

# Use of RS-232 Interface for BayCom type Software.

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The BayCom modem uses the RS-232 lines in a quite different way from the way the RS-232 designers intended it to be used. The main reason for this is that AX.25 requires synchronous operation, which is not supported by the RS-232's 8250 interface chip (and compatibles): they expect asynchronous data with start and stop bits.

As a result, RXD and TXD lines of the RS-232 interface could not be used. For BayCom type modems, following RS-232 lines are used:

RS-232 pin	RS-232 name	Modem use
3	TXD	Power supply only
4	DTR	TX Data
5	GND	GND
7	RTS	PTT
8	CTS	RX Data

For programming reasons, pin 3 outputs an irregular clock that may be used as the modem's power supply. Further power may also be obtained from RTS (on "high" when the modem is transmitting) and DTR (on "high" while the modem receives).