

RJ45 Non-Standard Cabling Examples

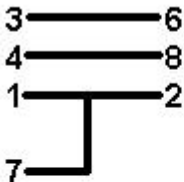
The following are examples of cable configurations for connecting terminals, printers and modems to RJ45 (Non-Standard or Unshielded) connectors.

RJ45 Port pinout

Pin	Circuit	Function
1	DSR	Data Set Ready
2	DCD	Data Carrier Detect
3	RXD	Receive Data
4	CTS	Clear To Send
5	GND	Ground
6	TXD	Transmit Data
7	DTR	Data Terminal Ready
8	RTS	Request To Send

Loopback connector

For use with Specialix diagnostic utilities.



RJ45 to DB25 Terminal cable configuration

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

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

RJ45 to DB25 terminal with hardware flow control

For terminals operating at speeds high than 19200 baud or for terminals which do not support software flow control.

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

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

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

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 socket and RTS on the terminal to RTS on the RJ45 socket.

RJ45 to DB9 PC Com Port configuration

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

RJ45			DB9 Com Port	
RXD	3	-----	3	TXD
TXD	6	-----	2	RXD
S/GND	5	-----	5	S/GND

RJ45 to DB25 modem cable configuration

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

RJ45 to DB25 Serial Printer cable using software flow control

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

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	
RXD	3	-----	2	TXD	
TXD	6	-----	3	RXD	
S/GND	5	-----	7	S/GND	
RTS	8	-----	20	DTR	