




X-Stream Oscilloscope Version 4.9.1 Release Notes

June 2006

Product	New Feature	Enhancement	Behavior Change	Item	Description
WaveMaster		x		Autozeroing of ADP305 probe	The Autozero feature of the ADP305 probe now uses the lowest V/div value for actual attenuator settings. The probe, therefore, can be Autozeroed even when the timebase is set to 10 V/div or higher.
WavePro			x	incorrect units for AP011 probe	Using external trigger, when the AP011 probe was switched from voltage to current, the units remained in Volts. This has been corrected.
WaveRunner		x		trigger modes and Roll mode	The behavior of Roll mode has been standardized on all X-Stream scopes regarding Normal versus Auto trigger modes. (This does not apply to WaveMaster scopes, which do not have the Roll mode feature.)
SDA					
DDA					
WaveMaster		x		"Make mask from trace" feature	The boundaries of a mask created by the scope have been redefined to fit the trace better.
WavePro			x	units of FFT of JitterTrack	The vertical units of an FFT of a JitterTrack were incorrectly displayed as volts. They now appear as units of time.
WaveRunner			x	math traces off grid	On occasion, it was possible for some properly scaled math traces to be displayed running off the grid. This has been corrected.
WaveSurfer			x	remote queries returning default values	On occasion, it was possible for remote queries such as C1:WF? DESC and C1:WF? ALL to return default values like LECROYMAUI for INSTRUMENT_NUMBER. This has been corrected.
SDA					
DDA			x	scope crashes during probe insertion/removal	During insertion or removal of WaveLink or HFP series probes, it was possible for the scope to lock up. This has been corrected.
SDA	x			DA18000AC diff amp support	LeCroy is pleased to announce the release of our new DA18000AC differential amplifier. Intended for use with our SDA 18000 analyzer, the DA18000AC features 100 kHz to 18 GHz bandwidth. Visit www.lecroy.com for more information.
			x	eye width display of incomplete eyes	The display of eye widths of eye diagrams that don't contain all symbols (e.g., PCIe and FB-DIMM eyes) has been corrected.
		x		Find Noise feature	The functionality of this feature has been expanded to include the noise on a channel, in addition to that on zoom and math traces.
	x			Q-scale renormalization method	In this release LeCroy has improved upon the Q-scale method of obtaining random and deterministic components of jitter. Refer to the on-line Help downloaded with 4.9.1 software for details.
		x		undetected repeating patterns reported as "0 ps"	In the event of undetected repeating patterns, the scope will display "--" instead of "0 ps" and automatically revert to ISI Plot mode.

Product	New Feature	Enhancement	Behavior Change	Item	Description
SDA	x			Software Assisted Trigger	This release contains support for a new trigger mode in SDA 9000/11000/18000 analyzers. Software Assisted Trigger provides a quick way to create eye diagrams without the involvement of LeCroy's in-depth serial data analysis software. You can get a quick view of your signal and do the analysis whenever you wish.
WaveExpert	x			TDR support	This release contains support for LeCroy's time domain reflectometry feature.
		x		TDR calibration	The method for determining the amplitude of the incident pulse has been improved, but requires that a calibration of the ST-20 module be performed before any measurements are made. Also, a filter is now placed on the TDR rise time.
WaveRunner			x	recall of sequence mode waveforms	Under certain conditions (sequence sampling mode, normal trigger, Autofill enabled), it was possible to have a mismatch in the byte count of binary files when the files are recalled. This has been corrected.
		x		TV trigger	A trigger "Level" field has been added to the Trigger setup dialog for capturing TV trigger signals.
	x			suppression of temperature alarms	By turning off autocalibration, it is now possible to widen to about 10 degrees C the temperature range during which no alarm, and subsequent recalibration, occurs. This is desirable when long acquisitions (overnight, weekends) are in process and every trigger must be captured. At all other times, autocalibration should be re-enabled.
			x	Gigabit fatal errors	Conditions leading up to these errors have been eliminated.
			x	integral math function	An integral taken over a math trace could produce incorrect results because of a scaling mismatch. This has been corrected.
WaveRunner Xi			x	appearance of WaveStream trace after CLEAR SWEEPS	When CLEAR SWEEPS is executed, any accumulated data from the last acquisition is now completely cleared, resulting in a correctly displayed trace.
			x	polarity of Line trigger	The functioning of the polarity selection buttons for Line trigger was reversed. This has been corrected.
			x	video trigger Slope selection	The selection of positive or negative slope for positive-going and negative-going pulses was reversed. This has been corrected.
WaveSurfer Xs		x		MSIZ remote command	The range of values recognized by the Memory_Size command has been expanded.
			x	WaveStream intensity control	A trace intensity bar was being erroneously displayed at the bottom-right corner of the screen when the display mode was not in WaveStream mode. This is no longer the case.
MS-32	x			saving files in ASCII format	A script has been added to the MS-32 application that converts binary data to ASCII format. Furthermore, the script can be modified by the user.

Product	New Feature	Enhancement	Behavior Change	Item	Description
CANBUS	x			using Level Type to resolve error frames	<p>When a waveform is zoomed, and the “Level Type” is set to Percent (50%) in the CAN Trace dialog, the portion of the waveform used for calculations can actually be slightly higher. Now there is the option to select Absolute level type instead, which eliminates any false error frames.</p> 
			x	prolonged boot-up time with CAN TD connected to scope	A BIOS upgrade has eliminated this problem.
			x	Measure Gate feature	Under certain conditions, this feature was incorrectly unavailable, or produced error message “Incompatible source,” depending on the Source selected. This has been corrected.
			x	symbolic decode and zoom search	It was sometimes possible for searches to be restricted to symbolic mode when attempting to search data in hex mode. This has been corrected.
		x		hex value validation	When hexadecimal values are entered by means of the alphanumeric keyboard, entries are validated as hex values to prevent the inputting of text strings.
		x		symbol type and field activation	For a given symbol type, the appropriate fields will be available, and those not applicable will be grayed out.
ENET			x	incorrect display of splitter attenuation checkboxes	In the Ethernet Tests dialog, the “Splitter Atten.” checkboxes should only have been displayed when Disturber Present is checked. This is now the case.
			x	incorrect recall of dual grids	It was possible for panel setups using a single grid to be recalled from memory with two grids. The correct number of grids will be recalled now.
			x	erroneous invalid flags	Some ENET tests were returning “invalid” error messages on valid data. This has been corrected.