

User Guide

Ortery Image Capture Software

Windows / Mac

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Introduction

This User Guide offers information on the software features and workflows involved in operating Ortery equipment in the following product series for the capture of still and 360 product shots:

Photosimile, PhotoCapture, PhotoBench and ClothingPad

While the products are physically different, the software operation of each device to create professional still, video and 360 product views are similar and can be covered in one document.

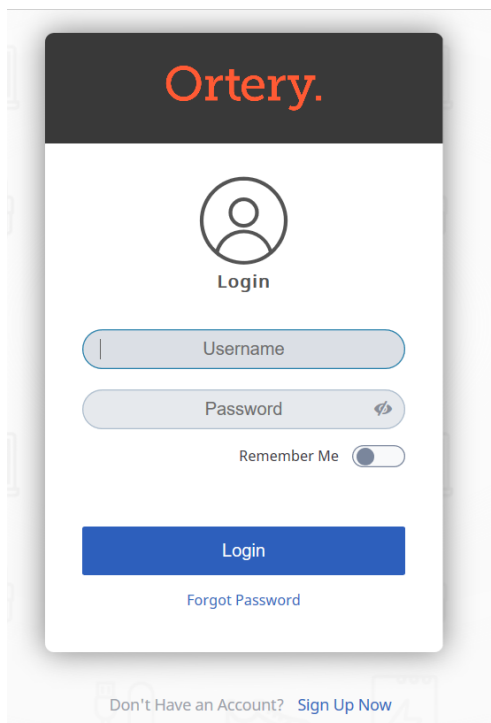
Minimum Software Requirements

Windows: 7 (with Service Pack 1), 8.1, 10
Mac: El Capitan (10.11), Sierra (10.12), High Sierra (10.13)
Processor: Intel i3 / AMD A4
Memory: 8GB RAM
Storage: 750MB For Software Install
Min. Screen Resolution: 1024x768
Internet Connection and active email account
Min. 2 USB ports

How to Get the Software

The latest software (for first time download and upgrades) can be obtained after registering the software on user.ortery.com

To register you will need to create an account and provide Ortery with a valid product serial number.



By default, Ortery Capture software needs to be connected to the Internet and users will log on each time the software is launched. Offline versions can be purchased. They will use a Credential login method.

Compatible Camera Models

To see the latest list of compatible cameras visit: <http://ortery.com/compatible-cameras>

Compatible Camera Settings

To see the required settings for any compatible camera, visit: <http://www.ortery.com/camera-settings>

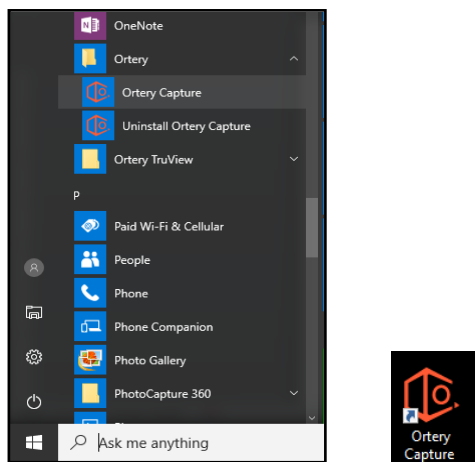
Installation and Assembly

For all information regarding software installation and hardware assembly, please refer to the Installation and Operation Guides that came in the package. The software needs to be registered before use.

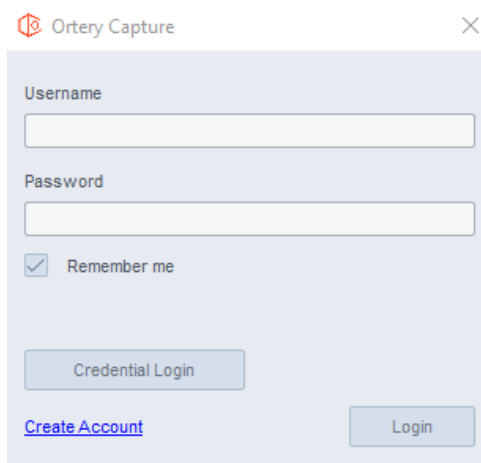
Launching the Ortery Image Capture Software

Windows

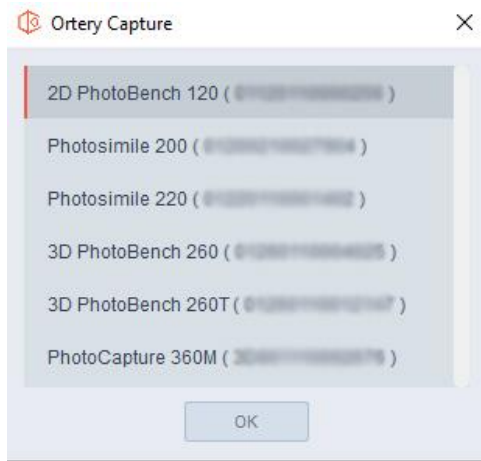
The Image Creation Software can be launched from the Windows Start menu or by double-clicking the desktop icon.



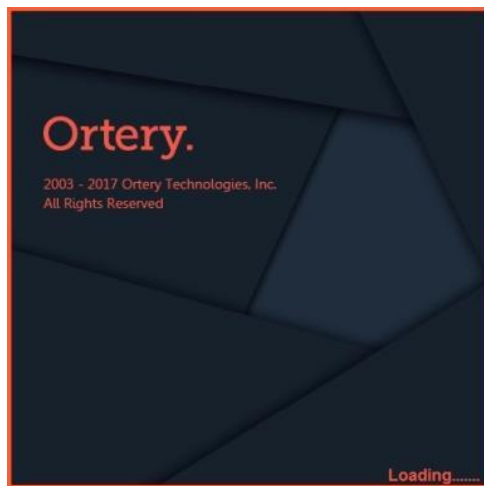
To login to the software type in your Username and Password and click Login.



If you own multiple Ortery products, you will be prompted to select the product you will be working with.



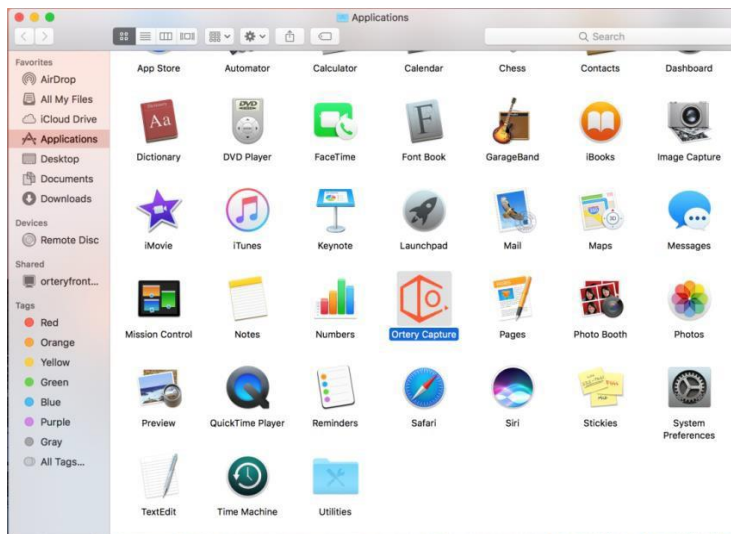
The software will launch.



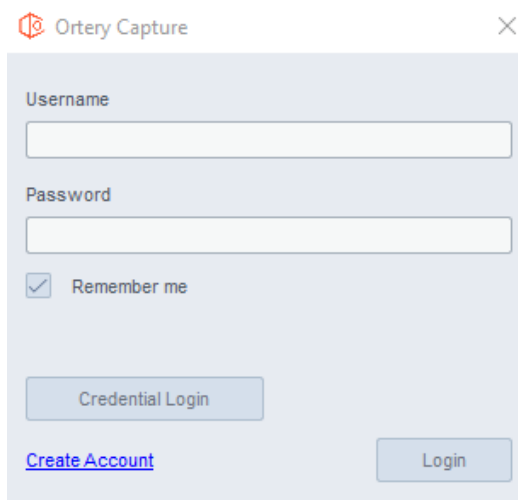
Mac

To launch the Ortery software, on the desktop select Go and from the dropdown menu that appears select Applications.

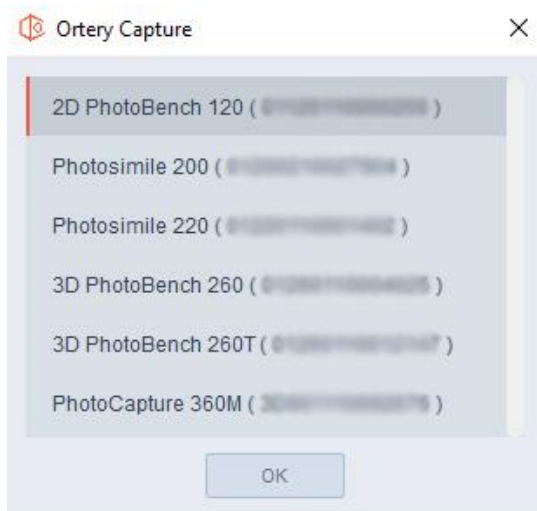




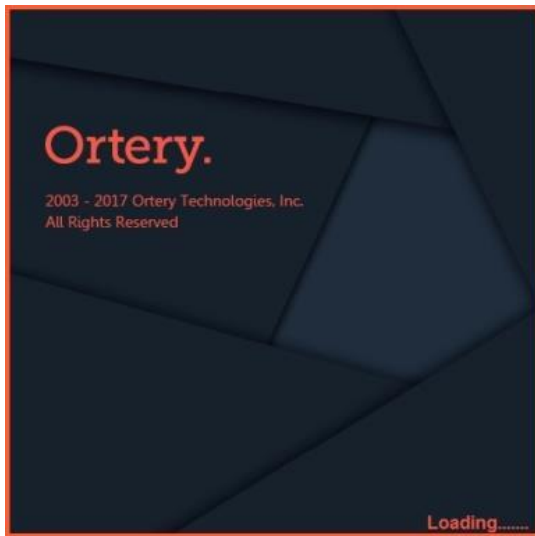
In the Applications window, find and double click the Ortery Capture icon. To login to the software type in your Username and Password and click Login.



If you own multiple Ortery products, you will be prompted to select the product you will be working with.



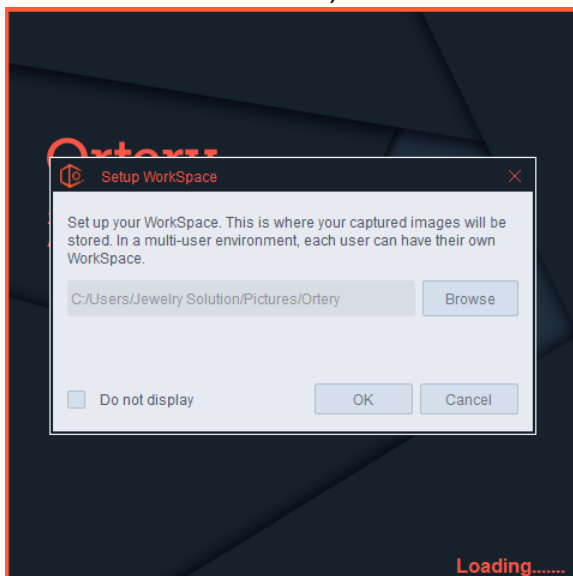
The software will launch.



Workspace Setup

Before entering the software, the user will be asked to setup a workspace. This is the area where captured images, videos and animations will be stored.

In a multiuser environment, different users can have different workspaces.



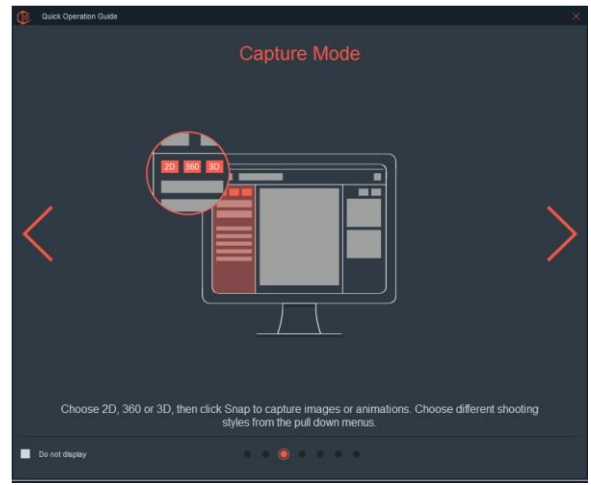
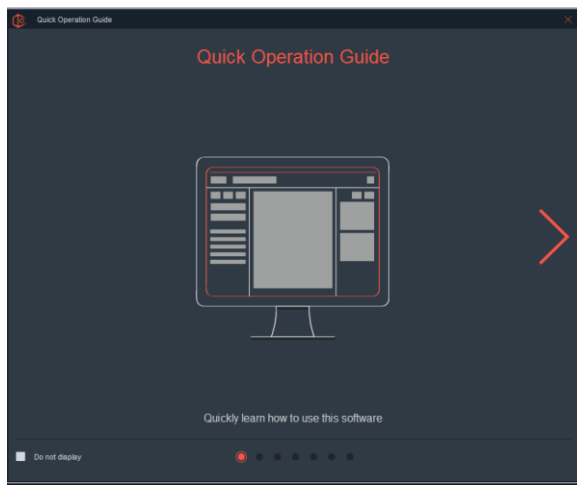
Simply choose a save location and click OK. To never see this screen again, click 'Do no display'. To have it appear again, go to Options and edit the Workspace Options under the General Tab.

NOTE – Do not select a folder with automatic cloud backup like Google Drive.

Quick Operation Guide

The Quick Operation Guide gives the user an overview of the software, its features and where to find them.

Note: It also has a 'Do not display' option.



Main User Interfaces

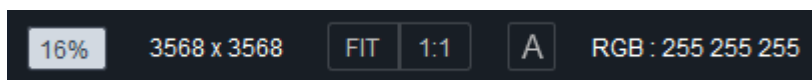
There are a few main interfaces inside the Ortery Capture software.

The Viewing Screen:

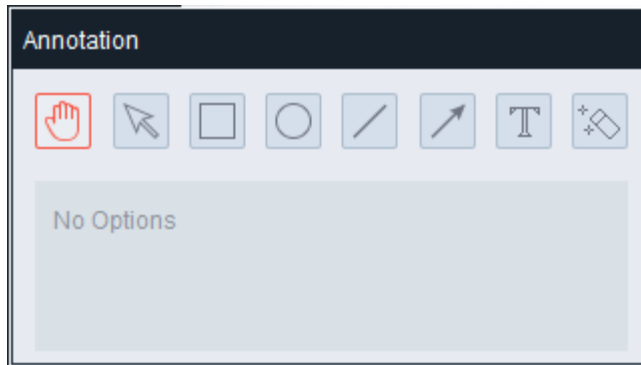
This screen is displayed when the user enters the software. This is where images and animations appear after they have been captured. It also offers access to specific viewing, saving and image processing features. To take a picture, click the 'Capture' button. To return to viewing, click the 'View' button.



The viewing tools in the bottom left show the total size of the image and the percentage of the image displayed in the viewing window. In addition, the image can be easily fit to screen or viewed at 1:1. There are also specific tools for selecting the background color when viewing PNG files.



Clicking the "A" icon brings out the Annotations menu.

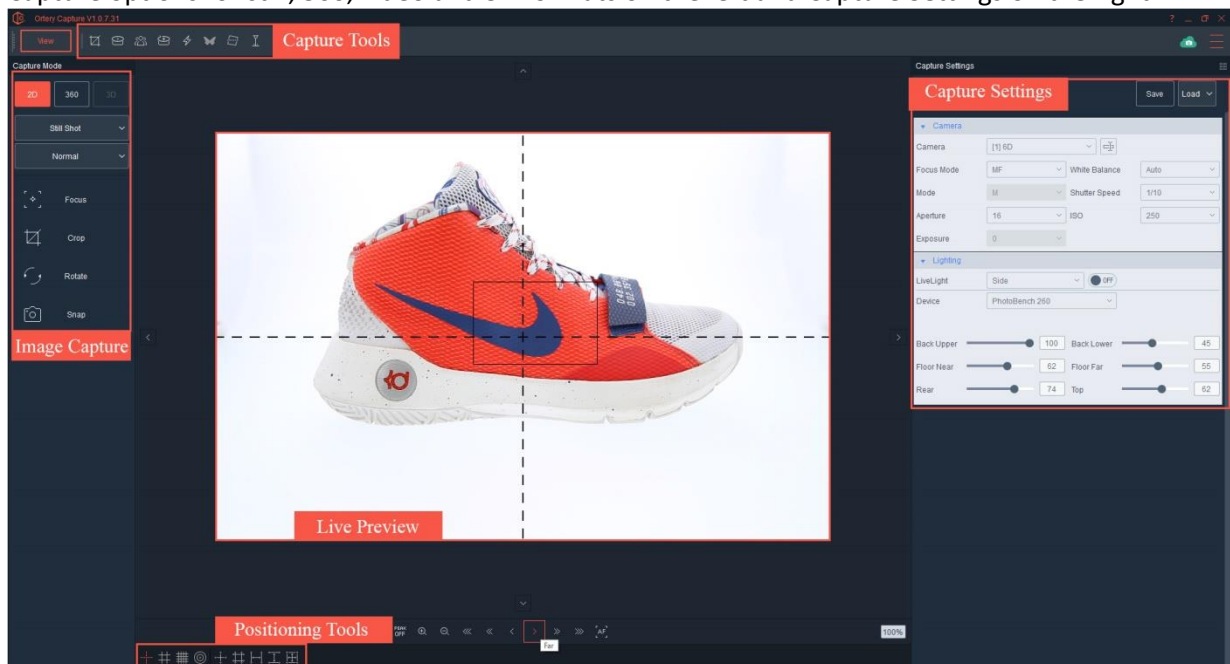


Captured images can be annotated with text and drawings to increase communication value. Annotated images are typically used for internal communication, but can be used for anything.

Finally, as the mouse moves over the image, the RGB color values of each pixel are displayed. Pure white is represented as 255, 255, 255.

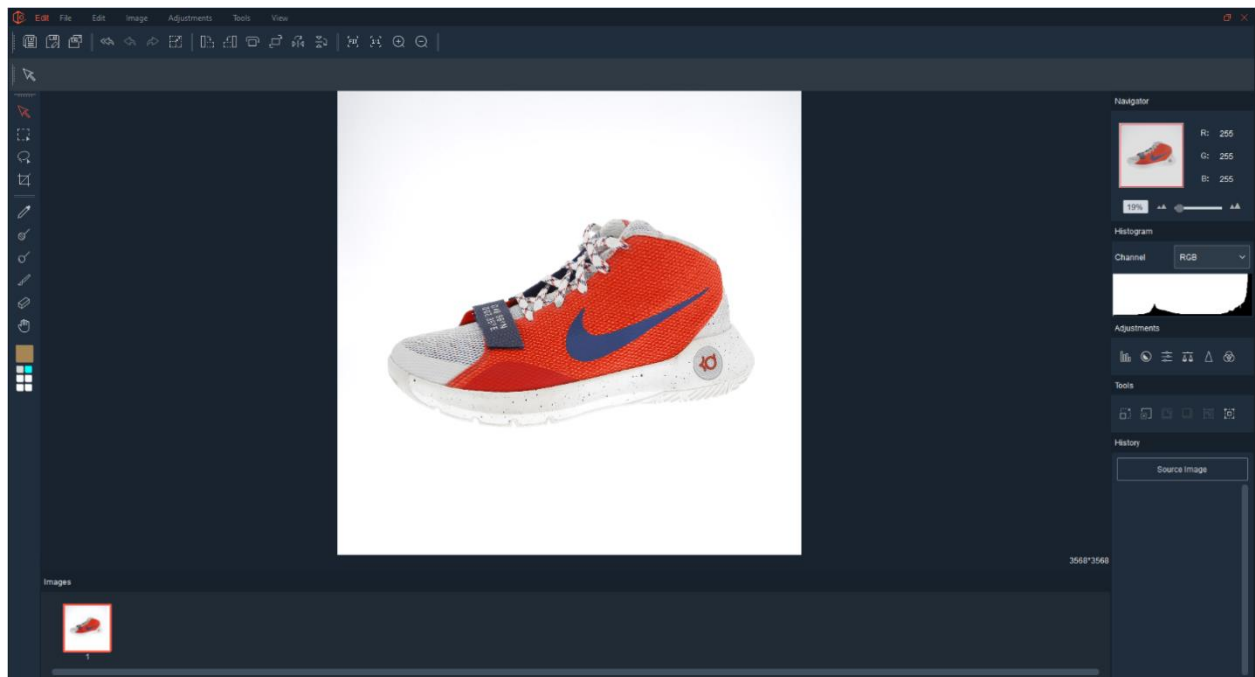
The Capture Screen:

This screen contains commands related to image capture. A Live Preview is located in the center with Image Capture options for still, 360, video and 3D formats on the left and Capture Settings on the right.



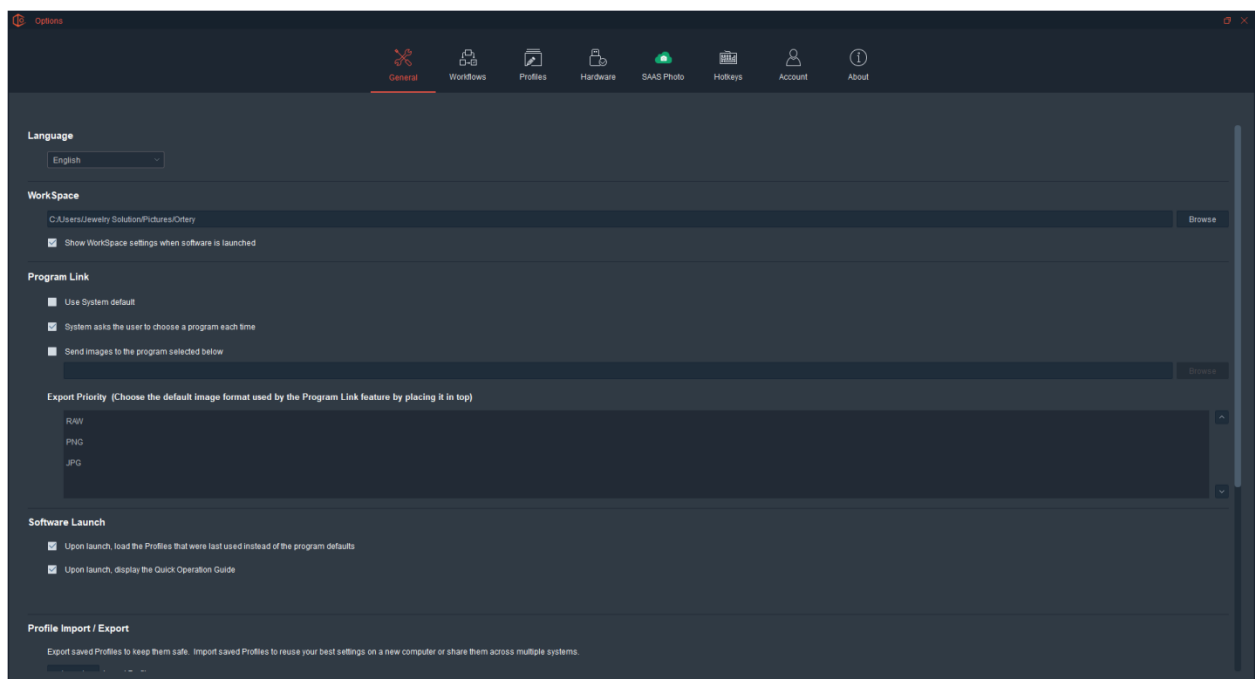
The Editing Screen:

This screen contains the tools used to edit captured images. Images appear along the bottom and editing tools appear across the top, left and right-hand sides of this interface.



The Options Screen:

This is where the user can set software defaults, critical workflow parameters and manage profiles.

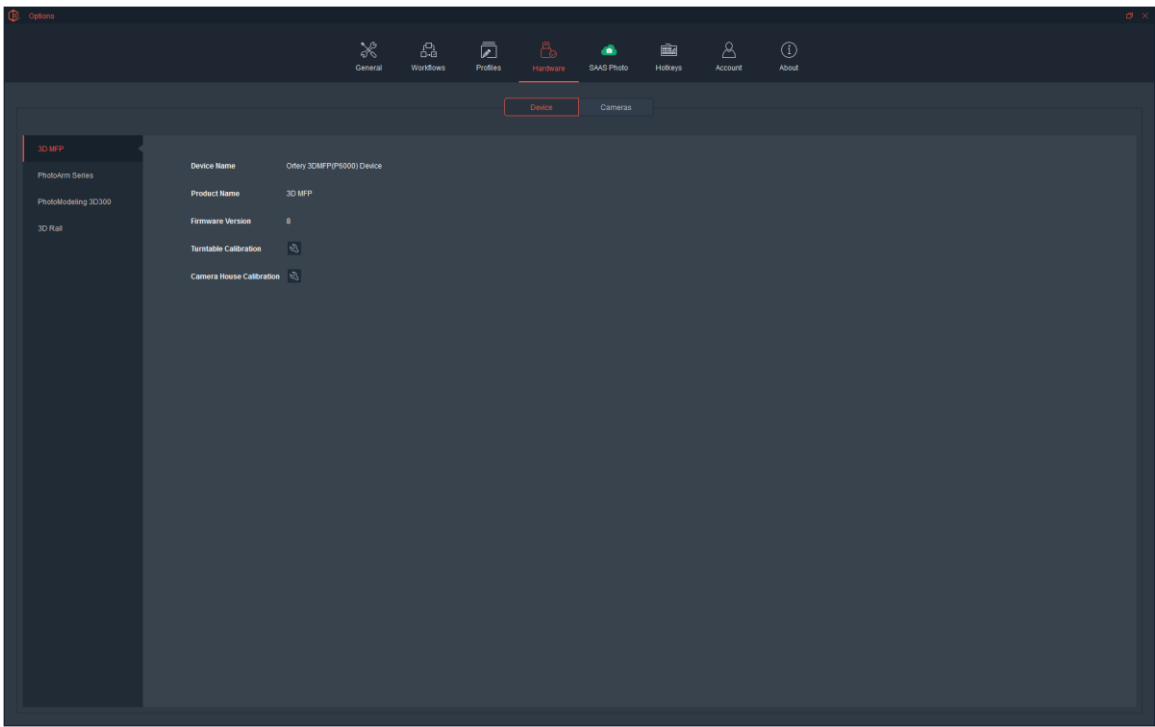


3D MFP / Photosimile 5000 Camera Housing Calibration

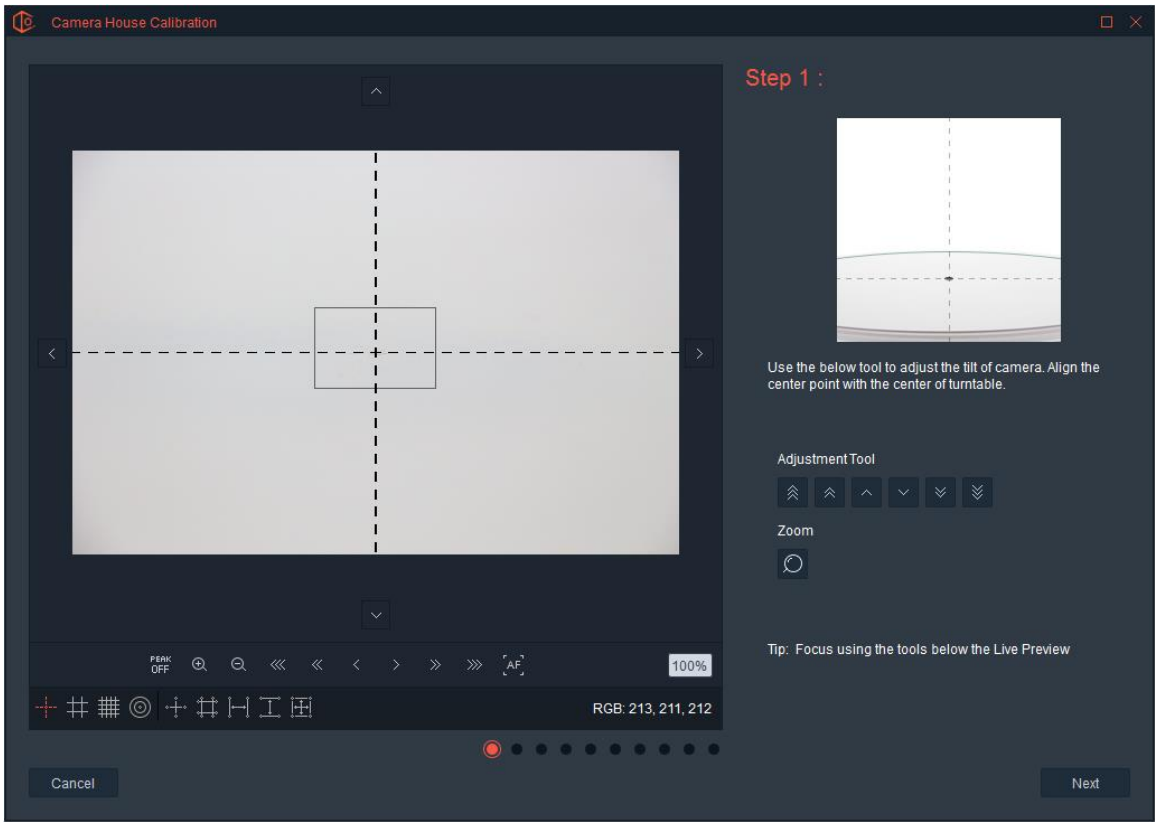
Only 3D MFP and Photosimile 5000 customers need to calibrate camera tilt position before starting to take photos.

This is a simple process that teaches the software where the center of the turntable is at each camera position. To calibrate the camera housing, the user will be asked to sequentially move the camera to 10 different locations along the rail and at each position tilt the camera until it is in line with the dead center of the turntable.

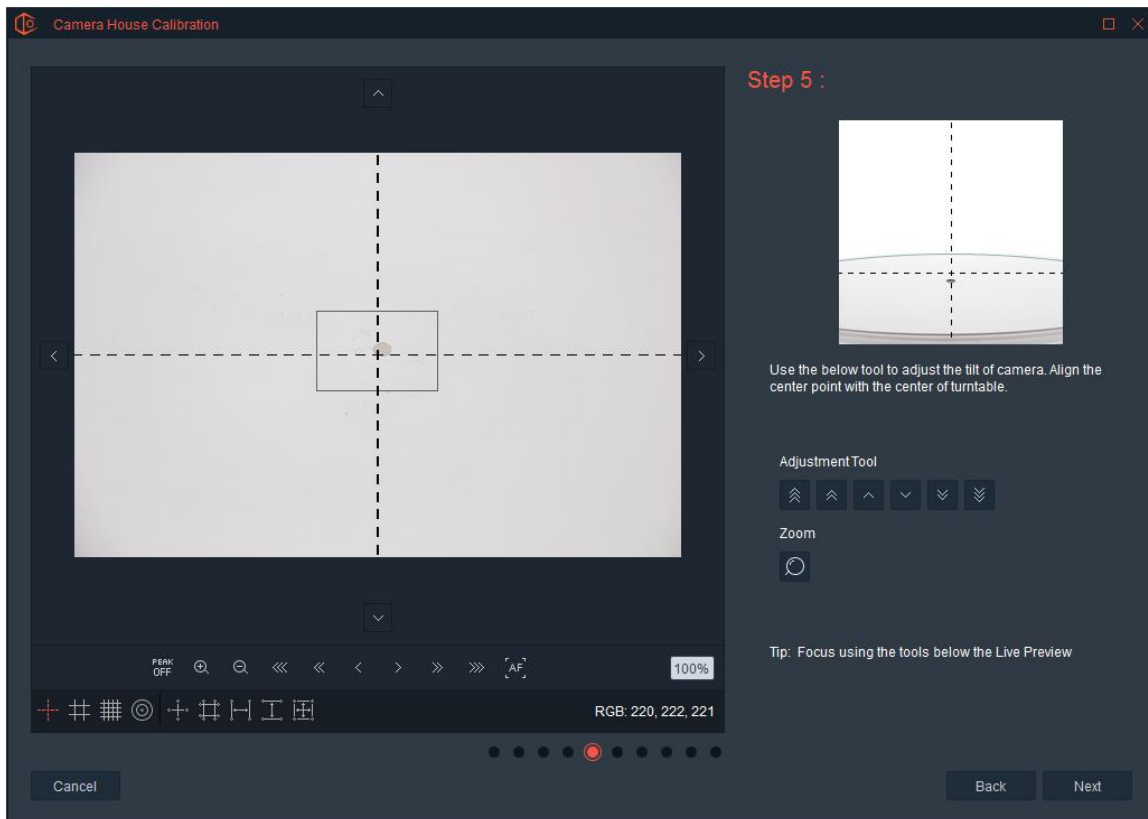
When a Photosimile 5000 or 3D MFP are run for the first time, the user will be asked to perform this calibration. Afterwards, if it needs to be calibrated again the user can initiate the Camera Housing Calibration process from the Hardware / Device Options screen (pictured below) by clicking the settings wrench.



The first step is shown below.



Simply use the tilt adjustment tools to move the camera housing unit until the center of the turntable appears in the vertical center of the crosshairs. Once completed, click Next to go to the next camera position. Continue this process until the calibration of all 10 camera positions are complete.



Note: If the dot (or center of the turntable) is a little off to the left or right, it's OK this process is to determine the vertical center. A small movement of the camera housing from left to right or right to left as it goes from 0 to 90 degrees is expected.

Taking Pictures

How to Take a Picture

The Ortery Capture software makes taking pictures fast and simple. The software is designed to memorize and reuse the best settings, so users can increase product photography speed, image quality and consistency.

To take a picture:

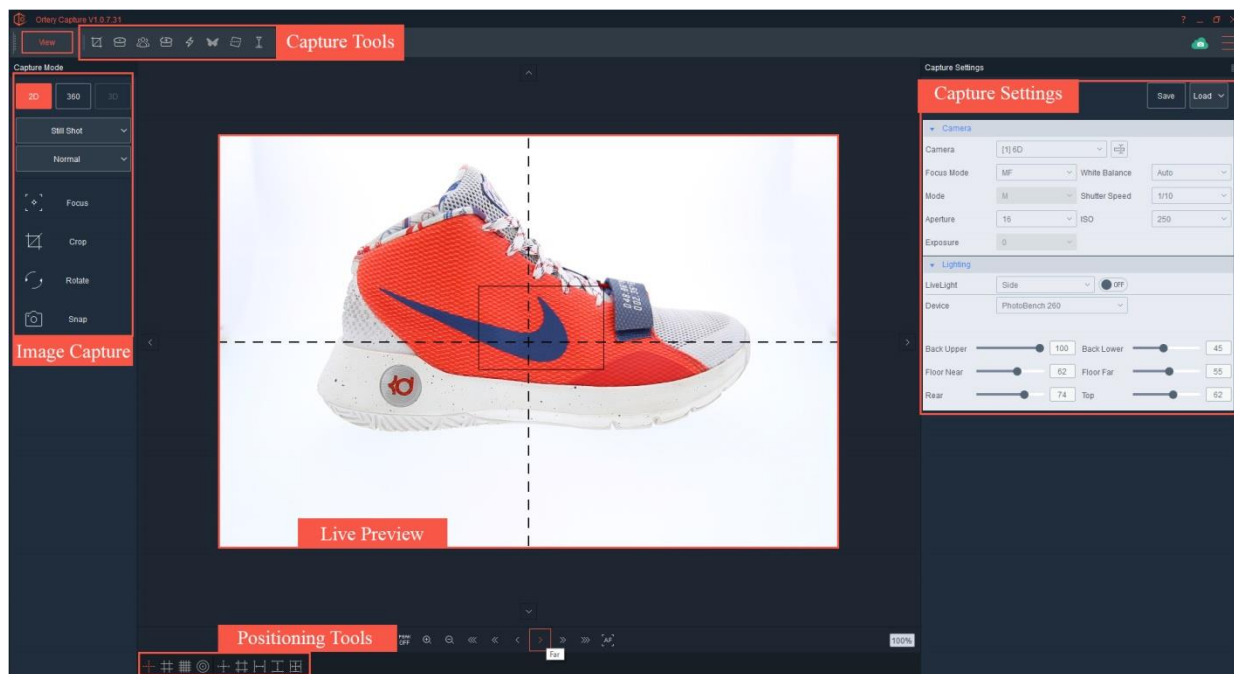
- Make sure the studio or turntable is turned On and a compatible digital camera is connected via USB.
- Launch the Ortery Capture software and create or choose a Workspace.
- Place a product inside the studio or on the turntable and point the connected digital camera at it.
- Click the 'Capture' button in the upper left. The Capture Screen will appear.
- Use the Live Preview in the center to begin composing the picture to be taken.
- Select 2D as the Capture Mode. 'Still Shot' and 'Normal' will automatically be set as the Capture Type and Style.
- Press Focus to have the camera focus on the product in front of the camera.
- Adjust Camera and Light settings until the item is properly exposed. Note: The Live Preview will show camera and lighting changes in real time*.
- Click Snap to take a picture.

*When a camera with Exposure Simulation is attached

The picture will automatically be downloaded from the camera and appear on the Viewing screen. Select the image and begin processing and saving the picture for online or print publication.

The Capture Screen contains features that control lighting, turntable and digital camera settings to take pictures.

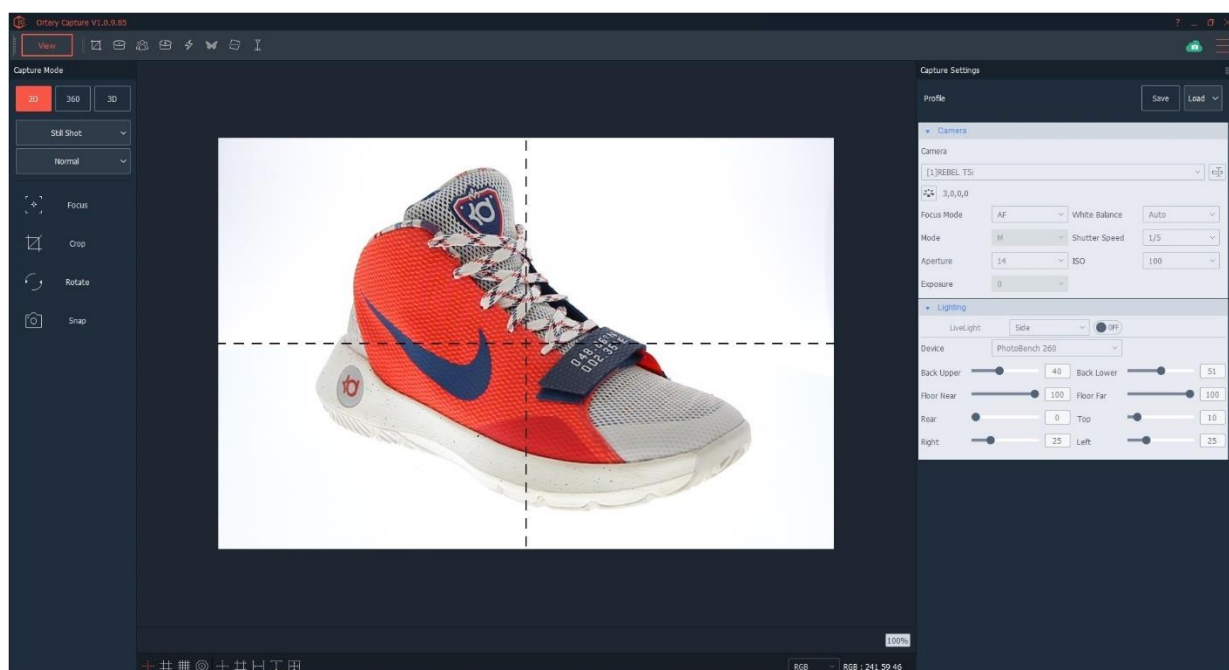
These features are broken down into Live Preview, Image Capture, Capture Settings, Positioning Tools and Capture Tools. Depending on the Ortery equipment in use, these features may vary. Each will be discussed in the next sections.



Live Preview

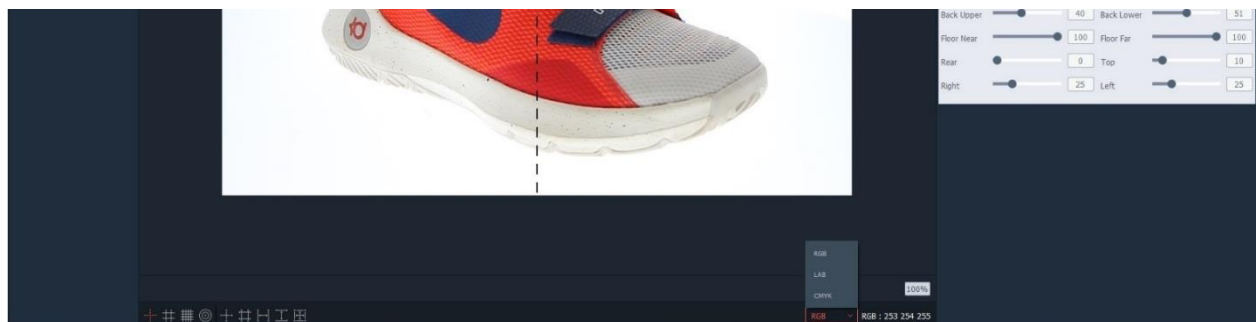
This area of the Capture Screen provides a live view of what is in front of the camera. If the camera has Exposure Simulation (all Canon cameras and some Nikon), then the Preview changes in real time to become either lighter or darker with camera and lighting changes.

The Live Preview is very important and is used to compose pictures. It provides a preview of what a picture will look like before it is taken.



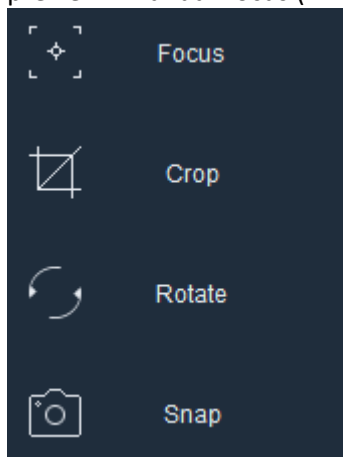
In addition to showing camera and light changes in real time, the Live Preview also helps align and crop the products to be photographed. Focus, Crop, Rotate and Positioning Tools also appear or affect what is seen inside the Live Preview.

The live preview allows users to understand the color of the background before they take a picture. Simply place the mouse over a specific pixel and the color value of that pixel will be displayed along the bottom in RGB, CMYK or LAB. This is very helpful, since when RGB (red, green and blue) all equal 255, that means that pixel is 'pure white'. So, before taking a picture the background color can be known. These tools also help when color matching to make sure the colors in the picture match the item.



Focus:

Pressing Focus automatically focuses the camera (when the camera lens is in AF mode) to provide a clear preview. Manual Focus (MF) and Fixed Focus (FIX) options are also available.



Crop:

The Crop button is a toggle that turns the crop markers On and Off. See the Live Preview with crop markers around the shoe below.



The shape and location of the crop marker can be moved freely (click and drag) but can also be fixed as a square or specific Length x Width ratio using the Crop Tool. Cropping takes place when the picture is taken.

Rotate:

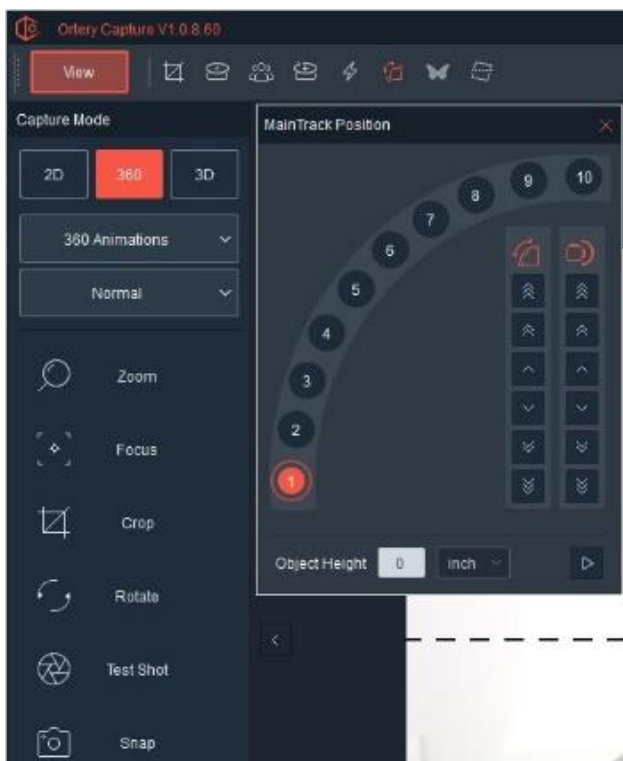
The Rotate feature rotates the Live Preview 90 degrees with each click. It is used to synchronize the camera view with the on-screen Preview.

Snap:

Pressing Snap is the same as pressing the shutter release on your camera. Snap focuses the camera, takes the picture, crops it if required then automatically sends the resulting image to the computer screen for viewing and processing.

Photosimile 5000 / 3D MFP Capture Interface

The Photosimile 5000 or 3D MFP is the same as other Ortery products, but it also can move the camera up and down the rail. In addition, the user can also zoom and tilt the camera with a click of a button.



These extra features work as follows:

The Zoom button allows the user to zoom the camera in and out.

The Camera Position window to the left allows the user to move the camera up and down the rail and control camera tilt.

By setting the Object Height, the camera will automatically tilt to the product's vertical center when capturing images on a new row. This simplifies 3D image capture.

Image Capture Mode

Use this part of the Capture Screen to choose which Capture Mode, Capture Type and Capture Style to use.

Capture Mode:

Take pictures in 2D, 360 and 3D Capture Modes

Capture Type and Capture Style:

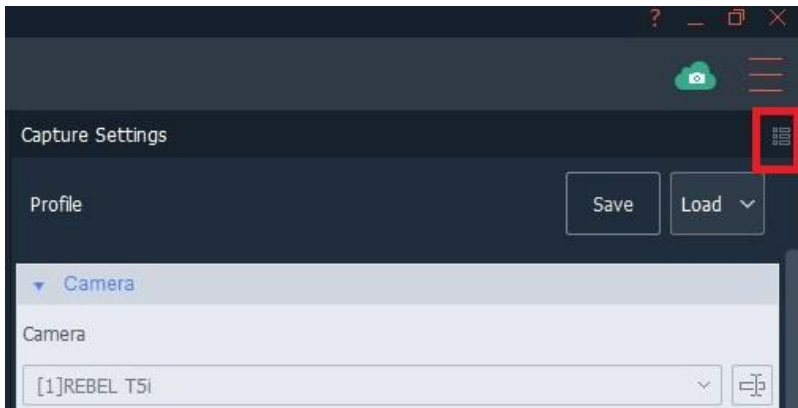
Each Capture Mode has its own unique set of Capture Types and Styles. The Capture Type determines the available Capture Styles.

Image Capture Settings

This section of the Capture Screen is used to change, save and manage the conditions under which pictures are taken. Depending on the Capture Mode, Type and Style the content of the Shooting Settings area will change. For example, when creating a 360-degree animation, this area provides direct control of all Camera Settings, Light Settings and Turntable settings.

Changing the Capture Settings View:

Note: The Shooting Settings area can be displayed vertically or in wide format by toggling the button highlighted below.



Camera

[1] 6D

Focus Mode

AF

Mode

M

Aperture

14

Shutter Speed

1/8

Exposure

0

ISO

200

White Balance

Auto

Lighting

LiveLight

Side

OFF

Device

PhotoBench 26i

Back Upper

30

Back Lower

30

Floor Near

30

Floor Far

30

Rear

70

Top

70

Right

70

Left

70

Camera

[1] 6D

Focus Mode

AF

White Balance

Auto

Mode

M

Shutter Speed

1/8

Aperture

14

ISO

200

Exposure

0

Lighting

LiveLight

Side

OFF

Device

PhotoBench 260

Back Upper

30

Back Lower

30

Floor Near

30

Floor Far

30

Rear

70

Top

70

Right

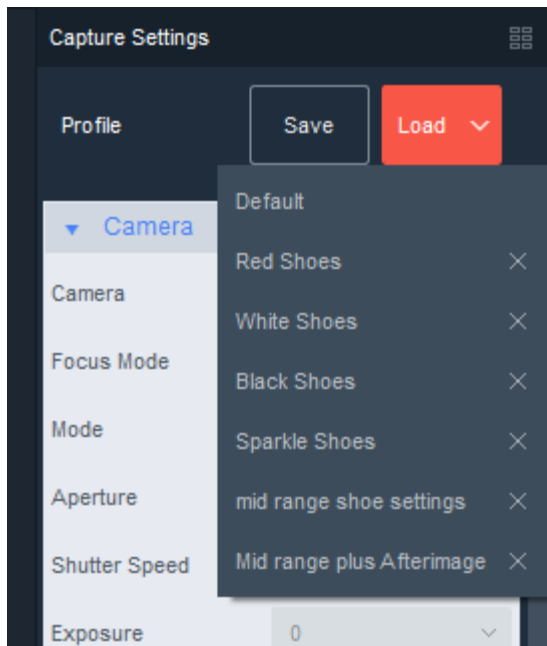
70

Left

70

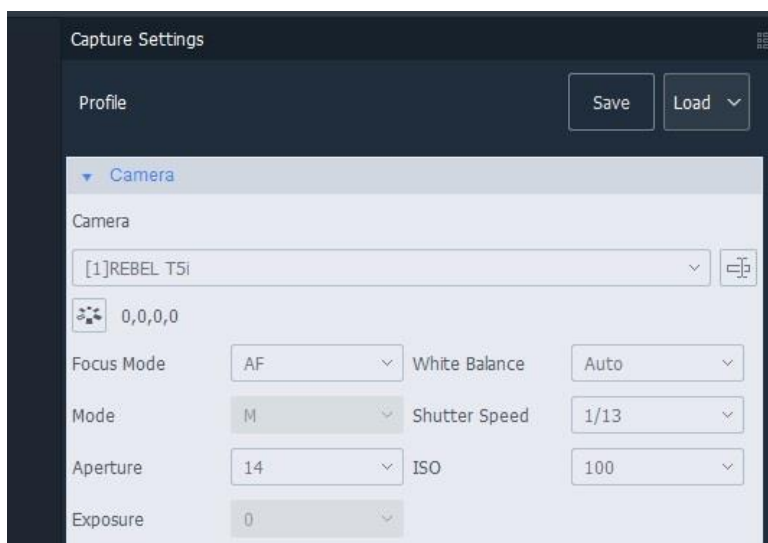
Capture Profiles

To make image capture simple, fast and consistent, every setting inside the Capture Settings area can be saved and re-used as an Image Capture Profile. Simply press Save and give the Capture Profile a name. To reuse a Profile, click Load and select the desired Profile.



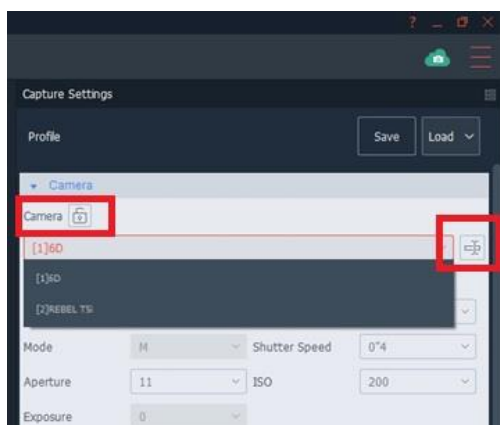
Camera Settings:

This area shows the compatible camera or cameras attached to the system. In addition, it also shows the camera settings to be used when taking pictures.

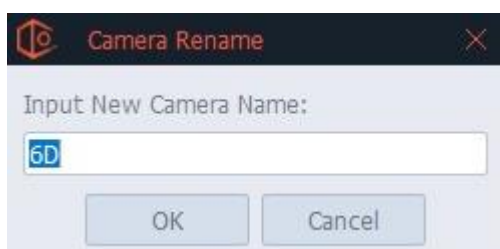


Attach Multiple Cameras

When multiple cameras are attached, use the pull down to switch between cameras. Multiple cameras can be utilized to facilitate picture taking from multiple angles in 2D, 360 and 3D Capture Modes. On most Ortery solutions, up to 5 cameras can be simultaneously attached and controlled. Also note that when more than one camera is attached, a Camera Sync or Lock icon appears so the same settings can be used on all the cameras attached.



When necessary, cameras attached to the system can be renamed. Simply click the button to the right of the camera name and enter a new camera name.



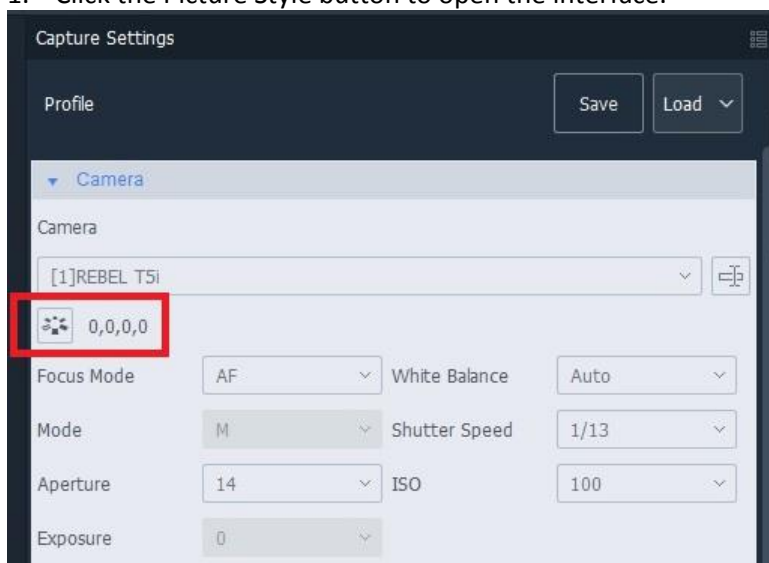
Depending on the digital camera attached to the system, critical picture taking settings such as Picture Style, Aperture, Shutter Speed, White Balance and more can be controlled directly through the software from this interface. Each will be discussed in order.

Picture Style

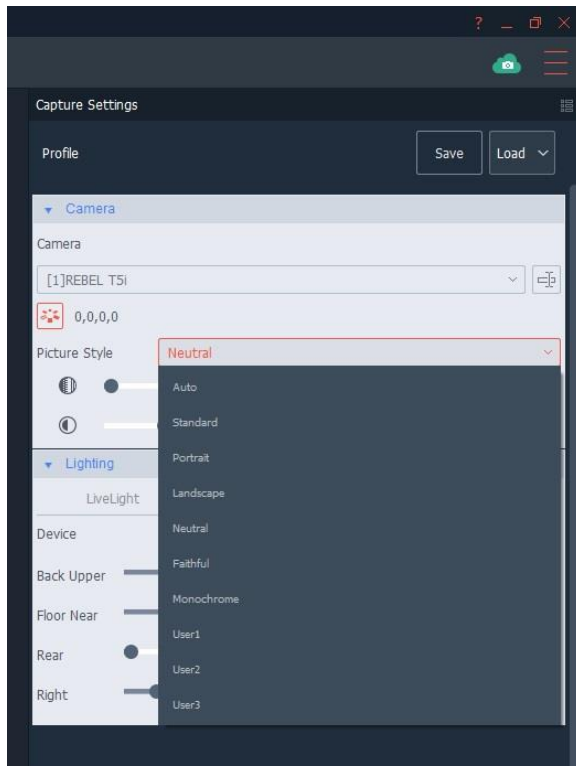
Many Canon cameras offer the ability to change the Picture Style on the camera. This allows the user to either optimize settings or take a picture a certain way. For example, by changing Picture Style a picture may be taken in Monochrome or automatically optimized Landscape or Portrait photography. The captured images are automatically adjusted inside the camera.

How to choose and adjust Picture Style:

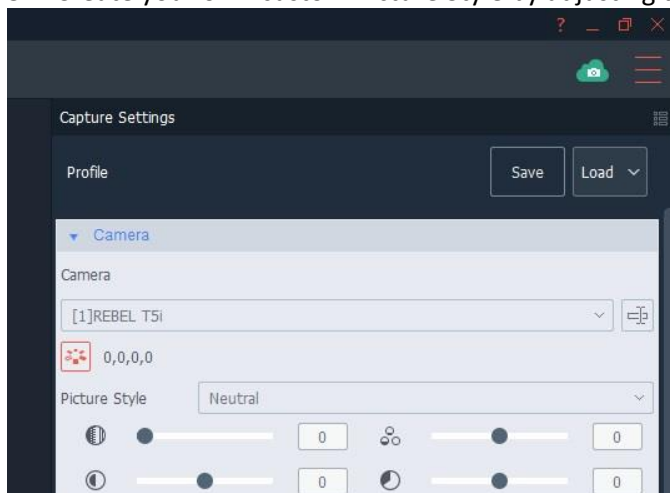
1. Click the Picture Style button to open the interface.



2. Choose the Picture Style you wish to use from the pulldown menu.



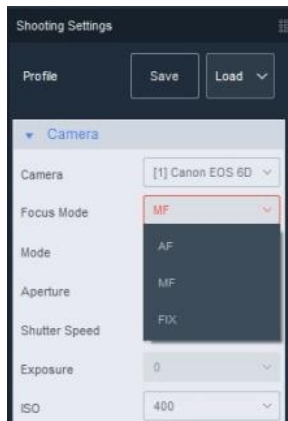
3. Create your own custom Picture Style by adjusting the four variables:



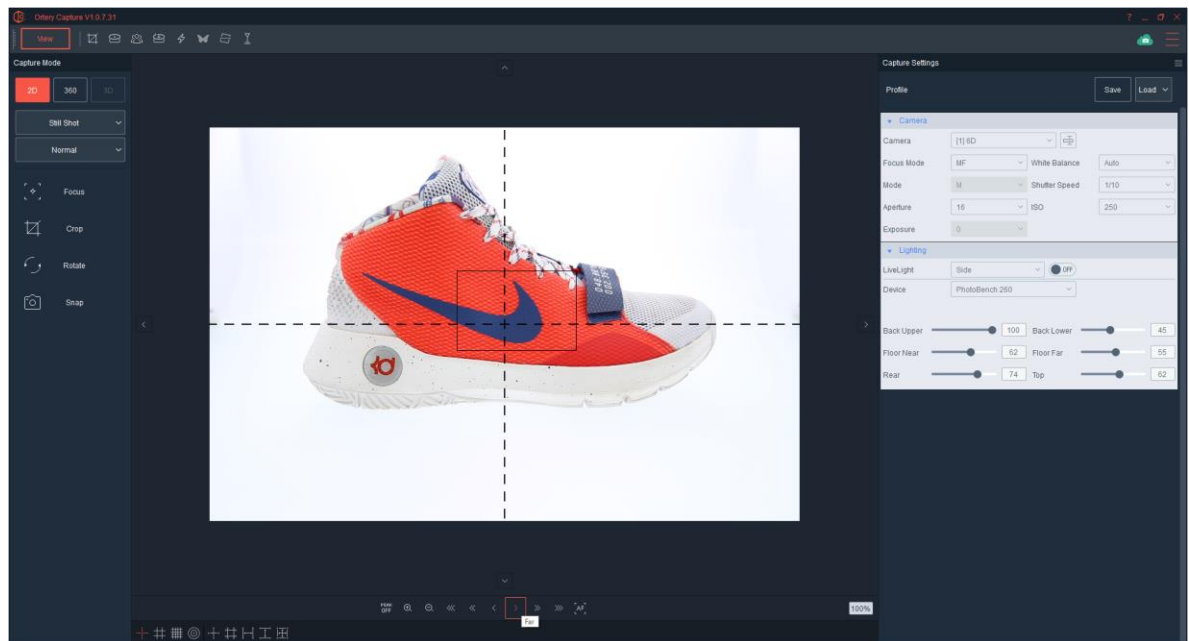
Drag the sliders to create custom Picture Style settings for Sharpness, Saturation, Contrast and Color Tone.

When a camera has Exposure Simulation capabilities, as the user changes camera settings, the Live Preview automatically changes and updates to show what the picture would look like if it were taken with those settings. **Focus Mode:**

Choose from AF, MF and FIX focus modes.

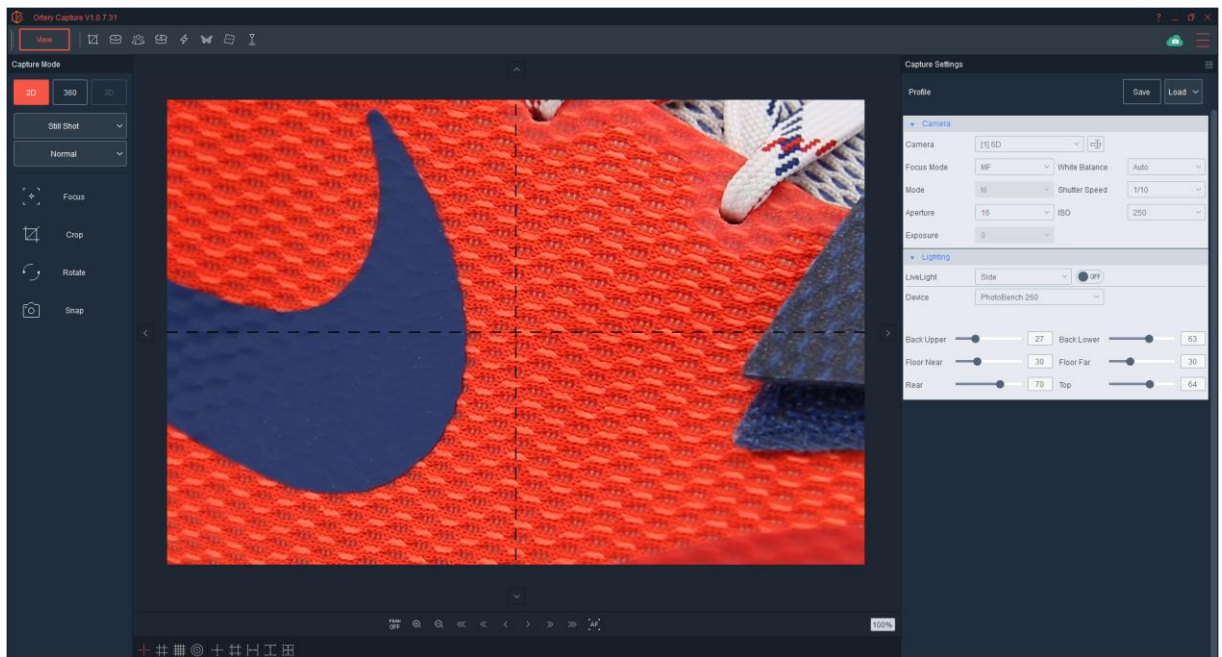


- *AF (AutoFocus):*
In this mode, when the Focus button is pushed, the camera will automatically determine where to focus based on the AF settings inside the camera.
- *MF (Manual Focus):*
The user chooses where the camera will focus. Selecting MF brings out the Manual Focus features below the Live Preview.



On the Live Preview, move the Focus Rectangle to the area of desired focus, then press the + magnifier button to enlarge the content of that area 10X.





Press the Near and Far buttons until the image is clear. Click Snap to take the picture.



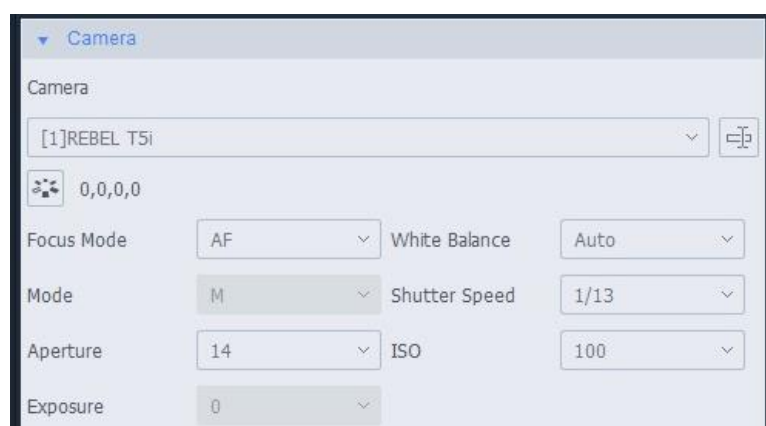
- **FIX (Fixed Focus):**

A fixed focus works the same way MF does, but it holds focal length the same for all pictures taken while in this mode. Fixed focus is mostly used when capturing multiple rows during hemispherical or spherical image capture.

Mode: The camera mode can only be manually set on the camera. When changed, the software automatically reflects the change and displays the current selection. Different camera modes give you more or less freedom to change aperture, shutter and the other camera settings within the software. We recommend using M for Manual.

Available camera modes depend on your camera. Common modes include: Manual (M), Aperture Priority (Av) and Shutter Priority (Tv). Each mode has advantages and disadvantages. To learn more about these modes and their optimal use please consult your camera manual.

Aperture Priority (Av) Mode: Allows the user to adjust aperture to a desired level. Shutter speed will be automatically be determined by camera to let the optimal amount of light into the camera's sensor. This feature is used when depth of field is important.



Shutter Priority (Tv) Mode: Allows the user to adjust the shutter speed to a desired level. The camera will automatically choose the appropriate aperture setting to optimize the amount of light entering the camera sensor. This feature is primarily used to take pictures of moving objects.

Manual Mode (M): Gives the user complete creative freedom. Both aperture and shutter speed are determined by the user.

Please note: By selecting a Camera Mode, some of the available pull down menus on the Camera Settings window may be 'grayed out' or unavailable for selection.

Aperture: This pull-down menu allows the user to select a fixed camera aperture. The larger the aperture number, the smaller the opening and thus less light reaches the sensor creating a larger depth of field in the resulting images.

Shutter: This refers to the camera's shutter speed and allows the user to set the shutter speed to a specific setting. The settings are in reference to one second – for example, a shutter speed equal to 1/160 means that the shutter will open and close in one, one hundred sixtieth of a second. The larger the denominator the faster the shutter opens and closes. Higher shutter speeds are used to stop motion.

Exposure: The exposure pulldown allows the user to increase or decrease the amount of light hitting the camera sensor over the available range. For example, -2 to +2 where zero is the default exposure setting.

Sensitization (ISO speed): This feature is the same as choosing a particular film speed for a traditional camera. By increasing the ISO speed, you can create bright images even in low light conditions. Be aware, however that higher ISO speeds increase image noise.

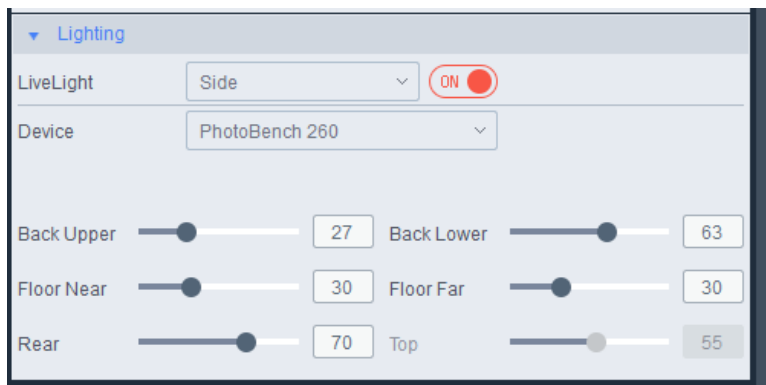
Flash: Some cameras have 'flip up' flash bulbs. For the Flash feature to be active, the flash on the camera has to be physically opened. When open, users have the option of using the flash as is or choosing a special type of flash such as 'red eye flash' or no flash from the pull down.

White Balance: When the white balance is set to match the light source, the camera reproduces colors more accurately. Different cameras offer different white balance options. Some examples include: Auto (this is the Default and should always be tried first), Daylight, Cloudy, Tungsten, Fluorescent, Flash and Custom.

Lighting Settings:

Use these settings to control the lights of an attached Ortery studio. The Live Preview shows lighting changes in real time. Depending on the studio / device attached, different controls will be available.

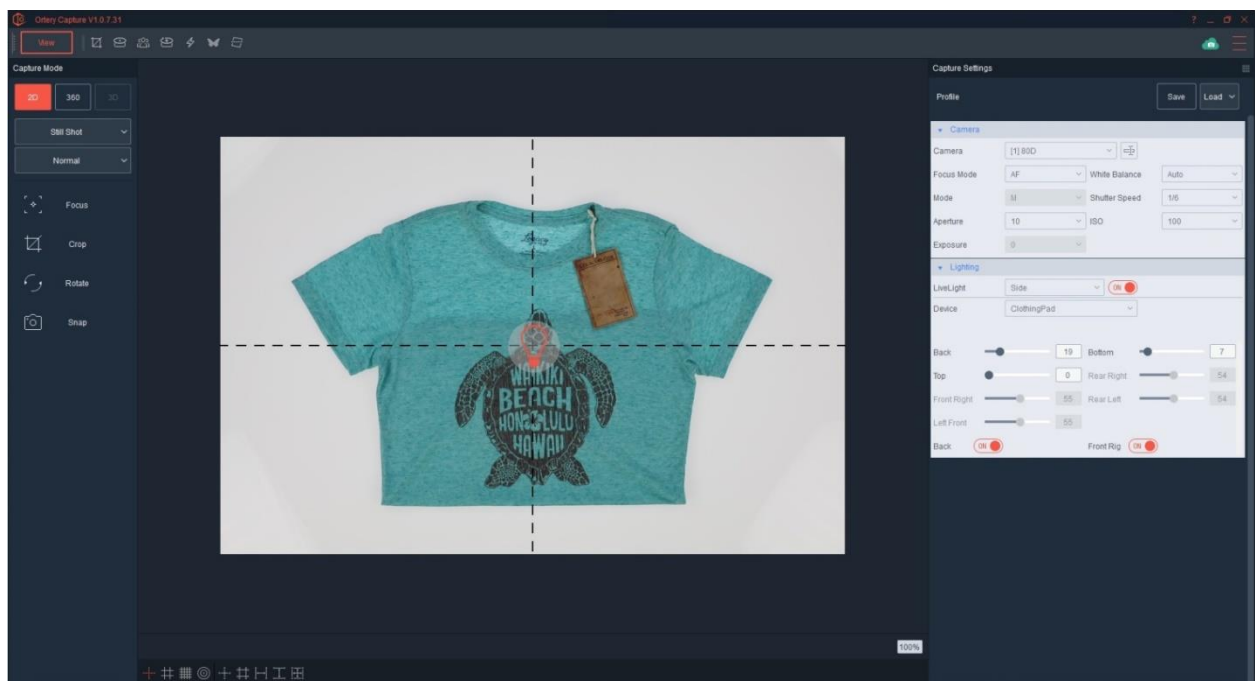
- For LED lighting systems, dimming controls will appear.
- For Fluorescent studios, On / Off options will appear.
- If the Ortery system has LiveLight Capabilities, then the option to turn on / off LiveLight from the Side or Top will appear.



Ortery LiveLight

Certain Ortery devices offer Ortery LiveLight. Ortery LiveLight allows users to control the direction and intensity of available lighting by simply moving around on the Live Preview. When available, LiveLight control will appear here. Once Ortery LiveLight is turned On, an icon of a light bulb will appear on the Live Preview.

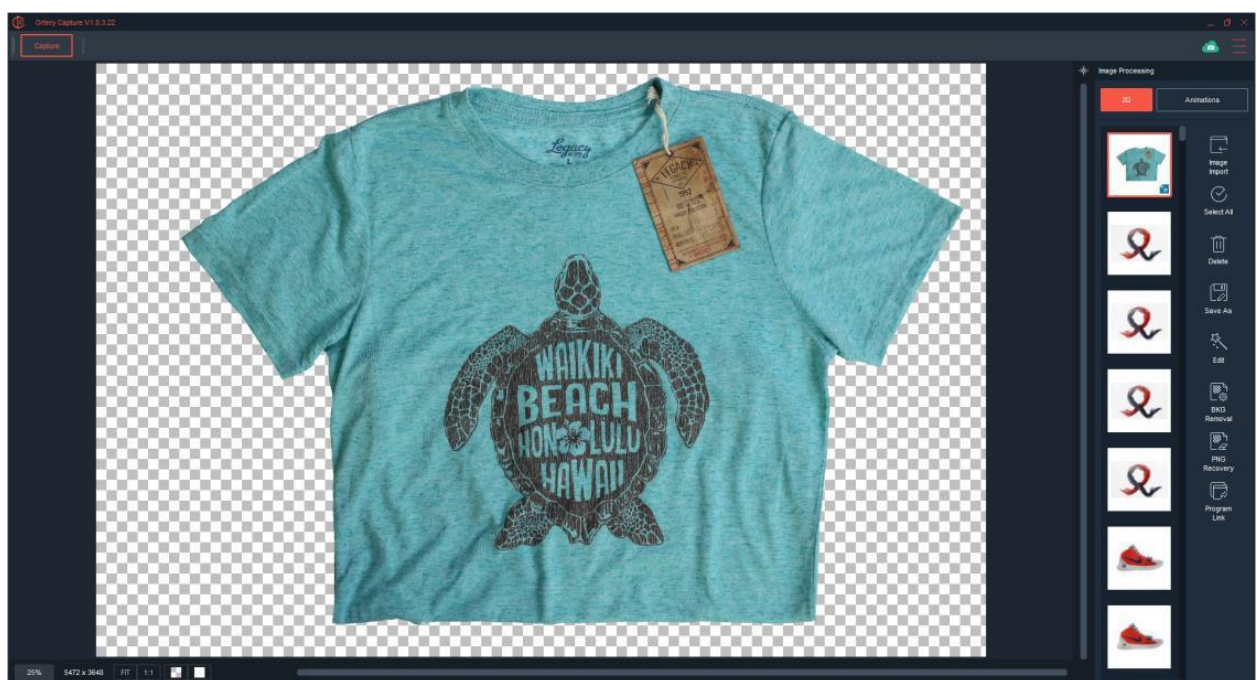
The location of the LiveLight icon indicates where the light will be most intense.



In the Preview examples below, the bottom light was set to off (in AutoPNG Mode) and LiveLight icon was used moved around to quickly determine the best light settings for calling out the wrinkles / depth on the shirt.



Once the best light is determined, a picture was taken. LiveLight brings items to life by giving them depth.



More Settings:

Depending on the Capture Mode more settings will appear in this area.

For example, when creating a 360 degree animation or video, turntable and 360 image capture options will appear and offer control over the workflow.

The Capture Settings related to each unique Capture Mode will be covered throughout this document.

* When connected camera has exposure simulation capabilities enabled

Positioning Tools:

There are several grid and interactive guide tools that overlay the Live Preview. Use them to make it easier to align objects, find center and consistently place objects in the same spot.



Live View Grids



Live View Guides



Note: Right-click each icon to change the color of the grid or guide. Positioning Tool colors can also be changed in Options under the General tab.

Image Capture Tools

These tools help users take better pictures by providing advanced options for product alignment, cropping and centering as well as turntable rotation control and features related to highlight alert and shooting with strobes.



Crop Options:

Ortery Image Capture allows users to crop images as they are captured. Crop markers appear in the Live Preview and give users several options to increase consistency, save time and immediately produce the desired result.

Crop

☒ Lock Crop Around Center

Re-Center

Crop Profile

Save

Load

Crop Ratio

Free Form

Width

3

↔

Height

2

Crop And Fill

Off

Width

3

↔

Height

2

Fill Color

Crop markers can easily be Re-centered or set up so they move around the center of the area to be cropped.

In addition, users can crop using a Free Form or a Fixed Ratio. Presets for common ratios can be selected and any ratio can be used.

Crop Free Form



Crop 16:9



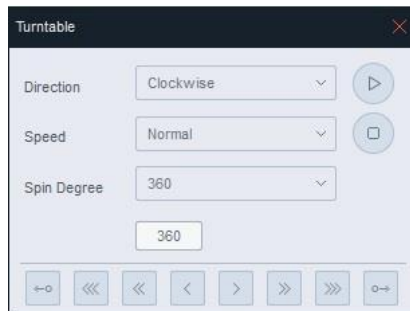
Crop Square





Turntable Tools:

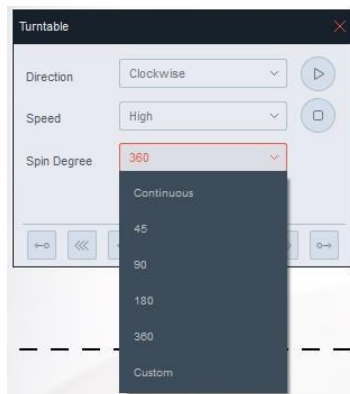
These tools give the user control over turntable movement, direction and speed.



- **Direction:** Choose from Clockwise or Counterclockwise.



- **Speed:** High, Medium or Low
- **Spin Degree:** The turntable can spin continuously or to a fixed degree.



Either:

- Choose Continuous and click Play
- Choose an angle from the pull down and click Play or
- Type in a specific angle and click Play.

Nudge or Click and Hold: Use these tools to slightly move the turntable in one direction or another. Buttons with one arrow, two arrows or three arrows (>, >>, >>>) exist for each direction. The more arrows, the more the turntable moves.



Users can also Click and Hold these buttons to move the turntable to any position.



AfterImage:

AfterImage consists of several tools that make it easy to consistently place objects in the same location for creating still shots and 360-degree animations.



In addition, there is a shortcut to the last AfterImage used and a transparency slider to control the opacity of the AfterImage on the Live Preview.



This button turns AfterImage On. It creates a transparent copy of the current Preview area and displays it over the Live Preview. AfterImage allows the user to place objects in the exact same spot with regards to angle and zoom to ensure maximum consistency between product shots.



This button captures a 360 AfterImage. It creates a smear of the object as it rotates 360 to help with centering, cropping and initial product placement on a turntable.



This button turns AfterImage Off.



This saves the current AfterImage for later use.



This button loads a saved AfterImage for re-use.

AfterImage of a shoe in Still Shot Mode



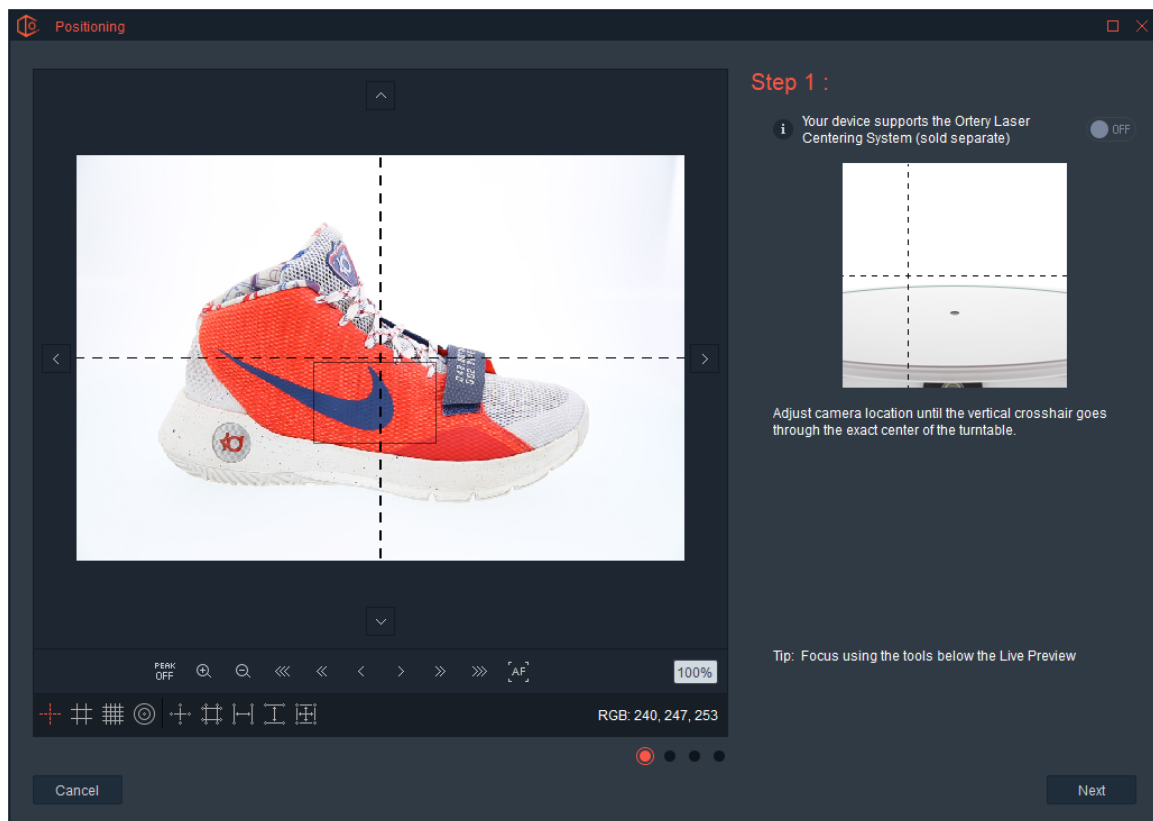
360 AfterImage of Shoe



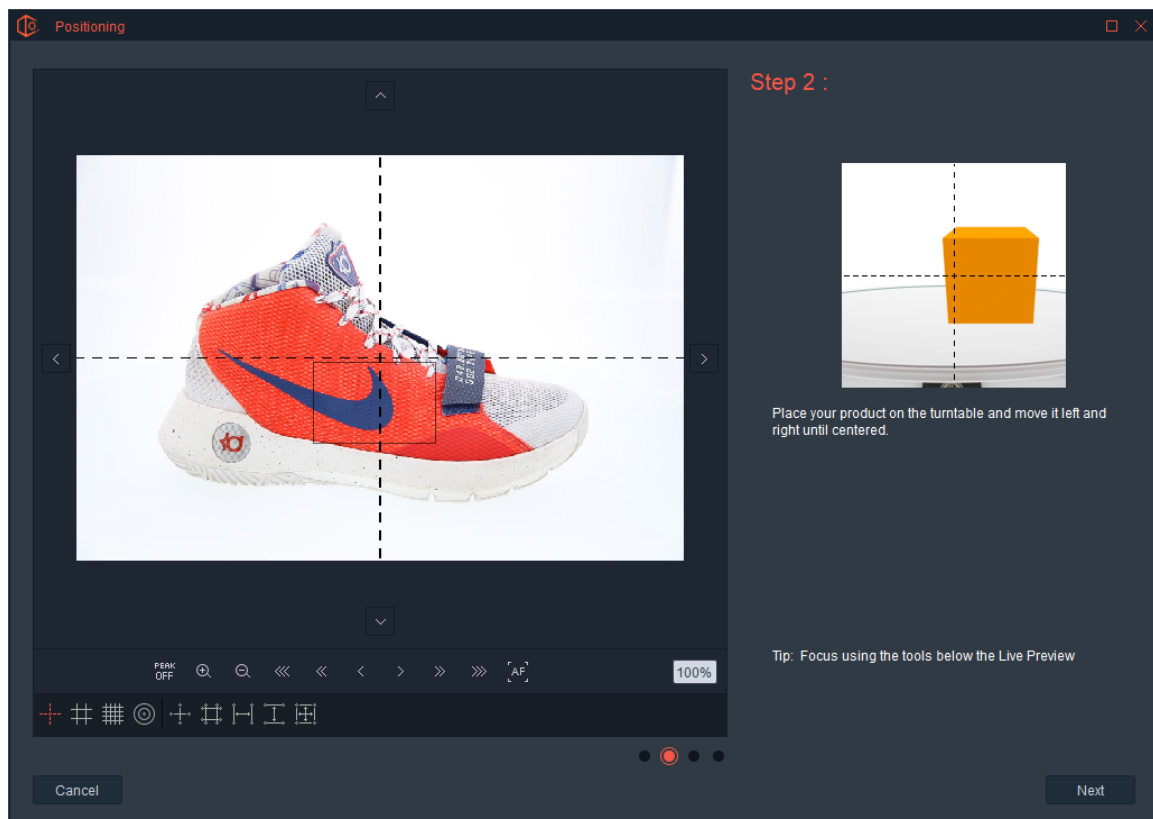
Position Tool

The Position tool offers a series of clever steps that help center an object on a turntable.

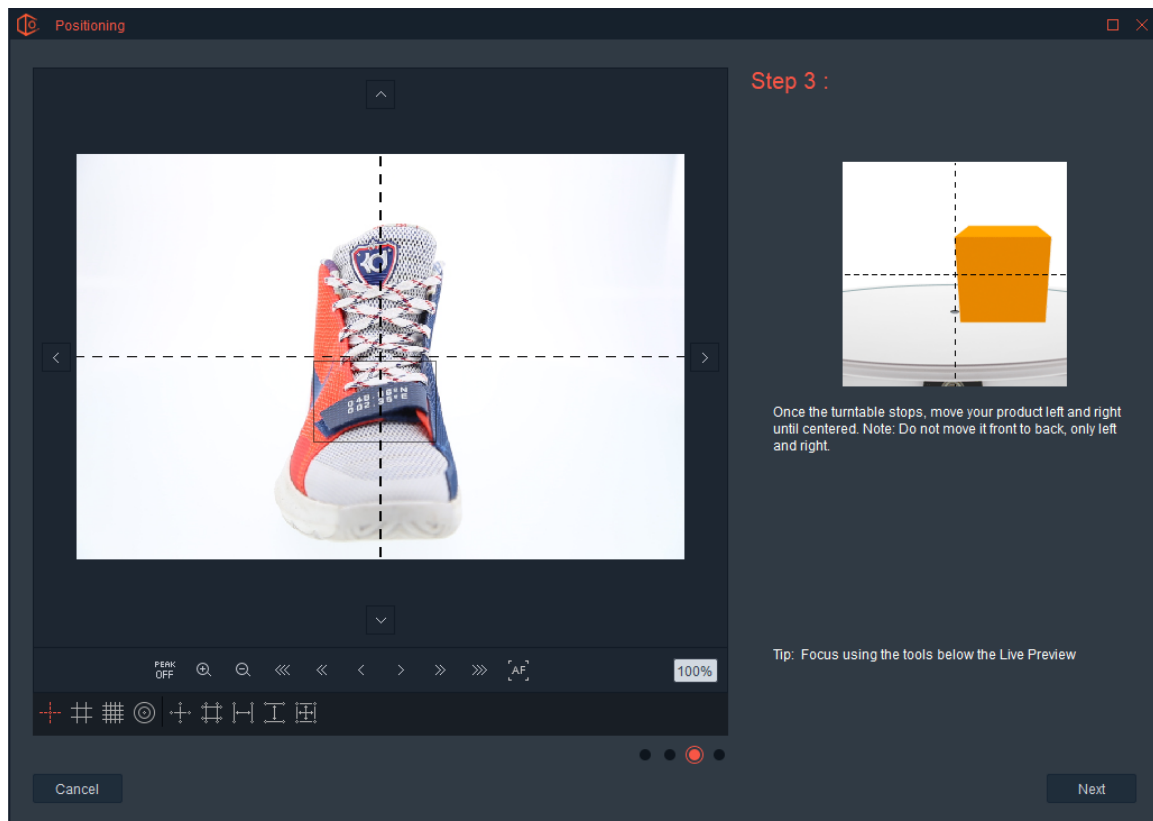
Follow the instructions at the top and use the tips in the bottom right of the interface. Press next to proceed.



Overall, center your camera so the vertical cross hair inside the Preview goes through the center of the turntable. Place an object inside and center it left and right. Click next.



Now you will center your product left to right until it is centered. Once it is centered, click Next.

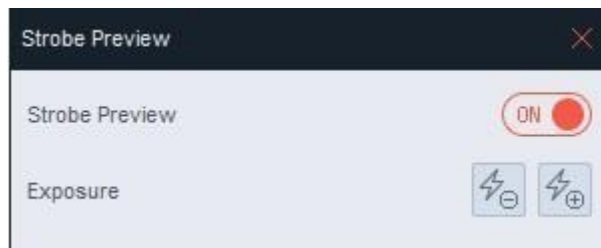


The turntable rotates 90 degrees. Center the object left and right again (not front and back) and in theory the product will be centered.



Strobe Mode:

When shooting pictures with strobes, the Ortery software provides an alternative Live Preview that works independent of the normal camera settings. With this, users can easily compose their shots under the dim modeling lights while maintaining camera settings that are ideal for capture with strobes.



Highlight Alert

Given the current camera and light settings, this feature shows what areas of the image (shown in black) would be pure white (R, G, B = 255, 255, 255) if the picture was taken.

Indicates back wall will be pure white



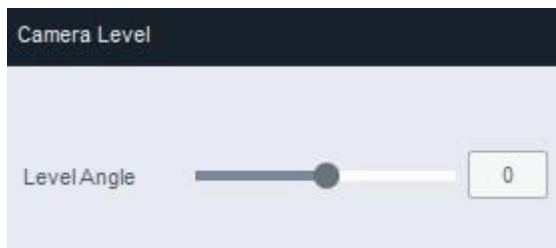
Indicates everything surrounding will be pure white





Camera Level

The Camera Level feature allows the user to make incremental adjustments to the Preview so the product is level (or not level depending on the application). Simply move the slider.



Before Camera Leveling



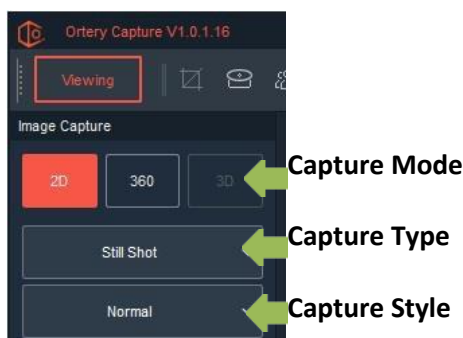
After Camera Leveling



This feature is used to quickly adjust the product level without adjusting your tripod. It does require additional processing on your computer and we recommend fixing the tripod as a long-term solution.

Capture Modes, Types and Styles

To choose the type of picture to take, first select the Capture Mode (either 2D, 360 or 3D) then select a Capture Type and Style.



2D Capture Mode

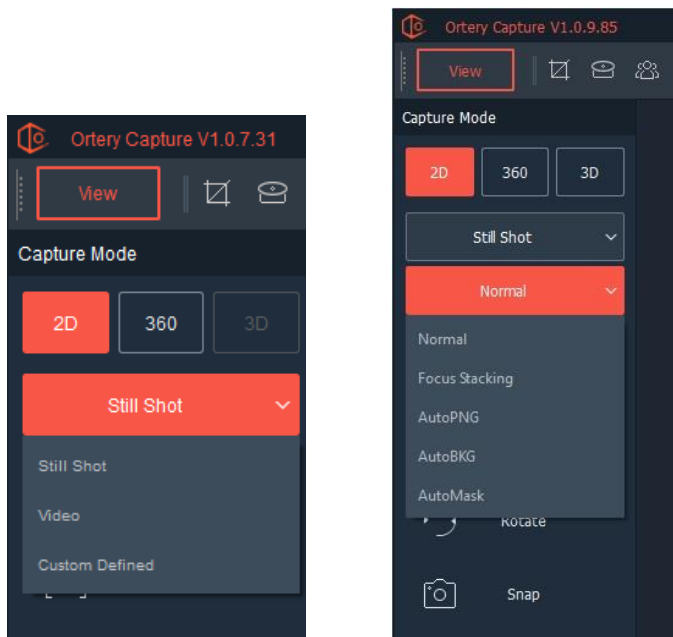
The 2D Capture Mode is used to take still shots. When 2D is selected as the Capture Mode, the default will be to capture Still Shots in Normal mode. However, with Ortery's Image Capture software several capture types and styles of still shots can be taken.

2D Capture Types and Styles:

There are two 2D capture types: Still Shot and Custom Defined

2D - Still Shot / Normal

Use these settings to take a normal still shot for use in any application.



After making these selections, utilize the Live Preview to compose the picture. Adjust camera and light settings as needed then click Snap to take the picture. The image will appear immediately on your monitor screen for viewing, editing and processing.

2D - Still Shot / Focus Stacking

Focus stacking is a special photography technique that allows the user to take several pictures over a defined focus range then combine them into a single image with a greater depth of field. It can be used to eliminate blurriness and depth of field issues. By selecting Focus Stacking, Focus Stacking Mode is turned On. For pictures taken in this mode the user will have to determine the focus range or area inside the picture to be in complete focus.

Limited Depth of Field – Blurry in the back



Focus Stacked – Completely in focus

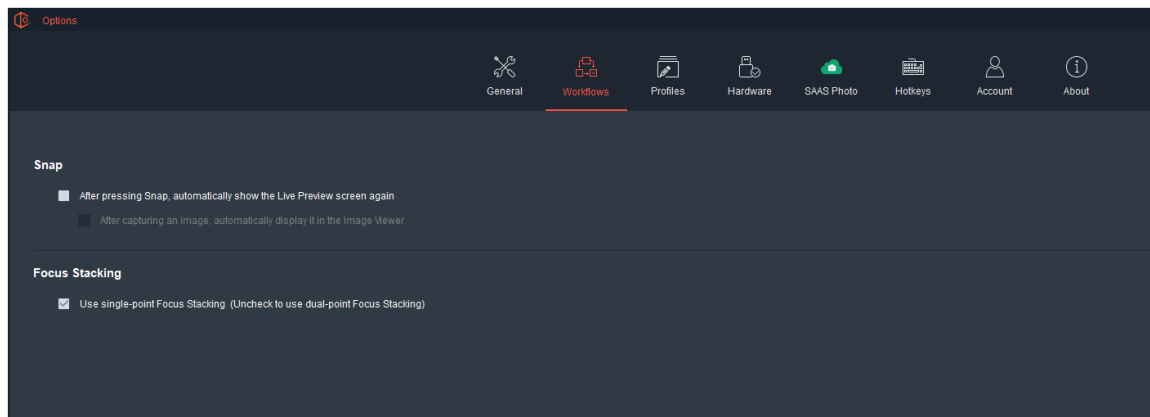


There are two Focus Stacking modes: Single Point and Dual Point

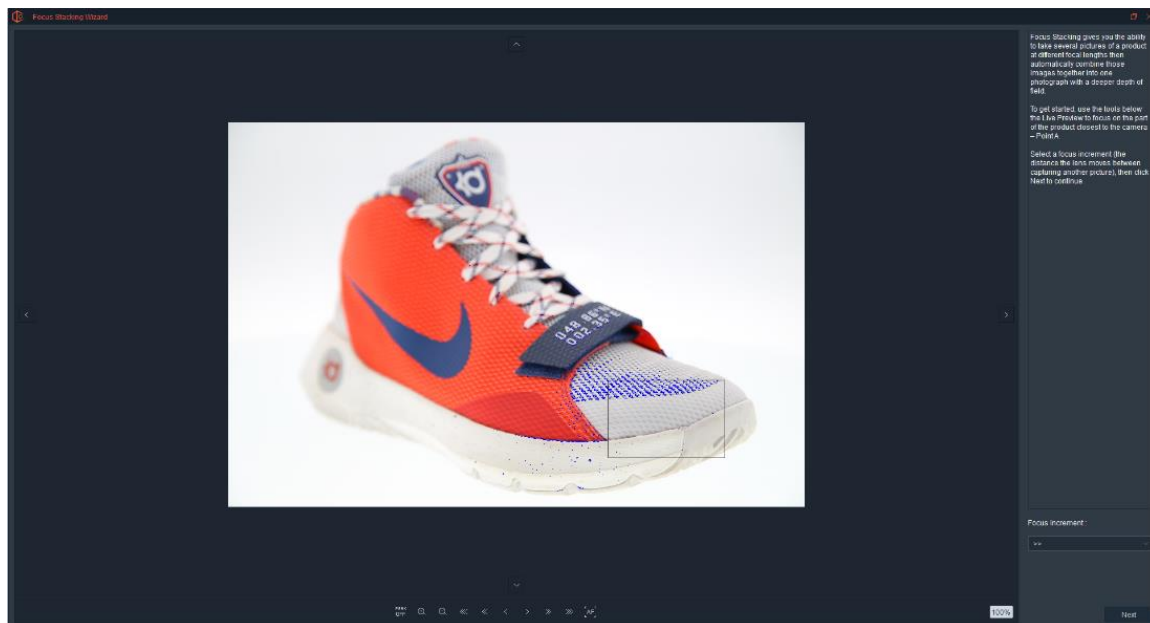
The difference between the two focus stacking types is the ability to select a specific range over which captured images will be focus stacked. Dual Point allows you to choose both beginning and ending points to create a specific range, whereas Single Point focus stacking allows you to choose the beginning point then the depth is based on the number of shots taken.

Focus Stacking - Dual Point

To enable dual shot focus stacking, click Options then select Workflows. Under Focus Stacking you will uncheck the box to turn on Dual Point focus stacking.

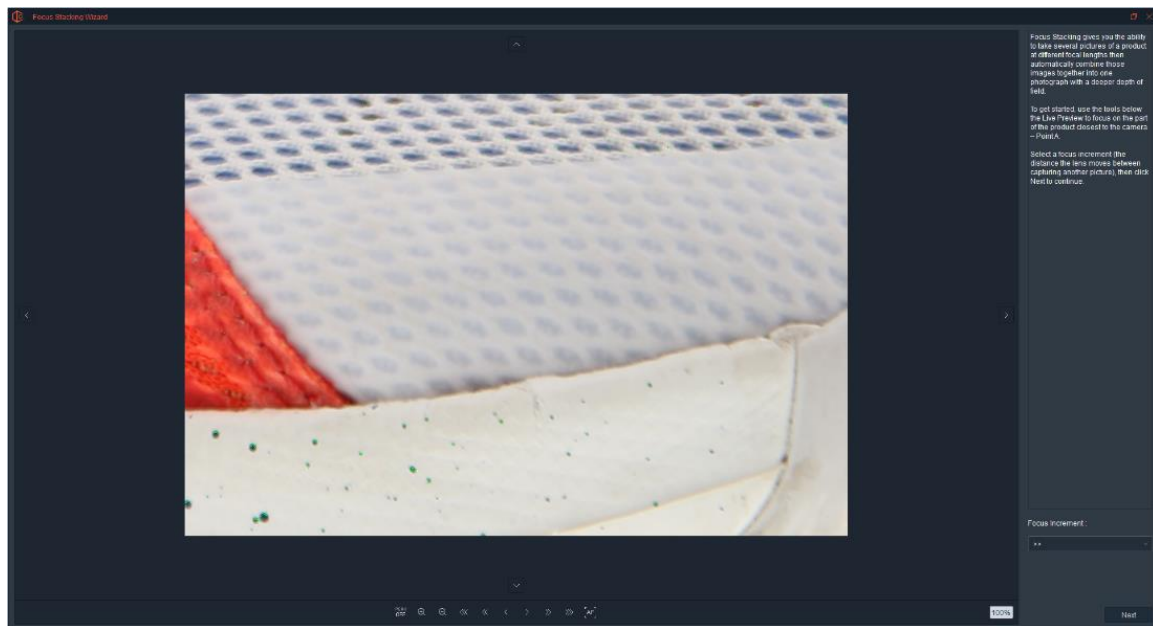


Dual Point focus stacking allows you to choose a range, from A to B, where the image / object will be in focus. By clicking Snap, the following screen will appear.



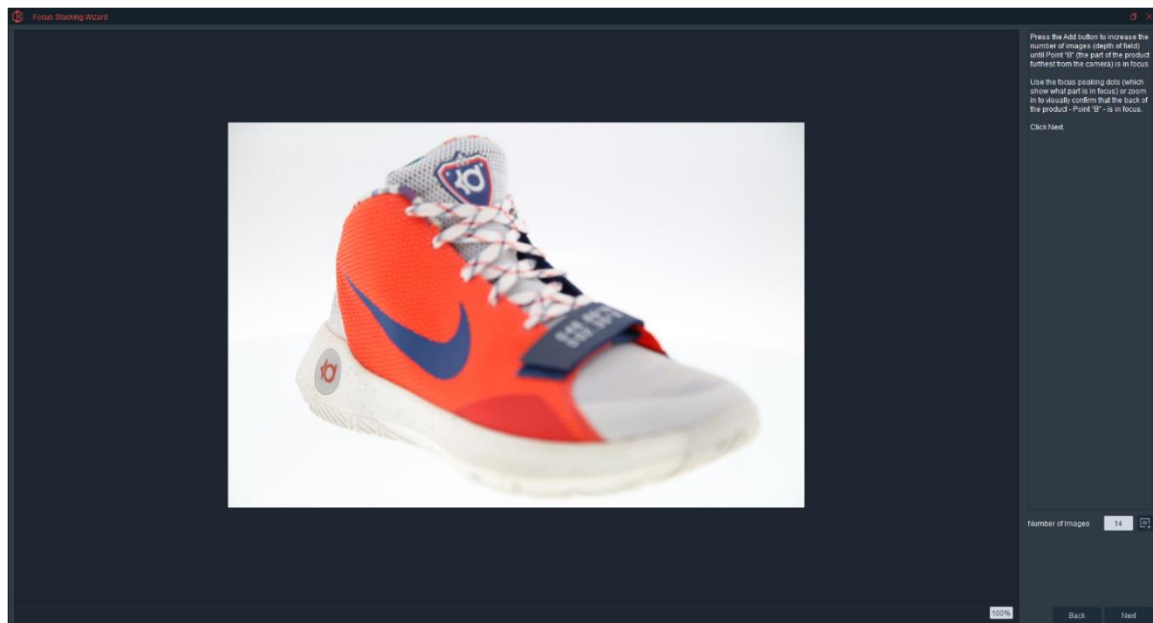
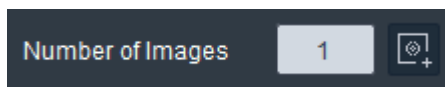
Choose the Focus Increment. This is the amount the lens moves between shots. It can either be >, >> or >>> where one arrow is fine (smallest movement used for fine jewelry to get best results), two arrows is normal (great general setting used for almost anything) and three arrows is rough (used on larger objects).

Move the Focus Rectangle to the part of the object closest to the camera. This will be point A. Press the magnifier icon to zoom into the area at 10X. Use the manual focus tools: (Near <<<, <<, < and Far >, >>, >>>) to bring that view into perfect focus. Note: The amount of arrows indicate the amount the focus will move when the button is clicked. This corresponds to the Manual Focus controls when you have MF selected as your Focus Mode.

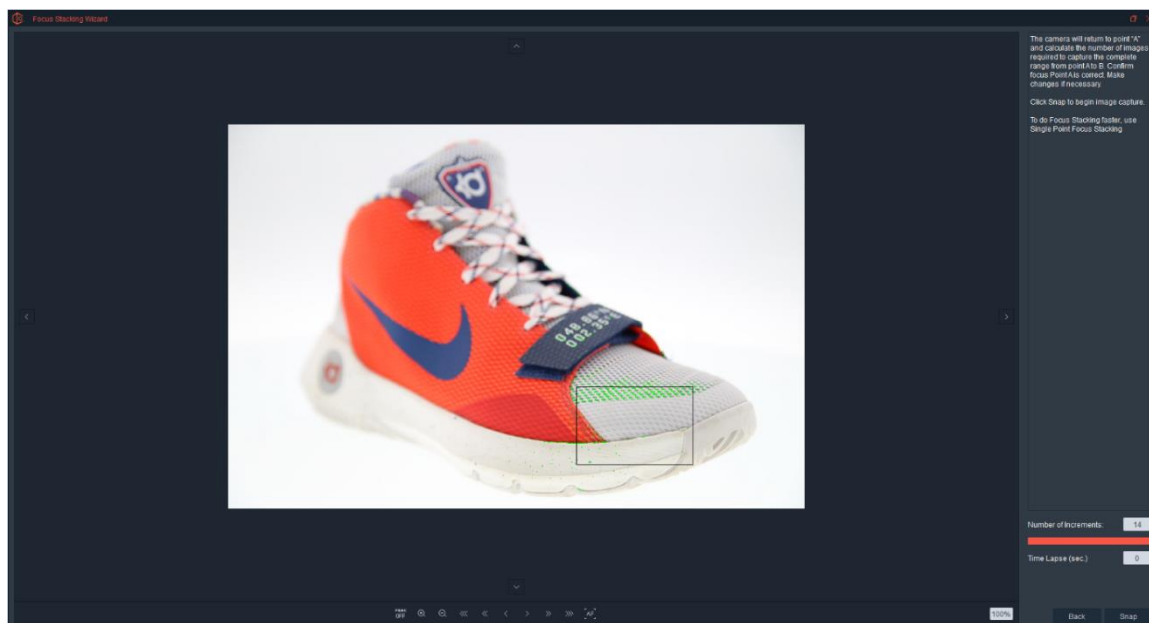


After focusing on the part of the object closest to the camera, click Next.

On the following screen, increase the number of images until the Focus Peaking markers indicate that the part of the object furthest from the camera will be in focus.

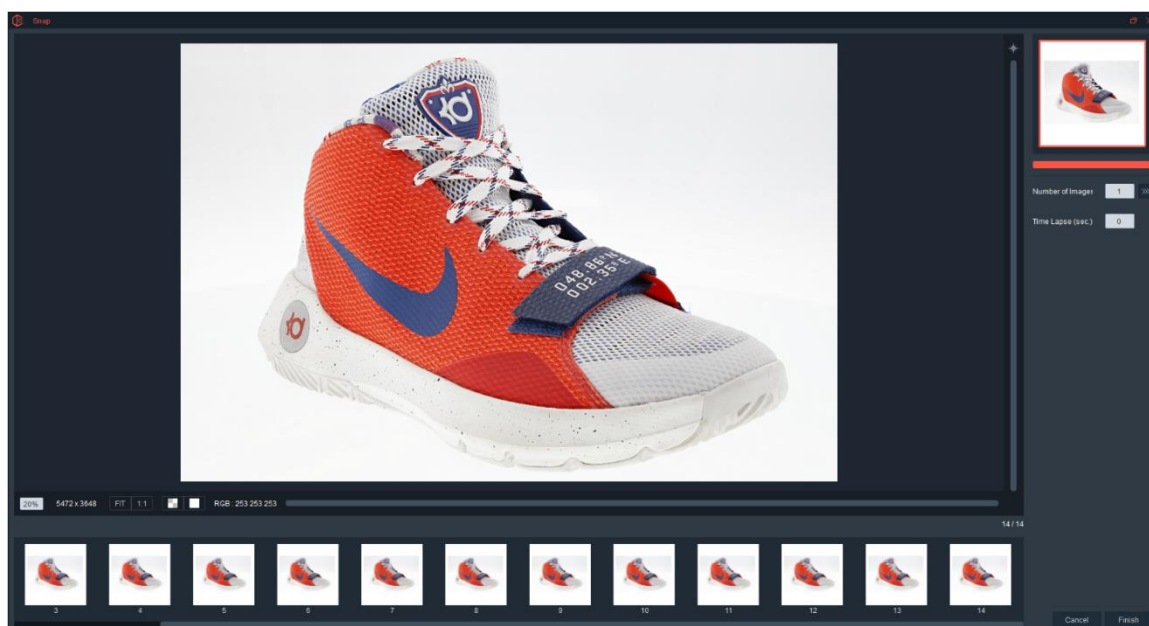


Click Next.



Re-confirm point A and to choose if you want to take pictures in Time Lapse Mode (with a pause between each shot). Click Snap to start taking pictures.

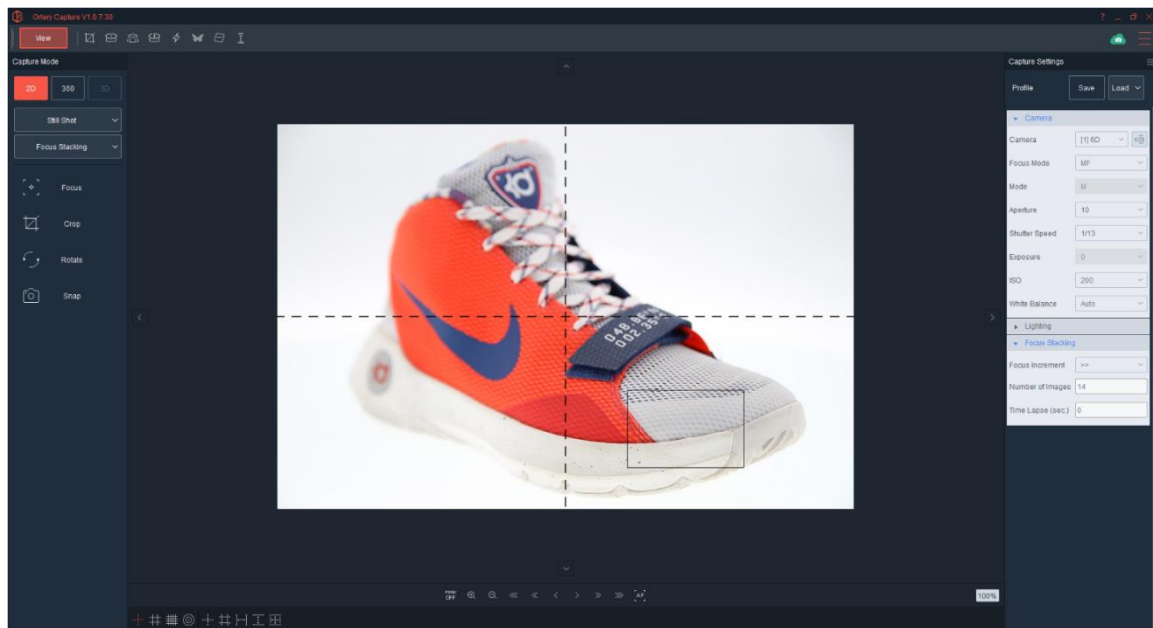
When all of the pictures have been captured and processed, the final focus stacked picture will appear on the screen and the user has two options - to add more images to the stack or click Finish.



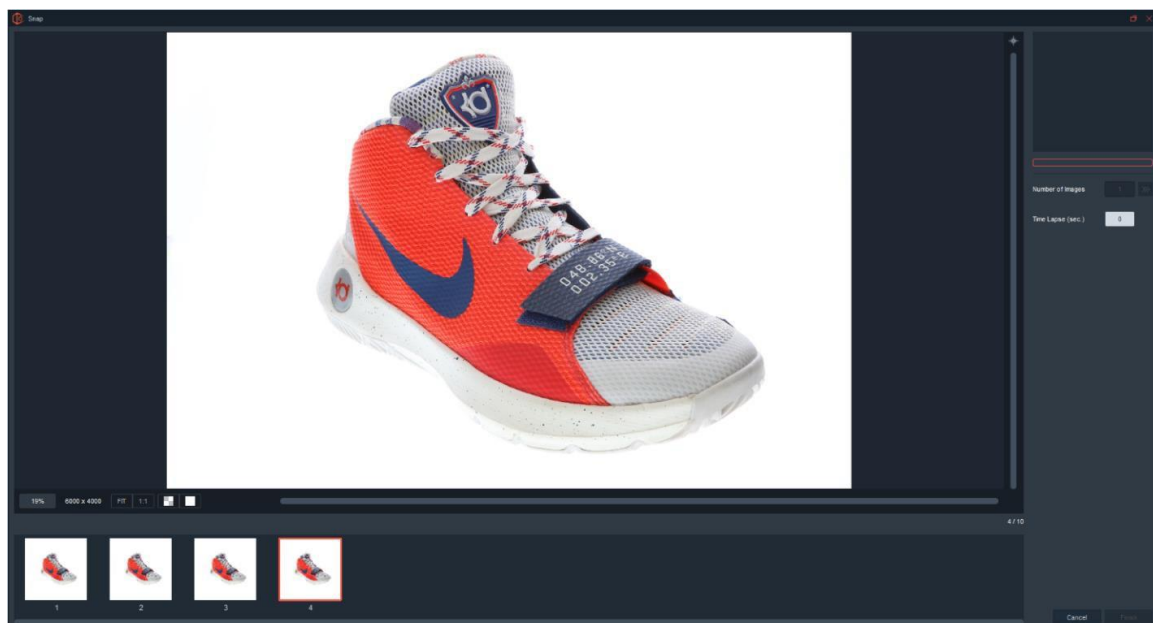
Focus Stacking – Single Point (the Default)

When focus stacking is selected, this is the default. This focus stacking method is typically faster and more accurate than the dual shot method. Read the section on Dual Point Focus Stacking to get a clear understanding of the tools involved in creating a focus stacked image.

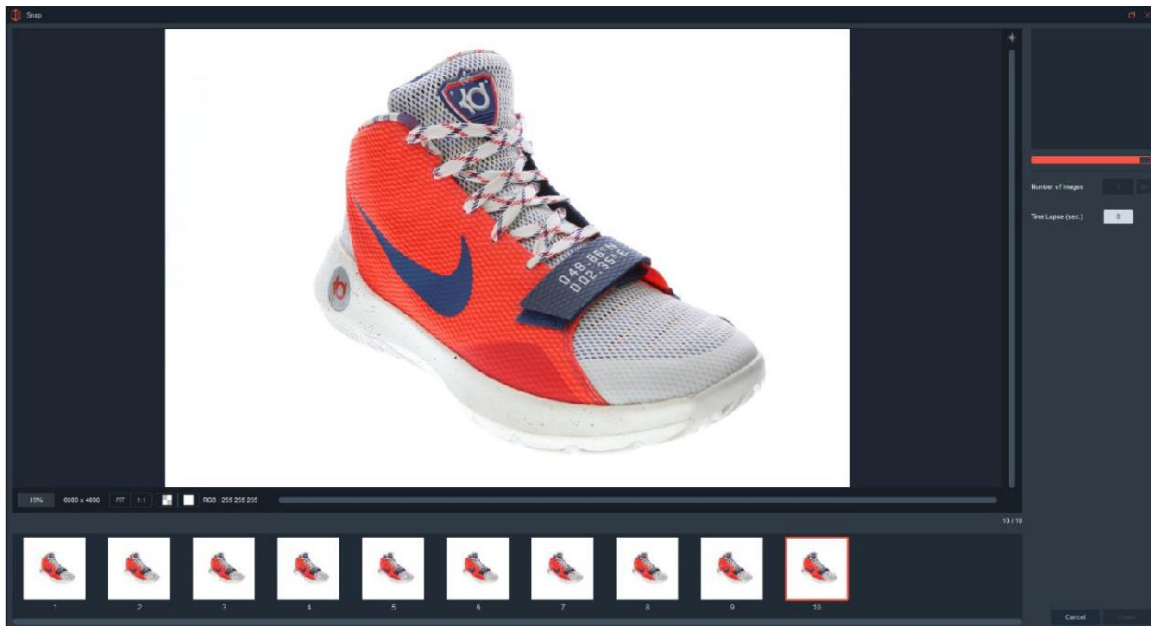
Use the Manual Focus tools, zoom and focus peaking to bring the part of the object closest to the camera into perfect focus.



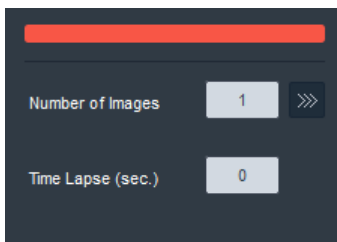
In the Focus Stacking window that appears on the right of the interface, select the Focus Increment, Number of Images to take and whether the Image will be taken in Time Lapse Mode. If Time Lapse is chosen, enter the number of seconds to wait between shots.



Once all the images have been captured, the software will show the focus stacked result in the middle of the screen and give the user two options – Add more pictures to the end or accept the result by clicking Finish.

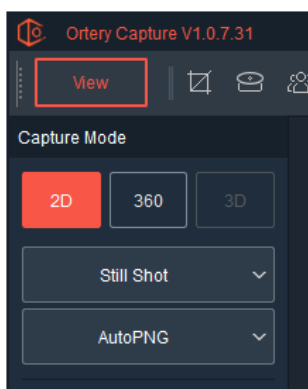


Click the icon to add more pictures to the current stacked amount.



2D Still Shot - AutoPNG

Depending on the hardware, this feature may or may not be available and on certain units and it can be used only for side or top shots or both.



AutoPNG allows users to take two pictures of an object under different lighting and camera settings then use that information to create a single PNG image with a transparent background.

By selecting AutoPNG as the shooting style, the user enters AutoPNG mode and the AutoPNG Window appears on the screen. To leave AutoPNG mode, select different shooting style.

The AutoPNG Window - From the AutoPNG window users can choose from the following selections:

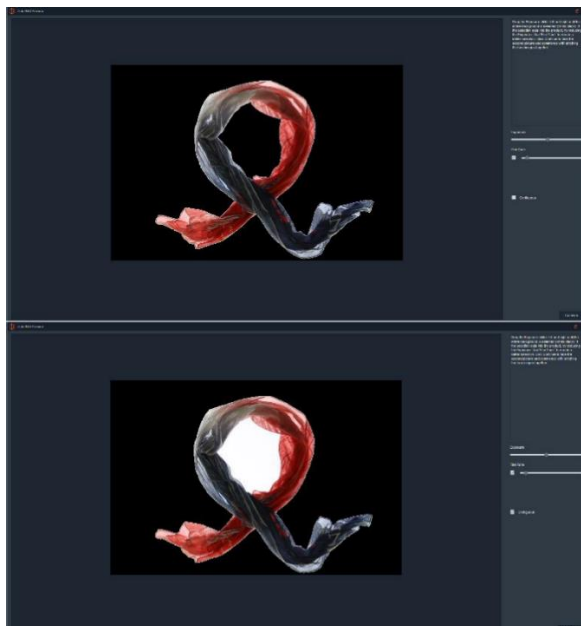


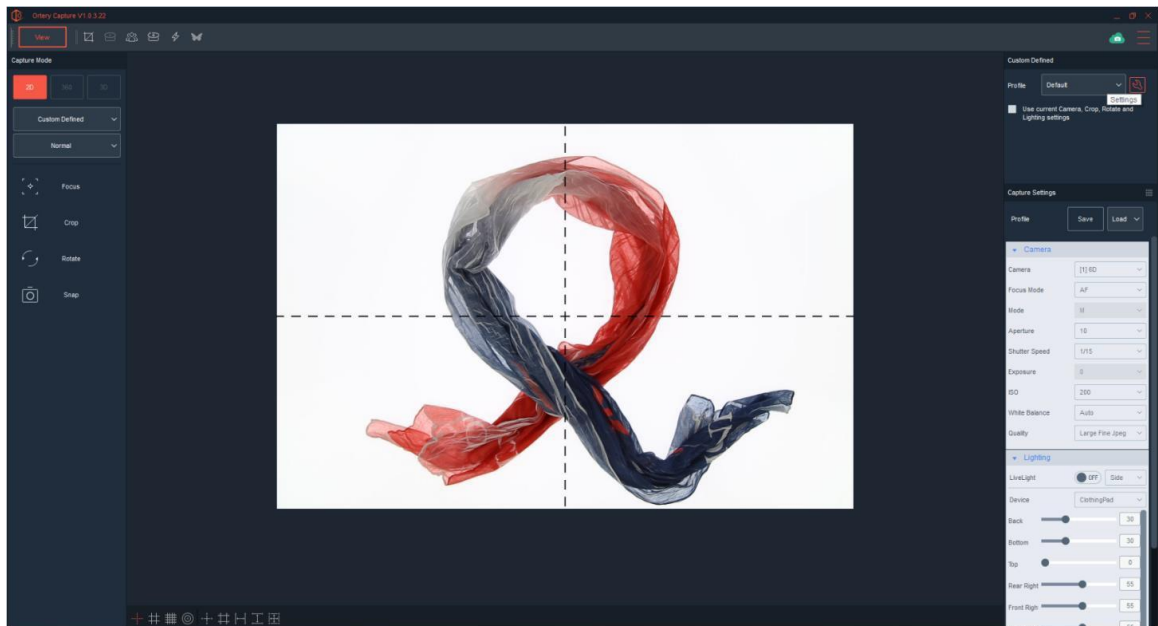
Shooting Angle – Depending on your hardware, AutoPNG files can be created by shooting from the side or from the top down.

Auto Trimming and Blur

Users have the ability to automatically trim and blend edges of a photographed object. If there is a noticeable hue around the outside of a product shot with the AutoPNG feature, especially when viewed on a dark color, increase the amount of trimming and blending. The defaults for Auto Trimming and Blending are 5 pixels and 3 pixels. Adjust until the results are ideal.

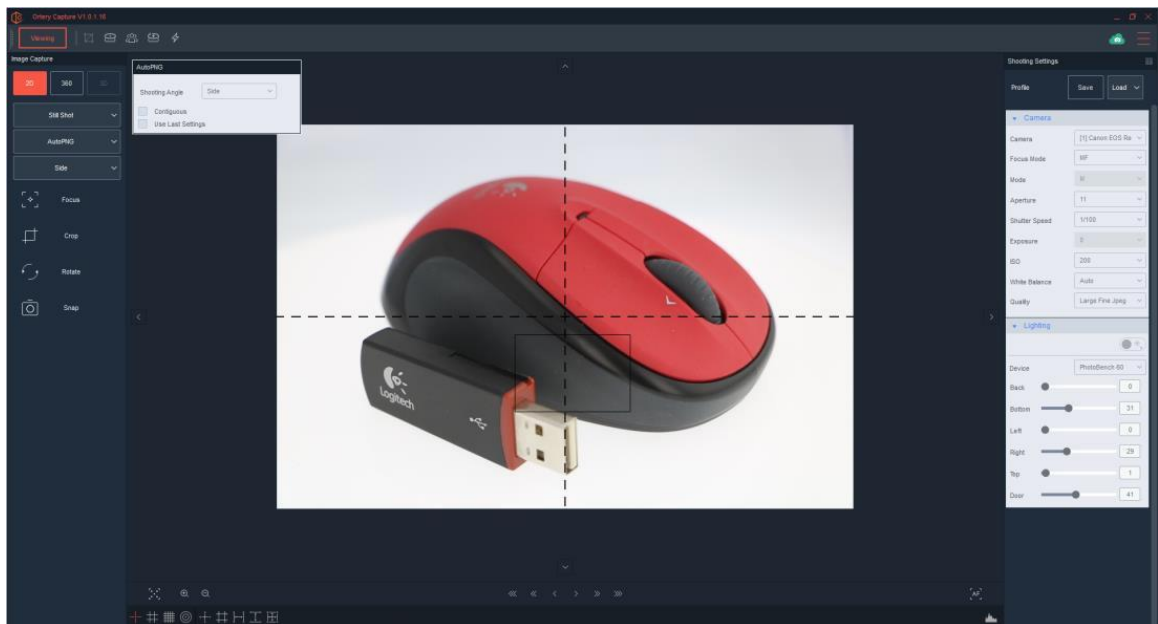
Contiguous – When Contiguous is turned On, only the pixels next to the pixel chosen and within the tolerance range of that pixel will be chosen.





Use Last Settings - When checked, AutoPNG will be automatically performed using the settings from the last AutoPNG performed.

To create an AutoPNG file with a transparent background, turn AutoPNG On and choose the correct shooting angle. Remember, it's a two-shot process. Note: When AutoPNG is On, (depending on the hardware in use) the user may or may not have full control over the back and bottom lights for the first shot. Best results are obtained when there is an exposure difference between the first and second shots.



For the first shot, focus and adjust lighting and camera settings to optimize the colors of the object being shot – do not worry about background color. For example, for the mouse in the example above, adjust the camera settings until the mouse looks the way you want it to appear in the final picture. Don't worry if the background is too dark.

Click Snap to take the first picture.

For the second shot, the goal is to overexpose the background. The 'Highlight Alert' (blinking black) feature is used here to indicate the parts of the Preview that will become transparent if the picture is taken.

Adjust the Exposure Slide bar to ensure the entire Preview / background (or just the area inside the Crop markers is blinking black). Note: If exposure is too high it might eat into the object, however if it is too low the background will not be removed from the image.

Exposure too low
– Doesn't select entire background



Exposure too high –Eats into object



Proper Exposure – Background selected without eating into object

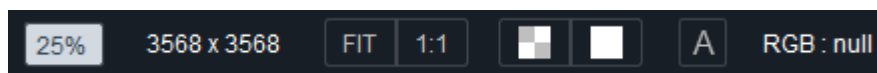


Once the proper exposure has been obtained, click 'Continue' to capture second image. The software will automatically process the two images into one PNG file, locate the edge of the object and change the background to transparent.

Please note: There must be a significant enough difference between the lighting and cameras settings used in the first shot and the second shot.

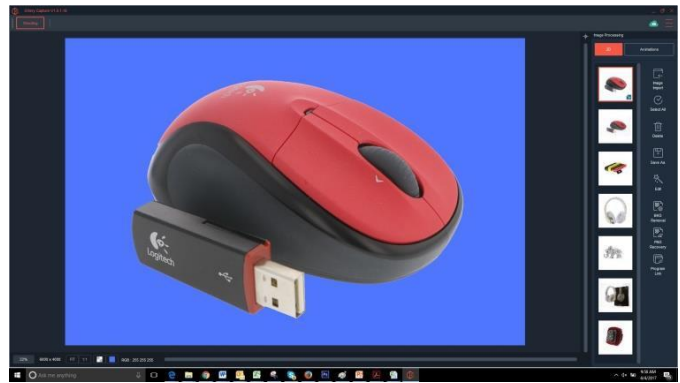
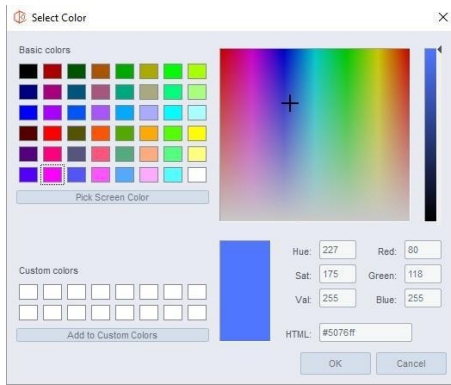


The transparent result in .PNG file format shows up on the viewing screen. Users can quickly change the background color using the viewing tools in the bottom left.



These tools show the total size of the object and the percentage of the object in the viewing window. In addition, the image can be easily fit to screen or viewed at 1:1.

Click the color swatch to select and apply a new color to the background.



Finally, note that the RGB color of the selected pixel is indicated by a number. For example: 239: 240: 240 Where pure white is represented by equal amounts of red, green and blue at 255, 255, 255.

How to get better AutoPNG results?

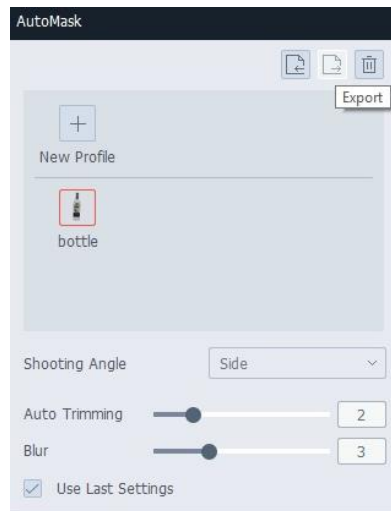
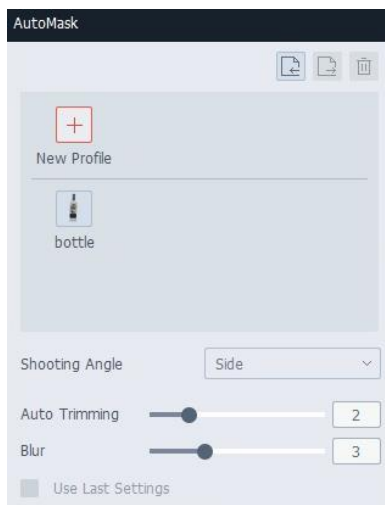
- Manipulate the lights and camera settings between the first and second shot so there is enough contrast between the product and background to find the product edge.
- Make sure there is enough contrast between your object and the background by potentially placing a black piece of paper along the side of the object to give the edge of the object more contrast.
- Make sure the product fills the preview screen. The higher the resolution of the photo, the easier it is to identify and drop the background.

2D – Still Shot AutoMask

If your Ortery device has the AutoMask feature, it means your device and software are capable of working together to deliver the best workflow for background removal. AutoMask utilizes a new and unique way of isolating products from their background.

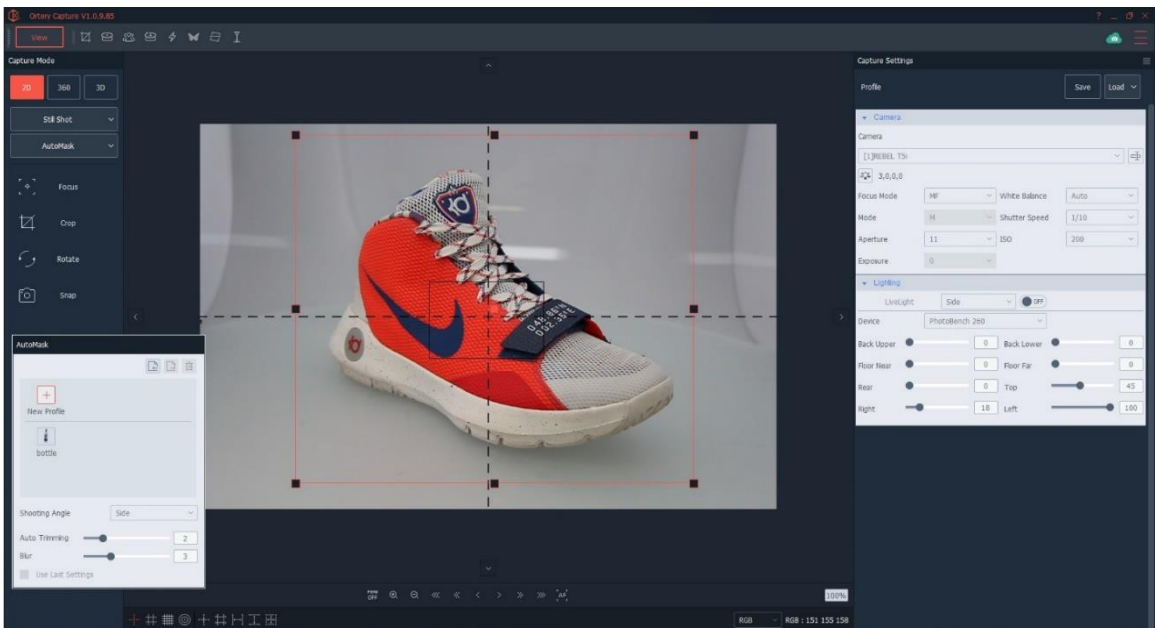
Here's how it works.

Click AutoMask. Note that a new window opens. This window is for managing the default and AutoMask profiles you create. Either select and use an existing AutoMask Profile or take a picture without using a profile.



On the AutoMask profiles screen note that choices for Shooting Angle, Auto Trimming, Blur, Import, Export, Use Last Settings and Delete exist.

Adjust only the front and top lights and camera settings until the object appears in the real time preview the way you want it to look in the final image. Press Snap to take the picture.



Note: Two pictures were taken. A second shot was taken simply to help isolate the product from its background. Read the instructions in the upper right. They explain what can and should be done next.



The goal is to completely isolate the object from the background and if the object has any parts that are transparent, maintain those transparent areas while isolating the product from the background. Overall there are four things that can be done next:

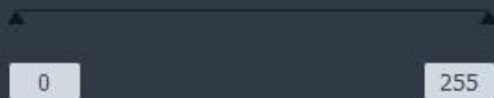
AutoMask Instruction

In order to automatically remove the object from its background, two pictures were taken. The first shows how the object will appear in the final image. The second is for background removal.

This screen shows the result of the second picture and offers the ability to edit or reshoot. Use the two arrows / sliders (right) to adjust object and background opacity.

- Move the left arrow right to increase opacity.
- Move the right slider left to increase transparency.

When retaking the second picture, maximize the difference between the object and background. Adjust available light and camera settings until the background is consistent and the object is a dark silhouette. Retake and edit until the desired result is obtained. Holding black or grey paper near the object can be helpful.



Retake

Finish

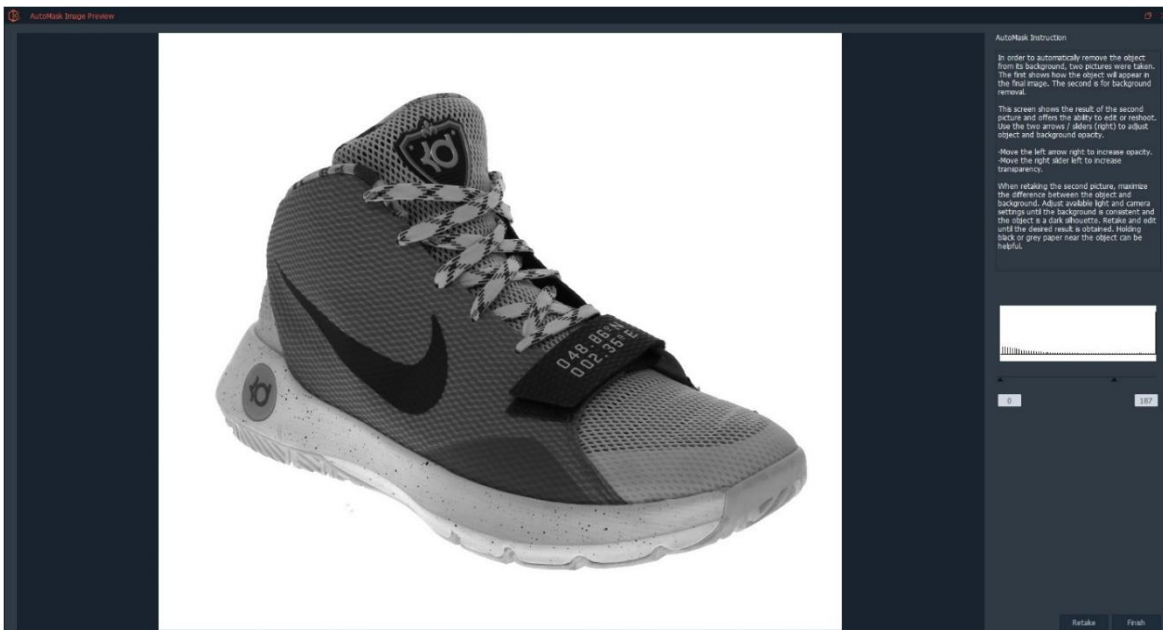
- Adjust Transparency
- Adjust Opacity
- Do Nothing
- Retake the Second Picture

Adjust Transparency

Note the picture taken is black and white and in this example it has a couple of lines coming in from the sides that show where the turntable was. To adjust the transparency, move the slider on the right to the left. When you start it looks like this.



After moving the transparency level, you can see that the background is now clear and white.



Adjust Opacity

Next, move the opacity slider toward the right. Move it until a solid object (with no transparent spots) appears completely black and opaque – no light passes through it.



If the background is clear and the object is as opaque as you need it to be, then then press Finish. The program will calculate and show the final result.

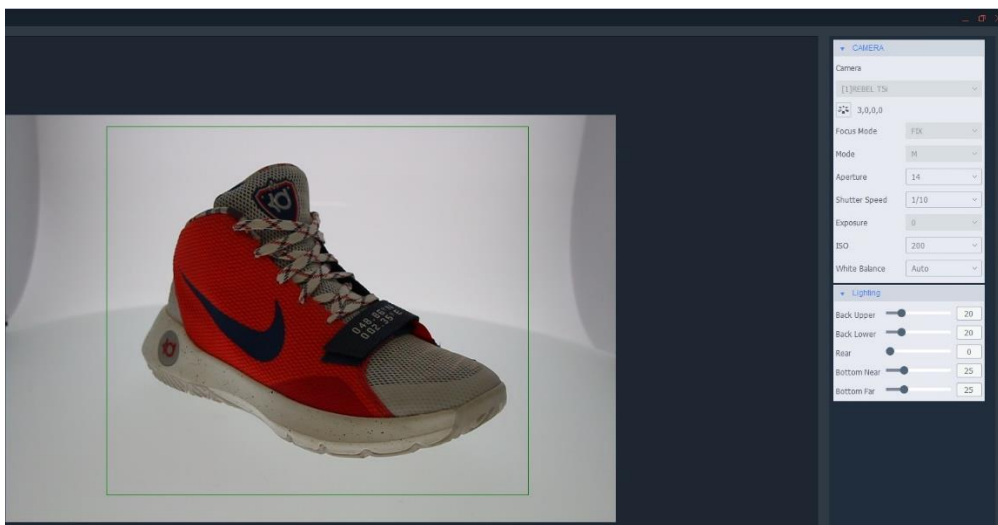


The object has been isolated from its background and is now sitting on a transparent background that can be replaced by any color or picture. Save this image as a PNG or TIFF file.

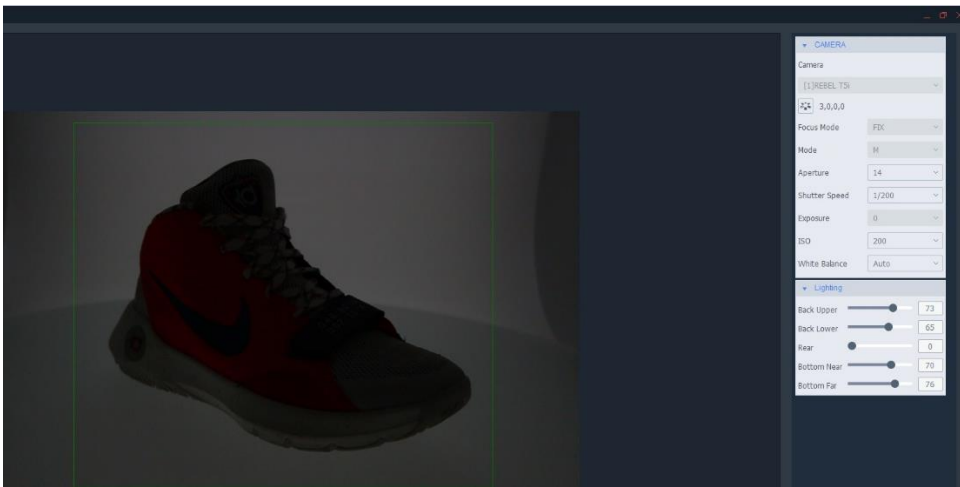
Retake the Second Picture

Depending on the quality of the second shot, you may move the transparency and opacity sliders and find that not matter how you adjust, them they cannot give you the desired result. In this case, you will need to click Retake and take the second picture again.

When retaking the second picture, adjust the lights and camera settings so that the edge of the object is silhouetted against the background. For example, start here...



...and go to here before taking the picture.



If the second shot is a good one, then Adjust Transparency and Adjust Opacity until the desired result is obtained, then click Finish.

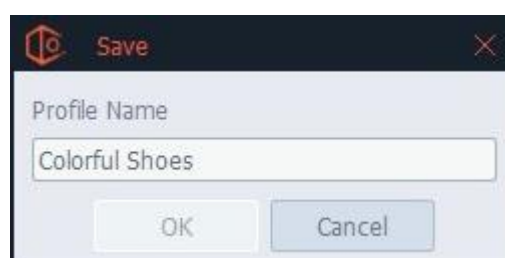
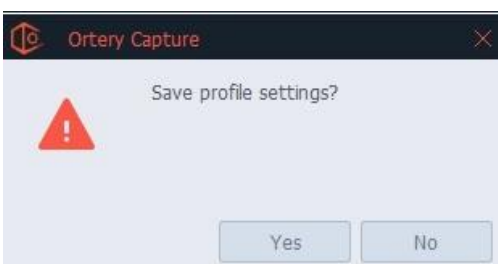
Do Nothing

If the second picture looks great and has the right amount of transparency and opacity then simply click Finish and the resulting picture will be stripped from its background, placed on transparent and look the way you took the first picture.



Save an AutoMask Profile

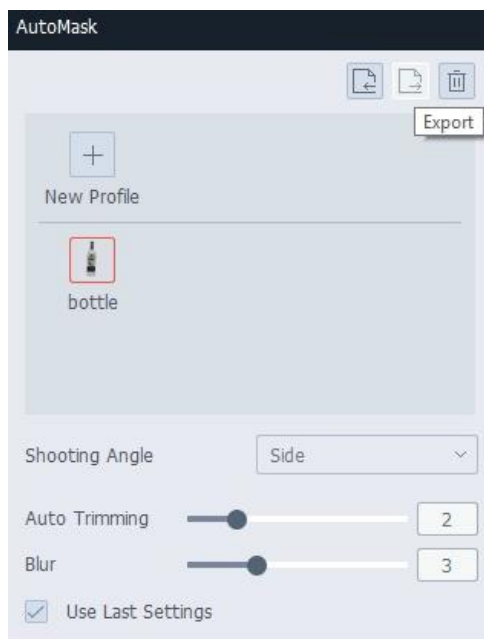
Once the process is complete, the software will ask you if you want to save an AutoMask profile. This will allow you to re-use the same settings over time to save time and money.



We encourage our customers to create several profiles and name them according to what they do. It's good to create enough profiles so that the entire color spectrum is covered from light to dark. For example:

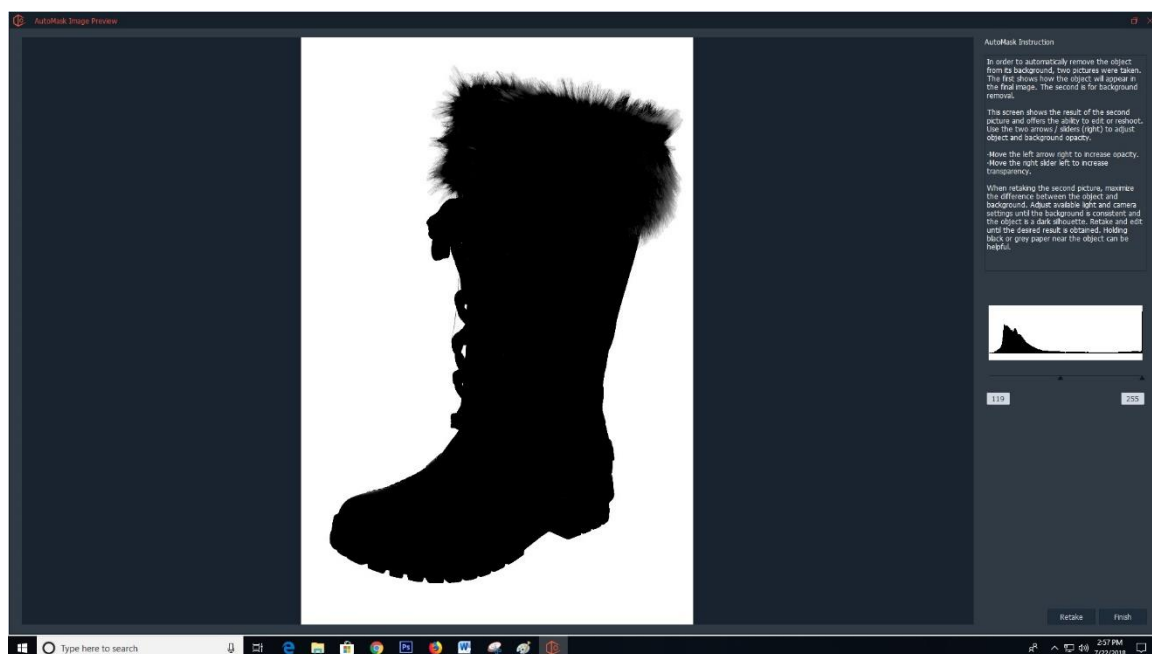
- White shoes
- Light Tan shoes
- Colorful shoes
- Brown shoes
- Black shoes

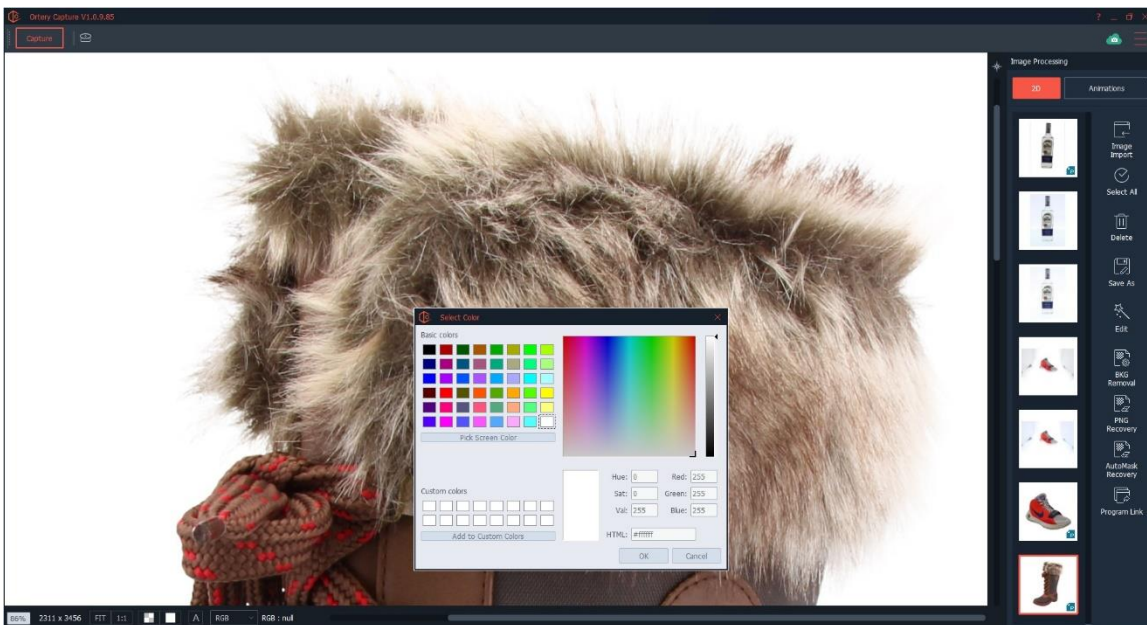
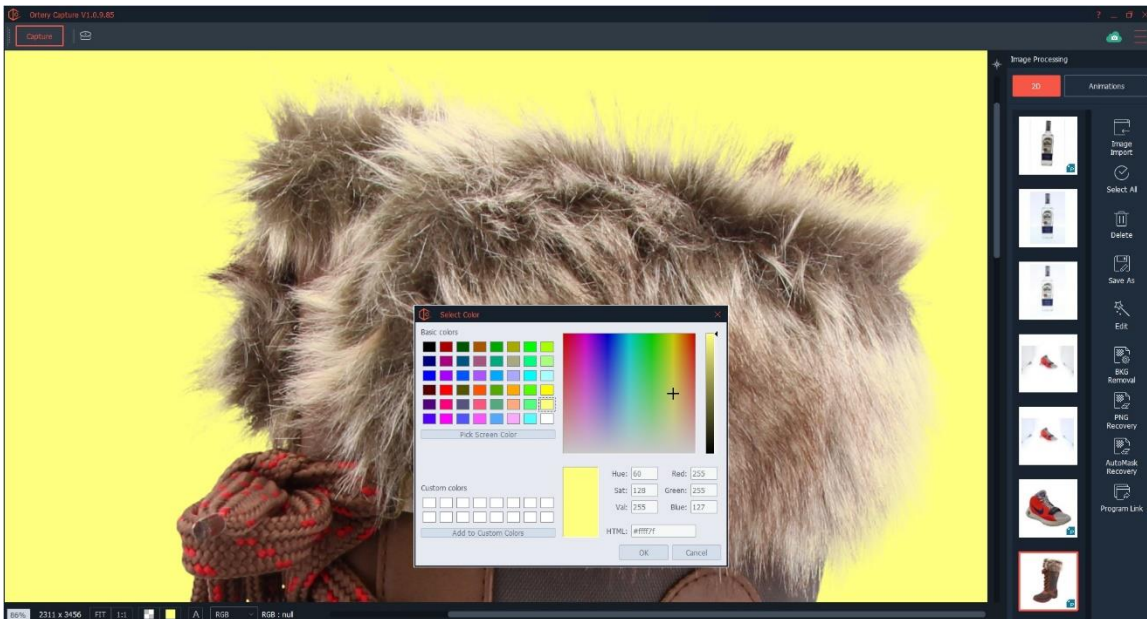
AutoMask profiles can be exported for use on other computers.



When taking a picture using AutoMask, note that you have the ability to control the Auto Trimming and Blur being applied to the image edge. In addition, you also have the ability to 'Use Last Settings' so even though you may not want to use a profile, you can simply re-use the last settings to repeat a capture.

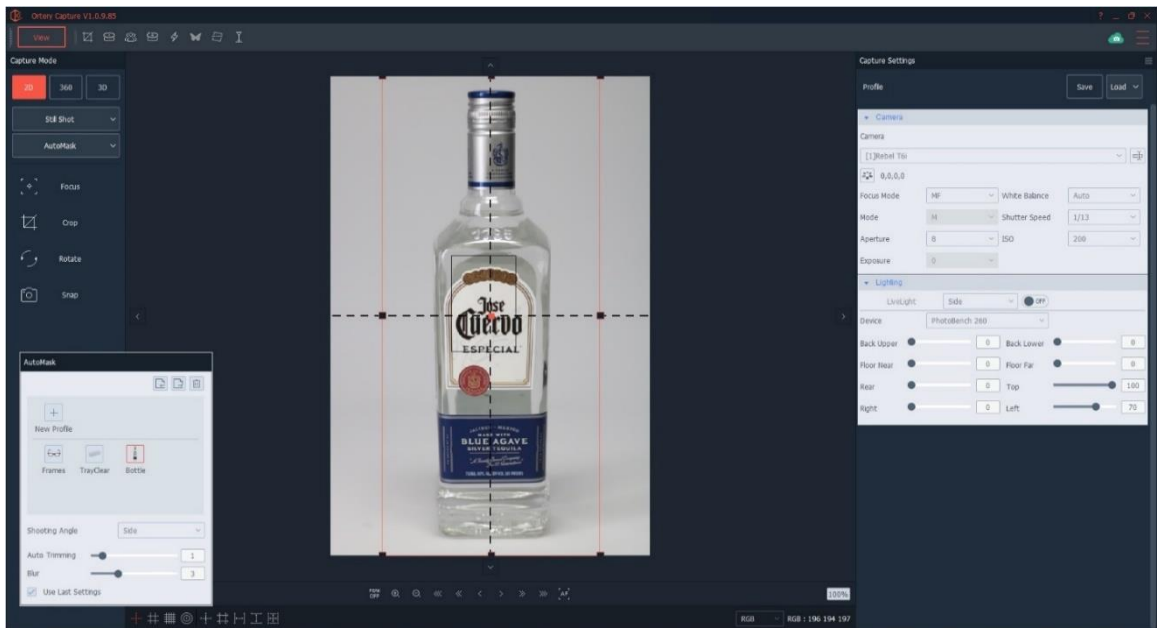
For items that are furry, adjusting Auto Trimming and Blur can be very helpful. Here are a couple examples.



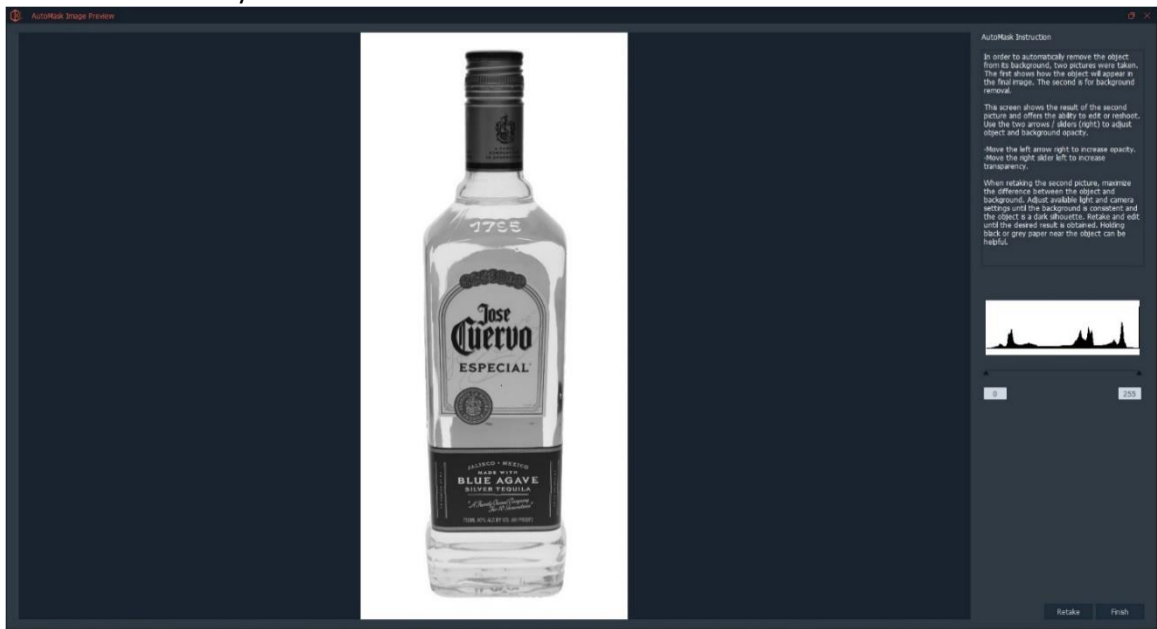


When shooting items that are transparent, it is important to choose the right transparency and opacity. Here is an example of the complete workflow:

Take a color accurate picture of the item.



The software will try to isolate the item.

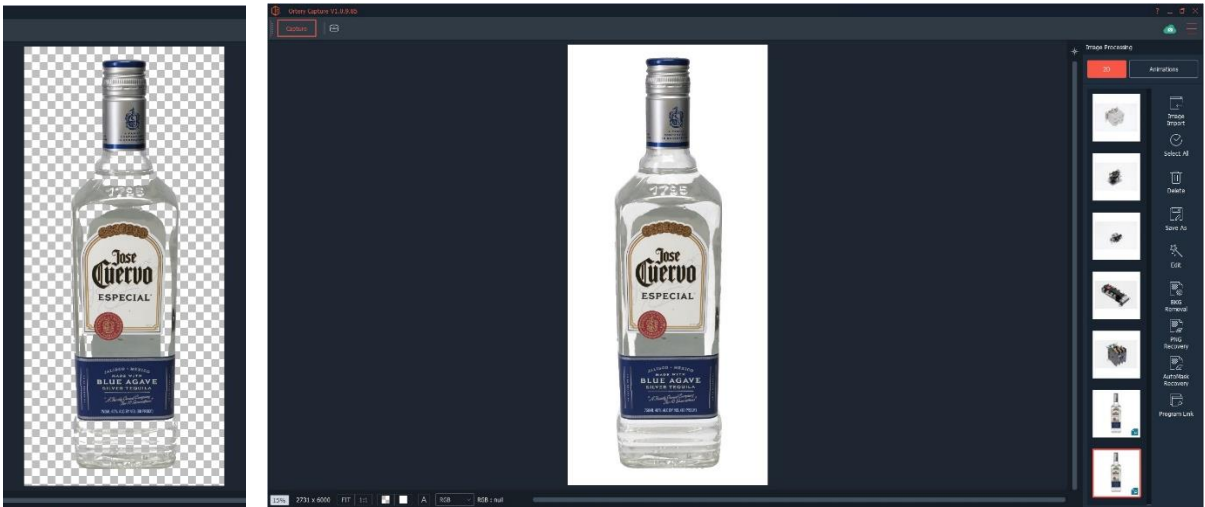


Use this screen to adjust transparency and opacity. Once the desired result is achieved, click Finish.



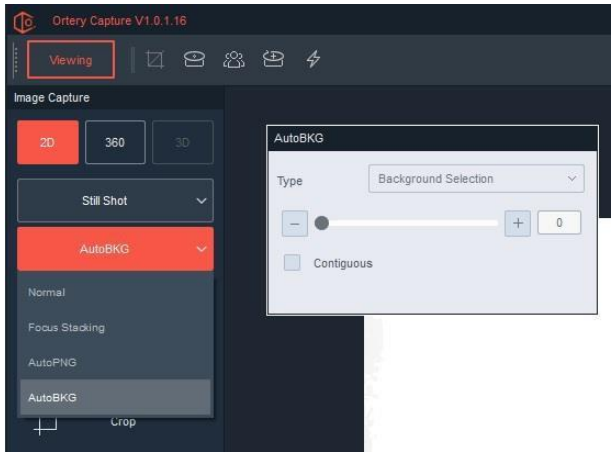
If you cannot create the desired result, select ReTake. If you have to ReTake, then adjust the lighting and camera settings until you have a good silhouette of the object.

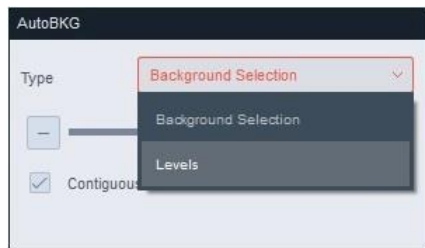
The final result will be the object cut from its background and ready for any background to be placed behind it. In this case a pure white background was used.



2D - Still Shot / AutoBKG

This feature allows the user to essentially edit an image before it is taken, resulting in a JPG on pure white or a PNG file on transparent. Select 2D as the Capture Mode, Still Shot as the Capture Type and AutoBKG as the Capture Style.

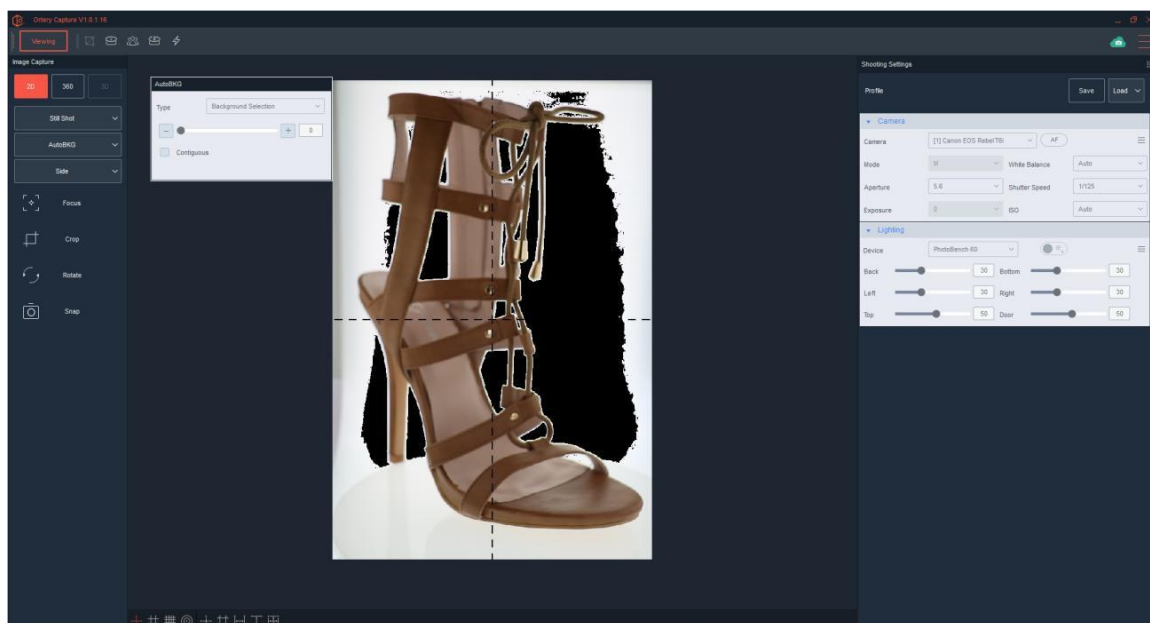




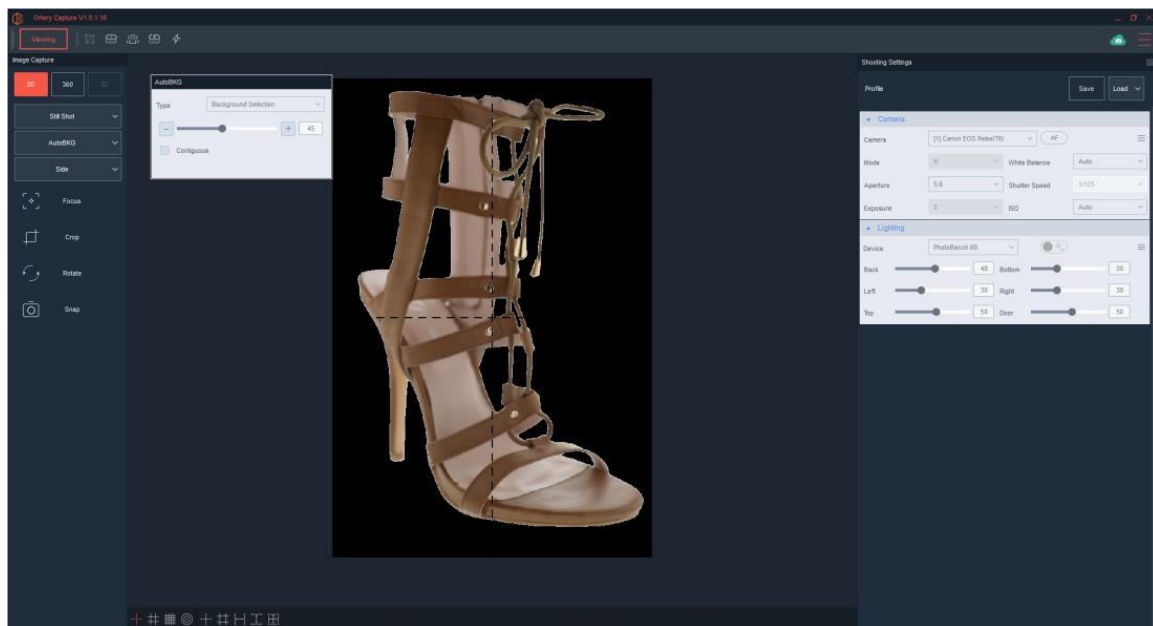
The AutoBKG window will appear on the screen. On this window, Background Selection or Levels tools can be selected to isolate the product from its background.

Using Background Selection to Isolate:

Move the slider until the area around the product blinks black. The areas that blink black indicate which parts of the image will become transparent when the picture is taken.

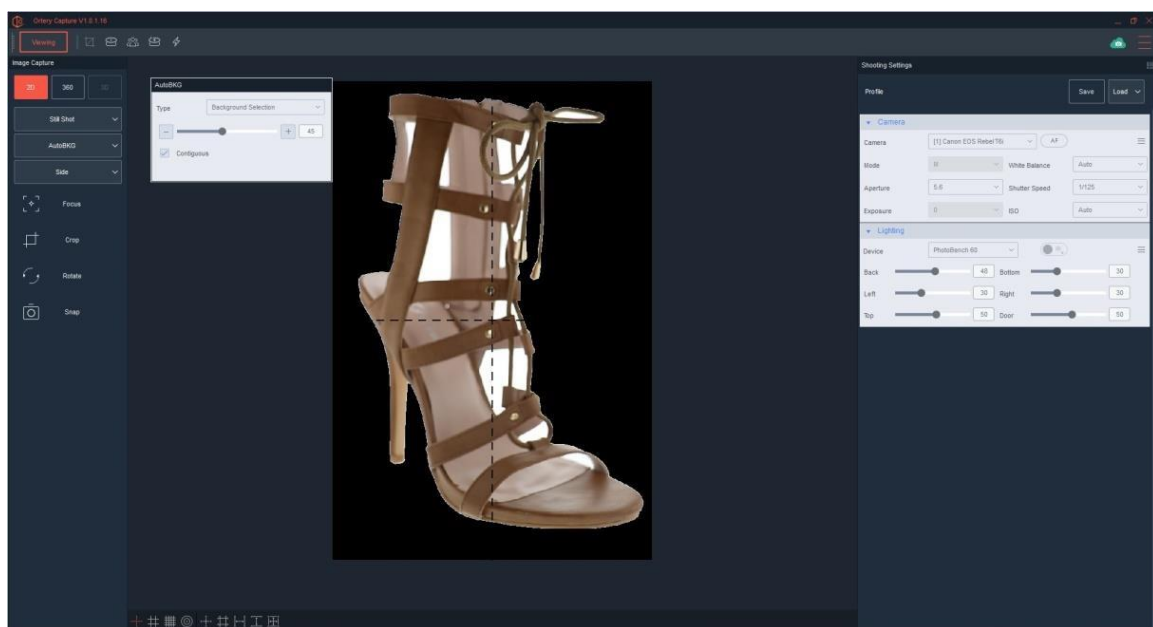


Keep in mind, all other studio settings - camera settings, lighting settings, etc... can be used to help isolate the product and the result of any change can be immediately seen in the Live Preview. In the example below, both Shutter Speed and Background Selection were moved until the entire background was selected.



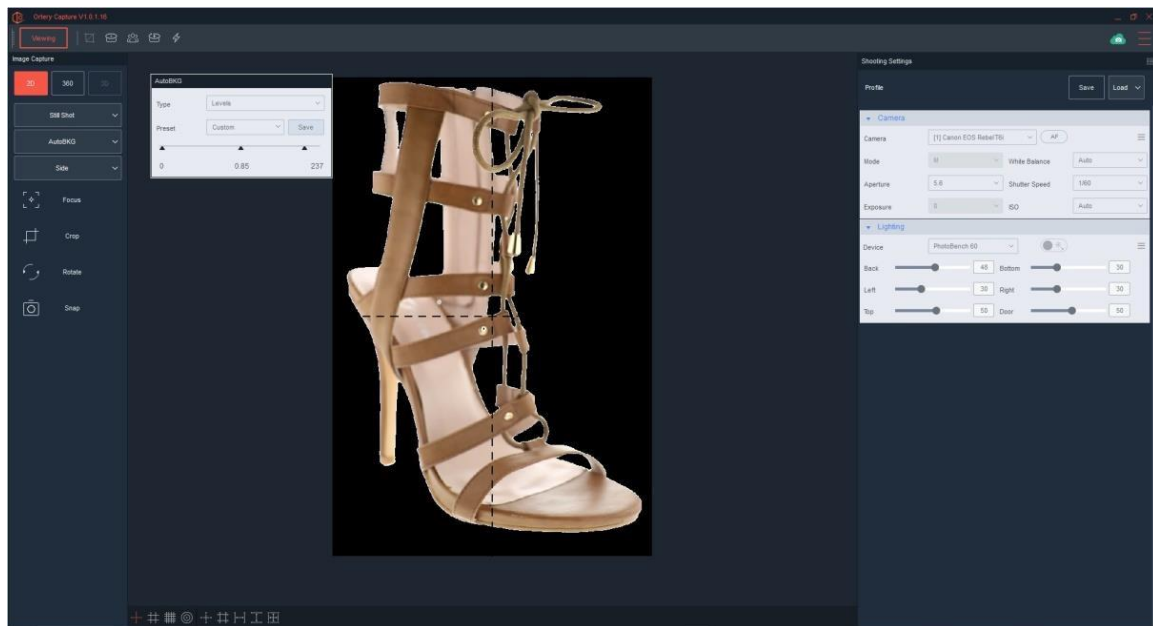
The Contiguous button allows you to use a different method to select background pixels. When Contiguous is not selected, pixels within the tolerance range, regardless of location inside the image will be selected and blink black. In the example above you can see how the areas between the leather were selected, as all the pixels with the same color are selected.

When Contiguous is selected only the pixels next to and within the tolerance range will be selected, so if there are holes in an object, then the pixels inside the holes will not be selected. Contiguous is most useful when there are bright spots inside an object that you don't want to be dropped with the background.

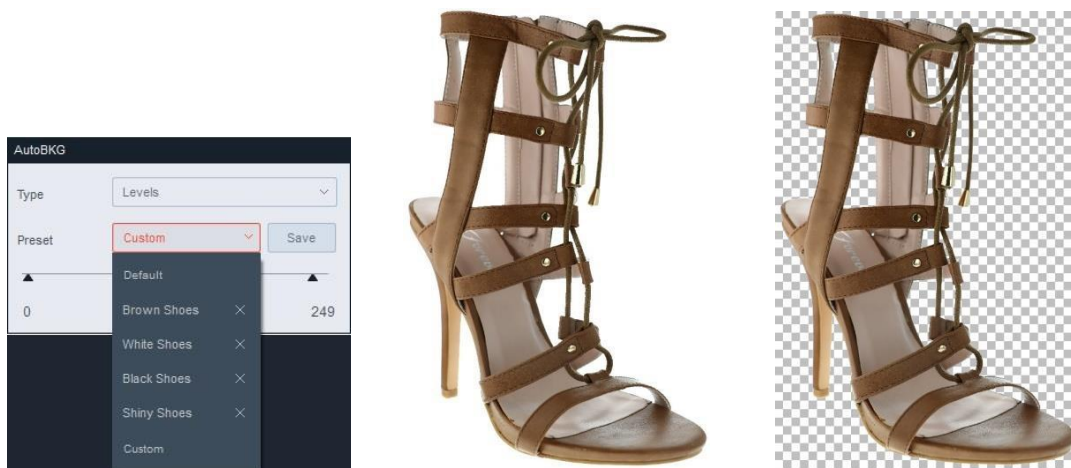


Using Levels to Isolate:

Similar to using Levels for editing, AutoBKG Levels is superior because the Levels can be set and the result viewed before even taking the picture. Not only can the highlights be adjusted to select the background areas that will become transparent, but the mid-tones and shadow settings can also be adjusted and automatically applied to the final image.



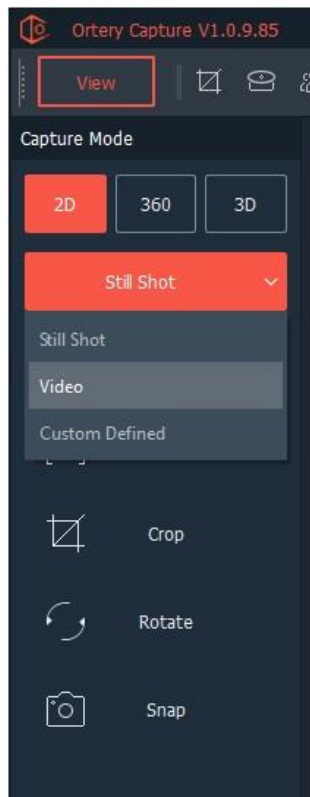
With Levels, the resulting image can be saved as a JPG image with a pure white background or as a PNG file on transparent. Settings for each type of product can be saved and re-used as a Profile to increase efficiency.



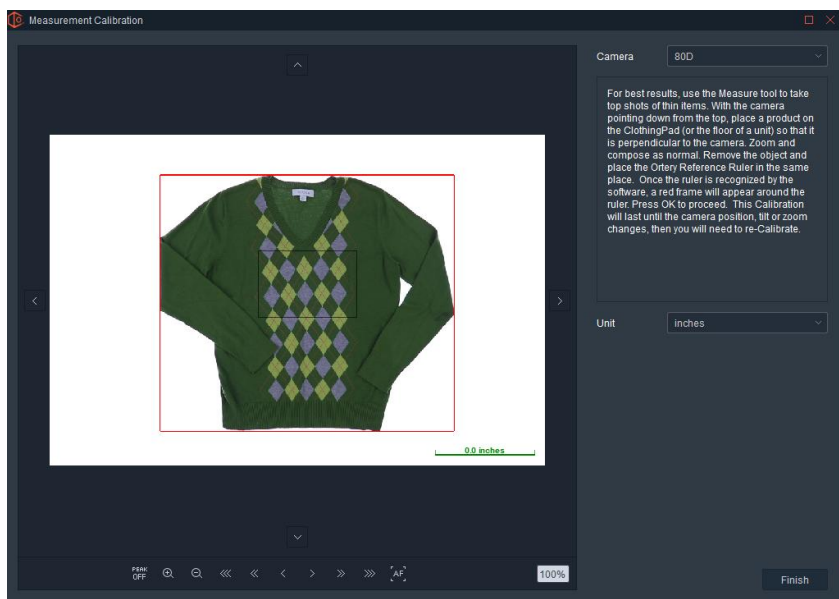
Measure:

The Measure feature is only available on ClothingPad and ClothingPad Mini solutions. It allows users to calibrate a shooting space so that when a product is captured, the user can click and drag the resulting image to determine product dimensions. For the ClothingPad Series, the Measure feature only works for top shots. Here's how it works:

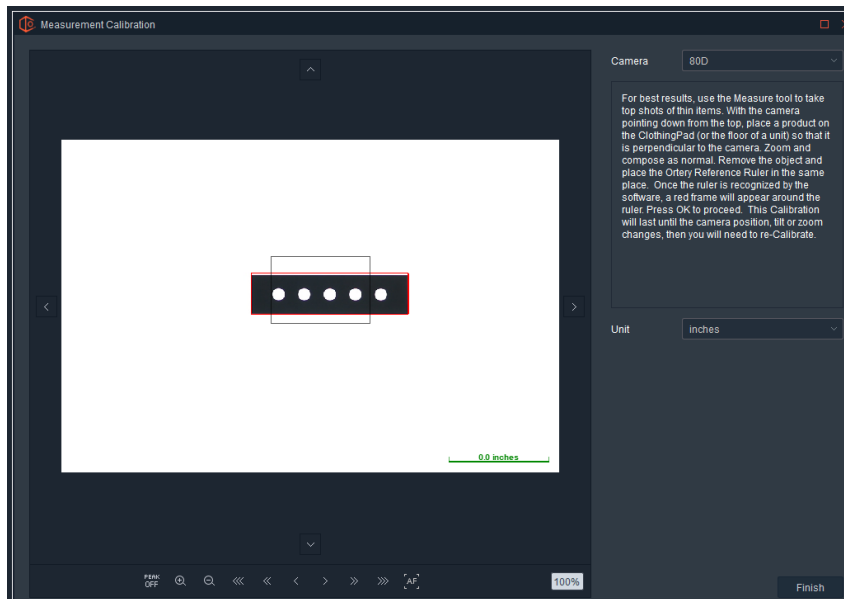
In the Ortery software,
On the Capture Screen, select 2D / Still Shot / Measure.



Place an object on the ClothingPad / ClothingPad Mini that represents the size of objects you will be shooting and measuring. Adjust zoom and make sure the items fit inside the Preview.

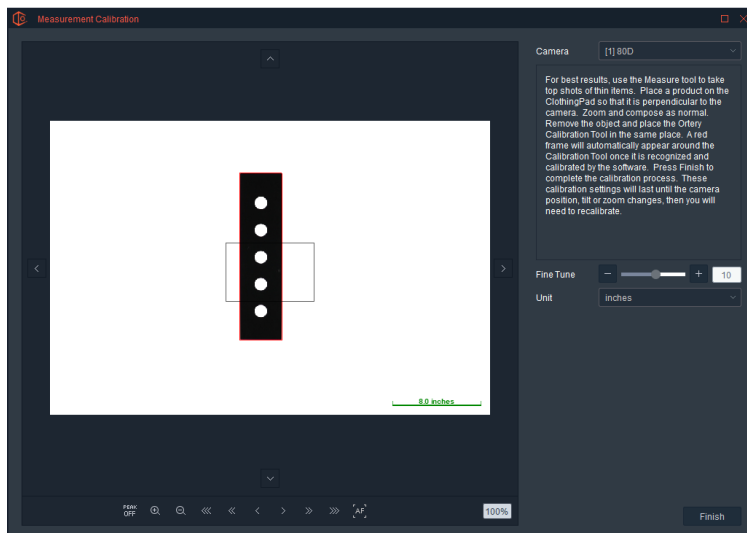


Remove the object. Place the calibration tool in the center of the Live Preview.



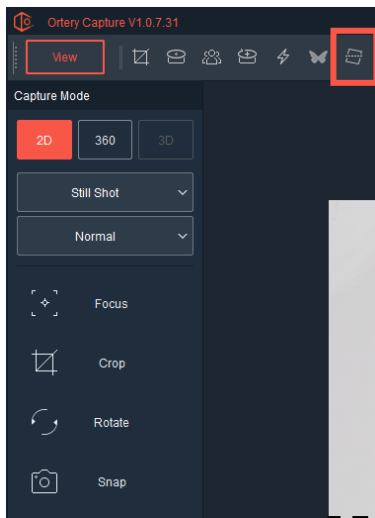
The software should automatically recognize the black calibration tool. When recognized, a red rectangle will surround the tool.

Note: Use this screen to change cameras and unit of measurement.

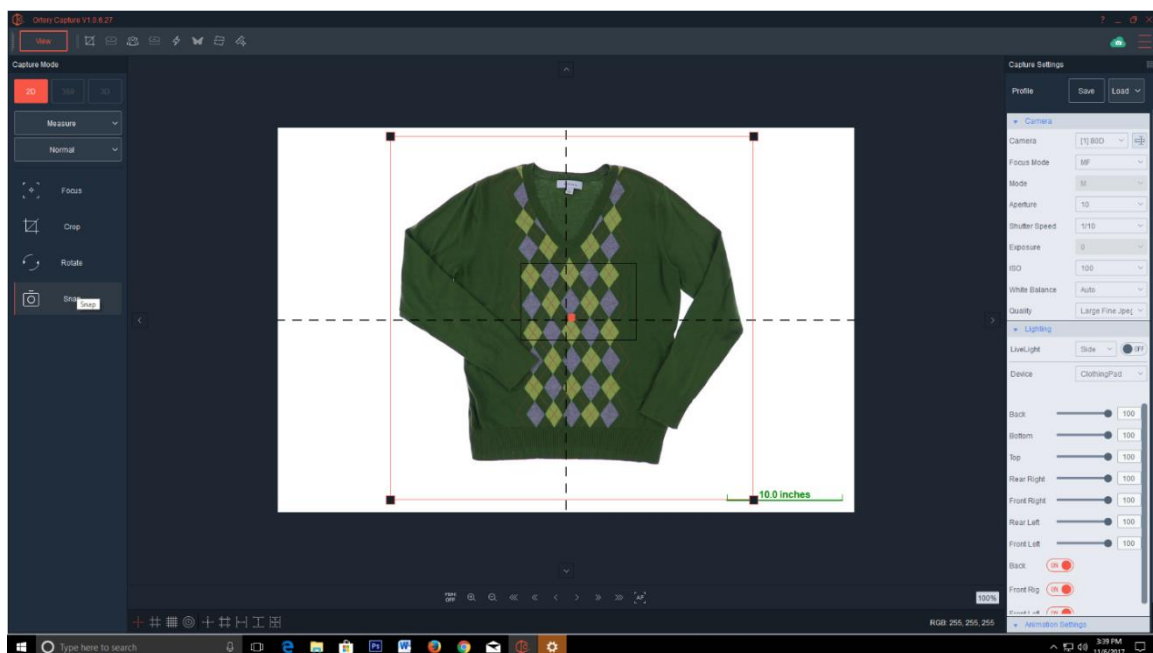


Click Finish to calibrate the Measure feature.

The Measure icon will appear at the top of the Image Capture interface to indicate that the system is calibrated.

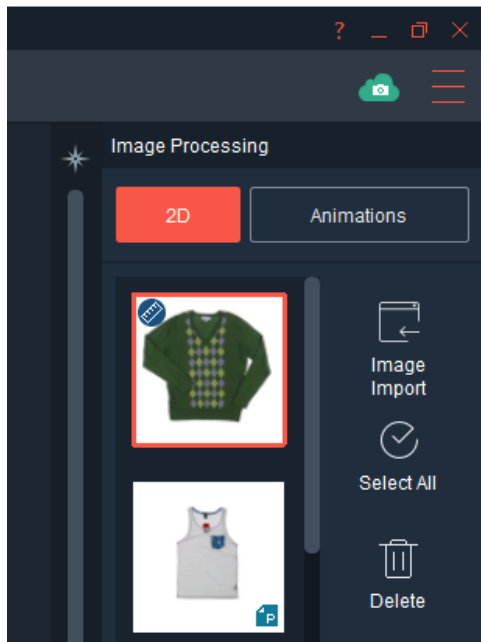


If the user changes camera zoom, calibration will become invalid and will need to be performed again. Until then, the captured images can be saved in HTML format and measured.

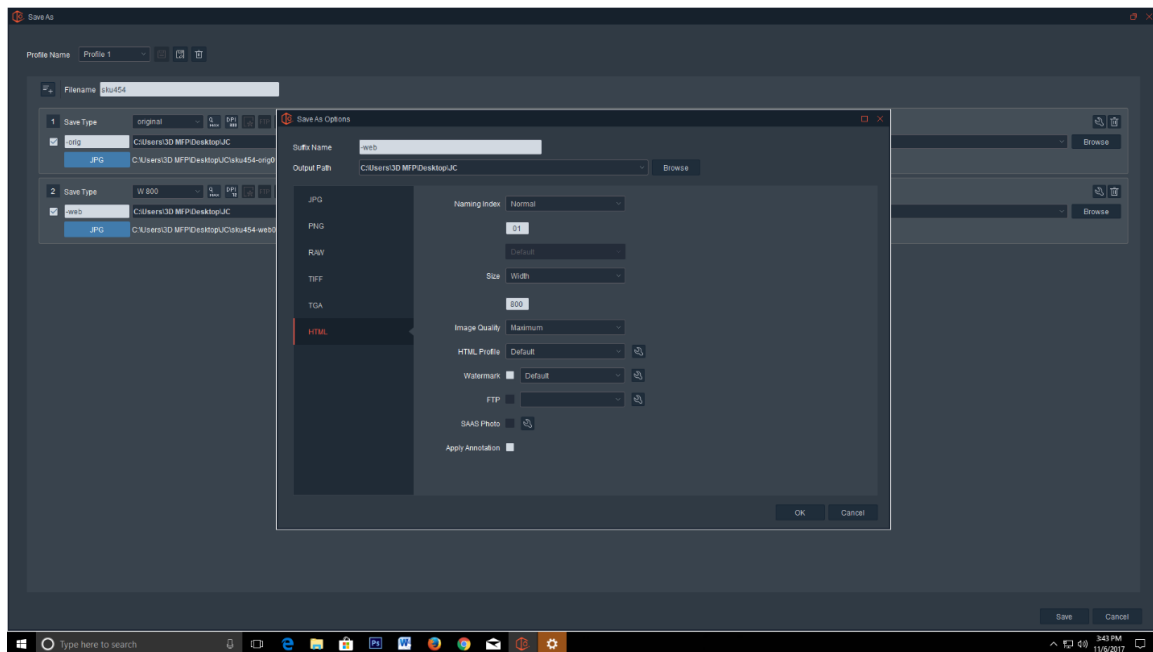


Place an item on the ClothingPad / Mini. Use the normal image capture tools to compose the image. Click Snap.

Captured images will appear in the thumbnail list and have a Measure icon on them to indicate the file type.

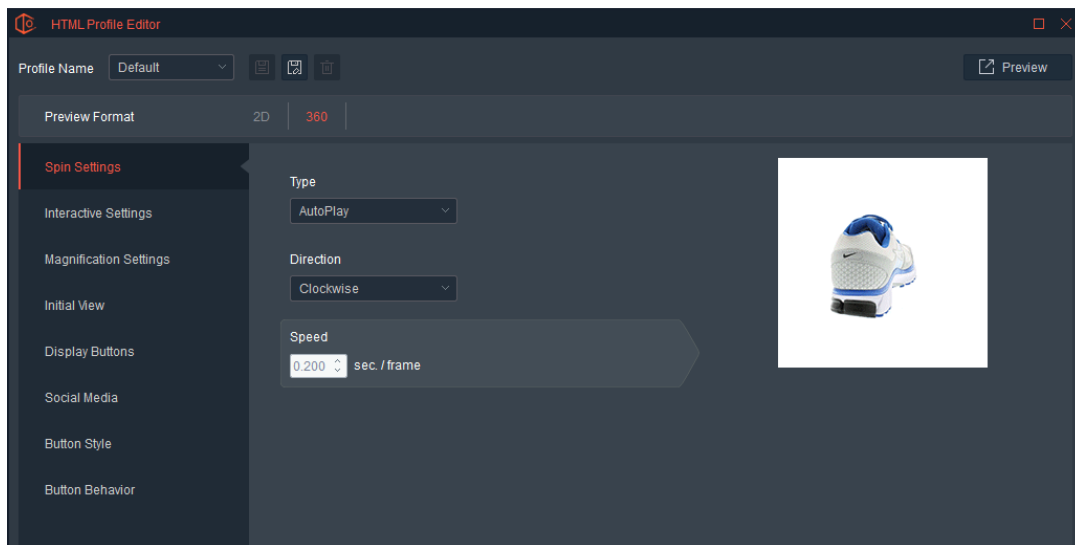
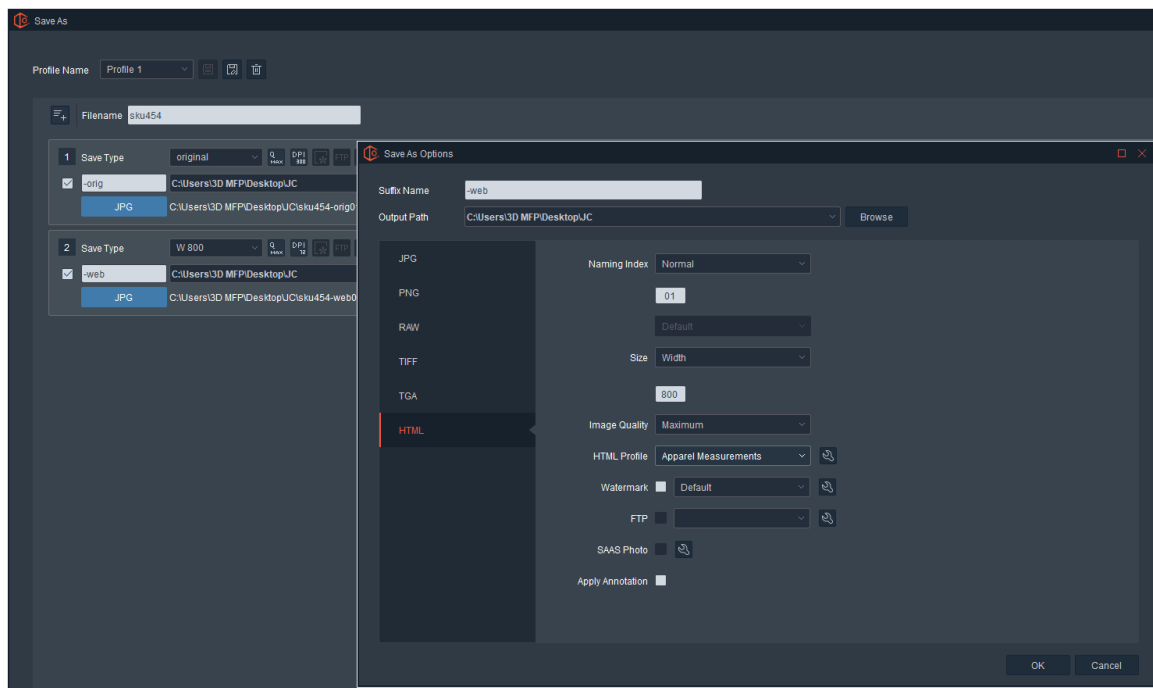


Images captured under calibration using the Measure workflow must be saved and exported in HTML format.



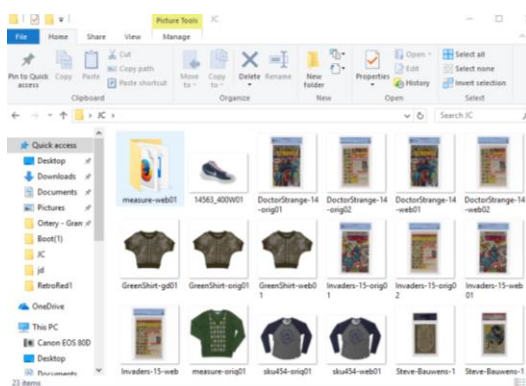
Set up the HTML profile to best fit your needs. Choose how you want people to interact with and measure the item. HTML options include:

- *Magnification Settings* – If and how the viewer can zoom in or magnify the original image
- *Measure Settings* – The color and measurement tools that appear
- *Display and Button Styles* – Similar to a HTML animation, what style and type of buttons will be used to control the HTML display.

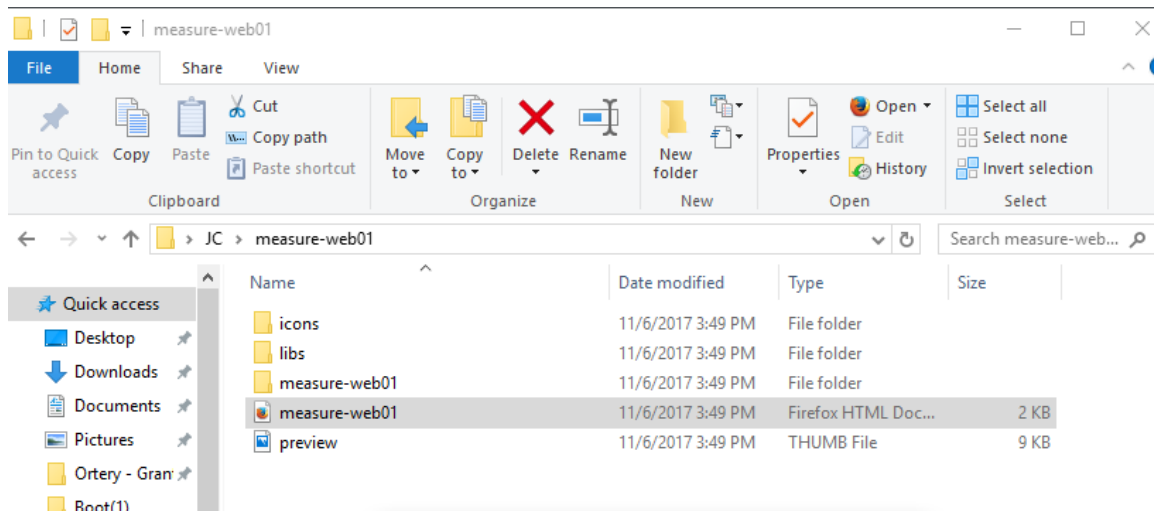


Once the settings have been determined, save them as a Profile and use that profile to save the image.

The image gets saved inside a folder with supporting HTML code.



Double click the HTML Document to launch the picture and the measurement capability in a browser. Note: Google Chrome will not allow you to view the HTML locally. To view locally, use Firefox or Internet Explorer.



The image appears inside a browser window and the user has the ability to view and measure the object. Its up to you how you want the viewer to interact with the image. In the example below, there are buttons for Zoom In, Zoom Out, Measure, Stop Measuring and for sharing this result on Social media.



Here is another example where the image was zoomed then measured.

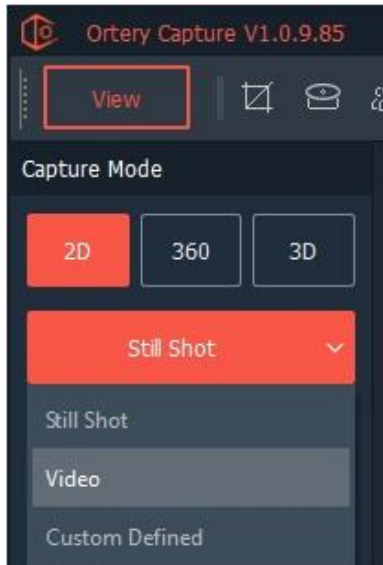


Note:

- The Measure feature is only available when shooting in 2D mode on a ClothingPad Series product
- The Measurement feature is most accurate when the object is captured and measured in the same plane calibration took place.
- Images can be cropped, resized, and zoomed without changing the accuracy of the measurement.
- Recalibration is required when changes are made to the camera location or zoom.

Video

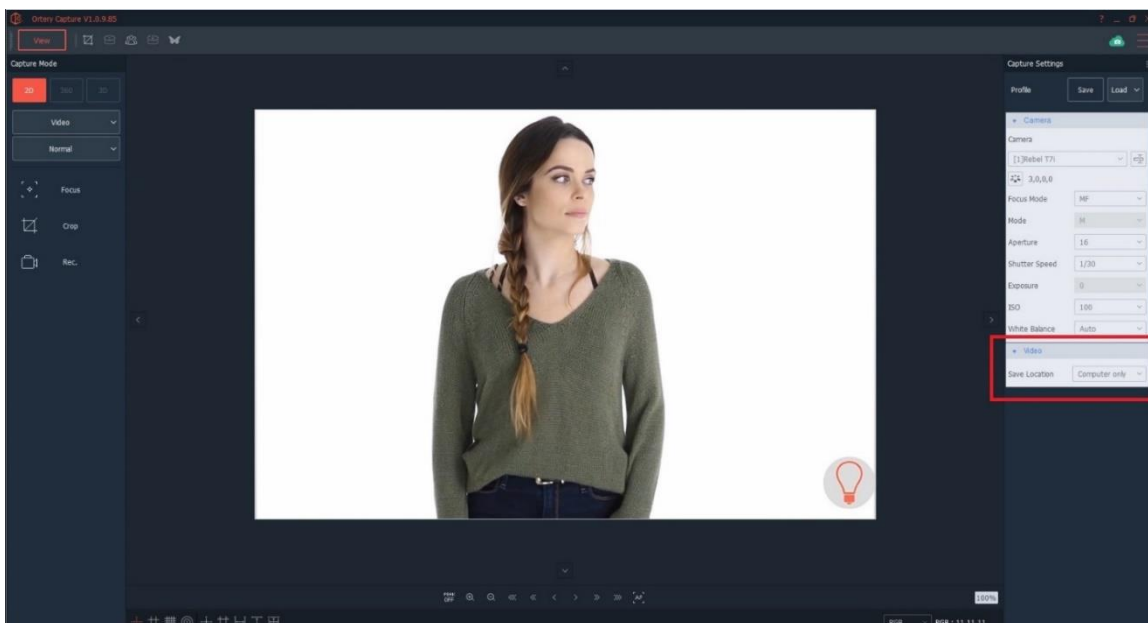
If you are using a compatible Canon digital camera, the Ortery Capture software allows you to create videos. Simply select 2D, then select Video from the capture style pull down. This feature is essentially the same as creating a video when the camera is not connected to a computer, however there are some significant workflow benefits.

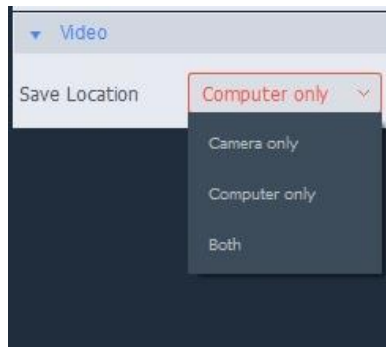


The main video settings regarding frames per second and video quality need to be set inside the menu system on the camera.

Adjust light and camera settings until overall exposure is correct. Please note that to capture a video, Aperture needs to be set to either 1/30th or 1/60th depending on the frames per second to be captured.

Also note that when in video capture mode, the right hand of the user interface offers a Video area in which you can select where the video will be saved.

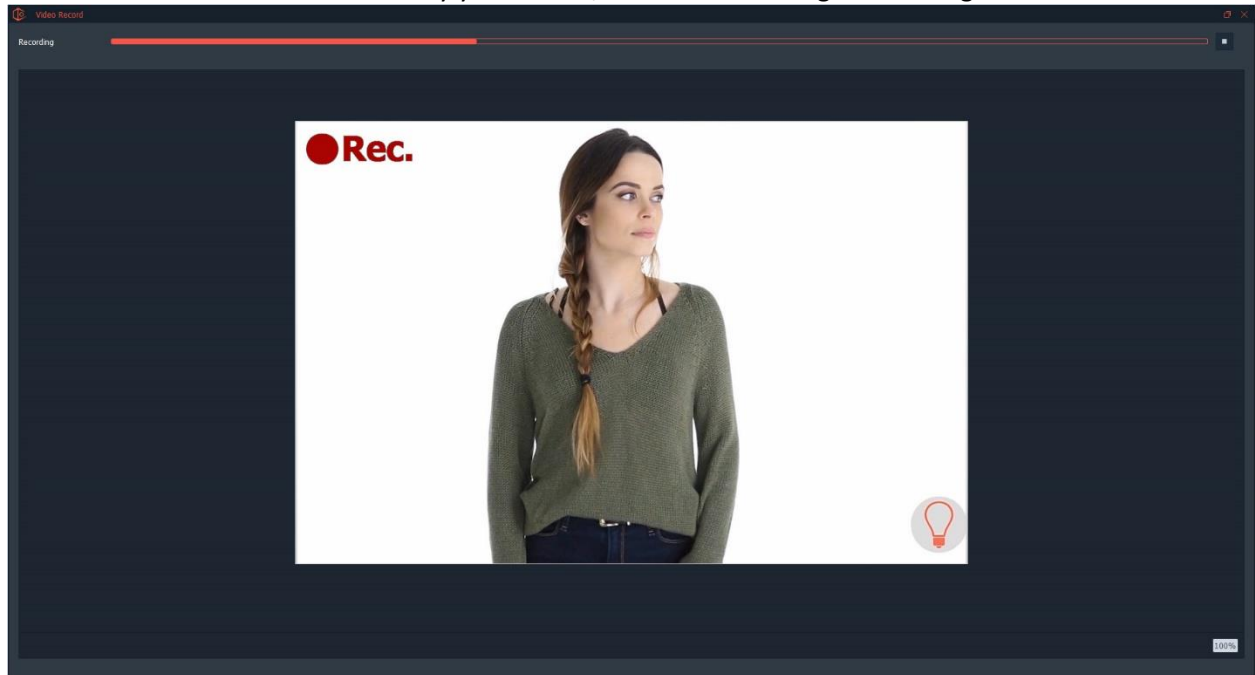




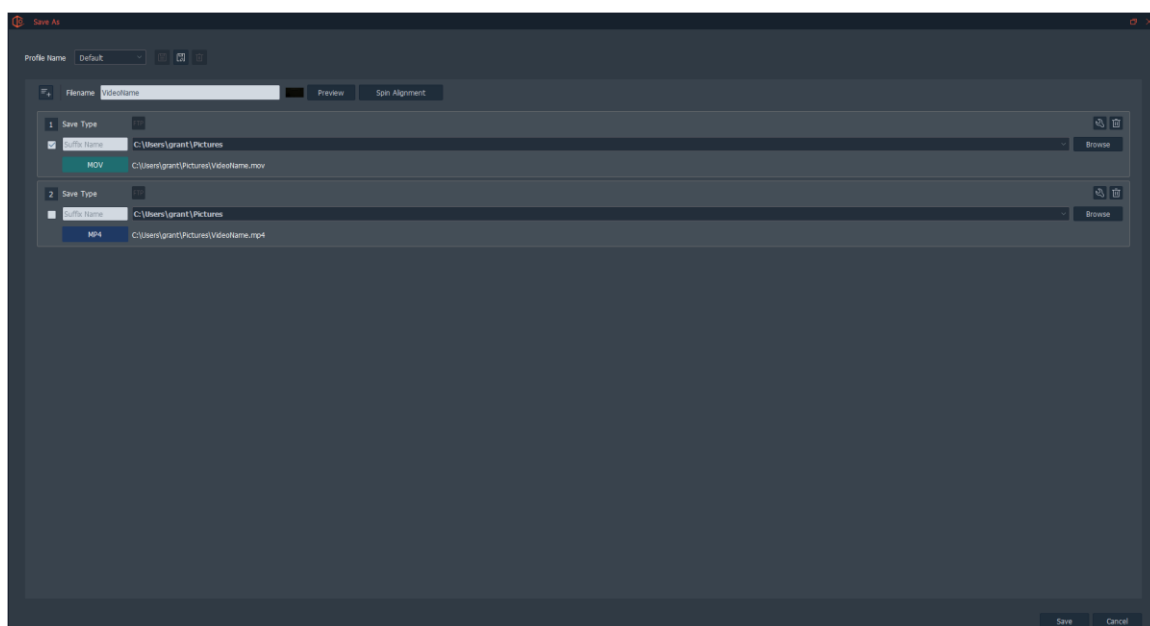
Videos can be saved to the following locations using the Video pull down.

- Computer Only
- Card Only
- Both

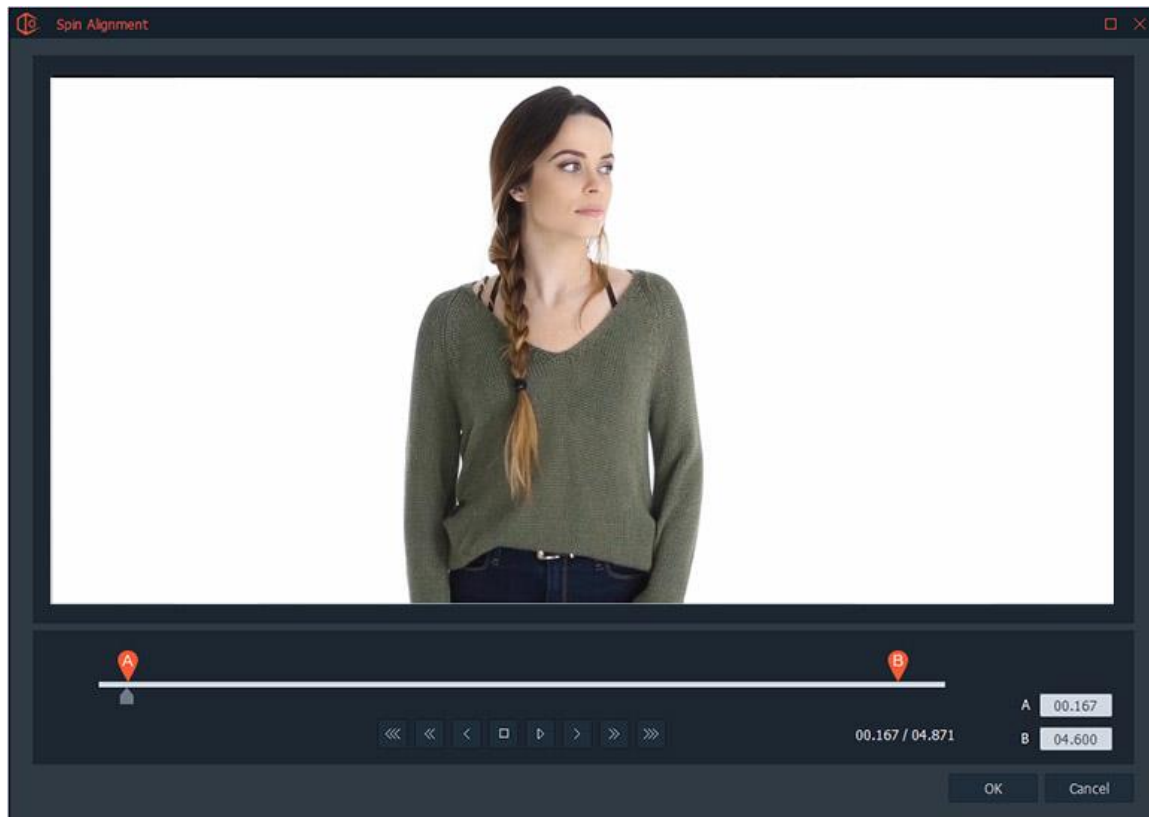
When the Live Preview looks the way you want it, click Record to begin recording.



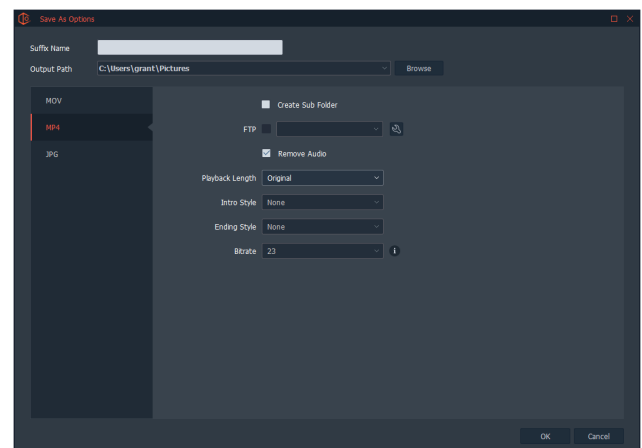
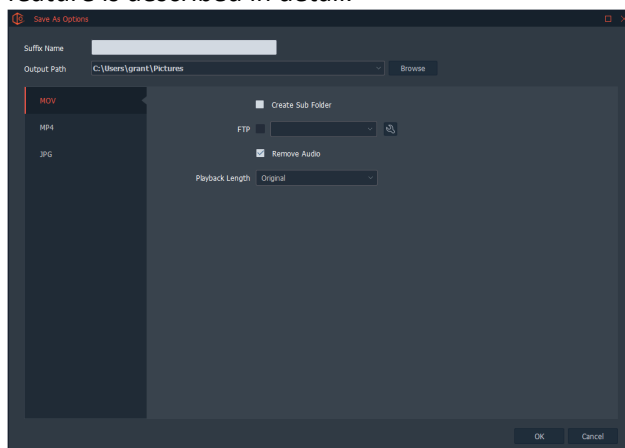
After recording is complete, Save screen appears. On this screen you can do some light editing and save the video as a MOV or MP4. While saving there are many parameters that can be set and reused to increase efficiency.



If necessary, click the Spin Alignment button to clip the ends of the video. Move the A and B points to select the beginning and ending frames of the video.

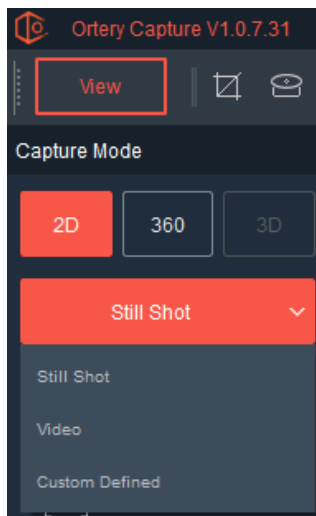


After editing, click OK. On the saving screen select either MP4, MOV or JPG. To learn more about the video saving options associated with each saving type, visit the '360 Video' section of this document where each feature is described in detail.



2D Custom Defined

This feature automates the process of capturing images from multiple angles. When there is more than one camera attached to an Ortery system, 2D Custom Defined can be used to create a repeatable shooting sequence that automatically captures images from several angles.

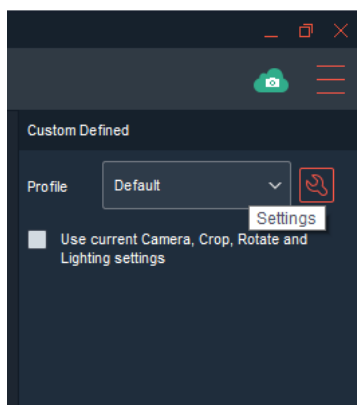


For example, with 3 cameras attached a 2D Custom Defined Profile can be created to capture a picture from the front, top and 45-degree view. Profiles can be saved and reused.

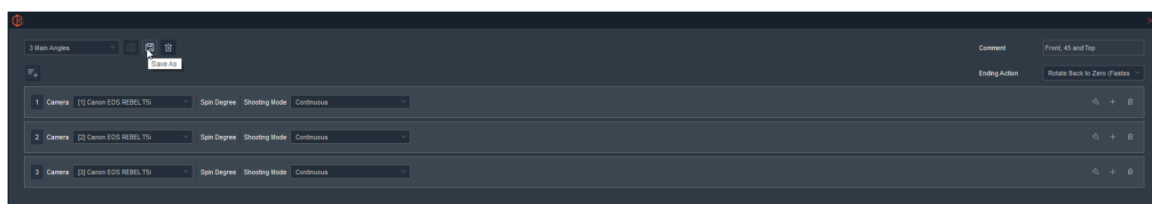
After selecting Custom Defined, additional options appear on the right side of the user interface. Users have the choice of creating a new Custom Defined Profile or using an Existing Profile.

Create a Custom Profile

To create a new Custom Profile, press the Settings button.

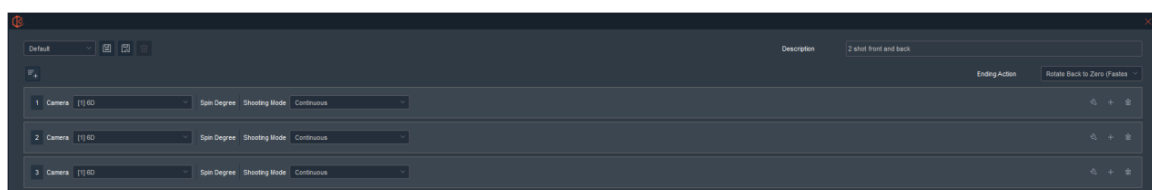


This brings out a screen where the user can see an overview of the image capture sequence. Each horizontal line represents a picture to be captured. To see a preview and settings for a particular picture inside the sequence, simply click the settings button (wrench) at the end of the row.



Profile Settings

At the top, users can select and manage Custom Defined Profiles using the Save, Save As and Delete buttons. In addition, a profile can be given a Description and the user can determine an appropriate Ending Action.

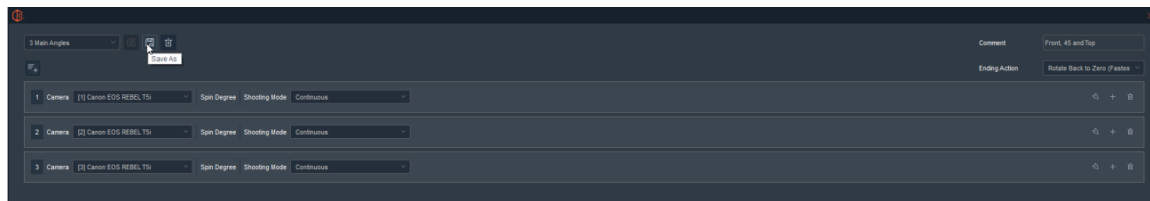


When using Custom Defined to capturing 2D images with multiple cameras, a turntable is not connected, so an Ending Action will not apply.

Picture Settings


The pictures to be taken are defined one-by-one and represented on a horizontal line. Note: Pictures are added in sequence and can also be deleted or edited.

In the case below, three images from three different cameras and angles are set up to be shot. Note the profile is appropriately named '3 Main Angles'.

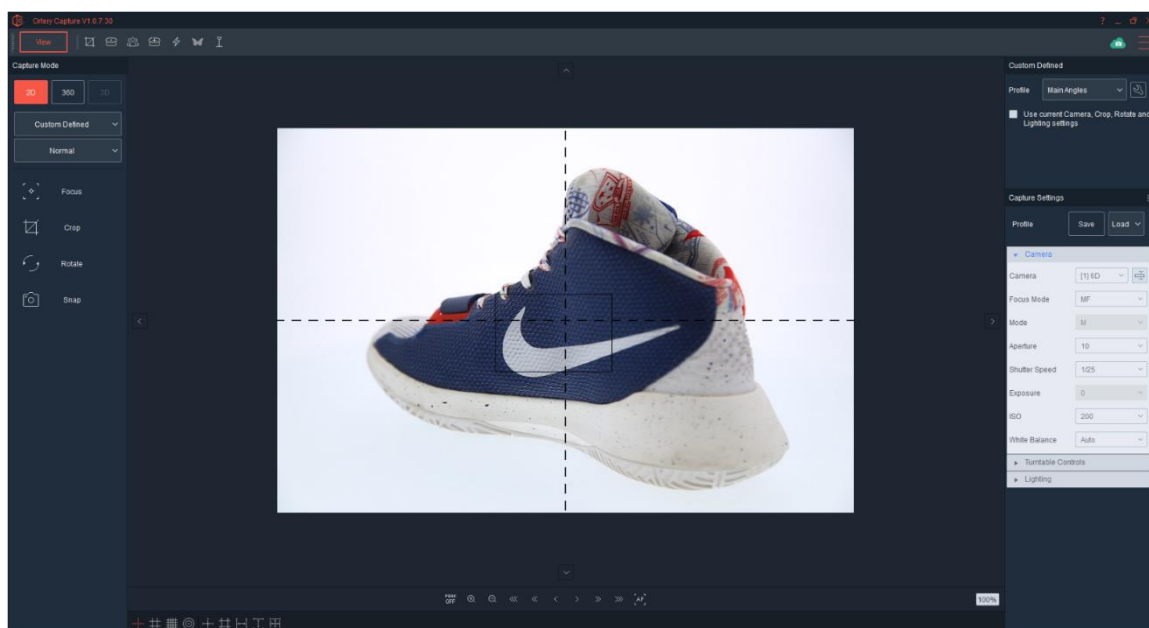


In this case, all three pictures are using a different Canon T5i camera. Note that the pictures will be taken in Continuous mode rather than Time Lapse or Manual where the workflow will either pause for a specific amount of time or until the user clicks Snap before continuing.

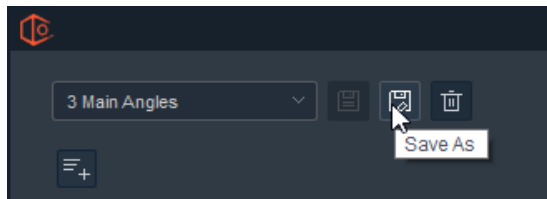


Pictures can be edited, added or deleted. To add a fourth picture to this sequence, simply click the + or  picture button.

By pressing the Settings button, the user can further define the settings of the picture to be taken. A live preview will appear and the user can set up the shot. Camera settings, lighting settings, crop settings as well as preview rotation settings can all be set and memorized as part of the Custom Defined profile. Each picture inside the sequence can be defined this way.



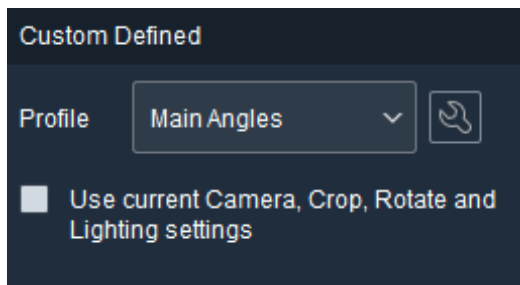
Once each shot of the Custom Defined sequence has been defined, the user can describe the profile then click Save or Save As to save the Custom Defined profile.



Once saved, the profile can be used.

Select an Existing Custom Defined Profile

Use the pull down to select the Custom Defined Profile. After a profile has been selected, clicking Snap initiates the entire image capture sequence, as it was defined.



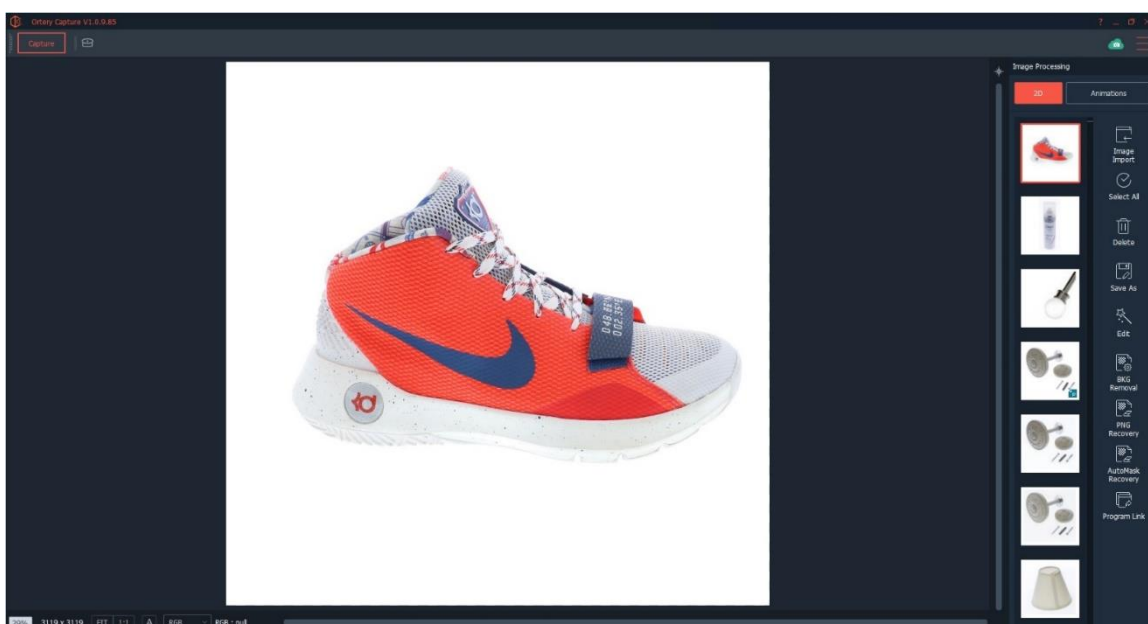
Note: Users can override the individual picture settings inside a profile and use the current camera, crop, rotate and lighting settings by clicking the check box. This makes it easy to go from shooting one color or type of product to another without having to re-define an entire shooting sequence.

Image Viewing Screen

After taking a picture or animation, it can be viewed on this screen. This screen also allows users to edit and manage their photos.

Capture / View Toggle

Simply click Capture to leave this screen and take another picture. To come back to the Viewing screen click the View button in the same location.



2D / Animations Toggle

The 2D / Animations Toggle allows the user to view thumbnails of both still shots and 360/3D animations in the thumbnail Area.

Thumbnails

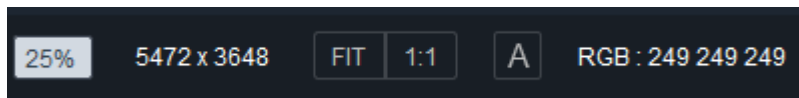
This area displays a thumbnail of each captured image or animation. Click a thumbnail to view it in the Viewing Window; the red border denotes the image has been selected for viewing or processing.

Note: More than one thumbnail can be selected for processing.

An “R” or a “P” in the bottom right of the thumbnail indicates that the image is a RAW or PNG file, respectively.

Viewing Tools

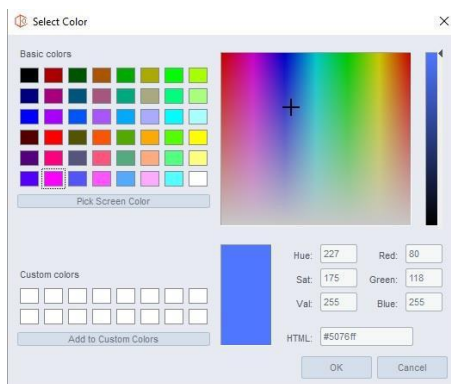
Captured images and animations appear in the middle of the screen.



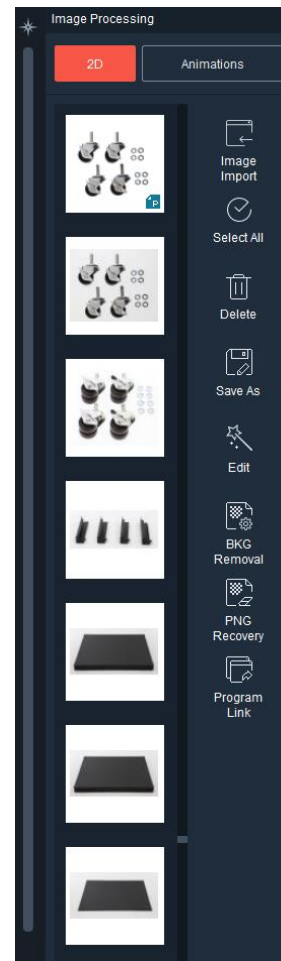
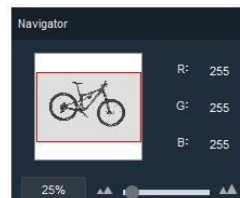
The viewing tools in the bottom left show the total size of the image and the percentage of the image displayed in the viewing window. In addition, the image can be easily fit to screen or viewed at 1:1.

Note: The RGB color of the pixel under the mouse cursor is indicated as a number: 245, 245, 250 where pure white is represented by equal amounts of red, green and blue at 255, 255, 255.

When viewing PNG files, click the color swatch to select and apply a new color to the background.

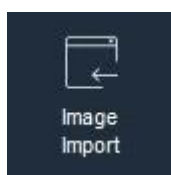


Navigator: To show and use the image navigator, click the star in Image Processing area.



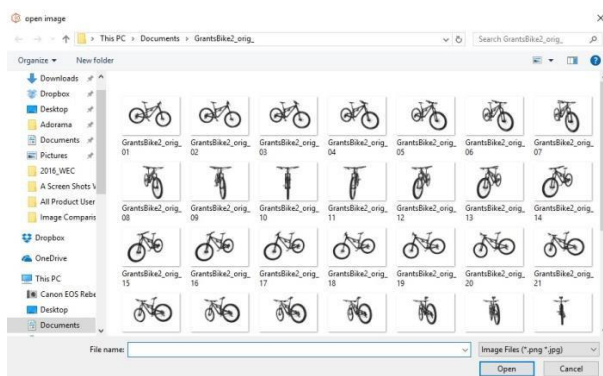
2D Image Processing Tools

Once an image has been captured, Ortery offers several processing tools to efficiently prepare the image for publication. The Image Processing area of the user interface can be used to process both 2D images and Animations. Simply toggle between processing 2D images or Animations.



2D Image Import

Any JPG or PNG image can be imported into the program. By clicking Image Import, the following screen appears where users can select one or more images for import.

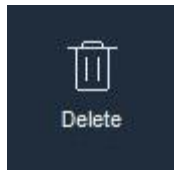


Imported images will automatically appear in the thumbnail window.



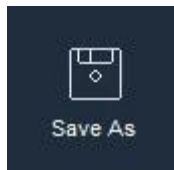
Select All

Pressing Select All selects all of the images in the thumbnail window for processing. Once selected, images can be processed using one of the Image Processing commands.



Delete

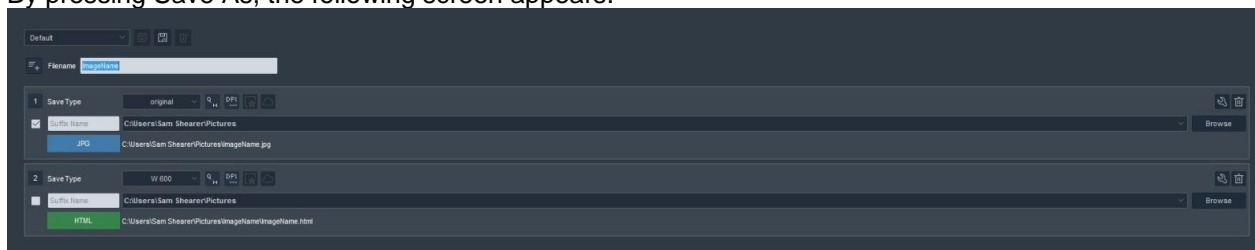
Use this tool to delete selected images.



Save As

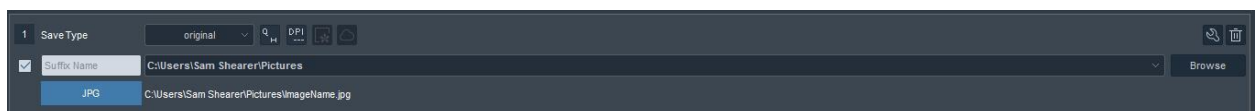
Pressing Save As allows users to quickly save one or more selected images. The Ortery software streamlines the saving process by using Saving Types and Saving Profiles. In this manner, it's easy to simultaneously save an image (or images) in many different ways at the same time.

By pressing Save As, the following screen appears.

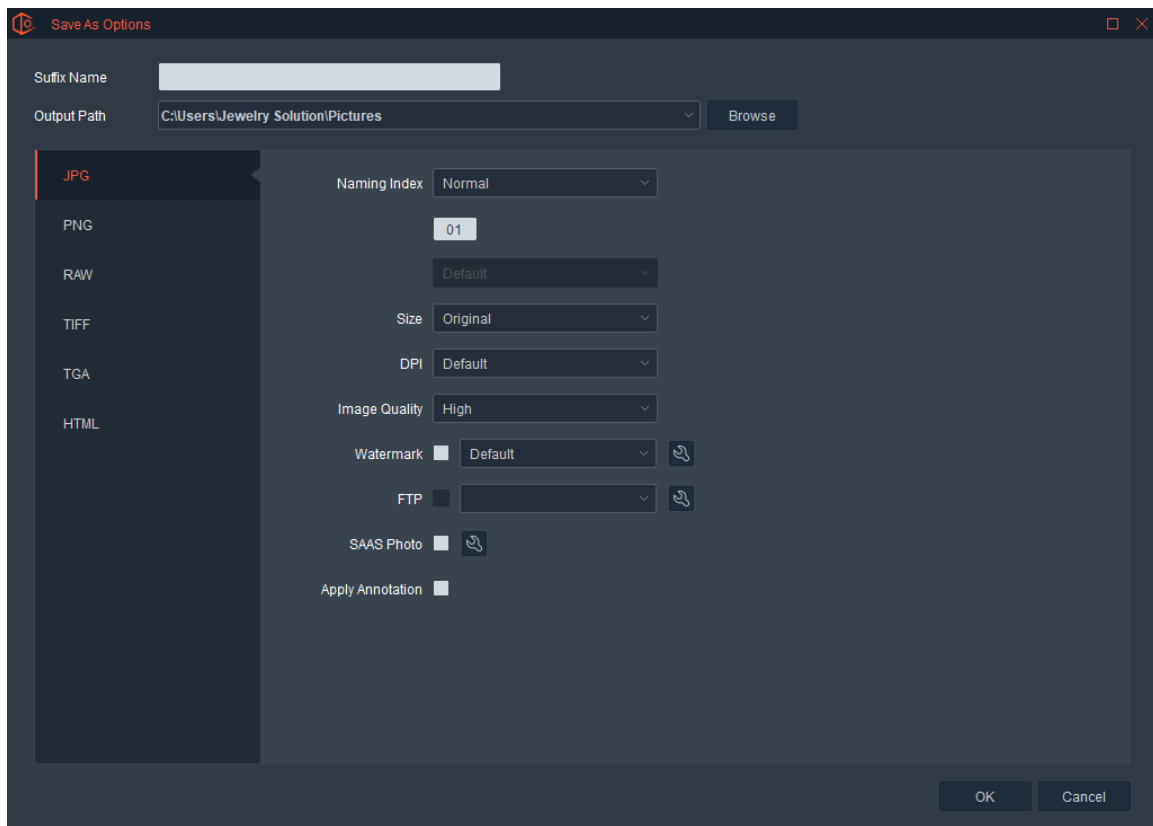


Save Types

On this screen, users can Add and define multiple Save Types. A Save Type allows the user to define how an image will be saved. On this screen, the Save Type is displayed in its condensed format as follows:



The condensed Save Type shows many of the saving parameters (Filename, file format, save location, DPI, etc.) as a name or icon. Each parameter can be changed by directly clicking the icons or by clicking the wrench icon. The wrench icon allows the user to see and change all of the saving parameters at once.



Selecting different file formats brings up different saving parameters.

Note: Icons with a wrench on them indicate that more advanced settings can be defined for that feature.

In general, the following saving parameters can be defined:

Filename

- Create a filename by combining the prefix and suffix components.

Save Location (Output Path)

- Browse to or create the best saving location.

Output Format

- Images can be saved as JPG, PNG, TIFF, TGA or RAW files. In addition, still images can be automatically saved in a HTML5 format that has built-in measuring, Hotspots or magnification features.

Naming Index

- This will be covered below.

Image Size

- Keep files at the original size or resize them to any specific size. Most customers using the system for eCommerce resize the master image to create thumbnail, normal and oversized images for website use.

Image Quality

- When saving JPG images, the user must select the level of compression. High is the recommended default.

DPI

- DPI (Dots Per Inch) only matters if the user plans to print the image. Three options are available: 72, 150 and 300. 300dpi is print quality. 72 is the Internet standard.

Watermark

- When selected, a watermark will be placed on each image. The Settings button allows the user to create new and edit existing watermarks.

Clicking OK saves the parameters and returns the user to the condensed Save Type view. Several Save Types can be created and used to bring great flexibility and efficiency to the saving process.

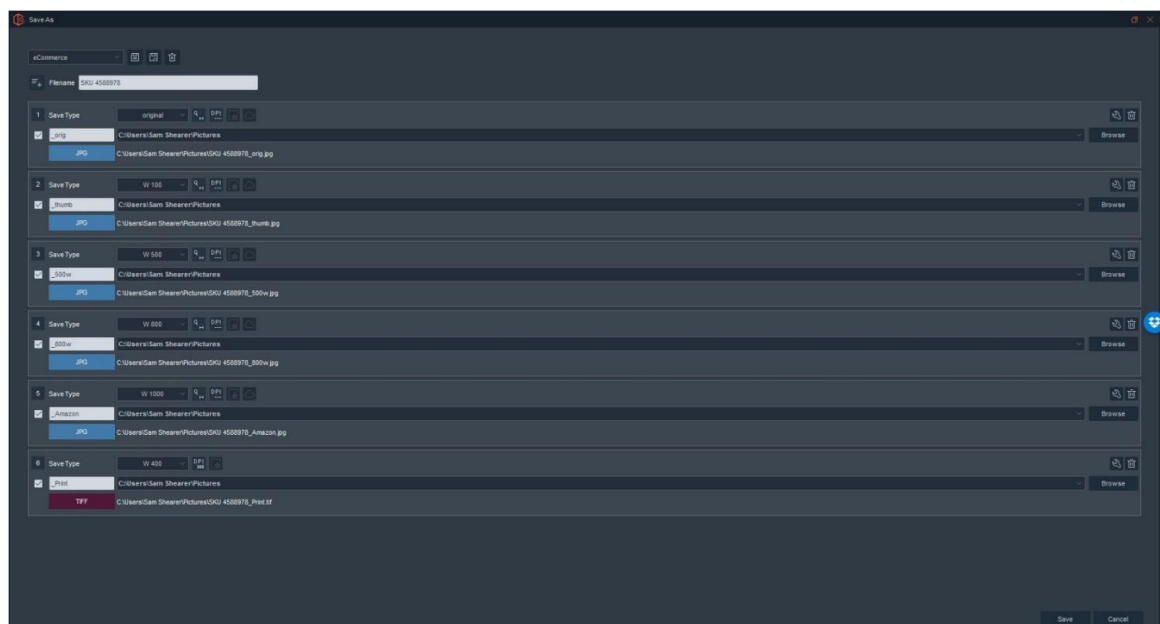


Adding a Save Type

In addition to editing existing Save Types, new ones can be created. To add a new Save Type, simply click the Add Save Type button.

Here is a typical saving method for an image used in eCommerce. Each image is simultaneously saved six different ways using six different Save Types.

1. As a JPG file at original size
2. As a JPG file at 100 wide (thumbnail)
3. As a JPG file that is 500 pixels wide
4. As JPG file that is 800 pixels wide
5. As JPG file that is optimized for use on Amazon.com at 1000 pixels wide
6. As a TIFF file at 300 DPI for print



File Naming

Filenames consist of a Prefix and a Suffix. This gives the user extreme file naming flexibility. Typically, the Prefix is a SKU or model number and the Suffix is related to how the image is saved. For example:

Prefix Name = SKU12345

Suffix Name = _500w (for 500 pixels wide)

This scenario will generate an image with the following name: SKU12345_500w.jpg

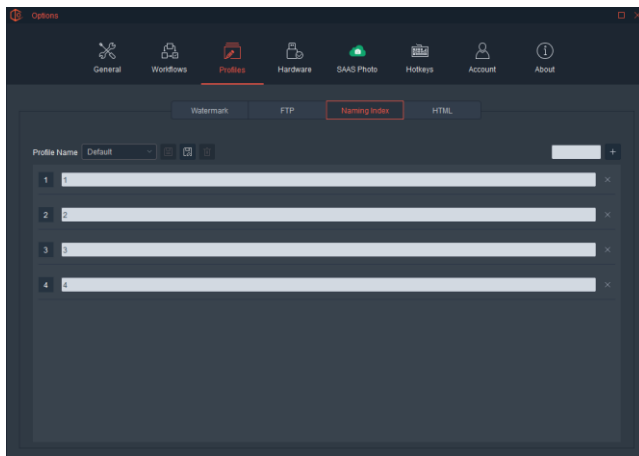
If the user has selected more than one image to save, for example a front and side shot, then the names would be: SKU12345_500w_01.jpg and SKU12345_500w_02.jpg

Naming Index

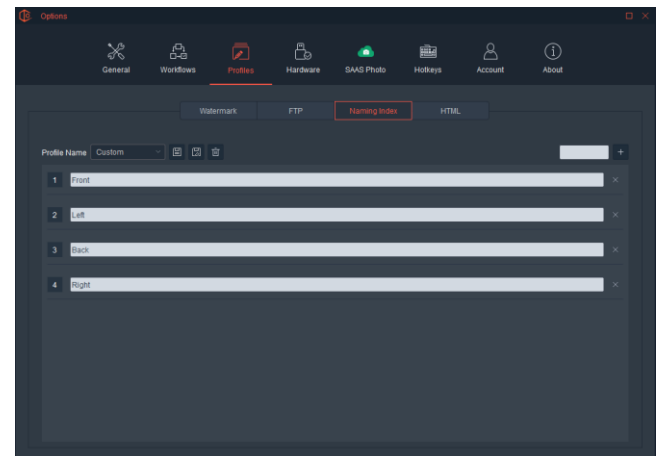
The program automatically adds a Naming Index behind the Filename. The Naming Index feature is located in the Options area under Profile / Naming Index.

The default Naming Index, is a single digit number; however, it can be changed to a two or three-digit number, a name or almost anything you desire.

Default Naming Index – *two-digit numbers*



Custom Naming Index – *Descriptive words*

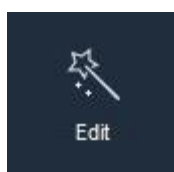
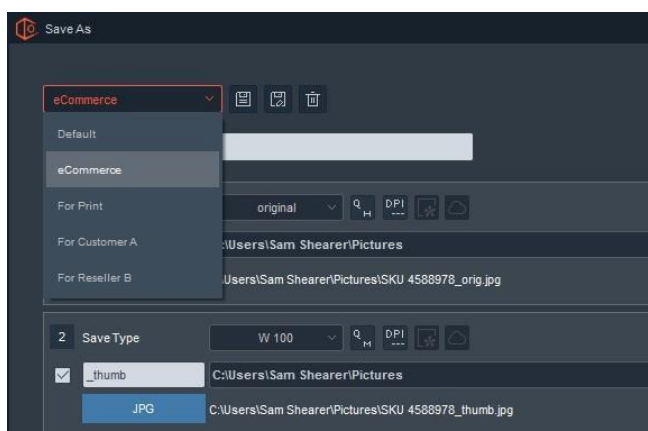


Saving Profiles

Once one or more Save Types have been created, they can be saved as a Saving Profile.



Users can save, select and delete Saving Profiles using the pulldown menu and related buttons. There is no limit to how many Saving Profiles can be saved and re-used.



Edit

After an image is selected, clicking Edit allows the user to perform various editing functions.

The Editing Screen is divided into several segments. Each will be covered in the following sections.

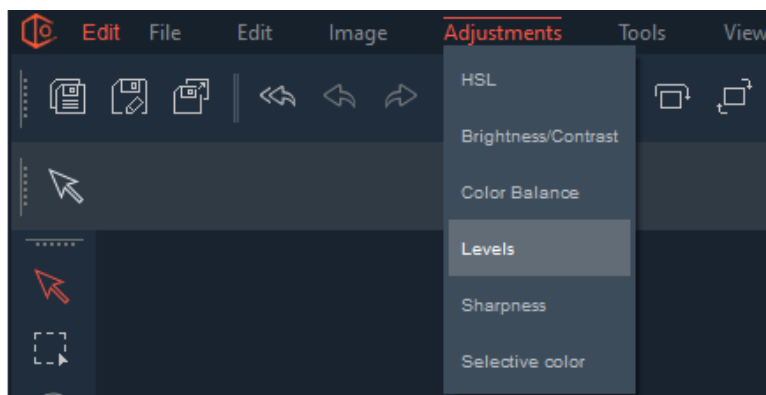


Images

Any number of images can be brought to this screen for editing. They will be displayed along the bottom. Only the selected image will appear in the main viewing window and be active for editing.

Pull Down Menus

Each Pull Down Menu contains features, tools and functions related to editing, saving and manipulating the look and feel of an image.



Saving, Editing and Viewing



These shortcut tools across the top give easy access to Saving, Undo, Rotate, Flip, Inverse and more.

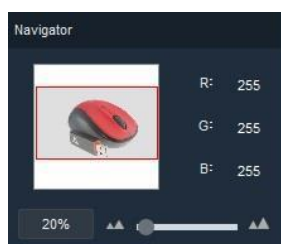


Drawing Tools

These tools allow the user to edit the image by drawing on it and include: A Pointer Tool, Selection Tool, Polygonal Lasso Tool, Crop Tool, Dropper Tool, Brushes, Eraser and Hand Tool.

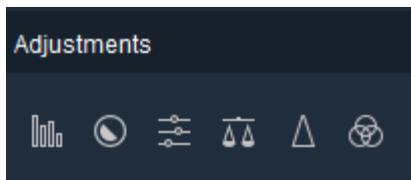
Navigator and Histogram

These two tools give the user a better idea of the colors and distribution of colors that make up the image. The Navigator also provides a viewing capability.



Adjustments

The image editing tools inside the Adjustments area typically have to do with global color manipulations. They can be accessed from the pulldown menu or by the shortcuts in the Adjustments area.



The following Adjustment tools are available:

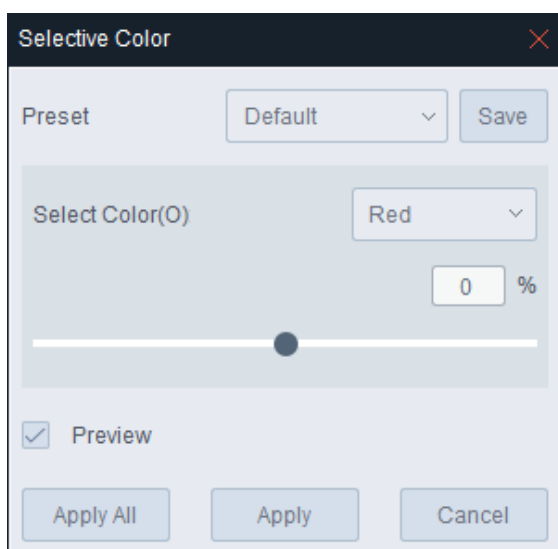
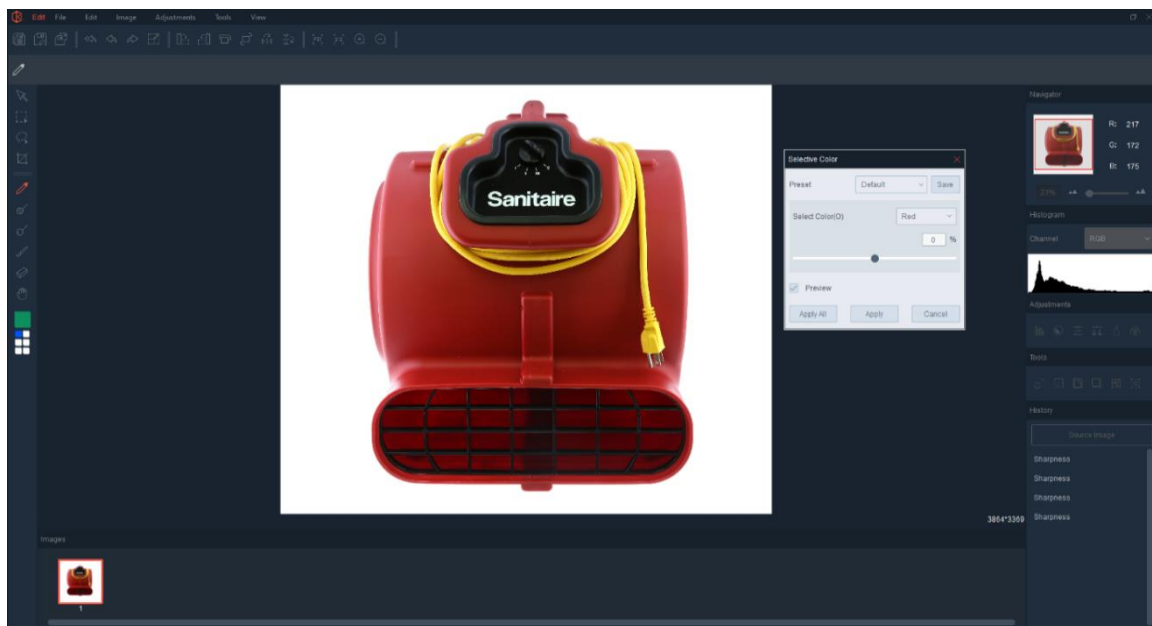
- Levels
- Brightness / Contrast HSL
- Color Balance Sharpness
- Selective Color

Since these are very standard editing tools we will not go into great detail about the function of each tool. To learn more, search each tool on YouTube.

Selective Color

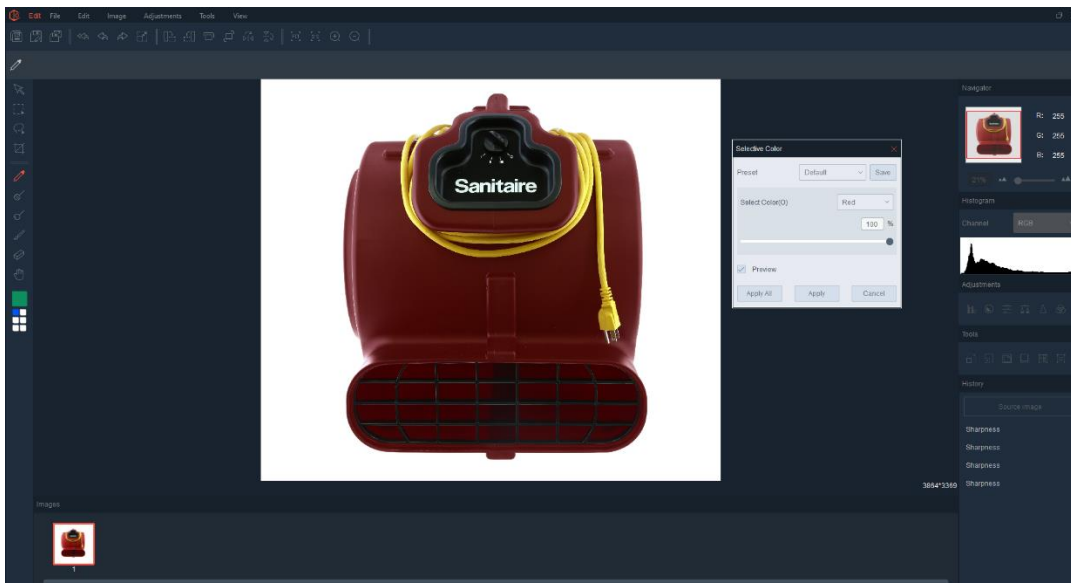
This is the only adjustment we will go over in more detail as it isn't as common as the other adjustments tools in our software.

Often you might find yourself wanting to select only a certain color in your product and modify just that color. An example of when this would be common is in the jewelry industry where you want to isolate your sapphire stone from your sterling silver ring. We will use a similar blue color for this example.



First select the color you would like to edit from the Select Color dropdown list. Use the slider to increase or decrease the intensity of the color selected.

In this example we moved the red value up to 100% and got a significantly darker result from our Blue that we see in the product. See example below:



Click Apply to perform the adjustment to one image and Apply All if you want to apply the adjustment to multiple images.

Tools

The image editing features inside the Tools area solve specific problems and can be very useful. They can be accessed from the pull down menu or by the shortcuts in the Tools area. The following Tools are available.

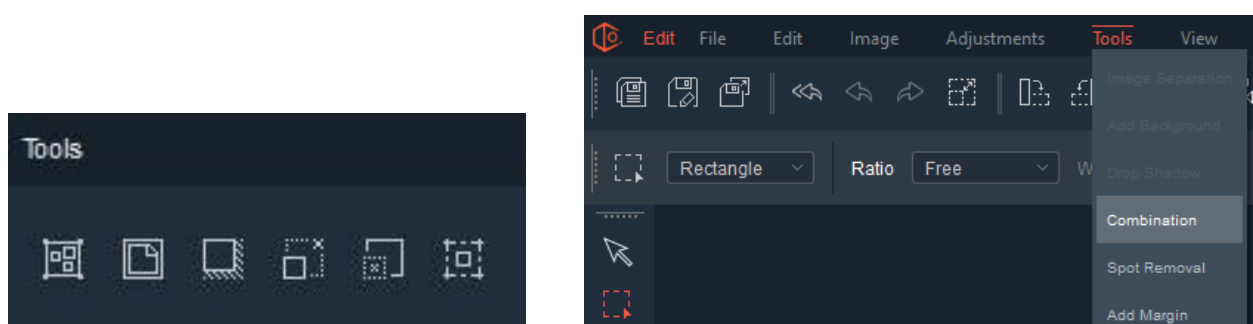
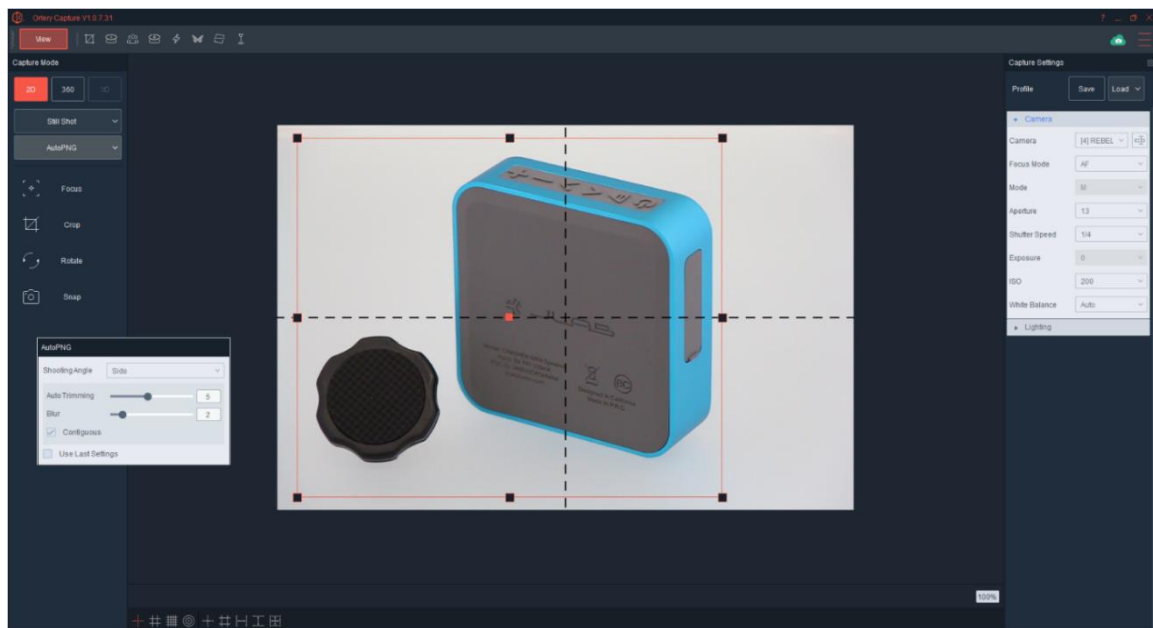


Image Separation

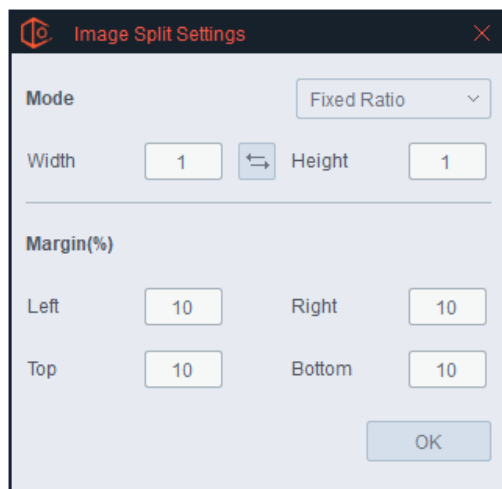
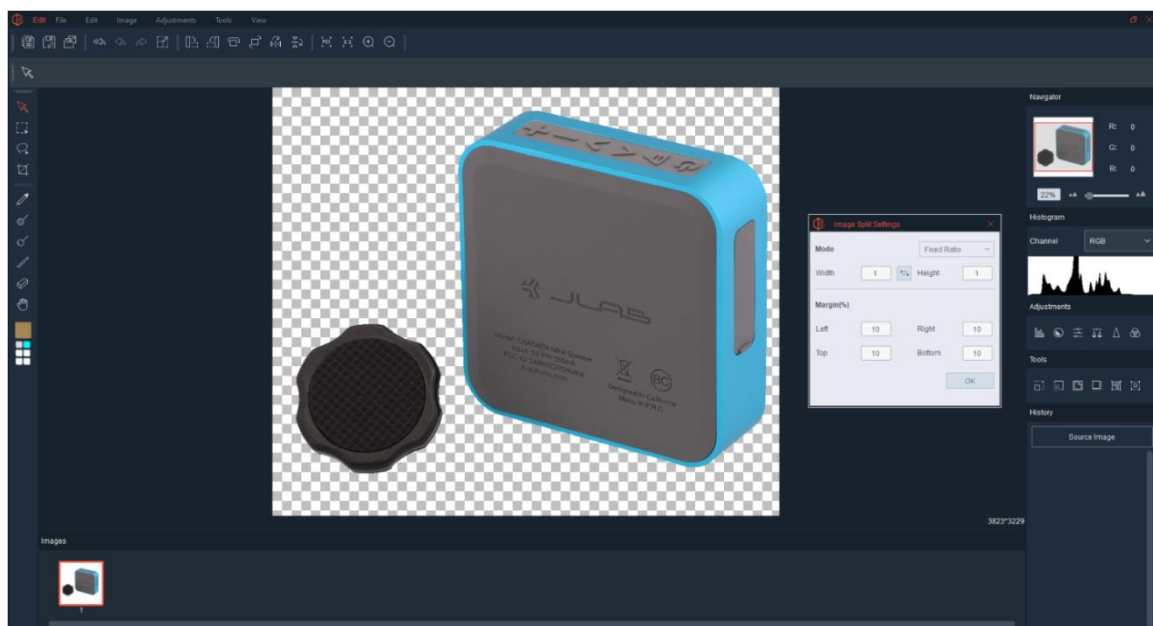
This feature gives the user the ability to identify and save the individual components found inside a PNG file.

For example, if all the items of a package were laid out and shot as a PNG file, each of the components could be identified, isolated and saved independently.



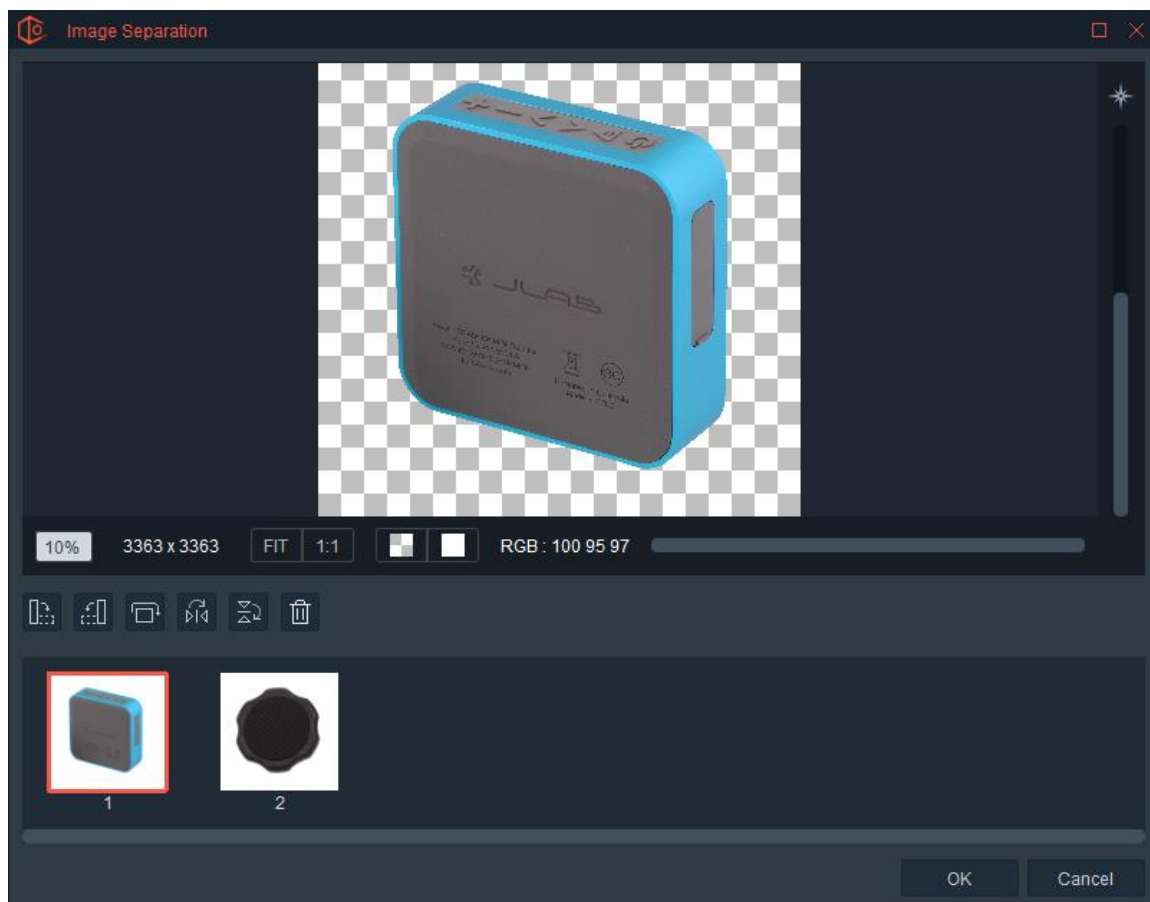
Lay out the items and use AutoPNG or AutoBKG to take a picture in PNG file format (or shoot it as a JPG and use the Background Removal to obtain a PNG file with a transparent background).

Select the PNG image from the thumbnail list and click 'Edit' then select 'Image Separation'.

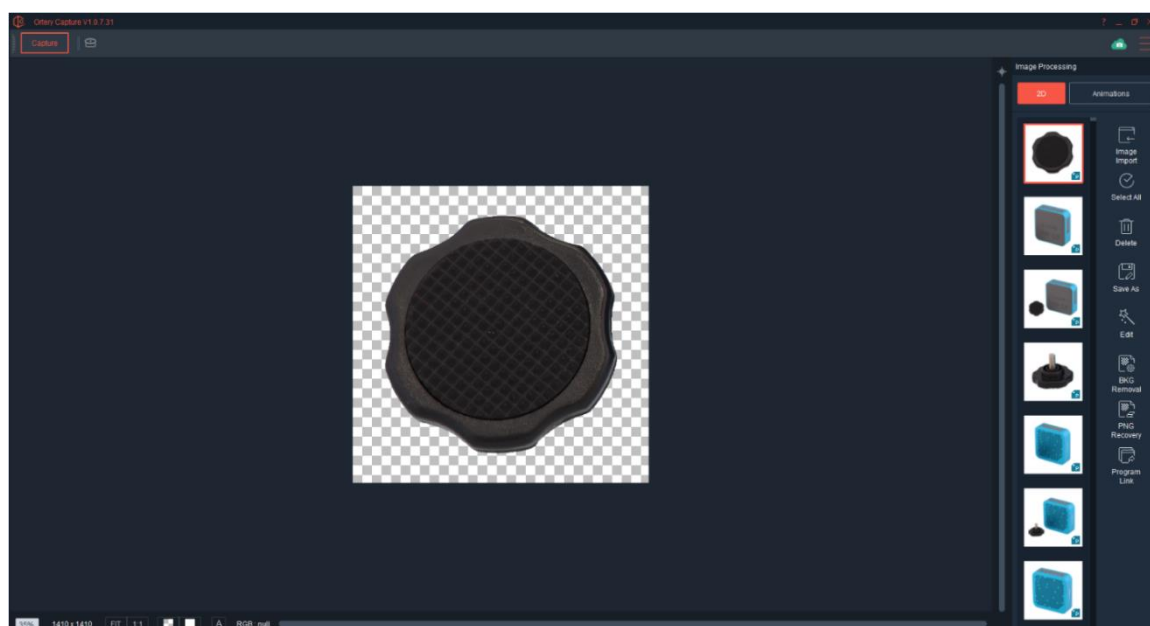


On the window that appears, select the image aspect ratio as well as the margin of white or transparent space around the object. For example, if the user wants the separated images to have a 1:1 (or square) aspect ratio, then change the Fixed Ratio to width = 1 and height = 1. Then, if the user wants to have equal amounts of margin between the edge of the image and the edge of the object, they can set the percentage of each margin for the Left, Right, Top and Bottom accordingly.

Pressing OK starts the Image Separation process. Each of the individual items will be separated and displayed on the bottom. These results were obtained from a 4:3 aspect ratio and a 10% a margin in each direction.



Click OK to return to the editing screen. There you can either make more edits, save the images or return to the Viewing Window where all three images in this case would appear as thumbnails.



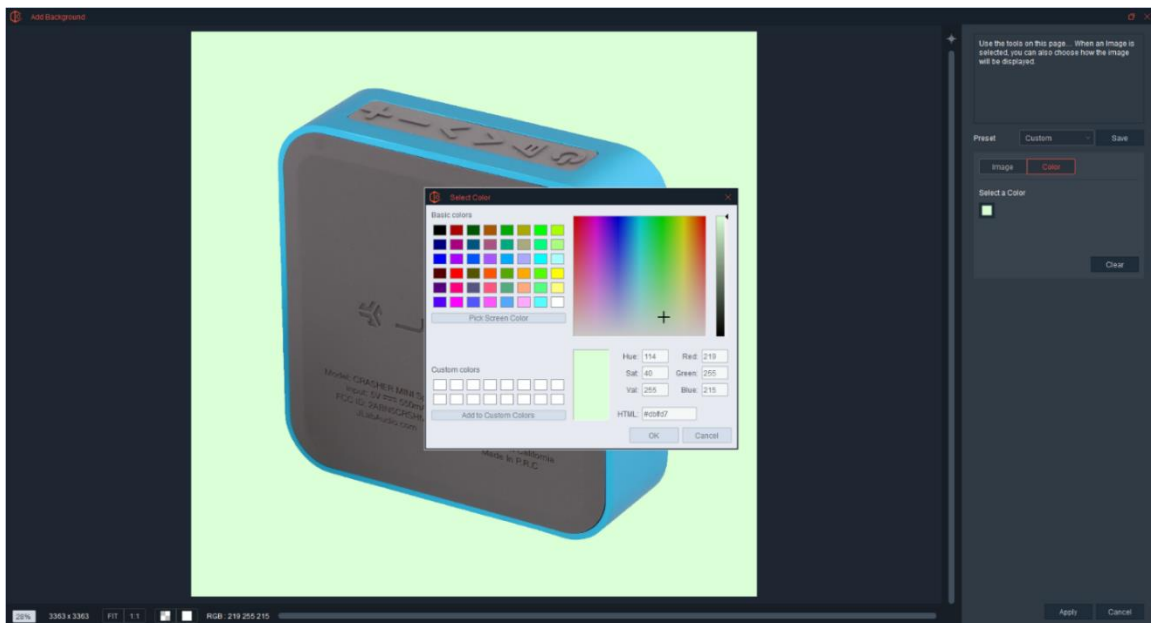
Add Background

After a PNG file has been selected for Editing, click the Add Background tool to add any picture or color as a background. Simply select to add an Image or Color.

If adding an image, Browse for the image and select a Display Style.



If adding a color, simply select the color.

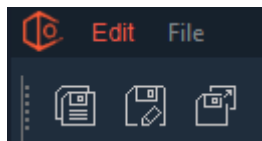


In the case below, 'Tile' was selected as the Display Style.



The Background Image, Color and Display Style can be saved and re-used as a Profile. Simply click Save. To re-use, click Load and select an existing Profile.

To save the final result, click Apply then use the Save All, Save As or Save As and Close buttons on the Edit screen.

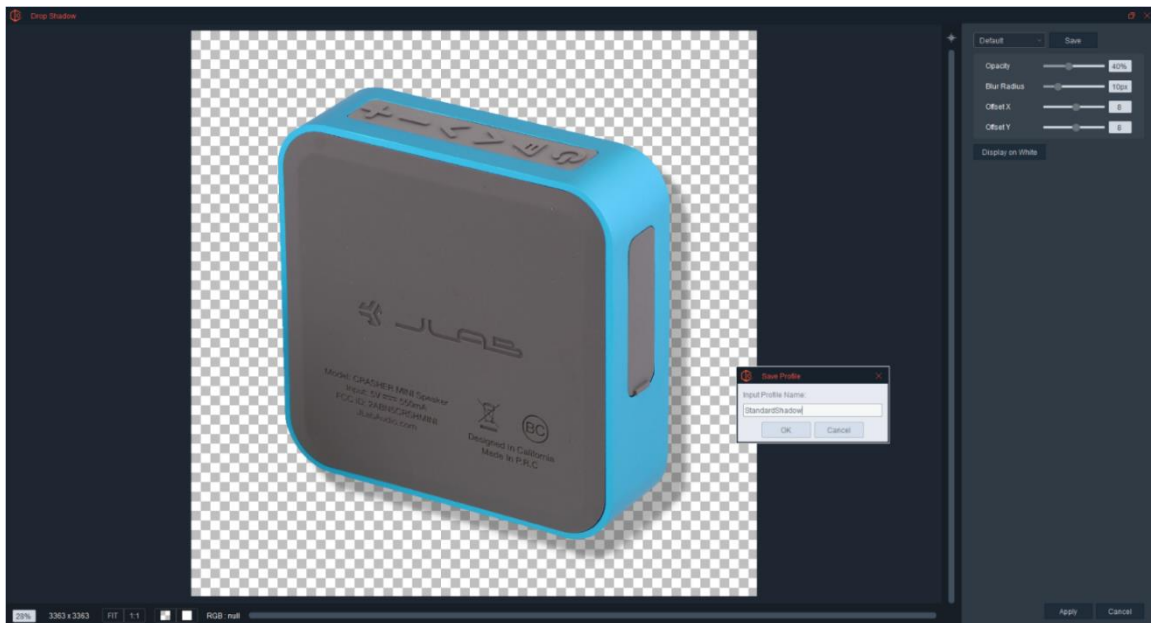


Drop Shadows

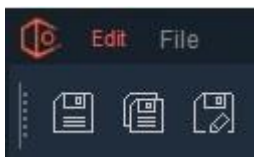
After a PNG file has been selected for Editing, click the Drop Shadow tool to add a Drop Shadow to the image. Manipulate Opacity, Blur Radius and X / Y Offsets to obtain the desired drop shadow, then click Apply.



Drop Shadow settings can be saved and re-used as a Profile. Simply click Save, then use the pull down to Load a previously saved profile.



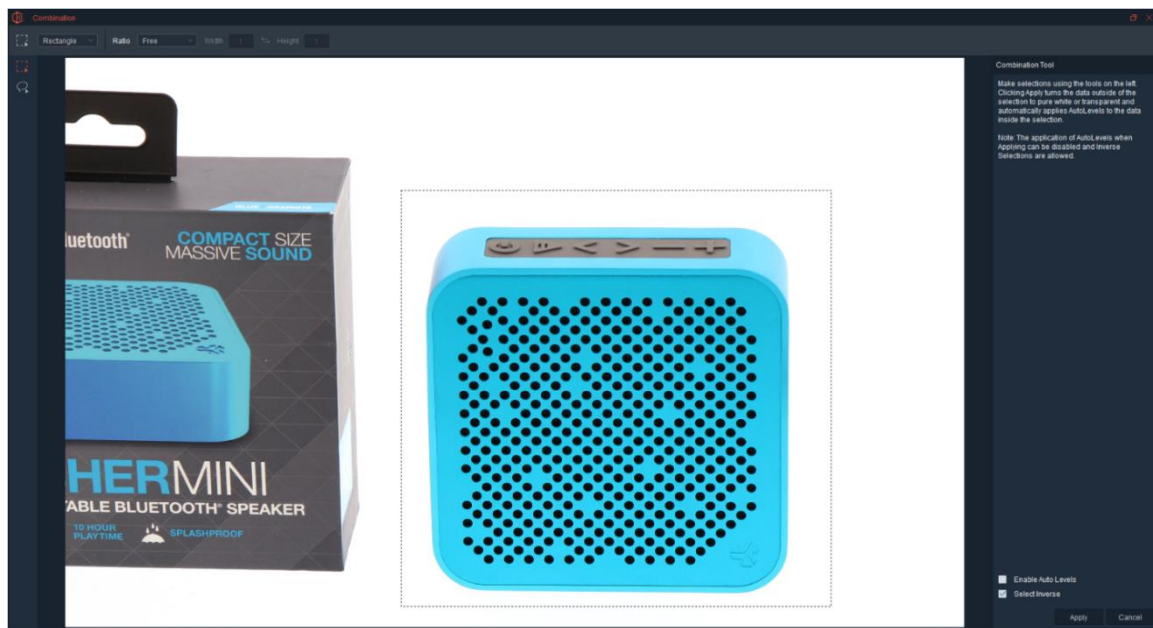
To save your final result, click Apply and use the Save, Save All or Save As settings on the Editing screen.



Combination

The Combination tool allows users easily remove unwanted items in the background. Simply select a specific area on the image, then use the Combination tool to simultaneously Drop the inverse of the selected area to pure white or transparent, and Apply Auto Levels to the selected area. (applying Auto Levels to the inside is optional)

First, Make the Selection.

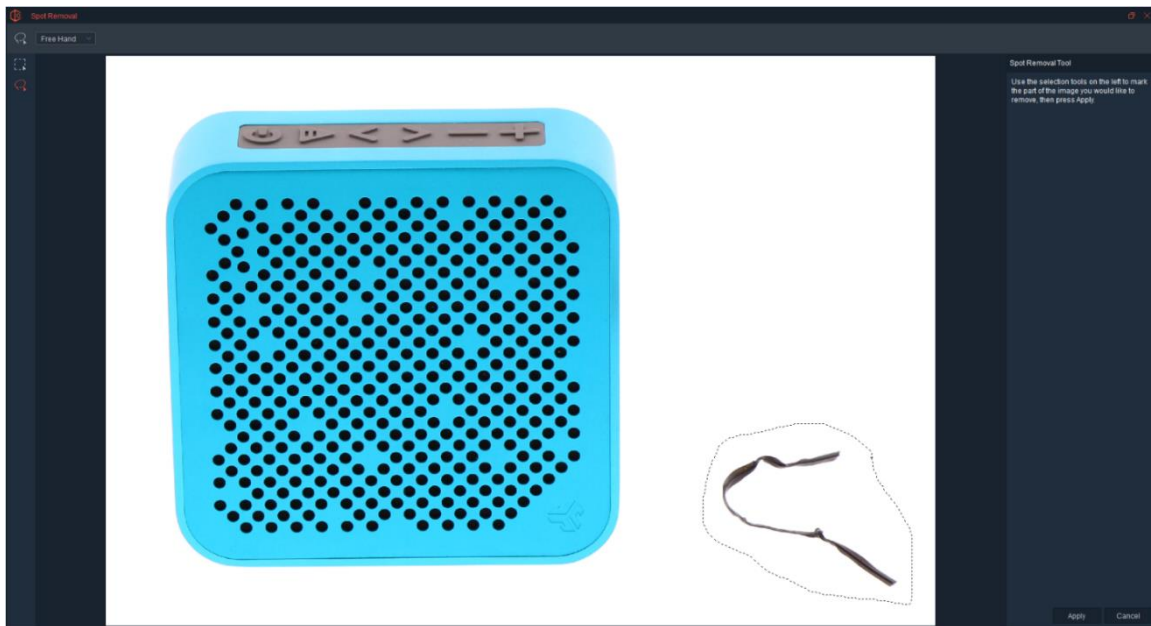


Second, Apply the Combination.



Spot Removal

As the name implies, this tool is used for removing unwanted parts of images.



Simply use the selection tools to mark the part of the image that is unwanted and click Apply. The selected part of the image will be turned pure white (255, 255, 255).

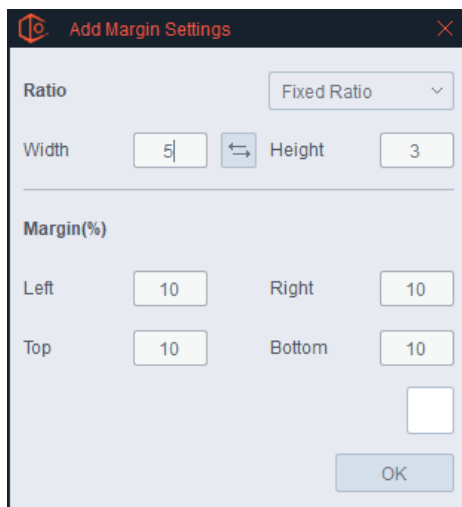
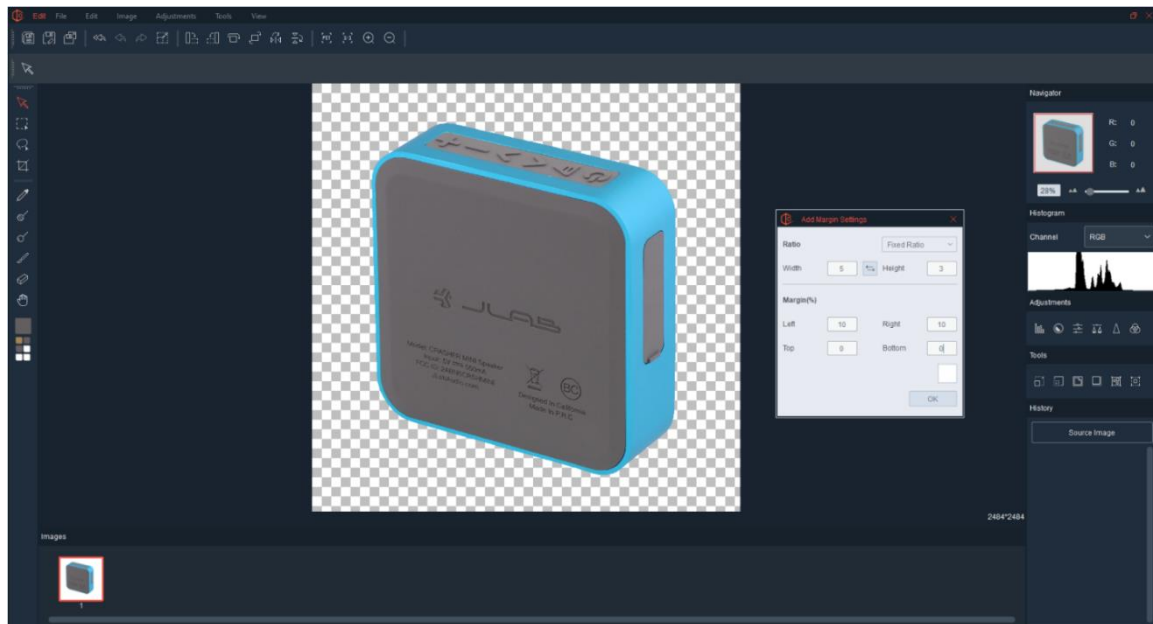
When complete, the image remains on the Edit screen where the user can Save or continue editing other parts of the image, if necessary.

The result:



Add Margin

After selecting a PNG file Editing, click the Add Margin tool to add the desired amount of margin to the image. To do so, use the screen that appears to select the image aspect ratio as well as the margin size (area of white or transparent space around the object).



For example, if the user wants the images to have a 1:1 (or square) aspect ratio, then change the Aspect Ratio to width = 1 and height = 1. Then, if the user wants to have equal amounts of margin on all four sides, they can set the percentage of each margin equally for the Left, Right, Top and Bottom.

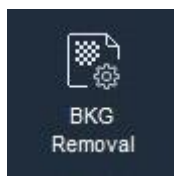
Pressing OK adds the margin. These results below were obtained from a 4:3 aspect ratio and a 10% margin.



To save the results, click the Save, Save All or Save As button at the top of the Edit screen.

History

This tool shows each of the editing actions performed on an image. Users can press 'Undo' on the top menu to go back a single step or simply select any previous step on the History list. For example, clicking Levels on the History list undo's the Brightness / Contrast changes that were made to the image. To show them again, simply press Brightness / Contrast.



Background Removal

Clicking this button takes the image into the PNG editing area where different editing tools can be used to further select and refine the isolation of the product from its background.



Removal Method - Global or Regional

Background Removal can be done Globally and Regionally meaning on the image as a whole or on specific sections. Different tools are available depending on the Removal Method selected.

Global Background Selection:

There are a few ways to isolate a background using Global selections. The main method is Tolerance Selection. Note: When selecting the Background Removal button, the software automatically determines and selects the dominant background color for removal. This automatically defines the Color Indicator and gives you a head start. In many cases this automatic selection will be good enough.

Tolerance Selection:

This portion of the interface, gives you the ability to select which color you would like to use as the tolerance basis as well as the ability to choose a different tolerance level using the slider. The slider works with the image color channels (red, green and blue) to isolate the product. Overall, the larger the tolerance the more pixels will be selected.

When Tolerance is increased, the entire background is selected.



You can increase tolerance a long way without an adverse effect, but at some point, the selection will start to eat into the object. If this happens, try selecting a specific color channel (red, green or blue). Choose a channel color that is not inside (or appears the least) in the object. This will make background selection easier.

Output Options:

Auto Trimming and Contiguous are covered in several locations of this document. Auto Trimming will automatically expand the selection by a set number of pixels. Contiguous will limit pixel selection to only the pixels touching the pixel selected. For example, if there is a hole in an object, with Contiguous turned off the pixels inside the hole will be selected. If Contiguous is on then the pixels inside the hole will not be selected because they are 'land locked' and not touching the pixels on the outside of the object.

Preset and User Defined Settings:

Presets and User Defined settings can speed up background selection and removal. Users can save the best Tolerance and Output Options to create each of the User Defined buttons. That way when a User Defined button is pressed, it simply applies saved settings.

Viewing Background:

The color used to highlight the background selection can be changed by pressing the color swatch at the bottom of the viewing window.



Regional Background Selection

When using regional background selection, the tools in the Tolerance Selection area are almost the same as Global Selection with one main difference – users get to choose the different parts on the images and set different tolerances for the different parts you choose. In the example below, the user clicked Add then clicked on a pixel inside the image. Upon clicking, a Region was created with region size being a factor of the tolerance used.

Regions with specific tolerances can be added until the desired background selection has been obtained.



PNG Recovery

Users can recover parts of a PNG image that were automatically selected and removed when shooting in AutoPNG or AutoBKG mode or doing Background Removal. In the next two images below, note that there are both mask remnants inside the product and areas in the mask that need to be cleaned up.



Using the PNG Recovery Tools users can select or erase certain parts of the image to make sure the mask and product are isolated. The tools are standard – Save, Pointer, Hand, Eraser +, Eraser Minus, Polygonal Lasso, Undo, Redo, Fit to Screen, 100% Zoom, Zoom In, Zoom Out.



On the next image, the Eraser tool is being used to erase the false mask areas inside the product.



Here is the final result, on the screen.



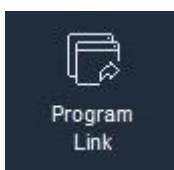
Here is the final PNG result.



AutoMask Recovery

This feature is used to change the opacity and transparency of images that were previously shot using the AutoMask feature. For example, if a product was shot using AutoMask and the images are still available in the workspace, then the user can use this feature to re-adjust the opacity and transparency of the images to generate an improved image.

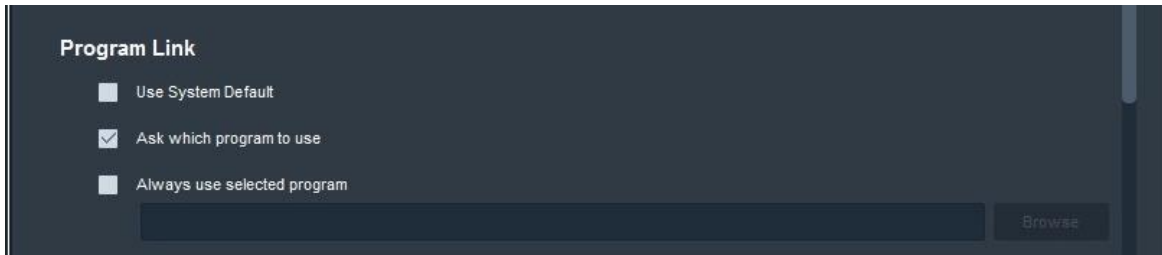
To learn more about adjusting opacity and transparency while working on images shot using the AutoMask feature, visit the AutoMask section of this user guide to see all the details.



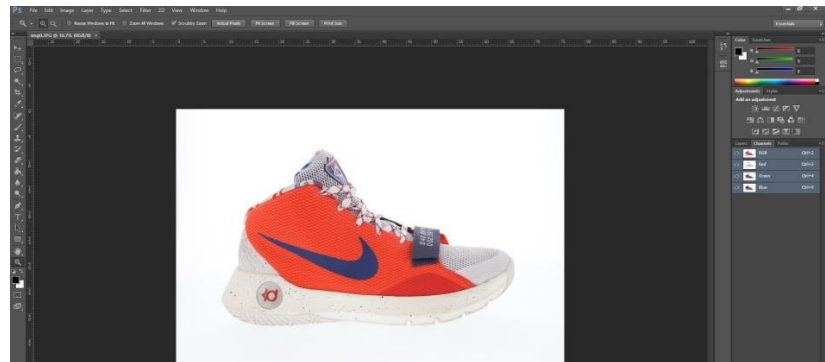
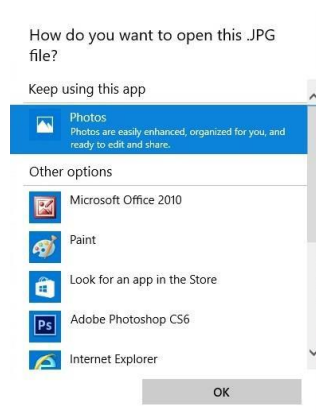
Program Link

Ortery software comes with most of the editing tools a user will need to prepare images for publication, however if Photoshop or some editing program is required, the Program Link feature can be used to directly send images to the program desired.

To use this feature, simply select an image(s) in the Thumbnail Window and click Program Link. Depending on the settings selected on the Options / General Tab the image one of three things may happen:



- The image may be automatically opened inside of the System Default program
- The operating system may ask the user which program to open the image inside of
- The image may automatically open inside the program of the user's choice



To increase speed, we recommend sending images directly to the program of the user's choice. To set it up, go to the Options / General Tab, choose the third option and search for the executable file of the desired program to link it to the Ortery program.

SAAS Photo:

SAAS Photo is an integrated cloud-based image hosting system. Ortery created SAAS Photo to make it easy for our customers to capture an image, video, 360 or 3D animation and immediately send their creations to the cloud for sharing.



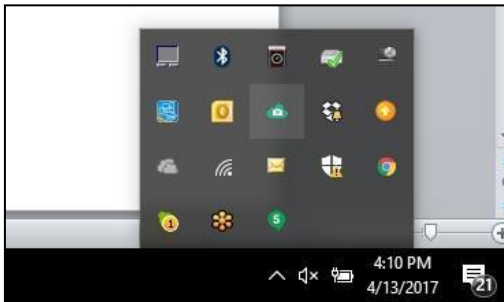
After creating an account, the assets created with this program can be automatically saved to SAAS Photo where they can be immediately used in websites, landing pages or shared with anyone by email.

Clicking the SAAS Photo icon in the upper right takes you to the login page inside the Options.

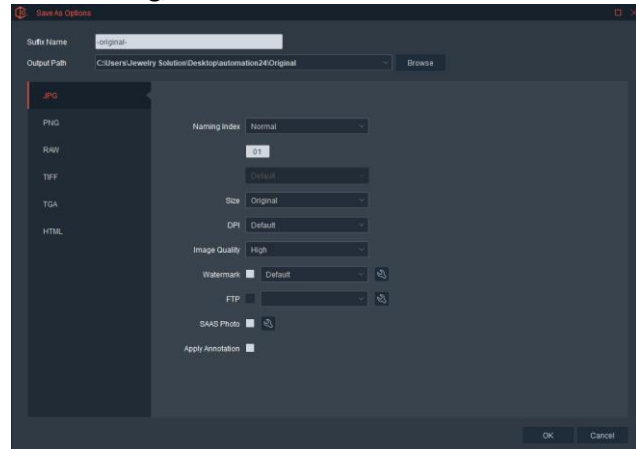
Once logged in, the SAAS Photo Uploader appears in the active programs area down by the clock.

Whenever an image is selected to be saved to SAAS Photo, the Uploader appears and shows the status of the upload. After the image is uploaded, the Uploader offers the ability to show or mail a link to the cloud-based assets.

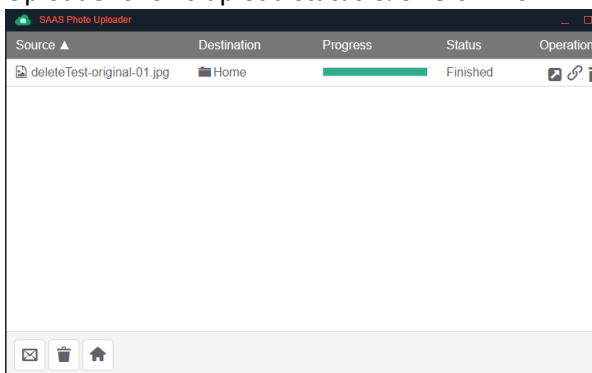
SAAS Photo Uploader Becomes Active



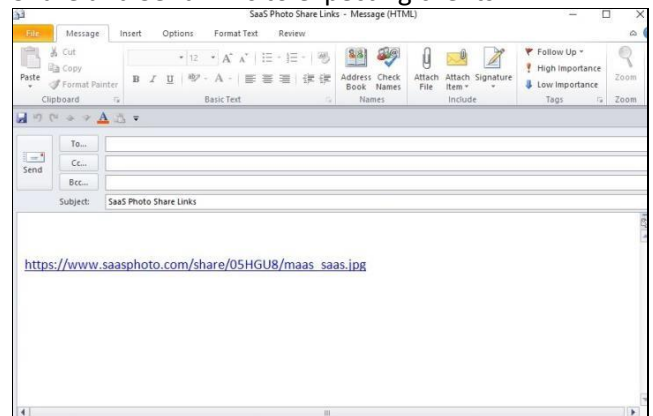
When saving, select SAAS Photo



Uploader shows upload status & offers links

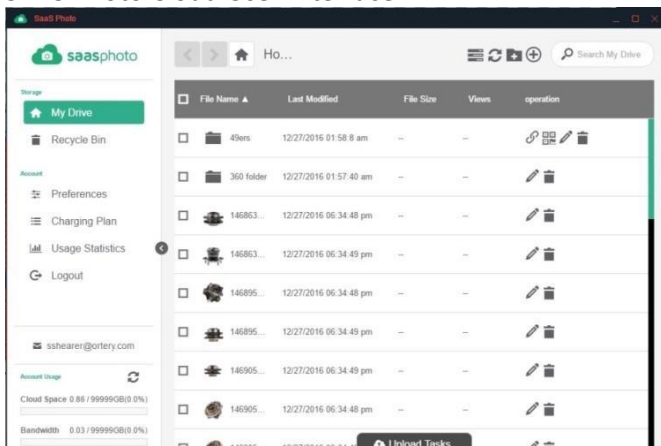


Share and Send links to expecting clients



Users can always visit SAAS Photo.com to see the entire contents of their SAAS Photo account.

SAAS Photo Cloud User Interface



SAAS Photo allows you to manage your assets online and makes it easy to deliver content quickly. It also provides detailed Usage Statistics.

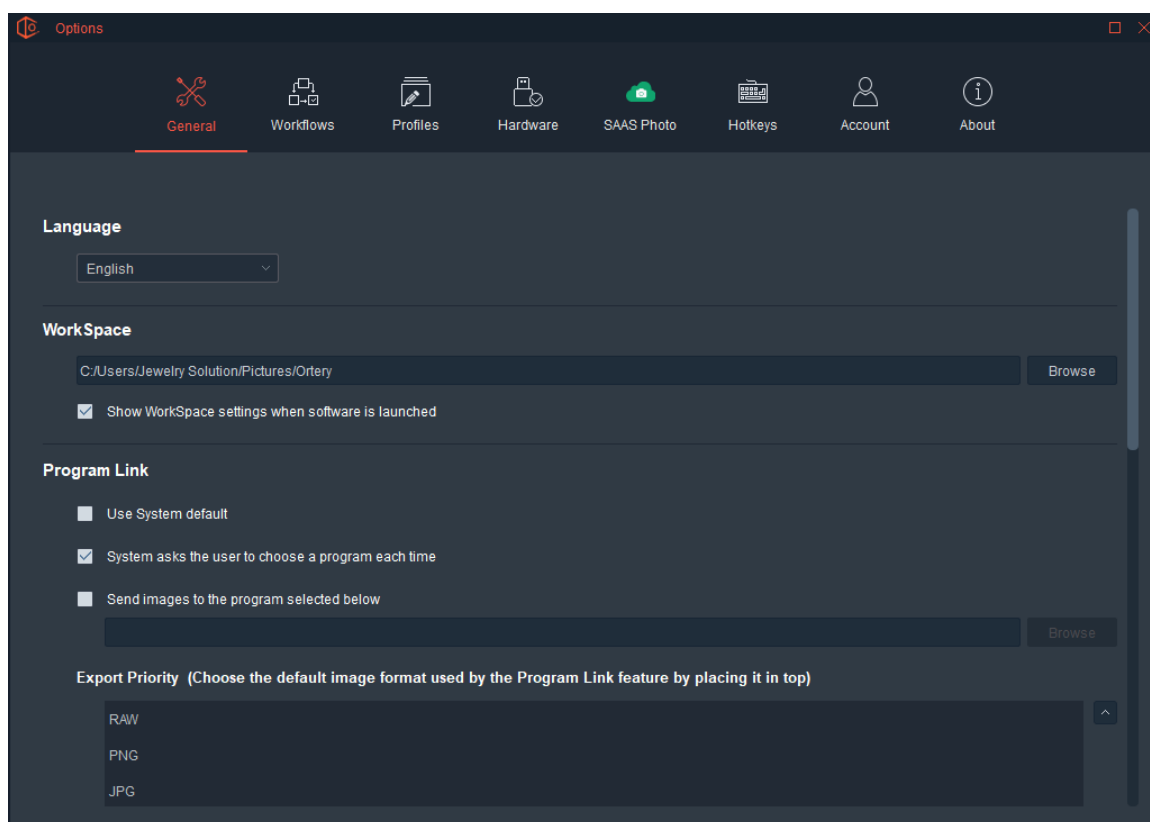
Visit www.saasphoto.com for more information.

Options:

Use this area to see system status and manage default software settings.

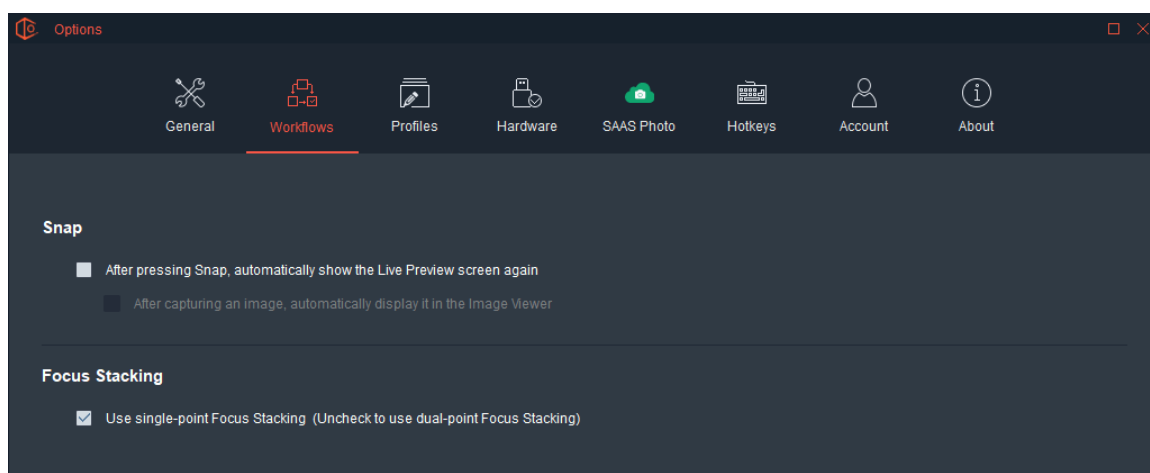
General

These Options are for managing overall software settings. Users can choose the language they want to use, set or change workspace location, manage the Program Link button options and more.



Workflows

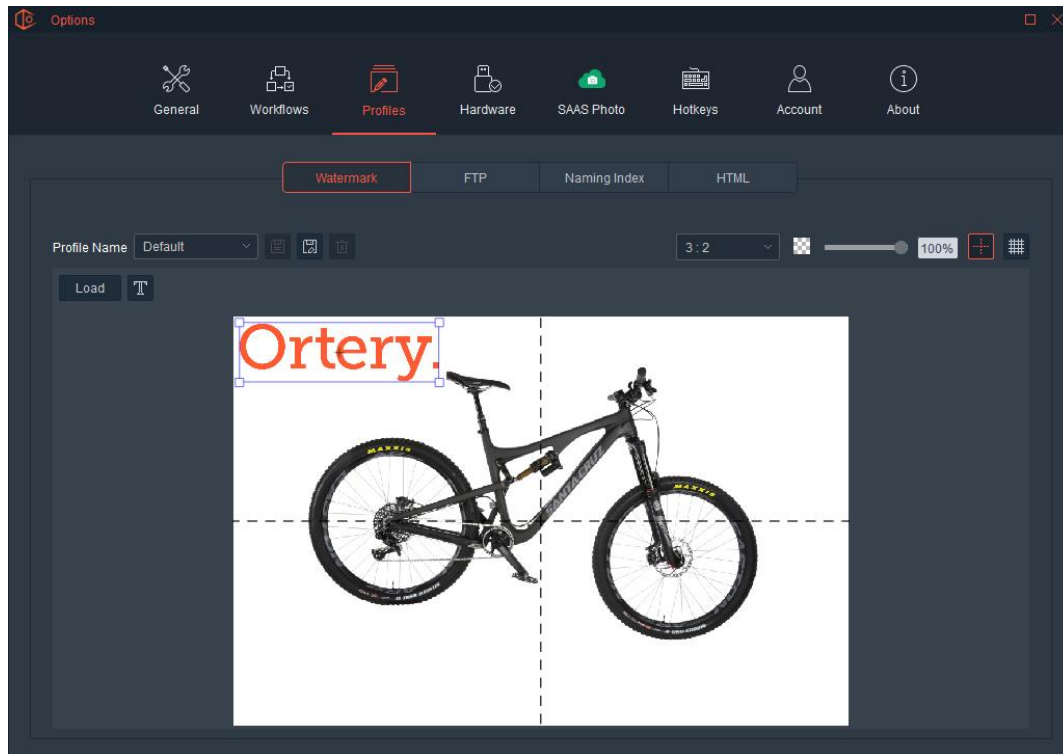
Allows you to change the software behavior after clicking the Snap button as well as change the Focus Stack mode. More workflow options will be added in the future.



Profiles

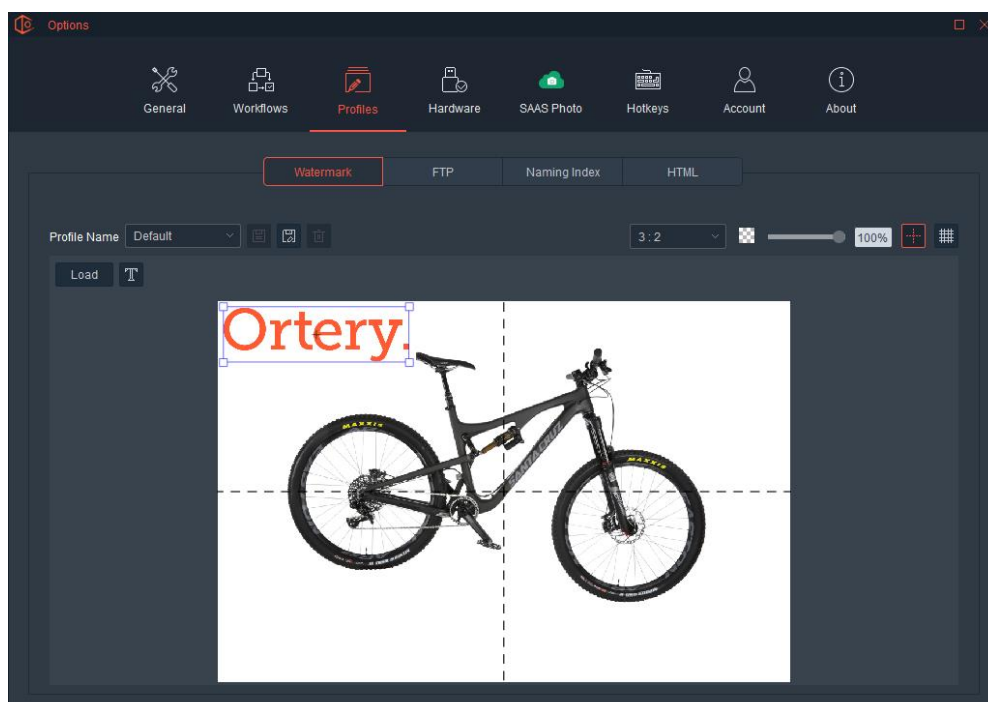
To increase efficiency, best or commonly used settings can be saved and managed as Profiles in the program. Here, users have direct access to the content of three profile types – Watermark Profiles, Naming Index Profiles and HTML Profiles.

From here, Profiles are created, edited or deleted, but the actual use of the Profile is determined inside the individual workflows.



Watermark Profiles

Watermarks turn an image into a statement. A watermark offers an opportunity to market your company or brand. It also protects your images from being copied or stolen. It works by digitally superimposing one image over another. Most watermarks are either a company logo or an image containing text such as a company website, “Inspected by” or “Appraised by”, so when an image is printed, extra info can be added.



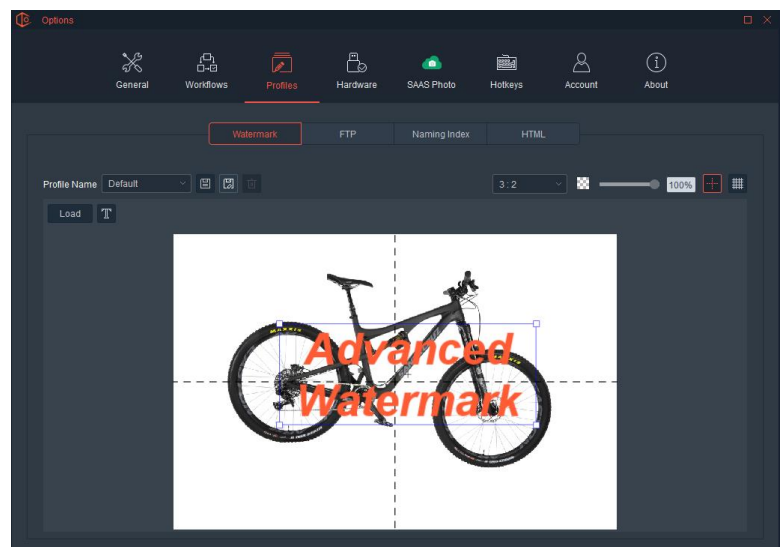
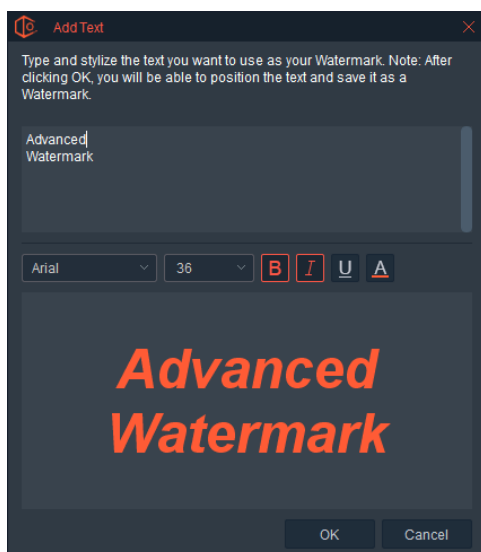
In this area, users can create, save and delete the watermarks they apply to the images they save.

The program comes with one Default watermark (Ortery) and two pre-set options (Confidential and Proof-Proof).

Choose how a watermark will appear on the default image by clicking and dragging it to the location and size desired. Note: Grid tools, aspect ratios and image rotate options are available to help with watermark alignment and consistency.

Users can also adjust the opacity of the watermark using the percentage slider. There are two ways to create a new watermark:

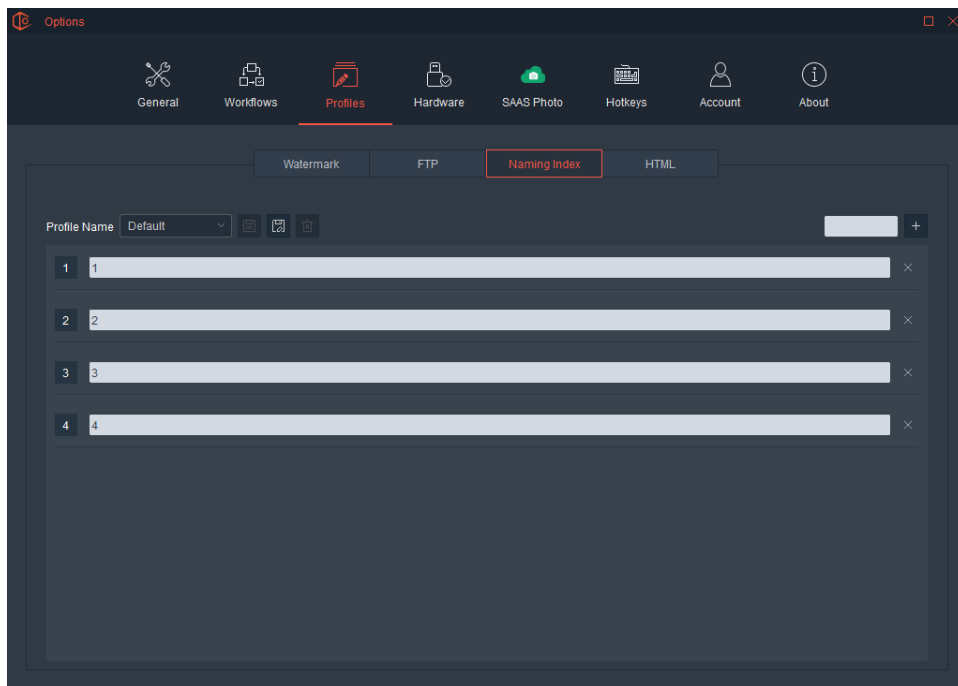
- Press Load and browse for the image to be used as the watermark. Note: watermark images must be in PNG file format.
- Press the “T” button then use the screen provided to write the text you want to appear as the watermark. Note: Users can adjust all aspects of the font. Pressing OK displays the text as the watermark. Adjust the size and move the text to the location it should appear. Click Save As to save it as a watermark that can be re-loaded from the Watermark Profile section.



Users can create, save and load as many Watermark Profiles as needed.

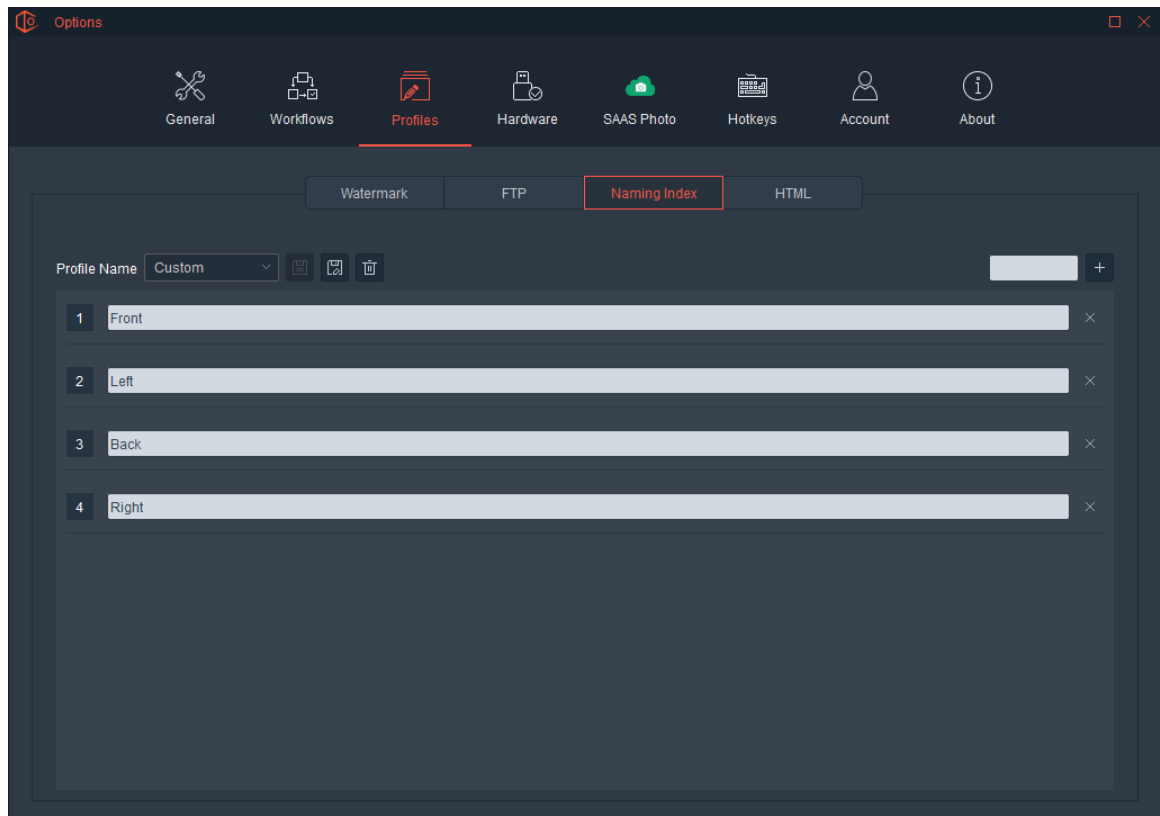
Naming Index Profiles

When users simultaneously save more than one image, a naming index is automatically applied and numbers are added to the end of the file name. For example, SKU12345_500w_0.jpg would be the result of saving an image if the naming index screen was used below.



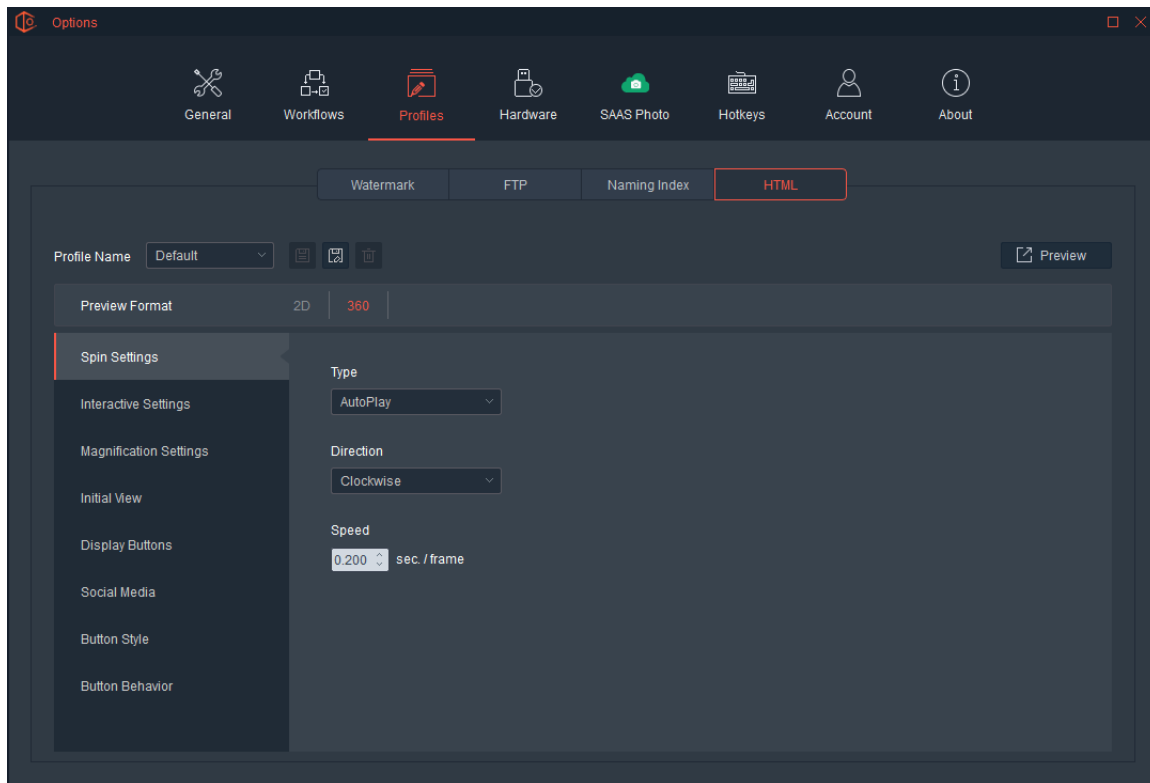
Users can also create custom Naming Indexes to meet their specific file naming needs. For example, if a 4-shot sequence of a shoe was taken and the Naming Index below was used, each image file would be named as follows:

SKU12345_500w_**Front**.jpg
 SKU12345_500w_**Left**.jpg
 SKU12345_500w_**Back**.jpg
 SKU12345_500w_**Right**.jpg



HTML Profiles

The majority of features inside the HTML Profiles are used for 360 and 3D animations and those will be covered in the 360 section, however there are also some Measurement components (ClothingPad and ClothingPad Mini studios only) that are covered in the 2D section above.

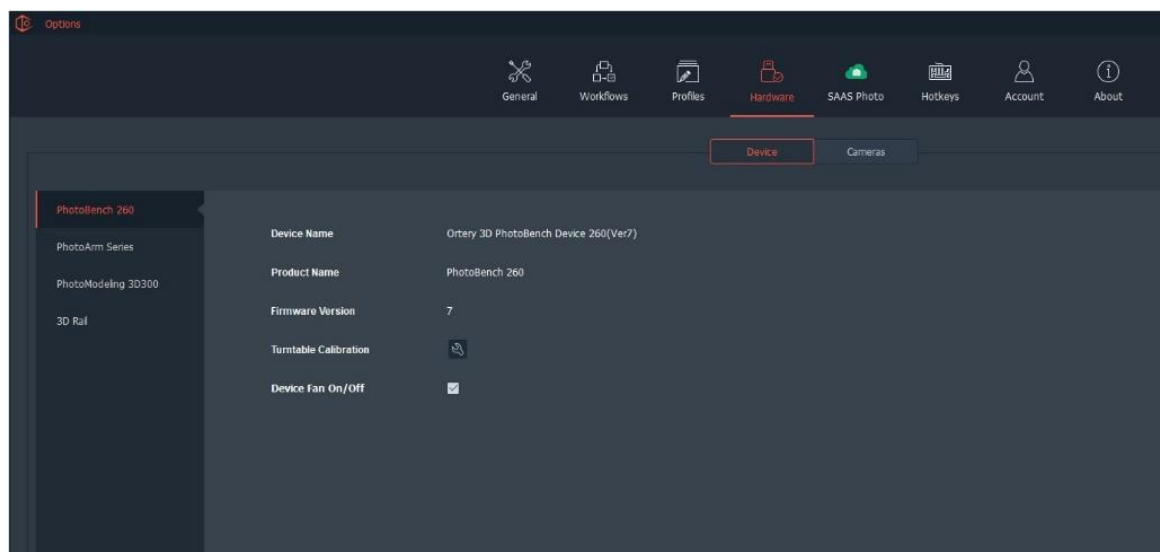


Hardware

This Option gives the user information about the hardware connected to the software. Hardware Options are divided into two tabs: Devices and Cameras.

The Device Tab

This tab provides information about the devices attached to the software, including: Device Name, Product Name, Firmware Version and more. Depending on which device is attached, the contents of this screen can change. In certain cases, more than one piece of hardware (photography studio, 360 turntable or camera) can be attached to the software at the same time.



In addition to providing information, the Hardware Options Tab also allows users to manage certain aspects of the hardware such as Turntable Calibration, Device Fan and LiveStudio Lighting Setups.

Turntable Calibration:

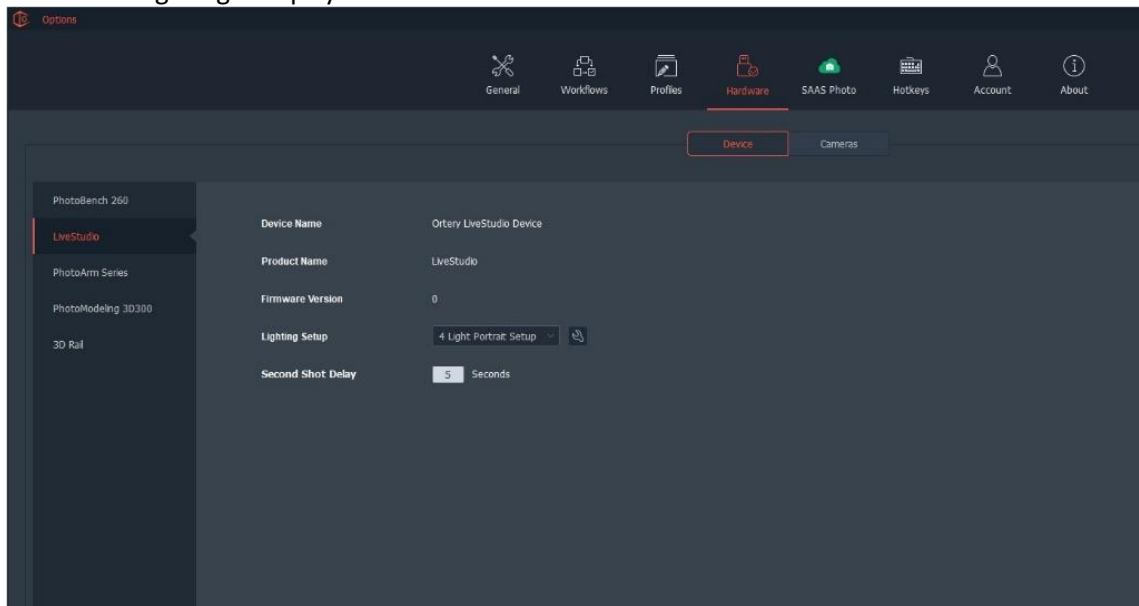
When a PhotoBench Series product is attached to the software, before the built-in 360 turntable is run for the first time and periodically thereafter, the turntable will need to be calibrated for spin accuracy. Click the 'Settings' button to access the turntable calibration feature. The turntable calibration process is documented well inside the software. Simply follow the step by step instructions as they appear on the screen.

Device Fan On/Off

We don't really recommend it, but there are situations when it can come in handy to turn the device fan off. This button allows you to do so.

LiveStudio Lighting Setup

Also covered in the LiveStudio section, this is where you can select preset and the different LiveStudio Lighting Setups you've created and saved.

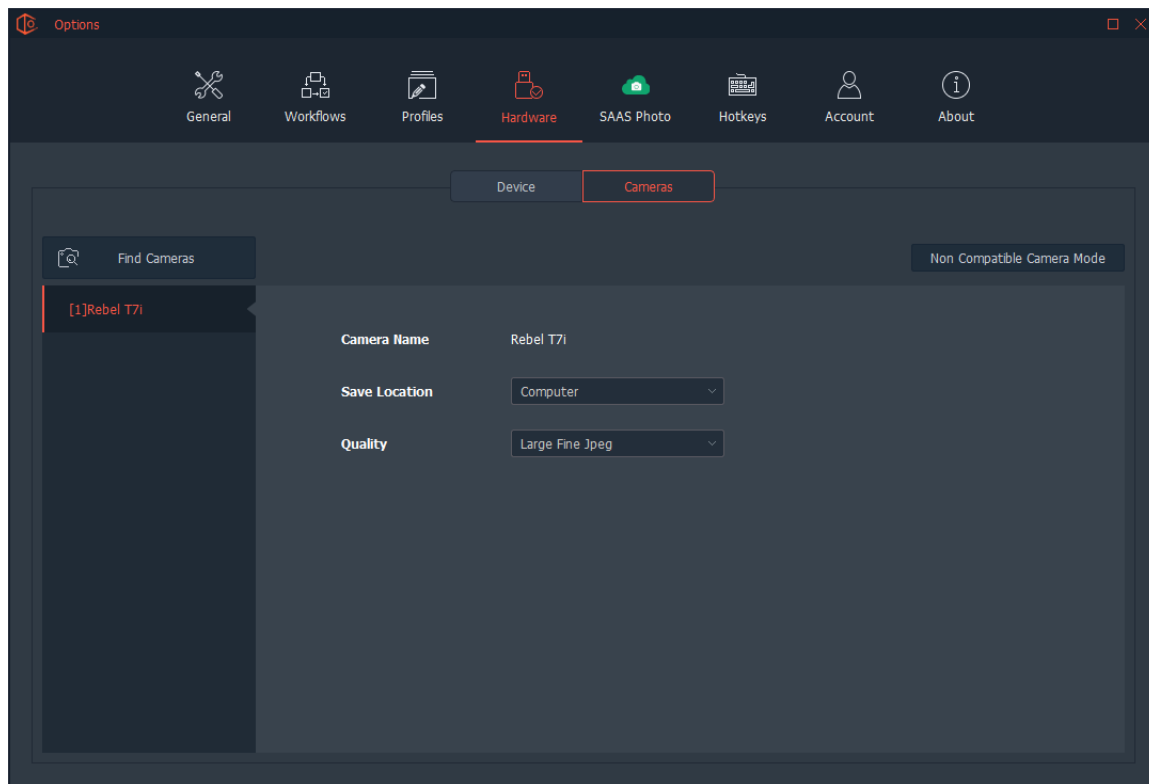


Second Shot Delay

If you own a ClothingPad or ClothingPad Mini with Fluorescent lights you can use this feature to add a delay between the first and second shots when in AutoPNG mode.

The Cameras Tab

On this screen users can see which cameras are attached to the system, search for new cameras being attached and manage specific camera features.



Find Cameras

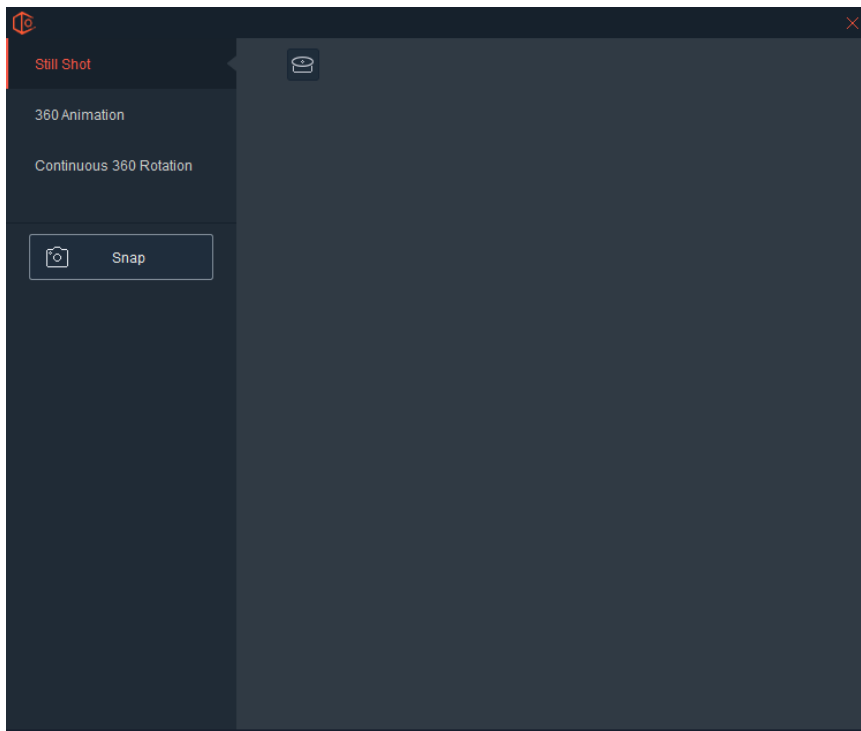
This feature searches the computer for compatible cameras that can be used with the Ortery software. It is also used to re-find a camera after it has been disconnected.

Save Location

Images captured using the system are automatically saved to the computer (by Default) but can also be saved to a memory card or to both the computer and memory card at the same time.

Non-Compatible Camera Mode

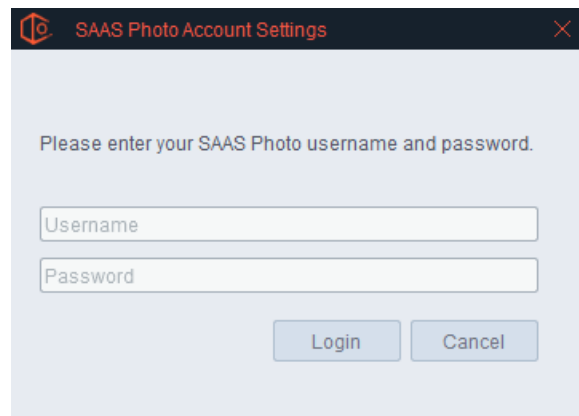
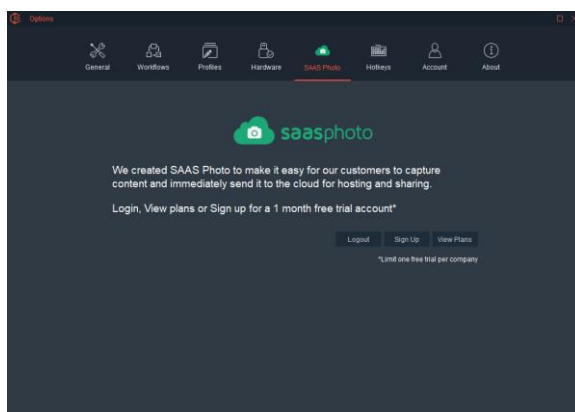
This allows you to use a non-compatible camera with our software. This mode will provide limited functionality as we cannot control the camera and we do not recommend using this mode. This mode requires that you connect a shutter release cable from our hardware to your camera. Images captured in this mode will be saved on the camera locally to an SD card.



Single Shot, 360 Animations and Continuous 360 Rotation will be the options available if you have a turntable or a studio with a turntable device. If no turntable is available, Single Shot will be the only capture option.

SAAS Photo

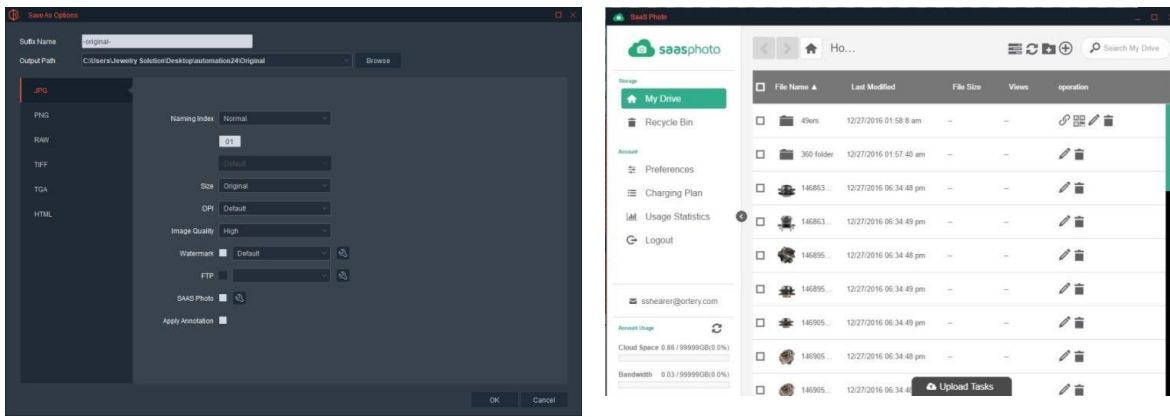
SAAS Photo is an integrated cloud-based image hosting system. Ortery created SAAS Photo to make it easy for our customers to capture an image, video, 360 or 3D animation and immediately send their creations to the cloud for sharing.



After creating an account, the assets created with this program can be automatically saved to SAAS Photo where they can be immediately used in websites, landing pages or shared with anyone by email.

When saving, select SAAS Photo

SAAS Photo Cloud User Interface

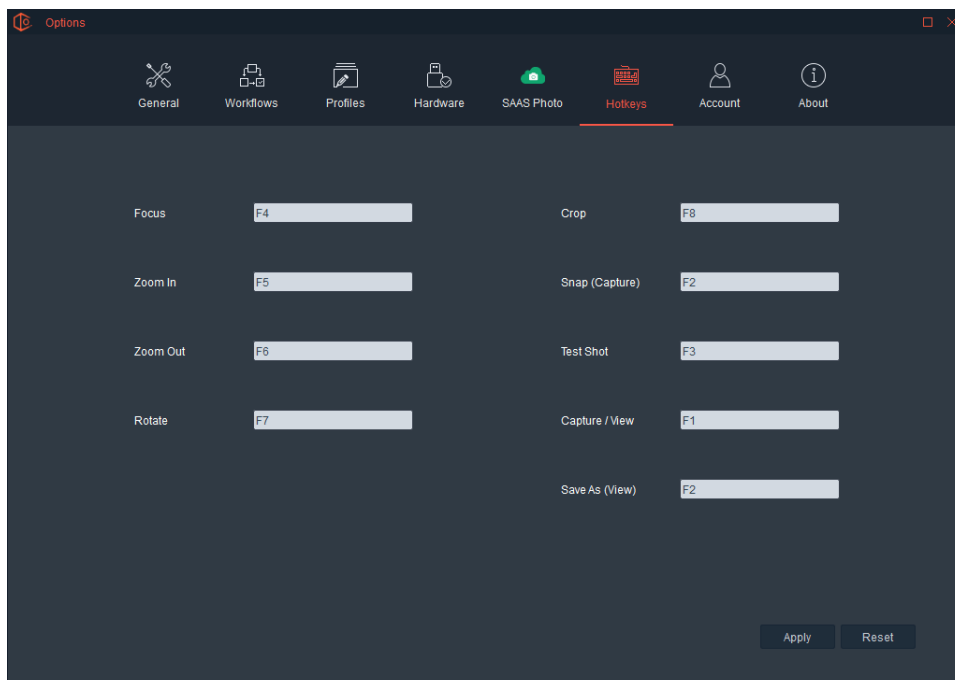


When saving an image, video or animation simply click the save to SAAS Photo option. SAAS Photo allows you to manage your assets online and makes it easy to deliver content quickly. It also provides detailed Usage Statistics.

Easily create and send links to interested customers or iframe links to the website team. Visit www.saasphoto.com for more information.

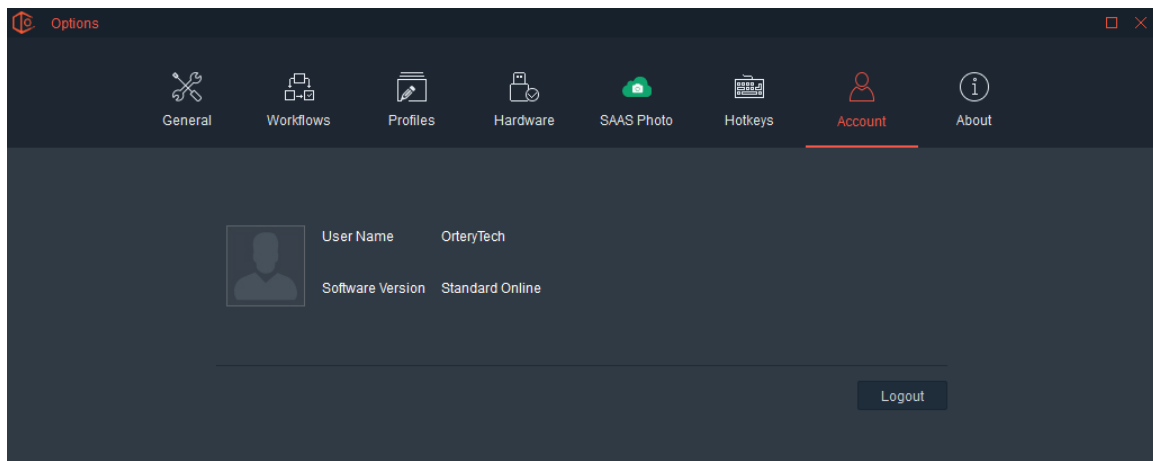
Hotkeys

To make photography more efficient, the Ortery software allows users to define their own Hotkeys. The actions are listed on the left. To change the Hotkey that initiates the action, simply select that cell and hold down the key or keys you want to use. They will automatically appear. Click Apply to finalize the change.



Account

This displays your user account information and tells you the type of software license you own.



About

This tab gives the user information about the software Copyright.



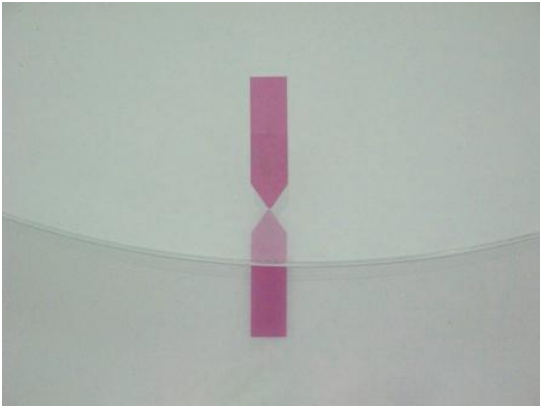
360 Capture Mode

When using Ortery hardware that has a built-in turntable or an Ortery turntable is attached, selecting 360 as the Capture Mode allows you to capture and create 360 product animations, 360 videos and Custom Defined image sequences that utilize the turntable to capture images at specific angles.

Turntable Calibration

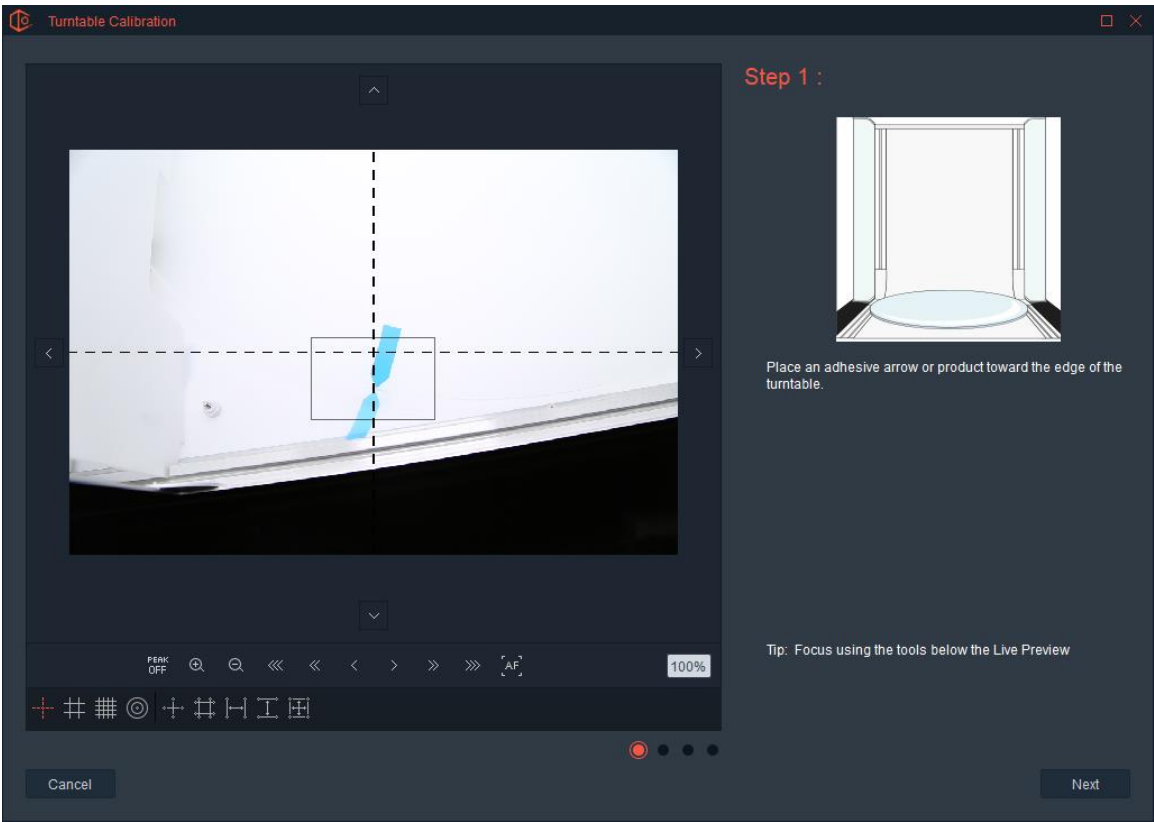
Not all Ortery turntables need to be calibrated, only the glass / transparent turntables need it. Before these built-in 360 turntables are run for the first time and periodically thereafter, the turntable will need to be calibrated for spin accuracy. The first time, the Turntable Calibration wizard will automatically appear. Afterwards click the 'Options' button then select "Hardware" to access the Turntable calibration feature.


The turntable calibration process is documented well inside the software. Simply follow the step by step instructions as they appear on the screen.

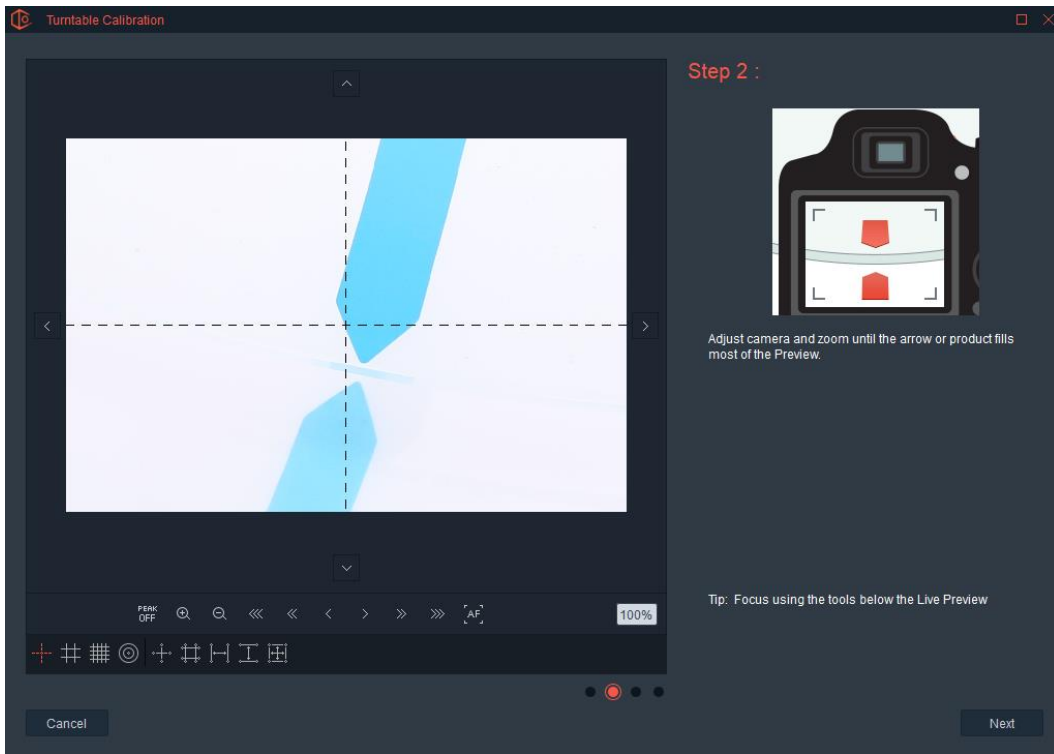


In the first step, use the self-adhesive arrows included in the package to create a starting point. Place one arrow on the transparent turntable platform. Place the other below it. Make sure the arrows point toward each other as pictured above.

In Step 2 point the camera at the arrows.

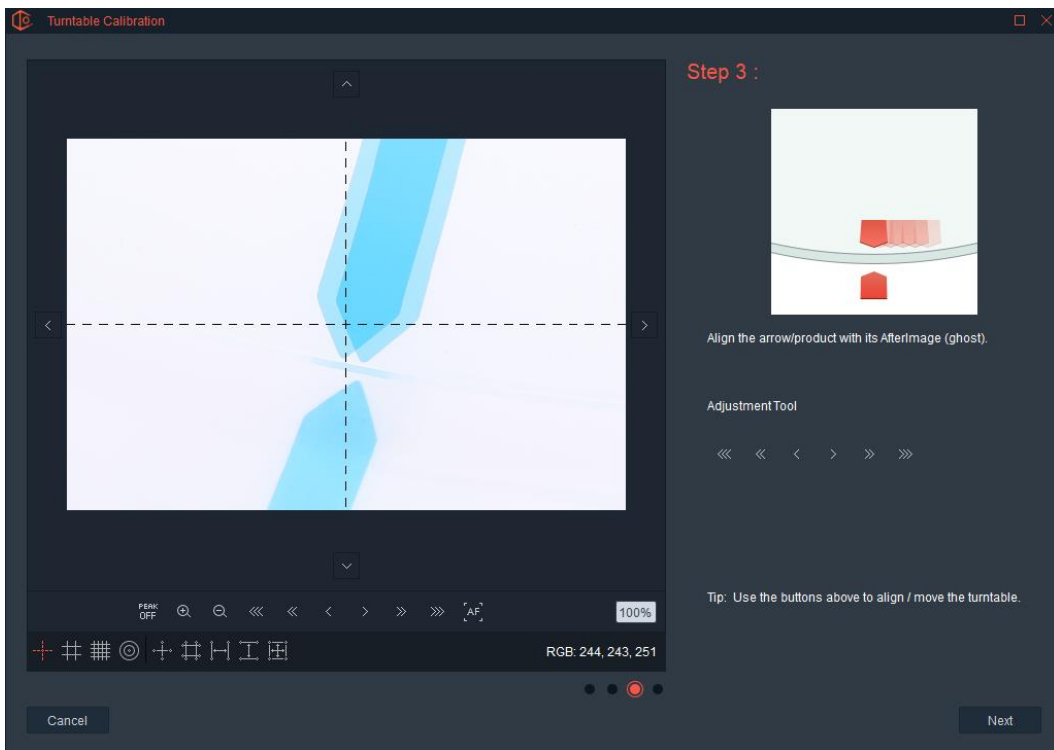


We recommend using the zoom window for increased level of accuracy. Place the black rectangle in the live preview over the arrows and click the  icon to zoom 10X.

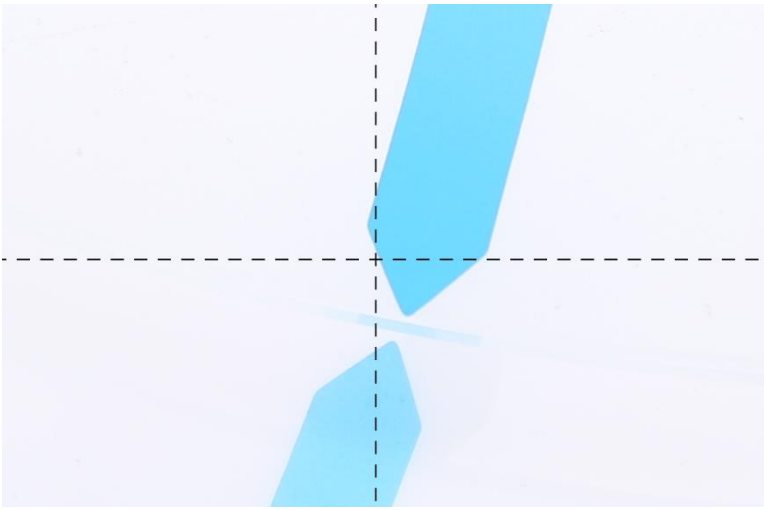


Click Next. The turntable will rotate just shy of 360 degrees.

Step 3 Use the turntable controls (Adjustment Tools) to align the actual with its AfterImage.



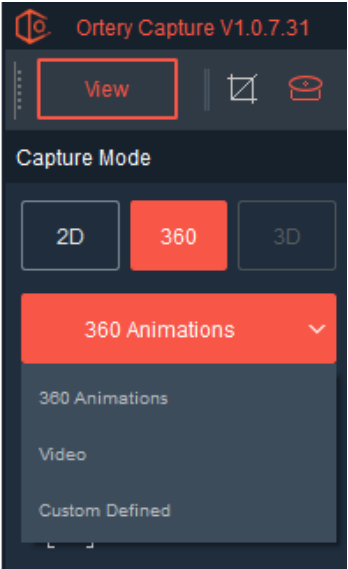
Once aligned, click Next again.



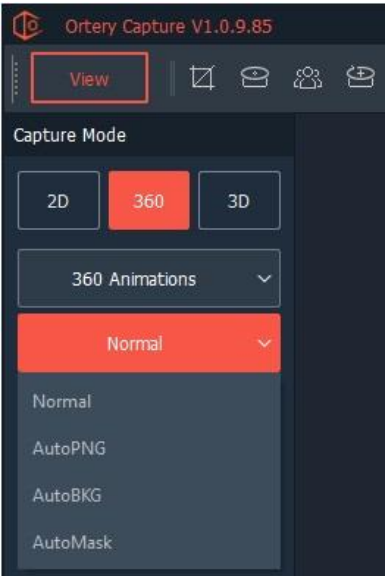
The turntable should return to the exact same position. If it does, click “Next” and calibration is complete. If it does not, then calibrate again.

360 Capture Modes and Styles

360 Capture Types

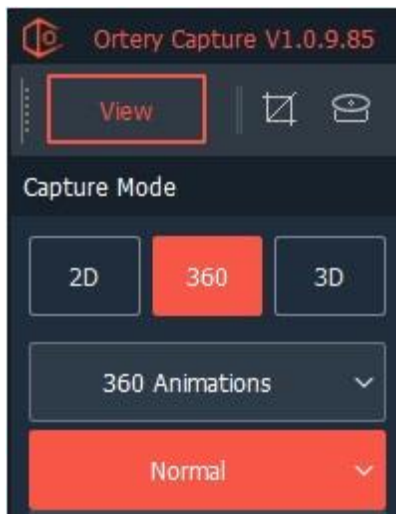


360 Capture Styles

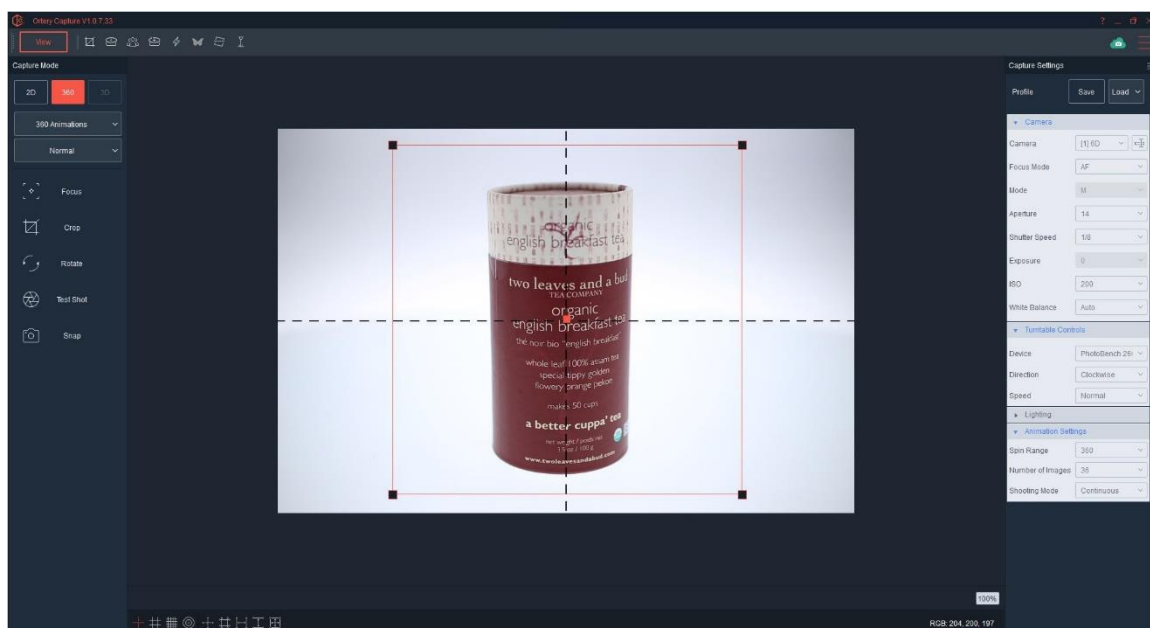


360 – 360 Animations – Normal

The default selection will be 360 Animations. This will allow you to create interactive 360 animations in GIF or HTML5 format. 360 Animations are created from a sequence of still images captured at different degrees as the turntable rotates, then the images are stitched together to simulate movement.



By selecting 360 as the capture mode and 360 Animations as the capture types, Turntable and Animation Settings will appear in the Capture Settings on the right-hand side of the user interface.



Place the product on the turntable. Compose the image using the Camera Settings and Live Preview. Note: The Camera, Lighting, Live Preview and Image Capture features were covered in the 2D sections of this document.

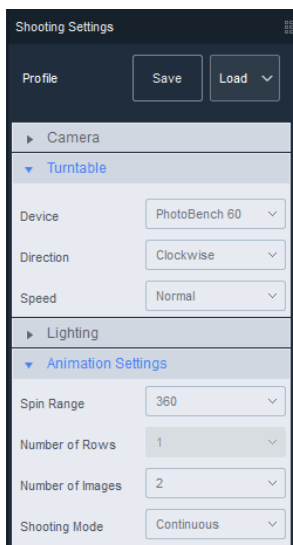
Remember, to increase efficiency and ease of use, all Capture Settings, whether for still shot, 360 or 3D can be saved, loaded and re-used as a Profile.

Turntable Settings

Device – This pulldown shows the device or devices connected to the software. If more than one device is connected the user can switch between the connected hardware using this dropdown. For example, if an extra turntable is connected and used for hanging products, both turntables would appear in the pulldown.

Direction – This indicates the direction the turntable will spin. Clockwise is the default. Counterclockwise is the option.

Speed – Default turntable speed is normal. Users can also select high and low. High will allow for faster capture speeds and the low speed is ideal for products that do not rest well on their own.



Animation Settings

Spin Range – The default is 360. Users also have the option to create 180, 120, 90, 60 and 45-degree animations.

Number of Rows – When creating 360 animations, this will always only be 1 row, so this option is not shown. In 3D Capture Mode, users can choose to capture images from multiple rows.

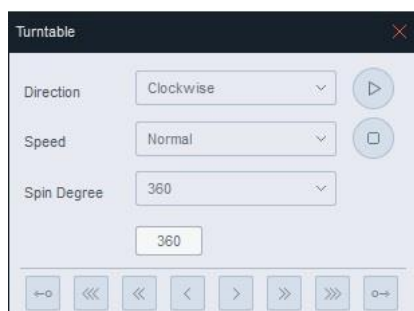
Number of Images – Users can do as few as 2 or as many as 720 images for a 360 capture. More images will make the animation smoother, but will increase the file size.

Shooting Mode – Shoot products in a Continuous, Time Lapse or Manual manner. Continuous shooting produces the fastest capture results and is recommended. Time Lapse can be selected if your product is unstable and needs time to settle after moving or if flash strobes need more time to rejuvenate. Use Manual if the product needs to be staged between shots.

Turntable Tools



Use the Live Preview and the Turntable Tool to rotate the product 360 degrees.



While the product spins, watch and if needed make adjustments. Make sure it is centered and not wobbling around the center. Use Guides to assist in placing objects in the center.

Set the Crop Markers so that during the spin the product never leaves the crop area.

Once centered, use the Nudge tools to slightly move the turntable until the product is in the right starting position.

Product Centering

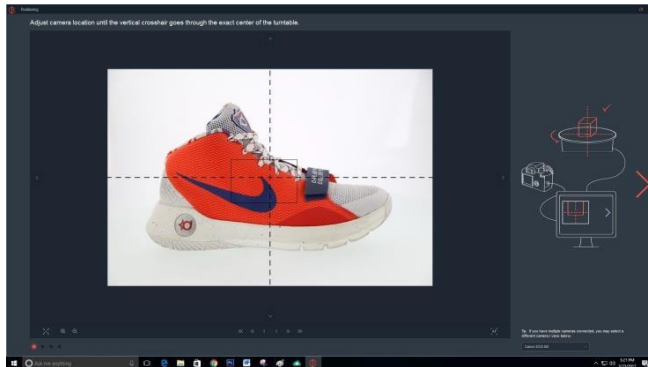
To create an attractive 360 product view, the product must be placed in the center of the turntable. Over time you will get good at placing objects in the center. Ortery offers several software and hardware features,

such as the Centering Laser and Positioning feature, to help place products in the center of the turntable. Both will be covered below.

Position Tool



The Position tool offers a clever series of steps that can help the user center an object on a turntable. After clicking the button on screen directions will walk you through the process.



Position Centering System

3D PhotoBench 160, 260 and 260T products come with the option to purchase and install a laser alignment tool to make it easier to place products in the center. A crosshair of light is projected from the top of the unit to designate center.



The icon to turn on/off the optional Position Centering System can be found in the top quick bar with this icon

3D PhotoBench 260 with Laser Centering System

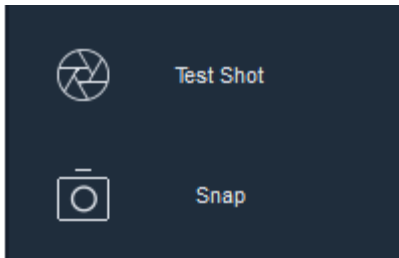


Laser Marks Denote Center



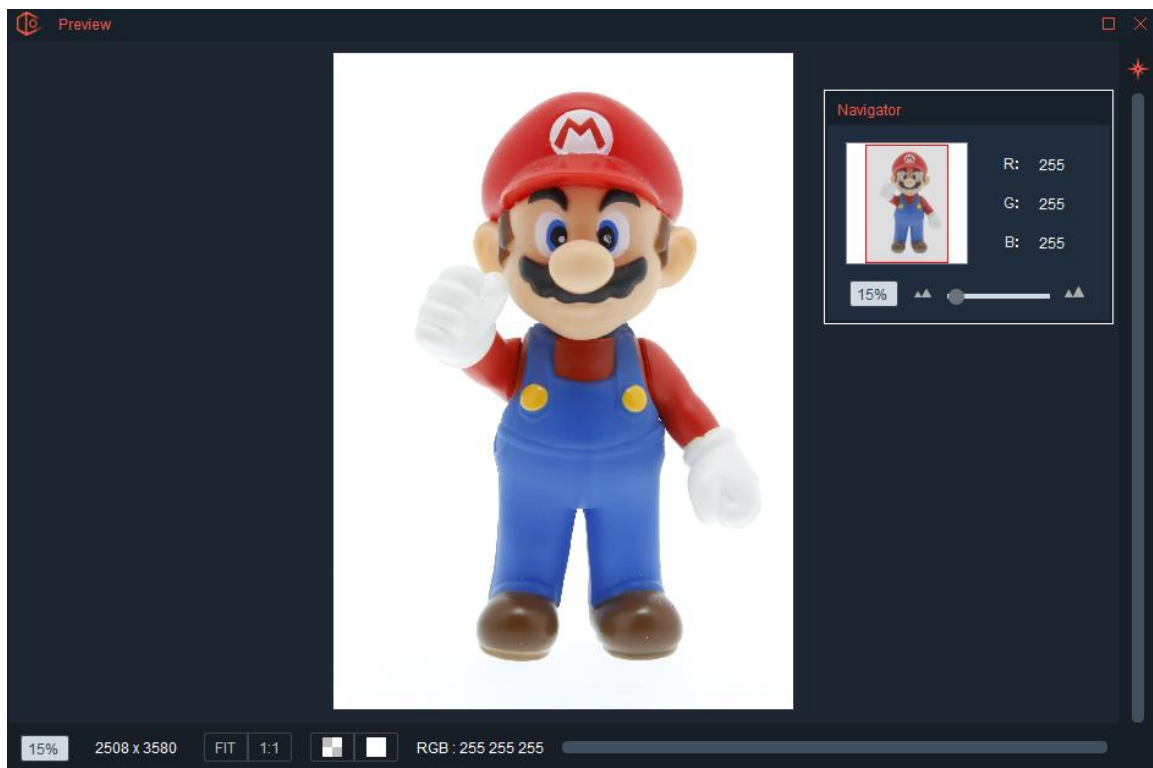
Test Shot

In 360 mode, users have the option of doing a 'Test Shot'. Taking a Test Shot will snap one image allowing you to see the results prior to committing to the 360 capture. The screen below will appear and allow users to use the Navigator to preview RGB values in the image.



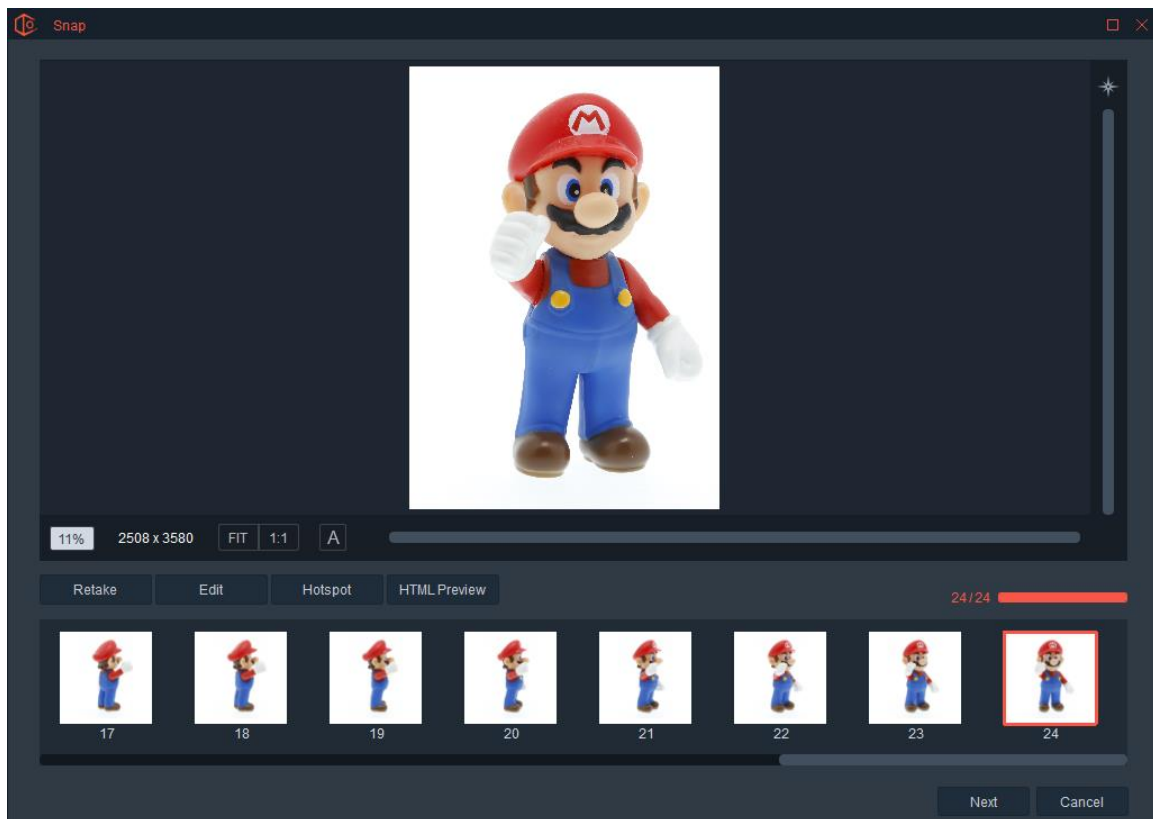
When finished reviewing the image, click the X in the top right-hand corner to return to the previous screen.

To start the animation capture process click Snap button.



Clicking Snap starts the 360 image capture process. If in Continuous or Time Lapse Mode, image capture and turntable movement are synchronized to automate 360 image capture.

After a 360 capture is complete the screen will look like the screen below.



Users can select the images and review them prior to saving the results.

Retake

If an image needs to be taken again, select the image and press the 'Retake' button found on the lower left-hand side of the screen. This will rotate the turntable back to that position and recapture the image.

Edit

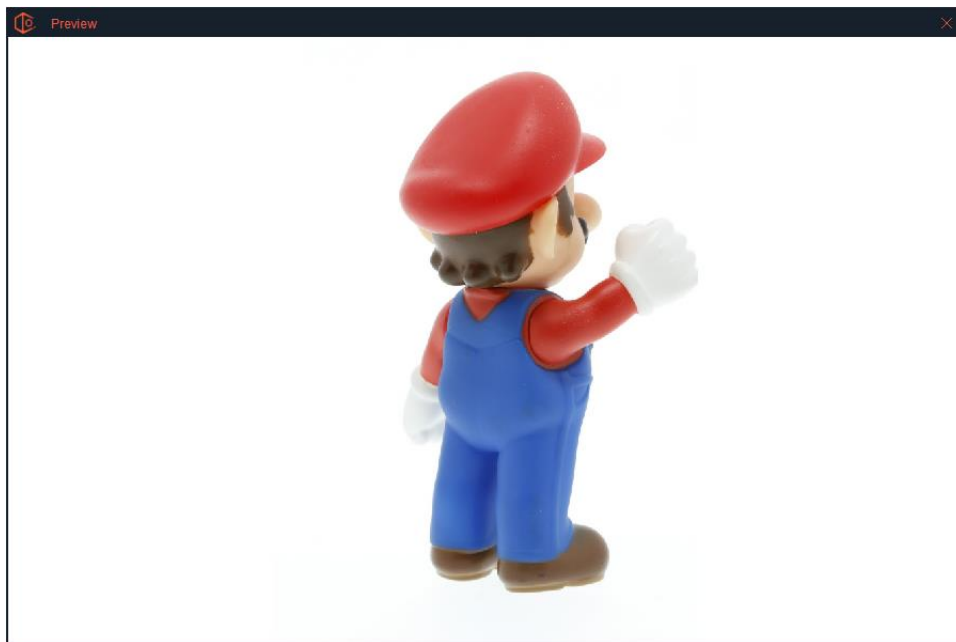
Clicking the Edit button moves the entire sequence of images into the Edit Screen where users can edit images individually or in a batch. When creating 360 animations, its best to edit all images consistently to avoid the situation where one images is different than the rest in the rotation. For 360 Animations, the Levels Tool works well to get each picture on pure white and adjust the color so that the image looks the best it can be. Each feature on the Editing Screen is covered in the Edit Screen section of this document. We recommend watching videos on YouTube to learn more about Levels adjustments.

Add Hotspots

This will be covered in the following section.

HTML Preview

This will quickly allow you to view a basic 360 animation of the images captured. It allows you to Preview your animation before committing to editing/saving. You can click and drag this animation to interact with it but it will not have all the final features. It's essentially a quick preview.



When ready, continue to the Saving portion of the process by pressing the Next button.

Creating Hotspots and Thumbnails

Essentially there are three types of Hotspots or ways you can add extra communication capabilities to your 360 animations.

- Hotspots
- Thumbnails
- Animations

Hotspots can be added to a 360 animation while the animation is being created. Pressing the “Add HotSpots” button on the image below opens the Hotspot Editing portion of the software.



The HotSpot Creator Screen

This is where the user can create the different types of hotspots.



The creation of each Hotspot type will be covered below.

Creating Hotspots

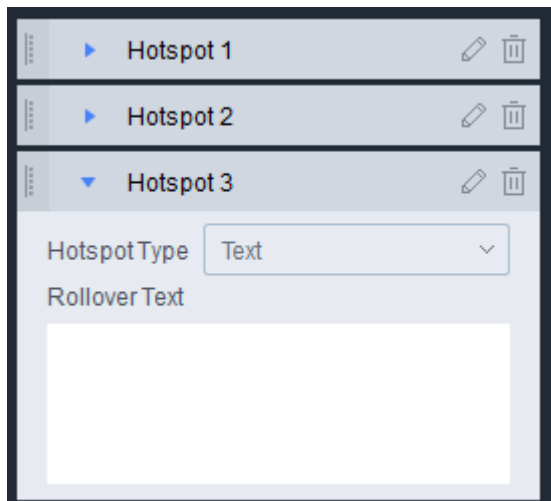
A hotspot is a spot that travels with the object as it spins. Text is shown when the user mouse hovers over the hotspot, and if clicked it can either open a web page or show an animation. For example, the door on the dryer below could open and close.



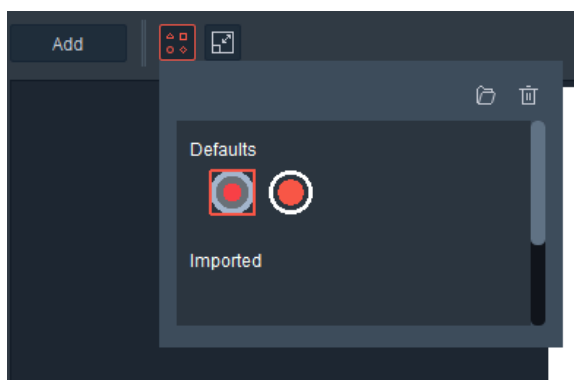
After selecting Add Hotspots, Select Add in the top left.



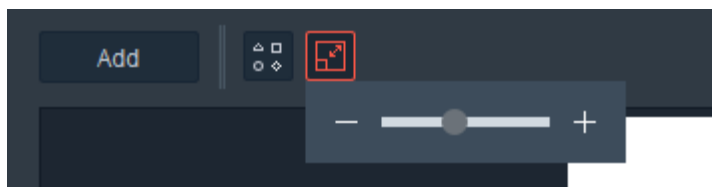
Select the frame in the bottom left corner in which you would like the first hotspot to appear. Each box represents a frame in the sequence.



Important Note: More than one hotspot can be created per animation. Clicking the Add Hotspot button will add another hotspot as a tab. Simply click the tab to go between open hotspots for editing.



This is the default hotspot icon. It represents the hotspot. Click on it to choose from other available hotspot icons in the software or to import new hotspot icons in SVG format.



Use this slider to increase or decrease the size of the hotspot icon.



Once your hotspot is set on one image, it can be easily added to other frames in the sequence. To do so, select the hotspot, Right Click (hold) and drag your image left or right until reaching the frame you want to stop on. Once you land on the ending frame, move your hotspot to the desired location. Note, several boxes are now highlighted in the bottom left.

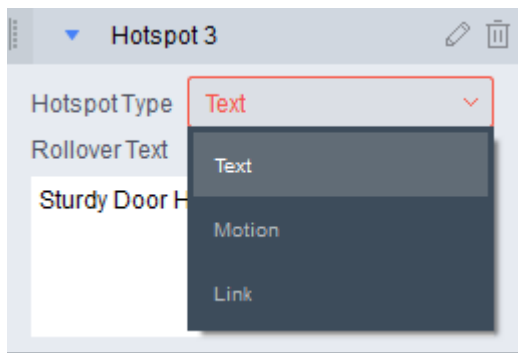


This indicates that the software took its best guess to automatically place the hotspot icon on the frames selected. Confirm and edit the hotspot icon location on each frame by selecting each frame and moving the hotspot manually.

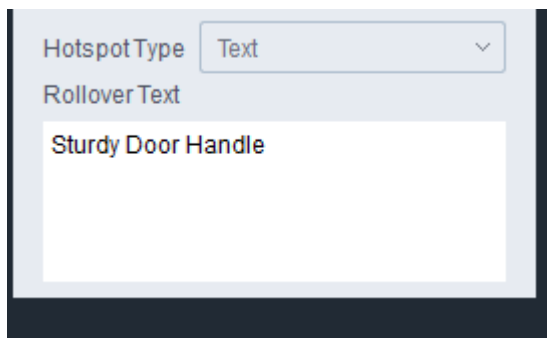


When adjustments are made on a frame, the box will be filled in.

Create Hotspot with Rollover Text



Select Hotspot Type to Text



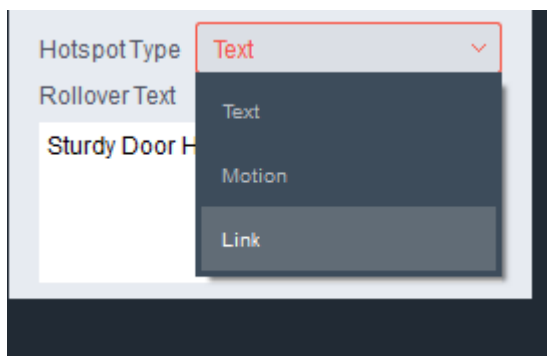
Fill in the Roll over Text to display text on the highlighted hotspot.



Example of the Rollover Text

Create a Hotspot that Links to a Web Page

To create a hotspot that links to an external website page, go to Hotspot Action, pull down the menu and select Link.



Fill in the Link and the Rollover Text information then choose whether the web page will Display in the same window or be opened in a new window.

Hotspot Type: Link

Link: www.ortery.com

Rollover Text: Sturdy Door Handle

Create a Hotspot that Opens / Plays Another Motion

Sometimes it makes sense to display a Motion when the hotspot is clicked. To do so, choose 'Motion' from the Hotspot Type pull down.

Hotspot Type: Link (dropdown menu open showing Text, Motion, Link)

Link: www.ortery.com

Rollover Text: Sturdy Door Handle

Hotspot Type: Motion

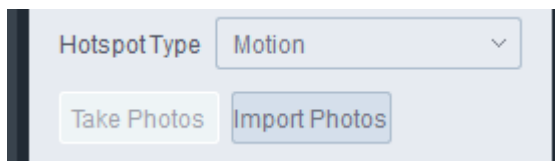
Take Photos: [button] Import Photos: [button]

Stop Motion and 360 / 3D animations can be added to a Hotspot. Either click Take Photos to capture the images you want to use, or click Import Photos to use existing images.

Rollover Text: Sturdy Door Handle

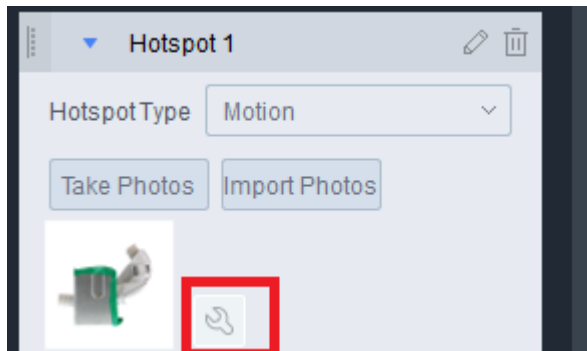
Fill in the Rollover Text, to display text when the icon is hovered over. To add a motion, you can either select 'Take Photos', or 'Import Photos'.

Create Motion from 'Taking Photos'

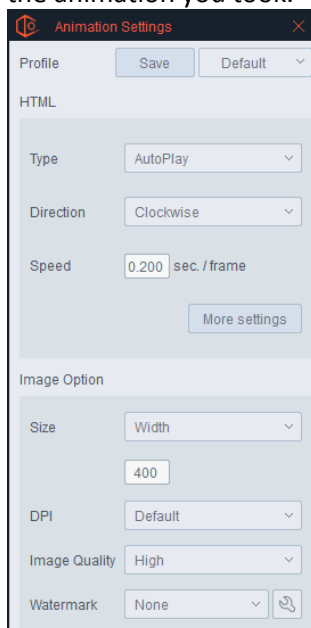


Click the 'Take Photos' button in the upper left.

You will now Create your Animation / stop motion using still images. For further instructions on creating an animation, see 360 Capture Mode. When the animation is complete, return to the Hotspots by hitting Finish in the bottom right of your screen.



To Change your settings for the animation created, select the 'Wrench icon' near the thumbnail created by the animation you took.



You may change the settings of how the animation will interact above.

The hotspots will appear on your animation and when clicked, the motion will play.

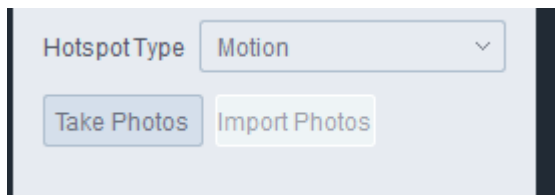


Clicking the Hotspot will open the Motion.

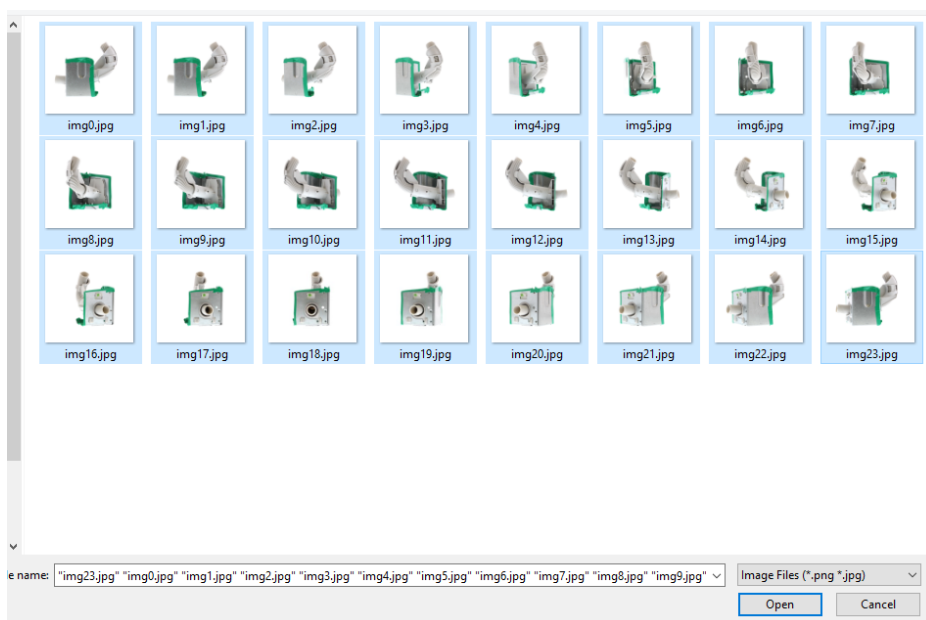
X



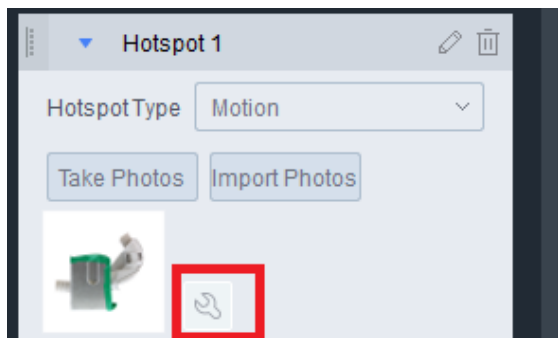
Create Motions from Existing Pictures



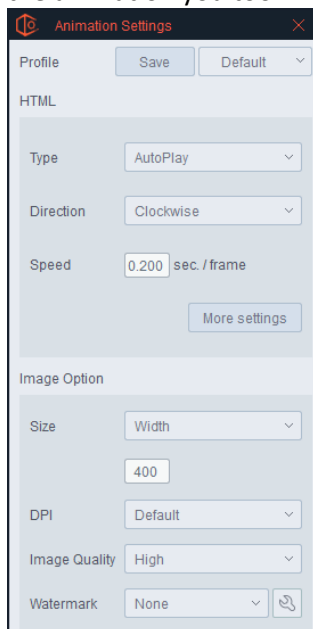
Select 'Import Photos' below your hotspot type.



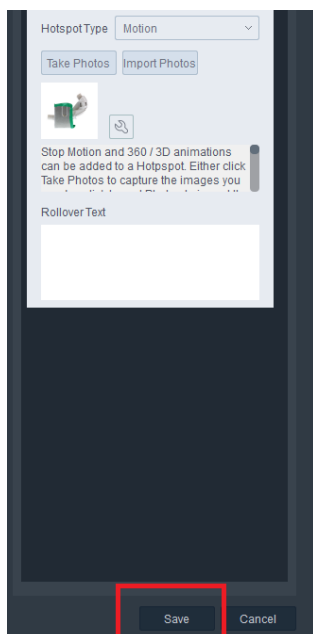
Select all images you wish to import.



To Change your settings for the animation created, select the 'Wrench icon' near the thumbnail created by the animation you took.



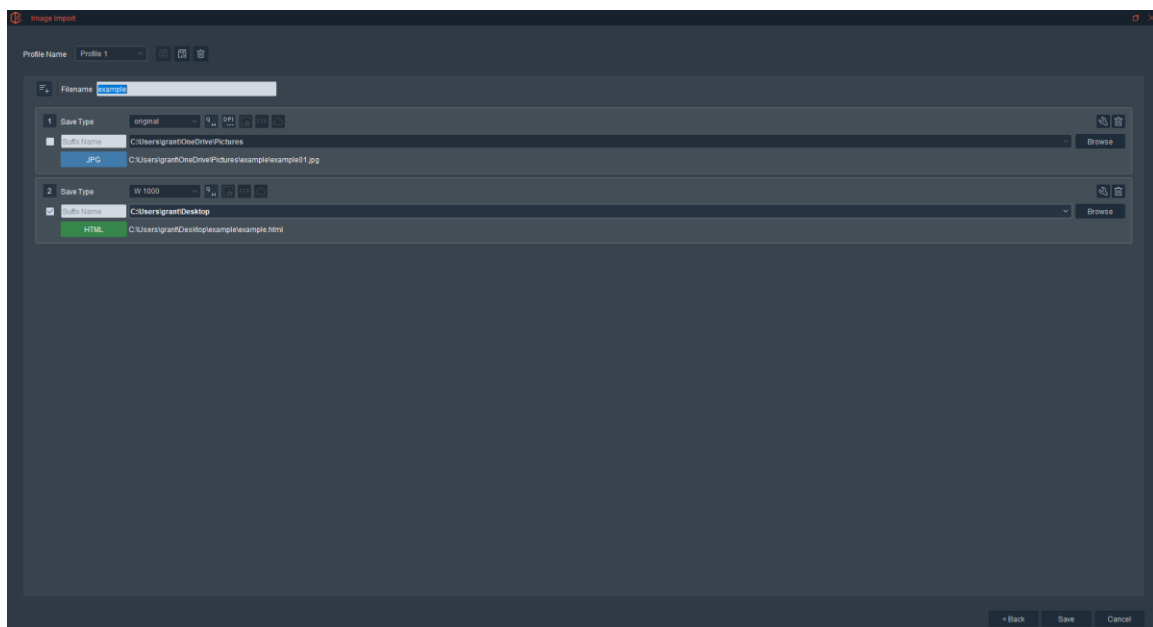
You may change the settings of how the animation will interact above.



Once you are satisfied with your hotspots, Save the Hotspots.



Select Next button.



Name the animation and select save. The hotspots will appear on your animation and when clicked, the motion will play.



Clicking the Hotspot will open the Motion.

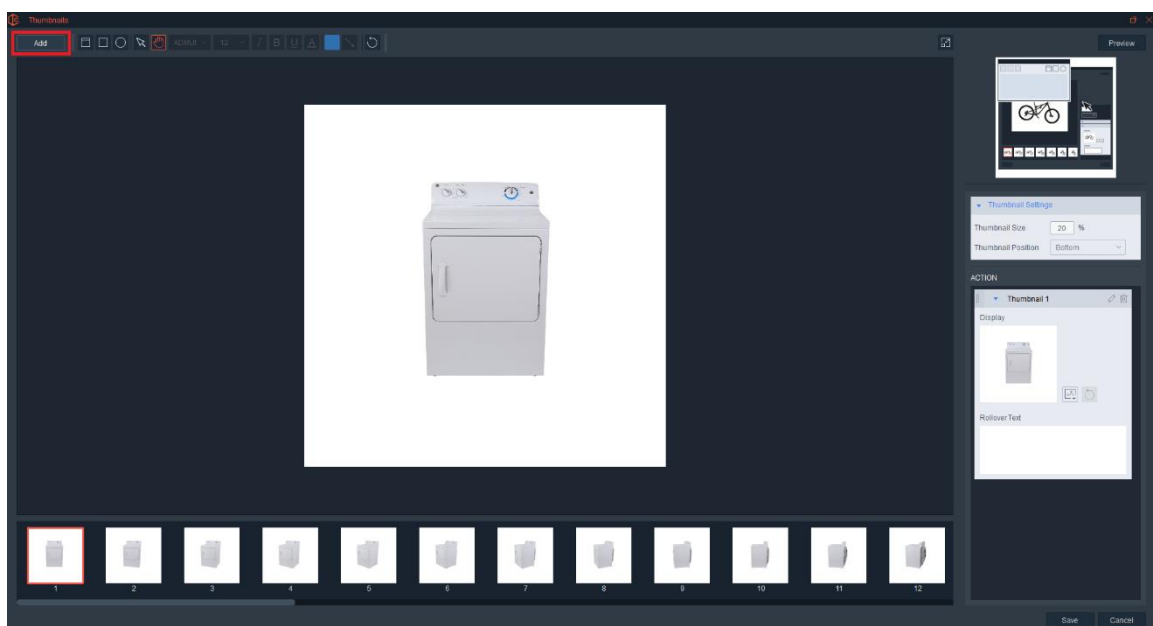


Create Thumbnails

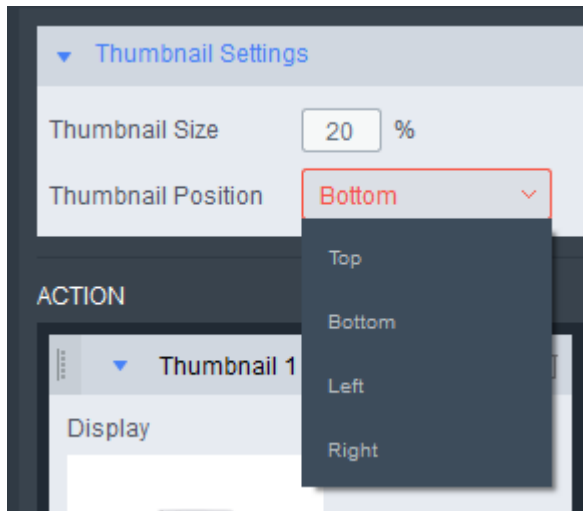
A Thumbnail is a bar customers can interact with to rotate product to specific angles or display other pictures of the product from different angles. It features a specific image or view that has annotations and/or drawings on it to make a specific point. **Note:** More than one Thumbnail can be used per animation.



To create a Thumbnail, press the 'Thumbnails' button at the bottom of the Creator Screen.



Select Add at the top of the Thumbnails page.

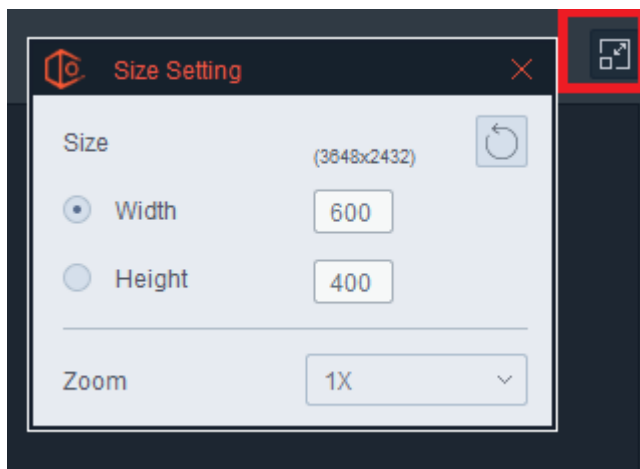


Thumbnail Settings

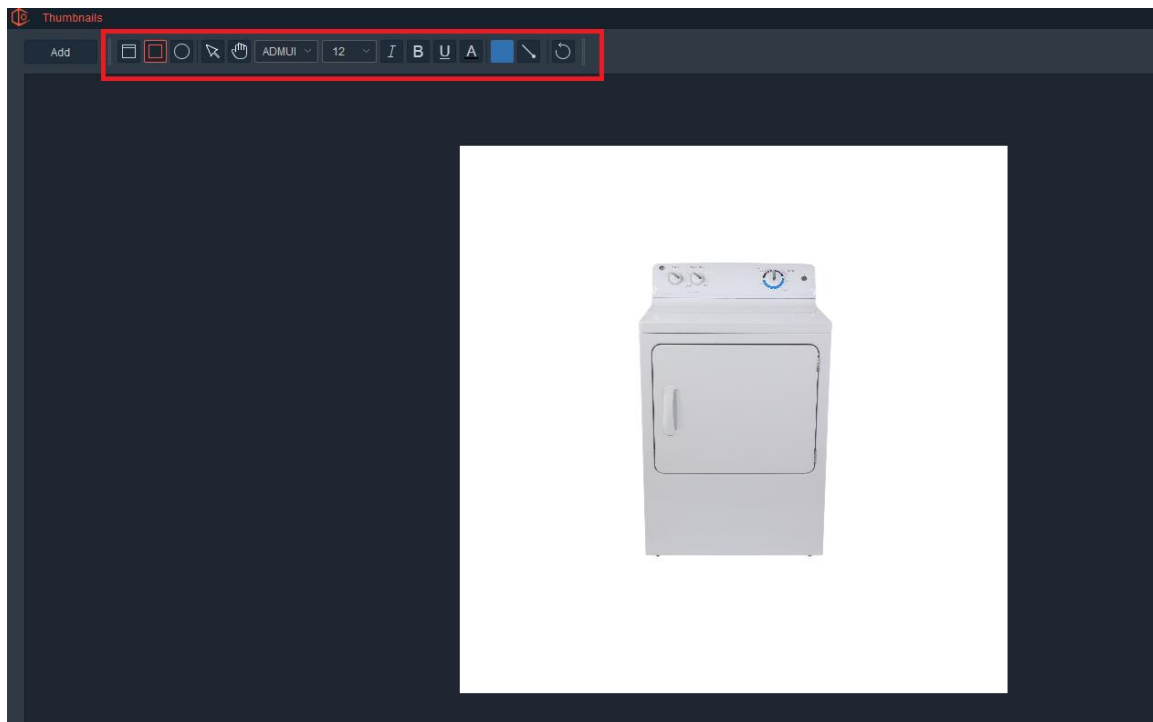
This section allows you to change the size of the thumbnails, as well as the position.

Thumbnail List Size – This allows the user to choose how large the Thumbnails will appear inside the animation.

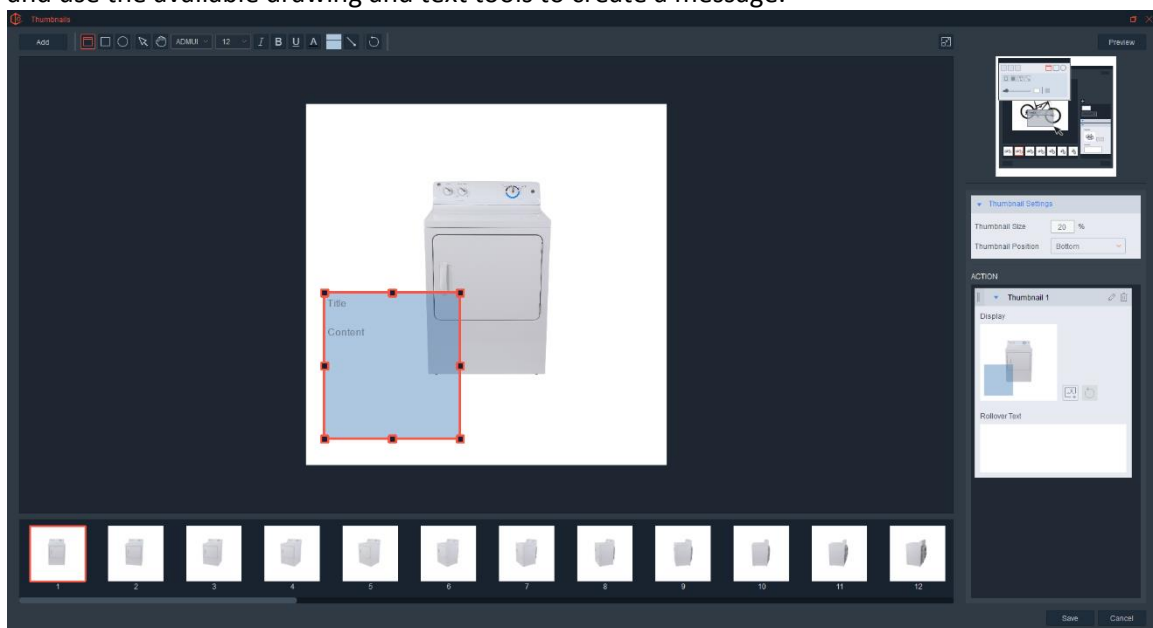
Page Position – This allows the user to choose where the Thumbnails appear on the animation. They could be on the top, bottom, left or right.



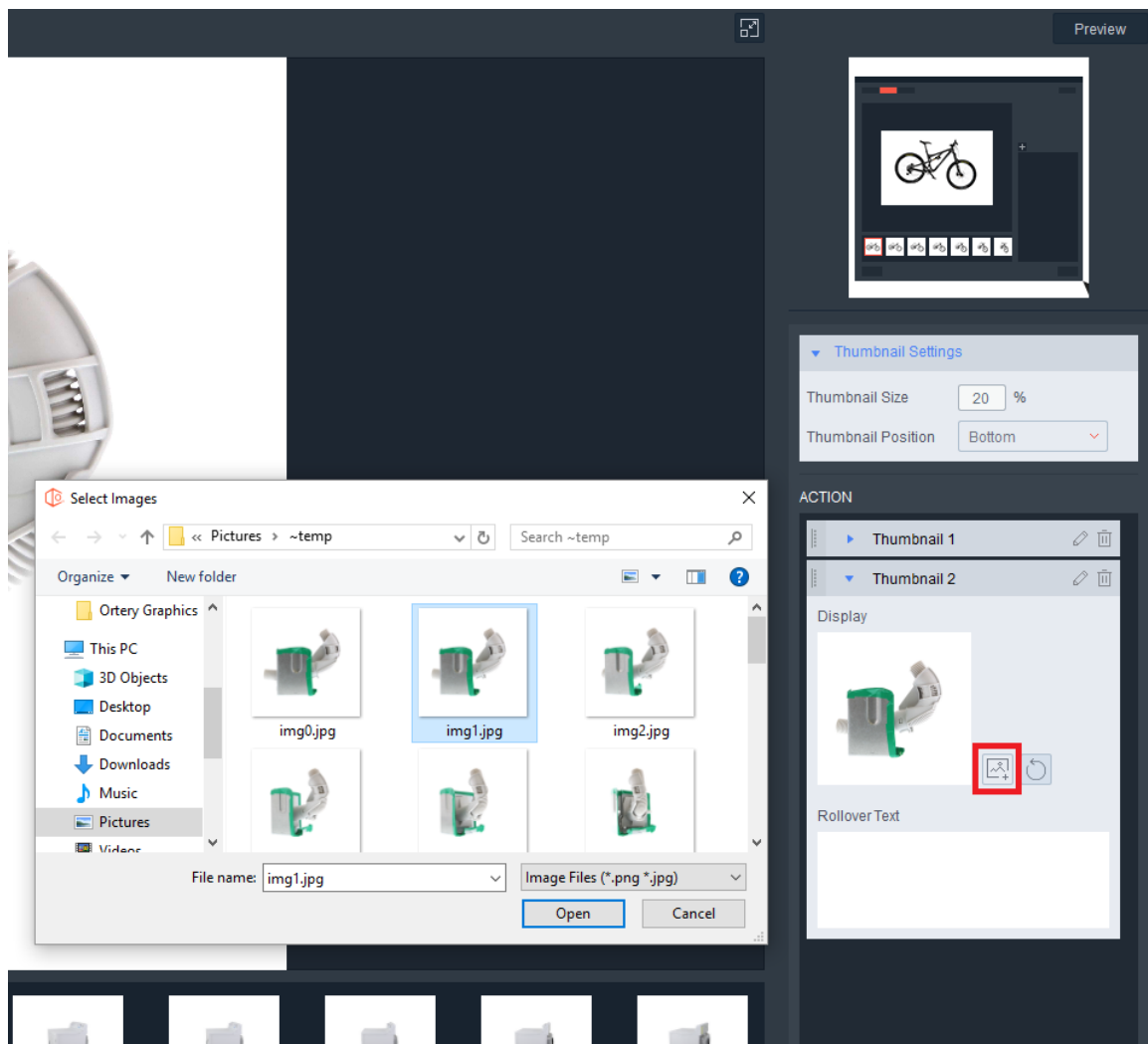
Size Settings – Choose a window size for the thumbnails output when clicked on.



Use the Annotation tools that appears to insert text or draw on the image directly. Choose a call out Style and use the available drawing and text tools to create a message.



Choose your style and simply select text and drag it to the desired location.
 Note: users may add more than one Annotation to each of the thumbnails.



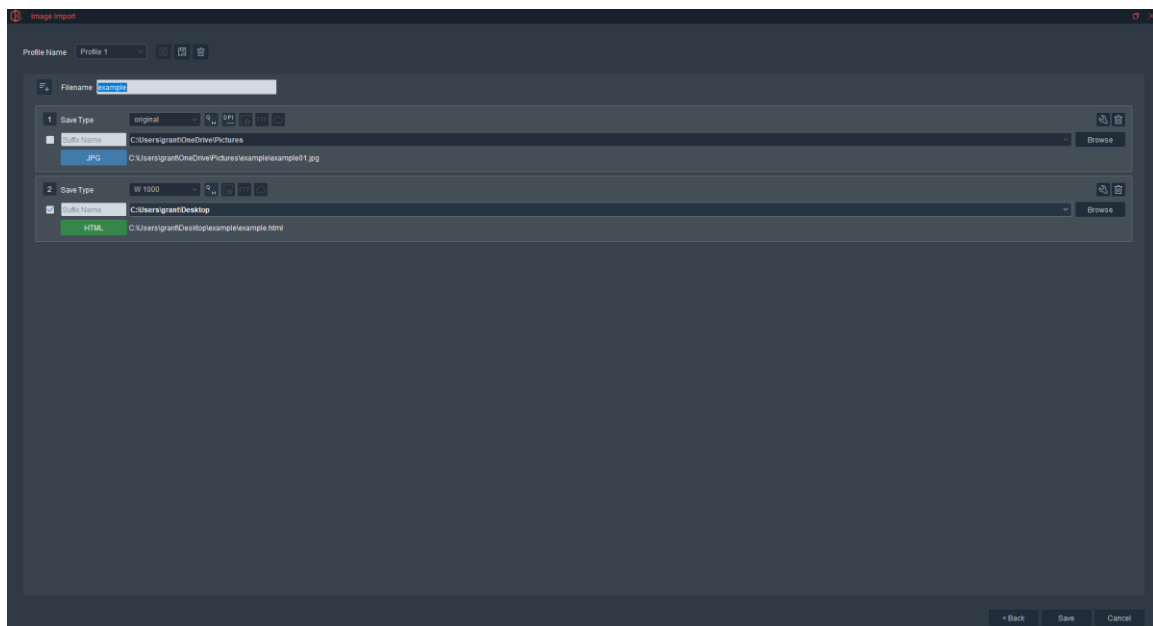
Add a different image to your thumbnail section by importing an image.



To save your changes, select save.



Select Next.



Save the complete animation.



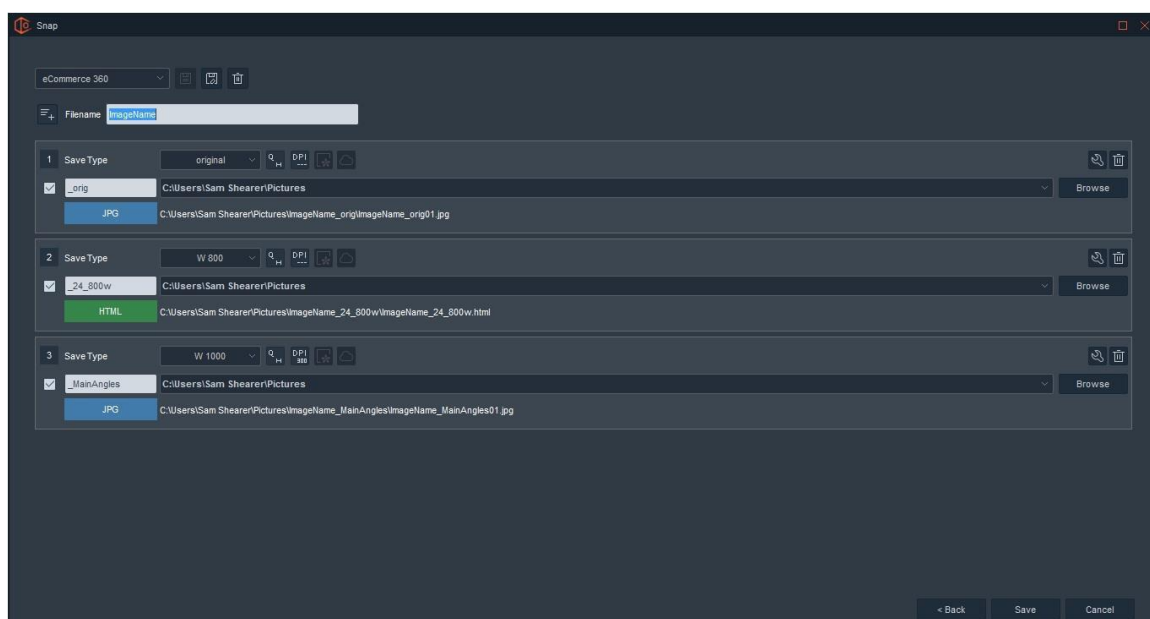
Saving 360 Animations

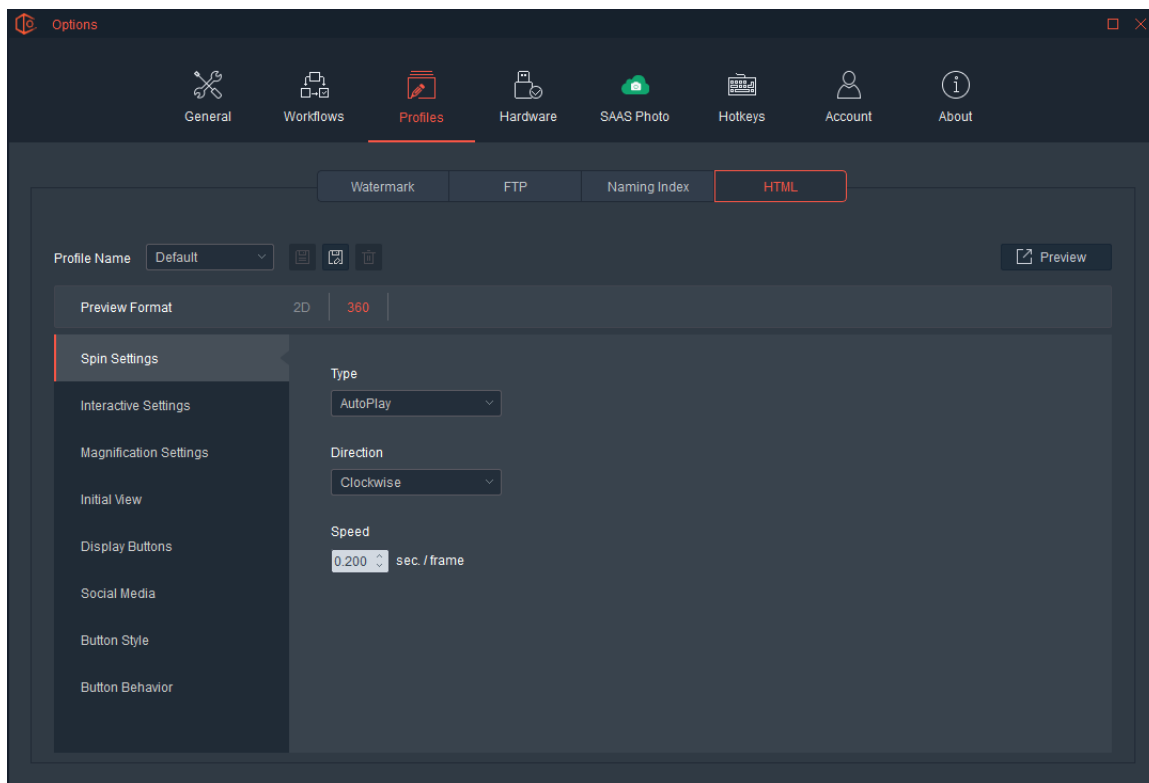
The Save 360 Screen and the 2D Save Screen are very similar and operate on the same two main principles – Save Types and Saving Profiles. The use of these features are explained in detail in the 2D Image Saving section. Here we will discuss which Saving Types best apply to saving 360-degree product animations.

Below is a screen capture of a 360 Save Profile used for saving 360 animations used for eCommerce. Note: The profile name is 'eCommerce 360' and the profile simultaneously saves the images three ways:

- The individual JPG images used to create the animation are saved at their Original size.
- An 800 pixels wide HTML5 animation is to be created.
- The JPG pictures corresponding to the Main Angles, the 0, 45, 90, 180 and 270 degree angles are saved at 1000 pixels wide to a sub-folder inside the Pictures folder.

These are three common ways to save the pictures taken to create a 360 animation to be used for eCommerce.





Saving and Using HTML Profiles

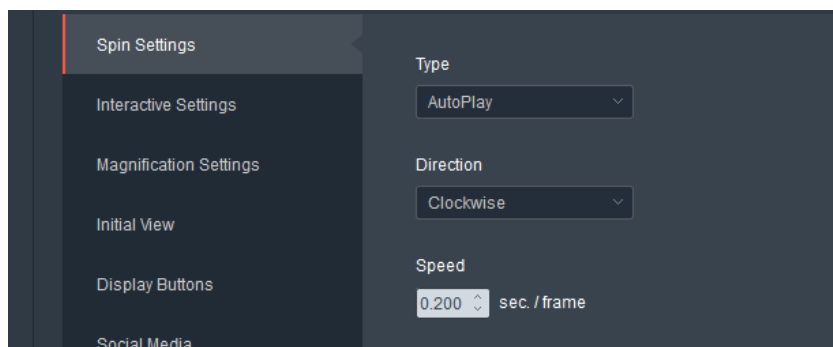
At the top of this interface, are HTML Profile management tools.



Here the user can Select, Save and Delete HTML Profiles. In addition, a Preview option is also available. The preview option simulates what an animation could possibly look like given some of the output options on selected within the HTML Profile. It is not an exact match and should only be used as a tool to quickly preview what some of the HTML Profile options do.

HTML Profile Features

Spin Settings – Customize Animation Type, Direction and Speed



Type – Determine the way the animation plays

AutoPlay – Continuously spins. When a user interacts with the animation, they take over control, but once they release it will go back to continuously spinning.

SpinOnce – Will do one full rotation and then stops. The user can interact with it afterwards.

SpinBack – Will do one full rotation in the selected direction and then one full rotation in the opposite direction and stops. This is useful when displaying animations of models, as their facial

expression may have changed from the first and final shot. This spin type does not allow the user to rotate the animation from the last to the first frame and vice versa.

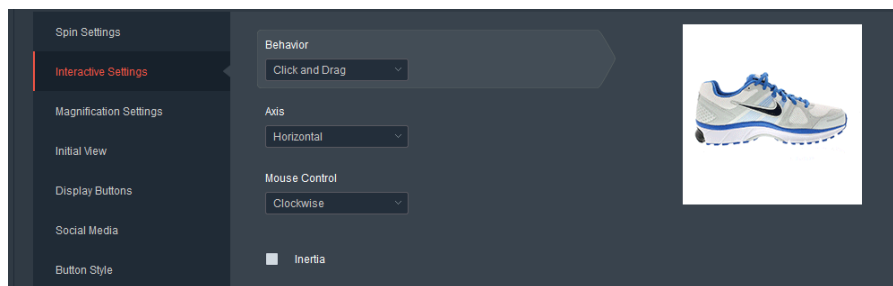
Stationary – The animation will not play on its own. The user is still able to control the animation.

Direction – Use this to determine the Direction the animation will play - clockwise or counterclockwise.

Speed – Animation speed is determined by how long each frame in the animation is displayed. It is set in Seconds. For example, if there are 10 frames in the animation and speed is set to 1 second per frame, then it will take 10 seconds to complete one spin.

Interactive Settings

Allows you to customize the way a user interacts with the animation.



Behavior – This controls the mouse interaction with the animation.

Click and Drag means the user will need to click and hold down the mouse while controlling the animation, releasing the mouse click will let go of the animation.

Mouse Over will allow a user to control the animation just by putting their mouse in the viewing area and rotating back and forth.

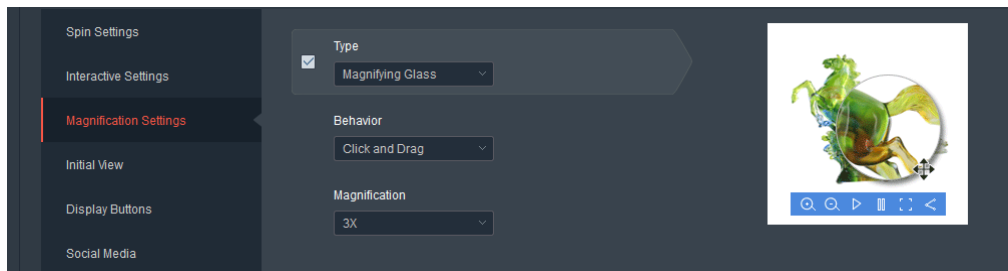
Axis – This can be toggled between Horizontal and Vertical. Horizontal allows the user to interact with the animation by moving their mouse left and right. Vertical allows the user to interact with the animation by moving their mouse up and down.



Mouse Control – Clockwise or Counterclockwise. This determines which direction the product moves when rotating the animation. It also relates to the direction the image sequence was captured.

Inertia – Toggling this On will create inertia in the animation. Quickly moving the animation one direction will cause it to slowly come to a stop opposed to immediately stopping.

Magnification Settings – Customize zoom level and how it operates.



Type – Change the view of your magnifier.

Magnifying Glass – Standard magnifying glass creates a movable layer that shows the magnified view on top of the normal animation.

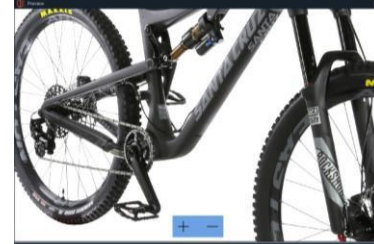
Magnifying Glass



Enlarge



Zoom with Buttons



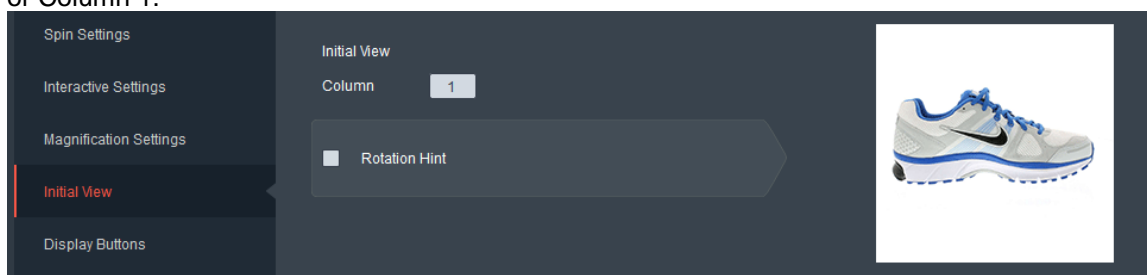
Enlarge – Replaces standard view with magnified view. User is able to navigate around magnified image.

Zoom – Allows user to use scroll wheel or touch screen controls to zoom in and out of the animation.

Behavior – Allows you to switch between Click and Drag magnification controls with Mouse Over.

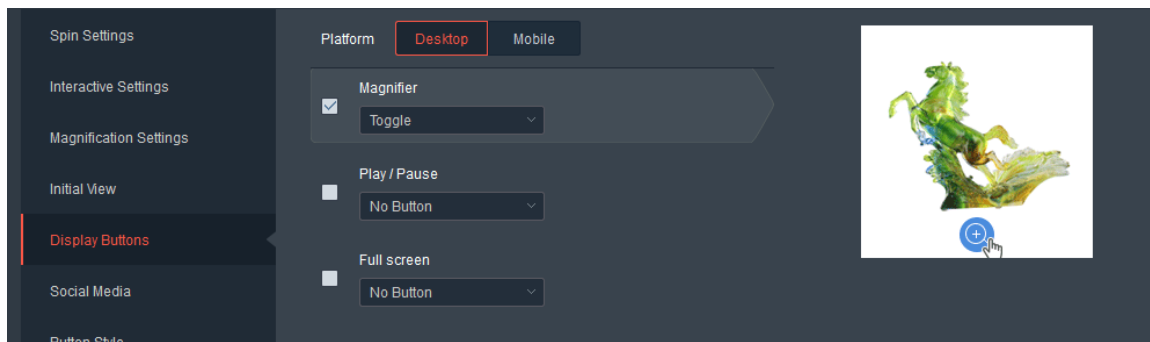
Magnification – Allows you to switch between 2X, 3X and 4X magnification.

Initial View – Allows you to choose the starting frame in the animation. By default it will start on the 1st frame or Column 1.



Rotation Hint – Enabling the Rotation Hint means an icon indicating how to control the animation will appear and remain on top of the animation until it is interacted with.

Display Buttons– This option allows the user to choose the main buttons and controls to be displayed on the animation - Magnifier, Play / Pause and Full Screen options – for both Desktop and Mobile display types.

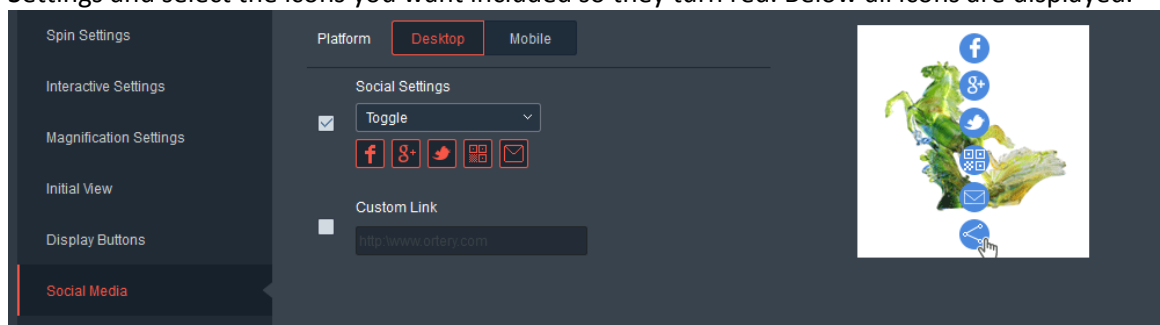


All options allow the user to select 'None' for no buttons, 'Separate' which will provide a button for each option and 'Toggle' which provides one button that updates based on what option is currently selected.

Important Note: Different display options can be used to create customized buttons for viewing animations on Desktop and Mobile devices.

Social Media – Allow the user to customize Social Media options for Desktop and Mobile independently.

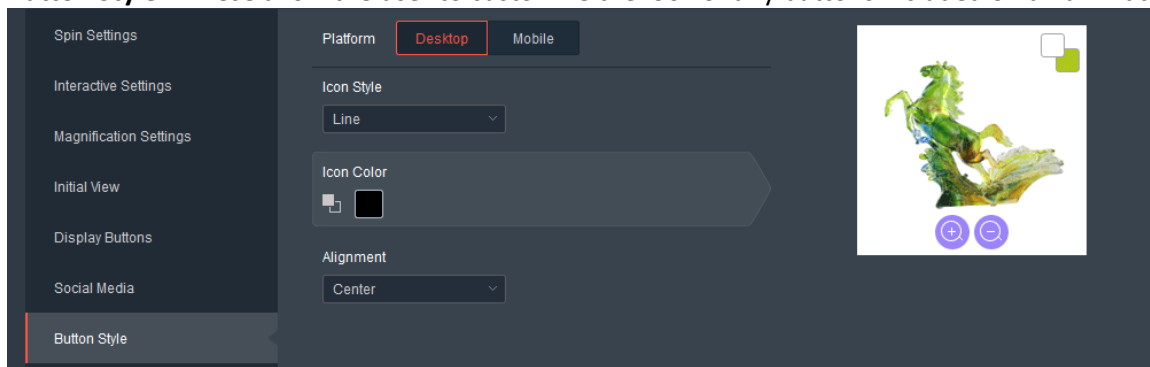
Social Media To use Social Media links on your animation, make sure Toggle is selected under Social Settings and select the icons you want included so they turn red. Below all icons are displayed.



Custom Link

Custom Link allows the user to offer an external link to any URL.

Button Style – These allow the user to customize the look of any buttons included on an animation.



Icon Style

Switch between having Backplate, Circle and Line.

Line - provides basic wireframe buttons with no background.

Circle - creates a circle background around the button graphic

Backplate - connects all the buttons in a rectangle using the background color

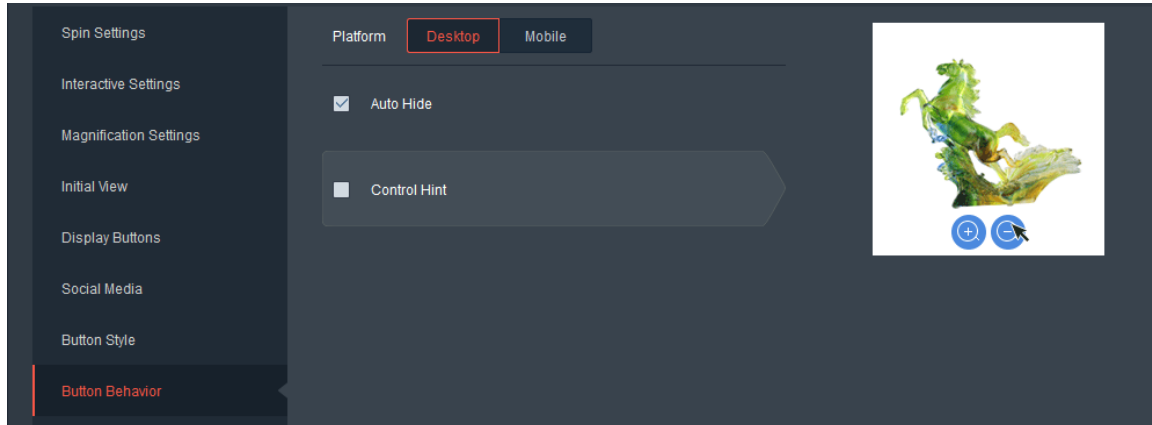
Icon Color

Allows you to select the colors of your buttons. Icon Style Line only lets you select one icon color where the Backplate and Circle Icon Styles allow you to select two.

Alignment

Standard left, center and right options for button placement.

Button Behavior – These buttons allow the user to determine how the button behaves when a mouse goes over it.



Auto Hide

Automatically hides buttons when not being used.

Control Hint

Desktop only. Shows text for what buttons do when you hover over them.

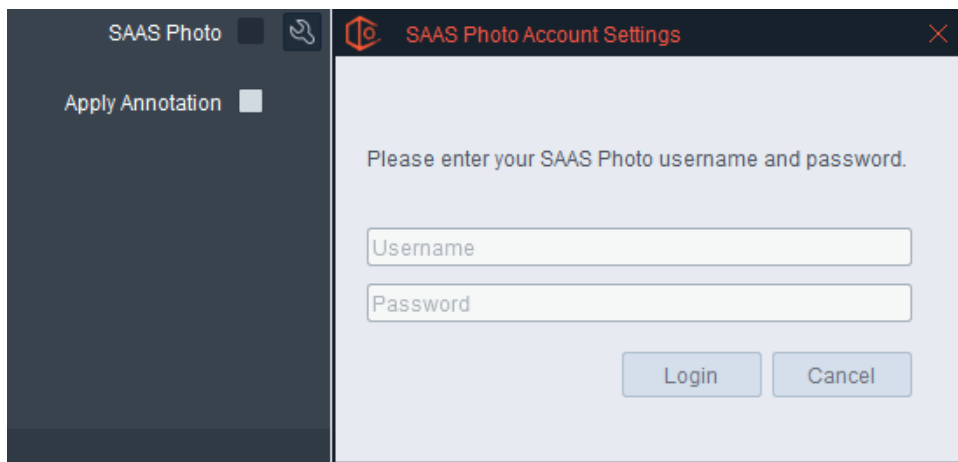
Hosting 360 Animations Online

HTML5 Implementation Guide

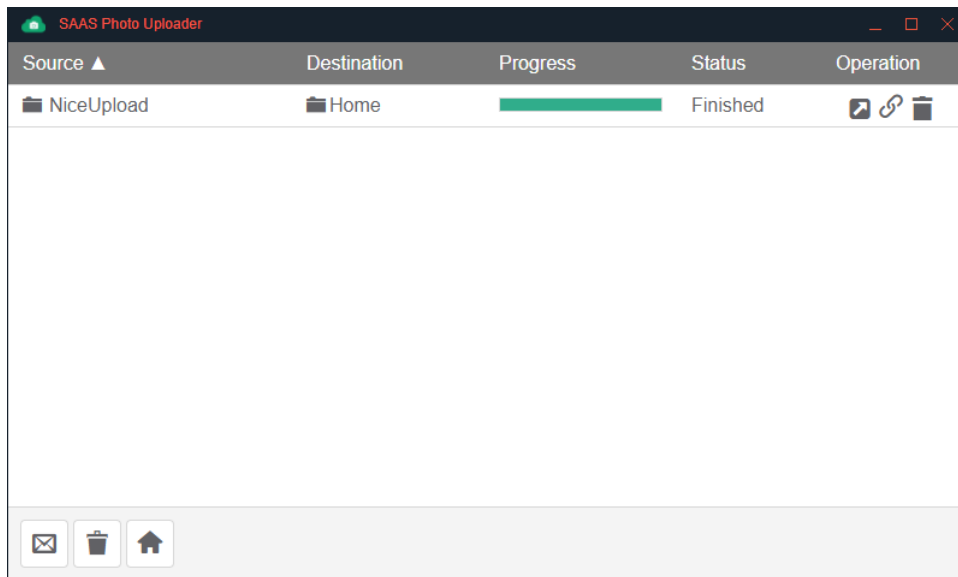
Ortery publishes a [HTML5 Implementation Guide](#) to help users deploy 360 animations on websites and in eCommerce platforms. Ortery also has created plug-ins for specific eCommerce platforms. Another way Ortery makes it easy to use and share 360 animations is with SAAS Photo.

Hosting 360 Animations on SAAS Photo

SAAS Photo is a hosting service offered by Ortery for images, animations and videos. If you have an account, you can save images directly to SAAS Photo by putting a check mark in the box and clicking save. To log into SAAS Photo click the Settings icon with the wrench on it.

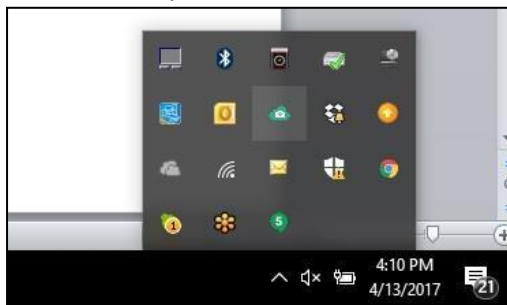


After creating an account, the assets created with this program can be automatically saved to SAAS Photo where they can be immediately used in websites, landing pages or shared with anyone by email.

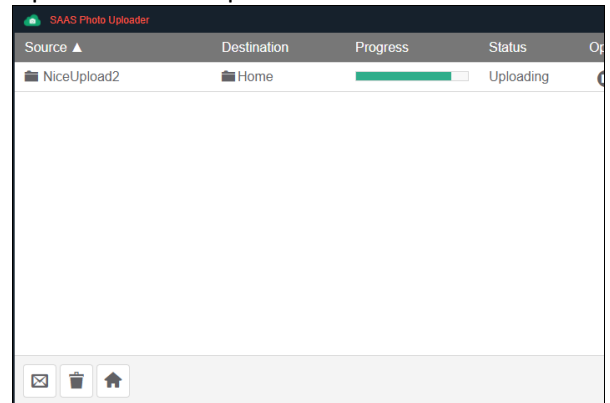


Whenever an image is selected to be saved to SAAS Photo, the Uploader appears and shows the status of the upload. After the image is uploaded, the Uploader offers the ability to show or mail a link to the cloud-based assets.

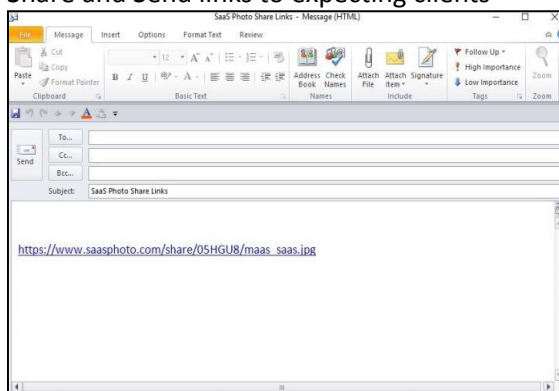
SAAS Photo Uploader Becomes Active



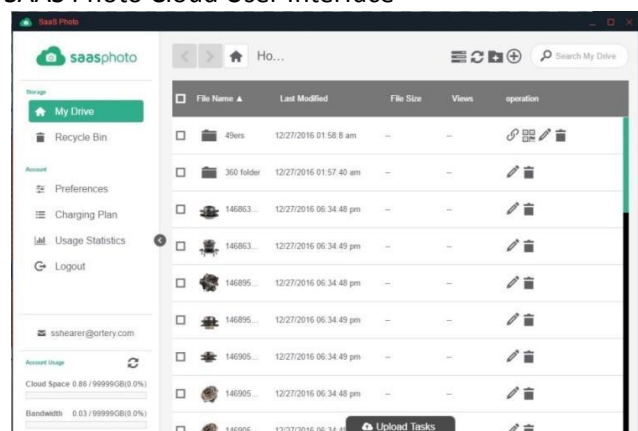
Uploader shows upload status & offers links



Share and Send links to expecting clients



SAAS Photo Cloud User Interface

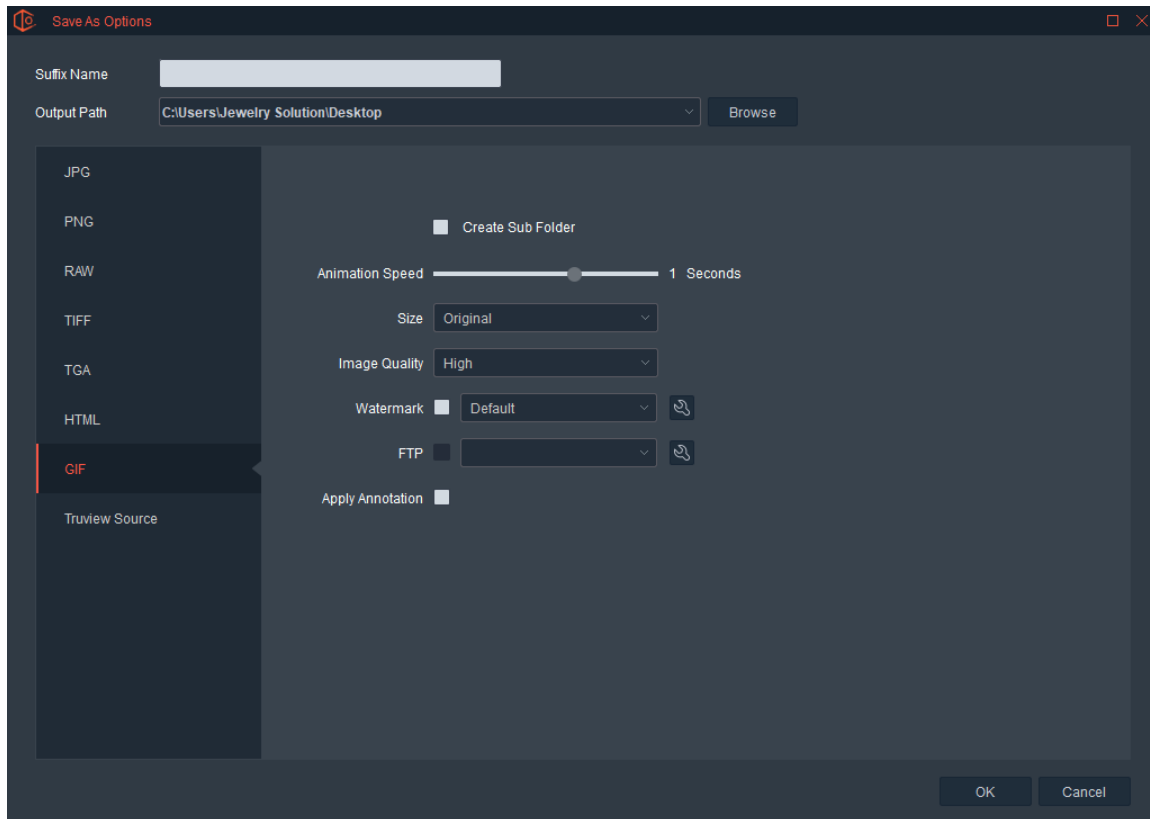


Users can always visit www.SAASPhoto.com to see the entire contents of their SAAS Photo account as well as manage SAAS Photo settings and view usage statistics.

Saving 360 Animations in GIF

When creating 360 animations users can also save animations in GIF file format. GIF is not recommended as the animation is not interactive and GIF format only offers 256 colors. The only benefit of using a GIF

animation is that it can be used in some places where an HTML5 cannot. In the software the GIF settings are easy to understand. Animation Speed will control how fast or slow the animation moves.



360 – 360 Animation – AutoPNG

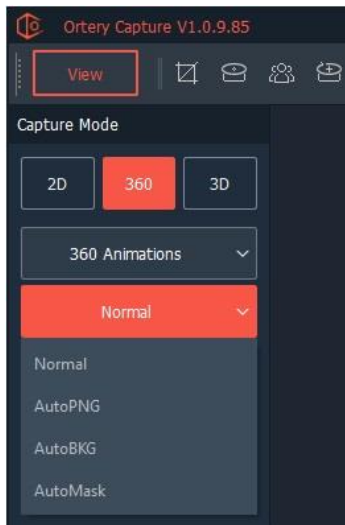
360 Animations can also be created by taking pictures in AutoPNG format. In this format two pictures of the object are taken at each angle. The images are combined to create a 360 degree product view on a transparent background.

The process is the same as creating a 360 Animation as discussed above, however the initial settings are a little different. In this case select, 360 as the Capture Mode, 360 Animations as the Capture Type and select AutoPNG for the Capture Style. Keep in mind that PNG files are much larger than JPG files, so a 360 Animation made up of PNG files will be much larger than an animation made from JPG images.

As with all AutoPNG image capture, the settings of the first and second picture will be different. In the first picture, use camera and light settings that properly expose the image and deliver rich accurate colors. The goal of the second shot is to isolate the product from its background. Set the exposure high to obtain a silhouette of the object. The two images from each angle will be combined to create a single image with the product on a transparent background

360 – 360 Animation – AutoBKG

To create an animation using the AutoBKG Capture Style, the workflow is almost the same, however just like a still shot AutoBKG, the user will have the ability to control all the aspects of the lighting system to generate an isolated product shot on a transparent background in just one photo. This method of creating a 360 degree animation on a pure transparent background is the fastest and relies heavily on good lighting.

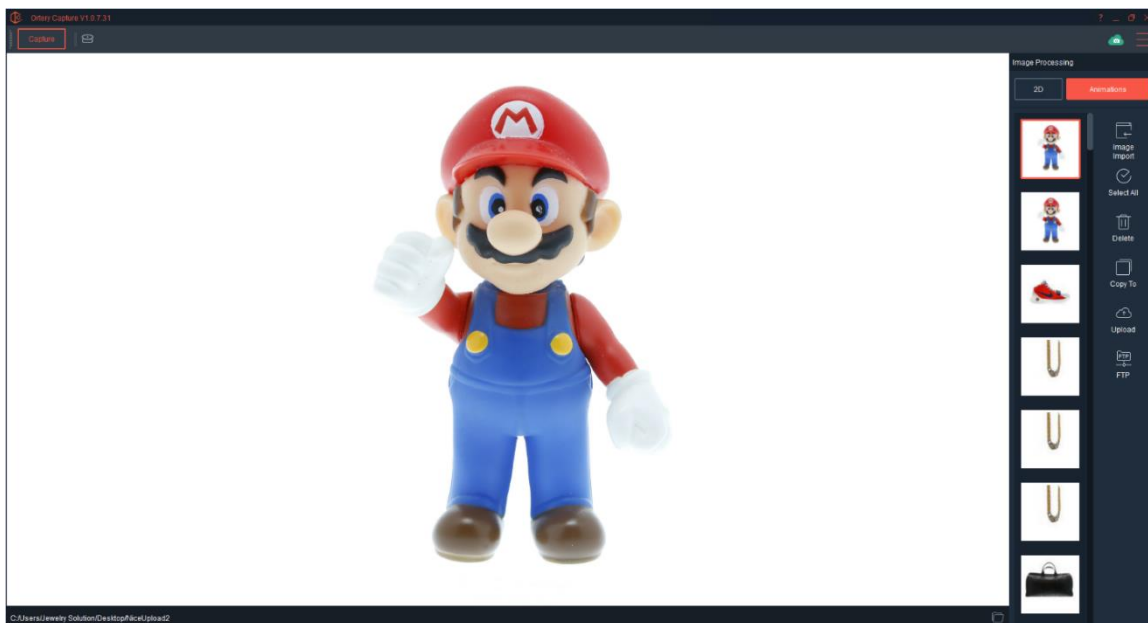


360 AutoMask

The AutoMask feature can also be used to capture images in 360 degree format. The overall workflow will be similar to all the other 360-degree image capture workflows except the pictures will be taken using the AutoMask feature. Each picture will automatically isolated from its background. For a detailed explanation of how this works and how to create a profile that can help isolate the product at each angle, please visit the 2D AutoMask section.

360 Animation Viewing Screen

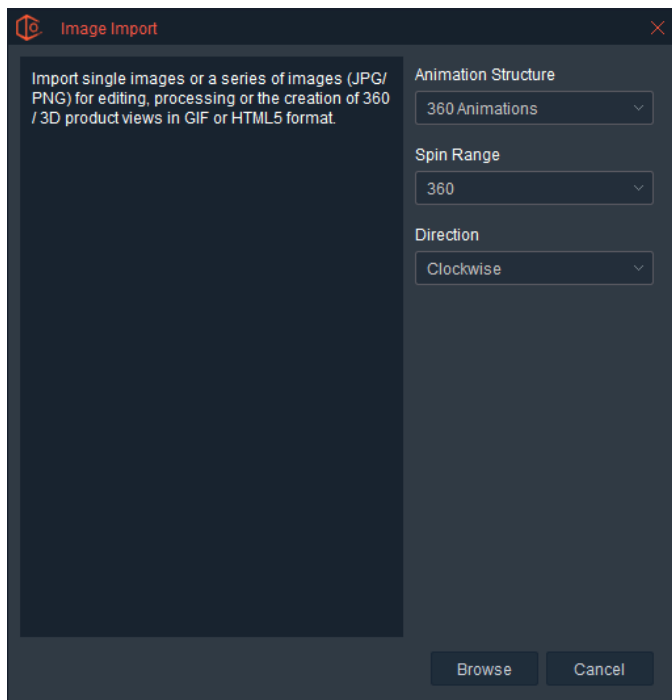
Once a 360 Animation is created, it can be viewed and managed from the Animations portion of the Viewing Screen. Simply select Animations to view all 360 Animations created. Note: By selecting Animations, the processing and saving tools along the right change.



Specific 360 Animation management tools include Image Import, Select All, Delete, Copy To and Upload

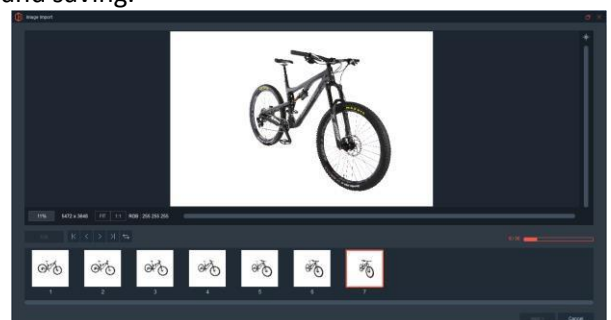
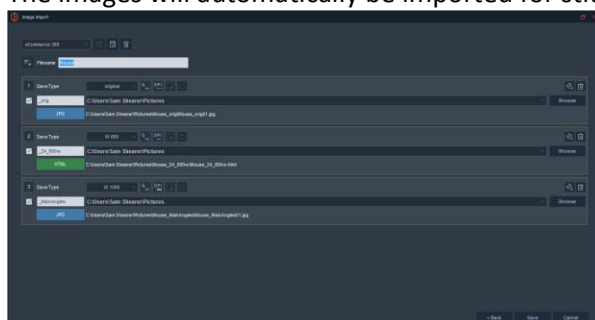
360 Image Import and Stitching

Users can quickly import 360 image sets to stitch and save interactive 360 animations.

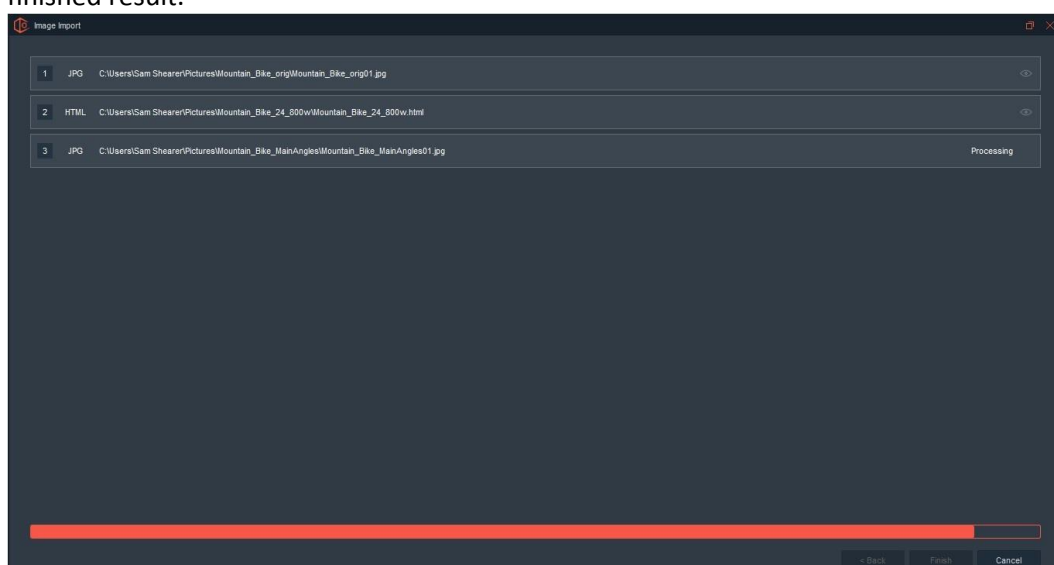


Select the Animation Structure, Spin Range, Spin Direction and Number of Rows (if necessary). Click Browse to find the images to import.

The images will automatically be imported for stitching and saving.

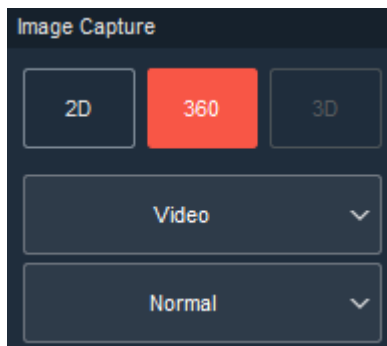


Note: After processing completes, an eyeball icon appears. Pressing this icon allows the user to Preview the finished result.



- **Select All** – Pressing this feature selects all of the Animations in the thumbnail list for performing a specific action.

- **Delete** – This is used to Delete one or more selected animations in the thumbnail list.
- **Copy To** – This feature copies any selected animation in the thumbnail list to a user determined specific location.

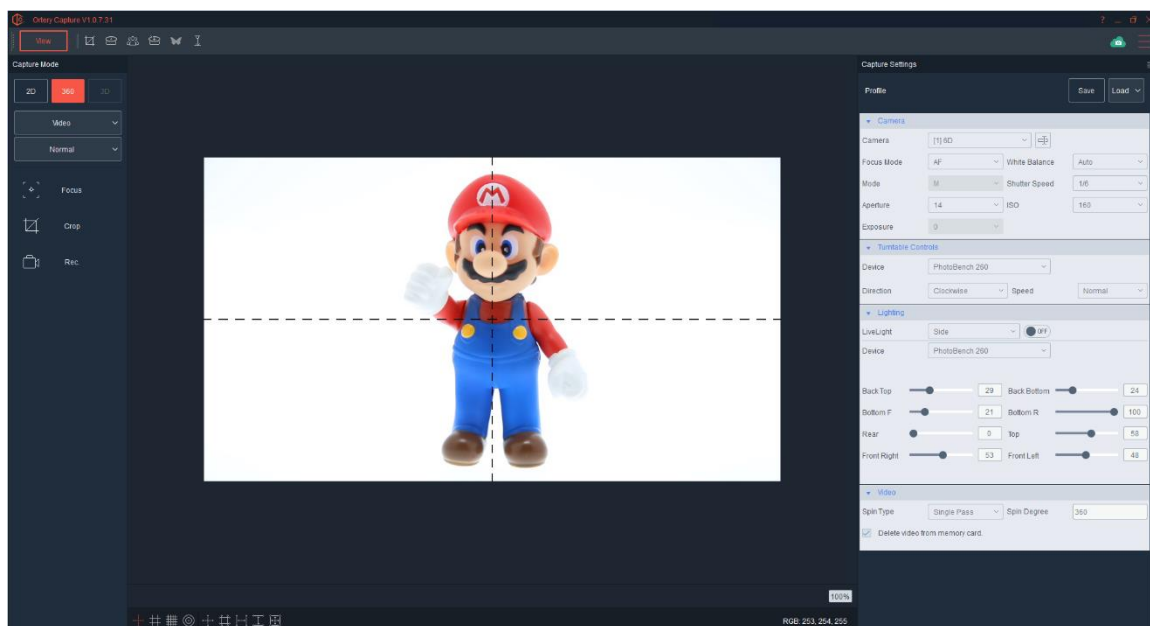


Upload – If the animation was not uploaded to SAAS Photo while saving, it can be selected here and uploaded to SAAS Photo for storage and saving in the cloud by pressing Upload.

360 Video

360 – Video – Normal

Create and display products in video format. The 360 Video feature makes it easy to establish all the settings needed to create and publish a 360-product video.

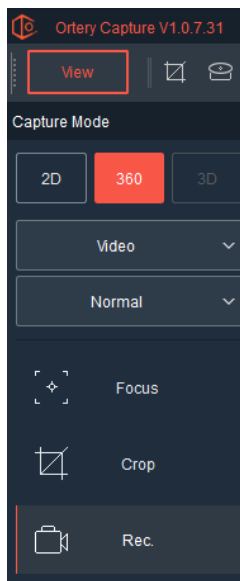


After selecting 360 as the Capture Mode, select Video as the Capture Type. For creating a 360 video, select Normal as the Capture Style.

This will allow the user to use the turntable to create 360 video in .MP4 and .MOV formats. Do not physically turn the camera into video mode, the software will do that automatically. Capturing Video requires a SD card to be installed in your camera. We recommend using SD cards with a class rating of 10 or above.

Turntable speed and rotation direction can be chosen from the Turntable Tools window highlighted below.

The options that pertain to video capture will appear on the screen. Clicking the highlighted record button shown below will start the video capture.



The Live Preview gives the user the ability to compose the video - adjust camera settings, rotate 360, spin the object and use AfterImage to help get it centered.

The capture aspect ratio and Live Preview are automatically set to 16:9. This is the default for most video capture. Check your camera settings to make sure the video capture ratio is set to 16:9. Also check your camera settings to see frames per second. The default is 30 fps, but 60 fps could also be used.

Note: When shooting 60 frames per second, shutter speed cannot be slower than 1/60. When shooting 30 frames per second, shutter speed cannot be slower than 1/30.

Video Settings

Note videos must be captured using a shutter speed of either 1/30 or 1/60 depending on the quality and type of video you want to capture. The main video capture settings for frames per second and video quality (for example 4K) are made in the camera's menu system. Each camera offers different video capture options.

Use this area of the Ortery Capture software to set 360 video capture settings.



Save Location

Captured videos are initially saved to the SD card then transferred to the computer. The default is to "Delete video from memory card", but other options for saving the video are available. Use the Save Location areas to select a new save location – for example: Computer Only, Card Only or Both.

Spin Type – Two Spin Types are available: Single Pass and Fan.

- Single Pass – This video capture method allows users to automatically capture a video between two points of rotation while the turntable constantly rotates in the same direction. For example: if 360 degrees is chosen, then the video will automatically start at 0 degrees and record until the turntable hits 360 degrees. During playback the video will spin 0 to 360.

- **Fan** – This video capture method allows users to automatically capture video between two points of rotation that are symmetrical around the starting point. Choose the fan angle by selecting Spin Degree, for example if 180 degrees is chosen then the turntable will rotate between -90 and +90 to capture the video. During playback the video will oscillate between these two points.

Spin Degree – This is where users can type in the desired rotation amount. Max Spin Degree is 360°

Overlap – When shooting 360 videos, there are some pitfalls to avoid.

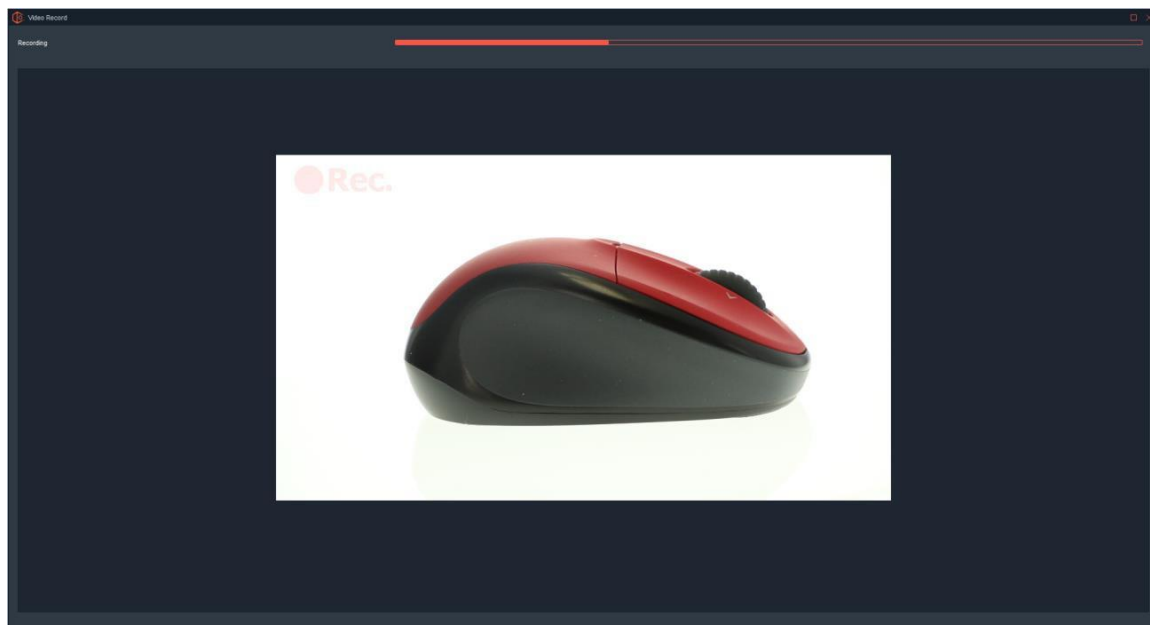
1. When the turntable begins to move the object may begin to wobble.
2. The turntable begins to move, but if it takes a little while for it to reach terminal speed the turning speed at the beginning and the end may vary OR
3. If the USB cable to the camera is long or of poor quality the turntable may start to move before the camera starts recording. This causes the first few degrees not to be captured.

If any of these are true, use the Overlap feature. To use the Overlap feature, simply type in the number of degrees you want to add to the front and back of your video. This ensures you have a complete 360 spin that is free of wobble and speed variation. For example, if you enter 20 as the Overlap, then the turntable will first spin negative 20 degrees. It will then record from -20 to positive 380. (an extra 20 degrees on each end of the video)

After shooting and Overlap video, you will need to press the Spin Alignment button to choose the beginning and end of the video. This will ensure the video is exactly 360 degrees.

Once the video is composed and the capture settings set, then press Record to begin recording.

While the video is being captured, the screen will look like this:

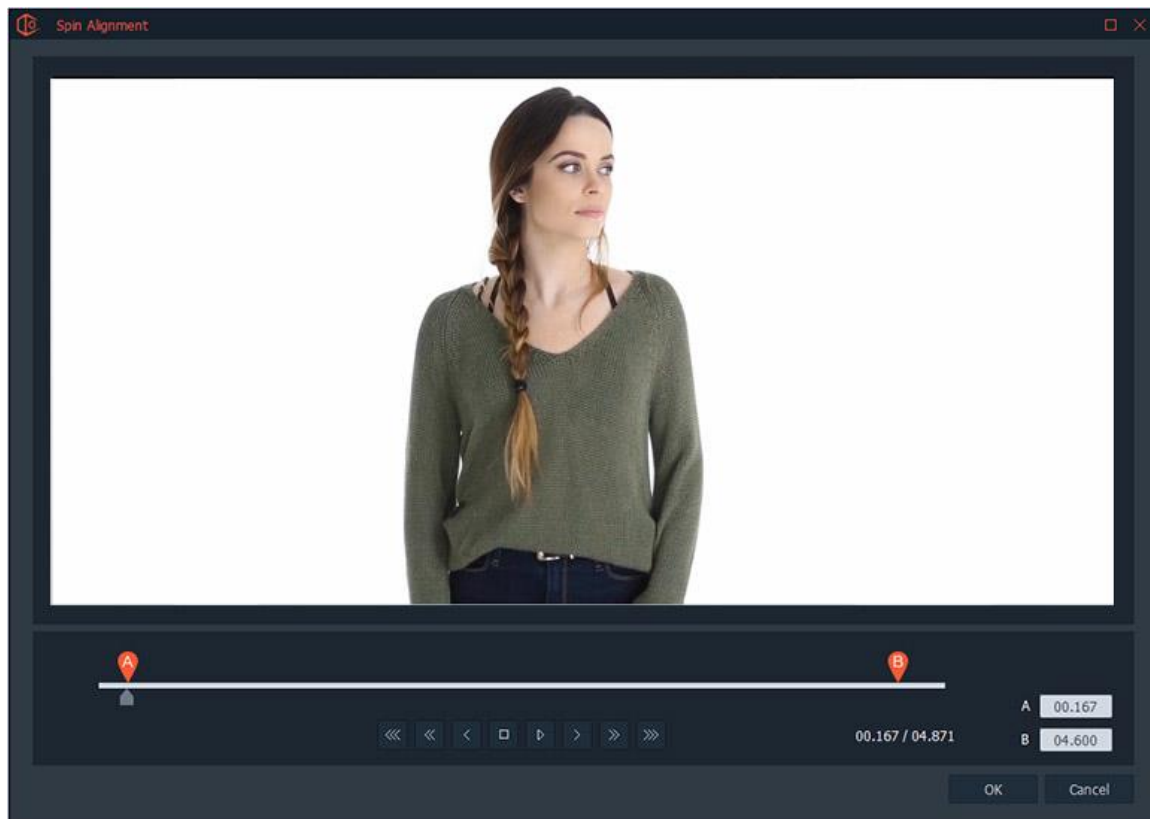


After video capture and transfer are complete, the user can choose how to save the video. Again, Saving Profiles and Saving Types are used to set, memorize and re-use the best settings.

Preview and Spin Adjustment

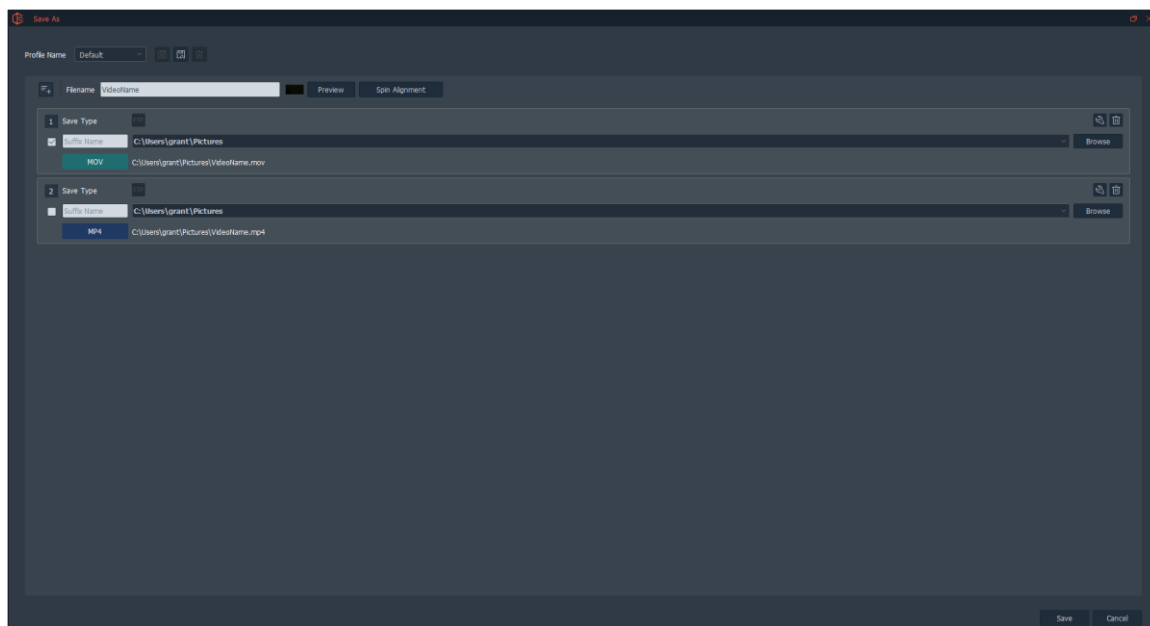
Previewing is simply playing the video to make sure everything looks good.

Spin Adjustment is necessary when Overlap was used to create the video. It gives the user the ability adjust the beginning and ending of the video so that a perfect 360 can be displayed.



Simply move the A and B indicators until the AfterImage of the first frame and the last frame are aligned. Videos can be saved as .MOV or .MP4 files or the individual frames can be pulled from the video and saved independently or stitching to create a 360, interactive animation.

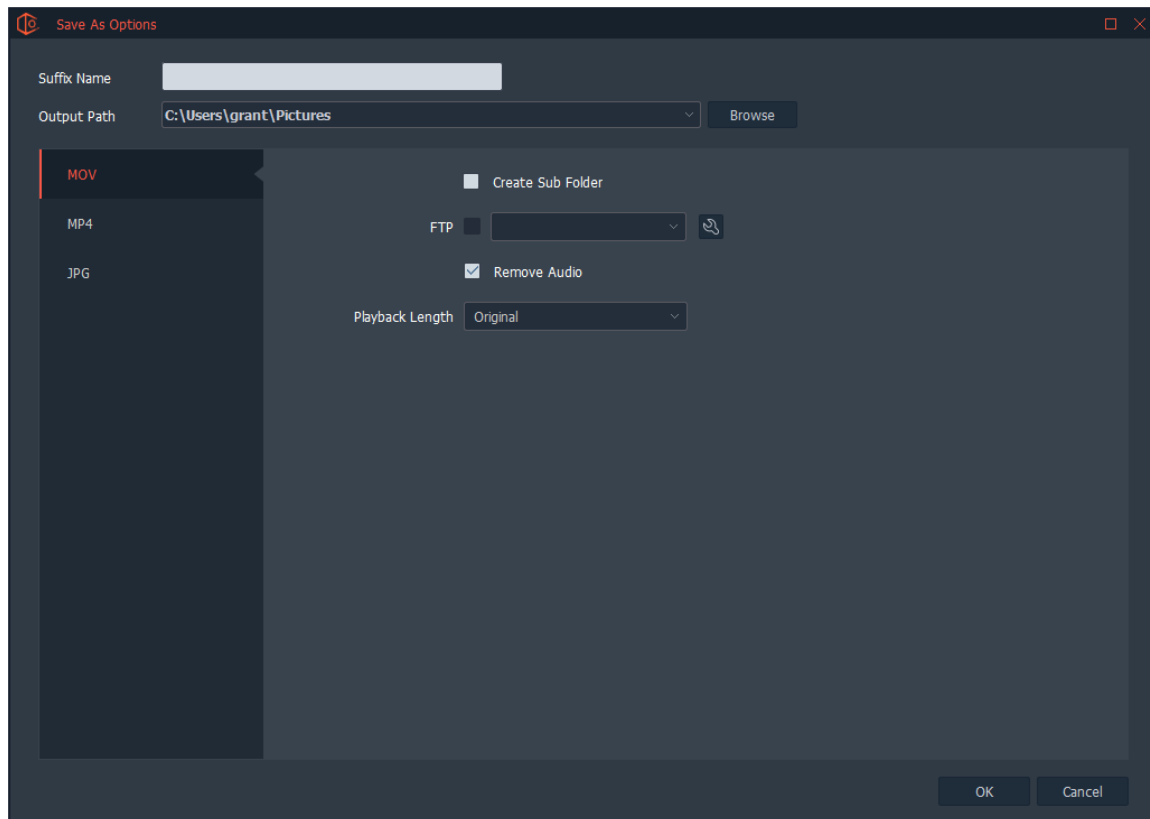
Saving 360 Videos



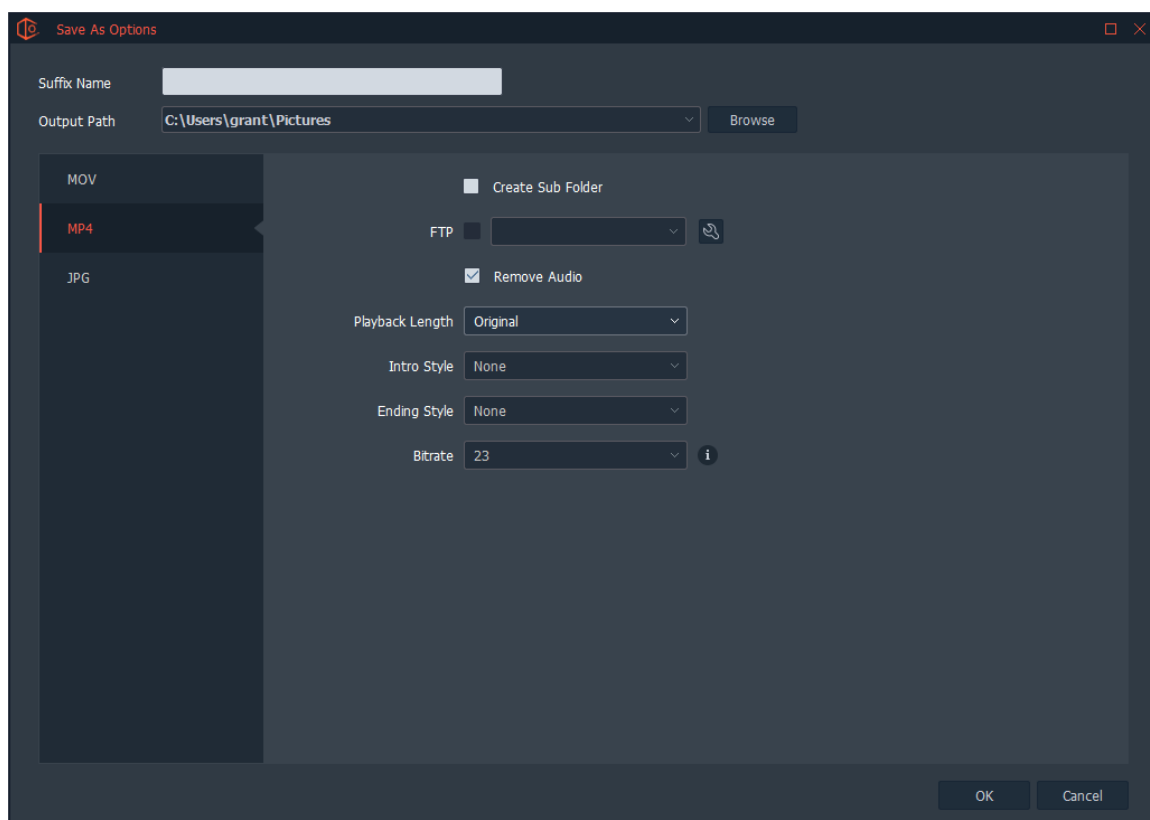
When saving a .MOV file, you have the option to change several saving parameters such as:

- Where you want to save it and whether it should be automatically saved into a sub folder.
- Whether you want to automatically FTP the video after it has been saved locally.
- Whether you want to remove the audio and
- Whether you want to change the playback length.

How to create a non-compressed video – Do not crop, do not remove the audio and do not change the playback length.



When saving the video as a MP4 file, the user has additional saving options and the video will be automatically compressed.



MP4 saving options include:

- Choosing where to save the video
- Whether to automatically create a sub-folder.
- Whether to remove the Audio.
- Whether to change Playback Length.

- Choosing Intro Style and Ending Styles.
- Whether to change the Bitrate.

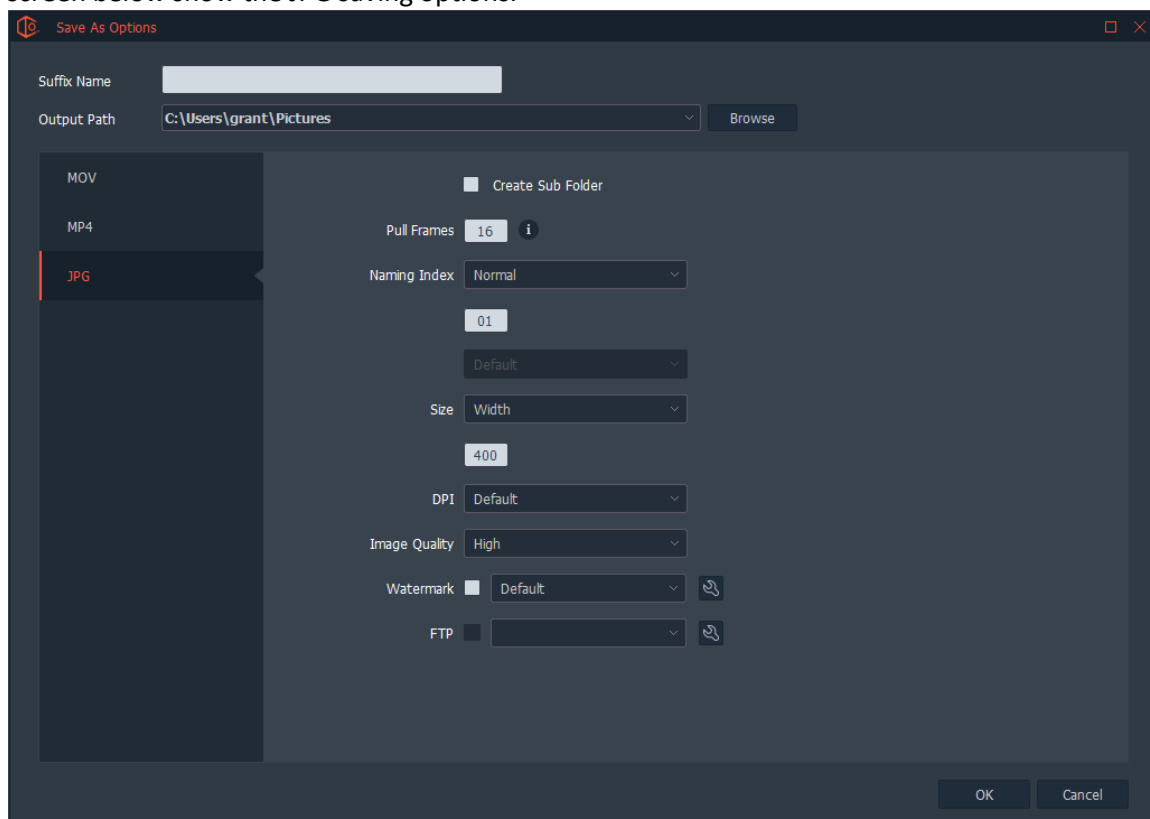
Adding Intro and Ending Styles give the user the freedom to customize the video by adding an Advertisement, Delay or Fade. These increase the communication value of the video.

- Delay: This holds the last frame of the video for the specified duration.
- Fade: This slowly fades the video away over the set duration.
- Advertisement: This shows an advertisement at the end of the video that remains on the screen for the set duration. Browse for the advertisement location and set the duration.

Just like saving still shots and 360's, all Save Types can be saved as a Saving Profile and re-used.

Pulling Frames

Although a video was captured, the individual frames of the video can be pulled and saved as JPGs. The screen below show the JPG saving options.



Pulling Frames from a video and saving them as JPGs has the same saving options as taking and saving an individual JPG file. The big different is how many frames to pull from the video and how they are pulled. In the example above, 16 frames will be pulled from the video. That means that 16 equally spaced frames will be pulled from the video. If the video is a 360, then a frame will be pulled every 22.5 degrees.

You can pull as many frames as you like, but you cannot go over the total amount from frames available. For example, if you were shooting 30 frames per second and shot for 10 seconds, then you would have up to 300 frames to choose from. If you tried pulling more than 300 frames and error message would appear.

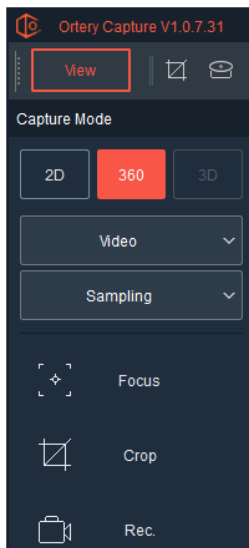
Many of our customers use this feature to quickly create and save a video, but also pull frames so they have the option to batch edit those JPG files and stitch them into an interactive 360 degree product animation.

360 - Video Sampling

360 Video Sampling allows the user to capture a video and take out the individual frames that correspond with specific angles in order to create a 360 Animation in HTML5 format. It has several advantages. When the user needs to capture a lot of images, using 360 Video Sampling will be faster. This gives the user an opportunity to edit the images to create the 360 Animation.

To create a 360 Animation from 360 Video Sampling, select 360 as the Capture Mode, Video as the Capture Type and Sampling as the Capture Style.

On the right side of the screen Animation Settings will appear. Choose the Number of Images to pull from the video over the Spin Range desired.



Press Record to start the 360 Video capture.

360 Custom Defined

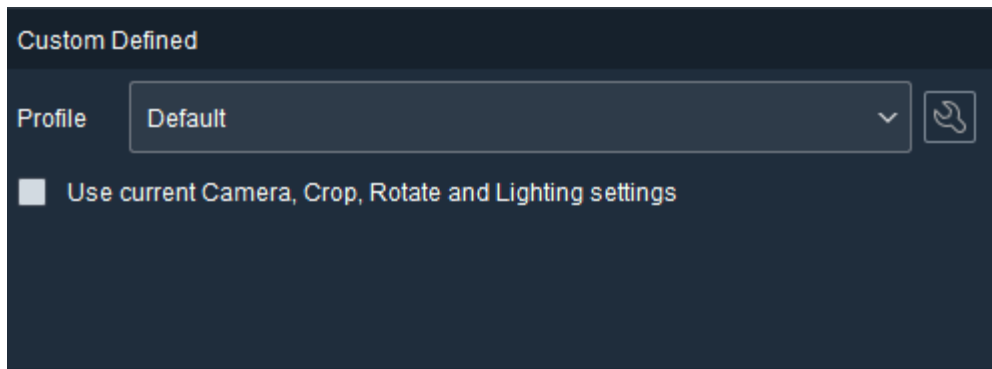
This feature automates the process of capturing images from multiple angles with one or more connected cameras. The 360 Custom Defined feature can be used to create a repeatable shooting sequence that automatically captures images from several angles.

For example, with 2 cameras attached to an Ortery machine with a turntable, a 360 Custom Defined Profile can be quickly created to capture pictures from 5 angles - the front, 45 degree view, left, right, back and top. Profiles can be saved and re-used.

By choosing 360 / Custom Defined, Custom Defined options appear on the right side of the user interface. Users have the choice of using an existing profile or creating a new one.

Create a New 360 Custom Defined Profile

To create a new 360 Custom Profile, press the Settings button.



This brings out a screen where the user can see an overview of the image capture sequence and the individual picture settings. Each horizontal line represents a picture to be taken. To see a preview and image settings for a particular picture, simply click the picture.



Profile Settings

At the top, users can select and manage Custom Defined Profiles using the Save, Save As and Delete buttons. In addition, a profile can be given a Description and the user can determine an appropriate Ending Action.



Ending Action

For Custom Defined sequences that utilize a turntable, after the final shot is captured the Ending Action feature is used to determine what happens next.

- Rotate Back to Zero (The way it came)
- Rotate Back to Zero (Fastest Way)
- Do not rotate Back to Zero

Picture Settings


The pictures to be taken are defined one-by-one and represented as a horizontal line. Note: Pictures are added in a sequence and can also be deleted or edited.

In the case below, 5 images from 2 different cameras and angles were set up to be shot. Note the profile name is '5 shot - sides'.

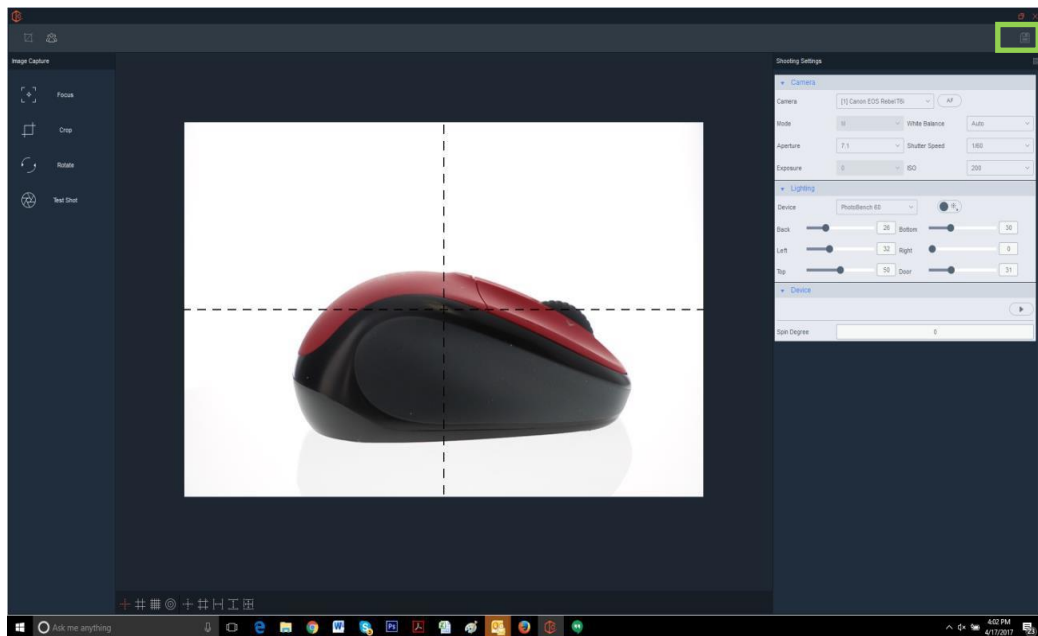


In this case, 4 pictures are using one Canon T5i camera and the final top shot is using another. Note that the pictures will be taken in Continuous mode rather than Time Lapse (or Manual).



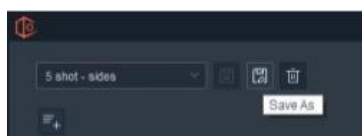
Pictures can be edited, added or deleted from the workflow. To add a sixth picture to this sequence, simply click the + or  picture button.

By pressing the Settings button, the user can further define the features of the picture to be taken. A live preview will appear and the user can set up the shot. Camera settings, lighting settings, crop settings, preview rotation settings – almost everything that makes up the Live Preview will be set and memorized as part of that picture. Just click the Save button.

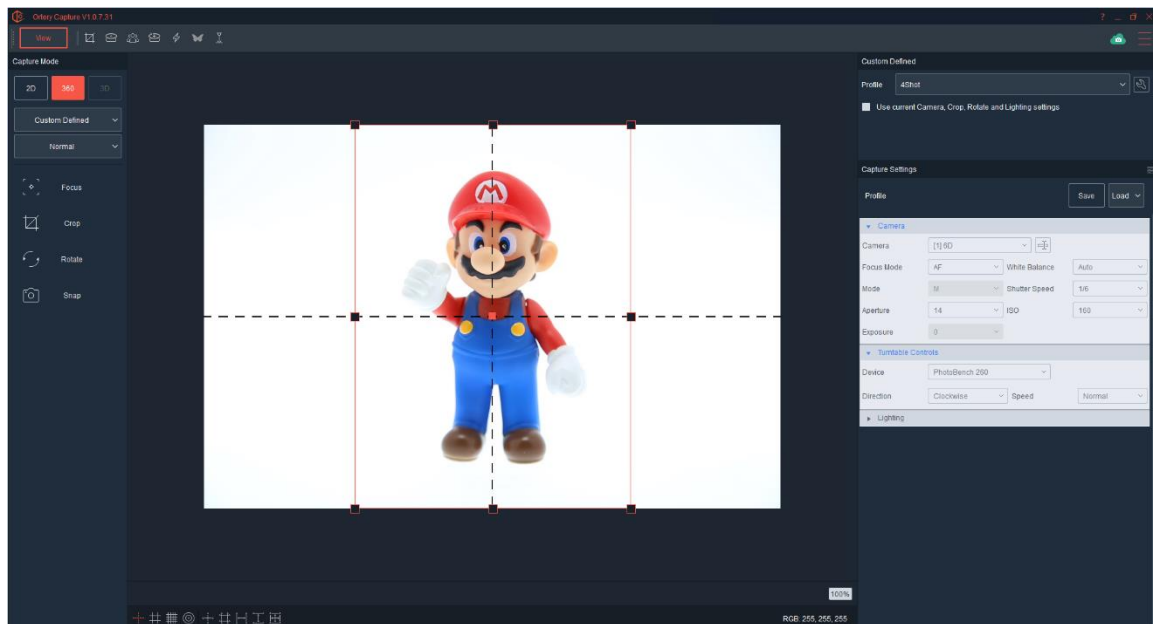


Each picture inside the sequence can be defined this way.

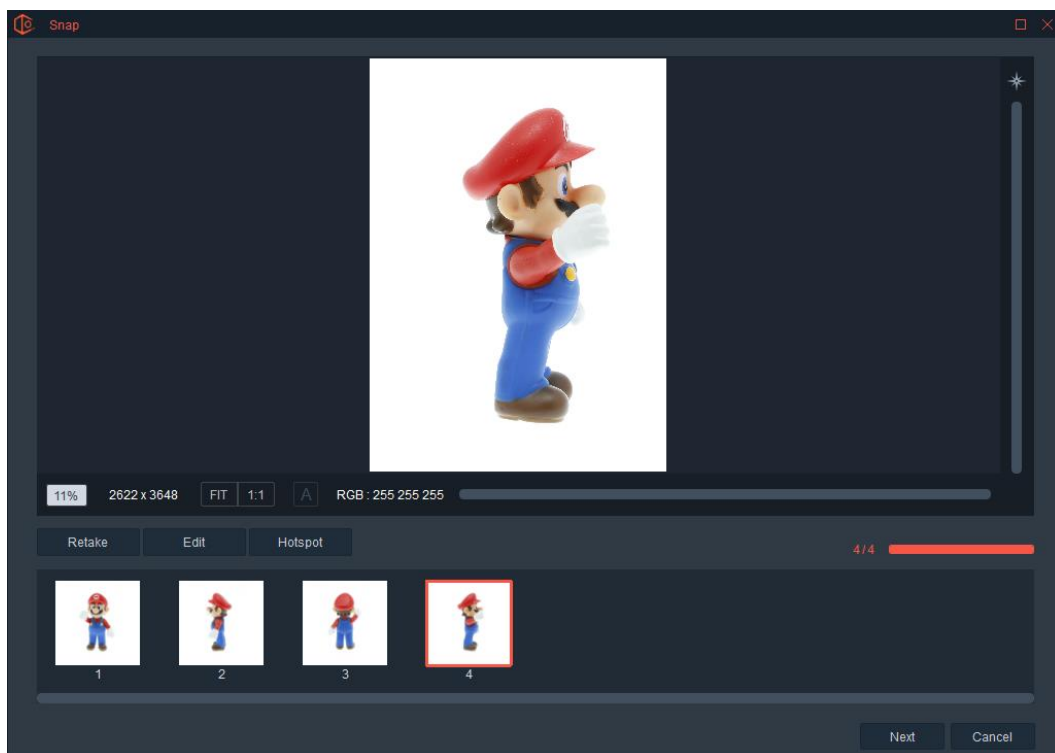
Once each shot of the sequence has been defined, the user can describe the profile then click Save or Save As to save the Custom Defined profile.



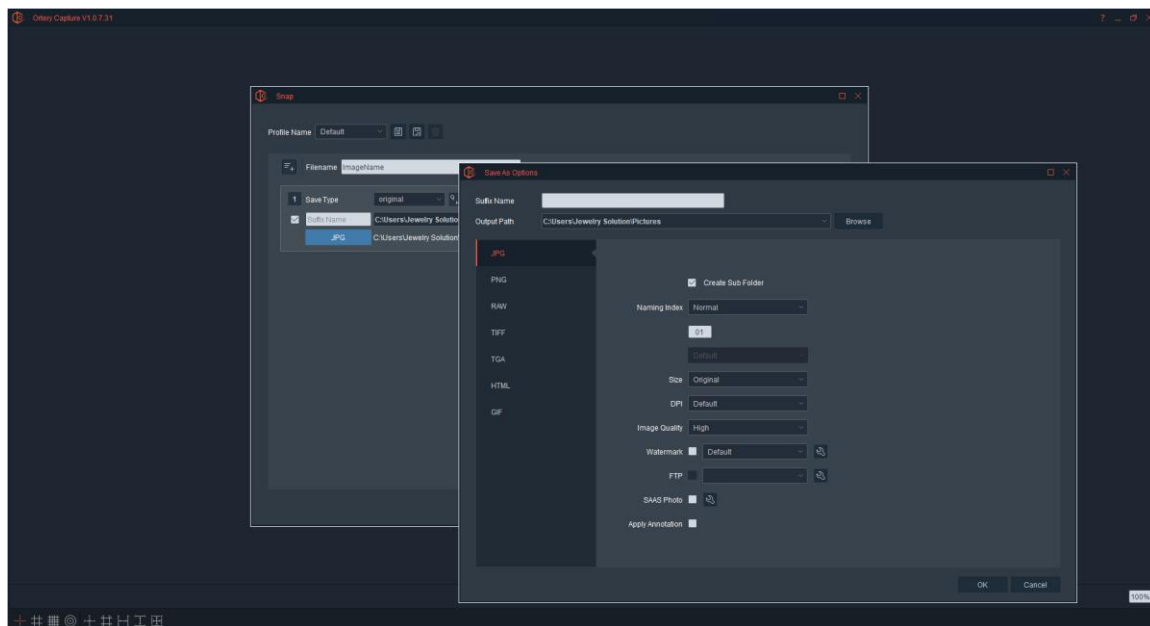
Once saved, a profile can be selected and used by clicking Snap to initiate the specific capture sequence.



The images are captured one by one.

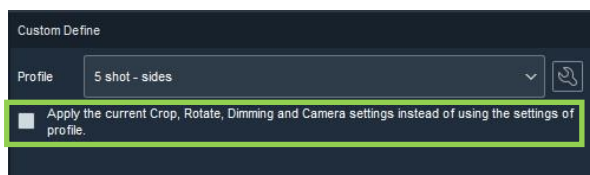


Captured images can then be saved using pre-defined Save Types and Saving Profiles.



Select an Existing Custom Defined Profile

Use the pull down to select the Custom Defined Profile. After a profile has been selected, clicking Snap will initiate the entire image capture sequence, as it was defined.

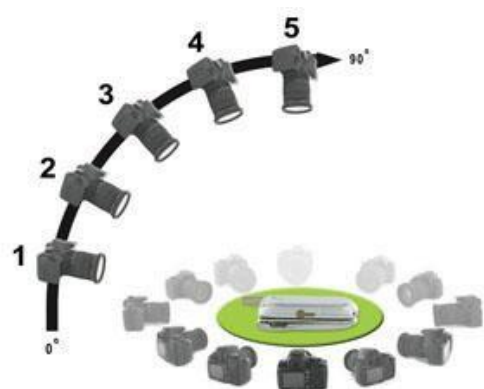


Note: The individual picture settings inside the profile, can be defined for each shot, however users can override the individual picture settings and use the current camera, crop, rotate and lighting settings by clicking the check box. This makes it easy to go from shooting one color or type of product to another without having to re-define an entire shooting sequence.

Create 3D Animations

Creating hemispherical and full spherical animations is very similar to creating 360-degree animations. The big difference is that the 360-degree process is repeated several times, at different “rows” while the camera moves up and over the object. For example, a 3-row hemispherical animation may contain 3 sets of 360-degree animations taken at 0 degrees, 45 degrees and 90 degrees with a certain amount of images in each row.

For spherical animations the camera moves over the top of the object to capture the “Northern Hemisphere” then the object is flipped and the process repeated to capture the “Southern Hemisphere”. For both hemispherical and spherical animations, the Ortery Capture software composes the individual files to make a coherent, interactive 3D animation of the images. These 3D animations offer high quality images, click and drag mouse control in any direction and zooming with HTML5 output options.



The 3D image creation feature references which hardware device is in use and automatically displays the appropriate software workflows and features. Overall, Ortery creates three types of 3D devices:

- 3D MFP and Photosimile 5000
- 3D MultiArm Series
- 3D PhotoArm Series, 3D Rail and 3D PhotoModelling 300

The workflows and features associated with each device type will be different since each of these devices capture images differently.

The Installation and Operation Guide of each device will go over how to physically set up the equipment. This User Guide covers the 3D software workflows and the specific functions that can be used to capture and produce 3D output.

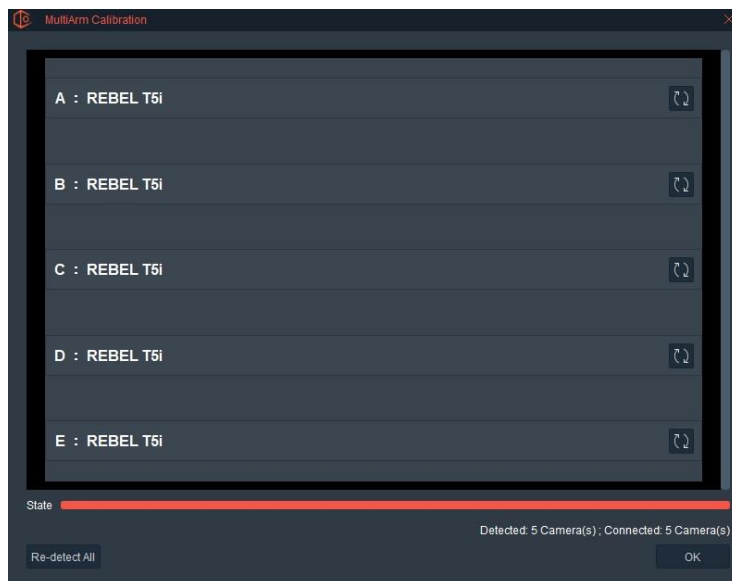
Regardless of the hardware, Ortery Capture allows the user to capture up to 800 images total. This limit is in place to ensure the files created are not too large to even play.

Some Ortery devices allow the user to capture up to 10 rows in the Northern Hemisphere and up to 10 rows in the Southern hemisphere. Therefore, the biggest animation possible would be a spherical animation with 20 rows (10 in the South and 10 rows in the North) each with 40 pictures per row.

Users can choose to shoot fewer rows and have more images per row. For example, 10 rows in a hemispherical format could have up to 80 images per row.

3D Image Capture Capturing 3D Images with 3D MultiArm and Multiple Cameras

When a 3D MultiArm device is attached and the software is launched, the software will automatically show the screen below and search for connected cameras.



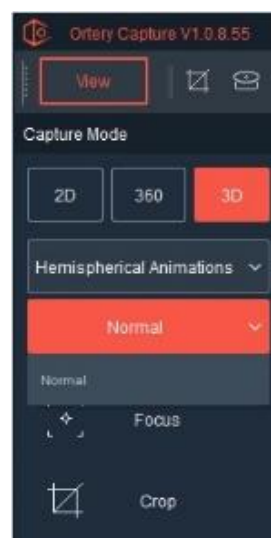
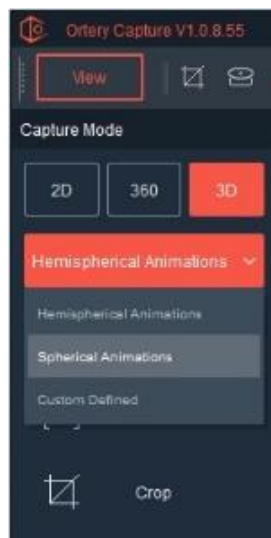
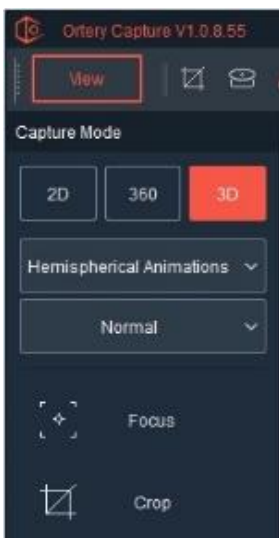
Clicking OK launches the software.



To capture images in 3D format, click Capture and select 3D as the Capture Mode, then choose the Capture Type. Choose from these three Capture types:

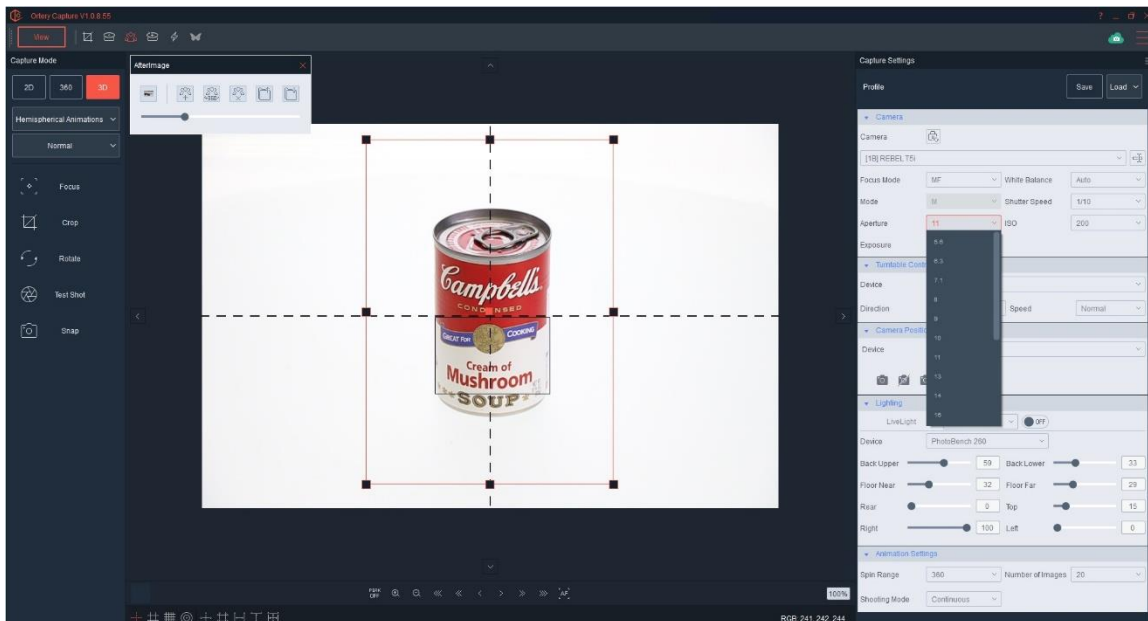
- Hemispherical Animations
- Spherical Animations
- Custom Defined

Then choose the Capture Style. **Note:** Normal is currently the only option.



After choosing the right shooting mode, type and style, adjust the lights and camera exposure until the preview looks like the picture you want to take.

This is exactly the same as if you were taking a still shot, except for the 'Lock' button at the top of the Camera Settings area. If you choose to lock the settings, then each of the attached cameras will simultaneously use the same settings.

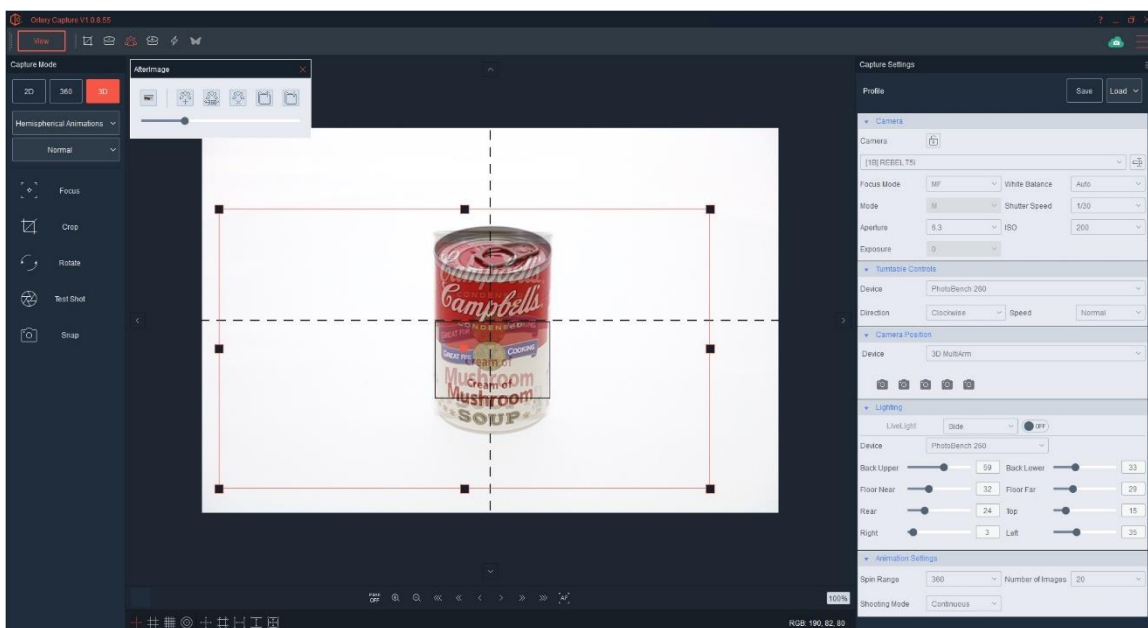


Camera Alignment

Move the entire 3D MultiArm until the top camera is directly above the center of the turntable. At the same time, make sure that all the other cameras on the arm point at the 0-degree position – in other words they cut through the center of the turntable vertically.

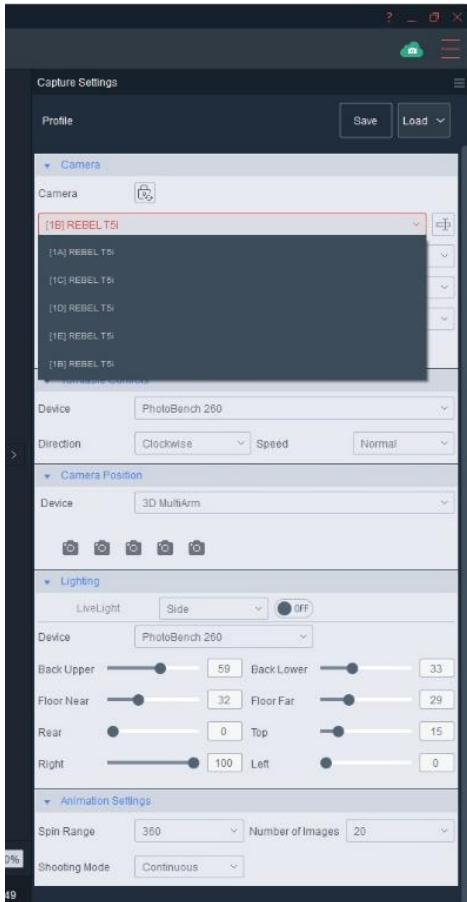
Place a product in the center of the turntable and on each lens move the focus slider to MF. The MultiArm only allows the user to focus manually, by twisting the focus ring on the end of the lens.

Move the 3D MultiArm up or down until Camera A – the lowest camera on the arm - cuts through the vertical center of the product.



Once Camera A is properly zoomed, focused and aligned, create an AfterImage from that angle.

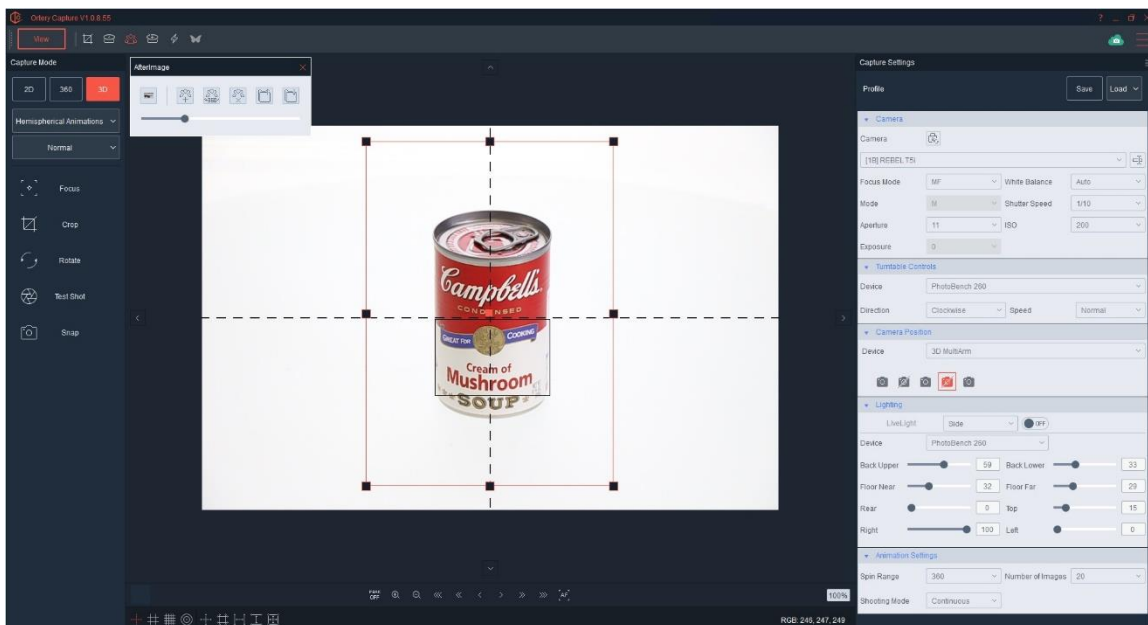
Pull down the list of attached cameras and choose Camera B. Use the AfterImage from Camera A to align, focus and zoom Camera B.



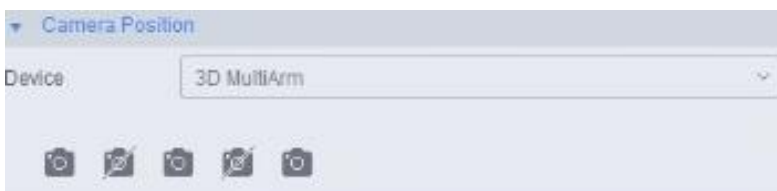
Repeat this process for each camera on the MultiArm.

After each camera is aligned, check the results by viewing the live preview of each camera. For example, select Camera A, then B then C then D then E and watch the live preview to make sure the product does not get bigger or smaller or shift left to right. It should simply go from a side view to a top view.

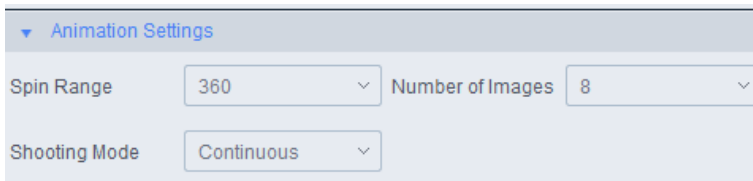
Adjust the crop markers, if necessary.



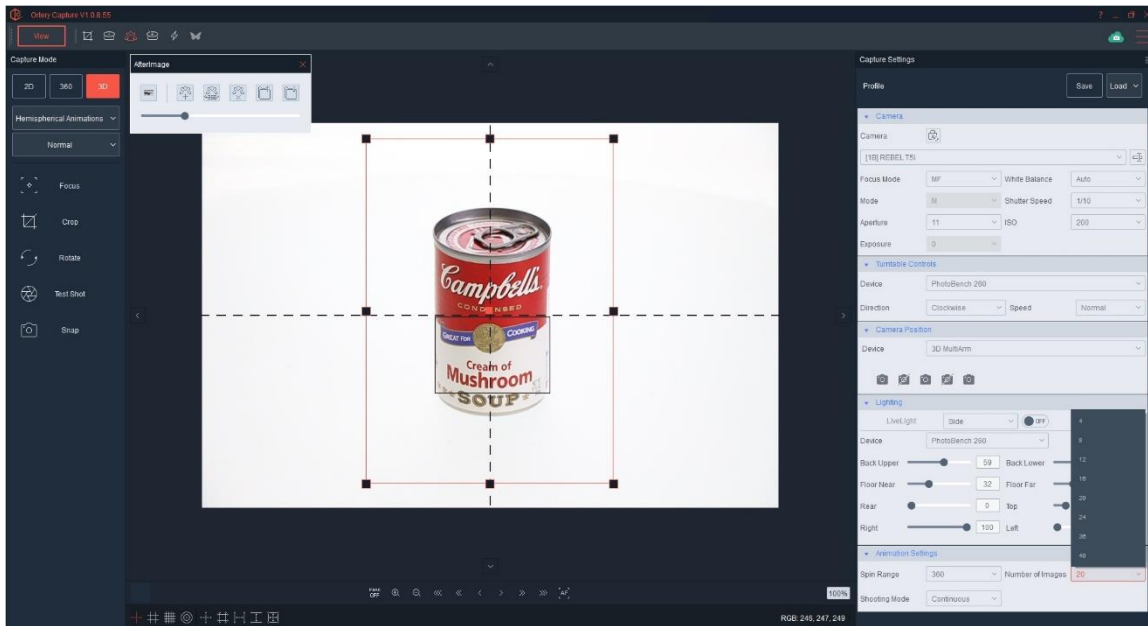
If there are 5 cameras attached to the arm, users can create animations that only utilize 2, 3 or 4 of the cameras by clicking the cameras they do not want to use. Here is an example where 3 of the 5 cameras are selected for use.



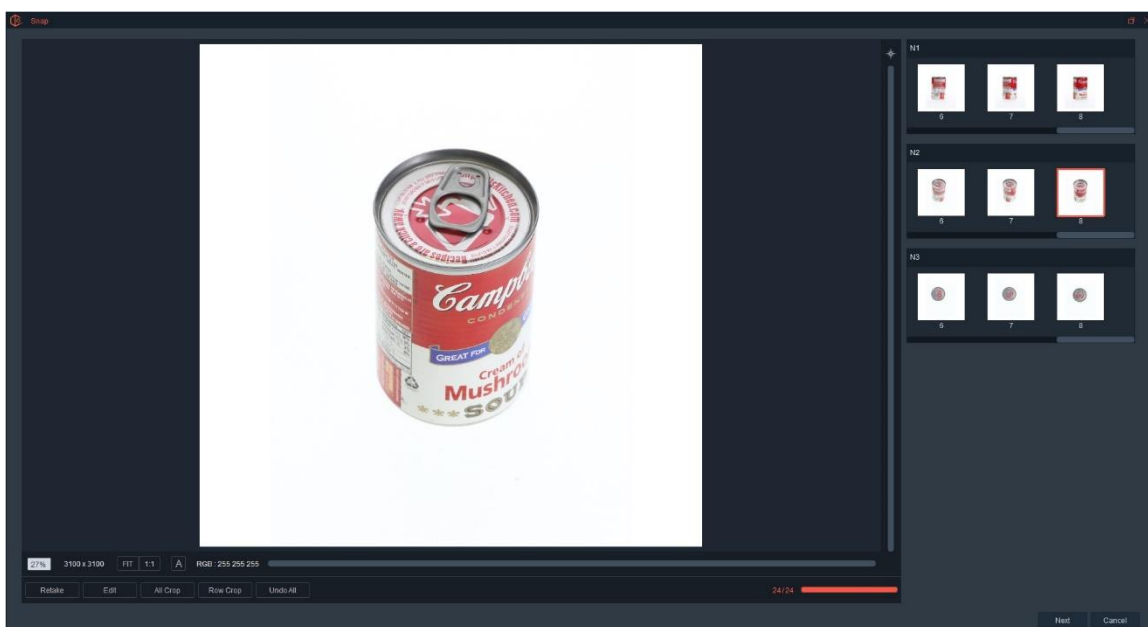
After selecting which cameras to use, the user can set the Animation Settings located at the bottom of the Capture Settings interface, they include Spin Range, Number of Images and Shooting Mode.



Confirm everything with a Test Snap, then click Snap to begin image capture.



Each camera will fire simultaneously and the turntable will automatically move to each position. In the example below, three rows in the Northern Hemisphere were captured.

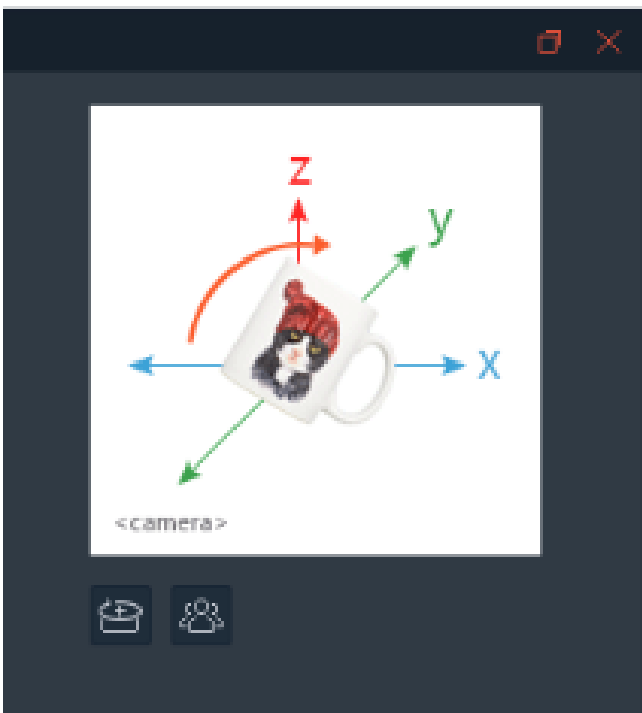
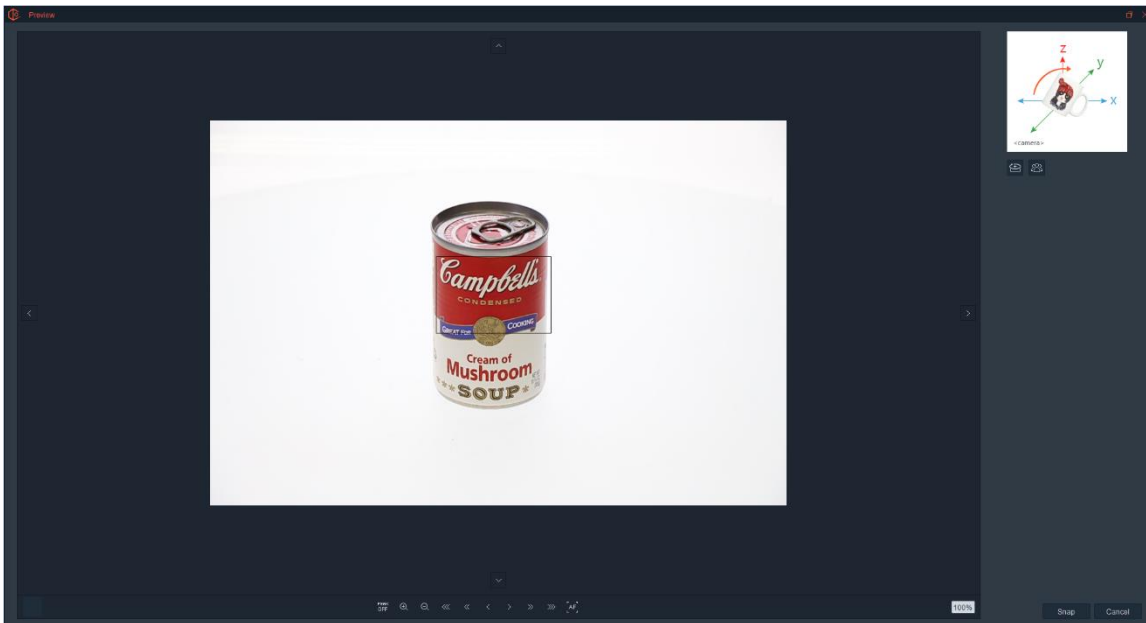


Once the images in the Northern Hemisphere are captured, if you are only capturing a hemispherical view, clicking Next takes you to the saving process.

When capturing a Spherical Animation, clicking next guides you through capturing the images in the Southern Hemisphere.

To prepare for taking the Southern Hemisphere, first, create an AfterImage to help you align the object. Second, follow the video instructions to flip the product upside down by rotating the product 180 degrees clockwise (from the camera's point of view) so the product is upside down.

Note: In order to create a Spherical Animation your product must be symmetrical.

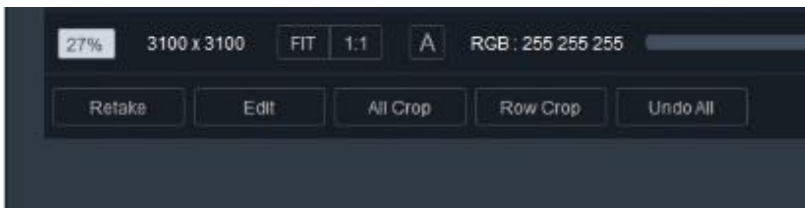


Use the turntable controls to rotate the product to ensure it is centered and perfectly aligned with the AfterImage. Clicking Next guides the user through capturing all the images in the Southern Hemisphere.

Note: In order to create a Spherical Animation your product must be symmetrical.

After image capture is complete, the user can view the images at 1:1, place annotations on specific images and view the RGB values inside any image. Note the display percent and total image size in pixels.

In addition, the user can Retake any image, Edit, All Crop or Row Crop the results.

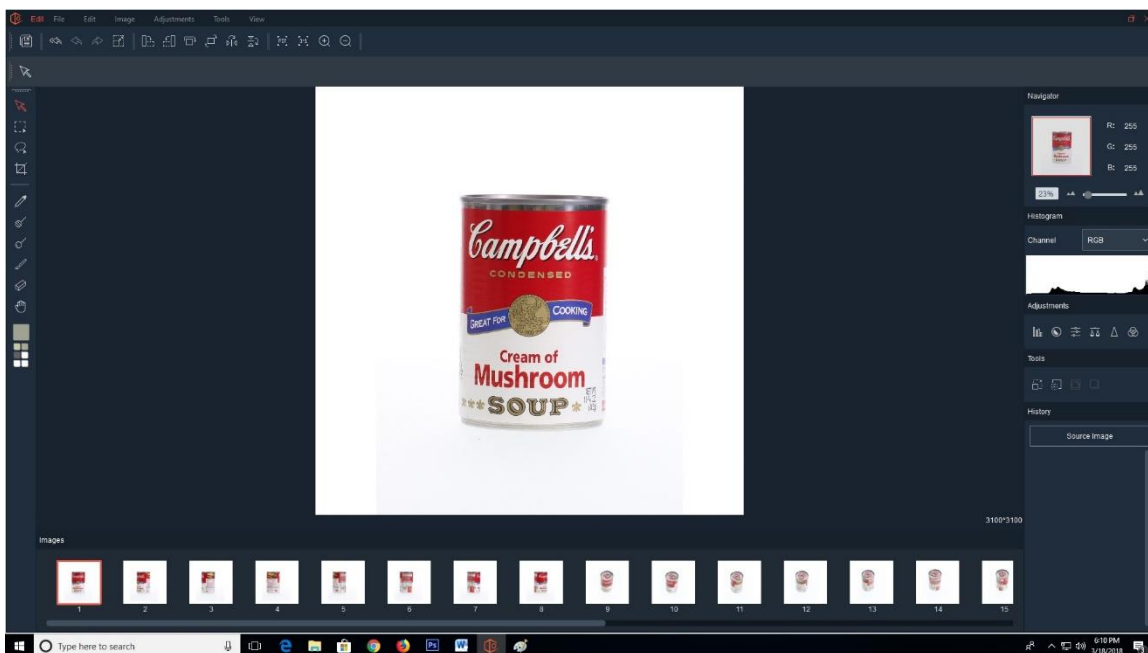


Retake:

Simply select an image press the Retake button. The turntable will rotate to the right angle and the software will instruct the right camera to re-capture the image and automatically replace the original.

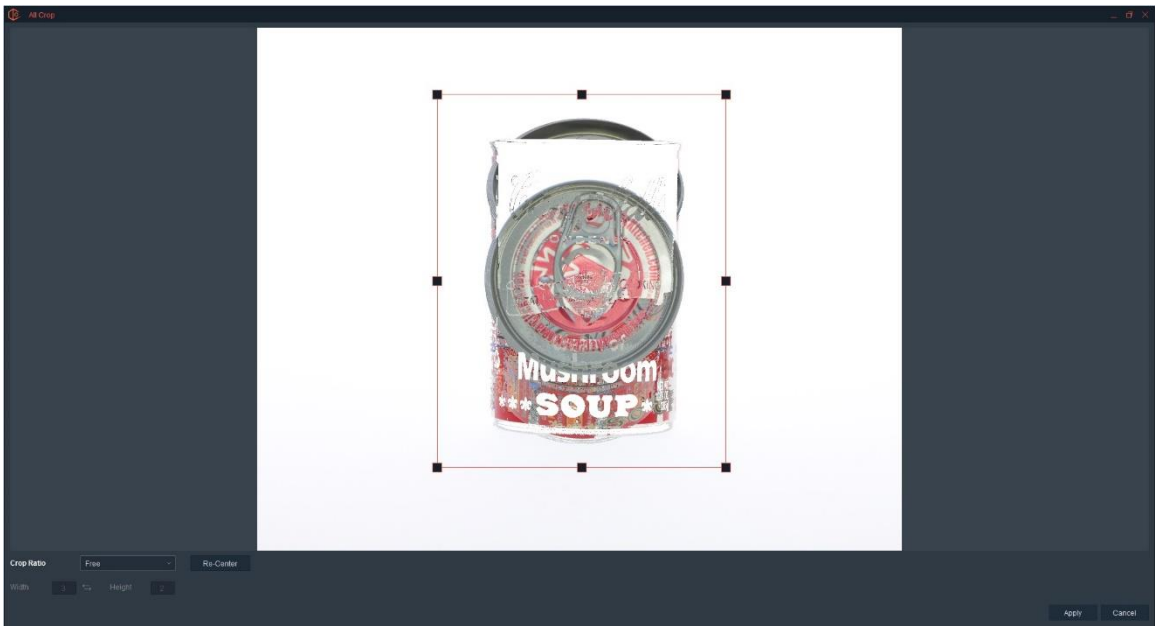
Edit:

Image capture from several angles means that good editing is critical to success. The editing features are exactly the same as those used for still and 360 product photography. These capabilities were covered earlier in this document. Just note that edits can be made row by row or to all rows at once.



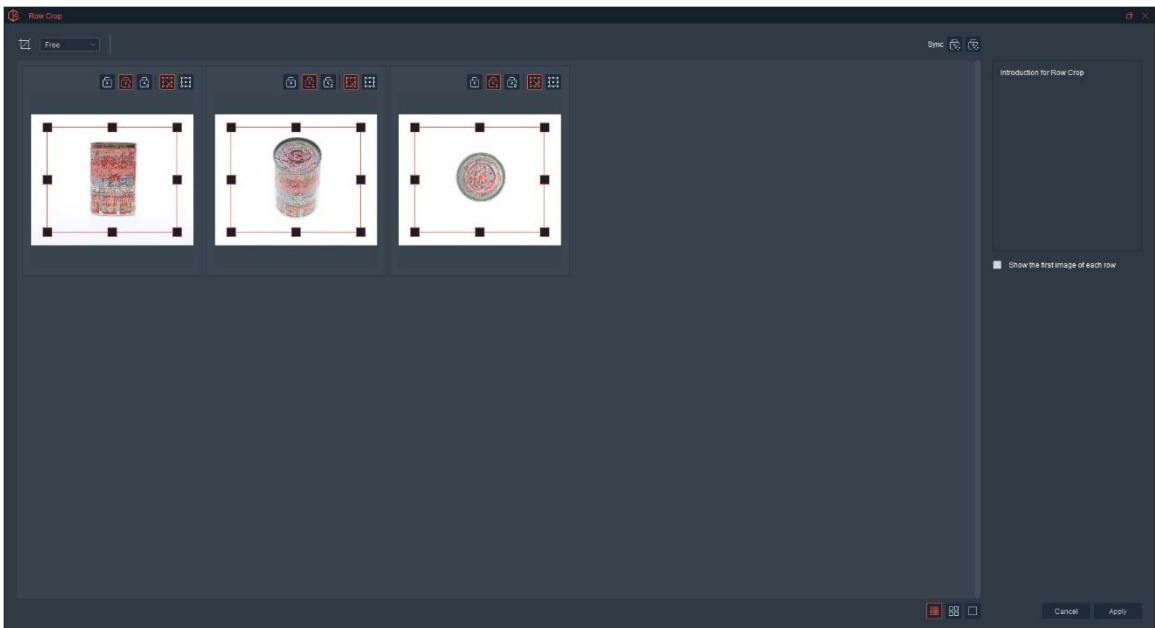
All Crop:

This feature takes the images from each row and overlays them in one convenient view. Adjust the crop markers accordingly and crop every image simultaneously.



Row Crop:

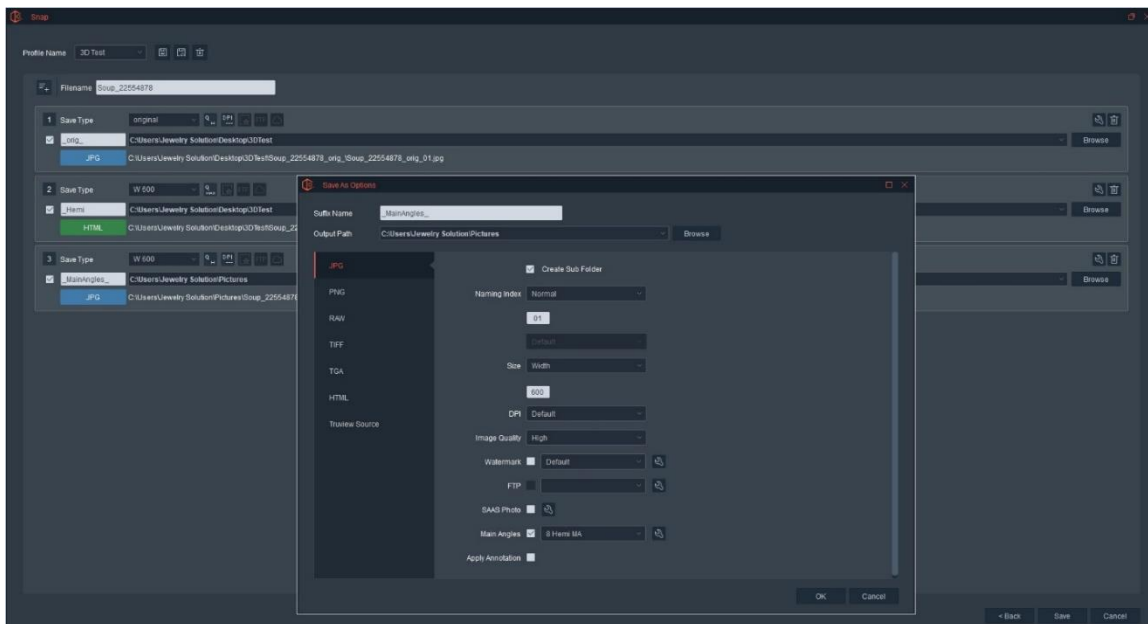
This feature overlays the images in each row and displays them row by row. Users can change the crop per row as well as apply the same crop to each row while seeing how the crop markers / crop will affect each row.



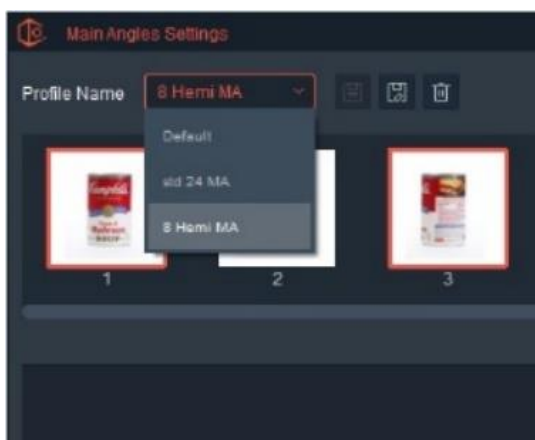
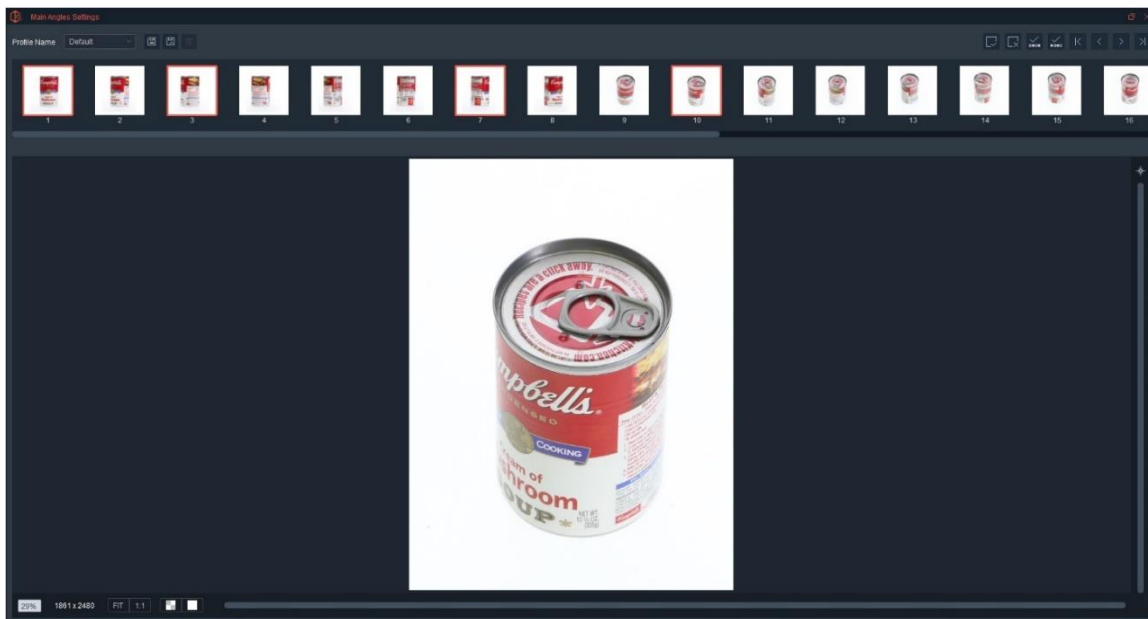
Note the user can crop free form, or by using a fixed size or ratio.



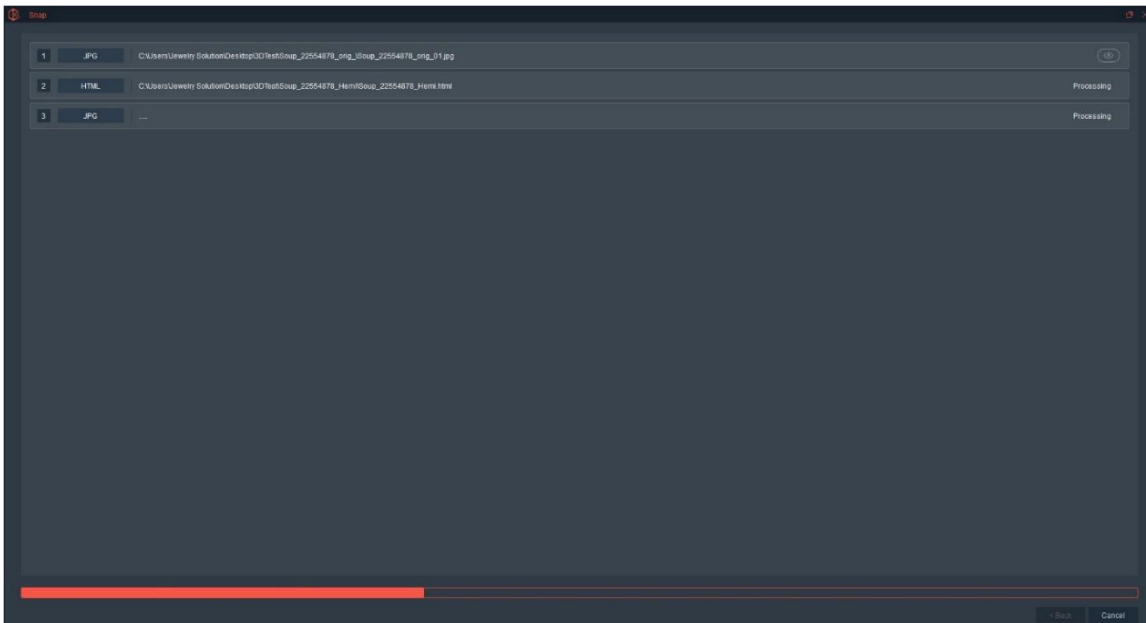
After editing and cropping comes saving. Saving a 3D animation is the same as saving 360 animation which is covered in the 360 animation section of this document.



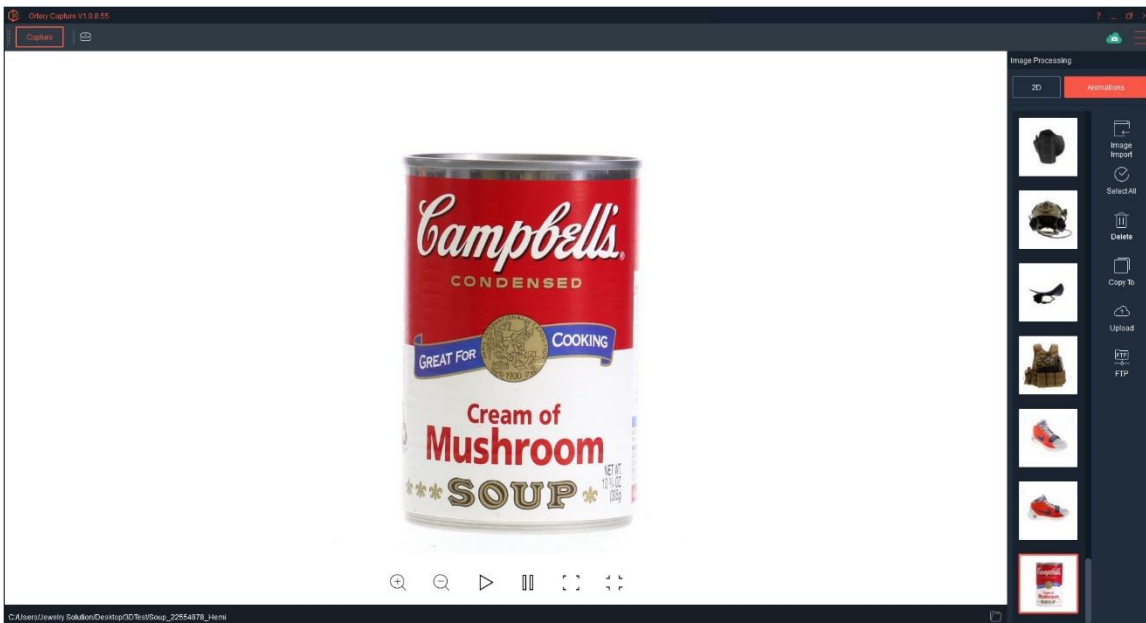
Similar to saving a 360 animation, note the Main Angles can also be pulled out of the full sequence and saved to a different folder with a different size, etc... and used for a different application. Main Angle profiles can also be created and re-used.



Once all the save settings have been set, including the creation of a 3D HTML profile, give the 3D animation a name and click Save.

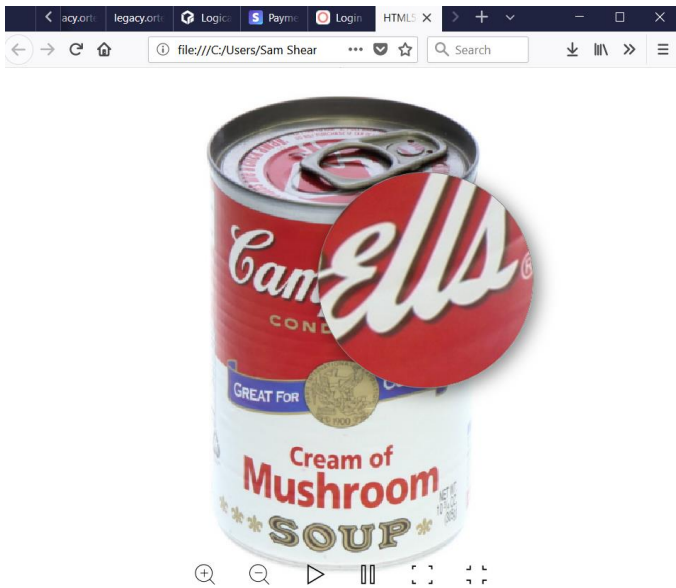


Once saved to the hard drive, the 3D Animation will also appear inside the Animations area on the View screen.



Here is an example of the animation displayed inside a browser. All hosted 360 and 3D animations created with Ortery equipment can be viewed in all browsers on desktop and mobile devices alike.

Keep in mind, SAAS Photo, Ortery's hosting system makes saving and sharing animations easy by automatically saving them in the cloud.



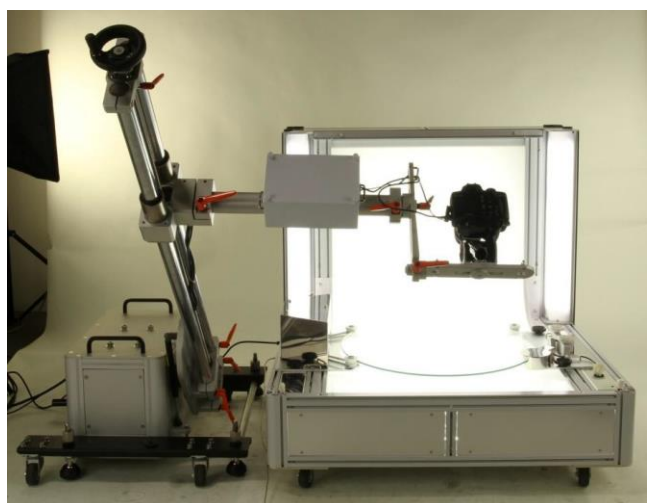
3D Image Capture with a Single Camera

Many Orery 3D devices utilize a single camera which means the camera will need to be moved from one location to another to capture the different rows. In addition, the camera will need to be tilted differently at each position to remain focused on the vertical center of the product. Other than those two, the software workflows are very similar.

Using 3D PhotoArm 2000 or 3000

If you are using Ortery 3D PhotoArm 2000 or 3D PhotoArm 3000 device the create 3D animation workflow will be as follows.

A 3D PhotoArm device can carry a camera to any angle along a spherical path around an object placed on a turntable.



The first step is system alignment. Proper positioning of the turntable and 3D PhotoArm is required. This will only be covered briefly since this information is covered in depth inside the 3D PhotoArm Installation and Operation Guides.

Proper System Alignment:

Move the 3D PhotoArm to the 90-degree position



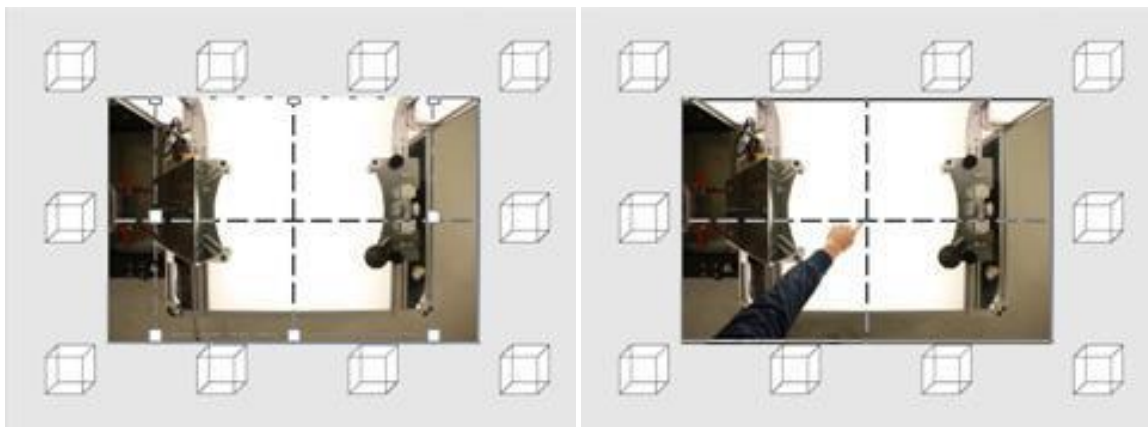
Measure and adjust 3D PhotoArm tank until it is level in all directions by raising or lowering each leg individually.

Adjust 3D PhotoArm Height

Adjust the height of the 3D PhotoArm until the top of the turntable is the same height as the fulcrum of the arm. This may require putting the legs on something solid.

Use the Live Preview in the software to:

Adjust turntable position until the center of the turntable is in line with the vertical crosshair in the camera preview window.



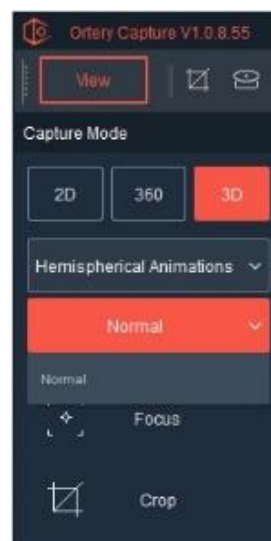
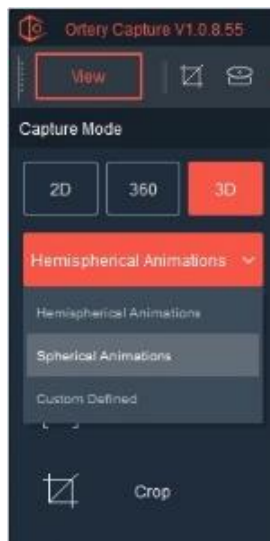
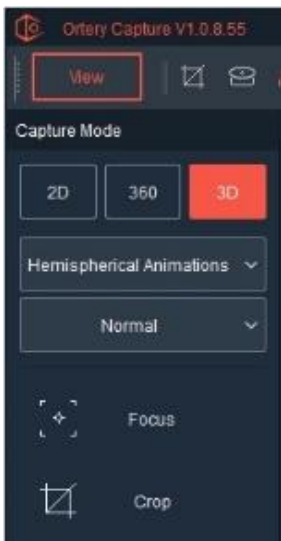
Zoom the camera to assist positioning. Double check everything.

Open the software, click Capture and select 3D as the Capture Mode, then choose the Capture Type and Style.

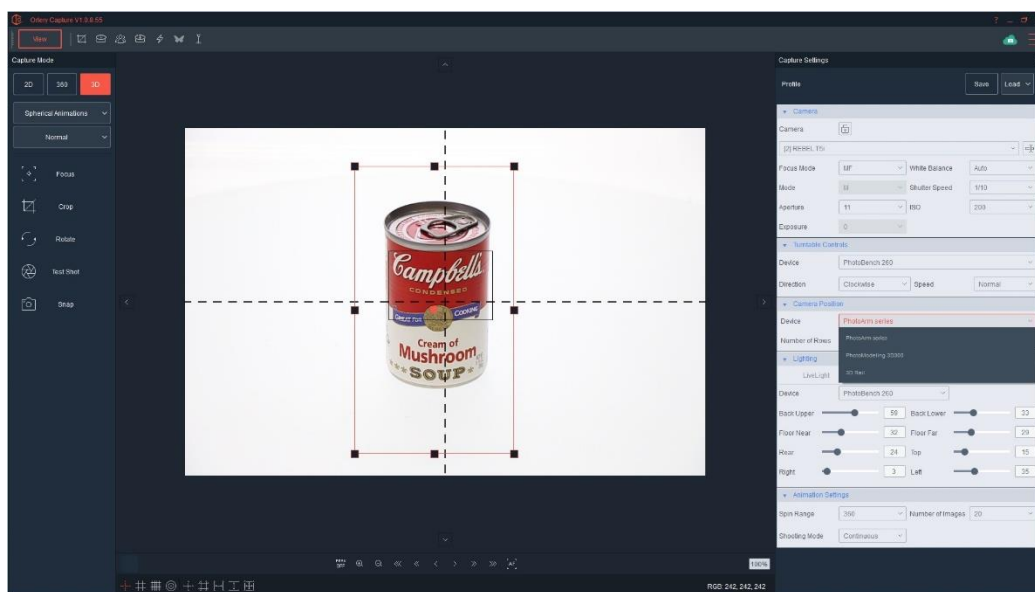
Choose from these three Capture types:

- Hemispherical Animations
- Spherical Animations
- Custom Defined

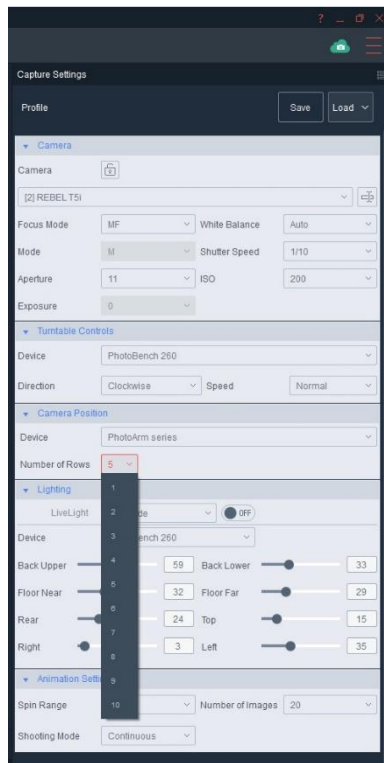
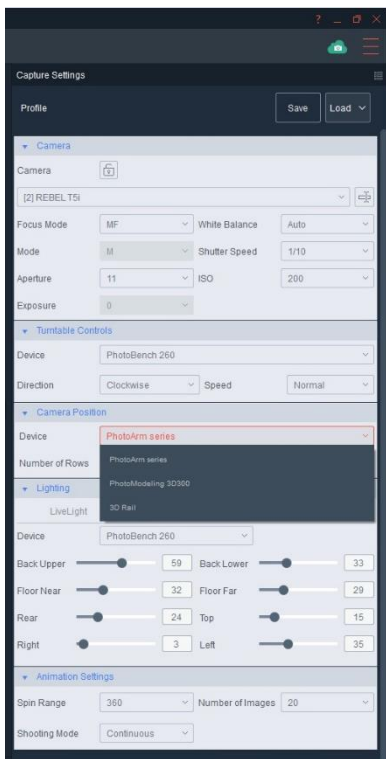
Note: Currently Normal is the only Capture Style.



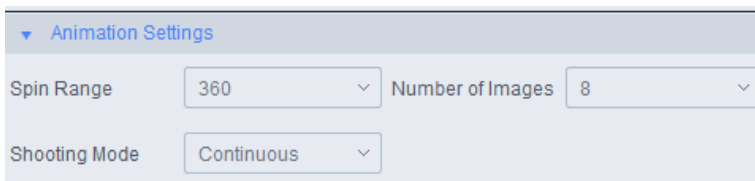
Next, under Camera Position use the Device pull down to select 3D PhotoArm.



Then, select the number of rows to be captured.



After selecting the proper Device and the Number of Rows, the user can set the Animation Settings. They include Spin Range, Number of Images and Shooting Mode.



Once the Capture Settings are set, compose the picture by making the appropriate lighting and camera adjustments, then center and crop.

Center the Object on the Turntable and Crop

In this step you will:

1. Use the real time camera view, Turntable controls and the Position button (optional) to make sure the object is in the dead center of the turntable.
2. While the object spins, adjust the crop markers so the object never goes outside the markers. Remember the same zoom and crop settings must be used for all rows and pictures, so if you change them, you need to re-confirm that the new crop will work at all the other rows.

Good Advice: You could go to each row and watch the product spin to make sure the object never goes outside the crop markers, but since today's cameras all have plenty of resolution. Its best to not crop at all (or very little) and use Ortery's 'Row Crop' or 'All Crop' feature to crop all of the images at once after they have been captured.

Just remember your initial crop has to be big enough to work for all rows.

Helpful Tip: When taking hemispherical or spherical animations on a single camera system, its best to change camera focus to either MF or FIX in the Image Capture software. Manual will hold the focus on a specific area, but will need to be adjusted for each row, while FIX will keep the same focus throughout the complete capture process. Using Auto may work well for some items, but it will fail for others. Using Manual or FIX guarantees a known result.

Hemispherical Shooting Angles

No. of Rows	Shooting Angles									
2	0° 90°									
3	0° 45° 90°									
4	0° 30° 60° 90°									
5	0° 22.5° 45° 67.5° 90°									
6	0° 18° 36° 54° 72° 90°									
7	0° 15 30° 45° 60° 75° 90°									
8	0° 12.85 25.7° 38.55° 51.4° 64.25° 77.1° 90°									
9	0° 11.25 22.5° 33.75° 45° 56.25° 67.5° 78.75° 90°									
10	0° 10 20° 30° 40° 50° 60° 70° 80° 90°									

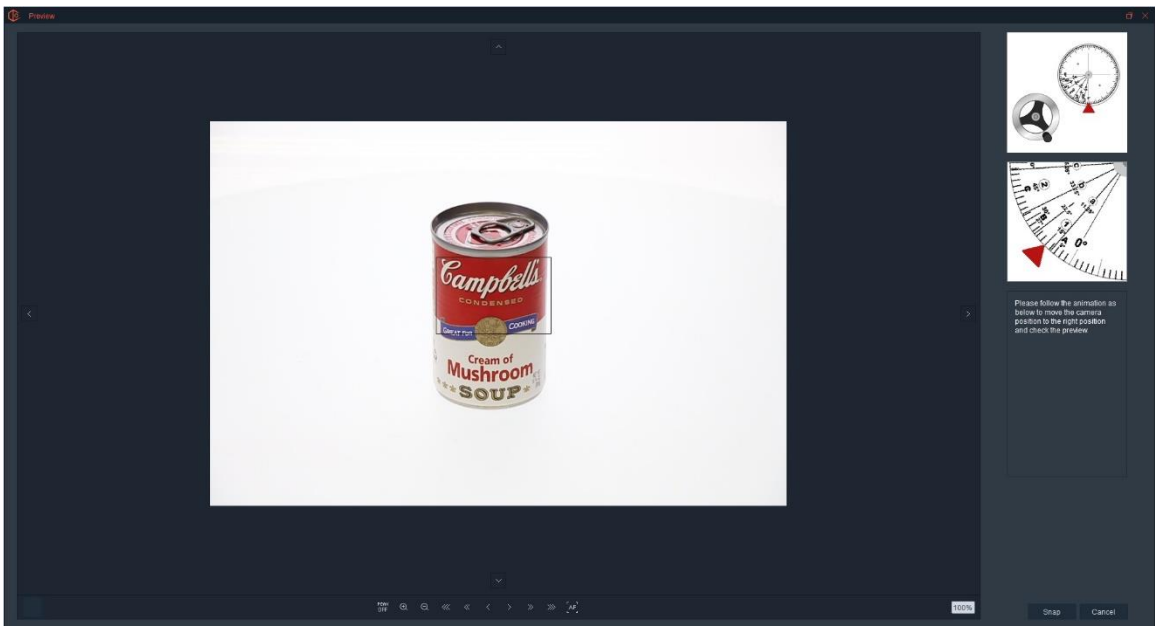
Spherical Shooting Angles

No. of Rows	Shooting Angles				
1	45°				
2	22.5° 67.5°				
3	15° 45° 75°				
4	11.25° 33.75° 56.25° 78.75°				
5	9°	27°	45°	63°	81°

For each row, the camera should point at the same place on the object (vertical center). That will provide a smooth, natural look as the view goes over the top of the object in the final animation.

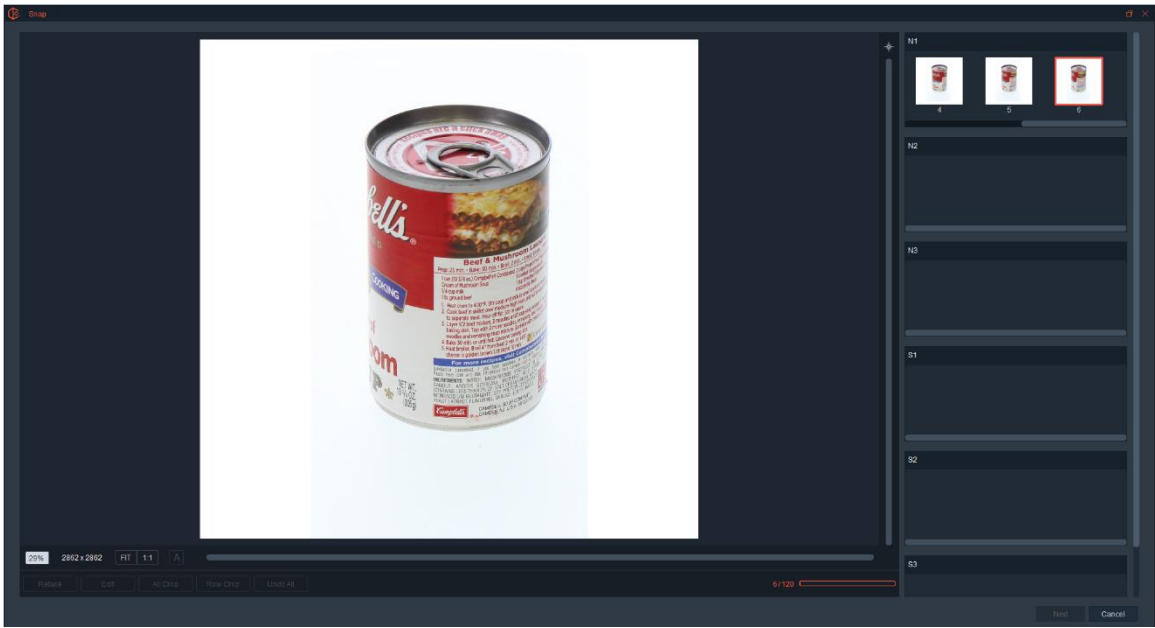
Take a Test Shot or click Snap to begin the image capture process.

The next screen guides the user to move the arm to the first capture position. Then, before starting image capture, make sure the camera is tilted to a position that cuts the object in half vertically (vertical center). In a single camera 3D system, the tilt will need to be moved manually to vertical center before capturing at each row.



The video on the upper right shows exactly which degree to position the arm to capture the first row of 360-degree images.

Clicking Next starts the image capture process.

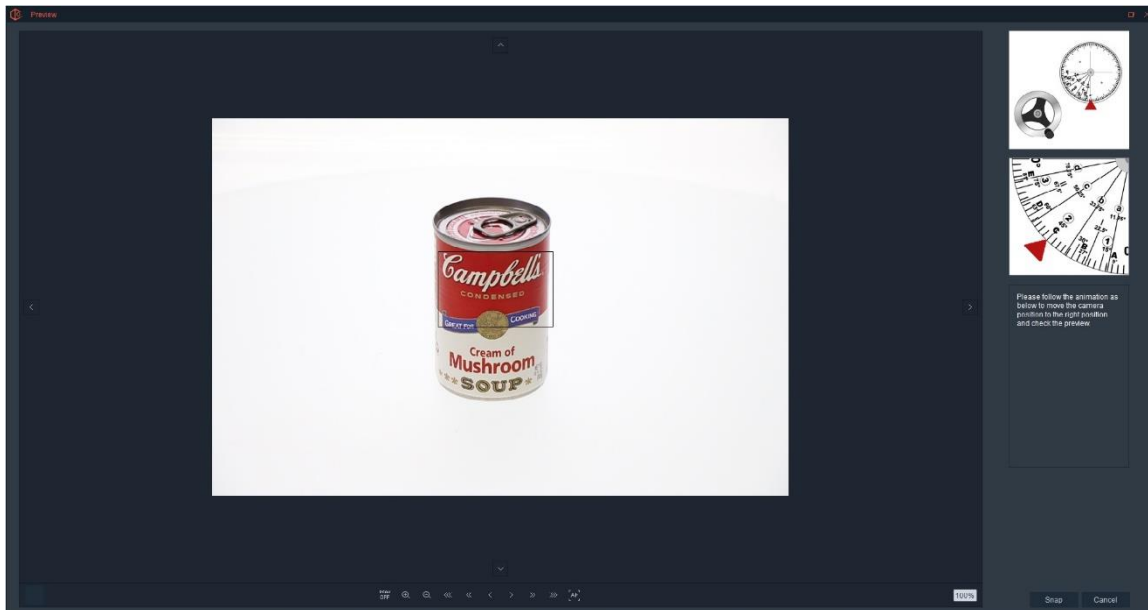


The following angle guide correlates camera position (not degrees) to the number of rows selected. For example, when creating a 3-row animation, the camera positions for image capture will be position 1, 5 and 10.

No. of Rows	Camera Position									
2	1	10								
3	1	5	10							
4	1	4	7	10						
5	1	2	4	8	10					
6	1	2	4	6	8	10				

7	1	2	4	5	6	8	10			
8	1	3	4	5	6	7	8	10		
9	1	2	3	4	5	6	7	8	10	
10	1	2	3	4	5	6	7	8	9	10

Once all the images in the first row have been captured, the program will guide the user to move the camera to the next capture position. Again, tilt the camera to vertical center before starting image capture for the second row.

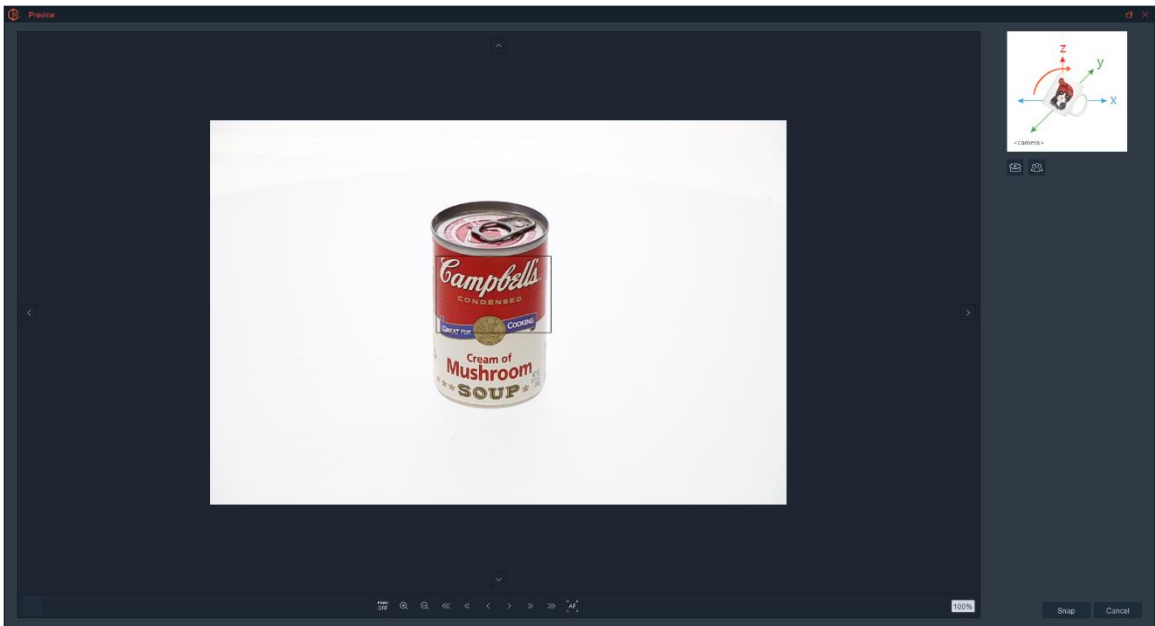


This process will continue until all rows in the Northern Hemisphere have been captured. If capturing a hemispherical view, clicking Next takes you to the saving process.

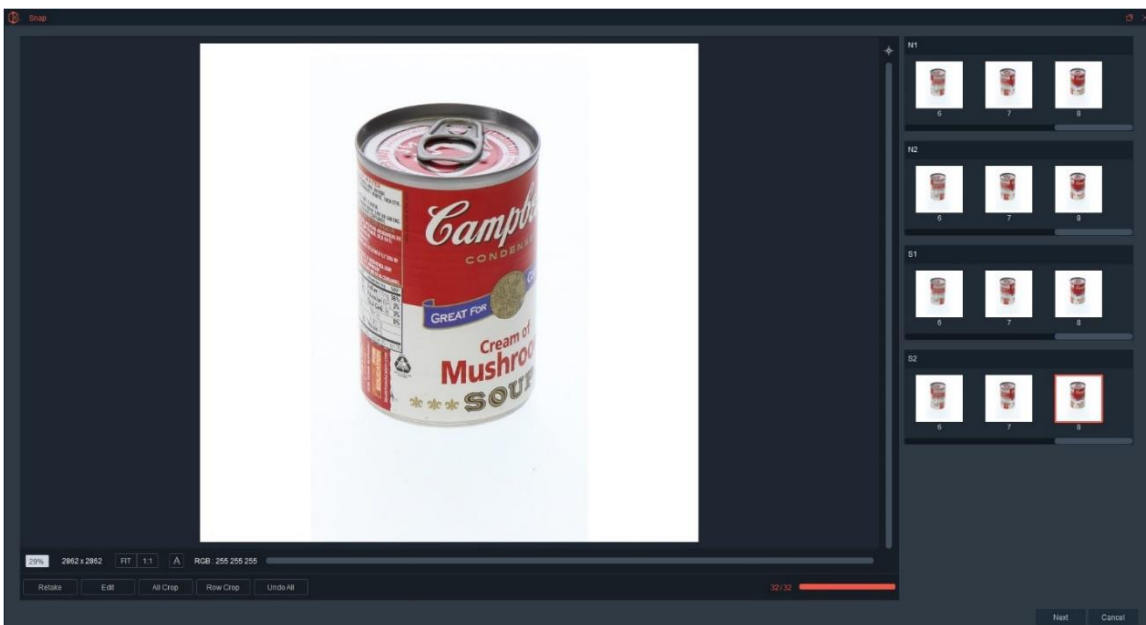
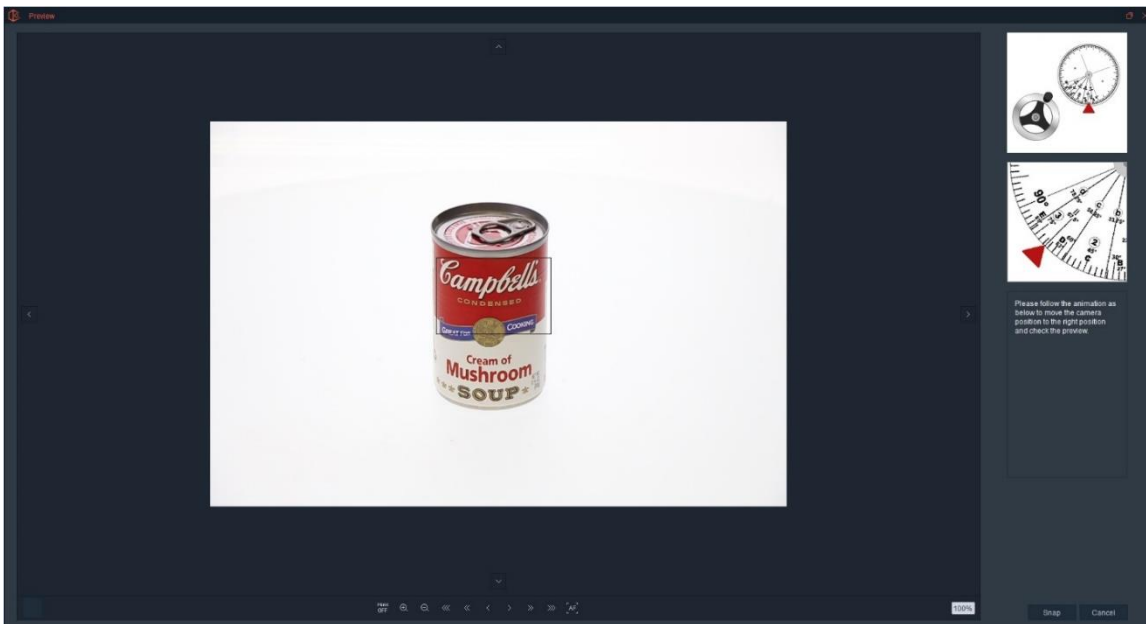
When capturing a Spherical Animation, clicking next guides you through capturing the images in the Southern Hemisphere.

To prepare for taking the Southern Hemisphere, first, create an AfterImage to help you align the object. Second, follow the the video instructions to flip the product upside down by rotating the product 180 degrees clockwise (from the cameras point of view) so the product is upside down.

Note: In order to create a Spherical Animation your product must be symmetrical.



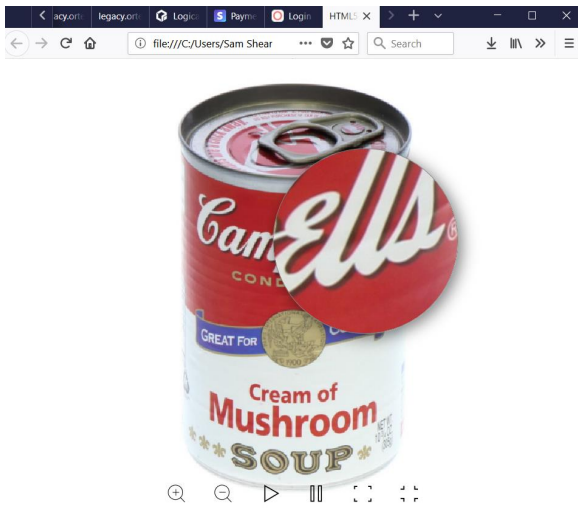
Use the turntable controls to rotate the product to ensure it is centered and perfectly aligned with the AfterImage. Clicking Next guides the user through moving and tilting the camera to properly capture all the images in the Southern Hemisphere.



Once all the images have been captured, clicking Next begins the saving process. To learn more about the saving process, view the 360 section of this document, it is almost exactly the same.

Here is an example of the animation displayed inside a browser. All hosted 360 and 3D animations created with Ortery equipment can be viewed in all browsers on desktop and mobile devices alike.

SAAS Photo, Ortery's hosting system makes saving and sharing animations easy by automatically saving them in the cloud.



Using a 3D Rail

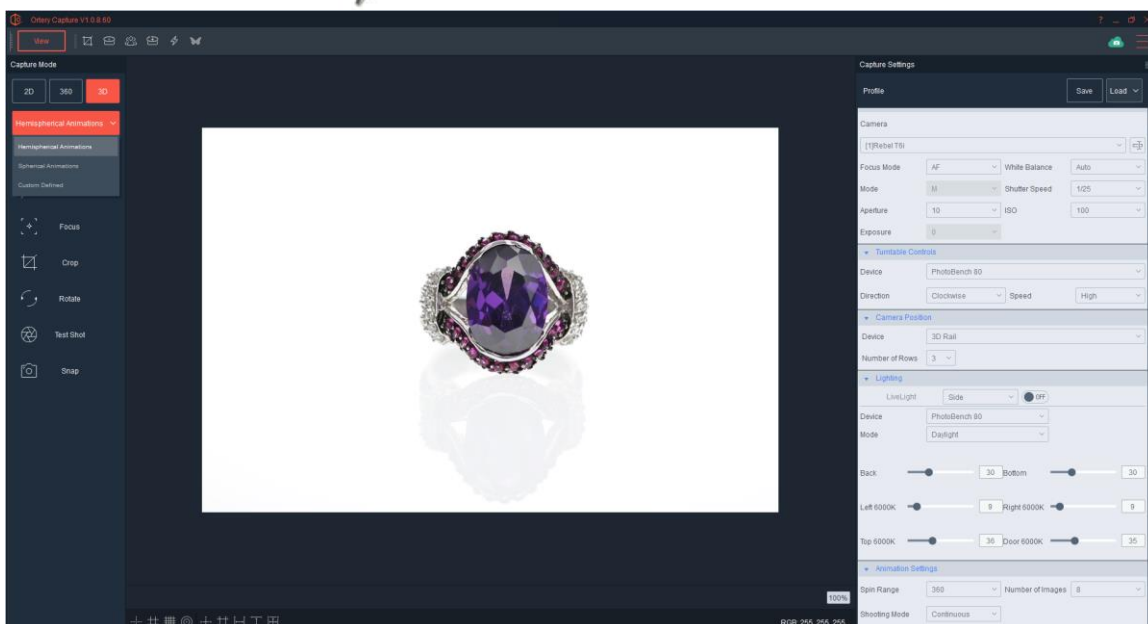
The 3D Rail is a unique 3D product used to assist in the capture of small items like jewelry. It was made to be used specifically with the PhotoBench 60 or 80.

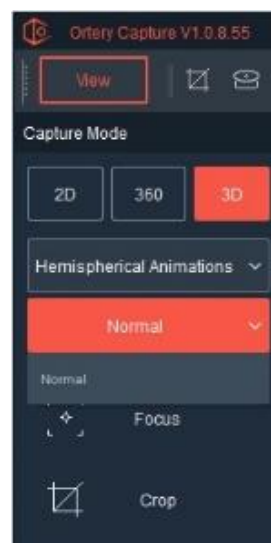
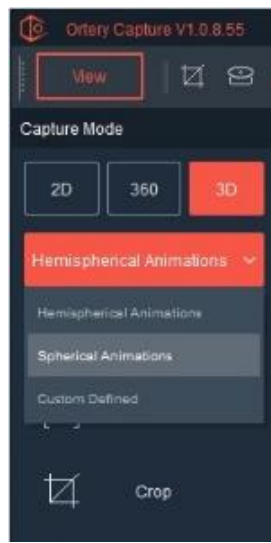
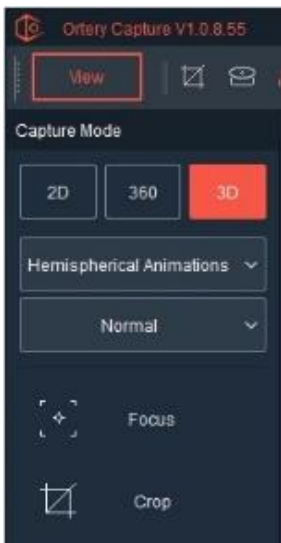


Open the software, click Capture and select 3D as the Capture Mode, then choose the Capture Type and Style. Choose from these three Capture types:

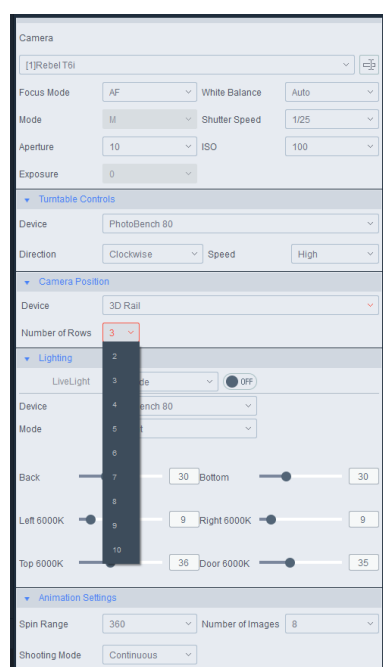
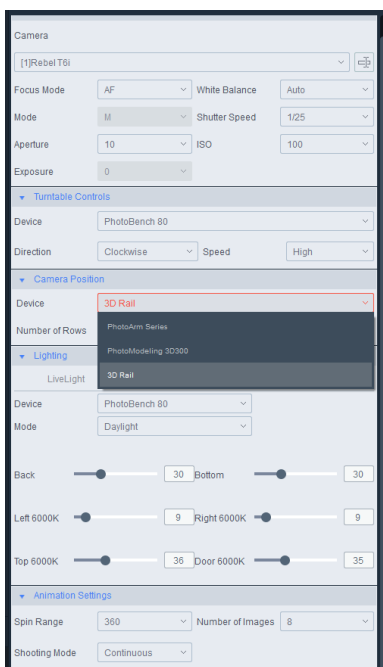
- Hemispherical Animations
- Spherical Animations
- Custom Defined

Note: Normal is currently the only Capture Style available.

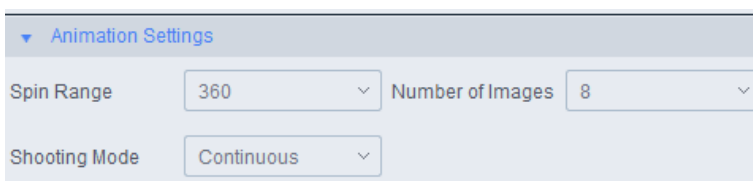




Next, under Camera Position use the Device pull down to select the 3D Rail. Then, select the number of rows to be captured.



After selecting the proper Device and the Number of Rows, the user can set the Animation Settings located at the bottom of the Capture Settings interface, they include Spin Range, Number of Images and Shooting Mode.



Once all the Capture Settings are set, compose the picture by making the appropriate lighting and camera adjustments then center and crop.

Center the Object on the Turntable and Crop

In this step you will:

1. Use the real time camera view, Turntable controls and the Position button (optional) to make sure the object is in the dead center of the turntable.
2. While the object spins, adjust the crop markers so the object never goes outside the markers. Remember the

same zoom and crop settings must be used for all rows and pictures, so if you change them, you need to re-confirm that the new crop will work at all the other rows.

Good Advice: You could go to each row and watch the product spin to make sure the object never goes outside the crop markers, but since today's cameras all have plenty of resolution. Its best to not crop at all (or very little) and use Ortery's 'Row Crop' or 'All Crop' feature to crop all of the images at once after they have been captured.

Just remember your initial crop has to be big enough to work for all rows.

Helpful Tip: When taking hemispherical or spherical animations on a single camera system, its best to change camera focus to either MF or FIX in the Image Capture software. Manual will hold the focus on a specific area, but will need to be adjusted for each row, while FIX will keep the same focus throughout the complete capture process. Using Auto may work well for some items, but it will fail for others. Using Manual or FIX guarantees a known result.

Hemispherical Shooting Angles

No. of Rows	Shooting Angles									
2	0° 90°									
3	0° 45° 90°									
4	0° 30° 60° 90°									
5	0° 22.5° 45° 67.5° 90°									
6	0° 18° 36° 54° 72° 90°									
7	0° 15° 30° 45° 60° 75° 90°									
8	0° 12.85° 25.7° 38.55° 51.4° 64.25° 77.1° 90°									
9	0° 11.25° 22.5° 33.75° 45° 56.25° 67.5° 78.75° 90°									
10	0° 10° 20° 30° 40° 50° 60° 70° 80° 90°									

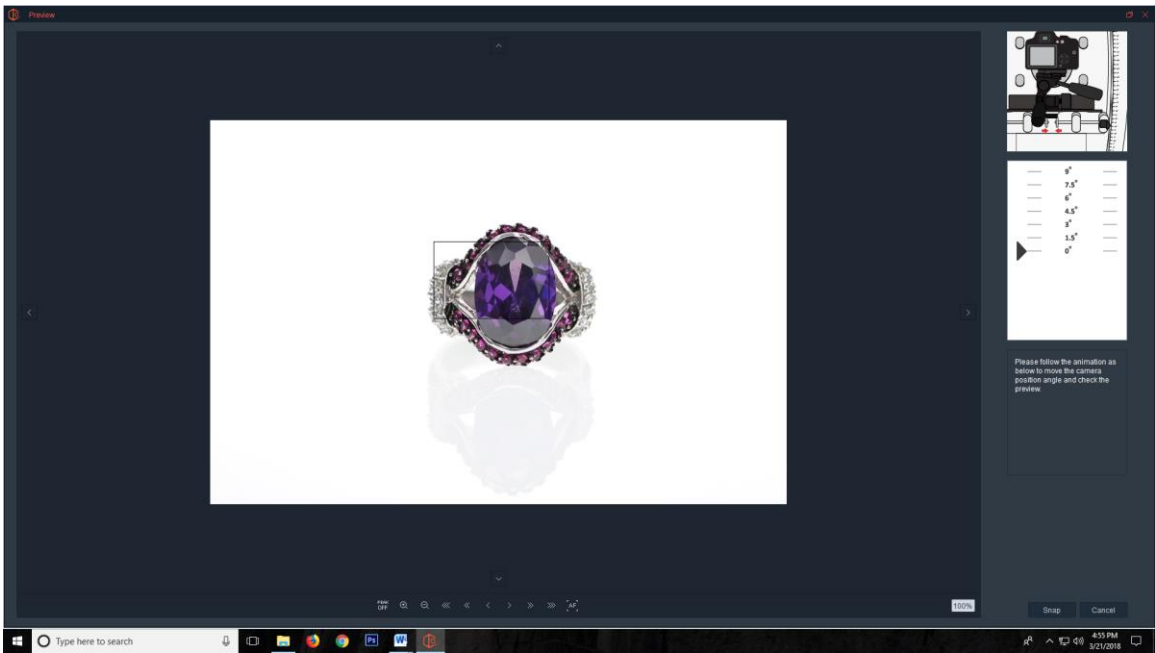
Spherical Shooting Angles

No. of Rows	Shooting Angles				
1	45°				
2	22.5° 67.5°				
3	15° 45° 75°				
4	11.25° 33.75° 56.25° 78.75°				
5	9°	27°	45°	63°	81°

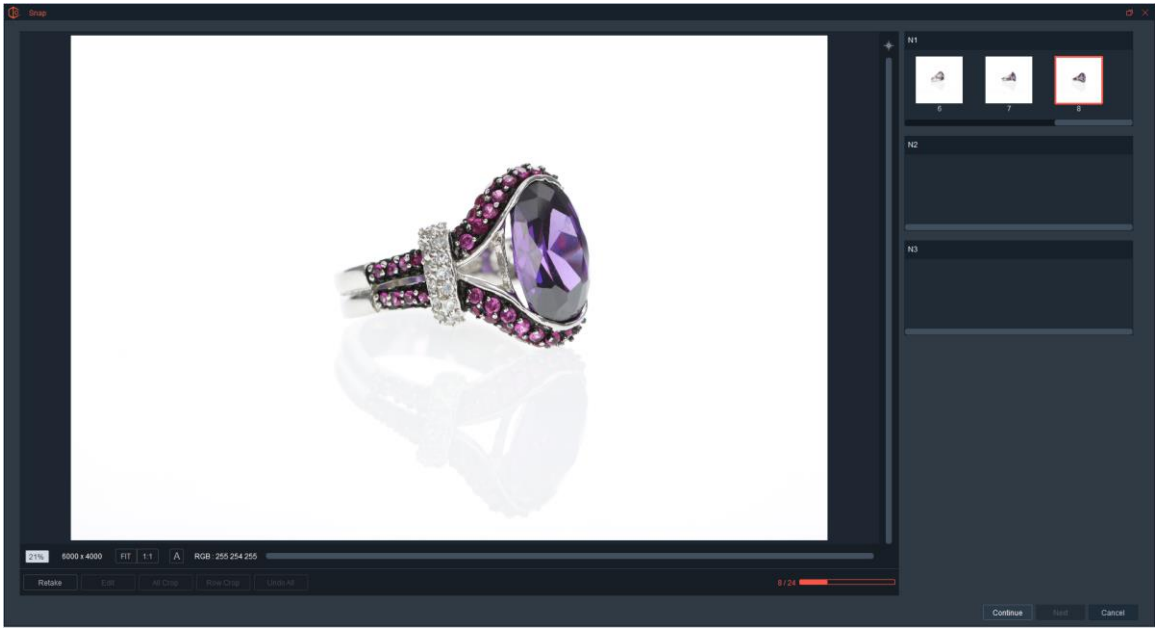
For each row, the camera should point at the same place on the object (vertical center). That will provide a smooth, natural look as the view goes over the top of the object in the final animation.

Take a Test Shot or click Snap to begin the image capture process.

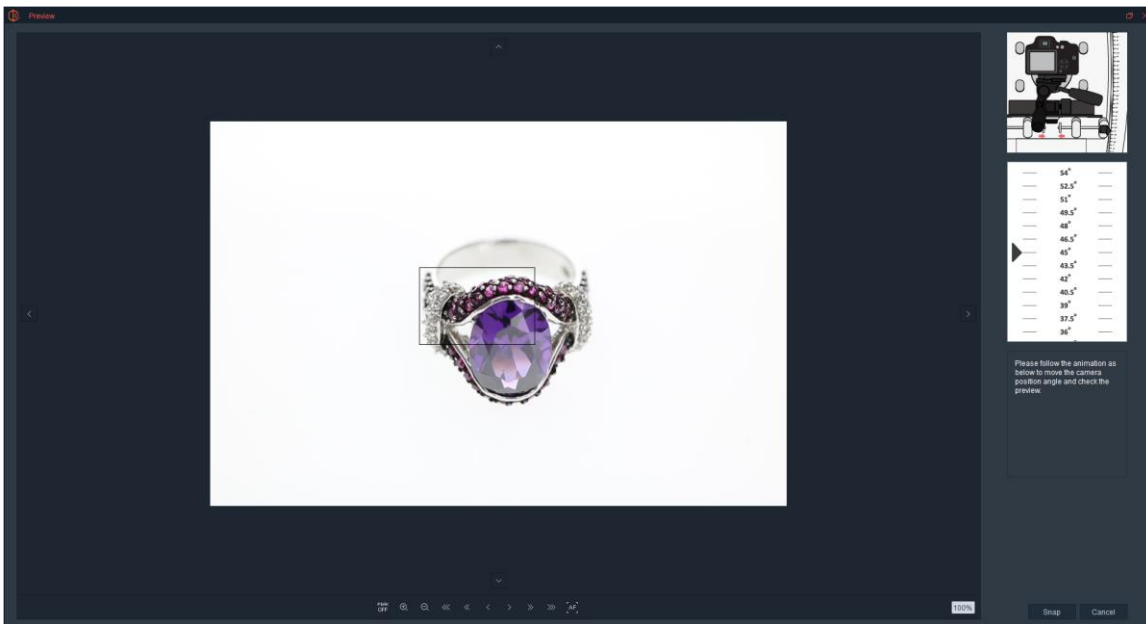
The next screen guides the user to move the arm to the first capture position. Then, before starting image capture, make sure the camera is tilted to a position that cuts the object in half vertically (vertical center). In a single camera 3D system, the tilt will need to be moved manually to vertical center before capturing at each row.



The video on the upper right shows exactly which degree to position the arm to capture the first row of 360-degree images.

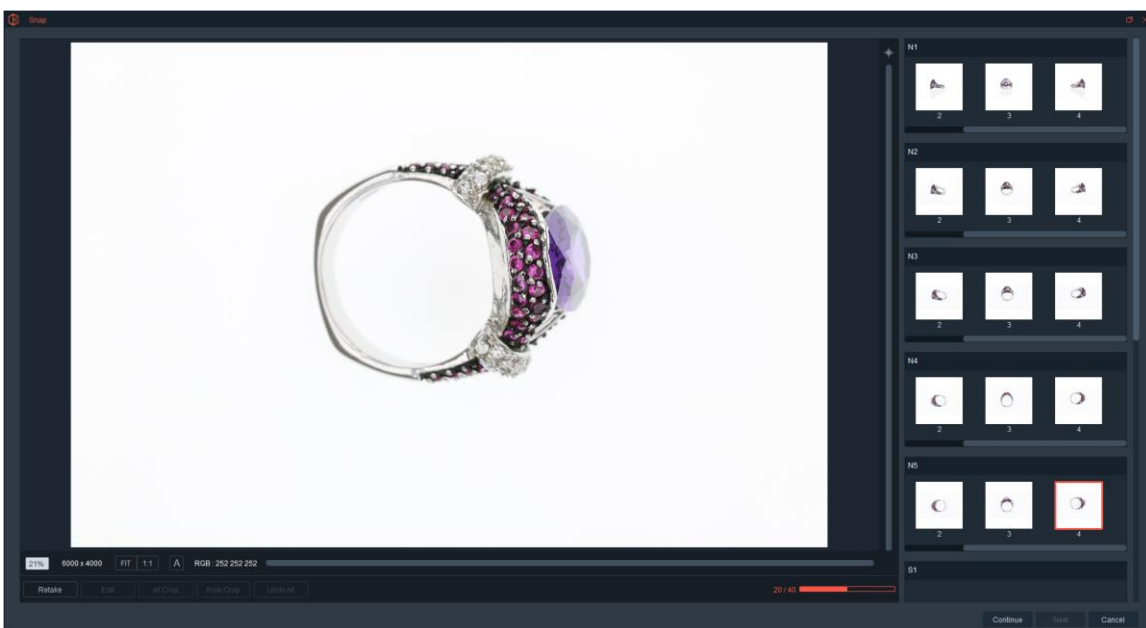


Once all the images in that row have been captured, the program will guide the user to move the camera to the next angle in order to capture the next row. Again, make sure the camera is tilted to vertical center on the product being captured.



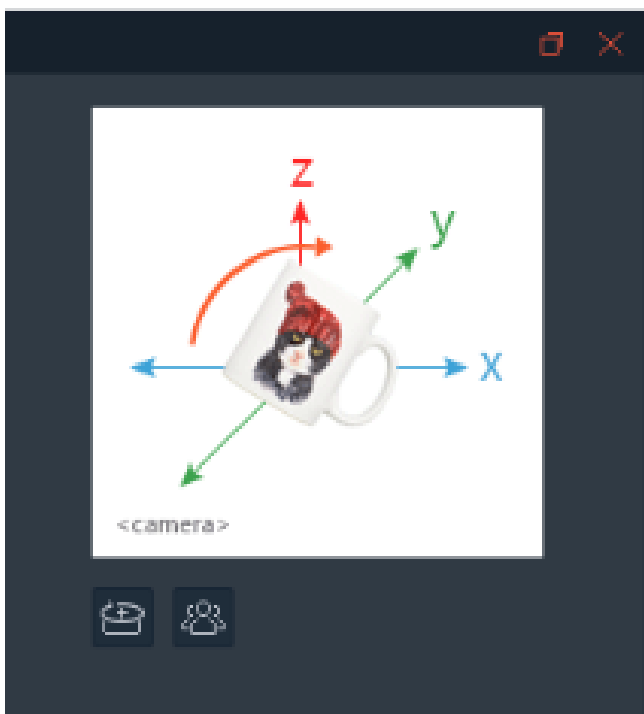
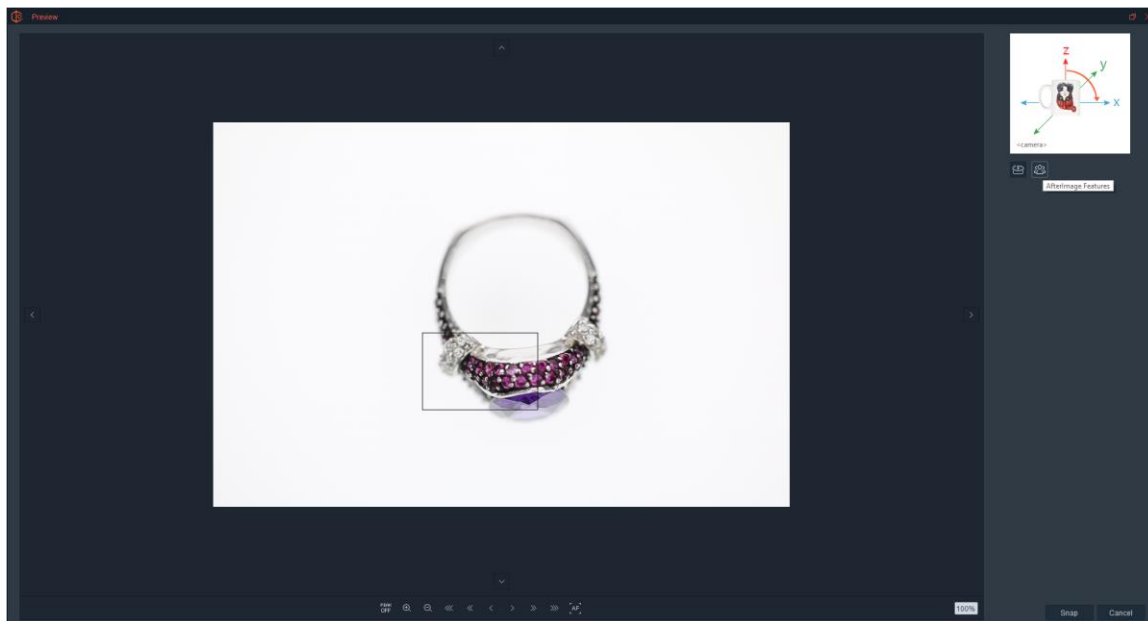
This process will continue until all rows in the Northern Hemisphere have been captured. If capturing a hemispherical view, clicking Next takes you to the saving process.

When capturing a Spherical Animation, clicking Next guides you through capturing the images in the Southern Hemisphere.

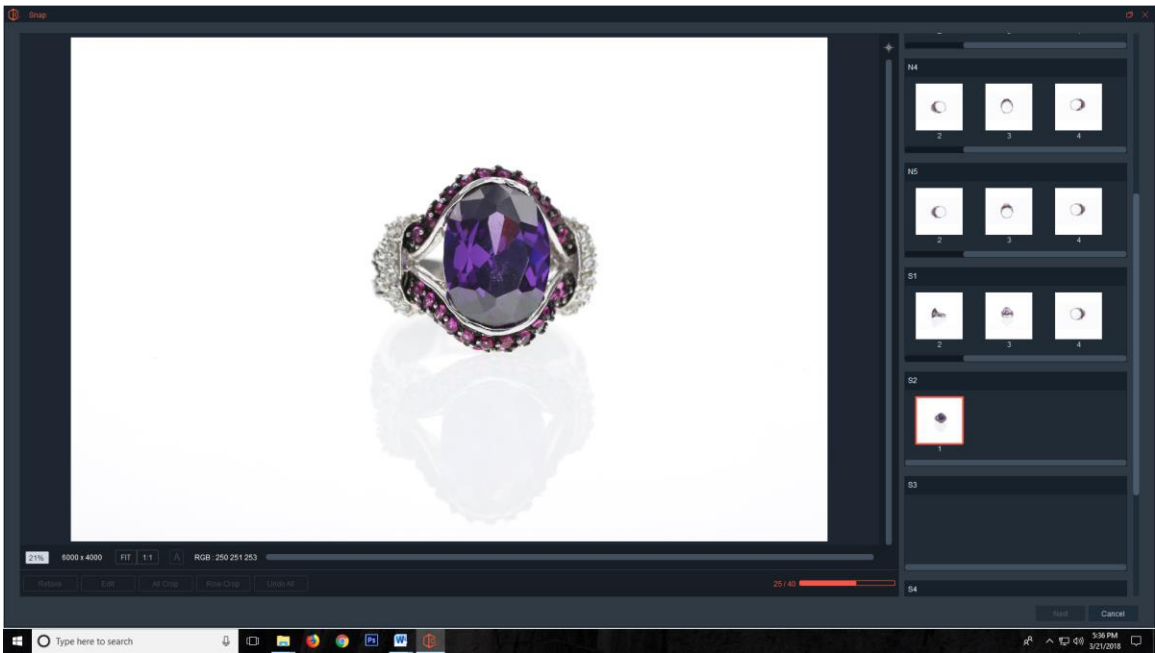


To prepare for taking the Southern Hemisphere, first, create an AfterImage to help you align the object. Second, follow the the video instructions to flip the product upside down by rotating the product 180 degrees clockwise (from the cameras point of view) so the product is upside down.

Note: In order to create a Spherical Animation your product must be symmetrical.



Use the turntable controls to rotate the product to ensure it is centered and perfectly aligned with the AfterImage. Clicking Next guides the user through moving and tilting the camera to properly capture the images in the Southern Hemisphere.

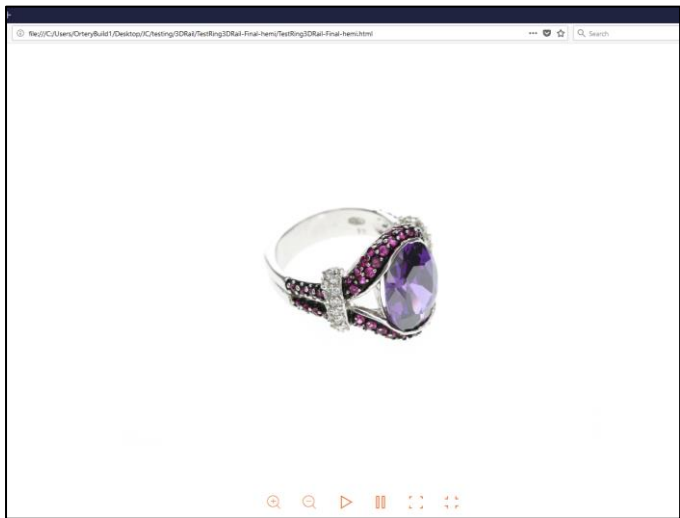


Once all the images have been captured, clicking Next will guide the user through the saving process. For more information about saving, refer to the saving process covered in the 360 Animation section.

Once saved, the animation can be viewed by going to the Animations tab on the Capture screen.

Here is an example of the animation displayed inside a browser. All hosted 360 and 3D animations created with Ortery equipment can be viewed in all browsers on desktop and mobile devices alike.

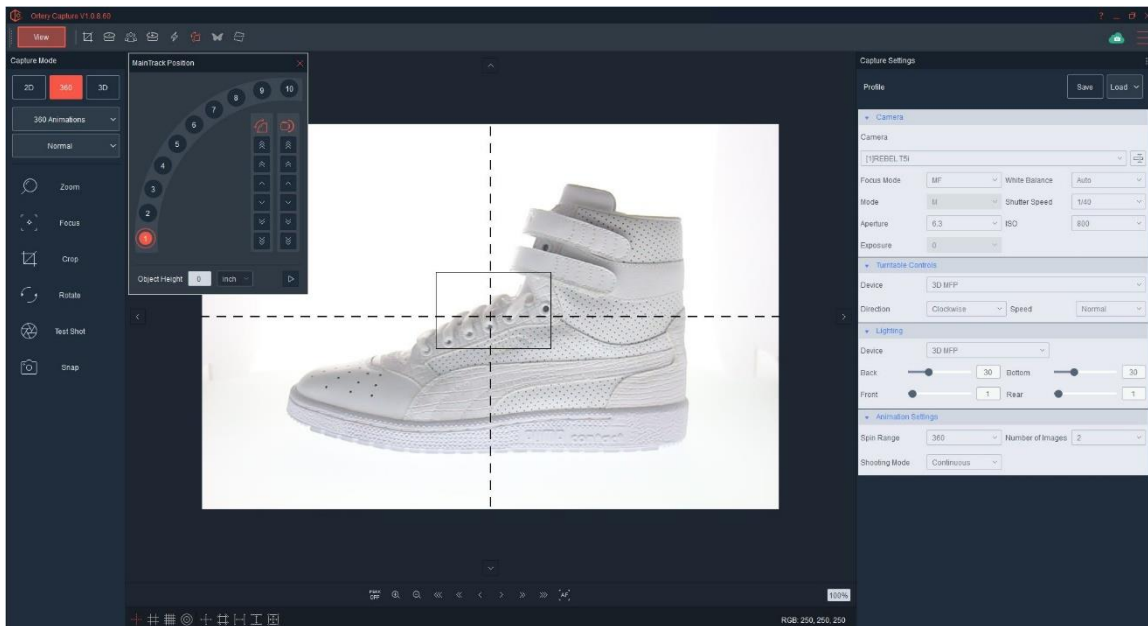
Keep in mind, SAAS Photo, Ortery’s hosting system makes saving and sharing animations easy by automatically saving them in the cloud.



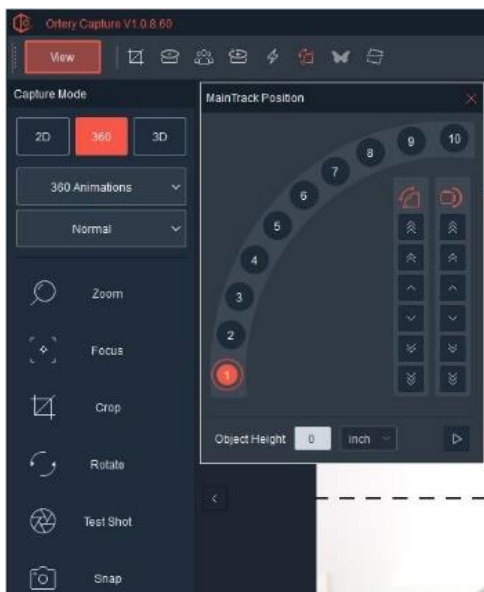
Using Photosimle 5000 or a 3D MFP

With regards to creating 3D animations and images, the Photosimle 5000 and 3D MFP are very similar in use. There is one camera that automatically travels along a rail up and over the product resting on an embedded turntable. Both hemispherical and spherical 3D animations can be created.

The all in one nature of these products make them very easy to use.



The Capture interface of a Photosimle 5000 or 3D MFP is the same as other Ortery products, but it also can move the camera up and down the rail. In addition, the user can also zoom and tilt the camera with a click of a button.



These extra features work as follows:

The Zoom button allows the user to zoom the camera in and out.

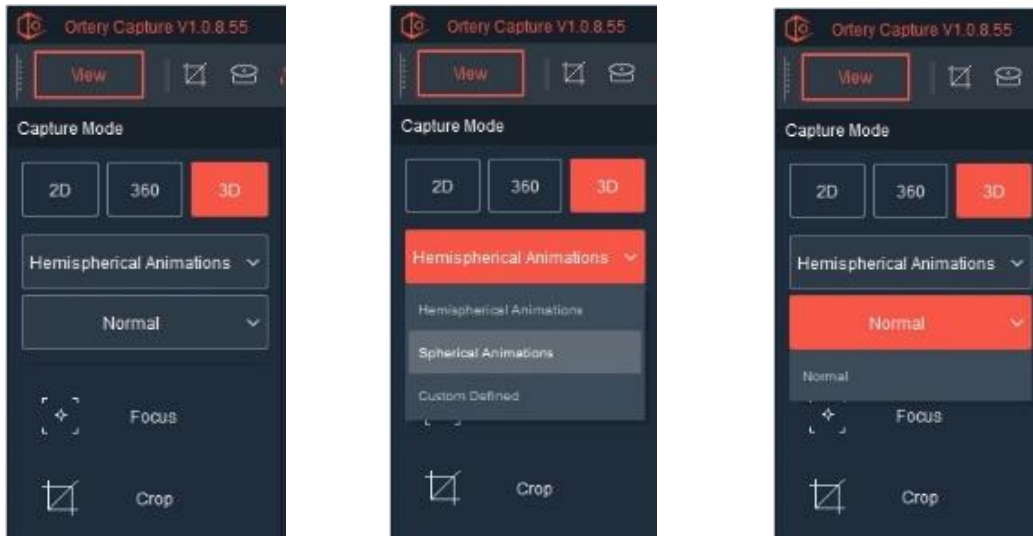
The Camera Position window to the left allows the user to move the camera up and down the rail and control camera tilt.

By setting the Object Height, the camera will automatically tilt to the product's vertical center when capturing images on a new row. This simplifies 3D image capture.

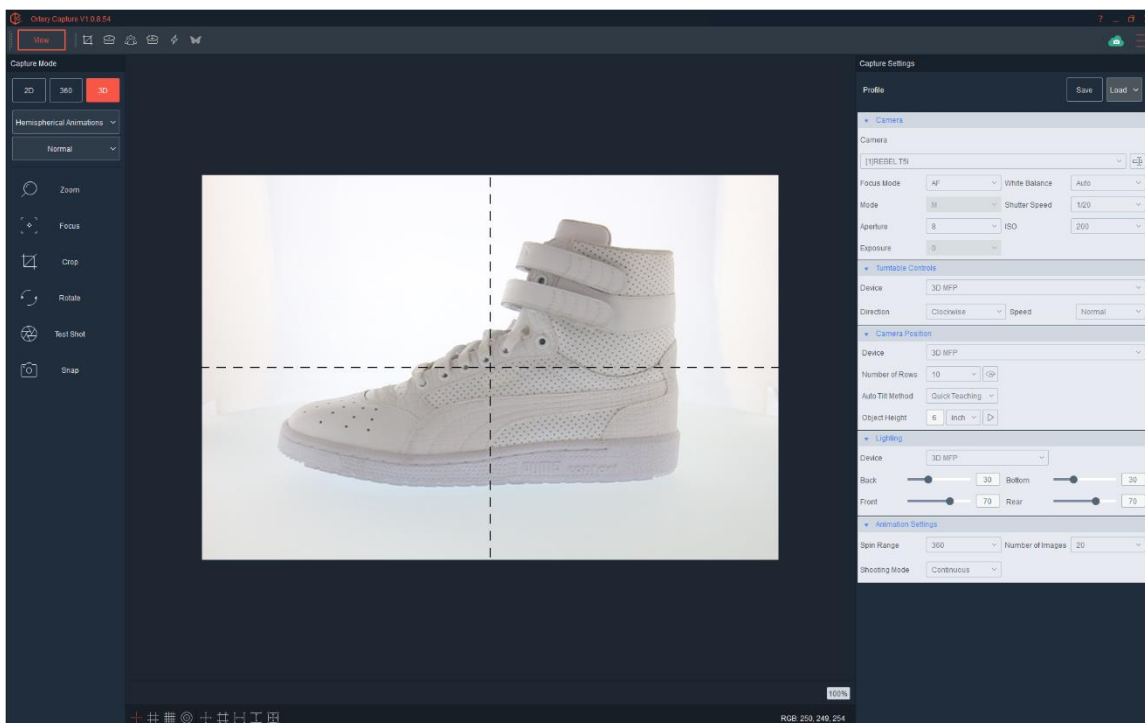
To create Hemispherical and Spherical animations with Photosimile 5000 or a 3D MFP, open the software, click Capture and select 3D as the Capture Mode, then choose the Capture Type and Style. Choose from these three Capture types:

- Hemispherical Animations
- Spherical Animations
- Custom Defined

Note: Normal is currently the only Capture Style available.

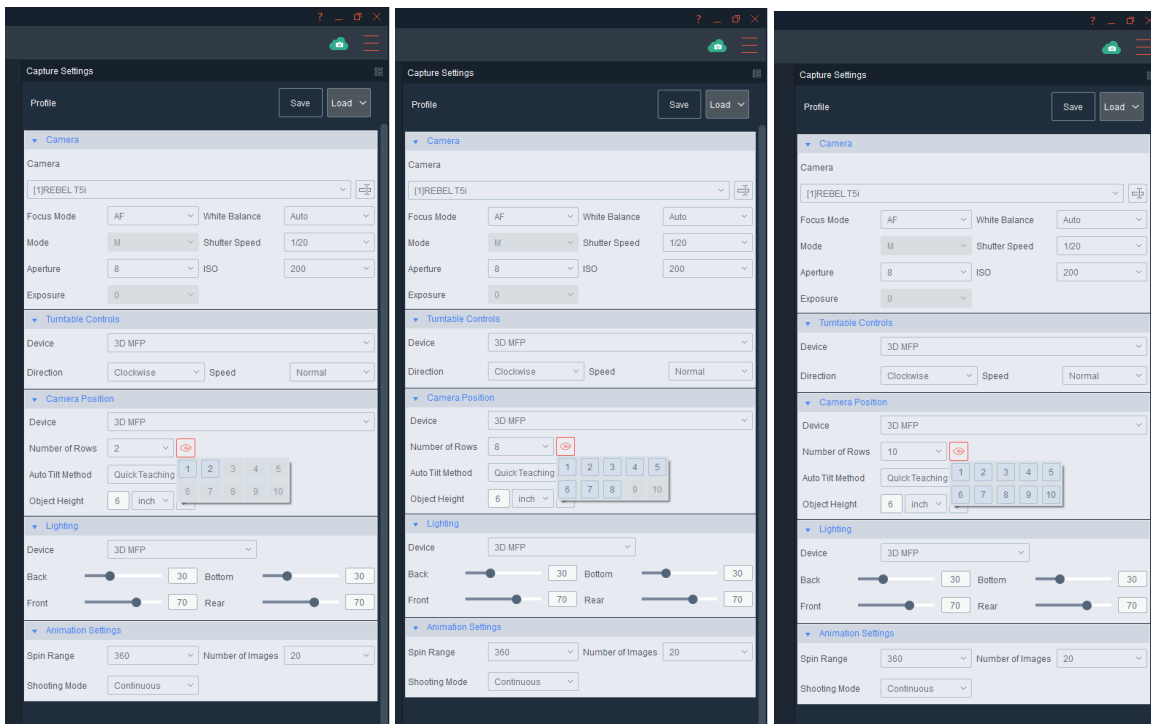


Next, under Camera Position, select the Number of Rows to be captured and Auto Tilt Method.



Number of Rows

This area allows the user to choose the number of rows to capture. The number of rows selected determines the camera position angles that will be used to create the animation. The examples below show how 2, 8 and 10 rows can be selected.



Auto Tilt Method

There are two automated tilt methods (Quick Tilt and Tilt Teaching) which automatically manage the tilt of the camera when it moves from one position to the next. The right tilt insures that the camera remains pointed at the same location as it goes up and over a product. This makes the final hemispherical or spherical animation look normal.

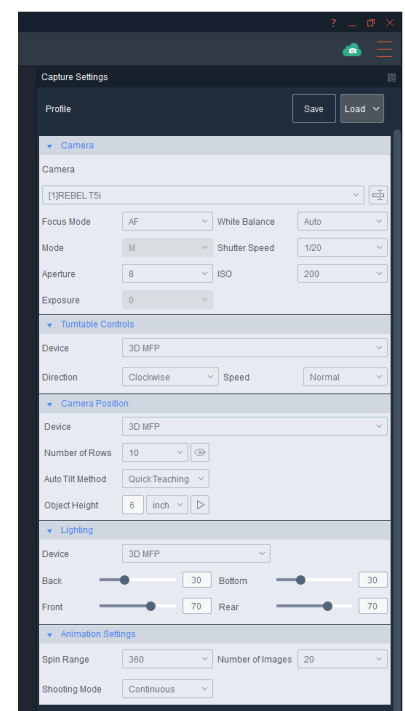
Quick Tilt

This tilt method works the best for most products. It is the easiest and most popular to use.

The user simply inputs the height of the object being photographed, then based on the object's height, the correct tilt (half the object's height) will be automatically calculated and used at all camera positions.

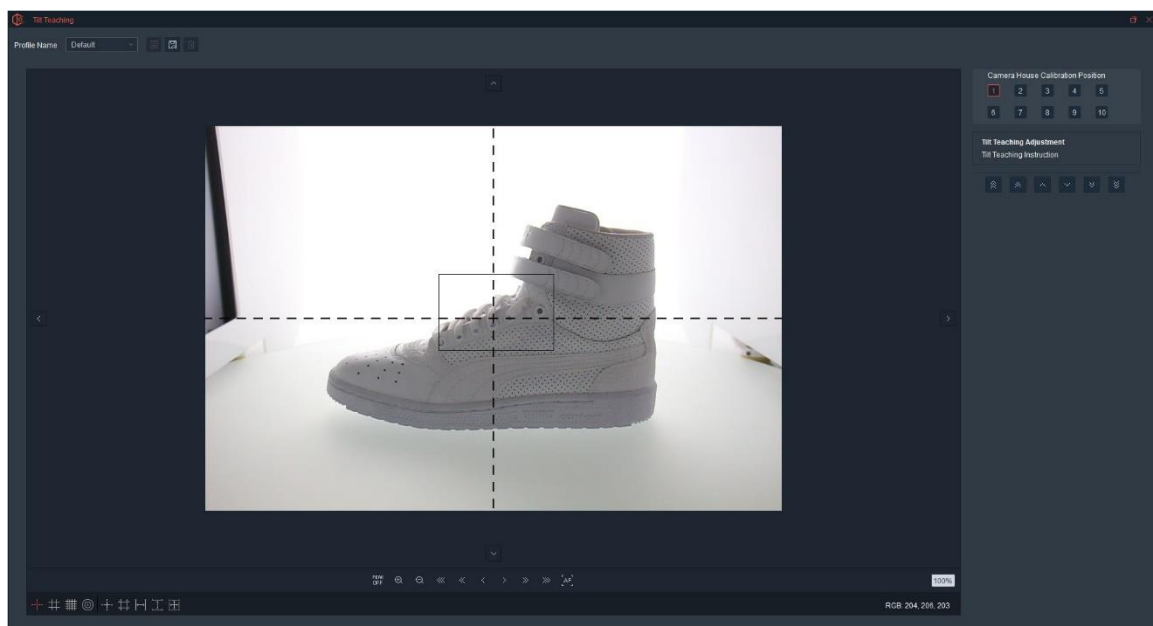
Tilt Teaching

This method allows the user to custom define camera tilt at each camera position. This method is used when the object being photographed has a unique shape or the user wants to create a special effect.

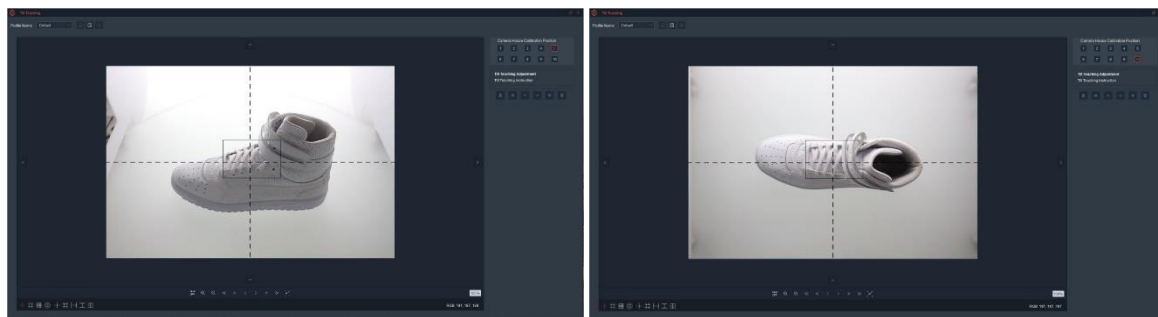
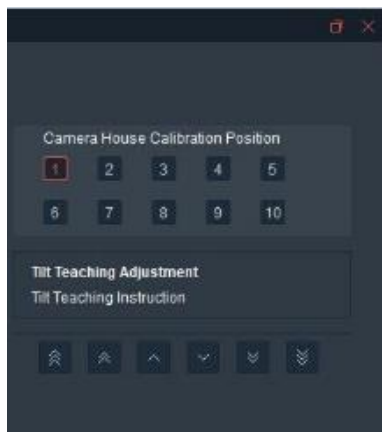




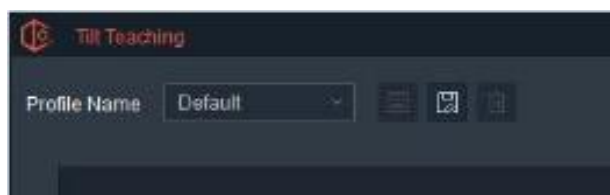
When selected, the following screen will appear.



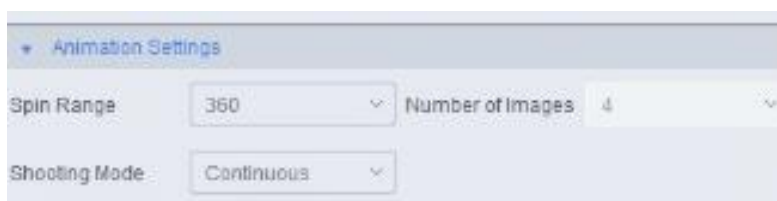
On this screen, the user will select and set a custom tilt for each camera position to be used in the animation.



Once completed, the user can name and save these settings as profile for re-use.



After selecting the Number of Rows and Auto Tilt Method, the user can set the Animation Settings located at the bottom of the Capture Settings interface, they include Spin Range, Number of Images and Shooting Mode.



Once all the Capture Settings are set, compose the picture by making the appropriate lighting and camera adjustments then center and crop.

Center the Object on the Turntable and Crop

In this step you will:

1. Use the real time camera view, Turntable controls and the Position button (optional) to make sure the object is in the dead center of the turntable.
2. While the object spins, adjust the crop markers so the object never goes outside the markers. Remember the same zoom and crop settings must be used for all rows and pictures, so if you change them, you need to re-confirm that the new crop will work at all the other rows.

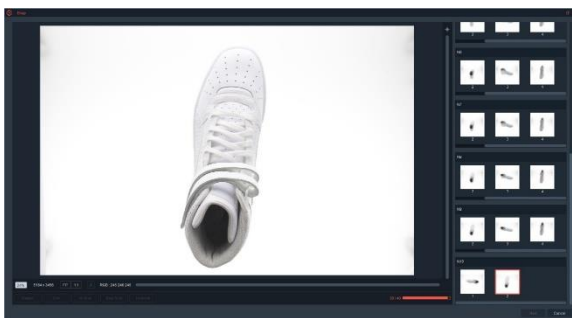
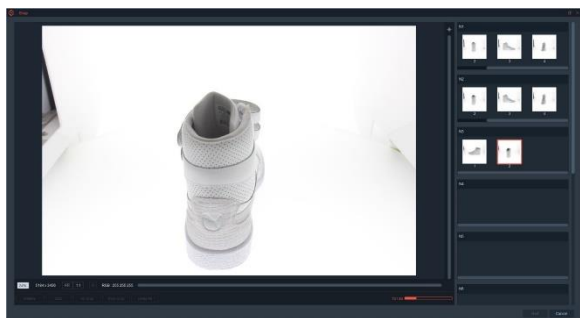
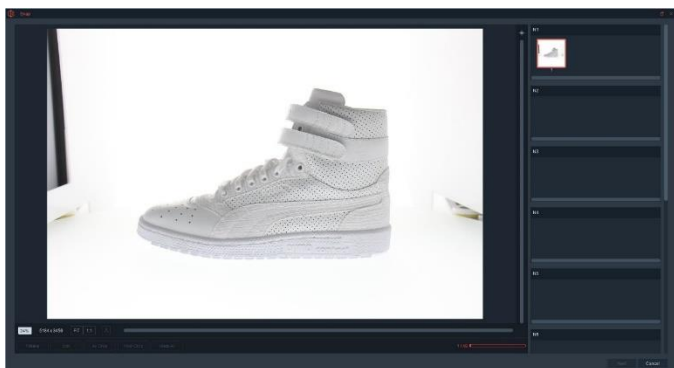
Good Advice: You could go to each row and watch the product spin to make sure the object never goes outside the crop markers, but since today's cameras all have plenty of resolution. Its best to not crop at all (or very little) and use Ortery's 'Row Crop' or 'All Crop' feature to crop all of the images at once after they have been captured.

Just remember your initial crop has to be big enough to work for all rows.

Helpful Tip: When taking hemispherical or spherical animations on a single camera system, its best to change camera focus to either MF or FIX in the Image Capture software. Manual will hold the focus on a specific area, but will need to be adjusted for each row, while FIX will keep the same focus throughout the complete capture process. Using Auto may work well for some items, but it will fail for others. Using Manual or FIX guarantees a known result.

Take a Test Shot to confirm composition settings, then click Snap to begin the image capture process.

The 3D MFP will move to the first row, capture all the images on that row and then automatically move to the next row. While the images are being capture, watch the progress.



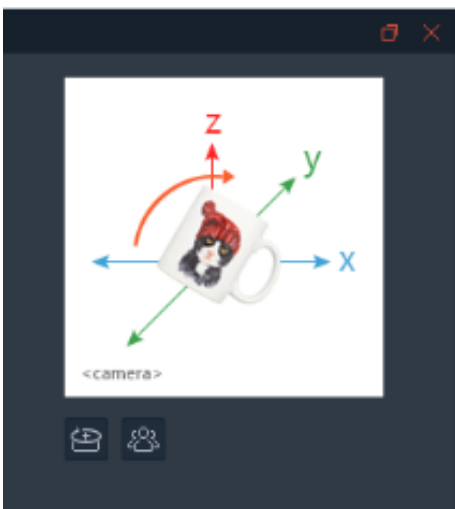
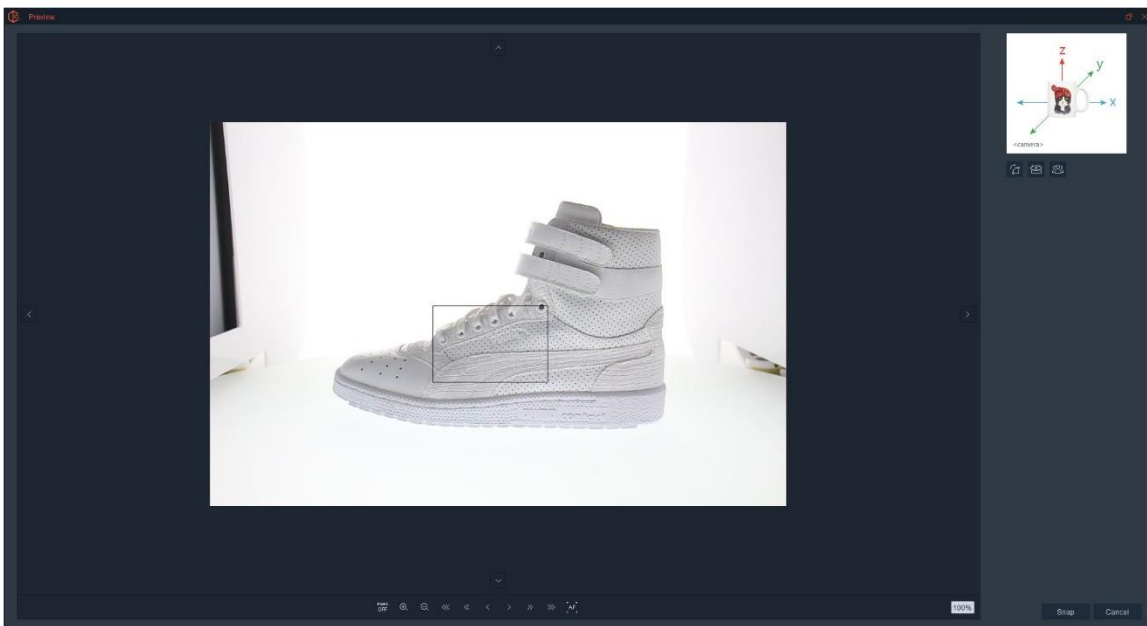
When capturing a hemispherical animation, once all the images in the Northern hemisphere have been captured clicking Next will begin the image saving process. To learn more about the saving process, view the 360 section of this document, it is almost exactly the same.

When capturing a Spherical Animation, once all the images in the Northern hemisphere have been captured, clicking Next guides the user through capturing the images in the Southern Hemisphere.

To prepare for taking the Southern Hemisphere, first, create an AfterImage to help align the object.



Second, follow the the video instructions to flip the product upside down by rotating the product 180 degrees clockwise (from the cameras point of view) so the product is upside down.



Note: In order to create a Spherical Animation the product must be symmetrical.

Use the turntable controls to rotate the product to ensure it is centered and perfectly aligned with the AfterImage. Clicking Next starts moving and tilting the camera to properly capture all the images in the Southern Hemisphere.



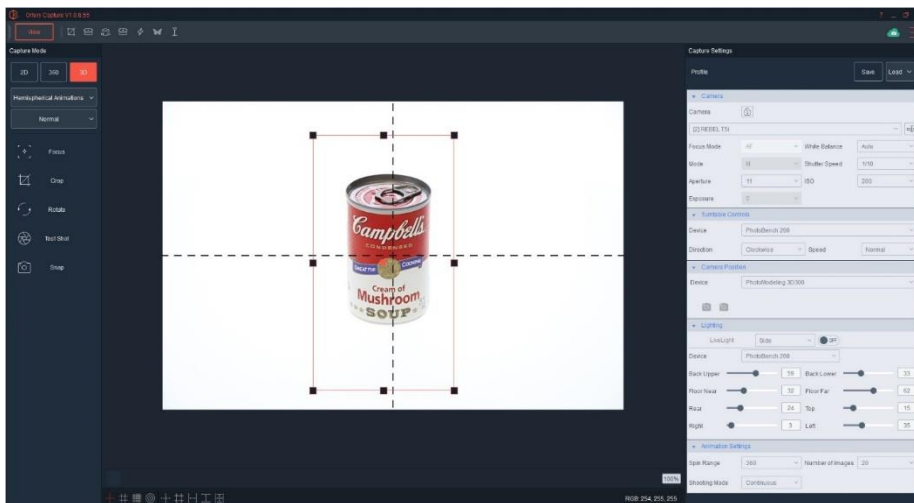
Once all the images have been captured, clicking Next begins the saving process. To learn more about the saving process, view the 360 section of this document, it is almost exactly the same.

All hosted 360 and 3D animations created with Ortery equipment can be viewed in all browsers on desktop and mobile devices alike.

SAAS Photo, Ortery's hosting system makes saving and sharing animations easy by automatically saving them in the cloud.

Using 3D PhotoModeling 300

The PhotoModeling 300 workflows for creating 3D animations and custom defined sequences is almost exactly the same as the 3D Rail and the 3D PhotoArm. The big difference is that the 3D PhotoModeling 300 capture and output is limited to two rows. Follow the onscreen instructions and refer to those sections for a detailed overview.



LiveStudio

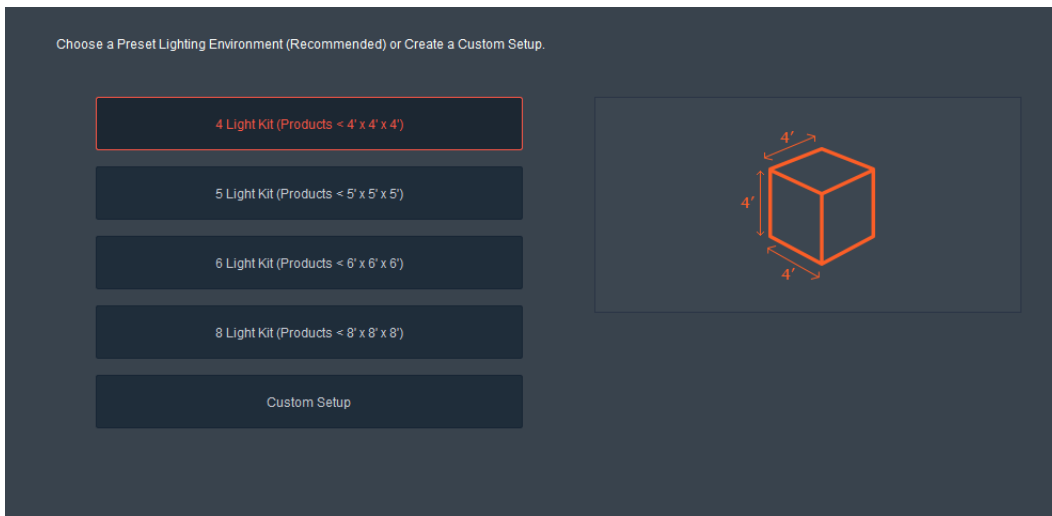
LiveStudio systems can be set up to accomplish almost any type of photography. They have all the advantages of a traditional lighting system, plus the Ortery LiveStudio controller and photography automation software which makes it a complete solution for faster, easier and better studio photography than ever before.

LiveStudio lights can be purchased individually or as a complete kit with a controller and software. While lights can be controlled and dimmed manually from the back panel on each light, the most efficient best way to use them is with the Ortery LiveStudio controller and software.

To make setup and use easy, a LiveStudio Installation and Operation Guide comes with each light and controller.

The purpose of this User Guide is to explain the main software features of LiveStudio and how it can be used by amateurs and professionals alike as a stand-alone lighting solution or for use with other Ortery turntables and studios.

LiveStudio is extremely flexible to setup and use. Upon entering the software the user is asked to setup their lighting environment by either choosing a Preset Studio Lighting Setup or a Custom Lighting Setup.



Light Setup

Depending on your skill level, how many lights will be in the system and the size of your products, choose a preset (recommended) or a custom studio light setup.

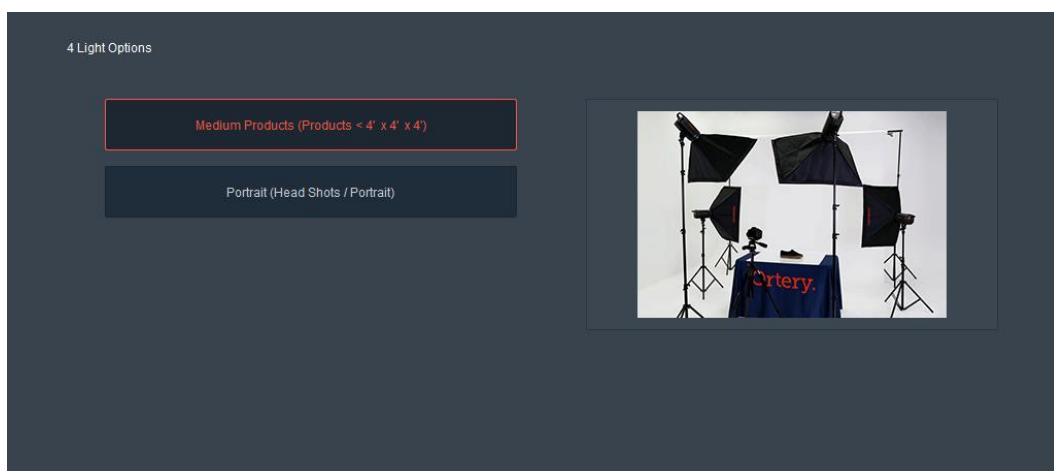
Preset Studio Light Setups

Ortery has worked with professional photographers to create preset studio light arrangements for 4, 5, 6 and 8 light systems. The Presets guide the user step by step to create traditional, standard light setups that have been used by professional photographers and videographers for years to capture professional level portraits, videos and product shots. They give the user a trustworthy, quick way to get a professional image capture system setup and working.

There are several Presets to choose from:

4 Light Kit

There are two 4 Light Kits to choose from. One for taking pictures of objects smaller than 4' x 4' x 4' and another for shooting standard portrait shots.



By choosing a specific 4 Light Kit, more information about the kit chosen will appear.

Medium Product Photography

4 Lights

Objects > 4' x 4' x 4'

- This professional setup works
- Features top front lighting from left and right
- Great for small and medium products on tabletops, stands and the floors
- LiveLight produces left and right real-time light control



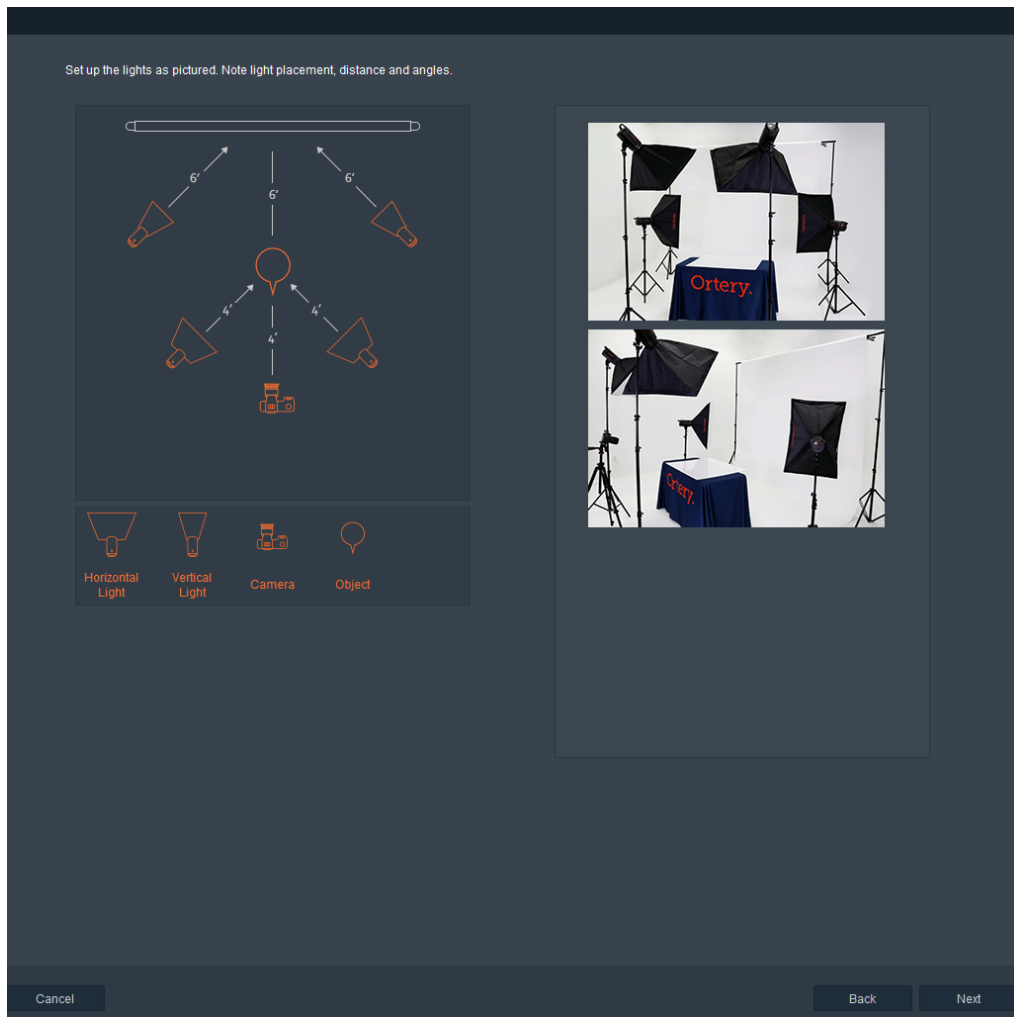
Cancel

Back

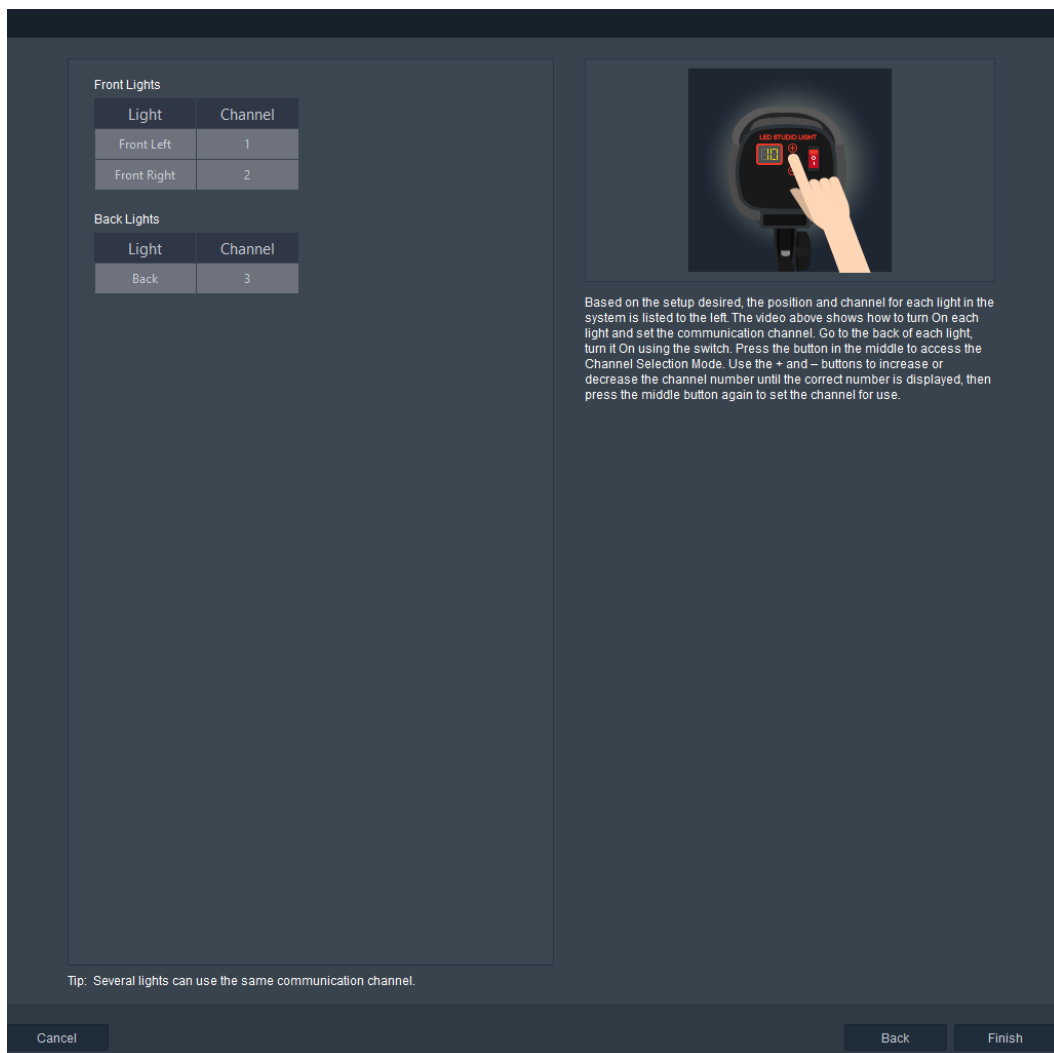
Next

Once a final setup has been chosen, the user will see a screen that shows:

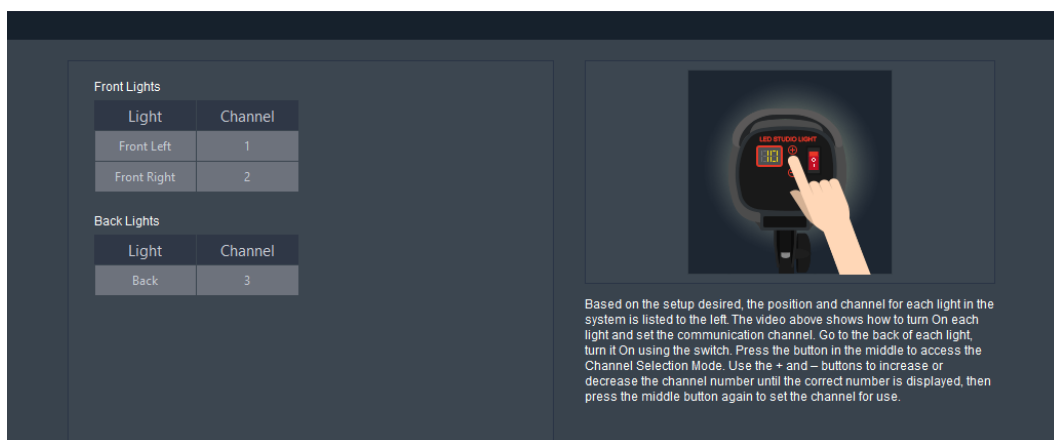
1. A top view diagram of the setup that clearly lists each component and the relative distances between the items in the setup.
2. Two pictures of the setup – one from straight on and another from the side to give the user a clear idea of the tilt and height of each softbox.



Use these descriptions to set up the studio. Once the physical setup is complete and the components are all in the right places, click Next to continue.



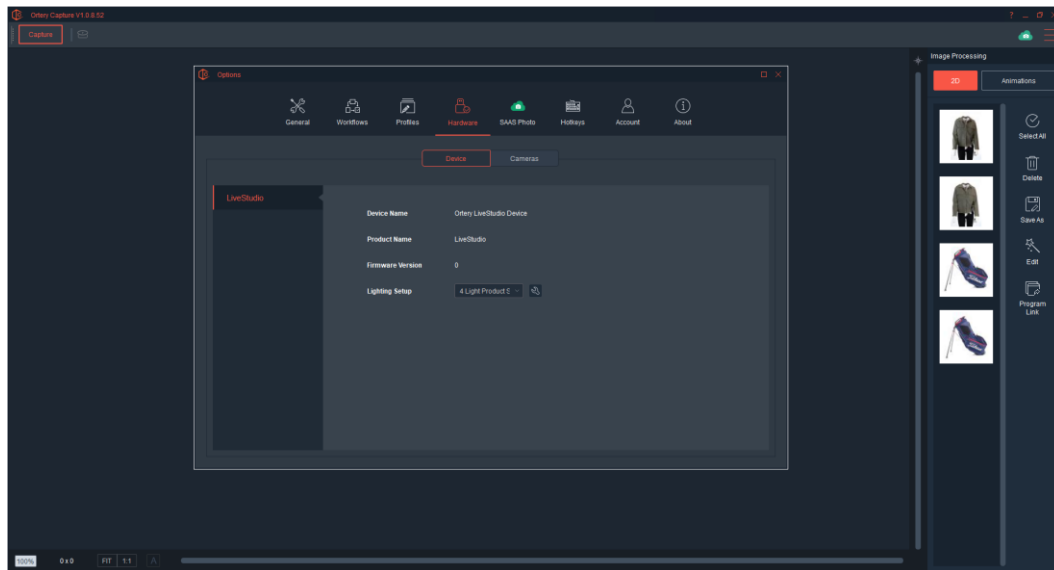
The next screen guides the user through assigning the right communication channel to each light in the system.



If a 4 Light Kit is chosen, this screen shows the name of the light and the communication channel to be used for that light. A video and text along the right show how to turn each light On and set the communications channel.

Simply follow the onscreen instructions. Physically go to the back of each light to turn it On and set the communications channel to the number required. Click Finish when all lights are On and are set to the right communications channel.

Note: Multiple lights can use the same communications channel.



When the program is launched, the names of the lights will automatically be on the interface ready for the user to control.

Ortery LiveLight

All Preset studio setups allow the user to use the Ortery LiveLight feature. Ortery LiveLight allows the user to simultaneously control the intensity of light coming from specific direction or group of lights with their mouse. It allows the user to easily fine tune the lighting and in real time determine the best lighting possible for a specific shot, project or sequence of photos.

The light setup process is the same for the 5, 6 and 8 light kits. Just more lights and different positions.

5 Light Kit

There is only one lighting option under the 5 Light Kit. It works great for objects smaller than 5' x 5' x 5'. It features 2 lights in the back, a front left, front right and top light. It's ideal for shooting objects on stands, tables or resting on the ground.



(C-stand sold separately)

6 Light Kit

There are two lighting options under the 6 Light Kit – both work great for objects smaller than 6' x 6' x 6'. One is for taller objects such as full mannequins and the other is for objects that photo best when in a horizontal position.



6 Light Kit for Tall Objects – People, Mannequins and more...

8 Light Kit

There is only one lighting option under the 8 Light Kit. It works great for objects smaller than 8' x 8' x 8'. It features 4 lights in the back and 4 lights in the front left and right. It's ideal for shooting live models, full mannequins and tall or large products.

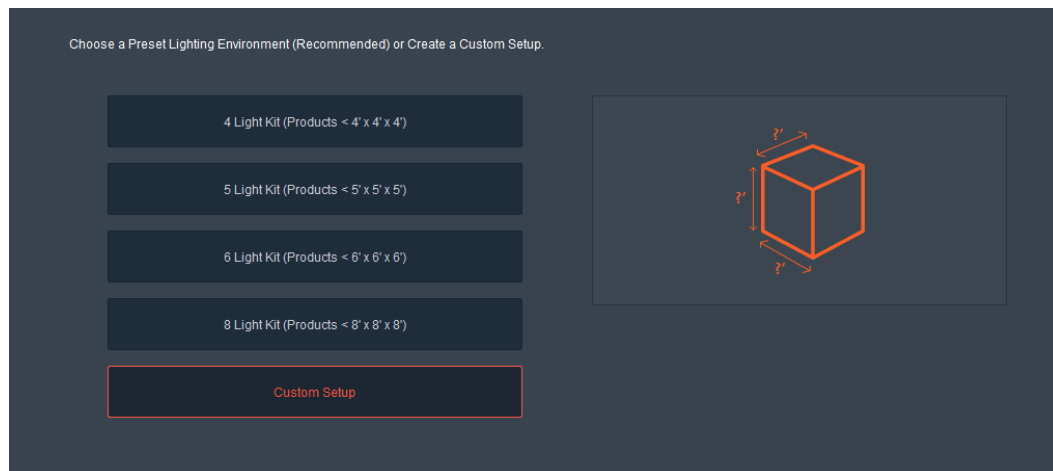


(Turntable optional)

Custom Studio Light Setups

When Custom Setup is chosen, users have complete control over how the lights can be arranged through two levels of flexibility. The first level allows the customer to choose how many lights will be coming from each direction. The second level simply allows the user to define how many lights they want to use and then assign those lights a name. These setups can be used by professionals to create almost any type of lighting environment. Here's how it works:

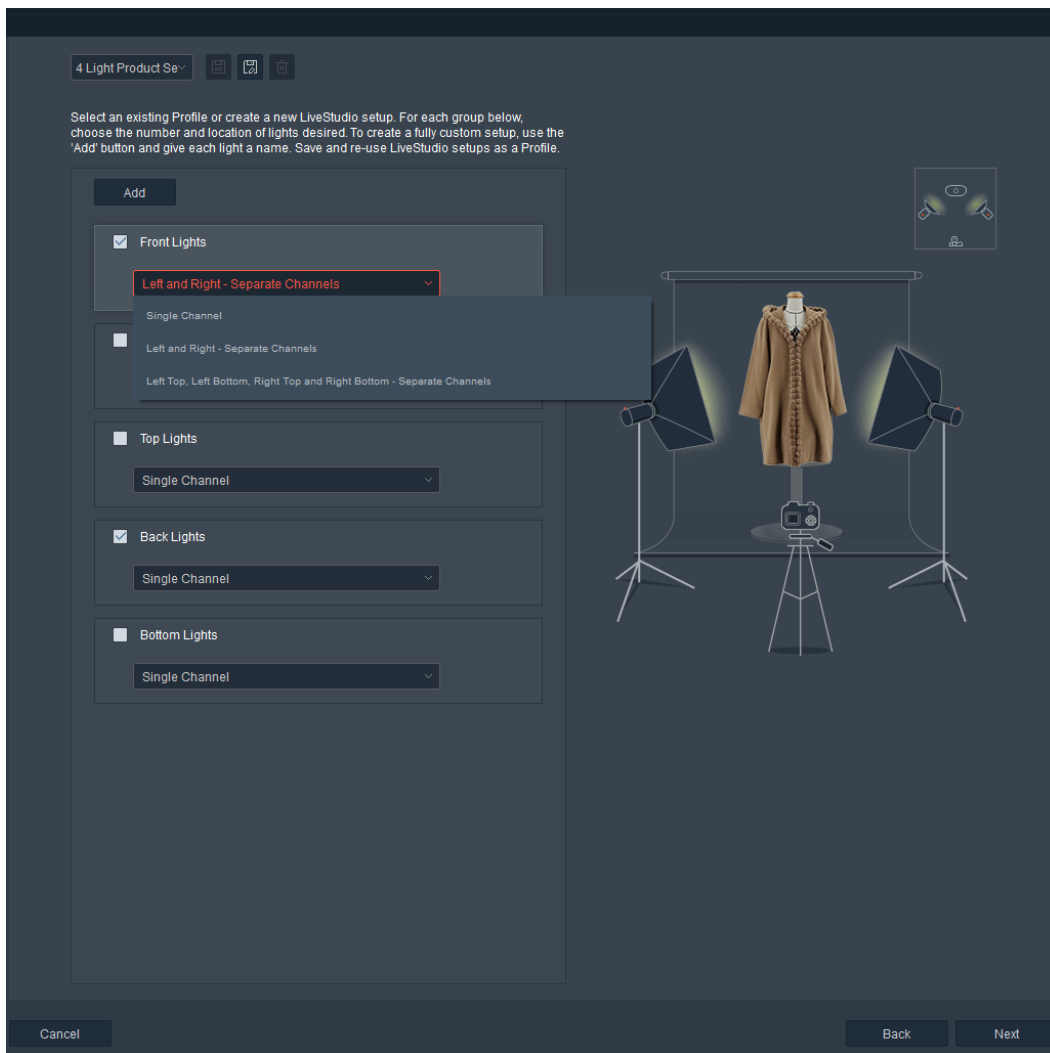
Choose Custom Setup.



Then choose the direction (Front, Side, Top, Back or Bottom), the amount of lights and the number of communication channels coming from that direction.

For example, if the user clicks Front Lights, the options inside the pull down menu include:

- Single Channel
- Left and Right – Separate Channels
- Left Top, Left Bottom, Right Top and Right Bottom - Separate Channels



Single Channel

If chosen, it means that all of the lights (one or more) coming in from the front will be controlled / dimmed from the software using the same communication channel. So, if there are four lights in the Front, then the intensity of these four lights will be controlled using a single slider (Front Lights) on the user interface in the software.

Left and Right - Separate Channels

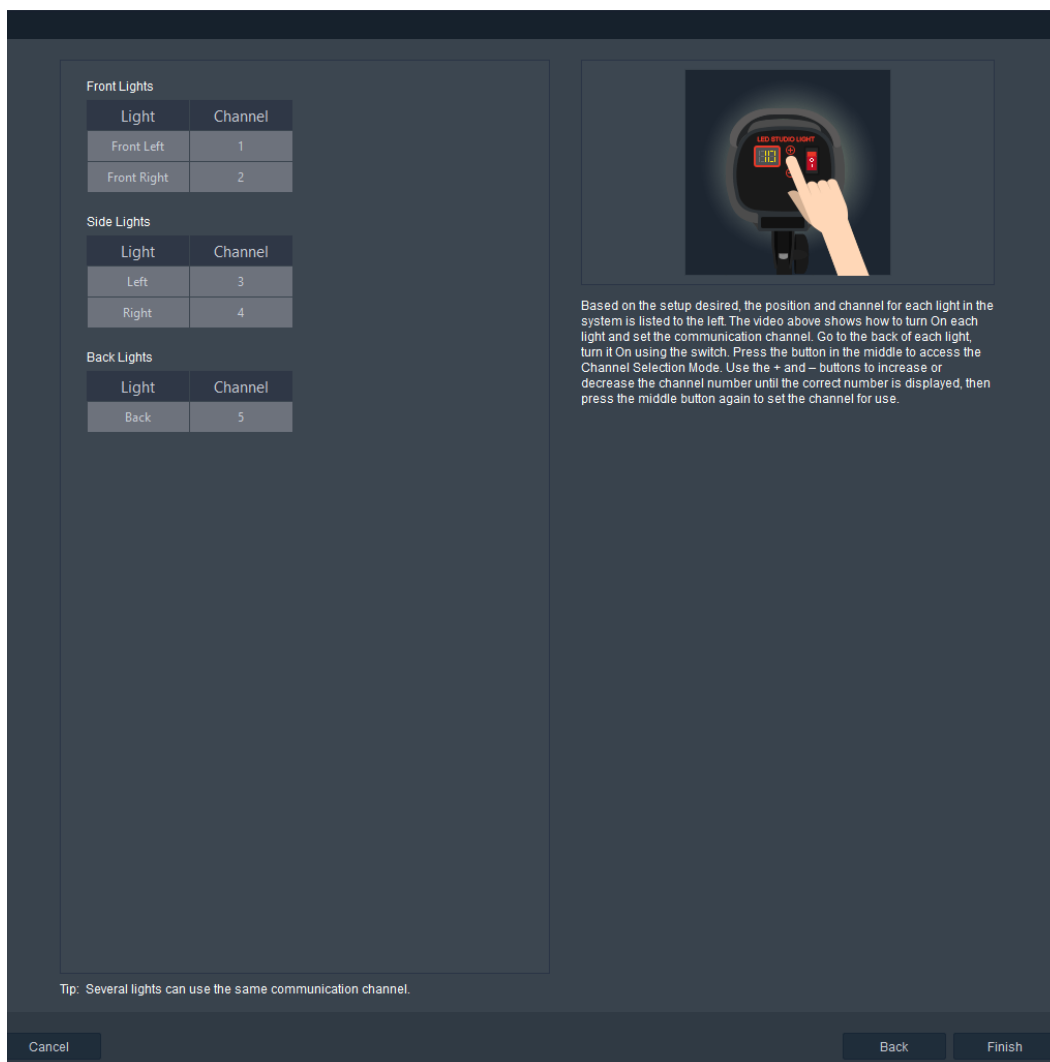
If chosen, it means that the Front lights on the left and right will be controlled using two different channels and thus two different sliders (Front Left and Front Right) on the main image capture user interface. So, the user can adjust the front left and right lights independently.

Note: Multiple lights can be controlled on the same channel, so there could be two or three lights on the left and two or three lights on the right.

Left Top, Left Bottom, Right Top and Right Bottom - Separate Channels

If chosen, it means there are going to be four lights out front and each of them can be controlled independently through a specific communication channel. Each light will also have its own intensity slider on the software interface.

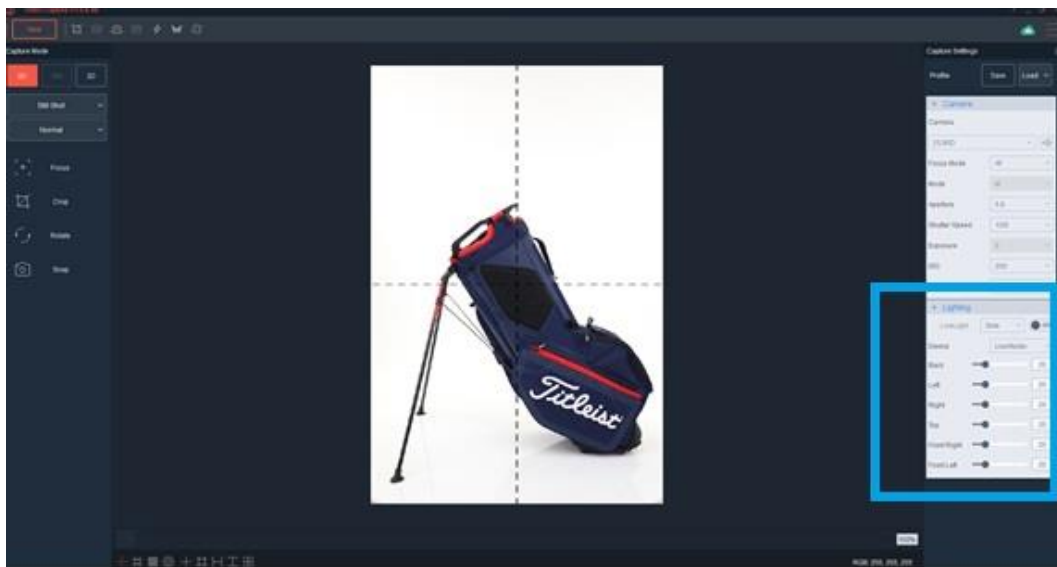
Once the number of lights and channels from each direction have been defined, the user can click Next to continue.



For the defined setup, this screen shows the name of the light and the communication channel to be used for that light. The video and text along the right show how to turn each light On and set the communications channel.

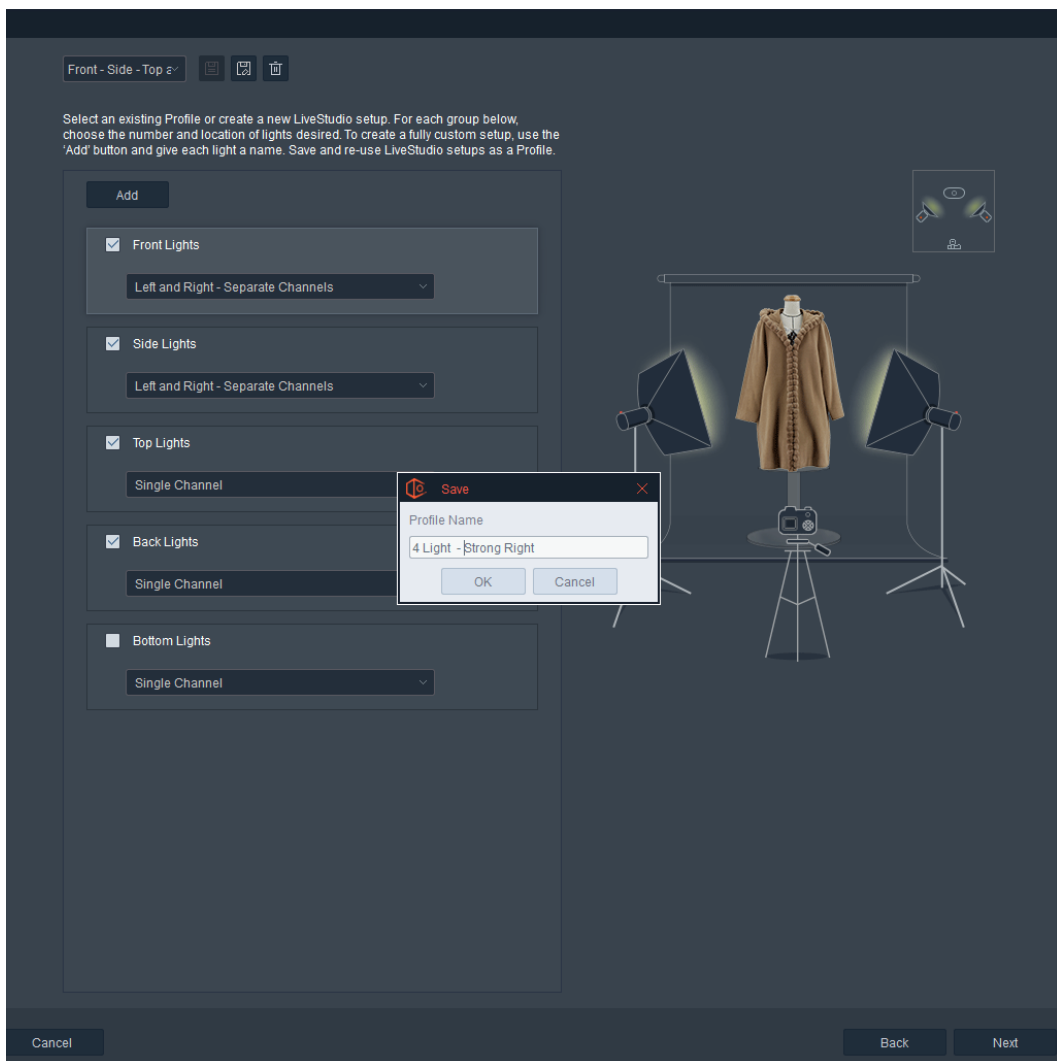
Follow the onscreen instructions. Physically go to the back of each light to turn it On and set the communications channel to the number required. Click Finish when all lights are On and are set to the right communications channel.

When the software is launched, the names of the lights will automatically appear on the Capture screen, ready for use.

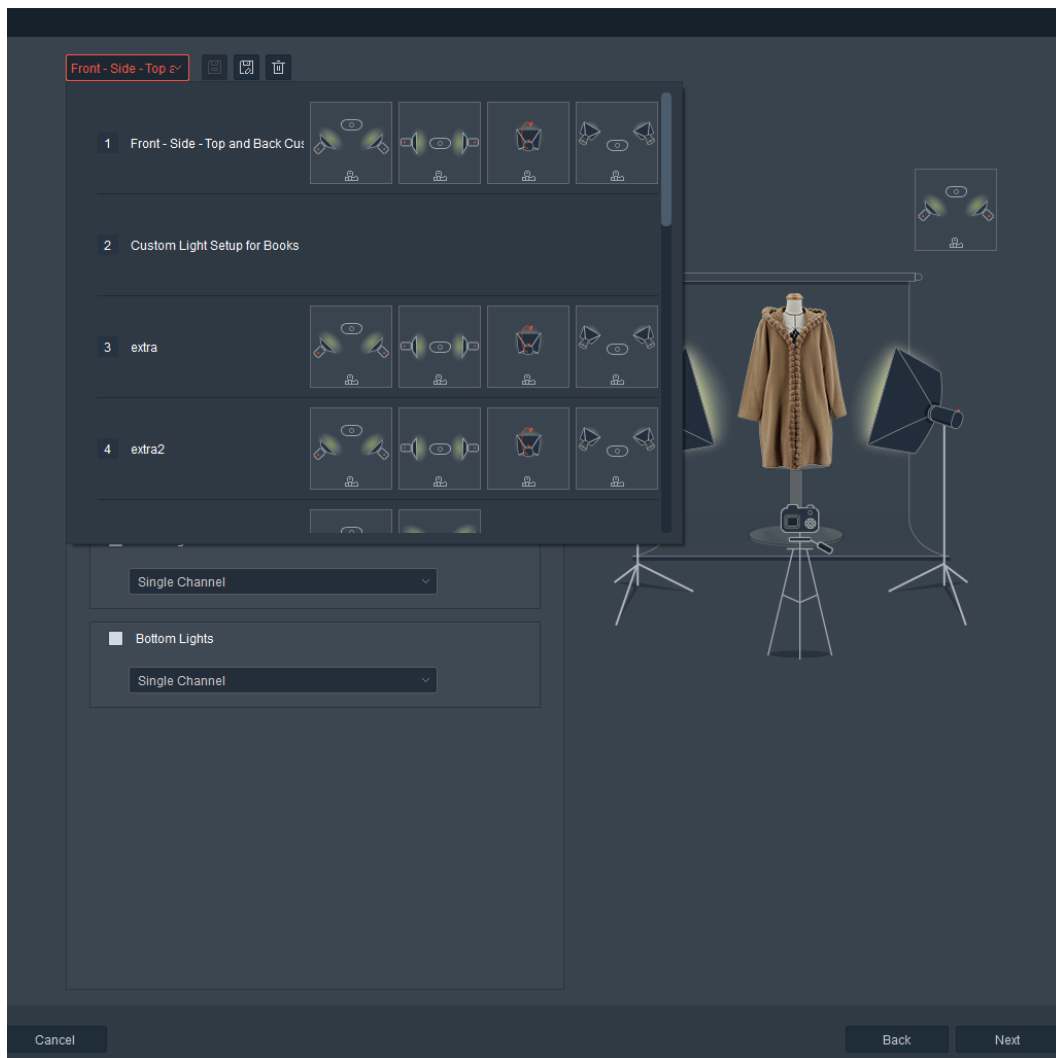


Saving Custom Light Settings as Profiles

Once a custom light setup has been created, it can be saved and re-used as a Profile.



The next time the program is run, the user can choose to use an existing Profile or create a new custom setup.



Full Custom

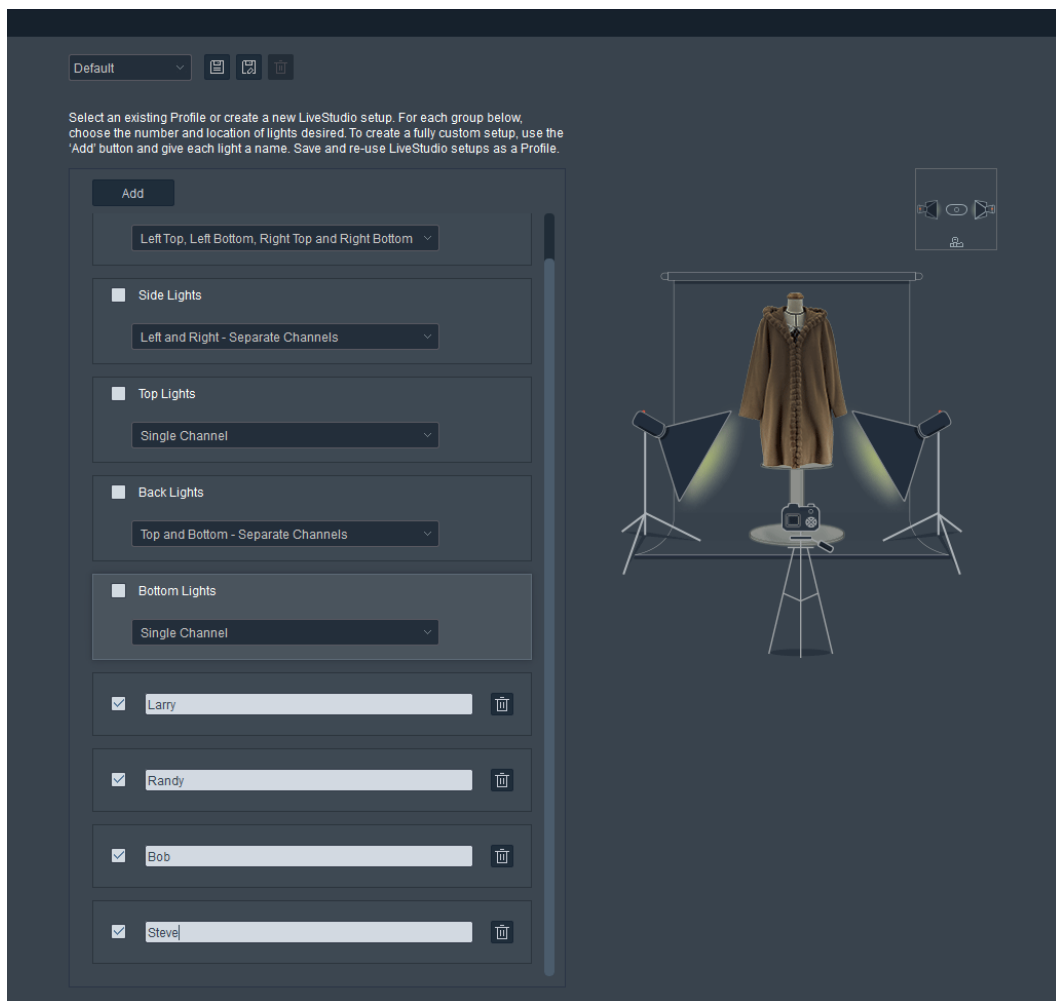
As part of the Custom Setup, users have the option to simply add a light, give it a name and set the channel. This provides the user with the maximum amount of flexibility in setting up the ideal lighting environment for the task at hand. No matter if the item is big or small, dull or reflective this mode gives the professional the ability to create the lighting environment they need.

Note: LiveLight cannot be used effectively in this mode because the software does not know the position of the lights.

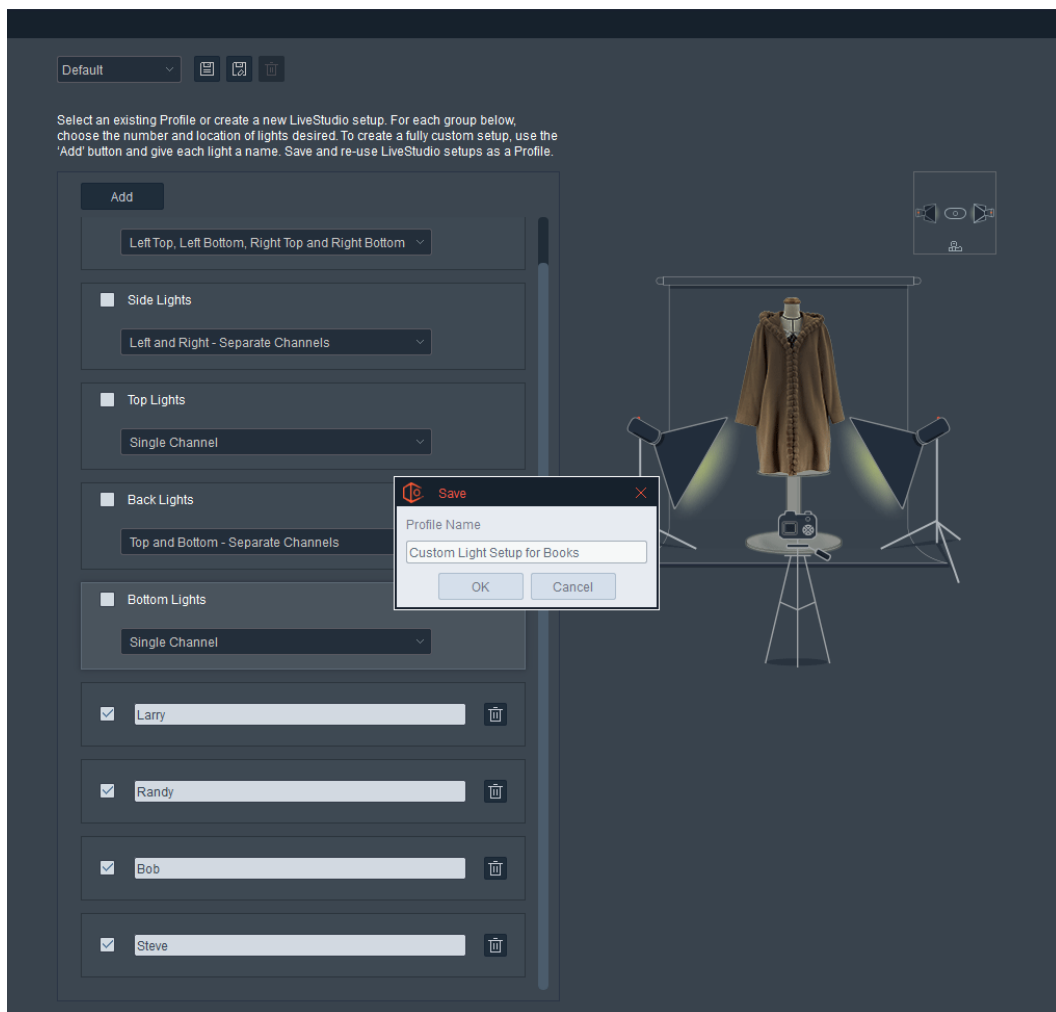
Here's how to set it up:

After choosing Custom Setup, instead of choosing where the light is located, simply press "Add".

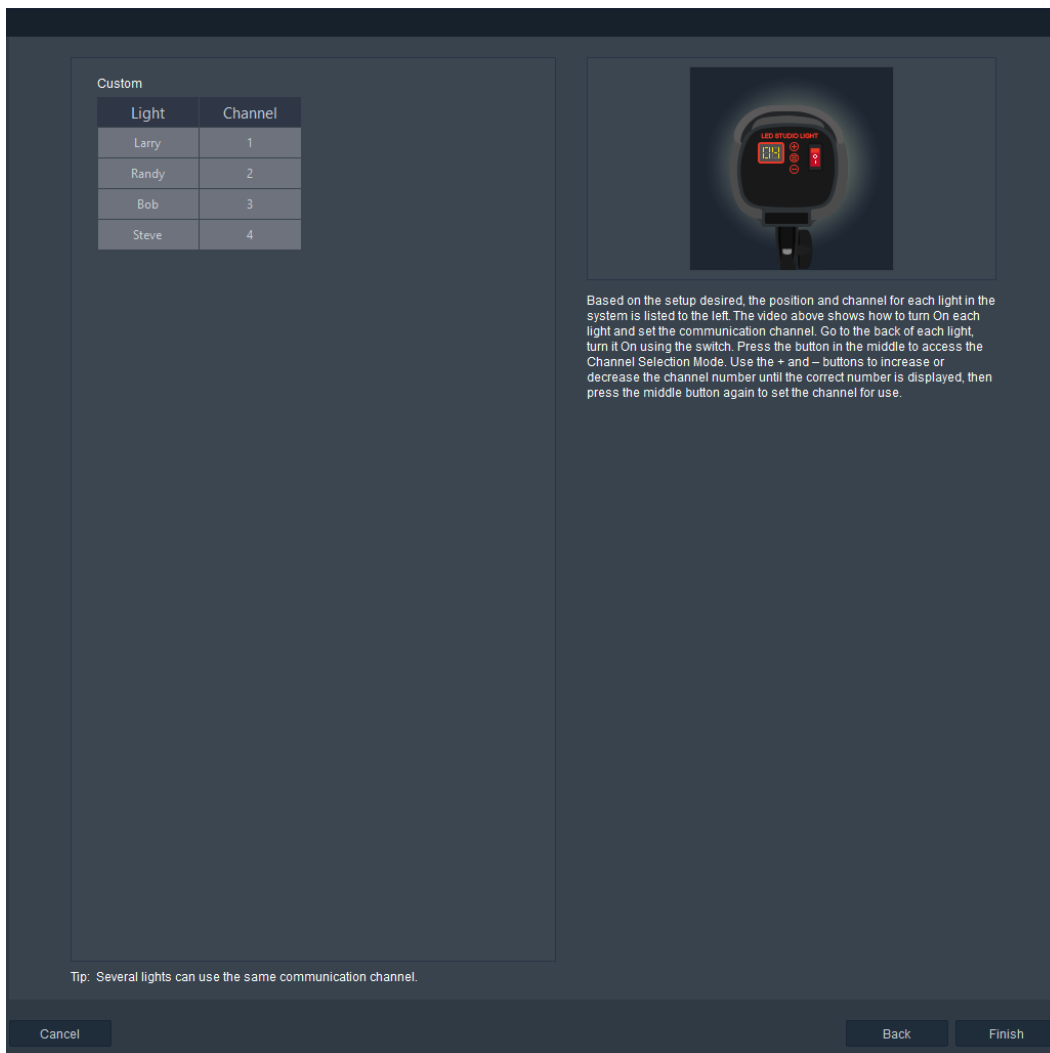
This brings a new option to the screen where the user can either keep 'Custom 1' as the name of the light or type in another name. Note: Whatever name is used, it will appear on the Capture interface.



Continue adding and naming lights until the desired amount has been achieved. Press Next to continue and Save the custom setup as a Profile.



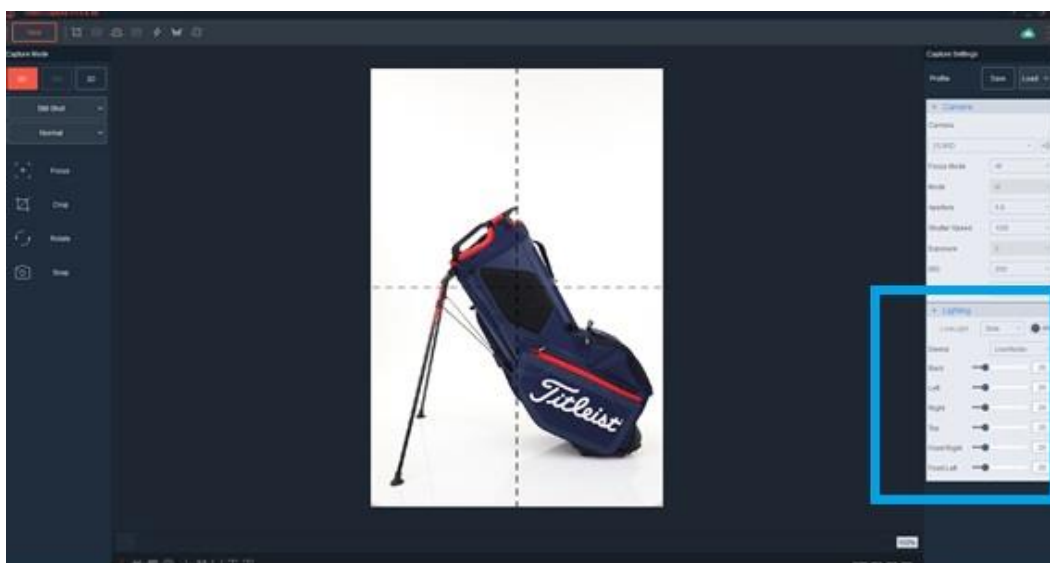
The last step is assigning each light a specific communications channel. Again, more than one light can be used per channel.



For the defined setup, this screen shows the name of the light and the communication channel to be used to control that light. A video and text along the right show how to turn each light On and set the communication channel.

Follow the onscreen instructions. Physically go to the back of each light to turn it On and set the channel to the number required. Click Finish when all lights are On and have been set to the right channel.

When the software is launched, the names of the lights will automatically be on the Capture screen.



Light Control

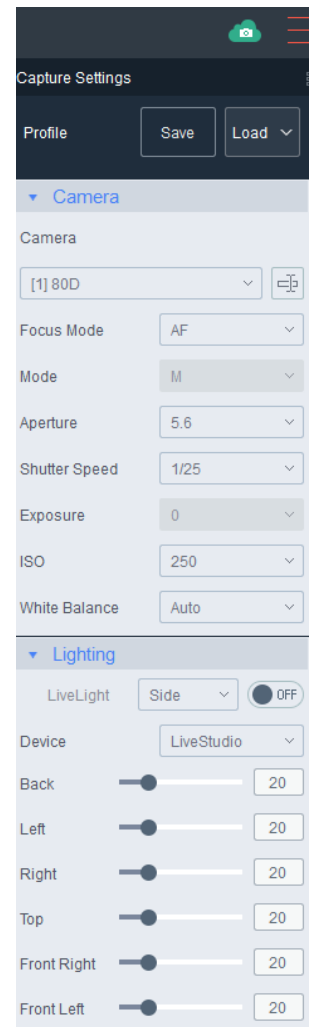
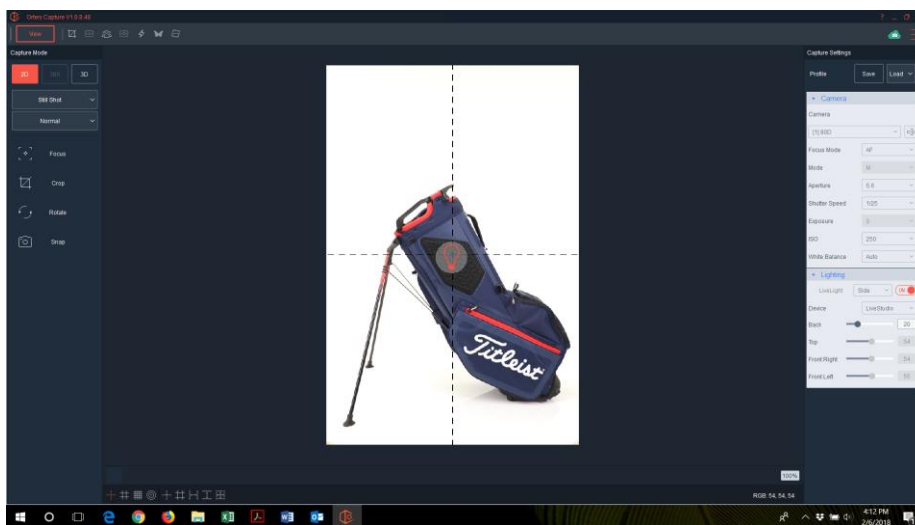
Using Sliders

For each channel, a name and a slider will appear on the Capture interface. Sliding the slider right and left will increase and decrease the intensity of the light or lights on that channel. The changes happen in real time.

Using LiveLight

LiveLight is a unique feature that allows the user to simultaneously control several lights from different directions. It allows the user to fine tune the direction and intensity of light in real time by simply moving the mouse.

When turned On, LiveLight can be controlled from the Top or Side and a light bulb icon appears in the center of the Live Preview.



In a 5 Light system with LiveLight (Side) turned on, when the user moves the light bulb icon around the Live Preview, the lights on the left, right and top change intensities based on the location of the cursor. When the mouse cursor is in the dead center, the intensity of each light is the same.

In contrast, when the light bulb cursor is placed in the bottom right corner of the Live Preview, the left and top lights are low but the right light is high.

It's an excellent tool for fine tuning the light hitting the object without having to get up and move a light further or closer to the object. With LiveLight the user can driver the system and the quality of the results with their mouse.

LiveLight Examples

(5 Light Kit with Lights from the Front Left, Front Right and Top)

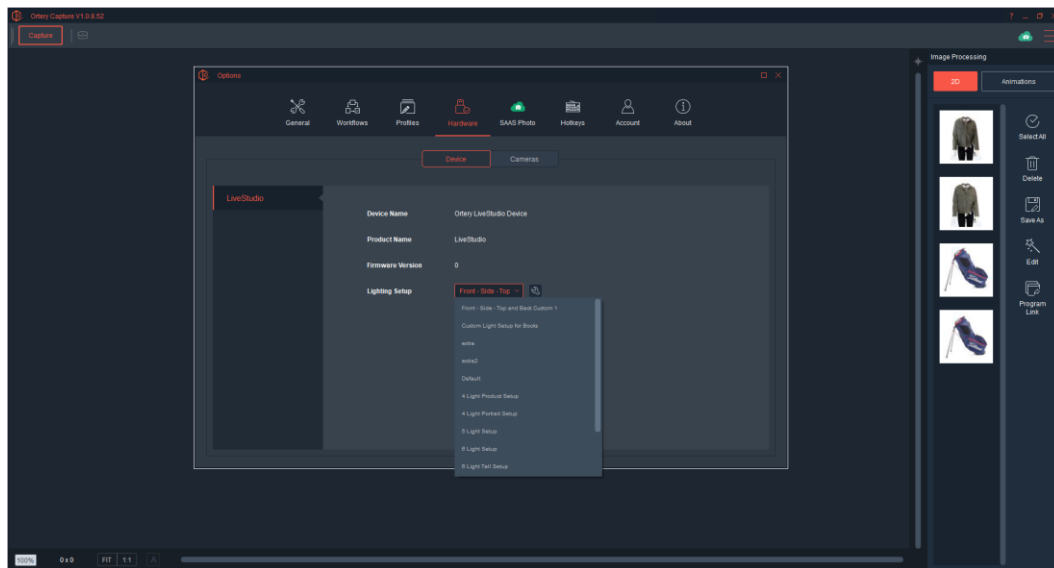


Note how the lights change when the LiveLight Lightbulb moves from one location to another.

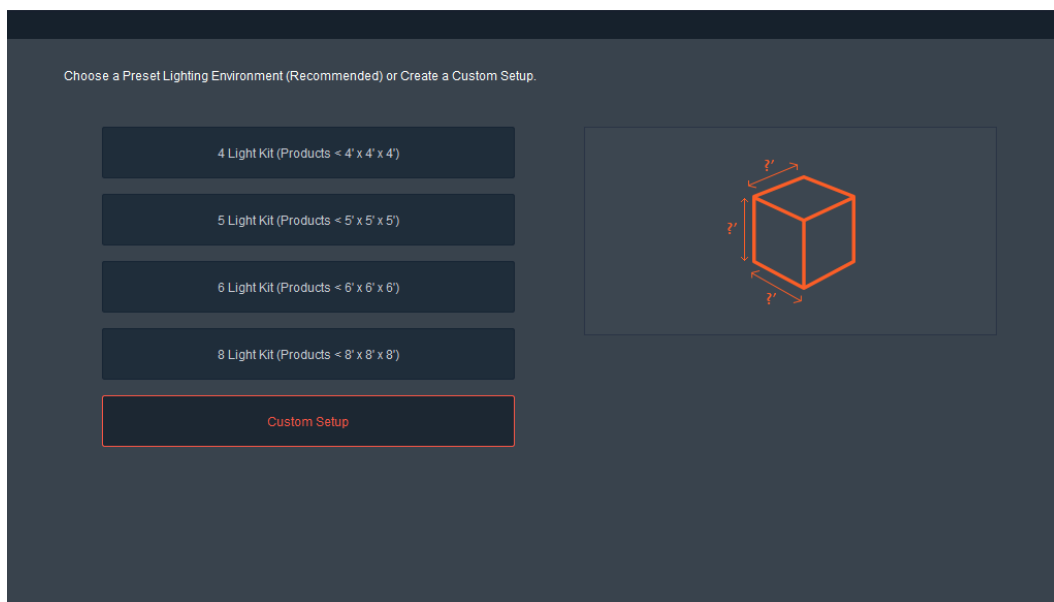
Changing Between Light Settings

Once a lighting Profile is in use, the user can change light setting in two ways:

1. Go to Options and select Hardware. Make sure the LiveStudio device is selected on the left. Then use the Lighting Setup pull down to select another set of light settings.



2. If a new lighting setup is desired, clicking the Tools icons (wrench) bring out the ability to use a new Preset or create a new Custom lighting setup from scratch.



Photography Tips

While each Ortery product has been fine-tuned to provide excellent image quality in a 'load and shoot' manner for most items, some items will require experimentation with different angles, backgrounds, light settings and keeping the door open to get the best shot. These tips will help to get you started. Remember: you can always give us a call and we can work together to determine the best way to shoot a certain item.

Keep Your Equipment Clean:

Periodically cleaning the camera lens, turntable and studio components can ensure consistent high-quality imaging.

Suggested Lamp Dimming Settings:

Use the Default Settings in the software. They work best for most objects.

Get Clearer Images:

Your DSLR camera's default setting is to use auto-focus. While this technology is almost perfect, auto focus is sensitive to picture content and errors can occur. If a blurry image results, try:

Pressing the "Focus" button to re-focus the camera before taking the next picture.

Using Manual Focus mode – This will allow you to adjust the focal point manually to ensure precise focus.

In the editing mode, adjust sharpness (either to single image or batch of images) to increase image quality.

Shooting Reflective Objects:

Spend time to adjust the location and position of the object inside the box or on the turntable.

To avoid the camera lens reflecting on the object when shooting from the top down, try moving objects away from the center of the studio.

To minimize reflections when shooting from the side, close the door and position the camera lens in the shooting hole (when available).

Reduce Floor Reflections – Dim the bottom light or use a higher shooting angle to capture the images.

Eliminate or reduce strong lamp reflections on the object by dimming the front and/or rear lamps. If this doesn't eliminate the issue, cover the lamp(s) in question with white, grey or black paper.

Try placing or holding a piece of black paper to the left or right (or front left or front right) of the object to give an object more depth. The larger the paper and the closer it is to the object, the larger the affect. You may also try taping this material to one or more of the walls inside the light box.

Proportional Cropping:

If your picture needs to be square or a specific proportion (length and width), enable this feature in the Crop Tool.

Maximizing Depth of Field:

If you are taking pictures of products that have depth, either use the Focus Stacking feature or maximize the camera's 'depth of field' to reduce or eliminate the chance of having certain portions of the photograph be blurry. To maximize depth of field, raise the Aperture to the largest number available then adjust (slow) the Shutter Speed setting so that the right amount of light enters the camera. For best results, we recommend using Focus Stacking over increasing Aperture.

Preparation for Shooting 360:

Product alignment is extremely critical. Take extra time to make sure the product is in the dead center of the turntable by pre-rotating the turntable and watching the product spin or use the Position feature. When using a compatible camera, watch your object rotate on the monitor screen and adjust the crop settings to ensure the object never rotates outside the crop area.

When creating animation files, file size can add up quickly.

For increased consistency when creating side shots with a tripod, mark the floor where each leg of the tripod should stand. Note the camera settings and keep the tripod head at the same angle and height.

Use the AfterImage tool to ensure objects are placed in the same spot to increase consistency between shots.

If you don't have a bottom lit studio, slightly overexposing will yield the best results. Although overexposing reduces color saturation, several editing tools can be used to add the color back to the object. Overall it will have the positive benefits of making the background closer to pure white, eliminating potential image noise and minimizing color differences between the rotating platform and the background.

Care and Maintenance

Lamp Specifications

Periodically inspect that all LED lights are working. It is possible that when one individual LED stops working that some of the surrounding LEDs will also stop working. Lamps can be purchased from Ortery directly.

Fluorescent Tubes

The florescent tubes used in Ortery products are manufactured by Philips and last 15,000 hours. Extra replacement tubes are given with the initial purchase.

Changing Lamps

Consult the Installation and Operation Guides that came with the system for detailed directions on Lamp installation.

Cleaning Glass

Avoid scratching or scuffing the surfaces inside the light box. Use detergent and cotton materials to clean periodically. In the 3D PhotoBench series, avoid getting water or cleaning materials on the 360 rollers that guide the transparent turntable platform.

Warnings

Serial Number

Each product has a serial number. One is stuck to the shipping carton. One is applied to the CD sleeve or on a piece of paper inside the software box and another is on the unit. It is important to keep the serial numbers in a safe place. To update the software, talk with a service rep or replace a component under Warranty, you will need the serial number.

Grounding

For safety reasons, each unit is grounded through the third pin on the electrical plug. Always plug Ortery hardware into a 3-prong outlet.

Product Registration and Warranty

To be covered by the Warranty, the user must register the product serial number online within 14 days of purchase. Product registration instructions are contained in the Installation Guide as well as in the software product package.

Product Registration and Warranty

For your product to be covered by the Warranty, you must register the product with Ortery Technologies, Inc. (Ortery) online.

Warranty Period

Ortery warrants to the first purchaser that the product will be free of hardware malfunctions and defects in both materials and workmanship for a period of 12 months from the date of purchase*.

All Ortery equipment comes with a one-year warranty ("Warranty") commencing on the date of product registration. The Warranty covers all major Studio electronic components, PC boards and wiring. During the Warranty period if electronic components break, malfunction, or are defective, Ortery will pay to deliver replacement parts by standard ground shipment as well as assist in the installation and testing to make sure the issue has been solved, all at Ortery's sole cost and expense. If a technician needs to be onsite, then Ortery, at its discretion and cost, will send a qualified person onsite to help remedy the situation. Consumable components such as Fluorescent and LED lights, scratches, turntable tops or other issues caused by user error are not covered under the Warranty.

***Limitations**

Warranty service will not be provided without a dated proof of purchase and prior product registration.

Warranty becomes null and void if the consumer fails to package the product in a manner consistent with original product packaging and damage occurs during shipment.

This warranty does not cover the following: circumstances beyond Ortery's control, damage to the product resulting shipping, from the use of attachments, accessories or alterations not produced and offered by Ortery; damages as a result of unauthorized modifications or service; misuse; abuse; or failure to use items supplied by Ortery.

ORTERY MAKES NO OTHER WARRANTIES, EXPRESSED IMPLIED, OR OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE FOR THIS EQUIPMENT OR SOFTWARE.

Replacement of product or product parts is Ortery's only obligation under this warranty. ORTERY WILL NOT BE RESPONSIBLE FOR ANY CONSEQUENTIAL OR INCIDENTAL DAMAGES RESULTING FROM THE PURCHASE, USE, OR IMPROPER FUNCTIONING OF THE PRODUT REGARDLESS OF THE CAUSE. Such damages for which Ortery will not be responsible include, but are not limited to, loss of revenue or profit, services, computer damage, or claims of your customers for such damages.

Obtaining Warranty Service

Continental United States

Please contact Ortery Technologies directly to obtain proper Return Material Authorization (RMA) documentation. Check user's manual, help file, or visit www.Ortery.com to find appropriate contact information.

*** Please note:** All replacement parts will be shipped by ground.

Outside the Continental United States

Contact local distributor or visit www.Ortery.com to contact Ortery directly.

RETURNS WILL NOT BE ACCEPTED WITHOUT A "RMA" NUMBER CLEARLY PRINTED ON THE OUTSIDE OF THE SHIPPING CARTON. ORTERY IS NOT RESPONSIBLE FOR SHIPMENTS DELAYED OR LOST IN TRANSIT.

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