

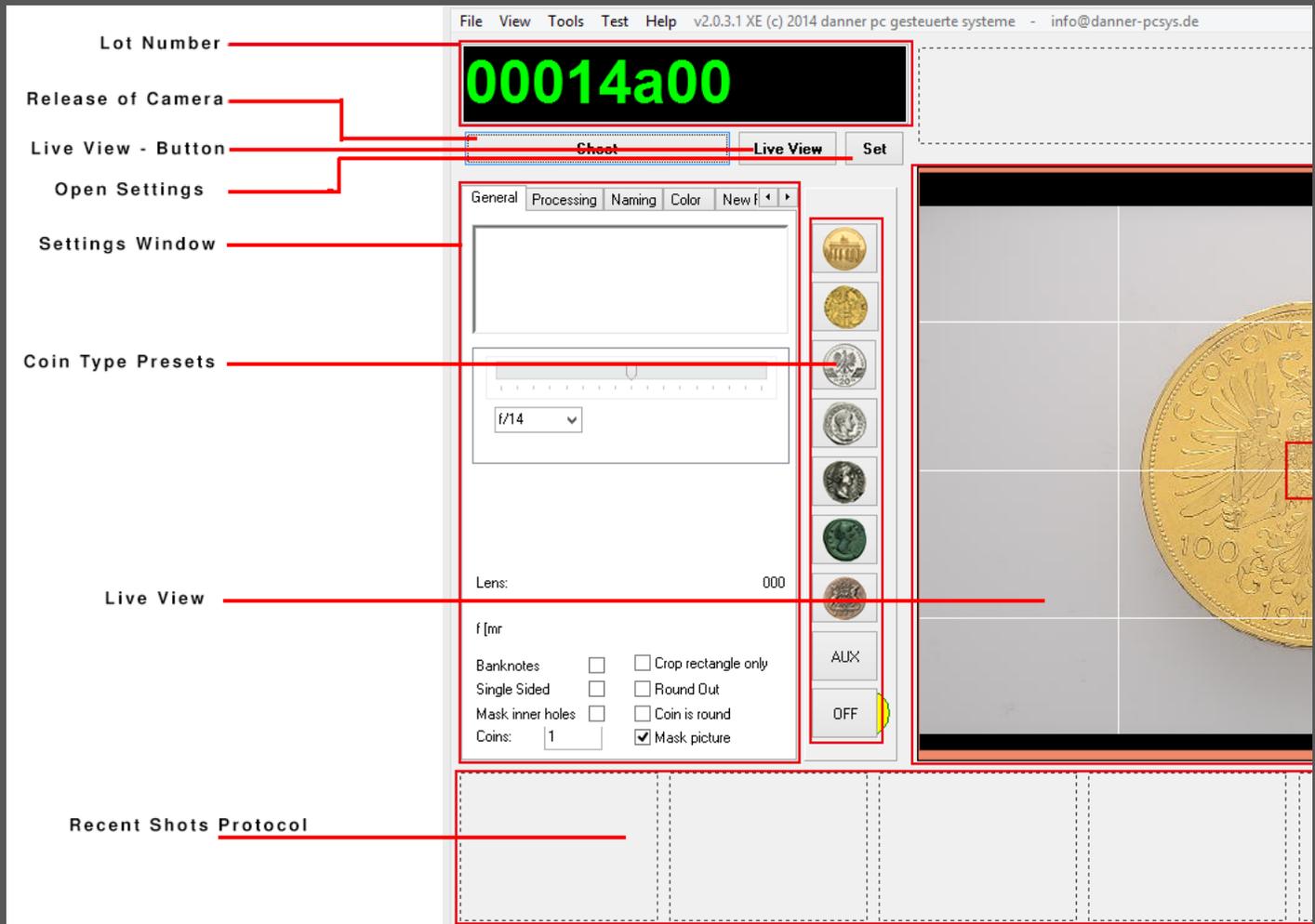


Interface

INTERFACE

This section deals with the general usage of the interface and with the different possibilities for adjustments the settings window offers you.

I. MAIN INTERFACE



1.1 Lot Number (the green number on the top left):

This display shows you the number for the next picture, that will be taken (by clicking on [shoot]). To change the number of the next shot click in the display, mark the characters you want to change and then type in the desired number. In the event that the typed number already exists, the program asks you if you want to overwrite the old file by a pop-up window. Click on [Yes] to overwrite or click [No] to cancel. After the picture files are created the system automatically jumps to the next number or to the reverse number respectively, if the picture you just created was an avers number (XXXa00). If there are many coins being photographed within the same lot number (see the tab [General]), the display counts on with the number behind the side abbreviation (a or r), right until all coins of the lots are photographed. You can change how the system counts, or rather how your pictures are named, in the tab [Naming] of the settings window.

1.2 Release of Camera ([Shoot]):

Press [Shoot] if you want to take a picture. The system will now create shots according to the settings you have made or by the default settings. You can also push the space bar on your keyboard. Because the system, if not adjusted otherwise, also creates masks, please wait until the recently taken picture appears in the [Recent Shots Protocol] at the bottom of the interface, before pressing [shoot] again.

1.3 Live-View-Button:

Pressing this button will start Live-View (the preview window on the right). This comes in handy if the Live-View window was minimized or deactivated as a result of inactivity.

1.4 [SET] Open camera settings:

By pressing the button [set] you can open the settings menu of Camera Control Pro 2.

1.5 Settings window:

Here you can make extensive changes and adjustments to optimize the photographing of your objects. With the tabs at the top of the settings window you can switch between thematically ordered settings areas. With the arrow buttons to the right you can show more options tabs.

1.6 Coin Type Presets:

Here you have the possibility to optimize the settings for all the different coin types. By default the buttons are furnished with beneficial settings for the following coin types (from top to bottom):

Gold (PP): Especially usual for many reflecting gold coins as they are found mostly in the modern age.

Gold: For matt gold (FDC) coins, usual in the antique and modern age.

Silver (PP): For strongly reflecting silver coins, primarily found in the modern age.

Silver (bright): Suitable for silver coins without a relevant patina.

Silber (dark): An option for silver coins with a dark patina.

Bronze (green/dark): For bronze coins with a strong green coloring or a very dark patina.

Bronze (brown): Bronze coins without a patina are ideally photographed with this setting.

AUX: A user-defined channel, which is reserved for your individual settings.

OFF: No special settings are used here. Instead the basic settings are applied.

Simply click on the respective icon, if you want to apply a setting. All following photos will be created with this setting. The settings apply until you click on another icon or restart the program. You can adjust the settings for the different coin types according to your personal taste. (You can do this in the [Color]-Tab in the settings window).

1.7 Live-View:

This is the preview window. Here you can see, you the photo will look like approximately (before post-processing). Always make sure that the



object lies at least roughly in the center of the screen and that it is shown in its entirety. Adjust the reflector on the device so it is shown at the top margin of the screen. Then push it back, that it is just outside of the screen. Should live-view be invisible click on the button [live-view] in the top area of the interface.

1.8 Recent Shots Protocol:

Here the program shows you the six most recent pictures you took, including the number with which they were saved. You can enlarge the pictures by clicking on the preview picture. Another click on the enlarged picture closes it.

You can delete a picture quickly by right-clicking on the preview picture and clicking on [delete].

You can rotate pictures you took by right-clicking on the preview picture and then clicking on [rotate]. Now qcturn.exe should open. Rotate the picture now into the desired position by simply moving the mouse. When the picture is to your satisfaction press [enter] on your keyboard. This saves the changes you've made and closes qcturn.exe. (Note: To make this work, the box [delete TIFF] in the [Reprocessing]-tab must be unchecked!)

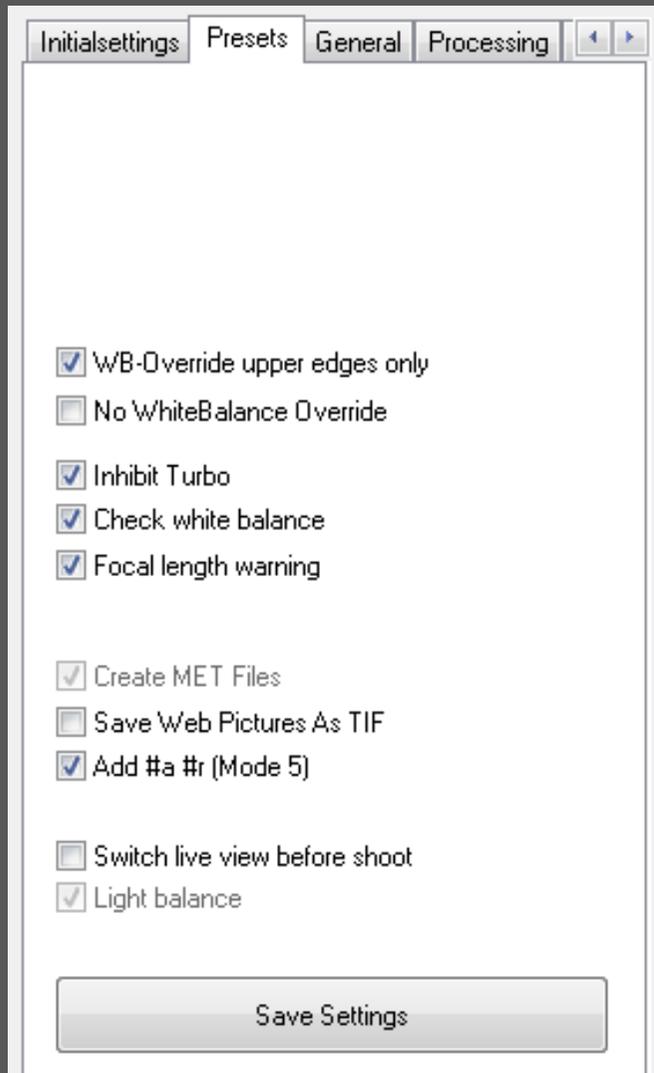
If you have rotated a picture the web pictures must be recreated. To do this right-click on the preview picture and then click with the left button of your mouse on [Reprocess].

II. SETTINGS WINDOW

Here you can make adjustments for your project and your shots. The different possibilities for adjustments are organized in tabs structured by topic. You can open the tabs by clicking on them in the tab bar at the top of the settings window. By clicking on the arrows on the right of the tab bar you can uncover more tabs.

On the following pages the different tabs are presented.

2.1 Presets



WB-Override upper edges only: Usually points in every corner of the picture are used to adjust the white balance performed by the camera. Activating this option will have the effect that only the two corners at the top of the picture are picked for white balance (this relevant for example in case you want to lie down a ruler at the bottom of the screen).

No WhiteBalance Override: If this box is checked no white balance adjustments are con-

ducted.

Inhibit Turbo: The turbo mode prevents the automatical cropping of images. This can effect a relevant rise in speed on older computers. The pictures must be cropped afterwards however. If this box is checked the turbo mode is deactivated. Activating this option on newer computers is explicitly recommended!

Check white balance: If this option is activated a warning in the live-view window will appear if problems occur in white balance adjustment. If you deactivate this option no warning will appear.

Focal length warning: If this box is checked a warning in the live-view window will appear if the focal length doesn't match the requirements. Deactivate this option if the warning shouldn't appear.

Create MET Files: This option effectuates the creation of metrics-data with every shot. It is set by default and appears only for maintenance purposes. Note that this box has to be checked for postprocessing by [Danner PC-gesteuerte Systeme]!

Save Web Pictures As TIF: Activate this option to save web pictures in TIF format instead of jpeg.

Add #a #r (Mode 5): This option affects mode 5 (free mode) in naming the pictures which you can find in the „Naming“ tab. If this option is activated an apprevation „a“ for averse and respectively „r“ for reverse will be added to your chosen picture name.

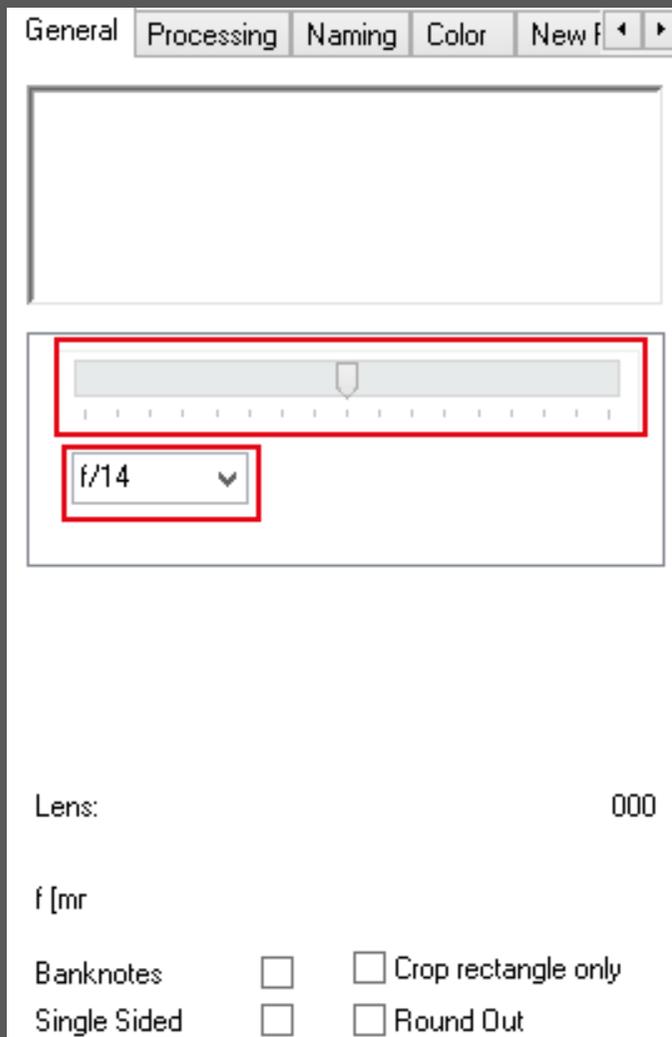
Switch live view before shoot: This option should only be activated if you use the Nikon D300

camera, because it can't focus while Live-View is active. Activating this option shuts live-view briefly to give the camera time to focus. All other supported camera models focus much more precisely while in live-view, therefore the option should be deactivated in this case.

Light Balance: This option exists solely for maintenance purposes and displays if you use a system with or without light balance.

Press [Save Settings] to apply your changes also for future sessions. Otherwise your changes will be lost after closing the program!

2.2 General



Lightbalance-regulator: With this regulator you can change the relation between sidelight and overhead light. The more you slide the regulator to the left, the lower the intensity of the side-

light and the more you slide the regulator to the right, the lower the intensity of the overhead light. Both lights have the maximum intensity when the regulator is situated in the center. Less sidelight can be applicable for objects with high reliefs, because in those cases irritating light reflections can occur when photographed with a high sidelight intensity. On the other hand, (small!) scratches or patina stains are suppressed in their depiction under intensified side light

Aperture Setting: In special cases where the depth of field does not suffice to depict the object well focused for its entire surface (i.e. very big objects or extreme enlargements), a short-term aperture setting can be chosen here. Simply click on the arrow to open a drop-down-menu and then choose the desired aperture setting by clicking on it. Don't forget to change the aperture setting back to the default setting (the first entry in the drop-down-menu) as soon as the special setting isn't required anymore.

Color Histogram: The color histogram shows you the frequency distribution of the different colors the most recent taken picture consists of. You should always make sure, that no color overlaps the right edge of the histogram considerably. An overlap means that the color possesses a very high saturation and structures are lost.

Additional picture information: This are you can find under the color histogram.

Lens information: Here the lens you used in your most recent picture is shown.

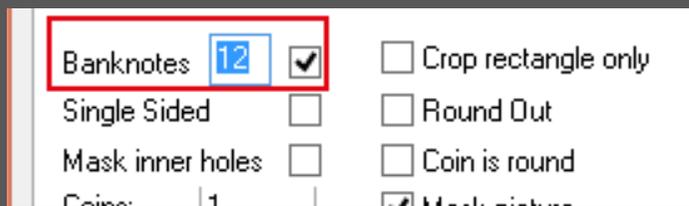
Color distribution in the corners: The values separated by dashes depict the red/green/blue distribution in the corners of the most recent picture. These values are used for the white balance. They should have approximately the same value. If that is not the case you can adjust it in CCP2. For that purpose click on the button [Set] in the main interface. Now the settings menu of CCP2 should open. Now click on the tap "Exposure 2". Right next to the item [White Balance] you find the button [Fine Tune...]. Click on it. Now a window opens where you can pull the

slider in the direction of the color which was underrepresented in the most recent picture (If the value for the color blue for example was lower than the values of the other colors, pull the slider into the direction of „blue“). When you're done, click on [OK]. Repeat the last shot now and check the color distribution again. Repeat the process until the value are approximately equal.

Mean brightness in the corners: The value to the right of the color distribution depicts the mean brightness in the corners. It is mainly relevant for maintenance purposes.

Focal length: The value on the bottom shows you the Focal length with which the most recent shot was created.

Bottom settings area:



Banknotes: If banknotes are being photographed it easily happens that they get depicted distortedly. With this option you can activate an augmented graphic rectification to counteract this effect.

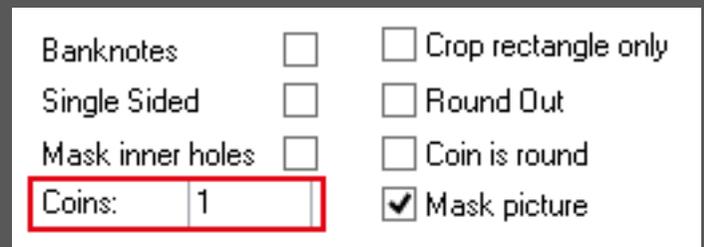


Single Sided: If you activate the option [Single Sided], the system jumps directly to the next lot number without inserting a reverse number (so no picture with the „r00“ ending is created), which is useful i.e. if you want to photograph one-sided medals. Caution: this option will be automatically deactivated after the shot! Always ensure that the check mark is set before photo-

graphing one-sided objects.

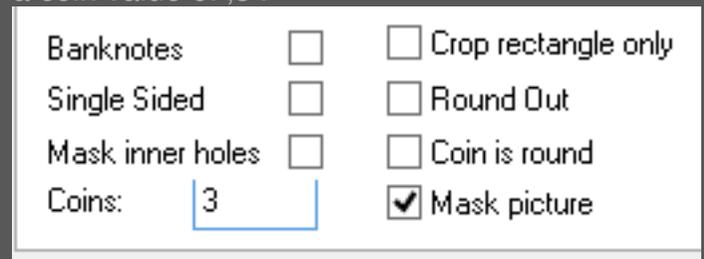


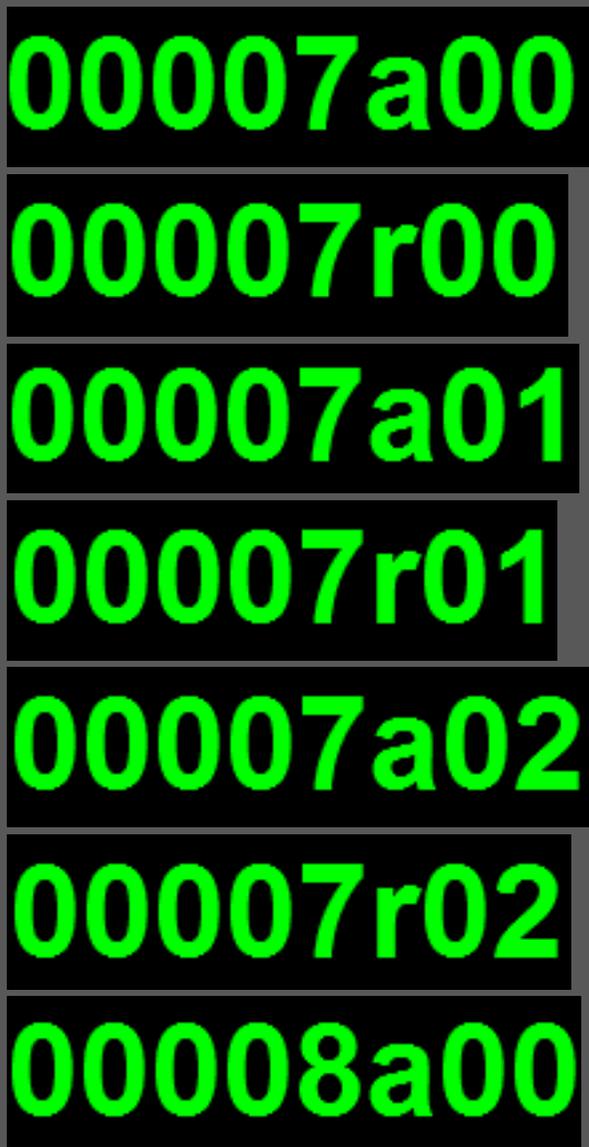
Mask Inner Holes: If this option is activated the system also crops holes within the object (relevant i.e. for some medals). Caution: This option only comes into effect if the option [Mask Pictures] is activated simultaneously.



Coins: With his option you can photograph several coins in one lot number, i.e. in case of lots. The objects are photographed as usual but the system now counts with the ending of the lot number (a01, a02, etc) until the stated amount is reached. After that it jumps to the next lot number. Please consider, that the counter next to [Coins] also sets back to „1“, as soon as all sub-numbers are done.

The following example illustrates this feature for a coin value of ‚3‘:





Round Out: This option activates the round-out function. For some coins the automatic cropping can leave unwanted traces on the edge of the coins picture (see the example picture for [Coin is round]). The [Round Out] function generates a mean value between these bumps and thereby smooths out the edge.

Banknotes	<input type="checkbox"/>	<input type="checkbox"/> Crop rectangle only
Single Sided	<input type="checkbox"/>	<input type="checkbox"/> Round Out
Mask inner holes	<input type="checkbox"/>	<input checked="" type="checkbox"/> Coin is round
Coins:	<input type="text" value="1"/>	<input checked="" type="checkbox"/> Mask picture

Coin Is Round: This option should be activated for round objects, if the automatic cropping does not work properly resulting of the material (i.e. reflecting or engraved edges) of the coin. That can be the case of coins with an edge engraving (parts of the engraving remain while the rest of the edge is cut, see item [Round Out]).



This feature works similar to the [Round Out] option but is only suitable for round coins. For more erratic objects we recommend [Round Out].

Banknotes	<input type="checkbox"/>	<input checked="" type="checkbox"/> Crop rectangle only
Single Sided	<input type="checkbox"/>	<input type="checkbox"/> Round Out
Mask inner holes	<input type="checkbox"/>	<input type="checkbox"/> Coin is round
Coins:	<input type="text" value="1"/>	<input checked="" type="checkbox"/> Mask picture

Crop Rectangle Only: If this box is checked, the pictures are not cropped as usual but merely cut. A rectangular image remains.

Banknotes	<input type="checkbox"/>	<input type="checkbox"/> Crop rectangle only
Single Sided	<input type="checkbox"/>	<input checked="" type="checkbox"/> Round Out
Mask inner holes	<input type="checkbox"/>	<input type="checkbox"/> Coin is round
Coins:	<input type="text" value="1"/>	<input checked="" type="checkbox"/> Mask picture

	Qual		Size	Char	oo	00	Sh
Thumb	80	<input type="checkbox"/>	40	st	<input type="checkbox"/>	<input type="checkbox"/>	0
Thumb2	80	<input type="checkbox"/>	90	cd	<input type="checkbox"/>	<input type="checkbox"/>	0
Preview	80	<input checked="" type="checkbox"/>	160	ef	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	1
Large	80	<input checked="" type="checkbox"/>	650	gh	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	1

Insert fileinfo Margin: Add
 Insert Logo Size 1:

The following five options only apply to web images:

[Insert fileinfo]: If this option is activated, additional picture information is inserted into the meta information of the picture files.

[Margin]: Here you can adjust the thickness (in pixels) of the white edge around the coins. A value of 0 means that no edge is kept.

[Insert Logo]: This function only applies to web pictures, where averse and obverse pictures are conjoined. If this box is checked, a logo is inserted in the space between averse and obverse pictures. By default this logo is a white space and can be found in the folder `c:\users\public\quickPX` with the name "logo.tif". If you want to insert your own logo, simply overwrite this file in the said folder with your logo (keep the name of "logo.tif").

[Size 1]: Here you can define the size of your logo. A relation value is given here to keep the perceived size of the logo the same for all images. For example if you type in „12“ into the panel, the size of the logo is 1:12, thus a twelfth of the image.

[Add]: In this panel you can type in a desired ending for the pictures names. (Whatever you type in here will be added at the end of the number)

Sharpen:
 Jpeg Qual (5-100):
 Normalise Path:
 Size %:

Delete:
 Tiff
 Jpeg
 None

Speed Up (refer to manual to learn about consequences)

The following options apply to the created print pictures:

[Sharpen]: The value in this panel defines to what extent the created print pictures are re-sharpened (see above). Given that most modern digital cameras sharpen the taken image themselves, you can ignore this item.

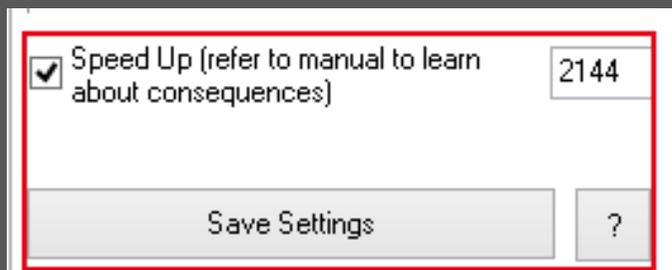
[Jpeg Qual]: Here you can set the quality of the jpeg – print pictures. 5 is the lowest, 100 the highest value. Caution: values lower than 90 make no sense for most print cases!

[Normalize Path]: This function is similar to the function [Round Out] in the [General]-Tab of the settings window. Bumps, which can occur at the edge of the coin picture when automatically cropped, get smoothed out by this function. Caution: Only recommendable for circular objects!

[Size %]: Here you can define the desired size of the print pictures in relation to the original object. For example: If it is desired (as in many cases) that the picture is larger than the original objects by 3 %, the value you have to type in here would be 103.

[Delete]: The system creates the print pictures in

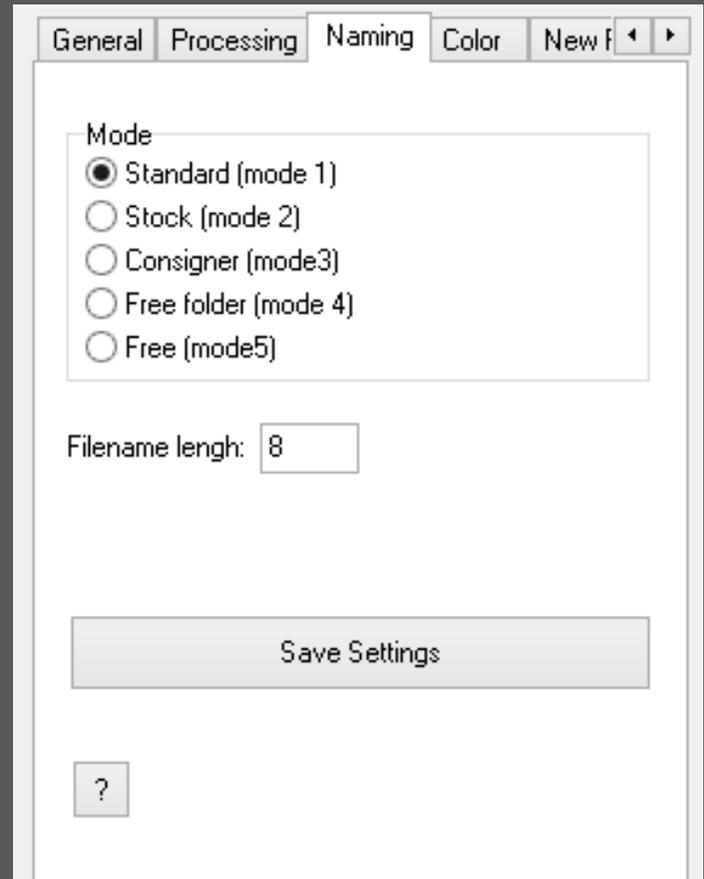
Tiff- as well as the Jpeg format. If one of these formats is of no use to you, you can choose here to let it delete it automatically. If you don't need i.e. pictures in the tiff-format, mark the corresponding item with a left-click. If you need both formats, select the item [None]. NOTE: [delete TIFF] must not be activated if you want to turn or reprocess the images, because the system needs the TIFF-files for that!



The following option applies to web pictures as well as print pictures.

[Speed Up]: By default the system creates raw data. These data is large (larger than necessary). Converting and reprocessing of large data amounts takes a long time, thus you have the possibility here to define, which target size (in pixels) your pictures should have. According to this the system converts the pictures to this new size and then performs the aforementioned reprocessing steps. That quickens the process significantly and the raw data is conserved in its original size!

2.4 Naming



Here you can change the naming pattern of the images and to some extent the logic behind the path structure where the pictures are saved. You can do this after setting it in the [New Project] tab.

Five different naming modes can be chosen:

Standard (mode 1): In this mode your images are saved in the chosen hard drive partition in the [Projekte]-folder and further in the respective project folder. There you can find the pictures in the subfolder [Bilder] in the folders for the respective photo numbers, 0-500 (folder [_0000500]), 501-1000 (folder [_0001000]). The file name consists of 8 digits, starting with five digits (for low numbers the zeros will be added automatically at the beginning), then a letter indicating the coin's side (a vor avers, r for reverse) and then two additional numbers (normally zeros, only for lots this numbers will be used to count the sub numbers).

Stock (mode 2): In this mode the path structure and the file naming of the standard mode are basically kept, but all pictures are saved directly in the [Bilder] folder of the project. The filename here can have up to 13 digits before the letter for side indication. You can specify how many digits there should be exactly in the [Filename length]-frame by typing in the desired number or by raising or lowering the number by pressing the buttons on the right side of the frame.

Consigner (mode 3): In this Mode path structure and basic naming pattern are kept as well. But here a consigner number (with up to three digits) is added as a prefix with a dash to the normal 8 digits picture name. You can specify the consigner number in the respective field, which appears on screen as soon as you have chosen this mode. It will be used until you change the number or the used naming mode

Free folder (mode 4): In this mode you can choose the target folder (in which the pictures are saved) freely (you can do this in the „New Project“ tab of the settings window). Like in stock mode you can specify how many digits should be before the side letter, with a maximum of 13 digits. To specify type the desired number into the field [Filename length]. Please be aware that you can only use numbers as picture names here.

Free (mode 5): In this mode you can choose the target folder for your pictures freely (in the tab [New Project]). Furthermore you can name your pictures freely. Simply click into the picture name window and type in the desired name. In the [Presets]-Window you can activate an additional option to add an „a“ for averse“ and respectively a „r“ for reverse at the end of the chosen title.

With the [Save Settings] button you can save your adjustments.

You are free to change from standard mode to the modes stock and consigner anytime. You can also change from free folder mode to free mode whenever you like.

2.5 Color



In the tab [Color] you can make adjustments in color cost post-processing. First click on one of the coin type preset icons. For example if you want to make adjustments for antique gold coins click on the respective Preset first. Thereupon the icon appears at the top of the settings screen.

The modification of the following adjustments you can follow, depending on your camera model, already in the live-view window.

Exp./Brightness: Hier you can adjust the exposition for this presets. Values with a [+] increase the brightness, values with a [-] decrease it.

Light Balance: Here you can adjust the relation between overhead- to side-light. (see [General]).

The following adjustments only apply to the picture and are not visible in the live-view window.

Red: Here you can decrease or increase the Red-Value.

Green: Here you can decrease or increase the Green-Value.

Blue: Here you can decrease or increase the Blue-Value.

Saturation: Here you can decrease or increase the Saturation-Value.

Contrast: Here you can decrease or increase the contrast-value.

The preset [AUX] is at your disposal. For your own convenience we recommend to make extensive adjustments only in this presets. Please make adjustments in other presets with caution!

CAUTION: Changes in color post-processing can only be evaluated properly on a configured high quality screen! Non configured screens distort the result, therefore no reasonable color adjustments can be made on the basis of those screens' display.

The checkbox [Auto Exposure] is only enabled if the preset [OFF] is activated. The box is checked by default and effects the rudimental post-processing measures the systems performs (for example brightening of dark spots). If you remove the hook from this box, the system will perform no post-processing in matter of color.

By pressing the button [Save Settings] you can save your adjustments for the respective preset for future sessions. Otherwise your changes will be lost after closing the program!

2.6 NewProject

Go to the tab [New Project] to start a new project. You have the choice between five different Settings regarding the naming of the pictures and the path, where they should be saved. (see also the tab [Naming]):

Standard (mode 1): In this mode your images are saved in the chosen hard drive partition in the [Projekte]-folder and further in the respective project folder. There you can find the pictures in the subfolder [Bilder] in the folders for the respective photo numbers, 0-500 (folder [_0000500]), 501-1000 (folder [_0001000]). The file name consists of 8 digits, starting with five digits (for low numbers the zeros will be added automatically at the beginning), then a letter indicating the coin's side (a for avers, r for reverse) and then two additional numbers (normally zeros, only for lots this numbers will be used to count the sub numbers).

Stock (mode 2): In this mode the path structure and the file naming of the standard mode are basically kept, but all pictures are saved directly in the [Bilder] folder of the project. The filename

here can have up to 13 digits before the letter for side indication. You can specify how many digits there should be exactly in the [Filename length]-frame by typing in the desired number or by raising or lowering the number by pressing the buttons on the right side of the frame.

Consigner (mode 3): In this Mode path structure and basic naming pattern are kept as well. But here a consigner number (with up to three digits) is added as a prefix with a dash to the normal 8 digits picture name. (To change the consigner no. go to the [naming] tab.)

Free folder (mode 4): In this mode you can choose the target folder (in which the pictures are saved) freely (you can do this in the „New Project“ tab of the settings window). Like in stock mode you can specify how many digits should be before the side letter, with a maximum of 13 digits. To specify type the desired number into the field [Filename length]. Please be aware that you can only use numbers as picture names here.

Free (mode 5): In this mode you can choose the target folder for your pictures freely (in the tab [New Project]). Furthermore you can name your pictures freely. Simply click into the picture name window and type in the desired name. In the [Presets]-Window you can activate an additional option to add an „a“ for averse“ and respectively a „r“ for reverse at the end of the chosen title.

In the panel [Project path] you can specify where the project should be created and therefore your pictures should be stored. Please notice that all digits which are not a „?“ must not be changed!

When you are done making adjustments click on the button [Create new project], to create the project.

2.8 InitialSettings

The tab [Initialsettings] depicts settings of the system and is solely relevant for maintenance and troubleshooting purposes.

2.9 About

Click on the tab [About] to receive more information on the producer and contact data.

