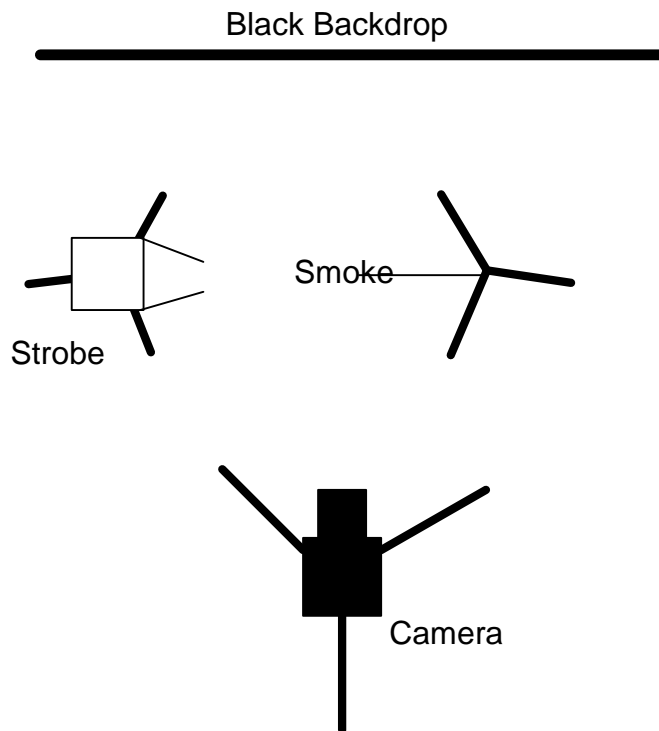Smoke Art Photography
By Michael Adkins

Below is a drawing of the general setup for taking Smoke Art Photographs.

Black Backdrop

Strobe

Smoke

Camera

The basic materials for Smoke Art Photography are as follows;
- A package of incense from Wal-Mart in the craft area.
- A piece of black felt or black light absorbing cloth for the backdrop.
- An off camera strobe that can be placed on a stand.
- Camera on a tri-pod with an external shutter release.
- A light stand with a clamp to hold the incense stick.

- A grill lighting torch to light the incense.
- A computer with Lightroom or Adobe Photoshop.

When shopping for incense make sure to pick something that is pleasing to your smell. If you are sensitive to smoke or burning incense then this may not be a good project for you. The reason is you need to burn the incense is a room that has minimum of air movement as this will adversely affect the ability to capture a good photo of the smoke. A large open area such as a garage is good for this project.

You may also want to pick up a piece of black cloth with a heavy nap and no patterns. I used a piece of cloth about a yard square. (36"x36").   The material should absorb light and have minimum reflective qualities.

You should plan to use an external strobe light. The strobe light is preferable over an incandescent light because the strobe will freeze the smoke movement. Looking at the diagram above you should place the strobe light at a 45 degree angle to the camera. This helps provide depth to the smoke and keeps the light off the background. A snoot or barn doors on the light will be needed to focus the light on the smoke area and off the front of the camera lens or the background. This can be easily fabricated with cardboard and tape if your strobe does not come with these accessories.

AFTER THE SETUP
After the setup you can light the incense and adjust the camera to catch where the smoke folds in on itself. Minimize your movements around the shooting area as the slightest air movement will disrupt the smoke flow. You want the smoke to travel as close to straight up as possible.

SETTING FOCUS
You should have your autofocus turned off on your camera and only use manual focus. The translucent properties of smoke do not give the camera autofocus any thing to focus on. I suggest that you place a finger or your hand in the smoke stream and manually set your focus. Then remove your hand or finger and wait till the movement lets the smoke settle down.

TAKING THE SHOT
Since there is very little reflected light you should plan to make a number of bracketed test shots. You want the background to be absolutely black with the smoke as white as possible. You should also keep in mind that depth of field is important as you will be working in close to the smoke and the depth of the smoke will very. So you will need to make the F-stop as high a number as possible. For example, F11 has a greater depth of field than F8.   For a single strobe light a good starting point would be F11 at 125 of a second for ASA 100.

When shooting the shot you want to find where the smoke folds on its self. This makes the best rings or effects of the smoke.

Now that you have your image(s) you are ready to start your post processing. As you can tell the images are white smoke with a black background.

STEP BY STEP POST PROCESSING.

I do my post processing in Adobe Photoshop CS2 but you should be able to do the same in Adobe Elements or similar post processing software that has layers.

1. Open the shot you want to process in Adobe Photoshop.
2. Crop the shot to the final size and dimensions of the photo. This will save you work later. If you plan to rotate your image also do that at this time.
3. You should not set the contract and brightness on your image to obtain the best blacks and the whitest smoke possible without blowing out any detail in the smoke. You can use the Histogram or Curves or you may just select Brightness and Contrast, whichever way works for you.
4. Now Press F7 to bring up the LAYERS Dialog Box.
5. Turn off the Background Layer by clicking on the EYE Icon.
6. You should now decide how many colors you want in your final picture. Right click on the Background Layer and select "Duplicate Layer". Name it your first color you want in your picture. For instance "RED".
7. Now select "Hue and Saturation" by pressing Control U. When the dialog box comes up click on the check box marked "COLORIZE". Now slide the HUE slider to match the color you named the layer. The shade or colors is up to you and is part of the artistic interpretation. I prefer deep earth tones but you can experiment with the colors to find the ones you like. Increase the SATURATION by sliding the Saturation slider. Too much color will cause the image to glow or blow out. About 70-80 percent is what I use but once again that is part of the artistic creation process. Decrease the LIGHTNESS slider to get a rich color of smoke and a deep black background. Once you have completed the settings on this layer turn it off for now but clicking on the EYE Icon.

8. Create another Layer by duplicating the background layer as above. Once again name the layer the color you wish to create. Repeat the process in the step above for all layers or colors you wish to create.
9. Now that you have created all the layers of colors it is time to start mixing the colors. Have all your layers turned off with exception of the bottom colored layer and the one directly above it. Click to select the top layer you have turned on. This should be the third layer up from the bottom in the LAYERS dialog box. The bottom layer is the Background Layer that we will leave turned off and not use. The next layer above that will be the first colored layer and the next layer above that one is the second colored layer. This is the one we want selected.
10. Now pick the ERASER tool from the tool bar. Set Opacity at about 50% and Flow at about 30%. This will help you have control and reduce hard edges when you use the tool. Start erasing areas that you want the bottom layered color. You will start to see the bottom layered color start to appear in the smoke area.
11. After you have colorized your image with the bottom two layers move on to the next layer up. Do not turn off the bottom layers that you have used but remember the area you have erased. You will now need to erase this same area on this layer so that the bottom colorized layer will come through the second layer to the layer you are working on. The more that you erase the deeper the colors from the layers below appear. Keep erasing till you obtain the results you like.
12. After you have completed the results you like you need to select Layers and Flatten Image. This reduces the image to a single layer. Now you can further manipulate the image. If you would like a white background and colored smoke then select Control I to inverse the image.

Have fun and enjoy creating your images.

That's it. Your Smoke Art photo is now completed.