



International Association of PANORAMIC PHOTOGRAPHERS e-Monitor

October 2011

Volume 2, Issue 02

Table of Contents

MOUNT RAINIER
POSTER2

Little Planets
tutorial4

That Initial Meeting
is Critical!8

Thing to do
in Gatlinburg10

Editorial Staff:

Published by the International
Association of Panoramic
Photographers. All rights reserved,
Copyright 2011

Bryan Snow, Editor

Dawn Snow, Creative Director

Contributors:

Will Landon

Peter A. Schaible

IAPP e-Monitor

The monitor on the rear of a digital camera is a device we use to quickly examine information about our photos. The IAPP e-Monitor was designed to give our membership a quick look at what is going on with the IAPP and with panoramic photography in general. It was originated to give our membership quicker information while they await the release of the PANORAMA.

We welcome any and all articles and photos from IAPP members for inclusion into the IAPP e-Monitor. This is a publication for the IAPP, by the IAPP, and about the IAPP.



Gatlinburg is NOW

October 2011 is IAPP Convention time! It seems like a long time since Tucson and it has only been 17 1/2 months. We had a good time there but, with cooler weather and lush green landscapes, we plan to have a great time in Gatlinburg.

Make sure you peruse the Conference Program and see that we have an excellent lineup of speakers with a wide variety of topics for all levels of panoramic photographers. If HDR photography is something you want to know more about then our pre-conference HDR workshop is for you. An IAPP Conference wouldn't be the same if it did not provide a wonderful opportunity to get out and take tons of panoramic photographs, and with early morning tours of some of the best locations in the Great Smoky Mountains National Park, if you go home without that perfect gallery panorama it's not our fault. Don't forget to bring your best panorama for entry into our Photo Contest, judging will be prior to our Banquet on Wednesday.

The IAPP Conference is back and better than ever. So clean off your lenses and sensors, grab your Velvia and tripod and make your way to Gatlinburg. You'll have a blast!



MOUNT RAINIER POSTER OF 1985

The plan for the winter of 1983 was to photograph Mt Rainier in winter from an excellent viewpoint north-east of the mountain called Dege Peak. There were many problems to solve. Chief among these was the annual winter closure of the Cayuse Pass road due to heavy snows, and the secondary closure of the White River entrance gate off the Cayuse Pass road. The plan was to wait until the snow plowing of the Cayuse Pass road reached the White River entrance; get permission from the park service to park my 1962 Buick LeSabre and snowmobile trailer at the entrance gate; snowmobile under the gate arms the five miles to the closed White River campground; park the snowmobiles there; put on cross country skis and an overnight pack with a Hulcherama camera; ski uphill for five miles to the Dege Peak trailhead; set up a winter camp; get up early; make breakfast; put on snow shoes; and pack the one mile (plus) trail to the view point; set up the camera; take the panoramic photograph at sunrise; pack everything up and ski down the road back to the snowmobiles and back to the entrance gate.

During the preceding summer there were several dry runs to Dege Peak to determine which was the best lens and lens mount combination to use for a full frame exposure. The Mamiya M645 110 mm lens was best when mounted in a lens board with a permanent three millimeter drop built in.

By late March of 1994 the plowing of the Cayuse Pass road reached the White River entrance Gate. Park service permission was received to snowmobile from there to the White River campground (closed of course), park the machines and ski up to what is called Sunrise Bend, where the Dege Peak trail started. Each weekend a buddy and I would do the entire trip, and try for a shot.. We would always go to Sunrise Bend and camp, but would decide the next morning if there was good enough weather to snowshoe the last bit to Dege Peak.. No luck getting the mountain, but had some good photographs with stormy lighting on parts of the peak.

Then the park service began to plow their five mile stretch of road to the White river campground.

At first we only had to snowmobile the bare road a short distance from the entrance. We then bought some lawn mower wheels and made mounts attached to the front skis for the wheels. The rubber drive track rode on bogey

wheels, similar to tractor treads. We would park at the White River campground underneath a sign that read "No snowmobiles beyond this point". We met the ranger, one Sunday morning, who drily observed that the sign had fallen down and he wouldn't be putting it back up for a while. This meant we could save five miles of uphill skiing.

The final good shot was anti climactic. The plowing had gone beyond the White River camp ground, and the White River entrance gate was opened to vehicles. We left the snowmobiles at the campground entrance, and proceeded on skis to Sunrise Bend on that Saturday, and took the poster grade panoramic on the first Sunday morning in June, 1984.

Phase two of the Rainier poster plan was to produce a full size print from which to make the poster. This was to be done on an old 8 x 10 Elwood enlarger which had a filter pack to supply color correction when printing color negative prints. An immediate complication was Mt Adams.

During some of the earlier weekends we were able to photograph Mt Adams by itself clearly, even though Rainier was unsuitable. So to

now insert Mt Adams into a Mt Rainier print I had to build a jiggle table on springs that had interchangeable plexiglas sheets and black masks the size of the poster. On one clear plexiglas there was a carefully placed black shape of Mt. Adams large enough to mask off unexposed paper slightly larger than an enlargement of the mountain.

The second mask on plexiglas had a cutout that would allow enlarging Mt Adam by itself. It was necessary to change the masks and the filter packs when making one print.. The net result was a print with Mt Adams fully rendered, with an unexposed white area around the mountain. The mounted print was sent to New York where a photographic retouching expert painted in sky and clouds with a natural look. The two overlapping halves of the mounted prints were then sent to the printer who produced 12,000 posters; and later on, a second printing..

— Will Landon

Photography is a way to tell others
how you feel about what you see.

—Anonymous

How to Submit Articles to the e-Monitor

This is your organization. And your newsletter. If the subject matter isn't what you want to read about, then send in the perfect (to you) article. If the organization is making a turn that you do not agree with, step in. We welcome all volunteers.

Email (secretary@panoramicassociation.org) your article as a document, with notations within your article where you want your photographs to appear. Please do not place your photographs within your document as this will compress the images too much. Please send them as separate files: tiffs or jpegs; 300 dpi and not larger than 7 inches on the long side. The deadline to submit articles is the 15th of the previous month you wish the article to appear.

Little Planets tutorial

— Peter A. Schaible

Little planets enable additional creative choices for panoramic photographers

If you're like many photographers, your enjoyment of an image is a complex amalgam of the total visual experience. Great photographs convey emotion, strike a responsive chord, and deliver a subliminal message. At its heart, every great photograph is an unspoken promise to entertain, enlighten or disturb the viewer.

Think about how you encounter most photographic images. First, you glance at the overall composition.

Next, your eye immediately moves to a target within the frame, or down along a vanishing point, and there it abruptly stops. Usually the eye movement experience is over in a mere moment.

But if you're a member of the IAPP, your particular photographic passion is probably the panoramic, with its wide, sweeping view that can move the eye — not just along one path to a single focal point, but in several directions to disparate objects.

That's what's so gratifying about panoramics. Traditional rectangular photographs capture your attention as a whole, then draw your eye to one specific spot or focal point. But panoramics force you to look all over the image to discover what's going on in the corners, on the sides, and above or below the horizon. Often, the so-called "rule of thirds" that governs composition is broken or ignored.

That's one reason I love making "little planets" from photographic images shot with

a fisheye lens. These intensely distorted panoramics generally cause viewers to screw up their faces in bewilderment, then smile in bemusement. The photographic experience is more intense and confrontational than usual.

And little planets are simply fun to make. They're a hybrid of the photographic magic you've been practicing for years.



They're a hybrid of the photographic magic you've been practicing for years.

Making little planets with PTGui is easy.

If you're used to making panoramics using a fisheye lens, projecting your stitched images in the "stereographic" or "little planet" format can be as easy as clicking a button.

You're probably familiar with PTGui, the popular photo stitching program that supports the panorama creation process from the beginning to the final stitched image. That's the program that was recommended to me by veteran panoramic photographers like Willy Kaemena and others when I attended my first IAPP conference in 2009.

I've stuck with PTGui Pro ever since, so I can't speak with authority about using Hugin (freeware), AutoPano Pro, or Adobe PhotoShop, with or without the commercial Flexify plug-in. But I'm certain those programs produce good results, too.

Here's the simple PTGui workflow I use. (Your mileage may vary.)

1. Using a Pentax K7 and the Pro Optic 8mm f3.5 fisheye lens (or similar configuration of camera and lens), shoot four around, one up, and two down, as you would for any interactive, immersive or "virtual reality" image. (I know, all you Nikonians and Canonites have probably never considered the wonders of a Pentax DSLR for making panos. It's terrific!)
2. Download, align and stitch the overlapping vertical images in PTGui Pro. (Getting a good nadir patch is essential.) Under Panoramic Settings, select the Equirectangular (for spherical panoramas) projection. Field of view 360 degrees horizontal by 180 degrees vertical.
3. Preview the resulting image in PTGui's Panorama Editor.
4. Realign, add control points, restitch and crop as needed. (Lather. Rinse. Repeat.)
5. When you've created the equirectangular image you want, change the projection setting to Little Planet 300 degree Stereographic. **Ta-da! Little planet!**
6. If you like the result, go to the Create Panorama tab and proceed as usual. If not, go back to the equirectangular projection in Panorama Editor and change the center point (set center point, third tab from the left). This will enable you to manipulate where the taller objects poke out along the circumference of your little planet, when you return it to the 300 degree Stereographic projection.
7. When you've got the image you want, click Create Panorama.
8. Save, crop as a square, and publish online or print as desired.
9. Reap raves and adulation from an appreciative audience.



Positioning the elements on the circumference

There are challenges in centered compositions, and where your tall buildings or trees appear makes a big difference in the effect you achieve. One judge of my local camera club competition awarded my first little planet (windmill) the lowest score possible because she said an object should *never* occupy the exact center of an image. (I think she had never seen a little planet previously and didn't know what to make of it, so she dismissed it without looking very closely.)

Of course, there are exceptions to every rule. I like my lighthouse little planet with the central object projecting from a “less than vertical” angle. But I couldn't image the windmill any other place than dead center on the top of that little planet.

After you've made a few very basic little planets, you may notice how much real estate in the center of the image is underdeveloped. It might be a vast empty field of grass or an asphalt blacktop driveway. That's your cue to start looking for a better place to put your tripod. Try it on a large flat rock, perhaps, or in the center of a flower patch. (Was it Ansel Adams who said that deciding where to stand was the biggest challenge to making a great landscape image?)

Alternatively, you can use PhotoShop, Paint Shop or another digital picture editor to blend an additional image on the little planet's surface. Just be careful to choose a photograph that doesn't overpower your original.

How else can you distort your panoramic to make an unusual yet visually appealing exaggerated or misconstrued image? For a “flipside” of the 300 degree Stereographic projection, go back to PTGui's Panorama



... the result will be an Alice in Wonderland, down-the-rabbit-hole, tunnel image that will challenge your model of the world.

Editor, reopen your little planet project, and choose the Stereographic Down projection. In most instances, the result will be an Alice in Wonderland, down-the-rabbit-hole, tunnel image that will challenge your model of the world.

Need inspiration?

Simply Google “little planets” and click “Search Images.” Google will return about 3,450,000 examples of these entertaining images that are sure to get your creative juices flowing.

As with all photographic techniques, the possibilities are virtually limitless. When making little planets from your fisheye panoramic images, the results are seldom predictable, but they're always entertaining.

panoramic photography . 360° . virtual reality . stitching . rewarding investment . precision
brand-new productivity . any camera (even heavy ones) . new touch screen
speed very strong motors . highly accurate . flexible
brilliant modular hardware . gigapixel imagery
x+y quality + speed + turntable + video + HDR
tough 4 second 360° rotation . time-lapse
terrific compact + lightweight . easy-to-use
smooth faithful companion . very very cool
99 programs value . 32-bit HDR . super efficient
combines with 3rd party products object movies . video sweeps . VR
Swiss engineered . long lasting advanced technology . fine positioning
2.3 kg compatible with many digital cameras
touch me! aluminum instead of plastic . pro gear
wireless remote automatic calculation of rows + images . many choices
simple + secure fully motorized for horizontal and vertical movement
bracketing online software updates . **beautiful** . spherical
people sharp . long operation times . advanced software
any lens 5 lb . multi-row . photographer's dream . design
precision + pleasure USB + ethernet connections . powerful Li-Ion batteries
never miss an image . value for money . the professional's choice . made in Switzerland.



The new Roundshot VR Drive - generation 2 -
is the world's most advanced automated stitching solution.

Discover why:

www.roundshot.ch

seitz@roundshot.ch . ph: +41 52 376 33 53

roundshot
fast 360 degree panoramic equipment

Hired for a Commercial Shoot?

That Initial Meeting is Critical!

– Bryan A. Snow

No matter whether you are just starting out or whether you are a seasoned commercial photographer, there is nothing more important than the first meeting you have with a client. The old adage that “You don’t get a second chance to make a first impression” is never truer than in this business. Even more important is that, in this meeting, there are TWO first impressions being made - the first impression that YOU are making on the client, and the first impression that the client is making on YOU! It is usually these impressions that will determine whether or not this particular photographer and this particular client will ever work together again.

First of all, you should always dress the part – but not the part of a Photo-Diva: blue jeans, long sleeved wrinkled cotton shirt with 15 pockets, and hiking boots; the kind of outfit you might wear out in the field to shoot those panoramas in a National Park. Dress business casual: dress slacks, an ironed shirt, tie optional (depending on your personality and the client’s location), and sometimes a casual sport coat or suit (again depending on the client’s location). This says to the client that you are professional enough to meet him/her on their own turf and that you respect them enough to dress the part.

Next, bring something on which to write notes of the meeting. You might bring a digital recorder and ask if you may tape the meeting

but sometimes clients are a bit hesitant to be recorded because it does make them totally responsible for everything they say. This can make them uncomfortable and affect the nature of the rest of the meeting. They don’t know you yet, and for you to immediately take an action that could make them feel that you are trying to gain the upper hand, can indicate to them that you are maneuvering for an advantage. The meeting can then feel more like a confrontation with you putting your client on the defensive.

Make no mistake, a meeting with a client is covered in The Art of War by Sun Tzu. But remember, you are not trying to out maneuver the client but you are trying to put them in a position to feel good about themselves and to

feel comfortable enough to give you the information that you will need to accomplish your mission, that of giving the client the photography he or she needs.

What Do You Need To Do To Make The Meeting A Success?

You need to do two things very well: Listen, and ask straight forward, to the point questions! Start by asking what might

seem to be a simple question: “Exactly what type of photography do you want?”. Then let them talk, while you make copious notes on what they are saying. Repeat the salient points they are making in order to reinforce your understanding of what they are saying. Don’t be afraid to ask them to elaborate on

... you are
trying to put
them in a
position to
feel good
about
themselves ...

something that they might not have made clear. By the time they finish speaking you must understand exactly what they want, how they want it done, when it is due, and who will be the

person you will be responsible to for your product. You must also be clear on what type of output and what size the finished product must be. Mutual understanding of all these things, and more, is critical.

Many clients will want to know how much this will cost. If you feel you have a firm grasp on everything the client is asking for and you know your hourly costs (you do, don't you?) then you might be able to give them a ballpark estimate but it is usually better to withhold the final costs until you can get back to your office and make sure your bid covers everything that will be needed. There is nothing worse than presenting a bid for a job and then realizing that your price didn't include some expense. Nothing says "I'm not a Professional!" more than having to go back to your client and deliver a superseding bid that is higher than the original one. If a client insists on a bid at this initial meeting it is to your benefit, and the client's as well, to explain that you need to take the time to go over each aspect of the job and double (and sometimes triple) check the charges on each item, making sure that your addition is spot on. Then, and only then can you present them with an accurate bid on what they want.

Always remember to indicate any discounts you might be able to give the client, as this is always appreciated by all the bean-counters that invariably scrutinize anything that affects their bottom line.

After the meeting is over and you return to

Any misunderstandings
must be weeded out ...

your office it is always a good idea to send the client an email thanking him or her for their time and the privilege of considering your company for their project. This is an excellent time to detail the important points

of your discussion with them to make sure (again) that the two of you have a mutual understanding of what is necessary to do the job and satisfy the client. This detailed email to the client accomplishes one other ABSOLUTELY NECESSARY purpose! It details IN WRITING what is to be accomplished. This way, if you do exactly what you believe the client wants, and it turns out that the client complains that you didn't accomplish the set goals, you can always call up a copy of this email and indicate that you accomplished exactly what you detailed in this message. In fact, it is a good idea to present a similar form and have the client sign off on this type of detailed process as a CYA insurance for your job. Basically, you are providing a "SoW" (Statement of Work detailing responsibilities and deliverable schedules) and any studio license policies that will be necessary to cover any legal aspects of the job. And remember, it's best to negotiate any details before your shutter is tripped for the first time. DO NOT begin a job until all paperwork is signed.

The more of an understanding you and your client have the better the job will go. Any misunderstandings must be weeded out early in the job or else they can really bite you before the job is over. Every photographer has at least one horror story about the Demon Client from Hell, but the lessons you learn from that client will make you better able to handle the other clients to come.

Things to do in Gatlinburg!

So, if you just can't take another day of seminars or you have travelled as a "spouse" to your partner's conference, here is a list of activities that may strike your fancy!

Wineries & Distilleries:

[Bootleggers Homemade Wine](#)

903 Parkway Suite 108, Gatlinburg, TN 37738, (865) 603-4611

Home Made Wine

[Ole Smoky Distillery](#)

903 Parkway #128, Gatlinburg, TN 37738
(865) 436-6995

<http://www.olesmokymoonshine.com/>

Visit Tennessee's only legal moonshine distillery! A jar of our 100 proof moonshine is Gatlinburg's finest souvenir. Learn about the area's moonshine heritage. Hear some of the areas most talented musicians play real mountain music. We offer free samples of our Corn Whiskey and White Lightnin. 10-10 everyday. No Alcohol sales on Sunday.

[Smoky Mountain Winery](#)

Winery Square

450 Cherry Street, Suite 2, Gatlinburg, TN 37738 Office: (865) 436-7505

Fax: (865) 436-0584

Tasting Room: (865) 436-7551

Toll Free: 1-888-765-9463

If you are
not reading
this issue of the
e-Monitor in
Gatlinburg ...
Why Not?

[Sugarland Cellars](#)

1133 Parkway, Gatlinburg, Tn 37738

(865) 428-4416

Coming in the summer of 2011, Sugarland Cellars will offer free tastings of its Alpine inspired, Tennessee wines. Come take a tour of our cellar and gain some unique insights into the winemaker's art.

Museums and Culture:

[Arts and Crafts Community Shops](#)

The largest group of independent artisans in North America. This historic 8-mile loop has been designated a Tennessee Heritage Arts & Crafts Trail. Established in 1937, these artisans whittle, paint, sew, cast, weave and carve to create original collectibles such as candles, baskets, quilts, brooms, pottery, jewelry, dolls, ceramics, scrimshaw, silver smithing, leather, stained glass, wearable fashions, fine photography, frameable art, oils and watercolors, also lodging, restaurants, cafés, tea room, soda fountain and candy

Not a member? We can fix that - [Join](#)

shops. Make plans to visit the Great Smoky Arts & Crafts Community.

Arrowmont School of Arts & Crafts

Various "weekend" workshops are scheduled before, during and right after our conference.

Contact them for more information.

<http://www.arrowmont.org/workshops-and-classes>

Tennessee Heritage Trail

Tennessee's history is rich and diverse. Historic sites, trails, music, crafts and the arts, paint a picture of a colorful state that has seen two centuries of statehood.

<http://ismoky.com/mountains/whats-new/heritage-trail.html>

Ripley's: Aquarium of the Smokies

America's #1 Aquarium! New \$5 Million Expansion, Ripley's Penguin Playhouse! Best Shark Exhibit in the Most Spectacular Underwater Tunnel! Thousands of exotic sea creatures, dive/penguin feeding shows and Much More!

88 River Road, Gatlinburg, TN 37738

(865) 430-8808 Toll Free: 888-240-1358

Believe it or not! Odditorium

Strangest Place in Gatlinburg! Where "Truth is Stranger than Fiction." Over 500

Outstanding and Incredible Artifacts from around the World! Hours of Family Fun! Why just say it, See it!

800 Parkway, Gatlinburg, TN 37738

Want to read the e-Monitor on your iPad or Kindle? We're working on that!

(865) 436-5096 Toll Free: 1-877-475-3974

www.ripleysgatlinburg.com

Haunted Adventure

908 Parkway, Gatlinburg, TN 37738

(865) 430-9991, Toll Free: 1-877-475-3974

www.ripleysgatlinburg.com

Enjoy Ripley's World-class Haunted Attraction & Gatlinburg's #1 Haunted House! Frights, Fun and Screams for Everyone! Bring all your friends...there's safety in numbers! Multi-Million, State-of-the-Art Haunted Attraction with Live Actors.

And other Ripley attractions.

Outdoor Activities

Bicycles

Bicycles can travel on most roads within the park. However, due to steep terrain, narrow road surfaces, and heavy automobile traffic, many park roads are not well suited for safe and enjoyable bicycle riding.

Cades Cove Loop Road is an exception. The 11-mile one way road, is a popular bicycling area. It provides bicyclists with excellent opportunities for wildlife viewing and touring 19th century homesites. During summer and fall, bicycles may be rented at the [Cades Cove Campground Store](#) (located near Cades Cove Campground). For information call (865) 448-9034.

A walk in the woods

Discover the treasures of Great Smoky Mountains with Naturalists Erik and Vesna Plakanis. Guided nature walks, day hikes, overnight trips, shuttle service, equipment rental and more. Permitted and insured. As seen on Samantha Brown on the Travel Channel. (865) 436-8283

Bent Creek Golf Course

3919 East Parkway, Gatlinburg, TN 37738,
(865) 436-3947, Toll Free: 1-888-251-9336
www.bentcreekgolfcourse.com

Gary Player Design. The front nine hugs the valley floor while the back nine offers a challenging mountain course. A beautiful sparkling mountain stream meanders throughout the entire course.

Horseback Rides

Guided horseback rides are available at four concession horseback riding stables in the park from mid-March through late November. Rides on scenic park trails are offered lasting from 45 minutes to several hours. All rides proceed at a walking pace. Rates are from \$25 per hour. Weight limits and age restrictions may apply. Please call the stable you are interested in for additional information.

Call for Articles

Call for articles for this year's issue of the PANORAMA Journal. The deadline for all articles is **November 15th, 2011**, as we are looking at this printed publication to be in our members hands before the end of December. The PANORAMA Journal is one of the items that the majority of members ABSOLUTELY wanted to have continued in printed form, and now is your chance to contribute to its creation. If we get no articles (or very few) from the members then there is a good chance that this yearly publication will not be continued. It takes a lot of work to put together this type of publication but it takes an enormous amount of work if we have to write everything as well. This is a member's publication and we do expect the members to be the ones to submit the articles. Article and photo submission rules are the same as for the e-Monitor (see page 3).

Cades Cove, near Townsend, TN

(865) 448-9009

(also offers hayrides and carriage rides)

[Visit website](#) for additional information

Smokemont, near Cherokee, NC

(828) 497-2373 (also offers wagon rides)

[Visit website](#) for additional information.

Smoky Mountain, near Gatlinburg, TN

(865) 436-5634. Visit [website](#) for additional information. Sugarlands, near Gatlinburg, TN
(865) 436-3535.

Hayrides

[Cades Cove Riding Stables](#) offers a 1.5 – 2 hour hayride around the Cades Cove Loop Road. Passengers sit on a bed of hay in a trailer pulled by a truck and enjoy an open air view of the scenery of Cades Cove.

Reservations are generally required and can be made by calling (865) 448-9009. Rates are \$10.00 per person.

Ranger-led hayrides are also offered on some evenings on a first-come, first-served basis. See the [Schedule of Events](#) for scheduled ranger-led hayrides. The rate for the ranger-led hayride is \$12.00 per person.

Carriage and Wagon Rides

Carriage or wagon rides are offered at two of the concession horseback riding stables in the park. These rides provide an opportunity to experience a 20-30 minute horse-drawn carriage or wagon ride on a park trail. Rates are \$10.00 per person. Please call the stable you are interested in for additional information.

Carriage Ride

Cades Cove, near Townsend, TN (865)

448-9009 (also offers hayrides and horseback rides) [Visit website](#) for additional information.

Wagon Ride

Smokemont, near Cherokee, NC (828)

497-2373 (also offers horseback rides) [Visit website](#) for additional information.

Use this code below
to receive 10% off
your order!
[iapp102011](#)



Award-winning Nodal Ninjas

Hobbyists - Hikers - Pros - Amateurs - Travelers - Realtors

Nodal Ninja's are specially designed panoramic tripod heads made to meet specific needs of panoramic photographers. If you are looking to seamlessly stitch panoramas free of parallax while simplifying your workflow, then look no further. Our award-winning lightweight panoramic tripod heads are precision built to do just that. And being universal they will work with just about any camera and lens. We offer exceptional value without compromising quality that is backed by industry leading support. Explore our products and see why we are "turning heads".



Nodal Ninja 3 MKII

Lightweight, compact and strong - perfect for those on the go and best suited for single row and multi row panoramas. Your camera can be mounted in both landscape and portrait modes. (for Point and Shoot and small DSLR cameras).

Starting at \$209.95



EZ-Leveler II

Our second generation EZ-Leveler is smaller, lighter and made with greater precision. The EZ-Leveler II lives to its name and makes leveling a pano head quick and easy. A great add-on for Nodal Ninja or any other pano head.

Starting at \$99.95



Ultimate R1

Even smaller and lighter, this ring clamp style pano head is designed for use with circular and full frame fisheye lenses. The Ultimate R1 incorporates a unique cantilever tilting option and a ring clamp that mounts directly onto the lens, freeing up the camera.

Starting at \$379.95



Pano Poles

If you are looking to take your panoramas to new heights take note. These carbon fiber poles are lightweight, stackable, compact and strong and are ideal for tourism, festivals, surveys, real estate, and many other applications.

Starting at \$269.95



www.nodalninja.com

store.nodalninja.com | nodalninja.com/forum | facebook.com/nodalninja

© 2010 Nodal Ninja®

What's coming up next month?

If you read this month's article on the initial meeting for a commercial shoot then, next month, you can read about the actual shoot - a huge panoramic image of our soldiers shipping out to war on the Air Force C-5 Galaxy transport. Were there problems with the shoot?



Only with the weather, models, art director, deadline, ...

Panoramic Images is not your typical stock photo agency.

For 25 years we've specialized in ultra hi-res, panoramic and wide format images from over 200 international photographers.

Instantly download 100 MB files. Custom scans up to 500MB available next day.*

Discover why publishers, corporations, ad agencies, graphic designers, web developers and on-demand printing companies depend on PI for the best in large and wide format landscape, skyline and travel photos.

Call us for custom researched lightboxes from 170,000 original film scans and digital panoramics.

**Additional fees may apply.*

iP
Panoramic Images
The big picture experts



www.panoramicimages.com • 800.543.5250 • 847.324.7000 • sales@panoramicimages.com