RELEASE NOTES
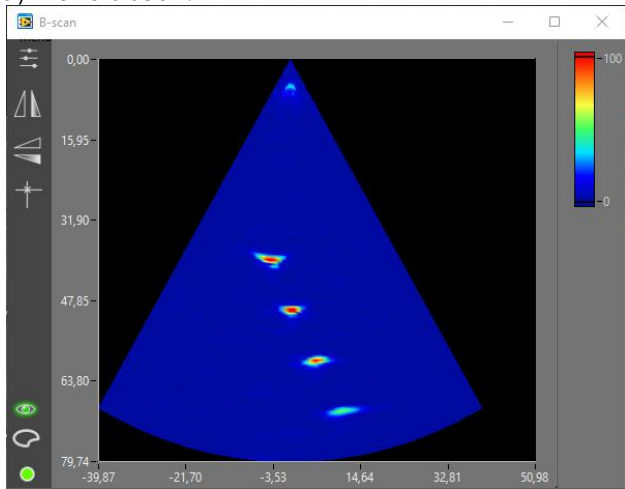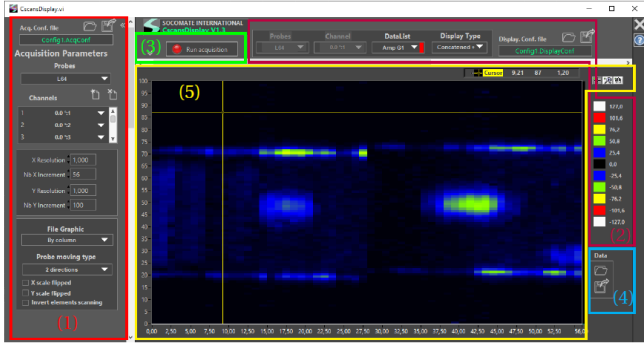
Software & firmware versions
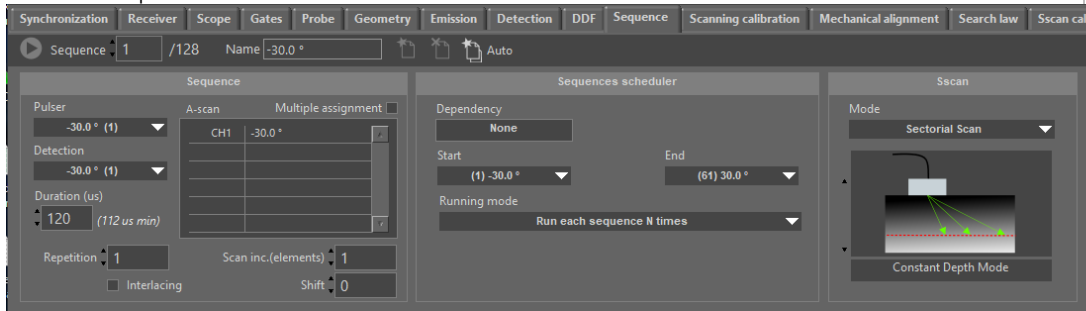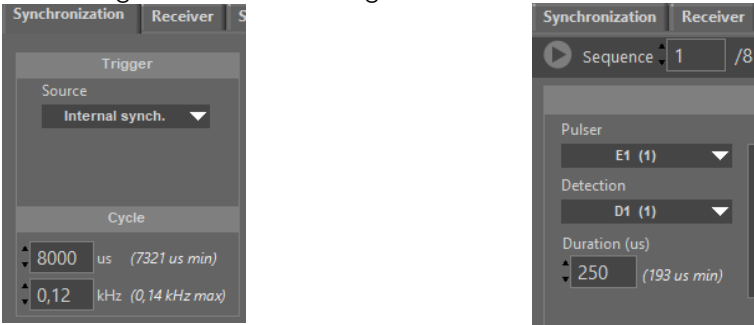
Components	Versions	

API software
     UTView_64.exe
     UTView_32.exe
	3.1.0.2	

Configuration file UTView.ini	5.5	

Language files
     English.xml
     French.xml
	2.5	

Library
     sidev_64.dll
     sidev_32.dll
	8.4.4	

Additional programs
     SIPATOOLS_64.exe
     SIPATOOLS_32.exe
	2.5	

Firmware Service	**9.10.1**	Firmware for FAAST-PA : frm_pa_221221.bin Firmware for SOCO-SCAN & SOCO-SWIFT-PA : frm_ssw_221221.bin Firmware for SOCO-X-UT : frm_soco_221221.bin Configuration files for all devices : cfg_generic_290621.bin 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_141019.bin Additional files for SOCO-8S-UT : cfg_soco_8s_141019.bin Additional files for SOCO-1-UT & SOCO-1AB-UT: cfg_soco_1_141019.bin
WebAdmin	1.3.1	
SocomatePlatformManager	1.1.3	

Interface modules
     INTLOG_IN:
     INTANA_OUT:
 	
     INTLOG_OUT:
	
	 4.0
	 2.3.1
	 3.1.4
	 2.3.1
	 3.1.3
		
		 INTLOG_IN_V_4_0_0.pof
		 INTANA_OUT_V_2_3_1.pof (model < c)
		 INTANA_OUT_V_3_1_4.pof (model ≥ c)
		 INTLOG_OUT_V_2_3_1.pof (model < b)
		 INTLOG_OUT_V_3_1_3.pof (model ≥ b)

Where is indicated model

New/Improved features

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

	A new COMPRESSED_AS_USPC A-scan mode has been added. 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.
⚠️	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. NOTE: This mode works with new laws calculated with SIPATOOLS 2.5
	Now, the time performances are displayed to know the maximum achievable performance according to the current settings.
	New alarm process to check temperatures and voltage has been embedded. This process periodically checks these parameters to set LED status.
	Improvement of plugins Displaying a message box to apply changes if certain changes were detected when the operator exits the current tab.
	Improvement of IO cards performances • Improve boot process (auto-check) • Increase the cable length up to 50m • Manage a LED to indicate the status of the cards • Enable IO card with SOCO-SCAN and SOCO-SWIFT • Correct a bug of the output of TOF (was 5V when TOF = 0usec) • Reset the output to 0V when an IO pin is unselected.
	New parameters are available with the DLL: • "sync_period_min", "sequence_time_min" to get time performance • "path" to get X, Y coordinate of points of the A-scan signal (*). • "gate_path" to get X, Y coordinate of points of the gates (*). • "gateX_projection", "gateX_relative_projection" to get the X, Y coordinate of a distance measured into a gate (*). • "gatex_inversed_projection", "gatex_relative_inversed_projection" to get an ultrasonic distance from an X, Y coordinate (*). • (*) Request a "law" created by the new SIPATOOL program. These parameters are used for B and S-scan representation.
	Improvement of Scanning-tool to calibrate the multi-beams configuration in one shot.

	The new DLL checks the INI configuration file to detect incompatibilities between selected options. Example: COMPRESSED_AS_USPC is not available for FAAST-PA, SOCO-SCAN and SOCO-SWIFT. An error will be detected and you could find details into the log file.
⚠️ Behaviour has been changed	The frequency sampling at 66.6MHz has been removed.

Bugs fixed

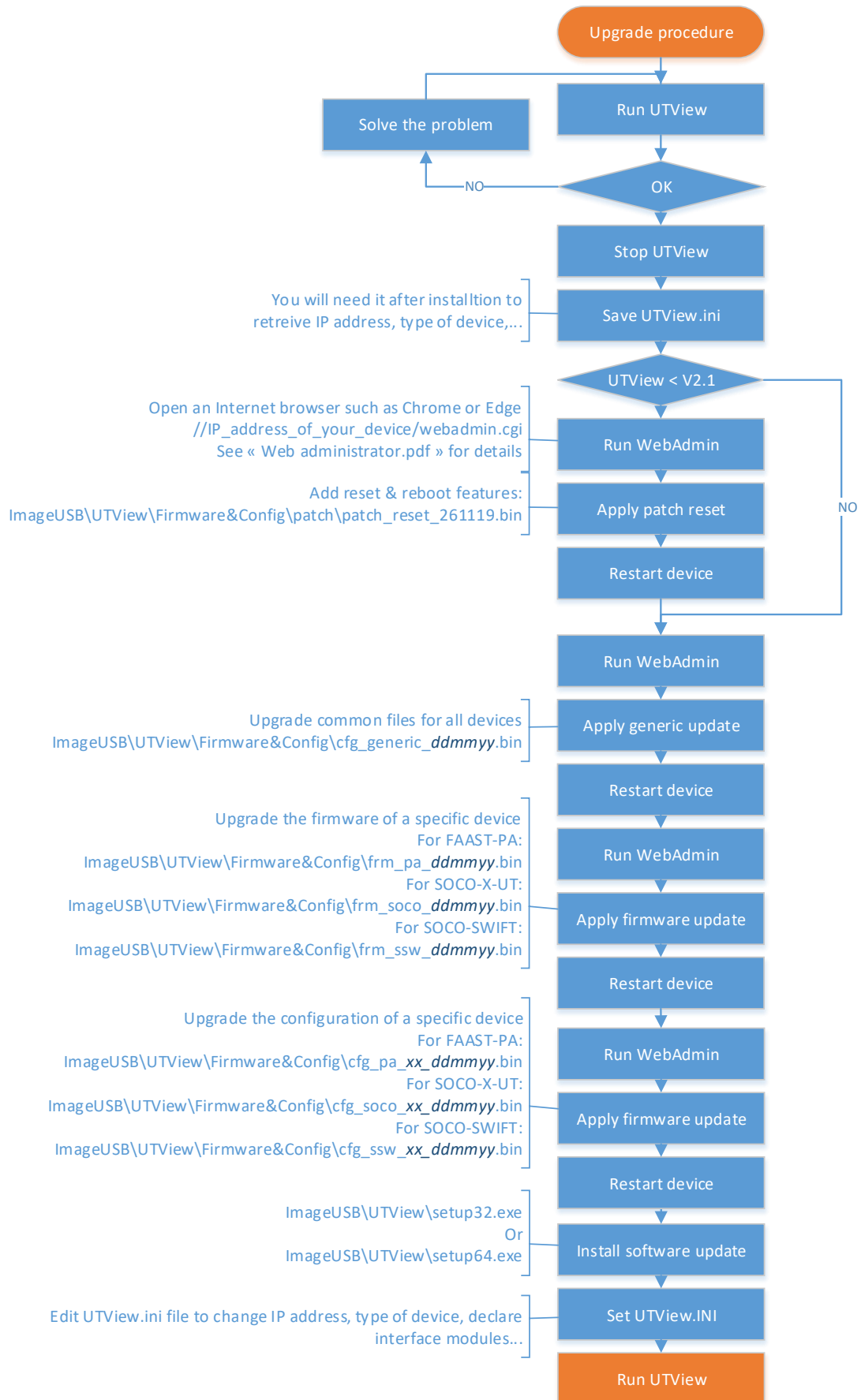| ID	Description
	The firmware has been updated:
	• To return all data on finite number of triggers.
	• To improve a dead zone at the beginning of the A-scan.
	• To run A-scans with COMPRESSED and EXTENDED mode at 8/9 bits for all frequency sampling.
	• To improve the element calibration process by eliminating inactive elements
	• To improve the Y calibration of the A-scan signal.
	• To improve the loading of the firmware when we change the A-scan mode.
	• To force divider to 1 when internal trigger is selected.
	• To correct the management of LED READY. It was OFF when a UT file designed for element calibration was loaded.
	• To correct interlacing mode. ○ Sends interlacing value to file upload ○ Auto recalculate the interlacing value if the repetition number changes

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 #400 #405	The firmware of the Interface output cards have been improved.
#379	Update VFAnalyzer program *(a tool to check version files)*

Bug fixed and improvements by patch 2

ID	Description
#389	Fix an issue into the DLL to enable to emulate more one device
#371	Fix 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	Fix 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.

How to upgrade an existing system

Upgrade procedure

Run UTView

Solve the problem

OK — NO

Stop UTView

Save UTView.ini
— You will need it after installtion to retreive IP address, type of device,...

UTView < V2.1 — NO

Run WebAdmin
— Open an Internet browser such as Chrome or Edge //IP_address_of_your_device/webadmin.cgi See « Web administrator.pdf » for details

Apply patch reset
— Add reset & reboot features: ImageUSB\UTView\Firmware&Config\patch\patch_reset_261119.bin

Restart device

Run WebAdmin

Apply generic update
— Upgrade common files for all devices ImageUSB\UTView\Firmware&Config\cfg_generic_*ddmmyy*.bin

Restart device

Run WebAdmin

Apply firmware update
— Upgrade the firmware of a specific device
For FAAST-PA:
ImageUSB\UTView\Firmware&Config\frm_pa_*ddmmyy*.bin
For SOCO-X-UT:
ImageUSB\UTView\Firmware&Config\frm_soco_*ddmmyy*.bin
For SOCO-SWIFT:
ImageUSB\UTView\Firmware&Config\frm_ssw_*ddmmyy*.bin

Restart device

Run WebAdmin

Apply firmware update
— Upgrade the configuration of a specific device
For FAAST-PA:
ImageUSB\UTView\Firmware&Config\cfg_pa_*xx_ddmmyy*.bin
For SOCO-X-UT:
ImageUSB\UTView\Firmware&Config\cfg_soco_*xx_ddmmyy*.bin
For SOCO-SWIFT:
ImageUSB\UTView\Firmware&Config\cfg_ssw_*xx_ddmmyy*.bin

Restart device

Install software update
— ImageUSB\UTView\setup32.exe Or ImageUSB\UTView\setup64.exe

Set UTView.INI
— Edit UTView.ini file to change IP address, type of device, declare interface modules...

Run UTView

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