LRTL Import

Welcome to my first ever LRTimeLapse Pro tutorial for processing and stabilizing drone hyperlapses utilizing LRTimeLapse Pro, LightRoom, and Premiere Pro Warp Stabilizer. I have personally found when following tutorials, it's best to have a written document to follow rather than a voice over. This way you can pause the video as you go and refer back to this for the exact steps you need to take.

I HIGHLY recommend heading over to Gunther's LRTimeLapse Pro website to check out his in-depth tutorials. He is the creator of the software and an extremely helpful and knowledgeable resource; far beyond my knowledge!

In this tutorial I will be utilizing an older version of LRTimeLapse Pro (Version 5.7). Gunther has since released Version 7 which has some serious upgrades, is more user friendly, and produces even more professional results. The reason for this tutorial is to give you the basic workflow of switching back and forth between LRTimeLapse and Lightroom, and finally, the most important step for drone hyperlapse specifically, Warp Stabilizing in Premiere Pro.

Start of Video
Here you will be importing the RAW hyperlapse sequence you have pulled off your drone from the DCIM->Hyperlapse->100_0001. I recommend dropping this straight onto your desktop as trying to process from external drives can cause errors due to the lack of read/write speed of external SSD's.

Before starting, make sure you have both LRTimeLapse Pro and Lightroom open.

Selecting the LRTimeLapse_Tutorial folder, LRTimeLapse will automatically import the entire sequence, read the metadata, and apply the preview luminance column. Make sure to let the software fully ingest and populate this column before proceeding. Once the blue line has completed and the column populated, you can now preview your hyperlapse directly in LRTimeLapse. You will immediately notice the video is VERY bumpy/shaky. Not to worry, this will be fixed later on. (FYI: the way DJI automatically creates the video for you is because it takes the images being shot in 5.5K and reduces it to UHD (3840x2160). This takes away from a lot of what you thought you were taking a hyperlapse of.)

Once this has completed, you're going to want to use the Keyframe Wizard (0:41). The reason for this is so that you can edit individual frames throughout the sequence depending on the lighting and other factors in Lightroom. By doing this, LRTimeLapse will then incrementally change what you have edited frame by frame, thus reducing flickering - one of the most common issues with hyperlapse/timelapse photography, and **why LRTimeLapse Pro is the go-to editor for professional grade results.**

From this point on, there will be a lot of switching back and forth from LRTimelapse to Lightroom. I reduced my workflow speed to 80% in the videos for those of you doing this for the first time. I expect you will still have to pause the video, go backwards, and refer to this document.

After you select the number of Keyframes you want (shown by the blue diamonds on the timeline), press SAVE in LRTimeLapse and then click and hold the “Drag to Lightroom” button (0:58) and drag it over to your LightRoom library. Here you will be prompted with an Import page in LightRoom (1:04). MAKE SURE the “ADD” is highlighted at the top, NOT the “COPY.” Ensure all of the photos are selected with checkmarks and press IMPORT (1:07).

LightRoom will now populate the library with your entire sequence and create initial previews. At this step, you will edit your keyframes you have selected in LightRoom. To automatically show the keyframes only, in the top right select the dropdown and select LRT5 Keyframes Only (1:15). Once you see the two keyframes, double click the first one and press the DEVELOPE tab in Lightroom (1:24). You can now edit each photo individually to your liking. My recommendation is to start with the simplest first; white balance, exposure, highlights, shadows. After you have edited the first one, press shift and select the second photo. On the far right side at the top of Lightroom you will see a little squiggle mark, select that dropdown (1:48), and select Sync Keyframes. This will apply the edits you made to the first photo to the second. Then click on the second photo and make edits you see fit from there. Once complete, this is a very important step; you want to save the metadata of each keyframe to the file. You can do this by selecting the photo, selecting the “Photo” dropdown at the top, and selecting “Save Metadata to File” (2:13). Complete this step for each photo.

Now we are going to be returning to LRTimeLapse Pro. At this point, you’re going to want to press the RELOAD button (2:33). LRTimeLapse will now read the metadata from the keyframes and reload that info into the LRTLimeLapse sequence. Next, press AUTO TRANSITION (2:47). This is one of the most important steps of the whole process as this is where LRTimeLapse Pro is going to incrementally change the edits to every photo in the sequence based on your keyframe edits. After this has completed, press the VISUAL PREVIEWS button (3:05). At this pint, LRTimeLapse is going to use Adobe DNG converter to change the edits to every photo in the sequence. Depending on your machine and the number of photos, this step can take anywhere from 1-10 minutes. Before proceeding to any further step, make sure the pink line makes it all the way across and all of the yellow dots have disappeared. Once this has happened, you can preview the sequence in LRTimeLapse, and should see a significant reduction in any flickering. At 3:40, I cut to black in order to give you a place to make sure you are caught up and can go back as necessary before moving on.

Coming back, you can now watch you hyperlapse with all of the edits made. Again, it will be VERY shaky, but worry not, we will fix that. Save in LRTimeLapse again and switch back to LightRoom. Make sure you have the full library shown by selecting the LRT5 Full Sequence from the dropdown. Then select all of the photos (CMD-A Mac, CTRL-A Windows). Select the Metadata dropdown in Lightroom and select read metadata from files (4:22). Lightroom now reads the metadata that LRTimeLapse has written to all of the photos. In order to properly export the sequence from Lightroom, you will need to right click on ctrl click (Mac) anywhere in the library and select “Go to Folder in Library” (4:39).

Select the file dropdown, and select export (4:46). This will bring up the export dialogue box in Lightroom. At this point, you're exporting an intermediary sequence the LRTimeLapse Pro will then use to render your full hyperlapse. Ensure you have the LRTimeLapse Pro preset selected and then choose how you want to export. TIFF has greater quality than JPEG, as does 16-bit over 8-bit. However, TIFF/16-bit is exponentially larger file sizes that take significantly longer to process. This all depends on the quality you want in your final product. Once you have selected these, press export (5:07). Again, depending on your machine, number of photos, and TIFF vs JPEG, this export process can take anywhere from 5 minutes to over an hour. This should give you plenty of time to go back and rewatch, read, and comprehend the steps we have taken to get here.

Coming back at 5:30, we have now completed the export from LightRoom and are back in LRTimeLapse Pro to export the final video before we stabilize it. To do this, click the File dropdown and “Render Video” (5:34). Locate the intermediary sequence you exported from LightRoom and select it (5:41). Then choose where you want to export the video to (the second bar down) and the name you would like to give it. After this, you have several selections in the bottom left for your video. I always recommend selecting “Original Resolution” - 23.976 Frames per second, High Quality, and 422 sampling. Also ensure “Delete Intermediary sequence” is checked so the software automatically deletes this from your computer. Once everything is selected, press Render Video (6:02).

Coming back at 6:28, we are now opening Premiere Pro and creating a new project. This step is where we are going to make your final hyperlapse silky smooth at FULL resolution of 5.5K. Create the new project in Premiere Pro, give it a name in the top left, and press create (6:37). Drag in the video exported by LRTimeLapse Pro into the project (6:45), and then drag that video into your workflow. Go to the “Effects” window, and type “war” until you see Warp Stabilizer show up. Click on that and drag directly onto your timeline. I recommend using the default settings applied by Warp Stabilizer. Once you have dragged this on, this step can take anywhere from 1-10 minutes to stabilize the video.

Once we are back at 7:30, CHECK OUT THE DIFFERENCE IN THE VIDEO. This is where the magic happens as now you have a full resolution video, with no more shaky frames. At 7:45, I replay the video originally exported by LRTimeLapse to give you an idea of just how much the video was smoothed by Warp Stabilizer; pretty damn impressive isn’t it? At this point you have many choices on how to export from Premiere Pro for your FINAL DRONE HYPERLAPSE VIDEO. I recommend exporting with the Apple ProRes 422 preset for the highest quality.

That wraps up this intro tutorial to this entire workflow. I have done this over 1000 times at this point so it’s second nature. The more you do it, the easier it will get. This document is VERY thorough and a lot of information to take in, but I hope you can refer back to it as you continue to create more and more drone hyperlapses. As always, PLEASE feel free to ask me any questions, any time. I will be doing another tutorial with LRTimeLapse Pro 7 in the near future to show off it’s upgraded capabilities. Until then, happy lapsing and please keep contributing to our Drone_hyperlapse subreddit! We love seeing what all of you are doing out there!!