



User Guide for Preferences of PROGRES GRYPHAX® software

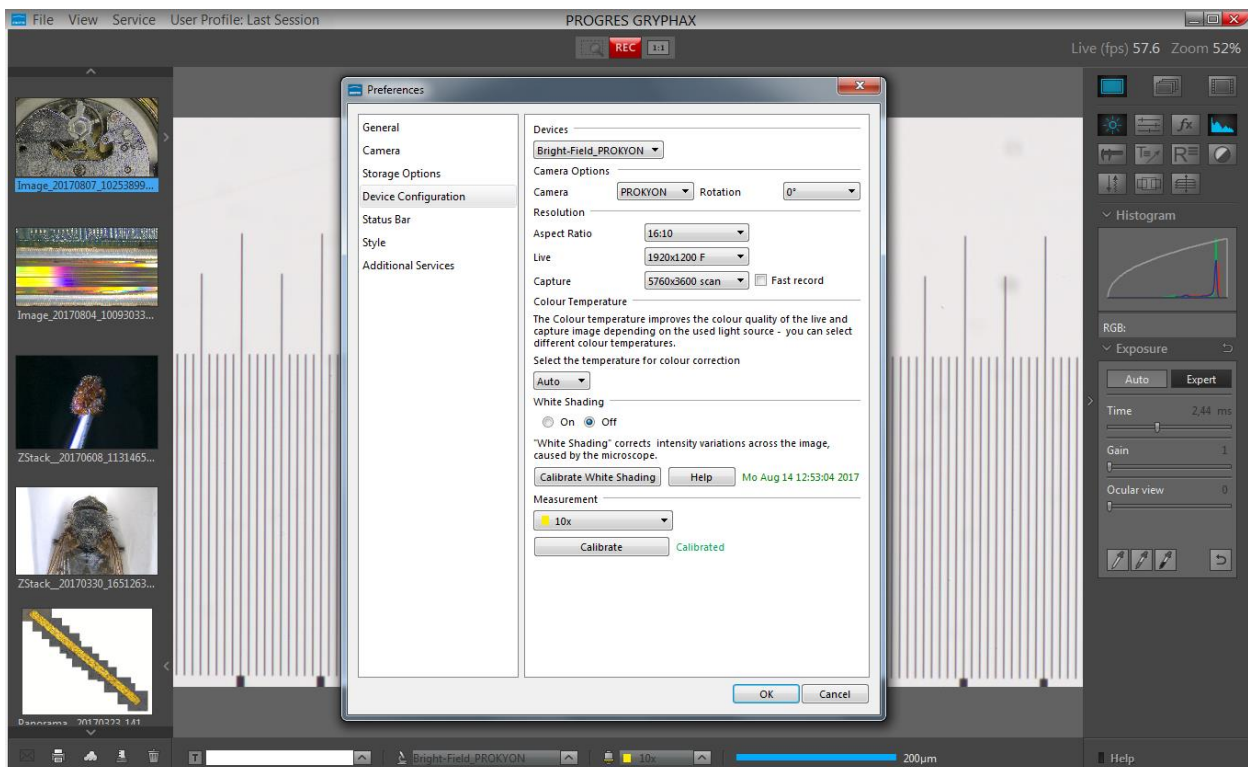
General description:

PROGRES 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.

To work **versatile** with favorite equipment, user can use the GRYPHAX Preferences to create own device configurations which can optionally transferred to other computers and software platforms.

The “**Preferences**” menu of GRYPHAX software is located at the title bar and contains all major software and camera settings for initial software setup and to generate individual device configuration.

Opened preferences during device calibration:

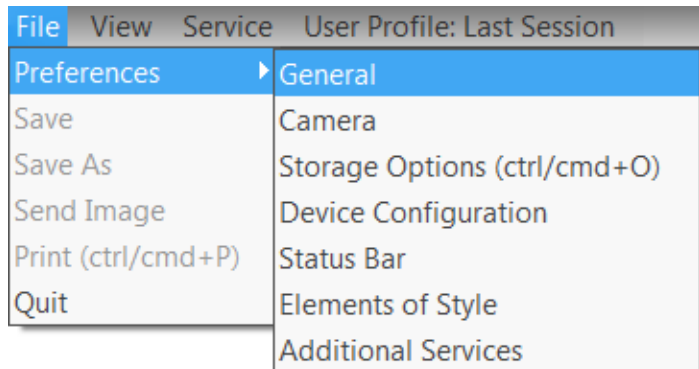


Enter Preferences:

To **enter** software Preferences go to the program title bar under menu File / Preferences. A submenu will be displayed to directly enter specific preferences section.

For the **initial software start**, we strongly recommend to begin with top first preferences entry "General" and follow up all sections step by step.

File menu and submenu to enter software Preferences.



After click on option e.g. "General" a separate "Preferences" window will be opened. The window is separated into two areas:

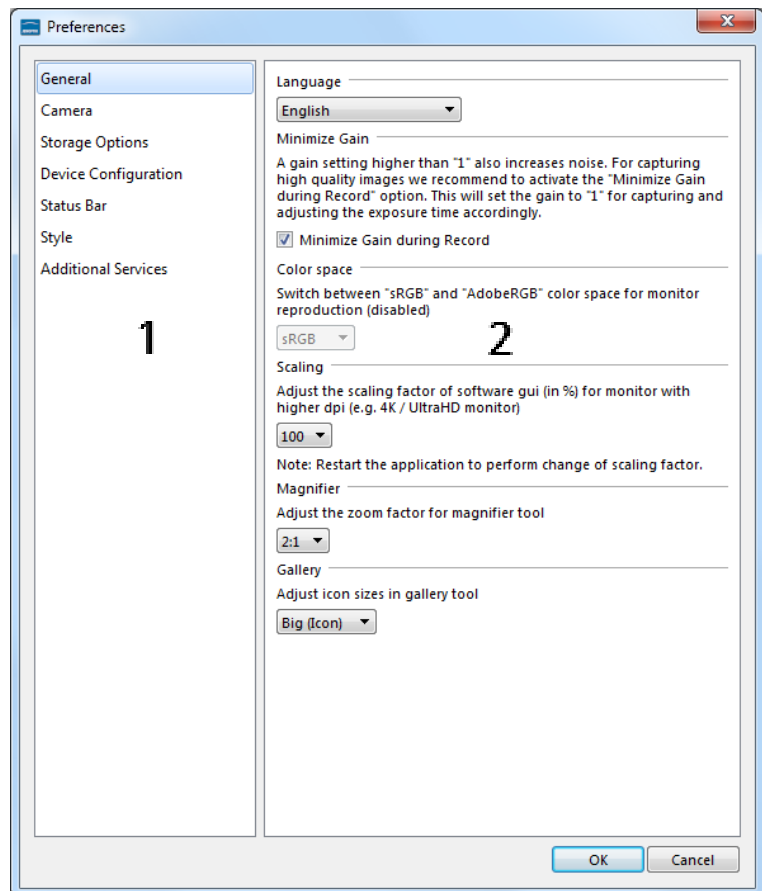
To **navigate** through the **preferences sections** click to the corresponding option from column on the **left** window side (1).

To **change** options according your needs edit on **right** window section (2).

To **apply** any changes to software settings, leave preferences window by "OK" button!

To **leave** preferences without applying any changes press "Cancel" button.

Note: Some options depending on camera type. Disabled options are greyed out and can't be reached.



General:

At "General" menu all global software settings can be adjusted. Initial language is assumed from system language. All other settings are pre-defined by software default values.

Language

To **change** language select one of the available software languages from drop down list. Entire software GUI will change language after software restart.

Minimize Gain

Option "**Minimize Gain**" is activated as default. Function increase image quality by **reducing noise level** for recorded images by minimize gain value. Deactivate this function if you want to record images with gain factor from live preview.

Color space

To **switch** between "sRGB" and AdobeRGB color space to enhance color reproduction on corresponding monitor. AdobeRGB currently disabled.

Scaling

To **adjust scaling factor** of software interface (GUI) in correlation to high resolution screens (e.g. UltraHD/4K/5K).

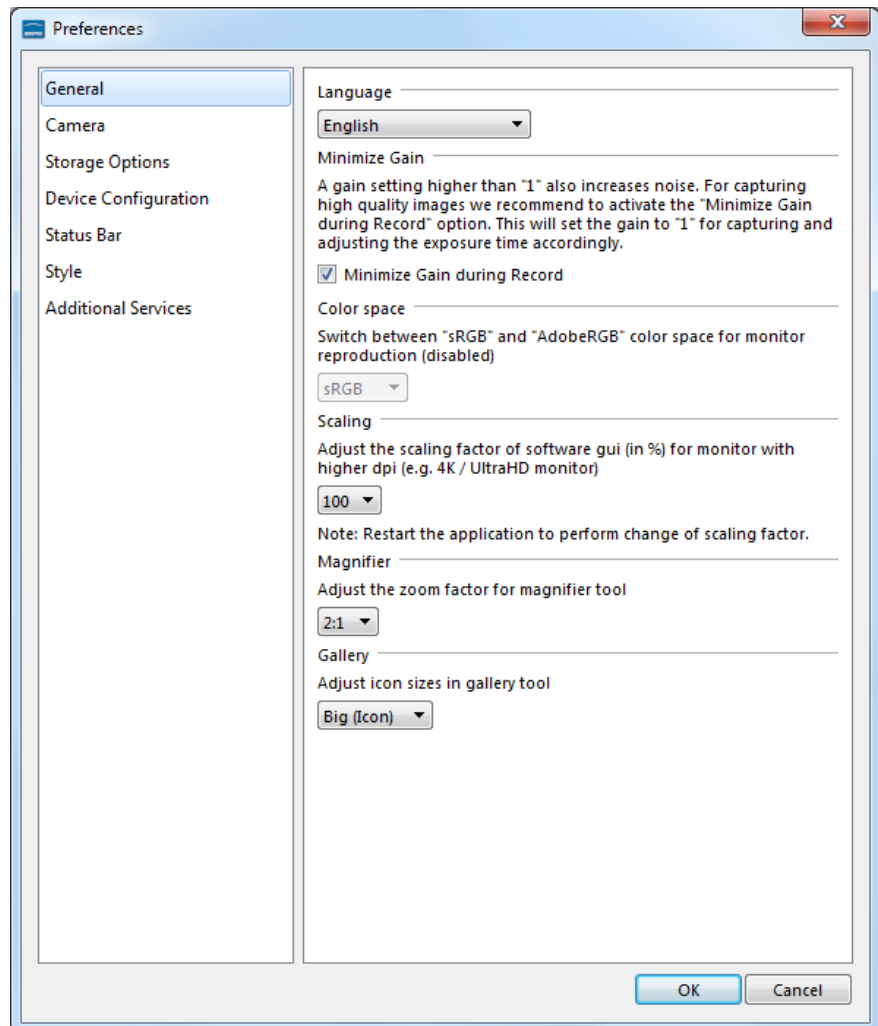
Select according scaling factor from drop down list. Entire software GUI will change scaling after software restart.

Magnifier

To **adjust** the **zoom factor** of detail window for magnifier tool. The factor can be chosen in steps from 100% to 300%. Select according zoom factor from drop down list.

Gallery

To **adjust** the **icon sizes** of preview thumbnails in gallery window. The size can be chosen between small preview and big preview thumbnails. Select according size option from drop down list.

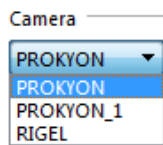


Camera:

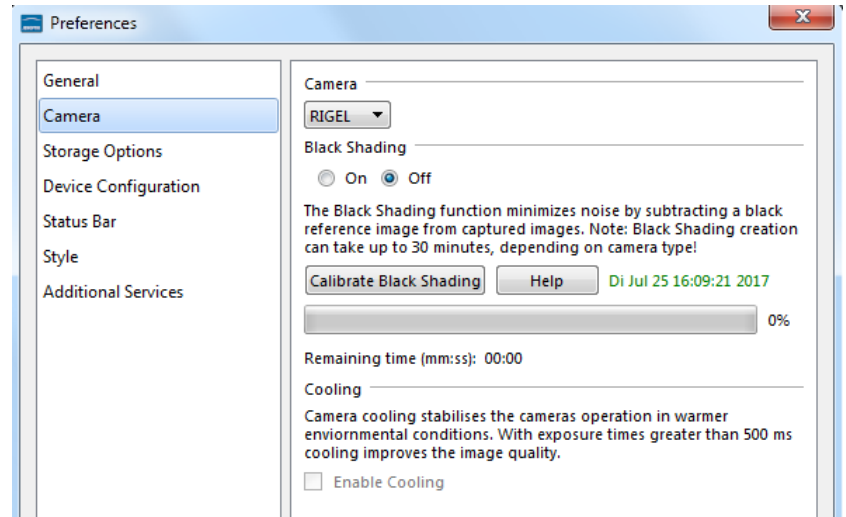
At "Camera" menu all camera related settings can be adjusted independently from configured devices.

Camera

To **select** connected camera from drop down list. Camera will be activated immediately. Live preview is starting at image window in background.



Note: Connecting **multiple** cameras from same type will be displayed by a suffix number at name to distinguish from each other.




Black Shading

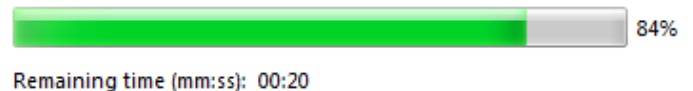
The **Black Shading** function **minimizes noise** by subtracting a black reference image from recorded images.

It is recommended to create black shading correction especially for long exposure images e.g. Fluorescence or dark field applications.

Before create a black shading reference file, remove camera from microscope and close the sensor by the protection cap. Take care that no light falls into the sensor, otherwise the creation will be aborted.

Press the icon  "Calibrate Black Shading" to start and wait until the process is successfully finished.

During creation the calculated remaining time and status will be displayed.



After successful creation the file date will be displayed on preferences window. **Di Jul 25 16:09:21 2017**

Black Shading correction can be switch on or off by selecting of corresponding radio buttons: On Off

On the "Help" button  you will find detailed information to create shading reference file.

Note: Black shading creation can take up to 30 minutes depending on camera type.

Cooling

Option to activate camera cooling to stabilize camera operation in warmer environmental condition.

Note: This option is available for cameras with active cooling function only.

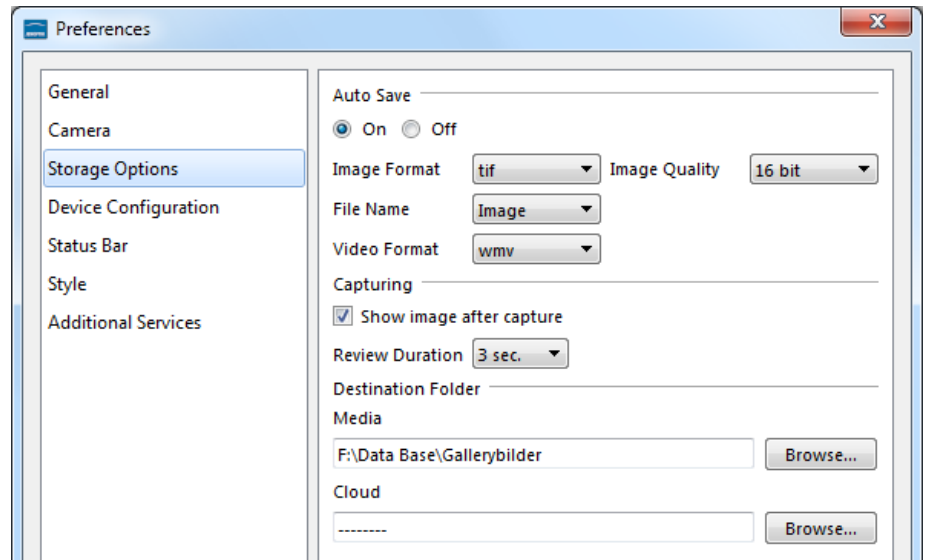
Storage Options:

At "Storage Options" menu all related options for image format and storage can be adjusted.

Auto Save

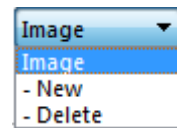
Option **Auto Save** is activated as default. With the storage option "Auto save" all recorded media files will be saved with an automatic given naming structure. Manual save can be used by deactivate Auto save function.

Image Format can be select from drop down list. The following formats are available: bmp, jpg, tif and png



At option **Image Quality** user can select quality level and bit depth of according selected image format.

Option **File Name** represents the image name prefix for auto saved images. **Create**, **select** or **delete** file name to any individual prefix at drop down menu.



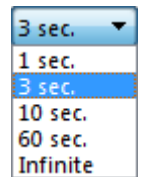
Video Format can be select from drop down list. The following formats are available: wmv, webm and mp4 depending on operating system.

Capturing

By option Capturing user can adjust preview **duration time** of recorded images after capture.

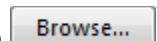
The time can be chosen in steps from 1 second till infinite by drop down list.

If option "Show image after capture" is **deactivated**, live image immediately restarts after image capture.



Destination Folder

To **change** media file **destination folder** where to save recordings. Click on "Browse" button and a separate window will be opened. Select correspond folder by browse folder structure of hard drive. Confirm new destination folder by "Select Folder" button.



After change of destination folder, the *Gallery* will display all media files of new selected folder. All new captured images and media files will be save to the selected folder. Furthermore, the media destination folder of Tree view tool is synchronized with the software preferences.

Additionally, a separate media files destination folder for **cloud services** can be predefined.

Device Configuration:

At menu "Device Configuration" user can create individual device sets to enhance user's daily work-flow by changing between different cameras or workstations within seconds!

Devices

To create, select, rename or delete device configurations at drop down menu.

Camera Options

To select a connected camera from list.

Change image orientation according camera mounting from drop down list in steps of 90° (degree).

Resolution

Choose available aspect ratio from list and the resolutions for "Live" & "Capture" will be displayed accordingly.

Define camera resolution separately for live preview and captured images.

Activate "Fast record" option for fast image capture. Not supported for scanning modes.

Colour Temperature

To select the temperature for colour correction according light source at drop down list to reach best colour reproduction. With option "Auto" software automatically choose best fitting colour correction according your light source after grey balance adjustment.

White Shading

Before create a white shading reference file, remove specimen from microscope and activate the light source. Take care that no dust or specimen is in the light path, otherwise the white reference file will correct temporary objects.

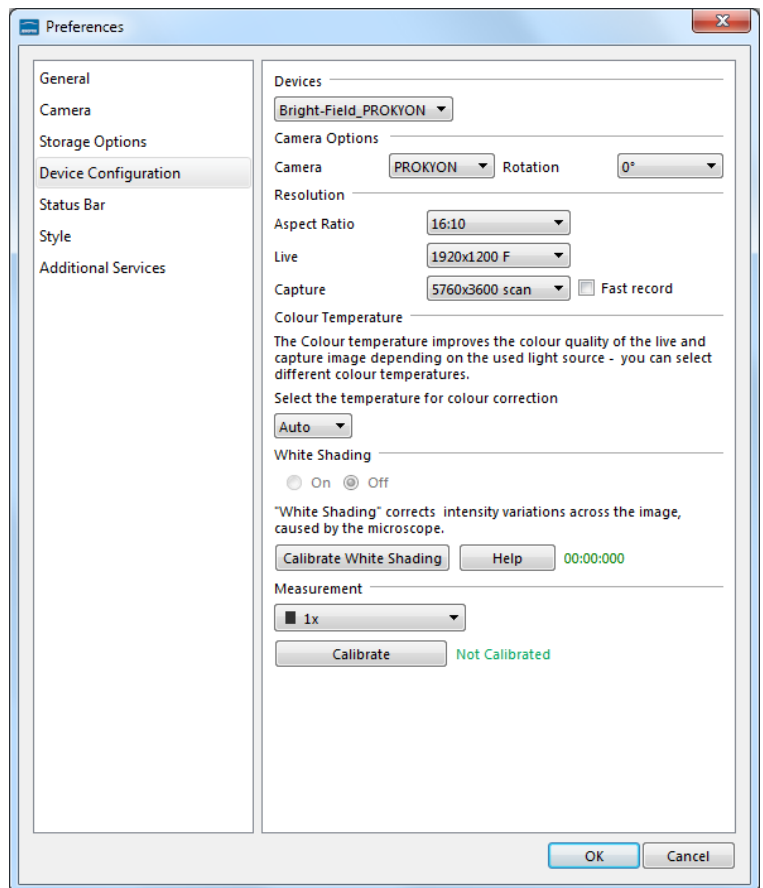
Press the icon  "Calibrate White Shading" to start and wait until the process is successfully finished.

After successful creation the file date will be displayed on preferences window. Di Jul 25 16:09:21 2017

White Shading correction can be switch on or off by selecting of corresponding radio buttons: On Off

On the "Help" button  user will find detailed information to create shading reference file.

Note: White shading reference will be connected to the currently used objective from microscope. By change of objective at microscope a new white shading reference must be created!

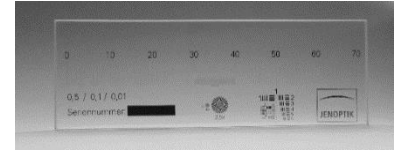




Measurement (calibration)

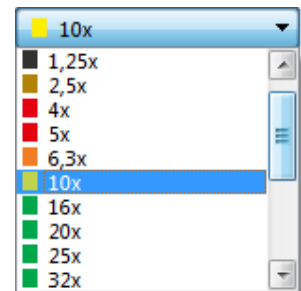
To use **Measurement tool** you have to calibrate your microscope objectives in advance! Otherwise the Measurement tool cannot be activated and used.

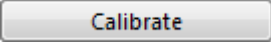
To calibrate the microscope you can use the PROGRES GRYPHAX® **calibration slide** (order number: 563683).



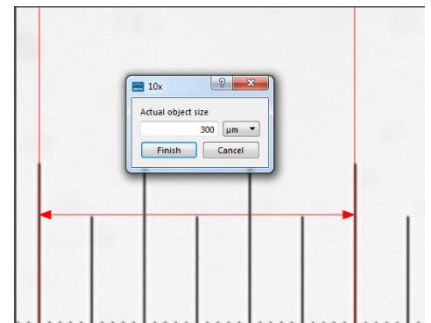
Create:

To **create** measurement calibration please oriented the object micrometer horizontally on the microscope stage. Select objective type from drop down list according to the currently used objective from microscope e.g. 10x.

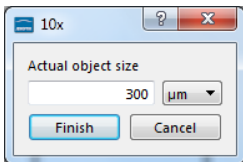


Press "Calibrate" button  to start drawing a reference line onto live preview from image window.

Start **drawing** by left-hand mouse click on first reference point and release. Move mouse to reference endpoint confirm position by click and release again. While drawing a detail window will appear to find exact positions.

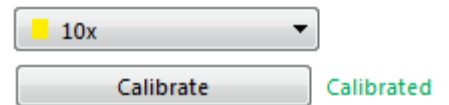


Reference line will be drawn as overlay onto the image window and the calibration value window will appear after definition of reference.



Enter **reference length** into the calibration value window. Choose the correct unit from drop down list and finally confirm by button "Finish".

After successful objective calibration the status for each objective from list is displayed by "**Calibrated**" in green.



Note: If an objective is not on the list, user can create individual custom objectives as well.

Remove:

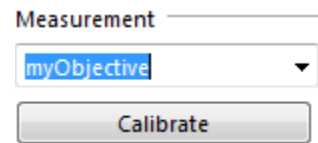
To **remove** created calibration from list, select corresponding objective type and use the drop down menu entry "Remove Calibrations" --**Remove Calibration**. Only calibration information will be deleted.

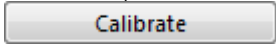
After remove, calibration status of objective will be displayed as not calibrated "**Not Calibrated**".



Create custom objectives:

To **create** a **custom objective** use the drop down menu entry **Create Custom Objective** from drop down list.



Enter custom objective name at input field and start objective calibration with button "Calibrate" .

After successfully calibration the custom objective is added to the objective drop down list of measurement and the status for objective from list is displayed by "**Calibrated**" in green. The new custom objective will be available at magnification menu of status bar.

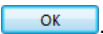
Remove custom objectives:

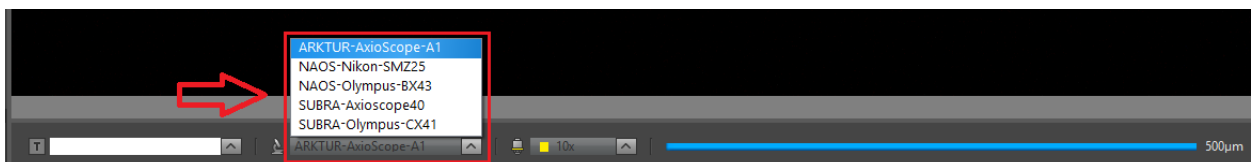
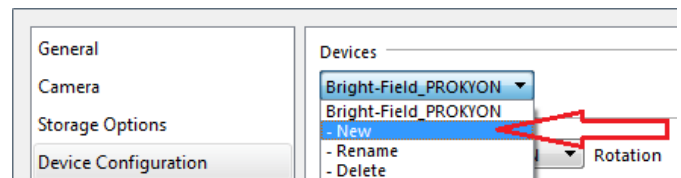
To **remove** custom objective calibration from list, select corresponding objective type and use the drop down menu entry "Remove Objective Calibrations". Custom objective entry at list and calibration information will be deleted.

Video tutorial:

[Press the link](#) to watch the video tutorial **how to calibrate** the microscope objectives.

Create device:

- (1) To **start** with "**device**" creation follow up the given structure step by step by choose option "New" to enter individual "device name" at first.
- (2) **Select** a camera from camera list and set all relevant parameters from "Device Configuration" page and calibrate all objectives of microscope.
- (3) To **save** device configuration and confirm all changes from preferences press button "OK" .
- (4) After successful device configuration users are able to **switch easily between created devices and calibrated magnifications** at the "**Status Bar**" of GRYPHAX software.



Note: Remove device configurations by option "Delete" will lost all settings and calibrations of those!

Status Bar:

At "Status Bar" menu all related options for status bar and scale bar can be defined. In addition a "status bar" can be added at the bottom of captured images to display significant information like: scale, device name, used magnification and notification.

Settings

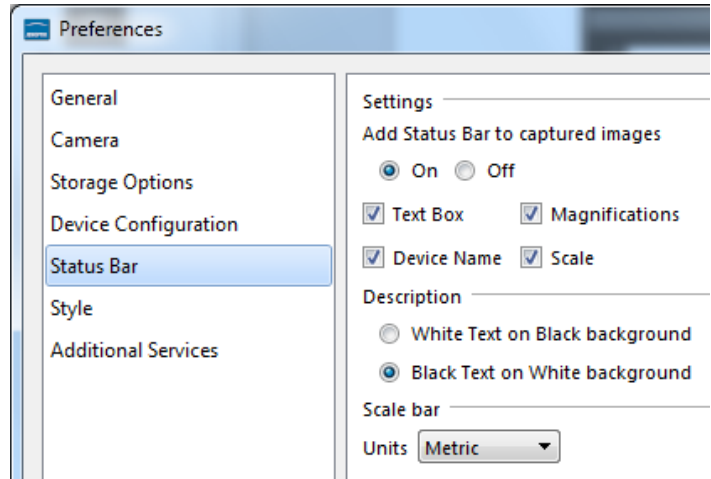
Decide if status bar should be added to the captured images by radio buttons On / Off.

Check mark all information which has to be displayed on added status bar of captured images.

Description

Choose the appearance of the added status bar between:

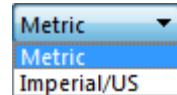
- (a) "White text on Black background" or
- (b) "Black text on White background"



Note: The drag and drop scale bar from status bar will be appear within these setting overlaid on the image window.

Scale bar

To adjust the scale bar unit of status bar from software and at added status bar to captured images. Adjust between units: "Metric" or "Imperial/US".



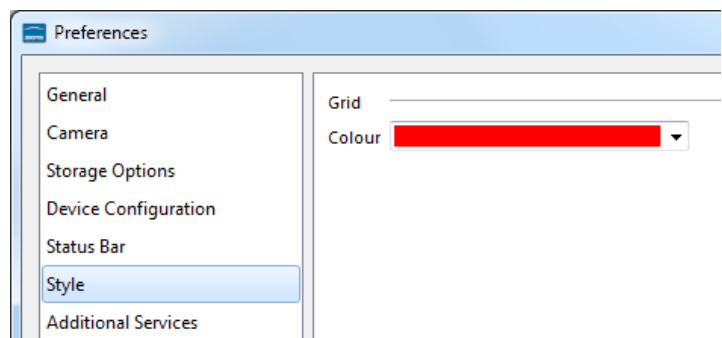
Elements of Style:

At "Style" menu general options for software style and colors can be adjusted.

Grid

Lines colour for Grid view can be pre-defined by colors of drop down list.

Note: Line pitch will be always restored from last defined line pitch of Grid mode use.



For more detailed information, please have a look to the separate user guide "Grid mode".



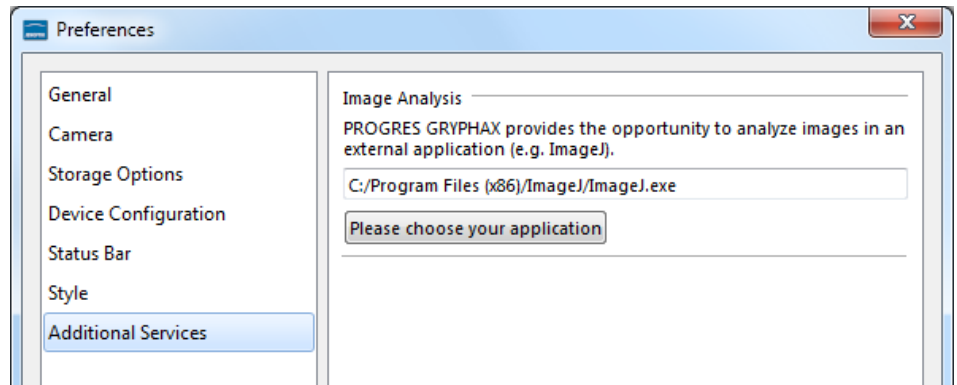
Additional Services:

At "Additional Services" menu the image analyses settings can be pre-defined. The "Image Analysis Option" enables user to open image from GRYHAX Gallery [directly](#) at 3rd party "analysis" applications.

Define:

To [select](#) an **external application** press the button [Please choose your application](#) and choose appropriate application e.g ImageJ from your computer.

Selected application file path will be displayed at preferences window.



For more detailed information, please have a look to the separate user guide "Image Analysis function".

Transfer software settings:

Software settings or "user profiles" can be [transferred](#) to other computer (platform independent) to work with same settings or devices! User can **copy and paste** the software settings file from current computer and transfer to others.

The current software settings are stored at settings file: "lastsession.ini" located under following system folder depending on used operating system:

- Windows OS: „C:\ProgramData\Jenoptik\...”
- MacOS: „MacHD/Library/Application Support/Jenoptik\...”
- Linux OS: „/var/lib/Jenoptik/...”

Please note: Deleting or rename of settings files will lost all software settings and calibrations! Please handle with care! For details about transfere software settings, please have a look to the separate user guide "Transfer software settings".

Video tutorial:

[Press the link](#) to watch the video tutorial for **Preferences** of GRYPHAX software.

Limitations:

For [correct](#) software operation it is mandatory that user has permission of "full control" for software settings location (system folder of OS) and settings files.



Learn more about PROGRES GRYPHAX® software and the easy workflows and tools.

Watch our video tutorials.

[VIDEO TUTORIALS](#)

HELPFUL? We appreciate your feedback.

[FEEDBACK](#)

We looking forward to hearing from you and remain sincerely,

Your PROGRES GRYPHAX® Team