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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.
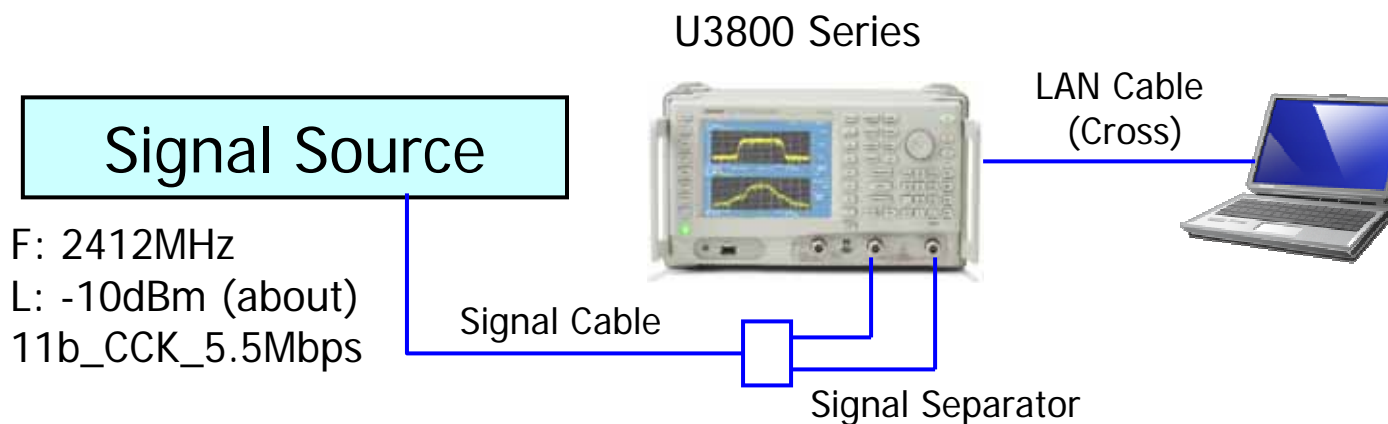
Measurement item:

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.)

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U3800 Series

Signal Source

LAN Cable
(Cross)

F: 2412MHz
L: -10dBm (about)
11b_CCK_5.5Mbps

Signal Cable

Signal Separator

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.

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Execute sample software | **1)** Set IP Address | **2)** Connect | **3)** Measure
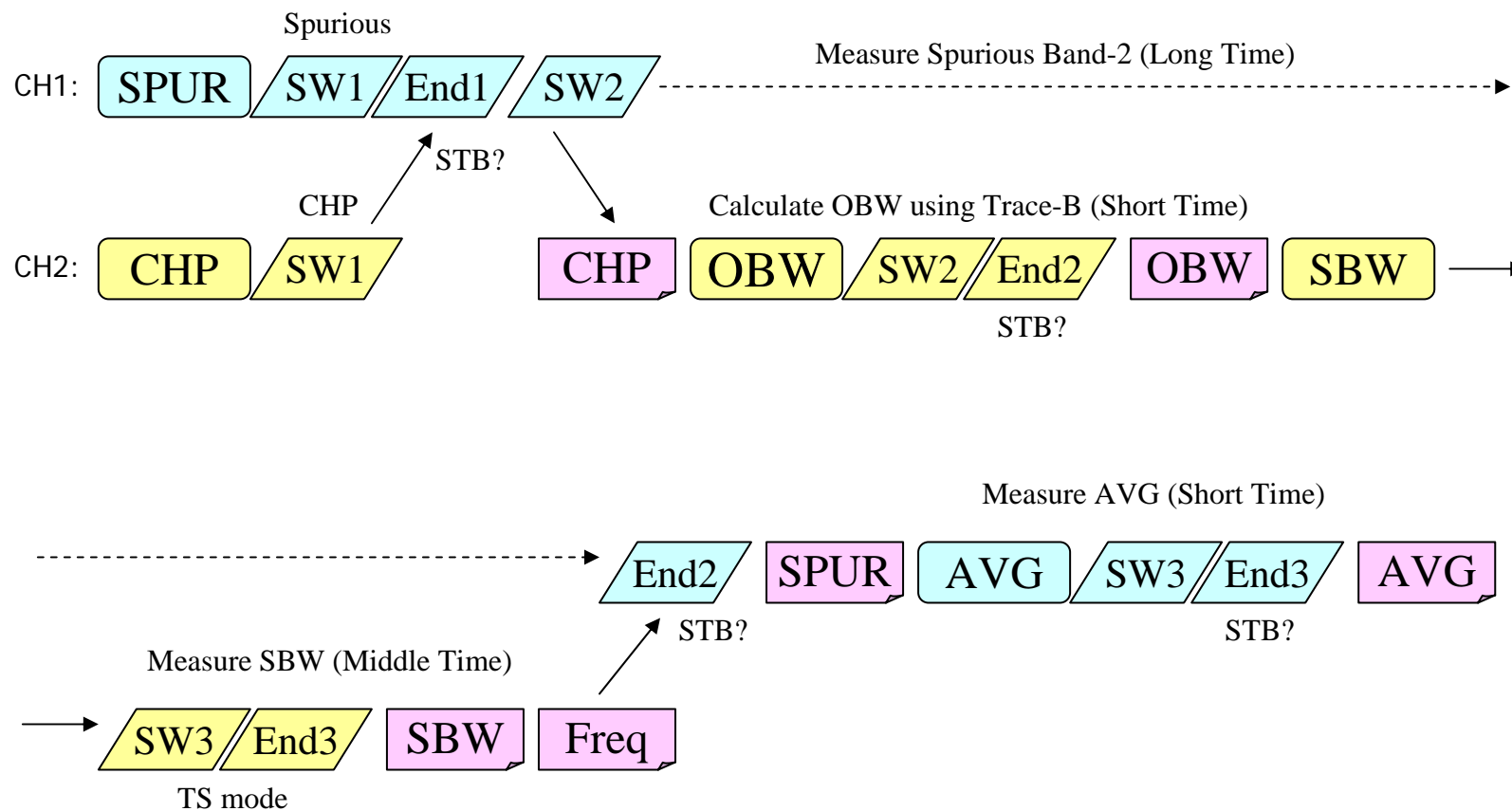
4. Measuring process and main key **ADVANTEST®**

Execute the application software and measurement:

1. Execute the application software: Select U3800 LAN_CH1CH2
2. Confirm the IP address, or set IP address. (Default is 192.168.0.1)
3. Set SPA initialization if you want. (Select U3841/51 or U3872)
4. The batch measurement is done with Meas 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. Continuity is ON/OFF of the continuity measurement.
   (However, only the Meas All operates.)
   After the measurement ends, it automatically becomes turning off.

Appendix1: Combinational example

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Spurious

CH1: SPUR / SW1 / End1 / SW2 - - - - - - - - - - - - - - Measure Spurious Band-2 (Long Time) - - - - - - - - - - ►

STB?

CHP

Calculate OBW using Trace-B (Short Time)

CH2: CHP / SW1 ⟋ CHP OBW / SW2 / End2 / OBW SBW ►

STB?

Measure AVG (Short Time)

- ► End2 / SPUR AVG / SW3 / End3 / AVG

STB? STB?

Measure SBW (Middle Time)

→ SW3 / End3 / SBW Freq

TS mode

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Appendix2: WLAN Frequency Bands ADVANTEST®

IEEE802.11b Channel

IEEE802.11g Channel

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