X-Stream Oscilloscope Version 4.8.0 Release Notes

For WaveMaster, WavePro, SDA, and DDA5005 scopes only

May 2006

Product	New Feature	Enhancement	Behavior Change	Item	Description
WaveMaster WavePro SDA DDA			x	PAST? remote control query	It was possible for this query to generate an "unforeseen error" message after an invalid argument is re-entered correctly. This is no longer the case.
			x	SMART Trigger waveform capture at 10 ns/div	Due to insufficient propagation delay in SMART Trigger mode at 10 ns/div and 2 kS/s, pulses at the beginning of a record could appear distorted. This has been corrected.
			x	Multi-select operation in LabNotebook	When multiple records are selected for deletion, all records selected will now be deleted upon confirmation. Previously, only the first selected would be deleted.
			x	canceled remote queries	When a remote query is canceled, the buffer is now cleared correctly.
			x	qualified parameter measurements	When acceptance criteria for parameter measurements were being set, it was sometimes necessary to toggle the enabling checkboxes to effect the change. Now the new criteria take effect immediately.
			x	Width parameter measurement setup	A problem was introduced in software version 4.6.1.5 whereby setting up a Width parameter measurement could cause the scope to crash. This problem is no longer present.
			x	math trace color	Math trace colors are now consistent throughout the length of the trace.
		x		parameter gate	The functioning of the **Clear Definitions** button has been expanded to include resetting of the gate posts to their default 0 and 10 divisions values, and clearing of "Accept" criteria.
			x	sequence mode timestamps	The maximum number of viewable timestamps now equals the number of segments collected.
			x	fatal error when degaussing AP015 probe attached to AP1M	When an AP015 probe attached to an AP1M Hi-Z adapter was degaussed, under certain conditions a fatal error could be produced depending on the timing of the degauss operation. This has been corrected.
			x	persistence timeout	Traces are now properly cleared prior to the next acquisition when persistence time has expired.
		x		PAST? remote query	The parameter statistics query has been modified to return UNDEF in cases where the argument (CUST, VPAR, HPAR) does not match the measurement Type selected on the scope (custom, vertical, or horizontal).
			x	PCIE memory leak	A memory leak that occurred during certain PCIE tests has been eliminated.
		x		printing without admin rights	The scope can now print to any printer regardless of administrator rights setup.

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WaveMaster WavePro SDA DDA	x			serial bus analyzer (8B/10B) software option	This release contains support for LeCroy's SBA 8B/10B encoding/decoding software option. Visit www.lecroy.com for more information.
		x		USB2 parameters	When an inrush current test is performed, all non-relevant parameters will be cleared. Formerly, parameters that had been previously set by the user would continue to be displayed.
		x		responsiveness of front panel controls	When extended analysis is in process, and the selected controls (e.g., **OFFSET**, **V/DIV**, **DELAY**, etc.) are changed, priority is given to updating the associated trace.
SDA		x		# failures in mask violation locator	The "N Failures" field has been redefined to correspond to the limit of the number of failures (failed UI) in the "Failures" list.
		x		group delay compensation	In power-up mode or when the default setup is recalled, the SDA 11000 now boots with the channel set to **Eye Diagram** optimization mode instead of **Pulse Response** optimization mode. These two modes are available in the channel menu only when the DBI engine is enabled to achieve the full 11 GHz system bandwidth. This change is implemented to optimize the Eye Shape signal integrity aspect of the serial data signals.
		x		vertical noise compensation	When the SDA is in jitter mode, the "instrument noise" can optionally be accounted for in the jitter measurements. Since the "instrument noise" is specific to the channel and the V/div settings, the **Find Noise Level** button should be pressed whenever the SDA source or the V/div setting for that source is changed. Typical values are used but even better performance can be obtained by calibrating each scope. An X-Replay script is provided to perform this calibration. LeCroy's X-Replay program can be downloaded from www.lecroy.com.
	x			SDA-SAS software option	This release contains support for LeCroy's SDA-SAS software option, which provides quick and easy access to step-by-step procedures for compliance testing. Visit www.lecroy.com for more information.
	x			SDA 18000 support	LeCroy is pleased to introduce our SDA 18000 real-time serial data analyzer, which features 18 GHz bandwidth and 60 S/s sampling rate. The SDA 18000 is ideal for testing 10 Gb/s Ethernet, Fibre Channel 8.5, and SATA III standards. Visit www.lecroy.com for more information.
	x			SDA 9000 support	We are also introducing our SDA 9000 serial data analyzer. This 9 GHz analyzer supports rates up to 5 Gb/s. Visit www.lecroy.com for more information.
	x			DA18000AC differential amplifier	This release contains support for this new model of high-bandwidth differential amplifier. Visit www.lecroy.com for more information.

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SDA	x			Q-scale automatic renormalization	The SDA now uses a powerful method called “Normalized Q-scale Analysis” to estimate/measure the random and bounded, uncorrelated components of jitter.
			x	spurious eye transitions	When using the Jitter Wizard on a 000000 waveform, ISI Plot showed false transitions. This is no longer the case.
SDA-SATA			x	SATA Gen 1i jitter measurements	SATA Gen 1i Jitter Measurements (5 UI and 250 UI) in the presence of SSC could produce incorrect results. This has been corrected.

KNOWN ISSUES

- DA18000AC – the capability to set an amount of external attenuation in front of the amplifier is not yet available.
- In SDA Jitter Adv. Control, the **Find Noise Level** always finds 0 mV if the SDA source is a channel. It finds the correct value if the source is a zoom or other math function.