

## **SECTION 1. TEST METHOD**

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

- 1) DECT TEST SET(HP 8923B or CMD60)
- 2) MULTIMETER
- 3) TELEPHONE ANALYZER
- 4) POWER SUPPLY
- 5) STORAGE OSCILLOSCOPE
- 6) FREQUENCY COUNTER

## 2. Standard Test Condition

### 1) STANDARD VOLTAGE

- (1) BASESET UNIT ..... AC 230V  $\pm$  10%(50Hz)  
 (2) HANDSET UNIT ..... DC 2.5  $\pm$  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 ..... 1,152Kbps

### 10) VOICE CODING ..... ADPCM

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

### 3. Register of Handset

- 1) Before handset registration, press base' **<Paging> key** more than 3 sec.  
And set base to registration mode.
- 2) In idle mode, using the **[UP/DOWN] key** situate cursor to **"SYSTEM"**.
- 3) After pressing **[OK] key**, System' sub menu is displayed on LCD. And situate cursor to **"REGISTER"**. Press **[OK] key** again and then input Base' "NO" using **[UP/DOWN] key**.
- 4) When press **[OK] key** again, **"ENTER AC"** is displayed. After that, input Base' PIN code, press **[OK] key** and **"Searching"** is displayed and search for base in registration mode.
- 5) If got right RFPI, press **[OK] key** and registration is completed after success tone.
- 6) If got not right RFPI, using **[UP/DOWN] key** research RFPI. When got right RFPI, press **[OK] key** and registration is completed after success tone.

\* Note :

- The Pin Number of Base : "00000"(Default)
- Maximum 6 handset registration to one base / maximum 4 base registration to one handset.

## 4. Entering TEST MODE of Handset

### 1) Production Test Mode

- (1) Press the power key and make power off.
- (2) The Redial Key and Intercom Key must be pressed at the same time and then press Power key.
- (3) In the first line on LCD, Software version, date are displayed, in the second line on LCD, "OSC ADUJUST" is displayed.

### 2) Oscillator Trimming Mode(10.368MHz)

- (1) Connect the Test Point(SYRI) to Frequency Counter.
- (2) In production test mode, press [OK] key in "OSC ADUJUST".
- (3) Using [UP/DOWN] key, control Oscillator.
- (4) After control, press [OK] key.
  - To change Capacitance much, press [4] button using [UP/DOWN] key.
  - To change Capacitance little , press [1] button using [UP/DOWN] key.

#### \* NOTE :

After oscillator trimming, take out the battery in handset or power off.

### 3) CTR06 Test Mode

- (1) Press the power key and make power off.
- (2) The [3]+[9] button must be pressed at the same time and then press Power key.
- (3) The handset is scanning RFPI' "0000000000" base and synchronizes.

#### 4) All Clear Mode

-. All clear mode is to input default data to EEPROM.

(1) Press the power key and make power off.

(2) Pressing [7] and [9] button at the same time, enter power key.

(3) At the handset, "beep beep beep" sounds low.

\* NOTE:

At handset' all clear mode, all data except IPEI and oscillator trimming value is set to default.

## 5. Entering TEST MODE of Base

### 1) Production Test Mode

- (1) Press the power key and make power off.
- (2) Pressing paging button, power on.
- (3) After 3 sec., Base' call LED is blinking and then release paging button.

### 2) Oscillator Trimming Mode(10.368MHz)

- (1) Connect TEST POINT(SYRI) to FREQUENCY COUNTER.
- (2) At production test mode, press paging button 2 times short.(TX CW Mode)
- (3) Press paging button long again.( call LED' blinking stops)
- (4) When press paging button 1 times short, capacitance begins at "0".
- (5) When try to change capacitance to 4pF, press paging button long.  
When try to change capacitance little, press paging button short.
- (6) LED is blinking short when it recognizes long or short paging button.
- (7) This mode is always set from high frequency to low frequency. When lowered less than wanting default, follow upper process again.
- (8) Whenever pressing paging button, capacitance is saved and so there is no any save button.

\* NOTE: After oscillator trimming, take out base' adapter or power off.

### 3) CTR06 Test Mode

- (1) Press the power key and make power off.
- (2) Pressing paging button, power on.
- (3) After 3 sec., LED is blinking and then release paging button.

#### 4) All Clear Mode

- All clear mode is to input default data to EEPROM.

(1) Press the power key and make power off.

(2) Pressing paging button, power on.

(3) After 3 sec., LED is blinking and then release paging button.

(4) Press paging button more than 3 sec. And call' LED blinking is "ON".  
After confirmation tone, this mode is set.

(5) After completion, take out adapter or power off.

#### \* NOTE:

At handset' all clear mode, all E2PROM data except RFPI and oscillator trimming value is set to default.

## 6. Test for Handset

### 1) Preparation

- (1) Connect 50 $\Omega$  coaxial cable to antenna part of RF board.
- (2) Adjust the voltage of power supply to DC 2.5V.
- (3) The [3]+[9] button must be pressed and turn the power on simultaneously.
- (4) Connect the coaxial cable to DECT TEST SET(HP8923B).

### 2) Check the below items of the CTR06(Channel 0,5,9).

- (1) TX Frequency Accuracy :  $\pm 50\text{KHz}$ .
- (2) Frequency Deviation Limit :  $\pm 202 \sim \pm 403\text{KHz}$
- (3) Frequency Drift :  $\pm 40\text{KHz/ms}$
- (4) Jitter(SLOT to SLOT) :  $< \pm 1\mu\text{sec}$
- (5) NTP (Normal Transmitter Power) :  $22 \pm 2\text{dBm}$
- (6) Bit Error Test(RX Sensitivity) : 0.1% (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 DC  $2.1 \pm 0.1\text{V}$  .



## 7. Test for Baseset

### 1) Preparation

- (1) Connect 50 $\Omega$  coaxial cable to antenna part of RF board.
- (2) Adjust the voltage of power supply to 9V DC/150, 500mA.
- (3) Press the paging key, and then supply the power.
- (4) Connect the coaxial cable to DECT TEST SET(HP8923B).

### 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 :  $\pm 40\text{KHz/ms}$
- (4) Jitter(SLOT to SLOT) :  $< \pm 1\mu\text{sec}$
- (5) NTP (Normal Transmitter Power) :  $22 \pm 2\text{dBm}$
- (6) Bit Error Test(RX Sensitivity) : 0.1% (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, 30Vrms 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.