X-Stream Oscilloscope Version 5.0.0 Release Notes

October 2006

Product	New Feature	Enhancement	Behavior Change	Item	Description
WaveMaster WavePro WaveRunner WaveSurfer Xs Series SDA DDA	x			WaveScan Advanced Search and Analysis	WaveScan is a powerful tool that lets you quickly locate anomalies in your waveform, zoom in, histogram, and perform parameter measurements on them. Waveform features are time stamped and indexed in a table from which you can select individual features for further investigation. Visit www.lecroy.com for more information.
		x		improved zooming	When you zoom waveforms, either by touching the screen and drawing a box around a waveform feature, or by pressing the front panel QuickZoom button, a zoom trace designated Z1 to Z4 will appear automatically without your having to specify a math location. If you want to create more than four zoom traces, this can still be accomplished by applying the Zoom math function to the trace.
			x	WF? query	When applied to a segmented waveform, this query will return data for a single segment after setup command WFSU SN, 1. Previously, it returned data for all segments.
WaveMaster WavePro WaveRunner SDA DDA			x	invalid error message during recall of memory traces	When traces were recalled from hard disk or USB memory, it was possible for the error message “Current Path x is not a valid directory!” to be issued. This has been corrected.
			x	HFP series probe LEDs	When an HFP series probe is plugged into a LeCroy scope, the channel-coded LED will light immediately. Previously, the LED would light only after an acquisition.
			x	fit of masks used for mask testing	When a Measure Gate is applied to a mask test, the horizontal boundaries of the mask are now defined by the gate posts.
			x	context menu for traces	Clicking or touching any trace, in addition to the active trace, will again display a menu of options for that trace.
		x		reporting of Imax parameter value	If 25% of the way down (toward min) from max, or 25% of the way up (toward max) from min is more than 10,000 points away from the extremal value, then the extremal value itself is used as the local max or local min. This speeds up processing of local max.
WaveRunner 6000 Series WavePro 7000Series WaveMaster	x			I^2C and SPI Serial Decode options	LeCroy introduces two new serial decode options. Completely isolate specific SPI or I^2C message events for better understanding and debug. Visit www.lecroy.com for more information.

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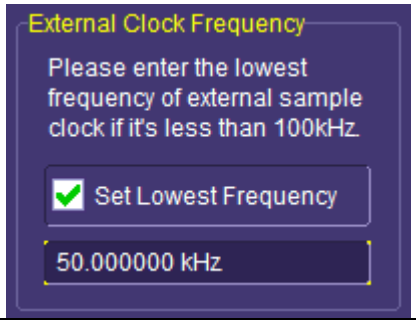
WaveRunner WaveSurfer			x	missing channel controls in Italian UI	When the local UI language was changed from English to Italian, the Active Channel controls could disappear from the screen. This has been corrected.
WaveRunner 6000 Series			x	incorrect upper current and voltage limits with Qualify trigger	When external trigger is used as the qualifier source, the upper limits of current and voltage were 8.2 A and 410 mV, regardless of attenuation setting. This has been corrected.
WaveRunner Xi WaveSurfer Xs	x			ZS1000 and ZS1500 High Impedance Active Probes	LeCroy is pleased to announce the new ZS Series of high impedance active probes for use with the new WaveRunner Xi 1 GHz, and the WaveSurfer Xs 1 GHz and 600 MHz scopes. The ZS Series features low input capacitance and is designed for probing consecutive square pins. Visit www.lecroy.com for more information.
	x			I^2C and SPI Serial Trigger and Decode options	LeCroy introduces two new serial decode options. Completely isolate specific SPI or I^2C message events for better understanding and debug. And use a conditional I^2C DATA trigger to select a range of DATA values to trigger on, not just a single DATA value. Visit www.lecroy.com for more information.
			x	unexpected switching of termination from 1 MΩ to 50 Ω	When the scope was shut down in 1 MΩ termination mode, it was possible for it to change to 50 Ω after reboot (while reporting 1 MΩ) until the first acquisition. This has been corrected.
		x		trigger setup dialog	The trigger setup dialog has been redesigned to make it more intuitive and easier to use.
WaveRunner Xi	x			low frequency external clock	A new control has been added to the Clock Source dialog that allows you to indicate the frequency of a clock signal slower than 100 kHz. This is necessary for using low frequency external clocks. 
			x	combining channels	It is again possible to combine two channels to obtain 10 Mpts of memory.
			x	mismatch in RIS mode reported sampling rate	There had been a mismatch in the RIS mode sampling rate set in the Timebase dialog and the rate displayed in the Timebase label (0 TS/s). This has been corrected.

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WaveRunner Xi		x		new probe commands	Three new probe remote commands have been created: PRNA (PRobe NAme), PRCA (PRobe CAlibration), and PRDG (PRobe DeGauss).
			x	incorrect display of derivative and integral math functions	A problem with scaling of these functions could cause an incorrect display. This has been corrected.
WaveExpert		x		support for non-binary prescaler numbers	When operating in CIS mode, the WaveExpert now also recognizes non-binary numbers from an external prescaler.
		x		Timebase drop-down menu function	When you select a sampling mode (Scope, TDR, Eye) by means of the menu bar, this will also display the appropriate setup dialog in addition to enabling the sampling mode. This is the same functionality as pressing a front panel QUICKSET button.
			x	Clear Sweeps function	On occasion, it was possible for previous data to be retained after a Clear Sweeps operation, manifested in a faint trace from a previous acquisition. This has been corrected.
			x	"TDRN:OSL(T) Normalization processing error" messages	Conditions leading to these error messages have been eliminated.
			x	recall of calibration files	On occasion, it was necessary to execute a recall of calibrations files twice before the trace appeared. This has been corrected.
		x		Eye SgToNoise parameter	You can now select **Both** zero and one levels to compute the signal-to-noise ratio measurement on an eye diagram.
		x		timebase **Delay** control	Timebase delay is now a user-selectable value.
		x		Autosetup of eye mode	The functioning of Autosetup when the instrument is in eye mode has been improved.
SDA	x			DA18000 Differential Amplifier	LeCroy proudly introduces our DA18000 differential amplifier. This amplifier is a very high bandwidth differential amplifier with 50 ohm inputs and high common mode rejection, and is designed to be used exclusively with the SDA 18000 Serial Data Analyzer. Visit www.lecroy.com for more information.
		x		**Clear Sweeps** soft button	An on-screen **Clear Sweeps** button that was added to the ASDA software option is now available for the SDA option also.
			x	incorrect zero jitter value for SATA 1G	The edge-to-edge Periodic Jitter value was consistently reported as zero for SATA 1G measurements. This is no longer the case.
		x		expanded number of digits for TIE@level parameter	The "Custom freq." field can now accommodate ten digits (previously nine) to keep accumulated TIE within the SDA's jitter noise level.

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VBA CAN TDM CAN TD			x	CAN table scrolling	As you scroll through the table of CAN acquisition results, using the front panel multiplex knobs, the zoom trace will reflect the highlighted table entry. Formerly the zoom remained on the previously selected trace. In this way, the functioning of the knobs is consistent with the on-screen scroll buttons.
		x		CAN table scroll buttons	The operation of the scroll buttons is now more “finger friendly.”
			x	unexpected cursor controls	Attempting to scroll through the CAN table by means of the front panel **ADJUST** knob sometimes invoked cursor movement instead. The knob is now decoupled from cursor operation when the slider bar in the table is yellow (active).
			x	PACU command	The PARAMETER_CUSTOM command is now also accepted by scopes running CAN01 software.
			x	CAN table display of zoom selection	Under certain circumstances, it was possible for a zoomed trace not to be highlighted in the CAN table. This has been corrected.
		x		hexadecimal representation of values	A hexadecimal pop-up keypad is now displayed for entry of hex values; and in the hex data fields, “0x” has been replaced by “XX” (don’t care) for clarity, where appropriate. “0x” is no longer required (or allowed) as a prefix to the Hex value entered with the use of the Hex keypad.
			x	incorrect display of CANtoCANSing parameter selection	CANtoCANSing was being inappropriately displayed in the **Select Measurement** menu. This name is actually the same as CANtoCAN, which is still selectable from the menu.
			x	Time@CAN parameter in WaveScan	The Time@CAN parameter was incorrectly included in WaveScan. It has been removed.
CANbus VBA			x	empty DBC files	Under certain conditions it was possible for Data Bus Controller files to be improperly accessible (i.e., before they were populated), creating views of seemingly empty files. Now the **DBC** button will not be active until the file is properly populated.
			x	error message during change of measure mode	Switching between **My Measure** and **Std Vertical** or **Std Horizontal** measure modes could generate a ParamEngine error message. This has been corrected.
			x	DBC window functions	When the DBC button was pressed in the CANtoValue setup screen, the selected item in the Select Signal window would default to the first one in the list, instead of the currently selected signal. Also, canceling out of the window did not restore previous settings. This has been corrected.

Product	New Feature	Enhancement	Behavior Change	Item	Description
MS-32			x	misalignment between digital and analog traces	Depending on the trigger delay that is set, it was possible for digital and analog traces to be out of alignment in time. This has been corrected.
		x		rectangular zooming of traces	The number of traces that can be included in a zoom operation when the touch-and-drag method is used has been expanded to include all traces enclosed in the rectangle drawn. Previously the limit was four traces.
		x		QuickZoom of digital traces	When the front panel **QUICKZOOM** button is pressed, digital traces are now included in the zoom also.
8B/10B		x		enhanced 8B/10B decode capability	The 8B/10B option now features table readout and a UI integrated with I^2C and SPI, if present.
ENET			x	incorrect 100Base-T base level	By the application of (sinx)/x interpolation, correct base levels are now obtained.