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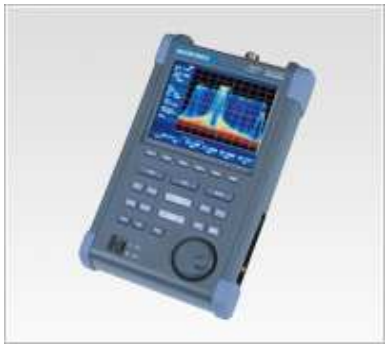
Measurement of BS/CS converter output by signal analyzer

◇ **The method of measuring the output of BS/CS converter using handheld real time signal analyzer will be introduced.**

＊Application＊

Connection block diagram



Signal analyzer MSA538

Bias Tee

BS・CS antenna /converter

DC power supply11/15V

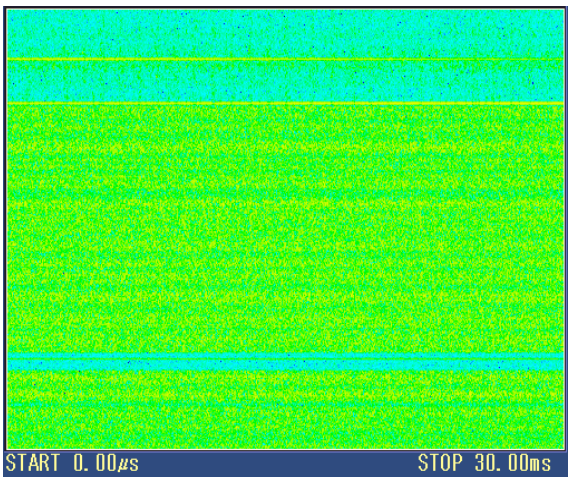
＊Solution＊

■ The satellite signal of 12GHz band is converted to IF frequency from 1.5 to 2GHz by BS・CS antenna / converter.

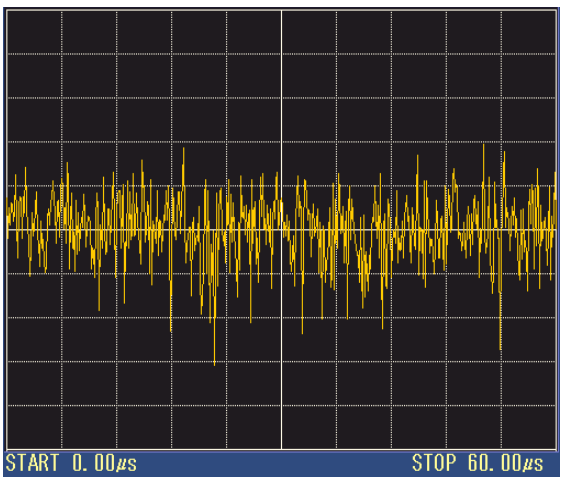
■ Bias Tee will convert the impedance from 50Ω at spectrum analyzer side to 75Ω at antenna side, and also supply the power to BS/CS converter.

■ Bias Tee is supply the power from the external. The polarization plane of the antenna can be changed by switching the voltage of 11/15V.

The time response of frequency and power can be observed using the spectrogram function of signal analyzer.



Similarly, the temporal variation of power and phase will be observed using the time domain function. The figure below shows the time response of power.



＊System configuration＊

Spectrum analyzer [MSA538]	×1
Bias Tee [PD264]	×1
DC power supply 11/15V	×1
Cables	×1

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