

## **SECTION 1. TEST METHOD**

### **1.1 HANDSET**

#### **1. Instrument for Test**

- 1) MULTIMETER
- 2) AC VOLT METER (ACVM)
- 3) AUDIO FREQUENCY GENERATOR (600ohm OUTPUT)
- 4) STORAGE OSCILLOSCOPE
- 5) TELEPHONE ANALYZER  
or 20Hz RING GENERATOR with ADJUSTABLE OUTPUT LEVEL
- 6) R/S DIGITAL RADIOCOMMUNICATION TESTER (CMD60)  
or HP8932A(B) DECT Test Set

## 2. Standard Test Condition

### 1) STANDARD VOLTAGE

(1) BASESET UNIT ..... INPUT : AC 230V  $\pm$  10%, 50Hz  
 OUTPUT: DC 6V 200mA  
 AC 9V 100mA

(2) HANDSET UNIT ..... DC 3.6  $\pm$  0.1V

2) TEMPERATURE ..... 25  $\pm$  5°C

### 3) CHANNEL FREQUENCY

<u>CHANNEL</u>	<u>FREQUENCY</u>
0 -----	1897.344 MHz
1 -----	1895.616 "
2 -----	1893.888 "
3 -----	1892.160 "
4 -----	1890.432 "
5 -----	1888.704 "
6 -----	1886.976 "
7 -----	1885.248 "
8 -----	1883.520 "
9 -----	1881.792 "

4) MODULATION ..... GFSK Bbt = 0.5

5) CHANNEL MULTIPLEX ..... TDMA

6) DUPLEX METHOD ..... TDD

7) TELEPHONE LINE IMPEDANCE ..... 600 $\Omega$

8) CHANNEL GRID ..... 1.728MHz

9) BIT RATE ..... 1152Kbps

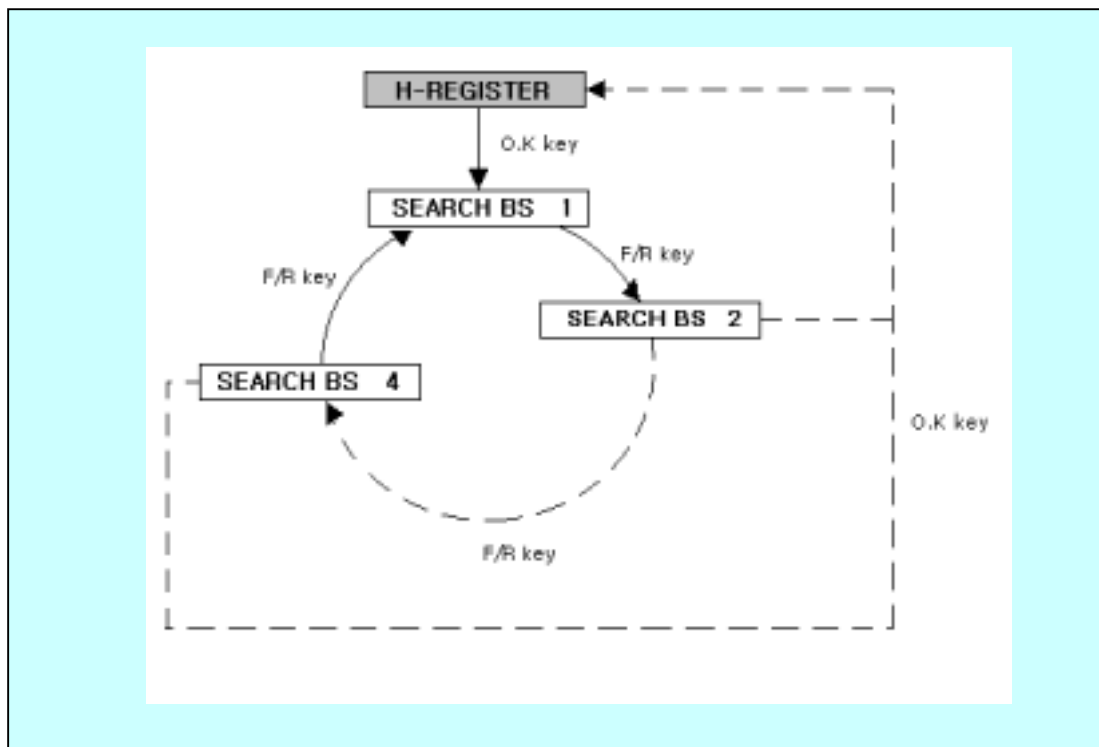
10) VOICE CODING ..... ADPCM

11) TRANSMITTED POWER ..... 250mW(Peak)

### 3. Register of Handset

- 1) Press the **<Paging Key>** in Base more than 15 secs until **beep sound** is heard.  
-. After a reset of the Base, the Base is set automatically to register mode.
- 2) Press the **[F/R]** key on the **Idle Mode** and select the **“H-REGISTER”** Display
- 3) Press the **[O.K]** key on the **“H-REGISTER”** Display and select the **“H-REGISTER”** Menu.
- 4) **“SEARCH BS 1”** is displayed. Press the **[F/R]** key, the Baset Number changes from 1 to 4. Searching Baset Number is displayed, select after pressing the **[O.K]** key.
- 5) After the Handset automatically searches, if the **RFPI Code** is displayed, the **“PIN : “** is displayed. This RFPI Code is different per a Handset.
- 6) If the **“PIN: ”** is displayed, input the PIN Code. After inputting PIN Code 4(four) digits(default : 1590), press the **[O.K]** key.
- 7) Returned to the **“H-REGISTER”** Menu.

Figure 1 Register Function Flow



## 4. Entering TEST MODE

### 1) Handset test mode


- (1) Press the power key and make power off.
- (2) The [ ] ~~key~~ must be pressed and then power key pressed at the same time.
- (3) 1 → T6 2 → T10 is displayed.  
-. It means that T6 is TBR6 mode and T10 is TBR10 mode.
- (4) Press the number 1 to enter TBR6 test mode.
- (5) If test mode made a success, valid tone sounds and antenna symbol displayed.
- (6) When you want to escape the test mode, press the power key.

### 2) Base test mode

- (1) Pull out the power connection cable.
- (2) Press the paging key, and then connect the power adaptor cable.
- (3) At this time, you must press the paging key continuously during about 5~6 seconds.
- (4) And then you can hear the bell sound.
- (5) If you hear the bell sound, you detach the paging key.
- (6) And then test mode Entered automatically.
- (7) When you want to escape the test mode, pull out the power connection cable.

## 5. Test for Handset

### 1) Preparation

- (1) Adjust the voltage of power supply to DC 3.6V.
- (2) The [ ] key  must be pressed and turn the power on simultaneously.
- (3) 1→T6 2→T10 is displayed, and press the number 1 to enter TBR6 test mode.  
\* Disassemble the antenna.
- (4) Connect 50Ω coaxial cable to antenna part of RF board.
- (5) Connect the coaxial cable to DIGITAL RADIOCOMMUNICATION TESTER (CMD60).

### 2) Check the below items of the each channel and slot.

- (1) TX Frequency Accuracy :  $\pm 50\text{KHz}$ .
- (2) Frequency Deviation Limit :  $\pm 202 \sim \pm 403\text{KHz}$
- (3) Frequency Drift :  $\pm 10\text{KHz}$
- (4) Jitter :  $<1\mu\text{sec}$
- (5) NTP (Normal Transmitter Power) :  $23\pm 2\text{dBm}$
- (6) Bit Error Test : 0.001% (TX Level : -83dBm)
- (7) Power Time Mask (Rise/ Middle/ Fall) : Pass

### 3) Test for Low Battery

- (1) Turn the power supply switch off/on.
- (2) Decrease the voltage to check that the point which Beep tone is heard below  $\text{DC } 3.4\pm 0.1\text{V}$ .

## 6. Test for Basetest

### 1) Preparation

- (1) Adjust the voltage of power supply to 6V DC 200mA.
- (2) Press the paging key, and then supply the power.
- (3) At this time, you must press the paging key continuously during about 5~6 seconds. and then you can hear the bell sound. If you hear the bell sound, you detach the paging key.  
\* Disassemble the antenna.
- (4) Connect 50 $\Omega$  coaxial cable to antenna part of RF board.
- (5) Connect the coaxial cable to DIGITAL RADIOCOMMUNICATION TESTER (CMD60).

### 2) Check the below items of the each channel and slot.

- (1) TX Frequency Accuracy :  $\pm 50\text{KHz}$ .
- (2) Frequency Deviation Limit :  $\pm 202 \sim \pm 403\text{KHz}$
- (3) Frequency Drift :  $\pm 10\text{KHz}$
- (4) Jitter :  $<1\mu\text{sec}$
- (5) NTP (Normal Transmitter Power) :  $23 \pm 2\text{dBm}$
- (6) Bit Error Test : 0.001% (TX Level : -83dBm)
- (7) Power Time Mask (Rise/ Middle/ Fall) : Pass

### 3) Test for Ring

- (1) Set the normal mode by entering power to base and handset.
- (2) Adjust ring output Telephone Analyzer to 20Hz, 38Vrms and connect base to tel. line.
- (3) Check the ring is occurred in Ringer of handset when the output of ring is started in Telephone Analyzer.