

## UltraVision TOUCH 3.8R11 (PC and TOPAZ versions)

### Product Bulletin



## Table of Content

Table of Content .....	2
UltraVision Touch 3.8R11.....	3
Purpose of UltraVision Touch 3.8R11 .....	3
Important information about UltraVision Touch 3.8R11.....	4
New TOPAZ <sup>16</sup> .....	4
UltraVision New Features and Improvements.....	4
Interactive Help.....	4
Non Corrected C-Scan View .....	5
Inspection speed optimization.....	5
Read back mode.....	5
Pause mode for analysis .....	6
Scan Axis Repositioning .....	6
Improvements to weld overlays .....	6
Proposed setup for NDT PaintBrush .....	7
Compound Scan .....	7
Important note about using a 1D Dual Linear Corrosion type arrays on TOPAZ <sup>16</sup> .....	7
Downloading and installing UltraVision Touch 3.8R11 for TOPAZ .....	9

## UltraVision Touch 3.8R11

Zetec has just released UltraVision Touch 3.8R11. This software version can be used in TOP $\Delta$ Z, TOP $\Delta$ Z<sup>16</sup> and TOP $\Delta$ Z<sup>32</sup> as well as on a PC running Windows 7 or Windows 10.

This product bulletin presents an overview of the new features and changes that are included in the new UltraVision Touch 3.8R11 software release.

UltraVision Touch 3.8R11 is also the first version of UltraVision Touch that includes TOP $\Delta$ Z<sup>16</sup> instrument support. More information about this product can be found visiting <http://www.zetec.com/products/ultrasound/instrumentation/topaz16/>

UltraVision Touch 3.8R11 is available in three embedded versions for TOP $\Delta$ Z product family:

- **Topaz 3.8R11** for TOP $\Delta$ Z instruments
- **Topaz16 3.8R11** for TOP $\Delta$ Z<sup>16</sup> instruments
- **Topaz 3.8R11 (x64)** for TOP $\Delta$ Z<sup>32</sup> instruments

And two PC versions:

- **UltraVision Touch 3.8R11** for 32-bit version environments
- **UltraVision Touch 3.8R11(x64)** for 64-bit version environments

For downloading UltraVision Touch 3.8R11 or other any UltraVision version and access to our latest software documentation, please visit [www.zetec.com](http://www.zetec.com)

## Purpose of UltraVision Touch 3.8R11

UltraVision Touch 3.8R11 is Zetec's latest upgrade for Zetec's UltraVision Touch software. This software release includes several new features and improvements. Zetec's hardware and software development process is performed according to a quality system that is certified ISO 9001-2008.

With this certified software development process, Zetec guarantees that the changes between previous UltraVision Touch (3.5R10, 3.6R1, 3.6R5, 3.7R1, 3.7R21 and 3.8R7) to UltraVision Touch 3.8R11 have no consequences on the sensitivity and the accuracy of the signal amplitude and flight time outputs displayed, recorded or automatically processed by the software. This includes additions of mathematical modules used for the positioning of indications or for geometric conditions adjustments.

# Important information about UltraVision Touch 3.8R11

## Upgrades management

Since March 2016, all UltraVision Classic and UltraVision Touch versions running on PC will be managed under the Software Service Program (SSP). This means that one-year of free upgrades is offered at the purchase of the license key. After that, upgrades will need to be purchased according to the SSP guidelines.

All embedded UltraVision Touch versions running on TOP $\Delta$ Z, TOP $\Delta$ Z<sup>16</sup> or TOP $\Delta$ Z<sup>32</sup> units will continue to benefit from unlimited free of charge upgrades.

## New TOP $\Delta$ Z<sup>16</sup>

TOP $\Delta$ Z<sup>16</sup> is the latest member in Zetec's family of portable integrated ultrasonic products. It is available in two configurations (16/64 and 16/128). More information about this product can be found at <http://www.zetec.com/products/ultrasound/instrumentation/topaz16/>

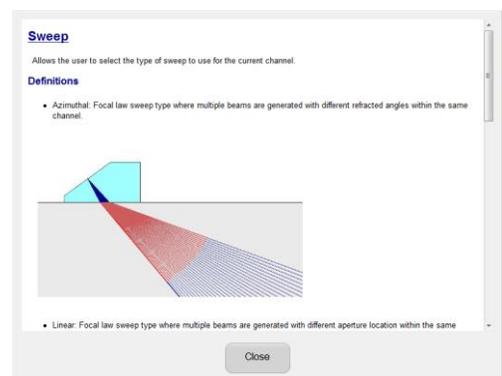
# UltraVision New Features and Improvements

## Interactive Help

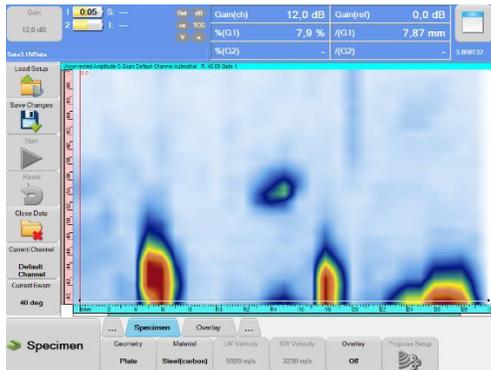
UltraVision Touch 3.8R11 adds a new Interactive Help tool.

Interactive Help is activated by pressing on a button or features for 3 seconds. A pop up type window containing the description and "how to..." guidelines for this feature will appear.

Interactive Help simplifies training and the understanding of the less used functions.



## Non Corrected C-Scan View



The **Non Corrected C-Scan View** displays the amplitude readings of each focal law taken from the gate and plotting the information side by side, without correction for actual angle.

When used on a Raster Scan, the data cursor allows selecting which scan line to display in the view.

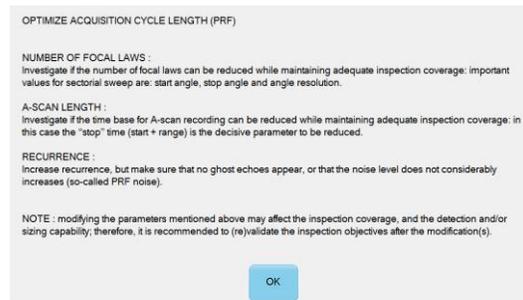
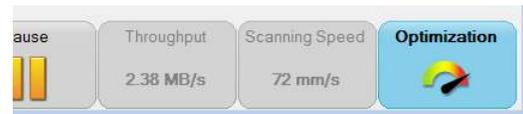
## Inspection speed optimization

Maximum acquisition speed is typically determined by:

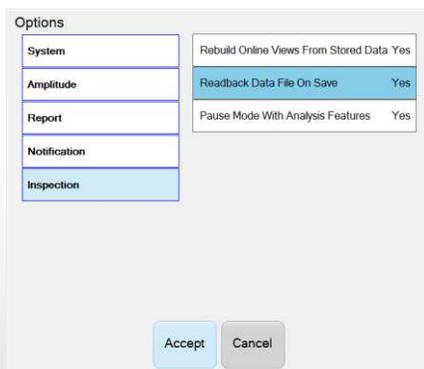
- Data throughput
- Available energy for pulsing
- Acoustic sound propagation time

During setup preparation, any of these three factors can limit the achievable acquisition rate. UltraVision Touch now includes an optimization algorithm that helps identify which of the above mentioned factors is limiting the maximum acquisition speed. Optimization is not performed automatically as this may modify existing settings.

This new optimization is located in Channels menu.



## Read back mode



When **Read Back mode** is enabled, data files will be automatically opened at the end of each inspection cycle.

It is no longer necessary to manually perform the “open data file” operation for doing the analysis of the recently acquired data. Simply closing the data file will automatically prepare the instrument for the next inspection cycle.

This new operating mode can be activated from the Options -> Inspection menu.

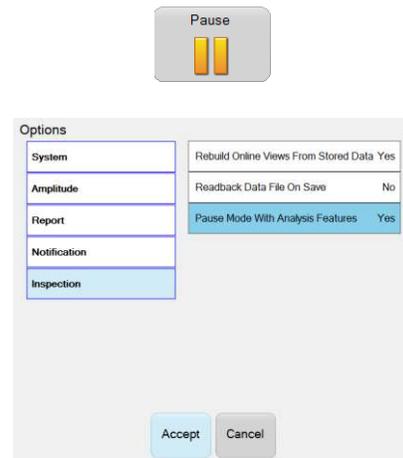
## Pause mode for analysis

The new **Pause mode** enables users to access analysis tools previously not available in acquisition mode. When pausing an acquisition, it is now possible to:

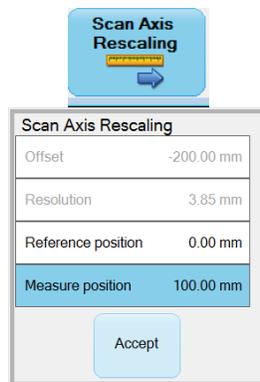
- Change the focal displayed
- Choose the data position displayed
- Do sizing and measurements with cursors
- Move gate selector in dynamic views

When in Pause mode, it is also possible to reconstruct Online Views from Stored Data for doing data validation without opening inspection data files.

Pause mode can be activated or deactivated from the Options menu.



## Scan Axis Repositioning



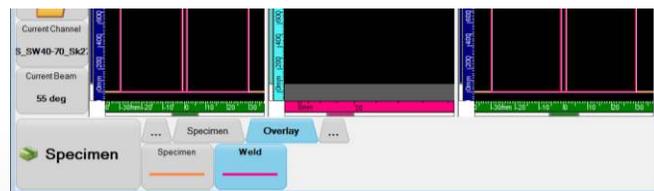
During post inspection analysis, data scan position can be re-scaled along a new scan axis length. This new feature allows for proper scaling of data when performing a manual non-encoded inspection sequence.

When a data file is loaded, the user can rescale data along the scan axis. The selection of the data area is done with cursors and the new scan length is specified to stretch or shrink data.

Scan Axis Repositioning button is accessible in the Analysis menu.

## Improvements to weld overlays

Weld Overlays can now be configured to adjust overlay color, line weight and line type.



## Proposed setup for NDT PaintBrush



A new Proposed Setup tool for NDT PaintBrush configurations is now included in UltraVision Touch 3.8R11.

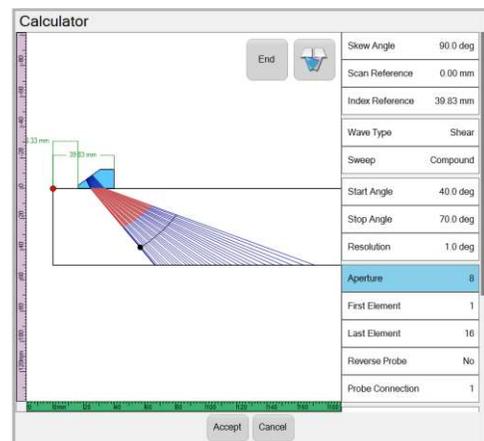
This tool helps create the right UT setup when using either 1D Dual Linear Array type probe for corrosion inspection or traditional 1D linear arrays.

The proposed setup tool pre-configures the apertures and positions the gates according to the specimen settings for a simpler setup creation process.

## Compound Scan

Compound scanning is improved:

- It is now possible to define the resolution for the compound scan generation (this replaces the option Sparse/Dense available in previous versions)
- The increment in aperture element will now be a function of the number of focal laws and the length of the probe to cover



## Important note about using a 1D Dual Linear Corrosion type arrays on TOPAZ<sup>16</sup>

1D Dual Linear Arrays 10053850 and 10053851 will replace probes 10051864 and 10052070 for corrosion mapping applications using NDT PaintBrush. Probes 10051864 and 10052070 are not supported by TOPAZ<sup>16</sup>.

These new part numbers have the same acoustic characteristic of the probes that they are replacing. Element wiring has been modified to be compatible with TOPAZ<sup>16</sup>, TOPAZ<sup>32</sup> and TOPAZ instruments (when using UltraVision Touch 3.8R11 or higher).

- 10053850 ZPA-PB1D-TR-5M48x10-6.0-ZPAC-WM (replaces item 10051864)
- 10053851 ZPA-PB1D-TR-5M24x10-6.0-ZPAC-WM (replaces item 10052070)

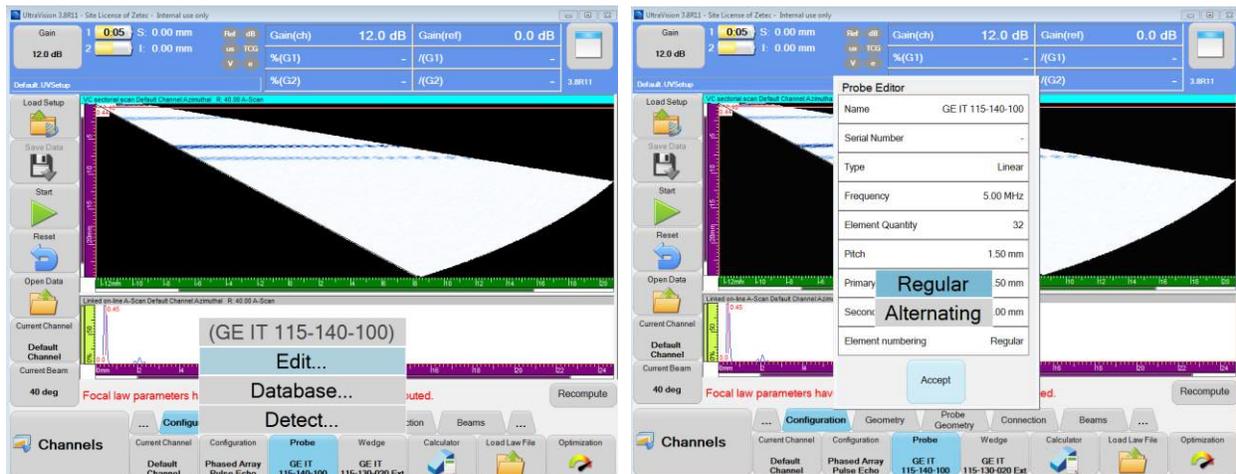
## Using GE IT Corrosion Probes with TOPAZ and NDT Paintbrush

The same Proposed Setup can be used for both probe types. However, since their wiring is different, they need to be handled differently in UltraVision. The difference is in the probe definition, element numbering. Note that this option is only available in UltraVision Touch, version 3.8R11 and up.

Old Zetec ID	New Zetec ID	Old GE part ID	New GE part ID	Zetec Part description
10051864	10053850	115-140-100	115-140-105	ZPA-PB1D-TR-5M48x10-6.0-ZPAC-WM
10052070	10053851	115-140-101	115-140-106	ZPA-PB1D-TR-5M24x10-6.0-ZPAC-WM

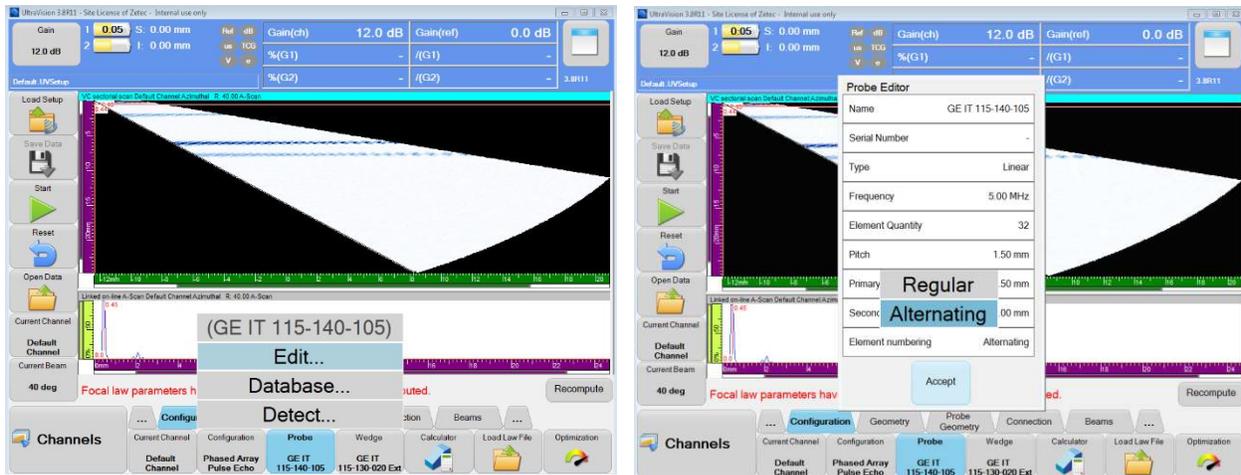
Using probe 10051864 (GE 115-140-100) or 10052070 (GE 115-140-101)

In the **Edit** Probe Menu, make sure the element numbering is set to **Regular**.



Using probe 10053850 (GE 115-140-105) or 10053851 (GE 115-140-106)

In the **Edit** Probe Menu, make sure the element numbering is set to **Alternating**.



## Downloading and installing UltraVision Touch 3.8R11 for TOPAZ

To upgrade TOPAZ products family software to the new 3.8R8 version, please download the appropriate UltraVision Touch version according to your instrument model from our website: [www.zetec.com](http://www.zetec.com)

UltraVision Touch is available in two main versions (embedded or PC based) and there are several install files available according to the software version and platform to use:

- *UltraVisionTouch 3.8R11*: Install file of UltraVision Touch for PC in 32-bit version.
- *UltraVisionTouch 3.8R11 (x64)*: Install file of UltraVision Touch for PC in 64-bit version.
- *Topaz 3.8R11*: Install file of UltraVision Touch for TOPAZ.
- *Topaz16 3.8R11*: Install file of UltraVision Touch for TOPAZ16.
- *Topaz 3.8R11 (x64)*: Install file of UltraVision Touch for TOPAZ32.

To install the downloaded version on your TOPAZ:

1. Save the file and unzip it on a USB drive
2. Connect the USB drive to your TOPAZ
3. Go to **TOOLS > SYSTEM** and click on **System Update**
4. In the dialog, you should already see the TOPAZ 3.8R11 installer from your USB drive, but if not, click on the arrow at the top-right corner of the dialog until you see your USB and select the TOPAZ 3.8R11 installer
5. Click on **Install**.