



For Immediate release 1/23/2020

New Product– Model 855B Multi-Channel Signal Generator Series Presented by Berkeley Nucleonics

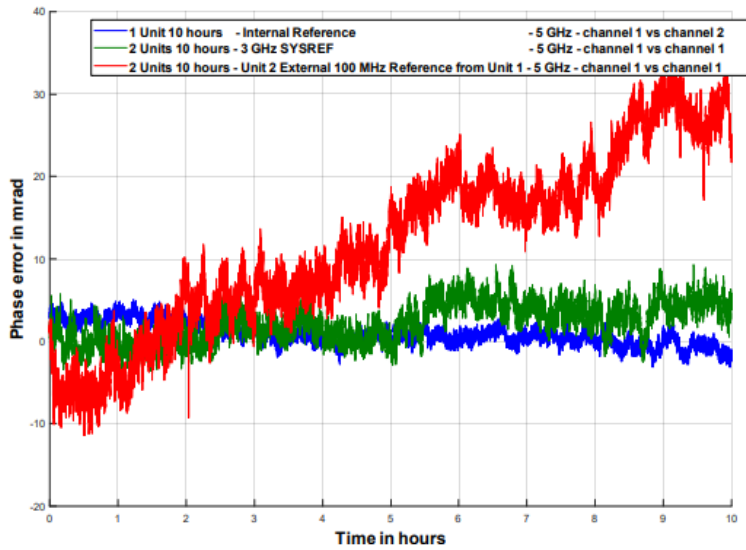
The Model 855B Series 2-Channel, 4-Channel, and 8-Channel RF/Microwave Signal Generators are multi-channel signal sources with expand testing capability by enabling multiplexing, increasing data throughput and improving signal-to-noise ratios. The phase relationship of each channel is extremely significant, and Berkeley Nucleonics claims industry-leading phase coherence and phase memory stability between channels with this most recent design

“We virtually eliminate phase drift”, comments Company President David Brown, “thereby ensuring days or weeks of operation with constant phase coherence.”

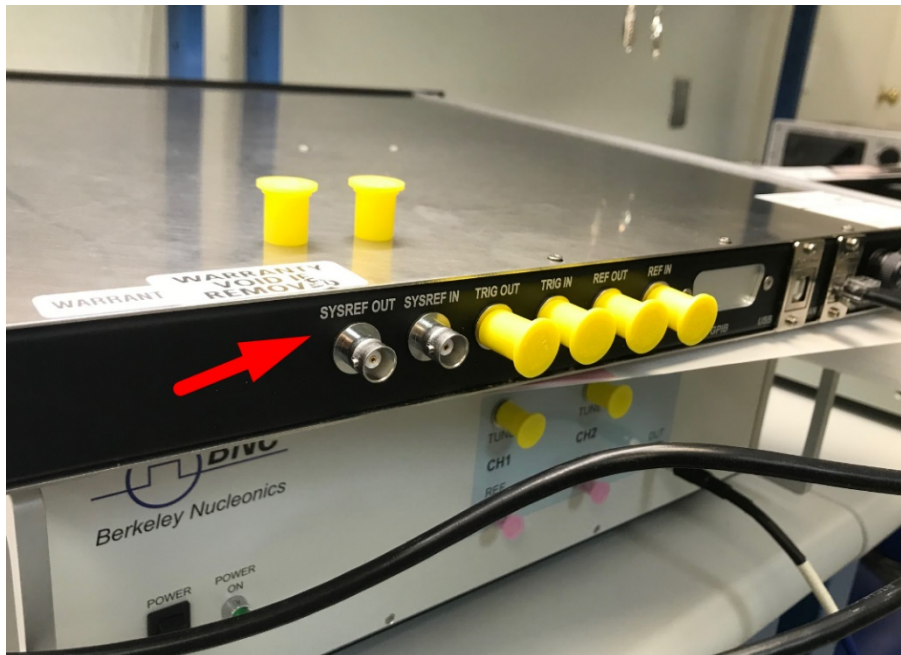
The growing need for testing multiple channels in multi-antenna applications is driving new signal simulation and characterization capabilities. The ultra-compact Model 855B offers superior performance in several critical areas. The new design increases power range to an impressive -80dBm to 25dBm on each output. The operator’s frequency selection has been expanded to 300kHz – 40GHz and ultra-fast switching speeds are now down to 25uS. The new design boasts a very respectable Phase Noise measurement of -150dBc/Hz at a 100kHz offset from a 1GHz carrier (-100dBc/Hz at 10Hz offset).

Each channel can be programmed independently in frequency, phase, amplitude, and modulation. By programming each channel, users can perform synchronized power and frequency sweeps concurrently, an order of magnitude increase in output flexibility. This functionality can be done manually, by loading set point lists into the utility or by using standard ASCII command sets. Other applications for multiple channels RF/Microwave Signal Generators include Radar Simulation, Quantum Computing, EW/Defense systems, and Beamforming. A software GUI and periodic updates ensure users they will always be working with the latest version of the product. The software GUI also drives down the product cost, front panel complexity and overall space required. A 4-channel, 40GHz system is packaging in a 1U 19” module for easy Rack Mounting.

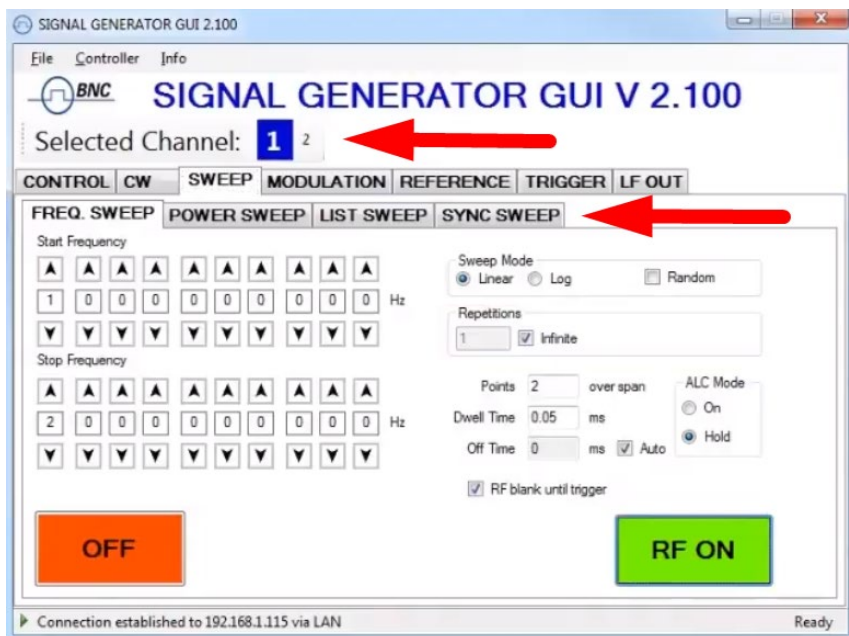
For even more complex test applications, the 855B now offers a dedicated clock synchronization mode to maintain phase coherence across multiple instruments. The units feature a pair of high-frequency 3GHz SYSREF ports (one input, one output) for phase synchronization among multiple Model 855B instruments. (See Green Plot showing phase coherence across multiple instruments).



**Instruments – to – Instrument Phase Error
5GHz when coupled with Dedicated Synchronization Clock**



New 3GHz SYSREF Ports Shown Above on Model 855B-4Ch-20GHz



855B-6-2 GUI Shown Above

See the company's published Phase Noise plots, test the User Interface or discuss your specific applications at www.berkeleynucleonics.com (live chat) or 800-234-7858.