

**Y**ou know, I love photographing people. I love sculpting subjects with light then working with them to bring out their best and finally when all is right, immortalising them into pixels. Invariably, no matter how much I put into lighting, they almost always need some retouching. Now I absolutely love retouching in Photoshop, but it's not something I want to spend the whole day on, and that is easy enough to do. Also I love making money, I like making lots of money, so if I could shoot and retouch many more faces in a day, I'd become inconsolably happier than I already am – if such a thing is possible. So what follows is one of the techniques I use to stream-line facial retouching without compromising quality for speed. This technique is called 'Frequency Separation'.

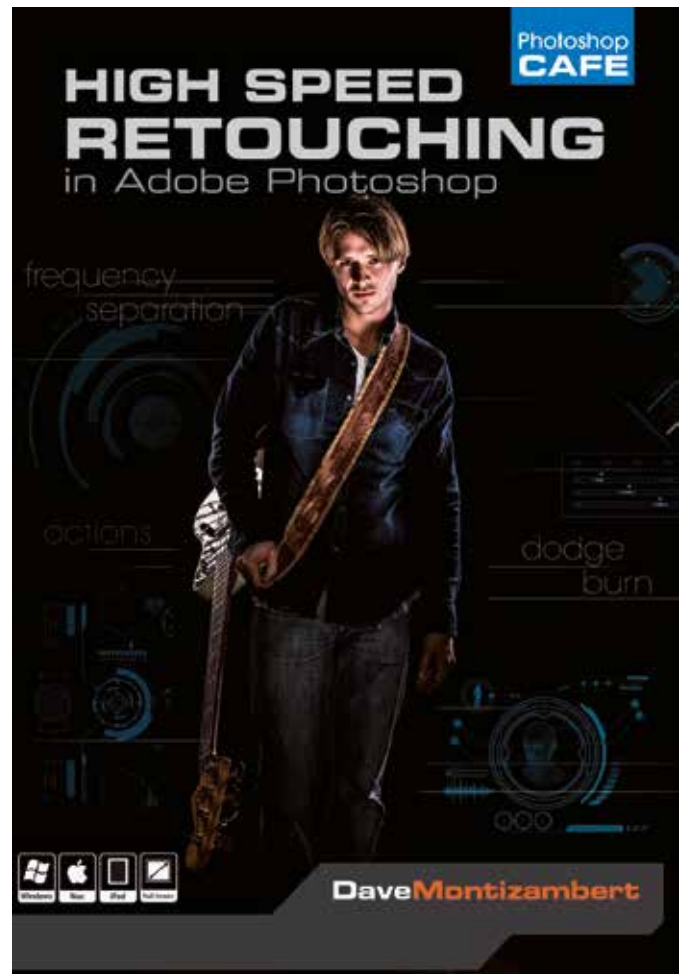
Frequency Separation sounds like a mental condition audiophiles might battle after too much time away from their stereos, but happily for them, and myself, it is not. Frequency Separation allows retouchers to separate the high-frequency pixel information from the low-frequency pixel information in images and make edits to them separately, in other words you can work on texture and detail independently from colour and tone, and vice versa, making most day-to-day retouching so much easier. When you think about, when someone has a wrinkle, if you fully remove that wrinkle with the Clone tool or one of the Healing tools, they start to look artificial, they start to look like they are made out of plastic. I don't like that look, I want my subjects to look real, but I still like to tone down the wrinkles and remove temporary imperfections so that they do not distract the viewer. As my friend and master retoucher, Robb Carr says, "It's about reducing the distractions so that we can get to the essence of the person."

2



Frequency Separation is a tremendous aid if, for instance, I'm dealing with a deep wrinkle (see Image\_02), Frequency Separation allows me to go in and keep some texture and detail for authenticity, while reducing the toning that makes that wrinkle look so deep and distracting. Or I can completely remove black-heads from a nose by wiping over the affected area with the clone tool, removing just these blemishes (see Image\_03) without messing with the colour and tone. Or I can seamlessly put detail back into a burned out area in seconds (see Image\_04).

3



1



4

## dave MONTIZAMBERT'S creating with light



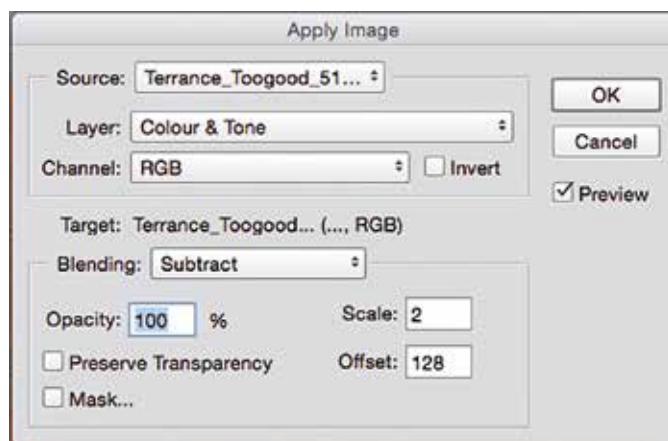
To unlock the magic of Frequency Separation you need to geek out for a bit and follow my recipe below.

- With an 8-bit image file open in Photoshop, duplicate the background layer by typing Cmd/Ctrl-J (I notate the first modifier key for Mac users and the second modifier key after the forward slash symbol for Windows users).
- Name this duplicate layer 'Detail & Texture', this will be the top layer of the layer stack – the high-frequency layer – click on this layer's visibility eyeball to temporarily turn its visibility off.
- Rename the Background layer to 'Colour & Tone', this will be the low-frequency layer.
- Right click on the Colour & Tone layer and select 'Convert to Smart Object'.
- With the Colour & Tone bottom layer still selected, go to the Filter menu and select: Blur > Gaussian Blur > Radius: 2.0 pixels (that's the amount I like to use). The result you are looking for is a radius that lightly blurs all the fine detail.
- Type Cmd/Ctrl-Shift-N to create a blank new layer above the bottom layer, name it 'Retouch Colour & Tone'.
- Select the Detail & Texture layer (the top layer) and click on its visibility eyeball to turn on its visibility.
- From Image menu select 'Apply Image...'
- In the resulting Apply Image window (see Image\_05), Photoshop will have automatically chosen the file you are working on, so its name should appear in the 'Source' field.
- Set the 'Layer' field to the bottom original layer now called Colour & Tone (this will apply the Detail & Texture layer to this layer).
- Set the 'Channel' field to RGB.
- The 'Invert' checkbox should be unselected.
- Set the 'Blending' field to Subtract.
- Set the 'Opacity' field to 100%.
- Set the 'Scale' field to 2.
- Set the 'Offset' field to 128.
- The 'Preserve Transparency' and 'Mask...' checkboxes should be unselected.
- Click the 'OK' button to apply the 'Apply Image' settings to your image, you now have detail & texture separate from colour and tone, although the image now looks like a weird grey line drawing.
- With the Detail and Texture layer still selected, go to the top left corner of the Layers Palette then click on the Blend Mode field (which by default reads Normal) and set it to 'Linear Light'. Notice how your weird grey image now looks normal again, only now it is sharp again. To see what the final layer stack should look like see Image\_06.
- The next step is to smooth the subject's skin-tone, ie make wrinkles less dark and so less noticeable, or tone down 'glare' areas.

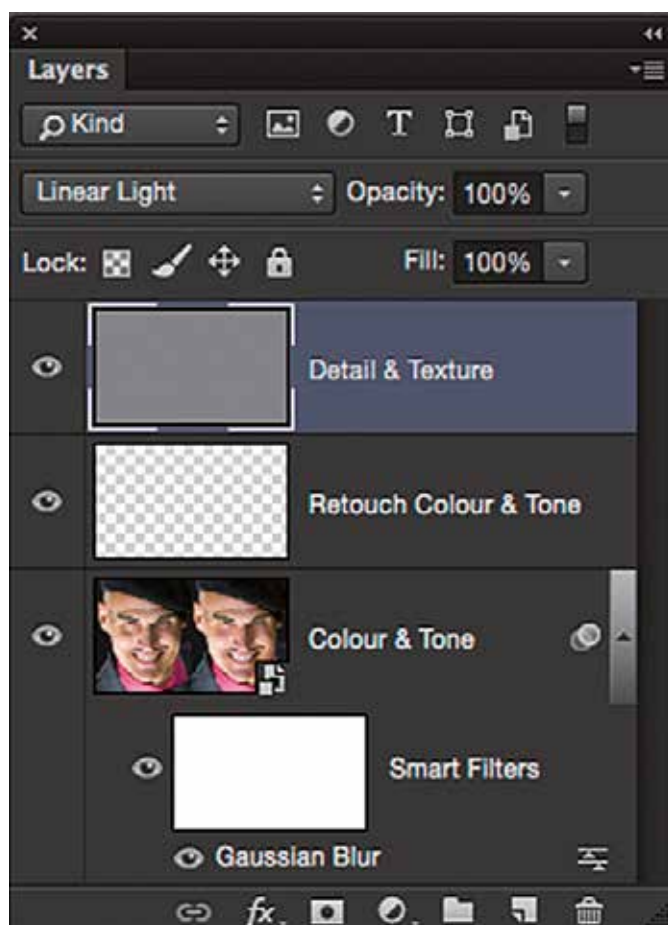
Now Frequency Separation is set and ready to be brushed over the subject to smooth and tone the skin reducing roughness, making wrinkles less dark and less noticeable, plus toning down 'glare' areas. Here's how I like to do it:

- Select the 'Retouch Colour & Tone' layer then brush over wrinkles and blotches with the Healing Brush tool, or the Clone Stamp tool. Make sure to set the 'Sample' field in the Tools' Option Bar at the top of the open window to 'Current & Below' so as to not select any pixel information from the top layer (see Image\_07).
- Select the 'Detail and Texture' layer to remove unwanted sharp detail like blackheads and rough skin texture, or use this layer to seamlessly clone detail back into burned out areas, using the Clone Stamp Tool set to 100% Opacity and Flow. If you haven't done it yet, be sure to set the 'Sample' field in the Tools' Option Bar at the top of the open window to 'Current Layer'.

Now I hope the recipe above didn't make your head ache trying to follow it, I know I got lost several times while proof-reading the above and I wrote it! The problem here is trying to learn visual concepts from written word, actually seeing it demonstrated first hand or better still in a video, which you can play it over and over again, makes comprehension so much easier. To avoid 'Frequency Separation Frustration', I suggest that you apply the steps of this recipe to an image while reading it, this will make it much easier to understand, and I also suggest that you should record the first 18 steps listed above as a Photoshop Action so you never ever have to do them ever ever again!



5



6



7

To make learning Frequency Separation and general facial retouching much easier and to delve more deeply into the subject than space for this article allows, I have created a DVD tutorial called High-Speed Facial Retouching (see Image\_01) available now at [www.montizambert.com](http://www.montizambert.com). This absolutely incredible :) set of retouching video tutorials, shows you in painstaking detail, everything you need to master Frequency Separation including how to use it with 8-bit images as well as 16-bit images. This DVD also includes a ready-to-go Photoshop Action for Frequency Separation retouching and has not one but two versions: one for 8-bit images and one for 16-bit images (I use different 'Apply Image' settings when working with 16-bit files). The great thing about the Action is you open an image, run the Action, decide what areas of your image need retouching help, select which layer (the Colour and Tone or the Detail and Texture layer) best suits that retouching situation, decide whether to start with the Healing Brush Tool, or the Clone Stamp Tool, then brush over the afflicted areas, and a short while later you are on the beach sipping mai tai's with all the time you have saved.

See Dave speak at:

- 'Fototage' Gmunden Austria – 21 March 2015 <http://www.fototage.at/produkt-kategorie/seminare-und-workshops/>.
- 'I Am' Tallinn Estonia April 11, 2015 <http://festival.iamphotographer.eu/EN/platform-classes/dances-with-one-light>.
- 'World Photographic Cup' Montpellier France 14 April 2015 <http://www.europeanphotographers.eu/events/icalrepeat.detail/2015/04/12/10/-/world-photographic-cup-awards-ceremony-montpellier-france>.

## Bio

Dave Montizambert lectures internationally on lighting, digital photography, and Adobe Photoshop. He is also a published author having written two books on lighting and digital photography [www.montizambert.com](http://www.montizambert.com) plus numerous magazine articles on these topics in North America, Europe, Russia and Asia. Dave also creates Lighting and Photoshop tutorial DVDs for [www.software-cinema.com](http://www.software-cinema.com) and [www.photoshopcafe.com](http://www.photoshopcafe.com). Dave is available for lectures and workshops in your area and can be reached through [www.montizambert.com](http://www.montizambert.com). Also checkout 'Learn From Dave', '!!!!!!!Free Stuff!!!!!!' - free on-line lighting tutorial videos at <http://blog.montizambert.com/product/articles/>.