SSA5000A Firmware Revision History

Version	Revision

V1.9.0.2.2R3
2025/5/27
	New Functionality:
	• Add user calibration for reference clock
	
	Improvements:
	• SA mode: optimize refresh efficiency
	• AMA mode: optimize AF smoothing effect
	• NF mode: exporting table results as .csv files
	• Add FTP switch function
	
	Solved Issues:
	• SA mode: align estimated scan time and regular scan time
	• BT mode: solve issues including Preset, EDR signal demodulation, and no response to quick operations
	• PN mode: solve issues including signal averaging failure and incorrect sweep width
	• NF mode: solve issues including calculation errors
	• RTSA mode: solve issues including no waveform in screenshots, peak failure, failure to save and load files, and missing reference offset
	• Add and modify SCPI commands:
	  1. Period cursor reading error (:CALCulate:MARKer:FCOunt:X?)
	  2. Query cursor function returns off (CALCulate:MARKer:FUNCtion?)
	  3. Setting external trigger command is inconsistent with programming manual (:TRIGger[:SEQuence]:SOURce)
	  4. Harmonic analysis command is missing to obtain each order harmonic frequency and power and obtain total harmonic distortion (:READ:HARMonics:AMPLitude:ALL? :READ:HARMonics:DISTortion?)
	  5. SA command reads back cent, low, high.Q results when obtaining NDB results(:CALCulate:MARKer:BANDwidth:RESult?)

V1.1.2.2.0 2024/1/17	**New Functionality:** • Add Phase Noise Measurement Mode • Add Noise Figure Measurement Mode • Add Pulse Measurement Mode • Add Blue Tooth Analysis Mode • Add AF spectrogram, SNR,Dist/Total,THD parameter analysis results in AMA Mode • Add image browsing in SYSTEM **Solved Issues:** • EMI mode Scan Only rescan with one less count issue • EMI mode sending command unable to rescan meter and Meas issues

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V1.1.2.1.9 2023/11/4	Improvements： • AMA support demodulation time setting • SYS add Open Source Software declaration • SYS upgrade display progress bar and upgrade failure prompt, split display of version number Solved Issues： • GPSA error in waveform after automatic calibration • GPSA unable to send command to set fixed marker • GPSA rbw10hz zero sweep width waveform error • GPSA harmonic selection value mismatch, set to 1, SCPI query to 2 • AMA SINAD correction of calculation errors • AMA peak command missing completion • CCDF error in saving STA file • CCDF the default number of counts is incorrect • CCDF mark detaches from the trace after modifying the scale • CCDF frequency offset should not be added to the marker
V1.1.2.1.8R6 2023/9/23	Improvements： • Increased front protection • AMA measurement Y-axis scale adjustable • AMA measurement demodulation time is adjustable • AMA measurement supports peak • Optimization of ascending and descending order icons in peak table in SA mode • SA marker cursor added prompt outside waveform area • Restore the previous MEAS when SYS is powered on to last or user VNC interface optimization Solved Issues: • SA rbw10Hz and RBW 1Hz noise floor difference is 20db processing • SA zero span priority is greater than RBW manual • SA small RBW does not scan problem fixed • SA noise cursor modification RBW change problem handling • SA automatic calibration amplitude compensation error in Trace View state • Bug fix for DMA SCPI query demodulation type error • Solving the problem of one less average number of times in IQ mode single • There is no chance of response issues with HDMI connections
V1.1.2.1.7R3 2023/4/1	Improvements: • Support EMI mode • VNC interface optimization

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	Solved Issues: • The default detection type of the third-order intermodulation in SA mode is changed to Pos • Fixed cursor readout update error when the readout type is not auto • 10db higher signal amplitude under harmonic analysis • Harmonic analysis cannot modify the number of harmonics • MA mode time domain graph marker display unit corrected to dBV • Solved the problem that FTP cannot be used
V1.1.2.1.5R1 2022/7/18	Improvements： • SA mode optimizes the problem of large 3db bandwidth error under 1M RBW filter setting • SA mode adds the function of integrating bandwidth linkage span change in ACPR, CNR, Channel power • SA mode optimizes the marker display in the upper right corner, and displays all markers when the marker table is not opened • SA mode optimizes the abnormal detection waveform with black vertical lines inserted • MA mode adds PM demodulation mode • MA adds a command to switch between AMA and DMA • LXI support Solved Issues: • In SA mode, the problem of not scanning when triggering zero span and negative delay is corrected • SA mode fixed the problem that FFT cannot be selected in Gate method • In SA mode, the problem of loading scan points through the user configuration file is not loaded correctly • In SA mode, the problem of spurious signals near 13G is corrected • System fixed crash problem when loading through configuration file without a certain mode option • System fixes the problem of white borders in reversed screenshots in ma mode • UI fixes the afterimage problem when dragging controls
V1.1.2.1.3R2 2022/6/10	Improvements: • SA mode optimization ref automatically adjusts the strategy modification of the Attenuator, and the Attenuator automatically steps down to 1 dB • When optimizing Meas in SA mode, it also supports opening the Freq counter. Solved Issues: • Fix the zero Span type when FFT in SA mode • Fix the OPC response in EMI mode

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V1.1.2.1.0 2021/4/7	This version is the first time introduced.