Cables for PC Asynchronous Serial Data Connections

These pages show connection diagrams for a number of cables used in PC Asynchronous Serial Data Communications. I've tried to draw them so the connectors are oriented as you would see them when you're soldering the wires. The cables you need depend on both the hardware and software you're using.

PC to Modem

PC to Modem cables require 9-wires if your software receognizes RI (Ring Indicator), 8-wires otherwise. Modems with 25-pin D-sub connectors are probably the most standardized asynch serial connections to be found.

PC to PC 'Null' modem cables

PC to PC 'null' modem cables are used to connect two computers together for serial networks and general communications. If they use the hardware handshaking signals, 7-wires are normally required with DCD an option. Software like Microsoft's Interlink (and LapLink?) require 7-wire connections.

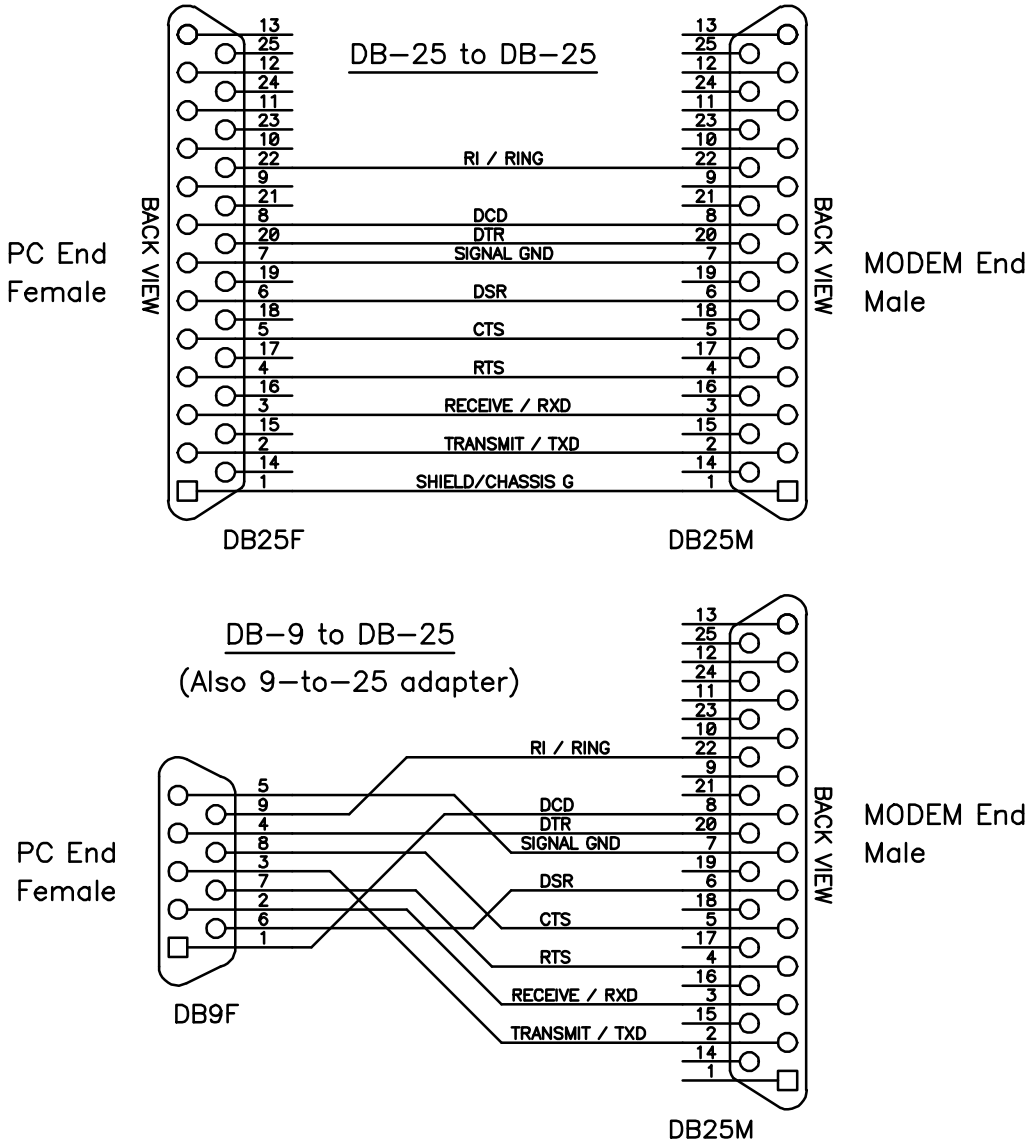
3-wire 'null' modem cables

If you have a choice, this is a bad idea. Use the handshaking lines if your software and hardware supports them. Sometimes you don't have a choice so here they are. With these cables, software flow control is the only option since the hardware lines aren't connected to the other end. Instead they are looped back so you can use software on one end that won't work without them.

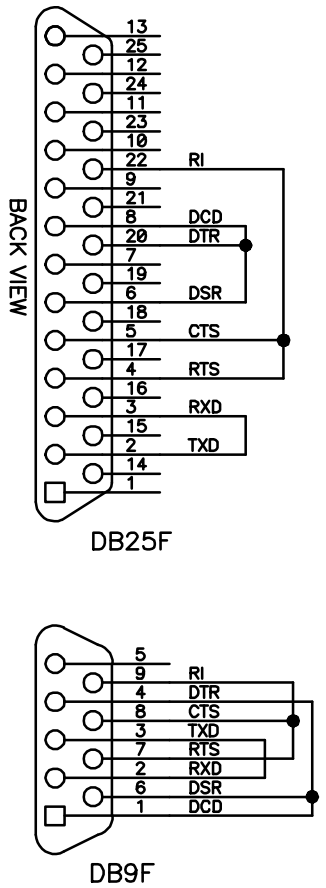
PC to Terminal cables

Most terminals that I'm familiar with use DTR for hardware flow control while most PC software is modem oriented and expects CTS to change for hardware flow control. These cables are for those situations. The dotted lines are optional connections that may be used/useful.

PC to Modem Cables

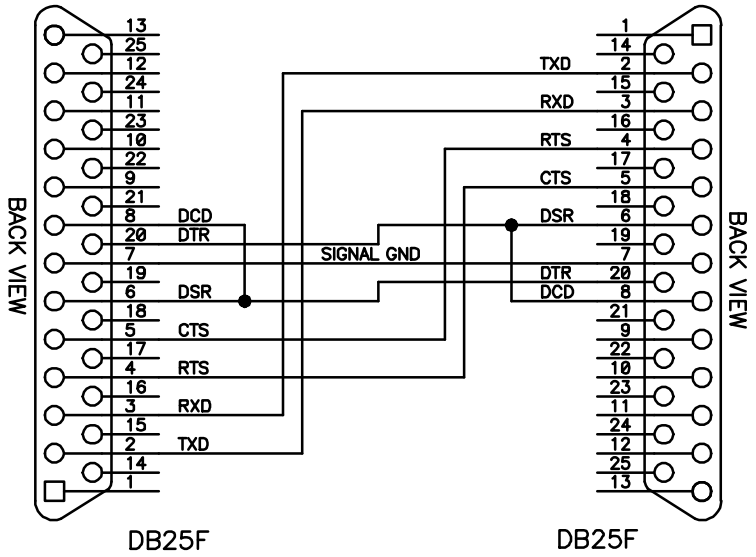


PC Loopback Plugs

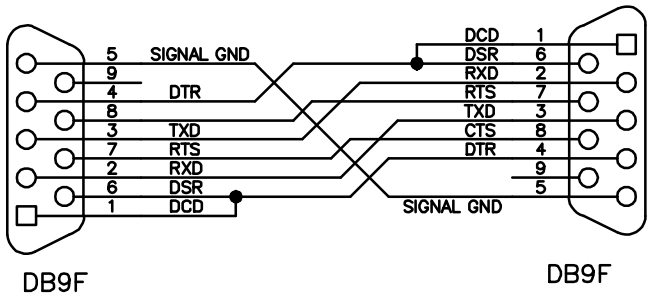


Title	Modem Cables and Loopback Plugs	
Size A	The Computer Journal 800−424−8825	Rev
Date Mon Feb 23 1998		Drawn by DIB
Filename SERCABLE.S01		Sheet 1 of 4

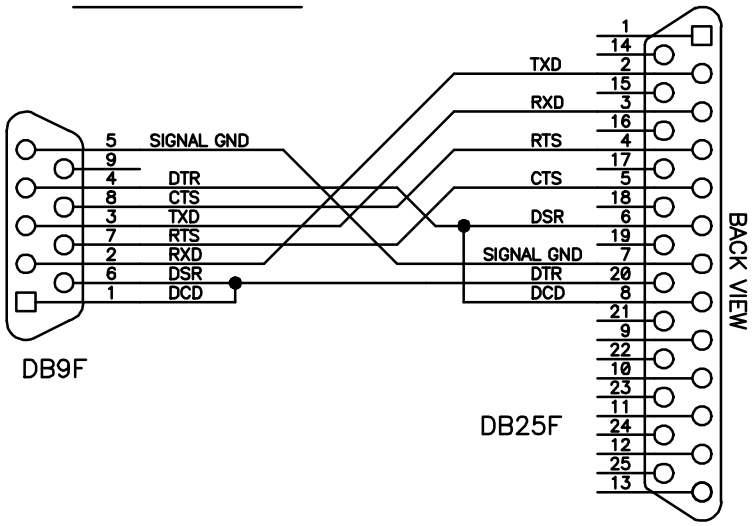
DB–25 to DB–25



DB–9 TO DB–9



DB–9 to DB–25



Title	PC to PC 'Null' Modem Cables	
Size A	The Computer Journal 800–424–8825	Rev
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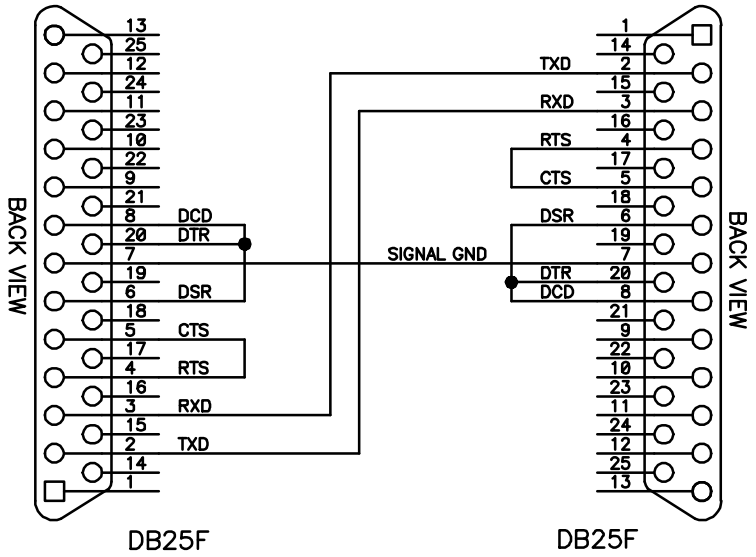
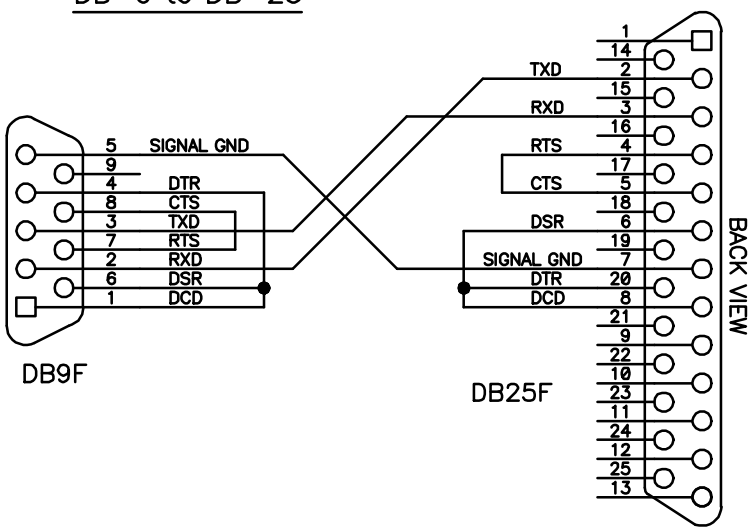
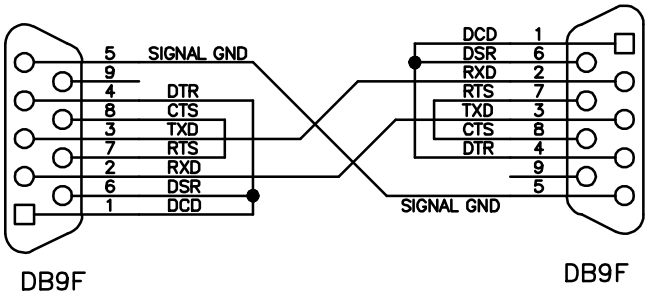
DB–25 to DB–25



DB–9 to DB–25



DB–9 TO DB–9



Title	PC 3–wire 'Null' Modem Cables	
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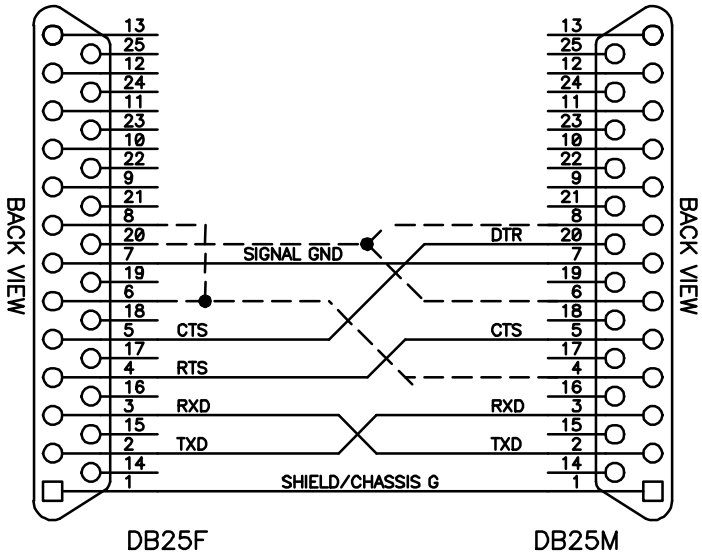
DB–25 to DB–25

PC End
Female

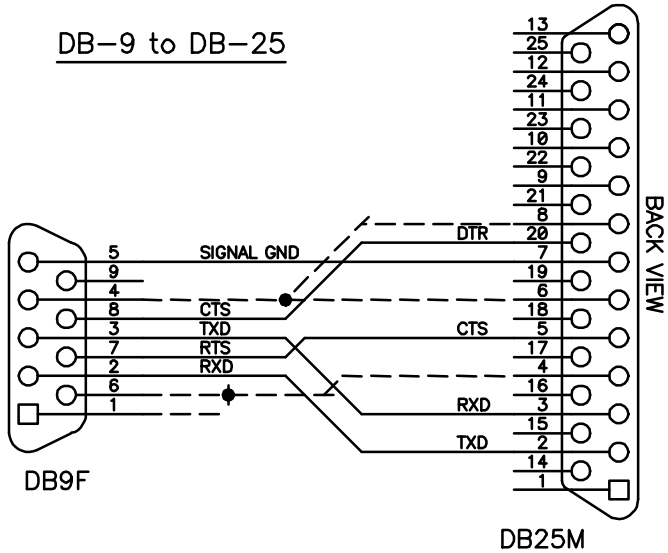


DB25F DB25M

Terminal End
Male

DB–9 to DB–25

PC End
Female



DB9F DB25M

Terminal End
Male

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