

SSA3000X-R Firmware Revision History

Version	Revision
V3.2.2.6.0R7 2023/4/10	<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>New Functionality:</p> <ul style="list-style-type: none"> • Add ECal in VNA mode • Add three new formats in VNA mode: Unwrap Phase/Real/Imaginary • Add Z Reflection in VNA mode • Add PM demodulation in MA mode • The time of analog demodulation in MA mode is adjustable <p>Improvements:</p> <ul style="list-style-type: none"> • SCPI command for setting/obtaining the format Unwrap Phase/Real/Imaginary: CALCulate#[:SElected]:FORMat adds three new parameters for UWPH/REAL/IMAG • SCPI command for setting/obtaining Z Reflection: :CALCulate#:TRACe#:CONVersion:FUNCtion OFF/ZREFlection • In VNA mode, when the format is Phase, the scpi command to read the marker y value: CALCulate#:FSCan:MARKer#:Y? returns the unwrap phase value in addition to the phase value • SCPI commands for Calibration: Select Open Calibration [:SENSe#]:CORRection:COLLect:METHod[:RESPonse]:OPEN Select Short Calibration [:SENSe#]:CORRection:COLLect:METHod[:RESPonse]:SHORT Select Enhance calibration [:SENSe#]:CORRection:COLLect:METHod:ENHAnced Select Through Calibration [:SENSe#]:CORRection:COLLect:METHod[:RESPonse]:THRU Select 1 Port Calibration[:SENSe#]:CORRection:COLLect:METHod:SOLT1 • SCPI command for setting/obtaining the demodulation type: ADEMod:STYLe, new parameter is PM • SCPI command for setting the scan time in MA mode [:SENSe#]:SWEep:TIME • Add SCPI commands in MA mode: Get AM parameters: FETCh:AM#? Get FM parameters: FETCh:FM#? Get PM parameters: FETCh:PM#? • Add SCPI command: Exit remote status: SYSTem: LOCal <p>Solved Issues:</p> <ul style="list-style-type: none"> • Fix the problem that the bandwidth of the emi filter in SA mode • Fix the problem that setting the TG Level in SA mode may cause TG to have no output • Fix the problem that the n dB Marker measurement results in SA mode are inconsistent

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	<p>with the OBW measurement results</p> <ul style="list-style-type: none"> • Fix the problem that there is an invalid frequency menu in Harmonic in SA mode • Fix the problem that the SCPI command: READ:ADEMod? would return an invalid value when reading the analog demodulation measurement results in MA mode • Fix the abnormality of the first scan in EMI mode • Fix the problem that setting rbw may crash when qpd is not enabled in EMI mode • Fix the problem of wrong reset when switching continue/single in RTSA mode • Fix the problem that the 3D Spectrogram in RTSA mode will be abnormally full when pressing pause under continuous scanning • Fix an issue where 'micro' relative units represented by 'u' were not recognized when reading files
V3.2.2.5.1R1 2022/5/10	<p>Notice: 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"> • Optimize the Ref level and Att couple • Add SCPI commands in MA Mode <ul style="list-style-type: none"> •READ:ADEMod:AVG? •[:SENSe]:ADEMod:FM:DEVI? •[:SENSe]:ADEMod:FM:DRIFt? •[:SENSe]:BWIDth[:RESolution] •[:SENSe]:BWIDth[:RESolution]? •[:SENSe]:BWIDth:EQLPf •[:SENSe]:BWIDth:EQLPf? •CALCulate:MARKer#:PTPeak • Add Cable Atten to correct cable loss in DTF Mode • Add .trc file in EMI Mode • Add .lic file auto scan <p>Solved Issues:</p> <ul style="list-style-type: none"> • Fix the false signals in density view in RTSA mode • Fix pi/4 DPSK 和 pi/8 DPSK decode errors in MA mode • Fix calibration error when port extension on in VNA mode • Fix fft frequency error in narrow span in SA mode • Fix trace avg calculation error in SA mode • Fix the zero sweep type when fft in SA mode
V3.2.2.5.0 2021/9/30	<p>Notice: 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>

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	<p>New Functionality:</p> <ul style="list-style-type: none"> • Add Ext Trigger Delay from 0-10 seconds in SA Mode • Add Limit in Log mag and Lin mag format; add calibration average; add s1p touchstone file save in VNA mode <p>Improvements:</p> <ul style="list-style-type: none"> • VNA sweep points up to 10001; Scale down to 0.001 in Smith chart; • MA Filter type Nyquist change to Raised Cosine to align SCPI command; improve filter performance in low frequency • EMI RBW/Step from 1 to 3 <p>Solved Issues:</p> <ul style="list-style-type: none"> • SA: Fixed the difference between marker and peak and marker style; Center Freq error; Limit fail to stop error; Auto frequency error; In normalization, auto re-normalized after any setting changes • VNA: Fixed Phase error; STA file saving error; CSA file loading error; S21 calibration error; Enhanced calibration error • RTSA: Fixed continue peak preset error; freq step error • EMI: Fixed frequency offset error; saving std lim path error • Web browser: Fixed change IP error, Login error after changing password
V3.2.2.4.0 2021/1/15	<ul style="list-style-type: none"> • Fix TG switch error at small RBW • Fix Help and Limit file lost when Factory reset • Fix Auto open delay unit error in VNA mode • Fix CNR calc error when no peak found • Fix OBW result overflow • Fix Harmonic calc error at 100Hz RBW • Fix Reflection Open+Short calibration action • Fix spectrum amplitude error in DMA mode • Optimize EMI .csv file content to all signal list • Optimize EMI peak search • Optimize Auto cal process • Add Peak search to Spectrum in DMA mode • This version can not be rolled back
V3.2.2.3.3R1 2020/12/01	<p>New Functionality:</p> <ul style="list-style-type: none"> • Add EMI filter in SA for EMI option <p>Solved Issues:</p> <ul style="list-style-type: none"> • Optimize the response in RTSA • Optimize the TG flatness and control procedure • Optimize Help • Fix Correction, .csv file, add peak numbers to 20 in EMI mode

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	<ul style="list-style-type: none"> • Fix ADC overload warning error, and time unit error in Calibration in VNA Mode • Fix amplitude error in DMA Mode • Fix the frequency band downgrade to 3.2GHz on some units Fix upgrade failure issue
V3.2.2.3.2 2020/09/09	New Functionality: <ul style="list-style-type: none"> • Add VNA and DTF mode • Update EMI option to a new EMI measurement mode Solved Issues: <ul style="list-style-type: none"> • Fix bug in Help File • Fix some ADC overload warning • Fix some PvT and Density marker bugs. • Fix Ch Power calculation bug in small span in SA Mode • Fix amplitude bug in AMA Mode • Fix peak search bug in SCPI command