# 360 Video Creation and Editing Instructions

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### **Recording 360 Videos**

#### Insta360 ONE X2 Setup

- 1. Turn on the Insta360 ONE X2 by clicking on the side button with the power logo ( $^{\circ}$ )
- 2. Tap on the camera icon (<sup>(a)</sup>) located at the bottom of the touch screen
- 3. Scroll down to the video icon (\*) and select the desired quality (standard or HDR)
- 4. Tap on the desired quality to select it
- 5. Make sure the icon on the left of the touch screen says "360"
- 6. To swap recording cameras, click on the icon to the right of the touch screen ()

\*\*\*If touch screen does not show any icons, tap on the touch screen once to make them appear. If the touch screen is off, but the blue light is still on, the Insta360 ONE X2 has gone into sleep mode. Click the side button with the power logo ( $^{\circ}$ ) again to wake it

#### Recording on the Insta360 ONE X2

- 1. Make sure the Insta360 ONE X2 is securely attached to the tripod and facing in the general direction that you would like to record
- 2. When you are ready to record, click the button in the middle, just below the touch screen and above the blue light
- 3. You will know that the Insta360 ONE X2 is recording because the blue light will change to a flashing red light
- 4. Once you are done recording, click on the middle button once again
- 5. In order to access your recorded videos, slide your finger from the left side of the touch screen to the right side
- 6. Click on the play icon (►) in the middle of the touch screen to view your recording
  - a. In order to utilize the 360 feature, you must play the video. You will be able to utilize the 360 feature before playing the video.
- 7. To view more recorded videos, slide your finger across the touch screen up or down
- 8. To view the recorded videos as a grid, click on the icon at the bottom of the touch screen
- 9. To delete any recorded videos, click on the trash icon () to the left of the touch screen
- 10. To go back to recording, slide your finger from the right side of the touch screen to the left side

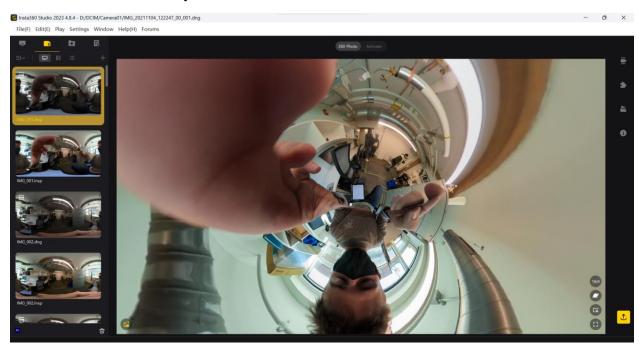
\*\*\*To turn off the Insta360 ONE X2, hold the power button briefly

## **Exporting 360 Videos**

#### Insta360 Studio 2023 Setup

- 1. Download Insta360 Studio 2023 from the following link and complete the installation process: <u>https://www.insta360.com/download/app/studio2019</u>
- 2. Open Insta360 Studio 2023
- 3. Turn on and connect the Insta360 ONE X2 to the computer using the provided USB-A to USB-C cable
  - a. The USB-C port is on the side opposite to the power button. Move the top first slider up and gently lift the tab to reveal the USB-C port
- 4. Insta360 Studio 2023 will show a pop-up stating "*Import Automatically? New storage device detected. Import all files?*"
- 5. Click "Import all"

6. Your screen should look somewhat like this, with a list of all your recorded videos on the left and the currently selected video in the center



#### Exporting from Insta360 Studio 2023

- 1. Before exporting, make sure the following settings are set:
  - a. Stabilization Type
    - i. Automatic horizon leveling = On
  - b. Stitching
    - i. Sticky Lens Guard
  - c. Stitching Optimization
    - i. Dynamic Stitching = Off
    - ii. Optical Flow Stitching = On
    - iii. Chromatic Calibration = On
  - The following settings can be found to the right of the screen, by clicking on the following icons



- 2. To start exporting, double click on the desired 360 video
- 3. Click "*File*(*F*)"  $\rightarrow$  "*Export*(*E*)"
- 4. The following window will be displayed:

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File Name:	VID_202	30620_1	51503_00_0	23.mp4	
File Path:	E:/360 V	ideos (Pl	hase 2)	Change	
Preset Parameters:				✓ Save	
Bitrate(Mbps):	-•			25	
Resolution:	1920		1080		
Frame rate(fps):					
Encoding Format:	H.264		`	~	
Export Type:					
AI Effects:	Remo	ve Grain			
File size 64.12MB (Estimate)		Add to	o Queue	Start Expo	ort

- 5. Click on "*Export 360 Video*" at the top of the window
- 6. The Encoding Format can be set depending on preference; however, it is typically set to **ProRes 422** 
  - a. ProRes 422 makes the quality of the 360 video better; however, it comes with a larger file size and more time exporting
- 7. Make sure to set desired file name and file path
- 8. Click "Start Export" and the 360 video will begin exporting

### **Editing 360 Videos**

#### Editing with Adobe Premiere Pro 2023

- 1. Open Adobe Premiere Pro 2023
- 2. Click on "New Project," located at the top left of the window
- 3. On the top left of the window, rename the project name and choose the project location
- 4. Once complete, click on "Create" on the bottom right of the window
- 5. You will be met with the following window:

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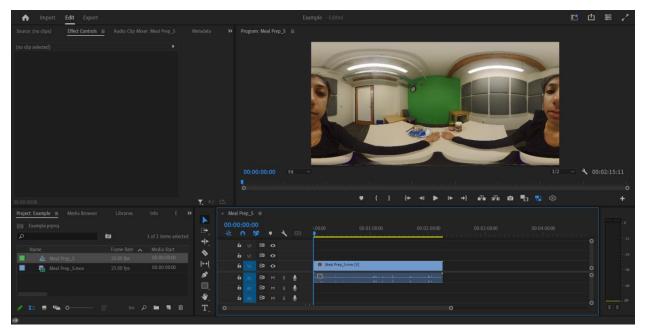
6. In order to begin editing, drag and drop your video into the bottom left section of the window

Project: Example ≡ Media Browser	Libraries		Info		»
Example.prproj					
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- 7. Once in, click on the video and drag and drop it into the bottom right section of the window titled "*Timeline*"
  - a. Note: This will create a sequence of the video, from which you will be using to edit the video

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8. After creating a sequence of the video, you will also see a still image of the beginning of the video in the top right section of the window. Your screen should now look something like this:



9. In order to add effects to the video, click on the two arrows located in the "*Project*" section to and click on "*Effects*"

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10. Here, you can search for specific effects that you add want to add to your video

a. In order to add a fade to black video transition, click on "*Video Transitions*" > "*Dissolve*" > "*Dip to Black*"

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🗸 🖿 Dissolve		
🗾 Additive Dissolve	5	
🗾 Cross Dissolve	<b>5</b>	32 NUV
🗾 Dip to Black	<b>5</b>	32 100
🗾 Dip to White	<u>5</u>	32. YUV
🗾 Film Dissolve	<u>6</u>	32. NUV
🗾 Morph Cut	<u>5</u>	
🗾 Non-Additive Dissolve	53	
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 b. In order to add a blurred effect, click on "Video Effects" > "Blur and Sharpen" > "Gaussian Blur"

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> 🖿 Adjust	
∼ 🖿 Blur & Sharpen	
💼 Camera Blur	
💼 Directional Blur	<b>5</b>
💼 Gaussian Blur	
💼 Reduce Interlace Flicker	節
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💼 Unsharp Mask	盛
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- c. You can experiment with different types of effects depending on how you want to edit your video
- 11. Once you know which effect you want to add, click, drag, and drop the effect from the section to the "*Timeline*" section onto the video sequence
  - a. Depending on the effect, it may show up differently on the video sequence. We'll use the "*Dip to Black*" effect as an example.

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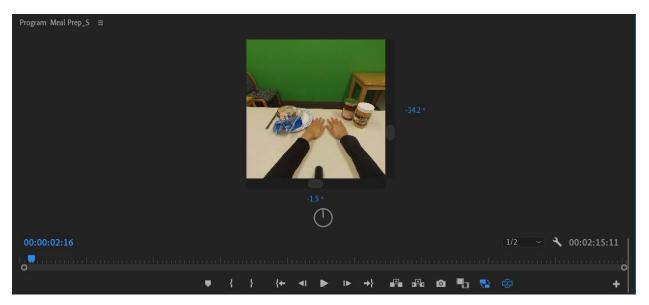
b. If you don't see the effect, try shrinking or enlarging the video sequence using the scroller and the radial buttons located at the bottom of the "*Timeline*" section

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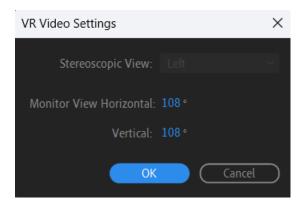
- 12. Continue adding effects as needed!
- 13. In order to view the video as a virtual reality video, click on the VR icon include on the bottom right of the "Program" section
  - a. If the icon is not there, click on the plus button to the far right to add the icon



14. The view of the video should change and it should look something like this:



15. In order to enlarge the video, right click on the video and go to "*VR video*" > "*Settings*" 16. The following popup window will appear:



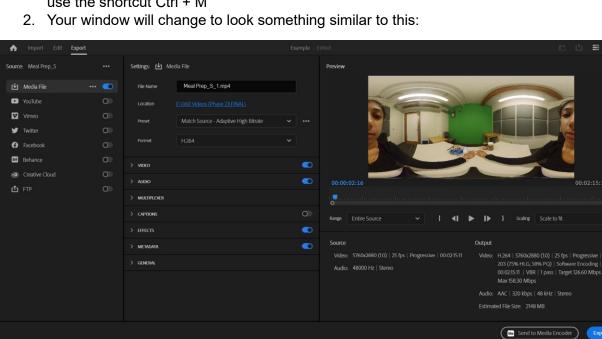
- 17. For the largest video ratio, change the "*Monitor View Horizontal*" value to 180 and the "*Vertical*" value to 90. Then click "*OK*"
- 18. Your video will now look like the following and you will be able to preview it with all the video effects incorporated



19. After you are satisfied with how the video came out with the effects, you are ready to export!

#### Exporting in Adobe Premiere Pro 2023

 In order to export your edited video, click on "File" > "Export" > "Media..." or you can also use the shortcut Ctrl + M



- 3. Change the "File Name" and "Location" of the video; however, I would recommend keeping the "Preset" and the "Format" the same
  - a. "Preset" should be "Match Source Adaptive High Bitrate"
  - b. "Format" should be "H.264"

4. You can keep everything the same as it is; however, you need to make sure that Adobe Premiere Pro 2023 recognizes the video as a 360 virtual reality video. Do this by clicking on the "*Video*" drop down menu and clicking "*More*"

Settings: 🛃 Mee	dia File		
File Name	Meal Prep_S_1.mp4		
Location	E:\360 Videos (Phase 2)\FINAL\		
Preset	Match Source - Adaptive High Bitrate	~	•••
Format	H.264	~	
✓ VIDEO			
Basic Video Setting	5		
	Mat	ch Source	
Frame Size			
Frame Size Frame Rate			N N
Frame Rate			
Frame Rate Field Order			V V

- 5. Scroll down until you see "VR Video."
- 6. Make sure the "Video is VR" box is checked and that the options are as follows:
  - a. Frame Layout = Monoscopic
  - b. Horizontal Field of View = 360
  - c. Vertical Field of View = 180

Advanced Settings									
VR Video									
Frame Layout	Monoscopic	~							
Horizontal Field of View	360								
Vertical Field of View	180								

- 7. Lastly, scroll back up to "Bitrate Settings"
- 8. Here you can choose how good you want the quality of the video to be
  - a. Note: The higher the quality of the video, the longer it will take to export the video
- 9. I typically recommend setting the following options for higher quality if you have the time

Bitrate Settings				
Bitrate Encoding	VBR, 2 pass		~	
Target Bitrate [Mbps]		0	150	
Maximum Bitrate [Mbps]		(	D 200	

10. However, if you don't have the time, I recommend these lower quality options

Bitrate Settings					
Bitrate Encoding	VBR, 1 pass			~	
Target Bitrate [Mbps]		-0			100
Maximum Bitrate [Mbps]			-0		150

- 11. Feel free to adjust these however depending on the situation.
- 12. Lastly, click on the "Export" on the bottom right of the window and you're all set
- 13. You'll see a popup window appear with the percentage as well as an estimated time remaining for the export process to complete

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Estimated time remaining: 5 minutes, 24 seconds		
•	2%	
	Cancel	$\supset$

- 14. Once the video has completed exporting, you should find the video file in the location that you specified before exporting
  - a. Note: Only certain media players support 360 videos. I recommend using VLC Media Player as it supports 360 videos

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