

1. Graphical User Interface (GUI)



Versatility – giving you the freedom to work with your favorite equipment.



General description:

JENOPTIK GRYPHAX[®] software is a modular and platform independent software for state-of-the-art microscopy. It contains camera control and image processing to optimize by a wide range of techniques.

The "Graphical User Interface" of the JENOPTIK GRYPHAX software is platform independent and delivers identical GUI and functionalities under Windows, MacOS and Linux.

The interface is divided into **three main areas**. In the center screen area of the interface is the image window to display live preview from camera or loaded media files from Gallery.

At the left-hand site are the Gallery tool and the Treeview located. They provide an easy and fast overview about advance file management and displays all images and media files as thumbnails.

On right-hand site, the toolbar provides access to record modes and all image processing enhancements tools. Additionally, tools to measure and annotate and image acquisition modules like "Panorama", "Z-Stack" (EDF) or Multi-Fluorescence are available.

Video tutorial how to install JENOPTIK GRYPHAX software:

Press the link to watch the video tutorial for installation of JENOPTIK GRYPHAX software.





1.1 Overview of JENOPTIK GRYPHAX interface:



1 Title bar 2 REC bar 3 Gallery

- 4 Image window 5 Header 6 Tool bar
- 7 Help bar 8 Treeview 9 Status bar

1.2 Title bar:

🖬 File View Service User Profile: Last Session PROGRES GRYPHAX

The title bar of JENOPTIK GRYPHAX software contains the menu bar to access all menus you need to manage, edit or to change views. Additionally, you have quick access to create and change current user profiles.

Minimize program windowMaximize program window

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Change program window size to any selected
 Close program window | short cut (alt + F4 / cmd + Q)

File	View	Service
Pref	erences	
Save	;	
Save	e As	
Send	d Image	
Print	t (ctrl/cn	nd+P)
Quit		

File menu:

- Enter software Preferences
- Save copies of selected media files to alternative destinations
- Print selected images from Gallery
- Quit software

View	Service	Us	er Profil
Prese	ntation Mo	ode	F11
Grid			G

View menu:

- Change to Presentation mode
- Activate / deactivate Grid mode overlaid at image window



Service User Profi	Service menu:
Help F1	Help – open JENOPTIK GRYPHAX FAQ website
Update Check	 Update Check – starts download page to check for software updates
Website	Website – open JENOPTIK GRYPHAX website
Log File	 Log File – open software log file for trouble shooting
About	About – displays software information
Service Mode	• Activate "Service Mode" for trouble shooting – saves special tiff image with log files

User Profile: Last Session	User Profile:
Default	 Default – reset back the factory "default" software settings
Last Session 🖌	 Last Session – change back to last stored session settings of software
User Profiles 🕨	 User Profiles – open list to select or change already created user profiles
Save As Delete	 Save As – save current software settings to user profile (op. password protection) Delete – selected user profile from list

Also current user profile e.g. "Last Session" will be displayed directly at title bar and updates accordingly.

Note: Double-click on title bar changes between maximizes program window view and reduced program window view to any selected size.

1.3 REC bar:



The REC bar is the most important tool of the JENOPTIK GRYPHAX software. It controls all image capture and file save. The status of the REC bar buttons is changing accordingly to status of software.

REC REC button indicates live preview is running, by pressing button images will be captured to Gallery Live button indicates that no live preview is running and an image from Gallery is displayed instead Stop button indicates recording / capturing is activated, pressing button stops record / capture process

Magnifier button – activates magnifier glass to observe important image areas and display current and maximum focus level by "focus indicator bar"

Note: During Magnifier mode, Zoom level of displayed image from image window can be changed by keyboard key: "+" or "-"to zoom in or zoom out.

Arrow tool button – to change back to standard mouse pointer "arrow" to select or adjust e.g. overlays of measurement or annotations

Hand tool button – to activate hand tool during "1:1" view or Zoom. Mouse pointer change to "hand" and image section can be moved.

"1:1" button indicates that "Fit to Window" is active, pressing button changes to "1:1" view Fit to window button indicates that "1:1" view is active, pressing button changes to "Fit to Window" view



Contractive button* of <u>calibrated objectives</u> to <u>quick-change</u> objectives by mouse click at GUI. Scale bar and Status bar will change accordingly.

Moreover, objective buttons visually indicates the current selected magnification by highlighting. Up to 6 objectives / measurement calibrations can be displayed on Rec bar.

In addition, it displays the value by mouse over tool tip

1.4 Tool bar & Help bar:

To open the JENOPTIK GRYPHAX tool bar by pressing the arrow on right-hand software site or use keyboard short cut (**ctrl / cmd + T**)

The Toolbar is divided in 4 parts and contains the following sections:

- **1 Record modes** to change between record modes: "Single shot", "Time-lapse", "Video record" or "SlowMotion video"
- 2 Tools section to activate / deactivate tools
- 3 Active tool section displays activated tool widgets
- **4 Help section** shows tooltips and help information of tools by mouse over

Tool status:

- Activated tools are highlighted in blue.
- Tools, which are not access able, are "greyed out" by software automatically and cannot reached.

Mode "Single shot" is default recording mode. Check box on widget to activate Fast Record mode. If checked, recorded images will be taken from the <u>live view stream</u> instead of making camera shot! Capture settings from Preferences will ignored!



Note: Fastest record mode in combination with activated option *auto save*.

Collapse / expand witton on each tool to hide separate widgets on active tool section.

Reset button on a tool widget sets all properties to their initial values. Initial values are fixed by factory settings.

To activate or deactivate "Help" section, click on the Help icon help bar. Active help section is indicated by blue icon.

<u>Note:</u> Status and accessibility of tools depending on previously activated tools. Not all tools and options can be activated at the same time!

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1.5 Gallery:

The "Gallery" of JENOPTIK GRYPHAX software enables user to preview and display all saved media files of media destination folder or from selected destination path of "*Tree view*" tool easily inside of JENOPTIK GRYPHAX software.

To open the GRYPHAX Gallery by pressing the below arrow on left-hand software site or use keyboard short cut (**ctrl / cmd + G**).

The Gallery consist of two parts. The Gallery preview window (1) and the Gallery bar (2).

The Gallery windows shows the media files thumbnails from top to bottom in order of the file time stamp. New recorded images or media files will be add <u>on top position</u> at Gallery preview window.

To change the media destination folder you can use the Treeview tool or change folder at the software preferences under *storage options*.

At the Gallery preview window you can use operation system typical short cuts (e.g. ctrl + A; shift key + mouse click) to select items.

<u>Note:</u> The more images are stored in a folder and are loaded in a Gallery, the longer it will take to display a single image. To enable an easier workflow with JENOPTIK GRYPHAX, we recommend you to reduce the number of images in the target folder by changing the target folder from time to time, by deleting some images or by copying them to another folder.





1.6 Treeview:

The Treeview tool is located on the left software side next to the Gallery. It can be used with and without opened Gallery. Treeview deliver two different sizes: "**Narrow**" or "**Wide**" view to display the media target tree.

To open, expand or close of the Treeview tool press the

top left arrow on the left-hand software side or use the keyboard short cut (**ctrl / cmd + D**).

<u>Note:</u> After first software start the Treeview tool is starting and displaying the default destination folder of operating system "own Pictures" from current user.

Alternatively, the Treeview is automatically displaying and using the last used destination folder from last software session or from activated user profile settings.

The media destination folder of Treeview is always synchronized with settings of software preferences under section *storage options*.



1.7 Image window:

The **image window** is the main software area. All other tools can be hidden to have full focus at live preview from active camera or at loaded images from Gallery.





Additionally, a small overview window will be displayed over the image at "1:1" view. The currently displayed part of image is marked as rectangle. The position (ROI) can be moved by mouse operation. Also, size and position of overview window can be changed by mouse operation.

<u>Note:</u> A full screen view without any software GUI can be activated by "Presentation" mode under menu: "View" at the title bar or by keyboard short cut (F11).

1.8 Header:

The header section of program window is displaying the following information from image window.

Frame Rate – Indicates the current frame rate in frames per second (**fps**) delivered by the active camera. Zoom factor – Indicates the current zoom level (in %) of displayed image from image window.

1.9 Status bar:



The status bar of JENOPTIK GRYPHAX software contains powerful options to operate work-flow optimized and intuitive directly at software GUI.

The status bar is divided in 5 sections – text field, device configuration, calibrated objectives, scale and check box* to add status bar to recordings.



User can fast switch between created **device configurations** and **calibrated microscope objectives** to apply correct measurement calibrations and scale for the live preview image from camera.

Additionally, the **scale bar** is displayed according selected objective.

Status bar **check box*** to quick enable / disable status bar added to recorded images. This option is synchronized to software preferences settings. (*as of V2.2.0 or newer)



500µm

5x 10x

20x

<u>Note:</u> Loaded images from Gallery with included meta-data calibration are displaying the correct values and scale automatically and independent from selected device or magnification of status bar.

1.10 Video tutorial:

<u>Press the link</u> to watch the video tutorial for Graphical User Interface (GUI) of JENOPTIK GRYPHAX software.