

## MEASUREMENT CONDITION

### 1) STANDARD VOLTAGE

HANDSET

DC 3.6 V  $\pm$  0.1 V

BASE UNIT

AC/DC 120 V  $\pm$  3 V 60 Hz

/9 V  $\pm$  1 V 300mA

25 °C  $\pm$  2 °C

### 2) TEMPERATURE:

### 3) PERFORMANCE REQUIREMENTS

#### A) STANDARD VOLTAGE

REMOTE UNIT

DC 3.5 V TO 4.2 V

BASE UNIT

AC 120 V  $\pm$  12 V

25  $\pm$  15 °C

#### B) TEMPERATURE

#### 4) 2.4G RF Freq Table

| CHANNEL | BASE     |          | CHANNEL | HANDSET  |          |
|---------|----------|----------|---------|----------|----------|
|         | TRANSMIT | RECEIVE  |         | TRANSMIT | RECEIVE  |
|         | MHz      | MHz      |         | MHz      | MHz      |
| 1       | 2403.050 | 2474.000 | 1       | 2474.000 | 2403.050 |
| 2       | 2403.100 | 2474.050 | 2       | 2474.050 | 2403.100 |
| 3       | 2403.150 | 2474.100 | 3       | 2474.100 | 2403.150 |
| 4       | 2403.200 | 2474.150 | 4       | 2474.150 | 2403.200 |
| 5       | 2403.250 | 2474.200 | 5       | 2474.200 | 2403.250 |
| 6       | 2403.300 | 2474.250 | 6       | 2474.250 | 2403.300 |
| 7       | 2403.350 | 2474.300 | 7       | 2474.300 | 2403.350 |
| 8       | 2403.400 | 2474.350 | 8       | 2474.350 | 2403.400 |
| 9       | 2403.450 | 2474.400 | 9       | 2474.400 | 2403.450 |
| 10      | 2403.500 | 2474.450 | 10      | 2474.450 | 2403.500 |
| 11      | 2403.550 | 2474.500 | 11      | 2474.500 | 2403.550 |
| 12      | 2403.600 | 2474.550 | 12      | 2474.550 | 2403.600 |
| 13      | 2403.650 | 2474.600 | 13      | 2474.600 | 2403.650 |
| 14      | 2403.700 | 2474.650 | 14      | 2474.650 | 2403.700 |
| 15      | 2403.750 | 2474.700 | 15      | 2474.700 | 2403.750 |
| 16      | 2403.800 | 2474.750 | 16      | 2474.750 | 2403.800 |
| 17      | 2403.850 | 2474.800 | 17      | 2474.800 | 2403.850 |
| 18      | 2403.900 | 2474.850 | 18      | 2474.850 | 2403.900 |
| 19      | 2403.950 | 2474.900 | 19      | 2474.900 | 2403.950 |
| 20      | 2404.000 | 2474.950 | 20      | 2474.950 | 2404.000 |
| 21      | 2404.050 | 2475.000 | 21      | 2475.000 | 2404.050 |
| 22      | 2404.100 | 2475.050 | 22      | 2475.050 | 2404.100 |
| 23      | 2404.150 | 2475.100 | 23      | 2475.100 | 2404.150 |
| 24      | 2404.200 | 2475.150 | 24      | 2475.150 | 2404.200 |
| 25      | 2404.250 | 2475.200 | 25      | 2475.200 | 2404.250 |
| 26      | 2404.300 | 2475.250 | 26      | 2475.250 | 2404.300 |
| 27      | 2404.350 | 2475.300 | 27      | 2475.300 | 2404.350 |
| 28      | 2404.400 | 2475.350 | 28      | 2475.350 | 2404.400 |
| 29      | 2404.450 | 2475.400 | 29      | 2475.400 | 2404.450 |
| 30      | 2404.500 | 2475.450 | 30      | 2475.450 | 2404.500 |
| 31      | 2404.550 | 2475.500 | 31      | 2475.500 | 2404.550 |
| 32      | 2404.600 | 2475.550 | 32      | 2475.550 | 2404.600 |
| 33      | 2404.650 | 2475.600 | 33      | 2475.600 | 2404.650 |
| 34      | 2404.700 | 2475.650 | 34      | 2475.650 | 2404.700 |
| 35      | 2404.750 | 2475.700 | 35      | 2475.700 | 2404.750 |
| 36      | 2404.800 | 2475.750 | 36      | 2475.750 | 2404.800 |
| 37      | 2404.850 | 2475.800 | 37      | 2475.800 | 2404.850 |
| 38      | 2404.900 | 2475.850 | 38      | 2475.850 | 2404.900 |
| 39      | 2404.950 | 2475.900 | 39      | 2475.900 | 2404.950 |
| 40      | 2405.000 | 2475.950 | 40      | 2475.950 | 2405.000 |

## HANDSET

### 1) TRANSMITTER:

| DESCRIPTION                                          |                           | NOMINAL | LIMITS | UNITS |
|------------------------------------------------------|---------------------------|---------|--------|-------|
| TX POWER                                             | 3.8V power supply         | 0       | ±3     | dBm   |
|                                                      | between Channel           | ±2      | ±3     | dB    |
|                                                      | voltage from 3.4V to 4.2V | ±2      | ±3     | dB    |
| FREQUENCY TOLERANCE                                  |                           | ±4      | ±8     | PPm   |
| TX Code DEV                                          |                           | 10      | ±1     | kHz   |
| TX Audio DEV (I/P 1kHz 18mV)                         |                           | 5       | ±0.2   | kHz   |
| TX Audio DEV variation of difference between channel |                           | ±0.2    | ±0.3   | kHz   |
| Max TX Audio DEV (I/P 2.5kHz 180mV)                  |                           | 8       | 10     | kHz   |
| Tx modulation Distortion                             |                           | ≈3      | ≈5     | %     |

### 2) RECEIVER:

| DESCRIPTION                |  | NOMINAL | LIMITS | UNITS |
|----------------------------|--|---------|--------|-------|
| 12dB SINAD SENSITIVITY     |  | <-106   | <-106  | dBm   |
| Audio O/P Distortion       |  | ≈3      | ≈5     | %     |
| Audio O/P Level (5kHz DEV) |  | 65      | ±10    | mV    |
| Audio O/P S/N Ratio        |  | >55     | >50    | dB    |

### 3) POWER CONSUMPTION

| DESCRIPTION        |            | NOMINAL | LIMITS | UNITS |
|--------------------|------------|---------|--------|-------|
| ST-BY MODE CURRENT | AVERAGE    | < 5     | < 5    | mA    |
| TALK MODE CURRENT  | MID-Volume | 120     | 130    | mA    |

### 4) LOW BATTERY DETECT VOLTAGE

| DESCRIPTION               |  | NOMINAL | LIMITS    | UNITS |
|---------------------------|--|---------|-----------|-------|
| ALARM VOLTAGE (TALK MODE) |  | 3.3     | 3.1-3.5   | V     |
| NOT ALARM VOLTAGE         |  | 3.6     | 3.45-3.65 | V     |

## BASE UNIT

### 1) TRANSMITTER:

| DESCRIPTION                                          |  | NOMINAL | LIMITS | UNITS |
|------------------------------------------------------|--|---------|--------|-------|
| TX POWER                                             |  | 0       | ±3     | dBm   |
| FREQUENCY TOLERANCE                                  |  | ±4      | ±8     | PPm   |
| TX Code DEV                                          |  | 10      | ±1     | kHz   |
| TX Audio DEV (I/P 1kHz 300mV)                        |  | 5       | ±0.2   | kHz   |
| TX Audio DEV variation of difference between channel |  | ±0.2    | ±0.3   | kHz   |
| Max TX Audio DEV (I/P 2.5kHz 3V)                     |  | 8       | 10     | kHz   |
| Tx modulation Distortion                             |  | ≈3      | ≈5     | %     |

### 2) RECEIVER:

| DESCRIPTION                |  | NOMINAL | LIMITS | UNITS |
|----------------------------|--|---------|--------|-------|
| 12dB SINAD SENSITIVITY     |  | <-108   | <-108  | dBm   |
| Audio O/P Distortion       |  | ≈3      | ≈5     | %     |
| Audio O/P Level (5kHz DEV) |  | 450     | ±10    | mV    |
| Audio O/P S/N Ratio        |  | >50     | >50    | dB    |

### 3) POWER CONSUMPTION:

| DESCRIPTION              |  | NOMINAL | LIMITS | UNITS |
|--------------------------|--|---------|--------|-------|
| ACTIVE CURRENT (DC JACK) |  | 120     | +/-10  | mA    |

4) TELEPHONE LINE (PULSE)

| DESCRIPTION                    | NOMINAL | LIMITS | UNITS |
|--------------------------------|---------|--------|-------|
| MAKE RAITO (at 20mA/80mA)      | 40      | 38~42  | %     |
| DIAL PULSE RATE (at 20mA/80mA) | 10      | ±1     | PPS   |
| TIME BEAK FLASH (at 20mA/80mA) | 600     | ±50    | mS    |

5) TELEPHONE LINE (DTMF):

| DESCRIPTION               | NOMINAL | LIMITS | UNITS |
|---------------------------|---------|--------|-------|
| HIGH GROUP (at 20mA/80mA) | -5      | ±2     | dBm   |
| LOW GROUP (at 20mA/80mA)  | -7      | ±2     | dBm   |
| H/L GROUP LEVEL TWIST     | 2       | ±2     | dB    |
| FREQUENCY TOLERANCE       | =1      | =1.5   | %     |

6) CID CW

| DESCRIPTION              |                         | NOMINAL   | LIMITS | UNITS |
|--------------------------|-------------------------|-----------|--------|-------|
| FREQUENCY VARIATION      | Mark                    | 1200      | ±12    | Hz    |
|                          | Space                   | 2200      | ±22    | Hz    |
| BAUD RATE                |                         | 1200      | ±12    | BPS   |
| FSK DETECTOR SENSITIVITY | Mark                    | -12 ~ -38 |        | dBm   |
|                          | Space                   | -12 ~ -39 |        | dBm   |
| NOISE IMMUNITY           | Noise below 200Hz and 3 | -20       |        | dB    |
|                          | Noise between 200Hz and | -25       |        | dB    |
| CAS DETECTOR             |                         | PASS      |        |       |
| OFF-HOOK FSK RECEPTION   |                         | PASS      |        |       |

7) MEMORY AND REDIAL:

| DESCRIPTION     | NOMINAL | LIMITS | UNITS    |
|-----------------|---------|--------|----------|
| DIGIT OF REDIAL | 32      |        | DIGIT    |
| DIGIT OF MEMORY | 16      |        | DIGIT    |
| MEMORY NUMBER   | 40      |        | Location |

8) RINGER I/P ( Ringer patter 2 second ON and 4 second off )

| DESCRIPTION                     |   | NOMINAL                      | LIMITS   | UNITS  |
|---------------------------------|---|------------------------------|----------|--------|
| a) RINGER DETECTOR LEVEL        |   | 30                           | 30 to 35 | Vr.m.s |
| b) NOT RINGER LEVEL             |   | 25 ~ 30                      | 20 ~ 30  | Vr.m.s |
| c) RINGER FREQUENCY             |   | 15 to 75                     | 15 to 75 | Hz     |
| d) RINGER OUTPUT LEVEL (1 foot) | H | 80dBA                        | >70dBA   | dBA    |
|                                 | L | 65dBA                        | >60dBA   | dBA    |
| e)                              |   | 2 SECOND ON AND 4 SECOND OFF |          |        |

9) OTHER:

| DESCRIPTION                                  | NOMINAL | LIMITS | UNITS |
|----------------------------------------------|---------|--------|-------|
| SAFE IMMUNITY (1700V DC 0.5mA 1 Second)      | PASSED  |        |       |
| ACOUSTIC EST TOLR : 0 kft (at Normal Volume) | =-40    | =-53   | dB    |
| ACOUSTIC EST ROLR : 0 kft (at Normal Volume) | =41     | =51    | dB    |
| ACOUSTIC EST SOLR : 0 kft (at Normal Volume) | = 3     | =99.9  | dB    |
| TRANSMITT FREQUENCY RESPONSE                 | PASSED  |        |       |
| RECEIVE FREQUENCY RESPONSE                   | PASSED  |        |       |

NOTE: Volume High Low Difference =12dB