DETAILED TECHNICAL SPEC

MODEL : H61056

DOCUMENT NO : H61056 DTS_Ver1.0

Changing History

Rev	Changing Details	Release Date
1.0	1st Release	22 Sep 2006

I. STANDARD MEASUREMENT CONDITION:

A.	Standard DC Power		
	4 AAA internal batteries		6.0 Vdc
B.	Test Temperature		25°C ±5°C
C.	Standard Audio Frequency		1KHz
D.	Standard RF Input		1mV
E.	Standard Ref. Modulation		
	Audio		± 1.5 KHz
	CTCSS		± 0.4 KHz
F.	Standard Ref. Audio Output		40mW
G.	Standard Ref. Audio Load @ SPEAKER		24 Ω Resistive
H.	Antenna Impedance		50 Ω
I.	Measurement Channel	CH 1	462.56250MHz
		CH 14	467.71250MHz

J. Channel Assignment

CH	1 = 462.56250MHz	15= 462.55000MHz
	2 = 462.58750MHz	16= 462.57500MHz
	3 = 462.61250MHz	17= 462.60000MHz
	4 = 462.63750MHz	18= 462.62500MHz
	5 = 462.66250MHz	19= 462.65000MHz
	6 = 462.68750MHz	20= 462.67500MHz
	7 = 462.71250MHz	21= 462.70000MHz
	8 = 467.56250MHZ	22= 462.72500MHZ
	9 = 467.58750MHZ	
	10= 467.61250MHZ	
	11= 467.63750MHZ	
	12= 467.66250MHZ	
	13= 467.68750MHZ	
	14= 467.71250MHZ	

K. CTCSS Tone Frequencies

CH1 = 67.0Hz	34 = 218.1Hz	67 = 116.75 + 183.0Hz
2 = 71.9Hz	35 = 225.7Hz	68 = 116.75 + 189.5Hz
3 = 74.4Hz	36 = 233.6Hz	69 = 120.875 + 148.75Hz
4 = 77.0Hz	37 = 241.8Hz	70 = 120.875 + 154.0Hz
5 = 79.7Hz	38 = 250.3Hz	71 = 120.875 + 159.5Hz
6 = 82.5Hz	39 = 109.0 + 134.125Hz	72 = 120.875 + 165.0Hz
7 = 85.4Hz	40 = 109.0 + 138.875Hz	73 = 120.875 + 170.875Hz
8 = 88.5Hz	41 = 109.0 + 143.75Hz	74 = 120.875 + 176.875Hz
9 = 91.5Hz	42 = 109.0 + 148.75Hz	75 = 120.875 + 183.0Hz
10 = 94.8Hz	43 = 109.0 + 154.0Hz	76 = 120.875 + 189.5Hz
11 = 97.4Hz	44 = 109.0 + 159.5Hz	77 = 125.125 + 154.0Hz
12 = 100.0Hz	45 = 109.0 + 165.0Hz	78 = 125.125 + 159.5Hz
13 = 103.5Hz	46 = 109.0 + 170.875Hz	79 = 125.125 + 165.0Hz
14 = 107.2Hz	47 = 109.0 + 176.875Hz	80 = 125.125 + 170.875Hz
15 = 110.9Hz	48 = 109.0 + 183.0Hz	81 = 125.125 + 176.875Hz
16 = 114.8Hz	49 = 109.0 + 189.5Hz	82 = 125.125 + 183.0Hz
17 = 118.8Hz	50 = 112.875 + 138.875Hz	83 = 125.125 + 189.5Hz
18 = 123.0Hz	51 = 112.875 + 143.75Hz	84 = 129.5 + 159.5Hz
19 = 127.3Hz	52 = 112.875 + 148.75Hz	85 = 129.5 + 165.0Hz
20 = 131.8Hz	53 = 112.875 + 154.0Hz	86 = 129.5 + 170.875Hz
21 = 136.5Hz	54 = 112.875 + 159.5Hz	87 = 129.5 + 176.875Hz
22 = 141.3Hz	55 = 112.875 + 165.0Hz	88 = 129.5 + 183.0Hz
23 = 146.2Hz	56 = 112.875 + 170.875Hz	89 = 129.5 + 189.5Hz
24 = 151.4Hz	57 = 112.875 + 176.875Hz	90 = 134.125 + 165.0Hz
25 = 156.7Hz	58 = 112.875 + 183.0Hz	91 = 134.125 + 170.875Hz
26 = 162.2Hz	59 = 112.875 + 189.5Hz	92 = 134.125 + 176.875Hz
27 = 167.9Hz	60 = 116.75 + 143.75Hz	93 = 134.125 + 183.0Hz
28 = 173.8Hz	61 = 116.75 + 148.75Hz	94 = 134.125 + 189.5Hz
29 = 179.9Hz	62 = 116.75 + 154.0Hz	95 = 138.875 + 170.875Hz
30 = 186.2Hz	63 = 116.75 + 159.5Hz	96 = 138.875 + 176.875Hz
31 = 192.8Hz	64 = 116.75 + 165.0Hz	97 = 138.875 + 183.0Hz
32 = 203.5Hz	65 = 116.75 + 170.875Hz	98 = 138.875 + 189.5Hz
33 = 210.7Hz	66 = 116.75 + 176.875Hz	99 = 143.75 + 176.875Hz
		00 = 0.0Hz

L. Measurement CTCSS Frequency CH 12 (100 Hz)

II. GENERAL SPECIFICATION:

Note: All test are without CTCSS unless specified.

A. RECEIVER:	**UNIT**	**NOMINAL**	**LIMIT**
1. SENSITIVITY			
WITHOUT CTCSS (12 dB SINAD)	dBm	-119	-117
WITH CTCSS (12 dB SINAD)	dBm	-117	-115
2. COUPLING SENSITIVITY (by QA fixture)	dBm		TBD
3. RATED AUDIO OUTPUT @ 5% THD (24R LOAD)	mW	60	50
4. MAXIMUM S/N RATIO @ 1 mV	dB	42	38
5. SQUELCH			
a) Without CTCSS	dB SINAD	10	6-13
b) With CTCSS	dB SINAD	10	6-13
6. AUDIO FREQUENCY RESP.			
@ 500 HZ	dB	4	±2
@ 2500 HZ	dB	-11	±2

B. TRANSMITTER :	**UNIT**	**NOMINAL**	**LIMIT**
1. CARRIER POWER	dBm	19.3	24.5
2. RADIATED POWER (by QA fixture)	dBm		TBD
3. CARRIER FREQ. TOLERANCE	±HZ	300	1000
4. MODULATION LIMITING (@150mV I/P)			
for PCBA	±KHz	2.1	2.0-2.2
for Casing & QA	±KHz	2.1	</= 2.2
5. AUDIO FREQUENCY RESPONSE			
@ 500 HZ	dB	-7.5	±2
@ 2500 HZ	dB	-2	±2
6. AUDIO DISTORTION @1.5 KHz DEV.	%	3	5
7. HUM AND NOISE RATIO	dB	38	35
8. MIC SENS. FOR 10mV	KHz	1.2	0.9~1.4
9. CALL SIGNAL DEVIATION	KHz	1.4	1.1~1.5
10. CTCSS deviation	KHz	0.5	0.4~0.8
11. CTCSS FREQ ERROR	%	±0.2	±0.3

12. MIC sens to activate TX in vox mode			
a) at vox sens level 1	mv	13	±2
b) at vox sens level 2	mv	9	±2
c) at vox sens level 3	mv	4	±2

III. POWER SUPPLY :	**UNIT**	**NOMINAL**	**LIMIT**
1. BATTERY LIFE (5:5:90 RATIO)	HR	---	>24
2. STDBY CURRENT	mA	25	40
3. CURRENT DRAIN			
@ RATED AUDIO	mA	100	150
@ RATED TX	mA	350	400
@ POWER SAVE	mA	10	15
@ KEEP ALIVE (unit off)	uA	150	600
4. BATTERY LOW INDICATION			
☒	V	4.8	±0.1
☐	V	4.6	±0.1
☐ Flash	V	4.3	±0.1