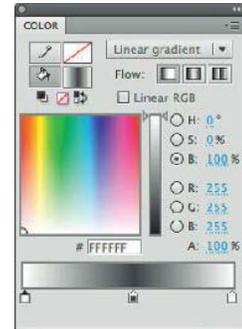


4 Motion techniques

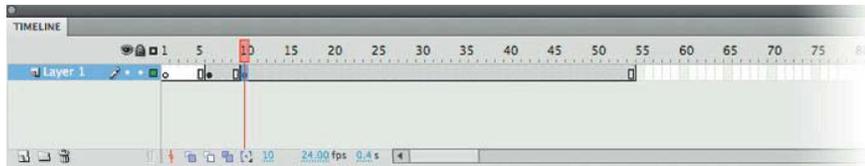
Flying text

REMEMBER THE FIRST time you learned to use a mouse? Or to tie your shoes? These tasks seem so simple now, but some things are just plain easier after someone shows you how. It's the "not knowing where to start" that can be frustrating.

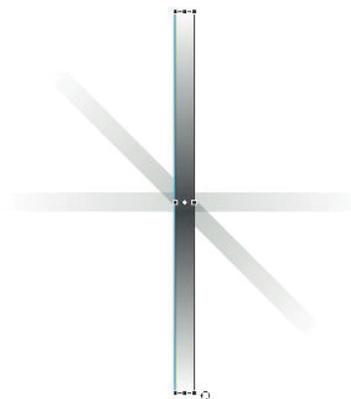
Well, consider this your start. I'm going to show you how simple it is to achieve some basic cool motion effects in Flash CS5 – effects that look really difficult to build, but, once you know how, are not so hard to create. Specifically, you'll make objects appear to move very fast using an animation effect known as Motion blur.



- 1 First, you need to create the two objects used for this effect: text and a linear gradient. The linear gradient should have at least three colors, the middle color should be a value similar to the main color of the object and the left and right colors should be the same color as your background. If you have a complex background, mix these two colors with 0% alpha so the blur blends into the background.



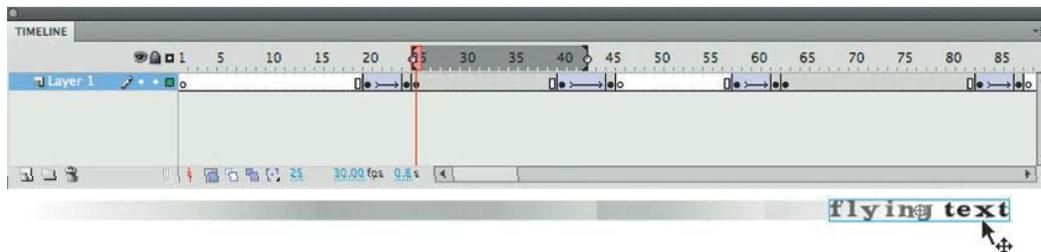
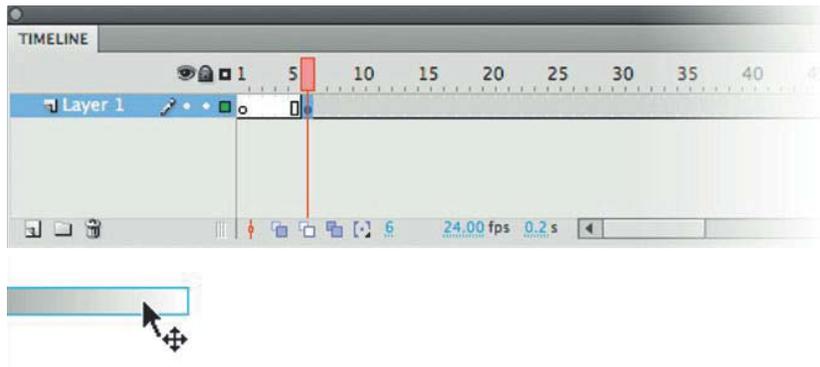
- 3 About three to five frames down your Timeline, add a new keyframe (F6). Holding down the Shift key, use the right arrow key to move the gradient across the stage. Position it wherever you like; just make sure it remains on the stage entirely (do not position it off the stage).



- 5 This effect is not limited to a horizontal format. Rotate the gradient 90 degrees.
- 6 Align the text below (or above) the gradient using the Onionskin tool to help guide you.

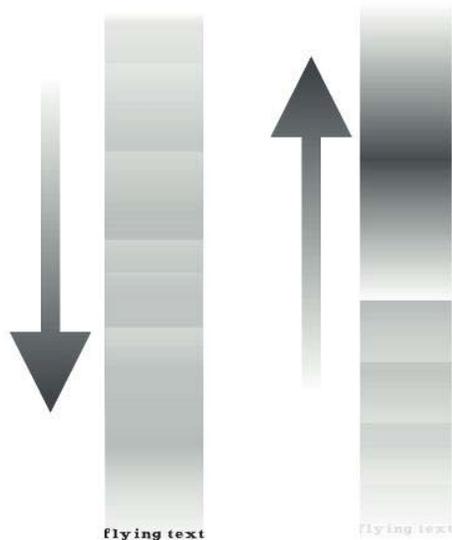
How to Cheat in Flash

2 To create the animation for this effect, convert the linear gradient to a symbol and place it about halfway off of one side of your stage. You might want to start the animation on a frame other than frame 1 to provide a moment for the viewer to anticipate the action.



4 Apply a Motion tween to make the gradient symbol move across the stage. Next, create a blank keyframe in the frame after your second keyframe and drag your text symbol to the stage from the Library panel   . Turn

on the Onionskin tool so you can see the previous frame and where the linear gradient is positioned. Align your text to the right of the gradient. Play back your animation.



7 Repeat the same procedure as you did for the horizontal effect. Motion tween the gradient vertically from outside the viewable stage area. Then, in the frame after the tween, add a blank keyframe and position and align the text below the gradient. Reverse the procedure to make the text fly out and off the stage. I'm sure you will have a lot of fun with this effect as it is one of the easiest to master, yet it looks so good!



HOT TIP

This technique works quite well with objects other than text. Balls, bullets, superheroes, cars, just about any object in action that requires a high rate of speed will work with this effect. You will likely want to play around with a combination of frame rate and the length of your Motion tweens depending on your project. The advantage with this effect is you do not need a very fast frame rate (although it does help). You can achieve the same results with a lower frame rate as long as the number of frames in the Motion tweens are fewer than compared to a higher frame rate.

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MAC WIN BOTH

4

Motion techniques

Combining effects

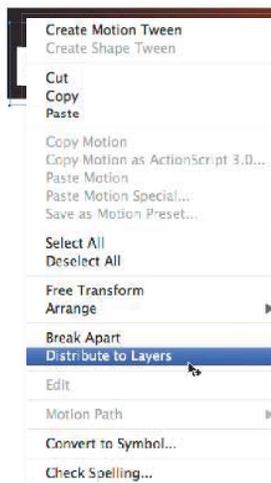


THERE ARE SOME ANIMATED EFFECTS that look so advanced, it's difficult to determine how they were actually made. It is often assumed the skill level necessary to create such advanced motion graphics is well out of the reach of the average Flash user.

Not true in most cases. When we watch animated motion graphics, if the frame rate is fast enough, the human eye may not be able to see everything that is happening. As a result, our mind fills in what may not even be there. The good news is, we can use this natural shortcoming of the human eye to our own advantage when creating "advanced" motion effects. In my experience I have discovered that the most visually appealing animations are a combination of multiple techniques happening at the same time.

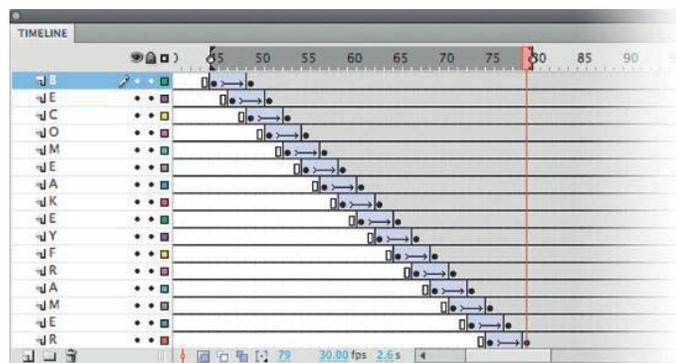
BECOME A KEYFRAMER

1 Type out your text using the Text tool. This particular font is pretty complex and already suggests movement. Your text, however, can be hand-drawn graphics depending on the style of project you might have.



A KEYFRAMER

3 With every letter still selected, right-click over one of them and select **Distribute to Layers**. This will create a new layer for every letter and each letter will be placed into its own layer for you. A true time saver if ever there was one. Now is a good time to convert each letter to a Graphic symbol.



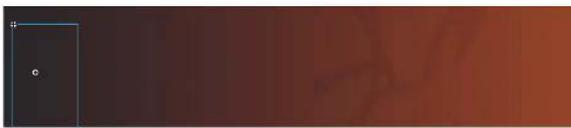
BECOME A KEYFRAMER

5 Next, to create the effect of each letter fading in one after the other, you will stagger each Motion tween to overlap the one below it. Starting with your second letter, select the range of frames in the Motion tween, then drag them down the Timeline a few frames. You can also select a frame before the tween and press F5 (Insert Frames) to push each Motion tween down the Timeline.

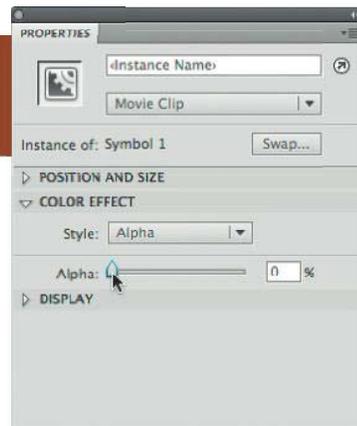
How to Cheat in Flash

BECOME A KEYFRAMER

2 With the text field still selected, break it apart using **⌘ C** (*ctrl*) **C** once. This will split the text field into individual text fields per letter. This retains the properties of the font and you have the ability to edit each letter as such. If you wish, you can break it apart one more time to convert the font into raw vector shapes.

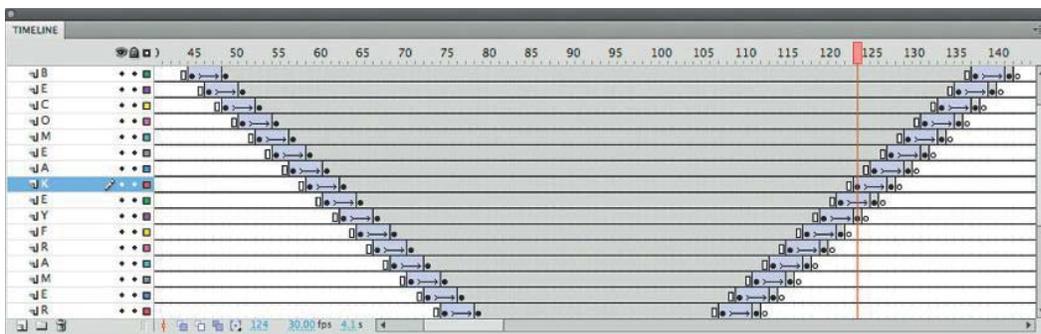


4 On each layer, add a keyframe about three to four frames down the Timeline. Now go back to the first keyframe containing your letter, select the letter symbol on the stage and apply some alpha via the Properties panel. Drag the alpha slider all the way down to 0%. Repeat this procedure for every letter. Apply a classic Motion tween for every letter so that they all fade in when you play back your Timeline. You can choose to use the new Motion tween for this effect if you prefer. Learn more about the new Motion tween in Chapter 12.



HOT TIP

Check out the “Extending Flash” chapter to learn about JSFL and how you can create your own commands for repetitive tasks such as applying a Motion tween. Once something is an actual command, you can then create a custom key shortcut for it. This will save you about two clicks every time you need to apply a tween. That can add up quickly over a period of days, weeks, and months. Every minute saved is a minute earned in this industry.



BECOME A K E

6 The final step is to select the first frame of each animation and use Shift while pressing the left arrow key. This will position each letter with 0% alpha to the left and on playback will create the motion of each letter flying into position while fading in at the same time. Once again, there is nothing particularly difficult about this effect. All you have done is use Motion tweens with some alpha fades. This is still a very basic Flash animation technique. The only difference is the timing of each letter relative to each other. Throw in a slight amount of movement and suddenly you have what looks like an advanced animated text effect.

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4 Motion techniques

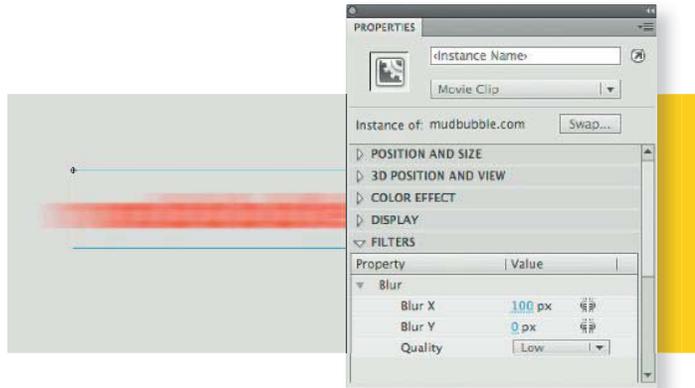
Blur filter (text)



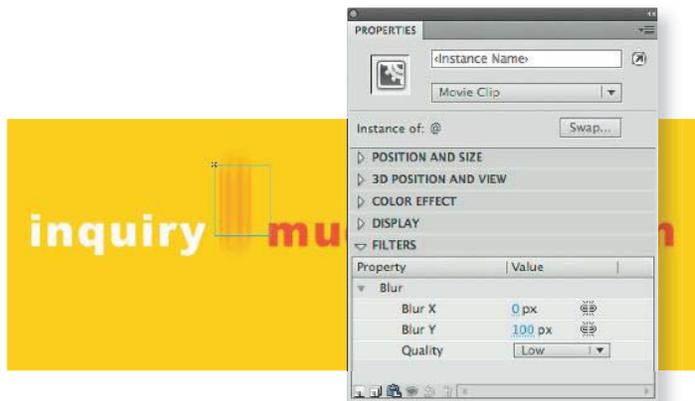
SOMETIMES YOU MAY NEED a blur effect that is more realistic than the linear gradient method. The Blur filter is perfect for creating realistic blurs, even animated ones. Filters were introduced in Flash 8 and to create the same blur effect in older versions, we had to export the object from Flash as a PNG file, open it in Photoshop (or any graphics editor of choice) and apply the Motion blur. Then we would have to export from Photoshop as a PNG file and import back into Flash. Thankfully, those days are long gone with the ability to not only apply filters, but to animate them as well.



1 It is usually a good idea when creating animated effects to work backwards. Start with the final frame, insert frames to extend your entire Timeline and then add keyframes to the last frame.

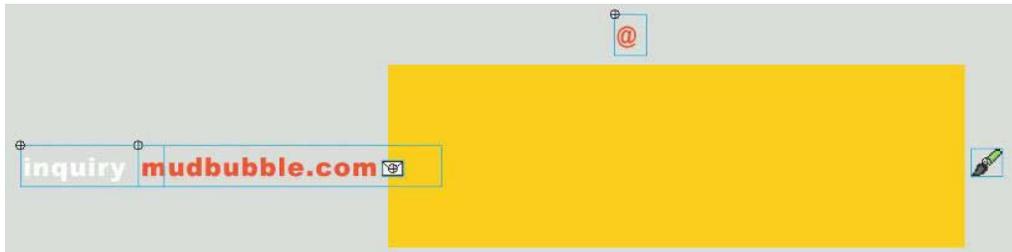


3 In frame 1, select a Movie Clip symbol on the stage and apply a Blur filter from the Filters panel. Click on the small black magnet icon to unlock the blur constraint. Use the slider to adjust the amount of blur for the X axis only.



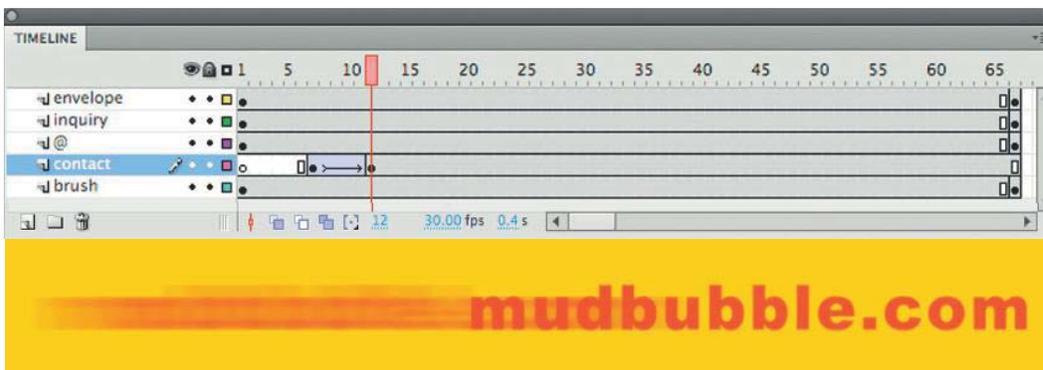
5 For objects that fly in vertically, limit the amount of blur to the Y axis. Remember to use your Shift and arrow keys to maintain alignment between keyframes, unless of course you want to have your object travel at an angle.

How to Cheat in Flash

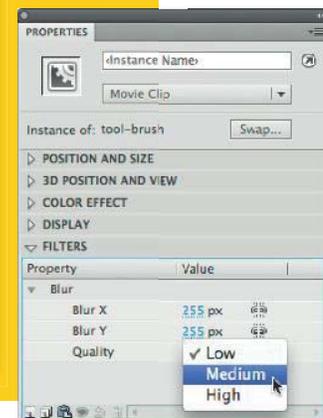
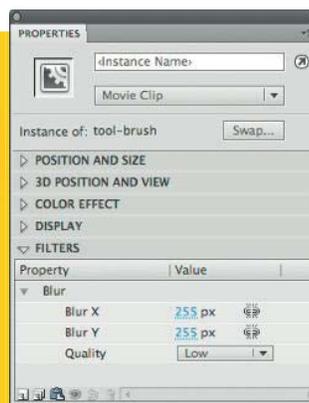
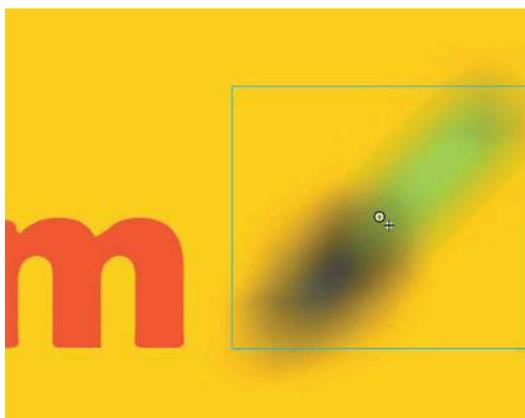


2 Go back to frame 1 and begin the animation process by positioning the objects that will animate into view off the stage. Hold down the **Shift** key while pressing the

arrow keys to maintain alignment and move the object incrementally ten frames.



4 Drag the keyframe in your last frame closer to the first keyframe and apply a Motion tween. The symbol will animate from outside the stage into its original position. The Blur filter will also be motion tweened from the amount of blur in the first frame to no blur in the last frame.



6 Objects that appear as if being focused from thin air use an equal amount of blurring for both the X and Y axis. Did you know you can set a blur amount beyond what the slider allows? The slider taps out at a value of 100, but you can type in your own value up to 255.



HOT TIP

Be careful about the number of filters you apply to objects. The playback performance of the Adobe Flash Player may be affected if too many calculations are needed to render each of the filtered effects. Each filter has a quality setting: Low, Medium and High. If you are unsure about the processor speed of your target audience, use the Low setting to insure maximum playback performance.

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