UltraVision TOUCH 3.8R13

(PC and TOPAZ versions)

Product Bulletin

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UltraVision® Touch 3.8R13

Zetec has just released the 3.8R13 version of **UltraVision Touch**. This updated version can be used on the TOPΔZ, TOPΔZ^{16} and TOPΔZ^{32} units as well as on a PC running a Microsoft Windows 7 or Windows 10 operating system.

This product bulletin presents an overview of the new features and changes included in the latest UltraVision Touch software release.

UltraVision Touch 3.8R13 is available in three embedded versions for the TOPΔZ product family:

- **Topaz 3.8R13** for TOPΔZ instruments
- **Topaz16 3.8R13** for TOPΔZ^{16} instruments
- **Topaz 3.8R13 (x64)** for TOPΔZ^{32} instruments

UltraVision Touch 3.8R13 is also available in two PC versions:

- **UltraVision Touch 3.8R13** for 32-bit environments
- **UltraVision Touch 3.8R13(x64)** for 64-bit environments

To download the UltraVision Touch 3.8R13 software, or other any UltraVision software version, and for access to our latest software documentation, please visit www.zetec.com

For any additional information about the **UltraVision Touch** 3.8R13 software or any previous UltraVision Touch releases, please contact us at Support-UTProducts@zetec.com

Purpose of UltraVision Touch 3.8R13

UltraVision Touch 3.8R13 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 conforms 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 versions (3.5R10, 3.6R1, 3.6R5, 3.7R1, 3.7R21, 3.8R7 and 3.8R11) and the UltraVision Touch 3.8R13, 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 condition adjustments.

Important information about UltraVision Touch 3.8R13

Managing upgrades

Since March 2016, all UltraVision licenses (Classic and Touch running on PC) are managed under the Software Service Program (SSP). This means that the initial license key purchase includes one-year of free upgrades. After this 12-month period, upgrades must be purchased according to the SSP guidelines. Contact Zetec for more information about our Software Service Program.

All embedded UltraVision Touch versions running on TOP$\triangle$Z, TOP$\triangle$Z^{16} or TOP$\triangle$Z^{32} units will continue to benefit from free, unlimited upgrades.

UltraVision New Features and Improvements

Time Reversal on TOPAZ^{32}

Starting with the latest version, the UltraVision Touch 3.8R13, TOP$\triangle$Z^{32} now supports **Time Reversal**.

Time Reversal is a real-time adaptive process, allowing for rapid and reliable phased array UT inspections on complex geometries such as CFRP (Carbon Fiber Reinforced Polymers).

This real-time adaptive UT inspection technique eliminates the effects of misalignment between the probe and the specimen. A "surface profiling" process uses the time-of-flight from individual probe elements to characterize the surface of the inspected specimen. Once this surface profile is known, a compensation delay is applied to the individual elements of the probe to achieve normal incidence of the beam on the surface.

Time Reversal is also supported on QUARTZ and ZIRCON units.
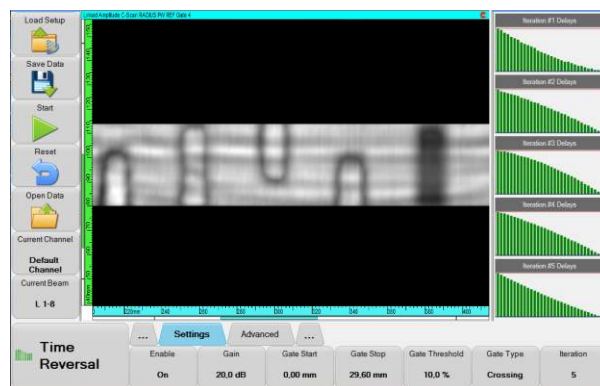
Improvements to Axial Weld Proposed Setup
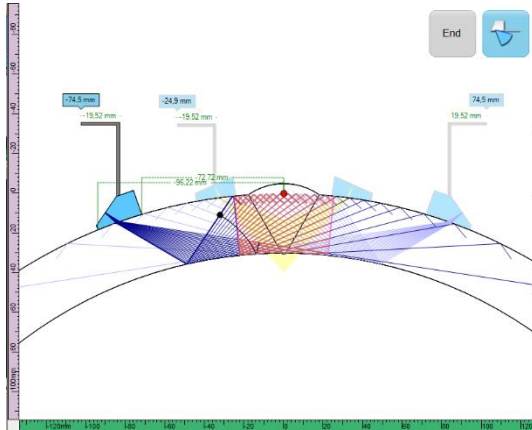
Several improvements are included in the UltraVision Touch version 3.8R13 to optimize the weld coverage when using the **Propose Setup** tool on an axial weld configuration.

The number of laws and the choice of the TOFD configuration are now calculated as a function of the specimen thickness, and continuing to compensate for the surface curvature in the case of pipes.

Propose Setup for Corrosion probe

With the launch of TOPΔZ[16], 1D Dual Linear Arrays 10053850 and 10053851 replaced probes 10051864 and 10052070 for corrosion mapping applications using NDT PaintBrush. The new probe's wiring allows using them on both PP and PR type instruments.
UltraVision Touch 3.8R13 now includes the support of both probe wiring types:
- Regular (REG): new probe wiring (for items 10053850 and 10053851).
- Alternative (ALT): discontinued probe wiring (for items 10051864 and 10052070).
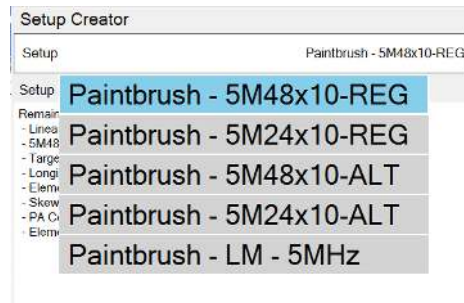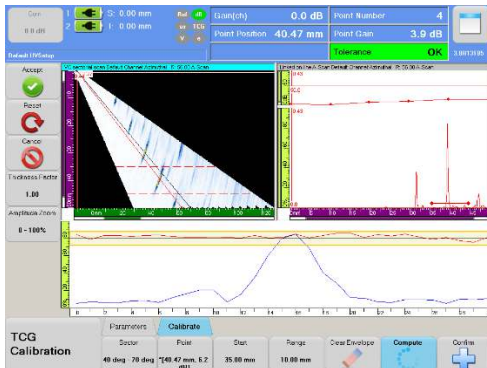
2M Matrix probes

When working with 2D-Matrix probes in TOPAZ32, the interface has been improved to clearly show the element reference numbers. Element configuration can also be set to a symmetrical emitter-receiver configuration.
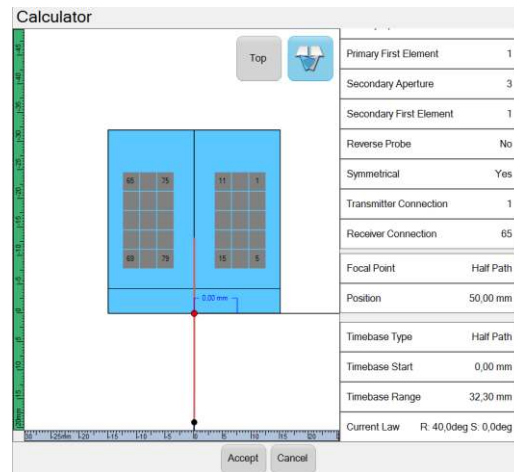
TCG Improvements

TOPΔZ[16] now has the capability of combining analog and digital amplification on TCG to allow a TCG range of up to 80dB/µs.

This improved TCG allows using up to 48dB of negative or positive gain to the TCG point, as well as access to the traditional analog gain.

Clicker Indexer

Index Encoder can be configured to **Clicker Indexer** mode. This mode increments a configurable distance each time **Clicker Indexer** button is touched.
Clicker indexer button is accessible from the **Inspection** tab.

Downloading and installing UltraVision Touch 3.8R13

To upgrade a TOPΔZ-product family software to the new 3.8R13 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 files for installing according to the software version and platform in use:

- ***UltraVisionTouch 3.8R13:*** Install the UltraVision Touch file for a PC in 32-bit version.
- ***UltraVisionTouch 3.8R13 (x64):*** Install the UltraVision Touch file for a PC in 64-bit version.
- ***TOPAZ 3.8R13:*** Install file of UltraVision Touch for TOPΔZ.
- ***TOPAZ16 3.8R13:*** Install the UltraVision Touch file for TOPΔZ[16].
- ***TOPAZ 3.8R13*** *(x64):* Install the UltraVision Touch file for TOPΔZ[32].

Once downloaded, install the version on your TOPAZ by following these instructions:

1. Save the file and unzip it on a USB drive.
2. Insert the USB drive into a USB connection on your TOPAZ unit.
3. Go to **TOOLS > SYSTEM** and click on **System Update**
4. In the dialog box, you should already see the **TOPAZ 3.8R13** installer on your USB drive. If not, click on the arrow at the top-right corner of the dialog box until you see your USB drive. Select the **TOPAZ 3.8R13** installer.
5. Click **Install.**