

Accessory Installation Instructions

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MODEL NUMBER : VXR-1000

Description: General information for interconnection workups

The VXR-1000 can be interconnected to virtually any FM land mobile radio, conventional or trunked. A knowledgeable technician should be able to work up the interconnections in about an hour. Following is general information to supplement that in the VXR-1000 Service Manual. The technician will need to have:

1. The VXR-1000 Service Manual
2. The service manual for the mobile radio being connected
3. An IBM or clone PC running MS-DOS (or MS-Windows in the DOS mode)
4. The Vertex CE-22 programming software and the VPL-1 programming cable set
5. Appropriate DC, audio, and RF test equipment

A semi-wired cable assembly with a DB-9 connector, 9 feet of cable, and color-coded tinned leads is provided with each VXR-1000. The color codes in this cable change slightly at Lot 03 (VHF) and Lot 04 (UHF). The colors in parentheses refer to cables included with the later VXR-1000s. Colors for pins 4 through 9 remain the same:

FUNCTION	VXR-1000 DB-9	RADIO
Signal Ground	1 Brown (Black)	Audio signal ground (usually chassis ground)
Mobile TX Audio	2 Red (Brown)	TX audio from the VXR-1000 to the mobile radio
Power Supply Control	3 Orange (Red)	VXR-1000 on/off switch
Mobile PTT Output	4 Yellow	PTT command from VXR-1000 to the mobile radio
Vcc (13.8 V)	5 Green	13.8 VDC power for the VXR-1000
Mobile RX Audio	6 Blue	RX audio from the mobile radio to the VXR-1000
Mobile COR Detect	7 Purple	COR signal from the mobile radio to the VXR-1000
Mobile Mic. Audio	8 Gray	TX audio from the mobile's mic. to the VXR-1000
Mobile TX Detect	9 White	TX status detect (trunked) or PTT command (conv.)

Page 6 of the VXR-1000 Service Manual provides detailed information and descriptions of the connections and values at each point. A copy of page 6 is included with this instruction. The DB-9 illustration on page 6 is looking into the (female) end of the supplied cable's connector.

The values and/or functions of pins 2 and 3 are set by solder jumpers inside the VXR-1000. The values and/or polarity of pins 2, 6, 8, and 9 are controlled by settings in the CE-22 software.

Connections to pins 1 through 7 are mandatory for all installations.

Connection to pins 8 and 9 are optional for conventional radios. The mobile radio's own microphone can be used for both transmitters when pins 8 & 9 are connected. If pins 8 & 9 are not connected, the MH-25 or MH-700 must be connected to the VXR-1000's microphone jack and used for mobile transmitting.

Connection to pins 8 & 9 are mandatory for trunked radio installations.

There are numerous programmable settings and options in the CE-22 software. Carefully review the Help files for each item to understand their functions.