



USG-Series



Output Signal



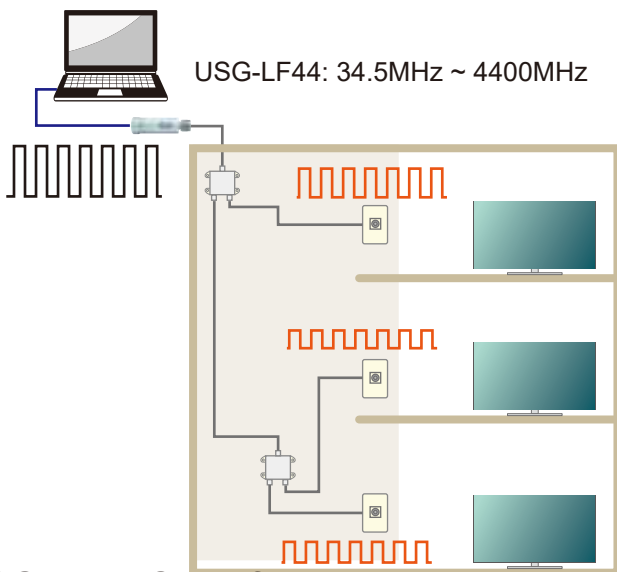

Note: When USG is connected to the PC, the signal is output at first. When software is activated, the output is set to OFF.

Features

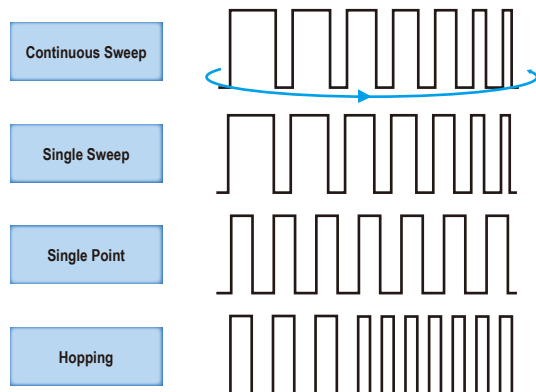
- Frequency Range: 34.5MHz ~ 4.4GHz (USG-LF44)
- Output Power Range: -30dBm ~ 0dBm
- Continuous Wave Signal Without any Modulation
- Support Fixed Frequency, Frequency Sweep, Frequency Hopping & Power Sweep Mode
- 107dBc/Hz Phase Noise @100kHz Offset
- Frequency Resolution: 10kHz
- PC USB Interface Powered and Controlled
- External PC Software Support Different Operating System



Example: RF signal for CATV Signal Level check



As continuous wave generators, the USG can generate a continuous wave, sweep, power sweep and frequency hopping waveforms.



USG-LF44 Specifications

Frequency Range	34.5 MHz to 4.4 GHz
Output Power	-30 dBm to 0 dBm in 1 dB steps
Internal Reference	25 MHz aging ± 1 ppm at first year
Frequency Accuracy	± 100 Hz at 100 MHz, 0 dBm Output
Resolution	10 kHz
Output Control	On / Off
On / Off Isolation	≤ -75 dBc
Mode Control	Fixed Frequency / Single Sweep / CW Sweep / Hopping
Step Dwell	≤ 1000 ms in 1* ms steps
Frequency Offset	-50 kHz to 50 kHz in 10 kHz steps
Amplitude Absolute Accuracy	0 dBm ± 1 dB typical at 2200MHz, 0 dBm Output
Output Flatness	± 3.5 dB, ref. to 2200MHz at 0 dBm Output
Phase noise	< -97 dBc/Hz 10 kHz offset @ 1.0 GHz, typical -100 dBc/Hz < -107 dBc/Hz 100 kHz offset @ 1.0 GHz, typical -110dBc/Hz
2nd Harmonics ^{*1}	≤ -15 dBc, typical 34.5 MHz to 2.0 GHz, fundamental ≤ -10 dBc, typical 2.0 GHz to 3.0 GHz, fundamental

3rd Harmonics ^{*1}	≤ -5 dBc, typical 34.5 MHz to 2.0 GHz, fundamental ≤ -20 dBc, typical 2.0 GHz to 3.0 GHz, fundamental ≤ -40 dBc, typical 3.0 GHz to 4.4 GHz, fundamental
Spurious related to Resolution settings ^{*2}	≤ -30 dBc, typical Resolution < 1 MHz ≤ -65 dBc, typical Resolution ≥ 1 MHz
Spurious related to the fundamental output ^{*2}	≤ -60 dBc, typical

Common

Interface	USB 2.0
USB Connector Type	Mini-B
Supply Voltage	5V nominal
RF Connector Type	N-type male
Impedance	50 ohm nominal
Output VSWR	$< 1.5:1$,Output level @ -30dBm
Max. DC voltage	+/-25VDC Max. Reverse Power +30dBm

