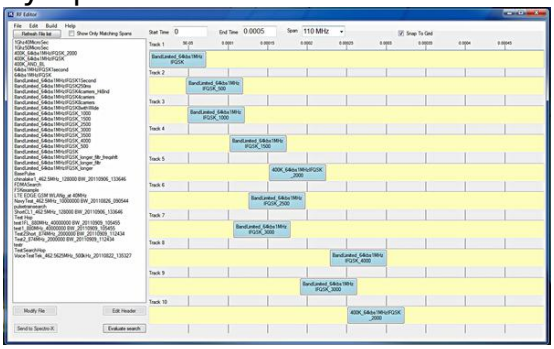
RF Editor Graphical RF Editor Software

X-COM Systems introduced Version 3.0 of its RF Editor Graphical RF Editor software, the industry's most advanced tool for modifying and building custom RF signal waveform files for use in defense, commercial, and system verification applications. RF Editor Version 3.0 is more intuitive, faster, and adds useful features that expand its capabilities. X-COM is demonstrating the capabilities at the 49th Annual Association of Old Crows (AOC) International Symposium and Convention in Phoenix, AZ, from September 23 to 26, Booth 130.



RF Editor is used in both military and commercial applications. Typical examples include modifying captured radar, jammer, and communications signals to create simulated threat scenarios, using custom waveform sequences built in RF Editor as stimulus signals to verify the performance of communications, electronic warfare, and radar systems, evaluating satellite and terrestrial wireless voice and data equipment, and for civilian and military spectrum monitoring.

The software runs on a Windows 7 PC and uses .xiq and .tiq (I&Q) files captured by X-COM's IQC-2110 RF Capture and Storage System, spectrum and signal analyzers from Agilent Technologies, Rohde & Schwarz, Tektronix, and other manufacturers, or waveform segments created in MATLAB and other third-party scientific programming languages. RF Editor is also integrated with X-COM's Spectro-X signal analysis and visualization software. Spectro-X is the most comprehensive commercially-available software for simplifying the process of identifying RF or microwave signals amongst thousands of others in signal captures covering broad swaths of spectrum and up to days in length. Together, Spectro-X and RF Editor make it possible to quickly find, identify, analyze, modify, and create complex waveforms and waveform sequences in far less time than with any other tools.

RF Editor lets the user make many types of modifications to a spectrum file and create new ones by moving segments or broader "slices" of spectrum to any location along 10 parallel time domain tracks. Waveforms can also be precisely located in time, repeated, or stretched in duration. Frequency domain editing allows recorded waveforms to be filtered, interpolated, decimated, and shifted in frequency before placement in the time domain. Once the edited waveform segments are in place, a new waveform file is built with a single mouse click and is immediately available for viewing and analysis in Spectro-X.

A powerful feature in RF Editor Version 3.0 is the Advanced Modify window, which allows multiple operations to be performed sequentially and automatically, such as frequency shifting, file decimation, applying filters with bandwidths as narrow as 10% of the signal sample rate, and adjusting occupied bandwidth.

RF Editor Version 3.0 also has a “stitch” function that makes it fast and easy to extract waveform segments identified and marked by the search function in Spectro-X and stitch them together to produce a file that contains only waveforms of interest. The user performs a carrier or waveform search in Spectro-X, exports the desired results to RF Editor, and stitches them automatically in seconds with only a few mouse clicks. RF Editor now also allows linear or time-domain magnitude profiles to be placed at the beginning and end of waveform segments or between consecutive signals to avoid spreading in the frequency domain.

RF Editor is available now from X-COM Systems. A free 30-day trial version and self-guided demo, videos that demonstrate RF Editor’s capabilities, and other technical resources can be accessed at X-COM’s Web site, www.xcomsystems.com [1].

September 24, 2012

Source URL (retrieved on *09/24/2014 - 12:57am*):
http://www.wirelessdesignmag.com/product-releases/2012/09/rf-editor-graphical-rf-editor-software?qt-digital_editions=0

Links:
[1] http://www.xcomsystems.com