

## **Revision History**

| Version   | Revision                                                                                                                                                          |
|-----------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| V1.3.9.10 | 1. This firmware must be upgraded from V1.2.8.1 or later, V2.X.X.X versions are not                                                                               |
| 2024/1/30 | supported for upgrading this firmware. If your SSA3000X has an earlier version, please update to V1.2.8.1 first and then proceed to update to the latest version. |
|           | 2. Fixed the error in setting RBW in EasySpectrum when using emi filter.                                                                                          |
|           | 3. Optimize the settable range of Ref Level. When the maximum value of Correction                                                                                 |
|           | data that is turned on is positive, the maximum settable Ref Level is correspondingly                                                                             |
|           | increased by an equal value.                                                                                                                                      |
|           | 4. Fixed TOI measurement marked error.                                                                                                                            |
|           | 5. Fixed the issue of possible crash when using the scpi command [:SENSe]:CORRection:CSET#:DATA? to read Correction data.                                         |
|           | 6. Optimize the use of command :DISPlay:WINDow:TRACe:Y[:SCALe]:RLEVel to set Ref                                                                                  |
|           | Level. If no unit is specified, the current amplitude unit is used as the unit.                                                                                   |
|           | 7. Fixed the issue where the command :CALCulate:MARKer#:Y? may read Marker                                                                                        |
|           | amplitude value incorrectly when using Video Trigger.                                                                                                             |
|           | 8. Add Peak to Center command                                                                                                                                     |
|           | :CALCulate:MARKer#:MAXimum:CENTer                                                                                                                                 |
| V1.3.9.8  | 1. This firmware must be upgraded from V1.2.8.1 or later. If your SSA3000X has an                                                                                 |
| 2021/7/20 | earlier version, please update to V1.2.8.1 first and then proceed to update to the                                                                                |
|           | latest version.                                                                                                                                                   |
|           | 2. Update the measurement result of MARKER immediately when changing its                                                                                          |
|           | parameters, instead of after the trace sweep ends.                                                                                                                |
|           | 3. Improve the stability of TG                                                                                                                                    |
| V1.3.9.7  | 1. This firmware must be upgraded from V1.2.8.1 or later. If your SSA3000X has an                                                                                 |
| 2021/1/30 | earlier version, please update to V1.2.8.1 first and then proceed to update to the latest version.                                                                |
|           | 2. Fixed the LOG scale sweep time and display error                                                                                                               |
|           | 3. Fixed the trace file .trc load and display error                                                                                                               |
|           | 4. Improve the stability of TG                                                                                                                                    |
|           | 5. Add peak excursion require command                                                                                                                             |
|           | :CALCulate:MARKer:PEAK:EXCursion?                                                                                                                                 |
|           | Add sweep state require command                                                                                                                                   |
|           | :TRACe:SWEep:STATe?                                                                                                                                               |
|           | Add N dB Bandwidth left and right frequency require command                                                                                                       |
|           | :CALCulate:MARKer*:BANDwidth:RLEFt?                                                                                                                               |
|           | :CALCulate:MARKer*:BANDwidth:RRIGht?                                                                                                                              |
| V1.3.9.6  | 1. This firmware must be upgraded from V1.2.8.1 or later. If your SSA3000X has an                                                                                 |
| 2020/7/20 | earlier version, please update to V1.2.8.1 first and then proceed to update to the                                                                                |
|           | latest version.                                                                                                                                                   |



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|------------|------------------------------------------------------------------------------------|
|            | 2. Fixed the problem unit in TG and the UNCAL condition                            |
|            | 3. Fixed the AVG detector in frequency LOG scale                                   |
|            | 4. Fixed the display error with long file name                                     |
|            | 5. Fixed some SCPI commands                                                        |
|            | 6. Fixed the beeper switch                                                         |
|            | 7. Fixed the .cor file error when recalling it                                     |
|            | 8. Add Limit mask offset in frequency and amplitude                                |
| V1.2.9.3a  | 1. This firmware must be upgraded from V1.2.8.1 or later. If your SSA3000X has an  |
| 2019/5/27  | earlier version, please update to V1.2.8.1 first and then proceed to update to the |
|            | latest version.                                                                    |
|            | 2. Fixed the OBW - Transmit Freq Error bug                                         |
|            | 3. Fixed the LOG scale –Correction display error                                   |
|            | 4. Fixed some marker and display text bugs                                         |
|            | 5. Add "UNCAL" warning when setting changed after TG normalization                 |
|            | 6. Add "Select All" in File-Operate menu                                           |
|            | 7. Add peak table "Sort By Freq/Ampt" menu in Peak-Search Config                   |
|            | 8. Optimize Freq Offset to 10 GHz, Scale/Div to 0.1 dB                             |
|            | 9. Optimize several SCPI commands, such as *OPC? , ESR? , etc.                     |
|            | 10. Optimize .sta file limit parameters, Optimize .csv file parameters             |
| V1.2.9.2a  | 1. This firmware must be upgraded from V1.2.8.1 or later. If your SSA3000X has an  |
| 2018/11/1  | earlier version, please update to V1.2.8.1 first and then proceed to update to the |
|            | latest version.                                                                    |
|            | 2. Add trigger slope in Video Trigger                                              |
|            | 3. Optimize Trace Math, and SCPI command                                           |
|            | 4. Optimize the noise during Demod in zero span                                    |
|            | 5. Optimize the screen text display                                                |
|            | 6. Optimize the Auto Tune                                                          |
|            | 7. Optimize the log scale in CSV file                                              |
| V1.2.9.1   | 1. This firmware must be upgraded from V1.2.8.1 or later. If your SSA3000X         |
| 2018/04/10 | has an earlier version, please update to V1.2.8.1 first and then proceed to        |
|            | update to the latest version.                                                      |
|            | 2. Fixed bugs on peak search and next peak.                                        |
|            | 3. Optimize SCPI commands for peak table, screenshot, etc.                         |
|            | 4. Optimize the LOG X-scale for EMI test.                                          |
|            | 5. Optimize the Quasi-Peak detector accuracy for EMI test.                         |
| v1.2.8.5a  | 1. This firmware must be upgraded from V1.2.8.1 or later. If your SSA3000X has an  |
| 2017/9/20  | earlier version, please update to V1.2.8.1 first and then proceed to update to the |
|            | latest version.                                                                    |
|            | 2. Fixed v1.2.8.5 bugs on Refl Mode.                                               |
|            | 3. Fixed v1.2.8.5 bugs on language and file.                                       |
| v1.2.8.5   | 1. This firmware must be upgraded from V1.2.8.1 or later. If your SSA3000X has an  |
| 2017/9/10  | earlier version, please update to V1.2.8.1 first and then proceed to update to the |
|            | latest version.                                                                    |



| Version         | Revision                                                                                   |
|-----------------|--------------------------------------------------------------------------------------------|
|                 | 2. Add 1 Hz/3 Hz RBW function.                                                             |
|                 | 3. Fixed some bugs on SCPI.                                                                |
|                 | 4. Fixed some bugs on sweep, Log scale, and display.                                       |
| V1.2.8.3        | 1. This firmware must be upgraded from V1.2.8.1 or later. If your SSA3000X has an          |
| 2017/6/10       | earlier version, please update to V1.2.8.1 first and then proceed to update to the         |
|                 | latest version.                                                                            |
|                 | 2. Improved the stability of sweep and avg detect.                                         |
|                 | 3. Fixed some bugs on sweep, frequncy counter and Log-Log scale.                           |
|                 | 4. Fixed some bugs on SCPI and the AMK option.                                             |
| V1.2.8.2        | 1. This firmware must be upgraded from V1.2.8.1 or later. If your SSA3000X has an          |
| 2017/2/14       | earlier version, please update to V1.2.8.1 first and then proceed to update to the         |
|                 | latest version.                                                                            |
|                 | 2. Add socket/telnet-scpi, you can operate remote control through LAN port without         |
|                 | NI-VISA installed. Please see SSA3000X 's Programming Guide for more details.              |
|                 | 3. Change two limit lines in different colours.                                            |
|                 | 4. When quit from TG, stay in "Auto" sweep.                                                |
|                 | 5. Lower some spurs when FFT.                                                              |
|                 | 6. Improve the stability.                                                                  |
| V1.2.8.1        | 1. Add "PNG " file type for screenshot.                                                    |
| 2016/11/3       | 2. Support TG in RBW less than 30 kHz.                                                     |
|                 | 3. Modify default TG output power, -20 dBm in spectrum ananlyzer mode and 0 dBm in         |
|                 | reflection measure mode, and some other TG issues.                                         |
|                 | 4. Updating the format of "LIM" file. After this firmware, the old limit files will not be |
|                 | supported. You can recreate them through "EasySpectrum" free software easily.              |
|                 | 5. After this firmware, do not support downgrade operation.                                |
| 100.01.02.07.07 | 1. Add "amplitude correction editing functions"                                            |
| 2016/6/29       | 2. Add "input impedance switching function between $50\Omega$ and $75\Omega$ "             |
|                 | 3. Add "jpg format screenshot function"                                                    |
|                 | 4. Add "Reset & Clear function"                                                            |
|                 | 5. Separate the "File Type" into "View Type" and "Save Type" in the file menu.             |
| 100.01.02.07.06 | 1. Fixed "error importing calibration files into machine."                                 |
| 2016/5/13       |                                                                                            |
| 100.01.02.07.05 | 1. Add USB-GPIB connect function                                                           |
| 2016/4/19       | 2. Add boot reset function                                                                 |
|                 | 3. Fixed "Spectrum Monitor function can be opened when using normalize or                  |
|                 | reflection meas"                                                                           |
| 100.01.02.07.03 | 1. Fixed "button does not respond after self test"                                         |
| 2016/3/30       |                                                                                            |
| 100.01.02.07.02 | 1. Fixed "the device can not start up when start option is user configuration"             |
| 2016/3/15       | 2. Fixed "the problem of frequency count large errors"                                     |
|                 | 3. Fixed "the device can not hunt signal when setting zero span occasionally"              |
| 100.01.02.07.01 | 1. Add "X log axis"                                                                        |
| 2016/2/29       | 2. Add "license inputbox"                                                                  |



| Version         | Revision                         |
|-----------------|----------------------------------|
|                 | 3. Add "file save alert dialog " |
| 100.01.02.07.00 | 1. Add "EMI function "           |
| 2016/1/15       | 2. File system upgrade           |



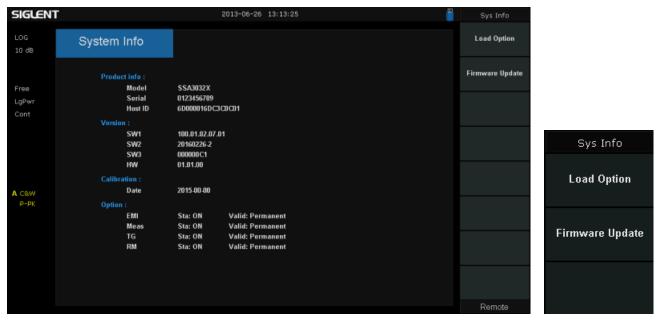
## **Update Instructions**

Note: During the updating, do not cut off the power or pull out the U-disk and if the upgrade process gets stuck, please contact SIGLENT immediately at support@siglent.com.

1. Copy the update file (\*.ads) to a FLASH type U-disk, and then connect the U-disk to the USB host port(10) of the instrument.

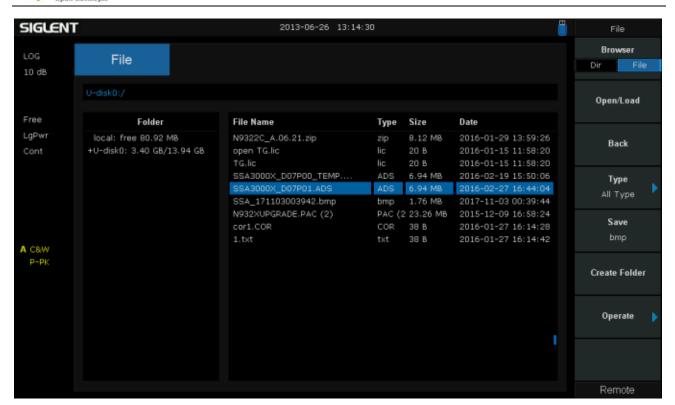


2. Press the System key on the front panel, and then softkey "System->System Info-> Firmware Update", to enter the interface of the file browser.



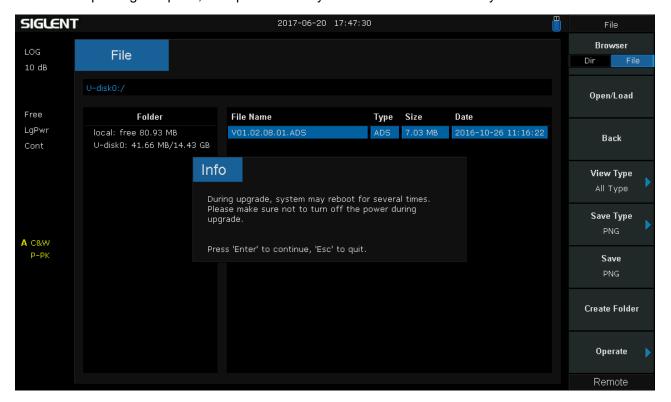
3. Select "U-disk" thru the knob on the front panel, press "Browser", and then select the correct ADS file.





 Press "Open/Load" to start the update. A progress bar is displayed during the update. It will take about 1~2 minutes.

When updating complete, the spectrum analyzer will restart automatically.



5. After the spectrum analyzer restarted, check the version information in sys info.