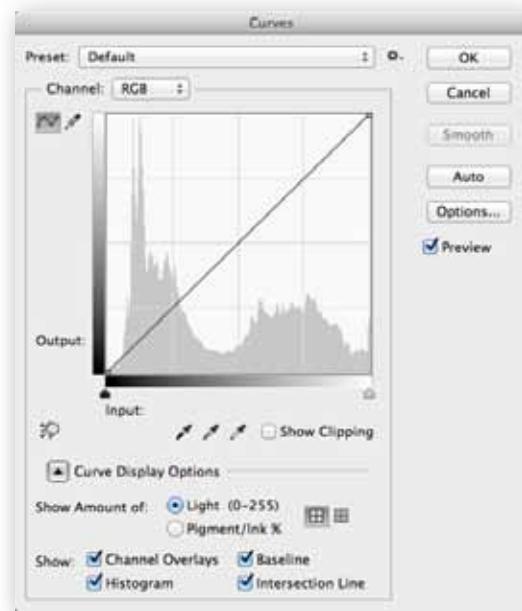


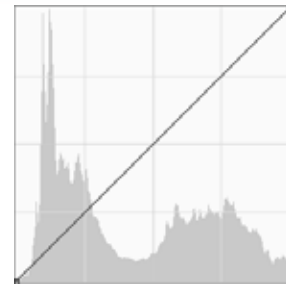
Learning Curves



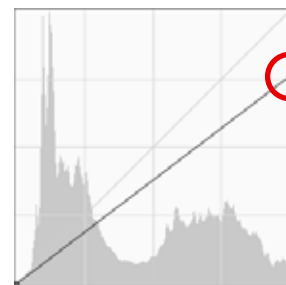
THERE ARE MANY WAYS OF adjusting images in Photoshop – Levels, Brightness & Contrast, Hue & Saturation, Color Balance. The most powerful of the lot is Curves, which allows you to make both fine and sweeping alterations in a single dialog.

The Curves dialog is one which confuses many new users, but it's worth getting to grips with. The graph shows how the input values (the original image) translate into the output values (the result of the operation); by subtly tweaking this graph, we can adjust not only the overall brightness and contrast but each of the red, green and blue channels as well.

Using Curves often involves thinking backwards: so if an image is too red, for example, the best fix is often to increase the blue and green components, rather than to reduce the red (which would result in too dark a result). Subtlety is the key: small adjustments are always the best way forward.



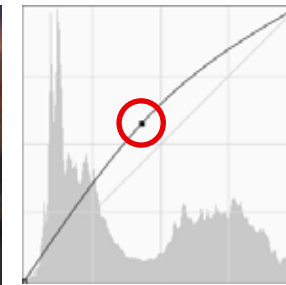
1 When you open the Curves dialog you see, perhaps surprisingly, not a curve but a straight line. As a default, the input values are the same as the output, so there's no change.



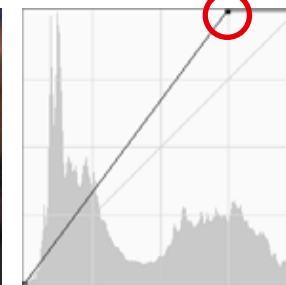
4 As well as clicking in the center, we can also adjust the endpoints. Clicking the top right point and dragging down limits the brightest part of the image, reducing contrast.



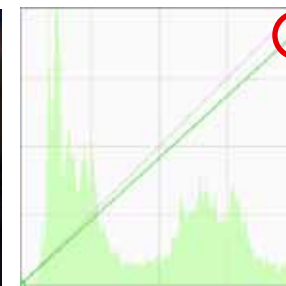
7 In step 6, the image became too red. We can fix this by switching to the Red channel, using the pop-up Channel menu, and dragging down on the curve.



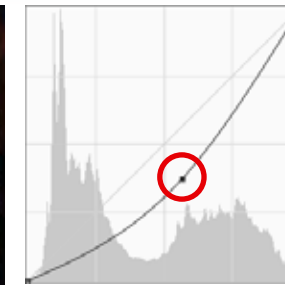
2 By clicking in the center of the line and dragging upwards, we make our first curve. Raising the curve increases the overall brightness of the scene.



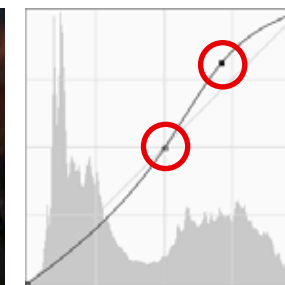
5 If we drag that top right point to the left rather than down, we produce the opposite effect – increasing the contrast of the image. This can be a very useful quick fix.



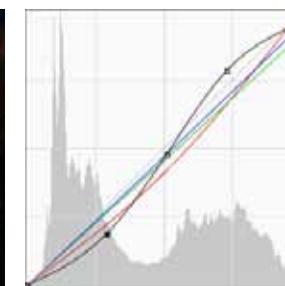
8 Now there's a little too much green in the highlights. Switch to the Green channel, and drag down on the top right point to limit the brightness of this component.



3 Conversely, clicking in the center and dragging downwards lowers the brightness, producing an image that's darker overall.



6 A common technique is to click once to 'pin' the curve in the middle, then drag up on the upper quadrant. This produces a controllable increase in contrast.



9 When you return to the RGB composite view, you can see all the Red, Green and Blue curves overlaid on each other. You can continue to tweak until the result looks perfect.



HOT TIP

If you find that Curves behaves in the opposite way for you, make sure the gradient bar beneath the graph is dark on the left and light on the right. If it isn't, click the double-headed arrow in the center and it will be changed for you.