

Living Image®

Release Notes Version 4.5.5

1. Purpose

This document provides a brief overview of improvements made to Living Image 4.5. The improvements made include some bug fixes and support for new hardware. The release notes for Living Image 4.5 cover new features and fixes in that release, and are available on the PerkinElmer web site at http://www.perkinelmer.com/lab-products-and-services/resources/in-vivo-imaging-software-downloads.html. This minor release serves as an update for Living Image 4.5 on all current IVIS Spectrum instruments and workstations.

2. New Hardware Support

This release includes support for new hardware on multiple platforms:

- RoHS-compliant motor board for USB-based Lumina instruments.
- Replacement low-speed NIDAQ board from the "mx" series for Spectrum instruments.
- Updated cameras from Andor.

3. Other Improvements

This release includes a number of fixes to reported issues. These are detailed below.

- Fixed an issue that could cause a crash when hovering the mouse over certain plots.
- Fixed an issue that could result in a crash when loading certain types of sequences into the Acquisition Control Panel.
- Fixed an issue that could cause a crash after acquiring images using a newly created User ID.
- Fixed an issue that erroneously suppressed a warning when requesting a fluorescence image at FOV A if the field of view was changed after selecting the fluorescence check box.

4. Known Issues

Previously discovered known issues are detailed in the Living Image 4.5 release notes, which are available at the link above. In addition, the following issues exist that will be addressed in a future release of Living Image:

1. After removing the XFOV lens on Lumina and un-checking the box for the lens in the Control Panel, f/1.2 is still available for selection. As a workaround, un-checking the box and then exiting and re-launching Living Image will correctly remove f/1.2 from the list of available f-stops.

5. System Requirements

PC:

Windows 7 32-bit 2GHz Core 2 Duo or higher processor recommended 4GB RAM

Windows 7/8.1/10* 64-bit 2GHz Quad Core (i5, i7) processor 8GB RAM recommended for IVIS Spectrum CT data analysis

Mac:

OS X/macOS* 10.10 to 10.12 2GHz Core 2 Duo or higher processor recommended 4GB RAM or higher recommended for IVIS Spectrum CT data analysis

Note: Support for Mac OS X 10.7 and earlier has been discontinued in Living Image 4.5.

* Windows 8.1, Windows 10 and OS X/macOS are supported for the analysis module only. A Mac computer equipped with an ATI Radeon video card or certain Intel Iris Graphics chipsets is required for 3D Multi-Modality support on OS X.

6. Video Card Requirements

3D Multi-Modality tools require that the graphics processing unit (GPU) meet the minimum specifications shown below. If the appropriate license is not installed or the GPU does not meet these specifications, the 3D Multi-Modality tools will not appear in the tool palette.

Specification	Description
OpenGL Version Requirement*	OpenGL 2.0 and above
OpenGL Extension Requirement*	GL-EXT-Texture3D
Graphics Card Memory:	Recommended: 1GB (Dedicated)
Consumer Graphics Cards (Desktop/ Mobile, Windows/Mac)	Supported: - NVIDIA® GeForce® 8 Series and above (8, 9, 100, 200, 300 and 400 series) - ATI Radeon™ HD 4000 Series and above (4000 and 5000 series) - Intel HD 3000 and above and Intel Iris/Iris Pro Graphics (Mac) Recommended: - Desktop - NVIDIA GeForce GT 240 and above - Mobile - NVIDIA GeForce GT 230M and above
Workstation Graphics Cards (Desktop/ Mobile, Windows/Mac)	Supported: - NVIDIA® Quadro® NVS Series and Above (NVS & FX series) - ATI FireGL™ V5600 and Above (FireGL, FirePro & CrossFire series) Recommended: - Desktop - Quadro FX 1800 and above - Mobile - Quadro FX 880M and above

^{*}If these specifications are not met, the 3D Multi-Modality tools will not appear in the tool palette.