

QUICK START GUIDE FOR INFINITY ANALYZE

This reference guide will help you quickly set up your camera and efficiently capture images once you have installed INFINITY ANALYZE and launched the software from the Windows Start menu.

PART I: CAMERA AND CAPTURE CONTROL

1. EXPOSURE/CONTINUOUS AUTO EXPOSURE

Adjust the Exposure slider until your image has the appropriate brightness level, or if you prefer, adjust to variable lighting conditions, based on the desired brightness set using the Average Intensity slider (Refer to Figure 1).

2. WHITE BALANCE

Remove your sample from the camera's field of view and click the White Balance button. You may also perform a white balance on a specific white area of your image by clicking the Area WB button (Refer to Figure 2).

3. IMAGE CAPTURE

Click on the Capture button to capture an image (Refer to Figure 2), or double click on the preview window. To save the image choose the File drop-down menu and select Save or Save As.

Note: The .SIF file format retains all calibration and measurement information. Please ensure files are saved in this format if future measurements are to be taken.

4. DISPLAY ZOOM

The standard toolbar includes a slider control and numerical entry field to control the zoom level of the live preview or any captured image (Refer to Figure 3). Move the slider control with the mouse to increase or decrease the scale in the active display window, or type a zoom level in the field adjacent to the slider. Every time a numerical value is typed in this field it becomes accessible as a new drop-down list item to choose from. The visibility of any toolbar can be controlled from the View menu, or from the Help Settings dialog, Interface tab.

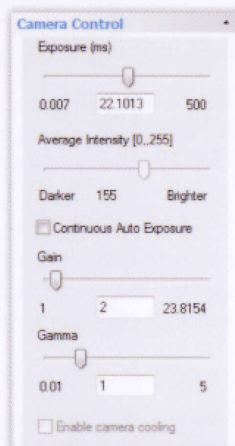


Figure 1

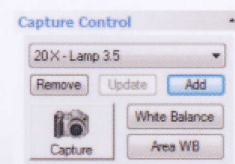


Figure 2

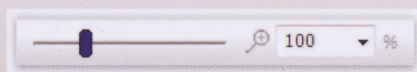


Figure 3

PART II: MEASUREMENT AND ANNOTATION

1. CALIBRATION

1. Focus on a stage micrometer or object of known dimensions in the field of view.
2. Verify that the option Preview Captured image is selected in the Capture Options Panel.
3. Capture the image.
4. Select Calibrate... from the Measure drop-down menu (Refer to Figure 6).
5. Left click once on a reference position.
6. Drag the cursor over a known distance then left click again to complete the operation, resulting in the display of the Micrometer Calibration dialog (Refer to Figure 4).
7. Input the length you just measured and the numerical value for the magnification.
8. Specify the desired label abbreviation for both linear and square measurement units.
9. Enter the number of microns in one of your measurement units (i.e. when using microns enter 1, inches enter 25,400, mm enter 1,000, etc.).
10. Press OK to complete the calibration.
11. Save the calibration as a Preset, as explained below.

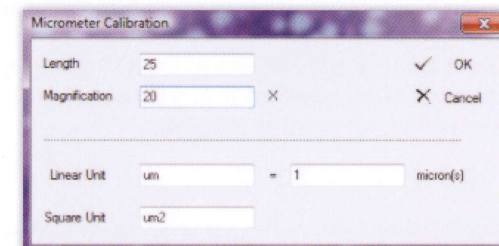


Figure 4

2. SAVING CALIBRATIONS

Each new calibration should be stored as a Preset. After performing the steps above, select the Add button and provide a name in the Preset Name dialog box. Choose a name for the calibration, such as the optic you calibrated against (for example 10x), then select OK to save.

Choose the applicable calibration from the drop-down box above the Add button (Refer to Figure 2) each time the microscope magnification is adjusted, and prior to capturing images. An active calibration remains in effect until an alternate is selected, or a new calibration is performed.

PART II: MEASUREMENT AND ANNOTATION CONTINUED

X:1614 Y:212 R-48 G-10 B-54 48% X-1616 Y-1216 um 20.00X W-199.00 H-149.74

Figure 5

3. ACTIVE CALIBRATION

The title of the active preset remains displayed in the Preset drop-down field. Enable the Status Bar from the View menu to see the magnification value for the active preset and calibration in the third field from the right (Refer to Figure 5).

4. MEASUREMENT

Once the software has been calibrated, measurements may be performed on the live preview or on any captured images. Types of measurements are presented in the Measure drop-down menu (Refer to Figure 6). Select a measurement option transforming the cursor to a crosshair, choose your starting point, left click, drag your mouse to the end of the item being measured, and left click to finish. The live preview will freeze during measurements and resume when the measurement operation is completed.

5. MEASURE OPTIONS

Measure Options can be found in the Measure drop-down menu. Enter values in the fields to specify the number of decimal places and other measurement options, such as nomenclature. To change the color or size of a measurement, select Overlay Color or Overlay Size in the View drop-down menu.

6. SAVING CALIBRATED IMAGES

Save images using the native .SIF file format to preserve calibrations with the image. This enables the image to be opened later to do any additional measurements. Annotations and measurements are automatically saved in any type of captured image (JPG, BMP, TIFF, SIF).

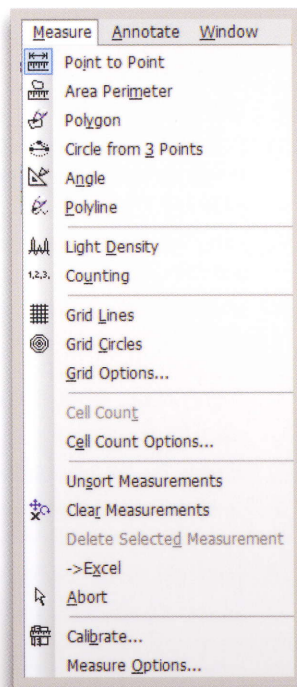


Figure 6

PART III: ADDITIONAL HELP

1. VIDEO TUTORIALS

Access the video tutorials from the Help menu by selecting Online Help. This will launch a web browser with direct access to the Support/Training & Tutorials section of our website at www.lumenera.com/support/microscopy/training.php. These tutorials offer an excellent opportunity to view the various functions of INFINITY ANALYZE.

2. INFINITY ANALYZE USER'S MANUAL

Select Manual from the Help menu to view the complete user-friendly user's guide for INFINITY ANALYZE. This Adobe PDF document is installed in the same location as the INFINITY software on your hard drive.

3. LUMENERA TECHNICAL ASSISTANCE CENTER (TAC)

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

4. SOFTWARE UPGRADES

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