

MES 6.2 detailed release notes

New features:

- Controlling motorized tilting objective
 - Redesigned Focusing GUI with controls for Femtonics X/Y stage and motorized tilting objective unit
 - A visual guide can be opened from the Focusing panel to help better understand the available handwheel modes
 - New Virtual mode for focusing and navigating with a tilted objective
 - More detailed movement range limiting allowing for a wider tilting range
- Photostimulation
 - Usage of several patterns at AO special scanning modes to perform photostimulation
- The Behavior importer module now handles velocity data (.vlg files) recorded with Femtonics Gramophone devices
- CurveGenerator window to insert user specified curves to selected channels in protocol window
- Electrophysiology measurement can be performed in camera mode without scanning

New analysis features:

- Improved and faster motion correction algorithm for Femto3D AcoustoOptic microscopes' chessboard scanned measurement units
 - With more intuitive parameter set
 - Units can be transformed to the same reference image
 - Motion correction batch process can be called from command line as well
 - Offset curves in X and Y direction are saved into .mat files

User experience:

- 3D visualization and navigation
 - Simplified GUI and new visualization mode for Femto3D AcoustoOptic (AO), and Piezo objective positioner specific 3D scanning features in the cases of Femto2D and FemtoSmart systems
 - Navigation commands (step left/right/up/down/Z-up/Z-down, zoom in, zoom out, fixed and free zoom) work in reference of the actual viewport, even in rotated cases
 - Protocol editor shortcuts for setting the most relevant parameters
 - Rotation controls moved to Navigation panel
 - In case of rotated planes the (0,0) coordinates are shown at the center of FOV

- Fast Z-stack gives a warning if the selected values aren't reachable with the AO focus or piezo
- Improved features in Folded Frame viewer
 - The borders of Folded Frame fields can be made visible in the viewer window of the measurement unit
 - The borders of user selected ROIs (i.e. which pixels belong to the selection) can now be visualized
 - The recalculation of curves from user selected ROIs can now be turned off with the checkbox above the graph
 - Advanced ROI selection and adjustment in FF viewer (ROIs can now be adjusted on a one-by-one basis)
- Z-stack mode chooser in synchron with handwheel modes
- Warning 1 week before license expiry
- Line scan: warns when less than 4 pixels are selected (to avoid kpm2 error)
- Redesigned InfoView window
- The 4D scan settings panel can not be closed when 4D scanning is enabled
- Settings menu items
 - the different settings will no longer be saved with a separate menu item
 - the windows that are closed with Save button will save the settings immediately (or close the application)

Stability:

- Improved stability for camera handling
- KGOLE object ungrouping image quality loss fixed