

UltraVision 3.10R2

Touch version

Product Bulletin



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UltraVision Touch 3.10R2

Zetec has just released UltraVision Touch version 3.10R2. This software version can be used on the TOP Δ Z, TOP Δ Z¹⁶, TOP Δ Z³² and TOP Δ Z⁶⁴ models as well as on a PC running Windows[®] 10 or Windows 7.

This product bulletin presents an overview of the new features and changes that are included in the new UltraVision Touch 3.10R2 software release.

UltraVision Touch 3.10R2 is available in three embedded versions for the TOP Δ Z product family:

- **Topaz 3.10R2** for TOP Δ Z instruments
- **Topaz16 3.10R2** for TOP Δ Z¹⁶ instruments
- **Topaz32 3.10R2 (x64)** for TOP Δ Z³² instruments
- **Topaz64 3.10R2 (x64)** for TOP Δ Z⁶⁴ instruments

As well, UltraVision Touch 3.10R2 is available in two PC versions:

- **UltraVision Touch 3.10R2** for 32-bit version environments
- **UltraVision Touch 3.10R2(x64)** for 64-bit version environments

To download UltraVision Touch 3.10R2 or any other UltraVision version, and to obtain access to the latest software documentation, please visit www.zetec.com

Purpose of UltraVision Touch 3.10R2

UltraVision Touch 3.10R2 is Zetec's latest upgrade for Zetec's UltraVision 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 the previous UltraVision Touch versions (3.5R10, 3.6R1, 3.6R5, 3.7R1, 3.7R21, 3.8R7, 3.8R11, 3.8R13, 3.8R16, 3.8R30, 3.9R9 and 3.9R20) to UltraVision Touch 3.10R2 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 also includes additions of mathematical modules used for the positioning of indications or for geometric conditions adjustments.

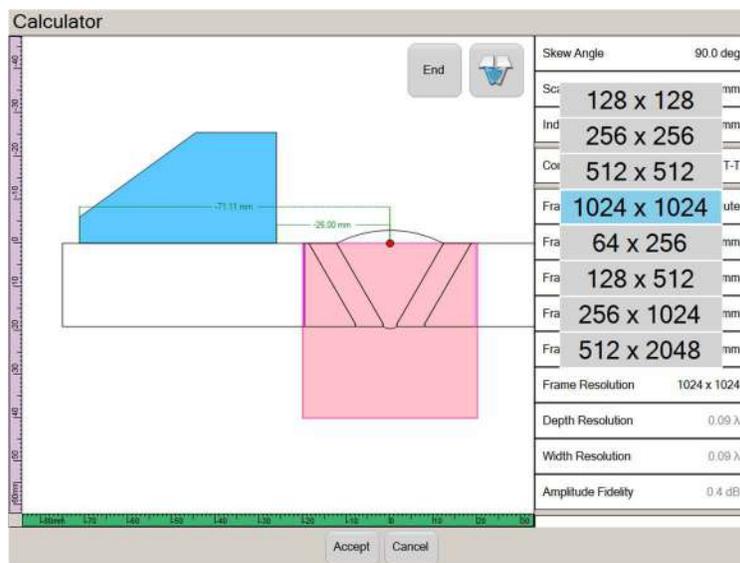
UltraVision Touch New Features and Improvements

TFM Frame 1024 x 1024

With UltraVision Touch 3.10R2, it is now possible to set the TFM frame to 1024 x 1024 pixels.

The **Total Focusing Method** (TFM) is a Phased Array (PA)-processing method using collected FMC data to generate a frame of pixels, where each pixel is computed using a dedicated focal law. Using the A-scans, reconstruction can be performed on-the-spot during data collection, or post-processed during analysis.

The TFM configuration can be set using the same easy calculator as used for the standard Phased Array channel. Frame resolution can now be set up to 1024 x 1024 pixels:



TFM TCG Calibration

It is now possible to calibrate the TFM channels in amplitude using the new TCG calibration. This new TCG calibration is used to define the gain correction to be applied to the signal of each individual pixel of a TFM image. Using reflectors located at different depths, it is now possible to normalize the amplitude response of TFM channels.

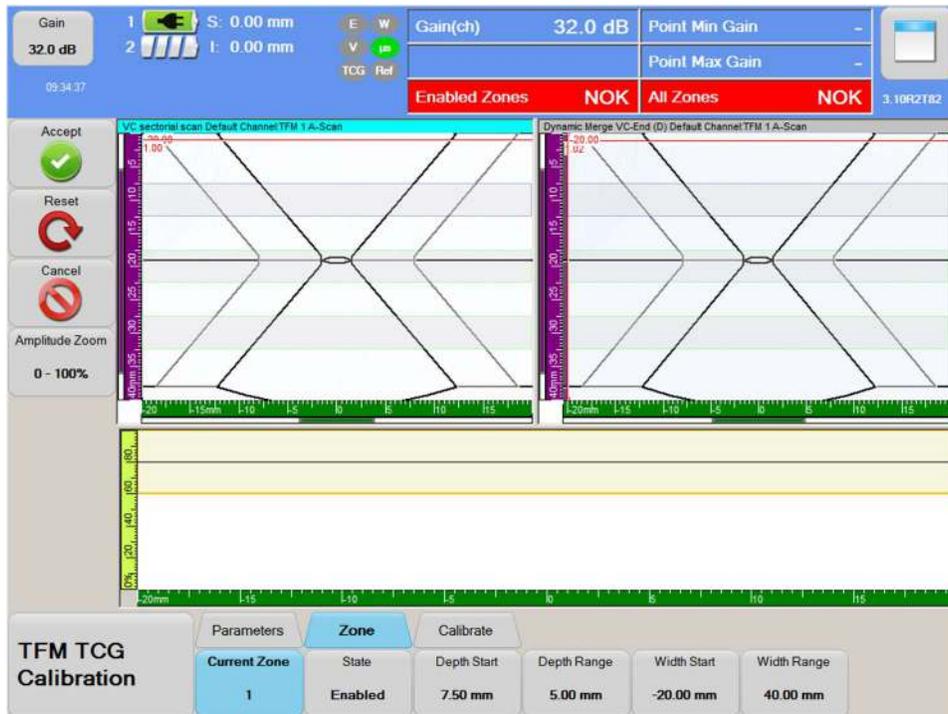
The TFM TCG calibration can be found in the calibration menu under the laws tab:



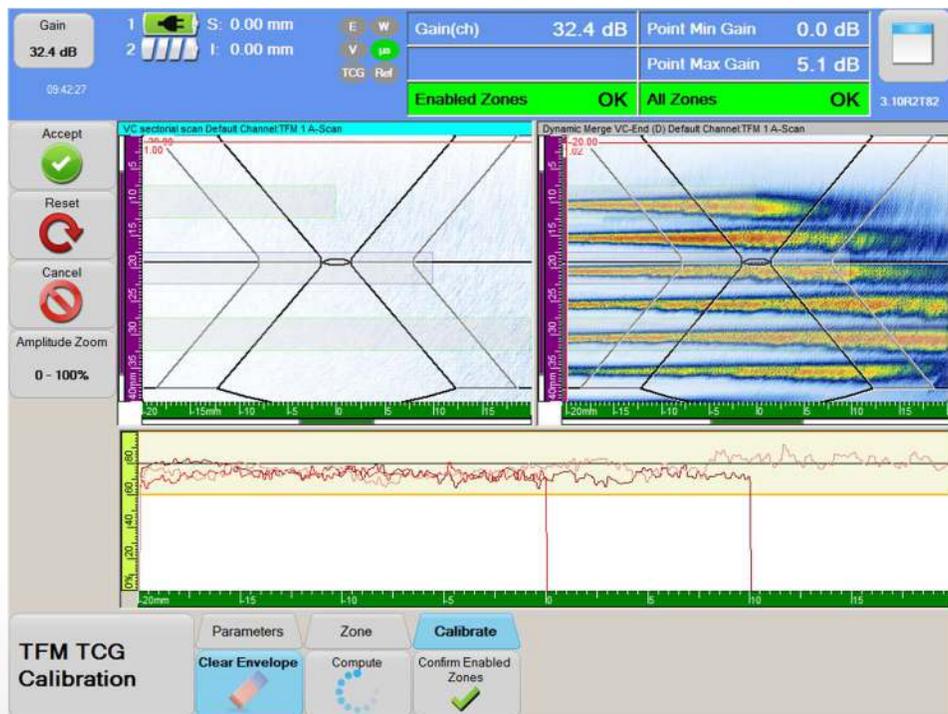
To do the TFM TCG calibration, user first needs to set the target amplitude, tolerance and threshold:



User then can create calibration zones, corresponding to the position of the reflectors. Zones can also be adjusted on the width of the TFM frame:



Zones can be computed and calibrated one by one or all together at the user convenience. Once the calibration is completed, user can confirmed zone(s) to have an accepted calibration:



Although TOPAZ64 supports multi-group operation, with 2 TFM channels or 2 LTF/STF channels displayed and recorded simultaneously, the TFM TCG calibration of only one channel is supported in this software version.

TOFD Offline Calibration

It is now possible to apply the basic TOFD calibration on previously recorded data directly in UltraVision Touch interface. User has now the ability to calibrate the wedge delay and either velocity or PCS, by simply placing two cursors on two signals (LW and BW, or any other two signals). Offline Calibration can be done on original data or after lateral wave synchronization.

Alarm Output for TOPAZ

It is now possible to connect an alarm output to the DB15 pin #14 thanks to a new interface menu in the mechanical settings. Any alarm configuration can be set as an output on the TOPAZ.

Note: The Alarm tab menu can now be found under the inspection menu.

Probe Database Update

The probe database has been updated to include new probes such as AL-TFM and SCC models.

Language Support

An update has been done on the translation of the Japanese and Russian language interface.

Downloading and installing UltraVision Touch 3.10R2 for TOPAZ

To upgrade the TOPAZ product family software to the new 3.10R2 version, please download the appropriate UltraVision Touch version according to your instrument model from our website:

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:

- *UltraVisionTouch 3.10R2*: Install file of UltraVision Touch for PC in 32-bit version.
- *UltraVisionTouch 3.10R2 (x64)*: Install file of UltraVision Touch for PC in 64-bit version.
- *Topaz 3.10R2*: Install file of UltraVision Touch for TOPAZ.
- *Topaz16 3.10R2*: Install file of UltraVision Touch for TOPAZ¹⁶.
- *Topaz32 3.10R2 (x64)*: Install file of UltraVision Touch for TOPAZ³².
- *Topaz64 3.10R2 (x64)*: Install file of UltraVision Touch for TOPAZ⁶⁴.

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 3.10R2 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 3.10R2 installer.
5. Click **Install**.

UltraVision PC recommended requirements

The following PC specifications are recommended for running UltraVision software:

- Windows 10 Pro (64 bits edition)
- Microsoft Office Professional 2016
- Quad-core i7 3.6 GHz processor
- Minimum of 16 GBytes RAM
- High-speed (1 Gb/s) Ethernet link
- High performance graphics card (Nvidia® Quadro® M2000M w/4GB GDDR5)
- High performance SSD (Solid State Drive) 256 GB or bigger

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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