



## Cable Specifications and Information

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This appendix provides the connector and pinout information you need for making or purchasing cables used with Cisco VG400 Voice Gateway. To order cables from Cisco, see the *Obtaining Technical Assistance* section. This appendix contains the following sections:

- [Console and Auxiliary Port Cables and Pinouts, on page 1](#)
- [Gigabit Ethernet Port Pinouts \(RJ-45\), on page 5](#)

### Console and Auxiliary Port Cables and Pinouts

Your Cisco VG400 Voice Gateway comes with the cable and adapters you need to connect a PC, an ASCII terminal, or a modem to your Cisco VG400 Voice Gateway. The cable kit includes:

- RJ-45-to-RJ-45 rollover cable
- RJ-45-to-DB-9 adapter cable for console connection
- RJ-45-to-DB-25 adapter cable for modem connection

The following illustrations and tables provide cable pinout information:

- Console port to a PC—See Table A-1 and A-4
- Console port to an ASCII terminal—See Table A-2 and Table A-4
- Auxiliary port to a modem—See Table A-3 and Table A-4

The console port is configured as data communications equipment (DCE); the auxiliary port is configured as data terminal equipment (DTE). Both are asynchronous serial ports and use RJ-45 connectors.

### Console Port to PC

Figure A-1 shows the RJ-45-to-RJ-45 rollover cable assembly and the RJ-45-to-DB-9 female DTE adapter (labeled TERMINAL); Table A-1 lists the pinouts.

Figure 1: Console Port to PC—Cable and Adapter

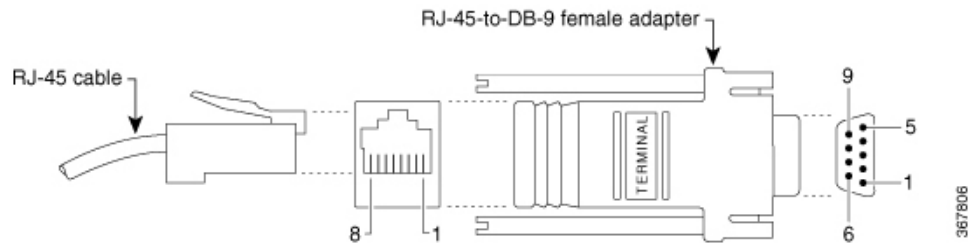


Table 1: Console Port to PC—Cable Pinouts (RJ-45 to DB-9)

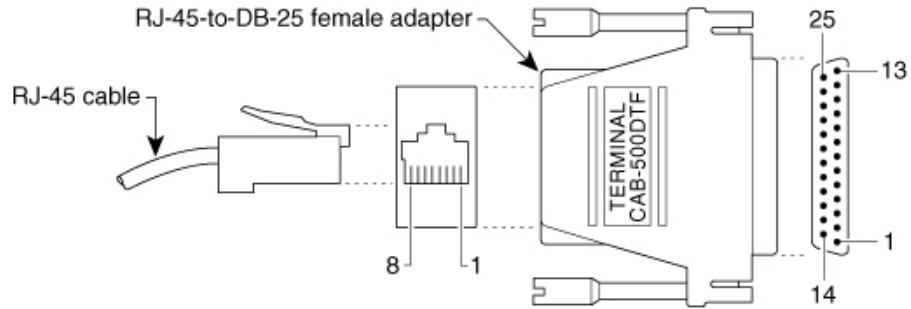
| Console Port (DCE, RJ-45) | RJ-45-to-RJ-45 Rollover Cable | RJ-45-to-DB-9 Adapter "TERMINAL" | PC Port (DTE, DB-9) |          |        |
|---------------------------|-------------------------------|----------------------------------|---------------------|----------|--------|
| Signal                    | RJ-45 Pin                     | RJ-45 Pin                        | RJ-45 Pin           | DB-9 Pin | Signal |
| RTS                       | 1 <sup>1</sup>                | 8                                | 8                   | 8        | CTS    |
| DTR                       | 2                             | 7                                | 7                   | 6        | DSR    |
| TxD                       | 3                             | 6                                | 6                   | 2        | RxD    |
| GND                       | 4                             | 5                                | 5                   | 5        | GND    |
| GND                       | 5                             | 4                                | 4                   | 5        | GND    |
| RxD                       | 6                             | 3                                | 3                   | 3        | TxD    |
| DSR                       | 7                             | 2                                | 2                   | 4        | DTR    |
| CTS                       | 81                            | 1                                | 1                   | 7        | RTS    |

<sup>1</sup> Pin 1 is connected to pin 8 inside the Cisco VG450 Voice Gateway.

## Console Port to ASCII Terminal

Figure A-2 shows the RJ-45-to-RJ-45 rollover cable assembly and the RJ-45-to-DB-25 female DTE adapter (labeled TERMINAL); Table A-2 lists the pinouts.

Figure 2: Console Port to ASCII Terminal—Cable and Adapter



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Table 2: Console Port to ASCII Terminal—Cable Pinouts (RJ-45 to DB-25)

| Console Port (DCE, RJ-45) | RJ-45-to-RJ-45 Rollover Cable | RJ-45-to-DB-25 Adapter "TERMINAL" | Terminal Port (DTE, DB-25) |           |        |
|---------------------------|-------------------------------|-----------------------------------|----------------------------|-----------|--------|
| Signal                    | RJ-45 Pin                     | RJ-45 Pin                         | RJ-45 Pin                  | DB-25 Pin | Signal |
| RTS                       | 1 <sup>2</sup>                | 8                                 | 8                          | 5         | CTS    |
| DTR                       | 2                             | 7                                 | 7                          | 6         | DSR    |
| TxD                       | 3                             | 6                                 | 6                          | 3         | RxD    |
| GND                       | 4                             | 5                                 | 5                          | 7         | GND    |
| GND                       | 5                             | 4                                 | 4                          | 7         | GND    |
| RxD                       | 6                             | 3                                 | 3                          | 2         | TxD    |
| DSR                       | 7                             | 2                                 | 2                          | 20        | DTR    |
| CTS                       | 81                            | 1                                 | 1                          | 4         | RTS    |

<sup>2</sup> Pin 1 is connected to pin 8 inside the Cisco VG400 Voice Gateway.

## Auxiliary Port to Modem

Figure A-3 shows the RJ-45-to-RJ-45 rollover cable assembly and the RJ-45-to-DB-25 male DCE adapter (labeled MODEM); Table A-3 lists the pinouts.

Figure 3: Auxiliary Port to Modem—Cable and Adapter

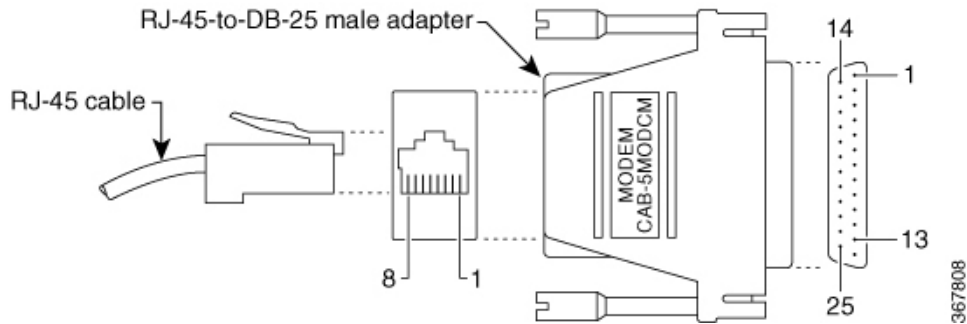


Table 3: Auxiliary Port to Modem—Cable Pinouts (RJ-45 to DB-25)

| Auxiliary Port (DTE, RJ-45) | RJ-45-to-RJ-45 Rollover Cable | RJ-45-to-DB-25 Adapter "MODEM" | Modem Port (DCE, DB-25) |           |        |
|-----------------------------|-------------------------------|--------------------------------|-------------------------|-----------|--------|
| Signal                      | RJ-45 Pin                     | RJ-45 Pin                      | RJ-45 Pin               | DB-25 Pin | Signal |
| RTS                         | 1                             | 8                              | 8                       | 4         | RTS    |
| DTR                         | 2                             | 7                              | 7                       | 20        | DTR    |
| TxD                         | 3                             | 6                              | 6                       | 2         | TxD    |
| GND                         | 4                             | 5                              | 5                       | 7         | GND    |
| GND                         | 5                             | 4                              | 4                       | 7         | GND    |
| RxD                         | 6                             | 3                              | 3                       | 3         | RxD    |
| DSR                         | 7                             | 2                              | 2                       | 8         | DCD    |
| CTS                         | 8                             | 1                              | 1                       | 5         | CTS    |

## Alternative Connections to Terminal and Modem

Your Cisco VG400 Voice Gateway ships with an RJ-45-to-RJ-45 rollover cable and two adapters for connection to a PC, a terminal, or a modem. If you want to use an RJ-45 straight-through cable or other adapters, see Table A-4 for usable cable and adapter combinations.

Table 4: Alternative Terminal and Modem Connections

| Cisco VG400 Port Connection | RJ-45 Type Cable      | Adapter                        |
|-----------------------------|-----------------------|--------------------------------|
| Console port to PC          | Straight-through      | DCE, DB-9 female               |
| Auxiliary port to modem     | Rollover <sup>3</sup> | DCE <sup>4</sup> , DB-25, male |
|                             | Straight-through      | DTE2, DB-25, male              |

- <sup>3</sup> An octal cable or RJ-45 breakout cable is equivalent to a rollover cable.  
<sup>4</sup> Modify the DB-25 adapter by removing the wire in pin 6 and placing it in the pin 8 position.

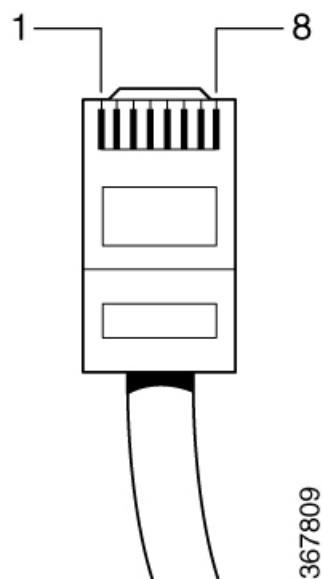
## Gigabit Ethernet Port Pinouts (RJ-45)

Figure A-4 shows the RJ-45 connector wiring for the Gigabit Ethernet cable; Table A-4 lists the pinouts.



**Note** Pinout shown is for category 3, 4, or 5 10/100BASE-T connection to an Gigabit Ethernet switch.

**Figure 4: RJ-45 Connector Wiring**



**Table 5: Gigabit Ethernet Port Pinouts (RJ-45)**

| Pin <sup>5</sup> | Signal |
|------------------|--------|
| 1                | TX+    |
| 2                | TX-    |
| 3                | RX+    |
| 4                | -      |
| 5                | -      |
| 6                | RX-    |
| 7                | -      |
| 8                | -      |

<sup>5</sup> Any pin not referenced is not connected.