Panorama tripod heads for 35mm & medium format digital cameras

Landscape panoramic digital photography with the Novoflex =Q PRO & QPL
FLAAR has a long-time interest in all the equipment and accessories for digital panoramic photography. We cover options for panoramic photography with large-format (4x5" or 9x12 cm), with medium format (4.5 x 6 cm, such as Rollei, Hasselblad, Phase One), with 35mm digital SLR (Nikon, Canon, etc) and with point-and-shoot digital cameras (there is an incredible new system for point-and-shoot digital cameras that we hope to test later this summer). The report you are about to read discusses a panorama head that is especially good for holding a medium format digital camera.

For over a decade I have taken panoramic photographs with a 48 megapixel BetterLight Pano/WideView system. This is one of the top three digital panoramic systems in the world (Seitz being one of the others). The BetterLight has one of the most sophisticated panorama tripod heads in the world.

Here is the BetterLight digital back being used to take panoramic photos on Atitlan Lake.
The large-format BetterLight system has many advantages, especially if you already have a Sinar, Cambo, Linhof, Arca-Swiss or comparable large-format camera. But the world is gradually moving to one-shot CCD systems: Kodak no longer makes the tri-linear CCD sensors that are required for BetterLight and all other large-format digital backs. Yes, you can still obtain a BetterLight this year, if you hurry, but the world of professional photographers have been switching to medium format because you can photograph moving objects (including people, who move when they breathe). With a tri-linear CCD you can photograph only objects which are stationary.

The primary advantage of medium format panoramas is that you can take them quickly. The moderate downside is that a medium format panorama may require more processing time, since the processing of a full pano is not always automatic with a medium-format digital back. The pano processing of BetterLight is instantaneous, but it takes two to three hours to set up the entire camera system and do the test shots and end up with a final image.

With medium format the set-up and actual photography on-site is just a few minutes. The processing time is back at your studio, which probably costs less than spending time with a complex set-up time out on location where you have an entire crew waiting for the scan to be finished (if you are using a large-format system).

**Searching for a pano head for a medium format digital camera**

A fully loaded Hasselblad, Contex, Mamiya or Rollei is quite heavy. Plus the center of gravity is out in the middle of the substantial mass of camera body, lens, and digital back.

When I began searching for a suitable pano head for medium format I found that almost every system is a raised L-shape. All, without exception, seem made for a 35mm SLR or point-and-shoot camera. This is a polite way of saying that none (as in zero) are sturdy enough to hold a medium-format camera without either bending the holding structure or simply having wiggle or wobble if you move anything.

It is not that they are not precise, but simply they are made to hold a simple 35mm digital SLR which is the kind most people have. A few of the better ones can handle a heavy Canon or heavy Nikon D-300 or larger, but again, the designers of pano heads had in mind the larger audience. You see the same with Gigapan: there are two models: one for point-and-shoot; the other for larger point and shoot and some 35mm digital cameras, but only the small ones: Nikon D60, D90, not the Nikon D3 or even the D300.

About six or eight years ago, I noticed Peter Lorber was using a Seitz VR Drive Panorama Set to hold a medium-format camera. So I was able to obtain one courtesy of Seitz. But this turned out to be an early version and could not hold the weight of my Hasselblad. I sent it back to be retrofitted (courtesy of Seitz) but attaching a heavy bulky medium format camera to something with five or more joints is an invitation of wiggle, wobble, and flex. If it bends even 1 mm, to me that is too much. So the issue is not whether or not the system is precise, but rather, it simply is made for a 35mm camera, not for the size, shape, or weight of a medium format camera.

So at Photokina 2004, Photokina 2006, and Photokina 2008, I kept looking for a system that was not complicated and could hold the weight of a medium format camera. The staff of Novoflex were very patient, as I visited their booth also every year at PMA or Photo Plus East (Photokina is every two years; the others are every year). Finally, at Photokina 2008, I found what I was looking for, in the Novoflex booth.

By the time it arrived my annual December shooting season was over, so I flew the pano system to Ljubljana to test it there. The report here are the results. I am now in Guatemala (June 2009) and will be testing the system in Guatemala.

Front cover photo: attaching base of Hasselblad camera to the Novoflex QPL-Panorama sliding plate. Be sure you have the correct size thread; Novoflex offers both American and European size attachment screws. You can use any tripod with any good tripod head: we tend to use Gitzo tripods and either Manfrotto, Gitzo, or as here, an Arca-Swiss tripod head (about 25 years old and easier to use than most newer style ballheads).
This is the Novoflex Panorama =Q PRO tripod head. This could go directly onto your tripod (without needing a tripod head). The advantage of putting it directly onto the tripod is that a separate tripod head is just one more variable that you have to level. The =Q PRO is the high-end of three models of panorama plates from Novoflex.

The bubble level is essential, indeed you get one for each direction. This is one difference between this version of the Novoflex tripod plates: the others have only one single circular bubble level.
It does not require a PhD to figure out how to attach the sliding plate into the Q PRO base unit.
In all these photos we are using an intermediate tripod head because I am not in or near my office so I have no easy place to leave the tripod head (I am in Ljubljana, capital of Slovenia, south of Austria and west of Trieste, Italy).

Hasselblad ELX with Zeiss lens (each about 25 years old and still working perfectly; I defy any other medium format camera (not made in Germany) to hold up this long after being used around the world including years in remote archaeological sites throughout Guatemala, Belize, and Mexico. The tripod is only about 4 years old (Gitzo, courtesy of Bogen Imaging).
This is the Novoflex panorama head with Hasselblad ELX medium format camera.
Adjusting the lens shade after adjusting the polarizing filter. When you turn the lens shade you have to be careful it does not cause the polarizing filter to turn out of position. The digital back is a Phase One P25+ courtesy of Global Imaging.
Attaching the Hasselblad to the Novoflex plate. Tina Kosir is a student of graphic design at the University of Ljubljana. She has worked with FLAAR on photography projects in Guatemala and Honduras, and was part of the FLAAR team at FESPA 2009 in Amsterdam and at Sepiax Ink Technology in Austria the week after FESPA. Tina is doing her thesis on 3D scanning of cultural heritage.
Novoflex QPL-Panorama plate and =Q PRO tripod head.

Nicholas at the left with Tomaz Paskuli, a student at University of Ljubljana.

Tina Kosir, Nika Papic, Nicholas Hellmuth, Tomaz Paskuli
This building is good for light-and-shadow, as well as for HDR.
A good example of typical distortion when you do not have a 4x5 camera with movements. A 4x5 camera is too heavy to carry around the world; even the portable Linhof is too much on a business trip.
The architect’s name is Joze Plecnik and the name of the building complex is Plecnikove Zale (in English Plecnik’s Zale).

This could be considered a High Key kind of photograph.
Some of the whites are burned out, so this kind of photo needs HDR (at least three different photographs: one exposed for dark shadow areas; one for gray areas; one exposed for white; and then mixed in HDR software).
Steps to do a panoramic picture.

First, you have to open the images in Photoshop CS3.

Second, put all pictures together in one file, and select all layers
Third, go to Edit and choose Auto-Align Layers, and finally choose Edit>Auto-Blend Layers.

This is the final result of the panoramic photo.
Conclusions

This Novoflex system works great. What I really like about it is that it’s not bulky. There are no needless frills or accessories that make no sense. Since I travel around the world I don’t want to be stuck with some giant construction with ungainly arms, extensions, and gadgets. What you need is what you get, and it is all made with Germanic precision.
I recommend you first visit the Novoflex web site, and then visit them at a major photography trade show.
Of course if you prefer to do QTVR or landscape panoramic photography with a 35mm SLR or point-and-shoot camera, then Novoflex has a variety of panorama tripod head attachments for your needs. For cameras of this size, shape, and weight, an L-shaped system is the standard.

Next in the queue to be reviewed:

FLAAR will be testing and evaluating the Novoflex focusing rail system for close-up photography with 35mm digital macro lenses. We have projects on tropical Maya ethno-botany in Guatemala, so have plenty of subject matter. The cacao flower is tiny as are many indigenous orchid flowers. Our evaluation of the Novoflex focusing rail will be available during June 2009.

What other Novoflex products do we recommend?

It would be inappropriate to recommend a product that we have not yet used ourselves. But having seen the Novoflex team at trade shows around the world for at least eight to ten years, I can definitely say they are an ethical team that make good products.
Once we finish issuing our full-color PDF reports on the Novoflex pano system and Novoflex focusing rail system, I would be interested in evaluating the following Novoflex products:

- QuadroPod, yes, a “tripod” with four legs.
- Novoflex ClassicBall 5 (I will need to decide between mini-connect and Q-base)
- Novoflex Ball Head 40, for Nikon and Canon, since the “5” I would prefer for medium format. I have decades of experience with Arca-Swiss and Gitzo ballheads, so would be able to comment quickly on how the Novoflex compared with those brands.
- Novoflex BALPRO 1 to try out some of my great Hasselblad Zeiss lenses on a Nikon or Canon, since often the subject (insect or flower) is so much smaller than medium format size that the more appropriate size is a 35mm digital SLR.
- I am definitely curious about the PROSHIFT+ which looks comparable to what would be a sliding back adapter with multi-stitch for a large-format camera (using a medium format back on a large-format camera).

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