

LIGHTING ESSENTIALS

tech sheet

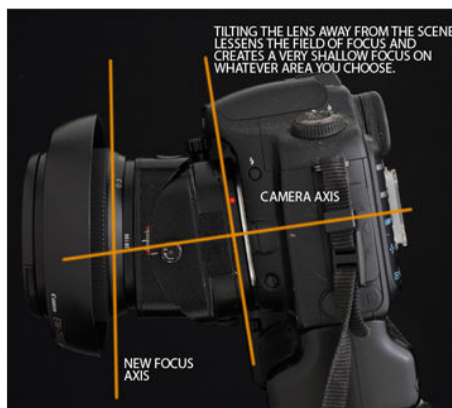
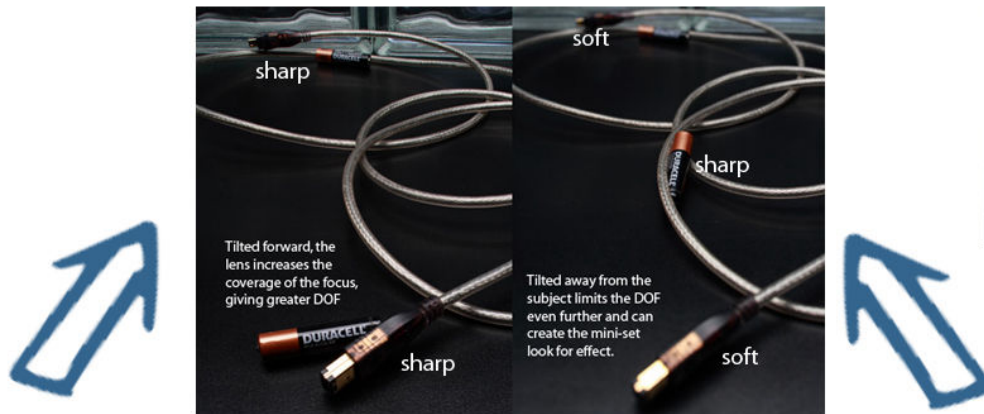
SHIFT AND TILT



One of the specialty lenses that I have used a lot is the Tilt and Shift lens. I had a 35mmPC for my Nikons and it was one of my most used lenses. I still like that lens and will shoot it on occasion when film is appropriate.

That lens only had shift, but this new Canon one we got from www.borrowlenses.com, has both shift and tilt. For those who wonder, yes you can also use the shift on a horizontal axis as well as using the tilt as a swing. These are tools of the view camera now on our smaller cameras.

On the left is what happens when you tilt the lens down. This method will give the shot more field of focus and increase the apparent Depth of Field.



USING A TILT SHIFT LENS

A SPECIAL LENS FOR PERFECT PIX

FOR THESE PHOTOGRAPHS:

- CANON CAMERA
- 24MM TILT SHIFT LENS (Canon via www.borrowlenses.com)

Tilt-shift lenses provide the small camera shooter with the functionality of a view camera. At least some of the functionality of a view camera. The front half anyway.

The ability of the camera to change the relationship between lens placement and film or sensor placement can provide many different possibilities. Two of the most popular are the tilt lens and the ability to shift the lens above and below the sensor axis.

Let's examine the tilt tool on the Tilt Shift lens. Tilting helps control the Depth of Field on images. By tilting the lens forward, the photographer can manipulate the amount of focus by increasing the angle of the lens' DOF.

Below is the image taken with the camera at a normal setting:



On the right we see the effect of tilting the lens away from the subject. This lessens the DOF and creates narrow planes of focus.

You would use this method if you wanted to make shots of your city to make it look like a small set.

You can have a lot of fun with the tilt function of this lens.

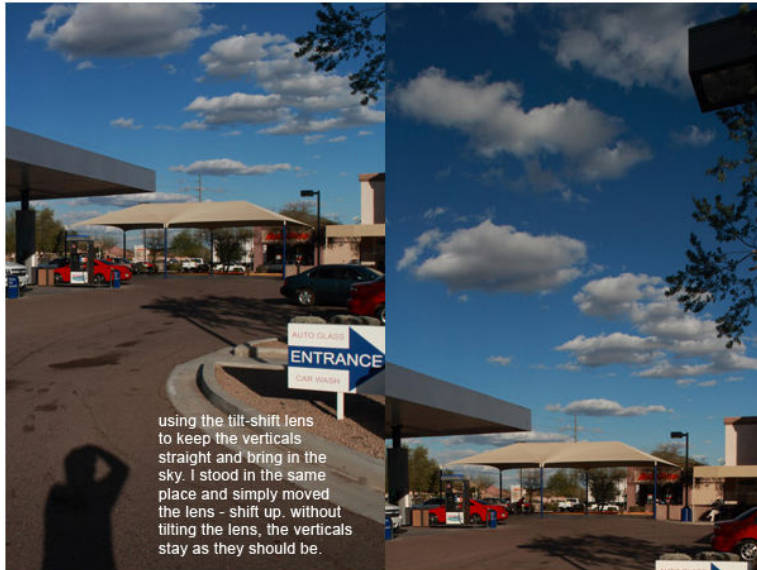
Thank you again to: www.borrowlenses.com for the use of this Tilt/Shift Canon lens.

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USING A TILT SHIFT LENS

A SPECIAL LENS FOR PERFECT PIX **page 2**

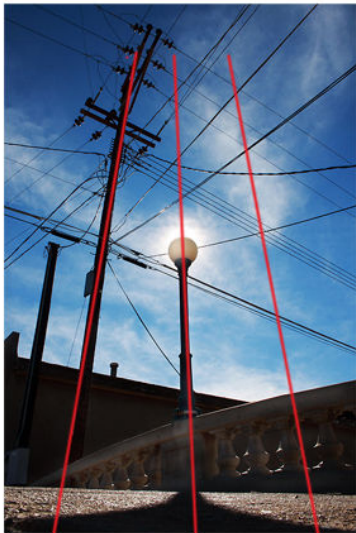


using the tilt-shift lens to keep the verticals straight and bring in the sky. I stood in the same place and simply moved the lens - shift up, without tilting the lens, the verticals stay as they should be.

The shift function of the lens is one that I use a lot. Keeping the vertical items from keystoneing (seeming to fall back) can be very useful when shooting architecture, still life and landscape.

On the shot on the left, I stood in the same spot and made the two images. To get rid of the parking lot, I simply shifted the lens up, keeping the camera vertical without tilting it up. This gave me more dramatic sky without changing the verticals of the architecture in the foreground.

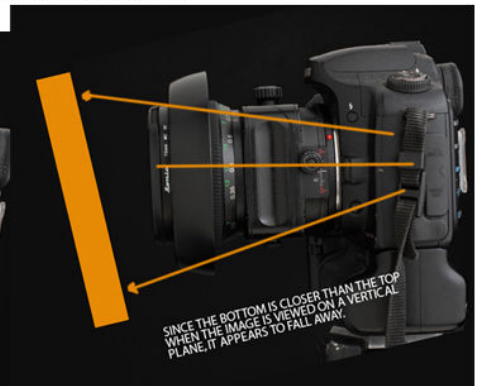
Tilting the camera is what causes the image to seem to fall back. So by keeping the camera at the same vertical axis as the subject, the look of falling back is eliminated.



Notice how the poles seem to converge, and fall away from the viewer.



SINCE THE BOTTOM IS CLOSER THAN THE TOP WHEN THE IMAGE IS VIEWED ON A VERTICAL PLANE, IT APPEARS TO FALL AWAY.



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KEYSTONING CREATED BY TILTING THE CAMERA

SHIFTING THE LENS UP WHILE KEEPING THE CAMERA LEVEL CREATES A MORE PLEASING IMAGE.

MAKING THE IMAGE HAVE STRAIGHT VERTICALS MEANS A COMPOSITION THAT DOESN'T WORK

In the shot on the right, I shifted the lens up to get rid of the foreground and present a more attractive view, without tilting the camera up and getting a keystone effect on the buildings.



Images created to show the verticals straight. This results in more dramatic sky and the foreground is cropped out. We can fix that by shifting the image up with the shift lens.

With the telephone pole shot you can see the result of the camera tilting back. Since the back of the camera is no longer vertical, it renders the keystone effect.

Now, look... it is fine to do this keystone thing. I like it when I want it. I like the telephone shot with it.

But getting rid of it when you need to for a specific shot is what you have this lens for. Architecture, landscape and still life can really benefit the image.

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The image above shows how the shift of the lens changes the axis of the image as it strikes the sensor or film. The angle remains the same, but the composition can change.

USING A TILT SHIFT LENS

A SPECIAL LENS FOR PERFECT PIX [page 3](#)

A still life shot of a clock.

As a former studio generalist, I did a lot of shots like this for a wide variety of clients. Many times I liked to use the design of the object itself as a feature of the photograph.

There were many times when doing that and showing the surface that it is sitting on would conflict. I would use a view camera in most cases, either 4x5 or 8x10.

These cameras have tilt and shift on both front and back of the camera. It was absolutely important to be able to compose the image with a sense of design, and eliminate some of the things that were not relevant to the shot.

In this photograph I used the shift function to place the camera at a center spot on the table, eliminating the view of the surface, then shifted the lens to get the composition to the point I wanted it.



In this shot, we wanted to get the shot of the airplane without the table it is sitting on. We didn't want to look up at it, but as straight across as possible.



By lowering the camera we placed the center of the table at the center of the frame. That eliminated the surface of the table, but placed the plane too high in the frame. (Note: we have cropped for space here.)

