

FCUltra 1.7.21 Release Notes

(For FVAM-2000, INX, P5000i)

Installation Notes

Important

- This software is only supported for PCs with Windows 10 or 11.
- It is recommended to uninstall prior installations of FCUltra before starting this installation.
- For Timberlake (FVAM-2000) microscopes, ensure FW 2.2.1 or higher is installed before running with this release.

Software Release 1.7.21 — Cumulative Release

This is a cumulative release incorporating all fixes and enhancements from versions 1.7.0 through 1.7.15. This release addresses stability improvements, REST API reliability, UI/UX enhancements, P5000i probe support, and introduces new features such as live image capture, factory reset, auto-focus on insert, and firmware upgrade improvements.

Included Software / Firmware Versions

- FCUltra for (FVAM-2000, INX, P5000i): Version 1.7.21
- Firmware: 3.1.0
- P5000i Probe

New Features and Enhancements

REST API & Connectivity

- Live image capture via RESTAPI endpoint: Added endpoint `../live/capture` to return and displays the captured image upon completion.
- Custom result path RESTAPI endpoint: Added GET/PUT REST endpoint `../test/result/path` to save cached images, JSON results, and report files into a user-specified directory.
- Filtered connector layouts RESTAPI endpoint: Added missing custom connectors to REST endpoint `../connectorLayouts/filtered` and fixed connector selection bugs via GUI or PUT REST endpoint.
- Auto-focus on insert REST endpoint: Added ULTRA REST GET/PUT endpoint for `autofocusOnInsert` and an option to set auto-focus on insert in the Settings window.
- Image Guide Pins & dual exposure REST endpoints: Added ULTRA REST GET/PUT endpoints for `ultra/mscope/v1/settings/imageGuidePins` and `ultra/mscope/v1/settings/dualexposureforduplex`, with Settings window updated accordingly.
- Reboot device RESTAPI endpoint: Added ULTRA REST endpoint `/ultra/reboot` to reboot the device and a corresponding Reboot button on the Microscope window.

- Factory Reset button: Added a Factory Reset button on the Microscope page to restore factory defaults on the unit.

User Interface & Experience

- Live stream image capture button: Added a capture button on the stream window. Captured images are saved and the file path is displayed in the status bar. Fixed capture directory creation and P5000i floating capture icon, which is now properly embedded in the window layout.
- Pan/zoom for live view: Added a snapshotView for live mode to enable pan/zoom capability. Pan/zoom is restricted to fullscreen live mode only.
- Profile window redesign: Redesigned Profile window to use stacked layout for cleaner use, with smaller toolbar icons.
- Scalable UI for screen resolutions: Profile and Settings windows now scale based on screen resolution. Microscope and DUT windows include scrollbars for lower resolutions.

Duplex Connector Workflow

- New duplex workflow with separate exposure: Implemented new duplex workflow supporting different exposures for each fiber. JSON result files are merged into a single output. Two exposure fields added to the Connector tab for duplex types. Improved duplex connector detection and goLive endpoint handling at end of workflow to prevent auto-focus/pan issues when running a new test.
- Duplex exposure population fix: Fixed populating the exposure value for fiber2 on the Connectors page.

Fixed Issues

Version 1.7.21

- Improve UI scaling with different screen resolutions
- Add Home Auto Focus before Inspection REST API support
- Fix crash issue with loading of previously saved JSON reports and results
- Included microscope FW 3.1.0

Version 1.7.17

- Add Ribbon SM APC PM Panda V1 inspection profile
- Fixed memory leak affecting long term testing

Version 1.7.15

- Added Factory Reset button on the Microscope page to reset factory defaults on the unit.
- Fixed ULTRA REST endpoints not working when connected to a P5000i probe.
- Fixed the display scaling when connected to a P5000i probe, used for drawing measurement lines with the correct scale.
- Added "Home Autofocus before inspection" to force homing of Autofocus position before a new test. This provides better AF performance with robotic inspection applications.

Version 1.7.11

- Added capture button on the stream window; saved captured images and displayed the path in the status bar.
- Fixed the bug where no profiles in the profiles folder would cause a crash on test run. Added a check for missing profiles on P5000i probe to display a message box preventing the test from running. Fixed ULTRA REST endpoint ../test/result to show the correct profile for both a new test and a loaded test. Fixed a bug where P5000i probe results did not display zones.

Version 1.7.9

- Fixed bug where toggling "Include Inspection Details" off then on in REST API Results caused inspectionDetails to be empty in the ULTRA REST API `../test/result` response.
- Fixed P5000i probe handling for the ULTRA RESULT API `../test/results` reply.
- Disabled Save button on the left toolbar until a test is complete. When connected to P5000i probe, Test Options are hidden; when no hardware is connected, Test Options in the Settings window are disabled.
- Improved GUI multi-screen display resolution support
- Added Reboot button on the Microscope window and ULTRA REST endpoint `/ultra/reboot`.
- Fixed bug where auto-focus on insert followed by ULTRA REST endpoint `../test/run` would cause the GUI to freeze. Added and cleaned up tracing for default debugging.

Version 1.7.7

- Fixed issue where a defect was not showing in the correct zone. New check is based on `distanceMaxUm < zone radius`.
- Added option to set auto-focus on insert in the Settings window, along with ULTRA REST GET endpoint for `autofocusOnInsert`.
- Added ULTRA REST GET/PUT endpoints for `ultra/mscope/v1/settings/imageGuidePins` and `ultra/mscope/v1/settings/dualexposureforduplex`; updated Settings window to reflect these options.

Version 1.7.5

- Fixed issue where test results may be generated even on an Inspection Error. When an inspection error occurs and ULTRA REST endpoint `../test/result/save` is sent, no folder or files are generated and an error message is returned.

Version 1.7.3

- When creating a new Connector, the Connector drop-down now selects the newly created Connector.
- Added check for missing trailing slash in the `pathName` field of endpoints `../test/result/path` and `../test/result/save`.
- Cleared the fiber table when a low-magnification image is selected; prevented overlays from showing when an item is selected in the table.
- Implemented new duplex workflow with different exposures. JSON result files are merged into a single file. Added two exposure fields to the Connector tab for duplex type. Improved duplex connector detection.
- Fixed bug to allow entering 0 or blank for profile fields; when a field is blank, it is excluded from the profile JSON.
- Each log file is now timestamped with the current time, generating individual ZIP archives.
- Fixed showing overlays with tooltips for simplex/duplex; fixed drawing on low-magnification view to use the correct scale value.

Version 1.7.1

- Fixed Issue causing upgrades issues with certain FW versions. Upgrade check to correctly handle FW version numbers.
- REST endpoint `../live/capture` now returns and displays the captured image.
- Fixed text on the "clear images" checkbox to reference `savePath`; fixed bug when closing the application with this checkbox set.
- Added `snapshotView` for live view to enable pan/zoom capability. Fixed setting connector from REST endpoint.
- Fixed bug when opening the results folder to point to the correct directory.
- Included images inside the custom path specified by the REST endpoint.
- Added GET/PUT REST endpoint `../test/result/path` to save cached images, JSON results, and report files into a specified directory. Changed default behavior to place all files in `Users/Public/FiberChekULTRA/results` folder.

- Added missing custom connectors to REST endpoint ../connectorLayouts/filtered; fixed bug when selecting a connector via GUI or PUT REST endpoint.
- Added REST endpoint ../test/result/save to save report and results into a specified path with filename.

Version 1.7.0

- Fixed bug where loading a test was not setting the correct profile with zone colors.
- Fixed bug where loading a test was not using the profile from the JSON test file.
- Fixed bug when saving JSON results with updated DUT info; fixed bug where loading a test and calling ULTRA REST endpoint ../results returned an empty report field.
- Fixed bug where updating microscope profiles could result in the drop-down being disabled.
- FOMICRO-641: Implemented ULTRA REST endpoint ultra/mscope/v1/live/capture to capture a live image.