

Jan/11/2012

## Outline:

It introduces the control technique of simultaneous measurement of two items that is the feature of 2ch Spectrum Analyzer (SPA). Moreover, measuring time between 1ch and 2ch can be compared. Additionally, there is a control sample of CH1 and CH2, and the appearance into which the screen changes depending on a set mode is understood.

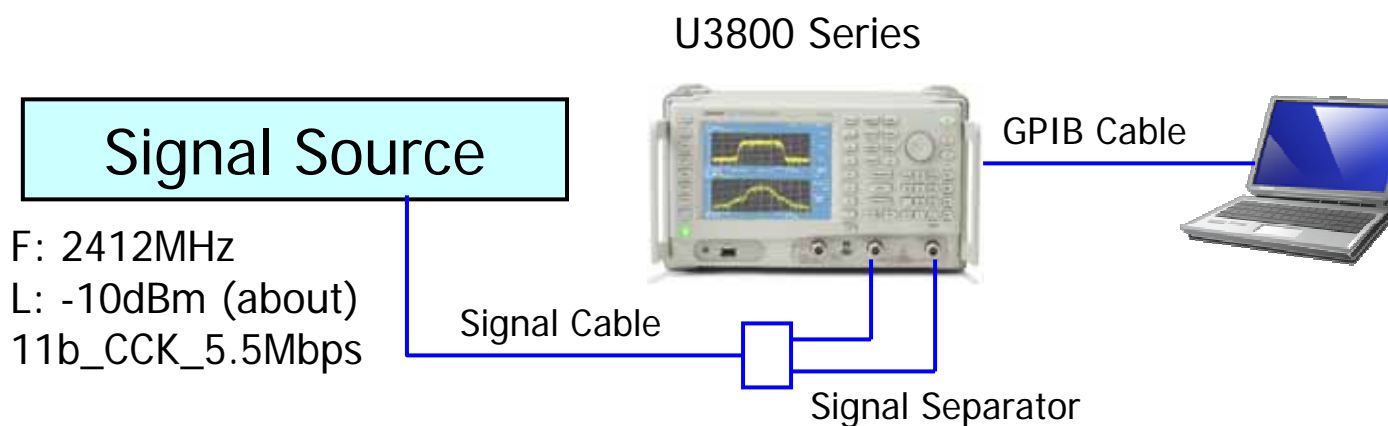
## Measurement item:

Refer to the small electric power data communications system (WLAN) measurement of TELEC. (Telecom Engineering Center)  
Please correct it by the usage.

## Measurement method:

Set Center Frequency and Reference Level and Sweep Time.  
Default of the Sweep Time is 1 second for burst signal. (It is for a analog spectrum analyzer.)

## 2. U3800 GPIB\_CH1CH2 Connection **ADVANTEST**



1. Connect the Signal Source (WLAN:11b\_CCK\_5.5Mbps)  
This software works even if there is no signal.
2. Measuring time of the combination measurement and the single measurement can be compared. It shows high precision and the high stability of the channel power measurement.
3. The measurement screen of CH1 and CH2 is seen in the channel switch.

### 3. Measuring process and panel

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1. Execute sample software

2. Set GPIB Adrs-8 of SPA

3. Measure

U3800 GPIB CH1CH2 Power Ver. 1.0

**Measurement (1)** ☐ AVG ON **Measurement (2)** **CH1 + CH2**

Total Power OBW (99%) Frequency AVG Power (1M) Meas (1) ALL

Spurious (CH1) OBW (90%) sec OBW (99%) Meas(2) ALL

CHP Frequency Ref. Level Sweep Time Freq + AVG

ACP 2412 MHz 20 dBm 1000 m sec EXIT Spuri+Pow+AVG

Select SPA

Preset ☒ U3841/51 ☐ U3872

SPLIT Full CH1 Dual ON SCRF ON

Overlay Full CH2 Dual OFF SCRF OFF

## 4. Measuring process and main key **ADVANTEST®**

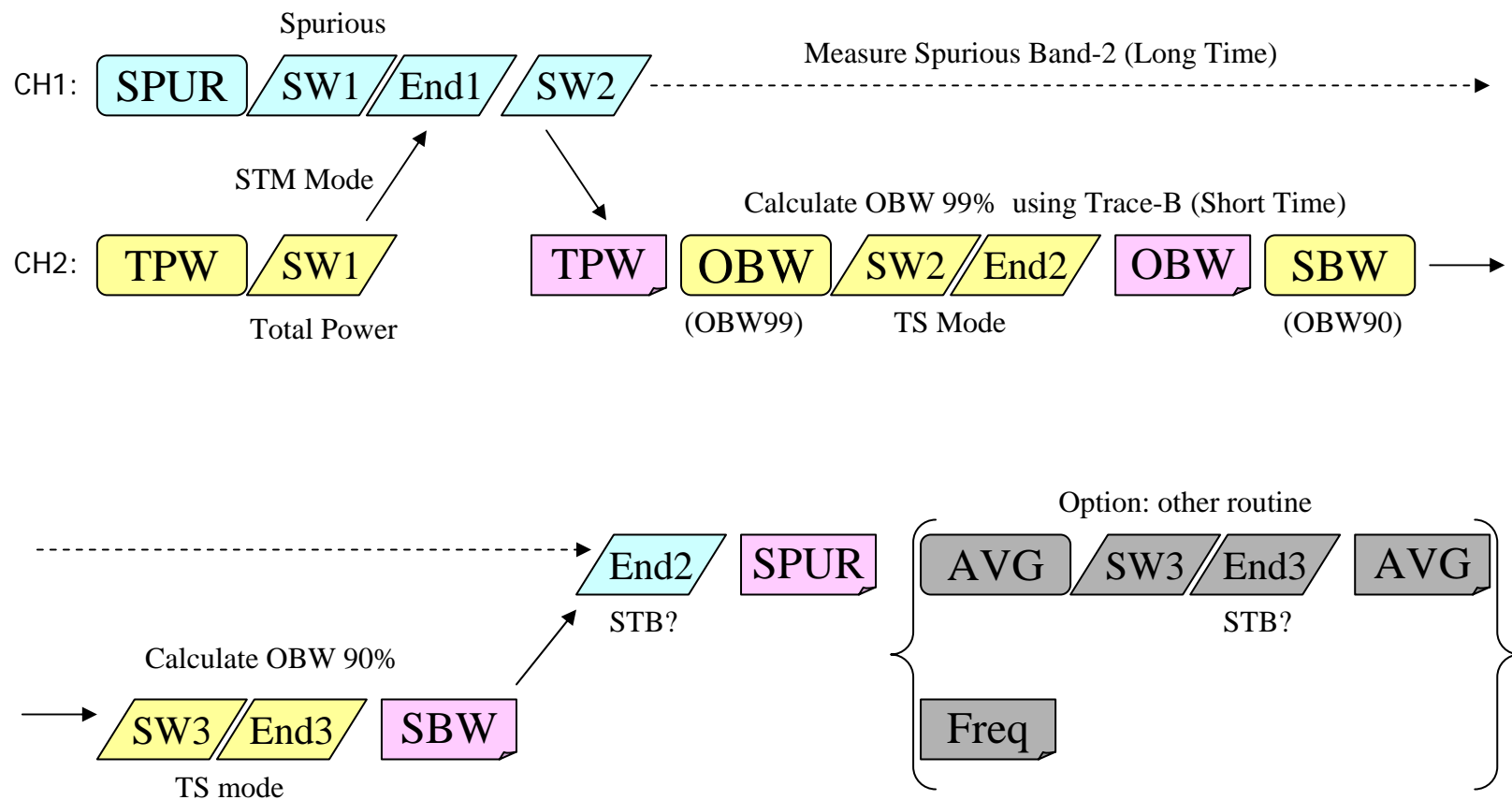
### Execute the application software and measurement:

1. Execute the application software: Select U3800 GPIB\_CH1CH2
2. Set the Spectrum Analyzer's GPIB address 8. (Default is 8)
3. Set SPA initialization if you want. (Select U3841/51 or U3872)
4. The batch measurement is done with Meas(1) ALL.  
Or it individually measures it with the individual item key.
5. You can see each measuring time.
6. Measuring time changes somewhat by the condition of SPA.  
Please measure it several times.
7. The end is EXIT key.

### Other keys:

- a. Set data to SPA is applied to a necessary channel.
- b. Please execute the Preset key after selecting the model.  
Additionally, the mode of the SPA screen can be confirmed to keys such as SPLIT and Overlay.
- c. AVG is ten time ON/OFF of the average measurement.  
(However, only an individual item operates. )  
After the measurement ends, it automatically becomes turning off.

# Appendix1: Combinational example **ADVANTEST**



## Appendix2: WLAN Frequency Bands **ADVANTEST®**

