CAB−449MT and CAB−449FC EIA/TIA−449 Serial Cable Specifications

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Introduction
Prerequisites
Requirements
Components Used
Conventions
EIA/TIA−449 Speed and Distance Limitations
Serial Cable CAB−449MT
EIA/TIA−449 Serial Cable Assembly
EIA/TIA−449 DTE Cable Pinouts
Serial Cable CAB−449FC
EIA/TIA−449 DCE Cable Pinouts (DB−60 to DB−37)
Related Information

Introduction

This document provides the technical and cable specifications for the EIA/TIA−449 serial cables.

Prerequisites

Requirements

There are no specific requirements for this document.

Components Used

This document is not restricted to specific software and hardware versions.

The information in this document was created from the devices in a specific lab environment. All of the devices used in this document started with a cleared (default) configuration. If your network is live, make sure that you understand the potential impact of any command.

Conventions

For more information on document conventions, see the Cisco Technical Tips Conventions.

EIA/TIA−449 Speed and Distance Limitations

The use of balanced drivers allows EIA/TIA−449 signals to travel greater distances than the EIA/TIA−232 standard. The table below lists the standard relationship between baud rate and maximum distance for EIA/TIA−449 signals. These limits are also valid for V.35 and X.21.

Data Rate (Baud)	Distance (Feet)	Distance (Meters)
2400	4,100	1,250

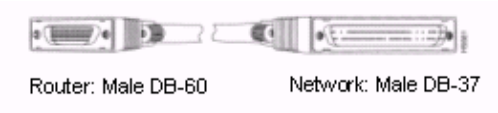
4800	2,050	625
9600	1,025	312
19200	513	156
38400	256	78
56000	102	31
T1	50	15

Caution: The EIA/TIA−449 and V.35 interfaces support data rates up to 2.048 Mbps. Exceeding this maximum could result in loss of data and is not recommended.

Serial Cable CAB−449MT

This section presents the cable assembly and pinouts for the CAB−449MT serial cable.

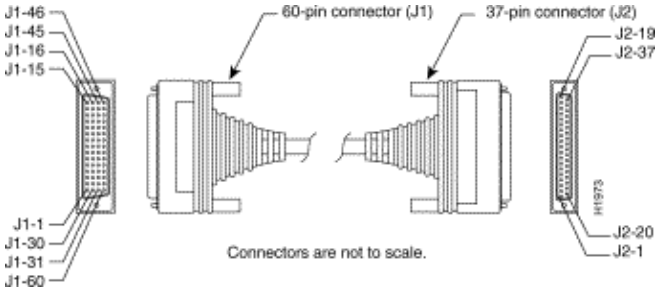
Note: The cable itself identifies the Cisco router as a data terminal equipment (DTE) or data communications equipment (DCE) device to other devices in the network; for this reason, it is important to select the correct product number from the table below.



The cable gender for this product (part number 72−0795−01) is Male DB−60 to Male DB−37, mode − DTE.

The CAB−449MT cable is used in the Cisco 7000 family, Cisco 4000 series, Cisco 3600 series, Cisco 2500 series, Cisco 1600 series, Cisco access servers, and AccessPro PC cards. This cable has a male DB−60 connector on the Cisco end and a male DB−37 connector on the network end.

EIA/TIA−449 Serial Cable Assembly



EIA/TIA−449 DTE Cable Pinouts

The table below shows the EIA/TIA−449 **DTE** cable pinouts (DB−60 to DB−37).

Note: The arrows indicate signal direction:

- −−−> indicates DTE to DCE
- <−−− indicates DCE to DTE

	Signal	Description	Direction		Signal

60 Pin[1]				25 Pin	
J1−49 J1−48	MODE_1	Shorting group	_	_	_
J1−51 J1−52	GND GND	Shorting group	_	_	_
J1−46	MODE_DCE Shield_GND	Single	−	J2−1	Shield GND
J1−11 J1−12	TxD/RxD+	Twisted pair no. 6	−−−>	J2−4	SD+
J1−24 J1−23	TxD/RxD− TxC/RxC+	Twisted pair	−−−> <−−−	J2−22 J2−5	SD− ST+
J1−28 J1−27	TxC/RxC− RxD/TxD+	Twisted pair no. 9	<−−− <−−−	J2−23 J2−6	ST− RD+
J1−9 J1−10	RxD/TxD− RTS/CTS+	Twisted pair no. 11	<−−− −−−>	J2−24 J2−7	RD− RS+
J1−26 J1−25	RTS/CTS− RxC/TxCE+	Twisted pair no. 5	−−−> <−−−	J2−25 J2−8	RS− RT+
J1−1 J1−2	RxC/TxCE− CTS/RTS+	Twisted pair no. 10	<−−− <−−−	J2−26 J2−9	RT− CS+
J1−44 J1−45	CTS/RTS− LL/DCD	Twisted pair no. 1	<−−− −−−>	J2−27 J2−10	CS− LL
J1−3 J1−4	Circuit_GND DSR/DTR+	Twisted pair no. 12	− <−−−	J2−37 J2−11	SC DM+
J1−7 J1−8	DSR/DTR− DTR/DSR+	Twisted pair no. 2	<−−− −−−>	J2−29 J2−12	DM− TR+
J1−5 J1−6	DTR/DSR− DCD/DCD+	Twisted pair no. 4	−−−> <−−−	J2−30 J2−13	TR− RR+
J1−13 J1−14	DCD/DCD− TxCE/TxC+	Twisted pair no. 3	<−−− −−−>	J2−31 J2−17	RR− TT+
J1−15 J1−16	TxCE/TxC− Circuit_GND	Twisted pair no. 7	−−−> −	J2−35 J2−19	TT− SG
	Circuit_GND	no. 9	−	J2−20	RC

[1]Any pin not referenced is not connected.

Serial Cable CAB−449FC

This section presents the cable assembly and pinouts for the CAB−449FC serial cable.

The cable gender for this product (part number 72−0796−01) is Male DB−60 to Female DB−37, mode − DCE.

This cable is used in the following systems:the Cisco 7000 family, Cisco 4000 series, Cisco 3600 series, Cisco 2500 series, Cisco 1600 series, Cisco access servers, and AccessPro PC cards. This cable has a male DB−60 connector on the Cisco end and a female DB−37 connector on the network end.

EIA/TIA−449 DCE Cable Pinouts (DB−60 to DB−37)

The table below shows the EIA/TIA−449 **DCE** cable pinouts (DB−60 to DB−37).

Note: The arrows indicate signal direction:

- −−−> indicates DTE to DCE
- <−−− indicates DCE to DTE

60 Pin[1]	Signal	Description	Direction	25 Pin	Signal
J1−49 J1−48	MODE_1	Shorting	_	_	_
J1−46	GND Shield_GND	group Single	−	J2−1	Shield GND
J1−28 J1−27	RxD/TxD+	Twisted pair	<−−−	J2−4	SD+
J1−13	RxD/TxD−	no. 11	<−−−	J2−22	SD−
J1−14	TxCE/TxC+	Twisted pair	−−−>	J2−5	ST+
J1−11	TxCE/TxC−	no. 7	−−−>	J2−23	ST−
J1−12	TxD/RxD+	Twisted pair	−−−>	J2−6	RD+
J1−1	TxD/RxD−	no. 6	−−−>	J2−24	RD−
J1−2	CTS/RTS+	Twisted pair	<−−−	J2−7	RS+
J1−24	CTS/RTS−	no. 1	<−−−	J2−25	RS−
J1−23	TxC/RxC+	Twisted pair	−−−>	J2−8	RT+
	TxC/RxC−	no. 9	−−−>	J2−26	RT−

J1−9 J1−10	RTS/CTS+	Twisted pair	−−−>	J2−9	CS+
J1−29	RTS/CTS−	no. 5	−−−>	J2−27	CS−
J1−30	NIL/LL	Twisted pair	−−−>	J2−10	LL
J1−7	Circuit_GND	no. 12	−	J2−37	SC
J1−8	DTR/DSR+	Twisted pair	−−−>	J2−11	DM+
J1−3	DTR/DSR−	no. 4	−−−>	J2−29	DM−
J1−4	DSR/DTR+	Twisted pair	<−−−	J2−12	TR+
J1−5	DSR/DTR−	no. 2	<−−−	J2−30	TR−
J1−6	DCD/DCD+	Twisted pair	−−−>	J2−13	RR+
J1−26	DCD/DCD−	no. 3	−−−>	J2−31	RR−
J1−25	RxC/TxCE+	Twisted pair	<−−−	J2−17	TT+
J1−15	RxC/TxCE−	no. 10	<−−−	J2−35	TT−
J1−16	Circuit_GND	Twisted pair	−	J2−19	SG
	Circuit_GND	no. 8	−	J2−20	RC

Related Information

- **Technical Support − Cisco Systems**

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