Panoramic Photography
With Medium Format

Digital Camera backs using Novoflex Pano Head

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Panoramic Photography with Medium Format Digital Camera backs using Novoflex Pano Head

To evaluate digital camera equipment we do most of our photography in Guatemala (I have been photographing in Guatemala since age 17, more than 45 years ago). But another location we use for testing camera equipment is our family property in the Ozark Mountain area of Missouri. Our family has 3,000 acres of forests, hills, lakes, streams, and cave springs, about a 3-hour drive southwest from St Louis. The beauty of the fields, hills, and creeks offers a great place to test photography equipment related to panoramic landscapes.

The evaluation discussed in the present FLAAR Report was undertaken during 2010.

This is the second of three FLAAR Reports on the Novoflex Panorama=Q PRO panorama plate system. The first report was accomplished in Ljubljana, and the third in a mangrove swamp in the Monterrico area, adjacent to the Pacific coast of Guatemala.

FLAAR has also published a report on the stacked focus close-up system of Novoflex.

Here you can see the Hasselblad ELX, wide-angle 50mm Zeiss lens, lens shade, Novoflex PANORAMA=Q PRO. Not visible is the Gitzo tripod from Bogen. We are also interested in evaluating the QuadoPod from Novoflex but do not yet have one to test.
Equipment used

All the photography using the Novoflex is with a Phase One P25+, a 20 megapixel medium format digital back. We use it on a Hasselblad ELX with Zeiss lenses, usually a wide-angle 50mm or a standard 80mm. The camera and lenses are over 25 years old. The digital back is about 3 years old. The results from medium format are superior to even a 21 megapixel Canon EOS-1Ds Mark III (we have both cameras, plus three Nikon cameras and a Canon EOS 5D).

It helps to use a linear polarizing filter and of course a lens hood to keep the sun off the front glass of the lens.

We use a stable tripod, almost always a Gitzo. There is no need to utilize a tripod head when using this Novoflex equipment.

Novoflex Panorama=Q PRO panorama plate system compared with Seitz

Yes, of course you can utilize any 35mm DSLR, but to put a 35mm camera into a position to take a vertical shot you have to turn the entire camera 90 degrees, and place the camera on an upright pole. Most of these kind of L-shaped pano tripod heads wobble too much if you are using a heavy 35mm camera. I have tried these systems and even the Seitz wobbled when I tried to put the Hasselblad on it. Yes, I realize the Seitz system has been used for medium format by others, but it is not worthwhile putting up with even thinking of wobble.

When I am out on a photo shoot I want to concentrate entirely on the composition: on the angle of photography, where I want the sun to be (normally should be behind, over your shoulder). I am looking at light and shadow, texture and colors, and composition. I don’t want to be distracted by anything else, so I try to have assistants to take care of arranging the camera equipment in the position that I select. This also provides the student assistants great opportunities to learn how to handle the actual equipment out in the real world.

So having to jerry rig a medium format camera onto a system made for a 35mm size and shape camera is not worthwhile to me.

Seitz is a Swiss company with an excellent reputation making panoramic camera equipment. I have one of their last Seitz SuperRound shot cameras every made (for 120, 220, and 70mm film). It cost about $24,000 in its day and was worth every penny. But times change, and today an $800 Gigapan can run circles around the pano aspects of the Seitz (but Gigapan can’t do rollouts).

Prior to testing the Novoflex, I tested the Seitz VR Drive Panorama Set but it required too much assembly. And once I noticed that the Seitz did not hold the weight of the medium format camera, I took it for a retrofit, but after that simply gave up trying to use it. With four photographers on the team, and constantly moving accessories in and out of the studio to go out on field trips, its tough to keep every single piece of equipment together and back on the right shelf. With over a ton of photography equipment, there was no way to keep track of where each part was located in the storage area in two widely developed parts of the world (St Louis, Missouri and Guatemala, Central America).
This view shows the accessories better. You screw the Novoflex base plate (QPL- PANORAMA) onto the 3/8’s “European” mount at the bottom of the Hasselblad. Most screws don’t hold well in a Hasselblad mount (I never figured out why).

The Novoflex panorama base is directly on top of the tripod itself (no tripod head is needed). This assumes you are using a professional tripod head which will tend to have a 3/8’s size “European” thread size.
Now you can see the panorama that I am about to take. The beauty of this view is that you have things in the foreground (split-rail fence, then pine trees) then a considerable distance to the landscape itself (the fields and wooded hill behind the fields).
Here is the finished panorama. With this type of view a Gigapan would not be needed because there is not much up or down that is not already captured. Even a modest 20 megapixels per shot creates a final image at 300Mb at 300dpi (since of course you are using only the center portion of each shot to create overlapping views in Adobe Photoshop software). The Photoshop work is relatively manual.

The other alternative would be to use a large-format digital scanning camera back such as the BetterLight. This would involve having a 4x5 camera body plus of course all the BetterLight equipment. It's hard to get this kind of equipment onto an airplane as hand baggage these days, so I tend to find the medium format more practical for travelling by air.
Here is another view from Nicholas Hellmuth property. The digital back is arranged vertically (normal view is horizontal).

Single photos taken with Novoflex Pano Head using a polarized filter.
This vantage point is in front of a local landmark called "The Sinks" where Sinkin (Sinking) Creek flows through a hill. Since the Ozark Mountains are a Karst area, you get lots of caves, cave springs, and sinkholes ("cenotes" in the Mayan area of Yucatan, Mexico).

I have selected a vantage point where I can see all the way 100 meters through the cave-like tunnel created by the creem.
Here is the resulting photograph of The Sinks.
3 single photos were taken with Novoflex Pano Head for this panorama.

Here is the resulting panoramic photograph of the river that runs through The Sinks. Panoramic photograph stitched in Adobe Photoshop CS5.
4 single photos were taken with Novoflex Pano Head for this panorama.

Resulting panoramic photograph of the river that runs through The Sinks. Panoramic photograph stich in Adobe Photoshop CS5.
4 single photos were taken with Novoflex Pano Head for this panorama.

Resulting panoramic photograph of the river that runs through The Sinks. Panoramic photograph stich in Adobe Photoshop CS5.
More information at:

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