

# **Creating VR Panoramic Images**

# **Using the Tello Drone**

## **Required Materials**

Tello Drone
Cell Phone
Adobe Lightroom Classic
Adobe Animate

#### Instructions

- 1. **Turn on the Tello Drone** and connect to your phone's Wi-Fi (network name will be some variation of TELLO-XXXXXX)
- 2. Open the Tello FPV App. Command the drone to **lift off** and maneuver the drone to desired location.



- 3. On the top right corner of your screen are four round buttons in a row.

  The second from the left (circled in yellow) is the toggle photo/video button. If necessary, tap the button to show the image of a camera.
- 4. Tap the button with a landscape image (where the orange arrow is pointing) this is the Pano 360 button.
- 5. The drone will now take a series of 10 pictures pausing between each photo to upload to your phone and then rotate slightly for the next photo. The app will indicate to you when this set of photos has been completed.
- 6. To access the photos, look in the DCIM folder of your phone for a folder labeled "TelloFPV Photo". Download the photos into a folder on your computer.
- 7. Open Adobe Lightroom Classic.
- 8. Select "Import" and locate the folder with the pictures in the "Source" field.
- 9. Check all the photos and select "Import".
- 10. Highlight all the photos by holding down the SHIFT key, clicking on the first image, and then clicking on the last image.
- 11. From the top menu bar, select "Photo" > "Photo Merge" > "Panorama"
- 12. In the preview dialog box, choose a projection (experiment and see what works best for you). Adjust the "Boundary Warp" or "Fill Edges" to meet your needs. Try "Auto Crop".

13. Once you've made any adjustments you need/like, select "Merge".

### 14. Open Adobe Animate.

- 15. Select "Create New" and then select the "Advanced" option. Under "Beta Platforms" (you may have to scroll down) select "VR Panorama (Beta)". In the "Details" pane, adjust the "Width" and "Height" (in pixels) to match those of your image (this information can be found by right clicking on the file and selecting "Properties" > "Details"). Then select "Create".
- 16. Drag the image file created in Lightroom Classic and drop in the white box on the screen. This is now layer 1. Click on the lock image and the texture layer image (two to the left of the lock).
- 17. Under "Document Settings" on the right side of the screen, select "Match Contents" and then adjust the view to "Fit In Window".
- 18. Save the file it will create a .fla file.
- 19. To test an image in a web browser, select "Control" from the top menu and then "Test Movie" > "In Browser" this will open up a new browser window/tab with your file that you can move around.
- 20. To publish the panorama image, go to the "Doc" panel on the right side and select "Publish Settings" and then "More Settings".
- 21. Choose an "Output Name" (file name) and select "Publish". This will create all the HTML, JavaScript and image textures you need to upload to your webserver to show off your VR Panorama image.

Sources: Adobe Lightroom Classic Tutorial and LinkedIn Panorama VR 360 Tutorial