Ever had an image that simply didn’t work? The angles are off, the colours aren’t quite right, the focal point is all wrong – things simply aren’t clicking? The kaleidoscope effect is a fun way to bring new life to this kind of image, and a creative way to experiment with pattern-based work in Photoshop.

The actual premise of the technique is very simple, based on symmetry, replication and rotation, but the effects it can generate are frequently quite complex. There’s no limit to the intricacy one can achieve with a kaleidoscopic image, as the technique may be simply repeated with different variables and Layer Modes to generate minutely detailed work. This technique can be applied several times to different sections of the same base image, and as such is a useful way of presenting each separate aspect of the initial work in a new light.

In this tutorial, you’ll be shown how to create a basic kaleidoscope effect, as well as how to achieve several slightly more advanced variations to create your own original kaleidoscopic pieces.

Illustration and tutorial by Justin Maller
www.superlover.com.au

PHOTOSHOP
KALEIDOSCOPIC IMAGES

Applying a kaleidoscope effect to an image can generate some wild and unexpected results. Justin Maller explains how to create colourful designs full of chaotic impact using basic Photoshop techniques.

1 In Photoshop, open the carnival.jpg file from this issue’s CD. Make a square selection of an area you find interesting by holding down Shift while you drag the Rectangular Marquee tool. Now Copy and Paste this selection into a new layer.
Using the Polygon Lasso tool, make a diagonal selection from the bottom left to the top right of the image and clear the lower triangle. Duplicate the remaining triangle, and flip it horizontally.

To add more depth to the image, merge these layers and duplicate them. Rotate the new layer by 45 degrees and position centrally. This will give the illusion of previous transformations, as it adds corner angles to the image.

Position the duplicate to the right of your original selection and merge the two layers together. This new shape will form the basis of your kaleidoscope, so make sure you’re happy with it. If not, go back to the start and try a new selection.

Duplicate this layer again, and rotate it 90 degrees clockwise. Make sure each edge is touching the other, and that there are no gaps. You’ve now created a very basic kaleidoscopic image.

To add more depth to the image, merge these layers and duplicate them. Rotate the new layer by 45 degrees and position centrally. This will give the illusion of previous transformations, as it adds corner angles to the image.

You can now incorporate other elements from within the original image to simulate the next transformation. Duplicate your base image and re-size it to 50 per cent. Make a fresh selection within the image, and repeat steps one to five.

Invert your selection (Shift+Ctrl+L) and clear. Position this image at the centre of the piece. You now have the beginnings of what would be the next shift in the kaleidoscope.

Continue to add detail by repeating the first nine steps, positioning the new elements at symmetrical positions throughout the piece. You may wish to concentrate on the central area, or add variations to the corner images; so long as you keep things symmetrical, the kaleidoscopic effect will not be lost.

DON’T STOP
There’s no need to be satisfied with a basic kaleidoscope image. Repeat the process on various sections of the original image many times to generate the most detailed and intricate piece of work possible. For an ultra-detailed response, try making a kaleidoscope out of a kaleidoscopic image. For even more detailed results, try experimenting with the various Layer Modes when making your replications.

LIGHT WHEEL
This is a variation kaleidoscope technique. Make a vertical selection, then Copy and Paste into a new layer. Duplicate this layer, set it to Lighten Layer mode, and rotate it by ten degrees. Repeat these two steps until you’ve completed a full rotation, then merge all layers. Finally, make a circular selection of the centre, then invert and clear to reveal a perfect light wheel.

ART130.tut2   57
6/11/06   16:47:00