

INTERFACING KANTRONICS KWM-1200 PLUS MODEM TO ESP520DX DATA RADIO



This application note provides the basic cable wiring information for connecting a SEA ESP520DX mobile radio (with data terminal interface) to the Kantronics KWM-1200 Plus modem. Additionally, a procedure is provided for minimally configuring the PC to operate the modem with the terminal software provided with the modem. The information in this application note is believed to be correct at the time of issuance but is provided strictly as a courtesy to SEA customers without warranty.

1. Minimum system requirements:

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- 2 - Kantronics KWM-1200 Plus Modems with terminal software.
- 2 - ESP520DX Radios with Rev 2.0 or greater Firmware.
- 2 - IBM compatible computers with COM 1 or COM 2 available
MS-DOS version 3.3 or higher, at least 384K RAM and a 3.5" floppy drive.
Hard drive is optional.
- 1 - PC to Modem cables (not supplied). Refer to section 2 for details.
- 1 - Radio to Modem cables (not supplied). Refer to section 3 for details.

2. PC to Modem cable:

KPC-3 DB-25 male		PC DB-9
1	----- FG ---	----- n/c ---
2	----- TXD ---	----- 3 ---
3	----- RXD -----	----- 2 -----

	----		----
4	-----	RTS	-----
	----		----
5	-----	CTS	-----
	----		----
6	-----	DSR	-----
	----		----
7	-----	SG	-----
	----		----
8	-----	DCD	-----
	----		----
20	-----	DTR	-----
	----		----

3. Radio to Modem cable:

	<u>KPC-3</u>		<u>520DX</u>
	<u>DB-9 male</u>		<u>DB-25 male</u>
1	-----	TX	-----
	----		----
3	-----	PTT	-----
	----		----
5	-----	RX	-----
	----		----
6	-----	GND	-----
	----		----

4. SEA520DX Programming:

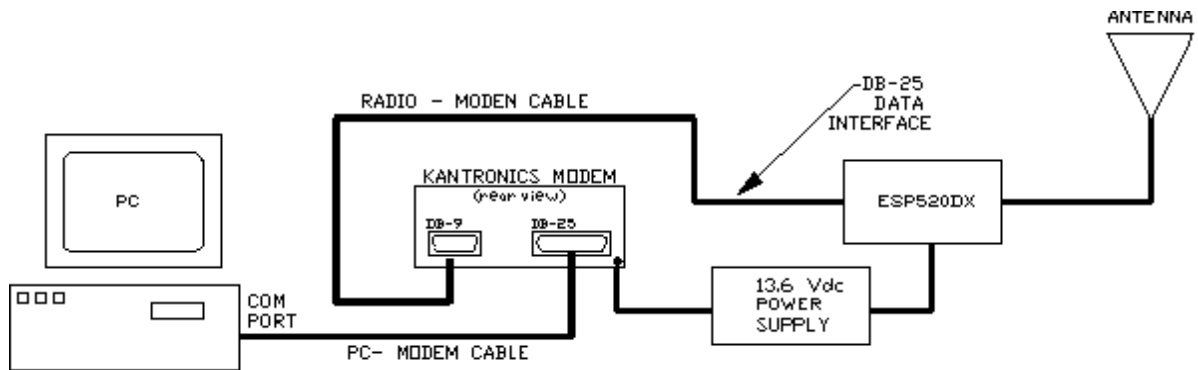
- Program modes to match the REPEATER SYSTEM(S) which will be used or CHANNEL(S) for talkaround use if no repeater is being used. Refer to the ESP520DX programming manual for instructions on programming for DATA operation. **BELL 202** data type must be selected.

5. SEA Repeater System Programming:

- Optional: Talkaround users may bypass this section.

Program repeater(s) according to the programming manual with the correct Channel Number, Area Bit and Home Channel. Test the repeaters with a couple of mobiles in voice mode to insure system is functioning properly before using the DATA mode on the mobiles.

6. System Configuration:



7. Minimum Required Software Setup Procedure:

- A. Load the 3.5" floppy disk into the computer that is provided with the modem.
- B. Select **RUN** program from the Windows **FILE** menu and type: **A:TNC**; **Press Enter**.
NOTE: If running the program in **DOS**; type: **A:TNC** at the command prompt and then **Press Enter**.
- C. Follow the instructions in the software to get to the **MAIN MENU**.
- D. At the main menu, select **PACTERM PROGRAM**.
- E. At the next menu, select **INSTALL PACTERM**.
- F. Select **DRIVE** and **PATH** that you want to store the terminal program.
- G. Once the files are copied, select **RETURN TO DOS**.
- H. At the Windows Main Menu, select **RUN** program. Type the drive and path in which the terminal program is located along with **PACTERM** and **Press Enter**. If using **DOS**, type the path along with **PACTERM** and **Press Enter** at the command prompt.
- I. EXAMPLE: C:\COMM\PACTERM
- J. Once Pacterm is loaded, select the **COM PORT** that will be used and its **BAUD RATE**.
NOTE: Do not confuse this with the modem's baud rate as the modem is set at 1200 baud. If this setting is incorrect, you will not have proper communications between the modem and the PC.
- K. The PC is now ready to send data. Duplicate this process for the second computer and modem configuration.
- L. Refer to the manual provided with the modem for specific commands and operation. There is also documentation on the disk provided that can be printed out. Follow the steps A-D above to find the documentation file.