Revision History

Date	Version	Revision
7/20/2023	2.01.01.37R8	1. Solve the problem of slow USB drive detection during startup 2. Solve the problem of outputting abnormal pulses during burst mode 3. Add instructions for saving and reading status (XML) files 4. Add the instruction to clear the statistics of the counter
3/4/2023	2.01.01.37R6	1. Compatible with Rev.G hardware 2. Fix the bug that the system does not respond when there is no operation for a long time after the counter is turned on
8/31/2022	2.01.01.37R3	3. Compatible with Rev.F hardware 4. Support trig dual channel separated when use mannul trigger. 5. Support using another channel as the modulation source 6. Support setting the output frequency after the completion of sweep 7. Counter add fast measurement mode 8. Change the square waveform data used in square FM modulation
12/16/2019	2.01.01.35R3B2	Optimized debounce of the front panel buttons.
9/10/2019	2.01.01.35R3B1	1. Changed the amplitude strategy of AM modulation: The carrier stays fixed at the amplitude, regardless of the modulation setting. 2. Increased the upper limit of Harmonics number from 10 to 16. 3. Supported Multi-Device Synchronization. 4. Supported Up followed by Down Sweep mode in Linear sweep (no change for Log sweep). 5. Added an icon to indicate clock source is internal or external. Internal: External: External and the clock is lost: 6. Changed the clock switch strategy: When the clock source is set to External and no actual external clock signal is being received, the clock source will not switch to Internal automatically but the clock icon will

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		indicate that external clock is lost
		7. Supported specifying Arb type by remote control when the modulating waveform is Arb.
		8. Optimized the UI of selecting built-in arbs
		9. Supported changing the unit of amplitude without any amplitude change by long pressing the "Amplitude" softkey.
		10. Added "User" option under "PowerOn Setting".
		11. Added "Normal" as a new UI color style.
		12. Added memory space information in Store/Recall UI.
		13. Optimized response of the universal knob
		14. Added indicator for double function of the soft keys
		15. Removed the warning message when parameter is set to a value beyond the limit
		16. Fixed several bugs
		a) [2017/04/07-92573] Digit changes when setting delay of Pulse by the knob
		b) Amplitude unit "dBm" is not remembered after a reboot
2/28/2018	2.01.01.23R8	Optimized calibration and PV process on the production line.
8/29/2017	2.01.01.23R7	1. Supported system recovery from U-disk.
		2. Fixed a bug which may cause the generator report a false over voltage alarm when start-up.
3/23/2017	2.01.01.23R3	1. Allow 0 Hz for CH Frequency In MOD Modes PM, AM, DSB-AM, ASK, PSK
		2. Allow MOD frequency > CH Frequency In MOD Modes PM, DSB AM, ASK
		3. Allow DSB-AM, AM MOD Modes In TrueArb Mode
		4. Up Followed by Down Sweep Mode is Supported in Linear Sweep (No Change for Log Sweep)
		5. Added ARB waveform name to display, allowing user to know what Arb waveform is loaded
		6. Fixed some bugs
		a) Arb Waveforms In DDS Mode Have One (Small) Glitch Per Cycle
		b) Built in Ramp waveform has a flat spot issue at the rising slope zero crossing right at the SYNC pulse.
		c) Power Up Last Does Not Remember

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			SRate/Frequency Setting
		d)	MOD Type = DSB AM Has Amplitude Issues
9/30/2016	2.01.01.22R5	1.	Permit setting the frequency to 0. 0 Hz would mean that the DDS accumulated phase word would be held/not change with time.
		2.	Fixed some bugs
		a)	Single Channel AM Modulation Output Amplitude Is 9.3% Low
		b)	Manual trigger can not trigger both channels at the same time
		c)	SW bug regarding the modulation with noise
		d)	Frequency Coupling/Phase Lock Does Not Work in TrueArb
		e)	Instrument Powers Up With Wrong Waveforms
		f)	TrueArb mode CH Coupling Bug When Entering Samples/Sec
		g)	Display graphic error for displayed wave shape
		h)	Can not save the last state after the update
6/16/2016	2.01.01.21R2	1.	Added Waveform Combination function, to support combining ch1 and ch2 from internal to generate complex signals such as sine + noise and two-tone. The set path: Utility | Output Setup | Wave Combine
		2.	Added mode selection: "Pase-Locked" and "Independent". In "Pase-Locked" mode the generator resets both channels every time the frequency is changed to maintain synchronization automatically. In "Independent" mode the generator will not reset any channel when the frequency is changed; the phase difference between channels is random. The set path: Utility | mode
		3.	Fixed some bugs
		a)	Can not delete files with illegal characters
		b)	In burst mode, press the soft key for cycles, it changes to infinite right off the bat
		c)	External modulation input inverted compared to convention
		d)	Can not remember the clock source setting
		e)	Some unexpected glitches when enabling the output or change the parameters
1/16/2016	2.01.01.17R5 NOTE: After being	1.	Added statistic function in counter mode
		2.	Supported using method 2 from our "generating

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	updated to this release, the generator cannot be backward to previous releases any more	mulitphase waveforms" application note (refer to http://www.siglentamerica.com/prodcut-pxzl.aspx?id=90&tid=16&T=2) to synchronize 2 units of SDG2000X 3. Fixed some bugs **a) A bug in file system could cause the generator never startup** b) DHCP does not run at power up c) Channel lock phase can be wrong in modulation sometimes d) Error in calculation of frequency deviation in counter mode e) Instrument does not allow CH1 and CH2 to both use the external input for the modulation source simultaneously in tracking mode f) Downward compatibility of .xml state file g) Unable to delete files with uncommon character(s) in their names
11/30/2015	2.01.01.16R2	1. Added phase deviation option in channel tracking mode 2. Optimized the User Interface, including save/recall, arb, etc. 3. Supported long pressing the Output key to switch the load between 50ohm and HiZ 4. Supported to autosave the imported binary file (*.bin). 5. Fixed some bugs a) Unexpected change on Phase difference between channels in sweep mode when switching the style between linear and log b) Channels not aligned when the frequency of one channel is integral multiple of another c) Wrong sweep profile when using manual trigger d) Unexpected reset on output when setting illegal parameters e) Unstable waveform at the beginning of after enabling the output f) Display error when switching between TrueArb and DDS in Arb mode g) Frequency deviation display problem in Counter mode h) Wrong project name in system information i) When pressing the waveform button, the parameter button flashes

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		j) Unable to set variable load value without touch screen
		k) Unexpected digit jumping when setting parameters with the knob
		l) Set CH2 to invert and then do a system -> default, the option will return to "normal", but the signal will stay inverted.
9/30/2015	2.01.01.15R2	1. Supported adjustable noise bandwidth 2. Supported harmonic 3. Added some built-in arbs, so the number of arb types increased to 196 4. Fixed some bugs
8/27/2015	2.01.01.12R1	The first formal release

Compatibility between Versions

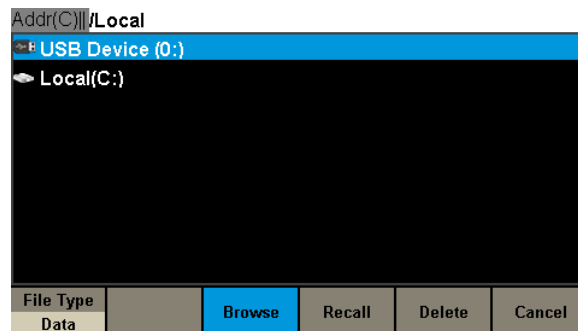| Source Version	Object Version	Compatibility
2.01.01.37R6	2.01.01.37R8	Tested.
2.01.01.37R3	2.01.01.37R6	Tested.
2.01.01.35R3B2	2.01.01.37R3	Tested.
2.01.01.35R3B1	2.01.01.35R3B2	Tested.
2.01.01.23R8	2.01.01.35R3B1	Tested.
2.01.01.23R7	2.01.01.35R3B1	Tested.
2.01.01.23R7	2.01.01.23R8	Tested.
2.01.01.23R5	2.01.01.23R8	Tested.
2.01.01.23R3	2.01.01.23R8	Tested.
2.01.01.22R5	2.01.01.23R8	Tested.
2.01.01.21R2	2.01.01.23R8	Tested.
2.01.01.17R5	2.01.01.23R8	Tested.
2.01.01.16R2	2.01.01.23R8	Not compatible. Please update to 2.01.01.17R5 at first
2.01.01.15R2	2.01.01.23R8	Not compatible. Please update to 2.01.01.17R5 at first
2.01.01.12R1	2.01.01.23R8	Not compatible. Please update to 2.01.01.17R5 at first

Update Instructions

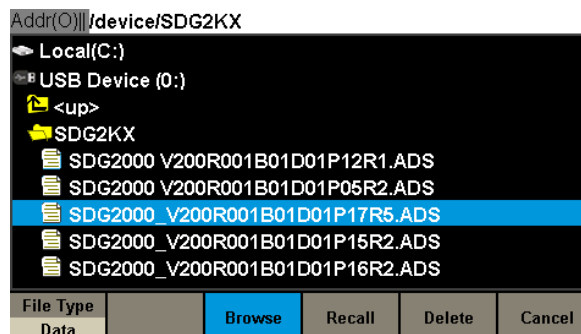**WARNING: DO NOT shut off the instrument until the update is completed.**

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

2. Press the ☐ Utility ☐ key on the front panel, and then softkey "System ->Page 1/2 -> Firmware Update", to enter the interface of the file browser.

3. Select "USB Device" thru the knob on the front panel, press "Browse", and then select the correct ads file using the knob

4. Press "Recall" to start the update. A progress bar is displayed during the update. After the update is completed, the generator will restart automatically.

WARNING: DO NOT shut off the instrument until the update is completed.