

Cable between PX-8 and modern PCs

There are several reasons to connect the PX-4 or PX-8 to a PC;

- transfer files using the FILINK protocol via the RS-232 port
- 'print' files via the SERIAL port
- use the PC as floppy emulator using the epsp protocol via the SERIAL port.

The standard cables in the User manual are for specific purposes like PX-4/8 to modem (#724), PX-4/8 to another generic computer or a printer (#725), PX-4/8 to another PX-4/8 (#725). The #725 should be right, but it doesn't take the quirks of the IBM PC/AT into account, like the gender of the connector and the handshake line state dependency. One can solve this with a [gender changer](#) and a loop-back. But when often used, a custom cable is a better solution. The cable that fixes the gender looks like the ASCII-art below. PC-9 pin DE9F and PC-25 pin DB-25F are two options for the PC end. Both are female connectors.

	PX-4/8 8 pin mini-DIN		PC-9 pin DE-9F		PC-25 pin DB-25F
S.GND	1	-----	1	-----	7
TxD	2	-----	2	-----	3
RxD	3	-----	3	-----	2
RTS	4	-----	4	-----	5
CTS	5	-----	5	-----	4
DSR	6	-----	6	-----	20
DTR	7	-----	7	-----	6
DCD	8	-----	8	-----	8

Nothing short of remarkable is how Epson used the exact same numbering that several years later was used by IBM for the AT RS-232c 9-pin connector!

This will work well if you are sure the PX-4/8 sets the handshake lines properly, or when the PC is set to ignore them. This latter case is probably the reason an USB-RS-232c converter works with this cable.

The handshake lines are a remnant from the times modems were mostly analog and signalled the condition of the line and signals received this way. Since the introduction of the [Hayes AT command set](#), these lines were only there to be backward compatible. For the PX-4/8 - PC usage, certainly when you use a real RS-232 port, it is better to loop them back, certainly at the PC-side. The PX-4/8 doesn't really care for the handshake lines.

	PX-4/8 8 pin mini-DIN		PC-9 pin DE-9F		PC-25 pin DB-25F
S.GND	1	-----	1	-----	7
TxD	2	-----	2	-----	3
RxD	3	-----	3	-----	2
RTS	4		+---- 4		+---- 5
CTS	5		+---- 5		+---- 4
DSR	6		+---- 6		+---- 20
DTR	7		+---- 7		+---- 6
DCD	8		+---- 8		+---- 8

- [RS-232c](#)
 - [RS-232 null modem info](#)
 - [mini-DIN connectors](#)
 - [Hayes AT command protocol information](#)
-