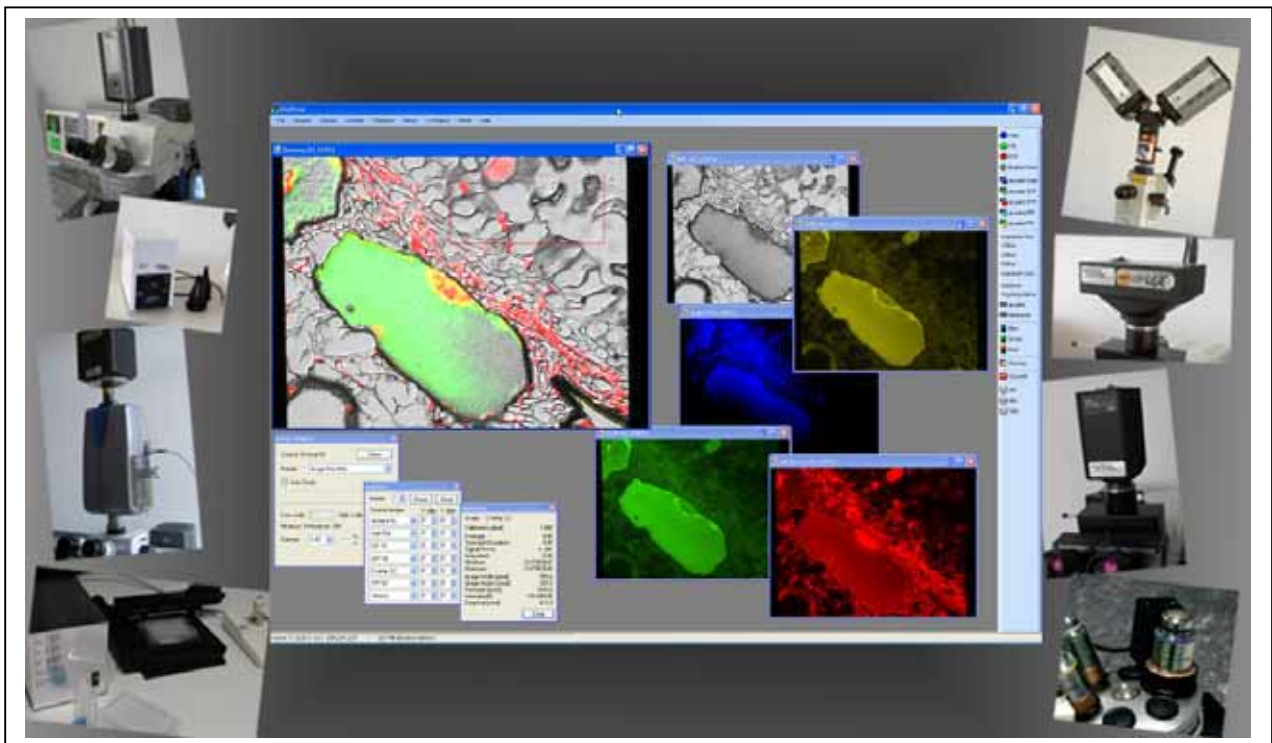


## VisiVIEW Imaging Software



## VisiVIEW Imaging Software

**VisiVIEW** is a high performance imaging software from Visitron Systems GmbH for BioImaging application. It is specially designed to meet the needs for high-speed image acquisition and processing at a low cost, with ease of use. The full multi tasking software supports parallel use of e.g. image acquisition and analysis at the same time.



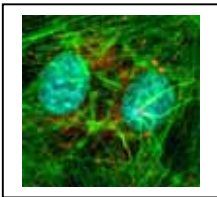
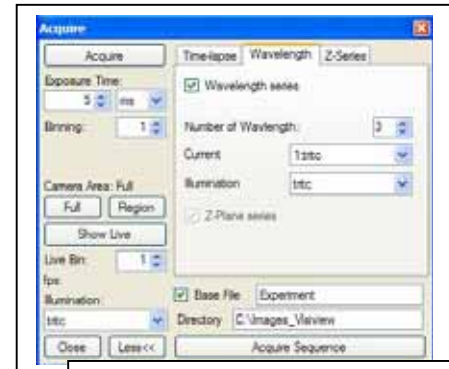
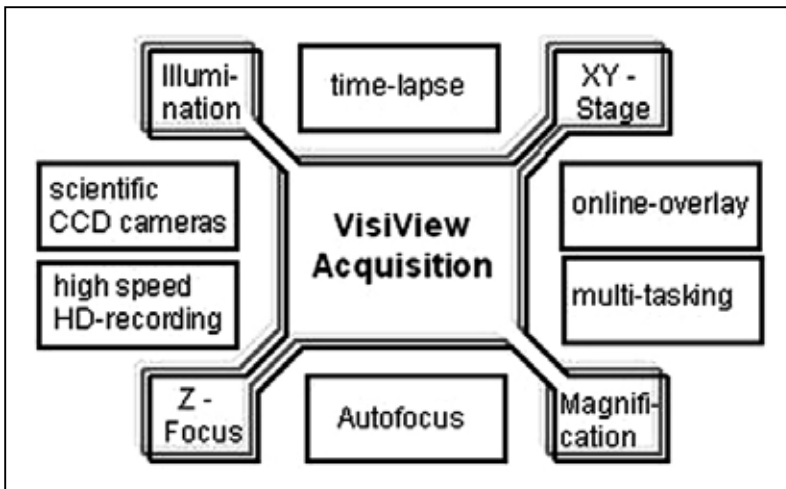
Visitron Systems GmbH VisiVIEW Software Standard Features:

- High speed image acquisition
- Color, monochrome and EM CCD camera support
- Exposure and gain control
- Multi-dimensional time-lapse acquisition and viewing
- Region of interest (ROI) and binning definition
- CCD temperature control
- Independent scaling for color and up to 16 bit monochrome images
- Independent focus mode and acquisition parameters
- Colour merge and overlay of up to 7 Images
- Display of individual color look up tables
- User-defined "experiment setup" files
- Ability to save as TIF (8-, 16-, and 24-bit formats), STK files, Winview files and BMP files
- Macro function and custom defined tool buttons
- Shutter control by TTL

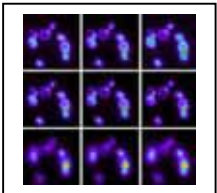


## VisiVIEW Imaging Software

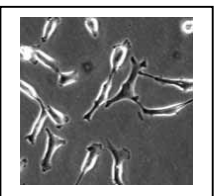
### Microscope Control and Image Evaluation



**Flexible Acquisition and Camera Support:** A well arranged acquisition menu allows easy selection of camera parameter like binning, exposure time, live mode etc. Currently we support all Photometrics PVCAM cameras, Diagnostics Instruments SPOT cameras and PCO SensiCam cameras.



**Time Lapse:** The time-lapse module allows the image acquisition of dynamic time sequences. It controls beside the image acquisition also an high speed shutter to prevent damage to the specimen. The frames of the image sequence will be saved in single TIFF files or in a special multi file stack or nd format.



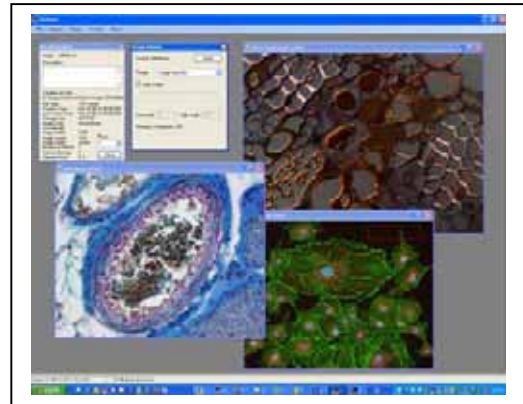
**MDA - Multi Dimensional Acquisition:** It supports a complete multi dimensional acquisition (MDA) experiment. This means a free combination of z-stack, different wavelength, time points and different xy stage positions to one sequence acquisition (6D-imaging).



**RGB Color and High Dynamic Display Support:** Digital cameras are supported as color RGB or black/white versions and can have a very wide dynamic range for high accuracy. Most cameras use 12 bit digitization, which represents intensities from 0 to 4095. Some use 14 bit with intensities from 0 to 16383 and special cameras may use up to 16 bit dynamic with intensities from 0 to 65535 counts. The typical display of RGB images is in standard 24 bit format. Full dynamic range can be set manually or auto scaled.



## VisiVIEW Software Microscope Control and Image Evaluation



### VisiVIEW Basic Version includes following Functions:

- realtime data acquisition under MS-Windows
- online display and screen operation
- true color and up to 16 bit monochrome display
- time-lapse function and fast streaming
- handling for big movie sequences
- on-line overlay multichannel fluorescence combine up to 7 different images.
- file format: bmp, tif, stk, nds, spe
- TTL shutter control via parallel port or RS232
- one camera driver out of:
  - all Photometrics PVCAM cameras or
  - Diagnostic Instruments Spot cameras or
  - PCO SensiCam cameras
- toolbar / taskbar
  - creation of individual toolbar, dialogs and macro functions
- macro programming
- movie player and digital recorder
- context sensitive help function

### VisiVIEW Additional Software Options:

- illumination control option
  - e.g. filter wheel, polychromator, laser, AOTF
- magnification option
- z-axis / focus control option
  - including software autofocus
- autofocus: support of Zeiss Definite focus and ASI Criff
- device streaming option e.g. TTL, AOTF, polychromator or piezo focus system
- xy-stage control option
- splitview option for splitting of optical images for ratio/overlay analysis

### VisiVIEW hardware support:

- automated microscope Zeiss, Olympus
- shutter / filterwheel control
- Sutter DG4 illumination system
- Xcite and HXP lamp control
- VisiChrome polychromator
- laser – AOTF control
- Vt-Infinity / CSU spinning disc control
- VisiFRAP control
- ASI, Märzhäuser and Ludl xyz-stage
- Piezo z-focus control
- OptiGrid / VisiGrid confocality by structured light illumination

