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The Nikon Booth at PMA 2007 was so large that editor Tom Boné had to borrow an AF Nikkor 14mm f/2.8D ED from Nikon representative Carol Fisher to get this shot with his D100 at 1/60 sec, f/4.0. Carol's generous loan of the lens helped get half the booth in frame. Borrowing the lens was easy. Carol was very familiar with Nikonians. She attended a workshop with our Nikonians podcast Image Doctor co-host Jason Odell last year and trusted a fellow Nikonian. Tom's report on his Las Vegas trip is on the next page.

On our Cover

Our Nikonians Photographer of the Year 2006 First Place photo graces the cover of this issue. It is "Day Dreamer" by Knut Askim (DrBjarnt) from Norway. More information on the contest, the finalists and our highly appreciated sponsors can be found on page Page 6. Nikonians thanks Hewlett-Packard, Phase One, and Nik Software who sponsored our contest. Their support is greatly appreciated!

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Editorial

Greetings fellow Nikonians!

By J. Ramón Palacios (jrp) Administrator Charter Member 20486 posts

We welcome 2007 with great anticipation as we prepare to add significant milestones to our seven year history.

This community will reach the 100,000 member mark before the year is out and we have so many of you to thank for our phenomenal growth.

All communities that experience such rapid growth in such a short period of time also must endure a number of "growing pains" and Nikonians have been no exception.

Within the past few months, thanks to the contributing support of our members as well as our corporate partners, we have tackled this growth by obtaining new servers, employing state of the art cluster technology.

In pure terms of capabilities, we are moving to servers that provide eight times more processing power on hardware that is designed to carry our workload easily into the next few years with comfortable room to spare.

This technological leap into our future is heavily linked to our past. From the very beginning my co-founding partner Bo and I have always focused on making Nikonians a friendly community. Those two words -- "friendly"

community" -- have been a key ingredient for our success on the Internet and our rapid growth.

Our Team of more than 45 international moderators deserves the lion's share of credit for maintaining this friendly atmosphere 24 hours per day, seven days a week. A recent count of our member's survey shows we have been most

successful at capturing the frequent attention of photographers of all levels, however in the most sought-after and difficult to attract segments in terms of age and income. This makes Nikonians in turn most attractive to serious advertisers, sponsors and media partners.

As the moderating Team helped sustain the original concept of Nikonians, we have been





Editorial

quickly adding valuable benefits for the community from behind the scenes. These benefits include a constantly expanding inventory of free articles, reviews and podcasts designed to help our members to share, learn and inspire each other.

When we saw a community desire for professional photo accessories, we answered that need with two PhotoProShop fulfillment centers. Earlier this year, Bo and I traveled to New Orleans, Louisiana to finalize arrangements for the movement of our U.S.A. operations. The new center is in an area spared from destruction by the devastating Hurricane Katrina, and we are proud of our small part in helping to bring more commerce to their economy.

Boosting our membership benefits has also been the driving force behind the formation of the Nikonians Academy is now offering over a hundred workshops across North America and soon adding sessions in Europe.

As the community has grown, we have also developed a unique benefit for our members that crosses all geographic and demographic boundaries.

Our Nikonians can now rely on support throughout their entire photographic "lifecycle." Regardless of each member's experience level at the start of their involvement with the community, they soon learn that we have information specifically tailored to help everyone from beginners to advanced professionals (and everything in between). They also

quickly find that in our more than 70 unique forums they will find answers along each step of the way, whether it regards the purchase of a new camera, lens or accessory or advice on how to handle all kinds of shooting situations. In that process, more often than not, strong true friendships are formed across borders and continents.

This community approach to sharing information is the one constant factor that has always been our proudest achievement. That achievement is evidenced by the fact that we have been growing by an average of 4,000 new members per month, and we are now at over one-million visits per month to our site, even while waiting for the new servers to come online.

All numbers regarding server usage, load capacity, new members and Web-site visits would only have a cold figures meaning if it were not for the fact that our resolve to preserve our vision and mission intact from more than seven years ago, is bearing its fruits in the form of a stronger brotherhood.

We have thrived thanks to the heart and passion displayed by our members, who are supporting us not only through financial contributions but also their active contributions to our knowledge base, with a clear understanding of community friendliness. When you combine that level of support under the guidance of our Moderators Team, you have a recipe for success. We will dedicate most of our efforts in 2007 to further enhance the value of the

benefits for paying members. Thanks to all of you, we have a bright future to look forward in this trek towards strengthening our place as Worldwide Home for Nikon Photographers.

Our special thanks to Nikon and National Geographic for recommending Nikonians as a unique learning resource.



Not sure what to give your hubby on Mothers and Fathers Day?

Get them
PhotoProShop vouchers
so they can choose whatever they may
want by themselves

In Europe? They are also available in Euros

Membership levels

Nikonians offers several levels of membership. Of course there is a free, basic membership, but we invite you to enjoy the fun and benefits of Silver, Gold and Platinum membership levels providing you with sell & buy opportunities, image upload, free shipping, insurance and more.



Access our free forum areas. Learn, share and participate in lively discussions
Receive our newsletters, podcasts and RSS feeds
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Access our fast search portal NikoScopeTM



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Try the silver level for 25 days for free. The trial membership is automatically converted to a full Silver Level Membership if not cancelled within the trial period



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Access to the classifieds forums (sell & buy)
Access our Nikonians Photo Tours and Workshops
Participate in photo contests
Eligible for the global coverage photography equipment insurance NikSecureTM



A membership starts as low as \$25 USD per year or less than 25 cents a day. Join today at www.nikonians.org/membership



Contest results



Black and White entries earn Top Honors

Our three winners of the Nikonians Photographer of the Year 2006 contest are from

Norway, Belgium and the United Kingdom. The judging panel had an extremely difficult challenge selecting the top three from 18 finalists, and Nikonians Contest Coordinator Chris Gray (wpgf100) says "all were all winners in their own right."

First Place winner was "Day Dreamer" by Knut Askim (DrBjarnt) from Norway. Knut's " stunning depiction of the wonder of childhood"

earned him a brand new HP B9180 Printer, three years of Gold membership in the Nikonians community and a Certificate of Nikonians High Photographic Achievement.

Nikonian Nico Housen (nhou) from Belgium took Second Place honors with his penguins entry titled "Gentle Gentoo." Nico earned Capture One Pro software from Phase One, two years of Gold membership in the



Contest results



The judges comments for our three winners are in the 2006 wrap-up.

Check our Winner's Gallery for a look at all the finalists (and their shooting data).

Nikonians thanks Hewlett Packard, Phase One, and NIK Software who sponsored our 2006 contest. Their support is greatly appreciated!

Interested in **participating** in the 2007 Contest?

Become a member, participate and win attractive prizes from our contest sponsors:

Hewlett-Packard
Phase One
Color Vision
Think Tank Photo
NIK Software
&
LaserSoft Imaging

Nikonians community and a Certificate of Nikonians High Photographic Achievement.

Our Third Place winner (above) was Nikonian Russ Barker (LeCCy), of the United Kingdom. His landscape entry "Jokulsarlon" was featured on the front cover of the Nikonian eZine-31. Russ won the latest version of NIK Color Efex Pro 2.0 from NIK Software, one year of Gold membership in the Nikonians community and a Certificate of High Photographic Achievement.















Nikonians gather for "the big show"

Thanks to a special invitation from our newest Nikonians corporate partner we had the honor of attending the opening sessions of the PMA '07 International Convention and Trade Show in Las Vegas (March 8-11).



flashdeadline Administrator 04-JUL-2002 3495 posts

The invitation was to join Hewlett Packard's Michael Diehl, Vice President, Digital Photography and Entertainment Imaging and Printing Group EMEA, at a pre-show press conference March 7, as he announced HP's decision to partner with the Nikonians community. The collaboration agreement will see HP contributing its wide breadth of knowledge and expertise to the Nikonians community in the form of original content, workshops and events, while the community provides HP with advertising channels, product feedback and ideas.

Diehl's announcement at the Bellagio Hotel briefed journalists representing the international media. The conference previewed a series of announcements addressing not only





HP's Michael Diehl prepares his press conference PowerPoint presentation with the assistance of Zoe Parravicini (on left) and Niamh O'Grady, of Porter Novelli public relations.

HP's new products and services, but also their vision for the future of photography.

Diehl explained the HP vision by describing a "digital photography ecosystem" encompassing a wide range from home consumers to commercial ventures. Within each component of that ecosystem he showed HP products and services geared to home,

online, retail and professional photography needs.

During the "Pro Photo" segment of his presentation he announced the partnership with Nikonians. The HP focus on strong research and development had led them to Nikonians he said. This R&D will be enhanced by getting closer to their market. He then invited me to meet the press. It was heartwarming to know that although many did not know the specific details behind our community, most of the media representatives I met that day knew of our reputation.

With the help of notes and a PowerPoint presentation provided by Nikonians <u>co-founders</u> Bo Stahlbrandt (bgs) and J. Ramón Palacios (jrp) I described our community history and dedication to the ideals of sharing images,



PMA '07

ideas and inspiration. Following the conference, I was invited to accompany the media to the Las Vegas Convention Center and the opening of the 83rd annual PMA International Convention and Trade show.

My first stop, (after the HP booth) was of course to find the Nikon folks. Rumors of a brand new digital single lens reflex from Nikon had been abundant in the weeks before the show. The Nikon D40x had been unveiled just a few days earlier, and our forums were buzzing about the possibility of a new top-end DSLR announcement in Las Vegas.



With a pleasant smile and a handful of gear, Nikon Senior Technical Manager Lindsay Silverman put an end to the rumor. "We've already made our announcement," he said with a grin. "Right now I've been pretty busy explaining this new D40X."

Silverman said he's been answering a lot of model-comparison questions following Nikon's introduction of the D40X four months after the D40 was announced. "Some are worried that D40 is on its way out," he said. "I assure them both models will be available."

Nikon's Lindsay Silverman demonstrates the features of the new D40X sporting the equally new 55-200mm f/4-5.6G IF-ED AF-S DX VR Zoom-Nikkor lens.

Nikon refers to the cameras as "sisters" and Silverman says the choice of which to buy will depend on each photographer's needs, and budget. "You've got plenty of photographers that are more than happy with the 6-megapixel D40, but if they feel the need to go to 10-megapixel

without going up to a D80, the new D40X is there for them."

He points out that The D40X with a kit lens sells for close to \$799 while the D40 is available with a kit lens for less than \$550. "Depending on the deals you can find, it amounts to about a \$200 difference," he said. The jump from a D40X body to a D80 body is (not surprisingly) also about \$200 he noted. In essence, the D40X filled the gap in prices, while adding some new features.

During my stops at the Nikon Booth I saw the familiar face of our friend from LetsGoDigital, Dennis Hissink. As the editor of the <u>LetsGoDigital Online Magazine</u> he had traveled from his home in the Netherlands to attend the show.



With his Nikon D200 in hand, he was on hand with his team gathering material for the <u>LetsGoDigital PMA report.</u>

Dennis assured me that the LetsGo-Digital team would continue to exchange news of interest to our community.

We didn't have much time to chat because I had a meeting slated with Jeffrey Roberts, Vice President and Publisher of PopPhoto.com, the online home of Popular Photography and Imaging and American Photo.

Dennis Hissink with his Nikon D200



PMA '07

Roberts used our meeting to invite Nikonians co-founder J. Ramón Palacios (irp) to visit the American Photo and Popular Photography Magazines Mentor Series Trek to Guadalajara, Mexico on April 19-24.

This area is jrp's home turf, and he readily accepted the invitation to meet Mentors Dave Black & Doug Menuez and sharpen his skills in the process. Our back page includes a sample of one of the photos he captured with his Nikon D2X and 28-70mm f/2.8D ED AF-S Nikkor combo.

After the visit with Jeffrey Roberts and his associates Anthony Ruotolo and Sara Schiano there was just enough time to look for Anneliese Lettner, who was busy in the **BKA Booth** providing demonstrations of her Green Clean contact free sensor cleaning system.

Nikonians Media and Content Sales representative Hajo Bauer had contacted me from his office in Germany and asked me to stop by and have a look at the Green Clean demo. As a proud D100 owner with plenty of sensor cleaning horror tales to share I was naturally curious. My only positive experience had been a direct result of following posts referring to the Copperhill system through our Nikonians Forums.

In many of the forum discussions Nikonians were being warned not to use canned air to blow out their sensors. So, when I heard of the Green Clean system, which relies on canned air, I was skeptical.

Anneliese Lettner, the product's inventor and CEO of *Green-Clean for* fine technics (headquartered in Austria) put my worrries to rest. There is indeed a can of compressed air involved, but instead of blowing the air, it sucks like a vacuum cleaner. I regret having slept through my science classes when the teacher explained the "venturi effect" – which Lettner explained is how she can turn a can of compressed air into a vacuum cleaner.

She held her tube comfortably distant from a sample sensor and easily sucked away the many dust spots that had gathered in the crowded PMA halls.



Anneliese Lettner demonstrates her Green Clean System to Eduardo Solórzano, Director General of Compuimport. headauartered in Guadalajara, Mexico.

She never touched the sensor. To show how powerful the vacuum can be, she even had a tray full of miniature ball bearings - all quickly sucked up by her device.

The vacuum alone will work for most fast cleaning jobs she explained, but if the job calls for direct contact and some

wet swabbing, her system includes both wet and dry sweepers handy travel packs.

Sensor cleaning, and the multitude of commercial solutions available in today's market has long been a favorite topic in our forums. To follow those discussion, I suggest you use our NikoScope search engine.



PMA '07

Type in the words "sensor clean" and watch what happens.

My trip to the PMA was limited to the first day, and I regret not having a chance to meet Image Doctors co-host Nikonian Jason Odell, who set up a flurry of humorus discussions when he reported on his Saturday trip and the chance to meet a lens he called SigZilla.

The funny part is that I had cruised by that booth a half dozen times, and never saw it.

The brief visit to PMA reminded me of the PhotoPlus Expo at Jacob K. Javits Convention Center in New York City last October. The mere mention of Nikonians usually evoked a smile and a warm handshake. The graciousness of our HP hosts is greatly appreciated, and we thank all the fine folks at the Nikon booth for their warm reception.

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Field Techniques – Using Custom Menus

By Steve Barger (sbarger) Nikonians Gold Member

Planning ahead for a photo trip was once a matter of making sure you had all the right camera bodies, lenses, and film.

With the introduction of the latest Nikon digital singlelens reflex cameras (DSLR's), there is one tool built into these cameras that can give you extra shooting advantages. This tool is the camera's ability to use menus customized by you.

A firm knowledge of how to use these customized menus, and some practice, will give you the ability to quickly change several settings "on the fly" to match the shooting situation. Imagine it in terms of having three or four camera bodies, each set up for different shooting strengths, at your side. You would select the right camera for the right situation. In this case, you have "predialed" your one camera to handle them all.

Most of us who photograph nature and wildlife are generalists; the subjects we photograph are diverse. We photograph landscapes, weather phenomena, sunrises, sunsets, birds, and mammals. Some of these subjects are static allowing plenty of time to set up and compose the image in the viewfinder. Other subjects are continually changing and there may only be a brief moment when the light on the subject or the pose of the animal is just right.

One minute we are photographing the landscape illuminated by sweet golden light with a wide angle lens, the next minute we are capturing images of several sandhill



"Full Speed Ahead"

© Steve Barger (sbarger)

The Action Bank was used to photograph this mountain lion. Group Dynamic Autofocus, AF-C Priority to FPS Rate, and focus Lock-on to "Off" were used so that the camera autofocus sensors would quickly and accurately track the subject as the lion moved toward the camera. When the FPS Rate is set to "Off," the camera will immediately adjust focus as the subject moves.



cranes in flight against the blue sky or a grizzly bear on the magnificent red tundra. To capture these extraordinary situations and walk away with that killer image, the nature and wildlife photographer must be prepared. We are always planning ahead to insure that we have the proper exposure dialed in, the proper meter pattern and focus mode set, sufficient exposures remaining on the film or flashcard in the camera, and that our lenses and accessories are within easy reach.

Your knowledge of the effective use of the Menus functions could be one of the most effective tools in your kit – and it's already built in to your Nikon D2X, D2Xs, and D200.

Recently, I had the opportunity to travel with other photographers by boat in the Arctic Ocean skirting the pack ice about 600 miles from the North Pole, home of the symbol of the Arctic wilderness, the polar bear. A male polar bear can weigh 1200 pounds. On one occasion a polar bear was spotted playing on the pack ice. After first spotting this bear, which appeared as a small dot on the Arctic landscape, I was truly in awe. How could any animal survive in this vast, harsh Arctic environment? One answer is biological. Polar bears are well insulated with water repellant guard hairs on their white coat, dense under fur, a short furred snout, short ears, and hair nearly covering the bottom of their feet. Polar bears have teeth that are adapted for carnivorous diet. Their main source of food are seals. They must hunt over the vast expanse of the pack ice requiring polar bears to be strong, cunning, and very aggressive. Thinking about these biological characteristics as the bear approached our boat, I realized this animal commanded nothing but respect. For more than two hours, this bear treated us to some fantastic photography as he ran across the ice, approached the edge of the ice several yards from our boat providing us with wonderful reflections, and sprawling on the ice to cool off. There were times that the bear would look directly at the boat recognizing our presence. This was his home and we were his guests. He would tell let us know when the photography session was over and it was time to leave.

This was truly a unique opportunity to capture polar bear behavior on film. All during this time I continually switched perspective from an



"Leap of Faith" Image 1

"Leap of Faith" Image 2





80-200mm medium telephoto lens to a 500mm long telephoto lens. Eventually the bear moved onto the pack ice away from our boat. Most photographers were either packing their gear away or excitedly talking about the great images they had captured. Out of the corner of my eye, I noticed he was walking directly toward a break in the pack ice. Thinking that there was a good chance he would jump across the break, I quickly mounted my 500mm lens on my tripod. After checking the exposure to make sure that the shutter speed would be fast enough to capture the motion, I pre-focused, checked that my custom menu bank was set to what I had pre-configured and labeled as "General" and set the shooting mode to high speed.

All that remained was to watch the bear through the viewfinder.

As he crouched to jump, I pressed the shutter button and recorded the four shot sequence shown here. As he walked away after the jump, I knew the photo session was over. Once my heart stopped racing, I realized that this was a once in a lifetime opportunity. I knew that I had captured several unique images, but didn't realize until reviewing my processed images, that each image of the jump sequence contained a reflection of the bear in the water. By analyzing the situation, anticipating the action, checking the camera configuration including the Custom Settings bank, making sure that I had the appropriate lens on my camera, and planning ahead I was able to capitalize on this opportunity.

What are the Customizable Menus?

Today's SLR cameras offer features such as predictive focus tracking with lock-on and group dynamic autofocus. Being able to quickly and accurately focus on a moving subject while keeping the subject in sharp focus as it moves across the viewfinder or toward the photographer, improves the odds of capturing sharply focused action shots that were only dreamed about a few years ago. To consistently capture these action shots, we must understand our cameras. This means we need to be thoroughly familiar with our camera's external controls. Also, several higher-end cameras offer us the ability to set several of the camera's controllable options via customizable menus.



"Leap of Faith" Image 3

"Leap of Faith" Image 4





These customizable menus were developed when the number of controllable features on cameras grew to the point that it no longer became practical to set these options using external dials and buttons. Before we look at these valuable menu options and how they might help improve our odds of capturing that great image in difficult situation, let's look at how they are laid out.

The customizable menu options on the Nikon D2X, D2Xs, and D200 consist of four sub-menus: the Playback Menu, the Shooting Menu, the Custom Settings Menu, and the Setup Menu. These sub-menus divide the camera's customizable options into four groups making it easier to program these options to fit our own style of photography.

The Playback Menu contains settings that help manage images stored on memory cards and how images are displayed on the LCD and played back.

The Setup Menu contains options for basic camera operation which includes time and date, mirror lock-up for cleaning, and battery information. Once the options on these two menus are set they are not likely to change during field shooting.

The third menu is called the Shooting Menu and contains advanced options such as image quality, sharpening, color space, color mode, noise reduction, and tone compensation. Since the settings of several of these menu options will change with different shooting situations, there are four shooting menu banks.

All Shooting Menu options except interval timer settings and multiple exposure settings can be saved in these banks. The default names for the banks are A, B, C, and D. You have the ability to re-label them using a more descriptive name.

Based on my style of photography, I program only one Shooting Menu bank. I have found that after I have set the Shooting Menu options to my preferences, they remain constant regardless of the shooting situation. The exception would be the ISO setting, since this varies as the lighting conditions change and can be set via an external control

button. Once the necessary menu options are changed from their default settings, the changes are saved in a bank renamed General Settings. The General Shooting bank will remain active regardless of the shooting situation.

The fourth and most important sub-menu is the Custom Settings Menu. This sub-menu is where I find the different banks the most helpful. The options here are broken down into six groups: Autofocus, Metering/Exposure, Timers/AE&AF Lock, Shooting/Display, Bracketing/Flash, and Controls. These settings help fine tune the performance of the camera depending on the shooting situation.

As with the Shooting Menu, there are four banks for the Custom Setting Menu. Each bank can be programmed for a particular shooting situation. Changes to the Custom Setting Menu options can be saved in these banks. These banks can also be renamed.

To simplify the use of these banks, I have broken down the shooting situations that I am most likely to encounter in the field into three categories; General, Action, and Flight. These three categories were then used to develop my Custom Menu Setting Banks.

The first bank, named General, includes general landscape and mammal photography settings. These will be used for approximately 75% of the shooting situations I encounter in the field. For landscape and mammal photography, I may select manual focus over autofocus for better control.

The Action Bank is used to photograph mammals or birds moving toward the camera where focus tracking is needed to render a sharp image.

The Flight Bank is used to capture birds whose flight path is not toward the camera. Here, closest focus priority is used. This will ensure that the camera focuses on the bird and not a distant tree line or mountain. For action and flight photography, where autofocus is used almost exclusively, the autofocus options in the Custom Settings Menu are the most critical. These three banks will work for almost all shooting situations I will encounter in the field.



Sample banks for the Custom Settings Menu

Shown in the table below is a listing of the autofocus options that were changed from their default settings for each of the three Custom Settings Menu banks. This is not a complete listing of the options changed from their default settings.

	GENERAL	ACTION	FLIGHT
AF-C Priority	Focus	FPS Rate	Focus
Group	Pattern 2	Pattern 2	Pattern 2
Dynamic AF	Center Focus	Center Focus	Closest Focus
Lock On	Normal	OFF	Short

How to use the Custom Settings Menu in the field - Some Examples

At right are several examples illustrating the use of the camera's Custom Settings Menu in conjunction with its external controls.

The General Bank was used to photograph the two Coastal Brown Bear cubs standing. Since the bear cubs were not moving quickly or toward the camera, the Action or Flight Banks were not used. For compositional reasons, the Group Dynamic Autofocus option was used. AF-C Mode Priority was set to Focus to insure that the bears would be in focus when the shutter is released. Since subject movement was minimal, focus Lock-on was set to normal. Closest subject focus priority should not be used here since it could cause the camera to focus on the grass in the foreground rendering the bears out of focus.



The General Bank was also used to capture the image of Denali with the fall tundra in the foreground. For most landscape situations, I prefer manual focus over autofocus.



© Steve Barger (sbarger)

The image of two sandhill cranes (next page) was captured using the Flight Bank to take advantage of Group Dynamic Autofocus with closest subject priority, quick focus Lock-on, and AF-C Priority set to focus. These settings prevent the camera from focusing on distant objects such as mountains or trees, minimize focusing delay as the subject moves, and insure that the subject is in focus when the shutter is released. Dynamic Autofocus with closest subject focus priority would also work. For compositional reasons, Group Dynamic Autofocus was selected over Dynamic Autofocus.





"Graceful Symmetry"

A process for developing Custom Settings Menu Banks

The programmable Custom Settings Menu options that the Nikon engineers have provided us on cameras such as the D2X and D200, can greatly help optimize the camera's performance for specific shooting situations. When programming the Custom Settings Menus the first step is to list the subjects that you photograph.

I began the list with landscapes, mammals, birds in flight, and subjects such as birds and mammals moving toward the camera. Once this is done, list the Custom Settings Menu options needed to photograph each subject group. Then review each list to determine if there are any subject groups with the same or similar Custom Settings Menu options that can be combined.

For example, I found that Landscape and Mammals subject groups had the same Custom Settings Menu options and could be combined. The object here is to make the banks for the Custom Settings Menu as simple as possible making them easy to use in the field.

We can all remember a great photographic situation that developed quickly before us, and the frustration at not being able to capture a good image because we were not prepared.

Being prepared with the right lens and camera settings, will improve the odds of capturing that great image. In addition to knowing your subject and anticipating what will happen next, using the camera's customizable menus expedites proper camera setup. This ensures that that all options are set the way you want.

Also, the Custom Settings Menu banks provide a handy reference for settings that you might not use very often. As you can see from the examples above, some settings involve the camera's external controls. Using the customizable menus on the camera does not eliminate the use of these external controls such as the autofocus and metering modes.

Be sure to check each of the bank settings after performing a firmware upgrade or sending your camera in for service. Most likely you will find that at least some of the menu options have been reset to their default values.

Steven C. Barger

Barger Nature Photography

www.BargerNaturePhotography.com

Team Profile



B Lela Bouse-McCracken (owl)

Despite her very busy schedule Lela has found time to serve as our Director of the Moderators Team during the rapid expansion of the Nikonians Community. She has recently stepped down from that role, and remains a member of the Team.

Lela has also moderated:

- Image Making & Shooting Issues / Shooting Panoramas
- Image Sharing / Online Photo Assignments
- Image Making & Shooting Issues / Photojournalism
- Nikon Products / D200 Users Group

Greetings fellow Nikonians!

Did you ever in your wildest dreams think you'd be part of an online community of more than 85,000 strong? Me either! When I was a kid, I wondered what my Mom meant when she said "it's a small world." With the advent of the internet, that cliché takes on a whole new meaning and now we find ourselves involved in the largest Nikon community in the world.

Creating art has always been my number one passion. The focus (pun intended) of my photography over the years was to capture images that would be references for paintings. But with the advent of digital and the immediate feedback, I was hooked - and creating art through the viewfinder started taking more and more of my time.

Growing up on a farm, I had the desire for photography, but not the means. I still recall my excitement in elementary school when

I wanted to win a small plastic camera for magazine sales. Later on, family events were recorded with a long series of point and shoot cameras, but they left a lot to be desired. After using a borrowed Nikon N2020 for a while, I settled on my first Nikon in 1997, an N90.

I teamed it with the AF Zoom-Nikkor 35-70mm f/2.8D (2.0x) and the photos it produced compared to previous cameras amazed me. It was then I knew my passion for creating was moving from painting to photography.

After teaching art for 14 years, I accepted the challenge of being photographer and photo editor for a daily newspaper. When I joined the paper, they were still shooting film. I used my N90 for most of the PJ work and was eagerly awaiting the release of a rumored consumer DSLR so that I could use my lenses on a digital camera. I had since added a second lens, the 80-200mm f/2.8D ED AF Zoom-Nikkor.

With the release of the D100 in 2002, I started searching the Internet for feedback on it and that's when I found Nikonians. I couldn't believe the forum was so friendly and active that questions were answered almost immediately. And that one of the members would go home at lunch, take comparison shots for me and show me the results on the same day!



Team Profile

Talk about devoted and helpful Nikon fans!

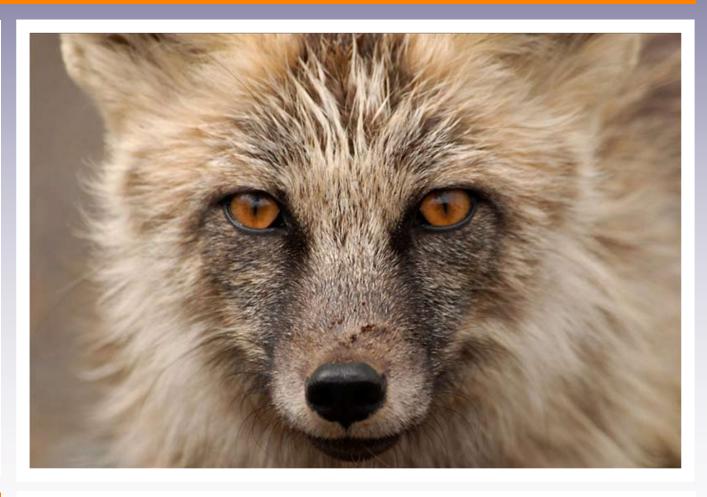
I'm now shooting a D200 and still learning things about it almost every time I take it out of the bag. My lens collection has grown as well, with the help from some very friendly and knowledgeable Nikonians. My three favorite lenses now are all Nikkors - the 105mm, the 12-24mm, and the 80-400mm VR. I'm just starting to have some of my photos printed 20x30, including the fox photo. I'm very pleased with the detail and color that the D200 is producing.

I've also added a Gitzo tripod and Markins ball head to my gear based on recommendations from fellow Nikonians. I am truly honored to be part of such a great team and to be part of the dream of JRP and Bo. Thank you, gentlemen, for your dedication to photography and to Nikons.

Lela Bouse-McCracken (owl)

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Lela's most recent favorite photo is called "Cross Phase Red Fox." She captured this image with her Nikon D200. She had her 80-400mm f/4.5-5.6D ED AF VR Zoom-Nikkor at the full 400mm setting while shooting at ISO 400. She set her exposure mode to auto, and used spot metering.



New from Nikon: The D40X Camera



New from Nikon: The D40X Camera

For quick reference - differences from the D40 are indicated in blue

Effective Pixels

10.2 million 6.1 million

Image Sensor

RGB CCD, 23.6 x 15.8 mm; total pixels: 10.75 million, Nikon DX format RGB CCD, 23.7 x 15.6 mm; total pixels: 6.24 million

Image Size (pixels)

3,872 x 2,592 [L], 2,896 x 1,944 [M], 1,936 x 1,296 [S] 3,008 x 2,000 [L], 2,256 x 1,496 [M], 1,504 x 1,000 [S]

ISO Sensitivity

ISO 100 to ISO 1,600 in steps of 1 EV with additional setting one step over ISO 1,600 ISO 200 to ISO 1.600

Storage Media

SD memory card, SDHC compliant

Storage System

Compressed NEF (RAW): 12-bit compression, JPEG: JPEG baseline compliant

File System

Exif 2.21, Compliant DCF 2.0 and DPOF

White Balance

Auto (TTL white-balance with 420-pixel RGB sensor), six manual modes with fine-tuning and preset white balance

LCD Monitor

2.5-in., 230,000-dot, low-temperature polysilicon TFT LCD with brightness adjustment

Playback Function

1 frame; Thumbnail (4 or 9 segments); Magnifying playback; Slide show; Histogram indication; Highlight point display; Auto image rotation

Delete Function

Card format. All frames delete, Selected frames

Video Output NTSC or PAL

Interface

High-speed USB: Mass Storage and MTP/PTP selectable

Text Input

Up to 36 characters of alphanumeric text input available with LCD monitor and multi selector; stored in Exif header

Compatible Lenses

Nikon F mount with AF coupling and AF contacts Type G or D AF Nikkor

- 1) AF-S, AF-I: All functions supported,
- 2) Other Type G or D AF Nikkor:
- All functions supported except autofocus,
- 3) PC Micro-Nikkor 85mm f/2.8D: Can only be used in mode M; all other functions supported except autofocus.
- 4) Other AF Nikkor (Excluding lenses for F3AF)/AI-P Nikkor: All functions supported except autofocus and 3D Color Matrix Metering II,
- 5): Non-CPU: Can be used in mode M, but exposure meter does not function; electronic rangefinder can be used if maximum aperture is f/5.6 or faster. (IX Nikkor lenses can not be used).

Picture Angle

Equivalent in 35mm [135] format is approx. 1.5 times lens focal length



New from Nikon: The D40X Camera

Viewfinder

Fixed-eyelevel penta-Dach mirror type; built-in diopter adjustment (-1.7 to +0.5m-1) Eyepoint 18mm (-1.0 m-1)

Focusing Screen

Type B BriteView Clear Matte screen Mark V with superimposed focus brackets

Viewfinder Frame Coverage

Approx. 95% (vertical/horizontal)

Viewfinder Magnification

Approx. 0.8x with 50mm lens at infinity; -1.0

Viewfinder Information

Focus indications, AE lock indicator, Shutter speed, Aperture value, Exposure/Exposure compensation indicator, Exposure mode, Flash output level compensation, Exposure compensation, Number of remaining exposures, Flash-ready indicator

Autofocus

TTL phase detection by Nikon Multi-CAM530 autofocus sensor module with AF-assist illuminator (range approximately 0.5-3.0m/1ft. 8in.-9ft. 10in.); Detection range: -1 to +19 EV (ISO 100 at 20°C/68°F)

Lens Servo

1) Autofocus (AF): Instant single-servo AF (AF-S); continuous servo AF (AF-C); auto AF-S/AF-C selection (AF-A); predictive focus tracking automatically activated according to subject status. 2) Manual focus (M)

Focus Area

Can be selected from three focus areas

AF Area Modes

- 1) Single Area AF,
- 2) Dynamic Area AF,
- 3) Dynamic Area AF with Closest Subject Priority

Focus Lock

Focus can be locked by pressing shutter-release button halfway (single-servo AF) or by pressing AE-L/AF-L button

Exposure Metering System

TTL exposure metering system

- 1) 3D Color Matrix Metering II (type G and D lenses); Color Matrix Metering II (other CPU lenses); metering performed by 420-pixel RGB sensor
- 2) Center-weighted: Weight of 75% given to 8mm circle in center of frame
- 3) Spot: Meters 3.5mm circle (about 2.5% of frame) centered on active focus area

Exposure Metering Range

1) 0 to 20 EV (3D Color Matrix or center-weighted metering), 2) 2 to 20 EV (spot metering)

Exposure Modes

Digital Vari-program (Auto, Auto [Flash Off], Portrait, Landscape, Child, Sports, Close Up, Night Portrait), Programmed Auto (P) with flexible program; Shutter-Priority Auto (S); Aperture Priority Auto (A); Manual (M)

Exposure Compensation

±5 EV in increments of 1/3 EV

Exposure Lock

Exposure locked at detected value with AÉ-L/AF-L button

Shooting Modes

- 1) Single frame shooting mode,
- 2) Continuous shooting mode: approx.
- 3 frames per second (The fastest frame rates can be achieved by choosing manual focus, rotating the mode dial to S or M and selecting a shutter speed of 1/250 seconds or faster, using defaults for all other settings.),
- 3) Self-timer mode,
- 4) Delayed remote mode: 2 seconds delay,
- 5) Quick-response remote mode.

Shutter

Electronically controlled vertical-travel focal plane shutter, 30 to 1/4000 seconds in steps of 1/3 EV, bulb

Combined mechanical and CCD electronic shutter

Svnc Contact

X-contact only; flash synchronization at up to 1/200 seconds

X-contact only; flash synchronization at up to 1/500 seconds

Flash Control

1) TTL: TTL flash control by 420-pixel RGB sensor. i-TTL balanced fill-flash for digital SLR and standard i-TTL fill-flash for digital SLR available when CPU lens is used with



New from Nikon: The D40X Camera

built-in flash, SB-800, SB-600, and SB-400, 2) Auto aperture: Available with SB-800 with CPU lens,

3) Non-TTL Auto: Available with Speedlights such as SB-800, 80DX, 28DX, 28, 27, and 22s 4) Range-priority manual: Available with

Flash Sync Modes

SB-800

AUTO, Portrait, Child, Close Up: Auto, auto with red-eye reduction; fill-flash and red-eye reduction available with optional Speedlight. Night portrait mode: Auto, auto slow sync, auto slow sync with red-eye reduction; slow sync and slow sync with red-eye reduction available with optional Speedlight. Landscape, Sport modes: Fill-flash and red-eye reduction available with optional Speedlight. P. A modes: Fill-flash, rear-curtain with slow sync, slow sync, slow sync with red-eye réduction, réd-eye reduction S, M modes: Fill-flash, rear-curtain sync, red-eve reduction

Built-in Flash

AUTO, Portrait, Child, Close Up, Night Portrait: Auto flash with auto pop-up P/S/A/M: Manual pop-up with button release

Flash Compensation

-3 to +1 EV in increments of 1/3 EV

Accessory Shoe

Standard ISO hot-shoe contact with sync, signal, and ground contacts and safety lock

Self-timer

Electronically controlled timer with duration of 2, 5, 10 or 20 seconds

Remote Control

Via Wireless Remote Control ML-L3 (optional)

Power Source

One Rechargeable Li-ion Battery EN-EL9; charging voltage (Quick Charger MH-23): 7.4V DC, AC Adapter EH-5 (available separately; requires optional AC Adapter Connector EP-5)

Tripod Socket

1/4 in. (ISO1222)

Dimensions (W x D x H)

Approx. 126 x 64 x 94mm (5.0 x 2.5 x 3.7

Weight

Approx. 495g (1lb. 1oz.) without battery, memory card or body cap Approx. 475g (1lb. 1oz.)

Supplied Accessories

Rechargeable Li-ion Battery EN-EL9, Quick Charger MH-23, USB Cable UC-E4, PictureProject, Rubber Eyecup DK-16, Camera Strap, Body Cap BF-1A, Eyepiece Cap DK-5, Accessory Shoe Cap BS-1 (Supplied accessories may differ depending on country or area.)





Optional Accessories

Wireless Remote Control ML-L3, Capture NX, Camera Control Pro, AC Adapter Connector EP-5, AC Adapter EH-5, Video Cable EG-D100, Semi Soft-Case CF-DC1, Speedlight SB-800, SB-600, SB-400 and R1C1



The D40X

- Nikonians perspective

By Tom Boné (flashdeadline) Administrator 04-JUL-2002 - 3495 posts

Four months after announcing the Nikon D40, Nikon followed up with a new sister version.

At first glance (and feel) you would find it hard to distinguish the difference until you see the new camera is marked D40X. It's just a letter in the alphabet, but that "X" indicates new features that give Nikonians added choices as they shop for a new body.

Once again Nikon is sticking to the small, light and easy to use concept - yet adding the icing to the cake for those fence-straddling consumers who are still convinced the measure of a camera is rated in megapixels.

If they didn't want to jump into the digital single-lens-reflex market before, it's obvious Nikon has sweetened the offer. Despite countless reassurances from their fellow Nikonians regarding the differences between 6.1 and 10.2 megapixels - some potential consumers were not convinced. Nikon has now made that issue a moot argument. The D40X fills the slot offering a 10.2-megapixel CCD in a body weighing 495g (1lb. 1oz.) - only 20 grams more than its older sister the D40. If you can't picture the difference, just imagine cutting a regulation 45.93 gram golf ball (1.620 ounces) in half

Four months between the announcements of the two D40's may seem short, but in digital technology terms - that's a long time. Since the original D40 announcement the SD memory card manufacturers have flooded the market with higher speed and more massive memory capacity, while lowering prices. We can't help but feel that Nikon knew the 6.1 megapixel "barrier" would be a disappointment to some consumers eying compact digitals boasting larger numbers, so they probably had their engineers perfecting the upgrade before even announcing the D40, which served to establish a foothold in the affordable DSLR market. while opening the door for the new D40X to follow.

The "X" follows with more than just adding resolution capacity. While retaining the same battery, charger and AC adapter (Li-ion EN-EL9; Quick Charger MH-23 and optional EH-5 AC Adapter) the D40X is rated at up to 520 images per charge as compared to the 470 images per charge for the D40. This is a plus for you D40 owners who won't have to buy different batteries or buy new models of chargers and AC adapters to match them with. The faster frames-per-second rate (3 fps instead of the D40 2.5 fps) is once again a notable increase that most average users won't even notice, but in this world of "higher numbers must mean better performance" it's a definite plus. A comparison search for things that can occur in half a second often leads to the average time it takes for your eye to blink.

Also on the improved features list is a nod to 100 ISO sensitivity fans. The D40 bottomed out at ISO 200, while the D40X matches the 100 ISO offered by bigger cousins like the D80 and D200.

Conclusion:

It's a toss-up as to whether we could classify this as a D50 light or a D40 heavy. The D50 offered the more traditional manual use options plus the easy to use Variable program modes, while the D40 came in strong with Seven Digital Vari-Program modes. The D40X follows the D40 in that regard, offering a more user friendly interface for the point and shoot







The D40X - Nikonians perspective

photographers who prefer the ease of automation while having the option of experimenting.

The D50 sports a 2.0-inch LCD monitor, while the D40 and D40X offer the larger and more popular 2.5-in., 230,000-dot, low-temperature polysilicon TFT LCD found in the D80 and higher models.

The shutters are different this time around, as the D40's mechanical and CCD electronic shutter with 30 seconds to 1/4000 second speeds in steps of 1/3 and allowed for flash synchronization at up to 1/500 second, and the D40X (with an electronic only shutter) was able to match the previous shutter speeds, but dropped X-Flash synchronization to 1/200 second (same as the D80). In comparison, the D50 has the 1/500 second flash synch rate. We predict that will be an issue for some of our fill-flash using Nikonians.

The Nikon D40X is not a "giant leap" for Nikon, but it appears to be another well-measured step, adding yet another DSLR option for the large market of photographers deciding on stepping into the advanced amateur and serious semi-pro ranks.

New D40X owners have been welcomed in the Nikonians D40/D50 Users Group



55-200MM ZOOM-NIKKOR LENS

55-200MM F/4-5.6G ED-IF AF-S DX VR ZOOM-NIKKOR LENS WITH VIBRATION REDUCTION

Nikon Inc. introduced the new 55-200mm f/4-5.6G IF-ED AF-S DX VR Zoom-Nikkor lens at the same time as their D40X (March 2007).

The new compact telephoto zoom Nikkor lens offers Nikon's Vibration Reduction technology in a highpowered 3.6x zoom lens. Engineered exclusively for use with Nikon's DX format digital SLR cameras this new lens approximates the picture angle characteristics of an 82.5-300mm lens on a 35mm film SLR camera.



Main Features

A compact telephoto zoom lens featuring Vibration Reduction (VR) and Silent Wave Motor (SWM), at an affordable price (\$180 to \$250 US, depending on where you shop). Vibration Reduction (VR) offers the equivalent of shutter speeds 3 stops faster for more flexible

hand-held shooting.

The Extra-Low Dispersion (ED) glass element offers superior sharpness and color correction by minimizing chromatic aberration.

Internal Focusing (IF) construction allows the lens to focus without changing its external size, improving balance and handling characteristics.

The Compact SWM (Silent Wave Motor) provides high-speed autofocusing that's extremely accurate and super quiet.

Specifications:

Lens construction

15 elements in 11 groups (1 ED glass element) Picture angle 28°50′ - 8°

Focal-length scale 55, 70, 85, 105, 135, 200mm

Number of diaphragm blades 7 (rounded)

Minimum f/stop 22-32

Closest focusing distance 1.1m (through the entire focal range)

Maximum reproduction ratio 1/4.3

Zoom control Manual, via separate zoom ring

Macro focusing N/A

Focus-limit switch N/A

M/A mode N/A

A-M mode switch Available

Focus lock button N/A

Weight (approx.) 335g

Dimensions (approx.)

(from the camera's lens mounting flange) 73.0 x 99.5 mm

Lens cap Snap-on

Lens hood HB-37

55-200MM ZOOM-NIKKOR LENS



Tripod collar N/A

External front filter attachment frame Rotatable

External front filter 52mm

Slip-on filter N/A

Built-in/rear filter N/A

Circular polarizing filter II
Usable, even with dedicated Lens Hood
HB-37.

Infrared compensation scale N/A

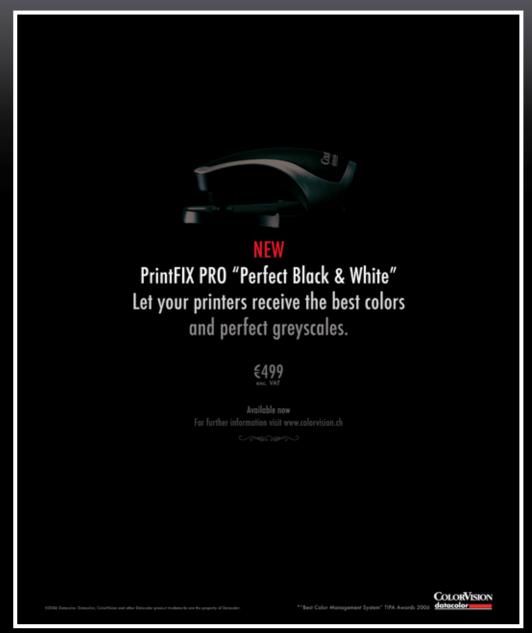
Supplied accessories

52mm Snap-on front lens cap LC-52, Rear lens cap LF-1, Bayonet hood HB-37, Flexible lens pouch CL-0918

Optional accessories 52mm screw-in filters

Aperture ring N/A

Distance scale N/A





COOLPIX Lineup expands

COOLPIX Lineup expands

Our single-lens reflex Nikonians were not the only ones who had a chance get a close look at the latest offerings from Nikon at PMA 07 in Las Vegas. The COOLPIX line had been beefed up in the previous month, and the Nikon booth staff was busy displaying them. Each camera has unique characteristics and cutting-édge feátures such as built-in Wi-Fi, Vibration Reduction (VR), Face-Priority Auto Focus, In-Camera Red-Eve Fix, D-Lighting and Pictmotion.

The new COOLPIX cameras included:



The COOLPIX P5000 from the Nikon COOLPIX Performance Series of digital cameras. The new COOLPIX P5000 offers advanced functions, ease of operation, and high image quality that is sure to satisfy photo and camera enthusiasts. The P5000 boasts 10 effective megapixels,

a 3.5x Zoom-Nikkor glass lens, an optical viewfinder, and an incredible, bright high resolution 2.5-inch LCD monitor with anti-reflection coating.





S500

S200

Building on the success of the COOLPIX Style Series of digital cameras introduced the S500 and S200. Boasting 7.1 megapixels, a 3x Zoom-Nikkor glass lens, VR Image Stabilization technologies, and sleek metal bodies, these cameras exude high performance and exquisite design. Both cameras feature a classic camera design as the lens extends from the camera's body when the cameras are turned on; the S200 is constructed from brushed aluminum and the S500 from stainless steel. Each camera has distinct unique features (even if they look very much alike).

For a complete listing of the numerous COOLPIX choices currently available visit the COOLPIX information pages provided by Nikon at: http://www.nikoncoolpix.com/main.html

Markins M10/M20 Ball Head Review

A ball head is a ball head -- right? I used to think so! I've always had the attitude that it really doesn't matter what ball head you use, since all it does is clamp the camera in the position you want. I figured any ball head that was big enough to handle the weight was good, and all that really matters is the price. Well, I come before you today with a different attitude. As the old song says, "I've seen the light!" Until I actually used a pro-level ball head I simply didn't know what I was missing. I'm just glad I never wrote any articles about less-than-professional ball heads, because I'd have to take them back.



Digital Darrell Platinum 22-APR-2004 5180 posts

Let me tell you how I came to this recent conclusion. Back last summer I was enjoying a nice photographic day in the Great Smoky Mountains. A couple of Nikonians and I were running around the Smokies bringing home lots of great early summer images. I stopped at a nice overlook on the Foothills Parkway West and got a few shots. I realized that the heavy

workload of taking images had made me hungry, so we stopped to consume a few sandwiches. I leaned my Bogen® 3021B Pro tripod with its massive 488RC2 ball head up against the back of my Jeep while we ate. That's the last I ever saw of it!



Somehow, when we got in the Jeep and headed down the road, my tripod was no longer with me. Whether it was stolen or simply left behind, I cannot tell. We drove to a different part of the Smokies before I got out to take another shot, and discovered that my dear tripod was gone. Back we went in search of it, but, no joy. I had no tripod, in the middle of the day, in the most beautiful spot on earth.

Somehow I got through the day, and on the way back home I stopped at the local superstore and bought for myself a deluxe, crankthe-handle-for-maximum-height, \$29.00 USD genuine plastic and metal tripod. I was set for the next trip!

That evening, I was sitting at home feeling particularly sorry for myself for losing my \$250.00 USD tripod and ball head. I was Skyping with a certain famous Señor Palacios of Nikonians. org about my tragedy, and he was very sympathetic. In fact, he told me he was going to send me a nice Markins M10 Ball head to test, and that we could make arrangements later about purchase if I liked it. Since I was currently almost tripod-less (still had the plastic and metal crank unit), I agreed that it was probably a good idea. A few days later the UPS man drove into my driveway with a box from a certain Pro Shop.

Within a short period of time, my photographic life changed.

I opened that small box expecting "just another ball head" only to find that I had never truly ever seen a real ball head before. Every ball head I had used before that moment paled into insignificance. I had never spent over \$100 USD for a ball head and had no idea what a few more dollars would bring to my photographic life. The first thing I noticed was the highly refined finish on the ball head. "This Markins M10 is clearly made to last," I thought. Looking it over, I saw a thing or two that I had never seen before, and other things that were simply better than anything I had ever seen before.

I am now going to attempt to express my enthusiasm for this Markins M-Series Q-Ball head. I'll discuss the various features I found important, and tell you how I used the head



during ANPAT 2006 to bring home some of the best images of my life.

I'll use a Markins M10 ball head as a reference point in this article, but remember that the Markins M20 is also available for a few extra dollars. It does everything the M10 does, plus allows for monster telephoto lenses.

Look, Feel, Weight, and Support

The Markins M10 is a smaller ball head than you would expect. It is no weakling however. In fact, for its size it supports more weight than many other heads in its class. The smaller size means that your very light carbon-fiber tripod will not feel top heavy like with some of the other big fat heads that support less weight.



The Markins has a unique patented "bi-axial locking mechanism" that allows it to be smaller and lighter, yet support more weight. In fact, the weight to load ratio is 80:1, which means the Markins will support eighty times more weight than it itself weighs.

The M10/20 uses the industry standard Arca

Swiss style dove-tail plates, so you'll never have problems finding extra plates for them. I bought three Markins plates for my M10; one for each the D2X, D200, and my larger Nikkor 80-400mm lens. You'll want to get a plate for each camera body and any lenses with collars, since they are designed to attach semi-permanently.



NEW Birectional plate for D200 without MB-D200

Other tripod heads I've used in the past were simply too tall. Some of the squeeze type heads can be so tall that you can't fully extend the legs of the tripod and still look through the camera viewfinder. The Markins M10 is not overly tall at 3.9 inches (98mm). I am slightly less than six feet tall (1.83 meters), and I can comfortably extend my tripod to full height and still see through the camera viewfinder.

Some low cost ball heads have an oily or greasy

substance smeared on the ball, and since your hands are always touching the area you will invariably get the grease on your hands. This substance always seems to attract dust too.

Fortunately, the Markins ball heads do not have any oil or grease on the ball. The Markins is designed to be used in a wide range of weather conditions, and will not attract a lot of dust to the ball area. It is basically a "maintenance free" head. You'll be able to use it for years without worrying about oiling the thing. Just clean it every once in a while with a dry rag, and you are ready to go.

Why the Markins Ball Head Tension System?

Of all the features found on the Markins Q-Ball heads, the tensioning system alone makes the heads well worth their cost. It is vastly superior to any other ball head I've ever used, and makes the use of the head much more flexible and fast.

On my previous ball heads, I would use my left hand to control the tension knob while using my right hand to position the camera at the best angle for the image. When I was done with one picture, I'd loosen the tension knob and hold on to my camera carefully until I had it positioned for the next image, then retighten the tension knob. For obvious reasons, I had to be very careful not to let go of the camera at any time the tension knob was loose.

I was perfectly happy with that process, since it was simple and fast enough. However, once



I used the Markins tensioning system, I was a changed man. I discovered a principle that I later discovered was called the "sweet spot." What is a sweet spot, you ask? Well, let me rave a little about it!



Nikon D2x using the sweet spot and swiveling

With the Markins, instead of moving my camera with one hand, clamping with the other, and hoping I didn't forget to hang on to the camera while the tension is loose, all I had to do was tighten the ball head until the tension allowed me to move the camera at will, screw in the minimum tension limit dial and then go shoot. In other words, I found I could set the ball head tension so that it kept my camera from moving, but I could then just reach up and move the camera to a new position without touching the tension knob. What a concept!

The "sweet spot" is the place where the tension on the ball clamp exactly balances the torque of the camera with lens so that it does not move. Without touching the tension knob I could use one hand to move the camera to any position I'd like.

No more was I a slave to the tension knob. No longer did I have to worry about my camera flopping over forward because I had not set the tension correctly. I simply put my camera on the ball head, set the tension so that it would still move without flopping, screw in the limit dial and then go shoot pictures. I would not have to touch that tension knob again unless I put a much heavier lens on the camera and needed to adjust for the extra weight.

To me this was a revelation. I had tried tripod heads of all sorts for years and never really been happy with any of them. I've had heads with so many positioning knobs that I'd have trouble remembering what they all did. I've used heads with all sorts of squeeze-and-position ideas too. None of them ever satisfied that inner desire for a simple head that was easy to use but very flexible.

I almost found tripod head happiness with a standard ball head, but was aggravated with how the camera flopped around so easily if I did not get the tension just right on the ball clamp. It only took me a few minutes with the Markins M10 to realize that I had honestly found what I had been looking for in tripod heads. To me it is the ultimate ball head!

How Does the Tensioning System Work, or How Do I Find the Sweet Spot?

It is a very simple system requiring only a thumb. Huh? That's right, you do need to have at least one thumb to use a Markins M series ball head. Well, If you have no thumbs, you could simply use a fingernail to set a special "friction limit control dial" (tension lock) on the side of the "progressive friction control knob" (main tension knob).



After you select your camera and lens combo for your shooting session, you'll mount the camera on the ball head. Then, just like with a cheaper ball head, you'll then hold your camera with one hand, and tighten the tension knob with the other. The only difference is that you do not set the tension knob so tightly that the camera cannot move. You only tighten it up enough so that the camera does not flop over in any direction. Then you turn the little tension lock with your fingernail or thumb



clockwise until it stops. At this point, your camera will move to any position the ball head allows, without creeping or flopping around.

When you are done with a shot, you don't have to do anything except move the camera to a new position for the next spot. You've got the sweet spot set for that camera lens combo. That's all there is to it!

One nice thing about the tension lock that also takes away a measure of aggravation is that, once you have it set, you cannot loosen the ball head enough to make the camera flop over. You can loosen it enough to let it creep under its own weight, but not flop with catastrophic results. This is a marvelous protection for your expensive camera and lens, and takes away the most difficult part of using a ball head. No more too loose settings.

Later, if you decide to use a bigger camera body, or a much heavier lens, you may need to readjust the tension ball and lock. First you'll use your thumb or nail to release the lock in a counterclockwise direction. Then you'll reset the tension on the main knob to match the weight of the new camera lens combo, and then you'll turn the tension knob lock back clockwise until it stops. Another sweet spot located!

This is a really simple system of adjustments. It takes all of two minutes to learn how to use. I cannot begin to tell you how much time it saves, and how much faster you can use your camera with this Markins O-Ball head.

Which Markins Ball head Should I Consider Buying?

I use a Markins M10 ball head myself, because my biggest lens currently is the ÁF Nikkor 80-400mm VR. If you have a larger camera, like the D2X/s, and use a big lens like the 300mm f/2.8 or larger Nikkor, you might want to consider the Markins M20 instead.

It is not so much a matter of weight, since the M10 will support up to 88 pounds (40 kg), and I don't think many of us have a camera or lens that weighs that much. The problem is that the tension required for a very heavy camera lens combo makes it harder to find a sweet spot as smooth as with smaller lenses. The heavier weight of the large lenses causes such a tight tension to be set to prevent movement, that it is hard to move the camera as smoothly without loosening the knob.



Nikon D2x and 80-400mm VR lens on M10

From my experience with the D2X camera and the medium sized 80-400mm Nikkor, the M10 works just fine. If you are using anything smaller than a D2X, like a D200, D80 or comparable camera, and normal lenses, you will not need anything bigger than the M10. The only time I'd consider the M20 is if you have a D2X/H camera and a really big fast telephoto lens. Or, you might just like to own the M20 in case you ever buy a big lens and camera in the future. That is a consideration, because I can't imagine wearing out one of the Markins ball heads in a lifetime or two of use.

Camera and Lens Plates

Another feature of the Markins system that I really appreciate is the design of the camera and len's attachment plates.



Since the Markins heads have the rare sweet spot feature of the truly professional ball heads, you'll find yourself moving the camera around a lot. There is a little bit of torque involved in moving the camera, and so the plates are



designed to wrap around the body to prevent unscrewing themselves when you move the camera.

How often in the past have you moved your camera on another type of tripod head, and had the blasted plate turn on the bottom of the camera? Then you have to remove the camera from the tripod, and over-tighten the plate to keep it from coming loose again. This is not good for your camera, since all that extra tension of over-tightening the mounting plate is pulling against the threads in the camera's bottom side. It is only a matter of time until something breaks.

The Markins plates solve that problem by extending the plate with a lip or flange around the bottom of the camera in at least one, and often in two directions, so that they are securely fastened and will not rotate loose when moving the camera.

Using the other ball heads, I have often left my plate on the bottom of the camera, but it was an aggravation because they were thick, and cause the camera to not sit on its bottom very well. That can't be avoided completely, but the Markins plates are much nicer in that respect. They are very thin plates, and fasten to the bottom of your camera or lens with an Allen head screw. They are very attractive looking, and blend in well with the camera body. If anything, they add to the coolness of the camera with their distinctive look

Everything about the Markins ball head

system speaks quality! When someone sees this ball head and camera plates, along with your Nikon and Nikkors, they'll know without a doubt that you are a serious photographer.

Panorama System

Many of us like to experiment with panorama imaging. The Markins ball heads have a very smooth panorama control on the bottom of the tripod.



There is a small lock knob for the pano system just below and to the right of the main ball head tension knob. When you loosen the knob, the entire head will turn in a full circle. I don't know how they accomplished it, but it has a very smooth, almost fluid-like feel to it. It is not dampened like with a fluid head, but is super smooth in the way it turns.

The pano base is marked in degrees so that you can accurately make a turn to a particular degree mark. You might start at 0 degrees, and then turn to 30 degrees, then to 60 degrees, then to 90. At each point you can take

a picture that overlaps the last and next one, so that you can use computer software to connect or "stitch" the images together into one long panorama image.

You could get really technical about it and learn how to find the nodal point of your lens, and then use a rail or <u>sliding plate</u> that allows moving the center of rotation directly under the nodal point. Then you can make undistorted rotations. Or, you could just put your camera on the Markins, loosen the pano lock knob and take a series of overlapping pictures without worrying much about the technical aspect.

Either way, with the Markins panorama features, you can get the images you want. You can just have some fun, or get really serious about panoramas. The important thing is, you'll need a head with pano features to even attempt panoramas. The Markins Q-Ball design does the job exceedingly well.

Conclusion

During the 6th Annual Nikonians Photo Adventure Trip (ANPAT 2006) I used the Markins M10 for seven days of exciting shooting action. In fact, of the 25 Nikonians on the ANPAT, 20 of them were using Markins heads. I find that to be a telling number. Why do so many Nikonians use Markins ball heads?

I can only speak for myself, and so I'll tell you what I think. One very cold morning on top of the Smoky Mountains at Newfound Gap,





we were shooting a sunrise. It was about 6:45 AM, very dark, and 17 degrees F with the wind blowing small icy particles. Needless to say all the Nikonians surrounding me were at least double their normal size from the layers of clothing. I had on a pair of gloves that would have made it very difficult to use any tripod head. However, with the Markins, I was set to go.

Before I headed up the mountain, while still in the warmth of the motel room, I set my tripod up with the camera and lens I was going to use. I put the D2X and 80-400mm lens on the Markins, set the sweet spot, then removed the camera and packed everything up.

When I arrived at the top of the cold dark mountain, I simply unpacked my tripod and camera, attached it to the Markins, and I was ready to go. I could simply reach out and move the camera to whatever position I needed to get the shot. I didn't have to touch the tension knob. I just grabbed the camera and moved it. Even in extreme cold the Markins performed like the professional ball head it is. I got the shots I wanted.

Later I took the Markins over to the Tremont area and returned that evening with some of the best shots I have personally ever taken. It might have had something to do with the fact that I was surrounded by world-class Nikonians photographers

that I could imitate, but I came away from that ANPAT with images that make me very happy. The Markins was part of an overall photographic system that performed flawlessly in all of the conditions I found myself in.

Does it take a Markins to get images like this one? Maybe not, but, it sure helps when you don't have to think about fiddling around with your tripod head and have the certainty of getting no-unintentional blur razor-sharp images. When you can just set it for the body and lens load you are using and then shoot, it makes images like this one come easier than ever.

Do I like my Markins? Yes! Could I ever go back to a cheap ball head? No way! I use Nikon cameras, Nikkor and Sigma EX Pro lenses, and now Markins ball heads. What's in your bag? If you don't have a Markins, ask yourself, "Why not?" They're not overly expensive. You use professional camera equipment, why not a professional ball head.

The Markins M10 certainly changed my mind on why I need a pro-level head.

Get one to try out and see if it you don't see the light in new ways too!





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Understanding Filters

Understanding Filters – Still valuable tools in the digital age

By Nikonian Jeff Bower (jdbower): 12-Jan-06 2398 posts

Jeff helps out as Moderator of:

- Nikon Products / D80 Users Group
- Nikon Products / D40/D50 Users Group
- Image Making / Underwater Photography

In today's digital world filters are becoming less and less common, which makes them a scary thing for a novice to jump into. Some filters still have a great place in digital photography, and others are less useful, but all of them can still serve a purpose.

In general no filters are absolutely "needed" for photography and it's probably best to start out just learning your camera before expanding into the realm of filters. But, when you're ready they can do things that can't always be done in post processing alone. Let's start with some filter basics.

Filter Types

There are filters out there for any purpose under the sun (and some for well beyond). Some of the most common filter types are listed below. I've arranged things in order of how commonly they're used, so feel free to skip to the next section once you've gotten bored!

Protection Filter

A protection filter (often mistakenly called a "UV" filter, because

for years many photographers used ultraviolet filters primarily for protection) is used to protect the front element of a lens. Whether this actually provides any protection, is cost effective or causes issues with images is covered better in an article covered in a Nikonians resources article "UV, Haze & Skylight filters" by J. Ramón Palacios (jrp).

It is, however, useful to distinguish between UV filters (which block UV light) and protection filters (which may be UV's or others - but more commonly recommended are clear filters today).

A UV filter is of little utility today. Most films and digital sensors are already protected from UV light. A protection filter is your decision to weigh the use of a filter over the use of a lens cap or hood, purchasing insurance for the lens, the type of shooting you do, and your ability to judge when the risk of reflections is too great. If you choose a protection filter, most newer filters like the Nikon NC are much better choices than some of the older UV filters. In an ideal world a protection filter has no effect



on image quality so there should be no difference in a shot with or without such a filter but if you choose to purchase one it's important to choose a quality filter over a generic store brand.

Figure 1: A Nikon NC protection filter

Circular Polarizer

A circular polarizer, or CP, is used to reduce non-metallic reflections as



Understanding Filters

well as to enhance the color of the sky. The reduction of reflections is something that cat be done in post processing. If there's a fish in a pond that you can't see because of a reflection, Photoshop won't know about it. Enhancing the color or the sky is something that I tend to prefer to do in post processing if I need to, but mostly because it never occurs to me to use a CP to do it in the field. To use a circular polarizer simply mount it to the lens and rotate the filter until you get the desired effect. Note that using a circular polarizer on a wide angle lens generally gives an uneven effect because of the various angles of light that pass through the filter, in these cases it's often preferable to make changes in post processing so the effect can be more uniform. Because the reduction of reflections cant be done in post the circular polarizer is, in my opinion, the most useful filter in digital photography.







Figure 2: B+W Wide CP, note a lack of front threads, and a CP reducing the impact of a reflection

Linear Polarizer

Older polarizers were linear, not circular polarizers. These linear should be avoided not only on digital cameras but on any camera with autofocus or through the lens (TTL) metering. Autofocus or TTL metering functions of cameras can be fooled in some cases when these older filters are used.



To get an idea of why this is a problem, wear some polarized sunglasses and look at an LCD monitor. You'll find that if you rotate your head the screen will appear to go black at some point. Most of the time this will be just fine, but you never know when or how this will strike.

Figure 3: Polarized sunglasses on an LCD screen can have little effect (bottom lens) or black out everything (top lens)

Neutral Density

A neutral density, or ND, filter (solid, not graduated) is used to help you increase the shutter duration. This can help you introduce a desired "motion blur" for example. There are a few other ways to do this, but all have other side effects. You can decrease the ISO, but in bright light you'll quickly drop to the minimum ISO sensitivity and you may not be able to get shutter times on the order of seconds and if you're looking for a "grainy" high ISO look you'll have to add it back in afterwards. You can shoot with a narrow aperture, but this will increase your depth-of-field (DoF) and may change your image. If you are not familiar with depth-of-field, check the interesting article with examples by Nikonian Digital Darrell in a recent issue of the Nikonians eZine.

In bright light you may not be able to get a long enough duration.



Even worse, at the smallest apertures your image can be subject to diffraction which will make for a very soft image. The best way is often to use an ND.

The typical example of using an ND is to photograph moving water like a waterfall. To use an ND, just install the filter and take a picture. Filters are rated in terms of how dense they are, but this isn't a very uniform labeling. Some vendors like Singh Ray list stops; a one stop filter will double your shutter duration, a two stop will double it twice making a 4x change in the duration. Other vendors like Cokin will report the multiplication factor directly; an ND8 is 8x the shutter duration. Still others like B+W and Hitech report a logarithmic density of the amount of light; 0.3 is 1-stop, 1.8 is 6-stops.

Hitech Neutral Density Filters

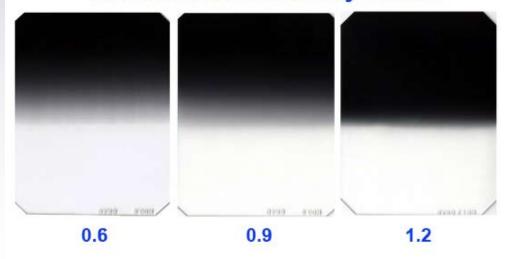


Figure 3a: Side-by-side comparison of ND's in 0.6, 0.9 and 1.2 grads

To help with a conversion between various ND nomenclatures, please see the table oposite:

	Log	Multiplication
Stops	Density	Factor
1	0.3	2
2	0.6	4
3	0.9	8
4	1.2	16
5	1.5	32
6	1.8	64
7	2.1	128
8	2.4	256
9	2.7	512
10	3.0	1024

ND filters are still pretty useful in digital, but there are some techniques you can use to replicate their function. For example, setting up a camera on a tripod and taking a series of shots in a row and then overlaying them on top of one another in post processing can produce similar results. In some cases this isn't practical. For example this technique will take longer than a single long duration shot. If you're lucky enough to have a very fast lens it's also possible to want to shoot wide open for shallow DoF but not be able to get shutter speeds long enough to get a good image - with my 58mm F1.2 I can get down to 1/4000th of a second for a normal scene on a sunny day and be stuck overexposing in bright light without an ND.

ND filters in the 2-3 stop range seem to be the most useful. If you're having trouble deciding and have some money to spend, a <u>Singh-Ray</u> VariND may be a good selection.



I initially purchased it because I couldn't decide what densities of fixed filters to get, but I keep it because it's a compact all-in-one solution. If you're interested in ND filters, I highly recommend reading about



graduated ND filters below before making your decision.

Figure 4: The Singh-Ray VariND can be set from 2-8 stops or more by rotating it.

Graduated Neutral Density

A graduated neutral density filter, called either

a grad ND or an ND grad or just a grad, is designed to reduce the dynamic range of a shot. If you've tried to take a picture of a sunset, you've probably found that either you get a gorgeous sunset and a black foreground or a well-exposed foreground and a washed out sunset. Using an ND grad you can even out the shot so you get both a colorful sunset and a visible foreground, aiding to your composition.

A traditional ND grad consists of a filter that is darkest at the top (although they can be rotated) and becomes clear near the middle and stays clear through to the bottom. Filters can have a "hard edge" transition where there is a well-defined line that goes from dark to clear or they have a "soft edge" transition where the filter fades more gradually to clear. Hard edge ones are for times where you need the edge to follow a line like the horizon, or a shoreline. Soft edge ND grads are useful if the line isn't as straight as we'd like. An example may be a desert shot with a

deep blue sky where you'd want to use a hard-stop filter to tone down the bright sand. On the other hand a rocky mountain range would probably be better off with a soft stop filter to darken a sky that may be too bright. Each manufacturer may have a different idea of soft. The Singh-Ray (for instance) starts darker and fades more gradually while the Cokin starts lighter and fades abruptly.



Singh-Ray offers a "Reverse ND Grad" which —looking at it top-down- starts light, fades to the darkest point in the center, and then goes clear again for the bottom half. The utility of such a filter is to take sunset/sunrise pictures where you want the most density at the horizon but don't need anything for the landscape or for much of the sky. Additional similar filters exist that are simply stripes across the middle of the filter, but they simply blur the line between ND grads and special effects filters.

Figure 6: A Singh Ray Reverse ND Grad, although a dark 3-stop note how it fades to a lighter color at the top

ND grads are available as standard round screw-on filters, but I don't recommend these. The problem is that the division line or area must be in the center of the composition, seldom the most desirable; so if you want more sky or more land you need to zoom out and crop. Rectangular filters like those for the Cokin system (see below) allow the dividing line to be not only rotated but also moved up or down - putting you back in control of the composition instead of having a filter limitation.



What about digital? ND grads still work just fine on digital, of course, but they aren't as necessary as one may think. If you've got a good tripod (and I recommend one even with filters) many cameras have a "bracketing" function - and the ones that don't you can perform the same function manually. What this does is takes a series of shots with various exposure settings, leaving some pictures exposed for the bright subjects and others exposed for the shadows and as many as you want in between. Combining these in post processing, using blending or High Dynamic Range imaging (HDR) techniques, you can pick and choose which parts from each you like. This is, in some cases, more flexible in that you're not limited to roughly linear divisions between the bright and dark regions, but it requires that you can take a series of pictures which can cause problems with moving subjects. HDR itself requires some skills to avoid images to look "unreal"

I count ND grads as "gateway filters", once you start lusting for them you're hooked on filters and should invest in the best filter system you can get.

UV/IR

Sometimes called "bandpass filters UV and IR filters are nearly black in appearance. They only pass light that's not part of the visible spectrum. This is a very interesting form of photography. IR photography can produce some eerie black and white images with white leaves and a black sky while UV photography can reveal surprising details about flowers (honeybees see well into the UV spectrum so some flowers have evolved a UV "landing strip" to lure them in). The difficulty of using these filters is that you can't see through them, so typically the shot will be framed and the camera focused, then the filter will be installed and the shot will be taken.

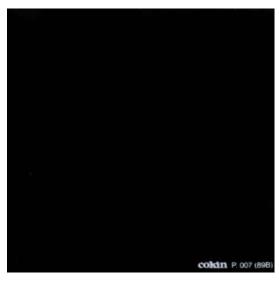


Figure 7: A Cokin IR filter is nearly black

These filters have an interesting home in digital. For a modern digital camera they are not very useful, but only because digital cameras have a filter in front of the sensor that blocks all of the non-visible light. A typical CCD is actually very sensitive to infrared light, but this means that it's hard for them to produce a true color without a filter in place to block these

wavelengths. Companies like <u>LifePixel</u> can remove these filters which will allow IR or UV photography with digital. They can also replace the sensor filter with an IR bandpass filter, which means that you can actually frame and focus normally and just shoot the image. Once a digital camera has been modified it is very good for this sort of photography.

Generally these filters can only be simulated in post processing; the visible spectrum will overwhelm the out of spectrum wavelengths. Some techniques exist to take a color image and make it look like an IR image, but it's not a true IR image.

Coloring

Many filters exist that simply color a scene. Whether these are "warming" or "cooling" filters or actual colors (often, oddly enough, for black and white shooting) I don't find them to be very useful on digital. If you like to use them there is no problem with them other than they will steal



some light from the scene, but you'll probably need to switch to manual white balance control or the camera may be able to fully compensate for them and make the picture look as though it was shot without a filter. These are the easiest filters to reproduce in post processing where you have the added benefit of being able to apply them to only parts of the scene if you choose. There are also packages that can simulate real-world filters and let you apply Brand X model number YY-ZZZ in a single step.

These color modifying filters are usually found in the bags of experts who don't like post processing. From a technical perspective the loss of light and limited selection of colors/densities is a turn off for me. Of course, using a coloring filter like an IR filter to really squash a significant portion of the spectrum is an interesting concept that can't be done in post. If you chose to use filters like these on digital I salute your talents!

Special Effects

There are many of special effects filters - far too many to cover here. Some filters are easier to reproduce in post processing than others. Things like softening filters are often easier to do with a Gaussian Blur function in post (plus you get the option to change your mind if you don't like the effect), but if you've got a favorite filter there's nothing wrong with using it. Things like diffractors or star effect filters and most other special effects fall into the same category, but often with more complex techniques to get things "just right" digitally. Using them sacrifices a little light and can't be undone, but it can save a lot of time in post if you know what you want. Again, this is more a matter of preference than having serious benefits in post vs. pre processing.

Filter Sizes

A typical filter will fit on the front of your lens. You'll notice that the front of most lenses are threaded for various attachments. There are several ways to check what size filter you need. On the lens itself is generally printed the attachment size in millimeters, for example Ø62 means a 62mm filter is needed. Lens caps that clip onto these threads also generally have their size printed on the back. When all else fails, of course the manual will have this information.

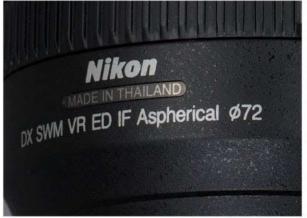




Figure 8: A lens's attachment size (72mm) printed on the lens and the lens cap, don't confuse this with the focal length

Some lenses, especially those with large front elements or fisheye lenses have a smaller filter at the back of the lens; in this case you'll likely be stuck with getting original equipment manufacturer (OEM) filters. Examples of this are the 10.5mm $\underline{f/2.8G}$ ED AF DX Fisheye Nikkor and 200-400mm $\underline{f/4G}$ ED-IF AF-S VR Zoom-Nikkor.



Figure 9: The horseshoeshaped drop-in filter slot at the rear of a 10.5mm f/2.8G ED AF DX Fisheye-Nikkor

If you've got multiple lenses it's fairly likely that you have multiple attachment sizes - this can get quite expensive to outfit each lens with quality filters. There is a device called a "step-up ring" which will allow you

to attach a larger filter to a smaller lens. There are two major issues with this. The first is that large filters are generally more expensive, and you'll likely want to ensure consistent quality so you'll probably want to buy the best you can. On the flip side, this is still cheaper than buying a quality filter in every size you need. The second issue is more critical.

You won't be able to use an appropriate lens hood with a step-up ring in many cases. If you choose to go the step-up ring route, no matter what size lens you have now it may be wise to go with a 77mm solution. In the current Nikon lineup the largest attachment sizes are 77mm and this is found in common lenses like the 12-24mm f/4G IF-ED AF-S DX Zoom Nikkor and the 80-400mm f/4.5-5.6D ED AF VR Zoom Nikkor. Additionally, some specialized filters like <u>Singh-Ray's VariND</u> only come in 77mm sizes.





Figure 10: A 72mm to 76mm step-up ring alone and mounted on a lens

Finally, another option is to go exclusively with a square filter holder like the Cokin system, that will be covered in much more detail later on.

Filter Features

Once the <u>filter types</u> are explained and you've selected a filter size you'll find a myriad of choices for filters. For example, as of the time of this writing one vendor makes a total of five different 77mm neutral (not warming or UV) circular polarizers ranging from \$76.50 to \$224.95 and a total of 9 different 77mm polarizers. Choosing a filter can be a daunting task even when you know what you want and what brand you want.



Choosing a Brand

Choose a good brand. Cheap filters generally do more harm than good by offering poor quality optics, shoddy construction, or even poor threads that can damage your lens. I tend to prefer B+W round filters, Nikon NC protection filters, and Singh-Ray rectangular filters myself, but other good brands include Hoya, Heliopan, Lee and in general any filter in the price range of these is likely to be of comparable quality. The reasons for my choices? B+W uses high quality optical glass and not the window glass cheap brands use and B+W's heavy brass rings have a nicer feel than Nikon or Hoya's aluminum ones. I use Nikon NC filters because B+W only offers them in UV form and Hoya's lineup seems much too confusing (With the exception of its Pro 1 series, Hoya spans the spectrum from cheap filters through premium filters with little real data to distinguish which is better).

Multicoating

Anyone who has a digital camera or may purchase a digital camera in the future should go for the best multicoating possible. This is because digital sensors are highly reflective so light entering the lens can bounce off the sensor and be reflected back either by lens elements or by the filter. A special coating on the filter can help prevent this, but it can't prevent it in all cases so you should still be careful with having unnecessary filters (like protection filters) when shooting a light source or any bright object.

Figure 11 (opposite): An example of the perils of poor filters, an old inexpensive protection filter creates a reflection in the lower left but a "naked" lens does not. Imagine the test flame is a birthday cake for a real-world situation, but even a bright white object in the daytime can cause a similar effect





Thin vs. Regular

The benefit of a thin or slim filter (sometimes called a "wide angle" filter) is that it's less likely to cause vignetting on a wide angle lens. The downside (other than usually being more expensive) is that many thin filters don't have front threads so you won't be able to stack filters (which defeats the purpose of a thin filter anyway) and, more importantly, you won't be able to attach a hood or use a lens cap. If the specific filter in question has a front thread in the thin version I usually go for the thin version just in case.

Rectangular Filters - the Cokin "P" System

Initially the concept of square filters was foreign to me, I knew they were good for grads and I knew why, but I had no idea what I needed to buy to get things off the ground. Coming from buying single filters that cost nearly \$200 I figured there was more to these inexpensive systems than meets the eye. When I finally took the plunge, it turned out that it's really not a complex system at all and I thought it would be useful to examine some of the components and how they work.

The Holder

At the heart of the system is the Cokin holder. Cokin offers two versions, a standard holder and a wide angle holder. The standard holder has



three slots for three different filters. The wide angle holder has just one. In addition, the slot closest to the lens can be used for a rotating filter, usually a circular polarizer or certain special effect filters. The benefit of the wide angle filter is evident in its name. It won't vignette on wide angle lenses as much as the standard filter because the "wings" that hold the filters in are much shorter. Prior to the release of the wide angle holder people would cut off the extra slots. Given the cheap price of these holders, I recommend getting one of each.





Figure 13: The Cokin "P" series normal (left) and wide (right) filter holders

The Attachment Ring

The attachment ring is very similar to a step-up ring but there are no threads at the larger diameter. The back of the holder simply slides onto the ring and tabs lock it in place. Generally I screw on the attachment ring and then slide on the holder afterwards. Note that all Cokin filters for a specific holder are the same size so you don't need to worry about getting a 72mm filter for your 18-200mm lens and a 67mm for your 105mm lens, but each lens attachment size will require its own attachment ring to use the holder. You can also use a round filter

step-up ring instead of getting different attachment sizes, but since this may push the filter holder out a bit more and cause vignetting I recommend the cleaner solution of getting separate adapter rings for each of my lenses.







Figure 14: A Cokin Attachment Ring, a ring installed on a holder, and the holder mounted on the lens

The Filter

A filter for the Cokin P system is generally just an 84mm x 100mm rectangular chunk of plastic resin (don't be fooled by the term plastic, this is a much better quality than the cheap plastic filters mentioned above and is good since it won't shatter like glass!). Some filters like the Singh-Ray grads are also rectangular, 85mmx120mm in that case. This just gives more leeway when it comes to positioning where the transition is. With the standard holder you can use up to three filters stacked on top



of each other, in a pinch you can usually just slap a filter in front of the lens without a holder if you're careful.

Figure 15: An assortment of Cokin Filters



The Geared Filter

The geared filter fits into the slot closest to the lens and is reserved for filters that need to be able to be rotated freely. Examples include stareffect filters (shown below) and circular polarizers. Rotating the filters in this slot is not incredibly easy. If possible I usually try to rotate the holder instead (of course, with something like a grad this isn't an option).



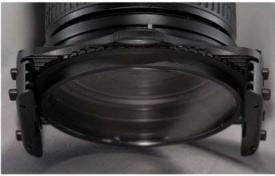


Figure 16: A Cokin Geared Filter alone and installed in a holder - note the slot closest to the lens for the geared

One limitation of the wide-angle holder is that if you want a polarizer it will use up the entire capacity of the holder because they are too thick. For those shots you're better off with a round screw-in type filter instead of a Cokin-style in my opinion.

Which Size to Choose - The most common size is the Cokin "P" size, this is typically pretty good with the wide-angle adapter down to roughly 12mm lenses on DX-sized sensors (about 18mm on film). Some have decided to hedge their bets and go to the larger Z-Pro system which has 4"x6" filters available from Singh Ray (in addition to the Cokin filters, of course). This should help prevent vignetting at wider angles but,

of course, the filters are more expensive and Singh-Ray doesn't make a circular polarizer in that format (they do for the "P" system). Even larger are X-Pro filters which may be a good choice if you also intend to use medium format cameras like Hasselblads. There is also a smaller "A" sized filter, but I would not recommend that for a DSLR.

Other Accessories - The Cokin system has a ton of other toys of various levels of usefulness. There are lens caps both for the adapter rings and for the holder so you don't have to remove the system between uses. There are lens hoods to help with flaring or other effects of stray light. An interesting accessory is a coupling ring that will allow you to mount one filter holder in front of the other, allowing you to stack even more filters or to simply use two filters mounted at different angles.

Other Brands - Lee and Hitech also make similar filter systems. Cokin seems to be the most common here with enthusiast Nikonians, but the Lee filter holder (for 4"/100mm wide filters) can be extended on demand in single filter increments - obviating the need for a separate normal and wide angle holder.

What to Buy - With all the options people tend to get confused, if you're in that state and just want someone to tell you what to buy this is the paragraph for you! If you haven't been able to follow everything above but want to get started with ND Grads, I recommend Cokin kit H250 which includes a holder and a few ND grads to get you started. If you've got a 12-24mm or 10-20mm lens I'd throw in a BPW700 wide angle holder. Finally, you'll need an adapter ring for your lenses. These part numbers are P4xx where xx is the adapter thread size in mm. For example, a 77mm lens is a P477 and a 72mm would be P472. At the time of this printing, this should be less than \$80 for a single lens (including the wide angle holder) and about \$14 for each additional lens - less than the price of a good round filter.



Rotation360° provides comfort, flexibility and protection

By Tom Boné (flashdeadline) Administrator 04-JUL-2002 3495 posts

My first glimpse of the Rotation360° backpack was last year in New York City. It was worn by Think Tank Photo's founder and lead designer Doug Murdoch during the Photo Plus Expo.

Murdoch had a camera strapped to the front of the backpack's shoulder straps (instead of the usual around the neck mode). "Now, I need to change lenses fast," he said. "And I don't want to take off the pack."

Presto! – With a flip of a wrist and a sharp tug around his waist, his backpack separated at the beltline, and within seconds he had a beltpack rotated in front of him with a nice assortment of lens choices to choose from.



The folks at Think Tank provide a great video of Doug and the pack in action at their Rotation360° site.

Watching it done is one thing - Doing it yourself is another. Think Tank's public relations representative Brian Erwin arranged to lend us a Rotation360° for review, with only one piece of advice. "Go ahead and treat it rough," he said.

Taking him up on the challenge, I knew exactly where to seek some

expert opinions. Having stomped through some miserable terrain wearing combat boots and packing a Nikon F and lenses in a makeshift Navy Corpsman's medical bag, I knew right away that an active duty Marine Corps photojournalist would be an ideal test subject. A quick call to the Public Affairs office at my nearby Marine Corps Air Station helped me find Corporal Curtis Keester. He's got four years of service under his belt, and before entering service he had been heavily involved in photography. Marine Corps policy requires that active duty personnel do not endorse products or services, but in this case, the public affairs folks allowed Keester to help me out as long as I did not shoot photos of him in uniform and made it perfectly clear that his views are strictly his own opinions, not a commercial endorsement by the Marine Corps.

With the ground rules set, I delivered the pack a couple of months ago and told him to "Go ahead and treat it rough."

A month later, Keester and I met for a debrief. He had the pack, with no wears or tears, stuffed with gear.

In the beltpack he had comfortably seated his AF-S DX Zoom-Nikkor 55-200mm f/4-5.6G ED, Tamron AF 70-300mm Tele-Macro f/4-5.6 LD and AF-S Zoom-Nikkor ED 18-70mm f/3.5-4.5G IF DX lenses.

On the backpack he had strapped on his Manfrotto 680B compact

monopod, and inside the pack was safely nestled his Nikon D70 with an AF18-200mm F/3.5-6.3 XR Di II LD Aspherical (IF) attached. Also stuffed into every conceivable compartment was a variety of filters, cleaning supplies, batteries and other accessories, including a small umbrella.

"Packing it was a challenge," he said. "I have a Lowepro and





Think Tank Rotation360° Review



I basically took everything out of that and stuffed it in here. The padding on this one is much thicker, and because the actual backpack is shorter to make room for the rotating beltpack, I found I had to carefully decide what I really needed to carry."

The pack comes with plenty of Velcro adjustable spacers and dividers, in fact when Keester returned it I found a pile of the spacers, unused, neatly placed in the box.

During his test, Keester used the pack both on and off-duty. "I got some interesting surprised looks when I pulled the beltpack around," he said.

"So what did you think of it?" I asked. The following is a summary of his long answer as well as my own observations:

Comfort

The shoulder straps and overall heavy padding on all sides (especially near the back) make it easy to wear for extended periods of time. On

Keester's back it rode "a bit high" but on mine it was just perfect.

Ease of operation

It takes a while before you can maneuver the beltpack to the front with the same fluid ease as Doug Murdoch, but you'll soon get the feel for it.

The loops that you tug on are



just the right size for most hands and clearly marked to show open and locked positions. Keester and I didn't use the special straps included in the pack for attaching the camera to the shoulder harness, although it is obvious that the straps would take the strain off your neck and make it easier to change lenses. Too many years of carrying a camera on a neck strap made it an unbreakable habit. However, the straps come with the case, and you should give them a try, especially if you carry heavy glass.

Once you get the rotation maneuver nailed down, making the lens switch is still much easier than pulling a standard pack. Keester said he could see the difference in lens changing speed and efficiency right away. "With the standard pack you end up on

one knee a lot," he said. "I'm 32, and I can already say I appreciate less wear and tear on my knees."

It's very easy to quickly detach the beltpack from the backpack and use either unit on its own. The pack can be rested on the ground straight up, and won't tip over. "Most of the packs I've used, when they are stuffed, they won't stand up like this,"

said Keester.

Enough Room?

The overall size of the combination beltpack and backpack is not as roomy as if it were a single unit, but Keester said a bit of trial and error when you first decide on your configurations will usually provide results.







Think Tank Rotation360° Review

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"I set everything out that I wanted to carry, and when I was done packing I could only get about 70 percent of it in. So, I took it all out, made some changes, and then got 95 percent in." The pack has rails that will adapt to a number of optional modular components available from Think Tank, which means you can carry more gear (especially long lenses), firmly attached to the main unit,

"I'd say this is perfect for a trail or wildlife photographer that likes to travel light," he said. "It's what I call bounce-able. In other words I never had worries about letting it slip and bounce off the deck. The padding is very good."

Summary

It's extremely comfortable, guaranteed to drop a few jaws when you change lenses, and extremely durable. Keester avoided getting the pack wet, but I put it on and stepped out in the rain, without using the protective covers that are neatly tucked inside. Three or four minutes in a brisk rain, with a roll of toilet paper in the back resulted in a completely dry roll.

Keester said he appreciates the design, but if he had a hand in advising Doug Murdoch on future generations of this style "I'd probably want the backpack just a bit wider and not as deep from front to back. I'd rather lay some gear side by side than on top of each other."

His only issue with the pack was the price. "It's more than I'd usually want to pay, but I can see from the quality of the build that it's worth it." The price reminds me of when I bought cheap sneakers for my three sons.

They destroyed them in one summer. If I had paid for the more expensive and durable brands, they would have lasted twice as long.

Conclusion

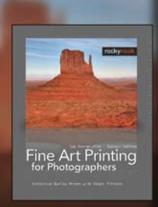
My opinion after interviewing Keester on his experiences and adding my own field tests:

For a backpack-beltpack combination that has set new benchmarks in comfort, design, durability and versatility, this Think Tank Photo Rotation360° is well worth the \$279 US price. It should provide years of reliable service and has all the optional attachments dreamed up by the Think Tank designers to suit the most challenging applications. Nikonians have been taking advantage of a special Think Tank Photo added value: The addition of a free gift of their choice, when ordering through the Nikonians link.

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Nikonians Academy

Nikonians North America Expands Workshops and Staff

The Nikonians Academy has increased its workshop presence to 23 major cities in North America as well as Vancouver and Toronto in Canada.

"Our workshops are renowned for their attention to detail, fine quality and excellent instructors," said Mike Hagen, Director of the Nikonians Academy. "By expanding our workshops to an increased number of cities, we are meeting the needs of photographers all over North America who have specifically requested workshops in their areas."

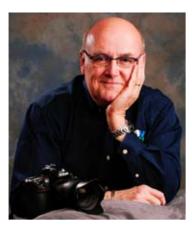
The Nikonians Academy's new instructors are Winston Hall and Darryll Schiff. Both are accomplished professional photographers and are among the very best at teaching their craft.



Darryll Schiff is an internationally known fine art and commercial photographer. Darryll has pursued a successful career in commercial photography, shooting assignments for Los Angeles Magazine,

Rolling Stone, San Francisco Magazine, Women's Wear Daily, Stern, Geo, Beverly Hills Magazine, Capitol Records, Charles Jourdan, and Pepsi. Darryll's list of celebrity clients include Tea Leoni, Mark Harmon, Jason Patric, Holly Robinson Peete, Sela Ward, Pat Riley, Regina King, Chazz Palminteri, Jasmine Guy, and Robin Williams.

Darryll works on a few select commercial assignments only, spending the majority of his time doing his fine art work, where he can focus on the purely artistic aspects of the images. His work appears in the collections of MOMA New York, the Art Institute of Chicago, George Eastman House, Norton Simon Museum, Museum of Contemporary Art Chicago, and in many private collections.



Winston Hall is a professional photographer, speaker / facilitator and business owner living in the Pacific Northwest where he pursues his passion of helping people express themselves creatively through his technical and

non-technical photography workshops and coaching services.

Winston's professional photography career

started with a job as a special events photographer. Following graduation, Winston continued to photograph special events, conventions, and weddings. It was during this time that he discovered his second passion; training and development, when he was asked to train newly hired special events photographers. Learning from this experience, he started his own special events photography business in the mid 1980's and he hasn't stopped shooting and instructing since. Throughout his career, Winston has continued to combine his love of photography, training and business.

"We are proud and honored to have Darryll and Winston on board with the Academy," said Mike Hagen. "Their teaching skills, knowledge and enthusiasm are among the best and I can't wait for them to succeed in their new roles." The Nikonians Academy plans to continue their rapid growth by adding additional cities around the USA as well as increasing content to include topics such as Master Printing, Fine Art Photography, Travel Photography, and Digital Workflow.

Nikonians Academy 2007 Workshops

http://www.nikoniansacademy.com



Calendar

ProShop goes to Fürstenfeldbruck

One of our newest ProShop offerings, The Whale Tail promises a whole new lighting method for the professional and prosumer markets. We will have it with us at the Photography exhibition at Fürstenfeldbruck: May 11-13, 2007.

More info at: https://www.photoproshop.com/ product info.php/products id/473

Hidden in Plain Sight: Contemporary Photographs from the Collection

May 15, 2007-September 3, 2007

The Howard Gilman Gallery – Metropolitan Museum of Art, New York City. This exhibition brings together the work of a number of contemporary artists who use the camera to call our attention to the poetic richness latent in ordinary things. Often deliberately understated in style, these photographs are filled with everyday epiphanies. They capture the unexpected beauty of found still lifes and modest interventions in the landscape, inviting us to look more closely at the world around us. The exhibition will feature approximately 35 works by various artists, including Gabriel Orozco, Jean-Marc Bustamante, Damián Ortega, Carrie Mae Weems, Bertien van Manen, and others.

More info at: http://www.metmuseum.org

Nikonians Academy North America workshops

Depending on location, the workshops offer instruction on the Nikon D200, D80/D70/D70s cameras, Capture NX, and the i-TTL/Nikon Creative Lighting System.
Denver, Colorado – June 14-16
Chicago, Illinois - June 22-24
Kansas City, Kansas – July 6-9
Vancouver, BC – July 19-22
Seattle, Washington – July 26-29

Complete workshops info at: http://www.greaterphoto.com/index.html

International Virtual Reality Photography Conference

Registration is now open for the largest ever VR Photography conference presented by the The International VR Photography Association (IVRPA) 15-20 June 2007 at the University of California at Berkeley campus. An international roster of photographers, producers, and web professionals will convene at the Berkeley campus for over 20 workshops and sessions including: Marketing VR Images, VR Imagery for Real Estate, Color Management, Smarter Workflow, Photoshop for VR Photographers, GigaPixel Images, HDR Imaging Workflow, and VR 101 (A Quick Introduction to VR Photography).

More info at: http://conference.ivrpa.org/

Digital Masterclass in Tuscany

The Masterclass, June 16-23, 2007, is designed for DSLR enthusiasts and professionals, this Digital Masterclass blends theory, practical and real life application to provide students with complete mastery of the entire photographic process whether within a studio setting or under natural conditions.

The studio portion of this masterclass is focused on acquiring complete control of the Photographic process. Morning classes will teach you the composition, light and color skills that you see in professional photography.

Guided by a Tuscan expert and Nikonians member, students are taken on daily expeditions to photograph some of the best Tuscany has to offer. This is a chance to have hands on experience with the tools acquired during classroom sessions.

More info at: http://www.walkingintuscany.com





