GigaPan compared with Novoflex Pano Head
Another difficulty we had was the changing light, because we decided to do it at the time shortly after sunrise, we realized that the light in this time of day it was the best time to make that picture, but at that time of day the sun is changing very fast, so we had to hurry because if not the GigaPan will be unusable because of the diverse levels of the changing light across the length of the pano coverage.

When taking pictures in a place like this you should watch out, because the photography equipment could be damaged by so much mud and water. So it is better to clean the tripod legs as soon as you finish using them.
In our field trip to Monterrico this year, we had an incredible experience in the middle of Mother Nature. Originally we had gone in search of an area of mangrove swamp to do a GigaPan wide-angle pano. We found areas where we could get the boat in a 10x10 meter area and do a pano inside the ring of mangrove trees. But instead we found something even more photogenic: totally outside, and a vista of over 80 kilometers (to the volcanoes that surround Antigua Guatemala). We are a few meters from the Pacific Ocean. All this is part of a long range project to find and photograph all flora and fauna which are depicted a thousand years ago in Classic Maya art.

In the middle of our expedition we changed our approach because of the beautiful landscapes in our country Guatemala.

In our journey up the canals to the mangrove swamps of Monterrico looking out to do some shots about water lilies, we found this beautiful landscape of the volcanoes “Agua, Acatenango and Pacaya”. The erupting volcano, Fuego, is hidden behind the second peak of Acatenango. Once we saw this view, we decided then to do some panoramas with two different techniques. One of them was with the GigaPan Epic Pro and the other one was with the Novoflex system using a Hasselblad camera with Phase One P25+ digital back.
Gigapan Epic Pro  Sofía Monzón and Jennifer Lara

To accomplish this panorama picture using the GigaPan Epic Pro we spent approximately 15 minutes mounting the equipment on the tripod and other 15 minutes making the whole panorama. We took 219 photos to do the complete view of the volcanoes and used a Nikon D300 with an 18/80mm.

If you do a cityscape with a GigaPan, most people use a 100mm, 180mm, or even 250mm lens, and take a thousand (or more) photos. But we do not need that detail. Plus we don’t have a memory card large enough to handle that. We have only 16 GB cards (courtesy of Hoodman).

The hardest part for this shot was setting the GigaPan in this location because it was very muddy ground, so it was very difficult level the tripod. The tripod legs kept sinking into the muck. Actually this was the only “dry land” we found where we could get out of the boat and not be over our knees in mud. We had to be almost motionless during the take of the pano because if we moved too much could ruin the shot (because the mud moved and that caused the tripod to move if we tried to move around).
Novoflex Panorama Tripod Head

Novoflex is a well known German company that makes accessories for studio photography (lighting and bellows), for macro photography (macro photography and bellows), for panoramic photography, and accessories that allow attaching your lens from one camera to camera bodies of a different brand.

Most of their accessories are for 35mm SLR size of camera, but some of their accessories allow you to handle Zeiss lenses from medium-format Hasselblad cameras.

You can see the Novoflex equipment at PhotoEast (New York, every autumn), at Photokina (in Cologne every two years) and I used to see them at PMA. But PMA has lost its clout after Epson pulled out in 2009 and Canon pulled out in 2010. So I don’t attend PMA any more until they can turn it around totally.

You can also see Novoflex equipment at digital photography expos in the UK and Europe other than those listed. Simply write Novoflex, tell them what part of the world you are in, and ask where and when is the next expo where they will be nearby.
What I like about Novoflex equipment (compared with other brands)

Novoflex equipment is still engineered and precision manufactured in Germany. How long this will be realistic is another question. But as of 2011, it is my understanding that the equipment is still made in Germany.

What I like about Novoflex is that everything is simple. Too many other brands have too many frills and accessories. Accessories eventually fall off, or simply get lost amidst the 50 years of accumulated photography equipment (even though we have things nicely labeled in our photo studio shelves).

When we are out in the field there may be three to five photographers with three to five different cameras and tripods. There will be case after case of equipment. If anything has too many bits and parts, it is a headache to find everything, put it together, use it, and then take it apart and store it. Novoflex consists of two precision engineered components of heavy metal.
What is the difference between this Novoflex Panoramic Tripod Head and GigaPan

GigaPan is best when you need to photograph really far-away landscapes or cityscapes. Since you are taking hundreds of individual photographs (hopefully each one with a telephoto lens) the result is that you can easily zoom into good detail far away.

But if you are really using a telephoto lens your Gigapan can take several hours. And of course during this time the sunshine will change, cars and people will be moving, tree limbs will be blowing in the wind. Plus there will be some images that overlap a bit awkwardly.

What alternatives exist for Gigapan?

At Photokina 2010 I saw two attempts to mimic or duplicate a Gigapan system. But neither was impressive. Both were L-shaped, which means your camera can wobble or at least sag. There is no excuse for continually designing L-shaped panoramic camera holders. Every one sags: even the expensive Seitz system, made in Switzerland, sagged so much I never used it (even after I paid hard-earned money for it). So neither of the German systems that I saw at Photokina tempted me. Though it would be worth looking at their stitching software.
L-shaped systems are left-over from the time when a pano was only one plane: left to right. You needed to turn the camera 90 degrees so you could capture as much up above as possible. But today you can do two passes with the camera horizontal, so there is absolutely no benefit whatsoever in having the camera hanging loppsided from an L-shaped frame.

The Dr Clauss Rodeon head is much-praised in user groups, but what about sag? Digital cameras today are a lot heavier than in past years.

The Gigapan Epic Pro is a third generation model. The first two generations were also L-shaped. So perhaps the European competition can improve and get realistic. But for now, and especially for $800 dollars, the Gigapan is worth every dollar.

Plus, I want equipment from a company that I know who they are, where they are. Gigapan is easy to find (even though no one answered my e-mails the first two times I wrote). But I did not get upset at all, since I figured thousands of people were probably writing them. The Rodeon head has been available or several years.

Dr Clauss is a challenge to find, or to know if his company is still fully functional. He was reportedly at Photokina 2010. In past years their company had a booth. But one by one companies are moving away from trade shows. So I have no way to inspect his system.

The helpful web site of kolor shows four pano systems

- GigaPan EPIC (they don't show the Pro yet).
- Merlin & Orion (I vaguely remember seeing this: looked impressive but L-shaped is still not convincing, at least not yet.
- Dr Clauss Rodeon (which I vaguely remember seeing at Photokina 2010)

Of these, the Merlin & Orion looked the best of the L-shaped. But I still like the full-frame U-shaped style of GigaPan. What would be a winner would be a design the shape of GigaPan but of the Germanic precision of Merlin & Orion.

The link for Papywizard did not work (January 9, 2011), but that happens even to CNN!
Software and Process for the Gigapan Epic Pro Pictures

Every time we do panoramas with the Gigapan we use special software to unify the photographs. You can see here the step by step workflow how we do it and get the final picture.

You can compare here the difference between a Gigapan picture and a panorama accomplished using a Novoflex PANORAMA=Q PRO click-stop pano head with a Novoflex QPL-PANORAMA sliding rail (so you can find the nodal point).

These two pictures are published in Adobe Photoshop CS5.
Software and Process for the Gigapan Epic Pro Pictures

You can see a distortion while the process. But after this we cut and edit the picture so we can have the complete and final gigapan.
Software and Process for the Novoflex Pictures

Juan Luis Sacayon used Photoshop to stitch the images taken with the Hasselblad + Phase One + Novoflex.

Alternative software would be

Autopano, by Kolor
Phase one photographs mounted on the NOVOFLEX Panorama Q=PRO, System.

11 snapshots where taken with the NOVOFLEX Panorama Q=PRO, System at 11 different degrees.
Other FLAAR Reports

- Gigapan compared with Novoflex pano head
- Novoflex pano head
- Panoramic Photography with Medium Format Digital Camera backs using Novoflex Pano Head
- Tripod Heads
- 4x5 Cameras Large Format scan backs (PhaseOne, Betterlight, etc.)
- Using the Novoflex Castel-XL for absolute stability
- Panoramic Photography for photography of people, places and things
- Reviews, prices Comparisons
- Sigma 200-500mm zoom compared with Canon 100 - 400mm zoom
- Panoramic Photography Landscape Photography Cityscape Photography
- Canon or Nikon vs Medium Format Large Format Digital Options

Nicholas Hellmuth, Sofía Monzón and Jennifer Lara
Acknowledgements

We thank Hoodman for providing the 16 GB memory cards; one for the Hasselblad Phase One, and another for the GigaPan. If you are going to work with GigaPan, or with a newer Phase One (ours is only 21 megapixels; new models are 80 megapixels), then you need a 32 GB card from Hoodman.
We thank Novoflex:

D-87700 Memmingen
Germany
Phone: +49 8331 88888
Fax: +49 8331 47174
mail@novoflex.com

General Manager:
Reinhard Hiesinger
We thank Manfrotto and Gitzo

The tripods and tripod heads we use are from Gitzo and Manfrotto. You can look at these tripods and tripod heads at Photokina and other leading photo expos around the world, or contact them via info@manfrottodistribution.us
Linking, Downloading and Sharing Policy

If you’re an educator in any college or university, or an official in any scientific society, museum, botanical garden, zoo or comparable, and want to distribute copies of FLAAR Reports on digital photography (www.digital-photography.org), on Maya archaeology, ethnobotany or ethnozool-ogy (www.maya-archaeology) or wide-format inkjet printing (www.large-format-printers.org) to your staff or students, please just let us know so that can authorize the distribution.

If your museum, university, college, botanical garden, or zoo want to receive all FLAAR reports in the future (similar to a subscription format), there will be no charge if you arrange a distribution system for your institution by linking to our www.digital-photography.org or www.maya-archaeology.org (download subscription (at no cost) currently available only for museums, universities, and comparable).

There is no cost for distributing this report, but it is preferable that the system is authorized by FLAAR publications. We prefer that the link to the actual download comes through our web page. In other words, you can link to our web page whereby the PDF can be downloaded at no cost.

This report is not intended to be put onto any other web site (other than museum, university, botanical garden, zoo) and only when authorized. This report is not available to be placed on other web sites (that are not a recognized educational resource).

One reason our reports are not intended for being copied is that this report may have been updated and we have no way to provide updates if we don’t know (via communication) who is posting our PDFs.

If you downloaded this PDF from somewhere else

If you downloaded this PDF from somewhere else, you may have an outdated or obsolete edition.


Updates and improvements

If you find any errors or permission in this report, or if you know anything that we missed, please let us know to consider it. Write to FrontDesk@FLAAR.org