

PhotoPlus Expo '02

*Commentary by Nicholas Hellmuth
on digital cameras, lenses, photo studio lighting, accessories*

Wide format inkjet printers, watercolor paper and other inkjet media

Exhibited at PhotoPlus Tradeshow, November 2002



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Introduction

PhotoPlus Expo is held once every year, always in New York and always at the Javits Convention Center. An equally annual aspect is that PhotoPlus Expo is right smack conflicting with SGIA tradeshow about a thousand miles away. So FLAAR attended 3 days of SGIA and then flew to New York on a red-eye to attend the last day of PhotoPlus. Since FLAAR was five days at Photokina in September, it made little sense to see the same items at PhotoPlus for four days; after Photokina one day at PhotoPlus was enough.

Because anything of note was long ago showcased at Photokina in Germany, it would be difficult to find anything new at PhotoPlus. However many companies who sell primarily in the USA do not exhibit at Photokina, and hence are only at PhotoPlus, such as BetterLight, AlienBees/White Lightning portable strobes, Photogenic, and dozens of other American companies.

Missing this year was Remin, Kart-a-Bag. The company itself is very much alive, just did not exhibit.



35mm Digital Cameras

Minolta and Sony did not show up at all. Canon had its usual large and attractive booth area but CMOS sensors don't excite me. I am a stickler for quality and it will be a few years before CMOS can match CCD sensor technology. Olympus had a large booth but is not really in the arena for digital cameras above entry level.

Canon

The new EOS-1Ds digital offers 11.1 megapixel CMOS sensor. The new Kodak DCS Pro 14n offers 13.89 megapixels.

However the winner is not the highest pixel count, but the software algorithms and associated software.

Contax

The Contax N Digital has been creamed in the marketplace by three factors:

- It was a year late being delivered at all
- When delivered the quality was embarrassing
- By the time the problems were fixed the Nikon D-100 had a 6 megapixel camera at much more reasonable cost. Plus the Nikon camera worked the first time around.

Now that an 11 megapixel Kodak CMOS camera is available it will be tough for Contax to catch up. Catching up is all the more difficult due to the run-away sales of the Nikon D-100 and the perceived quality of the Fuji S2 (may not sell as many as the less costly Nikon but most pro-sumers say the Fuji is preferable).

Fuji

Fuji's S2 is generally acknowledged as slightly better than Nikon D-100. For example, the Fuji S2 offers two slots to hold two recording media simultaneously. The Nikon D-100 holds only one.

Fuji S2 offers both FireWire and USB. I believe the Nikon has only USB.

Foveon - Sigma

The Foveon chip continues to inch towards being deliverable in the Sigma SD9.

The Sigma has a few neat features missing in a Nikon D-100: Sigma offers an image sensor dust protector. This prevents dust from settling on the sensor. Dust on the sensor has been a problem with other brands of 35mm cameras.

But what sets the Foveon chip apart from all others is the quality of the focus. Images from other digital cameras are fuzzy because CCDs have to interpolate 50% of the green, 75% of the blue, and 75% of the red. Then a Nikon, Sony, Kodak and others have to blur the image in order to remove moiré pattern.

With a Sigma SD9 you get 100% of the quality. So if you are doing scientific photography, or working in a museum, then the Foveon chip is worth waiting for.

Kodak

Kodak showed their CMOS sensor at Photokina previously. 13.89 megapixels at full-frame 35mm size. This means the Kodak offers effectively the same size sensor in a portable 35mm camera as all the other companies offer in medium format size (since a medium format sensor is not medium format size). Remember that a medium format scan back of year 2000 was smaller than 35mm size. Only in the last few months did the sensors of medium format backs approach the size of a 35mm negative.

Downside is that CMOS technology is still not fully convincing. Its main advantage is lower price.

Medium Format Scan Backs

Virtually all medium format cameras are abandoning the old 6 megapixel chips from Philips (18 MB file size) and moving to the Kodak chip with 48 MB. Then, after moving up to the larger size, the camera backs then went down to the 11 megapixel Dalsa-Philips chip. This shows all the more that size is not everything.

Just realize that the Kodak chip is square, so that whittles the real file size down to 40 MB when you crop to landscape or portrait mode.

Fuji

The Fuji Luma II has upgraded to the newer 11 megapixel Philips chip. I am guessing this is the chip offered by the Canadian company which took over CCD chip production from Philips. This chip is full frame for 35mm size. So far no full frame medium format chip has been successfully manufactured. The last company which tried, Dicomed, went bankrupt in the process.

The Fuji Luma II is a one-shot system, so comparable to PhaseOne and Kodak, neither of which offer any multi-shot options.

Jenoptik

Jenoptik and Sinar offer multi-shot backs.

Kodak, Fuji, PhaseOne only have 1-shot backs.

Megavision did not exhibit under their own name; if they were present then I missed them.

The advantages of multi-shot backs is described in the professor Hellmuth's course on digital photography



available from Bowling Green State University as well as also offered at Francisco Marroquin University in the summer.

After three years of attending photography tradeshowes we have selected Jenoptik as a choice we are ourselves interesting in exploring further. Additional details on Jenoptik are available in the FLAAR Report on Photokina 2002.

PhaseOne

The PhaseOne H10 is upgraded to the new Dalsa-Philips 11 Megapixel chip. ISO up to 400. With the 16 megapixel Kodak 48 MB chip you get just 100 ISO.

PhaseOne H5 uses the old Philips 6 megapixel chip. Only offers 100 ISO, rather slow. Cost is \$10,995; you can get a 6 megapixel image today from a 35mm SLR Nikon D-100 for under \$2,000. Would be an interesting test comparison. In theory the PhaseOne should beat the Nikon on software, but does it really? Trouble is that no one can afford to do such tests independently, so it's "buyer beware" in the meantime.

FLAAR would love to tackle such a comparison since we do not own stock in either PhaseOne or Nikon, but this is a full-time job and gets expensive quickly just in managing and keeping records and then publishing the results.

Tri-linear scanning backs for Large Format Cameras

BetterLight had their own booth adjacent to Parrot Digigraphic, a licensed source for BetterLight products. FLAAR uses the BetterLight Super 6000. We get flawless dark and white points and flawless color balance from the BetterLight software. We especially like the BetterLight pano and rollout options with their turntable.

PhaseOne still offers scan backs, though they did not enter the PMA competition this year. The previous year PhaseOne lost to BetterLight. So far BetterLight has surpassed all other tri-linear scan backs in the PMA competitions.

KST exhibited their high precision seamless panoramic systems. We describe these in more detail in the FLAAR Report on Photokina.

4x5 cameras

Wooden 4x5 cameras with sliding movements in brass fixtures are a mainstay of view cameras for more than a century. However in this new millennium of digital scan backs, such cameras are inadequate for indoor studio photography. The movements are simply not precise enough for the requirements of a CCD sensor which focuses on a millimeter and that's about it. Another concern with sliding movements in brass fixtures is that you can't always be sure that each side of the camera is at precisely the same position as the other side of the camera. Plus there is a bit of sag when things are tightened down.



Thus it is not recommended to use any camera with old-time brass fixtures for digital backs. There may be exceptions but why experiment. A Linhof 679cc, a Rollei X-Act, or Cambo camera has geared movements and hence are considerably more stable.

Also be sure to avoid any camera with L-shaped supports. The weight of a digital back may cause camera-sag.

Layton 4x5 camera

A new 4x5 camera, shown for the first time, was the Layton L-1. John Layton is a professional photographer. He has taken his years of experience to design a camera which gets rid of all the quirks and deficiencies of other brands of traditional camera.

Although this camera is made primarily for using with 4x5 film, we feel it may be one of the first cameras with sliding movements that could be used outside with a digital back. I specify outside since outside you are focusing on infinity, so it does not make much difference about the plane of focus.

For more information contact the developer directly, e-mail john.Layton@valley.net.

Arca-Swiss

At Photokina and again at PhotoPlus Arca-Swiss showed their new baby camera. It is very portable. However I was disappointed that it had the stick-like up-and-down support system. Although I am sure that Arca-Swiss has precision movements, I don't personally like stick-like up-and-down supports on any camera brand.

If you need a camera to hold a medium format back we would recommend the Cambo, Linhof 679cc, or Rollei X-Act models. I believe Sinar has a new model as well.



Toyo

When I first entered the world of large format digital photography, I noticed that the leading developer of large format scan backs, Michael Collette (BetterLight), that his personal camera was a 4x5 Toyo.

Over the years I have used Sinar and have several Linhof and Cambo cameras. The Linhof Technikardan is too wobbly for using with a heavy digital back.

Toyo makes three models which a digital photographer should consider:

- Toyo-View 45GII
- Toyo-View 45GX
- Toyo Studio/Field VX125 (jade green) and VX125b matte black)

The Toyo which seems the most tempting is their Studio/Field VX125. Jade green is an appropriate color for an archaeologist who has discovered a royal Maya tomb filled with jade. Archaeologists have to do studio photography and obviously do location photography.

If this camera is sturdier than the Linhof Technikardan, and if it can pack up and be portable,

sounds like a winner.

Camera Lenses for Large Format

When I began photographing decades ago I tended to buy Schneider lenses. Maybe they were the favorite of Ken Hansen Photo (where I bought most of my large format equipment over the years). Maybe these were more profitable for a camera dealer to push. I don't know but I did end up with about 90% Schneider lenses.

Now that I have moved to digital photography I begin to notice the deficiencies of these lenses which were so proficient with 4x5 chromes in the decades of darkroom photography. I am also noticing the potential of Rodenstock lenses. The Rodenstock catalogs offer excellent discussion of digital reality, making lens selection more easy. Overall I wish to try out Rodenstock lenses to gradually replace the Schneider counterparts.

Rodenstock offers one set of digital lenses for large format scanning backs and another set of digital lenses for medium format sensors which are roughly the size of a 35mm negative.

Rodenstock lenses are imported into the USA by HP Marketing, no relation to Hewlett-Packard printers.

Camera Lenses for Medium Format

You can obtain an independent lens test comparison report from www.mamiya.com. Click on the field for that report.

Lighting, strobe and flash

Elinchrome

Elinchrome lights what FLAAR has installed in its new digital photography evaluation studio. Elinchrome strobes are distributed by Bogen Photo.

The students report Elinchrome strobes are easy to set up and use. These lights are what you would expect from a product Made in Switzerland.

Paul C. Bluff, Inc.

Paul C. Bluff, Inc, is the umbrella for LightGear USA, Alien Bees, and White Lightning.

LightGear offers softboxes for Balcar, Photogenic, Hensel, Bowens/Calumet and naturally White Lightning and AlienBees flash systems. As you would expect from a full-system company LightGear also offers umbrellas as well as light stands to hold everything.

Alien Bees and White Lightning each offer portable flash units. Since FLAAR encourages people to get into photography, and as these lighting units are small and portable, they seem ideal for photographers of all levels who don't want to be burdened with complex, expensive, and delicate studio lighting. We would also recommend these lights for photography departments at universities, colleges, community colleges, and art institutes.



Other Strobe and Flash options

Dozens of other companies make studio flash units. Many of these companies exhibited at PhotoPlus Expo. Countless others exhibited earlier at Photokina, especially the European companies who tend not to exhibit in the USA.

It is unrealistic for us to cover each and every company. Therefore we tend to discuss the strobes and flash units which we have or are about to obtain, namely Elinchrome (Bogen Photo), Alien Bee and White Lightning (Bluff), and Photogenic.

Lighting, tungsten, fluorescent, HMI-HDI-HQI

Buhl Industries makes Buhllite ceramic HID (high intensity discharge) lamps, evidently a relative of HQI and sort of a distant relative of HMI. All are in the halide metal family. Regretably Buhl does not exhibit at photo tradeshows.

BetterLight recommends using Buhl lamps in museums or any situation where you wish to avoid heat from tungsten hot lights.

Light Modifiers: Soft Boxes, Reflectors, Umbrellas, etc

Countless companies offer light modifiers. But over the years we have noticed that Westcott stands out at the tradeshows. Turns out they are neighbors to Bowling Green State University; Westcott headquarters is a few minutes away in Toledo, Ohio.

Westcott

Westcott makes so many products you need their catalog, since we can't really show everything in this brief survey of the tradeshow. Contact is (419) 243-7311, e-mail info@fjwestcott.com.

Lastolite

Lastolite offers a wide range of backgrounds and light reflecting panels. All Lastolite products are available exclusively from Bogen Photo, tel. (201) 818-9500.



Light Meters

Gossen Light Meters

My first light meter, as a student at Harvard decades ago, was a Gossen Luna Pro. At one point that was stolen (also decades ago) and when I got a new meter I decided to experiment with Minolta. I now have a Minolta Flash Meter and Minolta Color Meter (for two decades, still have them, at the university in Guatemala).

Currently FLAAR is returning to utilizing a Gossen, in our new facilities at Bowling Green State University. We will report back on our success shortly. In the meantime, we note that Gossen sells a complete palette of light meters, spot meters.

Sekonic Light Meters

To date my experience is exclusively with Gossen and Minolta light meters. But at PhotoPlus Expo, I was shown the wireless radio transmitter modules for Sekonic light meters.

I like gadgets. Can't say anything since we don't have one, but we are checking them out.

Filters

Because Adobe Photoshop can employ so many "filters," photographers using digital cameras today sort of forget to add actual glass or gelatin filters to their camera lenses.

Lee Filters is one of the first companies which I have noticed offers a wide-angle filter adapter. This minimizes vignetting which would occur if you used a normal filter holder. You need an adaptor ring to accommodate the filter holder. Lee also has a push-on filter holder for wide angle lenses.

To further aid the landscape photographer, Lee offers the wide-angle lens hood, both in regular and slotted variety. The slot is for inserting the actual slip-in filter.

Fog filters provide a mist effect. Mist filters are graduated and would be my preference.

Sky blue is essential on certain days. Neutral density filters are necessary on almost all outdoor shots.

If you are after sunsets, Lee offers a 3-color version for when the sun is simply low and not fully generating its own colors, the Sunset 2 filter.

If the sun is colorful at sunset but you wish to enhance it, try individual sunset filters: sunset red, sunset orange, or sunset yellow filters.

Tripods

We noticed that the most popular tripod head at PhotoPlus as well as at Photokina was from Manfrotto. In other words, when other booths (booths other than Bogen or Manfrotto) were showing cameras, these cameras tended to be sitting on a Manfrotto tripod head. In most cases it was the same model tripod head that FLAAR uses, the 410, catalog number 3275.

Ries exhibited its tripods together with Wisner cameras. FLAAR uses both brands. The Wisner is portable and FLAAR does most of its photography outside. If you do digital photography, just be sure your bellows is infra-red proof.

Ries showed a tripod head that looked unique. It comes in two models: double-tilt head J250 for J-series Ries tripods and A250 for A series tripods. For a heavier duty model they offer the A250-2 for the A100-2 tripod. I first noticed this tripod head at the Layton camera booth and then went over to the Ries booth to learn more about it. I wish I had a tripod head such as this during the many decades when I was doing photography in museums around the world.

Contact for Ries Industries is tel (206) 842-9558.

Accessories

Novaflex

Novaflex makes the widest range of clever accessories you can imagine. We recommend you

check out their

- MagicBall tripod head. If you are tired of the Arca-Swiss head locking up on you, then take the Novaflex MagicBall for a trial run.
- Quick Release, Q=Base, for those (like us) already set on Arca-type system.
- Blue Wraps, for wrapping and protecting your camera (we know, since FLAAR photographs in Japan, Australia, Latin America, and Europe).
- Flat panel flash system.

The full range of goodies from Novaflex can be seen on their web site, www.novaflex.com. All Novaflex products are imported by HP Marketing. In the years I used Leica and Nikon cameras, wish I had known about some of the Novaflex gadgets such as auto-bellows, mini-tripods and portable flash-panel lights.

If you do table-top photography or nature photography of flowers, you need a Novaflex accessory for sure.

LumiQuest

LumiQuest makes countless accessories for soft lighting with flash units, primarily for flash mounted on your camera. If you already have your flash units, check out these add-on soft-lighting covers. Telephone (830) 438-4646.

Scanners

Microtek and Umax did not appear at all. Epson, HP, and a few low-end scanners were exhibited. I am guessing that Nikon showed their scanners inside their booth. However since Nikon showed no new cameras and probably no new scanners either, I spent my time elsewhere at the show. In the scanner arena, Epson definitely beats HP and other low-end scanners. HP scanners are clearly for home use or for office use where sophistication would not be an asset for secretaries or managers alike.

In distinction the Epson scanners come with an option for SilverFast, a professional level scanning software from LaserSoft Imaging of Germany. I would rate the Epson scanner as the best entry level scanner, potentially on the par with entry-level Microtek or Umax.

Creo exhibited their iQsmart3 flatbed scanner.

Fuji showed their FineScan 2750 flatbed scanner. This comes with ColourKit scanning software. ColourKit now includes features for scanning color negatives. Remember that scanners are "slide" scanners, not negative scanners. To scan color negatives requires a software module to handle removing the orange cast of color negs. This is available with Fuji and other professional scanners.

Imacon exhibited their complete line of upright scanners. Overall Imacon was the most visible scanner presence at the tradeshow, in part because Imacon sells digital camera backs too.

Aztec presented their drum scanner and new flatbed, the Plateau. The Plateau flatbed scans 14 x 18 inches, which is larger coverage than most flatbeds. Since we do not yet have this scanner, to obtain additional information we recommend you contact them directly,



toll free (800) 472-7455.

Wide Format Printers

Inkjet

A few HP 5500 printers were visible however the HP booth was definitely not oriented to wide format inkjet. In distinction Epson clearly ruled the entire tradeshow. Several Epson dealers exhibited such as Parrot Digigraphic. Although I would guess that Canon printers were somewhere in the nice Canon booth, they were nowhere featured (not even there).

It is as though Epson has so totally taken over the market for photographers that the other companies have either abandoned the market or figured Epson owns it so why spend marketing bucks there.

I did not have time to visit the exhibits; it is possible that other wide format printer companies had a presence in exhibit prints. Otherwise, the Epson exhibit in their own booth was the best of any tradeshow booth (at which the producing technology was identified).

Too bad that the other inkjet printer companies lacked presence, since Canon makes an outstanding desktop printer, their model 2200; same model numeration as Epson but of course Canon uses their bubble-jet thermal printhead technology.

Ironic also that the grandfather of wide format printers for photographs, the Iris, was nowhere on the floor, not even in its resurrected form as the Ixia.

Roland DGA was in the exhibit list but I did not see their booth, which suggests it was so small that I simply did not notice it.

Digital imagers (meaning no inkjet ink)

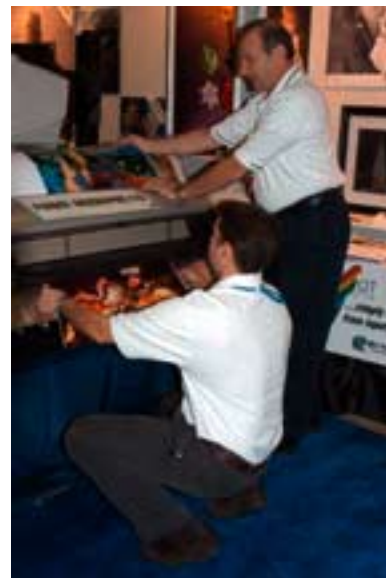
ZBE exhibited their Chromira photo printer. One photographer who uses a Chromira system for fine art prints also exhibited. Of course artists would not want continuous tone appearance of photo paper, but photographers do. However it is my distinct feeling that if you interviewed a dozen professional photographers, or more relevant perhaps, if you interviewed 100 big corporations who sought top level digital photo prints for exhibits, that virtually all would select either LightJet or Lambda, and few if any would specifically ask for ZBE Chromira.

While LightJet and Lambda set the high end standard for wide format, Fuji Pictographic and Fuji Frontier set the standard for normal size photo prints from non-inkjet technology. You can perhaps think of a Fuji Pictographic as a letter-size and tabloid size version of a LightJet or Lambda. Would be an interesting test comparison comparing output from a Pictographic to identical size but from LightJet and Lambda.

Wide Format Inkjet Media

Bogen distributes Legion inkjet paper, the kind that artists usually prefer.

Hahnemuhle displayed their wide range of watercolor paper for inkjet printers. Hahnemuhle is a



respected paper mill in Germany which offers watercolor paper for digital fine art worldwide.

Color Management

Anyone, indeed everyone, who uses an inkjet printer will need color management tools and software sooner or later.

Pictographic makes fine software but did not exhibit at PhotoPlus nor did we notice them at Photokina.

Monaco DCcolor works with the Macbeth ColorChecker, GretagMacbeth ColorChecker DC, and HutchColor reflective target. Just remember, you need an ICC profile for every change of lighting. The Monaco DCcolor walks you through the steps.

Monaco OPTIX provides calibration both for LCD and CRT displays. Calibrating your monitor is the first step in color management. You need to calibrate your monitor, your camera, scanner, and then your printer.

Monaco provides three levels of color management

- Desktop level: inkjet, laser printers, Monaco EZ Color
- Intermediate (Monaco PROOF): large format and proofing
- Professional level, Monaco PROFILER: large format, including Hexachrome.

Naturally you will need a spectrophotometer or colorimeter (color measurement tool) to coordinate with the software.

On another aspect of color management totally, Tribeca Imaging Laboratories offers a novel algorithm to transform the RGB color model to what TIL suggests is more accurate for skin tones and product colors such as logos. It's at least worth asking about: contact@tribecalabs.com. Since this product is new no reviews are available. If you can achieve CocaCola or fire-engine red in an inkjet print then their system deserves acceptance.



Laser Printers

Xerox was the only company which exhibited laser printers, at least the only ones I noticed.

They showed their Phaser series, inherited from Tektronix. Phasers use solid ink (hot melt). The samples they gave out looked lovely. Our university has one already but we have not received many rave reviews about it. Need to compare it with the Minolta-QMS model we have.

FLAAR Awards for Quality and Innovation

The neatest tripod accessory we saw is the Action Head from Ries tripod. If you photograph birds or other wildlife with a 35mm camera and giant telephoto lens with a rotating tripod mount, then you definitely ought to check out this impressive gizmo: the Ries DPNP Action Head 2000. tel (206) 842-9558.

The most impressive tripod head ever designed is offered by Arca-Swiss.

Neatest gizmos at the tradeshow were offered by Novaflex. This German company has designed some of the most innovative studio products you can imagine.

The highest quality digital panoramic camera system is from BetterLight. Their professional software allows the user to get flawless white point, dark point, and excellent color balance.

Best price breakthrough on a color management tool is the EyeOne by Gretag Macbeth.

Sources and Resources

At some point you will want to speak with someone in person about your needs, whether scanner, camera, scan back, lighting, wide format printer, or digital imaging accessories.



A general resource on digital photography, traditional photography, lighting, and related subjects is Calumet Photographic. Contact Scott Price, toll free (800) 231-1585, x 3209, e-mail scott.price@calumetphoto.com. All Bogen and Manfrotto camera equipment is available from Calumet.

If you seek an Epson printer, models 2200, 7600, 9600, or 10600, we recommend Parrot Digigraphic since they have the expertise in color management, ICC color profiles, RIP software, and fine art giclée printing. Contact Dan Hunt, dhunt@parrotcolor.com, or their president jlorusso@parrotcolor.com.

If you need specific details on professional quality flatbed scanners contact Aztek at tel (800) 472-7455. We know the staff at Aztek from many years of seeing them at leading international tradeshows. However we have never used their scanners ourselves so do not have the personal experience as we do with Heidelberg, Fuji and Creo(Scitex) scanners, all of which are excellent. Of course Heidelberg (and Agfa) scanners are defunct.

www.wide-format-printers.org	www.fineartgicleeprinters.org	CLICK HERE TO VIEW EACH FLAAR NETWORK SITE
www.digital-photography.org	www.flatbed-scanner-review.org	
www.laser-printer-reviews.org	www.cameras-scanners-flaar.org	www.large-format-printers.org
www.FLAAR.org	www.ctpid.ufm.edu.gt	www.wide-format-printers.NET

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