

# Catalyst 1800 Token Ring Switch Cable Kit Guide

This guide provides configuration and connection instructions for the EIA/TIA-232 console/modem cable and the adapters used when connecting a PC, a VT series terminal, or a modem to the Catalyst 1800 Token Ring switch to access out-of-band management via the EIA/TIA-232 DB-9 male console port.

**Note** EIA/TIA-232 was known as recommended standard RS-232 before its acceptance as a standard by the Electronic Industries Association (EIA) and Telecommunications Industry Association (TIA).

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Management terminal and modem requirements are as follows:

- VT 320/420-series terminal or VT-type terminal running emulation programs for the VT series
- IBM or compatible PC running a VT-series emulation software package
- Hayes-compatible modem

This guide also provides the following pin assignments:

- DB-9 console port connector on the Catalyst 1800 chassis
- DB-9 PC connector

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- DB-25 VT-series connector
- DB-25 modem connector

The Catalyst 1800 console cable kit (part number 78-1188-01) includes

- One 6-foot (1.8-meter) length of unshielded twisted pair (UTP) EIA/TIA-232 cable with RJ-45 connectors at each end
- One RJ-45 to DB-9 female adapter (for console port connection)
- One RJ-45 to DB-9 female adapter (for PC connection)
- One RJ-45 to DB-25 female adapter (for VT terminal connection)
- One RJ-45 to DB-25 male adapter (for modem connection)

#### Connecting to a VT-Series Terminal

Follow these steps to connect a VT 320/420-series terminal to a Catalyst 1800 Token Ring switch (see Figure 1):

- **Step 1** Plug either end of the EIA/TIA-232 cable into the RJ-45-to-DB-9 female adapter labelled "Console port."
- **Step 2** Connect the console port female adapter to the male DB-9 console port on the front of the Catalyst 1800 chassis.
- **Step 3** Plug the RJ-45 connector at the other end of the EIA/TIA-232 cable into the RJ-45-to-DB-25 female adapter labelled "VT series."
- **Step 4** Connect the VT-series DB-25 female adapter to the DB-25 male adapter on the cable extending from the VT terminal's COMM port.
- **Step 5** Turn on the terminal and access the setup directory. Set the following parameters on your terminal:

Transmit	9600	
Bits per character (BPC)	8	-
Parity	None	
Stop bit	1	
Flow control	Off	

After these parameters are set, you can access out-of-band management. Refer to the *Catalyst 1800 Token Ring Switch User Guide* for instructions on using the console interface.



Figure 1 Connecting a VT-Series Terminal to a Catalyst 1800 Switch

#### Connecting to an IBM PC or Compatible

Follow these steps to connect an IBM PC or compatible to a Catalyst 1800 switch (see Figure 2). Note that the PC must be running a VT terminal emulation program.

- **Step 1** Plug either end of the EIA/TIA-232 cable into the RJ-45-to-DB-9 female adapter labelled "Console port."
- **Step 2** Connect the console port female adapter to the male DB-9 console port on the front of the Catalyst 1800 chassis.
- **Step 3** Plug the RJ-45 connector at the other end of the EIA/TIA-232 cable into the RJ-45-to-DB-9 female adapter labelled "PC."
- **Step 4** Connect the DB-9 female adapter to the appropriate male communications port on the PC.
- **Step 5** Turn on the PC and configure its VT emulation package with following parameters:

Transmit	9600	
Bits per character (BPC)	8	
Parity	None	
Stop bit	1	
Flow control	Off	

After these parameters are set, you can access out-of-band management. Refer to the *Catalyst 1800 Token Ring Switch User Guide* for instructions on using the console interface.



Figure 2 Connecting an IBM PC or Compatible to a Catalyst 1800 Switch

#### **Connecting to a Modem**

Follow these steps to connect an IBM PC or compatible to a Catalyst 1800 switch (see Figure 3). Note that the PC must be running a VT terminal emulation program.

- **Step 1** Plug either end of the EIA/TIA-232 cable into the RJ-45-to-DB-9 female adapter labelled "Console port."
- **Step 2** Connect the console port female adapter to the male DB-9 console port on the front of the Catalyst 1800 chassis.
- **Step 3** Plug the RJ-45 connector at the other end of the EIA/TIA-232 cable into the RJ-45-to-DB-25 male adapter labelled "Modem."
- **Step 4** Connect the DB-25 male adapter to the appropriate female communications port on the modem.
- **Step 5** Turn on the modem and configure its VT emulation package with following parameters:

Transmit	9600	
Bits per character (BPC)	8	
Parity	None	
Stop bit	1	
Flow control	Off	

After these parameters are set, you can access out-of-band management. Refer to the *Catalyst 1800 Token Ring Switch User Guide* for instructions on using the console interface.



#### Figure 3 Connecting a Modem to a Catalyst 1800 Switch

## Wiring and Signal Assignment Specifications

Diagrams in this section provide wiring and signal information for the cable and adapters in the Catalyst 1800 console cable kit.

RJ-45 cable wiring diagram			
End 1 End 2		d 2	
Pin	Conductor	Pin	Conductor
1	White/Orange	1	White/Orange
2	Orange/White	2	Orange/White
3	White/Green	3	White/Green
4	Blue/White	4	Blue/White
5	White/Blue	5	White/Blue
6	Green/White	6	Green/White
7	White/Brown	7	White/Brown
8	Brown/White	8	Brown/White
RJ-45 connector end 1 Pins 1 8 Male		RJ-45 connector end 2 Pins 1	8 Male

Console port adapter wiring & signal diagram			
DB-9 RJ-45		-45	
Pin	Signal	Pin	Conductor
2	RD	4	Red
3	TD	1	Blue
4	DTR	8	White
5	GND	5	Green
7	RTS	6	Yellow
DB-9 connector Pi 5 <del>&lt;</del>	ns → 1	RJ-45 port F 8◀	Pins ←>1
Female 9	→ 6	Female	

PC adapter wiring & signal diagram			
DB-9 RJ-45		-45	
Pin	Signal	Pin	Conductor
1	DCD	6	Yellow
2	RD	1	Blue
3	TD	4	Red
5	GND	5	Green
DB-9 connector Female	$ \begin{array}{c} ns \\ \rightarrow 1 \\ 0 \\ 0 \\ \hline \end{array} \\ \hline \end{array} \\ \hline \end{array} \\ 6 $	RJ-45 port 8 • Female	Pins ←→1

Modem adapter wiring & signal diagram			
DB-25		RJ-45	
Pin	Signal	Pin	
2	TD	4	
3	RD	1	
4	RTS	8	
7	GND	5	
20	DTR	6	
DB-25 connector 1 ← ○ ○ ○ ○ ○ ○ ○ ○ 14 ←	ns → 13 ○ ○ ○ ○ ○ ○ ○ ○ Male → 25	RJ-45 port 8 Female	Pins ←→1

VT series adapter wiring & signal diagram			
DB-25		R	J-45
Pin	Signal	Pin	Conductor
2	TD	4	Red
3	RD	1	Blue
4	CTS	8	Yellow
7	GND	5	Green
20	DTR	6	White
DB-25 connector $13 \leftarrow 1$ $0 \circ 0 \circ$		RJ-45 port Pins 8◀→1 Female	

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- WWW: http://www-europe.cisco.com
- WWW: http://www-china.cisco.com
- Telnet: cco.cisco.com
- Modem: From North America, 408 526-8070; from Europe, 33 1 64 46 40 82. Use the following terminal settings: VT100 emulation; databits: 8; parity: none; stop bits: 1; and connection rates up to 28.8 kbps.

For a copy of CCO's Frequently Asked Questions (FAQ), contact cco-help@cisco.com. For additional information, contact cco-team@cisco.com.

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