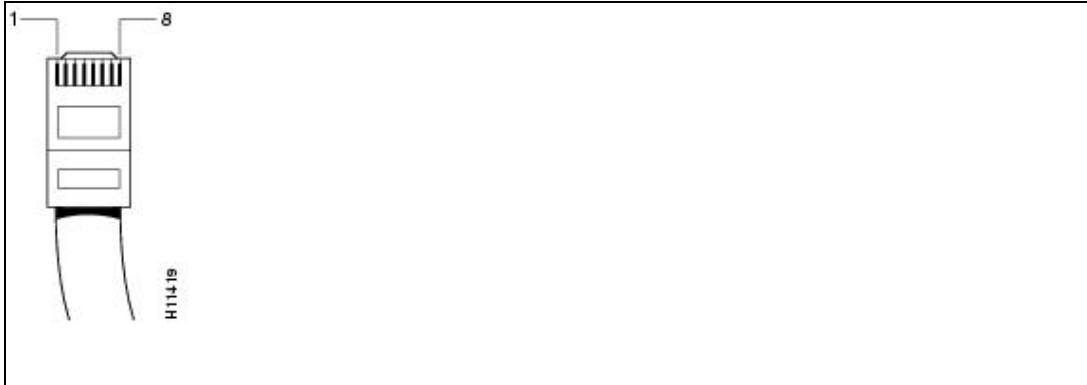


Table: Pinouts for T1/E1 Trunk and Digital Voice Port (RJ-48)

Pin	Signal
1	RX (input)
2	RX (input)
3	-
4	TX (output)
5	TX (output)
6	-
7	-
8	-

T1/E1 Trunk and Digital Voice Port Pinouts (RJ-45)

Table: T1 or E1 Port Pinouts (RJ-45)

RJ-45 Pin	Description
1	RX tip
2	RX ring
3	RX shield
4	TX tip
5	TX ring
6	TX shield
7	-
8	-

Shutdown Port

If the port is not operational, check to make sure the port is not shut down. Enter the **show voice port** command with the voice port number that you are troubleshooting, which tells you:

- If the voice port is up. If it is not, use the **no shutdown** command to make it active.
- What parameter values have been set for the voice port, including default values. (these do not appear in the output from **the 'show running-config' command**.) If these values do not match those of the telephony connection you are making, reconfigure the voice port.