

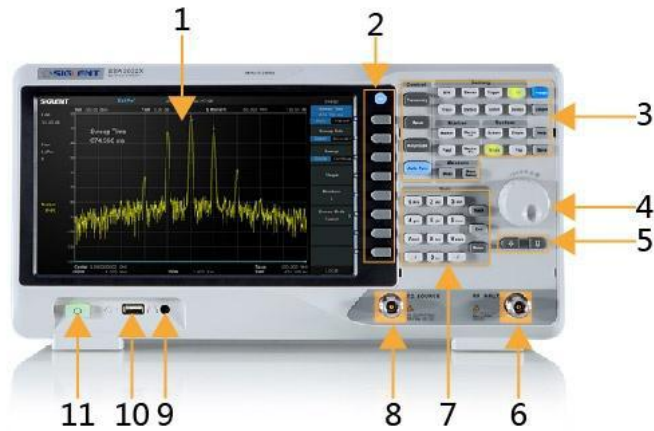
## SVA1000X Firmware Revision History

Version	Revision
V2.2.1.2.5 2019/11/11	<p>Notice: This firmware must be upgraded from V2.1.1.1.12a or later. If your SVA1000X has an earlier version, please update to V2.1.1.1.12a first and then proceed to update to the latest version.</p> <p>Improvements:</p> <ul style="list-style-type: none"> <li>• Optimize trace, marker, signal track, TG normalization in SA Mode</li> <li>• Optimize calibration flow, calibration algorithm and sweep speed in VNA 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 admittance error, port extensions error in VNA Mode</li> <li>• Fixed spectrum amplitude error, meas error, waveform discontinue in MA Mode</li> <li>• Fixed English help, system message</li> </ul>
V2.2.1.2.2 2019/8/1	<p>Notice: This firmware must be upgraded from V2.1.1.1.12a or later. If your SVA1000X 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 2019/6/1	<p>Notice: This firmware must be upgraded from V2.1.1.1.12a or later. If your SVA1000X 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> </ul>

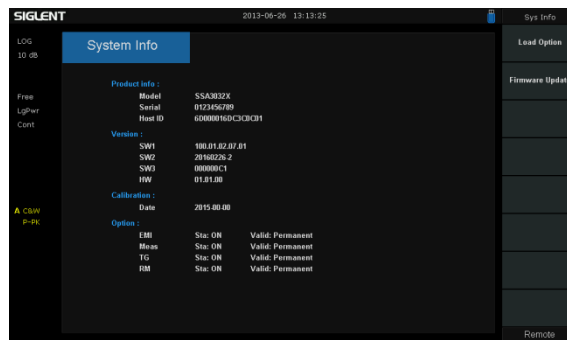
Version	Revision
	<ul style="list-style-type: none"> <li>• Add new marker functions, multi-traces and multi-format overlay display for MA Mode</li> <li>• Add SCPI commands for VNA and MA Modes</li> <li>• Add some system functions: Screen Annotation in Display menu, FTP server for file transfer</li> </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> <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 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 2018/8/8	<ol style="list-style-type: none"> <li>1. Spectrum Analysis mode : Improved the stability of sweep and interface.</li> <li>2. VNA mode: fasten the VNA sweep speed; expand the minimum span from 10M to 10 kHz.</li> <li>3. Modulation Analysis mode: add trigger, optimize the modulation analysis algorithm.</li> <li>4. Add user port number selection for web server.</li> </ol>

## Update Instructions

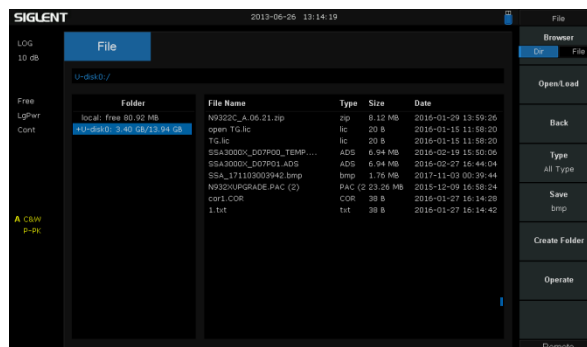
- Copy the update file (\*.ads) to a FLASH type U-disk, and then connect the U-disk to the USB host port(10) of the instrument.

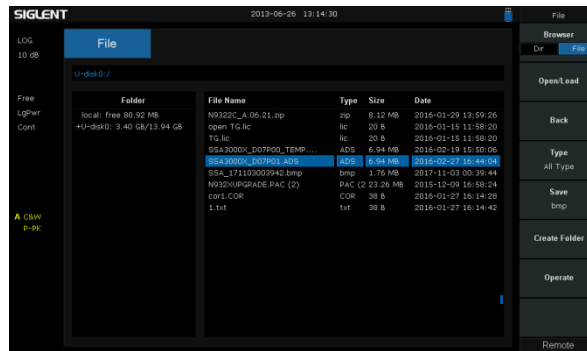


- Press the **System** key on the front panel, and then softkey “System->System Info-> Firmware Update”, to enter the interface of the file browser.

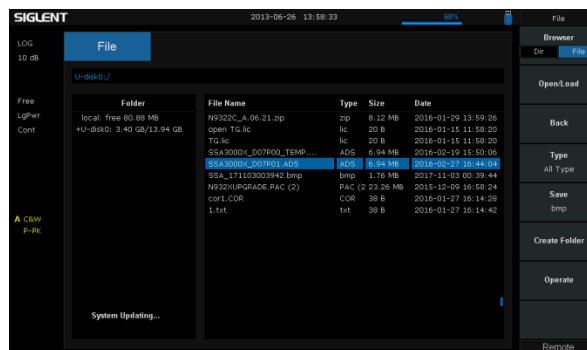


- Select “ U-disk” thru the knob on the front panel, press “Browser”, and then select the correct **ADS file** using the knob





- 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**