

## Easy Dust and Scratch Removal

Cleaning up dust and scratches from images can be tedious work, especially in older photos which tend to be covered with it. The good news is that Photoshop has a dust and scratch filter which can help eliminate this dust. The bad news is this tool isn't perfect and often blurs the image while trying to clean up dust. The problem is that Photoshop is looking for differences in contrast, but it can't tell the difference between dust and other small objects such as the pupils of the eye, buttons on a shirt, a small branch or grass. Although carefully setting the radius and threshold can help, it still isn't perfect.

What would be nice is a "smart" dust tool - one where you decide what is dust and what isn't, but then lets Photoshop do the work for you. Well, fortunately there is a way to do just that. Although this may seem mysterious and complicated at first, it is really quite simple after you try it a few times. The only tricky part is making sure you follow these steps in the exact order, otherwise it won't work correctly.

1. Start by opening the image that you want to clean. This example assumes that there is only one layer to start with - the background layer.
2. Duplicate the background layer and call it something like "Dust & Scratches".



3. Now place an empty layer on top of that and call it something like "Clone Layer". From the top down you now have an empty layer, a duplicate image layer and the original background layer.
4. Select the clone tool and make sure "Aligned" is turned on, and "Use All Layers" is turned off. At the same time, make sure that the info palette is visible.
5. Set the middle layer as the active layer and find a typical dust spot. Don't try to fix a giant "blob" with this technique, nothing can work miracles.
6. Place the clone tool over this dust spot and set it as your source by hitting ALT-click with the mouse. At the same time look at the info palette and make a note of the EXACT x, y location that you selected. Either make sure you remember this location or write it down.
7. With the duplicate layer still active, go up to the dust & scratch filter (Filter/Noise/Dust & Scratches) and adjust the radius and threshold to get rid of the majority of "typical" dust. You can be somewhat aggressive here, but again, don't go crazy and try to fix giant blobs of dust. Your goal should be to eliminate most or all of the average size dust. At this point the rest of your image will probably become blurred. Don't worry about that for now, this will be taken care of later.



8. Now disable the middle layer and all the dust should reappear and your image should be sharp again and then go to the top layer (the clone layer) which is still empty at this point.
9. At this point your clone tool should still be active and the info palette should still be visible. While watching the info palette, click on the top layer with the clone tool in the exact same spot where you set your source in Step 6 above. The dust spot should magically disappear!
10. At this point you should be able to quickly go around and click on each dust particle and it should disappear in a similar way. Note that you only need to set the source and destination once as described above. Once there are set relative to each other they never need to be set again - and in fact should not be set again.
11. As an added measure you may want to set your blending mode to either darken or lighten (depending on whether it is a positive or negative) as described in the cloning workshop.