

Studio Software Update 2013.10.17 – Release Notes

Previous Studio Release: 2012.05.30/2013.02.04

Update Priority: Critical

Summary:

Akrometrix Studio 2013.10.17 is characterized as ‘Critical’ and required for ongoing Akrometrix Customer Service support. All included Studio applications have been validated for compatibility with previously created Akrometrix Studio file formats.

Important bug fixes and added features are listed below. This list does not include all resolved bugs. Additionally, some known open issues are listed, with work-arounds where applicable.

Update Procedure:

Install all applications for Studio 2013.10.17 by launching the provided file “Akrometrix Studio 2013.10.17 Installer.exe”. Uninstalling older Studio applications is not required prior to launching this file, as this will be done automatically. A computer restart should not be required.

Key Feature Changes or Additions:

Digital Fringe Projection (DFP) Support: The release of the DFP Module also included a number of capability enhancements, many of which are also powerful for use with shadow moiré data. This includes a new version of Surface Measurement for DFP.

- **Surface Measurement:**

- An auto displacement smooth function was added into Surface Measurement options.

- **Thermal Profiler:**

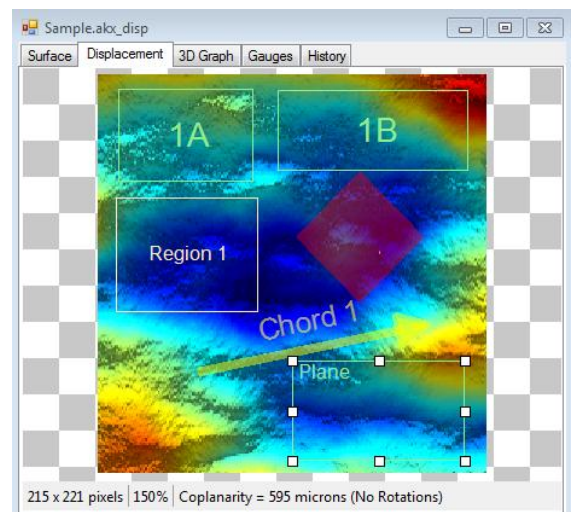
- Oven Output Power is now recorded as a percentage in the Thermal Profiler table.

- **Surface Analysis – New Displacement Image Interface**

- Partitioning, Masking, Chord plots, etc. functions can be performed directly on Z displacement data. (*.akx_disp file)
- Data rotation can now be defined based on a user specified region of the data set.
- Step Height feature added, gives users a height between two user defined regions.
- Isolated data or islands can now be created on data sets.
- Custom smooth options are now available. This includes changes in kernel size and multiple smoothing algorithm options.
- Displacement Image Interface includes Surface Image (shows an image of the sample), 3D Graph, Gauge, and History tabs (shows history of operations performed to data).
- Image operations (mask, partition, etc.) can be performed on Displacement or Surface tab.

- **Surface Analysis**

- New gauge, High Density Coplanarity: Defined by finding the median of the highest 0.1% of the data set and the lowest 0.1% of the data set and taking the difference between these values.



- Added functionality for Displacement Files, User Defined Plane Rotation, Step Height gauge, and Custom Smooth added to Batch Processing Interface.
- Added ability to save phase image pictures or 2D Displacement Images as Batch Processing output.
- Software now normalizes partition and mask functions so that they may be reused and correctly located on measurements with pixel dimension changes.
- Output image file format can now be saved as PNG, replacing BMP file format. JPG file format is also still available.
- Added fractional image rotation in Batch Processing. Rotation can now be done to tenths place (i.e. 0.3°)

MP10 is no longer supported under Studio 2013.10.17. Customers wishing to use MP10 Surface Measurement should run an earlier Studio software version.

Key Bug Fixes:

- Surface Measurement:

- Region of Interest in Camera Window is no longer left in a strange state when exiting Fringe Value Calibration and Accuracy Check modes.
- Part Tracking model size can no longer be set over 1024 pixels in either dimension, which would previously cause a software error.
- Full Field Phase Images are now correctly saved when Part Tracking finds 0 parts during a thermal profile.
- The Studio Installer file no longer uninstalls Akrometrix Interface Analysis.

- DIC Surface Measurement:

- Fixed DIC Surface Measurement “failed on first call” error on multiple software restarts.

- Surface Analysis:

- Fixed minor inconsistency seen between displayed area and affected data when using the Rounded Rectangle shape.
- Gauge values shown on 2D graphs, after chords are normalized, now correctly display the normalized gauge values instead of the original gauge values.
- Image view rotation is no longer incorrect when plotting both 3D Surface and Contour graphs in the same Batch Processing Generate Output.
- Chord sets with multiple predefined chords now save correctly.
- Batch Rotation now correctly overwrites and adds suffix extensions to file names.
- Improved Batch Crop memory utilization after many crop functions are called.
- Fixed “The RPC server is unavailable” error for users where Print Spooler service is stopped.

Known Issues:

“Ctrl + I” Hotkey does not save an image when used on Displacement results. The context menu image save works normally.

- Surface Measurement:

- Search areas saved in the “akx_track” file may show very slight size and position changes when reloaded. Note that careful position of the search area is not critical for accurate part tracking.
- The bottom 1-2 rows of pixels in the camera window are noisy and should not be used in the data set.

- Surface Analysis:

- Mask function can be put into strange state if user inverts the drawn box or performs an undo instead of deleting the mask area when undesired.



Versions (listed for reference):

SurfaceMeasurement	7.4.4841
SurfaceAnalysis	7.4.4844
ProfileGenerator	7.4.4841
FileConverter	7.4.4841
StudioManager	7.4.4841
LicenseUtility	7.4.4841