

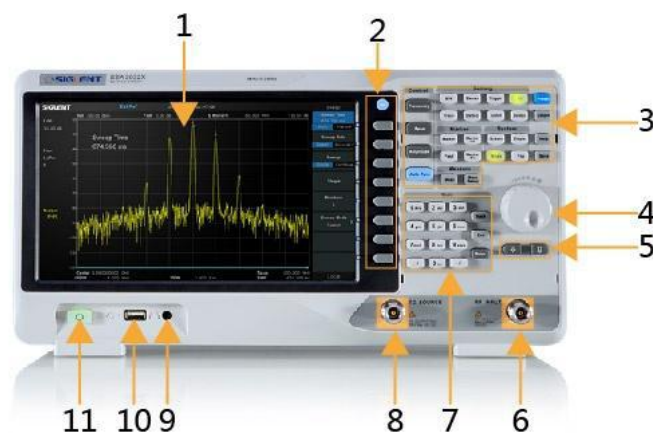
## SVA1000X Firmware Revision History

| Version                | Revision  |
|------------------------|---|
| V2.2.1.2.2<br>2019/8/1 | <p>Notice:</p> <p>This firmware must be upgraded from V2.1.1.1.12a or later. If your SVA1015X has an earlier version, please update to V2.1.1.1.12a first and then proceed to update to the latest version.</p> <p>New Functionality:</p> <ul style="list-style-type: none"> <li>• Add a spectrum view, marker for MA Mode</li> <li>• Add mode couple for center frequency</li> <li>• Add system message</li> </ul> <p>Improvements:</p> <ul style="list-style-type: none"> <li>• Optimize .sta file, trace interpolation for VNA Mode</li> <li>• Optimize PSK/QAM clock sync ability for MA Mode</li> </ul> <p>Solved Issues:</p> <ul style="list-style-type: none"> <li>• Fixed AVG, Math bug for VNA Mode</li> <li>• Fixed Date&amp;Time set bug</li> </ul>  |
| V2.2.1.2.1<br>2019/6/1 | <p>Notice:</p> <p>This firmware must be upgraded from V2.1.1.1.12a or later. If your SVA1015X has an earlier version, please update to V2.1.1.1.12a first and then proceed to update to the latest version.</p> <p>New Functionality:</p> <ul style="list-style-type: none"> <li>• Add CNR, Harmonic measurement in AMK options for SA Mode</li> <li>• Add port extensions, user cal kit, new marker functions, correction switch, multi-traces and multi-format overlay display for VNA Mode</li> <li>• Extend xQAM, MSK, xPSK modulation analysis in DMA option for MA Mode</li> <li>• Add new marker functions, multi-traces and multi-format overlay display for MA Mode</li> <li>• Add SCPI commands for VNA and MA Modes</li> <li>• Add some system functions: Screen Annotation in Display menu, FTP server for file transfer</li> </ul> <p>Improvements:</p> <ul style="list-style-type: none"> <li>• Optimize UI, refresh and response for all Modes</li> <li>• Optimize SCPI commands for basic control, such as INIT, *OPC?, *ESR, Abort, etc.</li> <li>• Optimize Log scale axes, Peak search, Auto tune, TG normalization for SA Mode</li> <li>• Optimize S11 and S21 simultaneous measurement, calibration control, trace control and auto scale for VNA Mode</li> <li>• Optimize some system functions: Power Saving, IP config</li> </ul> <p>Solved Issues:</p> |

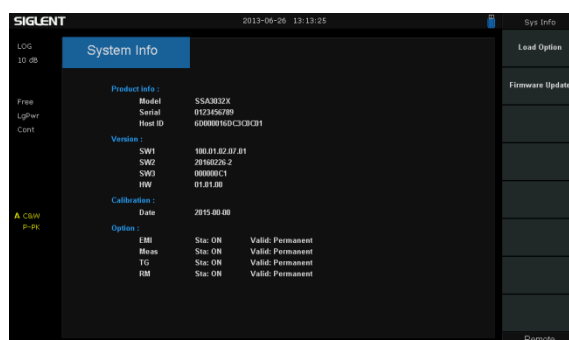
| Version                  | Revision   |
|--------------------------|--|
|                          | <ul style="list-style-type: none"> <li>Fixed OBW Transmit Freq Error</li> <li>Fixed bugs during Mode switch</li> </ul>   |
| V2.1.1.1.13<br>2018/11/1 | <p>New Functionality:</p> <ul style="list-style-type: none"> <li>Screen saver for power saving</li> <li>VNC View only for web server</li> <li>VNA: .csv file for each format, Expand Phase for marker</li> </ul> <p>Improvements:</p> <ul style="list-style-type: none"> <li>VNA: Auto Scale, min Scale to 0.1 dB</li> <li>DTF: logistic scale for RL display</li> </ul> <p>Solved Issues:</p> <ul style="list-style-type: none"> <li>Invalid Demod time in FM</li> <li>Scale in TG</li> <li>Wrong units in Markers and peaks</li> <li>Boot or Mode start lock up</li> <li>Udisk display wrong files</li> <li>SCPI command incompatible</li> <li>Min span to 10kHz in AMK power measurement</li> </ul> |
| V2.1.1.1.12a<br>2018/8/8 | <ol style="list-style-type: none"> <li>Spectrum Analysis mode : Improved the stability of sweep and interface.</li> <li>VNA mode: fasten the VNA sweep speed; expand the minimum span from 10M to 10 kHz.</li> <li>Modulation Analysis mode: add trigger, optimize the modulation analysis algorithm.</li> <li>Add user port number selection for web server.</li> </ol>   |
|                          |  |

## Update Instructions

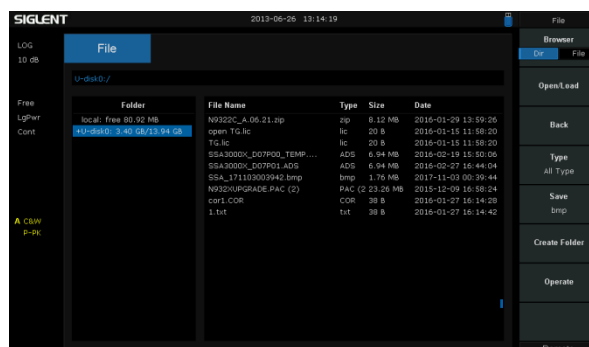
- Copy the update file (\*.ads) to a FLASH type U-disk, and then connect the U-disk to the USB host port(10) of the instrument.

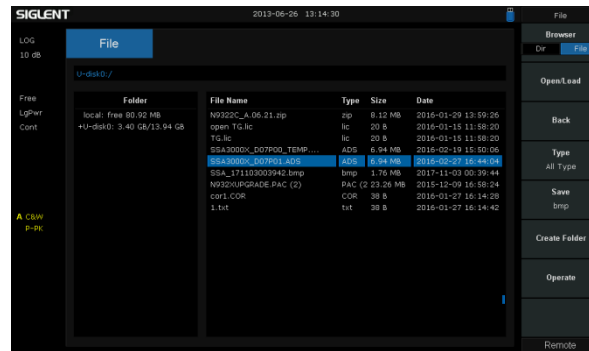


- Press the **System** key on the front panel, and then softkey “System->System Info-> Firmware Update”, to enter the interface of the file browser.

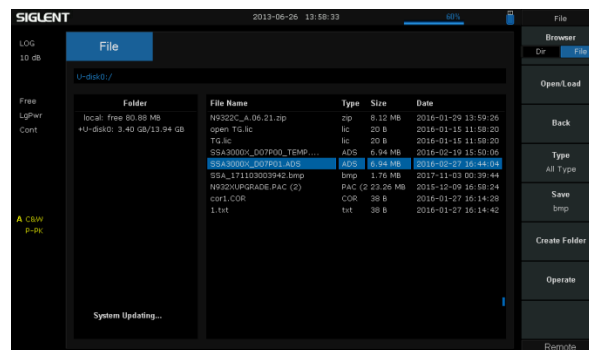


- Select “ U-disk” thru the knob on the front panel, press “Browser”, and then select the correct **ADS file** using the knob





- Press "Open/Load" to start the update. A progress bar is displayed during the update. When updating complete, the spectrum analyzer will restart automatically.



**WARNING:**

**DO NOT shut down the instrument during updating**