



## RELEASE NOTES

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## Software & firmware versions

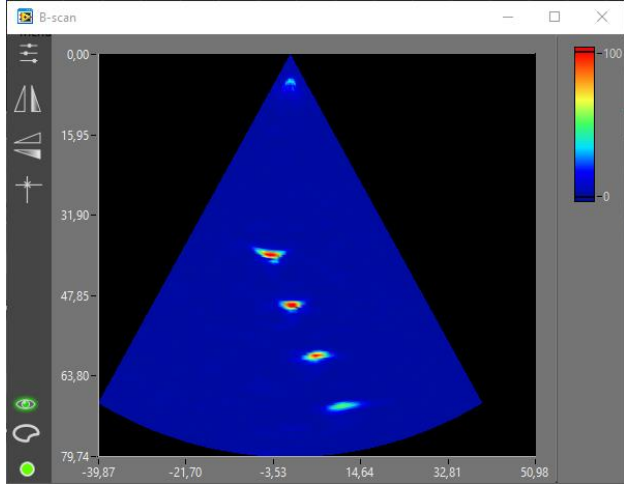
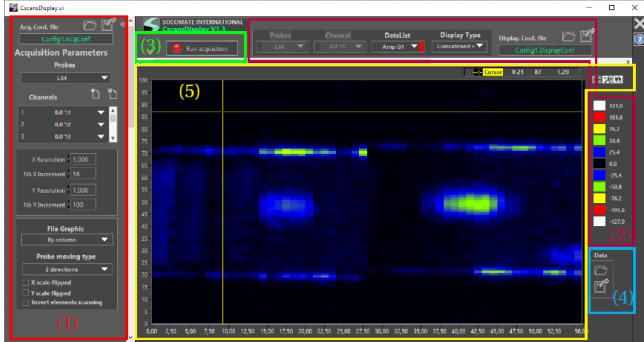
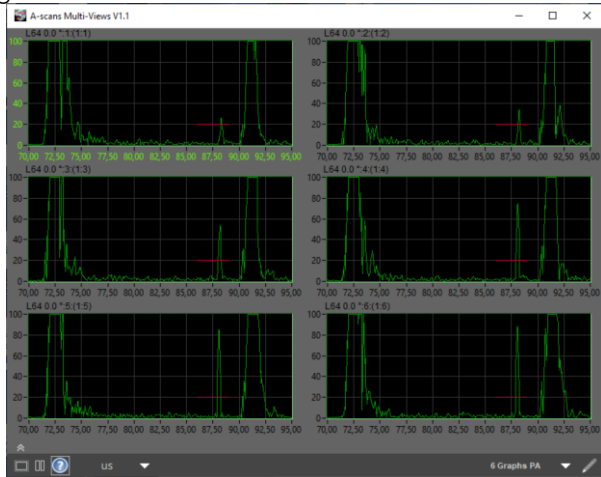
Components	Versions	
API software	3.1.0.3	
UTView_64.exe		
UTView_32.exe		
Configuration file		
UTView.ini	5.5	
Language files	2.5	
English.xml		
French.xml		
Library	8.6.0	
sidev_64.dll		
sidev_32.dll		
Additional programs	2.6.4	
SIPATOOLS_64.exe		
SIPATOOLS_32.exe		
Firmware		
Service	10.0	<p>Firmware for FAAST-PA :  <a href="#">frm_pa_250822.bin</a>  Firmware for SOCO-SCAN &amp; SOCO-SWIFT-PA :  <a href="#">frm_ssw_250822.bin</a>  Firmware for SOCO-X-UT :  <a href="#">frm_soco_250822.bin</a>  Configuration files for all devices :  <a href="#">cfg_generic_120522.bin</a>  Additional files for FAAST-PA :  cfg_pa_1x32_080719.bin, cfg_pa_2x32_080719.bin,  cfg_pa_3x32_080719.bin, cfg_pa_4x32_080719.bin,  cfg_pa_1x64_080719.bin, cfg_pa_2x64_080719.bin,  cfg_pa_1x96_080719.bin, cfg_pa_1x128_080719.bin,  cfg_pa_1x32_128_080719.bin  Additional files for SOCO-SCAN :  cfg_soco_scan_1x16_250621.bin,  cfg_soco_scan_1x32_250621.bin,  cfg_soco_scan_plus_1x16_250621.bin,  cfg_soco_scan_plus_1x32_250621.bin  Additional files for SOCO-SWIFT :  cfg_soco_swift_1x32_250621.bin,  cfg_soco_swift_1x64_250621.bin,  cfg_soco_swift_1x96_250621.bin,  cfg_soco_swift_1x128_250621.bin,  cfg_soco_swift_1x256_250621.bin,  cfg_soco_swift_plus_1x32_250621.bin,  cfg_soco_swift_plus_1x64_250621.bin,  cfg_soco_swift_plus_1x128_250621.bin,  cfg_soco_swift_plus_1x256_250621.bin,  Additional files for SOCO-XP-UT :  cfg_soco_xp_250621.bin  Additional files for SOCO-8S-UT :  cfg_soco_8s_250621.bin  Additional files for SOCO-1-UT &amp; SOCO-1AB-UT:  cfg_soco_1_250621.bin</p>
WebAdmin	1.3.1	
SocomatePlatformManager	1.1.3	
Interface modules		
INTLOG_IN:	4.0	INTLOG_IN_V_4_0_0.pof (model MAX)
	1.0	INTLOGIN_C_V1.pof (model Cyclone)
INTANA_OUT:	2.3.1	INTANA_OUT_V_2_3_1.pof (model < c)
	3.1.4	INTANA_OUT_V_3_1_4.pof (model ≥ c)
INTLOG_OUT:	2.3.1	INTLOG_OUT_V_2_3_1.pof (model < b)
	3.1.3	INTLOG_OUT_V_3_1_3.pof (model ≥ b)

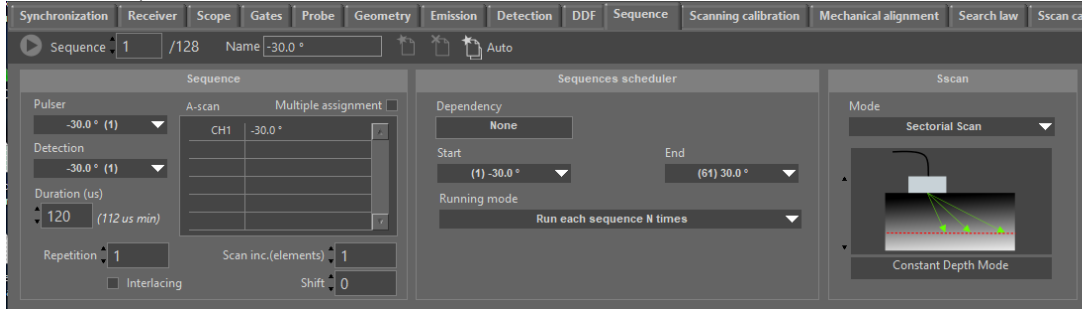

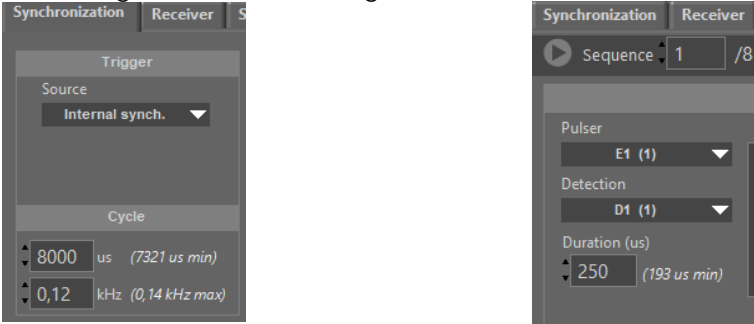



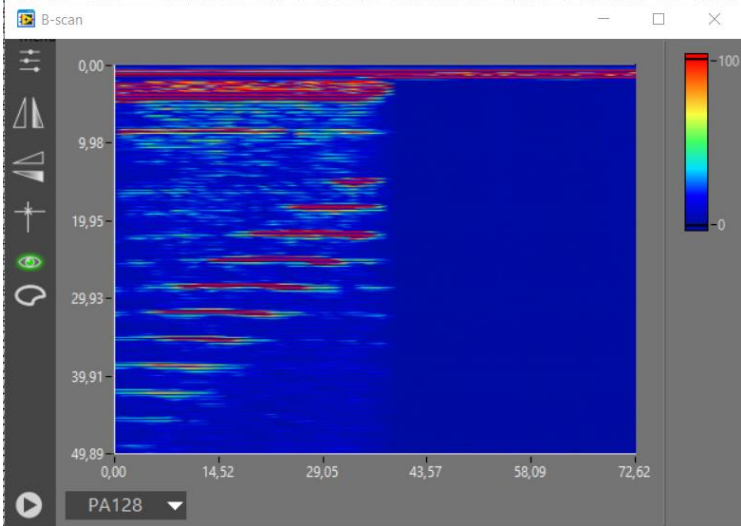
Where is indicated model

Color to indicate additions or corrections made by a patch

## New/Improved features

ID	Description
	<p>Some programs and tools have been added:</p> <p>Bscan_xx (for SOCO-SCAN, SOCO-SWIFT and FAAS-PA products) A program to display B and S-scan.</p>  <p>CscansDisplay_xx(for all devices) A program to configure, acquire and display C-scan data.</p>  <p>AscansMultiView_xx (for all devices) A program to configure and show several A-scans on a window.</p>  <p>UT_dependencies_xx A tool to check and ZIP an UT file with all this dependencies files such as laws, probe, ...</p> <p>VFAnalyzer_xx A program to check the file versions of the installed components.</p> <p>Note: These programs are named with the number of bit of the target Ex : B-scan_32.exe or B-scan_64.exe</p> <p>A new COMPRESSED_AS_USPC A-scan mode has been added.</p>

	<p>This mode is reserved for SOCO-X products at FS=200MHz. This mode has been designed to return the A-scan signal as the old USPC products done.</p>
	<p>A new S-scan mode has been added. The tab sequence has been modified to manage this mode. New tabs have been added to calibrate the S-scan and to set a DAC You can call Bscan_xx program to get a graphic representation of S-scan during the calibration process.</p>  <p>NOTE: This mode works with new laws calculated with SIPATOOLS 2.5</p>
	<p>Now, the time performances are displayed to know the maximum achievable performance according to the current settings.</p> 
	<p>New alarm process to check temperatures and voltage has been embedded. This process periodically checks these parameters to set LED status.</p>
	<p>Improvement of plugins Displaying a message box to apply changes if certain changes were detected when the operator exits the current tab.</p>
	<p>Improvement of IO cards performances</p> <ul style="list-style-type: none"> <li>• Improve boot process (auto-check)</li> <li>• Increase the cable length up to 50m</li> <li>• Manage a LED to indicate the status of the cards</li> <li>• Enable IO card with SOCO-SCAN and SOCO-SWIFT</li> <li>• Correct a bug of the output of TOF (was 5V when TOF = 0usec)</li> <li>• Reset the output to 0V when an IO pin is unselected.</li> </ul>
	<p>New parameters are available with the DLL:</p> <ul style="list-style-type: none"> <li>• "sync_period_min", "sequence_time_min" to get time performance</li> <li>• "path" to get X, Y coordinate of points of the A-scan signal (*)</li> <li>• "gate_path" to get X, Y coordinate of points of the gates (*)</li> <li>• "gateX_projection", "gateX_relative_projection" to get the X, Y coordinate of a distance measured into a gate (*)</li> <li>• "gatex_inversed_projection", "gatex_relative_inversed_projection" to get an ultrasonic distance from an X, Y coordinate (*)</li> </ul> <p>(*) Request a "law" created by the new SIPATOOL program. These parameters are used for B and S-scan representation.</p>
	<p>Improvement of Scanning-tool to calibrate the multi-beams configuration in one shot.</p>
	<p>The new DLL checks the INI configuration file to detect incompatibilities between selected</p>

	<p>options.</p> <p>Example: COMPRESSED_AS_USPC is not available for FFAST-PA, SOCO-SCAN and SOCO-SWIFT.</p> <p>An error will be detected and you could find details into the log file.</p>
 Behaviour has been changed	<p>The frequency sampling at 66.6MHz has been removed.</p>
	<p>A new acquisition mode has been added.</p> <p>Now, you can specify the number of frames you want to get when you read data. If the number of frames is greater than expected then the remaining frames will be ignored and lost.</p> <p>This mode is useful when you want to collect a certain number of consecutive frames without collecting all data. For instance, to build a B-scan.</p> <p>The new program BscanAcq uses this mode.</p> 
#399	Constant definitions for C# developers have been added into the SIDEV class
#492	Adds a feature to SIPATOOLS to calculate the delay laws with a spherical matrix probe.
#501	SIPATOOLS improvement. Management of beam obliquity when a linear probe is oriented around its central axis.

Color to indicate additions or corrections made by a patch

## Bugs fixed

ID	Description
	The firmware has been updated:
	<ul style="list-style-type: none"> <li>To return all data on finite number of triggers.</li> <li>To improve a dead zone at the beginning of the A-scan.</li> <li>To run A-scans with COMPRESSED and EXTENDED mode at 8/9 bits for all frequency sampling.</li> <li>To improve the element calibration process by eliminating inactive elements</li> <li>To improve the Y calibration of the A-scan signal.</li> <li>To improve the loading of the firmware when we change the A-scan mode.</li> <li>To force divider to 1 when internal trigger is selected.</li> <li>To correct the management of LED READY. It was OFF when a UT file designed for element calibration was loaded.</li> <li>To correct interlacing mode. <ul style="list-style-type: none"> <li>Sends interlacing value to file upload</li> <li>Auto recalculate the interlacing value if the repetition number changes</li> </ul> </li> </ul>

## Bug fixed and improvements by patch 1

ID	Description
#388	Correct a bug when gates use inches
#370	Add missing source codes for LabView developers.
#334	Add signal description of K2 connector of SOCO-X cards.
#335	Correct the Developer's manual. "device%d_hv" command description wasn't correct.
#312	The 32 bit Detection plugin (for Phased Array devices) wasn't up to date.
#387	The firmware of the Interface output cards have been improved.
#400	
#405	
#379	Update VFAnalyzer program ( <i>a tool to check version files</i> )

## Bug fixed and improvements by patch 2

ID	Description
#389	Fixe an issue into the DLL to enable to emulate more one device
#371	Fixe an issue into the DLL to enable to open an empty file (for multi-elements devices)
#410	Correct the SOCO-SWIFT emulation keys into the Windows registry. The previous keys were designed to emulate the SOCO-SWIFT-PLUS.
#432	Fixe an issue into the DLL to correct the velocity of gates when current unit is not in usec.
NEW	Displays the patch version in the "About" window. The fourth version number of the index is used as the patch number Ex: Version 3.1.0.2 will be displayed as 3.1.0 P2 in "About"
#433	Improve encoder counting → Count or down count on rise flank of channel A and B. Previously, only channel A was working on rise flank, the channel B was working on level. This can introduced an error on changing direction.
#434	Correct the service to limit the gain of SOCO-X products to 80dB.
	Display the Patch version into the "About" window. Example: If the version of UTView_64.exe is 3.1.0.2 then it will be displayed as "3.1.0 P2" into "About".
#435	Reading the refresh period of the A-scan on the fly and no longer when opening UTView. This allows, for example, by changing the registry key "AscanRefreshPeriod", to control the refresh speed from another application. And thus slow down UTView in favor of this application. Note: A period >= 1000 ms stops the refreshing.

## Bug fixed and improvements by patch 3

ID	Description
#420	Fixed a bug when a SOCO-SWIFT device uses an output interface module. The app was crashing.
#424	Fixed a bug when UTVIEW's law finder called the SIPATOOLS program. SIPATOOLS did not return the correct laws.
#442	Added additional information on how encoder inputs work in the documentation.
#443 #471	Added a time constraint of 10usec between the end of detection and the beginning of the next sequence when Phased Array devices use an analog output board. This new constraint may affect your existing setting files if they don't respect it. The time of cycle and sequences can be increased when you load your files.
#458	Added additional information about data format in the developer's manual.
#460	Fixed a bug on analog outputs connected to devices of the SOCO-X-UT family. The outputs assigned to the 7th probe were not working.
#465	Change and harmonization of interface manual names. <b>LOG ANALOG OUTPUT manual</b> becomes <b>INT ANALOG OUTPUT (ANALOG) manual</b> <b>LOG DIGITAL OUTPUT manual</b> becomes <b>INT LOGICAL OUTPUT (LOGOUT) manual</b> <b>LOG INPUT manual</b> becomes <b>INT LOGICAL INPUT (LOGIN) manual</b>
#469	Fixed a bug in the <b>sidev_32.lib</b> file. This file referenced the 64-bit library.

## Bug fixed and improvements by patch 4

ID	Description
#436	The duplication mode couldn't be changed when duplication was active. The new version enables to change the duplication when it is active.
#470	Impossible to save geometry. The new geometry plugin fixes this issues.
#483 #493	Some VI sources weren't distributed. The new setup program fixes this issues.
#484	Adds "gatex_output_offset" and "gatex_output_range" into the developer's manual.
#489	Correct the definition of "gatex_phase_mode" and "gatex_detection_mode" into the developer's manual.
#495	Fixes a bug in SIPATOOLS to calculate delay laws with a tube and an encircling probe.
#502	Fixes a bug in SIPATOOLS. Correct the centering of a linear/matrix probe position when calculating the delay laws on the opening zone and when this probe is oriented around its Z axis.

# How to upgrade an existing system





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