



Photoshop Video Keyframes

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In this lesson, we're going to dive deeper into video editing with Photoshop. Note that there is a separate lesson that covers the basics, so you may want to visit that one before working through this one.

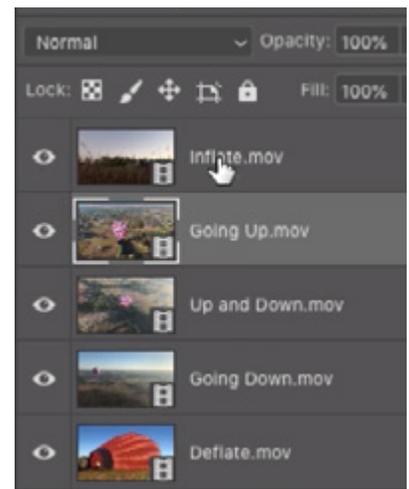
Here, I am going to introduce the concept of keyframes. Keyframes allow us to change a certain quality of a layer over time. This can be the opacity of the layer, the position of the layer, or a transformation that you've made to a layer.

Getting Videos into Photoshop

Let's start by getting the videos and other media we want to work with into Photoshop. We'll open the folder containing the media in Adobe Bridge. When I first viewed my video files in Bridge, I only saw the Quicktime icon instead of a video preview thumbnail. To fix this, I went to the Tools menu and chose "Manage Cache." A dialog appeared and I clicked on the top option, "Build and export cache folder *folder name* and all enclosed folders." I then clicked OK and all of the thumbnails displayed images instead of Quicktime icons.

You can preview a video in Bridge by first clicking on the thumbnail to make it active. The video will appear in the Preview panel with a play slider beneath it. Click on the Play button and then use the slider to scroll back and forth through the video. (Note that you have to first click the Play button in order for the slider to work.)

I also renamed my video files before moving them into Photoshop. This just helps you remember what kind of action is happening in each video layer. Select all of the video files within Bridge, go to the Tools menu and choose Photoshop > Load Files into Photoshop Layers. When it's done, a new Photoshop document will open and there will be one layer for each video file. The layers will be named based on the file names.



A series of video files were selected in Bridge and then loaded as layers into one Photoshop document.

The Timeline Panel

The video layers will also appear within the Timeline panel, which runs along the bottom of the interface and is where you'll be doing much of your video editing. I like to expand the Timeline panel so that I can see all of the video layers and then resize the main image so that I can see the entire thing within the main image window. Use the little slider at the bottom of the Timeline panel to zoom in and out. This is like zooming in and out on a map. You're not changing the length of any of the videos. You're just changing the view of them.

If you ever want to get rid of the Timeline panel, you can either click on the Window menu and choose Timeline (to remove the check box next to its name) or you can click on the Window menu, choose Workspace and then choose a workspace that's not the Motion workspace.

Organize the layers by changing their order within the Layers panel, based on the order in which you'd like them to play in your video. When you change the order of layers in the Layers panel, the order will also change within the Timeline panel.

The playhead is positioned, by default, on the left side of the Timeline. Click and drag to the right in order to preview the video, knowing that the top video layer will hide your view of the layers beneath it. The length of the video will be displayed at the bottom of the Timeline, beneath the list of video layers.



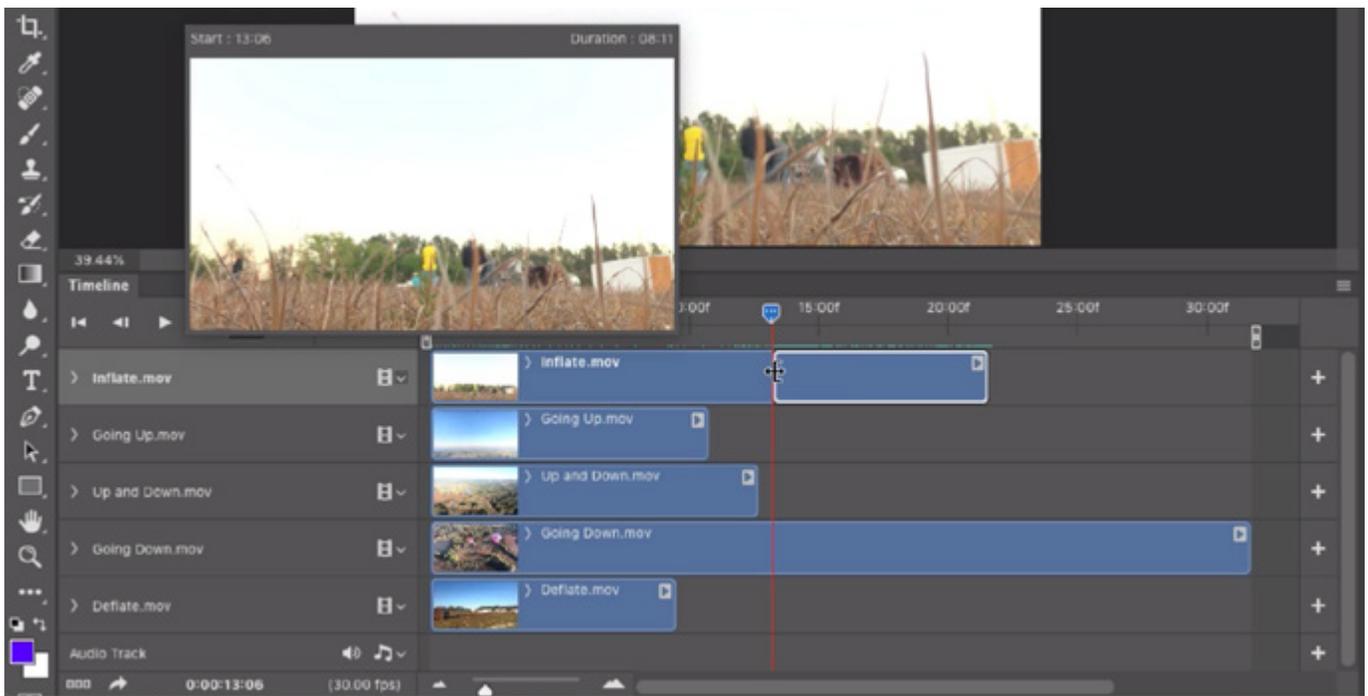
The Timeline panel is shown above. It shows all of the layers and how they will appear over a specified time frame.

Splitting clips and removing pieces of clips

You may not want to use the entirety of a video clip in your project. If that's the case, you could either split the clip in two pieces and remove the unwanted piece, or you could trim the clip from the beginning or from the end.

To split a clip into two pieces, first position the playhead over the area where you want to split the clip and then click the little Scissors icon in the top left side of the Timeline panel. This will split the clip into two pieces, with each piece on a different layer. You can then delete the layer that you don't want.

To trim a clip, first position the playhead over the area that you want to trim to. Then hover your cursor over the beginning or ending edge of the clip. When the cursor changes into a bracket with two arrows, click and drag on the edge of the clip until it meets the location where you positioned the playhead. You can then click and drag on the clip in order to position it where you want it to appear within the Timeline. In the video example, we trimmed the clip to remove the first half and then we dragged it to the left side of the Timeline so that it would start playing at the beginning of the video.

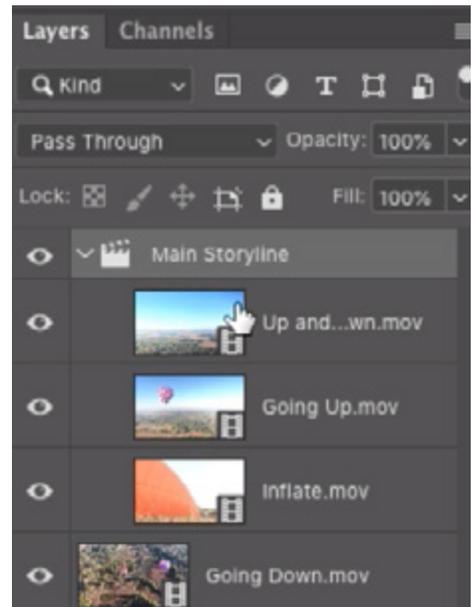


The top clip is being trimmed by clicking and dragging on one of the edges of the clip within the Timeline panel.

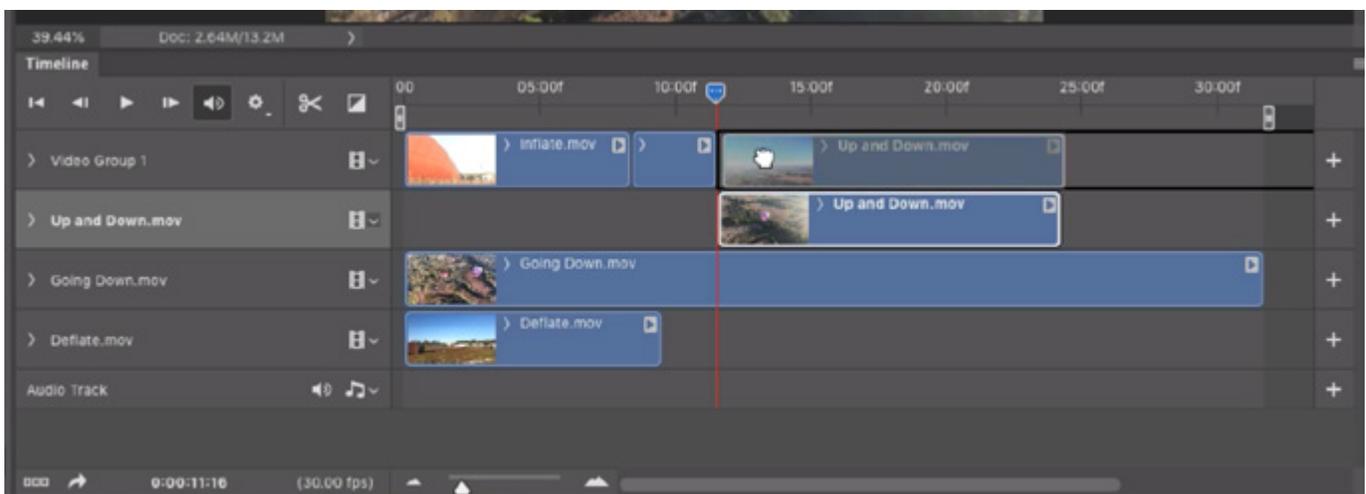
Grouping video layers

If you know that you're not going to have more than one video clip playing at the same time (where one video overlays another), you can simplify your Timeline panel by placing the video layers sequentially on a single horizontal bar. This is a simple drag-and-drop process. When you place more than one video on a single horizontal bar, those video layers will be placed into a layer group, and you will see that reflected in the Layers panel. You can change the name of the layer group within the Layers panel.

In the video example, we placed a series of video clips on the top bar in the Timeline panel and then dragged on the edges of each clip to trim the beginning and ends, ensuring we weren't including any video footage that we didn't want. When you trim clips that are grouped on the same horizontal bar, it's going to automatically snug the clips together so that there are no gaps between them.



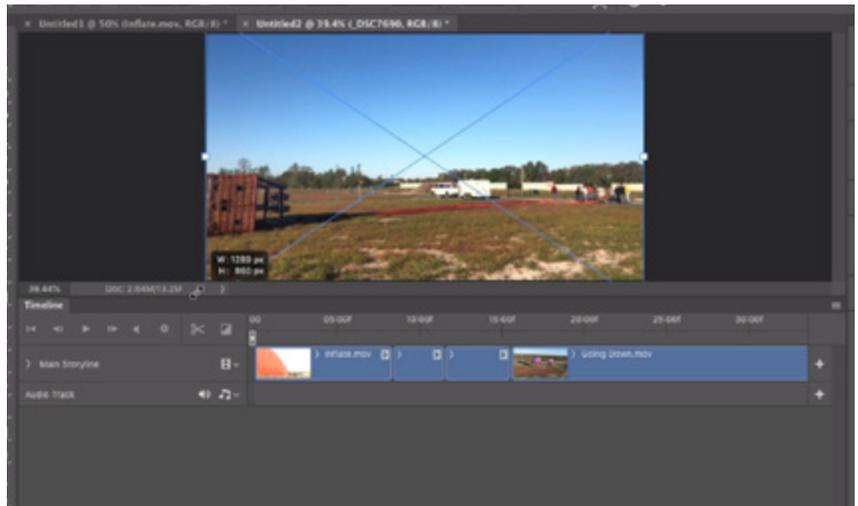
When multiple clips are moved to the same horizontal bar in the Timeline, they will be placed in a group within the Layers panel. Here, we renamed the group "Main Storyline."



Here, we are dragging multiple video clips onto the same horizontal video bar so that they will play in a sequential order.

Adding Still Photographs

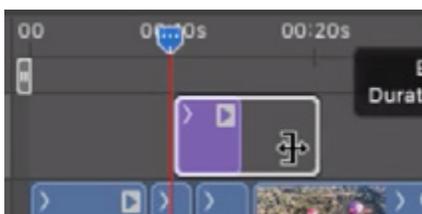
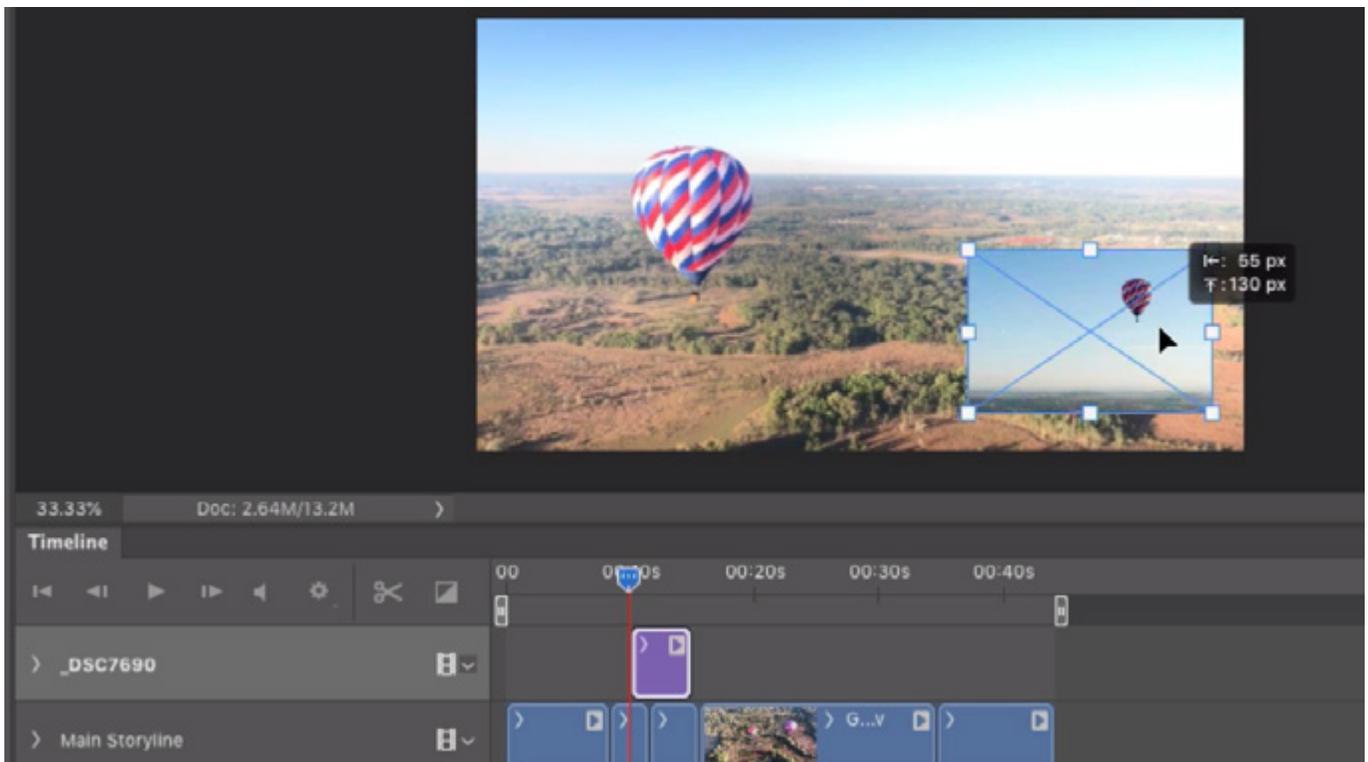
A video can also contain still photographs and there are a few ways of adding additional media to the document. The easiest way is to drag and drop. Position the Photoshop and Bridge windows so that you can see both on your screen at the same time. Then, simply use Bridge to find the image you want and then drag the image directly into the Photoshop image window. Whenever you add an image like this, Photoshop is going to add it as a smart object and it is automatically going to scale down the image so that it fits within the document bounds. The transform handles will be active so that you can manually adjust the image's size and position. In the video example, the image we added did not fill the document frame on the left and right sides so we actually used the transform handles to scale the image up so that it filled the frame completely.



This photo was dragged from the Bridge window directly into the Photoshop window. When you drag an image into Photoshop like this, it's added as a smart object.

When you drag an image from Bridge into Photoshop, that image is going to be placed on a layer that is directly above the layer that was previously active. In our example, the active layer was inside of a layer group, so the new image was placed inside of that group as well. Remember, any time that layers are placed inside of a single video group, they will be located on the same horizontal bar in the Timeline and they will all appear in sequential order within the video. In our case, we want the new image to appear on a separate horizontal bar in the Timeline because we're going to make the image appear as the same time as the video. To achieve this, we simply dragged the layer thumbnail outside of the layer group in the Layers panel.

Picture in picture You can make one picture (or video) appear at the same time as another video inside a smaller picture window. Place the playhead in the location where you'd like the picture to overlay on the video and then drag the photo clip to that spot. It should click in place to the location you set the playhead. By default, the picture will take up the entire frame, hiding any video layers beneath it. To create more of a picture-in-picture effect, click on the Edit menu and choose Transform > Scale. Transform handles will appear around the layer and you can use them to scale and reposition the image so that it appears in an appropriate place above the video layers. Press the Return/Enter key to lock in the transformation. To control how long that image should play within the video, drag the edge of the clip within the Timeline to make it wider (to play longer) or narrower (to play for a shorter time).



ABOVE: The image layer was positioned so that it overlapped the video layers in the Timeline. The Transform command is being used to scale the image down so that it only appears in a small window above the video. **LEFT:** The edges of the image clip are being dragged to specify the length of time the image will appear in the video.

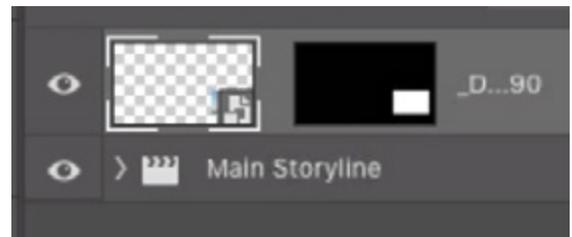
Keyframes: Make an image zoom over time

One of the things we can do with the images in our videos is make them zoom in or out over time. Note that to make an image zoom in, it needs to start in a state that is already scaled down so that we don't bring it to a resolution that is larger than 100%, as this would cause the quality to go down.

When we make the image zoom, we don't want to change the size of the image frame. We instead want the contents of the image to get bigger within the image's frame, and this will make things a bit more complicated.

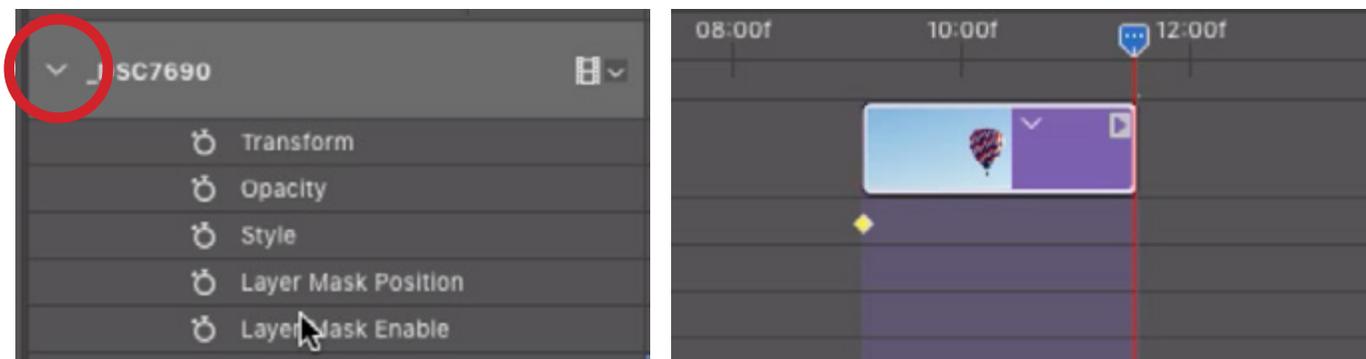
Make sure that the image layer that you want to zoom is active in the Layers panel. Then, hold down the Command key (Ctrl on Win) and click on the layer thumbnail. This will create a selection around the contents of the layer. Next, add a layer mask by clicking on the Layer Mask icon at the bottom of the Layers panel. This will create a mask that hides everything that's outside of the active selection. The layer has no content outside of the active selection but it will after we start scaling the layer up.

Now if you were to scale the layer as is, Photoshop will assume that the layer mask should scale with it, and you don't want that. You need to tell the layer mask to stay in place while the contents of the layer changes. To do this, click on the little link icon between the layer thumbnail and the mask thumbnail. This will unlink the layer from the mask so that they can move independently of one another.



A layer mask was added to the image layer and we unlinked the layer and the mask so they can move independently of one another.

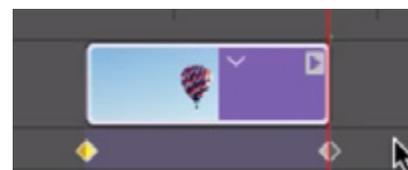
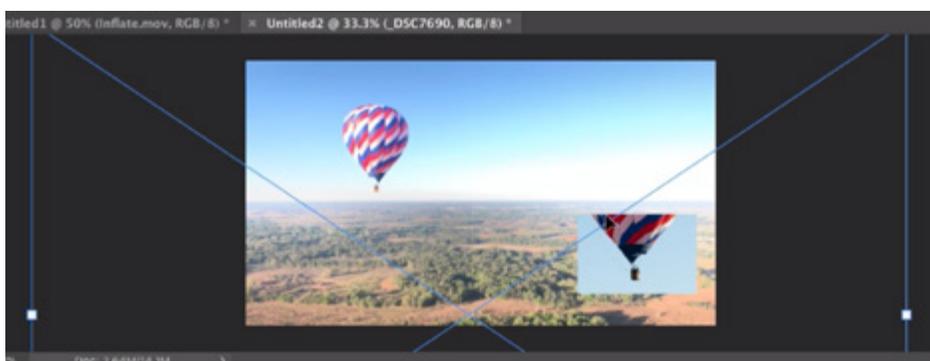
The Transform Keyframe Now the image layer is set up such that it can be scaled within its frame. In the Timeline, make sure that the image clip is active and that the playhead is positioned at the beginning of the clip. Then click on the little triangle to the left of the layer name for the image layer. This will expand a list of keyframe options. To create the scaling effect, you'll want to use the keyframe called Transform.



LEFT: Click on the little triangle to the left of the layer name (circled) to expand the list of keyframes. **RIGHT:** After clicking on the stopwatch icon to the left of the Transform keyframe, a yellow diamond will appear, marking the keyframe position.

Click on the little stopwatch icon and Photoshop will start keeping track of any transformations made to the layer. A little yellow diamond will appear beneath the image layer, indicating that Photoshop just recorded the size and position of the layer at that point in time. Whenever the playhead reaches that particular point, the image layer will look as it does right now.

Now, drag the playhead to the end of the image clip in the Timeline. Click on the Edit menu and choose Transform > Scale. Transform handles will appear around the layer and you can use them to scale the image up to the size that you want it to ultimately zoom to. Because the layer is unlinked from the mask, the image frame will not change size, just the image inside of it. When you're done scaling the image, hit the Return/Enter key to lock in the transformation. Another keyframe will automatically be added at the point on the Timeline where you made the transformation.

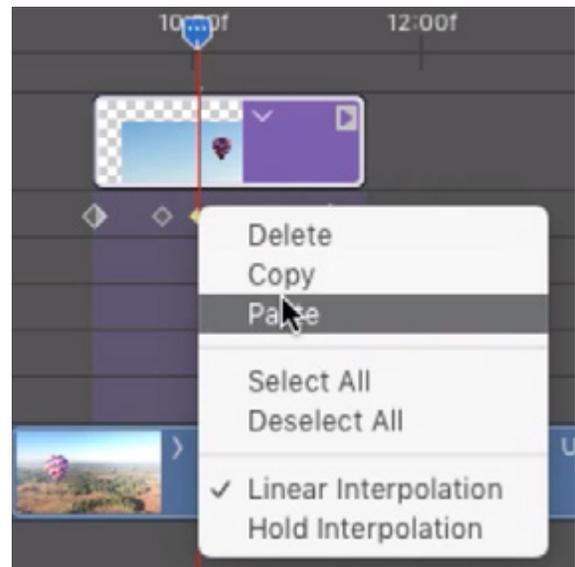


LEFT: The image layer is being scaled after creating a keyframe. **ABOVE:** After scaling the image, a second keyframe was added.

If you want to change the length of the image clip, you can do so by dragging the edges of the clip, but know that the keyframe will not move with it. If you want to move the keyframe as well, you will need to manually by drag it separately. You can also add multiple transformations to a single image.

In the example, we scaled the image up. If we were to move the playhead and then make another transformation (perhaps we rotate the image), then another keyframe would automatically be added for that transformation. You can manually add more keyframes by clicking the little diamond icon to the left of the Transform keyframe category on the left side of the Timeline.

To copy the function of one keyframe and apply it to another, right-click on the keyframe that you want to copy. A pop-up menu will appear and you can choose Copy. Then, right-click on the keyframe that you want to change and choose Paste from the pop-up menu. You can delete a keyframe by right-clicking on it and choosing Delete from the pop-up menu.



Right-click on a keyframe to copy or paste its functionality.

Keyframes: Make an Image Fade over time

The Opacity Keyframe Now let's look at some of the other types of keyframes. The Opacity keyframe can be used to make an image fade out or fade in over time. To make an image fade out, position the playhead at the location where you would like the image to start fading out and then click on the little stopwatch icon to the left of the word "Opacity" on the left side of the Timeline. This will set the first keyframe, locking in the opacity of the image at the specified point in time. Then, position the playhead at the location where you

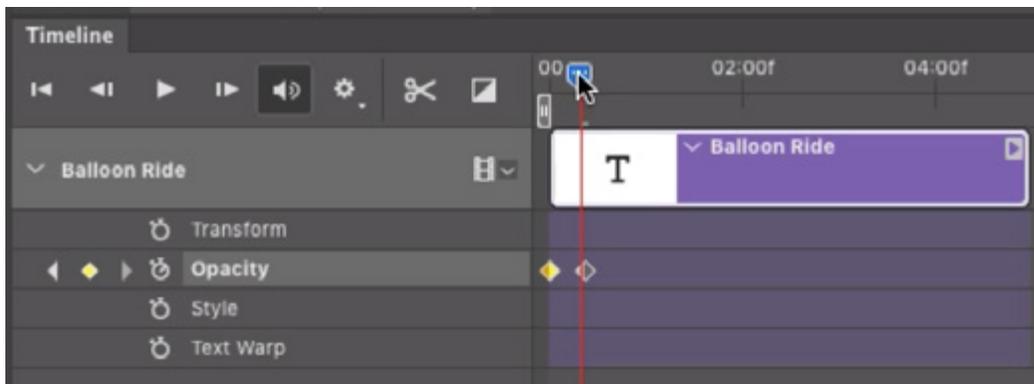
would like the fade-out to end. Use the Opacity setting at the top of the Layers panel to change the opacity from 100% to 0%. At 0%, the layer will be completely invisible. When you change the opacity setting, another keyframe will automatically be added, marking that change. Now, if you drag your playhead over the image clip, you will see that it starts at full opacity and then begins to fade after it passes the first keyframe. It will be completely transparent by the time it reaches the second keyframe.

Adding Text

Text can be added to your video projects just like you would add it to a regular Photoshop document. Activate the layer on top of which you'd like the text to appear. In addition, position the playhead in the location you'd like the text to appear in the Timeline. In the video example, we moved the playhead to the beginning of the Timeline because we want the text to start at the beginning of the video and serve as an introduction. We also activated the top layer so that the text layer would be placed above it, at the top of the Layers panel.

Activate the Text Tool, click within your document to place the cursor and start typing in your text. This will create a new type layer that will appear within your document. You will need to drag the edges of this clip within the Timeline in order to specify how long the text should appear in the video.

In the video example, we decided that we wanted the text to fade in at the beginning of the video. We set the playhead to the very beginning of the Timeline and then created an Opacity keyframe. (Remember that you need to click the little arrow to the left of the layer name in order to expand the keyframe list.) We set the opacity of the layer to 0% so that the keyframe marks the layer as being invisible in this location. We then moved the playhead to the right by the number of frames we want it to take for the text to fade in. We then set the opacity to 100% and when we did this, a new keyframe was automatically added.



At left, the Opacity keyframe was used to make the selected text fade in over a short period. At the first keyframe, the text is at 0% opacity. At the second keyframe, it's at 100%.

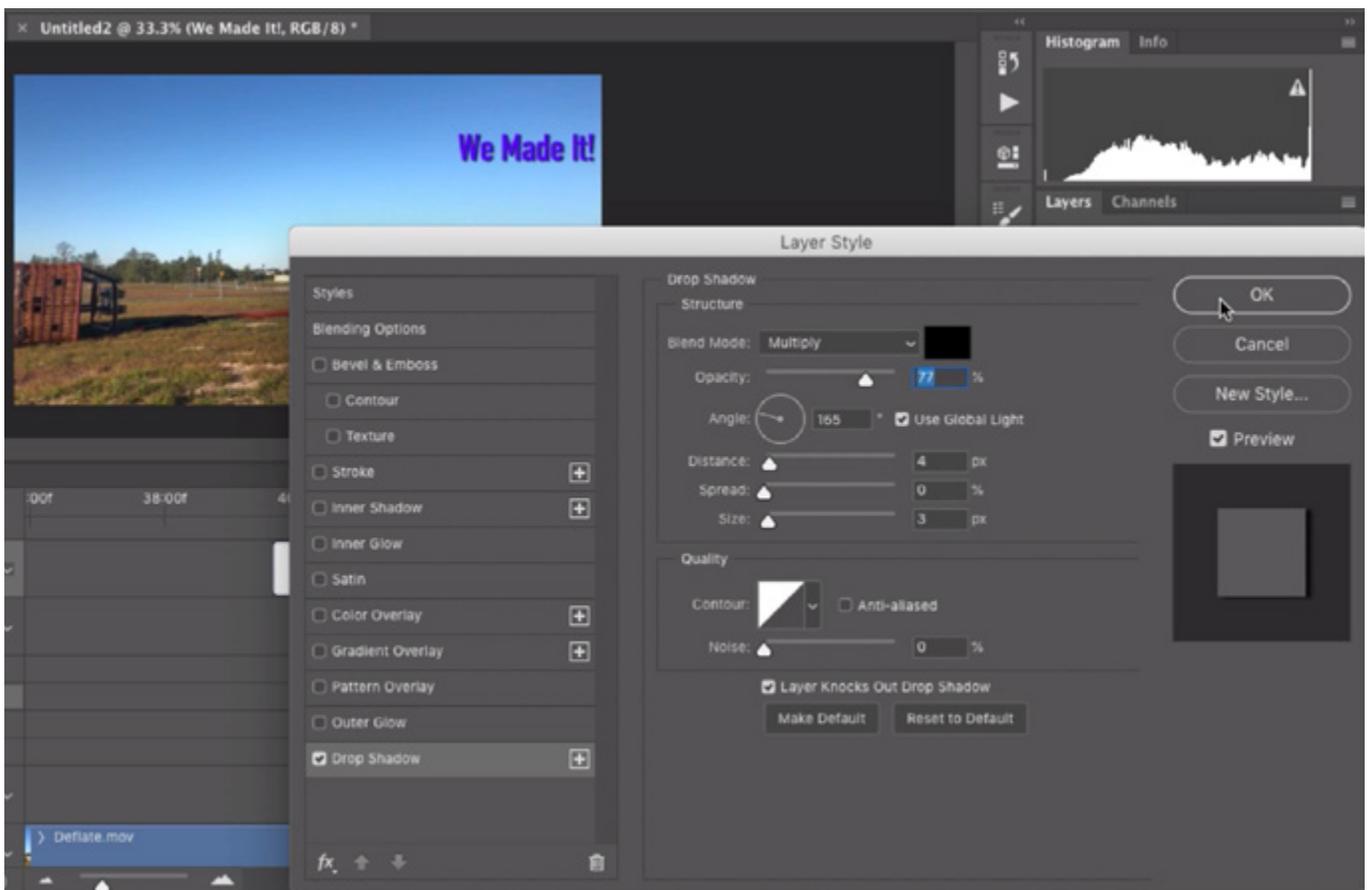
To take things further, we added some Transform keyframes to the text layer so that, in addition to the fading effect, the layer also got larger as it moved out of the frame. To accomplish this, we positioned the playhead at the location where we wanted the text to start moving and then clicked the stopwatch icon to add a Transform keyframe. We then moved the playhead to the location where we wanted the transformation to end and we used the Transform command to reposition and resize the text layer. When we did this, a second keyframe was automatically added to log that change.

Keyframes: Adding Styles

The type of keyframe named Styles is going to allow you to add the types of effects that you would find under the FX menu or the Layer Styles dialog and then cause these effects to change over time. This type of keyframe can be applied in the same way as the Opacity and Transform keyframes.

In the video example, we're going to use Style keyframes on another text layer that we want to appear at the end of the video. We'll add the text layer in the same way we did the previous one, this time positioning the playhead near the end of the video Timeline. We want this text to look like it's hovering above the ground and then coming to a land. We can achieve this effect by using drop shadows. If you move a sun-lit object closer and closer to the ground, its shadow will become darker and less feathered, so that's what we'll make the drop shadow do.

With this effect, we'll start by determining how it should look when it's done, so we'll position the playhead at the very end of the video, where we want the change to stop happening. We'll move the text so it's in the ideal ending position and then we'll click the FX icon at the bottom of the Layers panel and choose Drop Shadow from the pop-up menu. The Layer Style dialog will appear and the Drop Shadow settings will be at the forefront. We'll use our mouse to manually position the drop shadow so that it's very close to the text itself. We'll also make sure that the opacity is at a relatively high setting so that the shadow is dark, and then we'll click OK.

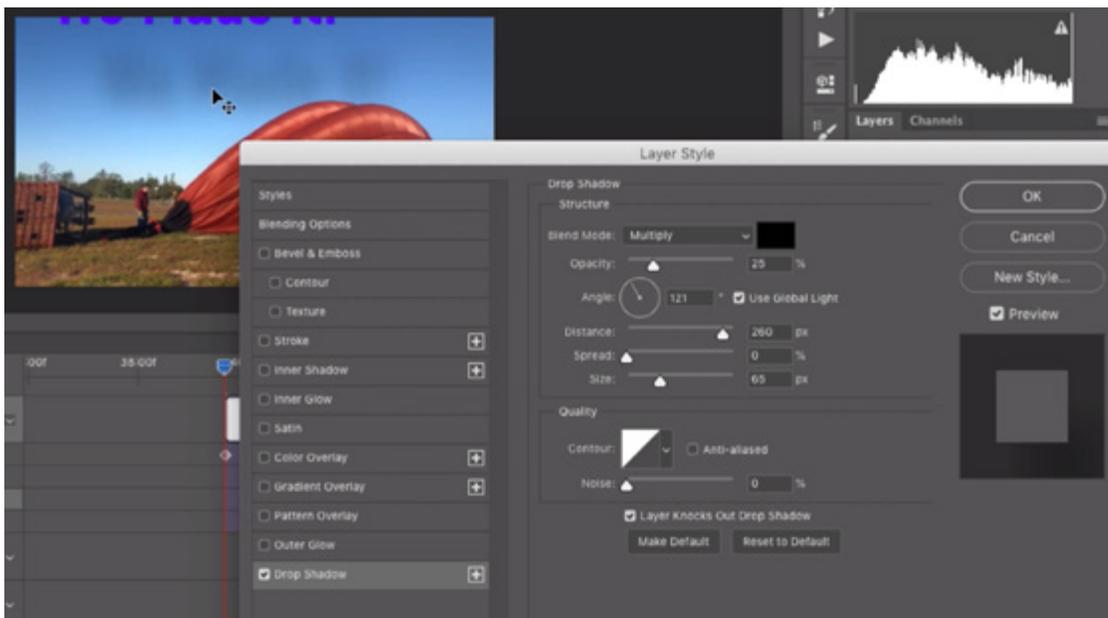


Here, we are defining what the text layer should look like at the end of the video. A Drop Shadow layer style is being added. At the end of the video, we want the shadow to be dark and close to the text.

Now we want it to keep track of the settings that we use for that layer over time, so we'll click on the arrow to the left of the layer name to expand the list of Keyframe types. We'll then click on the stopwatch icons for the Opacity keyframe, the Transform keyframe AND the Style keyframe. We want Photoshop to keep track of all these things put together.

Next, we'll position the playhead at the location where the text clip begins in the Timeline. We want the text to start off very large and move from outside of the screen so we'll use the Transform command (Edit > Transform) to scale the text size up quite a bit and position it almost outside of the top edge of the frame. We'll click Return/Enter to lock in the transformation. A keyframe will automatically be added to mark this change in the Timeline.

Then, we'll click on the FX icon at the bottom of the Layers panel and again choose Drop Shadow from the pop-up menu. We'll use the drop shadow settings to position the shadow very far from the text and set the opacity very low. We'll also move the Size slider far to the right so that the shadow is very soft and spread out. We'll click OK and, again, another keyframe will automatically be added to log the change. We'll also lower the opacity to about 50% so that the text starts off partially visible. A keyframe is automatically added to mark that opacity change.



Here, we are defining what the text layer should look like when it first appears in the video. A drop shadow is being added that is very soft, light and far from the text.

In the end, when we drag the playhead across the text clip, we will see it start off very large, with a soft drop shadow. As we drag the playhead to the right, the text gets smaller and moves into the frame, while the drop shadow gets harder, darker and closer to the text.

Keyframes: Warping text

The final type of keyframe that you'll see in the Timeline panel is the Text Warp keyframe. This type will only show up when you're working with a text layer.

To warp text, place the playhead over the area where you don't want the text to be warped and add a Text Warp keyframe. Then, position the playhead over the place in the Timeline where you DO want the text warped. Go to the Edit menu and choose Transform > Warp. A warp grid will appear over the text and you can use the Warp menu in the Options Bar above the image window to choose what type of warp you want. Then you can adjust the severity of the warp by using the additional settings in the Options Bar. Click Return/Enter when you're done. A new keyframe will automatically be added and the warp effect will gradually occur in the time period between the two keyframes.

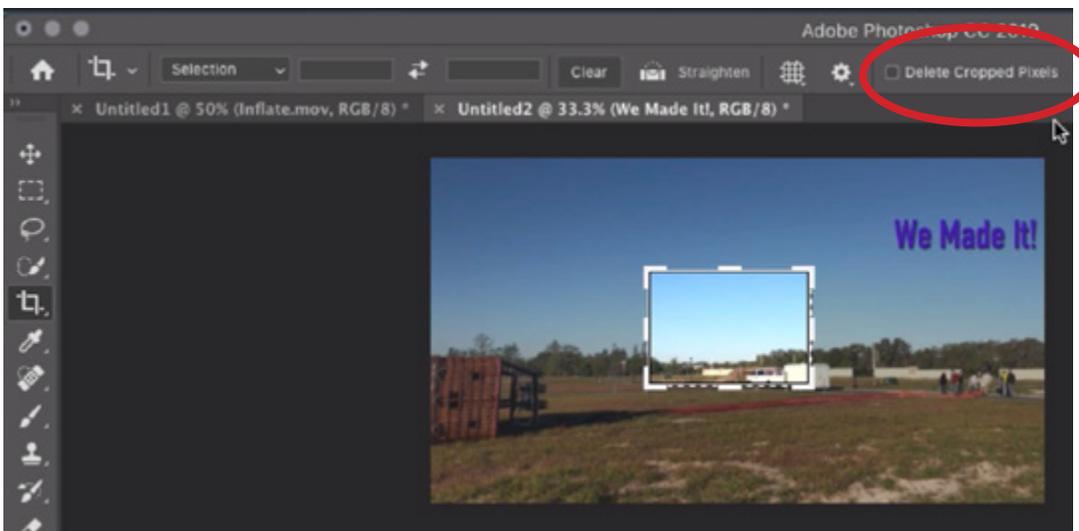


Above, you can see the starting and ending state of the text. It moves from one state to the other as the playhead moves over the text clip in the Timeline. The text bulge effect you see at the starting point was created using the Warp command.

A trick for using keyframes with video layers

A lot of cameras can capture 4K video, which is twice the width as HD video., though it's rare to need 4K video for a project. But, if you set your camera to record in 4K video, you'll have twice the width and twice the height that you'd actually need. This will allow you to zoom into your video clips without a loss in quality. You would do this using the Transform keyframe and you can scale up to twice the height and width of a normal HD video.

If you open a 4K video in Photoshop but only need HD video, here is what you can do so that you can use the zoom technique. Activate the Marquee Tool and, in the Options Bar, set the Style menu to Fixed Size. Type in the width and height in pixels for the document size that you need. If your goal is HD video, type in the dimensions of 1920 x 1080. Click within your image and you will get a rectangular selection of that size. Next, switch to the Crop Tool and the crop handles will automatically snap to the size of the selection. Before hitting Return/Enter, make sure that the "Delete Cropped Pixels" check box in the Options Bar is turned off. Hit the Return/Enter key and the canvas will crop to the chosen size, but the rest of the video content will still be there, outside of the frame edges. This will enable you to zoom out and in while retaining the image quality.



This 4K video file is being cropped to the size of HD video. The "Delete Cropped Pixels" check box is turned off so that we still retain all of the video content outside of the frame edges.