

## 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	_SUB scree	n setting		
ANALYSIS ACO FRAME STT FRAME ANL FRAME ENC STEP   MAIN SUB 1 1 1 1	POWER - T	SPECTROGM OFF	RETURN	Measu
		1] F2 F3 F4 F5		Jrer
(1) Select "F2" in the menu of real time spectrum analyzer.	(2) [1] Seleci	t "F2" for spectrogram in SUB screet		ne
- The menu of real time spectrum analyzer	[2] Selec	t "F6" for returning to real-time sp	bectrum analyzer	Ę,
ANALYSIS ACQ FRAME STT FRAME ANL FRAME ENC STEP	menu	· ·		
MAIN SUB 5000 1 1 1	The menu	of real time spectrum analyzer		
	ANAL	YSIS ACQ FRAME STT FRAME ANL FRA	ME ENC STEP	
		SUB 5000 1 1	1	
(3) [1] Set the number of acquisition frames with "F3".				
[2] Start measurement with "HOLD / RUN" key.		F2 F3 F4 F5	F6	
_Main screen setting	(4) Select "F	1" in the menu of real time spectrum	analyzer.	
SPECTRUM SPECTROGM OVERWRITE T DOMAIN	_ Time doma	ain setting		
SELECT RETURN	POWER - T	FREQ - T PHASE - T IQ - T Q -		
	"F4"		RETURN	
(5) Select "F2" for spectrogram or "F4" for time domain in MAIN	F1	F2 F3 F4 F5	F6	
screen.	(6) Select "E	1" for nower vs. time in MAIN screet		
v"F2" with "F1"			1.	
The menu of real time spectrum analyzer	The menu	of real time spectrum analyzer	i	
ANALYSIS ACQ FRAME STT FRAME ANL FRAME ENC STEP	ANA	LYSIS ACQ FRAME STT FRAME ANL FRA	ME ENC STEP	
MAIN SUB 5000 2529 500 1	MAIN	SUB 5000 2729 1	1	
				⊳
	F1	F2 F3 F4 F5		na
(7) Set frame to be analyzed with "F4" (start frame) and "F5" (number of frames).				
	REAL TIME			Š.
CF [HZ] 5795.0000M W Ro St. 22			4 · · · · · · · · · · · · · · · · · · ·	
20MHz MAIN screen	SPAN 20MHz	MAIN screen		
Spectrogram (selected frame is magnified)	REE	Time domain:power vs. time		
START 75. 84ms STOP 90. 84	4ms -30dBm	START 81.84ms	STOP 81.87ms	
SCL 10dB/	SCL 10dB/			
TRIG POWER	DWS TRIG POWER		Red line shows selected frame.	
ANALYSIS SPECTROGN HILLING HILLING HILLING	ANALYSIS POWER - T			
MEAS SUB screen	MEAS	SUB screen		
Holding Spectrogram	Holding	Spectrogram		
START 0.00#s STOP 150.0	loms	START 0.00µs	STOP 150.00ms	
				•
Measure on SUB screen and analyze the data captu	red on MAIN scree	n while changing the frame (ti	me) and analysis funct	ion.

[\*System constitution\*]

Handheld signal analyzer MSA500 series

\*MICRONIX Corporation reserves the right to make changes in design, specification and other information without prior notice.

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