

## SSA3000X Plus Firmware Revision History

Version	Revision
V6.3R2 2025/3/18	<p>Notice:</p> <p>This firmware must be upgraded from V3.2.2.4.0 or later. If your analyzer has an earlier version, please update to V3.2.2.4.0 first and then proceed to update to the latest version.</p> <p>New Functionality:</p> <ul style="list-style-type: none"> <li>● Add measurement related functions, including: APSK function, Marker Band function, MA Record function and 200 Hz EMI RBW(only SSA3075XPlus).</li> <li>● Add system related functions, including: local oscillator feedthrough self calibration, 10M out frequency accuracy Self-Calibration function and FTP function.</li> </ul> <p>Improvements:</p> <ul style="list-style-type: none"> <li>● Fixed some known defects.</li> </ul>
V3.2.2.6.2R5 2024/2/22	<p>Notice:</p> <p>This firmware must be upgraded from V3.2.2.4.0 or later. If your analyzer has an earlier version, please update to V3.2.2.4.0 first and then proceed to update to the latest version.</p> <p>New Functionality:</p> <p>Improvements:</p> <ul style="list-style-type: none"> <li>● Display the exit command in Remote Control mode interface.</li> <li>● SA/EMI/MA mode saves the current trace when saving user configuration</li> <li>● SA mode auto tune does not change the amplitude Unit and Scale Type (Log/Linear)</li> <li>● EMI mode exports Freq Interpolation (Log/Linear) when saving lmt file, and import the configuration when recalling the lmt file.</li> </ul> <p>Solved Issues:</p> <ul style="list-style-type: none"> <li>● Resolve the error issue of the SA mode TG waveform at 1.158GHz-1.168GHz.</li> <li>● Fix the problem of MA mode setting the SCPI command for filter type: DDEMod:FILTer:MEASurement setting root raised cosine and raised cosine failed.</li> <li>● Fix the problem that when the EMI mode does not have touch screen function, it is impossible to pull down to see more measurement results</li> </ul>
V3.2.2.6.2 2023/12/14	<p>Notice:</p> <p>This firmware must be upgraded from V3.2.2.4.0 or later. If your analyzer has an earlier version, please update to V3.2.2.4.0 first and then proceed to update to the latest version.</p> <p>New Functionality:</p> <ul style="list-style-type: none"> <li>● Add Picture Viewer</li> <li>● Add Open Source Acknowledge</li> <li>● Add Remote Control Mode, when entering, the interface displays system time, limit status, system messages, etc., shielding UI refresh. SCPI: DISPlay:WINDow:ENABle ON OFF</li> <li>● Save the configuration every 60 seconds, and load it when Power On is turned Last</li> </ul>

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	<ul style="list-style-type: none"> <li>SA mode Limit Setup adds Fail to Save, which automatically saves screenshot and trace data when the Limit Test result is Fail. It can only be used when Fail to Stop is turned ON</li> </ul> <p>Improvements:</p> <ul style="list-style-type: none"> <li>Preset optimization: When pressing the Preset button, it will first jump to the Preset menu instead of directly performing Preset; Touch Assist's Preset adds preset option</li> <li>Optimization System Info display content</li> <li>When taking screenshots, do not capture the message indicating successful screenshot</li> <li>Limit the length of numbers entered on the screen and keypad</li> <li>Add SCPI commands to read system messages:SYSTem:MESSAge?</li> <li>Added screenshot function under the Help window</li> <li>Set the FFT menu to invalid when the SA mode cannot select FFT</li> <li>SA mode can open the Freq Counter for markers other than marker 1</li> <li>The SA mode peak table displays the peak of the current trace</li> <li>The SA mode peak table displays the peak of the current trace, rather than the current marker's trace</li> <li>The dBc parameter range of the SA mode OBW is changed to negative numbers</li> <li>When Noise Marker is turned on in SA mode, set Detect Type to Average</li> <li>In SA/MA/EMI mode, Wait for Trigger is displayed only if Trigger is not triggered for 2 seconds.</li> <li>When using markers in SA/MA/EMI modes, display the marker info enlarged in the upper left corner of the screen</li> <li>SA/EMI mode display more information of limit fail and pass</li> <li>The MA mode supports the SCPI command: TRACe#[:DATA]? to get trace data</li> <li>SCPI command for setting marker X in MA mode: TRACe#:MARKer#:X supports specifying time units</li> </ul> <p>Solved Issues:</p> <ul style="list-style-type: none"> <li>Fix the problem of the inconsistency between the numerical accuracy displayed in SA mode Freq menu Ref Offset and the status bar on the left</li> <li>Fix the problem of Marker display unit error when Noise Marker is turned on in SA mode</li> <li>Fix the problem of the SCPI command TRACe#:MODE in the SA mode setting trace type, which causes a crash when the selected trace exceeds the range.</li> <li>Fix the problem of not adding Freq Offset to the marker x value in SA mode</li> <li>Fix the problem of Correction errors when switching between X-Scale Lin and Log in SA mode</li> <li>Fix the problem of inconsistent units and settings for values obtained by SCPI commands :DISPlay:WINDow:TRACe:Y:RLEVel? in SA/EMI mode</li> <li>Fix the problem where Sweep Time may be incorrect when set EqLPF to Auto in MA mode</li> </ul>
V3.2.2.6.0R7 2023/5/3	<p>Notice:</p> <p>This firmware must be upgraded from V3.2.2.4.0 or later. If your analyzer has an earlier version, please update to V3.2.2.4.0 first and then proceed to update to the latest version.</p> <p>New Functionality:</p>

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	<ul style="list-style-type: none"> <li>• Add PM demodulation in MA mode</li> <li>• The time of analog demodulation in MA mode is adjustable</li> </ul> <p>Improvements:</p> <ul style="list-style-type: none"> <li>• Add SCPI commands in MA mode: Set the scan time: [:SENSe]:SWEep:TIME Set the demodulation type: ADEMod:STYLE (new parameter is PM) Get AM parameters: FETCh:AM#? Get FM parameters: FETCh:FM#? Get PM parameters: FETCh:PM#?</li> <li>• Add system SCPI command: *OPC for EMI mode Exit remote status: SYSTem: LOCal for all mode</li> </ul> <p>Solved Issues:</p> <ul style="list-style-type: none"> <li>• Fix the problem that the bandwidth of the emi filter in SA mode</li> <li>• Fix the problem that setting the TG Level in SA mode may cause TG to have no output</li> <li>• Fix the problem that the n dB Marker measurement results in SA mode are inconsistent with the OBW measurement results</li> <li>• Fix the problem that there is an invalid frequency menu in Harmonic in SA mode</li> <li>• Fix the abnormality of the first scan in EMI mode</li> <li>• Fix the problem that setting rbw may crash when qpd is not enabled in EMI mode</li> <li>• Fix an issue where 'micro' relative units represented by 'u' were not recognized when reading files</li> </ul>
V3.2.2.5.1R1 2022/5/10	<p>Notice:</p> <p>This firmware must be upgraded from V3.2.2.4.0 or later. If your analyzer has an earlier version, please update to V3.2.2.4.0 first and then proceed to update to the latest version.</p> <p>Improvements:</p> <ul style="list-style-type: none"> <li>• Optimize the Ref level and Att couple</li> <li>• Add SCPI commands in MA Mode <ul style="list-style-type: none"> <li>• READ:ADEMod:AVG?</li> <li>• [:SENSe]:ADEMod:FM:DEVI?</li> <li>• [:SENSe]:ADEMod:FM:DRIFt?</li> <li>• [:SENSe]:BWIDth[:RESolution]</li> <li>• [:SENSe]:BWIDth[:RESolution]?</li> <li>• [:SENSe]:BWIDth:EQLPf</li> <li>• [:SENSe]:BWIDth:EQLPf?</li> <li>• CALCulate:MARKer#:PTPeak</li> </ul> </li> <li>• Add .trc file in EMI Mode</li> <li>• Add .lic file auto scan</li> </ul>

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	<p>Solved Issues:</p> <ul style="list-style-type: none"> <li>• Fix pi/4 DPSK 和 pi/8 DPSK decode errors in MA mode</li> <li>• Fix fft frequency error in narrow span in SA mode</li> <li>• Fix trace avg calculation error in SA mode</li> <li>• Fix the zero sweep type when fft in SA mode</li> </ul>
V3.2.2.5.0 2021/9/30	<p>Notice:</p> <p>This firmware must be upgraded from V3.2.2.4.0 or later. If your analyzer has an earlier version, please update to V3.2.2.4.0 first and then proceed to update to the latest version.</p> <p>New Functionality:</p> <ul style="list-style-type: none"> <li>• Add Ext Trigger Delay from 0-10 seconds in SA Mode</li> </ul> <p>Solved Issues:</p> <ul style="list-style-type: none"> <li>• SA fix the difference between marker and peak and marker style; Fix Center Freq error; Fix limit fail to stop error; Fix Auto frequency error; In normalization, auto re-normalized after any setting changes</li> <li>• EMI frequency offset error; saving std lim path error</li> <li>• Web browser cannot change IP, and cannot login after changing password</li> </ul>
V3.2.2.4.0 2021/1/15	<p>This version can not be rolled back</p> <ul style="list-style-type: none"> <li>• Fix TG switch error at small RBW</li> <li>• Fix Help and Limit file lost when Factory reset</li> <li>• Fix CNR calc error when no peak found</li> <li>• Fix OBW result overflow</li> <li>• Fix Harmonic calc error at 100Hz RBW</li> <li>• Fix Reflection Open+Short calibration action</li> <li>• Fix spectrum amplitude error in DMA mode</li> <li>• Optimize EMI .csv file content to all signal list</li> <li>• Optimize EMI peak search</li> <li>• Optimize Auto cal process</li> <li>• Add Peak search to Spectrum in DMA mode</li> </ul>
V3.2.2.3.3R1 2020/12/01	<p>New Functionality:</p> <ul style="list-style-type: none"> <li>• Add EMI filter in SA for EMI option</li> </ul> <p>Solved Issues:</p> <ul style="list-style-type: none"> <li>• Optimize the TG flatness and control procedure</li> <li>• Optimize Help</li> <li>• Fix Correction, .csv file, add peak numbers to 20 in EMI mode</li> <li>• Fix amplitude error in DMA Mode</li> <li>• Fix upgrade failure issue</li> </ul>

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V3.2.2.3.2 2020/09/09	<p>Solved Issues:</p> <ul style="list-style-type: none"> <li>• Fix avg power bug in EMI Mode</li> <li>• Fix amplitude bug in AMA Mode</li> <li>• Fix peak search bug in SCPI command</li> </ul>
V2.2.1.2.8 2020/06/30	<p>New Functionality:</p> <ul style="list-style-type: none"> <li>• Update EMI option to a new EMI measurement mode</li> </ul> <p>Improvements:</p> <ul style="list-style-type: none"> <li>• Improve TG output harmonic performance</li> <li>• Update Help file</li> </ul> <p>Solved Issues:</p> <ul style="list-style-type: none"> <li>• Fix ADC overload warning</li> <li>• Fix Ch Power calculation bug in small span</li> </ul>
V2.2.1.2.7 2020/05/12	<p>Improvements:</p> <ul style="list-style-type: none"> <li>• Add Limit mask offset in SA mode</li> <li>• TG Level adjustable in Reflection Meas</li> </ul> <p>Solved Issues:</p> <ul style="list-style-type: none"> <li>• Fixed AM and FM symbol rate error, Lpf coefficient error, in AMA mode</li> <li>• Fixed Filter bandwidth error in DMA mode</li> <li>• Fixed Freq counter error in SA mode</li> <li>• Fixed Harmonic error in SA mode</li> <li>• Help Display error</li> </ul>
V2.2.1.2.5 2019/11/11	<p>Improvements:</p> <ul style="list-style-type: none"> <li>• Optimize trace, marker, signal track, TG normalization, Reflection measurement in SA Mode</li> <li>• Optimize web server UI</li> </ul> <p>Solved Issues:</p> <ul style="list-style-type: none"> <li>• Fixed video trigger fail, errors in Harmonic measurement in SA Mode</li> <li>• Fixed spectrum amplitude error, meas error, waveform discontinue in MA Mode</li> <li>• Fixed English help, system message</li> </ul>