



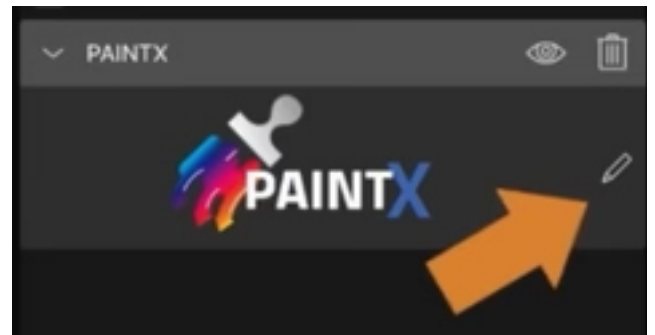
PaintX for LumaFusion

PaintX for LumaFusion Documentation

CoreMelt PaintX for LumaFusion allows you to create brush strokes tracked to movement in your video and has many uses. First, here is a quick reference guide to the user interface, then we recommend you look at our video tutorials.

Adding PaintX to a Clip in LumaFusion

PaintX is found under the color and effects tab in the plugins category. Click on PaintX to add it to the clip. Then press the "pencil" button after you add PaintX to a clip and the PaintX interface will open full screen interface showing a list of presets. Chose the desired preset and the PaintX editor window will open.



QuickStart to Workflow

The length of the current shot can be scrubbed using the play controls at bottom. Adjust brush settings using the settings window below the brush toolbar. Do your paint work as needed then track forward or backward using the tracking floating panel. When you have a good track use the "left arrow" button to return to the main LumaFusion screen with your tracked paint applied to the shot.

Each tool and methods for changing strokes after addition and fixing tracking issues are detailed below.

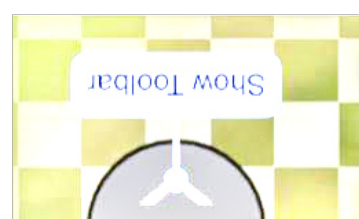
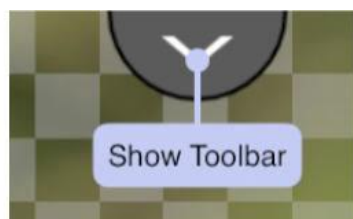
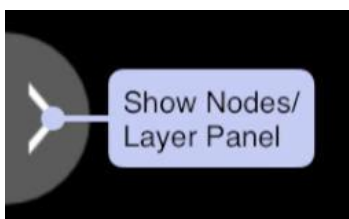
User Interface Overview

Press on the icon with the ? inside the cog to bring up the tool tips which give you the function of each button.

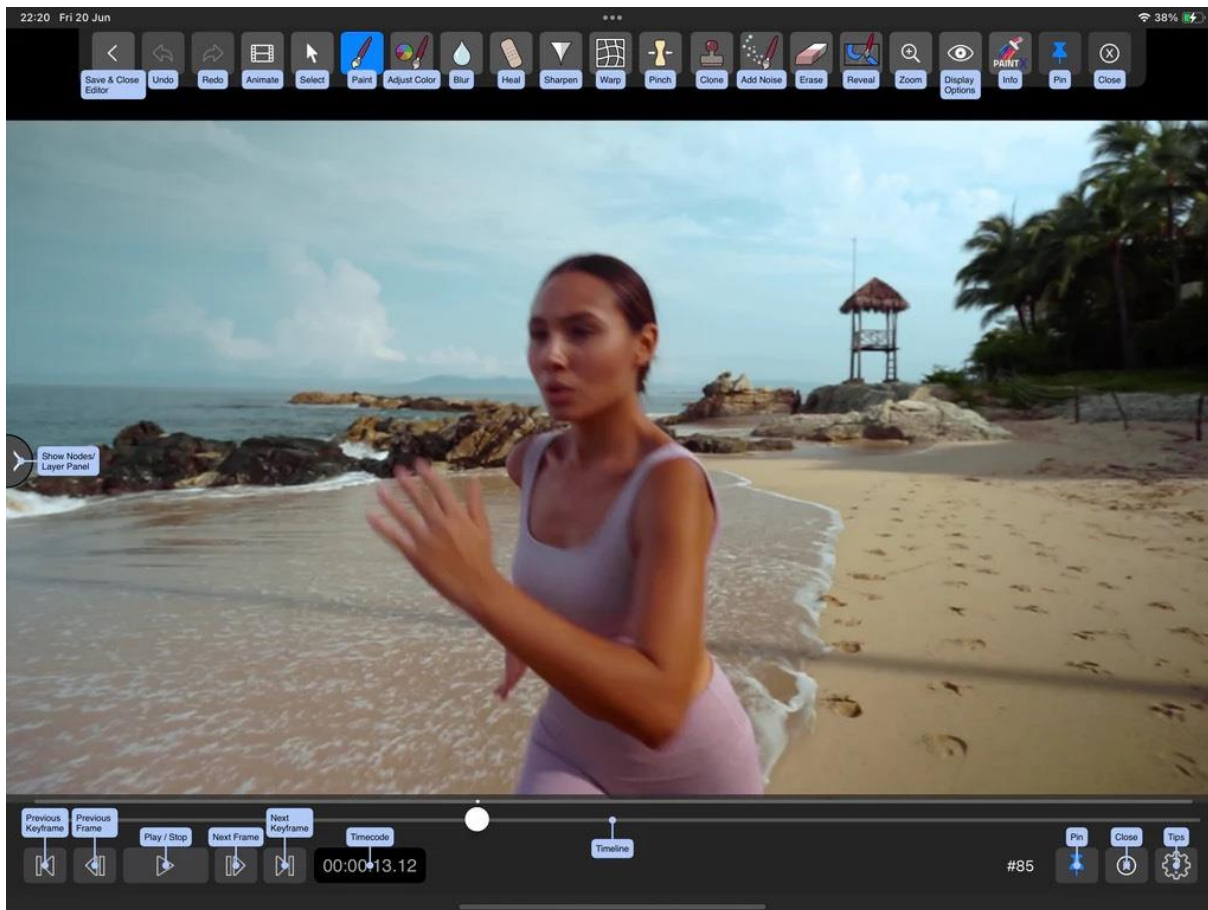
(Note that the Left Side Panel (Layers and Strokes controls) are hidden as a default.)

The top brush bar, side bar and bottom play controls can also be hidden if you want to paint full screen.

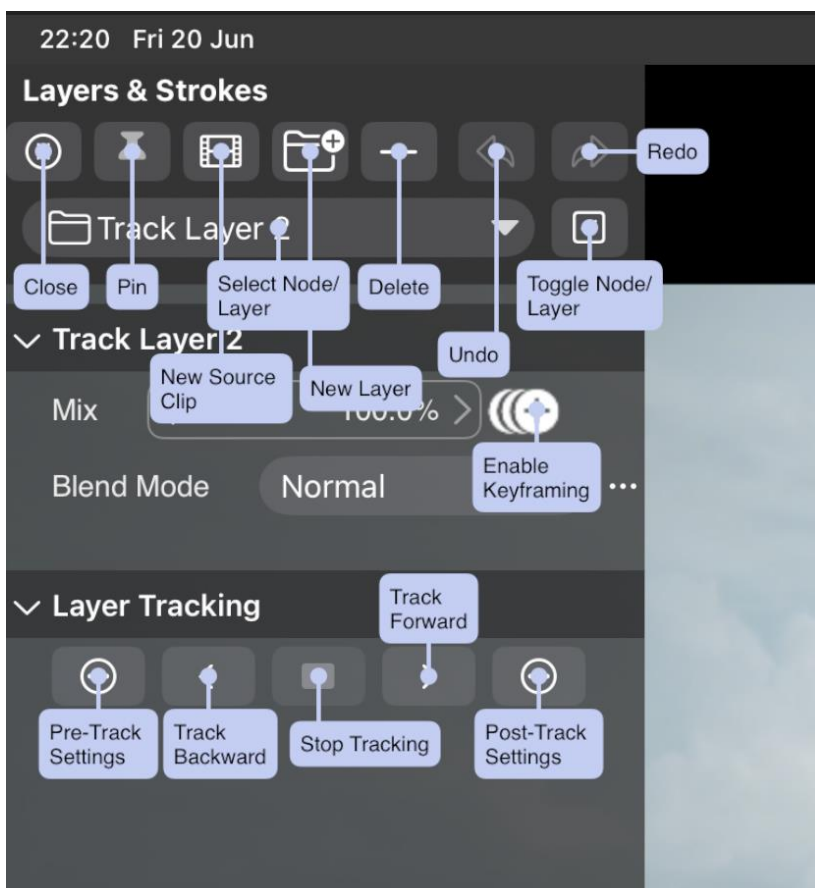
That is done using these buttons:



Tool Tips for Top Brush Panel and Bottom play / scrub control panels.

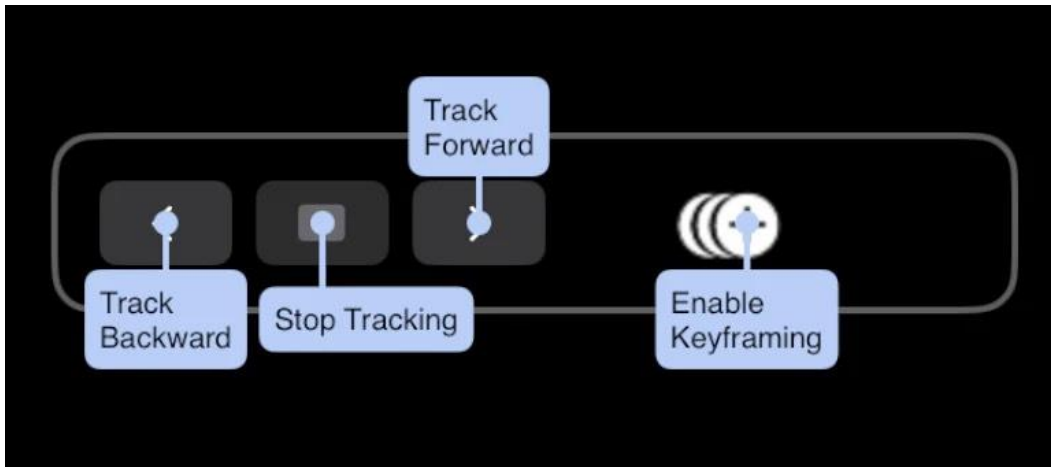


Tool Tips for the Left Side Layers and Strokes Control Panel



Tracking Controls Floating Palette

This palette allows you to track forward or backwards, stop tracking and enable / disable auto key framing when dragging a stroke. For the full track controls see the left side panel.



Some Tips for Fine Paint Work and Getting Better Results:

PaintX for LumaFusion has a lot of uses, so we can't detail every single usage. There will also be a certain amount of trial and error in learning to use tracked paint efficiently. Keep in mind you can always modify brush strokes after you create them, toggle them on and off, or delete specific brush strokes. All of this is done by using the "Layers & Strokes" window at left and then the bottom left window to edit selected strokes.

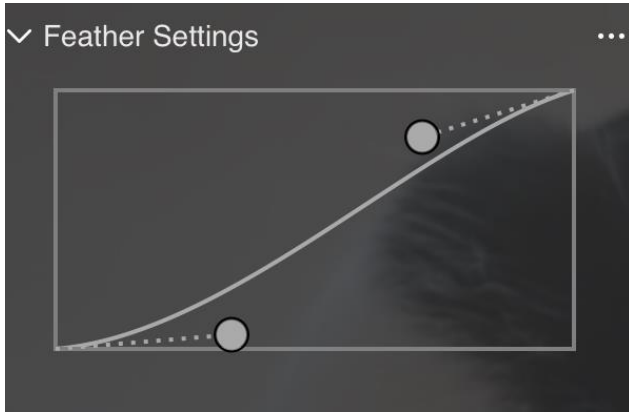
Use the checkboxes on layers or strokes to toggle previous strokes on and off to see before and after, either for an entire layer or individual brush strokes. This can help fine tune your work.



Layers & Strokes & Brush Tab

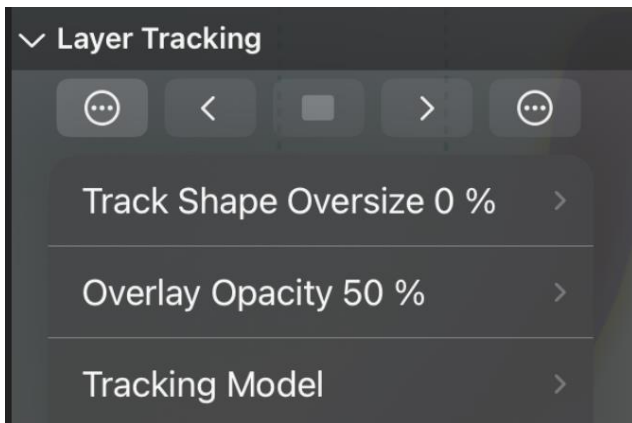
Use this drop down to select any stroke you have previously made. The strokes parameters appear in the brush window below. Options will change depending on what type of stroke is selected.

You can change any parameter, including those specific to the tool plus common ones like brush size, opacity etc. You can also use the select tool to pick up individual strokes, move them around, rotate them or scale them. Again this can help you fine tune your results.



Feather Settings: Adjust these tangents to control the roll off of the brush when it has a soft edge. The lower tangent controls the inner roll off and the top tangent controls the outer roll off.

Explanation of Tracking Controls



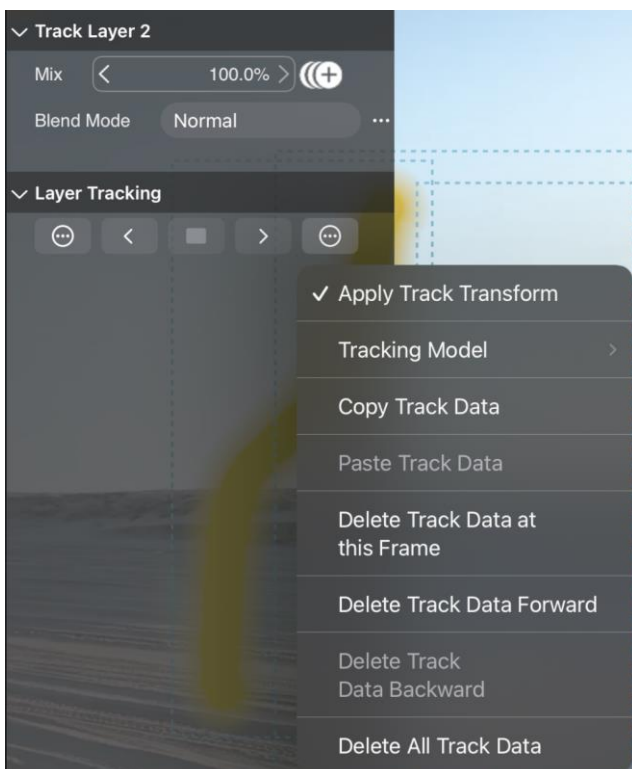
These controls are applied before tracking.

Track Shape Oversize: Expands the track shake outwards from the drawn stroke. Can be useful if the stroke you want to track is small.

Overlay Opacity: The opacity of the track shape preview shown during tracking.

Tracking Model: Translate / Scale / Rotate tracks the shape using translation, scale and rotation but no perspective distortion. This should be left as default in most cases.

Tracking Model: Perspective may give better results when the track shape has strong perspective distortion. Eg an object turning sideways more than 30-40 degrees.



These controls are applied after tracking.

Apply Track Transform: Toggle on or off to apply the track data or not.

Tracking Model: Perspective Apply the track data including all transforms.

Tracking Model: Translation only Apply the track data using only x and y translation. Useful for callouts or text labels.

Copy Track Data / Paste Track Data: You can use these to copy track data from one layer to a second layer. Many uses with different blend modes and brush modes.

Delete Track Data: The options here let you delete track data, only for the current frame, for all times forward of current frame, all times behind current frame or all track data for the entire length of the clip.

General Tips

There's often more than way to do something. For example if you want to change the color of something under the brush you can either use the color adjust brush, or you can also change colors of an area by using the color brush and trying different blend modes with a low opacity (eg 20%). Try lighten, screen and add blend modes, with a dark grey color selected and 20% brush opacity. This will also lighten parts of the image under the brush but may be easier for you to control in your specific case. A bit of trial and error will be needed to find the right combination of settings but it should only take a few minutes.

Likewise if you wish to remove a small spot or blemish, that could be done with the clone tool, the blur tool or the heal tool. Depending on the exact shot, the movement, and what colors are surrounding the area you need to fix then for some shots one method will be better than another. If you're not getting good results, try another method.

Tracking Problems and Suggestions

These are best covered with video tutorials showing you specific examples and how to deal with them. There is a skill to choosing the best track shape. Sometimes you need to draw a larger paint stroke, then track, then hide the stroke and draw a new one. The same track will still be applied.

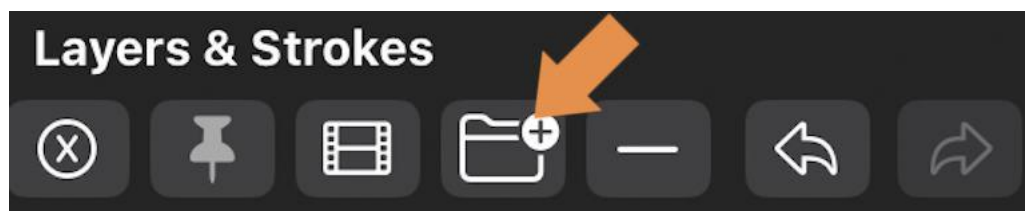
In other cases you might track an object to the side of the where you wish to place a stroke and then offset the track stroke after tracking.

In the case of a track that initially tracks well but then slips you can add keyframes to help compensate.

We show these and other techniques in the two videos on this page called "Fixing a track that slips" and "Tracking Tips including useful tips for before you shoot".

Advanced Techniques: Beyond the Presets

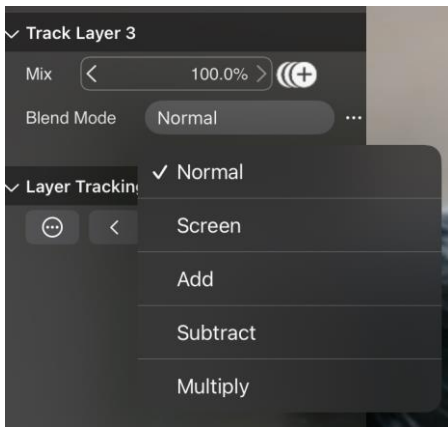
The included presets generally include two layers, Track Layer 1 is the original background layer, in most cases we don't modify this. Track Layer 2 is where we insert our tracked strokes to modify the background video. For many common tasks only a single track layer above the background is required. However PaintX for LumaFusion can support many additional layers. Use the + button on the Layers and Strokes Tab to add a new layer.



Each layer has its own individual track that can track a different object on screen, but also, each layer can only have one track. All strokes within a layer will move with the same track.

Track Layers are composited on top of each other from bottom to top in order. Think of them of a stack of transparencies overlayed on each other.

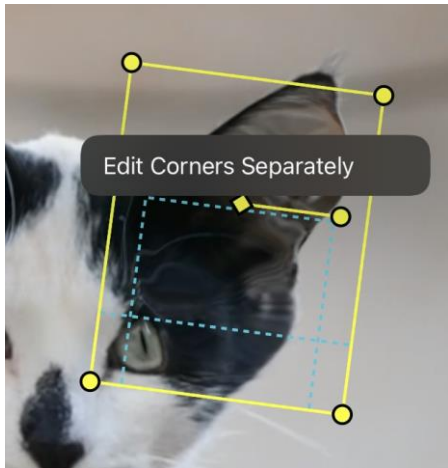
Track Layers can have many strokes, there is no hard limit, however playback may suffer if you add too many strokes to one layer.



Track Layer Blend Modes

Each Track Layer can have its own separate blend mode. These act the same as in other graphics tools like PhotoShop.

Screen and add can provide glow effects. Subtract and multiply can be used to cut out parts of an existing stroke with new strokes on layers above.



Edit Corners Separately Mode

Do a long press down on one of the yellow dots of the stroke bounding box and you will see the option to enable 'Edit Corners Separately'. Normally you can drag the bounding box of a stroke to change its rotation, scaling and position only. When you enable 'Edit Corners Separately' then you can drag the corners individually to apply a perspective distortion to the stroke.

(Note: we recommend only using this in a subtle way, its better to drag a new stroke with the desired shape than apply extreme perspective distortion.)

Uses For More Than Two Layers.

Tracking a stroke that goes behind another object using reveal source brush. If you need to hide part of a stroke that goes behind another object then first of all do you track as normal. Then add a third layer and change to the reveal source brush, paint the foreground object and track as needed. The reveal source brush paints back the original background effectively acting as a mask to hide parts of the stroke on track layer two.

Tracking different objects that move individually in one plugin instance. Each track layer can only have one track so if you want to track two or more different objects that move individually then you must add additional track layers.

Tracking strokes both before and after they pass behind a moving object with two separate tracks. It can be difficult to deal with tracking an object that goes behind another object. One solution is to break the track into two parts and track them on different layers. One track is the stroke up to when it goes behind the object, the second track is the stroke after it comes out from behind the object.

Tracking different parts of the body that don't move as a planar shape, eg the fore arm and shoulder individually. If you need to track someones entire arm you must track the forearm and upper arm separately because they move individually not as a single planar object. In such a case use two track layers as well as the base layer. If you need to track the hand / wrist as well then you would need three track layers and so on.

Help and Support

If our video tutorials and this reference does not help you, please feel free to contact us using our technical support form.

Guide To Tools in the Top Brush Palette

	Select Tool: use this to transform or move any stroke or layer after it has been created.
	Color Brush: paint with a solid color with adjustable size, softness and blend mode
	Color Change Brush: lets you paint on a color correction defined as a difference in hue rotation, luminosity and saturation from pixels below it.
	Blur Brush: paint a blur effect with adjustable blur strength
	Sharpen Brush: Paint a sharpen effect with adjustable sharpen strength.
	Warp Brush: Use this to drag pixel under the brush in the direction of movement to change the shape of objects.
	Clone Brush: Drag the cross to to set the clone source, then tap and drag to clone from the source area to the area under the brush. The offset stays constant for each clone stroke but can be changed with each new stroke.
	Noise Brush: use this to apply a noise texture similar to grain to areas under the brush.
	Heal Brush: this brush paints the texture from the outside of the brush inwards. It can be used to very quickly remove moles, spots, blemishes or specks of dust.
	Erase Brush: use this to erase parts of strokes within the same layer. Note you can also select any stroke and press delete key to remove the entire stroke.
	Reveal Source Brush: use this to erase parts of strokes within the same layer. Note you can also select any stroke and press delete key to remove the entire stroke.

Guide To Tools in the Top Brush Palette (cont.)

	Zoom Menu: opens a zoom menu to increase or decrease the zoom level in the viewer.
	View Menu: Choose to view the source or result, RGB channels and turn on or off HDR tone mapping in the viewer.
	PaintX icon: Click to open help web pages and tutorials
	Pin icon: Click to toggle whether the top bar stays open or closes automatically after a time.
	Close icon: Click to instantly close the top bar.