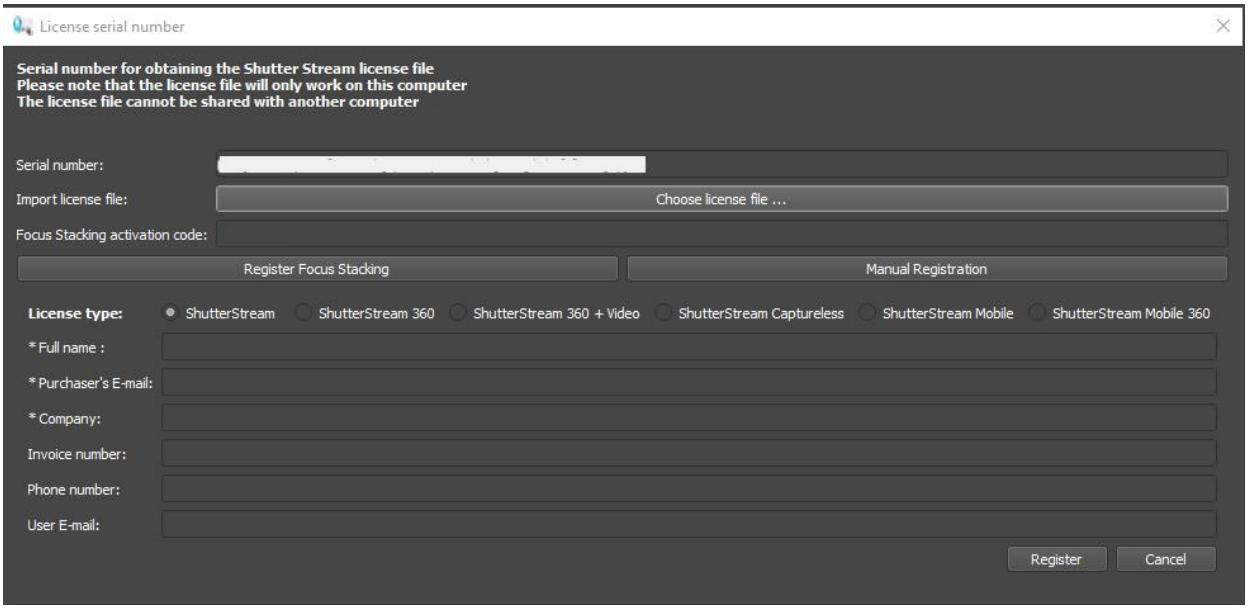
Shutter Stream Software Version 10.0 User Guide

Features Overview Video: see here

IMPORTANT – You must follow these steps before starting:

1. Registering the Software:

After installing the software and at the time of first launch, users will be prompted with the option to register the Shutter Stream software. This is required to ensure the software will not expire. Please select License type ShutterStream:



User will be required to fill out this form in its entirety and submit – this will be automatically sent to our licensing server. Please follow Registration Instructions here.

Within 72 hours, user will receive their license file along with license file import instructions (sent via email to the address used at time of registration) the software. The software will remain fully functional in the meantime.

IMPORTANT: *Please add contact@iconasys.com & support@iconasys.com to your safe senders list so the license email is not caught by a junk mail folder.*

2. Setting up your Compatible Camera:

Please select your specific camera model from this page and walk through camera settings set up instructions. This will ensure camera is ready to be used with Shutter Stream when you launch the software.

After camera settings are correct:

- **Canon & Nikon Cameras** – Power camera on, connect via USB to computer then launch the Shutter Stream Software.
- **Sony Cameras** – Wireless control, please follow instructions here
- **Smart Phone Cameras** – Wireless control, please follow instructions here

Training Documents:

Shutter Stream Quick Start Guide – https://iconasys.com/Downloads/Shutter-Stream-Quick-Start-Guide.pdf
Features Overview Video: https://youtu.be/_UeLsZyF2yg

Help Desk & Support:

Help Desk: The Iconasys Knowledge Base will provide answers to many FAQ's
Technical Support: Please see this page for all support contact options

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Overview - Shutter Stream UI (video link)

1. Image Capture Tools
2. Image Viewing Gallery
3. Image Processing Tools
4. Live View / Image Viewing Window
5. Camera Setting Taskbar
6. 360*, Help and Options

*360 shooting mode only available in Shutter Stream 360

Please ensure camera is connected via USB and powered on before launching Shutter Stream.

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Image Capture Tools

Live View (video) – 'Live View' will stream the cameras live view to the monitor screen in real time so users can view the subject they wish to shoot before actually capturing the image.

Enabling Live View: Left click on the icon to enable the cameras 'Live View'. This will then be projected in real time onto the 'Live View Window'. While in Live View, all 'Image Capture Tools' and the 'Camera Settings Window' will be enabled.

Disabling Live View: 'Live View' will be automatically disabled after users clicks 'Snap'. Alternatively, users can exit out of Live View mode by Left Clicking a Thumbnail Image in the Thumbnail Viewing Gallery. This will switch the application from 'Live View' mode to 'Image Viewing' mode.

Built into the 'Live View' is ***Exposure Simulation** (*this feature is only supported by cameras that have Live View Exposure simulation). This means the current exposure of the image (if it were to be captured) is projected in real time in the 'Live View Window'. While in the 'Live View Mode', users are able to use a variety of image capture tools which include: 'Image Overlay', 'Rotate', 'Crop' and 'Snap'. In addition to these tools, users can also adjust camera settings in the 'Camera Settings Window' to compensate exposure for the lighting environment.

Live View Options (video) – Click on the options area (gear icon in top right corner of software).

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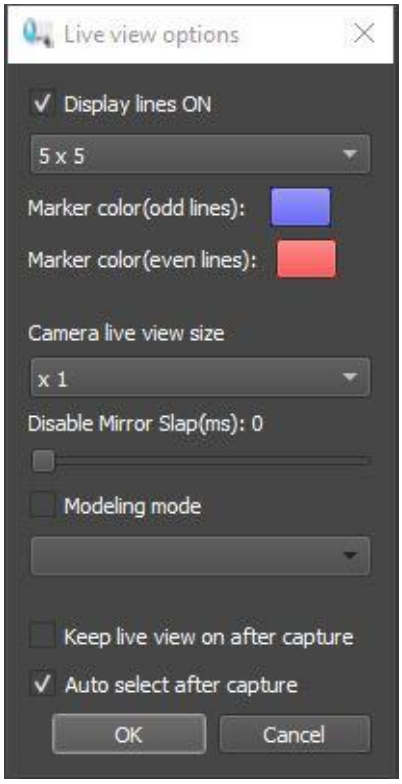
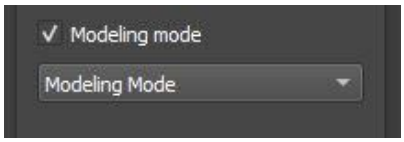


Display lines ON – This feature allows users to set cross hair grid markers in the Live View Window. Users can select up to 36x36 lines.
Marker Color – Users can change the display color of the odd and even Display lines independently. Display lines can with positioning and framing.
Camera live view size – Some cameras display the Live View window in a lower resolution (for ex. the Nikon D5200 camera displays Live View at 640 x 426 pixels) which can display quite small when working on a higher resolution monitor. Users can increase display size by selecting 2X or 3X.
Disable Mirror Slap – Users can define camera to wait XXX milliseconds between disabling live view mode and snapping picture to eliminate mirror slap (read more on mirror slap here). This feature is ideal when shooting macro photography or when shooting with longer exposures.



Modeling Mode:
Modeling mode is designed for users shooting with strobes who will require a different setting for Live View and Image Capture. Users will create and save a camera settings profile to be used for Live View purposes only. When this is enabled and the profile is selected, the live view will always reflect the exposure from the saved profile settings.

Keep live view on after capture – The standard operation of Shutter Stream is to upload the image after capture and display for viewing. Users also have the ability to leave the Live View Window enabled after capturing an image. This will automatically revert back to Live View mode after an image has been captured and uploaded to the 'Thumbnail Viewing Gallery'. Enable this by selecting the check box.
Auto select after capture – This option will enable an images to be automatically selected in the Thumbnail Gallery after capture.

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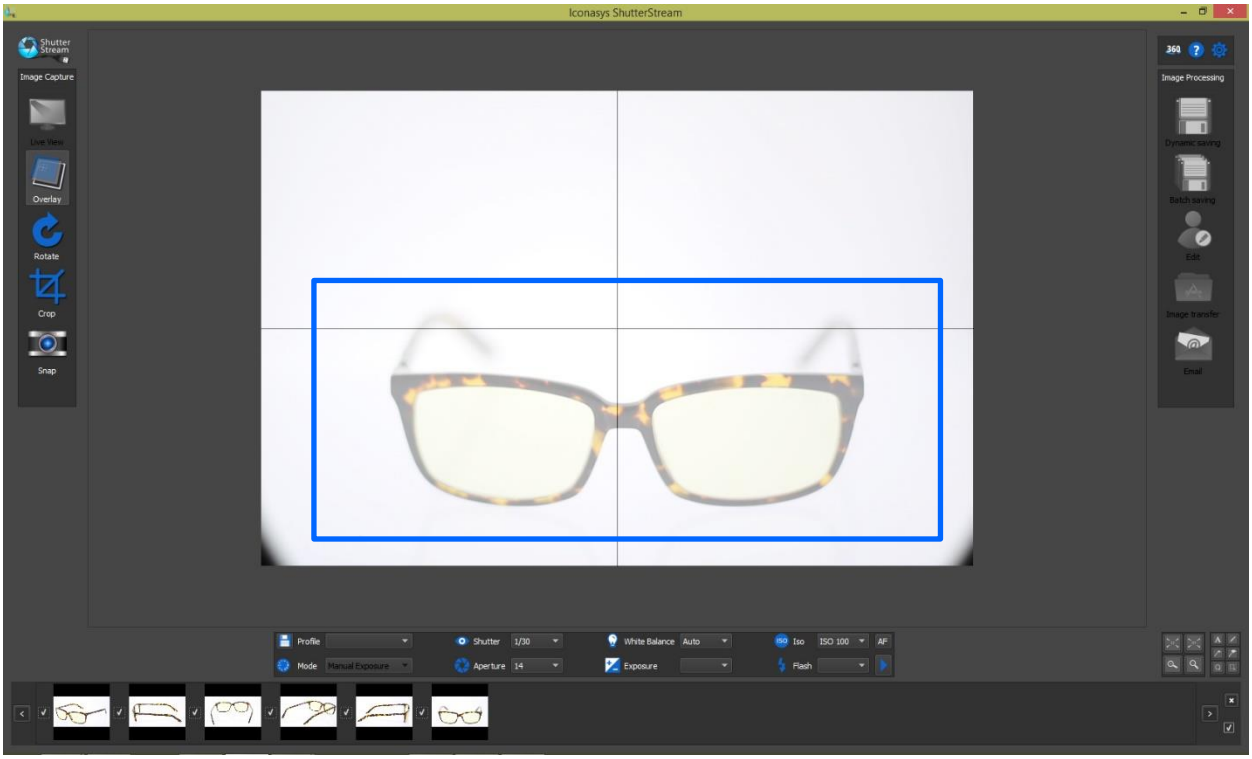
Image Overlay (video) - The ‘Image Overlay’ feature will allow users to overlay a transparent image over the ‘Live View Window’. This enables users to achieve consistent product placement and shooting angles.



First users will want to enable Image Overlay by left clicking on the button. Next, by right clicking on the ‘Image Overlay’ button users have 4 options: ‘Import’, ‘Create’, ‘Load’ & ‘Save’.

Importing an Image Overlay: Right click on the ‘Image Overlay’ button while in ‘Live View Mode’ and select ‘Import’. This will open file explorer and allow users to locate the image they wish to use for overlay (image must be in JPG or PNG format). After the image has been located in the file explorer, select the image then click ‘Open’. This image will be placed over top of the Live View window. Should a user wish to save this, Right Click on the Overlay button and select ‘Save’, give it a name,

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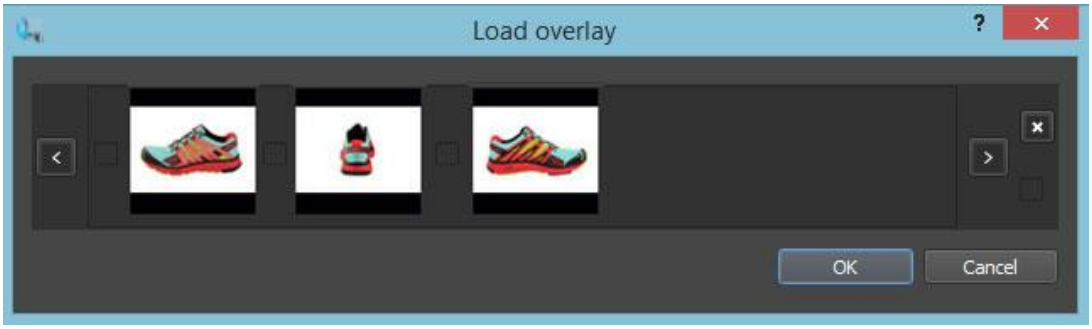
click ‘OK’. Users can adjust opacity of this image in the Options area ->Image Overlay Settings.

Creating an Image Overlay: Right click on the ‘Image Overlay’ button while in ‘Live View Mode’ and select ‘Create’ to create an overlay of the existing live view. This overlay will remain on the ‘Live View Window’ until the ‘Image Overlay’ button is disabled (left click to enable/disable).

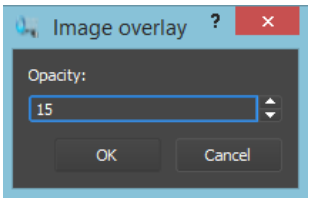
Saving an Image Overlay: After creating an ‘Image Overlay’, users may wish to save and store this for later use. Simply Right Click on the Overlay button and select ‘Save’, give it a name, click ‘OK’ and it will be retained in the software and can be reused at a later time. Users can save infinite ‘Image Overlays’.

Loading a Previously Saved Image Overlay: Right click on the ‘Image Overlay’ button and select ‘Load’. This will pop up a window that includes all previously saved image overlays. Simply select the overlay you wish to use by highlighting it, then click ‘OK’.

Deleting an Image Overlay: Left Click the checkbox to the left of the overlay then click the delete ‘x’ button in the top right of the Overlay Window. This will remove the previously save Overlay.



Adjusting Image Overlay Opacity: In the ‘Options’ area, select ‘Image Overlay Settings’. By adjusting the number (values between 15 and 85) users can adjust the overlay opacity where 15 being the most transparent (lightest) and 85 being the least transparent (darkest).



The ‘Image Overlay’ feature is ideal for website and catalog product photography in

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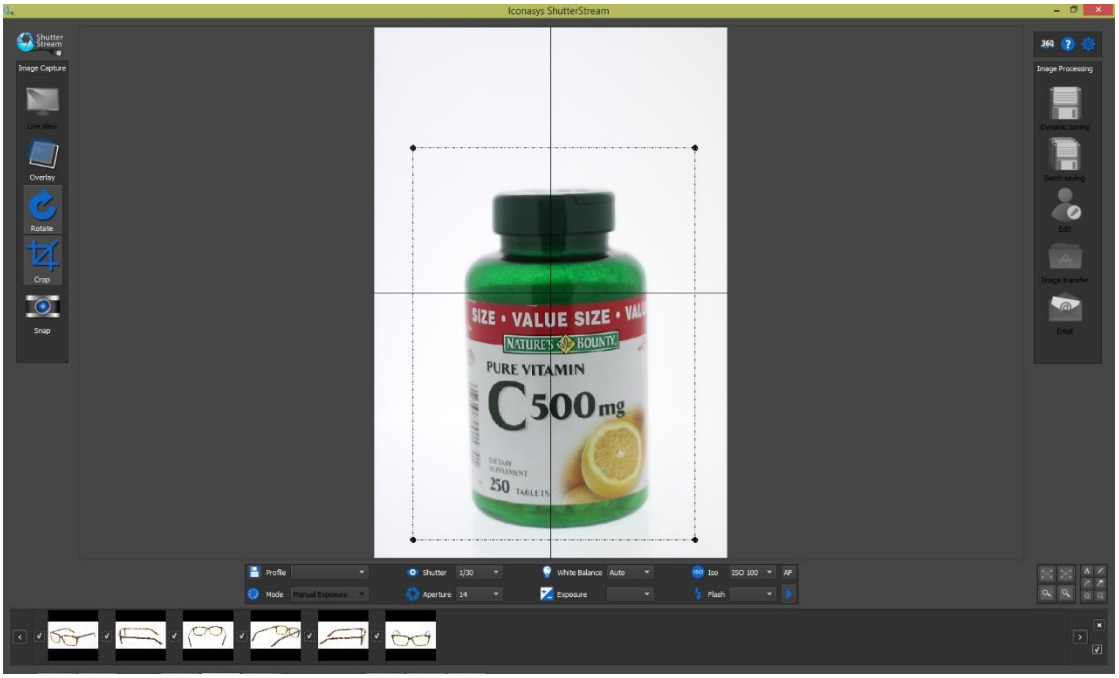
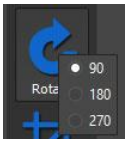
which consistent shooting angles and product placement are required. It is also a great tool for positioning objects in the center of the turntable.

Rotate (video) - Users can rotate live view and capture 90, 180 or 270-degrees. This feature is ideal for when the camera is rotated to shoot in portrait mode for tall skinny products or objects such as a bottle or mannequin:



Rotating the Live View: While in 'Live View Mode, left click on the 'Rotate' button and the 'Live View' will Rotate 90-degrees to a vertical orientation.



By **right clicking** on the 'Rotate' button, users have the ability to set the 'Rotate' to 90, 180 or 270-degrees.

Crop (video) – The 'Crop' tool gives users the ability to Pre-Crop their subject prior to capture. Typically crop is an action that is standard to post-

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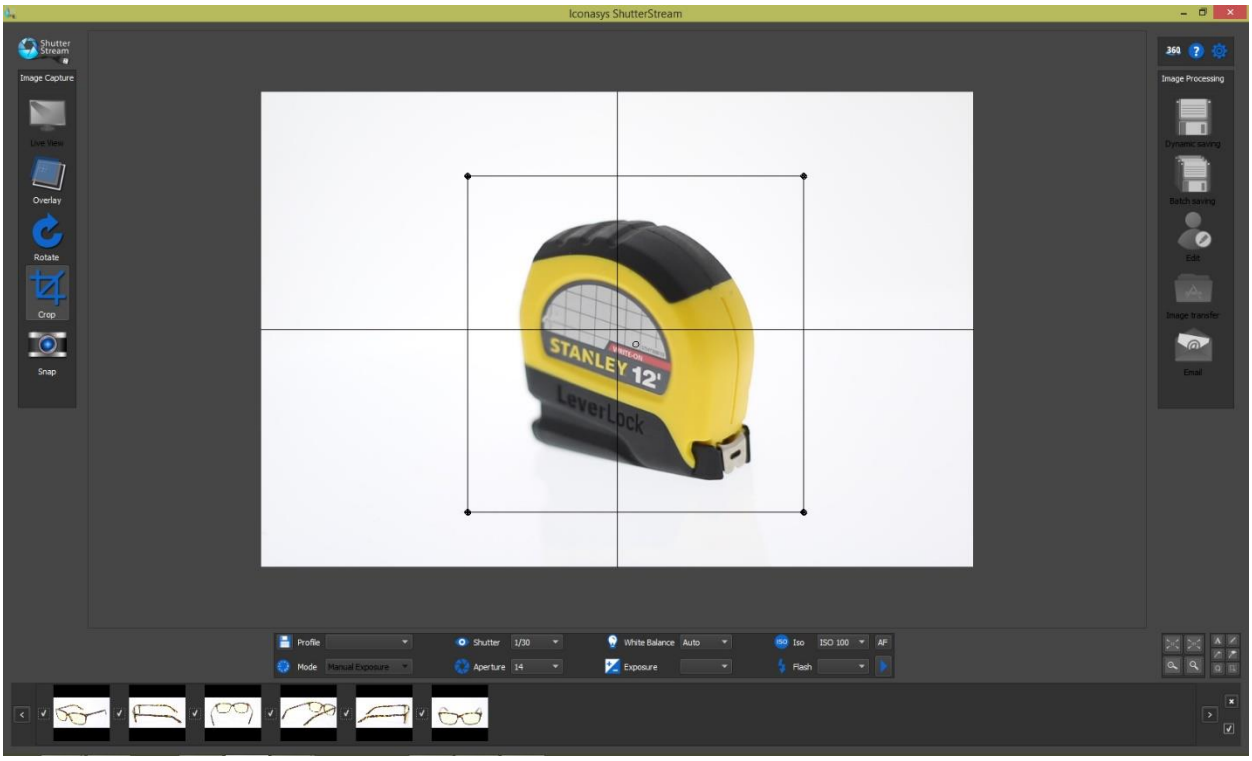
production however, in Shutter Stream, crop can instantly be applied to images as they are captured (Crop cannot be applied to RAW image format). In addition, users can define the Crop shape in a specific ratio (Square or Custom Ratio) if required. For example, if images are required at 800 x 500 pixels, users would want to select Pre-Crop in an 8 x 5 ratio.



Setting Crop: While in Live View mode, users can enable the 'Crop' by left clicking on the 'Crop' button then simply click and drag the mouse cursor over the subject in the 'Live View Window'.

Adjusting Crop: Drag and adjust from the bottom right corner. To get rid of a 'Crop', simply single click on the 'Live View' window outside of the crop. To move 'Crop' in current size and shape, left click and hold while inside crop and move accordingly to desired position. See Options area -> Crop Options to define Crop Ratio.

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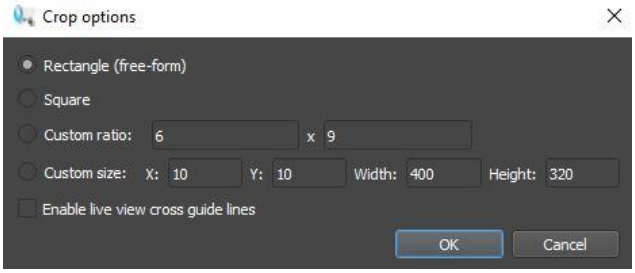
Saving Crop: Users can save a 'Crop' profiles to ensure for consistencies. To do so, please define 'Crop' in the Live View Window' and when set to desired location and size, right click on the 'Crop' button then select 'Save'. User will then define a name for the saved 'Crop' profile.

Loading a Previously Saved Crop: Right click on the 'Crop' button then click 'Load'. This will allow users to select a previously saved 'Crop'.

Removing a Previously Saved Crop: Right click on the 'Crop' button then click 'Remove'. Select the 'Crop' Profile you wish to remove then click 'OK'.

Crop Options: See Options area (blue gear wheel in top right of UI) -> Crop Options

Define Crop Ratio: Users can choose to define 'Crop' in a 'Rectangle', 'Square' or 'Custom ratio'. If defining crop in a **Custom Ratio**, please define the ratio (width by height) using the lowest common denominator (ex. if required at 800 x 500 use 8 x 5).



Custom Size: Users can define crop location by 'X' and 'Y'-axis in the Live View window. The 'Width' and 'Height' options define the crop size in pixels on the live view.

Enable live view cross guide lines: This option, when enabled, will place cross hair grid lines in the Crop area.

Snap (video) - The 'Snap' feature will send a command to the camera through USB to capture the image. Camera MUST be set to JPG or RAW+JPG shooting mode as JPG images, when captured, are converted to TIFF image format then displayed in the 'Thumbnail Viewing Gallery.'

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Capturing an Image: **Left Click** the 'Snap' button. The captured image is instantly captured and uploaded the Shutter Stream program within seconds for viewing, editing, processing, exporting, emailing and/or FTP'ing.

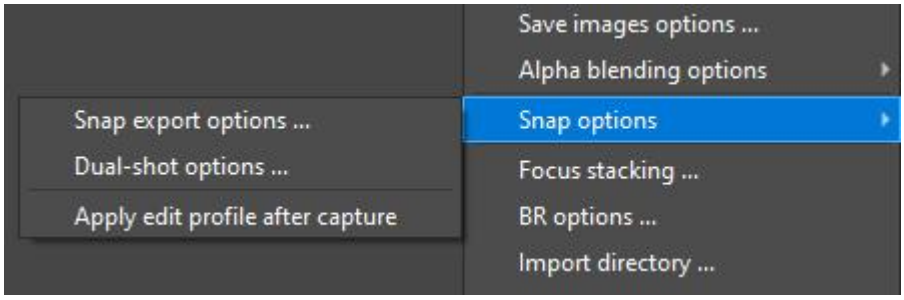
Right Click Snap Options:

Image Capture with Focus Stacking: Right click the 'Snap' button and select option 'Image Capture with Focus Stacking' (see Focus Stacking for more info options area). See this video communicating workflow and Options area in the user guide for parameter descriptions.

Image Capture with Multi Cameras: If using multiple cameras, users can toggle from one to another in the 'Options' area by selecting 'Reconnect to Camera' then selecting the available camera from the drop down menu.

Image Capture with Dual-Shot: This will enable Dual-Shot mode for using the Grey Mask Background Removal mode in the editing tools (see Grey Mask Background Removal for more info).

Options (blue gear wheel top right of UI) **-> Snap Options**



Snap Export Options: Enabling Instant Export will allow users to automatically export images after capture.

Dual Shot Options: Users are able to define Shot 1 and Shot 2 camera settings profiles when using the Dual Shot shooting method.

Apply Edit Profile: Users can automatically apply an editing profile to an image after capture.

Camera Setting Window (video) – Please ensure you have followed all instructions from the compatible camera set up guide for your specific camera using this link.

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Users have the ability to adjust camera settings through mouse clicks in the ‘Camera Settings Taskbar’ while in Live View. Simply left click the drop down to select a new value or setting.

Saving Camera Settings – After users have defined camera exposure settings (Shutter Speed, Aperture, White Balance & Sensitization) these can be ‘Saved’ these directly in the software. If lighting will remain consistent, it should be a consideration to pre-define different Profiles based on object colors. For ex. Light Objects, Dark Object, Yellow Objects etc.. In addition, this allows the software to retain the knowledge of correct camera settings so after initial set up, users of any skill level can create high quality images.

To save a ‘Camera Settings Profile’, users will left click the Disk icon in the top left of the Camera Settings Taskbar and this will bring up the Save Camera Settings UI. Users will then adjust camera settings if required, and click the ‘Save’ button. Next, the user will be prompted to add a Profile Name. After entering a name and clicking ‘OK’, the Camera Profile is saved. Users can access this Profile in the ‘Profile’ Drop Down menu.

To delete a previously saved Camera Settings Profile, simply click the Profile from the drop down in the Save Camera Settings UI and click the ‘Delete’ button. This will remove the Profile from the Shutter Stream program.

If using the Dual Shot Shooting Mode, users will set and save two separate camera setting profiles (at different exposures) .

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Camera Mode – This simply tells the user what Camera Mode the camera is set to. This reflects the physical setting that is set on the camera. It is not adjustable through the software but rather manually on the cameras Shooting Mode Dial. Please be sure Camera is physically set to 'Manual' Exposure mode.

Shutter Speed – **'**Shutter Speed' is the length of time a camera's shutter is open (defined in seconds) when capturing an image. The slower the Shutter Speed, the brighter the resulting image.

Aperture – **'**Aperture' is the opening through which light travels to the cameras sensor. The smaller the Aperture value, the bigger the opening and the brighter the resulting image. This setting is responsible for the depth of focus of a resulting image. The higher the aperture value, the greater the focal depth however can result in poorer image quality. Pending the type of products being shot and lens being used, we typically suggest an aperture value between 10 and 18.

White Balance – **'**White Balance' adjusts the intensity of colors in a resulting image. Ideally, users wish to match the light balance pre-set with their type of lighting. Users who are unsure of their lighting type should use 'Auto White Balance' as this will typically do a great job and automatically compensate for the lighting type being used. Users can also manually set a custom white balance (please refer to the cameras User Guide for instructions) for their own lighting – then select the Manual or Preset option in the drop down after set.

Exposure – **'**Exposure' is only an option with Nikon DSLR cameras and simply allows Nikon users to adjust 'Live View' brightness and darkness (this however does not affect the resulting image exposure when image is captured).

Sensitization – 'Sensitization' is another tool that is used to adjust exposure. This feature is designed for shooting in low light environments when not using a tripod. It is suggested to use a Sensitization value of 100 – this will help yield the best quality results.

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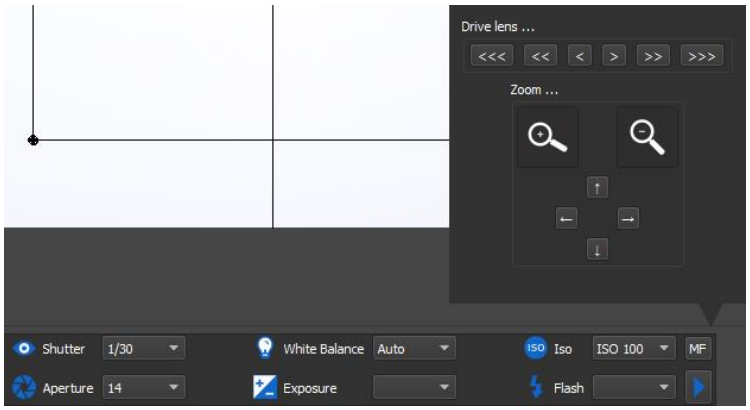
Flash – 'Flash' is the camera's Flash – this has to be enabled manually on the camera. It is not suggested to use the cameras pop up Flash as it is a harsh light that can hinder image quality. In addition, Live View exposure simulation will not work while Flash is enabled (Canon cameras).

Focus Adjustments (video):

Auto Focus – While in 'Auto Focus' mode, the camera will use the built in Auto Focus feature to capture images. By left clicking on the 'AF' button in the top right of the Camera Settings Taskbar it will allow users to toggle to the Manual focus mode.

Manual Focus – 'Manual Focus' will allow users to adjust the camera's focal point through mouse clicks. While in 'MF' mode, users can hover the mouse over the 'MF' button and the focal point adjustment window will pop out. The buttons are defined by near/far and focal length adjustment - <<<|>>> large increment, <<|>> medium increment, <|> fine increment. The focal point that is set is automatically fixed and applied to the image being captured. The magnifier tool '+' and '-'allow users to view 1:1 or full screen on the image being captured. The left, right, up and down arrows under the magnifier icons will allow users to adjust the 1:1 viewing area. The location of the 1:1 view will be defined by a blinking circle on the live view window.

After setting a focal point manually, this will be retained from shot to shot until adjusted (if need be).



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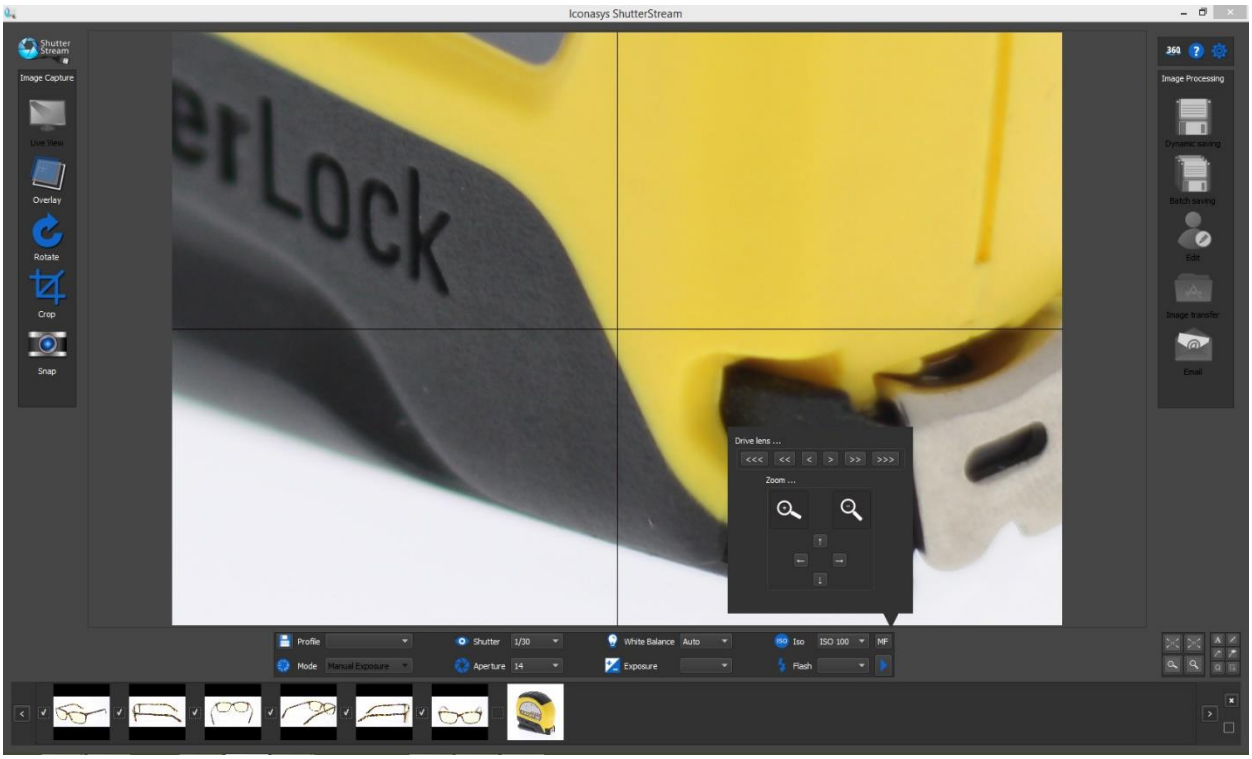

Viewing Gallery & Tools (**video**) - The 'Thumbnail Viewing Gallery' displays all images that have been previously captured into the Shutter Stream program.

Keyboard Shortcuts for Viewing Tools: Please see here for all Keyboard Shortcuts.

Viewing an Image: Left click on the thumbnail to view the image in large size in the 'Image Viewing Window'. The image number in the row will be defined in the top right corner of the 'Thumbnail Viewing Gallery' followed by the total number of images. For ex. 19/34 means image 19 is selected and there is 34 total images in the gallery. The total number of images selected is also displayed in the bottom left corner of the Thumbnail Gallery Window.

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Selecting an Image(s): Left click the small circle to the left of the image. Once selected it will be noted by a ● in the circle.

Batch Select a Set of Images: Select the first image, hold ‘shift’ then select the last image in the set – this will select all images in between.

Select All images: Click the check box in the bottom right corner of the Thumbnail Gallery Window.

Duplicate an Image: Select the image you wish to duplicate then use keyboard:
Windows: CTRL + n
Mac: Command + n

After selecting an image(s), users can use the Image Processing tools to process and output images.

*Users can also define to have their images auto selected after capture in the Options area –> Live View Options -> enable ‘Auto select after capture’

Scroll Left/Right – The scroll buttons on the left and right of the ‘Thumbnail Viewing Gallery’ allows users to scroll through all images. Simply left click to scroll (or left click and hold to scroll continuously). Users can also use Keyboard shortcuts left and right arrows to scroll through ‘Thumbnail Gallery’.

Delete – The ‘Delete’ button in the top right corner of the ‘Thumbnail Viewing Gallery’ will delete any selected images (denoted by checkbox). Select images you wish to delete then left click the ‘Delete’ button to remove images permanently from the program.
The ‘Delete’ button can also be used to delete an existing row. If you have added multiple rows in the ‘Thumbnail Gallery’ and wish to remove a row, first remove all images from that row, then click the ‘Delete’ button on the empty row to remove the row.

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Multi-Row Thumbnail Gallery – Users have the ability to add additional rows to the 'Thumbnail Gallery'. This can be used to help with file management. First, in the Options area, under 'Thumbnail Options' users will need to ensure 'Disable Multi Row' is unchecked. To add an additional Row, right-click on the Thumbnail gallery and select 'Add new row'. Users will be required to provide a name for this row.

If using this feature, users can scroll up and down to view these different thumbnail gallery rows. Multiple rows are denoted by the bottom number displayed (in the case of this example 2/2 means viewing row 2 of 2 total rows). Use the up and down arrows to navigate between different rows. Alternatively, right-click on the thumbnail gallery and select the Row (by name) that you wish to view.

EXIF MetaData (**video**) – Users can choose to display EXIF MetaData on the image while in the 'Image Viewing Window'. This can be set in the 'Options' area under 'Show Image EXIF'. Note, EXIF MetaData is stripped after image processing (for ex. pre-crop an image or edit an image).

Displaying Alpha Channel (transparent background) – Should users edit and remove background from their images, these can be displayed with the Alpha Channel. To do so, select 'Options' then in the dropdown choose 'Alpha Blending Options' then check 'Use Chessboard Pattern':

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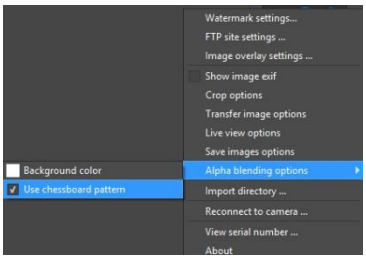
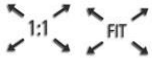


Displaying Alpha Channel – Background Color – The background color option sets the default background color to be used when outputting images. The Background Color will be applied to any JPG format images that have had their backgrounds removed in the image editing area.

Viewing Tools – These tools are designed specifically for viewing images in the 'Image Viewing Window'.



1:1 Viewing / Fit to Screen – These will allow users to view their images at 1:1 or fit to screen in the 'Image Viewing Window'. Simply left click to view 1:1 or fit to screen.

Zoom In/Zoom Out – Allows users to 'Zoom In' and 'Zoom Out' on the selected image in the 'Image Viewing Window'. Simply left click on either button to Zoom In/Out.

Annotation Tools (video)

Adjusting Annotation Properties

By right clicking on any of the 'Annotation Tools' and selecting 'Properties', users are able to adjust the individual annotation tool's size, color or font.

Annotate – Users have the ability to instantly add text to an image by left clicking on the 'Annotate' button, clicking where they wish to enter the text on the image in the 'Image Viewing Window' then typing.

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Pen – Users have the ability to freehand draw on an image by left clicking on the ‘Pen’ tool then clicking and dragging on the image in the ‘Image Viewing Window’.

Line – Users have the ability to draw a straight line on an image by left clicking on the ‘Line’ tool then clicking and dragging on the image in the Image Viewing Window’.

Arrow – Users have the ability to draw an arrow on an image by left clicking on the ‘Arrow’ tool then clicking and dragging on the image in the ‘Image Viewing Window’.

Circle – Users have the ability to draw a circle on an image by left clicking on the ‘Circle’ tool then clicking and dragging on the image in the ‘Image Viewing Window’.

Square – Users have the ability to draw a square on an image by left clicking on the ‘Square’ tool then clicking and dragging on the image in the ‘Image Viewing Window’.

Image Processing Tools

Dynamic Saving (video) - Users have the ability to save a single or multiple images from the thumbnail viewing gallery multiple times in different formats (JPG, PNG, RAW & TIFF), different size (pixels wide OR tall), Resolutions (72, 150 or 300 DPI), while having the option to apply a Watermark, an Editing Profile and also save to an FTP site. An example of a real world scenario is a business that has different use cases for each image they create. For instance, a user has shot 3 images of a single product – a top, a front and a side view. They wish to save this set of images for their print catalog (300 DPI .TIFF image at 1000 pixels wide and also for their website at 3 different sizes (thumbnail, product page and large view) - 150,

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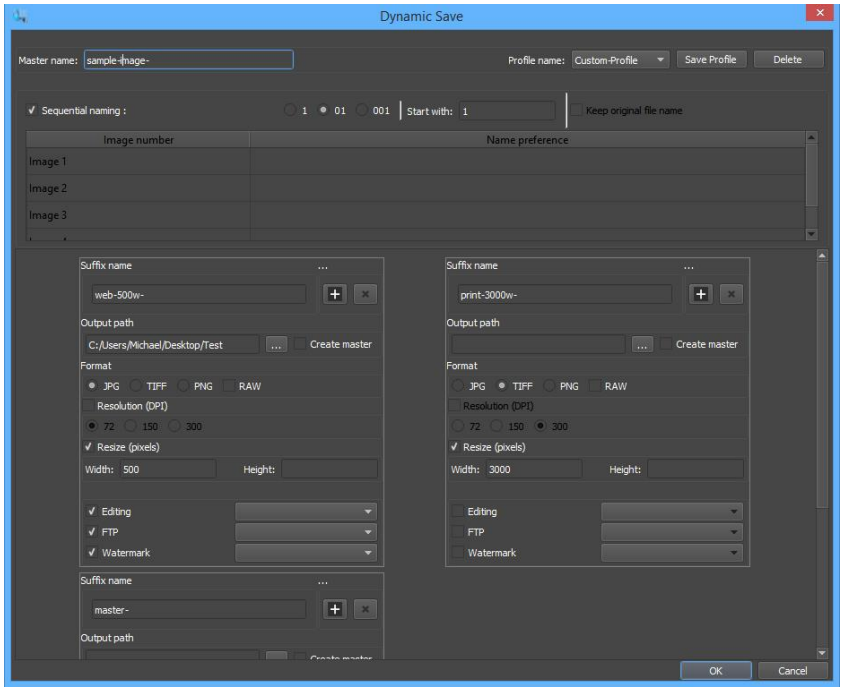
500 and 1000 pixels wide at 72 DPI. Using the ‘Dynamic Save’ tool, they can create a custom save profile that includes these 4 different save types and in one click the 3 images will each be saved 4 different times exactly as required for their applications.



Dynamic Save UI Overview

Image Naming:

Master Name: This is a mandatory field and will be at the start of the image name.

Suffix Name: This is an optional field and can be used as a unique identifier for the individual save type. This name will go after the Master name.

Sequential Naming: This is designed for users who are saving a set of images in the ‘Dynamic Save’ tool. Users have the option to name images sequentially by clicking the check box then selecting their numerical preference 1, 01 or 001 .

The **name** of the resulting images (assuming we are saving a set of 3 images) is as follows:

sample-image-web-500w-01.jpg

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sample-image-web-500w-02.jpg
sample-image-web-500w-03.jpg
Start with: Users can override sequential naming starting with 1 by entering a different number in this placeholder

.
This would then result in naming as follows for the previous example:
sample-image-web-500w-04.jpg
sample-image-web-500w-05.jpg
sample-image-web-500w-06.jpg
Keep Original File Name: Users can choose to retain original filenames provided by the camera.
Variable Naming: Users can enter these variables to auto name images being saved:
[day] – will enter the current date
[month] – will enter the current month
[year] – will enter the current year
For example, if today is the 22nd, and I enter into the Master Filename field: day-iconasys, the filename will be 22-iconasys.jpg

If users wish to provide a custom name for each individual image in the set, they can do so by unchecking the 'x' box next to sequential naming. This will enable the custom name fields below. In this example, we are saving a set of 3 images of the same product – a front, top and side view. We can specify so that instead of naming these numerically (01, 02, 03) they are now named as front, top, side.

The **name** of the resulting images is as follows:
sample-image-web-500w-front.jpg
sample-image-web-500w-top.jpg
sample-image-web-500w-side.jpg

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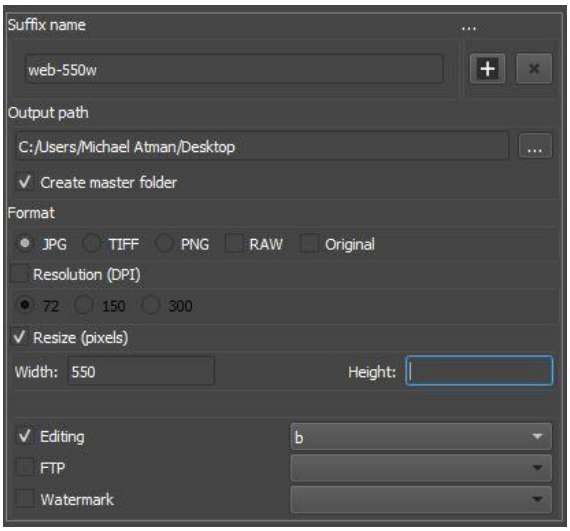
Individual 'Save Types':

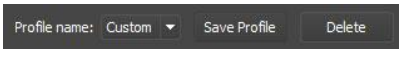


Users have the ability to save an image or set of images multiple different times.

To add an additional 'Save Type' users simply **click** the '+' icon to the right of the 'Suffix Name' field. To delete an additional 'Save Type' users click the 'x' icon.
Output path defines where the image(s) will save.
Format defines image format (JPG, RAW, TIFF, PNG). Both TIFF and PNG images will retain transparent background properties (if background had been removed).
Original will output the original, unedited image(s).
Resolution specifies pixels per inch (72, 150 or 300) – if not checked, this will default to the cameras pre-set resolution.
Resize allows users to resize image(s) by defining pixel width or height.
Create master will create a master folder using the 'Master' name.

Users can also chose to auto apply a previously saved **Editing** Profile and/or transfer images to their **FTP** site and/or add a previously saved **Watermark** by **clicking** the 'x' box and selecting a profile option in the drop down.

Creating & Saving a Dynamic Save Profile:
Users can create and save multiple 'Dynamic Save Profiles'. To create a profile simply add as many 'Individual Save Types' as required – while defining suffix name (optional field), output path, format, resolution (optional), image size (optional), editing profile (optional), transfer to an FTP site (optional) and/or apply a watermark (optional). After the profile has been created, user will click the 'Save Profile' button, enter in a name, then click 'OK'. This will retain all information so it can be accessed the next time the user wishes to save with the same profile.



Saving Images using the Dynamic Save Tool: After users have defined the 'Master Name' and the 'Individual Save Types', simply click the 'OK' button in the bottom right of the 'Dynamic Save UI'.

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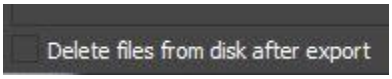
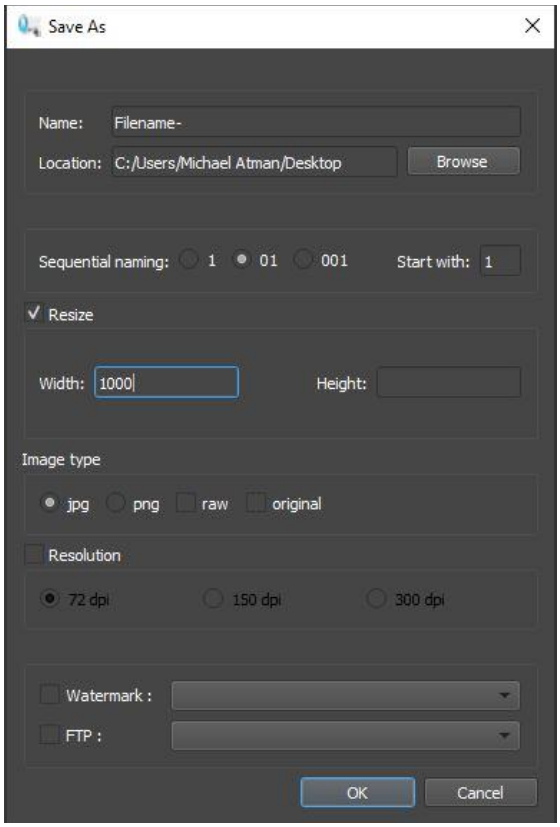
Delete files from disk after export: With this option enabled, images can be auto-deleted from the software after output.



Batch Saving (video) - Multiple product images can be saved with one click to a specific directory (local or network). Included in the 'Batch Save' feature is batch image resizing, resolution adjustment (web or print) renaming and watermarking. The Batch Saving Tool always outputs image as JPG format. Should user require a different image format (PNG, TIFF or RAW), please revert to 'Dynamic Saving' tool.

Name: The field which the user will enter the desired image name.
Location: This will be the Save To Directory. Users can change this by clicking the 'Browse' button to the right and locating/selecting the desired output folder.
Sequential Naming: Multiple images will be named sequentially in a numerical format. Users can define their numerical preference - 1, 01 or 001.
Resize: To enable resizing, **click** the 'x' box to the left of Resize text then specify a pixel width or height.
Image Type: Choose from either JPG, PNG or RAW format. Users can also choose to output Original – this will be the original unedited image(s) in JPG format.
Resolution: To enable resolution, **click** the 'x' box to the left of Resolution text then specify a DPI.



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Users can also chose to auto apply a previously saved **Editing** Profile and/or transfer images to their **FTP** site and/or add a previously saved **Watermark** by **clicking** the 'x' box and selecting a profile option in the drop down.

Edit (video) – 'Edit' will allow users to make edits to a single or multiple images to enhance image quality, remove backgrounds, color correct and other features to achieve desired quality. There is a wide range of tools available that can help users achieve better quality results.

Editing UI Overview

Shutter Stream Software includes a vast image editing suite that includes an array of tools. Editing features and functionality can be divided into 3 parts: Basic Image Editing, Background Removal Tools and Image Orientation Tools.

See Keyboard Shortcuts available in the Editing window here.
Examples.
Ctrl + Mouse Wheel Zoom in/out allows users to zoom in on image in preview

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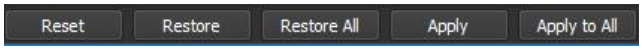
windows
L: Selects ‘Lasso’ tool

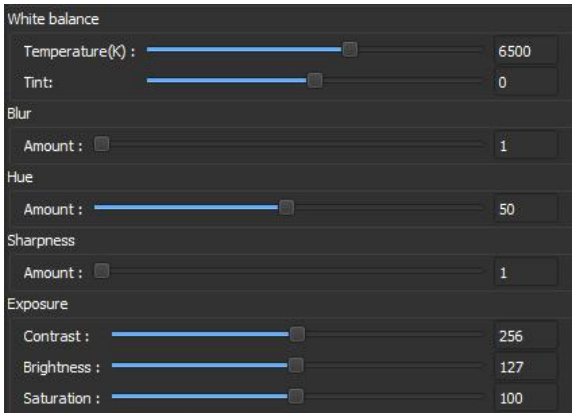
Basic Image Editing Tools:

To ‘Edit’ images, users will simply make adjustments using the available tools. As changes are made, the ‘Editing Preview Window’ will pop out and show edits in real-time. After these changes are reflected on the master, high resolution image, the ‘Editing Preview Window’ will go away. Editing changes are not formally applied to the image until the user clicks:
Apply: make the changes to a single image
Apply to All: make changes to all images in Editing Window Thumbnail Gallery
Reset: can be used to revert images back to original if the edits have not been applied
Restore: Revert a single image to its original state (after edits have been applied)
Restore All: Revert all images back to their original state (after edits have been applied)
*Important: Users are unable to restore images if edits have been applied and have exited the editing area).



Editing Features Overview: Users will **click and drag** slide bar to make editing adjustments

White Balance: Temperature (K):
Adjustment to the color temperature of the image. Affects the overall tone of the photo by making it appear warmer (more red tongs) or cooler (more blue tones). Users can also adjust white balance using the Eyedropper tool drop down, then manually selecting the white point.
Tint: Used to fix color contrast
Blur: Adjustment to add blur to the entire image.



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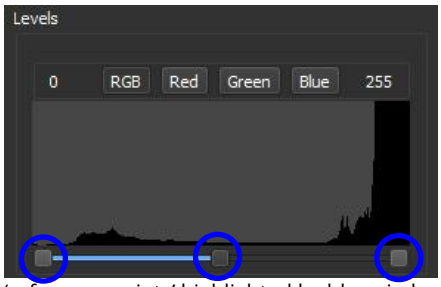
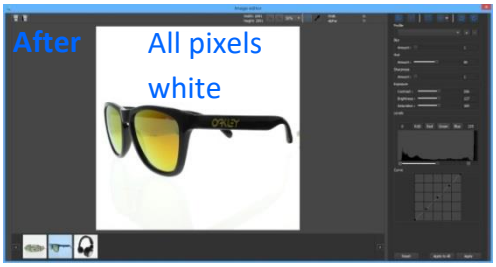
Hue: Adjusts the main color properties/vividness of an image.
Sharpness: Adjust how clear the image looks.
Contrast: Adjust the separation between the darkest and brightest areas of an image (typically shadows and highlights).
Brightness: Adjust an images brightness intensity.
Saturation: Adjust the separation between colors.

Levels: The graphic with the mountain looking shapes is called the Histogram - this describes the color values in the selected image. The left side is the very dark (black) colors in the image, on the right the very bright (white) colors in the image. The higher the mountain – the more a specific color is in the image. To adjust levels value, users will see three 'reference points' immediately below the histogram that are adjustable by clicking and dragging (or by double clicking on the reference point and entering a value). For instance, if we have an image with a grey background and wish to change that to white, we will drag the right reference point to the left – this will turn all colors to the right of the repositioned reference point white.



'reference points' highlighted by blue circles



Users can also 'Select a white point' or 'Select a black point'. These tools will help set all pixels beyond the selected pixel value (using eye dropper) to pure white or pure black. For example, if user selects a white point with a RGB Value of

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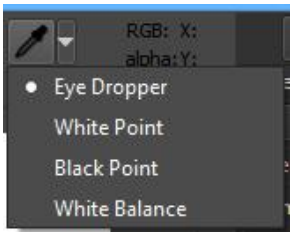
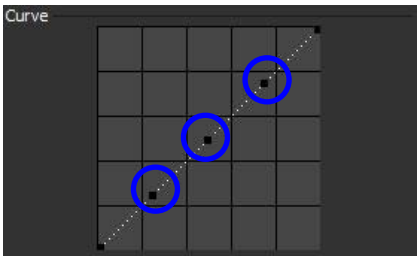
230,230,230, this will adjust all pixels with a value of 230,230,230 or greater to pure white (255,255,255). To 'Select a white point', select the eyedropper tool, then left click on the darkest white pixel to make other pixels. To 'Select a black point', right click on the lightest dark pixel.



Curves: This is a more advanced version of the Levels tool. The reference points are along a diagonal line. The Curves tool allows users to adjust 'reference points' throughout an image's tonal range by clicking and dragging. The top of the y-axis is white and the bottom is black. The right of the x-axis is white and the left is black.



Background Removal Tools:

Shutter Stream Software includes tools dedicated to removing backgrounds from images in the Shutter Stream Software. These allow users to remove product image background to a solid color (ex. white – this can be set in the Options area under 'Alpha Blending Color') OR to a transparent background (if output in PNG or TIFF format).These tools include:

Magic Wand Tool – which allows users to select a background color and automatically remove that color (within a defined tolerance) from the image *(page 45.*

Lasso Tool – which allows users to manually clip a product from the background or add parts of the image back in (*page 48)*.

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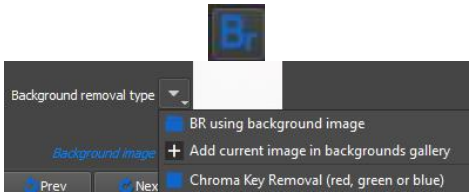
These background removal tools can be used in conjunction with each other if required. For ex. use ‘Magic Wand Tool’ to remove the background then use the ‘Lasso Tool’ to cut out the shadow under the product.

Automated Background Removal Tools – Denoted by the BR button, there is 3 automated background removal options:

1. BR Using Background Image *(page 30)*
2. Chroma Key Background Removal *(page 37)*
3. Dual Shot Background Removal *(page 39)*

BR (Background Removal) - 3 options:



BR Using Background Image (video): After shooting all product images, users are required to shoot a background only ‘Reference Image’ in which no variables (lighting, camera settings, focal point & zoom) have been adjusted.
This ‘Reference Image’ will be set as the Background Image. Step by step instructions as follows:

1. Enable ‘Live View’ mode then place an object in the field of view of the camera.
2. Adjust camera settings to optimize for lighting environment (if required).
3. Enable Crop and define Pre-Crop markers (if required) - that is the area that users wish to capture, around the subject.
4. Put camera into ‘Manual Focus’ mode to adjust (if required) and set a fixed focal point.

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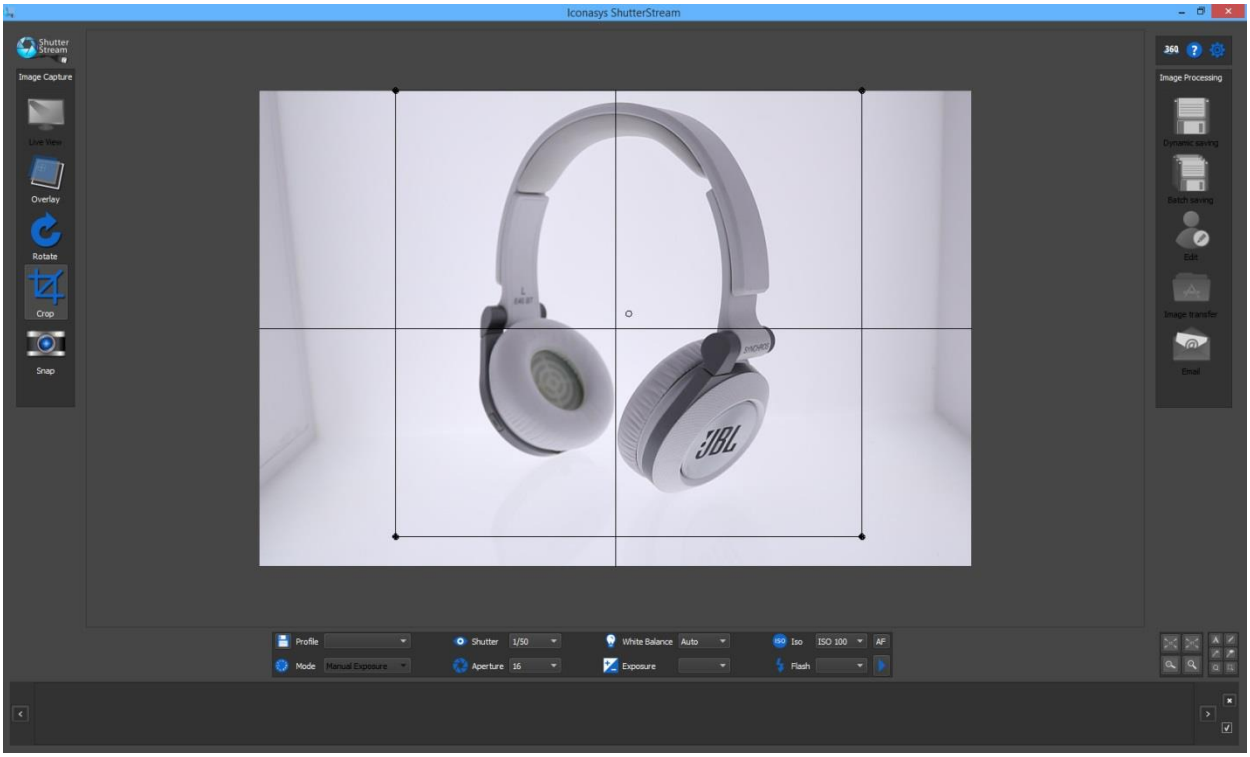

Figure A. 'Live View' mode enabled, Pre Cropped Subject

5. Capture image by clicking 'Snap' button in software – immediately after image is captured, this will be uploaded into the Shutter Stream application for viewing.

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Figure B. Captured image after clicking 'Snap'

6. Repeat steps 1 – 4 while not changing any variables (camera position, crop markers, camera settings, focal point and lighting must not change at all).

Figure C. Captured 4 product images with same crop, camera settings, focal point, camera position and lighting.

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7. After product images are captured, user will be required to shoot a ‘Reference Image’ – that is an image of just the background. All shooting variables must be maintained when capturing the reference (background only) image.

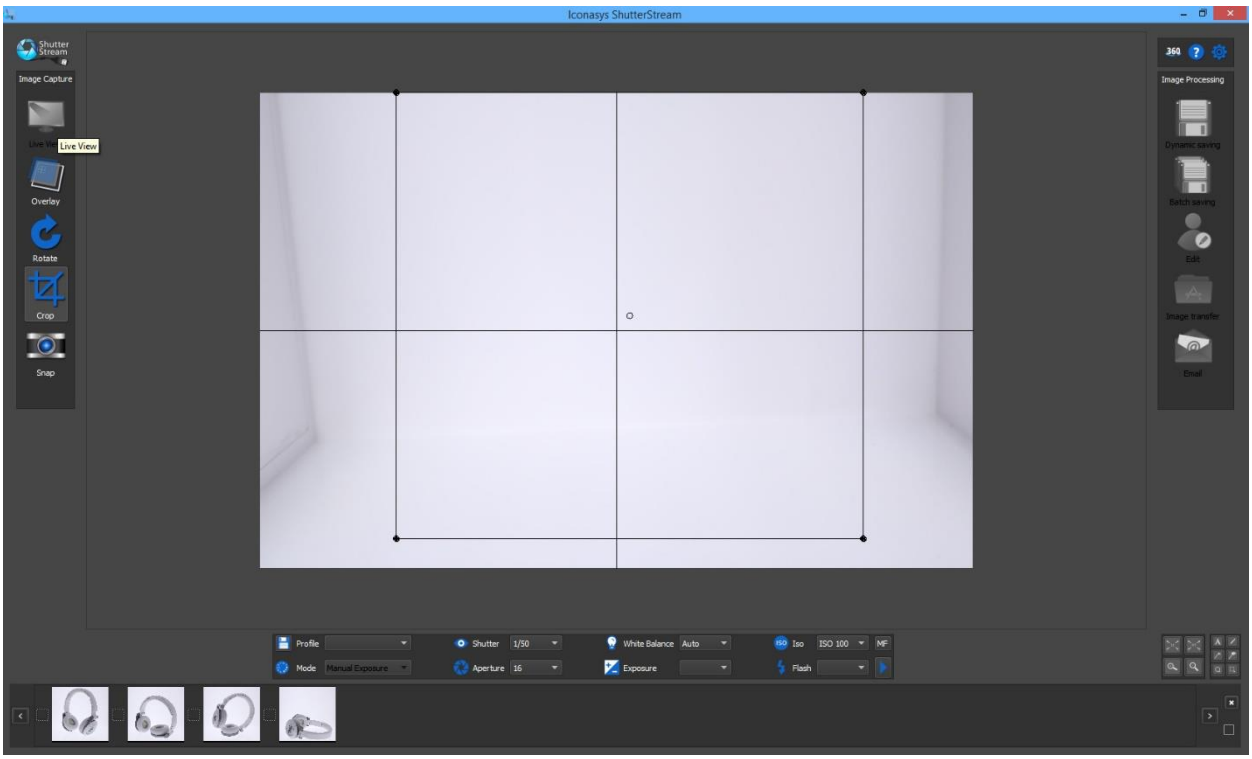

Figure D. Capturing Background Only image (Reference Image)

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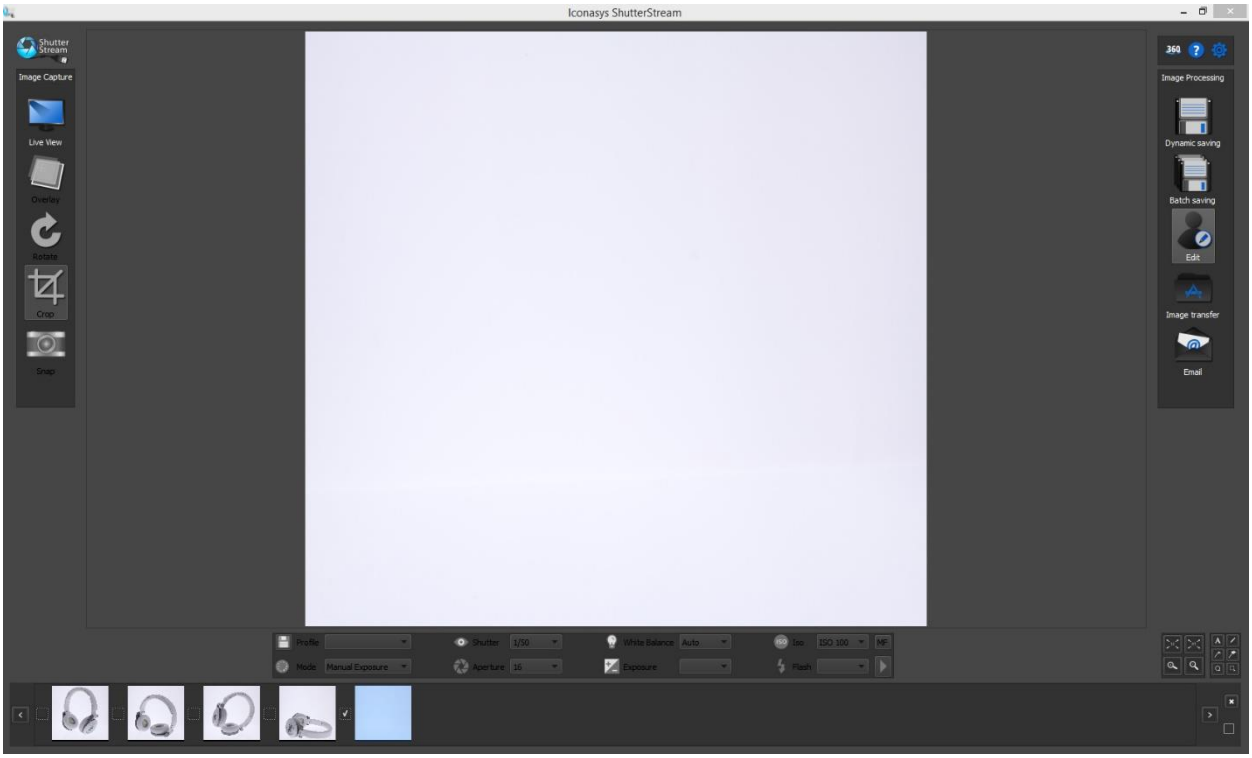

Figure E. Captured background only image – selected and ready to import into Editing area

8. Select and import the Background only 'Reference Image' into the BR area in the editing mode of Shutter Stream using 'Add current image to background gallery button'.

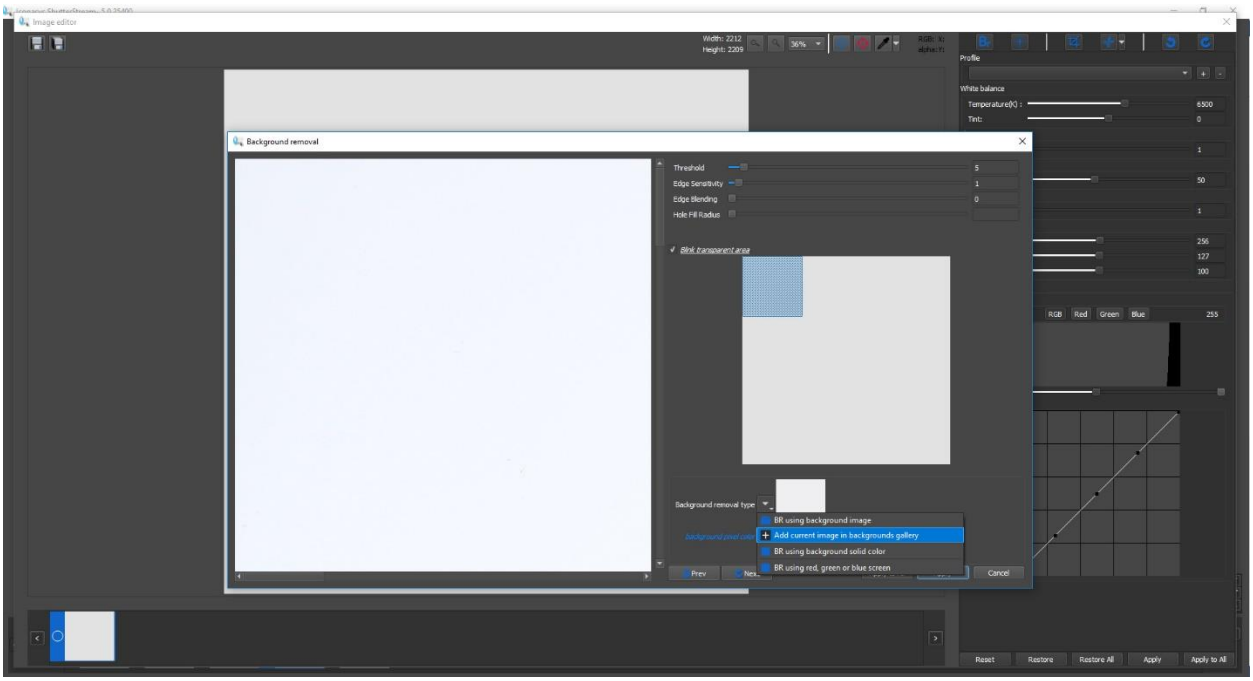

Figure F. Importing Reference Image (Background only) into BR tool

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9. After the Background Reference Image has been set, import the product images into the editing area.

Figure G. Imported product images into Editing Area

10. Select the ‘BR’ tool and adjust:

Mask Selection:

Constrain selection to clicked region: This option, when enabled (checked) will constrain the background removal to only pixels that are touching each other. If it is enabled, users will have to select a pixel location (prompted after selecting ‘Apply’ or ‘Apply to All’. Note, there is no real time preview for the constrain option.
Unconstrain selection: This will not constrain the selection and colors that are similar in the product vs. the background may be removed.

Edge Sensitivity: Defines the level of edge smoothing before applying the threshold. We suggest this between 0 and 7 (typically much closer to 0).

Threshold: This is used to adjust the amount the tool will remove colors that differ from the Reference Image. If the color of the product is similar to the background, you will want to use a lower number. If the product contrasts the background color

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well, you can use a higher number. For example if you are trying to remove shadows, you will want to use a higher number – however by increasing Threshold, it might eat into the product. Users will see flickering grey background – this denotes which part of the image is being removed. We typically suggest a value between 5 and 40.

Mask Processing:

Apply to new mask selection only: This will only apply the mask processing options to the current mask selection
Apply to entire mask: This will apply the mask processing options to the entire image

Hole Fill Radius: Fills in holes generated by larger threshold values in the BR tool. A note of warning though: if the tool is applied to objects that already have many holes, those holes may fill as well.

Speck Removal: This is the opposite of Hole Fill. Remove specks of foreground from the background.

Mask Grow Radius: This allows users to grow the mask selection area. It is defined in pixels.

Edge Blending: The sharpness of the transition between the foreground and the background. We suggest a value between 0 and 5 – typically closer to 0.

As changes are made, they will be reflected in real-time in the Background Removal Preview Window (areas of the image that will be removed will blink in grey if ‘Blink Transparent area’ option is checked). Users can adjust the 1:1 preview window using the viewfinder (shaded blue box) on the small preview to the right.

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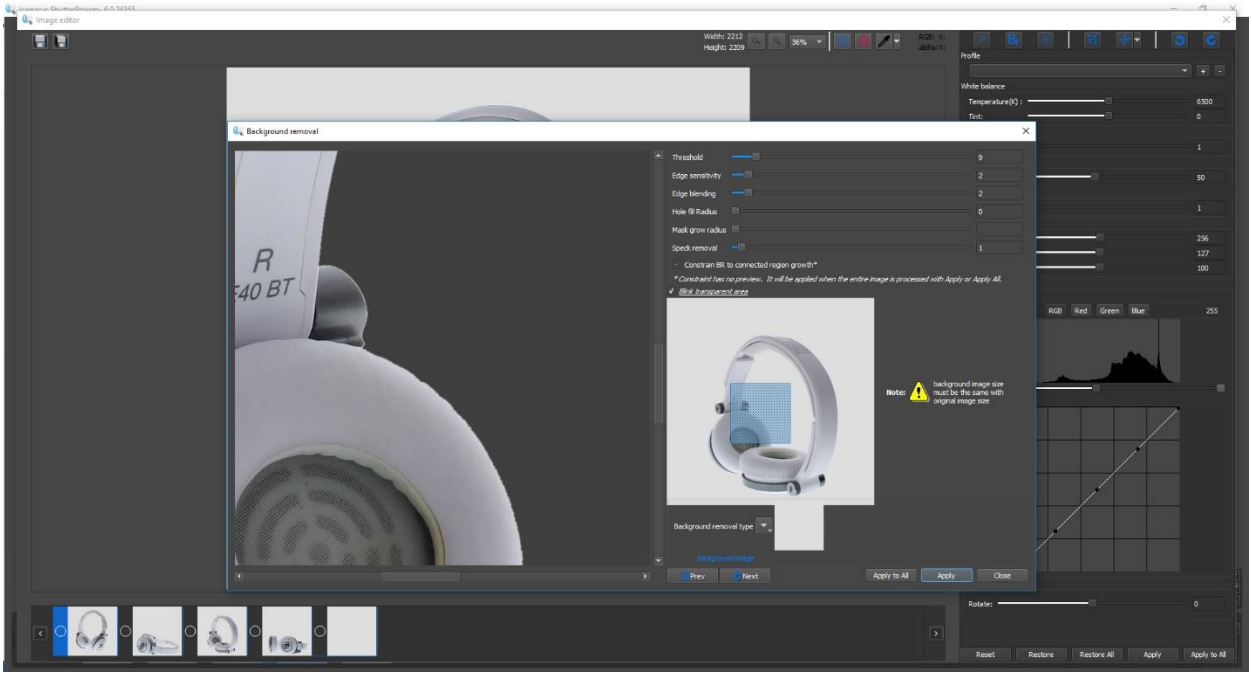

Figure H. Adjusting variables in Background Removal tool

11. Users then have the ability to Apply the Background Removal changes to a single (Apply button) or entire set of images (Apply to All button).

For the reference image to work flawlessly, it is important to ensure products are being shot under correct lighting conditions. To understand suggested lighting requirements, please see here

Chroma Key Removal (video): Similar to BR Using Solid Color, this option uses Chroma key colors (Red, Green or Blue):

1. Shoot on a Red, Green or Blue Background
2. Enable 'Live View' mode then place an object in the field of view of the camera.
3. Adjust camera settings to optimize for lighting environment (if required).
4. Enable Crop and define Pre-Crop markers (if required) - that is the area that users wish to capture, around the subject.
5. Capture image by clicking Snap button in software – immediately after image is captured, this will be uploaded into the Shutter Stream application for viewing.
6. Repeat steps 2 – 5 for shooting additional product images.

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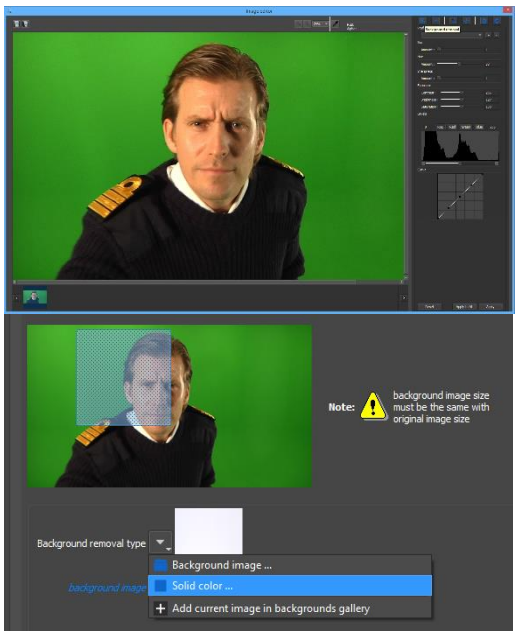
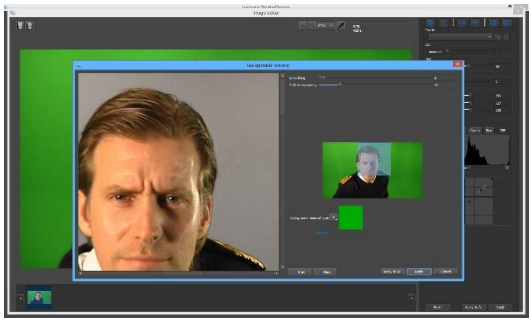
7. Import the product image(s) into the editing area, select the BR tool, then in the Background Removal window, under 'Background Removal Type' select 'Solid Color', then select the best shade of Red, Green or Blue to match product image(s) background.
8. Next, users will adjust:
   Smoothing: The higher the number, the smoother the edge definition.
   **Soft Transparency*: Will define the how much of the background is completely removed. The higher the number, the more background that is completely removed.
9. Adjust Mask Grow Radius (allows users to grow the mask selection area - defined in pixels) if required.
10. Users then have the ability to Apply the Background Removal changes to a single (Apply button) or entire set of images (Apply to All button).
11. If required, users can take advantage of the other editing tools (Lasso Tool, Levels, Curves, Brightness, Saturation, Contrast, Sharpness & Hue) to make additional edits and/or color corrections.





Soft transparency defined: Soft transparency controls the level of transparency based on the strength of the background color. By adjusting the transparency based on the strength of the background color the algorithm is able to more naturally introduce transparency around the edge of the object. Increasing the soft transparency threshold ignores subtle color changes more. This has the effect of making the background completely transparent. A lower value of soft transparency results in more semi-transparent backgrounds (versus fully transparent backgrounds) that look more natural. This effect can be easily noticed around strands of hair, smoke, fine details or transparent objects with a lot of color

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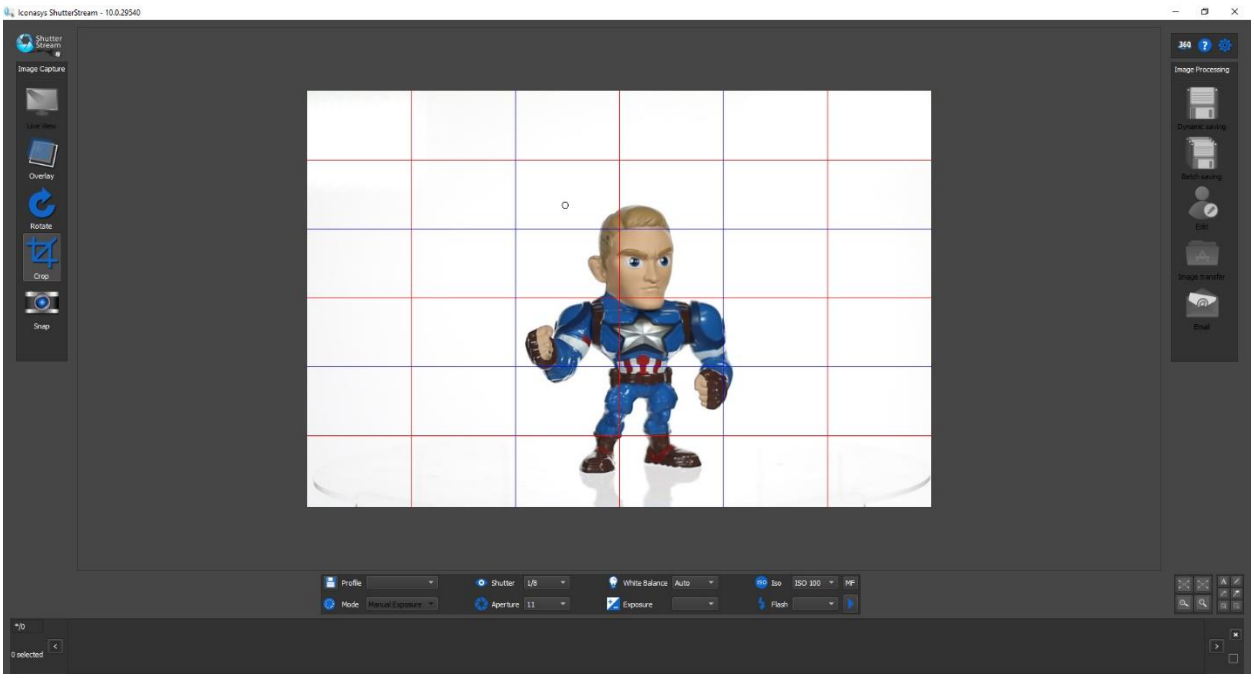
gradients. When the soft transparency is set to a low number, the fine details are maintained extremely well but the background is not fully transparent -- unless the pixels are exactly the color set for transparency. This creates a more natural look when replacing the background with another image or another color. When the soft threshold is set to a high number, the color transparency becomes more aggressive and more pixels become fully transparent at the cost of removing finer details and making the object look less natural and more threshold with fully transparent background pixels.

When using Chroma Key Background Removal it is best to set the background as far away from the object as possible so that the fine details of the background (i.e. material texture) are not in focus and they are out of the depth of field. This will allow users to use a lower soft transparency threshold, which will make the results look more natural.

Dual Shot Background Removal: The Dual Shot Background Removal Tool uses 2 images, shot at different exposure, and will attempt to remove backgrounds by analyzing both images.



Step 1: Enable Live View, adjust camera settings to correct exposure and save camera settings profile (ex. name it Correct-Exposure). Camera Settings Profiles can be saved using the blue disc icon in the top right of the camera settings window.

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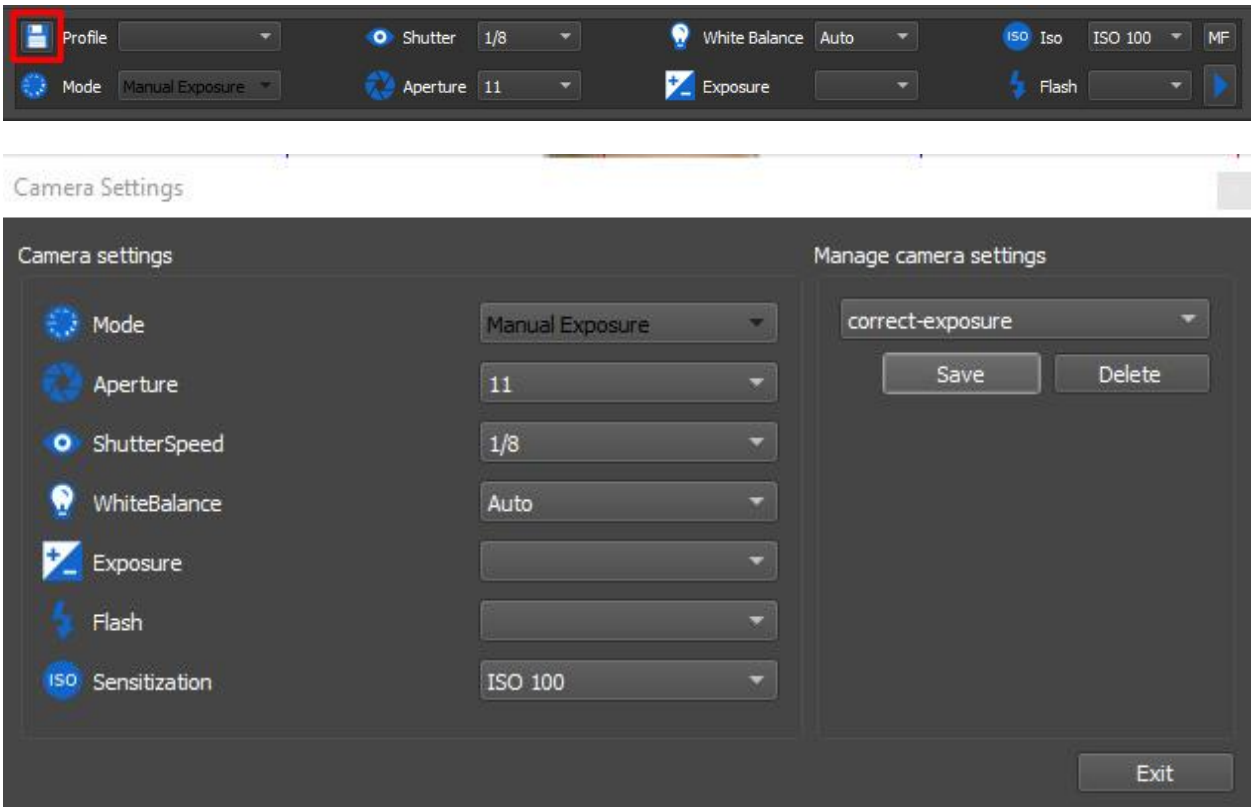

Step 2: While in Live View, adjust camera settings to an underexposed setting and save camera settings profile (ex. name it Underexposed). To adjust camera settings exposure, we suggest adjusting Shutter Speed.

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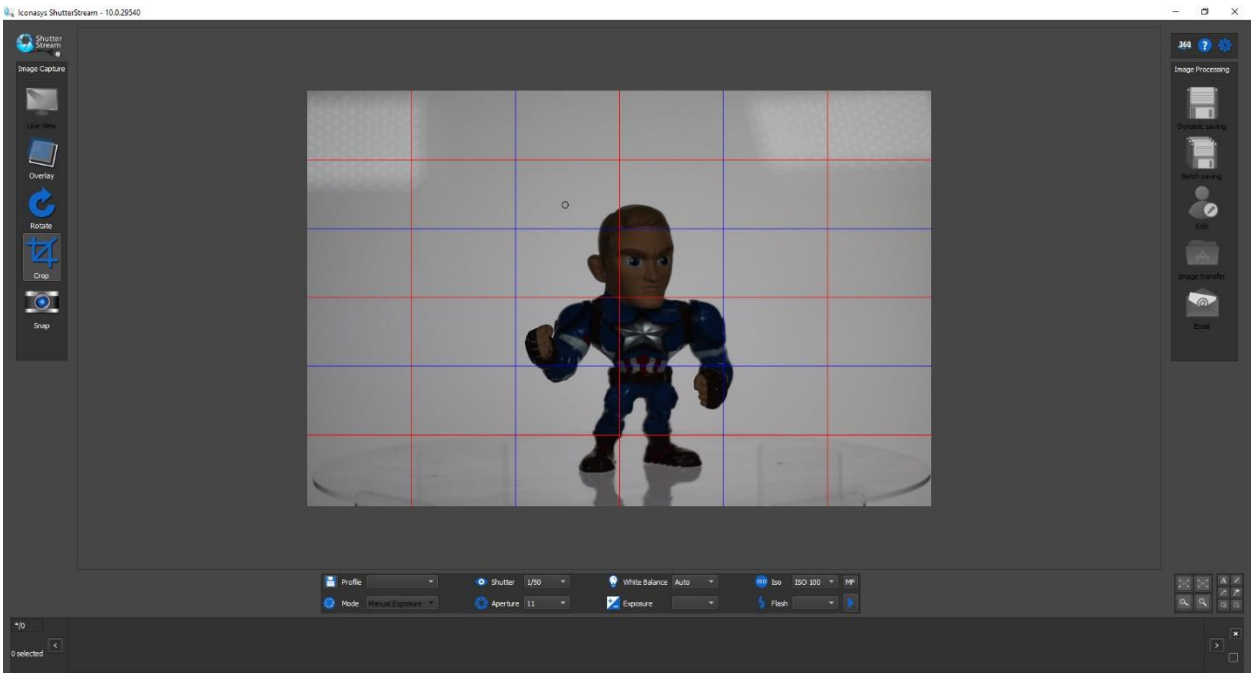
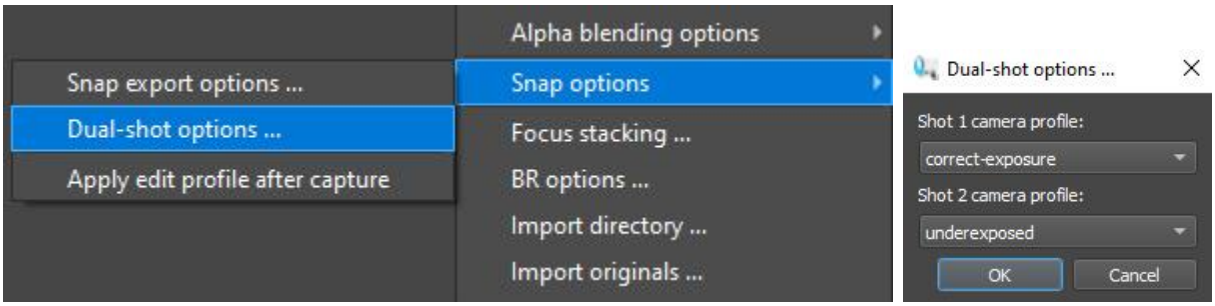
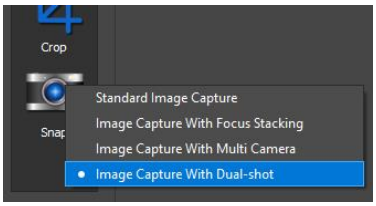


Step 3: Enter Options area, select ‘Snap Options’ then select ‘Dual Shot Options’ and select:
Shot 1 camera profile: Correct-Exposure
Shot 2 camera profile: Underexposed



Step 4: Enable Dual Shot Shooting Mode: Right click the ‘Snap’ icon under Image Capture Tools menu and select “Image Capture with Dual-Shot’



Step 5 (optional): Pre Crop Subject:

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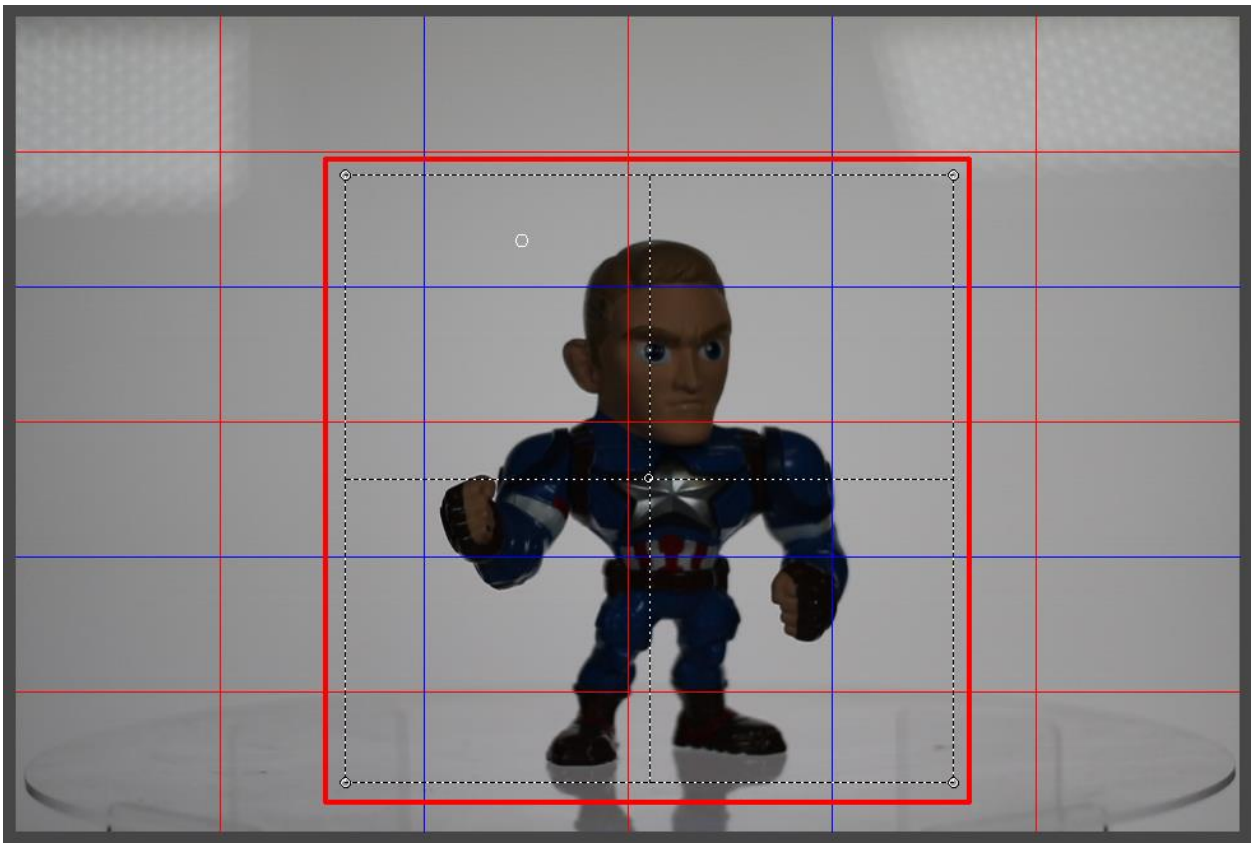
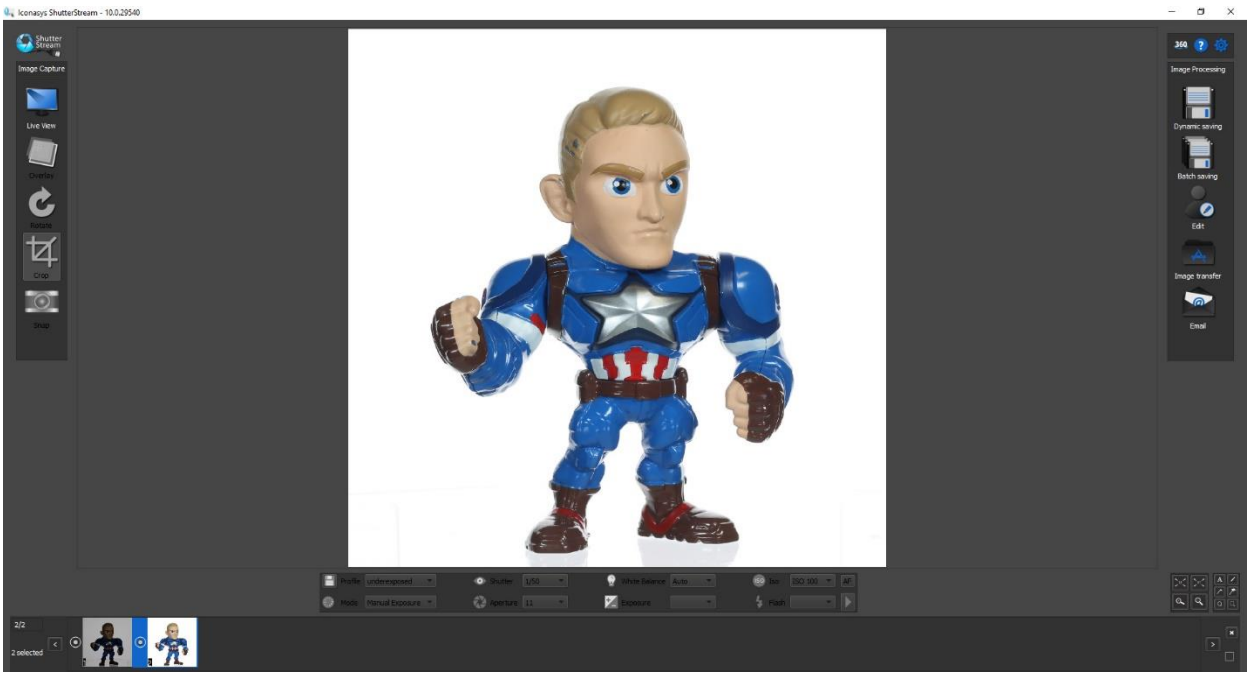


Step 6: Snap Image:



Step 7: Continue snapping images of product (if multiple angles required)

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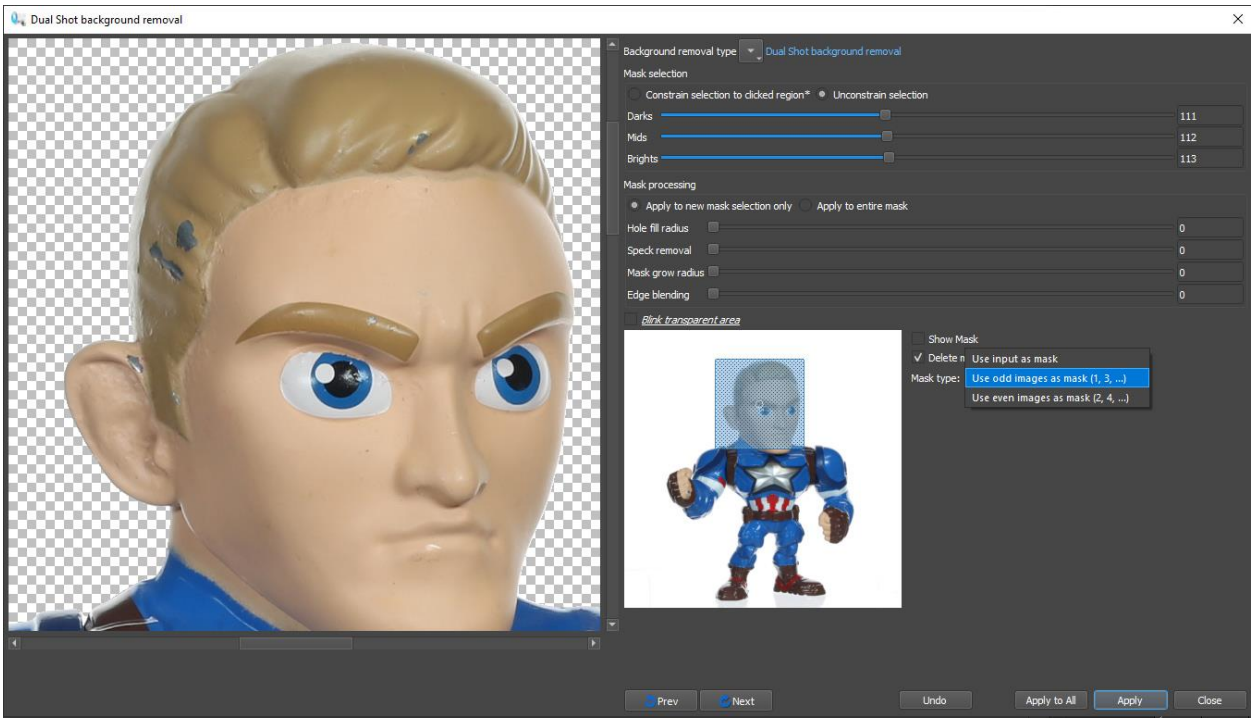
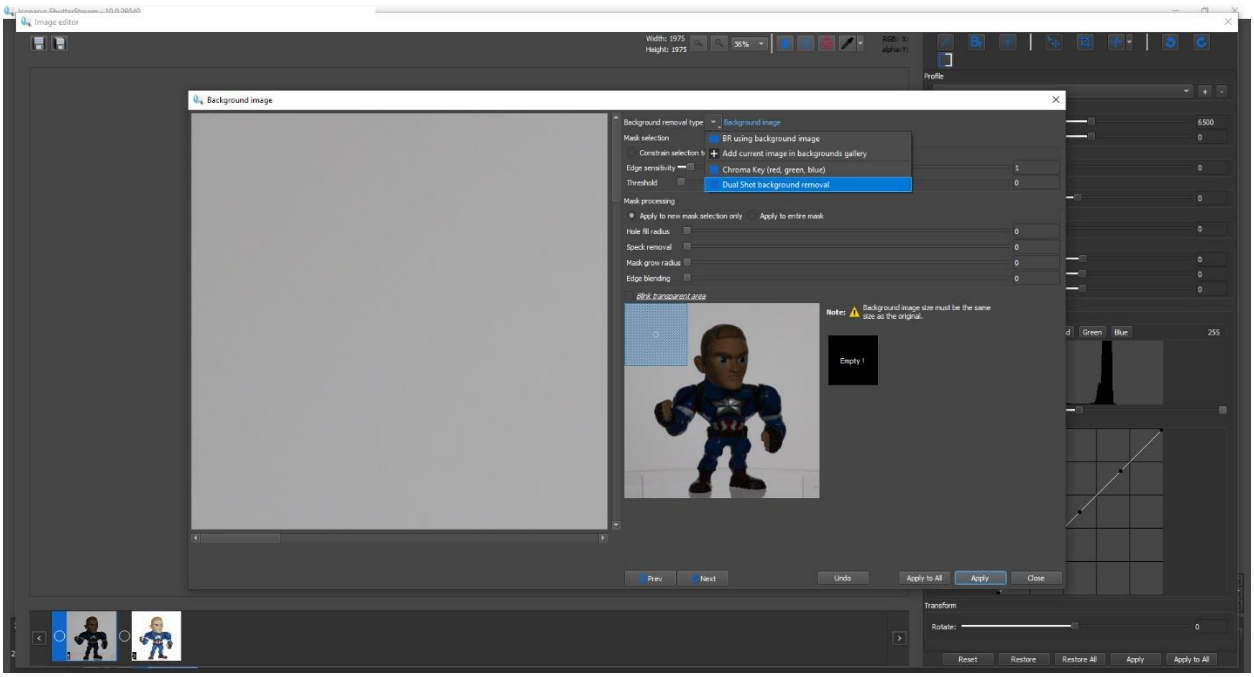
Step 8: Select Images and enter into the ‘Editing’ area

Step 9: Select Background Removal tool and select option ‘Dual Shot Background Removal’:



Step 10: Select Mask Type: ‘Use Odd Images as Mask’



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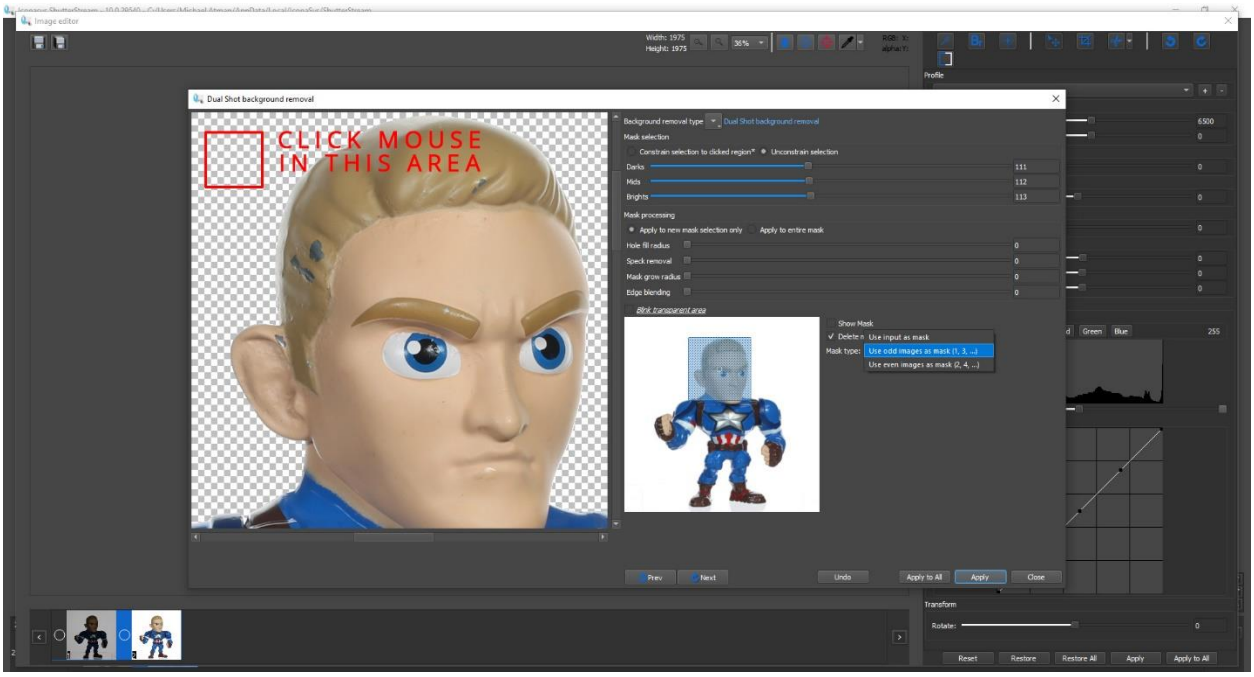
Step 11: Adjust the mask layer using settings:

Mask Selection:

Constrain selection to clicked region: This option, when enabled (checked) will constrain the background removal to only pixels that are touching each other. If it is enabled, users will have to select a pixel location. This can be done by clicking the mouse on the preview image on the background. If users forget to define selection area, they will be prompted after selecting 'Apply' or 'Apply to All'). Note, there is no real time preview for the constrain option.



Users will be able to adjust the mask using histogram tonal adjustments.

Darks: This refers to all black or dark pixels in the image
Mids: This refers to all mid tones in the image
Brights: This refers to all white or highlights in the image

Users will make adjustments to the 3 slide bars to find an optimal mask that will properly cut the image from its background. We suggest keeping these 3 bars close together (for example, Darks: 111, Mids: 112, Brights: 113). If you are editing an product image with some opacity (ex. a water bottle), it is suggested to spread out the sliders.

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Mask Processing:

Apply to new mask selection only: This will only apply the mask processing options to the current mask selection
Apply to entire mask: This will apply the mask processing options to the entire image

Hole Fill Radius: Fills in holes generated by larger threshold values in the BR tool. A note of warning though: if the tool is applied to objects that already have many holes, those holes may fill as well.

Speck Removal: This is the opposite of Hole Fill. Remove specks of foreground from the background.

Mask Grow Radius: This allows users to grow the mask selection area. It is defined in pixels.

Edge Blending: The sharpness of the transition between the foreground and the background. We suggest a value between 0 and 5 – typically closer to 0.

As changes are made, they will be reflected in real-time in the Background Removal Preview Window (areas of the image that will be removed will blink in grey if 'Blink Transparent area' option is checked). Users can adjust the 1:1 preview window using the viewfinder (shaded blue box) on the small preview to the right.

Step 12: Apply to a single or set of images (option to delete the mask after applying the edits)

Magic Wand Tool (**video**)

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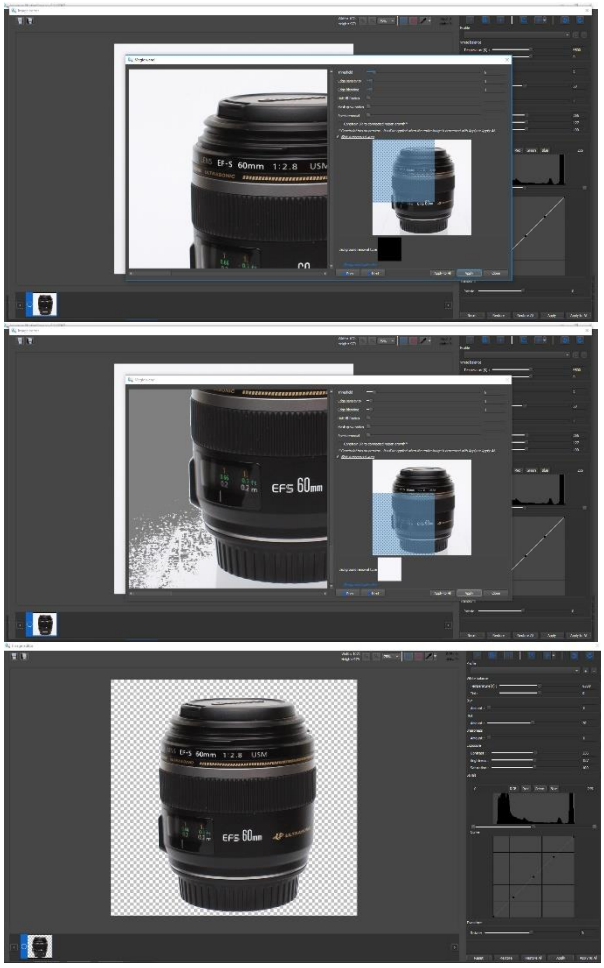
Steps:

1. Import images into ‘Editing’ area
2. Select ‘Magic wand’ tool
3. Hover mouse over image preview on right side of UI and select background color (icon will show color picker)
4. Adjust variables (Threshold, Edge Sensitivity, Edge Blending, Hole Fill Radius, Mask Grow Radius, Speck Removal) and inspect image using 1:1 viewer in preview window (shaded blue square shows viewing area).
5. Optional: Constrain BR to connected growth region.
6. Select ‘Apply’ or ‘Apply to All’ to process images.



Magic Wand Options Explained:

Mask Selection:

Constrain selection to clicked region: This option, when enabled (checked) will constrain the background removal to only pixels that are touching each other. If it is enabled, users will have to select a pixel location (prompted after selecting ‘Apply’ or ‘Apply to All’. Note, there is no real time preview for the constrain option. For example, if object has a hole in the center of it, the center hole would not be selected if this option was checked.

Unconstrain selection: Will select pixels within the threshold anywhere on the image frame. For example, if object has a hole in the center of it, the center hole would be selected if this option was checked.

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Edge Sensitivity: Defines the level of edge smoothing before applying the threshold. We suggest this between 0 and 7 (typically much closer to 0)

Threshold: This is used to adjust the amount the tool will remove colors that differ from the Reference Image. If the color of the product is similar to the background, you will want to use a lower number. If the product contrasts the background color well, you can use a higher number. For example if you are trying to remove shadows, you will want to use a higher number – however by increasing Threshold, it might eat into the product. Users will see flickering grey background – this denotes which part of the image is being removed. We typically suggest a value between 5 and 40.

Mask Processing:

Apply to new mask selection only: This will only apply the mask processing options to the current mask selection.
Apply to entire mask: This will apply the mask processing options to the entire image.

Hole Fill Radius: Fills in holes generated by larger threshold values in the BR tool. A note of warning though: if the tool is applied to objects that already have many holes, those holes may fill as well.
Speck Removal: This is the opposite of Hole Fill. Remove specks of foreground from the background.
Mask Grow Radius: This allows users to grow the mask selection area. It is defined in pixels.
Edge Blending: The sharpness of the transition between the foreground and the background. We suggest a value between 0 and 5 – typically closer to 0.

Manually Remove or Add Back in Parts of an Image

Lasso (video): Users have the ability to manually remove or fill back in parts of an image. This can also be applied inversely– meaning removing or adding parts of an image outside of the defined area. There is two Lasso options:

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- **Polygonal Lasso** – Users will mouse click to select the cutout path (and connect the polygon points by double clicking at the last point)
- **Normal Lasso** – Users will click and drag to draw the cut out path then when let go of mouse button, the polygon will close. This will not be as accurate as the Polygonal option.
- **Magnetic Lasso** – Users will click to start the selection path and adjust mouse around the object. This tool will automatically cling to edges of contrast objects. With this tool, users can define settings including Radius (size of boundary), Point Gap (distance between point placement) and Magnetic Force (strength of magnet).

Drawing with the 'Lasso Tool':
Users first want to define the area of the frame they need to remove (or add) by enabling the tool then clicking around their target area. Users will need to 'close off' the selection area by connecting the start and end point. This can be done by double clicking the left mouse button – this will automatically draw a straight line from existing point to the starting point. After user has confirmed the selection region and the selection output, hit 'Apply' or Right Click to enable 'Lasso Options' window.

Tip 1: It might be easier to use the 'Zoom' tool to view close up when manually drawing a polygon (ex. change viewing from 20% to 75%)
Tip 2: Hold space bar to change from lasso tool to navigation cursor to navigate on frame when zoomed in.
Tip 3: Should you wish to use the same Lasso tool options used previously, user can use keyboard shortcut 'Delete' and the changes will be applied

Lasso Cut Options include (this can be defined after selecting Apply or Apply to All):

Select Region:
Inside Polygon - Frame can be removed (Alpha Transparent) or added (Alpha Opaque) of the region (polygon) drawn.
Outside Polygon - Frame can be removed (Alpha Transparent) or added (Alpha Opaque) outside of the region (polygon) drawn.

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Selection Output:

Solid Color – This will fill the inside of the outside of the polygon with whatever color is selected.

Alpha Transparent – This will remove the defined area from the image, and fill with transparent. Use case: if a user uses background removal tool and it doesn't remove a shadow. User could manually cut out the shadow using this option.

Alpha Opaque – This will add previously removed frame back into the defined area. Use case: User cuts into product while using the background removal tool – they could then go and add the part that was previously removed back in using this option.

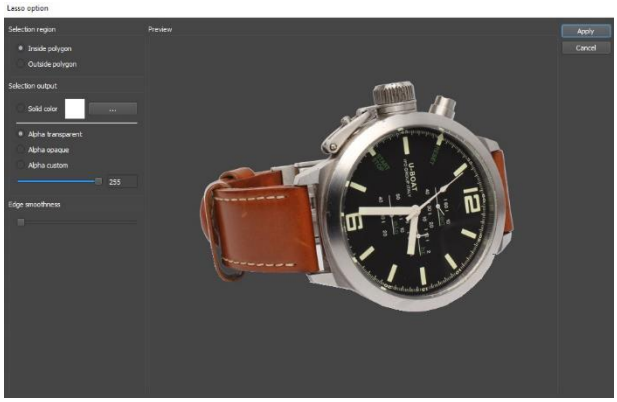
Alpha Custom – Users have the ability to choose opacity using this option. Meaning the layer selected can show at any opacity.

Edge Smoothness – Smooths the edges of the lasso selection.

Alpha Transparent Example:

In this example, we are required to manually cut out a shadow underneath our product. To do so, we use the view the object at 100% and use the lasso tool to cut around the shadow:

We then click 'Apply' or right click on the image to enter the 'Lasso options' window. In this window, we select 'Inside Polygon' as wish to remove inside our selection area, then the 'Alpha Transparent' option. As we make changes, we can see a preview of the portion of the frame that will be removed (highlighted in dark grey). We also have the ability



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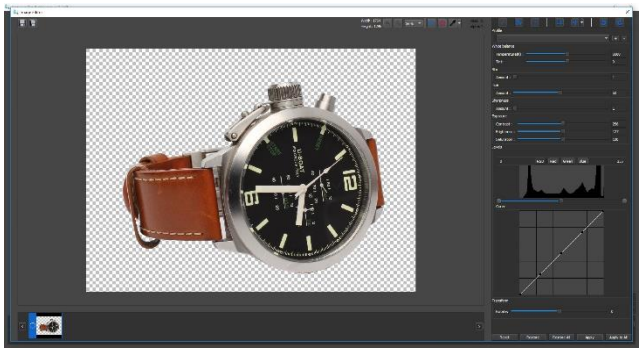
to smooth the edges using the ‘Edge Smoothness’ slide bar.

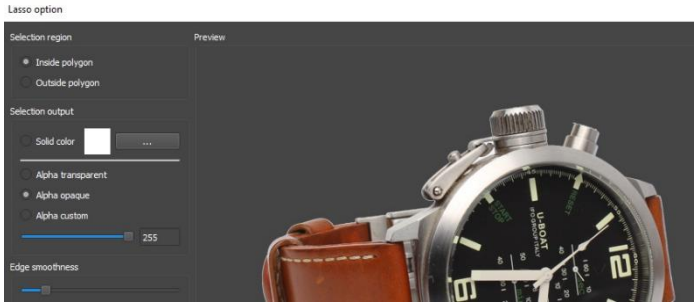
After we click ‘Apply’ we see the shadow has been successfully removed from under the product.



Alpha Opaque Example:

In this example, we used the Background Removal tool and it removed part of the product. We wish to add this part back in. We use the Polygon Lasso option to draw a polygon around the area we wish to add back in.

We select ‘Inside Polygon’ and ‘Alpha Opaque’ and can see a preview of the changes prior to applying them. We can also choose to Smooth the edges of the polygon we drew. We then hit the ‘Apply’ button and the missing part is added back in.



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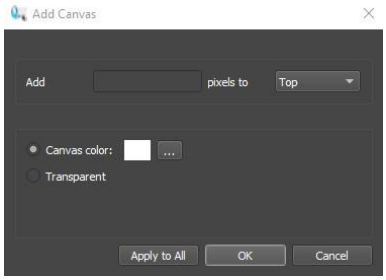
The ‘Lasso Tool’ can be also be applied to a batch set of images using the ‘Apply to All’ button

Additional Video Tutorials (Lasso Tool – adding or removing frame after BR):
BR Tool used with Lasso to Remove Additional Frame (ex. shadow): here
BR Tool used with Lasso to Add Frame Back in: here



Add Canvas: Users can add additional frame to an image. Users will define how many pixels to add to and to which portion of the image (Top, Bottom, Left, Right OR Top and Bottom, Left and Right). For ex. if a user choses to add 200 pixels to Left/Right, 100 pixels will be added to each side. Users also have the ability to choose the ‘Canvas color’ – this is the color of the pixels that will be added to the frame. This can also be added as a transparent layer by selecting ‘Transparent’.

Crop: Users can define a specific portion of the image to be retained. Enable the ‘Crop’ tool by **left clicking** on the ‘Crop’ button, then **click and drag** over the selected frame in the viewing area. If using a Crop Ratio (set in Options -> Crop Options) with Image Capture Crop, this will be retained in this tool.

Rotate: Users can rotate an image 90-degrees at a time either clockwise or counter-clockwise. Simply **left click** on either button to rotate an image

Transform (video): Users can reposition the object within the frame by clicking and dragging the frame. The Blue Guide markers can be repositioned to help with consistent object positioning.

Focus Stacking (*plugin required*): Users can manually stack image sets shot at multiple focal points to create a fully in focus image. Note, this process can be entirely automated as well.

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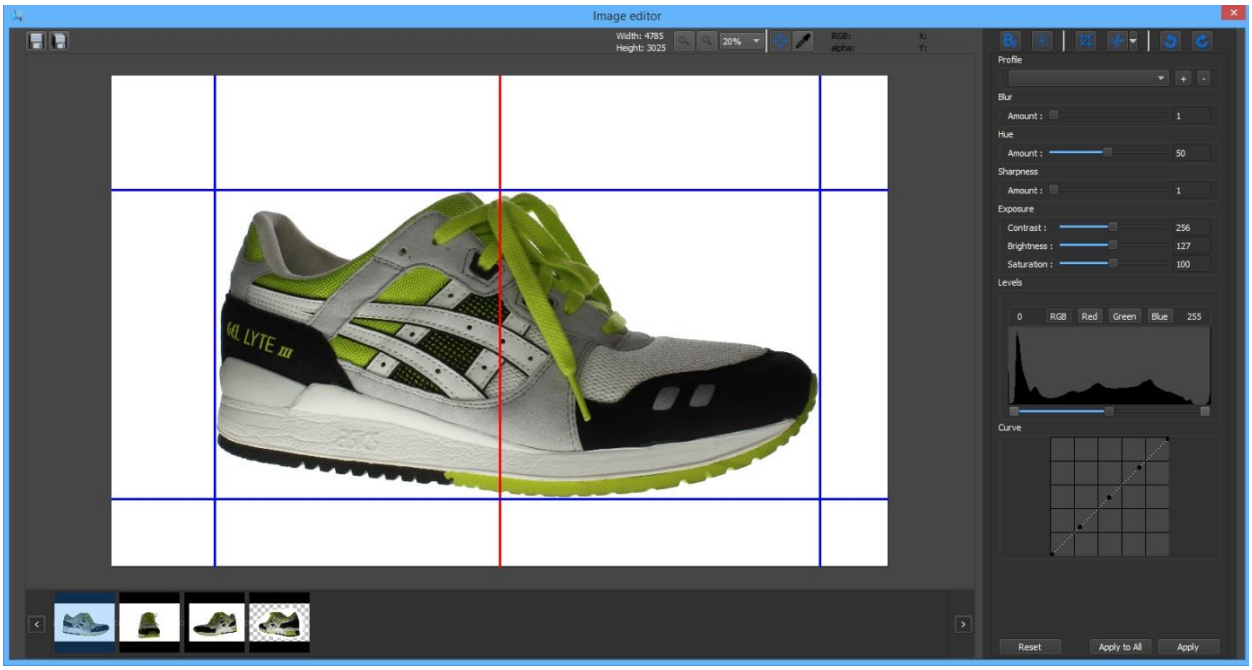
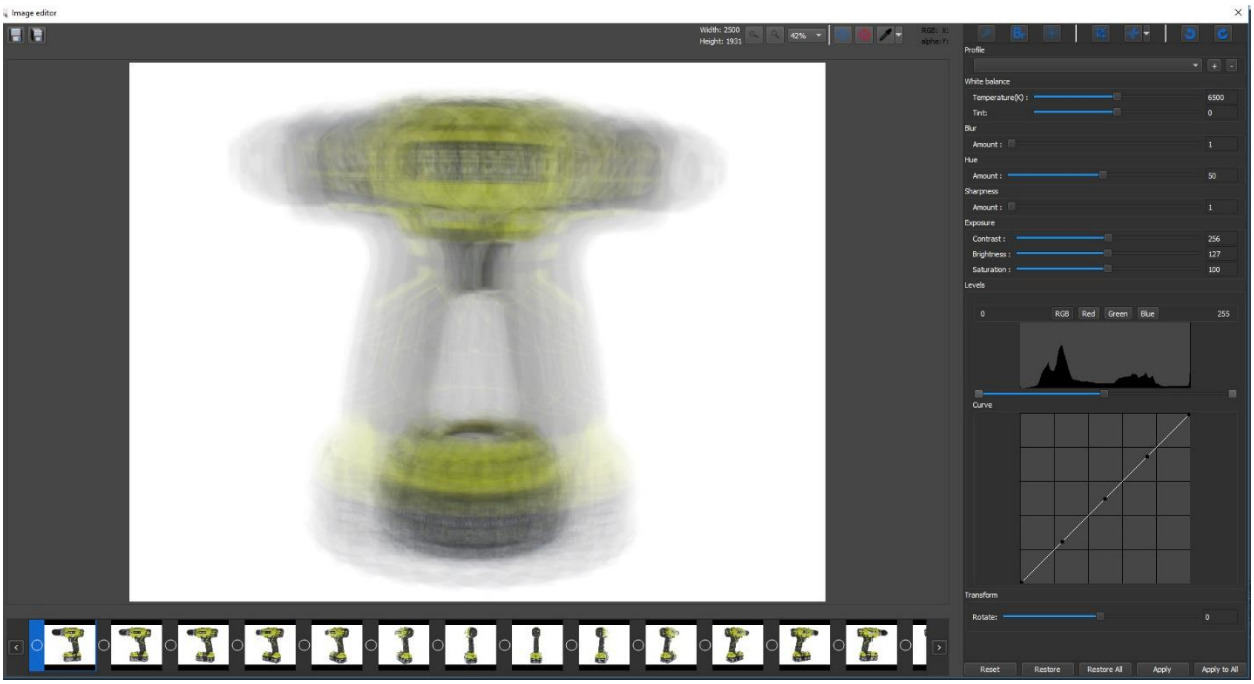


View Alignment (video): Users have the ability to compare a set of images stacked on top of each other. This tool is useful should a user wish to 'Batch Crop' a set of images after capture.



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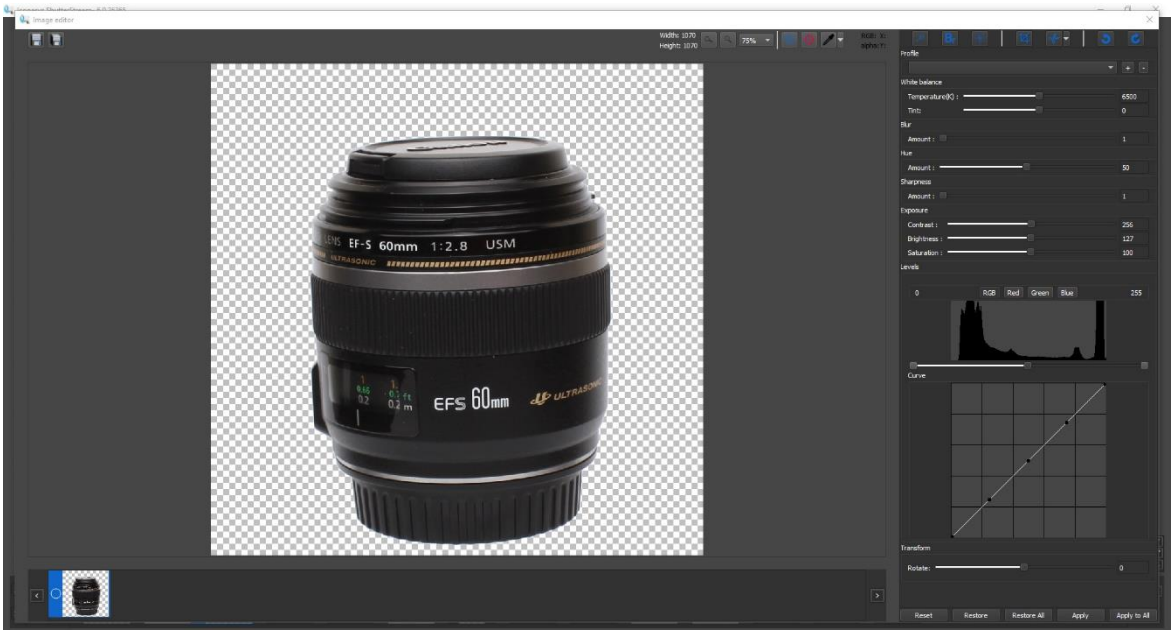
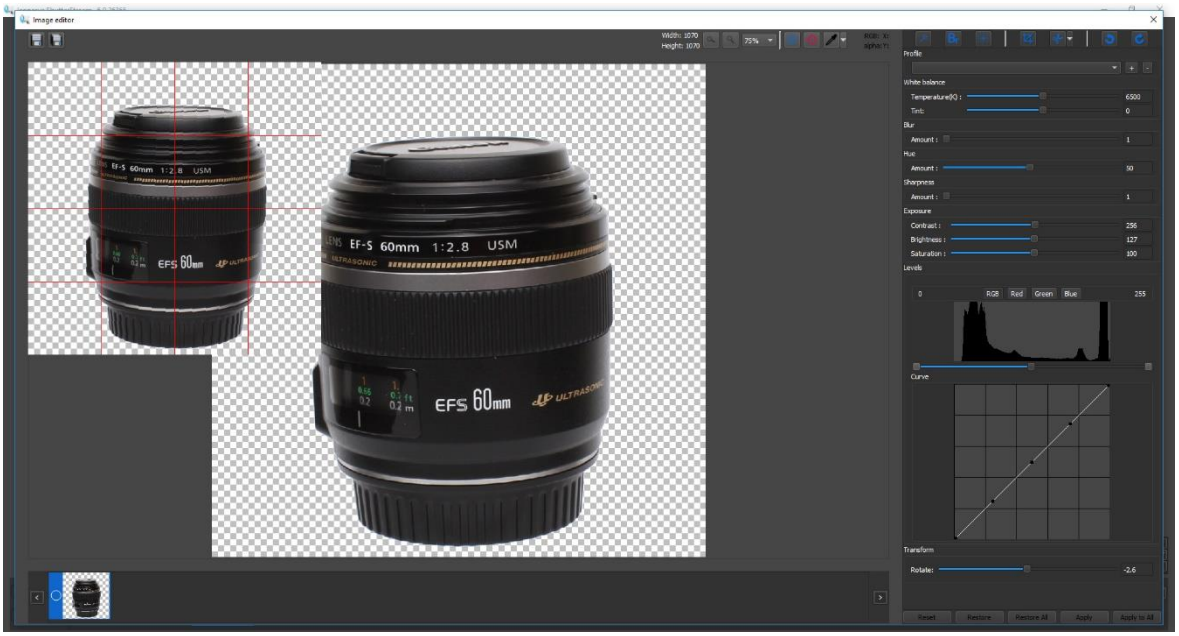
Transform (video) – Users have the ability to adjust images rotate images left and right in small increments using the slide bar (defined in degrees).





ex. adjusting by - 2.6-degrees

Saving Images from the Editing UI

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In the top left of the UI, users will be able to access the ‘Batch Save’ or ‘Dynamic Save’ tools by **left clicking** on either icon.

Creating and Saving an Image Editing Profile

Users have the ability to create and save an editing profile. Simply make adjustment as required to a single image then in the ‘Profile’ area **left click** the ‘+’ button, give the editing profile a name then **click** ‘OK’. This editing profile will be retained in the software and can be accessed and applied at a later time in the Editing tool OR automatically applied when saving images in the ‘Dynamic Save’ tool.

Edit Window Viewing Tools

Eyedropper Tool: The eyedropper tool allows users to inspect an individual pixel color value in an image (defined in RGB with Alpha Value for transparent backgrounds).

Pure white is RGB = 255, 255, 255
When moving the color picker tool over an RGBA pixel (converted after using Background Removal tool), if the RGBA pixel value contains an alpha value of zero then the background color will show through. In other words, the RGB values of the pixel are completely ignored by programs that are "alpha channel aware," such as most modern image viewers, browsers and Shutter Stream. A pixel with an alpha value of zero is sometimes called a transparent pixel because the RGB values are ignored. When displaying an RGBA pixel, with an alpha of zero, in Shutter Stream and the background color is set to white (from the "Alpha blending color" under the blue gear) then the displayed pixel is white regardless of the RGB values of the pixel. The color picker tool will show an alpha value of zero and the RGB values will be shown with an asterisk (*) next to them. For example, if the RGBA = (123,34,120,0) then the RGB value will be shown as: RGB*: 123*,34* ,120*. If RGBA = (123,34,120,1) then the RGB value will be shown as: RGB: 123,34,120

Note, Eyedropper tool can also be used to ‘Select a white point’ or ‘Select a black point’. See ‘**Levels’** area above for full description

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Zoom In/Out: To inspect images closer up, users may wish to 'Zoom In' or 'Zoom Out'. This can be done by holding 'shift' on the keyboard and using mousewheel to zoom in/out or by **left clicking** the magnified glass icons. Users can also chose at what percent to view the image in the viewing window by clicking the percent drop down and selecting a different value. After zooming users can hold 'space bar' on keyboard then clicking and dragging.

When making edits to an image, users will notice a preview window pop out then go away in the top left corner of the 'Image Viewing Window'. This 'Editing Preview Window' will allow users to view edits as they are made in real-time to the image.

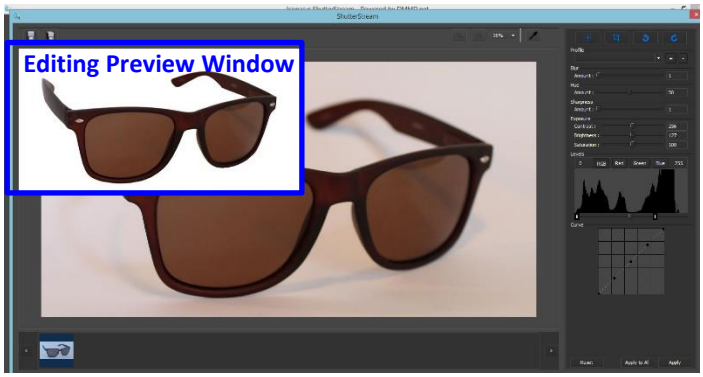

Image Transfer (video) – The 'Image Transfer' tool allows users to send images to a 3rd party application instantly.

Transferring Images: Users simply select the image(s) they wish to transfer from the 'Thumbnail Viewing Gallery' then left click the 'Image Transfer' button.

The 'Image Transfer' tool chooses where to send images based on the option the user selects in Options -> Image Transfer Options. The default is 'OS Default' which is the program the computer uses to open a TIFF format image. For instance, if a user wishes to automatically send images to Photoshop, they should set the default 'Open With' program on their computer to always open TIFF format images in Photoshop. Users can also define to send images directly to:
360 View Creator: If this option is selected, Shutter Stream will automatically send images to the Iconasys 360 Product View Creator Application (for composing 360 product views). Note, this application must be installed for this function to work.

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Custom: Users can define a path where images are automatically sent to
Agisoft: Images will automatically be sent to Agisoft software (for creating 3D Models). Note, Agisoft software must be installed for this function to work.
Image Server: This will automatically send images to the Iconasys Image Server.

Email (video) – The email tool will allow users to automatically attach images to an outgoing email.

Emailing Images: Users simply select the image(s) they wish to email from the 'Thumbnail Viewing Gallery' the left click the 'Email' button. Next, enter an email address, subject and body text (optional) then hit send. Users will be notified when the email has been sent successfully.

360 Shooting Mode (only available in Shutter Stream 360 Software). Contact us if interested in Upgrading.

Options:

Watermark Settings (video) – In this area, users can import create and save their own Watermark which can be saved and applied to images when exporting from the Shutter Stream program. It is important to consider the pixel size of the watermark being imported in relation to the desired output size of images from the Shutter Stream program.

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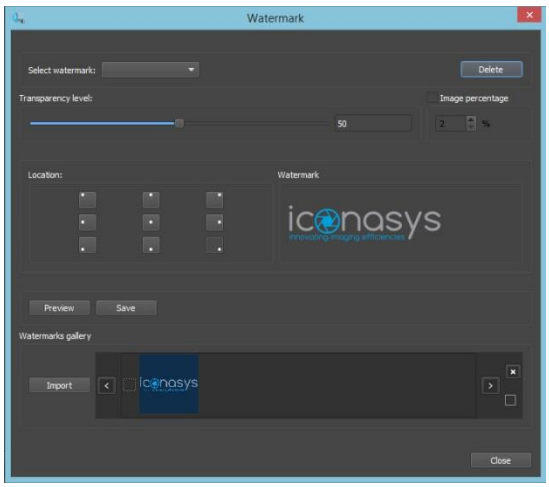
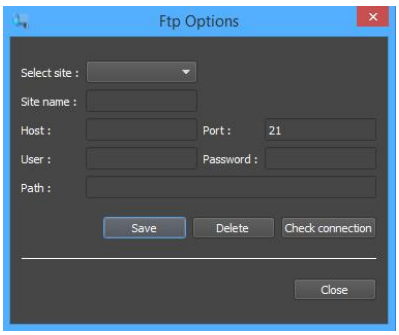


Select Watermark: This dropdown includes all previously saved watermarks in the program
Load: Users will select the 'Load' button to import their own images into the watermark area. The image format must be .png.
Delete: This will allow users to remove previously created Watermarks from the program.
Transparency Level: This slide bar (**click and drag left/right**) to adjust the imported images transparency level.
Image Percentage: Users can choose the percent (amount) of image the watermark will fill – so it will scale dynamically based on image output size.
Location: By **clicking** on one of the nine boxes in the location area, users can select where they wish to apply their watermark.
Preview: Will allow users to 'Preview' what the watermark will look like on an image.
Save: Will allow users to 'Save' their watermark as a profile.

FTP Options - In this area, users will set up their FTP site should they wish to transfer images online. Users will simply input:



Site Name: This is a unique identifier that users can define so they know which FTP site Profile it is.
Host: This is the location of the FTP site. Be sure not to include 'ftp.' Before the host name.
Port: Standard FTP port is 21. This will remain as a default however can be changed if FTP site settings differ
User: This is the User Name for the FTP site login
Password: This is the Password for the FTP site login.
Path: Should users which to save to a subfolder on the FTP, they will enter this folder location in the Path name field.
Save: This allows users to 'Save' their FTP site info.

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Delete: Users can 'Delete' a previously saved FTP site from the Shutter Stream program.
Check Connection: This button will validate FTP connectivity using your credentials.

Image Overlay Settings (video) – Users are able to define the transparency at which the Image Overlay is displayed over the Live View window. Options range from 15 – 85 where 15 is high transparency (lighter) and 85 is low transparency (darker).

Directories Watcher (video) – Users are able to 'hot-link' a folder so when any images are added into that folder, they will automatically be uploaded into the Shutter Stream software in the Thumbnail Viewing Gallery. Users can click 'Start' to auto-import any current images from the selected directory.

Show Image EXIF (video) – This is a toggle. When enabled image EXIF (metadata) will be shown on the top right of the image in the 'Image Viewing Window'.

Thumbnail Options – In this area users can enable multiple rows in the Thumbnail Viewing Gallery as well as adjust image sorting logic.

Edit Metadata – Users can enter custom metadata in the fields provided in this option. As images are saved, this metadata will be included in the image.

Crop Options (video) - To define Crop in a 'square' or 'custom ratio' simply click the Crop Options in the Options drop down in the top right of the UI and select Crop option accordingly. If cropping in a custom ration, please define this (width by height).

Crop can also be displayed by a Black or White marker. White markers make sense for when shooting products on a black background. Note, any crop size or shape set in 'Crop options' area, will be retained in 'Editing' tool crop.

By selecting 'Enable live view cross guide lines' this will display cross hair grid in the center of the Crop markers.

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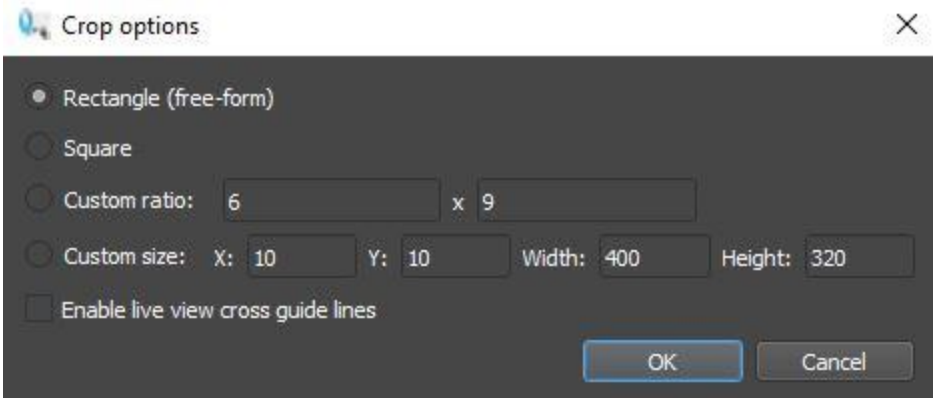
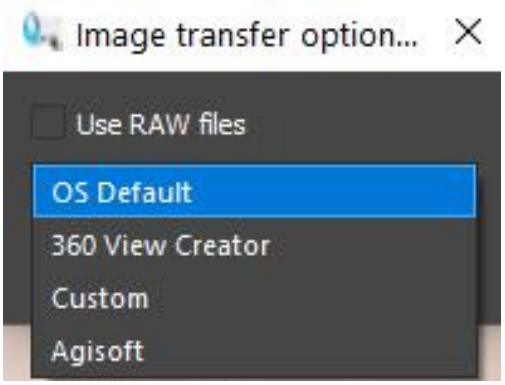


Image Transfer Options (video) – The Image Transfer option allows users to send selected image(s) to either the OS default image viewer, Iconasys 360 View Creator application (if user has the Shutter Stream 360 Software), a Custom program (3rd party application) or Agisoft (ideal for users using Shutter Stream for Photogrammetry). User will set the Image transfer options accordingly, then any images selected in the Thumbnail Gallery will be transferred when clicking the Image Transfer button.



If selecting either 360 Creator or Custom Program, user will need to define the path to the application file (ex. Windows .exe file or Mac .pkg file). For example, the 360 Creator path is as follows:
Windows: C:/Program Files/IconaSys Inc/360ProductViewCreator/360Creator.exe
Mac: Applications/360Creator.app
*Users must have 64 Bit version (version 4.0+) of the 360 Creator application.
For example using Adobe Photoshop® as the Custom program:
Windows: C:/Program Files/Adobe/Adobe Photoshop CS6 (64 Bit)/Photoshop.exe
Mac: Applications/360Creator.app
When saving to the 360 Creator, the Image transfer tool also will save the images locally using the Batch Save tool. If a user enables Remember save options, this will

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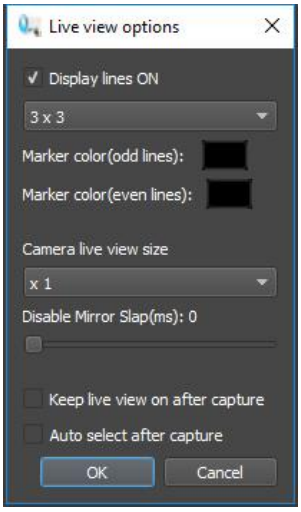
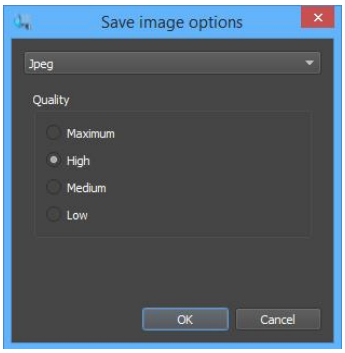
use all save to information previously used in the Batch Saving tool (including name, location, format, image size etc..).



Live View Options (video) – Users will have the option to include display lines over the 'Live View' up to 36 x 36 grid and select the color of the lines being used. Display lines are a great tool for helping center products in a consistent position. Users can choose to scale Live View window size by 2X or 3X (note, this will cause live view to lose sharpness as pixels are being stretched). Users can add a delay between camera snap and shutter opening to disable mirror slap (defined in milliseconds). Marker color defines the color of the Display lines (grid) in the Live View windows. Users also have the ability to leave the Live View Window enabled after capturing an image. Enable this by selecting the check box. Auto select after capture will automatically select the image in the Thumbnail Gallery after it has been captured.



Save Image Options – Users have the ability to define save image options. Options include:
JPG Image Quality Options – which will be applied during the exporting (Batch or Dynamic Saving) process. The lower the quality setting, the more image compression which results in a smaller file size. High image quality should be sufficient for most user's applications.
PNG Compression Level – Define the compression level for PNG image format.
PNG Background – Users can define to auto fill any transparency with a background color (background color defined in 'Alpha Blending Options' menu
TIFF Compression Type – JPG or Deflate compression
TIFF Quality – From Low to Maximum
TIFF Background – Users can define to auto fill any transparency with a background color (background color defined in 'Alpha Blending Options' menu

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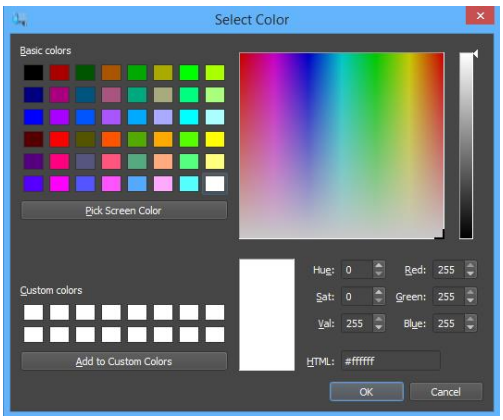
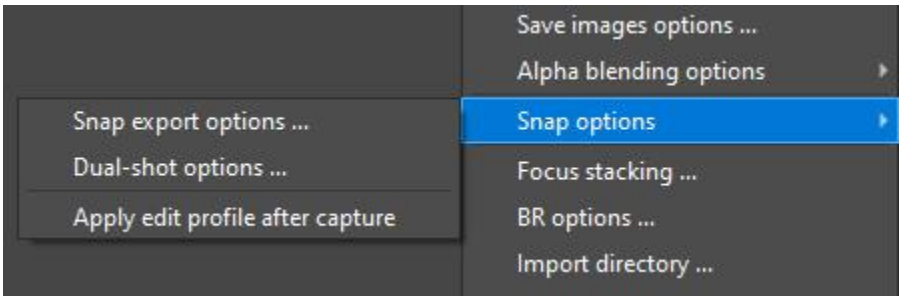
Alpha Blending Options (video) – The Automated Background Removal Tool, Magic Wand and Lasso tools removes backgrounds from images to a transparent layer. When outputting image as JPG format (default format for Batch Saving Tool or an option with Dynamic Saving Tool), users can choose either to apply a color to the transparent layer (select a color and click OK) or to use an image for a background (select Background Image then upload an image). Users can choose to show transparent properties of an image by checking 'Use chessboard pattern'.



Snap Options:



Snap Export Options (video) - Transfer Image allows users to instantly transfer images directly to a 3rd party imaging application, to a local or network folder and/or directly to an FTP site. This feature will bypass image saving to the Shutter Stream program and output in TIFF format. Users have the ability to instantly resize an image, adjust resolution and/or apply a watermark.

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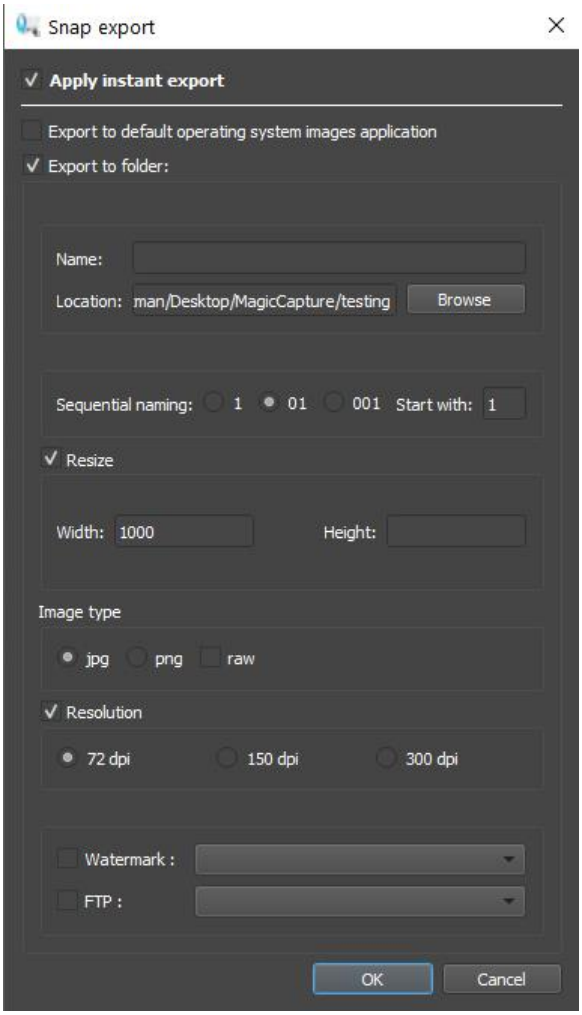
To enable this feature, users simply click the ‘x’ box next to the Apply instant export text then chose an option to ‘Export to default operating system images application’ and/or ‘Export to folder’. If user chooses to export to a folder, they can provide a name (optional - this can also be changed after image capture) and a folder location – select ‘Browse’ to choose folder location. Users can also instantly have images Resized after capture (click ‘x’ button next to Resize text and define pixel width or height) and adjusted to a specific resolution (click ‘x’ button next to Resolution text and select 72, 150 or 300 DPI – if not selected the default resolution of your camera – typically 96 DPI will be used). To instantly apply a Watermark to this image, select the ‘x’ box next to the watermark text and chose a default watermark profile



(if no watermark profiles have previously been saved, you can do so in the Watermark Options area). To instantly transfer images to an FTP site, click the ‘x’ box next to the FTP text and choose the default FTP site (again, if no FTP profiles have previously been saved, you can do so in the Watermark Options area).

After this feature is enabled, when a user clicks the ‘Snap’ button, the image is instantly resized and the image is shown in the Image Viewing Window. Users are prompted to Re-name their file before exporting and can also chose to Re-take the image if it is unsatisfactory. By clicking ‘Save’ the image will be transferred.

The ‘Export to default operating system images application’ chooses where to send images based on the default preference the computer uses to open a JPG image. For instance, if a user wishes to automatically send images to Photoshop, they should set the default ‘Open With’ program on their computer to always open JPG images in Photoshop.

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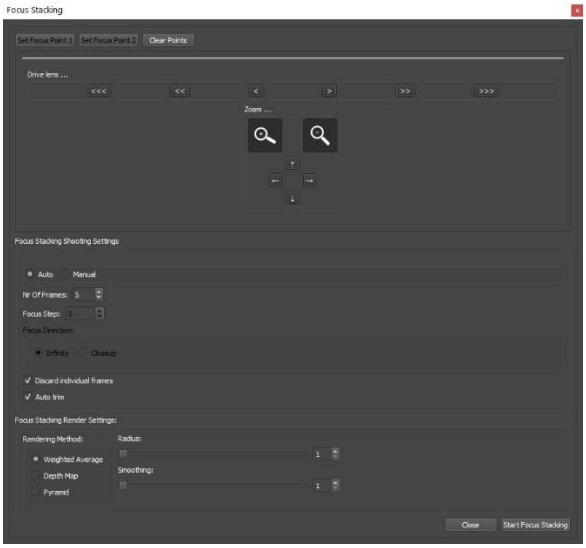
Dual Shot Options – This option is for users who use the Snap Option 'Image Capture with Dual Shot' (right click on Snap button to enable' and Automated Background Removal Tool 'Grey Mask Background Removal'. In this options area, users can set Camera Setting Profiles to use during the dual shot sequence.

Apply Edit After Capture – Users have the ability to auto apply edits to an image immediately after capture. In this options area, users will select a previously made editing profile and can enable/disable auto-applying the edits.

Focus Stacking (video) – Focus Stacking is available as a plugin (purchase required – see here) that will allow users to compose a single image using multiple images captured at different focal lengths. Refer to video for workflow usability.



Focus Stacking Shooting Settings:

Auto: will capture X frames at different focal points in an automated fashion (and auto calculate focus steps based on focal distance range / number of frames

Manual: will require manual capture and focal point adjustment

Nr of Frames: Sets the total number of frames to be captured in the focus stack

Focus Step: Focal distance adjustment (enter if using Manual mode)

Focus Direction: available if using Manual mode

Infinity – Will move focal point away from the camera

Closeup – Will move focal point towards camera

Discard Individual Frames: After capture is complete, the image set will be stacked, then the individual frames will be discarded.

Focus Stacking Render Settings: In most cases, you can use default values and get good results. For complex items, you may want to adjust the parameters.

Weighted Average: The most popular method, it is Ideal for preserving colors and contrast

Depth Map: Ideal for products with a simple surface that have no sudden changes in surface level. Also ideal for products that have glare.

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Pyramid: Ideal for products that has many crossing lines and changes in surface level. And images shot with more than 100 images in the stack

Radius: Radius is the most important parameter for processing. We mostly advise you to try different values. Start from the default value and then set it to its minimum and see what happens. Next try to increase the value to get rid of any noise or artifacts, particularly halos along the edges.
If your image has fine details and thin lines, as most images do, a low radius level (3-5) will probably yield the best results, although you will probably get more noise and a halo effect. So you'll need to try to find a balance.

Smoothing: All focus-stacking algorithms find and combine the sharp areas. Smoothing defines how the sharp areas are combined. Low smoothing produces a sharper image, but the transition areas may have some artifacts. High smoothing will result in a slightly blurry image without any visible transition areas. Start with the default smoothing. Then if you want more detail, decrease the smoothing value; if you get too much noise and too many artifacts, set a higher value.

To enable Focus Stacking Capture Mode, right click on the Snap button and select ‘Focus Stacking’.

Users can evaluate the focus stacking plugin prior to purchase – the final result will have a diagonal line through it.

BR Options: Users can define to auto apply Background Removal tools after capture. There is four options: ‘Use BR image’, ‘Use Magic Wand’, ‘Use Chroma Key’ and ‘Use Dual Shot BR’. For either option, if selected to Auto Apply, it will use previously set settings for either tool (previously set and used in the editing mode).

Import Directory (video) – Users have the ability to import existing images into the Shutter Stream software. This will import all images in a specific folder so please ensure all images you require to import are in a specific folder.

Import Originals – Users can choose to import the originally captured, unedited images back into the software. Users will be required to select the Image Row to import the Originals into.

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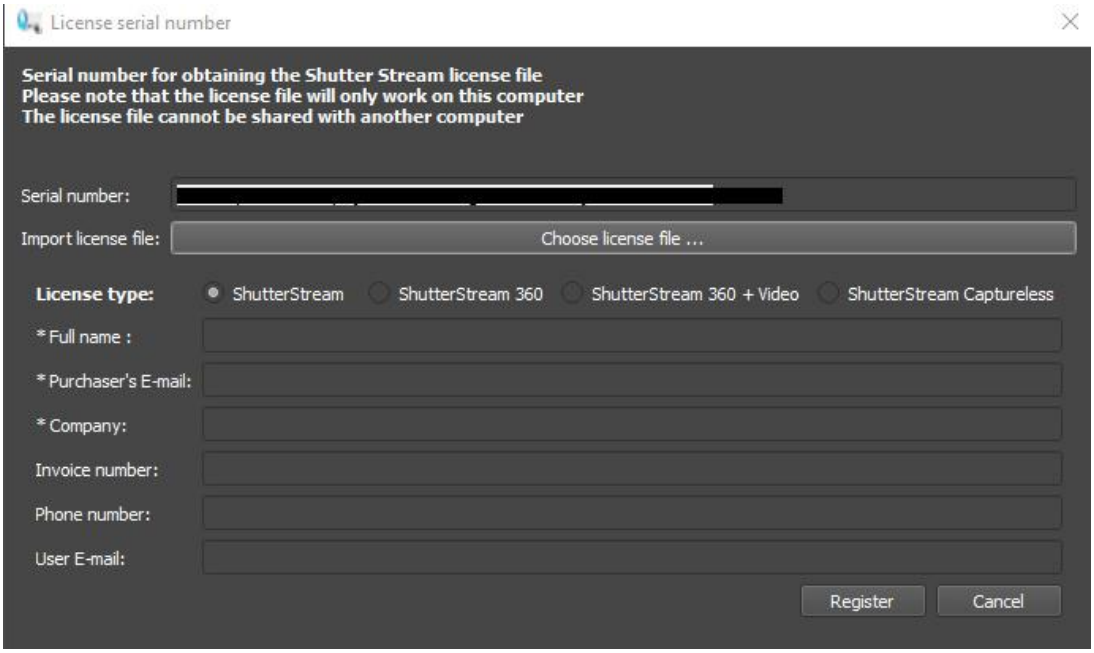
Show Originals Folder – When selecting this option, the windows explorer or mac finder will open where the Original Image Set folder is. This can be used to access original images should an user wish to backup or do something else with the original images.

Import Video – Allows users to import and extract frames from a video file. With this option, users can choose to downsample the video. For example, if you upload a video made up of 1000 frames and choose a downsample factor of 10, it will import 100 total frames. This feature is only available with the Shutter Stream 360 + Video Software license types.

Reselect Camera (video) – Should connection with camera be lost at any time, users can reconnect to their camera using this option. If multiple cameras are connected, the list of available cameras will be displayed in a drop down and users can change from one to another.

View Serial Number (video) – This will display a windows showing the Shutter Stream Serial Number and provide a registration page (should user have overlooked registering software – in this case, please be sure to select the correct 'License Type'). It is also in this area where users will Import their License File to activate the software so that it won't expire.



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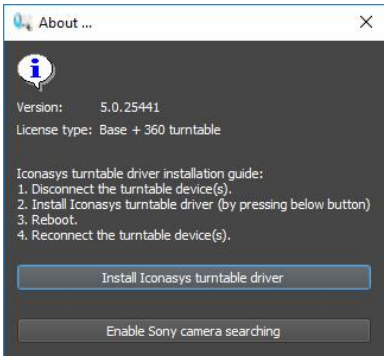
About – This will provide information about the Version number of the software being used, the License Type (should read ‘Base’ for Shutter Stream or ‘Base + 360’ for Shutter Stream 360) and includes an install button for the Iconasys USB turntables driver. Users can also Enable or Disable wireless search for Sony camera.



Help – This will give users access to this user guide.

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