

RJ45 Shielded (standard) port pinout

CS9000, Jetstream 4000 + 8500, Lanstream 2000, RTA8/RJX, RRC16, MTA8/RJX & SXDC8/RJX

Pin	Circuit		Function
1	DCD	Input	Data Carrier Detect
2	DSR	Output	Data Set Ready
3	DTR	Input	Data Terminal Ready
4	S/GND		Signal Ground
5	TXD	Output	Transmit Data
6	RXD	Input	Receive Data
7	CTS	Output	Clear To Send
8	RTS	Input	Request To Send
Shield	P/GND		Protective (Chassis) Ground

Loopback cable

DCD	1	—
DSR	2	—
DTR	3	—
TXD	5	—
RXD	6	—
CTS	7	—
RTS	8	—

RJ45 to DB25 JS8500/LS2000/CS9000 console cable configuration

RJ45		DB25 console	
DTR	2	-----	20 DTR
GND	4	-----	7 GND
TXD	5	-----	2 TXD
RXD	6	-----	3 RXD

Do not connect other signals.

RJ45 to DB9 JS4000 console cable configuration

RJ45		DB9 Console port	
S/GND	4	-----	5 S/GND
TXD	5	-----	3 RXD
RXD	6	-----	2 TXD

Do not connect other signals

RJ45 to DB9 PC Com Port configuration

RJ45		DB9 Com Port	
DCD	1	-----	1 DCD
DSR	2	-----	6 DSR
DTR	3	-----	4 DTR
S/GND	4	-----	5 S/GND
TXD	5	-----	2 RXD
RXD	6	-----	3 TXD
CTS	7	-----	8 CTS
RTS	8	-----	7 RTS

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RJ45 to RJ45 Null Modem Cable

RJ45		RJ45	
DCD	1 -----	3	DTR
DSR	2 _		
DTR	3 -----	1	DCD
	_	2	DSR
S/GND	4 -----	4	S/GND
TXD	5 -----	6	RXD
RXD	6 -----	5	TXD
CTS	7 -----	8	RTS
RTS	8 -----	7	CTS

RJ45 to DB9 null modem cable

RJ45		Server DB9	
TXD	5 -----	2	RXD
RXD	6 -----	3	TXD
CTS	7 -----	8	CTS
RTS	8 -----	7	RTS
GND	4 -----	5	GND
DCD	1 -----	6	DSR
DSR	2 _		
DTR	3 -----	1	DCD
	_	4	DTR

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RJ45 to DB25 Terminal cable configuration

For standard terminal operating at slow speeds or using software flow control. A simple 3-pin connection can be used.

RJ45		DB25 Terminal	
S/GND	4	-----	7 S/GND
TXD	5	-----	3 RXD
RXD	6	-----	2 TXD

RJ45 to DB25 terminal with hardware flow control

For terminals operating at speeds high than 9600 baud or for terminals which do not support software flow control. Terminal supports DTR flow control.

RJ45		DB25 Terminal	
S/GND	4	-----	7 S/GND
TXD	5	-----	3 RXD
RXD	6	-----	2 TXD
CTS	7	-----	5 CTS
RTS	8	-----	20 DTR

RJ45 to DB25 terminal using the modem device

Using the modem device on a local connection ensures that the login process is killed when the terminal is switched off.

This is achieved by wiring the terminals RTS or DTR to the RJ45 DCD.

RJ45		DB25 Terminal	
DCD	1	-----	20 DTR or 4 RTS
S/GND	4	-----	7 S/GND
TXD	5	-----	3 RXD
RXD	6	-----	2 TXD

RJ45 to DB25 terminal using the modem device and hardware flow control

Using the modem device on a local connection ensures that the login process is killed when the terminal is switched off. This is achieved by wiring the terminals RTS to the RJ45 DCD.

RJ45		DB25 Terminal	
DCD	1	-----	20 DTR or 4 RTS
S/GND	4	-----	7 S/GND
TXD	5	-----	3 RXD
RXD	6	-----	2 TXD

This example assumes that DTR on the terminal is being used for hardware flow control. If RTS is used for hardware flow control connect DTR on the terminal to DCD on the RJ45 and RTS on the terminal to RTS on the RJ45

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CS9000, Jetstream 4000 + 8500, Lanstream 2000, RTA8/RJX, RRC16, MTA8/RJX & SXDC8/RJX

RJ45 to DB25 modem cable configuration

RJ45		DB25 Modem	
DCD	1 -----	8	DCD
DSR	2 -----	20	DTR
DTR	3 -----	6	DSR
S/GND	4 -----	7	S/GND
TXD	5 -----	2	TXD
RXD	6 -----	3	RXD
CTS	7 -----	4	RTS
RTS	8 -----	5	CTS

DB25 to DB9 modem cable configuration

RJ45		DB9 Modem	
DCD	1 -----	1	DCD
DSR	2 -----	4	DTR
DTR	3 -----	6	DSR
S/GND	4 -----	5	S/GND
TXD	5 -----	3	TXD
RXD	6 -----	2	RXD
CTS	7 -----	7	RTS
RTS	8 -----	8	CTS

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CS9000, Jetstream 4000 + 8500, Lanstream 2000, RTA8/RJX, RRC16, MTA8/RJX & SXDC8/RJX

RJ45 to DB25 Serial Printer cable using software flow control

RJ45		DB25 Serial Printer	
S/GND	4	-----	7 S/GND
TXD	5	-----	3 RXD
RXD	6	-----	2 TXD

RJ45 to DB25 Serial Printer cable using hardware flow control

This example is for a printer using the DTR pin for hardware flow control.

RJ45		DB25 Serial Printer	
S/GND	4	-----	7 S/GND
TXD	5	-----	3 RXD
RXD	6	-----	2 TXD
RTS	8	-----	20 DTR

RJ45 to DB9 Serial Printer cable using hardware flow control

This example is for a printer using the DTR pin for hardware flow control.

RJ45		DB9 Serial Printer	
S/GND	4	-----	5 S/GND
TXD	5	-----	3 TXD
RXD	6	-----	2 RXD
RTS	8	-----	4 DTR

RJ45 Shielded (standard) port pinout

CS9000, Jetstream 4000 + 8500, Lanstream 2000, RTA8/RJX, RRC16, MTA8/RJX & SXDC8/RJX

RJ45 to DB9 IBM RS6000 Com Port configuration

RJ45		DB9 Com Port	
DSR	2	-----	1 DCD
RXD	6	-----	3 TXD
TXD	5	-----	2 RXD
S/GND	4	-----	5 S/GND
RTS	8	-----	7 RTS
CTS	7	-----	8 CTS

RJ45 to DB25 Sun Server

Here are the 2 main cable pinouts required to connect to Sun servers and workstations.

RJ45		DB25 serial	
DTR	3	-----	20 DTR
DSR	2	-----	6 DSR
GND	4	-----	7 GND
TXD	5	-----	3 RXD
RXD	6	-----	2 TXD
CTS	7	-----	5 CTS
		_____	8 DCD
RTS	8	-----	4 RTS

RJ45 to Sun server Netra Port RJ45

RJ45		RJ45 serial	
DSR	2	-----	7 DSR
DTR	3	-----	2 DTR
GND	4	-----	4 GND
TXD	5	-----	6 RXD
RXD	6	-----	3 TXD
CTS	7	-----	8 CTS
RTS	8	-----	1 RTS

RJ45 to Sun server Port DB9

RJ45		DB9 serial	
DTR	3	-----	4 DTR
DSR	2	-----	6 DSR
		_____	1 DCD
GND	4	-----	5 GND
TXD	5	-----	2 RXD
RXD	6	-----	3 TXD
CTS	7	-----	8 CTS
RTS	8	-----	7 RTS

RJ45 to Nokia 400/440 DB9 Com Port

Use RJ45 to DB9 PC pinout (or adapter)

RJ45 Shielded (standard) port pinout

CS9000, Jetstream 4000 + 8500, Lanstream 2000, RTA8/RJX, RRC16, MTA8/RJX & SXDC8/RJX

RJ45 to RJ45 Cisco cable with hardware flow control

This example supports both DTR/DSR and RTS/CTS signalling for both routers and switches.

RJ45		RJ45 Console port	
DSR	2 -----	7	DSR
DTR	3 -----	2	DTR
S/GND	4 -----	4	GND
TXD	5 -----	6	RXD
RXD	6 -----	3	TXD
CTS	7 -----	8	CTS
RTS	8 -----	1	RTS

RJ45 to DB25 Perle P series router console

RJ45		DB25 console	
DTR	2 -----	20	DTR
GND	4 -----	7	GND
TXD	5 -----	3	RXD
RXD	6 -----	2	TXD

RJ45 to RJ45 Perle P series router console

RJ45		RJ45 Console port	
DSR	2 -----	3	DTR
S/GND	4 -----	4	GND
TXD	5 -----	6	RXD
RXD	6 -----	3	TXD

RJ45 to DB25 Nortel switch

RJ45		DB25	
DCD	1 -----	4	RTS
S/GND	4 -----	7	S/GND
TXD	5 -----	3	RXD
RXD	6 -----	2	TXD
RTS	8 -----	20	DTR

RJ45 to Foundry Big Iron Switch DB9 serial port

RJ45		DB9	
S/GND	4 -----	5	S/GND
TXD	5 -----	3	RXD
RXD	6 -----	2	TXD
CTS	7 -----	8	RTS
RTS	8 -----	7	CTS