



Cable Pinouts

This appendix contains the following major sections that list pinouts for the connectors used with the CSS 11050, CSS 11150, and CSS 11800:

- [RJ-45 Fast Ethernet Connector Pinouts](#)
- [RJ-45 RS-232 Serial Connector Pinouts](#)
- [RJ-45 to RJ-45 CSS Cisco Console Adapter Cable](#)
- [Custom Cable Pinouts for Attaching the CSS Console Port to a Communication Server](#)
- [RJ-45 Timing BITS Connector Pinouts](#)
- [RJ-45 Management Connector Pinouts](#)

RJ-45 Fast Ethernet Connector Pinouts

Table B-1 lists the pinouts for the RJ-45 Fast Ethernet connectors on the:

- CSS 11050 and CSS 11150
- Fast Ethernet Module

Table B-1 RJ-45 Fast Ethernet Connector Pinouts

Signal Name	RJ-45 Fast Ethernet Pin Numbers	Crossover Cable Pinouts
RX +	1	3
RX -	2	6
TX +	3	1
Unconnected	4	4
Unconnected	5	5
TX -	6	2
Unconnected	7	7
Unconnected	8	8

When using the Fast Ethernet connectors to connect the CSS to a:

- Server or a workstation, use a straight-through cable
- Switch or a repeater, use a crossover cable

RJ-45 RS-232 Serial Connector Pinouts

RJ-45 RS-232 Serial connectors are the interfaces for the:

- Console and Diag ports on all CSS 11050 and CSS 11150, and CSS 11800 Switch Control Module (SCM) and Switch Fabric Module (SFM).
- Diag1 and Diag2 ports on the SFM2. These ports provide both console and diagnostic functionality on each of its RJ-45 RS-232 Serial connectors.

[Table B-2](#) lists the RJ-45 RS-232 Serial connector pinouts for the Console port.

Table B-2 *RJ-45 RS-232 Serial Connector Pinouts for the Console Port*

Signal Name	Pin Number
DTR -	1
TXD	2
RXD	3
RTS -	4
CTS -	5
DSR	6
GND	7
DCD -	8

[Table B-3](#) lists the pinouts for the RJ-45-to-DB-9 or RJ-45-to-DB-25 console cables supplied in the CSS Console cable kit.

Table B-3 *RJ-45 Connector to a DB-9 or DB-25 Connector Console Cable Pinouts*

Signal Name	RJ-45 Console Pin Number	DB-9 Pin Number	DB-25 Pin Number
TXD	2	2	3
RXD	3	3	2
GND	7	5	7

Table B-4 lists the RJ-45 RS-232 Serial connector pinouts for the Diag port.

Table B-4 RJ-45 RS-232 Serial Connector Pinouts for the Diag Port

Signal Name	Pin Number
Not Used	1
TXD	2
RXD	3
Not Used	4
Not Used	5
Not Used	6
GND	7
Not Used	8

Table B-5 lists the RJ-45 RS-232 Serial connector pinouts for the Diag1 and Diag2 ports on the SFM2. These ports provide both console and diagnostic functionality on each of its RJ-45 RS-232 Serial connectors.

Table B-5 RJ-45 RS-232 Serial Connector Pinouts for the SFM2 Diag1 and Diag2 Port

Signal Name	Pin Number
Not Used	1
TXD - Console	2
RXD - Console	3
GND	4
TXD - Diag	5
RXD - Diag	6
GND	7
Not Used	8

RJ-45 to RJ-45 CSS Cisco Console Adapter Cable

[Table B-6](#) lists the pinouts for the RJ-45 to RJ-45 Cisco console adapter cable that plugs into the CSS console and converts its pinouts to a standard Cisco console port. Once you plug the adapter cable into the CSS console port, you can connect a standard Cisco console cable to the adapter cable.



Note

When you use the adapter cable to connect to a terminal server, you must plug the adapter RJ-45 male connector directly into the CSS console port. Then, connect the adapter RJ-45 female connector to the terminal server interface cable. Do not directly connect the adapter cable to the terminal server port.

Table B-6 *RJ-45 to RJ-45 Cisco Console Adapter Cable Pinouts*

Signal Name	RJ-45 Male Pin Numbers	RJ-45 Female Pin Numbers
DTR -	1	2
TXD	2	3
RXD	3	6
RTS -	4	1
CTS -	5	8
DSR	6	7
GND	7	4
DCD -	8	5

Custom Cable Pinouts for Attaching the CSS Console Port to a Communication Server

This section describes how to create a cable to connect the CSS RJ-45 RS-232 Console port to a Cisco Systems router functioning as a communication server.

The CSS 11050, CSS 11150, and CSS 11800 support connection from their RJ-45 RS-232 Console port to a Cisco Systems router functioning as a communication server. To make the connection between a CSS and a Cisco communication server, you must make your own adapter cable or full cable as described in this section.

Depending on the Cisco Systems communication server in use, your cabling requirements may vary. Cisco communication servers handle multiple device interfaces, and the communication server platforms provide a number of methods to connect serial devices, including RJ-45, DB-9, and DB-25 connectors. To connect a Cisco communication server to the CSS Console port, review the communication server connections listed below and use the recommended cables:

- A multi-pin D-type connector attached to an octal serial cable (also known as an “octopus” cable or breakout cable) provides a rollover DTE connection. For this connection, make an adapter cable using the connector pinouts defined in [Table B-7](#). In addition to this adapter cable, you will also need a female-to-female RJ-45 adapter to connect the communication server to the the CSS (the RJ-45 adapter is included in the CSS Console cable kit).
- A RJ-45 pin female connector (without a rollover DTE connection). For this connection, you can either:
 - Make an adapter cable using the connector pinouts defined in [Table B-7](#). In addition to the adapter cable, you will also need a female-to-female RJ-45 adapter and a RJ-45-to-RJ-45 rollover cable to connect the communication server to the CSS (both the cable and adapter are included in the CSS Console cable kit). Note that the DTE side of the rollover cable is attached to the CSS Console port.
 - Make a full cable that includes the rollover functionality directly in the cable (using the connector pinouts defined in [Table B-8](#)).

- A DB-9 or DB-25 pin female DTE terminal adapter connector. For this connection, make a full cable that includes the rollover functionality directly in the cable (using the connector pinouts defined in [Table B-8](#)). In addition to the full cable, you will also need a RJ-45-to-DB-9 or RJ-45-to-DB-25 console cable to connect the communication server to the CSS (both cables are included in the CSS Console cable kit).

Table B-7 *CSS RJ-45 RS 232 Console Port, Adapter Cable Pinouts (Cable Not Reversible)*

Communication Server (DTE) Signal Name	Communication Server (DTE) Pin Number	CSS Console Port Pin Number	CSS Console Port Signal Name
TXD	3	2	RXD
GND	5	7	GND
RXD	6	3	TXD

Table B-8 *CSS RJ-45 RS 232 Console Port, Full Cable Pinouts (Cable Reversible)*

Communication Server Signal Name	Communication Server Pin Number	CSS Console Port Pin Number	CSS Console Port Signal Name
DSR	2	6	Not Used
RXD	3	3	TXD
GND	4	7	GND
TXD	6	2	RXD
DTR	7	4	Not Used

RJ-45 Timing BITS Connector Pinouts

Table B-9 lists the RJ-45 Timing BITS (Building Integrated Timing Supply) Clock connector pinouts on the SCM.

Table B-9 RJ-45 Timing BITS Connector Pinouts

Signal Name	Pin Number
Bitsck +	1
Bitsck -	2
Unconnected	3, 4, 5, 6, 7, 8

RJ-45 Management Connector Pinouts

Table B-10 lists RJ-45 Ethernet management connector pinouts on the:

- CSS 11050 and CSS 11150 rear panel
- CSS 11800 front panel

Table B-10 RJ-45 Management Connector Pinouts

Signal Name	Pin Number
TX +	1
TX -	2
RX +	3
Unconnected	4
Unconnected	5
RX -	6
Unconnected	7
Unconnected	8