

TUNING PROCEDURES

SETUP

Connect the EUT to an HP8920B using the AUDIO JACK and RF to SMA cables supplied. Connect AFI to the HP8920 AUDIO IN. Connect AFO to the HP8920 AUDIO OUT. Connect the RF cable to the HP8920 RF IN. Using the ALIGNMENT.EXE software adjust the EUT to the following specs.

	TEST ITEM	COMMAND	HP8920						SPECIFICATION		
			RX RF GENERATOR			AFO		MEASUREMENT	TARGET	MIN	MAX
			LEVEL (dBm)	FILTER (KHz)	DEVIATION (KHz)	FREQ (KHz)	OUTPUT (mV)				
	Description	Protocol Direction									
1	TCXO Frequency	USE PC TOOL	OFF	0.300	15	X	X	FREQ	848,970,000	848,970,424	848,969,576
2	Demodulation Level	USE PC TOOL	-50	0.300	15	X	X	AFI (H)	101 dbuv	98 dbuv	102 dbuv
3	Power Level 0 – Low Frequency	USE PC TOOL	OFF	0.300	15	X	X	POWER	29 dbm	27 dbm	33 dbm
	Power Level 1 – Low Frequency	USE PC TOOL	OFF	0.300	15	X	X	POWER	28 dbm	27 dbm	33 dbm
	Power Level 2 – Low Frequency	USE PC TOOL	OFF	0.300	15	X	X	POWER	27 dbm	27 dbm	33 dbm
4	Power Level 3 – Low Frequency	USE PC TOOL	OFF	0.300	15	X	X	POWER	23 dbm	21 dbm	25 dbm
5	Power Level 4 – Low Frequency	USE PC TOOL	OFF	0.300	15	X	X	POWER	19 dbm	17 dbm	21 dbm
6	Power Level 5 – Low Frequency	USE PC TOOL	OFF	0.300	15	X	X	POWER	15 dbm	12 dbm	17 dbm
7	Power Level 6 – Low Frequency	USE PC TOOL	OFF	0.300	15	X	X	POWER	11 dbm	8 dbm	13 dbm
8	Power Level 7 – Low Frequency	USE PC TOOL	OFF	0.300	15	X	X	POWER	7 dbm	5 dbm	9 dbm
9	Power Level 0 – Mid Frequency	USE PC TOOL	OFF	0.300	15	X	X	POWER	29 dbm	27 dbm	33 dbm
	Power Level 1 – Mid Frequency	USE PC TOOL	OFF	0.300	15	X	X	POWER	28 dbm	27 dbm	33 dbm
	Power Level 2 – Mid Frequency	USE PC TOOL	OFF	0.300	15	X	X	POWER	27 dbm	27 dbm	33 dbm
10	Power Level 3 – Mid Frequency	USE PC TOOL	OFF	0.300	15	X	X	POWER	23 dbm	21 dbm	25 dbm
11	Power Level 4 – Mid Frequency	USE PC TOOL	OFF	0.300	15	X	X	POWER	19 dbm	17 dbm	21 dbm
12	Power Level 5 – Mid Frequency	USE PC TOOL	OFF	0.300	15	X	X	POWER	15 dbm	12 dbm	17 dbm
13	Power Level 6 – Mid Frequency	USE PC TOOL	OFF	0.300	15	X	X	POWER	11 dbm	8 dbm	13 dbm
14	Power Level 7 – Mid Frequency	USE PC TOOL	OFF	0.300	15	X	X	POWER	7 dbm	5 dbm	9 dbm
15	Power Level 0 – High Frequency	USE PC TOOL	OFF	0.300	15	X	X	POWER	29 dbm	27 dbm	33 dbm
	Power Level 1 – High Frequency	USE PC TOOL	OFF	0.300	15	X	X	POWER	28 dbm	27 dbm	33 dbm
	Power Level 2 – High Frequency	USE PC TOOL	OFF	0.300	15	X	X	POWER	27 dbm	27 dbm	33 dbm
16	Power Level 3 – High Frequency	USE PC TOOL	OFF	0.300	15	X	X	POWER	23 dbm	21 dbm	25 dbm
17	Power Level 4 – High Frequency	USE PC TOOL	OFF	0.300	15	X	X	POWER	19 dbm	17 dbm	21 dbm
18	Power Level 5 – High Frequency	USE PC TOOL	OFF	0.300	15	X	X	POWER	15 dbm	12 dbm	17 dbm
19	Power Level 6 – High Frequency	USE PC TOOL	OFF	0.300	15	X	X	POWER	11 dbm	8 dbm	13 dbm
20	Power Level 7 – High Frequency	USE PC TOOL	OFF	0.300	15	X	X	POWER	7 dbm	5 dbm	9 dbm
21	Wide band Modulation Deviation – Low Frequency	USE PC TOOL	OFF	0.300	15	1	3,000	DEVIATION	13 khz	12.5 khz	13.5 khz
22	Wide band Modulation Deviation – Mid Frequency	USE PC TOOL	OFF	0.300	15	1	3,000	DEVIATION	13 khz	12.5 khz	13.5 khz
23	Wide band Modulation Deviation – High Frequency	USE PC TOOL	OFF	0.300	15	1	3,000	DEVIATION	13 khz	12.5 khz	13.5 khz
24	ST Level – Low Frequency	USE PC TOOL	OFF	0.300	15	X	X	DEVIATION	8 khz	7.5 khz	8.5 khz
25	ST Level – Mid Frequency	USE PC TOOL	OFF	0.300	15	X	X	DEVIATION	8 khz	7.5 khz	8.5 khz
26	ST Level – High Frequency	USE PC TOOL	OFF	0.300	15	X	X	DEVIATION	8 khz	7.5 khz	8.5 khz
27	SAT Level – Low Frequency	USE PC TOOL	OFF	<.020	6	X	X	DEVIATION	2 khz	1.9 khz	2.2 khz
28	SAT Level – Mid Frequency	USE PC TOOL	OFF	<.020	6	X	X	DEVIATION	2 khz	1.9 khz	2.2 khz
29	SAT Level – High Frequency	USE PC TOOL	OFF	<.020	6	X	X	DEVIATION	2 khz	1.9 khz	2.2 khz
30	MICIN Deviation – Low Frequency	USE PC TOOL	OFF	C Mess	99	1	50	DEVIATION	2.9 khz	2.5 khx	3.3 khx
31	MICIN Deviation – Mid Frequency	USE PC TOOL	OFF	C Mess	99	1	50	DEVIATION	2.9 khz	2.5 khx	3.3 khx
32	MICIN Deviation – High Frequency	USE PC TOOL	OFF	C Mess	99	1	50	DEVIATION	2.9 khz	2.5 khx	3.3 khx
33	Tone In Deviation – Low Frequency	USE PC TOOL	OFF	0.300	3	X	X	DEVIATION	8.6 khz	8 khz	9 khz
34	Tone In Deviation – Mid Frequency	USE PC TOOL	OFF	0.300	3	X	X	DEVIATION	8.6 khz	8 khz	9 khz
35	Tone In Deviation – High Frequency	USE PC TOOL	OFF	0.300	3	X	X	DEVIATION	8.6 khz	8 khz	9 khz
36	Compressor Linearity	USE PC TOOL						DON'T ADJUST			
37	Expander Linearity	USE PC TOOL						DON'T ADJUST			
38	-110 dBm input level capture	USE PC TOOL	-100	X	X	X	X		NA	NA	NA
39	-100 dBm input level capture	USE PC TOOL	-90	X	X	X	X		NA	NA	NA
40	-90 dBm input level capture	USE PC TOOL	-80	X	X	X	X		NA	NA	NA