

## 1-1. Introduction

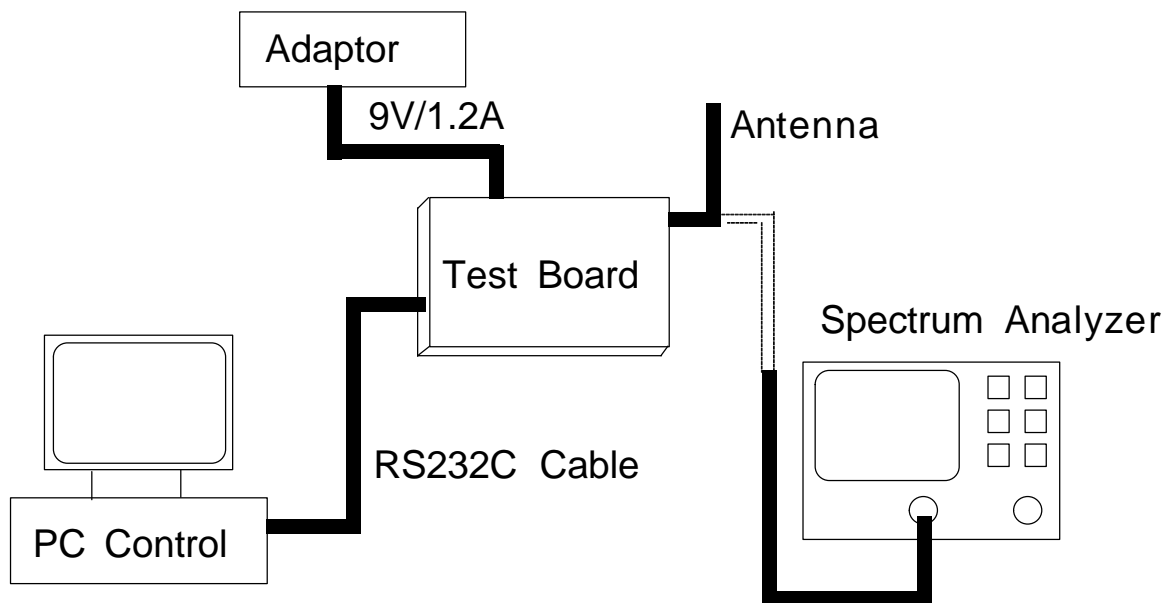
The 'Autotest Program' is the test program for SCW-R500 in 'test mode'. You should run the 'Autotest Program' in your PC or notebook to control SCW-R500 in test mode.

## 1-2. List of Equipment

• DUT(Device Under Test)	; SCW-R500
• RF Cable	
• RS232C Cable	
• Adaptor(9VDC/1.2A)	
• PC(IBM or compatible computer)	; at least 80386-SX
• Spectrum Analyzer	; HP8596E

## 1-3. Configuration of Test

When you check DUT works rightly, you may connect Spectrum Analyzer.



## 1-4. Test Procedure

### 1-4-1. Start in Normal Mode

1. When you connect a DUT(SCW-R500) with the adaptor, you can see the 'power' LED is ON(red) on the DUT. In a few minutes later, the DUT enters into 'Normal Mode' in the state of which you can make a call with CDMA Mobile Station Test Set(HP8924C, CMD-80 etc.).

### 1-4-2. Change to Test Mode

1. Connect DUT to PC with RS232C serial interface cable.
2. Run the 'Autotest Program' in your PC.  
If "F1 : SCW-R5000" is chosen with start, choose "F2 : SCW-R500" by pushing F2 key.  
There are two ways of selecting the test command you want; one is a pull-down type in which you can select the test command by moving "jè" and "jé" keys and hitting the enter key, the other is writing the test command number in "input command" section directly and hitting the enter key.
3. You can change DUT from Normal Mode into Test Mode when you enter the command "00" (Enter to Test Mode). If rightly initialized, "ACKed" message and some numbers at Terminal Info.(S/W, ESN, NAM) section will display.
4. The command "01"(Suspend) is entered to start the test.
5. To finish or restart the Test Mode, you should enter the command "02". And if you want to exit the Autotest Program, hit the "escape key" in the keyboard.

### 1-4-3. Carrier ON/OFF and Spreading Signal

1. The command "07"(Turn on Carrier) turns the carrier on.
2. If you want to turn off the carrier, enter the command "08"(Trun off Carrier).
3. The command "34"(CDATA) spreads the signal into CDMA spectrum.

### 1-4-4. Tx Power Output level Control

1. If you enter the command "71"(Set CDMA Tx AGC), you can control the Tx power output level by writing an AGC code. The AGC code range is 000 ~ 511 code.  
Note the AGC code must be written in 3-digit. For example, if you want 5, 43, 300 AGC code, you must write  $005_{10}$ ,  $043_{10}$  and  $300_{10}$  respectively.

2. You can confirm the AGC code you set in DUT by entering the command "71" and just hitting "enter key" once more without writing an AGC code.

**3. The AGC codes for Tx. max power(23dBm) and radiated spurious test power(-13dBm) are presented in 1-5.**

#### 1-4-5. Channel Selection

1. If you enter the command "09"(Set channel), you can select the channel. Similarly to entering an AGC code, the channel number must be written in 4-digit. For example, if you want 1011, 363 and 779 channel, you must write `1011`, `0363` and `0779` respectively.

2. You can confirm the channel you set in DUT by entering the command "09" and just hitting "enter key" once more without writing a channel number.

#### 1-4-6. RS232C Port Test

1. The command "32"(RS232C Port Test) makes the DUT communicate with the connected PC.

2. Write an arbitrary 6-digit numerical value and hit the "enter key". You will find the 6-digit numerical value you wrote shifts to the left by 1-digit in every 500msec if rightly performed.

### 1-5. AGC code for specific Tx output powers

Channel Output Pwr.	CH1011	CH363	CH779
-13dBm	290	290	293
23dBm	450	446	466