

# OKO-Vision 2.7



Okolab s.r.l.  
Via Giuseppe di Prisco, 152  
80040 Ottaviano NA - Italy  
p. iva 04506341215  
info@oko-lab.com

[www.oko-lab.com](http://www.oko-lab.com)

OKOLAB

# Time Lapse Software



Here you can define the camera acquisition parameters (Look Up Table). These parameters can be different for each object and for each fluorescence channel.

Digital Joystick. Total remote control of your experiment, even through the web.

Read the coordinates of the current position. Go to any (pre-set or new) position.

Set the optics for image calibration.

Here you can select the channels to be acquired for each object. You can apply different selections to different objects.

## Camera and motors control

This tool allows you to adjust the focus, XY position, camera parameters of any selected object during the experiment. In addition, you can also add a new object (or background) or delete an existing one.



## Acquisition modes

Different objects can have different acquisition modes.



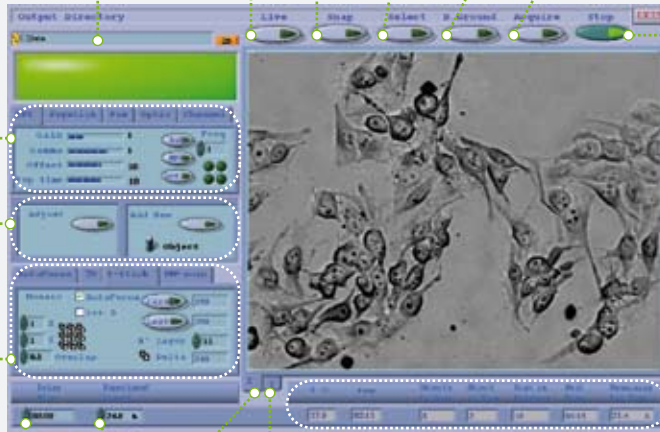
You can apply the most suitable autofocus algorithm to compensate for possible focus losses.

With this acquisition mode you can acquire a 2D or 3D mosaic of images with a defined overlap or spacing.

If you select the 2D acquisition mode, at each cycle, a single image will be acquired for any selected object.

If you select the Z-Stack acquisition mode, a stack of images, ranging from two selected extreme layers will be acquired.

The MW-scan acquisition mode allows you to automatically acquire a defined number of objects in each well of a multi-well plate.



Images will be stored in the Output Directory.

Live visualization.

Select and store the coordinates of the object in the live window. You can select as many objects as you want.

Snap&Save the image present in the live window.

This feature allows to define a Background focus position.

Acquire one image of each selected object. This function does not start the time lapse procedure.

Start the time lapse procedure.

In this area the software displays useful data on the experiment status.

In case you use oil immersion objectives and a stage incubator, this feature takes into account heat exchange between sample and objective in performing temperature control.

If you need to open the incubator during the experiment, a stand by procedure guarantees a smooth operation of the PID controller, thus avoiding any thermal shock to the samples.

Here you can set the Delay Time between consecutive acquisition cycles.

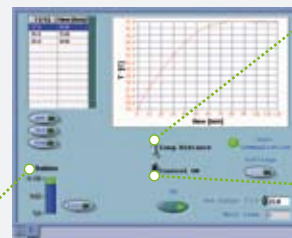
Live window.

Here you can set the Experiment Length.

## Temperature control

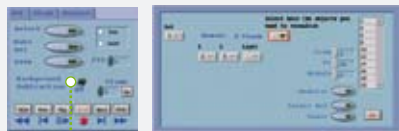
Full integration with Okolab Temperature Control Software is provided.

Visual reminder of time left before refilling water in the humidifying module.



## Avi Maker

This visualization mode allows you to build .avi files. You can build, play and save .avi files of one object vs time or vs Z-Stack layer (if the object is a Z-Stack).



If you selected a background quota in the Time Lapse Software, you can subtract it to the images before building the .avi file.

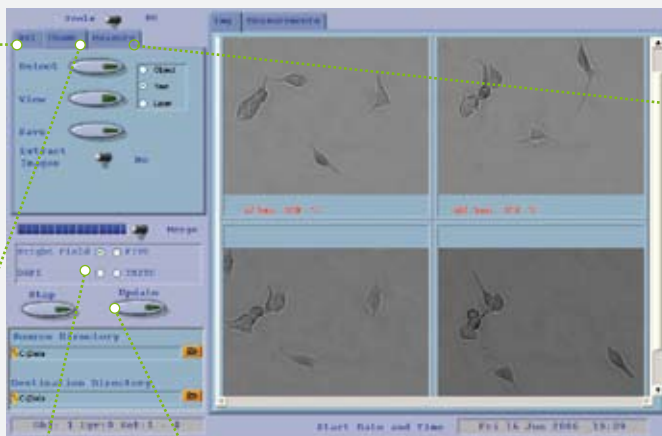
The Thumb visualization mode allows you to display and save composite images of one object vs time, of one object vs Z-Stack layer (if the object is a Z-Stack), or of several objects at a fixed time and Z-Stack layer. Time and temperature are reported in each image.

Here you can select which channel you want to visualize with the AVI Maker or with the Thumb function.

If the experiment is still running, you can use the Update function to visualize up to the very last image acquired.

You can merge or split different fluorophore signals.

# Image Tool Box



Dimension and intensity measurements. You can draw geometrical figures on the image. In the measurement window you can read dimensions and intensity values. The data are plotted and written in a table. The plot and the table can be exported to other programs.

