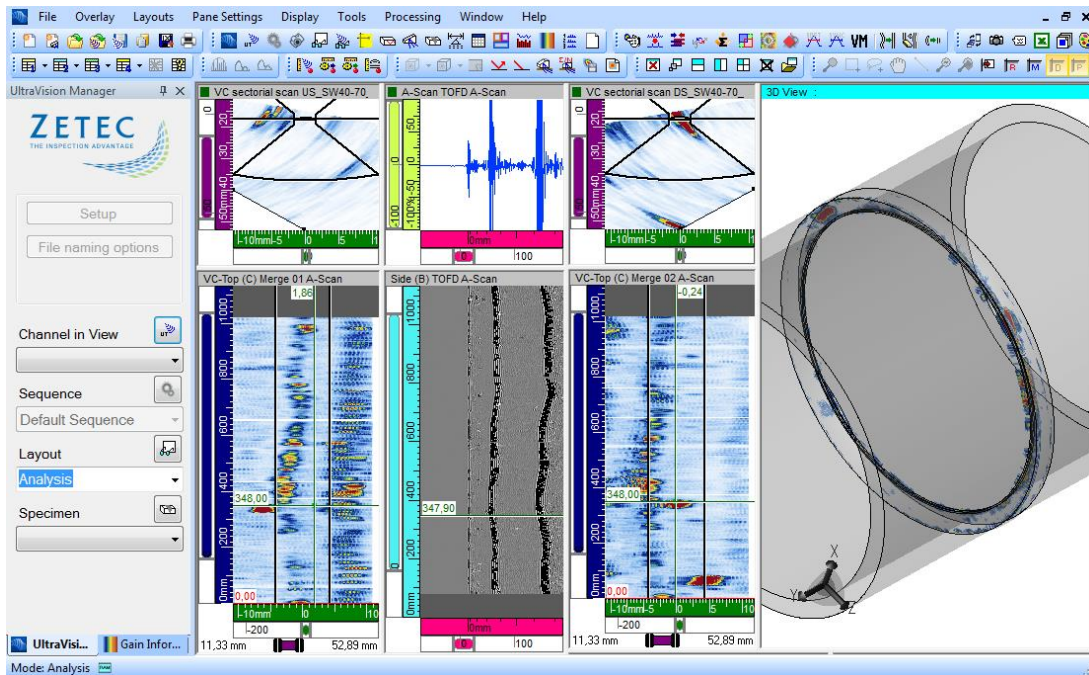


ULTRAVISION 3.8R7

Product Bulletin



UltraVision, a complete UT and Phased Array inspection package!

Table of Content

| | |
|---|---|
| Table of Content | 2 |
| Purpose of UltraVision 3.8R7 | 3 |
| Important changes to UltraVision Classic licenses..... | 3 |
| UltraVision Classic – 3D..... | 3 |
| UltraVision Classic – Advanced | 3 |
| UltraVision Classic – Basic..... | 4 |
| UltraVision Touch – Advanced | 4 |
| UltraVision Touch..... | 4 |
| UltraVision Touch – Viewer | 5 |
| Calibration Tool Improvement..... | 6 |
| Import/Export TCG Improvement..... | 6 |
| New Inspection Features | 6 |
| Save Data | 6 |
| New Data Analysis Features..... | 6 |
| Auto-Overlay Line Style..... | 6 |
| C-Scan Processing Median Filter..... | 7 |
| Auto-Batch Volumetric Merge (BVM) Execution | 7 |
| Execute Volumetric Merge (VM) or Batch Volumetric Merge (BVM) file to a list of UVData files..... | 7 |
| Auto-Load UVDisplay | 7 |
| Important notice about Autocrossing gates | 7 |

April 18th, 2016

UltraVision 3.8R7 Product Bulletin

Zetec has just released *UltraVision Classic 3.8R7*. This product bulletin document presents an overview of the new features and changes this version is offering.

For downloading this or other UltraVision versions, please visit www.zetec.com

Purpose of UltraVision 3.8R7

UltraVision Classic 3.8R7 is the standard upgrade for user currently working with a previous version of UltraVision Classic 3.

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 changes between UltraVision 3.6R5, 3.7R1, 3.7R21 and UltraVision 3.8R7 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 also additions of mathematical modules used for the positioning of indications or for geometric conditions adjustments.

Important changes to UltraVision Classic licenses

Starting with *UltraVision 3.8R7* release, some changes to the content of the *UltraVision Classic Basic* and *Advanced* licenses are implemented. These changes unlock some features previously only available in higher level versions.

UltraVision Classic – 3D

UltraVision Classic 3D remains as the most complete and advanced UltraVision license. There are no changes to its content except for the addition of new features. This version continues to give access to all UltraVision features including the complete 3D package.

UltraVision Classic – Advanced

UltraVision Classic Advanced is our intermediate level version. Starting with *UltraVision 3.8R7*, this version will also unlock some features previously available only in the 3D version, and will continue to support all features already available in 2015. The new unlocked features include:

- TFM support (requires DYNARAY for data acquisition)

- Custom Probe support
- DGS curves¹
- Data visualization in 3D Views for basic geometries (Plate & Pipe)

UltraVision Classic – Basic

UltraVision Classic Basic will continue to include all features of 2015 *Basic* license and will also add:

- 2D matrix array support
- DDF support
- Time Reversal support²

UltraVision Classic Basic will be unlocked by all PA Instruments, except TOPAZ and New TOPAZ³². Any other Zetec PA UT instrument connected to a PC will act as an *UltraVision Classic Basic* key without requiring the purchase of a separate license. A license key is however required for operating offline.

UltraVision Classic Basic will also support all *UltraVision Touch Advanced* features (see next section for details) and will work in Classic Desktop or Touch interfaces.

UltraVision Touch – Advanced

Starting with the release of version 3.8R7, *UltraVision Touch Advanced* is added to Zetec's UltraVision offering. This software version includes all 2015 *UltraVision Touch* features and in addition:

- 2D matrix array support
- DDF support
- All Weld Option (previously offered as a separate package)

UltraVision Touch Advanced will be unlocked by all PA Instruments including New TOPAZ³².

Customers who previously purchased *Weld license* package, will receive free of charge an upgrade license to *UltraVision Touch Advanced*.

UltraVision Touch

UltraVision Touch 3.8R7 will include all 2015 UltraVision Touch features and Weld Option as part of the standard package.

This *UltraVision Touch* version will be unlocked by all Zetec PA UT Instruments, including TOPAZ.

¹ Not included in version 3.8R7. To be available later 2016

² Time Reversal data acquisition is currently supported by ZIRCON and QUARTZ when purchasing the Time Reversal version of the instruments.

UltraVision Touch – Viewer

UltraVision Touch Viewer will continue to be offered as a free license featuring limited viewing options.

Calibration Tool Improvement

Import/Export TCG Improvement

Previous *Import/Export TCG* function only exported the TCG of the current beam, and when imported, applied the same TCG to all beams of the current channel. The *TCG Export/Import* saves multiple beams within a single exported XML file.

When more than one focal law exists for a given channel, the following options are available:

- Export All Beams
- Export current Beam only

Note: All XML files generated using previous version of UltraVision are still supported in UltraVision 3.8R7.

New Inspection Features

Save Data

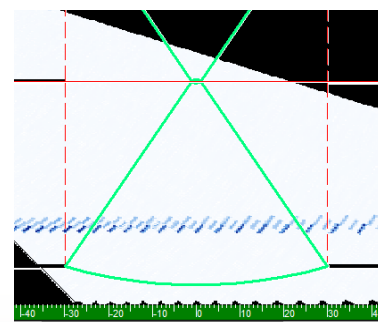
It's now possible to save a Data file while in Setup mode. Just go into the File menu and then click on the Save Data File button.

New Data Analysis Features

Auto-Overlay Line Style

In UltraVision Touch, the color and line style for the Overlay display of HAZ, Weld and Specimen can now be customized separately.

This function is available in the **Overlay** tab of the **Specimen** menu.



C-Scan Processing Median Filter

In addition to the Average Smoothing, the C-Scan processing tool is now able to perform a Median filter to smooth C-Scan images.

Auto-Batch Volumetric Merge (BVM) Execution

When loading a data file, UltraVision will automatically look in the same folder for an automatic volumetric merge file and execute if it exists. This allows saving time and applies the same type of merge to all files contained in a same folder.

Execute Volumetric Merge (VM) or Batch Volumetric Merge (BVM) file to a list of UVData files

It is now possible to select and execute a Volumetric Merge or a Batch Volumetric Merge to a series of files. In this way, it is possible to start the merging process of several acquisition and do their analysis without having to execute a merge each time reducing processing time.

Auto-Load UVDisplay

When loading a data file in *UltraVision*, it is loaded with the embedded .UVDisplay contained in it unless the *Display Setup* checkbox related to the .UVDisplay is manually unchecked in the file load dialog.

UltraVision now remembers the last state of the *Display Setup* condition and is reusing the same settings for subsequent file load operation during the same session.

Important notice about Autocrossing gates

Gates could be set to *Autocrossing* mode where the detection threshold is changed according to the maximum signal amplitude detected within the gate.

Some unwanted side effects have been detected on this feature. It is temporarily disabled for improving its performance and will be included again in next UltraVision release.