





AutoPaint Tips and Tricks

One of the new features introduced in **Commotion™** 1.5 was **AutoPaint**. There are a couple of examples in the manual but this document will show several more that will start to explore some of the possible uses of this tool.



Let's do a quick recap of AutoPaint and how it works:

1. When the AutoPaint record button  is turned on any brushing tool will be recorded. This includes paintbrush, airbrush, pencil, smudge, blur, wire removal and others.
2. All information about the brush stroke is recorded including pen pressure (if you have a Wacom tablet), frame number, brush tip and brush options.
3. These brush strokes can be played back over one frame  or the selection frame range .
4. **Cycle Frames** will playback recorded strokes on a sequence of frames over the selected frame range, repeating (cycling) if necessary. If you painted on frames 1,2 and 3 then played this back over frames 21-30 it would playback frame 1 brush strokes over frame 21, frame 2 over frame 22, frame 3 over frame 23, frame 1 over frame 24, etc.
5. **Stroke Only** uses the current brush settings when playing back, not the recorded brush tool. Only the stroke and pen pressure are used. This means you can have several different tools or brush tips follow the same motion.
6. **Wiggle** is a new feature in auto-paint in Commotion™ LE, and will be included in Commotion 1.5.6. This varies a brush stroke randomly to produce frame by frame variations. Useful for adding life to a stroke without having to create a sequence of recorded frames. Settings can be done with the popup menu.
7. If Animate playback  is used the brushstrokes will animate over the selection frame range.

Remember that AutoPaint can also follow a motion tracked point so you can have it follow an object.

Also don't forget that animated rotosplines can be stroked with all the same tools so they maybe better suited for some effects.

Hopefully these ideas will get you started on techniques that can be explored with AutoPaint. By combining different settings and brush strokes you can have an infinite possibilities.

Write On

This is a simple but effective use of AutoPaint. Turn on AutoPaint recording and draw text. To create a Write On effect set your selection frame range and hit the animate button.



Write On with Neon Look



Neon sign or lightning can be created by using **Stroke Only** Autopaint. Record a series of brush strokes and playback with a large soft brush at 50% opacity. Now select a smaller brush size and a brighter color and play it back. You can now select the blur brush if desired with a large enough brush to cover both paint strokes. These can be animated using the Animate button also.

Sketch Write On

Just like doing a write on with drawn text you can do an animated write of a sketch.
Record your brush strokes while you paint a scene or image.
Go to a New Clip or load a clip and set the selection frame.
Hit the AutoPaint "Animate" button and you'll see the brush strokes building up frame by frame.
When the clip is played back, the image will form over time.
Another usage for this is animating annotation (arrows) or paths on a map (ala the Indiana Jones movies).



Animated Shapes

Record a few painted shapes on a frame, advance to the next frame and repaint the same shapes with some slight variations. Turn on onion skinning to see the last frame as a guide. After recording a few frames turn on **Cycle Frames** and hit the Play button. Your shapes will shimmer.

Try the same thing but instead of making shapes write a word. Real world examples of this type of an effect can be seen in certain commercials and music videos.



Object Removal

As shown in the Commotion 1.5 demo video, AutoPaint can be used to help to auto remove items in a frame by taking advantage of the SuperClone tool.

In this example we have a shot of an eagle flying with a boat in the background. This is in the eagle folder in tutorials on the Puffin Demo CD and Commotion CD. Since the boat is only in a limited number of frames we can clone the water from a frame without the boat.

To remove the boat turn on AutoPaint recording and go to frame 5. Setup the SuperClone brush to clone from the same clip starting at frame 18 (frame without the boat).

Make a large brush big enough to cover the area where the boat will be. Hold down option-command and move the mouse to create a custom brush. While still holding down the mouse hold down the control key to make it feathered.

Now set the selected frame range to cover the frames of the boat (frames 5 through 17).

You can go to frame 5 and hit the '-' key to set the start frame.

Playback the brushstroke and you'll see the boat being removed.

Watch the video and check the example files on the CD to see this in action.



Before



After

Final Composite Touch Up

It's probably more common than most people think to have to make final hand touchups to a composite. If you've done a composite and found that a few frames have problems it may be faster and easier to touchup those frames than to make changes to the elements and then re-composite. This is especially true for 3D renders.

Unfortunately if you have to redo the composite after you've painted on it then you'll need to re-paint it all over again. With AutoPaint you can record your paint strokes and save them in case the client wants to make changes to the composite (like the color or contrast of the elements).

You can play them back again after you've re-done the composite.

In this example 'Car Chase - Near Final' from the Roto example on the CD the person mattes aren't quite correct since it's cutting into the shadow of the car. It's also doesn't have the motion blurred roto mattes so his legs are too sharp edged and have some strobing.

To fix the shadow matte we can SuperClone from the car element or paint with the same color as the shadow. To fix the legs the smudge and/or blur tool can be used.

Be sure to note the start frame of your touchup so you can play it back starting at this same frame and turn on Cycle Frames. Cycle frames being checked will make it so your recorded strokes are played back on the correct frames you painted on. Work on frames sequentially so playback will match.



Before



After

Animation from Tracing

By doing simple tracing (old fashioned rotoscoping) you can create animation based on live action that has a hand drawn look.

Load in a clip and start recording. Outline the areas you want to animate and step frame by frame through the footage.

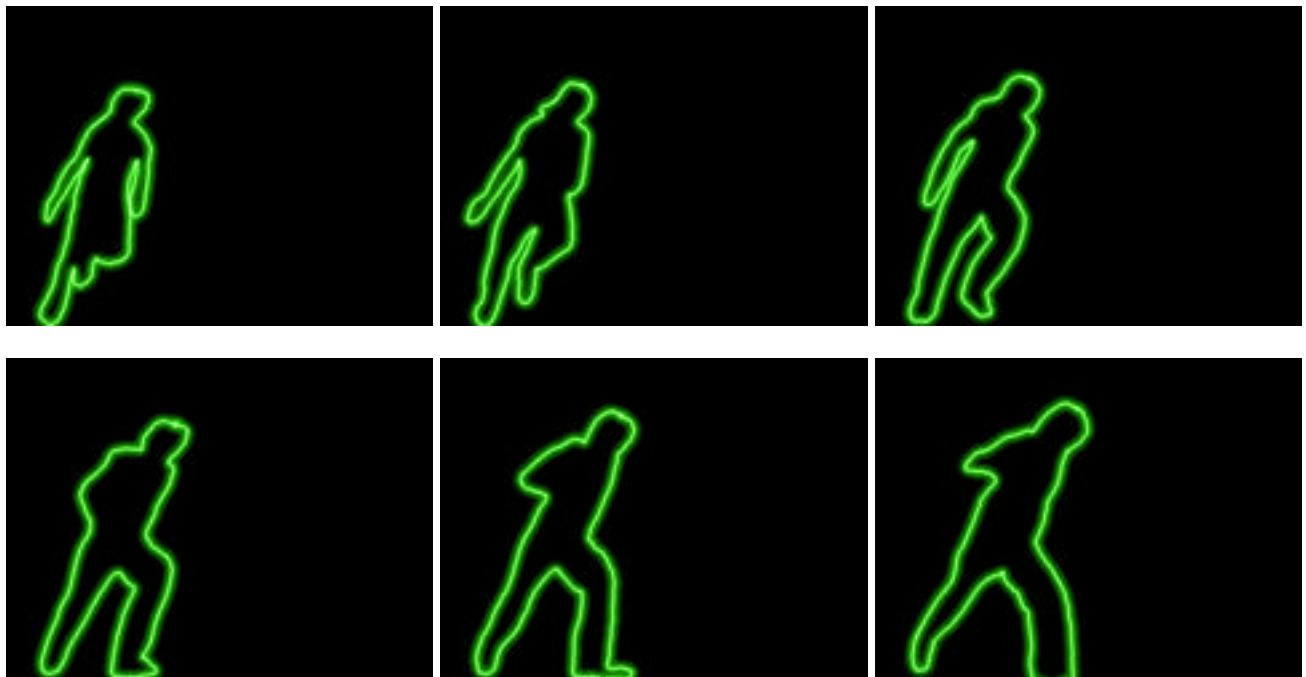
Now create a New Clip the same size as the image you were tracing. (You can close the original clip now if you want).

Now turn on Cycle Frames and hit the Play button.

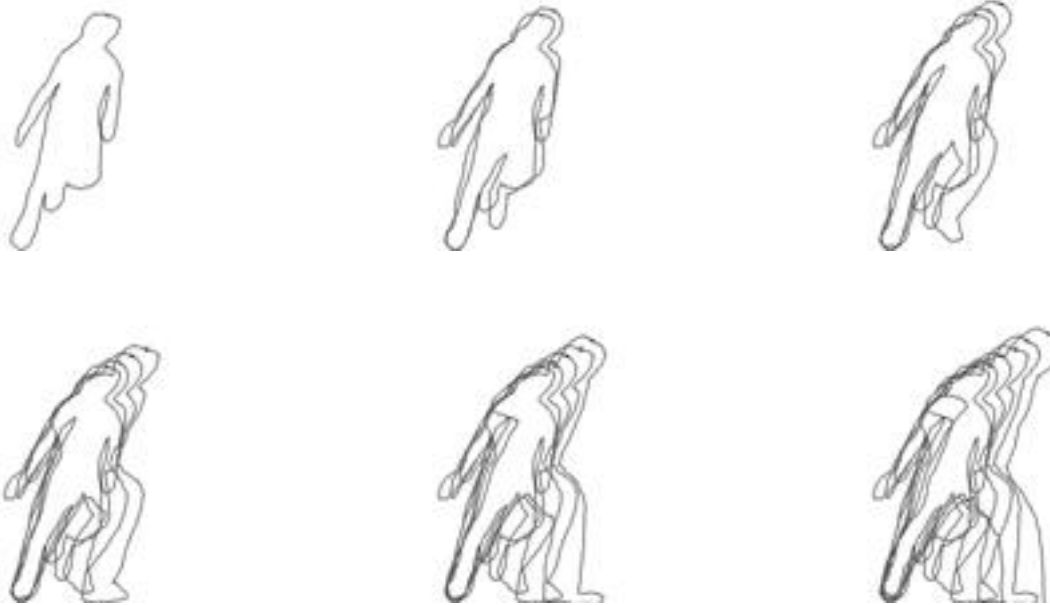
Your tracing will be recreated on the new clip.

Remember you can change the different types of tools by using stroke only.

This first example is of a man running from the roto example on the CD and has been given a neon look.



Animation from Tracing continued



This example was done by applying the BuildUp Minimum filter after the animation was laid down. This way the animation builds up during the shot.

Superclone Reveal

SuperClone and AutoPaint can be used together to do creative wipes or reveals from one scene to another.

Open up two clips and setup SuperClone so you're cloning from your next clip to your current clip.

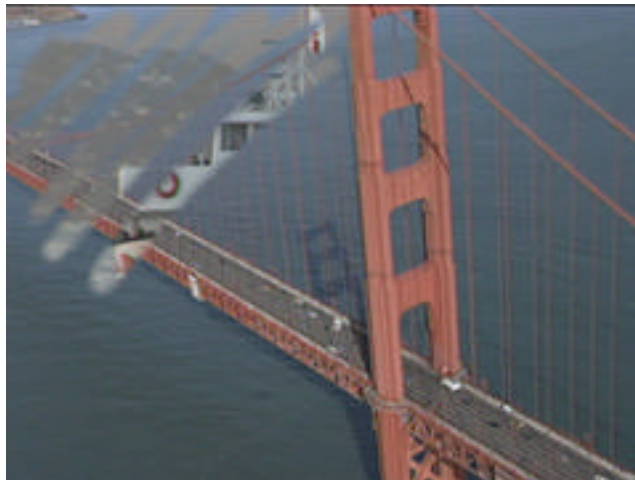
Record your brush strokes as you brush on the image.

Revert your modified clip, set your selected frame range for the transition you want and press the Animate button.

Now the second scene will appear to be brushed on over time.

Remember you can save your brush strokes so you can have a library of brush strokes.

This example shows a reveal from a shot of the Golden Gate bridge to a ferry boat.



Superclone Reveal continued



In this example we start with a New Clip and do a specific reveal of the Golden Gate bridge. We could stop part way through to only reveal the key parts of the bridge or finish as shown here with a look of a painting.

Creative smudging

Record a smudge brush going over an area of the image.

This could be done to the background to subdue it and let your spokesperson become the main focus or as in this example it's been done to a selected area to jazz up the image.

You can now play these same brush strokes over a series of frames and the look would be consistent.

You can also record a few frames of slightly changing smudging and then turn on **Cycle Frames** when you playback. This will add life to the smudge area.

By using the animate button you can have the smudging build up over time.

If you have a pressure tablet and have it set to opacity control you can start lightly and build up.

When used with the animate button this will build up the smudging with a softer look.

A real world example of this type of effect was in the movie **Contact** when Jodie Foster is 'traveling'.



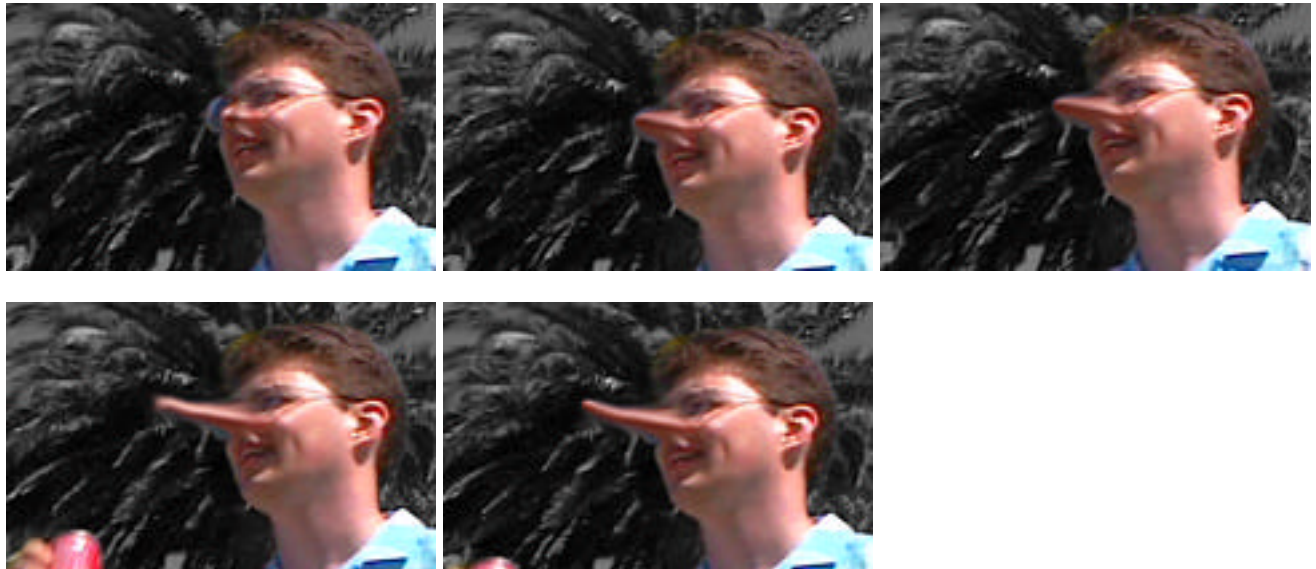
Original Image



Smudged shirt

Smudge stretching

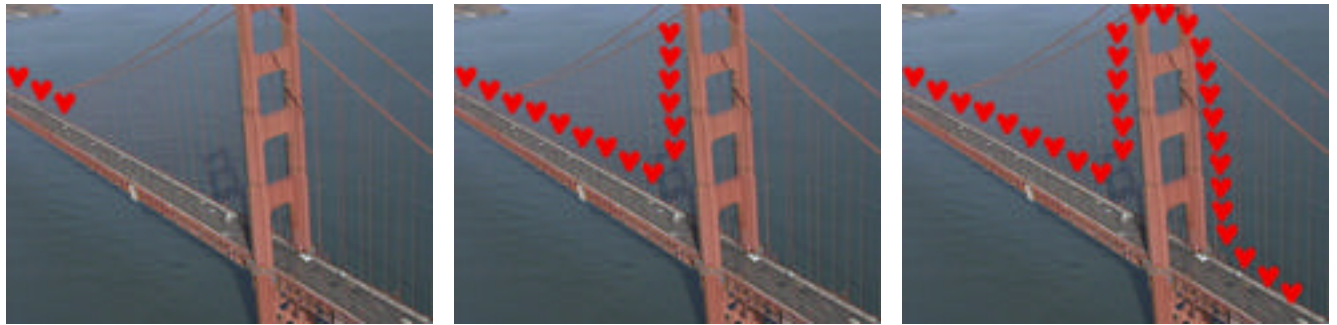
Record a soft smudge brush with high opacity and stretch out a nose, mouth or eye. Now playback with animate autopaint. Over the selected frame range the nose will stretch out.



Custom Brushes and AutoPaint

In Commotion you can create you're own brush shapes by painting a small gray or black image. Select it using the marquee tool and doing a copy. Now select Define Brush from the brush tools window popup menu. This is useful for creating decorative brushes or shaping a brush to specifically conform to an area of an image.

In this example we've drawn a heart and defined that as a brush shape. The brush spacing has been set to 100%. Then a brush stroke is drawn. By hitting the Animate button the decorative brush stroke is drawn over the frames of the selected frame range.



Motion Tracking and AutoPaint

AutoPaint can take full advantage of motion tracking. (Motion Tracking is not available in Commotion™ LE

On the Commotion 1.5 demo video is an example of using Motion Tracking with SuperClone AutoPaint. These files are in the Boat folder under Commotion tutorials on the CD. (Check out the video more more details)

Starting with the original shot of the boat we motion track the smoke stack.
(See the Commotion manual for the step by step process for motion tracking).

Once this is done load in the explosion footage and setup to SuperClone to clone from this to the boat shot.

Set SuperClone to use motion tracking.

Set the paint brush mode to Screen since this is an image on black. Record the brush stroke to cover the areas of the explosion.

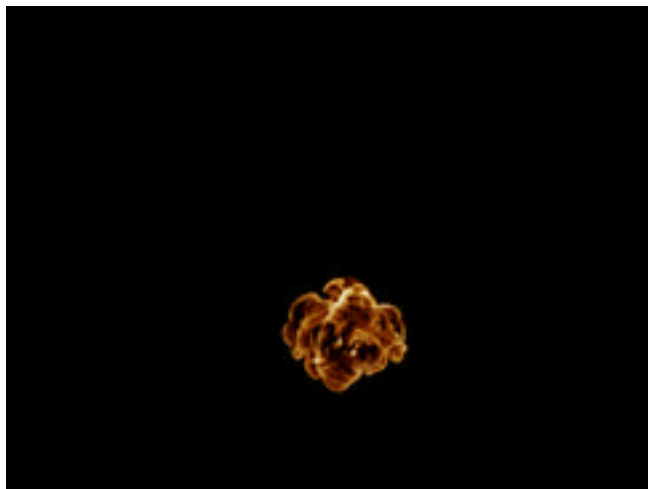
Now instead of hitting the play button for AutoPaint hit the Play Motion Track button right below it.



Original Image



Motion Track path



Explosion



Final Version

Motion Tracking and AutoPaint continued

This same technique can be used to replace unwanted items or rigs in a shot by SuperCloning or just normal cloning and using AutoPaint combined with motion tracking.

Single point motion tracking can be used for things like concealing the face of a person or the name of a product by using the smudge, blur or paint tools to obscure the image and then having this follow the area repeating the same brush strokes.

To add glowing eyes to an actor you can use the Hue mode on the paintbrush.

Don't forget you can use any of the paint tools such as dodge, burn, or wire removal with AutoPaint and with the added power of motion tracking you can have it follow an actor or object or work with a moving shot.

You can also do simple things like painting an image (hat, tie, etc.) and having this follow a person around.

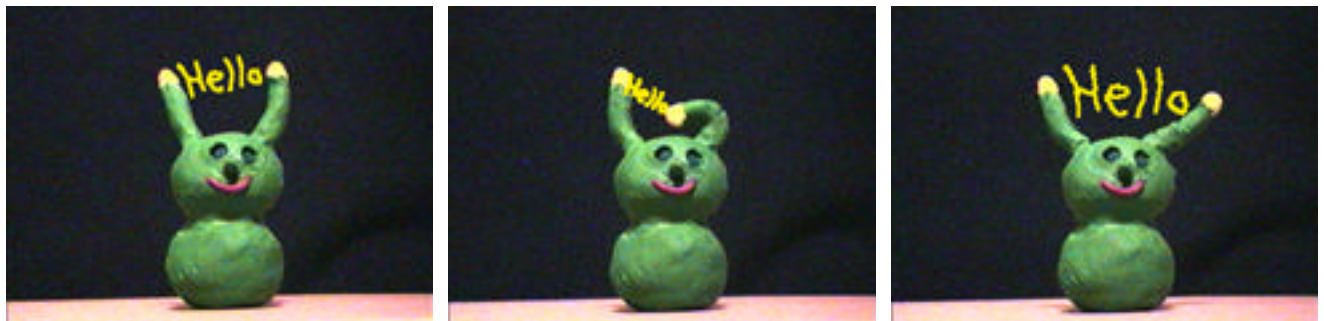
Two Point Motion Tracking and AutoPaint

Motion tracking can be used to follow two points of a scene. When applied to AutoPaint the paint strokes are scaled and rotated to match these two points.

In this example of clay animation the tips of the creature's antenna were tracked with a tracker for each. Then a spark was drawn between the two. When the Motion Track Play is pressed the two points cause the spark to be moved, scaled and rotated.



In the second example the same motion tracking is used but a word is drawn between the two. This could just as well be a person's hands playing 'air accordion' with a product name animating between his hands.



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