QUICK START GUIDE
INFINITY ANALYZE FOR MAC

This reference guide will help you quickly set up your camera and efficiently capture images. This preliminary release of the INFINITY ANALYZE application for Macintosh systems requires a minimum operating system version of OS X 10.7.

PART I: *WORKFLOW*

The basic workflow for INFINITY ANALYZE on Mac is divided into three parts; the Video View (1) provides a live preview window for the camera image, along with controls for camera settings, filenames, and calibration presets. The Browser View (2) displays the captured images from the database with the ability to view thumbnails stored in galleries. Double-clicking on any image in the Browser View will open the image in the Process View (3) where annotations and measurements are performed. Captured images can be exported into a variety of formats.

Control buttons located in the upper right of the application, enable easy switching between Video View, Browser View, and Process View (Refer to Figure 1).

Figure 1

In the top center of the application window the camera icon with the blinking flash indicates that the camera is streaming image data to the computer. The time displayed shows how long the application has been open during the current session. The name of the current View is always displayed after 'INFINITY ANALYZE' in the title (Refer to Figure 2).
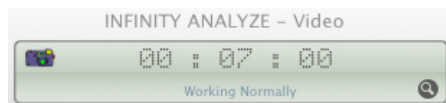

Figure 2

PART II: *VIEWS*

1. VIDEO VIEW

The application starts in Video View, with the live preview displayed to the right of the camera control panel. Each section of the control panel can be expanded or collapsed as needed.

Camera Adjustments

Slider controls are available to adjust the Exposure Time and Gain settings to achieve the desired image intensity level. The AutoExposure option can be used as an alternative method of exposure control, where the Target brightness slider is used to specify the image intensity as a percentage value. The **White Balance** button adjusts the camera's color response to the lamp source. For best results, remove the slide sample from the field of view for the white balance operation (Refer to Figure 3).

Image Capture

Use the **Camera** button to capture an image (Refer to Figure 4). Images are stored directly to the INFINITY ANALYZE database using either an automatically assigned image ID, or using the user-defined prefix, specified in the top section of the control panel. Captured images can be assigned into named Galleries by selecting from the drop down list (New Galleries are created in the Browser View). Thumbnail representations of recently captured images can be viewed in the drop down list accessed using the magnifying glass icon in the top center of the application (Refer to Figure 2).
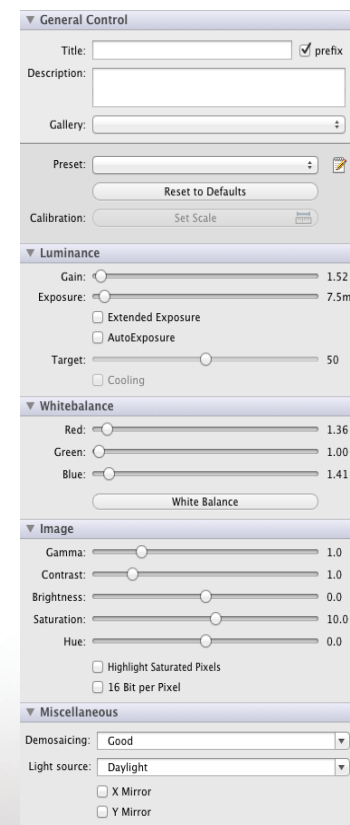

Figure 4

Figure 3

Saved Presets

Use the icon to launch the Preset editor (Refer to Figure 5). Enter a name and optional description for each preset. Select a preset from the list and use the circular arrow icon to make it active (Refer to Figure 6). A preset is used to store the current camera settings along with a scale calibration. Presets are added or removed by using the plus and minus icons. Click the **Calibration - Set Scale** button to associate a specific measurement calibration with a preset, for the current magnification (Refer to Figure 3). Click the **Load Image** button in the new window that is displayed, drag a line over a known distance and enter the value in the numeric field at the bottom of the screen, selecting the appropriate units from the drop down list. *Note: The Set Scale operation can only be performed once for a given preset. If changes are required to a preset calibration, delete the preset and create a new entry.*

Figure 5

Figure 6

Calibration

Prior to capturing an image, or a sequence of images, ensure that the appropriate calibration preset is active by selecting from the drop down list. (Create or edit Presets using the steps described above). Captured images are stored in the INFINITY ANALYZE database along with their calibration information.

2. BROWSER VIEW

Thumbnail image representations are displayed in the Browser View. Use the date or named gallery options to organize the thumbnails. Double-click any thumbnail image to open it in the Process View.

Use the **Export** button with any thumbnail selected, to display the dialog of image export options. Exported images in Adobe PDF preserve vector graphics for better scaling on enlargements (Refer to Figure 7).

Figure 7

Gallery names can be added or removed from the database using the buttons at the bottom left. All images must be deleted from a gallery before it can be deleted.

3. PROCESS VIEW

An image opens in Process View by double-clicking a thumbnail in the Browser View.

Annotation Functions are available on all images, and Measurement Functions are

available for any calibrated images. Buttons at the top of the Process View enable the various tools and functions used to manipulate graphic overlays and take measurements. The **Measure Mode** button is only enabled on images that were captured with an active calibration preset. Lines, Rectangles, Ovals, Text, and Arrows can be added or edited using the options provided. The **Selection Arrow** button must be active to choose or manipulate existing graphics. Measurement text appears adjacent to each graphic in the image when the Measure Mode is enabled.

A grid overlay can be added to any image, with the spacing controlled using the slider control on the left panel. Other options accessed via the panel on the left include manipulating the color and line thickness of graphic objects and selecting common font adjustments.

Measurement data can be viewed and exported using the tabular view accessed via the buttons on the top left of the Process View. Images, including the overlay graphics for measurement or annotations can be saved to common image file formats using the **Export** button (Refer to Figure 7).

PART III: *RESOURCES*

1. INFINITY ANALYZE FOR MAC USER'S MANUAL

The User Manual is presently in a development stage. With this being a preliminary release, we are collecting feedback on the application capabilities and possible future enhancements. Send feedback to support@lumenera.com.

2. LUMENERA TECHNICAL ASSISTANCE CENTER (TAC)

The Technical Assistance Center (TAC) offers full technical support for all INFINITY cameras. Hours of operation are 9:00 am to 5:30 pm EST, Monday to Friday. E-mail support@lumenera.com or phone 1 (613) 736-4077.

3. SOFTWARE UPGRADES

Software upgrades are available at no cost to current INFINITY customers. The newest versions of INFINITY software are available for download on the Lumenera website at www.lumenera.com/support/downloads/microscopy-downloads.php.