Motorola M100 Interface

The following items are included in the Motorola M100 interface kit:

1. M100 interface cable assembly.
2. Cable tie.
3. Instruction sheet.

The following steps outline the procedure for interfacing the Motorola M100 radio to the TrakIt-20.

This interface is for a M100 with a HLN9123A Logic Board.

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:

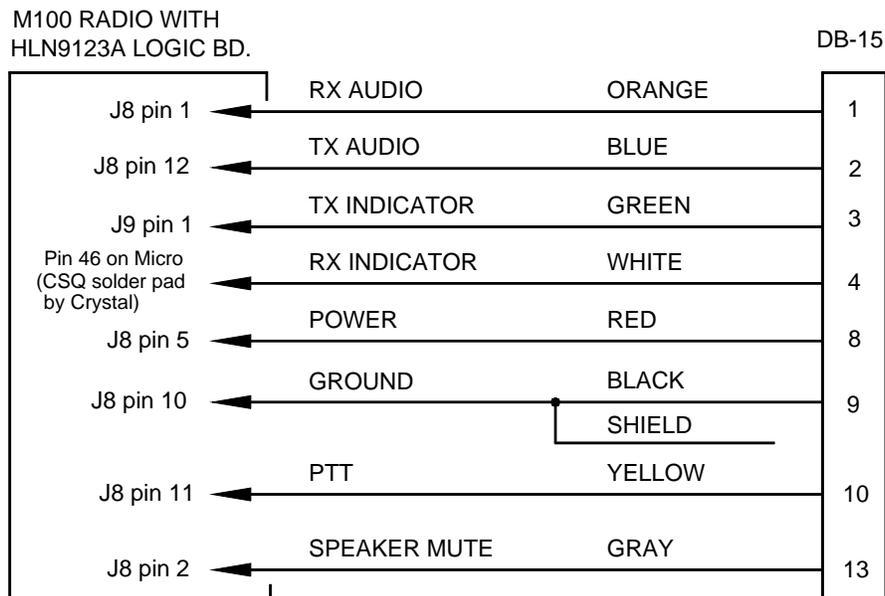 | | |
   |---|---|
   | Transmit indicator active: | Low |
   | Receive indicator active: | High |
   | PTT output active: | Low |
   | Enable Tx indicator as event 2: | No |
   | External output active: | Low |
   | External output mode: | Speaker mute |

2. Configure the following jumpers as indicated:

JP1	Removed
JP4	A-B

3. Remove the control head and the top and bottom covers of the M100 radio by following the instructions in the M100 service manual.

4. Pass all the wires from the M100 interface cable through the accessory connector hole in the radio chassis before connecting them to points internal to the radio. It maybe necessary to bend or cut the metal tab above the accessory connector on the inside of the radio.

5. Solder the orange wire of the M100 interface cable to pin 1 of J8.

6. Solder the blue wire of the M100 interface cable to pin 12 of J8.

7. Solder the green wire of the M100 interface cable to pin 1 of J9.

8. Solder the white wire of the M100 interface cable to pin 46 of Microprocessor. (there is a solder pad marked CSQ for connecting the wire)

9. Solder the red wire of the M100 interface cable to pin 5 of J8.

10. Connect the black and shield wire of the M100 interface cable to pin 10 of J8. Heat shrink any exposed portion of the shield wire.

Motorola M100 Interface (cont'd)

11. Connect the yellow wire of the M100 interface cable to pin 11 of J8.

12. Connect the gray wire of the M100 interface cable to pin 2 of J8.

13. Secure the M100 interface cable with the cable tie strap.

14. Replace the control head and the top and bottom covers of the radio.

15. Connect the DB-15 end of the M100 interface cable to the DB-15 connector on the back of the TrakIt-20.

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

M100 RADIO WITH
HLN9123A LOGIC BD.   DB-15

J8 pin 1	RX AUDIO	ORANGE	1
J8 pin 12	TX AUDIO	BLUE	2
J9 pin 1	TX INDICATOR	GREEN	3
Pin 46 on Micro (CSQ solder pad by Crystal)	RX INDICATOR	WHITE	4
J8 pin 5	POWER	RED	8
J8 pin 10	GROUND	BLACK	9
		SHIELD	
J8 pin 11	PTT	YELLOW	10
J8 pin 2	SPEAKER MUTE	GRAY	13

Motorola M100 Interface Cable Kit
106-MOTOM100

Item	Description	Part No.	Qty.
1	CABLE TIE (SHORT)	200-0081	1
2	SCREW/CLIP KIT	231-0014	1
3	CONN DB15 MALE	231-0035	1
4	COVER DB15	231-0036	1
5	CBL, 10 CONDUCTOR	800-1115	2'