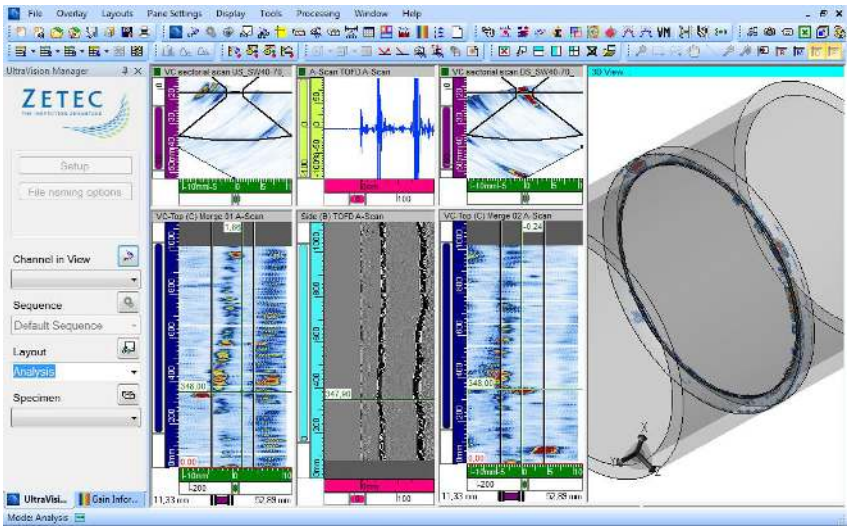
UltraVision 3.9R9

Limitations and Remaining Anomalies



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IMPORTANT MESSAGE

UltraVision® Classic & Touch 3.9R9 is the latest UltraVision release for the UltraVision software. This new software version incorporates a series of new features and improvements as described in the *Product Bulletin* and *Technical Guidelines* documents.

Zetec is committed to the highest levels of product quality. Some limitations and remaining anomalies were detected during the validation campaign and are listed in this document.

If, when using UltraVision Classic or Touch 3.9R9, you detect any other limitations or remaining anomalies not included in this document, please contact us at Support-UTProducts@zetec.com. Detailed information about the problem will help our software team to expedite the correction process.

UltraVision Classic - Fixed Anomalies

Gates - Threshold type not saving

Status:	**Anomaly**	**B2320**
Description:	With RF signal, gates with “Threshold Type” set to “Positive” or “Negative” do not save the setting with the setup.	
Correction:	Corrected	

2D probe database - longitudinal wedge has wrong roof top for 3.5MHz DMA probe

Status:	**Anomaly**	**B2323**
Description:	For the 3.5M16x2E20-12 probe, both the longitudinal and shear wedge have roof angle of 8degrees.	
Correction:	Corrected	

Wedge UT Database - Error message when editing the Type of a custom wedge

Status:	**Anomaly**	**B1494**
Description:	In the UT Database form for wedges, "Type" is editable (text box) and changing text causes an exception messages. The Type column is made non-editable.	
Correction:	Corrected	

Time Reversal - Option should only be visible when in PA Pulse Echo configuration

Status:	**Anomaly**	**B1718**
Description:	Time Reversal mode available in non-Pulse-Echo configurations.	
Correction:	Corrected	

TOFD transducer database: Element size information

Status:	Anomaly	B1718
Description:	In the UT probe database when TOFD is selected, it would be useful to have the element size information.	

Correction:	Add the column pitch in the Conventional Pulse-Echo, P&C and TOFD. In the TOFD database the column will be named Diameter and return the element Diameter information In the Conventional Pulse-Echo and P&C databases, the column will be named Primary Element Size and return the element Primary Element Size information.

Assisted Analysis - Amplitude C-Scan wrong when A-Scan start is not zero

Status:	**Anomaly**	**B2209**
Description:	If the A-Scan time base start is different than zero (Positive or Negative), Then the Assisted Analysis is not able to find indications on amplitude C-Scan. The Usound bound must not be checked on C-Scan, since there is none.	
Correction:	Corrected.	

Assisted Analysis - Exported selected data cannot be imported back

Status:	**Anomaly**	**B2767**
Description:	Importing a configuration of the Assisted Analysis (.aap file) does not check the selected data at the time of the export.	
Correction:	Corrected	

Soft C-Scan - Does not work on RF signal

Status:	**Anomaly**	**B1747**
Description:	When doing a Soft C-Scan on RF data, the threshold value is used as an "absolute" value. A threshold of -40% is considering everything between -40% and +100% instead of 40% to 100% AND -40% to -100%. Threshold value must is applied on both sides of the signal	
Correction:	Corrected	

C-Scan stitching - Soft C-Scan not available

Status:	**Anomaly**	**B1829/B2538**
Description:	Soft C-scan generated in analysis mode are not present in C-Scan stitching processing.	

Correction:	Corrected

C-Scan Stitching - Data not visible if data range is completely negative

Status:	**Anomaly**	**B2293**
Description:	Data not visible if data range is completely negative	
Correction:	Corrected	

ACIS - Wrong version of SAT file

Status:	**Anomaly**	**B2707**
Description:	Beam setup creates an error because of the wrong version number of SAT file. When loading the setup, the specimen shape is not loaded.	
Correction:	Version check is modified to properly load recent SAT files.	

QUARTZ - Gate crashes when checking Linear box in parallel firing

Status:	**Anomaly**	**B2297**
Description:	When checking the Parallelize Laws with the Linear box checked, it does not work.	
Correction:	Corrected	

Infofields

Status:	**Anomaly**	**B2791**
Description:	Info fields- C-CrAm%UnThr and C-CrAm%AbThr do not consider the soft gain	
Correction:	Corrected	

Soft gates

Status:	**Anomaly**	**B2621**
Description:	Soft Gates changes when law is changed	
Correction:	Corrected	

Analysis: Process summation - Progress bar

Status:	**Anomaly**	**B2644**
Description:	When launching a process summation, the progress toolbar does not show any progress that could mean that the system is not responding.	
Correction:	Corrected	

UV crashes when setup files are loaded thousands of times

Status:	**Anomaly**	**B2607**
Description:	Each time a new inspection is started a setup file is loaded, data file is generated and it starts over. The setup load time is gradually but steadily increasing until UV crashes after repeating the process more than 2700 times.	
Correction:	Corrected	

TOFD calibration for PA TOFD does not work

Status:	**Anomaly**	**B2332**
Description:	With TOFD Data acquired with PA probes, the TOFD calibration doesn't compute the right positions.	
Correction:	Corrected	

DYNARAY - Scale 0-200, 0-400, 0-800 cannot be selected

Status:	**Anomaly**	**B2475**
Description:	DYNARAY - The higher amplitude scale above 100% cannot be selected. Scale 0-200, 0-400, 0-800 not accessible.	
Correction:	Corrected	

SoftGain - Improperly saved in UVDisplay setup and data file

Status:	**Anomaly**	**B2478**
Description:	Soft gain settings are not correctly saved on setup file.	

Correction: Corrected

TCG - Import TCG does not import the first law points

Status: **Anomaly** | **B2661**

Description: When importing a TCG, the points created for the first law are not imported. The points for the second law are applied to the first.

Correction: Corrected

Assisted Analysis - Processing error

Status: **Anomaly** | **B2766**

Description: An error message is displayed when the Assisted Analysis processes specific data files.

Correction: Corrected

Palette - Use Min/Max colors does not work when amplitude range is not 0-100%

Status: **Anomaly** | **B2561**

Description: When a palette with the use Min/Max colors option is used on data where the amplitude range is not 0-100%, it does not work when the max/min are not 0 or 100%.

Correction: Corrected

Next beam shortcut (F7) does not work when focus is on the indication table

Status: **Anomaly** | **B2319**

Description: Next beam shortcut (F7) does not work when focus is on the indication table.

Status: Corrected

UltraVision Touch - Fixed Anomalies

DC offset calibration on TOPAZ64

Status:	Anomaly	B2854
Description:	On TOPAZ64, with TFM configuration, the DC offset calibration is not stable and can increase over time.	
Correction:	A new DC offset calibration is available with an external executable. Please refer to the install procedure.	

Deactivated Keypad on TOPAZ32

Status:	**Anomaly**	**B2946**
Description:	On TOPAZ32, the keypad is deactivated when the touch screen is locked .	
Correction:	Keypad is still activated when touch screen is locked.	

Signal Synchronization issues when using TFM and Phased Array Channels on TOPAZ64

Status:	**Anomaly**	**B2859**
Description:	On a setup with a Phased Array and a TFM channels, a signal desynchronization occurs on the TFM channel when activating gates on the Phased Array channel.	
Correction:	It is possible to activate gates on the Phased Array and/or the TFM channel without causing signal desynchronization.	

Maximum operating temperature warning on TOPAZ

Status:	**Anomaly**	**B2837**
Description:	TOPAZ stopped working at high temperature before the overheating warning messages appears.	
Correction:	When overheating, a warning message will appear to give the operator time to save files before the automatic shutdown of the instrument. *Fully tested on Topaz32 but not on Topaz64*.	

Remote mode - Using the Topaz16 as a license, the LW sync and LW removal options are locked

Status:	**Anomaly**	**B2938**
Description:	Using the Topaz16 as a license, the LW sync and LW removal options are locked because of "insufficient license"	
Correction:	Corrected	

Remote control: UV Touch does not communicate with TOPAZ - firewall problem

Status:	**Anomaly**	**B2159**
Description:	When controlling the TOPAZ remotely using UV Touch, the equipment is not detected (No UT devices found). Using the same computer settings but launching UltraVision Classic, everything works fine.	
Correction:	Corrected	

No possibility to setup a C-Scan view according to a gate

Status:	**Anomaly**	**B2631**
Description:	No possibility to define a pane (view of Layout) with a C-Scan and a specific gate.	
Correction:	Corrected	

Palette - Linear sectorial switched to End view does not keep its palette

Status:	**Anomaly**	**B2591**
Description:	When using a palette different from rainbow on a sectorial scan view for a Linear channel, once we open the datafile in analysis, the palette of the End view that replaces the sectorial is always set on Rainbow.	
Correction:	Corrected	

TOPAZ with UVTouch, CV mode - 9s delay between the scanning and display

Status:	**Anomaly**	**B2644**
Description:	In case of TOPAZ16, UVT3.8R30, 1 conventional channel, there is a 9 seconds gap between the probe moving & impact on the display (at the beginning). The display stops after some time. Detected also in TOPAZ32.	

Correction:	Corrected

Reset of gates in case of LAW recomputing

Status:	**Anomaly**	**B2578**
Description:	Gates (Interface, G1, G2, ...) are turned off in case of recomputing of laws.	
Correction:	Corrected	

TCG points from UT Settings lost after a recompute

Status:	**Anomaly**	**B2508**
Description:	TCG points from UT Settings lost after a recompute.	
Correction:	Corrected	

User field edited in analysis are not saved in Extension file

Status:	**Anomaly**	**B2504**
Description:	User field edited in analysis are not saved in Extension file.	
Correction:	Corrected	

UltraVision Classic - Limitations and Remaining Anomalies

Setup

Linear TFM Mode default setting

Status:	**Anomaly**
Description:	Default setting not coherent: Linear mode is set to active by default when selecting the TFM configuration thru the UT settings pane but is set to inactive by default if the TFM is set in the advanced calculator.
Bypass:	None.

View Display

3D Drawing Tools: Display layout with Slicing or Cutting

Status:	**Anomaly** | **B0508**
Description:	After using the **3D Drawing Tools**, the display layout with the **Slicing** and **Cutting** tools are lost when switching layouts.
Bypass:	None.

Predefined Layouts: Gates not Completely Open

Status:	**Limitation** | **B0207**
Description:	When loading the predefined analysis layout **Analysis - PA - Top, Side, End**, the gates are completely closed in the **VC-End** view, instead of being completely open.
Bypass:	None.

UltraVision Touch - Limitations and Remaining Anomalies

Setup

TOPAZ64 - TFM High Resolution (1024 x 1024)

Status: **Limitation**

Description: In *TOPAZ-64/128PR-TFM HR*, the TFM Frame maximum size is temporary limited to 256K points (equivalent to 512x512 or 1024x254) instead of 1M points (1024x1024 or 2048x512). The full TFM Frame resolution will be available in the next UltraVision Touch release version.

Bypass: None.

TOPAZ64 - TFM Aperture Definition in Linear TFM configuration

Status: **Anomaly** **B2619**

Description: The aperture of a linear TFM channel cannot be defined as starting from any element of a probe.
A **Linear TFM Channel** is created when using apertures having less elements (*Aperture* parameter in TFM Calculator) compared to the total number of elements available on the array (*Last Element*). Successive FMC/TFM apertures will be automatically defined using to cover all available elements in the array. Data is dynamically merged for an individual cross section.

Bypass: The aperture of a linear TFM channel needs to be defined as starting from element #1 of the probe.

TOPAZ64 - TFM Pitch & Catch with 2D probes

Status: **Limitation**

Description: Configuration with TFM in Pitch & Catch mode with 2D matrix probes is not available.

Bypass: None.

TOPAZ64 – Configuration with two TFM channels

Status: **Anomaly**

Description:	On setup with a configuration of 2x TFM channels, the second TFM channel gives wrong infofields information if the TFM frame resolution is different from one channel to the other.
Bypass:	Use same TFM frame resolution on both channels.

TOPAZ64 - Multiple simultaneous TFM reconstruction paths from the same FMC data

Status:	**Limitation**
Description:	The multiple simultaneous TFM reconstruction paths from the same FMC dataset feature is not available and will be supported in a future UltraVision Touch release.
Bypass:	None.

TOPAZ64 - FMC Raw Data Saving

Status:	**Limitation**
Description:	It is not possible to save the raw FMC data for analysis in post-processing. This feature will be available in the next UltraVision Touch release version.
Bypass:	None.

TOPAZ64 - Sectorial Total Focusing (STF)

Status:	**Limitation**
Description:	A new sectorial Total Focusing mode configuration is available in the TOPAZ64 instrument. This mode can be used like a standard sectorial scan with a few limitations: - Possibility of crashes or signal desynchronization occurring when used in combination with another channel - Possibility of crashes or signal desynchronization during probe or laws calibration - Gates in STF mode are not functional
Bypass:	STF channels can be used without gates activated.

TOPAZ64 - Automatic Scanner Detection

Status:	**Limitation** **B2601**
Description:	PaintBrush or Weld Crawler scanners are not automatically detected when connected on a TOPAZ64 unit.

Bypass:	Connect the scanner prior to booting the instrument.

TOFD Calibration

Status:	**Limitation**	**B1208**
Description:	When changing the crossover parameters in a TOFD calibration, there is no prior warning message displayed before the loss of all existing TOFD calibration parameters.	
Bypass:	None.	

TOPAZ64 – Conventional or TOFD Channel is not functional when used in combination with a TFM channel or STF channel

Status:	**Limitation**	
Description:	The combination of a conventional or TOFD channel with a TFM channel or STF channel creates a bug that makes the signal of the conventional or TOFD channel unusable.	
Bypass:	Use conventional or TOFD channel in combination with Phased Array Channel only.	

Analysis and reporting

C-Scan Stitching using Difference Gate

Status:	**Anomaly**	**B1854**
Description:	When selecting a Difference Gate to create a C-Scan Stitching, only the stitched C-Scan for that diff. gate will be created and not for the other gates of the channel.	
Bypass:	Select another gate than the difference gate before clicking on the Merge button.	

Miscellaneous

F1/F2 Buttons not functional on Topaz64

Status:	**Limitation** | **B2549**
Description:	It is not possible to set actions for the F1/F2 buttons on the side of the TOPAZ64.
Bypass:	If screen is locked, plug keyboard to USB and manually close the “lock screen” by pressing “ALT+F4”.

Encoder divider not reset on external reset

Status:	**Limitation** | **B2695**
Description:	When an external reset signal is received on a DYNARAY, the encoder location is reset to the preset value, but the divider register is not reset, and it keeps counting from its current location. This result in the reset location not being accurate, depending on the current divider value.
Bypass:	N/A

Quality

All work is performed in accordance with ZETEC Quality standards program, which complies with 10CFR50 Appendix B, ISO 9001:2008 and ISO/IEC 17025:2005.

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