VERTEX VX-2000 Interface

The following items are included in the VERTEX VX-2000 interface kit:

1. VERTEX VX-2000 interface cable assembly.
2. Cable tie.
3. 100K Resistor
4. Instruction sheet.

The following steps outline the procedure for interfacing the VERTEX VX-2000 radio to the TrakIt-20.

1. Set the TrakIt-20 up for a bench test and use the AVL Installer program to set the following operating constants in the installer table to the indicated value:

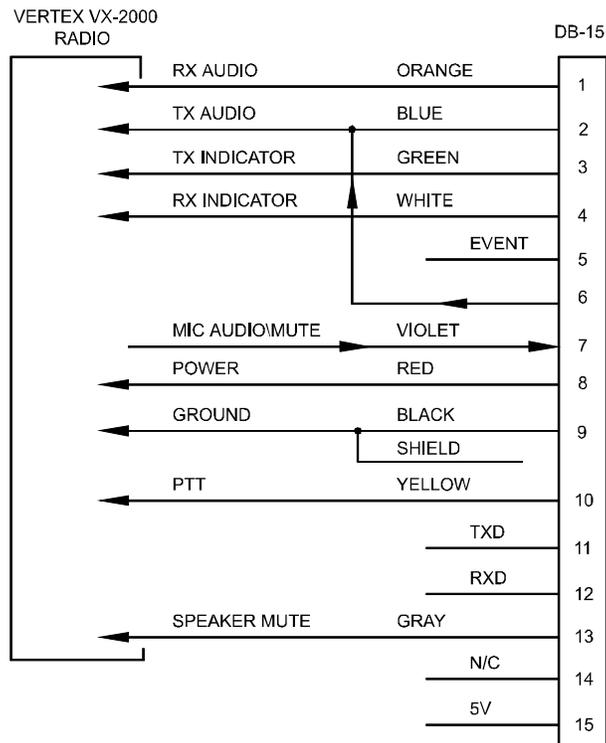 | | |
   |---|---|
   | Transmit indicator active: | High |
   | Receive indicator active: | Low |
   | PTT output active: | Low |
   | External output active: | Low |
   | Enable mic mute gate on TX | No |
   | Enable Tx indicator as event 2: | No |
   | External output mode: | Speaker mute |
   | Enable mic mute gate on TX | No |

2. Configure the following jumpers as indicated:

JP1	100K Resistor
JP4	B-C

3. Remove R49 form the TRAKIT printed circuit board.

4. Remove the top cover of the VERTEX VX-2000 radio by following instructions in the radio service manual.

5. Remove the external speaker jack from back of radio and cover the wires & connector with tape or unplug and remove it completely.

6. Insert the VERTEX VX-2000 interface cable in the slot where the speaker jack was removed with the tie strap installed on the inside of the radio as strain relief.

7. Solder the orange wire of the VERTEX VX-2000 interface cable to the left side of R 1049.

8. Cut the wire going from JP5001 pin 3 on the MIC UNIT to J1006 pin 3 on the MAIN UNIT.

9. Solder the blue wire of the VERTEX VX-2000 interface cable to the MAIN UNIT side of the wire cut in the previous step and heat shrink.

10. Solder the green wire of the VERTEX VX-2000 interface cable to the connector side of R2009 on DISPLAY 1 UNIT.
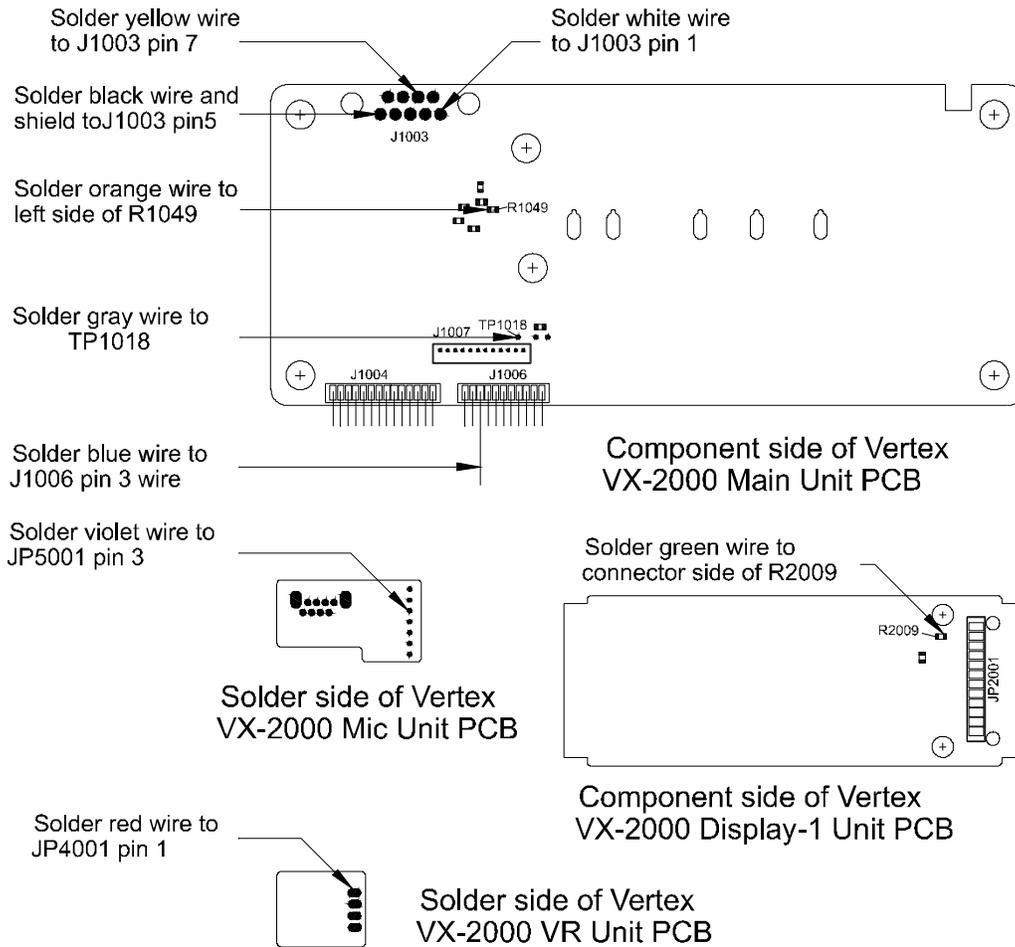
VERTEX VX-2000 Interface (cont.)

11. Solder the white wire of the VERTEX VX-2000 interface cable to pin 1 of J1003.

12. Solder the violet wire of the VERTEX VX-2000 interface cable to pin 3 of JP5001 on the MIC UNIT.

13. Solder black wire & shield of the VERTEX VX-2000 interface cable to pin 5 of J1003.

14. Solder the yellow wire of the VERTEX VX-2000 interface cable to pin 7 of J1003.

15. Solder the gray wire of the VERTEX VX-2000 interface cable to TP 1018.

16. Solder the red wire of the VERTEX VX-2000 interface cable to J4001 pin 1 on VR UNIT. (SW B+)

17. Connect the DB-15 end of the VERTEX VX-2000 interface cable to the DB-15 connector on the back of the TrakIt-20.

18. Check the TrakIt-20's audio levels by performing the alignment procedure described in this manual.

19. Re-assemble radio as needed.

VERTEX VX-2000
RADIO   DB-15

RX AUDIO	ORANGE	1
TX AUDIO	BLUE	2
TX INDICATOR	GREEN	3
RX INDICATOR	WHITE	4
	EVENT	5
		6
MIC AUDIO\MUTE	VIOLET	7
POWER	RED	8
GROUND	BLACK	9
	SHIELD	
PTT	YELLOW	10
	TXD	11
	RXD	12
SPEAKER MUTE	GRAY	13
	N/C	14
	5V	15

VERTEX VX-2000 Interface (cont.)

21. Below is a diagram for the VERTEX VX-2000 interface cable locator:

Solder yellow wire to J1003 pin 7

Solder white wire to J1003 pin 1

Solder black wire and shield toJ1003 pin5

Solder orange wire to left side of R1049

Solder gray wire to TP1018

Solder blue wire to J1006 pin 3 wire

Component side of Vertex VX-2000 Main Unit PCB

Solder violet wire to JP5001 pin 3

Solder green wire to connector side of R2009

Solder side of Vertex VX-2000 Mic Unit PCB

Component side of Vertex VX-2000 Display-1 Unit PCB

Solder red wire to JP4001 pin 1

Solder side of Vertex VX-2000 VR Unit PCB

VERTEX VX-2000 Interface Cable Kit
106-VX2000

Item	Description	Part No.	Qty.
1	HEAT SHRINK 1/16"	199-6098	2"
2	HEAT SHRINK 3/8"	199-6099	2"
3	CABLE TIE (SHORT)	200-0081	1
4	SCREW/CLIP KIT	231-0014	1
5	CONN DB15 MALE	231-0035	1
6	COVER DB15	231-0036	1
7	100 K RESISTOR	312-0003	1
8	CBL, 10 CONN 24 AWG STR	800-1115	2'