The PC lens advantage

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If your mantra is "what you see is what you get", you need to try a PC (Perspective Control) lens.

PC lenses, such as the new PC NIKKOR 19mm f/4E ED , are the choice for serious landscape and architectural photographers, due to their unique tilt and shift capability. This helps you control what's in focus in an image and, when photographing architectural subjects – interiors as well as exteriors – it allows you to keep parallel lines parallel and prevent distortion in a scene.

For example, if you were to tilt your camera upwards to get every inch of a tall building in the frame, its soaring lines would appear to be converging towards the apex. This is called keystoning, but a tilt/shift lens prevents it from happening by allowing the camera to remain parallel and perpendicular to the building while the lens shifts up.

NIKKOR PC lenses also rotate, so the up and down shift becomes a left and right shift – which is especially handy if you want to capture a panorama.



Putting things straight

If you're using a super-wideangle lens like a 14mm and want to photograph something in the foreground, you might have to tilt the lens down by angling the tripod head towards the ground, which can create distortion in other parts of the scene – bending mountains or trees at the top of the frame inward, for example. If you're angling the camera upwards to include something in the background, then areas might start to lean outward.

With a tilt/shift lens, on the other hand, you can keep the camera perfectly level and shift the lens up or down, enabling you to compose a scene using the shift instead of tilting the camera forward, meaning all the components in the frame, such as trees and mountains, stay straight.

Creating a sharp look

The tilt capability of a PC lens provides a huge amount of control over image sharpness. Rather than increasing depth of field, tilting the lens effectively re-selects the plane of focus to increase the range of sharpness. However, adjusting your aperture for depth of field is still important for fine-tuning the sharpness of the image; shooting at around f/11 will give you greater depth of field on either side of the focal plane. This will give you startling front to back sharpness in landscape and architectural photography, as well as precise focus control in still

life and fashion photography.



Reflecting on interior images

If you find yourself in a small place where even the 19mm PC NIKKOR isn't wide enough, you can use the shift function of the lens to move the view horizontally or vertically through the scene and stitch the photos into one image that captures a complete view of the challenging location. This can be extremely useful when shooting indoor architectural work, where you have to deal with mirrors. Put a camera near a mirror and it's likely you'll see said camera reflected in it. But with the 19mm PC, if you move the camera, say, a few feet to the right so it's no longer in the reflection, you can then turn the knob on the lens and shift the lens back to the left (in this case) to get your shot.

Quick tips

• Use the tilt function to produce a "miniature village" effect, where you're shooting above the scene to throw everything out of focus except for a couple of subjects.

• Use the shift to create horizontal or vertical panoramas, moving it to the left or right, up or down, without having to move the camera itself.



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