

RF Interference Troubleshooting

The X-COM RF Editor when used with the IQC5000A and an Keysight vector signal generator allows you to compile and playback RF spectra that are combinations of created and recorded waveforms. By testing your products' susceptibility to RF interference or jamming during design or evaluation you can understand better how a device or system will function in the actual channel environment. As a result you can optimize their performance when deployed and minimize the cost of troubleshooting in the field.

RF Interference Signals

RF signals that cause interference or intentional jamming are often transient in time. A spectrum recording taken in-situ can provide an exact replica of the communications environment in which a system is designed to operate. However, the recording may not necessarily contain an interfering waveform which is transmitted only under specific circumstances, nor may it have recorded channel anomalies that are caused by dynamic multipath conditions or storms. There may also be other pieces of the complete spectral picture; other files that contain recordings of a jammer or waveforms created in MATLAB that replicate an errant channel user. In addition, in order to simulate a multipath environment phase shifted copies of an information frame with synchronization header may be required.

To correctly simulate the operating environment all of these have to be combined in order to test your product's susceptibility to RF interference or jamming. The RF Editor from X-COM allows you to compile RF spectra that are combinations of created and recorded waveforms.

System Components

Keysight Technologies

E8267D	PSG vector signal generator, or
N7182B	MXG vector signal generator, or
N5172B	EXG vector signal generator

X-COM Systems

RF Editor	RF spectrum editor software
IQC5000A	Spectrum capture and playback system
IQC5000A-042	Adds second channel recording and playback

Solid state, internal memory blade (2 TB max, 0.5 TB per blade), external data pack interface adapter and 8 or 16 TB external disk also available.

To learn how this solution can address your specific needs please contact

Keysight's solutions partner,
X-COM

www.keysight.com/find/xcom



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X-COM Systems designs RF signal recording, analysis and playback solutions for system design, signal simulation and test applications.

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Published in USA, August 3, 2014
5990-9511EN