Revision History

Date	Version	Revision
2024/6/14	6.1.37R17	1. Optimize Autosetup speed
		2. Optimize SDS1104X-E bandwidth
		3. Standard software functions of FG, LA and WIFI
2022/5/20	6.1.37R9	1. Fixed the problem: The skew of the two ADCs is not
, _, _,		accuracy for hardware of 09 version (System Status shows
		Hardware Version: 09-xx). The other hardware version has
		no this problem.
2021/11/09	6.1.37R8	4. Fixed the problem: very few SDS1xx4X-e stuck at self-
		calibration
		5. Be Compatible with a new VGA chip
2021/10/15	6.1.37R6	1. Fixed the bug in 6.1.37R2 which cause the WiFi does not
		work
2021/07/26	6.1.37R2	1. Added data logger featuring Sample and Measurement
		Logger functions
		2. Added counter function
		3. Added Labels
		4. Added NTP (Network Time Protocol) and Time Zone. Also
		requires OS update to SDS1xx4X-E_OSV2 which is located
		on the SIGLENT product webpage. The OS Update
		Instructions is also included SDS1xx4X-E_OSV2.zip
		5. Modified negative or positive of horizontal delay: Time
		zero is in trigger. Before trigger, time position is -time
		(negative delay relative to trigger) and after trigger is
		+time (positive delay relative to trigger)
		6. Fixed a bug with Bin2CSV for ROLL mode
		7. Rebuilt Bin2CSV to File Converter which can also convert
		data logger file to CSV.
		8. Fixed a bug: some case there is a blue line on decode bus
		9. Fixed a bug with saving hex MSO CSV file
		10. Fixed a bug: After rebooting , Bode Plot cursor can't be
		moved
		11. Fixed a bug: fine adjusting with customer probe
		12. WiFi supported Spaces and Special Characters
2020/02/25	6.1.35R2	1. Added support for the SAG10211 USB Isolated AWG
		Module Hardware
		2. Fixed the bug: Sometimes PNSU command returns invalid
		value (Need referring to the latest Program Guide)
		3. Added 9 data bits for UART decoding
		4. Fixed the bug of UART decoder with some special
		settings

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		5. Increased baud rate of UART trigger from 5 Mbps to 20
		Mbps
		6. Fixed the bug: The command 'WF? DAT2' returns error
		length of waveform when digital is enable
		7. Fixed the bug: CSV file of waveform has no indication of
		the trigger point in the data
		8. Fixed the bug: After repowering all FFT markers are on
		just one peak
		9. Fixed the bug: After repowering, signal level of CAN
		trigger can't be recalled
		10. Fixed a few SCPI Commands errors:
		MATH: CURSOR_VALUE?
		C3:INVERT_SET? is missing
		HISTORY_LIST? is missing
		DIGITAL:LOW8_SWICHT, typo in name
		C5:COUPLING? typo in name
		11. Fixed the Bode Plot bug: Sometime there isn't enough
		delay after the scope switches timebase values before it
		tries to take a measurement
		12. Fixed the bug : Matlab can't import 14 M Matlab
		waveform files
		13. Fixed the bug: 'WF?' command ignores the length set
		by 'WFSU' for digital
2019/05/15	6.1.33	1. Optimized communication between SDS1xx4X-E and
		SLA1016. This revision (and higher) requires the SLA1016
		MUST be upgraded to 8.1.16 (or higher) first. Please take
		a look at 'Compatibility with SLA1016' at the end of
		the release notes.
		2. AWG Optimized Bode Plot: Accuracy and Sensitivity
		Improvement, New Vari-level Mode for Testing Loop
		Response, Miscellaneous Function and UI Improvements.
		3. Optimized FFT UI: Added Peaks, Markers, and search
		within FFT.
		4. Optimized accessing USB drive so that when a USB drive
		is moved to a computer, Windows will not prompt a restoration of the USB drive.
		5. Optimize WIFI connection: 63 characters can now be used
		for a WPA2 PSK key. 6. Added parity options of MARK/SPACE for UART of 9-bit
		 Added parity options of MARK/SPACE for UART of 9-bit Decode.
		7. Optimized behavior of the cursors (x-axis): Added a
		mode that the cursors remain at the set position on the
		waveform when changing time base.

Date	Version	Revision
		8. Optimize self-calibration for channels. (Recommend to
		perform a self-calibration after upgrading.)
		9. Added a pop message: If there are too many serial frames
		in one sample, the Scope does not decode all of the serial
		frames and pop up message of 'Decoding to maximum
		frame number limitation!'
		10. Fixed the bug of ROV measurement.
		11. Fixed the bug: Normal trigger can show more-than-one
		trigger event on the display at one time.
		12. Fixed the bug: Erratic triggering, randomly jumping
		between the first and the second edge of a signal.
		13. Fixe the bug: The acquire time of history is reset to zero
		if the time reach 1 hour and 11 minutes. The delta time is
		also wrong if the period is longer than 1 hour and 11
		minutes.
		14. Fixed The SPI triggering issue: the 16-bit trigger wouldn't
		work for a gap >360 ns between the two 8-bit packets.
		15. Fixed the bug: Save/Recall setup of trigger and scale
		issue.
		(SalesForce ID: P-00199) (SalesForce ID: P-00200)
		16. Fixed the bug: Reading cursors by SCPI is not accuracy.
		(SalesForce ID: P-00201)
		17. Fixed the bug: In fine adjust mode, some scale such as
		302 mV/DIV is in the wrong position.
		18. Fixed the bug: LIN decoder doesn't decode frames with
		zero-length response.
		19. Fixed the bug: If the Courser Offset is not a multiple of
		zoom time base, the curser will be replaced when zoomed.
		20. Fixed the bug: The measurements made with the cursor
		in Ref. Give wrong values for all the different probes of
		X1.
		21. Fixed the bug: Measures fairs with GATE give completely
		random values in signals of low frequency.
2018/09/20	6.1.26	1. Added SCPI command to set up gated measurements
		and return the data.
		2. Customers can save the result of decode list table to a
		CSV file.
		3. Modified the color of FFT to match the trace selected.
		4. There are some times of quick calibration during warming
		up the SDS XE. Added a menu below Utility to disable the
		quick calibration so that the sampling isn't interrupted.

Date	Version	Revision
		5. Created software that converts binary waveform data to
		CSV. It can be downloaded from the embedded web
		server on the scope.
		6. Fixed the bug: "Screen Save" button on web page does
		not work with some browsers.
		7. Fixed the bug: The setting of Educational mode can't be
		saved after power off.
		8. Fixed a bug with MSO decoding. and the SLA1016
		firmware also needs to be updated to 8.1.11.
		9. Fixed the bug: The binary block returned by the
		WAVEFORM command contains the length of the block
		in the "#9" header. This length is incorrect when the NP
		option of the WFSU command is used; the header then
		gives the memory depth instead of the actual size of the
		block.
		10. Fixed the bug of the scope response from the
		WAVEFORM command prefixes the binary block with the
		string "ALL," even when "CHDR OFF" is used.
		11. Added exiting the on-screen keyboard by OK button.
2018/05/31	6.1.25R2	1. Fixed the bug: Once the acquisition is stopped, the scope
		often can't find search events in other channels.
		2. Fixed the bug: In certain situations, the scope freezes
		when the Auto Setup button is pressed.
		3. Fixed the bug: The Pass/Fail mask is not correct at edge
		of screen left and right.
		4. Attenuation and invert indicator were added into the
		channel tab.
		5. Any arbitrary probe factor from 1e-6 to 1e6 can be set by
		universal knob.
		6. Got rid of suffix 'A' that stands for 'Acknowledge' from
		I2C decode.
		7. Fixed the bug: The dedicated window for long I2C data
		sometime lose data at right edge.
		8. Fixed the bug: The decoder sometimes does not show
		any info.
		9. Fixed the bug: After updating to the last firmware and OS
		version, the remote panel/control interface can no longer
		be connected.
2018/05/02	6.1.25R1	1. Increased XY mode wave fresh speed
		2. Changed the displayed system information screen. From
		ADS version of 6.1.25R1, the info screen now shows 5
		ADS version of 6.1.25R1, the info screen now shows 5

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Dutt		sections of software versions, including the OS version ID
		3. Optimized remote webpage screen update rate. Requires
		both OS and ADS update which are located on the
		SIGLENT product webpage.
		 Add virtual control panel for PC and mobile terminals
		5. Added SCPI commands for Math waveforms (except FFT)
		and digital channel waveforms (ADS version of SLA1016
		should be $> 8.1.9$)
		See the SIGLENT product webpage for software updates.
		6. Added Digital Channel cursor support
		7. Optimized accuracy of horizontal measurement,
		especially when there are only a few samples in very small timebase
		8. The 'Link to Trigger' menu modified to 'Copy setting'
		9. Added ability to disable one direction of the full duplex
		encoders
		10. Fixed the bug related to displaying long IC2 decoded
		packets
		11. Fixed the bug: SDS1xx4X-E webpage update would
		sometimes fail
		12. Fixed the channel inversion bug when changing timebase
		from 1ms to 2ms
		13. Fixed the bug: Unreadable digital system information
2018/02/27	6.1.20R1	2. Added Bode Plot support for all of Siglent's SDG
		instruments
		3. Fixed a bug in 6.1.20 which maybe cause the signal
		disappear after self-calibration for channels
2018/02/01	6.1.20	1. Add MSO/Logic functionality
		2. Added automatic vertical scale (volts/div) in Bode Plot
		mode
		3. Added USB WiFi support
		4. Optimized the WiFi GUI
		5. Automatic Roll mode selection will be disabled if
		manually disabled once
		6. Renamed Runt-Trigger in German
		7. Fixed a bug in the I2C triggering system of 7 bit Address&
		Data
		8. Improved Auto Setup function with1K compensation
		output
		9. Improved waveform update when using sequence mode
		on long timebases

Date	Version	Revision
		10. Optimize self-calibration for channels
2017/12/18	6.1.12R1	1. Modified Pass/Fail output pulse to 5us
2017/11/16	6.1.12	1. Initial formal release of SDS1xx4X-E

Compatibility between Versions

Source	Object	Compatibility
Version	Version	
6.1.37R10	6.1.37R17	Yes
6.1.37R9	6.1.37R17	Yes
6.1.37R8	6.1.37R17	Yes
6.1.35R2	6.1.37R17	Yes
6.1.33	6.1.37R17	Yes
6.1.37R6	6.1.37R17	Yes
6.1.37R2	6.1.37R17	Yes
6.1.26	6.1.37R17	Yes
6.1.25R2	6.1.37R17	Yes
6.1.25R1	6.1.37R17	Yes
6.1.20R1	6.1.37R17	Yes
6.1.20	6.1.37R17	Yes
6.1.12R1	6.1.37R17	Yes
6.1.12	6.1.37R17	Yes

Compatibility with SLA1016

Source	Object Version	Compatibility	
Version			

8.1.16	6.1.37R17	Yes	
8.1.11	6.1.37R17	No	
8.1.9	6.1.37R17	No	
8.1.8	6.1.37R17	No	

Update instructions

Important!

Because 6.1.33 fixed a bug with self- calibration for each channel. Please perform a selfcalibration if the machine is updated to 6.1.33 (or higher)

• Very important!

Optimized communication between SDS1xx4X-E and SLA1016. If the SDS1xx4X-E will be upgraded to this version (or higher), the SLA1016 **MUST** be upgraded to 8.1.16 (or higher) first.

• Very important!

Because 6.1.20R1 fixed a bug with self- calibration for each channel, immediately perform a self-calibration if the machine is updated to 6.1.20R1 (or higher)