MICRONIX

C & U
CREATIVE & UNIQUE

Example of using two waveforms display of Signal Analyzer

Here is an example of using two waveforms display of Signal Analyzer MSA500 series.

[*Application*]

In the real-time mode of the signal analyzer MSA500 series, it is possible to display two waveforms of SUB screen (lower screen) and MAIN screen (upper screen). In the two waveforms display, [1] set the waveform to be displayed on SUB screen and perform measurement. [2] While watching the waveform of the SUB screen of all frames captured, analyze by setting the analysis frame and the waveform type to be displayed on the MAIN screen. Perform the two steps of [1] and [2] above.
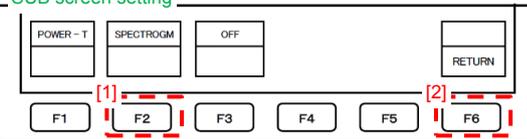
[*Solution*]

The case where the ASK modulation signal transmitted from the DSRC OBE tester ME9100 which is our product is measured will be explained.

The menu of real time spectrum analyzer

(1) Select "F2" in the menu of real time spectrum analyzer.

The menu of real time spectrum analyzer

(3) [1] Set the number of acquisition frames with "F3".
[2] Start measurement with "HOLD / RUN" key.

Main screen setting

(5) Select "F2" for spectrogram or "F4" for time domain in MAIN screen.

"F2"   Reselect function with "F1"

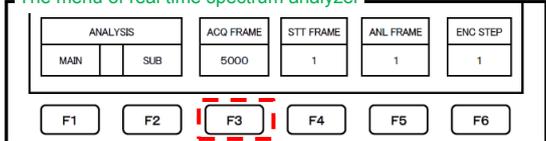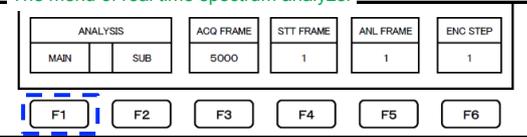The menu of real time spectrum analyzer

SUB screen setting

(2) [1] Select "F2" for spectrogram in SUB screen.
[2] Select "F6" for returning to real-time spectrum analyzer menu.

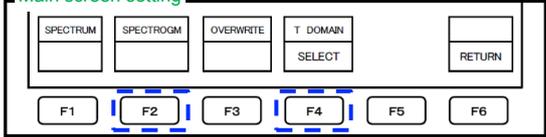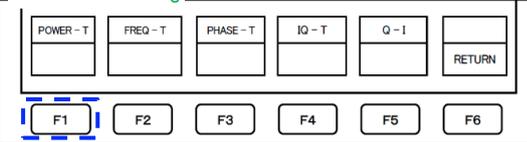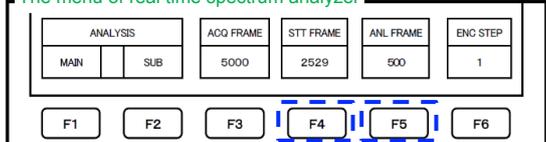The menu of real time spectrum analyzer

(4) Select "F1" in the menu of real time spectrum analyzer.
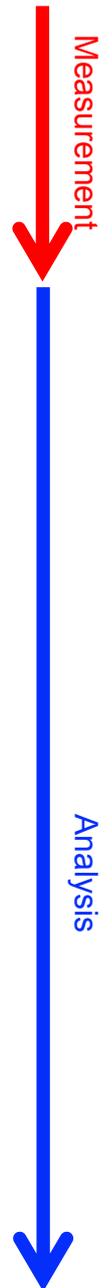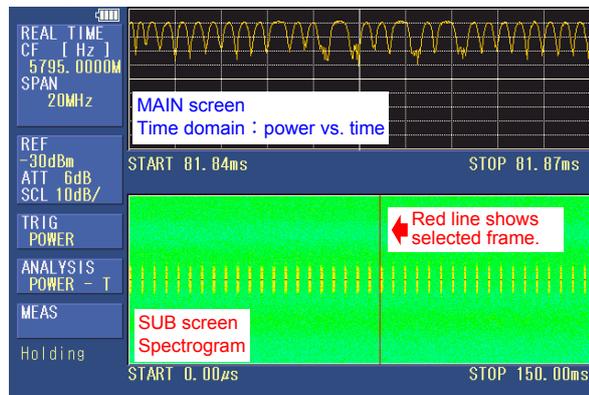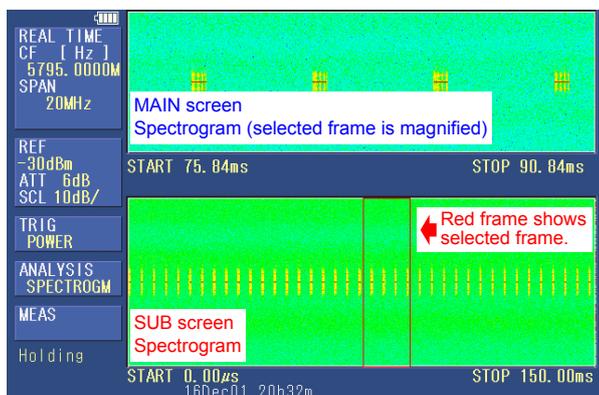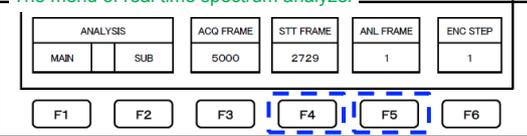
Time domain setting

"F4"

(6) Select "F1" for power vs. time in MAIN screen.

The menu of real time spectrum analyzer

(7) Set frame to be analyzed with "F4" (start frame) and "F5" (number of frames).

Measurement

Analysis

REAL TIME
CF [Hz]
5795.0000M
SPAN 20MHz

REF −30dBm
ATT 6dB
SCL 10dB/

TRIG POWER

ANALYSIS SPECTROGM

MEAS

Holding

MAIN screen
Spectrogram (selected frame is magnified)

START 75.84ms   STOP 90.84ms

Red frame shows selected frame.

SUB screen
Spectrogram

START 0.00µs   STOP 150.00ms
16Dec01 20h32m

REAL TIME
CF [Hz]
5795.0000M
SPAN 20MHz

REF −30dBm
ATT 6dB
SCL 10dB/

TRIG POWER

ANALYSIS POWER − T

MEAS

Holding

MAIN screen
Time domain：power vs. time

START 81.84ms   STOP 81.87ms

Red line shows selected frame.

SUB screen
Spectrogram

START 0.00µs   STOP 150.00ms

Measure on SUB screen and analyze the data captured on MAIN screen while changing the frame (time) and analysis function.

[*System constitution*]

・ Handheld signal analyzer MSA500 series