

Full-Service Digital Imaging Facilities at The LTC Group

One of the most dynamic digital imaging facilities today is The LTC Group. With studios and full-service imaging services in major markets across the country, The LTC Group serves a wide variety of clients in the retail, commercial and package imaging markets. Whether working directly with retail clients such as Dillards and Albertsons, with agencies handling accounts for Coca Cola, Wrangler and RJ Reynolds, or on package imaging for Kraft and Tyson, the company's hallmark is high quality and maximized workflow efficiency. The LTC Group also serves as a dedicated imaging facility for a number of major companies, locating their studios within close proximity or in the company's facilities themselves.

The evolution of The LTC Group to today's impressive stature began with the company's founding 12 years ago as a state-of-the-art color separator and prepress facility. In 1994, current director of photography Marlon Taylor joined the company and began the process of bringing digital imaging into the mix.

"We see digital photography as a part of our creative suite. It has had a major impact on our capabilities and workflow and is essential to our service offerings. Laser Tech is an extremely rich creative environment. We bring together an extensive knowledge and background in color and prepress with a real expertise in digital photography. We also offer

complete facilities for telecommunications and database management, important facets for today's fast-paced commercial imaging market."

What began as a department of one six years ago has grówn to 150 people directly involved with digital imaging services and support in major markets across the country. The company offers a full suite of services including layout and design, animation, illustration and composites. In short, it handles every step of the way from input to output.

"When we go to a customer we can offer a turnkey operation ranging from conception to layout to photography and output," said Taylor. "All of our departments work closely together to fulfill our clients' needs and go beyond their expectations."

The wide range of work demands a diversity of solutions. "We have developed a solution for every type of work we handle," said Taylor. "We have developed solutions for food, jewelry, fashion, tabletop, location and room setups. We have found systems that exceed our expectations for each venue and approach. We are heavy users of Broncolor lighting, Foba stands, Leaf backs, Sinar cameras, Expolux shutters; and are now using the Sinarback. We are very pleased with the stability and reliability of the Sinarback, which we use in our Salt Lake facility. We are also excited about the prospect of the 2k x 3k version."

The Sinarback offers both single and multi-shot capability, something Taylor sees as good economy for a studio environment. "We recently consulted with a major furniture retailer whose advertising content requires the ability to capture motion as well as high quality stills. Budget requirements dictated a single camera back solution. The Sinarback represents the ideal alternative for these application needs."

Taylor says, "when using the Sinarback, you shoot directly to RAM and have a computer right in the shooting workflow, you get that real sense of immediacy. You can have the art director right there pointing to the screen and making decisions right when you shoot. That kind of immediate feedback is great for the creative flow and when solutions like the Sinarback really work."

Taylor photographed this year's cover shot using a Sinarback on a Hasselblad medium format camera with 40mm lens. He used the back in the one-shot mode to capture 12 images to RAM in each shooting session. The images were then checked, selected and processed on a G3, while the next shooting session took place. Once the final images were selected they were exported to Adobe Photoshop, where various filters and color controls were

> applied. "We really used the single shot feature to its best advantage," said Taylor, "and the resultant image was a total digital effort using both the Sinarback and Sinar's CaptureShop software along with Adobe Photoshop in the Mac G3.

Actually, during the shooting of the cover Taylor undertook three setups to showcase the Sinarback's one-shot

capability. "We worked with a rock climber with a mural of the sky to show off color control, a child on a trampoline to show action photography and of course our beauty shot to show how the system handles skin tones. At the end of the day the skin tone rendition is the acid test of a digital photography system. That's a primary consideration for everyone.

As the market for digital imaging grows, so does the need for stable, consistent and reliable equipment. "We work with a number of companies to help fulfill our imaging solution needs," said Taylor. Sinar Bron Imaging has always been generous in their support --we have a very good working relationship with them. We will continue to explore new products with them and strive to find those that add to our quality output and workflow efficiencies."

Taylor sees a great future for The LTC Group. "We are growing and expanding our facilities across the nation. We're going to be entering the North Carolina market soon, as furniture is one of our specialties. We'll also be growing our New York area facility to an over 20,000 sq. ft facility."

"There are many challenges and opportunities ahead. It's our job to create solutions for our clients that bring together our expertise in color and digital imaging. Our aim is to exceed their expectations. Traditionally, our expertise has been imaging for ink on paper, but Internet imaging is growing very fast. There's an incredible opportunity there, one that we're very well positioned to handle. With our full system approach, excellent staff and the use of the best tools for digital imaging, we're poised to continue our growth."

What began as a department of one six years ago has grown to 150 people directly involved with digital imaging services and support in major markets across the country. Welcome to the 2000 Sinar Bron Imaging Catalog. Beyond the beginning of a new millennium, this is a special year for Sinar Bron. 2000 marks the 20th Anniversary of Sinar Bron.

For the past 20 years we have had the opportunity to serve the photographic community with some of the world's finest products from Sinar, Bron and Foba. Throughout that period we have seen innovation from each of the above companies that has provided a standard of quality and capability that is unsurpassed in the market place.

In addition, 2000 marks our fifth year as US distributor of the Leaf line of digital camera backs from Scitex. From the original DCB through the Volare and the new Cantare, we have seen improvements in digital imaging and processing that are nothing short of phenomenal.

This year the tradition of innovation continues. New products for 2000 include: the **Sinarback 23 Digital Camera System** which enables the photographer to capture both motion and high quality stills with the same back, the Broncolor Balloon Lamp which provides even 360° illumination, the Foba DSS-OMEGA Camera Stand which incorporates stability and precision at an affordable price, and the award-winning Scitex Leaf Cantare Digital Camera Back with its Live Video Adapter for producing superb images of people and subjects in motion.

As always Sinar Bron prides itself on service to our customers whether that means product information or repairs to equipment. Our staff is highly trained and ready to meet your needs.

I hope you enjoy this year's catalog. We'll also be running special 20th Anniversary promotions during the year so make sure you're on your dealers mailing lists. We'll be exhibiting at Photo Plus East and West, Seybold East and West, Graph Expo and regional shows throughout the year, so stop by and see us.

We look forward to serving your needs in 2000!

Jim Bellina

"2000 marks the 20th Anniversary of Sinar Bron Imaging."

New e-mail addresses

General information: in Technical help: tec Repairs: service Literature requests:

info@sinarbron.com tech@sinarbron.com service@sinarbron.com

literature@sinarbron.com

You can also e-mail your local Sinar Bron representatives. Addresses can be found on page 119.

Suggestion Box

Have a question or a comment about our products or support services? We'd like to hear about it. You can e-mail us as described above, or write:

> SINAR BRON IMAGING 17 Progress St. Edison, NJ 08820

Or call toll free (800) 456-0203

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http://www.sinarbron.com

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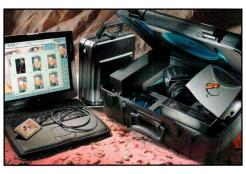
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Books	

Prices and specifications are subject to change without notice.

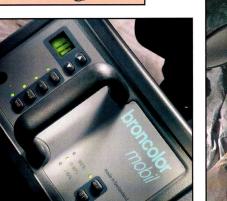
New for 2000

Sinarback 23





Leaf On Location Kit





Mobil Pack

DSS-OMEGA



Digital Photography

Scher

SIDER

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Leafvolore

The universal digital back from Sinar



3/17-2

Sinar begins its second half-century with the introduction of the Sinarback, a series of universal digital backs for virtually any type of application. **New this year are the 2000x3000 pixel Sinarback 23 and Sinarback 23 Light.**

In today's competitive market, it can be tough for photographers to specialize. You might be shooting everything from stereos to soup to supermodels on any given day. The Sinarback is designed to keep up with these demands. Its one-shot/four-shot technology can capture any subject, moving or still, with the best possible quality. The back itself is designed to behave much like film, and the included software gives photographers a very intuitive workflow from setting up a shot all the way through to capture and export. Key features of the Sinarback include:

Two Backs in One

- **One-Shot Action mode** to capture moving subjects in a single pass, much like film
- **4-shot Still Life mode** captures still subjects with higher quality
- **2048x3072 pixel** color CCD (24x36mm) on the new Sinarback 23
- 2048x2048 pixel color CCD (24x24mm) on the Sinarback 22
- **Microstepping CCD** moves between each 4shot exposure, capturing full color information for each pixel — no interpolation and no filter wheel needed
- Unique 2-axis piezoelectric stepping motors move the CCD just one pixel vertically and one pixel horizontally. Some other backs move the CCD four pixels on one axis, making registration problems more likely
 - Thermoelectrically cooled CCD suppresses image noise for clean shadow information
 - **14 bit** raw image capture gives 4 times the tonal information of 12 bit backs
 - Hardware anti-blooming circuitry keeps specular highlights under control
 - New Macroscan system moves the back across the image plane to seamlessly tile 4 full captures together, delivering files of 48 mb (Sinarback 22) or 72 mb (Sinarback 23)
 - Exclusive hardware and software Moire suppression technology

Now Four Sinarback Models

- The original, 2x2k Sinarback 22
- New Sinarback 22 Light is a one-shot only version of the Sinarback 22. The 22 Light can easily be upgraded to full one-shot/4-shot capability
- New Sinarback 23 features a 2x3k CCD, generating 18 megabyte RGB files. Special interface plates give you full rotation from vertical to horizontal on the Sinarcam 2 and the Sinar p2, and the option to mount in either orientation on most medium-format camera bodies.
- **Sinarback 23 Light** one-shot only model also available, and fully upgradable to Sinarback 23 1-shot/4-shot.

Live Video Mode

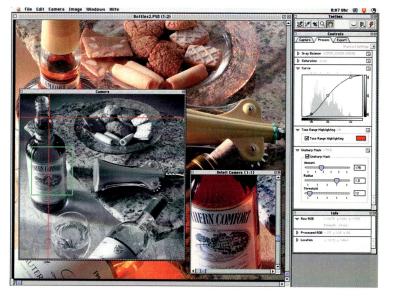
- Live video preview for composition and focusing, in color or black and white
- Frame rate of **up to 7 fps** in live mode
- Both full-frame and 1:1 detail live video windows available for critical focusing
- Live window includes customizable grid lines, and swing and tilt axes for Sinar p2.

Intuitive Software

- Proprietary ColorCatcher Engine, a central element of the Sinar Capture Shop Software is specifically designed to optimally produce faithful renditions of color and skintones.
- Toning curve for full control over contrast range and brightness
- Each tone curve point can be moved independently on a single axis with new sliders
- Fiber-optic link to the Sinarback transfers images to the Mac at blazingly fast speeds
- Capture up to one shot per second
- Shoot directly into contact sheet for maximum working speed
- Built-in ICC profiling capability captures color values from a Macbeth Color Checker
- Powerful "Batch Apply" converts entire folders of images automatically, based on your exact specifications
- Intuitive Sinar CaptureShop[™] software provides a familiar, Photoshop[™]-like interface
- Software is designed to guide you through the workflow from beginning to end
- Arrangement of windows and controls is fully customizable, and different workspace configurations can be saved for later use
- Save often-used settings for every control, or any group of controls that you choose
- Any control can become a floating window
- Built-in unsharp masking function
- Exclusive anti-moire function combines hardware and software solutions
- **Dual-mode Merge feature** lets you combine multiple images in a variety of ways.

Wide Compatibility

- Compatible with every Sinar view camera, as well as models from Hasselblad, Mamiya, Fuji and Rollei*
- New FlashSync Interface kit lets you trigger the Sinarback from your camera's sync circuit, making the back compatible with many non-motorized medium-format cameras as well as conventional large-format shutters.
- In view camera configurations, combine with the new Sinarcam 2 body/shutter for highest quality live video image
- Sinarcam 2 offers computer control of aperture and shutter speed
- Mount an existing 35mm or medium format lens to the Sinarback/Sinarcam 2 combination for fixed-body operation. Compatible with over 200 different lenses



Technical Specifications

CCD

2048x2048 pixels, 24x24mm (SB 22) 2048x3072 pixels, 24x36mm (SB 23) Thermoelectrically cooled Hardware anti-blooming

Exposure

4 shot color, 1 shot black and white Up to 32 second exposures Live video focusing at up to 7 fps ISO 100 equivalent

Dynamic Range

Greater than 12 f/stops 14 bits per pixel per color (16,384 levels)

Live Video Preview

Full frame and Full resolution modes Brightness control Grid lines for image alignment Tilt and swing focus axes (Sinar only)

Lighting

Compatible with all lighting, including Strobe, Tungsten, HMI, Daylight Dimensions: 4.5x3.5x2.8", 1.5 lb.

Body Adapters:

Hasselblad, Mamiya RZ 67, Mamiya 645, Fuji GX 680, Rolleiflex 6008, Contax 645, all 4x5 Sinar cameras, Sinarcam 2

Computer Requirements:

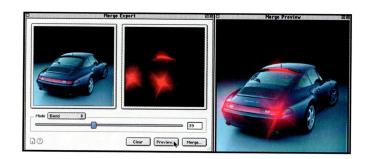
Apple Power Mac G3 or higher System 8.5 or higher Unoccupied PCI slot 128 MB RAM Monitor and video card for minimum 1024x768 resolution at 24 bits per pixel

File Size:

25 mb (42 bit), 12 mb (24 bit) 4 mb (8 bit b&w)

Power Supply:

110-220 vAC, 50-60 hz, autoswitching



Sinarback 22

Includes: back, cables, PCI card and software. **Requires**: MF power supply and interface kit for medium format configurations, or RS-232 power supply, interface kit, Sinarcam 2 and accessories for view camera configurations. All accessories are listed on page 7; complete configuration information can be found on page 8. *97-6002.....\$26,868.00*

Sinarback 22 Light

97-6300.....\$20,790.00

Sinarback 23

Includes: back, cables, PCI card and software. **Requires**: MF power supply and interface kit for medium format configurations, or RS-232 power supply, interface kit, Sinarcam 2 and accessories for view camera configurations. All accessories are listed on page 7; complete configuration information can be found on page 8. *97-6200.....\$30,000.00*

Sinarback 23 Light

97-6250.....\$23,700.00



Leaf sinar



Sinarcam 2 digital body

Functions as an electronic shutter in Sinarback view camera configurations. Contains blade shutter for exposure, as well as LCD shutter for high quality live video. In standalone mode, the Sinarcam 2 serves as a camera body with the addition of a lens and lensboard (pg. 19)

Tripod Adapter 2 for Sinarcam 2

96-6011	\$397.00
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Carrier Frame Wide

Use in place of normal 4x5 Carrier Frame for Sinarback/p2 configuration. Wide frame positions the CCD plane properly for 2-point focus calculations. *96-6018*.....*\$863.00*

Sinar p2 Digital

p2 without 4x5 parts for use with digital adapters.
96-1110\$5,298.00

Sinarback Interface Kits

Sinarback Accessories

Sinar Interface Kit for Sinarback 22

To connect the Sinarback to any Sinar 4x5 view camera, or to the Sinarcam 2 in the standalone configuration (non-rotating). 96-6010.....\$332.00

Sinar Rotating Interface Kit for Sinarback 23

As above, but with rotation to quickly change the orientation of the Sinarback 23. 97-6201.....\$687.00

Hasselblad Interface Kit for Sinarback
Now updated for use with the Sinarback 22
and 23.
97-6030\$490.00

Mamiya RZ Interface Kit for Sinarback	
97-6040\$490.0	0

Fuji GX-680 Interface	Kit f	for	Sinarback	
97-6050			\$490.0	0

Rollei 6008 Interface Kit for Sinarback 97-6060.....\$490.00

FlashSync Interface Kit for Sinarback*

Fires the Sinarback from the sync circuit of your camera, making it compatible with non-motorized medium format cameras, Copal shutters and the Sinar Auto-Aperture shutter. 97-6070.....\$545.00

Sinarback Power Supply, RS-232

For use with the Sinarback and Sinarcam 2 combination. Requires a USB/Serial Adapter for use with G4 and newer G3 Macs. *96-6200*.....*\$1,274.00*

Sinarback Power Supply, 12V/MF

For use with the Sinarback in medium format
configurations.
97-6205\$205.00

Hasselblad Gen. II Interface Kit for Sinarback 23

97-6202	\$947.00

Hasselblad CW Kit for Sinarback 23* 97-6203.....\$687.00

Hasselblad EL Kit for Sinarback 23 97-6204.....\$687.00

Mamiya 645 Interface Kit for Sinarback 23* 97-6045.....\$490.00

Sinarback Release Cable

97-6193	\$325.00
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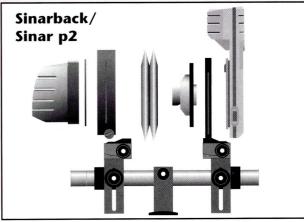
Recommended Sinarback Configurations

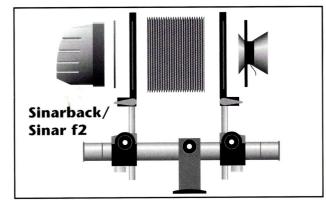
Sinarback / Sinar p2

97-6002	Sinarback
96-1110	Sinar p2 digital
96-6001	Sinarcam 2
96-6010	Sinar adapter kit for Sinarback
or	
97-6201	Sinar rotating adapter kit for Sinarback 23
96-6200	Sinarback power supply RS-232
96-6018	Wide carrier frame
23-3007	Wide angle bellows
25-31xx	Sinaron Digital Lens (pg. 22)

Optional Accessories

- 23-2223 Lens Shade Kit
- 23-6010 Pan/Tilt Head
- 23-12xx Extension Rail





Sinarback / Sinar f2

- 97-6002 Sinarback
- 21-1007 Sinar f2 4x5
- 96-6010 Sinar adapter kit for Sinarback
- 96-6200 Sinarback power supply RS-232
- 24-7xxx Sinaron Copal-mount lenses
- 97-6070 FlashSync Interface kit

Optional Accessories

23-2223	Lens Shade Kit
23-6010	Pan/Tilt Head
23-12xx	Extension Rail
22-2001	Sinar Auto Aperture Shutter
96-6016	On-camera LCD monitor 10.4"

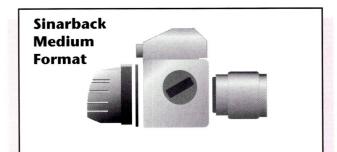
Sinarback / Sinarcam 2 Standalone

- 97-6002 Sinarback
 96-6001 Sinarcam 2
 96-6010 Sinar adapter kit for Sinarback 22 or
 97-6201 Sinar rotating adapter kit for Sinarback 23
 96-6200 Sinarback power supply RS-232
- 23-2017 4x5 rear carrier frame
- 96-6011 Tripod Adapter 2
- 96-5xxx Lensboard : Sinar/Olympus, Nikon, Leica-R, Hasselblad Shift, Mamiya 645 Shift
- Various: Lenses: Sinaron Digital (pg. 22), Nikon, Leica R, Olympus, Hasselblad, Mamiya 645

Optional Accessories

- 23-2222 Lens Shade Kit (basic)
- 23-6010 Pan/Tilt Head
- 96-6017 On-camera LCD monitor 6.4"





Sinarback for medium format

- 97-6002 Sinarback
- 97-6205 Sinarback power supply 12V/MF
- 97-60xx Hasselblad, Mamiya, Fuji, Rollei, Contax or Bronica adapter kit for Sinarback Note: Requires compatible medium format camera system

The Best of Both Worlds

The Sinarback is the first digital back we've offered which can capture both moving and still subjects in high-quality color. How? With a 2-axis piezoelectric stepping color CCD, of course. Try saying that fast five times.

But really, the idea behind it is very simple. Combination backs like this one start out as one-shot backs. They use what's called a color CCD, one which has a pattern of red, green and blue filters over individual pixels on the chip. When light falls on the CCD, each pixel will record light through its red, green or blue filter. The capture software then performs color interpolation — it looks at each pixel, plus color information from the surrounding, differently colored pixels, and determines what color each image point should be.

The result is an image which has full color information, even though it was captured in a single shot, just like film. However, single shot captures aren't perfect. Since color is interpolated, very fine details like cloth or small type might not be rendered perfectly. With the state of today's one shot technology, there is still a need for multiple-shot backs that can capture full color information for each pixel, with no interpolation.

Often, the solution to this problem is to buy two separate backs. But the technology built into the Sinarback lets it perform as both a single-shot and as a four-shot back.

In Still Life mode, four images are captured of the same subject. But between each shot, the CCD is moved exactly one pixel. Since adja-

Unprecedented Compatibility

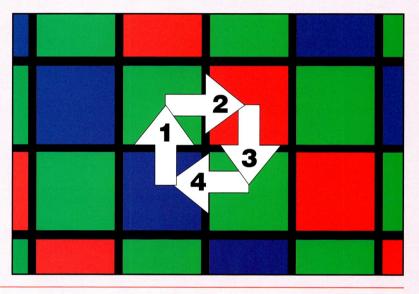
Another distinguishing feature of the Sinarback is the number of cameras and lenses it's compatible with. For "medium format" configurations, you can mount it to cameras from Hasselblad, Mamiya, Fuji and Rollei, as well as the new Sinarcam 2 digital camera body. With the Sinarcam 2, you can use lenses from Hasselblad, Mamiya, Leica, Nikon, Olympus and Sinar.

If your work requires view camera movements, there are more options than ever. The Sinarback is compatible with every 4x5 Sinar view camera ever made, all the way back to the original Norma. There's a broad range of price/performance options to choose from.

You'll get maximum ease of use with the Sinarback and Sinarcam 2 on a Sinar p2 view camera. With this combination, all shutter functions are automated, there's an LCD shutter for higher-quality live video, and you have the tried-and-true Sinar 2-point focusing system to calculate your camera movements. cent pixels are never the same color, every part of the image will be recorded by a different color pixel for each shot. When the four shots (red, blue, and two greens for improved contrast) are combined, you have a full color image with no interpolation needed.

The Sinarback is not the first back to use this approach, but we have improved the technology to give you better image quality. When the CCD moves, it's very important that the pixel positions overlap precisely. Other backs shift the CCD only along one axis, so there are four possible positions the stepping mechanism could be in. This introduces the possibility of calibration errors which could degrade image quality.

In the Sinarback, the CCD is only moved one pixel up, one pixel over, one pixel back down and then back to the starting position. Since there are only two positions each on the vertical and horizontal axes, it's much easier to keep the chip properly positioned. This gives you higher quality images, free from color fringing and other artifacts.







Introducing Captureshop

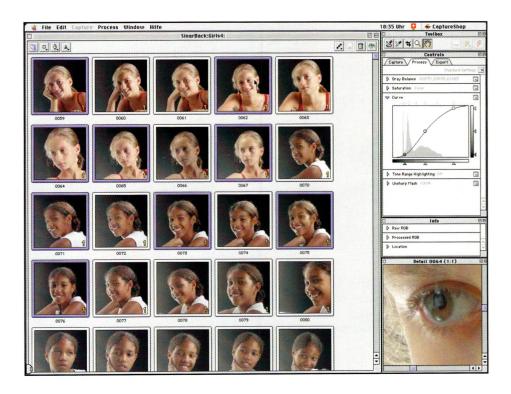
An integral part of the new Sinarback system, CaptureShop was designed with the needs of the digital photographer in mind. If you're familiar with Photoshop[™] or other imaging software, you'll feel right at home with CaptureShop. Major features of CaptureShop include:

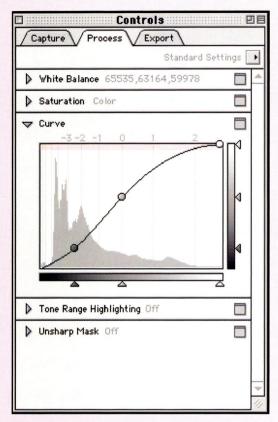
- Designed to guide you step-by-step through the entire workflow, from initial composition to saving the final image
- Interface is familiar to any PhotoShop[™] user
- Most controls are logically divided into three categories Capture, Process and Export
- Individual controls can be turned into floating windows
- You can save and recall multiple custom window arrangements

New in CaptureShop 2.0

- New plug-in architecture lets you add, remove or rearrange controls
- Individual settings can be saved for virtually every control
- Easily combine individual settings into groups

- **Batch apply** individual or grouped settings to many images at once
- New, faster color interpolation for oneshot images
- Software moiré control for one-shot images
- **Improved densitometer** displays readings as you pass the cursor over the image
- New drag-and-drop merge function with even more options
- Comprehensive, context-sensitive online help
- Images can be displayed with ICC monitor compensation
- Revolutionary new ColorCatcher Engine is specifically designed to optimally produce faithful renditions of colors and skin tones.





- Tone range highlighting shows all image areas falling within any brightness range you choose
- Graphical light meter helps judge overall image exposure
- Saturation control lets you export images as black and white, or desaturated color for special effects
- Powerful Batch Apply function applies saved settings to a group of images automatically

 for example, converting a batch of images to black-and-white, with specific tone curve and unsharp mask settings
- Brightness and contrast sliders
- Manual numeric adjustment of gray balance
- View red, green or blue channels individually

Export Controls

- Sophisticated merge function lets you custom-mix two images
- Built-in unsharp masking
- Export 8 or 16-bit files in TIFF or PhotoShop format, as well as Leaf HDR's for conversion in ColorShop.™
- Batch export function

Capture Controls

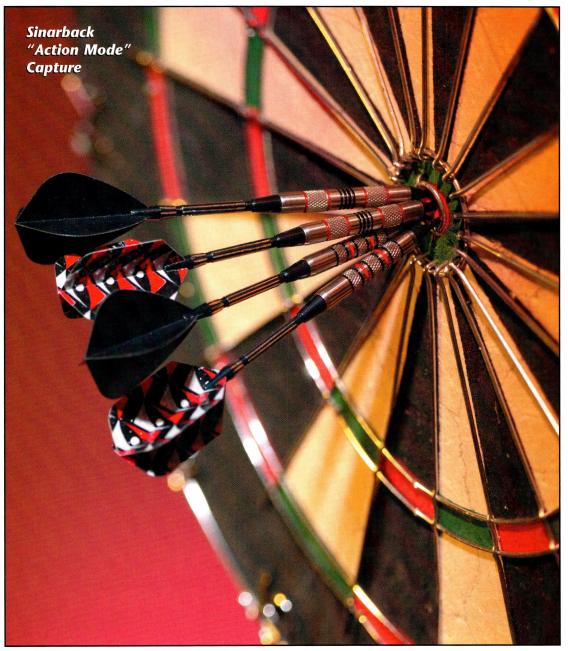
- Precise computer control of shutter speed and aperture (aperture control with DB lenses and Sinarcam 2)
- Focus Assistant combines faster, higher quality 1:1 live video window with a graphical contrast meter for precise focusing even when you're far from the Mac
- ICC profiling function automatically calibrates the camera to a Macbeth Color Checker
- White Shading function compensates for lens falloff
- Fully customizable grid lines on live video and capture windows
- Sinar tilt/swing axes (p2 only)
- Setup controls for camera type, master/slave trigger mode, early/late flash and portrait/ landscape orientation (Sinarback 23 only)

Process Controls

- Toning curve adjusts the brightness and contrast of the image by controlling the conversion from wide dynamic range 14-bit data to standard 8-bit.
- Individual vertical and horizontal adjustments for each point on the tone curve
- Digital densitometer reads R,G,B values in both 8-bit and 14-bit

CALL FOR A HANDS-ON DEMONSTRATION (800) 456-0203

Sinarback Image



The Advantages of Digital Photography

No matter which of our digital backs you choose, your business will reap the benefits of a digital photography workflow. Some of digital's advantages include:

- **Instant feedback**: When you capture an image digitally, you see the results immediately. If you like the shot, save it. If you have more changes to make, you can view the corrections instantly. For even faster feedback, use the Live Video window to adjust lighting and composition in real time. With live video, you can see what you're doing from anywhere in the studio, not just behind the camera. With Leaf digital backs, you can even compose the image right to a page layout or art director's sketch.
- Better image quality than film: Digital capture has what we call a linear color response it records the

amount of red, green and blue light reflected from a subject, without the color biases of film or the variability of lab processing. Images are also grain-free and have a much wider dynamic range than film.

- Zero consumables costs: When you switch to digital, you immediately eliminate the cost of film, processing, test prints and scanning. These are costs that can add up every time you click the shutter in chemical photography. With digital, the more you shoot the more your costs go down.
- **Faster throughput:** Digital images can be ready for press just a few minutes after capture, letting you put more work through your studio and letting your clients complete jobs in less time.

Sinar Gallery





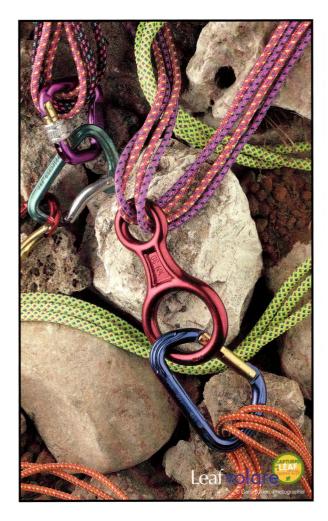
© Red Kite Studios

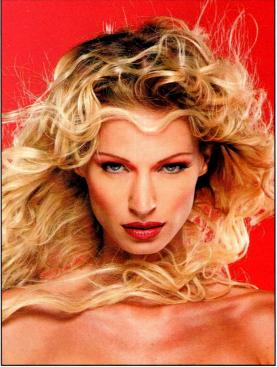
© Red Kite Studios



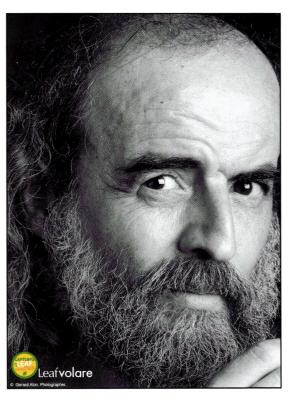
© Red Kite Studios

Leaf Gallery



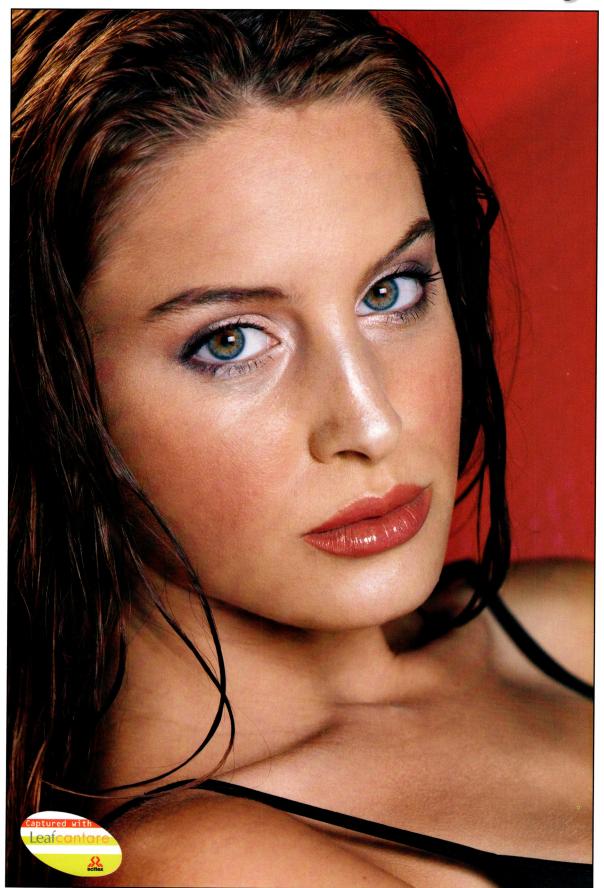


© Marco Glaviano





Leaf Cantare[™] Image



Leaf Cantare[™]

a new industry standard

Defining The new Scitex Leaf Cantare[™] has set the standard for what is possible in one-shot digital capture. Skin tones are natural, detail is sharp, and the files are extremely clean, smooth and noise-free. The Leaf Cantare is similar in design to the three-shot Leaf Volare, and shares its VHtwist rotating CCD, 18 megabyte file size and live video capability.

Advanced features of the Leaf Cantare include:

Maximum Image and Color Quality

- Advanced Scitex color reconstruction technology delivers great color and smooth, noise-free images
- Skin tones are natural and even, free of blotches and unusual color casts
- **ICC profiles** let you further customize color reproduction
- Amazing new MagicAL[™] anti-aliasing brush lets you remove artifacts or color moire with the stroke of a mouse

Leafcontore

Fast, Easy Workflow

- Rapid Shoot directly into the computer's memory once every 1.2 seconds.
- Contact sheet displays your images as you shoot, and lets you edit, process and display from one central location
- Batch processor converts raw images to TIFF files or to 14-bit HDR's.
- Auto-save and Hot Folder capabilities help automate your workflow.
- New on-the-fly processing lets you view image detail in full guality from within the capture application.

Leaf VHtwist[™] CCD

- 2048x3072 pixel color CCD
- **18 MB file** 50% larger than older backs
- Rectangular format means you won't have to crop away image information; amounts to 100% more usable CCD area than a square CCD for most applications
- Leaf VHtwist[™] CCD rotates from vertical to horizontal on the fly. There's no need to rotate the camera or the back, nothing to unplug or disconnect. Just twist the lever and the CCD rotates into position.

Leaf LiveFocus[™]

Live Video composition and focusing. (Requires Sinarcam 3 or optional LCD filter attachment)

• Full-frame, 4 frame per second live window acts as a large viewfinder to help you compose and light your shot.

- Zoom in to a full-resolution live image, letting you focus pixel-forpixel on any detail. It's like having a window into a 3-foot viewfinder.
 - Greatly improved contrast meter acts as a numerical focusing aid.

Even Better Image Quality

• Actively cooled CCD greatly reduces image noise, producing the cleanest files possible.

•14 bit per color (42 bit RGB) capture has over 16,000 levels of brightness. That's 4 times what's available in 12 bit backs, and gives the ability to describe much more subtle detail in the shadows.





- New Philips CCD features greatly improved hardware anti-blooming functions. New circuitry virtually eliminates blooming so you can use any type of light, even on highly reflective surfaces.
- Shutter speeds as long as 32 seconds are possible with remarkably low noise. Burn-in continuous light sources like candles on product shots just as you would with film.
- Widest possible dynamic range — over 12 f/stops of information.
- The toning curve control in LeafCapture software gives you complete control over brightness and contrast range.
- Optional ColorShop/HDR[™] software provides complete separation and prepress functions on the fly.
- Can be used with all types of lighting — strobe, tungsten, HMI, daylight fluorescent, or daylight, as well as mixed light.
- Compatible with the same cameras as previous Leaf backs, including models from Hasselblad, Mamiya, Fuji and Sinar.

Full Sinarcam Integration

- **Sinarcam 3** offers compatibility with hundreds of 35mm and medium format lenses. It also mounts the Leaf Cantare to a Sinar p2 view camera for full swings and tilts.
- Sinarcam is powered and controlled by the Leaf hardware, so there is only one piece of software and one cable running from the computer to the camera.

• Sinarcam 3 automates opening and closing of aperture for viewing and shooting, eliminating manual steps.

New Leaf On-Location Kit

• Now take your Leaf Cantare/Volare and shoot outdoors without sacrificing speed or quality.

Other Specifications

2048x3072 pixels, 24x36mm Actively cooled Hardware anti-blooming Leaf VHtwist™ CCD rotation

Exposure

Single shot Up to 32 second exposures Live video focusing at 4 fps ISO 100 equivalent

Dynamic Range

Greater than 12 f/stops 14 bits per pixel per color (16,384 grey levels)

Live Video Preview

Full frame and full resolution modes Contrast meter Leaf Digital Layout[™] Auto & manual brightness control Grid lines for image alignment Tilt and swing axes (Sinar only)

Lighting

Compatible with all lighting, including Strobe, Tungsten, HMI, Daylight

Camera Body Adapters:

Hasselblad 553 ELX, 500 EL (and non-motorized bodies with adapter kit) Mamiya RZ 67, Fuji GX 680 Sinarcam, Sinarcam/p2

File Size:

37 megabytes (42 bit HDR, color)18 megabytes (24 bit, color)6 megabytes (8 bit b&w)

Computer Requirements:

Power Macintosh G3 or higher System 8.5 or higher ColorSync 2.6 or higher Unoccupied PCI slot 128 MB RAM (256 recommended) Monitor and video card for minimum 1024x768 resolution at 24 bits per pixel

Leaf Cantare

Includes back, power supply, PCI card, cabling and software. **Requires** personality kit. See page 20 for recommended configurations. *95-6000\$23,000.00*

Live Video Adapter

95-6190\$999.00

Hasselblad Personality Kit

95-0111\$900.00

Mamiya Personality Kit

95-0222\$900.00

Fuji Personality Kit

95-0333\$900.00

Leaf Cantare/Volare Sinarcam Personality Kit 96-5090\$2,552.00

Leaf Volare[™]

state of the art





The new The next-generation Leaf digital back has finally arrived. The Scitex Leaf Volare[™] is the world's most advanced camera for still image studio photography. It captures even higher quality images, more quickly and easily than ever before. Advanced features of the Leaf Volare include:

New Leaf VHtwist[™] CCD

- 2048x3072 pixel CCD.
- 18 MB file 50% larger than older backs.
- Rectangular format means you won't have to crop away image information; amounts to 100% more usable CCD area than a square CCD for most applications.
- 3-shot color images through RGB filters; 1-shot black and white. RGB filters provide best possible color quality from a digital back, exposing each pixel to full color information.
- Leaf VHtwist CCD rotates from vertical to horizontal on the fly. There's no need to rotate the camera or the back, nothing to unplug or dis-
- connect. Just twist the lever and the CCD rotates into position.

New Leaf LiveFocus[™]

- Live Video composition and focusing.
- Full-frame, 4 frame per second live window acts as a large viewfinder to help you compose and light your shot.
- Zoom in to a **full-resolution live image**, letting you focus pixel-for-pixel on any detail. It's like having a window into a 3-foot viewfinder.
- Greatly improved contrast meter acts as a numerical focusing aid.
- Both the live window and the contrast meter are larger than before, and easily visible even when you're far away from the monitor.

Even Better Image Quality

- Actively cooled CCD greatly reduces image noise, producing the cleanest files possible.
- 14 bit per color (42 bit RGB) capture has over 16,000 levels of brightness. That's 4 times what's available in 12 bit backs, and gives the ability to describe much more subtle detail in the shadows.
 - New Phillips CCD features greatly improved hardware anti-blooming functions. New circuitry virtually

eliminates blooming so you can use any type of light, even on highly reflective surfaces.

Shutter speeds as long as 32 seconds

are possible with remarkably low noise. Burn-in continuous light sources like LED's on product shots just as you would with film.

Widest possible dynamic

range — over 12 f/stops of information.

• The toning curve control in LeafCapture software gives you complete control over brightness and contrast range.

Optional

ColorShop/HDR™ software provides complete separation and prepress functions on the fly.

• Can be used with all types of lighting — strobe, tungsten, HMI, daylight fluorescent, or daylight, as well as mixed light.

• Compatible with the same cameras as previous Leaf backs, including models from Hasselblad, Mamiya, Fuji and Sinar.

(continued)



Full Sinarcam Integration

- Sinarcam eliminates the need for an external filter wheel, and offers compatibility with hundreds of 35mm and medium format lenses. It also mounts the Leaf Volare to a Sinar p2 view camera for full swings and tilts.
- Sinarcam is powered and controlled by the Leaf hardware, so there is only one piece of software and one cable running from the computer to the camera.
- Sinarcam automates opening and closing of aperture for viewing and shooting,* eliminating manual steps.
- * With auto lensboards or aperture motor.

Other Specifications

2048x3072 pixels, 24x36mm Actively cooled Hardware anti-blooming Leaf VHtwist™ CCD rotation

Exposure

3 shot color, 1 shot black and white Up to 32 second exposures Live video focusing at 4 fps ISO 200 equivalent for b/w ISO 25 equivalent for color

Dynamic Range

Greater than 12 f/stops 14 bits per pixel per color (16,384 grey levels)

Live Video Preview

Full frame and full resolution modes Contrast meter Leaf Digital Layout[™] Auto & manual brightness control Grid lines for image alignment Tilt and swing focus axes (Sinar only)

Lighting

Compatible with all lighting, including Strobe, Tungsten, HMI, Daylight

Camera Body Adapters:

Hasselblad 553 ELX, 500 EL Mamiya RZ 67, Fuji GX 680 Sinarcam, Sinarcam/p2

File Size:

37 megabytes (42 bit Leaf HDR, color)18 megabytes (24 bit, color)6 megabytes (8 bit b&w)

Computer

Requirements:

Apple Power Macintosh 8500 or higher/Pentium II 233 or higher System 8.1/Windows NT 4.0 or higher Unoccupied PCI slot 128 MB RAM Monitor and video card for minimum 1024x768 resolution at 24 bits per pixel **Dimensions:** 8x5x4 in., 2.8 lb.

Power Supply:

110-220 vAC, 50-60 hz, autoswitching

Agency / Safety Approvals: FCC class A, DOC class A, CE,

UL, CSA, TUV

Leaf Volare

Hasselblad Personality Kit 95-0111\$900.00

Mamiya Personality Kit 95-0222\$900.00

Fuji Personality Kit 95-0333\$900.00

Filter Wheel

Required for above personality kits. 95-3005\$1,600.00

Leaf Volare with Sinarcam

Complete back and body combination, including Sinarcam personality kit. Requires lens, lensboard and tripod adapter (pg. 21), or Sinar p2, digital lens and aperture motor for view camera configuration.

96-1400 \$34,345.00

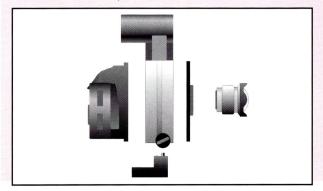
Leaf Configurations

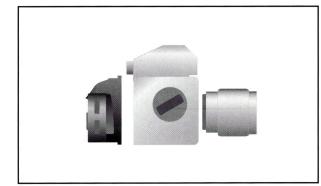
Leaf Volare Standalone Configuration

- 96-1400 Leaf Volare/Sinarcam
- 96-5001 Tripod Adapter
- 96-5xxx Lensboard (Sinar/Olympus, Nikon, Leica R, Hasselblad, Mamiya RB) Lens (Sinaron Digital 35-80mm zoom or any optics compatible with above boards)

Also recommended:

23-6010 Sinar pan-tilt head





Leaf Cantare Medium Format Configuration

- 95-6000 Leaf Cantare
- 95-0111 Hasselblad Personality Kit for Leaf Cantare 95-0222 Mamiya Personality Kit for Leaf Cantare
- 95-0333 Fuji Personality Kit for Leaf Cantare

Optional:

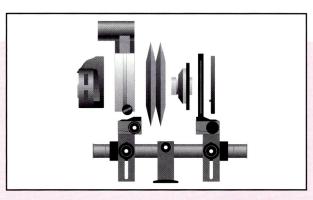
95-6190 Live Video Adapter

Leaf Volare View Camera Configuration

96-1400 Leaf Volare/Sinarcam
96-1110 p2 for Sinarcam (or your existing p2)
23-3007 Wide Angle Bellows
23-1207 6:" Extension rail
25-3xxx Sinaron Digital Lens
96-5020 Aperture Motor

Also recommended:

- 23-6010 Sinar pan-tilt head
- 23-2223 Lens shade package



Leaf Cantare View Camera Configuration

95-6000	Leaf Cantare
96-0008	Sinarcam 3
96-5090	Leaf Cantare/Sinarcam 3 Personality plate
96-1110	p2 for Sinarcam (or your existing p2)
23-3007	Wide Angle Bellows
23-1207	6" Extension rail
25-3xxx	Sinaron Digital Lens
96-5020	Aperture Motor
Also more	mmondod

Also recommended:

23-6010	Sinar pan-tilt head
23-2223	Lens shade package

What are the differences between all the Sinarcam models?

The original Sinarcam is designed for use with the Leaf Volare and Leaf DCB II Live digital backs. It contains a shutter, filter wheel and an LCD live video shutter. In all cases, the Leaf back mounts right to the Sinarcam. The combination can be used on the rear standard of a Sinar p2 view camera, or standalone, with a lens mounted directly.

The Sinarcam 3 is identical, but lacks color filters and is used with the Leaf Cantare.

The Sinarcam 2 is a new item designed for use exclusively with the Sinarback. It contains a shutter and a live video LCD filter. The Sinarback and a lens mount right to the Sinarcam 2 in standalone mode. On a view camera, the Sinarcam 2 mounts like a shutter on the front standard while the Sinarback mounts to the rear.

All lensboards and Sinaron digital lenses listed at right are compatible with both Sinarcams.

eat sinar

Rollfilm Adapters

Increase the flexibility of your Sinarcam by giving it the ability to capture images on film when necessary. Captures a 3x3 cm image on your Hasselblad or Mamiya RB rollfilm magazine.



Hasselblad Rollfilm Adapter

96-5014.....\$524.00

Mamiya RB Rollfilm adapter

96-5010.....\$524.00



Aperture motor for Sinar p2

To move the standalone Sinarcam to a Sinar p2, you have to add two things - a Sinaron digital lens (pg. 22) and this aperture motor,

which lets the Sinarcam control the lens aperture. 96-5020.....\$2,352.00



Tripod Adapter 2 If you purchase the Sinarcam p2 configuration, this adapter (along with a lens and lensboard) will convert it to standalone configuration. *96-6011......\$397.00*

Leaf On-Location Kit (Complete)

- For Leaf Cantare and Leaf Volare digital camera back users
 Connect to a PowerBook G3 and a portable battery and
- leave the studio
- Supports all Leaf tools: Rapid Shot mode, Live Video, immediate image display, Contact Sheet, active cooling of the CCD and more
- Custom hard case provides protection and convenience
- 95-5000\$2,500.00

A complete kit includes:

- Portable battery
- Battery charger
- PC card (plugs into standard PC-card slot)
- Camera power supply (communication cable to PC-card included)
- Dedicated accessory hard case
- Set of cables

Specifications:

- Computer
- Macintosh PowerBook G3 series, min. 300 MHz (not supplied)
- System 8.6
- ColorSync 2.6
- 192 MB RAM (128 MB free for application)

Sinarcam Accessories

Sinarcam 1 and 2 Automatic Lensboards

Gives you automatic opening and closing of lens diaphragm with the Sinarcam standalone. Eliminates the manual opening and closing of the diaphragm for viewing and shooting to further speed your shoot. F-stop is still controlled by the aperture ring on the lens.

Because of differing image planes, there are two series of lensboards - one for the regular Sinarcam Standalone, and one for use with rollfilm adapters or the Sinarcam Sliding Adapter (conventional or digital.)

Cat. #		Use with film	
Туре	for Digital	or sliding adap.*	Price
Nikon	96-5206	96-5306	\$1,103.00
Sinaron/Olympus	96-5204	96-5304	\$1,103.00

Sinarcam 1 and 2 Manual Lensboards

Uses a built-in slider to switch from working aperture to wide open without changing the f/stop setting.

Because of differing image planes, there are two series of lensboards - one for use with the regular Sinarcam Standalone, and one for use with both rollfilm adapters and the Sinarcam Sliding Adapter (conventional or digital.)

	Cat. #	Use with film	
Туре	for Digital	or sliding adap.*	Price
Hasselblad Shift	96-5002	96-5102	\$1,876.00
Mamiya 645 Shift	96-5003		\$1,876.00
Leica	96-5008		\$ 620.00
+0			

*Required when shooting film with the Sinarcam, or when using the Sinarcam sliding adapter.

Sinarcam 1 body only

Sinarcam r body only	
96-0001	\$10,592.00
Sinarcam 3 body only	
96-0008	\$10,067.00
Sinarcam adapter board	
To mount a DCB II Live to a Sinarcam1 body.	
96-5040	\$2.552.00
Sinar p2 for Sinarcam	
Without 4x5 format kit	
96-1110	\$5,298.00

Leaf PC-Card

- PCMCIA-size plugs into standard PC-card slot of PowerBook Battery
- 12V DC, rechargeable, provides over 4 hrs. (1000+ frames) of continuous operation

Battery Charger

- Input: 115/230V AC
- Output: 12V DC
- Charge time: 2.5 hrs.

PC Card and Cable only

95-5001.....\$999.00



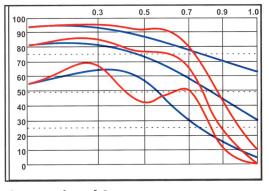
Sinar Digital Solutions



Focal Length	4x5 Equivalent	Aperture Range	Angle of Coverage	lmage cir. @ infinity	
35mm	135mm	4.5-22	85°	67mm	
45mm	170mm	4.5-32	82°	80mm	
55mm	210mm	4.5-32	83°	101mm	
80mm	300mm	4.0-32	58°	92mm	
105mm	400mm	4.0-32	54°	107mm	
120mm	450mm	4.5-22	46°	122-305mm*	44-
135mm	480mm	5.6-45	58°	150mm	
180mm	670mm	4.8-32	50°	168mm	
60mm	240mm		Call for	details	
90mm	360mm		Call for	details	

*Depends on scale of reproduction. Range shown from 1:5 to 2:1.

Prices and specifications are subject to change without notice.



Conventional Lens

MTF (modulation transfer function) curve shows the resolution of 300mm conventional view camera lens at (top to bottom) 5, 10 and 20 line pairs/mm

Sinaron Digital View Camera Lenses

Conventional view camera lenses are not very well suited for use with the new area CCD capture backs. The focal lengths of view camera lenses you already have become too long for studio use. What would be a normal lens on a 4x5 becomes the equivalent of over 500mm when used on a 3x3 cm CCD.

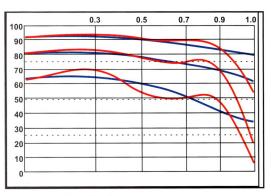
The Sinaron-Digital lenses have been designed for use with area CCD backs on Sinar view cameras. They have shorter focal lengths which are appropriate to the smaller size of the CCD chips relative to 4x5 film.

Digital Lenses also feature increased resolution to get the most out of the high pixel density of area CCDs. The MTF curves at left help illustrate the resolving power of digital lenses compared to their 4x5 equivalents.

The lenses are mounted behind the front standard, which moves the lens and CCD as close together as possible while still maintaining a comfortable separation between the standards. This permits greater swings and tilts than traditional view camera lenses.

Digital lenses are supplied in special DB mounts. They can only be used with the Sinarcam or Expolux shutter system.

Shifts at infinity	Tricolor Cat. #	Price
12mm	25-3166	\$3,800.00
22mm	25-3167	\$3,304.00
33mm	25-3168	\$3,430.00
28mm	25-3163	\$3,800.00
36mm	25-3165	\$3,966.00
44-137mm*	25-3169	\$3,304.00
58mm	25-3164	\$3,966.00
67mm	25-3066	\$8,032.00
	25-3171	\$4,000.00
	25-3170	\$3,195.00



Sinaron Digital Lens

This curve shows the resolution of an 80mm Sinaron Digital lens (equivalent to 300mm in 4x5) at 10, 20 and 40 line pairs/mm. Note that the digital lens performs better at 40 lp/mm than the conventional lens does at 20.

What is Bit Depth, Anyway?

When you're shopping for a digital camera, you'll eventually run into the issue of bit depth. You may hear numbers like 8 bit, 12 bit, 14, 24 and 42 bit. Sound a bit confusing?

Actually, it all boils down to the way that computers describe images. You probably

already know that the smallest piece of an image, a single dot if you will, is called a **pixel.** Each pixel represents one square on the 6 million pixel grid that makes up a Leaf or Sinar digital image. The computer simply sees

each one of those pixels as a number. The higher the number, the brighter the pixel.

This is where bits come in. Computers store everything as a series of 0's and 1's. This is the binary numbering system, and every **BI**nary digi**T** is called a **bit**. If you have just one bit describing a pixel, then it can be either zero (black) or one (white). One bit color, as this is called, doesn't leave room for shades of grey.

If you describe each pixel with a longer string of bits, say 8 for example, you'll have more intermediate shades available. A string of 8 bits gives you 256 possible combinations of 0's and 1's, giving your image a wider range of tones.

But even these 256 levels aren't enough to properly represent the full tonal range of an image. Many digital camera manufacturers use a depth of 12 bits per pixel, which gives them 4096 shades to work with. But as the illustration shows, even this many shades might not be adequate, especially in the shadows.

Leaf and Sinar backs are designed with a thermoelectrically cooled CCD. During normal operation, the chip is cooled to well below ambient temperature. At lower temperatures, the electronic noise in the shadows is reduced, allowing the camera to read data farther down the scale. When there's more good information available, you can achieve a greater bit depth. This is what allows a Leaf back to capture 14 bits of data.

14 might not sound like much more than 12, but don't forget that bits work exponentially. While 12 bits give you 4096 levels, 14 bits give you 16,384 levels - 4 times the tonal information of a 12 bit capture.

Now what does all this have to do with numbers like 24 and 42 bit? Everything we've looked at so far describes shades of grey. A color digital image, much like a color emulsion, consists of three superimposed layers. In digital imaging, each of these layers is called a channel. 8 bits x 3 channels (red, green and blue) is 24 bits. 14 bits x 3 channels is 42 bits.

While our backs capture a full 42 bits of data, today's electronic publishing systems are designed to handle only 24 bits. Despite this

Depth	Example	Combinations
1 bit	0	2
2 bit	10	4
4 bit	0110	16
8 bit	01010011	256
12 bit	01101001110110	4096
14 bit	1011000100101101	16384

limitation, virtually all digital cameras and scanners capture more than 24 bits. Capturing more data and then reducing it down to 24 bit gives much better tonality than just capturing 24 bits to begin with. The

software gives you total control over how your 42 bits of capture data is exported down to 24 bits of usable data. This ensures that you have the detail and tonal range you need in your highlights, midtones and shadows.

8 bit	12 bit	14 bit
256	4096	16384
128	2048	8192
64	1024	4096
32	512	2048
16	256	1024
8	128	512
4	64	256
2	32	128
1	16	64

When you don't have enough bit depth, it's the shadow detail that suffers the most. The photographic grey scale we're all familiar with is a logarithmic scale - move up or down one unit and you double or halve your brightness. The 0 to 256 or 0 to 16000 computer brightness scales are linear - if you want to double your brightness, you have to double your value. The chart above shows a simplified version of how these linear values are distributed along our logarithmic grey scale. As you can see, the 8 and 12 bit depths on the left don't have very many levels available to describe the last few stops of shadow detail. The 14 bit image on the right has enough shades available to give you plenty of subtle tonality in the shadows.

Leaf ColorShop/HDR[®]

for-press Leaf Volare Cantare digital backs

Create ready- Leaf ColorShop is a high-volume, dedicated image processor for the Leaf line of digital camera backs. Operating as part of the images on the LeafCapture software application, it performs its separation, color correction and sharpening fly with your functions on the fly, as you shoot and save your images.

ColorShop applies the technology behind and Leaf the advanced line of Scitex scanners to the Leaf digital backs. As you shoot and export images, ColorShop automatically performs whatever color corrections you set, as well as RGB to CMYK transformation, sharpening and other prepress functions.

> If you're in a complete Scitex workflow, ColorShop can even create low-resolution preview images for use with Scitex Automatic Picture Replacement. So just seconds after you capture an image, you have a press-ready file for import into page-makeup software. Unless there is retouching or manipulation work to do, you don't have to touch the image at all.

> ColorShop's functions are integrated into the LeafCapture software application. Its interactive processing lets you monitor changes in each function's effects individually, providing feedback both visually and numerically.

The entire range of standard prepress controls are included with ColorShop, including:

RGB to CMYK transformation

ColorShop includes a number of separation tables on which you will base your RGB > CMYK transforms. Starting with these tables, you can use the rest of ColorShop's controls to fine-tune separations for your particular press, paper and image characteristics. Once you've got a table you like, you can save it to the ColorShop menu for easy recall.

Color Correction

ColorShop has an extremely powerful set of color correction tools: Global, Local, Gray and Gradation.

Global Color Correction

This tool lets you select a basic primary or secondary hue (red, green, blue, cyan, magenta, yellow, plus skin tones) and adjust the color of everything in the image containing that hue. So if your reds are too blue, or your skin tone isn't right, here's where you'll correct it.

Local Color Correction

If you have a specific color that you have to control, Local Color Correction lets you work on a very narrow range of colors. Local corrections are useful for making sure that a logo reproduces properly, or that specific product colors match known CMYK values.

Gray Balance

If your separation table seems to be introducing color casts into neutral areas, correct them with the Gray Balance control. This lets you clean up casts in neutrals without having much effect on other colors in the image.

Gradation

Sometimes, you'll find that your image reproduces with an overall cast, both in neutral and saturated color areas. This is common with some conventional proofing methods, for example. Gradation adjusts overall color to remove these casts.

CMYK Samples

As you're performing color corrections, you can capture a palette full of sample swatches. This makes it easy to observe the effects of your corrections on specific colors, both visually and numerically. You can even drag a swatch of the "before" color into the image to compare it directly with the corrected version.

UCR/GCR Control

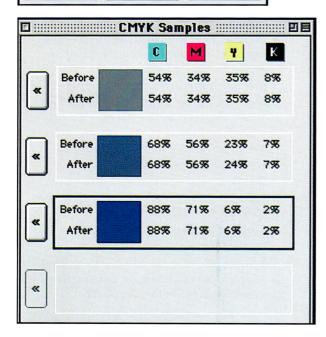
Based on information provided by your printer, this is where you'll set Undercolor Removal (UCR) or Grey Component Replacement (GCR) amounts.

@Default		Rever
ilter:	Red-Green	-
adius:	3 Pixels	-
ffect:	Smooth	-
irain Range:	No Grain	-
irain Reduction:	3	T
idge Adaptation Intensit Light: 4 Dark: 3	y Thresho High	ald

Adaptive Unsharp Masking

ColorShop's Unsharp Masking (USM) controls go far beyond anything you've seen in everyday image editing software. Of course, there are settings to control all the usual options. But we go far beyond that with things like grain reduction, which minimizes noise created in

	Color	E		
@Default		Revert		
Global Local Gray Separation				
	Rev	vert Gray		
Contrast: 20 ☆ Range: 22 ☆				
C				
4				
Black	0 9	57		
Start Cyan: 20) 🖨 Maximum:	57 🔤		
Start Gamma:	43	57 ☆ 42 ☆		
Save	Save As	omments		



Leaf ColorShop/HDR[™]

flat areas to let you sharpen more without side effects. There's also very powerful Edge Adaption control. This lets you directly manipulate the contours, or edges, which USM creates to give the effect of sharpness. The result is extraordinary control over the look of the sharpened image, especially in highly detailed subjects like jewelry.

Image Scaling

In addition to color and sharpening functions, ColorShop performs extremely high-quality interpolation. Leaf captures, normally 12 or 18 megabytes, can be easily scaled to full page, two-page or larger sizes. Even six-foot digital prints are possible with virtually no loss of sharpness or image quality.

Monitor Calibration

Monitors, which are self-illuminating RGB devices, can never exactly duplicate the look of ink on paper, which is reflective and made up of CMYK inks. However, it is possible to get a reasonably accurate monitor image. ColorShop includes a number of screen match tables to match many popular press and paper types, as well as one to match PhotoShop's CMYK display. If the preset tables aren't what you need, use the included MatchBuilder utility to create your own custom screen match.

Settings Menu

Saved color, gradation, sharpness or screen match settings can be instantly recalled from the Settings palette. So once you've built up a library of standard tables, they can be quickly applied to every image.

More Information

If you want to learn more about ColorShop workflow, check out the new tutorial at: www.scitex.com/products/ input/leaf/index.htm

ColorShop ADB version for Power Mac

Includes software, security dongle, and manuals. ColorShop requires a Leaf Volare, DCB, DCB II, DCB II Live or CatchLight, and a Power-PC based Macintosh. 95-0013\$2,200.00

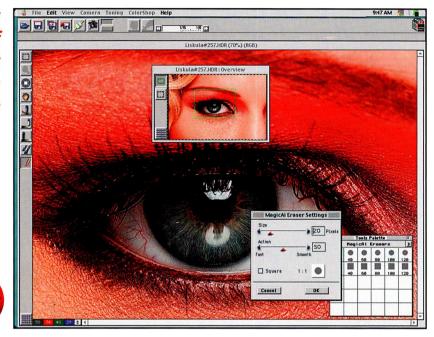
ColorShop Upgrade ADB version 95-0012\$1,150.00

ColorShop USB version for new G3 & G4 Mac's 95-0020\$2,200.00

ColorShop Upgrade USB version 95-0019\$1,150.00

Leaf Software and Hardware

The latest version of the greatest camera software



The Magic Al[™] Eraser – just like a magical tool, removes residual artifacts, maintaining all details for a clean, alias-free image.

LeafCapture 5.0

With the release of LeafCapture 5.1, Scitex continues its tradition of free software upgrades with major features. LeafCapture 5 is compatible with the Leaf Volare, Leaf Cantare and Leaf DCB II Live digital backs. For the DCB I, II and CatchLight, see DCB/CatchLight 3.6 below.

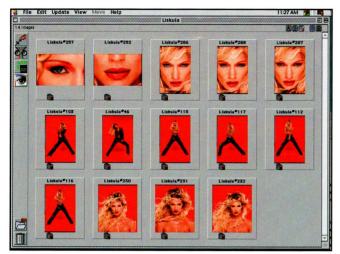
The features in LeafCapture 5 directly reflect the concerns and requests of Leaf users that we've heard over the past few years. Every refinement and addition was designed to give you a faster workflow and even more flexibility in the way you capture images.

Improvements in LeafCapture 5 include:

- ICC support lets you embed profiles in your exported RGB images
- HDR cloning brush lets you perform retouching directly on the HDR files, so you don't have to do the same work twice if you ever return to the HDR file
- MagicAL[™] anti-aliasing brush easily removes any artifacts or color moiré which may occur in Leaf Cantare captures
- New endpoint controls let you adjust your neutral balance in the highlights and shadows, in addition to the midtones
- Export 16-bit TIFF files for use in high-bitcapable applications
- New one-click neutral balance

- Hand tool (with spacebar shortcut) for easy navigation through an image
- New, clearly designed main toolbar
- New detail window toolbar
- 3 sizes for overview window
- New LiveFocus toolbar
- Improved LiveFocus bar (contrast meter) is more accurate, visible from across the room, and can orient vertically or horizontally.
- New keyboard shortcuts for hand tool, spot tool, zoom tool, show/hide palettes and view channels
- Depth of Field preview button in live video window stops down automatic Sinarcam lenses.
- Ability to show individual R,G,B channels
- New ASA control adjusts sensitivity of Leaf Volare and Leaf Cantare backs.
- "Enhance Preview" sharpens images to simulate results of unsharp masking for clients during the shoot
- Improved auto-toning algorithm
- Support for Apple Navigation Services newstyle Open and Close dialogs
- Standard and Precise options for brush cursor appearance
- Support for the new USB ColorShop dongle
- Support for non-motorized camera bodies via new Trigger Mode (requires cables)

Leaf Software and Hardware



Leaf Contact Sheet enables a series of images to be displayed on a digital contact sheet as they are captured. Jobs can be taken at a capture rate of one image every 1.3 seconds.

And that's just the new stuff. LeafCapture 5 and DCB/Catchlight 3.6 also share a wealth of features that make them the best camera software packages around.

- Full Sinarcam integration: Shutter speed, filters and aperture* controlled directly through LeafCapture no separate control panel required
- **32 second maximum exposure** (available on DCB II LV**, Leaf Cantare and Leaf Volare)
- **Toning curve** to manipulate brightness and contrast in 42 bit files
- Ability to save both 42 and 24 bit data
- Variable-size digital densitometer for precise color and brightness measurements
- Side-by-side full-frame and magnified view windows

- Leaf Digital Layout[™] for live backs lets you compose an image directly to a layout or sketch (or any other image) by superimposing it over the live video window, with completely controllable transparency.
- **Contact Sheet** provides easy folder viewing and smooth workflow management.
- Auto Save
- Rapid Shoot
- **Complete control over CCD cooling**, including the new Super Cool mode
- Automatic registration tool to compensate for any camera vibration
- Easy one-click color balance
- Highlight, midtone and shadow eyedroppers for quick tone curve building
- Save and reapply unlimited tone curves with the new tone curve library
- **Tone Range Highlighting** lets you pick a range in the histogram and immediately see it highlighted in your image.
- HDR Merge function gives you unlimited multiple exposures
- New HDR converter to open HDR images without the camera application

LeafCapture 5.1 is included with all Leaf Volare and Leaf Cantare digital backs. DCB II Live users can download an updater at:

http://www.scitex.com/supp/leaf/index.htm

Leaf DCB I, DCB II and CatchLight owners running version 3.0 or later can upgrade to 3.6 at no charge by downloading an updater from the above address. Users of versions 1.x and 2.x can upgrade for a small fee.

DCB/CatchLight 3.6 Upgrade from 1.x or 2.x

95-0011\$225.00

* Aperture control with Sinar aperture motor ** DCB II Live may require a firmware upgrade for 32 sec. exposures

Personality Kits for Leaf Digital Backs

Any Leaf digital back can be adapted to any of the camera bodies for which there is a personality kit. Each back is shipped with the kit of your choice, and you can order additional ones below.

Hasselblad Personality Kits

DCB II/CatchLight 95-0110\$1,100.00 DCB II Live 95-0550\$900.00 Leaf Volare/Cantare 95-0111\$900.00

Mamiya Personality Kits

DCB II/CatchLight 95-0220\$1,100.00 DCB II Live 95-0770\$900.00 Leaf Volare/Cantare 95-0222\$900.00

Fuji Personality Kits DCB II/CatchLight 95-0330\$1,100.00

DCB II Live 95-0660\$900.00 Leaf Volare/Cantare 95-0333\$900.00

Sinar Personality Kits Leaf Volare/Cantare to Sinarcam

96-5090\$2,552.00

DCB II Live to Sinarcam 96-5040\$2,552.00

DCB II/CatchLight

For the Sinar CapCam, p2 and x/d. Requires sliding adapter. For DCB II to Sinarcam, see below. 95-0440\$1,100.00

Sinarcam Sliding Adapter Personality Plate — DCB II Live, DCB II and CatchLight

Special personality plate required to mount any Leaf back to the Sinarcam sliding adapter.

The Leaf Digital Photographer's Field Guide

An Interactive Training Tool

El etc, Inc. is proud to announce the *Leaf Digital Photographer's Field Guide*, an interactive training CD for Leaf[®] digital cameras and Leaf ColorShop[®] software that has taken the guesswork out of digital imaging. With this exciting new tool, you can make the most out of your digital camera investment. El etc improves the quality of the product you produce by teaching you how to efficiently utilize ColorShop and your Leaf digital camera.

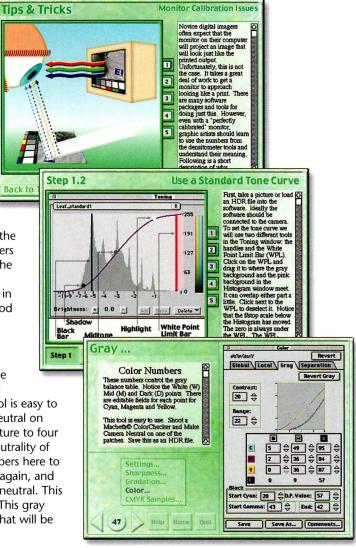
This easy to use, interactive training guide walks you through each step of both the Leaf digital camera and ColorShop color separation process. With our non-linear format, you can jump ahead to any specific area of interest. Don't miss out on the insightful tips on setting a standard Tone Curve, creating custom Look-Up Tables, utilizing the Sharpness Table and much, much more. The training professionals at El etc have spelled it all out for you. Following is an excerpt from the ColorShop section on developing custom Gray Balance tables:

Gray Table Setup

When printing in four color process, it is commonly stated that if the neutrals in an image print neutral, then the colors will print well. The Gray window is very important because it controls how neutrals are handled in the color look-up table. This window lets the user dial in numbers to control the neutral balance at output as well as control the black separation generation. On the CD-ROM we have included a starting color table. Load this table by placing it in the ColorShop Tables folder. This table should be a very good starting point for most applications. Notice the new gray control values with this table.

Color Numbers

These numbers control the gray balance table. Notice the White (W) Mid (M) and Dark (D) points. There are editable fields for each point for Cyan, Magenta and Yellow. This tool is easy to use. Shoot a Macbeth[®] ColorChecker and Make Camera Neutral on one of the patches. Save this as an HDR file. Export this picture to four color and proof it. Look at the proof, only observing the neutrality of the gray scale. If the scale has a cast to it, change the numbers here to correct the problem. Save the table, separate the same file again, and repeat. You will eventually reach a point where the scale is neutral. This must be done before any color corrections are attempted. This gray balance table should be the foundation of any color table that will be used in production.





To purchase the Leaf Digital Photographer's Field Guide, contact your Leaf dealer, or reach us by phone or email. Orders can also be e-mailed to: training@eietc.com. If you have any questions, please visit our website at www.eietc.com or call us at (508) 351-9567.

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Wolf Photography

Located in Kansas City, Wolf Photography represents a collaboration of a number of talents and disciplines. Founder Don Wolf is joined by Dan Ruettimann, Aaron Bales and production manager Pat Malinak in the creation of an exciting range of both film and digital images for clients ranging from Allied Signal, Bayer Corp., Sprint, Hallmark and Farmland Industries. They still do film on location, but increasingly find digital imaging as a staple of their studio work. They work with both a Leaf Cantare[™] and a Leaf Volare[™] back.

"We've recently completed two shoots that really show off what digital equipment can do," said Don Wolf. "The first was of two tap dancers in action, and the Cantare one-shot back allowed us to preview the images right away to make sure we captured the peak of the action. The latitude of the image capture also helped us hold every texture and tone of the image contrast. The other image was for a pet food client and required a dog running across our cyc. The client was right there with us and it allowed us to preview just the right image without waiting for film to be processed and contacts or chromes to be checked."

The Leaf Cantare is ideal for such applications. The Rapid Shoot feature allows for capture every 1.3 seconds, while on the fly processing allows for viewing of image detail in full quality mode right from within the capture application. There's also Leaf's LiveFocus[™] for live video viewing and a contact sheet view available in LeafCapture software. As to tonal range, the Cantare gives the widest possible dynamic range of any back, with tonal curve controls as well brightness and contrast controls within the software.

Wolf Photography got into digital imaging about five years ago when they purchased another brand digital camera from a prepress house. Clients enjoyed the digital advantages and Wolf saw the potential, but problems with employee training and camera system performance limited consistency. Then, about eight months ago the studio bought their Volare back, and soon followed with a Leaf Cantare. Says Pat Malinak, "We immediately saw an improvement in quality. Since then we have found that clients who might have been hesitant to use digital now love the digital option. We keep the backs busy." Wolf makes the logical choice in choosing the one-pass Leaf Cantare for fashion, animal and live action photography and the 3-pass Volare for catalog and furniture work. "We do a fair amount of animal photography here and the Cantare now helps us make our presentations to our clients", commented Don Wolf.

One such client is Kristy Scott of Rhycom Strategic Advertising in Kansas City, who worked with Wolf on the Thompson's dog food campaign. "The digital process is helpful from a workflow and creative decision-making standpoint", said Scott. "We see the image as it is captured. On some sets you can use Polaroids, and that's fine for color and light control. But when you're pho-

tographing live animals-and especially moving dogs-digital makes for a tremendous difference in the way the work is done. For the shot we did with Wolf, a previous art director tried it with film and they had to use five or six rolls of film before they were confident they had the right shot, and even then they had to be hopeful rather than being sure. We also like the fact that we can insure that color will be the same as we see on the monitor and that they'll be no color or quality loss when scanning the film."

Does Scott make a decision about a photographer or studio based solely on their digital capabilities? "It depends on the needs of the shot and how we feel digital is or isn't an essential part of the process. But we certainly feel there are times when it is beneficial to go digital for both quality and workflow reasons."

Dan Ruettimann of Wolf agrees. "We are very quality conscious and use the type of imaging the job requires. Right now, for example, we have about half a dozen fashion accounts, and three or four definitely prefer digital." Digital has also helped the studio offer diverse services. Aaron Bales said, "Two services we have been offering are QuickTime VR imaging and Shockwave animation. The Leaf Cantare allows us to make precisely matched images, and we can use the software for QT-VR positioning. We have done this for small products, models and furniture." (A sample of the furniture imaged by Wolf can be seen on Harter.com.) They have also done online catalog work for both Lee and Sprint.

Quality, speed and options make the Leaf Cantare a vital tool for Wolf Photography. Capable of 14-bit color, with an actively cooled CCD that reduces noise and circuitry that virtually eliminates blooming, the Leaf Cantare can be used for anything from portraits to fashion to animal photography. And, it's a great time saver.

Said Wolf, "I used to have to paint our big cyc wall every week. Now I just photograph against the white cyc and digitally put in the background. Just imagine what that's saved us on time and paint alone!"

To contact Wolf Photography, e-mail: **wolfphot@qni.com**

Lighting for Digital Photography

Controllability

Broncolor's engineers have made a point of designing the latest generation of power packs to work as smoothly as possible with digital photography. Perhaps the most visible result of this is the new PC/Mac control panel for the Grafit power packs. Now, you have access to the controls of every Grafit pack in your studio, right from your capture station. If the shot's overexposed, no need to get up and adjust all your packs manually. Just choose the packs you need to change, and adjust any setting with a click of the mouse.

The software gives you access to every function on the Grafit control panel and in the menus. There are a few new twists as well, like the ability to label each head. Now it's easy to tell your main light from your background light without having to follow cables across the floor. If you have more than one Grafit pack, each one appears as a numbered tab in the software window.

Since you're usually sitting in front of your computer when you realize a shot is under- or overexposed, having lighting control onscreen is a natural and fast way to make the necessary adjustments. Combined with the onscreen aperture control of the Sinarcam, we can put together the fastest-working digital studio possible.

Consistency

One very important issue in digital photography lighting is consistency. Most digital backs capture images in three passes - successive shots through red, green and blue filters. If the amount of light seen by the CCD each time is not identical, you will have uncontrollable color shifts.

In test after test, we've shown Broncolor power packs to be incredibly repeatable, pop after pop. At left is a series of readouts from a Leaf digital densitometer window. You can see that the variation from shot to shot is miniscule - a change of 2 or 3 represents just a 1% printing dot.

Another test we've done is to take readings across the Grafit's power adjustment range. Again, the color shift observed is negligible thanks to the Grafit's consistent color temperature.

Test your own strobes

Want to see how your own strobes do in the consistency test? Here's a simple way to do it, with any strobes and a 3- or 4-pass digital back.

Point your digital back at a color checker, grey chip or other neutral target. Take a color picture, and neutralize the camera to the grey patch. Record the RGB values from a single 9x9 pixel area on the grey patch. Since you just neutralized, they should all be equal.

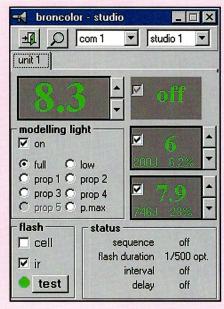
Now take four more pictures. Record the RGB values for the same point in each picture. If your strobes are accurate, you should see variations of only 0-2 points. On average, 2.5 points is equal to a 1% printing dot. If the numbers you're getting tend to vary by a significant amount, then you'll have no way to reliably predict your color balance. At right are the Leaf digital densitometer readings from a blue area of three successive captures. You can see that the variation from pop to pop is virtually nonexistent.

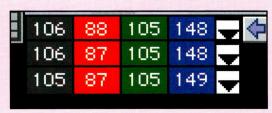
The second set of readings shows what happens when there's a 1/10 stop variation in the pack — note the changes from one shot to the next.

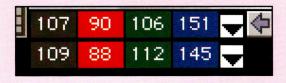
Quality of Light

It's often overlooked in all the discussions about watt-seconds, repeatability and all the other technical issues. But quality of light does as much to set Broncolor apart from the competition as does any quantitative measure.

Even our most basic accessories are designed to give you measurably superior quality. The light falloff from center to edge will be smooth, predictable and even all the way around. Many of our more unique light shapers are built to deliver very specific effects, so no matter what you can visualize in your mind, we have the tools to let you create them in reality.







With more and more digital backs offering live video preview, the quality of your modeling lights becomes even more important. Using live video, you'll find yourself judging your lighting setup using the modeling lights long before you capture an image to examine the final result.

Broncolor is designed for the best possible coincidence of flash and modeling light. Using the built-in proportional modes, you can use your digital back's live video window to set up and adjust your lighting with realtime feedback — no need to wait for a capture. By turning up the brightness of the live video window to match the exposure of the capture, you can achieve a near-perfect lighting preview.





oroncolor

Mobil Portable Power Pack



Mobilite Head

Designed specifically to work with the Mobil pack, the tiny Mobilite head weighs in at just 2.75 lb! Its 50 watt modeling lamp minimizes battery drain, and its integrated reflector means it can be used without additional accessories to make it even more portable.

Includes flashtube, modeling light, protection glass, tilt head.

12-1207.....\$529.00

Mobilite/Picolite Accessories

4 Wing Barn Doors

12-0471\$205.00 Snoot Attachment with honeycombs

and aperture plates Includes coarse, medium and fine honeycombs and two round aperture plates to control the

projected circle. 12-0472.....\$298.00

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Pulso Adapter Allows the use of lightweight standard Broncolor accessories.

12-1007.....\$164.00

Mobil Pack Accessories

Charger for Mobil

Required for battery use. Specify 110V or 2	20V.*
16-3010\$	189.00
16-3012*\$	189.00

Spare Battery for Mobil 16-3014.....\$210.00

AC Line Adapter for Mobil

Transforms the Mobil into a conventionallypowered 1500Ws pack. 16-3015\$995.00

Mobil Case	
10-2025	\$85.00

Mobil Travel Kit Case

Holds pack, extra battery, 2 heads, charger, and accessories. *10-2026*.....*\$225.00*

The new battery-powered Mobil pack is a long-awaited addition to the Broncolor System. This small, 1200Ws pack can take up to two heads and deliver 100-140 flashes at full power before having to recharge. Add the optional AC adapter, and the Mobil becomes a complete 1500Ws studio power pack with full modeling lights and faster recycle times.

Although it's a portable unit, Mobil is still Broncolor at heart. It features accurate 1/10 stop output control, integrated infrared/white light triggering, and all the safety, precision and reliability for which Broncolor is famous.

To complement the Mobil's portability, we've designed a matching portable lamphead. Hardly bigger than a soda can, the tiny Mobilite head is built to travel, while still delivering up to 1500Ws of power. There's also a series of ultra-portable accessories for the Mobilite, including barn doors, grids and a snoot. True to form, the Mobilite is also compatible with most regular Broncolor reflectors by means of an adapter.

If your work takes you outside the comfort of the studio, the Mobil system-within-a-system offers:

- Independence from AC power with interchangeable batteries
- 100-140 flashes per charge (depending on recycle speed)
- 4 f/stop range
- 1/10 f/stop adjustment increments
- Output of f/45²/₃ (2m, ISO 100, P70 ref.)
- Backlit LCD power display
- Two head connections with symmetric power distribution
- Compatible with Mobilite head (50w modeling lamp) or standard Broncolor heads (modeling lamp off while on battery)
- · Automatic timed modeling lamp switch-off to conserve power
- Optional AC adapter turns the Mobil into a full studio pack

Features of the new Mobilite head include:

- Smallest Broncolor head ever just 7.9" long and 3.2" across
- 50w modeling lamp
- 1600Ws capacity
- Fan-cooled
- Integrated reflector, 130° coverage
- Compact accessory line
- Compatibility with most lightweight Bron accessories

mobil

Capacity Output* Flash Duration t 0.1** 100% Recycle Time Triggering Adjustment Range Modeling Light Distribution Lamphead Outlets Power Requirements 1200Ws (1500Ws w/AC adapter) f/45²/₃ 1/230 sec. 6 sec. IR/Cord/Cell Over 4 stops in ¹/₁₀ stop increments 50 W (with Mobilite head), Auto shut-off Symmetric 2 Includes user-replaceable battery or optional AC line adapter 9.25x5.75x10.75 13.2 lbs

Dimensions Weight Catalog Number Price

* Output measured at $6^{1/2}$ feet (2 meters) at ISO 100 with a P70 reflector ** t 0.1 is a measure of flash duration which is comparable to actual shutter speeds. Shown with Mobilite heads, not included.

Requires charger or AC Adapter

10-2007

\$1,710.00



Primo power packs have all the power, reliability and compatibility you've come to expect from Broncolor, at a surprisingly low cost, small size and light weight.

Primo is compatible with all the existing Broncolor lampheads and accessories, which means it's even easier for photographers on a budget to get started in the Broncolor system.

Current Broncolor owners will appreciate the way Primo fits into their existing systems as a low-cost way to expand.

Primo features include:

- 1600Ws power.
- Broncolor's most affordable power packs.
- Compact and lightweight.
- Extremely simple to operate.
- Compatible with all existing Broncolor heads and accessories.
- 3 f/stop range in ¹/₃ stop increments.
- Dual voltage can be used anywhere in the world.
- Automatic proportional modeling light.
- Slow recycle mode .
- Built-in white light slave.
- Engineered for safety Meets UL specs.

Primo 4

This symmetric pack delivers output of $f/90^{1/3}$ (2 meters, ISO 100, P70 reflector) in a compact, easy to use package. Even though it's twice the power of the original, the Primo 4 is only 1.25" higher and 1.7 lb. heavier.

Primo Fashion

This 1000Ws Primo pack can deliver an amazing 5 frames per second to keep up with the demands of motor driven cameras. As the name would indicate, this pack is ideal for applications such as fashion where shooting speed and good motion-stopping capability are important.

Primo Power Packs



Clear, simple controls make the advanced technology of the Primo packs easy.

proncolor

Primo Infrared Receiver

This new add-on receiver lets you trigger Primo power packs with any of the Broncolor infrared transmitters. It attaches to the side of the pack and draws power from the pack's AC line. The IR Receiver is compatible with the



IRX and IRQ infrared transmitters, as well as the older IRI, IRS and IRS-E units. It can also be triggered with the FCM and FCC flashmeters. 16-3009.....\$377.00

	primo	primo Fashion	primo 4
Capacity	1600Ws	1000Ws	3200Ws
Output*	f/64 ¹ / ₃	f/45 ¹ / ₃	f/90 ¹ / ₃
Flash Duration t 0.5	1/700-1/1700	1/1200-1/2800s	1/260-1/630s
Flash Duration t 0.1**	1/230-1/530	1/400-1/950s	1/80-1/200s
100% Recycle Time	1.4-2.5sec	0.18-0.9s	
Triggering	Sync (Cable / Photocell / Optional In	frared
Adjustment Range		3 Stops in 1/3 stop increments	
Modeling Light	25	0 W proportional to flash pow	/er
Distribution	Symmetrical	Asymmetrical	Symmetrical
Lamphead Outlets	3	2	3
Dimensions	10.8"x6.5"x10.8"	11x7x11	11x7x12
Weight	14.3 lbs.	12 lb.	16 lb.
Catalog Number	10-2008	10-2017	10-2019
Price	\$1,695.00	\$1,695.00	\$2,495.00

* Output measured at 6¹/₂ feet (2 meters) at ISO 100 with a P70 reflector

** t 0.1 is a measure of flash duration which is comparable to actual shutter speeds.

Microprocessor Controlled for Digital Imaging!

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er grafit A2

Broncolor Grafit A ushers in a new generation of control and convenience in studio strobe lighting. Building upon the industry-leading Pulso A packs, Grafit introduces advanced new features as well as improvements of old ones.

- Menu-driven commands: All special features of Grafit A are controlled from a 4-line LCD menu screen. Simple controls let you change all the pack's advanced settings and display crucial information at the touch of a button. The LCD is backlit for easy visibility in dark studios.
- Even better asymmetric control: You can control the power of each head as if it were its own power pack. Just choose the power level for any head, and the overall power selection will self-adjust to match.
- Displays f/stop and watt-seconds or f/stop and percentage simultaneously.
- Faster recycle time as little as 0.03 seconds, allowing for stroboscopic effects. Maximum of only 2.2 sec. (1600Ws)
- Flash duration selectable to 1/6000 sec.
- Color temperature controllable with the FCC color meter.

Plus, Grafit has all the features that have set Broncolor apart for years.

• True 100% recycle.

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- Power stabilized to +/- 1%.
- 3 sync modes infrared, white light, cable.

- Consistent color temperature across the entire adjustment range.
- Flash sequence, delay flash, alternating pack functions, and more.
- Memory function lets you save two complete groups of settings (power levels, asymmetrics, programming functions, etc) for instant recall.
- Even more proportional modeling lamp modes.
- Wider adjustment range.
- 110-220V switchable.
- Multiple language menus.
- Can be controlled from a Macintosh or PC - ideal for digital applications. Standard on Grafit A+ packs, upgrade for Grafit A packs.
- Smaller and lighter than the Pulso A.
- Full remote capability with Servor 3 or Servor E
- Dual sync sockets.
- have set Broncolor apart for years.
 Infrared control of power levels
- with FCM flashmeter or Servor.Engineered for safety meets
- Engineered for safety meet UL specs.

	grafit A2	grafit A4
Capacity	1600Ws	3200Ws
Output*	f/64 ¹ / ₃	f/90 ¹ / ₃
Flash Duration t 0.1**	1/250-1/6000 sec.	1/125-1/6000
100% Recycle Time	0.03-1.6 sec.	0.03-3.2 sec.
Triggering	IR/Cord/Cell	IR/Cord/Cell
Adjustment Range	Up to 6.7 stops in 1/1	o or 1/3 stop increments
Modeling Light	250 W, proportional	to flash power
Distribution	Asym/Symm	Asym/Symm
Lamphead Outlets	3	3
Special Functions	Multiple Flash, Delay Flash, Flash Count, Trigger Delay, Stroboscopic Mode, Flash Duration Control, Color Temperature Control, "Ping Pong" multi-pack sync, function memory	
Power Requirements	110-120v/15A, 200-2	240V/10A Switchable
Dimensions	7x11x12	7x11x16
Weight	17.5 lb.	24 lb.
Catalog Number	10-3000	10-3025
Price	\$4,995.00	\$6,995.00
NEW!		
With Mac/PC interface:	grafitA2 plus	grafitA4 plus
Catalog Number	10-3200	10-3225
Price	\$5,695.00	\$7,695.00

* Output measured at 61/2 feet (2 meters) at ISO 100 with a P70 reflector

** t 0.1 is a measure of flash duration which is comparable to actual shutter speeds.

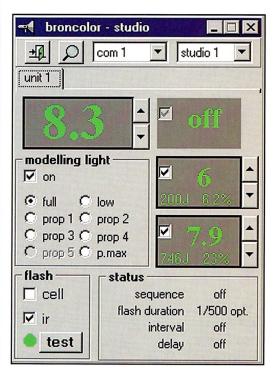
Grafit A2/A4 Power Packs



New Control Panel puts important information at your command



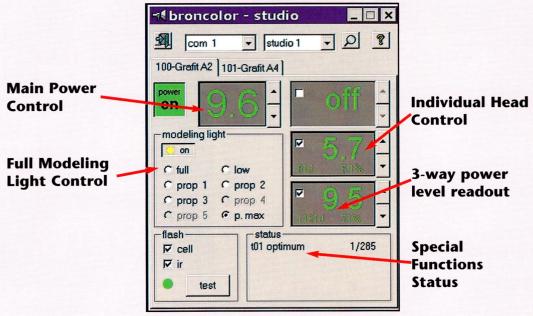
Grafit delivers selectable flash duration, flash sequence, flash delay and many other advanced features



Grafit Computer Interface

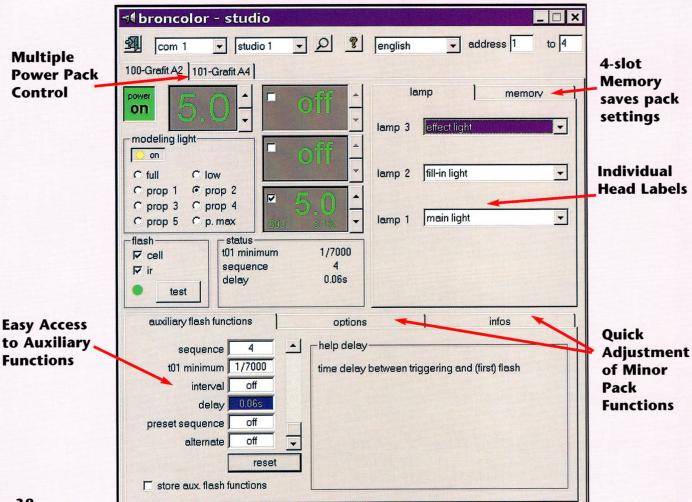
Upgrade for existing Grafit A2/A4 packs. Access all the functions of your Grafit packs from any Macintosh or Windows-based computer. Packs must be returned to Sinar Bron for upgrade. Includes both Mac and PC disks. Contact Service Department for details.

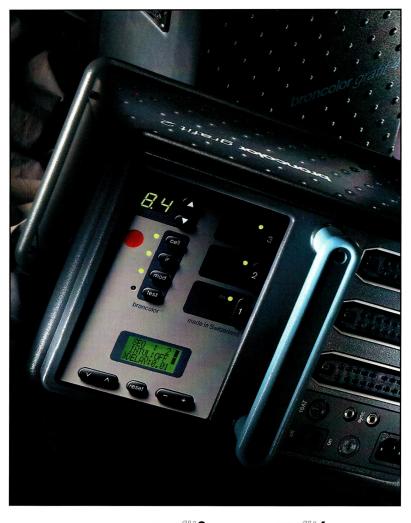
Grafit A In-Depth



Grafit A+ Software - Compact Display

Grafit A+ Software - Full Display





	grafit 2	grafit 4
Capacity	1600Ws	3200Ws
Output*	f/64 ¹ / ₃	f/90 ¹ / ₃
Flash Duration t 0.1**	1/150-1/850 sec.	1/80-1/425
100% Recycle Time	0.43-2.0 sec.	0.75-3.8 sec.
Triggering	IR/Cord/Cell	IR/Cord/Cell
Adjustment Range	4 stops in $1/10$ or $1/3$ s	
Modeling Light	250 W, proportiona	l to flash power
Distribution	Symmetric	Symmetric
Lamphead Outlets	3	3
Special Functions	Trigger Delay, Strob	y Flash, Flash Count, oscopic Mode, "Ping /nc, function memory
Power Requirements	110-120v/15A, 200	-240V/10A Switchable
Dimensions	7x11x12	7x11x16
Weight	17.5 lb.	24 lb.
Catalog Number	10-3100	10-3125
Price	\$3,695.00	\$5,595.00

* Output measured at 61/2 feet (2 meters) at ISO 100 with a P70 reflector

** t 0.1 is a measure of flash duration which is comparable to actual shutter speeds.

Grafit 2/4 Power Packs

New simplified control panel with 3-line LCD for advanced functions



New Grafit 2 and 4 Power Packs

We've expanded the popular new Grafit family of power packs with the more basic, more economical Grafit 2 and 4. The Grafit 2 and 4 are digitally-controlled, symmetric packs, with many of the same refinements as the Grafit A packs.

Naturally, they've got the safety, convenience and dead-on accuracy you expect from any Broncolor power pack. If you also want asymmetrics, flash duration control or color temperature control, take a look at the Grafit A packs on page 37.

Grafit 2/4 features include:

- Menu-driven commands: All special features of Grafit 2/4 are controlled from a 3-line LCD menu screen. Simple controls let you change all the pack's advanced settings and display crucial information at the touch of a button. The LCD is backlit for easy visibility in dark studios.
- Flash sequence, delay flash, alternating pack functions, and more.
- Even more proportional modeling lamp modes.
- 110-220V switchable.
- Multiple language menus.
- Dual sync sockets.
- True 100% recycle.
- Power stabilized to +/- 1%.
- 3 sync modes infrared, white light, cable.
- Infrared control of power levels with FCM flashmeter or Servor.
- Engineered for safety meets UL specs.



Grafit A In-Depth

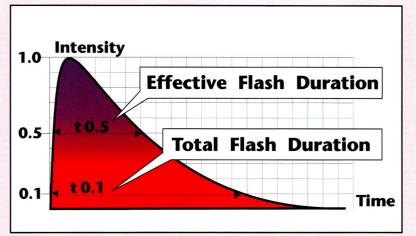
Flash Duration

One of the most impressive features of the Grafit A packs is their ability to control flash duration. This lets you select the motion-stopping capability you need, all the way down to 1/7000 sec. at t0.1.

What, you might ask, is t0.1 anyway? It turns out that unlike shutter speed, flash duration is not an absolute measurement. Duration numbers generally measure the length of time light is produced *above a certain power level*. Many strobe manufacturers use a measurement called t0.5 — that is, the flash duration above 50% of total power. As shown in the graph at right, the clock doesn't start running until the flash pop reaches 50% of its peak, and stops when it falls below 50%. That's why we term t0.5 "Effective

Flash Duration"

You can see that there's quite a bit of light which isn't accounted for by a t0.5 measurement. In effect, the flash duration is longer than you think it



Unlike shutter speed, flash duration is not an absolute measurement.

is — up to three times longer. So t0.5 really isn't a useful measurement, since we're used to thinking in terms of shutter speeds. That's why we measure all flash durations using t0.1.

T0.1 measures the flash curve from the 10% points. As you can see, covers virtually all of the light recorded by your camera. These measurements let you do a fair comparison to actual shutter speeds. T0.1 is often referred to as "Actual" or "Total Flash Duration."

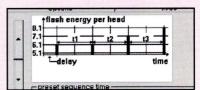
The Grafit A power packs are the only ones which actually let you select your desired t0.1 flash duration. You can tell the pack to give you the fastest possible duration for your power level, giving you motion-stopping capability all the way down to 1/7000 sec. No other power pack in the world will give you this level of control.



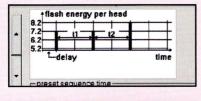


Predefined Sequences

Another great thing about the Grafit A is the way it makes complex tasks very simple. A collection of preset flash sequences programmed into the pack gives you instant access to stroboscopic effects that would have been difficult or impossible before. These sequences have different combinations of delay, number of flashes and flash power. They are designed to produce multiple-image effects which increase in intensity as they go, or with ever-increasing delays to capture the look of acceleration.









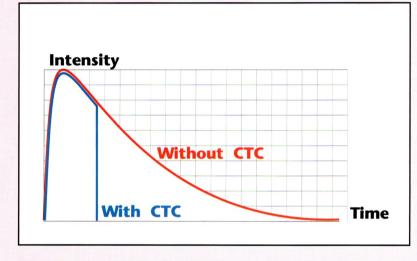
Grafit A In-Depth

Color Temperature: Consistent or Controlled

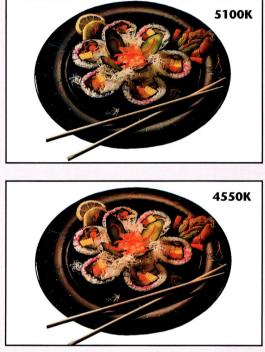
With most power packs, color temperature can decrease by about 120 degrees Kelvin for every f-stop of power reduction. Over a 3 stop adjustment range, that would be a color temperature decrease of about 360K. With a wider 6 or 7 stop range, the temperature difference would be about 800K from high power to low.

Grafit A offers Color Temperature Control (CTC) on outlets 1 and 2. CTC eliminates the color temperature shift — regardless of power level, the color temperature always stays the same! You can freely adjust the pack's main power without having to worry about possible color shifts. You can also shoot with multiple power packs at different power levels, and be confident that you'll have uniform color temperature generated by each head.

If you would prefer a slightly different color from what the pack normally delivers, you can use the Broncolor FCC Color Meter to fine-tune the Grafit A to the desired temperature, over a range of several hundred degrees. No other system offers this level of custom adjustments.



Below is an example of the effects of color temperature shift. The top image was captured at and balanced to a 5100K light source. The bottom image shows the result of a shift of only 550K. The Grafit A eliminates these color shifts as you adjust the power of your packs, and the FCC meter lets you precisely adjust the color to meet your needs.



Solution - stud	io _ 🗆 🗙
Stud	io 1 🔹 🔎 😵
100-Grafit A2 101-Grafit A4	
modeling light	7.3
full C low C prop 1 C prop 2 C prop 3 C prop 4	
C prop 5 C p. max	800.J 50%
IF cell t01 optin	num 1/405
V ir	

- broncolo	r - studio		X
com 1	 studio 1 	· 2	8
100-Grafit A2 101	I-Grafit A4		
on Salar	5: -	off	4
modeling light		7.6	
🕑 full 🔿 I		1 19%	-
C prop 1 C		66	
C prop 3 C I	prop 4	9.U 1 50%	-
flash Ir cell Ir ir	t01 optimum	1/40	15
• test			

Pinpoint control

We've discussed some very advanced features here, but it's important that we don't neglect the basics. Fundamentally, the Grafit is a very easy-to-use power pack. It lets you effortlessly put just the right amount of light through each head — there's no math to do, no plugs to swap. Just plug in one head, and set its power level to within 1/10 f-stop. Plug in a second head, and the overall power level of the pack will increase without affecting the first head at all. You can then freely adjust the output of either head, again without affecting the other. If you change the overall power setting of the pack, the heads will of course maintain their ratios. All the changes you see at left were made just by adjusting the power on head #2.

That's what makes the Grafit A such a pleasure to work with. You don't have to worry about how it works - just tell it exactly what you want to do, and get back to shooting.

Minipuls C Compact Units



- The Minipuls C40, C80 and C200 are the smallest, most portable units compatible with the Pulso accessory line. If you already own Broncolor accessories and you need portable, lightweight units for location work, Minipuls C is the ideal solution.
- New redesigned metal housing.
- Rated at 300, 600 and 1500Ws respectively.
- Bright 250W halogen modeling lamp no sacrifice in terms of ease of use.
- 3 stop continuously adjustable output range.
- t0.1 flash durations (equivalent to camera shutter speeds) of 1/400 and 1/250 sec. respectively.
- Flash voltage of the Minipuls is stabilized to within \pm 1% of the selected level for consistent output, time after time.
- Can be triggered by sync cord, infrared sync or white light slave.
- Comes complete with flashtube, clear protection dome, modeling light, sync cable, power cord and protection cap.

600Ws Flashtube for C40/80

5-0043	\$106.00
J-00+J	100.00

Flashtube for Minipuls C200	
15-0044	\$188.00

Glass Dome for Minipuls C

15-0022\$1	22.00
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Mat Protection Dome for Minipuls

For use with the optical spot attachment, or for	or
extra diffusion.	
15-0028 \$168.0)0

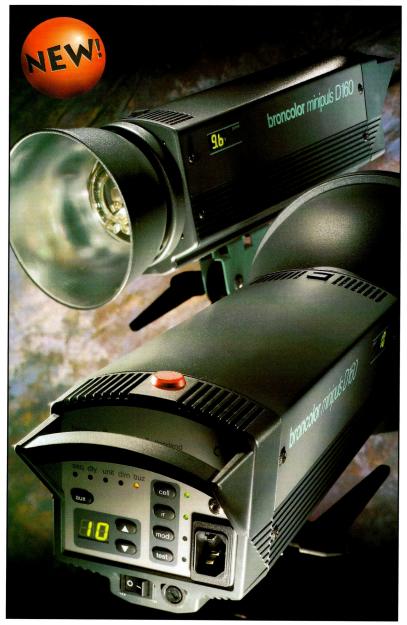
C200

	minipuls C40	minipuls C80	minipuls C200	Minipul ³ \$2060 f/64 for \$2060 Best dollar to f/stop value
Capacity	300Ws	600Ws	1500Ws	f/64 to f/stop
Output*	f/32	f/45	f/64	post dollar to
Flash Duration t 0.5	1/1000	1/600	1/1000	Bear
100% Recycle Time	1.3 sec.	1.9 sec.	2.4 sec.	
Triggering	IR**/Cord/Cell	IR**/Cord/Cell	IR**/Cord/Cell	
Adjustment Range	3 Stops, continuous	y variable	4 stops, continuo	ously variable
Modeling Light	250W	250W	250W	
55	Pr	oportional to flash power		
Power Requirements	110V/10A	110V/10A	110v/16A	
Dimensions	4.5x4x16"	4.5x4x16″	4.5x4x19.5"	
Weight	5.2 lb.	6 lb.	10 lb.	
Catalog Number	11-1042	11-1082	11-1200	
Price	\$1,080.00	\$1,299.00	\$2,060.00	

* Output measured at 61/2 feet (2 meters) at ISO 100 with a P70 reflector

** Minipuls C units can be triggered by the new IRX transmitter, as well as FCM-2 meters manufactured in 1995 and later.

Minipuls D Compact Units



minipulsD160 D160+ Capacity 1200Ws Output* $f/45^2/_3$ Flash Duration t 0.5 1/1000 100% Recycle Time 0.5-2.2 sec Triggering IR**/Cord/Cell Adjustment Range 5 stops, $\frac{1}{10}$ stop increments Modeling Light 300W, Proportional to flash power **Special Features** Flash sequence and delay, "Plus" upgradable to Mac/PC control 110-240v switchable, 16A **Power Requirements** Dimensions 4.5x4x19.5" Weight 10 lb. **Catalog Number**

Price

11-1600 (D160) 11-1660 (D160+) \$2,030.00 \$2.598.00 * Output measured at 61/2 feet (2 meters) at ISO 100 with a P70 reflector

** Minipuls D units can be triggered by the new IRX transmitter, as well as FCM-2 meters manufactured in 1995 and later.

The new Broncolor Minipuls D160 makes it even easier for you to use self-contained monolights in your studio or on location. The D160 gives you more precise control than you would find in most power packs, and compatibility with the world's largest line of lighting accessories. The D160+ version also features Mac/PC interface software, delivering centralized control of a studio full of Minipuls for digital and conventional photographers alike.

Minipuls D160 highlights include:

- Completely self-contained monolight design
- Digital touchpad controls
- Illuminated power level display on the back and both sides of the unit, visible from anywhere in the studio, even in the dark
- 1200Ws power
- 5 f/stop range
- Precise, repeatable 1/10 f/stop adjustments
- Automatic proportional modeling lights
- Built-in infrared and white light slaves
- Compatible with virtually all Broncolor accessories - seamless integration with existing power packs and heads
- Engineered for legendary Broncolor accuracy, reliability and safety

The Minipuls D160+ offers these additional features:

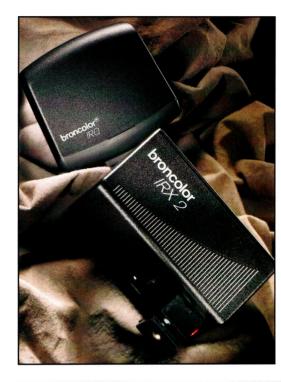
- Mac/PC control software for remote hardwired operation of all pack functions
- the convenience of centralized control with the built-in redundancy of individual self-contained monolights
- Can be software-controlled simultaneously with Grafit A+ packs
- The perfect addition to any digital studio

"Plus" upgrade kit for Minipuls D160 To add Mac/PC control to a Minipuls D160.

Please contact our Service Department for details.

ORDERS DEALERS **INFORMATION** (800) 456-0203

Power Pack Accessories



Minipuls Kits

Minipuls C Travel Kit

- Minipuls C40 2
- P-Travel Reflectors
- Barn Doors to P-Travel
- Stands 2
- Sync Cable Stand Bag
- Case
- 11-2020.....\$2,825.00

Minipuls C Classic Kit

- Minipuls C80
- Minipuls C40 2
- 2 P-Travel Reflectors
- Barn Doors to P-Travel Pulsoflex 80 1
- Stands 2
- Sync Cable Stand Bag
- Case
- 11-2025.....\$4,999.00

Minipuls C Expert Kit

- 3 Minipuls C80
- 2 P-Travel Reflectors Barn Doors to P-Travel
- 1 Umbrella Reflector 1
- Silver Umbrella
- Pulsoflex 80
- **IRX** Transmitter 1
- Stands 3
- Stand Bag 1
- Case
- 11-2030.....\$5,869.00

Infrared Transmitters

The IRQ and IRX are Broncolor's new line of cordless infrared triggers. They can fire infrared-equipped Broncolor strobes at distances of up to 150 feet, eliminating the clutter of conventional sync cables. They also provide you with complete freedom of movement around your set.

IRQ Transmitter

The IRQ is a single-channel infrared trigger with a 35 foot range. It is capable of up to five pops per second, making it ideal for fashion or other high-speed applications.

16-2011.....\$373.00

IRX 2 Infrared Transmitter

With a range of over 150 feet, the IRX is ideal for long distance applications, or studios with walls that don't reflect well. The IRX features two infrared channels, allowing two sets to operate in a single studio without interference. It's compatible with all infrared-capable Broncolor packs. Uses 2 AA batteries.

16-2012\$425.00

Camera Sync

Replacement camera/transmitter sync cord for IRX, IRQ, IRI, IRS. 17-2106.....\$21.00

Accessory	Shoe for	Sinar
23-4020		\$58.00

17-2107.....\$10.00

Minipuls Location Kit 2

- Minipuls C200 2 2
- P-Travel Reflectors
- 2 Stands
 - Sync Cable Stand Bag
- Case
- 11-2010.....\$4,999.00

Minipuls Location Kit 3

- Minipuls C200
- P-Travel Reflectors Barn Doors to P-Travel
- 1 Umbrella Reflector
- Silver Umbrella
- Pulsoflex 80
- **IRX** Transmitter 1
- 3 Stands
- Stand Bag 1
- 1 Case

11-2015.....\$8,369.00



Servor E Remote Control

The Servor E is a simple, inexpensive way to control your Opus, Pulso and Grafit power packs from anywhere in your studio. Switch on, adjust power and modeling light, turn on the

IRQ/IRI/IRS Battery

photocell and trigger up to four separate groups of power packs. Remote control is ideal for situations where vou're alone or can't get to all your packs. 16-3025.....\$380.00



Servor 3 Remote Control

The Servor 3 is an intelligent remote control unit which lets you access all the functions of your Pulso, Pulso A and Opus packs and your motor-



ized ceiling rail via an infrared link.

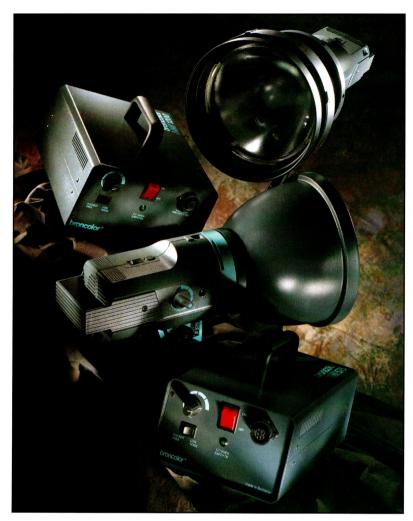
The graphic LCD display tells you the status of each pack and allows you to adjust all settings, even access the auxiliary functions of your pack.

If you have a light bank on a motorized rail system, you can use the Servor 3 to control all movements.

16-3020.....\$1,390.00

Sync Box

Allows up to three packs to be hardwired
together when cordless triggering isn't possible.
15-4011\$92.00



Photographers, film and video makers who require continuous light can now enjoy all the advantages of the rest of the Broncolor system.

- "Open-face" design lets you use many Broncolor system reflectors.
- The smallest, lightest HMI system available.
- Electronically-controlled ballast is switchable between flicker-free and low-noise modes.
- Daylight balanced, consistent over the life of the tube.
- $2^{1/2}$ times the output of a comparable halogen bulb.
- Ballast unit features a stepless 1-stop electronic dimmer.
- Lamphead focusing mount provides up to 1 stop further control along with adjustment of the light angle from 40 to 100 degrees.
- "Hot strike" capability gives you light when you need it.
- Automatic universal voltage can be used anywhere in the world.
- Designed with 3 separate safety systems.
- LCD hour meter (right) lets you know when to replace the bulb.



HMI Continuous Lighting

HMI 575 Quartz equivalent 1500W Max. output, Lux f/stop* Ballast size Ballast weight Head weight 5.75 lb

12000 lx f/11.5 11x4x7 7.5 lb

HMI 1200 3000W 318000 lx f/64 11x4.5x8.5 10.5 lb 6.5 lb

Compatible Reflectors - HMI 575

P50, P65, P70, P120, Softlight, Hazvlight Soft, Cumulite 2, Mini Cumulite Giant Light Bank, Megaflex, Flooter Pulsoflex EM 80x80, 80x140, 110x110

Compatible Reflectors - HMI 1200

Par Reflector and Lenses (included) Special Pulsoflex HMI softboxes (80x80, 110x110)

Measured at 2m, ISO 100, 1/30 sec. Spot lens used on HMI 1200.

HMI 575 Package

Includes ballast, lampbase, bulb. 14-2575.....\$4,857.00

HMI 1200 Package

Includes ballast, lamphead, bulb, Par Reflector and 5500K diffusion lens set. 14-4500.....\$6,851.00

Diffusion set for HMI 1200

Diffusion Set Clear (5900K)	
14-3583	\$125.00
Diffusion Set 5500K	
14-3584	\$408.00

Replacement 575W SE Lamp

14-3575	\$457.00
Replacement 1200W Lamp	
14-4525	\$538.00
HMI 575 Protection Dome	
14-3576	\$171.00

HMI Extension Cable, 22.5 ft.

14-3570	\$135.00
HMI/Flooter Adapter	
Required to use the HMI 575 in a Floote	er.
14-3581	\$249.00

Par Reflector for HMI 575, 5500K

The same reflector as the HMI 1200, adapted for the HMI 575. With 5500K UV coated lenses. 14-2520.....\$713.00 Par Reflector for HMI 575, 5900K 14-2525.....\$481.00

Lampbases



Head	Power	Dome	Cable	Fan	Dimensions	Wt	Cat. #	Price
Primo	1600Ws	Included	16′	Yes	5x6x5.5"	4.75 lb.	12-1018	\$ 699.00
Primo 4	3200Ws	Included	16′	Yes	5x6x5.5"	4.75 lb.	12-1019	\$ 975.00
Pulso F2	1600Ws	Included	16′	Yes	11.6x4.75x5″	6 lb.	12-0003	\$1,299.00
Pulso F2	1600Ws	Included	32'	Yes	11.6x4.75x5"	6 lb.	12-0007	\$1,455.00
Pulso F4	3200Ws	Included	16′	Yes	11.6x4.75x5"	6 lb.	12-0005	\$1,770.00
Pulso F4	3200Ws	Included	32'	Yes	11.6x4.75x5"	6 lb.	12-0010	\$2,015.00
Pulso Twin 4	2x3200Ws	Included	16′	Yes	10.5x4.75x5"	9 lb.	12-0016	\$2,167.00
Picolite	1600Ws	Included	11.4'	Yes	8x5.5x3″	2.75 lb.	12-1208	\$ 529.00

Picolite

If you need lots of light in a tight space, or if you just like to travel light, use the Picolite with any Broncolor power pack. This tiny 1600Ws head has a built-in 130 degree reflector. You can add a compact set of 4-wing barn doors, or a snoot with honeycombs or spot masks. There's even an adapter to let you use many standard Broncolor reflectors, so the Picolite can integrate easily into an existing studio.

Also available as the Mobilite, with 50w modeling lamp for use with the Mobil power pack.

12-1208\$529.00

Adapter-Mobilite/Picolite to Satellite Reflector 12-1009\$113.00

Twin Articulated Arm

Great for table top shooting with the Mobile and Picolite heads. This arm comes with three separately adjustable twinarms with four individual bending joints for added versatility. 16-3016\$117.00

Clamp to attach Arm to table

12-3019\$73.00



TOLL

FREE

ORDER

LINE

(800) 456-

0203

Reflectors



Reflector	Angle	Dia.	x Depth	f/stop*	For use with	Cat. #	Price
P45 reflector	45°		x 14"	128	Primo, Pulso 2/4 heads	12-0045	\$ 373.00
P50 reflector	50°		x 15.5"	1281/3	Pulso 8, Twin, HMI	12-0050	\$ 520.00
P65 reflector	65°		x 9.5"	128 ¹ / ₃	Pulso 8, Twin, HMI	12-0065	\$244.00
P70 reflector	70°		x 7.5"	90 ¹ / ₃	Primo, Pulso 2/4	12-0070	\$165.00
P120 reflector	120°	and the second se	x 1.7"	45 ² / ₃	All heads	12-0120	\$104.00
P-Travel reflector	55°	7.5	x 3.5"	64 ¹ / ₃	All heads	12-0055	\$ 75.00
Softlight reflector	_	20	x 7"	45 ² / ₃	Primo, Pulso 2/4, HMI	12-0080	\$ 428.00
Conic Snoot	20°	3"	x 10"	32 ¹ / ₃	All except HMI	12-0073	\$135.00
Umbrella reflector	And the Andrew States of the States of the		_			12-0041	\$ 125.00

Barn Doors

For Use With	Wings	Prod.#	Price
P70	4	12-0271	\$321.00
P70	2	12-0270	\$265.00
P65/P45	4	12-0266	\$549.00
Mini-Hazylight	2	12-0469	\$419.00
P-travel	2	12-0155	\$104.00
Flooter		12-3036	\$228.00
Pulsospot 4	2	12-4015	\$259.00
Lightbar 60	2	12-5370	\$381.00
Lightbar 120	2	12-5371	\$481.00
Picolite/Mobilite	4	12-0471	\$205.00

Honeycombs

For Use With	Set of	Prod. #	Price
P70	3	12-0170	\$ 299.00
P65/P45	3	12-0165	\$ 399.00
P50	3	12-0182	\$ 399.00
Softlight Reflector	1	12-0180	\$ 192.00
Mini-Hazylight	1	12-0468	\$ 648.00
Hazylight 2 / Soft	1	12-0393	\$1,040.00
Mini-Cumulite	1	12-2019	\$ 723.00
Striplight 60	1	12-5375	\$ 186.00
Striplight 120	1	12-5376	\$ 243.00
Picolite/Mobilite	3	12-0472	\$ 298.00

Filters

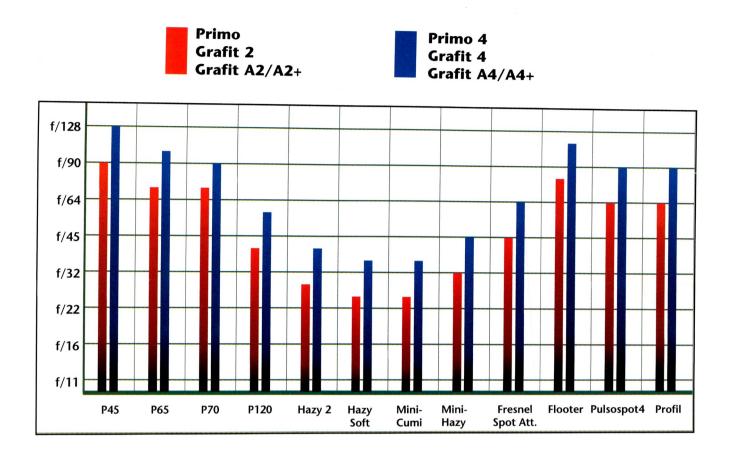
Designed for use with Pulso barn doors. All P70 filters come in sets of 12.

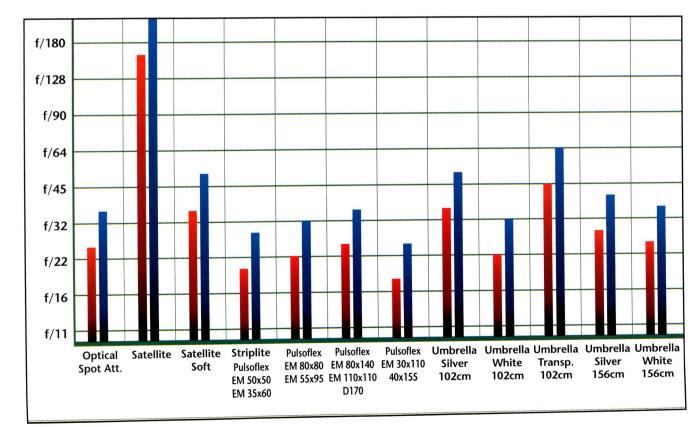
Туре	Product #	Price
Color - P70	12-0370	\$155.00
Grey - P70	12-0373	\$155.00
Diffuser - P70	12-0371	\$ 88.00
Diffuser - Softlight	12-0380	\$248.00

Broncolor reflectors are designed to give you maximum light quality and efficiency. They produce as much light as possible for their given area of coverage, with extremely smooth, even falloff for predictable, controllable gradations.

Most parabolic reflectors can accept honeycombs, barn doors or both. Color, diffusion or ND filters can be added to barn doors.

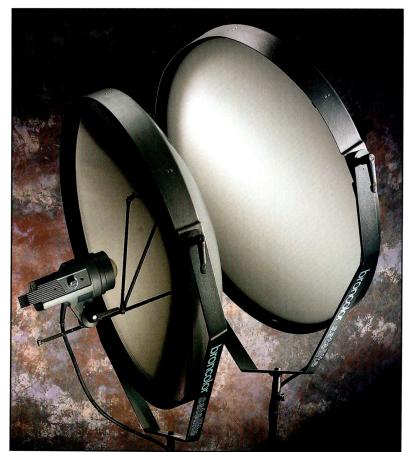
Power Pack/Reflector Output levels





48

Satellite and Sunlite Reflectors







Satellite Reflectors

Broncolor's two Satellite reflectors are among the most unique and interesting accessories we offer. The original Satellite reflector gives you an extremely powerful, hard light with nice open shadows. It's great for simulating sunlight or lighting fabrics, and its output of f/180²/₃ lets you light from a distance. The highly concentrated beam of light put out by the Satellite spreads out very little, putting all your light just where you want it.

The Soft has the same 35" diameter as the original Satellite. But, instead of concentrating light, it provides a soft, diffuse light with a center hot spot to kick up contrast. It's great for lighting people, and even gives you nice round catchlights in the subject's eyes.

Satellite Reflector 🔸

 $f/180^{2}/_{3}$ @ $6^{1}/_{2}$ feet, ISO 100, 3200Ws $f/16^{2}/_{3}$ @100 feet, ISO 100, 3200Ws The original, polished aluminum, ultra-highintensity Satellite reflector. This updated design features a hard plastic shell on the back of the reflector to prevent accidental dents and dings. Compatible with the Pulso F2 and F4 lampheads, HMI 575 and Mobilite/Picolite (with adapter, below). Includes special reflector and mat protection dome.

12-0095.....\$2,279.00

Adapter - Mobilite/Picolite to Satellite

12-1009.....\$113.00

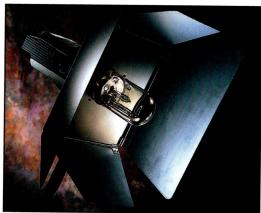
Satellite Soft 🛲

f/45¹/₃ @ 6¹/₂ feet, ISO 100, 3200Ws The same 35" parabolic dish as the original Satellite, but white-coated, with a front plexiglass diffuser, and designed so the head shoots through the reflector instead of into it. Compatible with any Pulso or Primo lamphead, plus the Minipuls C40 and C80 self-contained units. Not recommended for the Minipuls C200 due to weight constraints. 12-0096......\$2,279.00

Sunlite Set

Now there's an easy way to duplicate the characteristics of sunlight in the studio without knocking out an entire wall. The new Sunlite set is a point light source with integral barn doors, adaptable to any Pulso lamphead. When directed at the subject, the narrow, horseshoe-shaped flashtube presents a small, point light source for hard, direct light. The barn doors allow you to control the extent of spill from the sides of the tube, and therefore the shadow depth. When used as a main light, the Sunlite Set emphasizes details and evenly lights large areas. It can be used for all types of still life, food and fashion photography. Includes 3200Ws flash tube, special barn doors, mat and clear UV domes.

12-0150.....\$908.00



Softboxes and Umbrellas

More efficient and controllable than conventional umbrellas, the Pulsoflex provides soft, diffused, direct illumination, making it an excellent light source for almost any type of job.

Broncolor's Pulsoflex line of softboxes is now completely new - the versatile, easy to use Pulsoflex EM and the affordable Pulsoflex C.

Pulsoflex EM

Expanding on all the convenience and performance of the Pulsoflex VM, these new softboxes are even easier to assemble and provide better control than their predecessors.

- New projecting rim extends beyond the face of the diffuser for excellent color saturation, shadow definition and falloff control
- Hollow outer seams for support rods allow the softbox to be collapsed without removing the rods or the diffuser
- Compatible with all Broncolor Pulso and Primo lampheads, Minipuls, Compuls and the HMI 575 (80 cm and above)
- New expanded line of accessories including barn doors, honeycombs and louvers to give you an even wider selection of effects and light quality.
- High-efficiency silver interior
- Includes travel bag
- Adapter ring sold separately, so you can use one ring for multiple boxes.

Size (All box	es require ring)	Product #	Price
C 70 x 70	(27.5x27.5")	12-0880	\$290.00
C 100 x 100	(39.5x39.5")	12-0801	\$399.00
C 60 x 100	(23.5x39.5")	12-0802	\$342.00
C 35 x 120	(14x47")	12-0803	\$321.00
C 80x140	(31.5x55")	12-0805	\$519.00
C 150x150	(59x59")	12-0804	\$699.00
EM 50x50*	(20x20")	12-0760	\$389.00
EM 80x80	(31.5x31.5")	12-0761	\$449.00
EM 110x110	(43x43")	12-0762	\$799.00
EM 35x60*	(14x23.5")	12-0763	\$389.00
EM 55x95*	(21.5x37.5")	12-0764	\$499.00
EM 80x140	(55x55")	12-0765	\$680.00
EM 30x110*	(12x43")	12-0766	\$539.00
EM 40x155*	(16x61")	12-0767	\$625.00

Pulsoflex C

- Same Broncolor quality, new low price.
- Adapter ring sold separately, so you can use one ring for multiple boxes save cost and weight.
- Simple construction assembles and disassembles quickly
- Compatible with all current Broncolor strobe heads (70x70 and 35x120 need fan cooled heads) and compact units.

Size (mounts to Par Reflector)	Product #	Price
80 x 80 cm for HMI 1200	12-0753	\$578.00
110 x 110 cm for HMI 1200	12-0754	\$865.00
Adapter Rings - Required by all P	ulsoflex EM a	and C
Adapter ring , standard	12-9100	\$120.00
"Hot Spot" and HMI 575 ring	14-3580	\$168.00
Pulsoflex Bag	12-0745	\$ 16.00
Accessories for EM 80x80 / HM	11200 80x8	0
Barn doors	12-0268	\$207.00
Honeycomb	12-0781	\$649.00
Additional diffuser	12-0746	\$450.00
Louver set	12-0780	\$477.00

Prices and specifications are subject to change without notice.

New-Style Umbrella Bracket

12-0281	\$34.00
Umbrella Reflector	
12-0041	\$125.00
Older-Style Umbrella Bracket for P70	
12-0273	\$98.00

Hazylight

The Hazylight 2 and Hazylight Soft reflectors are designed to produce "wrap around" lighting over a 20 degree field. The large 40"x40" parabolic reflectors reduce light scatter and give you precise, even gradation.

The Hazylight 2 yields higher illumination and color saturation than an equally powered multi-head banklight. The Hazylight 2 is highly recommended for advertising, fashion, and still-life photography.

The Hazylight Soft gives you a softer light with no hot spot. Highlights in reflective objects such as glass and metal appear flawlessly even.

Hazylight 2 🛹

- Excellent contrast and brilliant color saturation.
- Precise 20° falloff lets you place gradations exactly where needed.
- Brings out texture in surfaces like cloth, leather and food.
- Rotation ring allows you to easily maneuver the light.
- Requires Hazy lampbase.

12-0390.....\$3,395.00

Hazylight Soft 🛛 🗲

- Perfectly even, softer lighting edge-to-edge due to the white interior and graduated counter-reflector.
- Flawless reflected highlights with no hot spot.
- Rotation ring for easy mobility.
- Perfect for glass, silverware, jewelry, etc.
- Uses any standard Pulso or HMI 575 head.
- Durable plexiglass diffuser.
- Requires counter reflector (12-2015)

12-0392.....\$3,395.00

3200Ws Hazy Lampbase

Required for Hazy2 and older style Hazylights. Includes flashtube (15-0004), modeling lamp (15-2001), protection dome (15-0026) and glass counter reflector. *12-0027*.....*\$2,375.00*

Counter-Reflector

For Hazy Soft with Pulso 2/4 or Primo lamphead. 12-2015.....\$212.00

Honeycomb to Hazy 2 / Soft

12-0393.....\$1,040.00

Diffuser Foils with Tape

15-3008.....\$191.00

Diffuser Foil

10 meter roll. 15-3009.....\$718.00

New Pillar Stand 215 🛹

- Replaces Mini-Hazylight Stand.
- Crank gear height adjustment mechanism for greater precision.
- 7'2" tall, solid steel design with platform & caster wheels (with brakes) to accommodate power pack.
- For use with Mini-Hazylight, Satellite Reflectors, Spotlights, and all Pulso and Primo lamp bases.

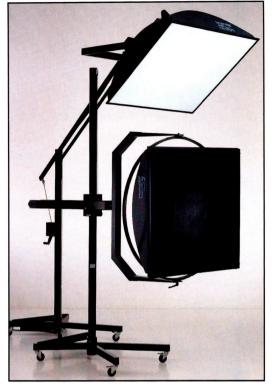
13-0465\$1,599.	00

Hazy Diffusion Foils with Frame and Tape 49 15-3016.....\$405.00

Flamingo Adapter for Hazylight/Mini Cumulite 13-1011.....\$207.00

Counterweight for 301 Stand

13-1006.....\$337.00



Broncolor 301 Stand 🛹

- For Hazylight or Mini-Cumulite.
- Counterbalanced horizontal arm for quick adjustment.
- Maximum height 8.8 feet.
- 13-1005.....\$4,240.00

Flamingo Stand 🦽

- For use with the Hazy, Striplight or Mini-Cumi
- Light stays at same angle when raised and lowered.
- Max. height 10.7', but fits under a 7' ceiling.
- 5-foot horizontal reach.
- Requires adapter (13-1011).
- 13-1010.....\$3,147.00

Mini-Hazylight 😣

The Mini-Hazy gives you most of the same advantages as the larger Hazylights. At about ¹/₄ the surface area and a fraction of the weight, the Mini-Hazy is ideal for smaller product work, or situations where you need that unique Hazylight quality on a location shoot.

- f/45 at 6¹/₂ ft. (3200Ws, 100 ISO)
- Uses standard lampbases

12-0460.....\$1,589.00

indicates items which ship by truck. Call for shipping rates.

Spotlights



Profil 11/26 Theatrical Spot 8

The Profil 11/26 is the most versatile of the extensive line of Broncolor spots. Dual focusing lenses allow you to adjust the angle and focus of the beam simultaneously. You can further control the light using the built-in iris diaphragm, light shapers and mask holder. The combination of these controls lets you create a spot of any size and shape.

The Profil can accept power packs up to 3200Ws, for light output of f/90 ($6^{1}/_{2}$ feet, ISO 100, 11°.) Scales for angle and focus allow you to easily repeat any combination of settings. **12-3032**.....\$3,995.00

Pulsospot Accessories

Barn Door to Pulsospot 4

12-401	5	\$259.00

Slide Holder 6x6

13-3026	 	 	\$ 65.50)

Slide Holder 24x36

13-3028	\$65.50

4 Part Slide Template

12-3030.....\$98.00

⁹ indicates special order items. See pg. 114 for details.

Pulsospot 4

f/90 at 61/2 ft., (3200Ws, 15°), f/641/3 at 61/2 ft., (3200Ws, 45°)

- 3200Ws hard edge spot projector.
- Fresnel lens adjustable from 15° to 45°.
- Optical attachment lenses available for projecting masks or transparencies.
- Excellent for applications where direct light with strong gradation is required.
- Use to bring out contrast and texture in objects, or to enhance areas with tightly controlled lighting.
- Fresnel lens has 5300° K UV coating.
- Use with any 110V Pulso, Opus or Primo power pack.
- Weight 19 lb.
- Includes flashtube (15-1022) and modeling light (15-2001).
- 12-3022\$2,695.00

Attachment lens 150mm

 $f/32^{1}/_{3}$ at $6^{1}/_{2}$ ft., (3200Ws, ISO 100) Projects a non-color fringing hard light circle (from 5 to 30 inches at $6^{1}/_{2}$ feet). Can project transparencies for rear or top projection with slide holders, see below.

12-3024\$2,174.00

Attachment lens 100mm

f/22¹/₃ at 6¹/₂ ft., (3200Ws, ISO 100) Projects a larger circle than the 150mm attachment lens (7 to 44¹/₂ inches at 6¹/₂ feet) **12-3025****\$2,060.00**

Spotlights



Pulso Flooter "S"

f/128 @ 6¹/₂ ft. (ISO 100, 3200Ws. 15°). The Flooter provides "artificial natural light," ideal for large sets such as cars and furniture, or for fashion when used with the honeycomb. It is a broad light source which evokes fifties-style film lighting. Its effect is

comparable to a theatrical fresnel spot. The Flooter can be used with any Pulso, Primo or HMI 575 lampbase. The Fresnel lens has an active diameter of 340mm for extremely efficient light output and is adjustable from 15 700 M/ 1 1 241

light output, and is adjustable from 15-70°. Weight 24 lb.	
12-3135\$2,496	.00

Barn Door set To Flooter

12-3036	\$228.00
12-3036	\$228.0

Honeycomb To Flooter

12-3037	\$171.00
Modification Kit for Flooter	
Converts older Flooters to new "S" m	odel
12-3038	\$119.00
HMI Adapter to Flooter	
Required for use with the HMI 575.	
14-3581	\$249.00

5/8" Stand Threaded Adapter

Attaches large lights with threaded base like the Flooter or Pulsospot 4 to light stands with a 5/8" male stud. Also known as the Impact Adapter to Superboom. 17-2027.....\$56.00

Fresnel Spot Attachment

f/64 at 6¹/₂ feet, (ISO 100 at 15°, 3200Ws) This focusing Fresnel spot attaches to any Pulso 2/4, Primo, Minipuls or Compuls head. The Fresnel lens has a diameter of 160mm (6.3 inches) and focuses from 15 to 35°. The focal length is 250mm and the unit attaches via the standard bayonet mount.

The lighting effect produced is similar to the Mole Richardson continuous spotlight. An additional advantage of the Fresnel Spot Attachment is that it's lightweight enough to be used easily with the Minipuls and Compuls self-contained units. 12-3033.....\$1,559.00

Broncolor Optical Spot

f/32¹/₃ at 6¹/₂ ft. (ISO 100, 3200Ws) This optical spotlight projects a non-color fringing hard light circle. It attaches to the Pulso 2/4 and Primo lampheads. Includes Diffusion Dome and Aperture mask.

12-3031.....\$1,559.00

Cumulite 2



You can use the Cumulite 2 for even, edge-to-edge illumination (top left,) a smooth gradation (center left) or a central hot-spot (bottom left).

- Broncolor's incredible 79x48" bank gives you light of unparalleled quality.
- Glass counter-reflectors, white interior coating and plexiglass diffuser ensure perfectly even light, making it the natural choice when you're working with reflective objects.
- The hard plexiglass diffuser won't show surface wrinkles in reflective highlights the way fabric diffusers can.
- Comes equipped to handle two standard Pulso or HMI 575 heads.
- Add a third, central lampbase for even more flexibility. The third head produces a hot spot in the center of the reflected illumination if desired. Focusing lampbases control the size and relative intensity of the spot.
- Honeycomb grid available to further increase contrast and saturation.
- With Grafit or Opus power packs and a motorized rail system, all pack functions and mechanical movements can be controlled with the Servor 3 infrared transmitter.

Cumulite 2 Reflector 🛛 🦛

f/32.7 @ 3200Ws (6¹/2 ft., ISO 100) 79x48" fiberglass reflector supplied with plexiglass diffuser, 2 glass counter-reflectors and cover for central opening. Weight 64 lbs. 12-2026.....\$7,500.00

Balloon Lamp

- Compatible with the full line of Primo and Pulso lamp bases, as well as entire range of Minipuls compact units.
- 20" diameter Plexiglas dome diffuses light similar to a street lamp; even 360° illumination.
- Creates highlights that are round and slightly burned out, ideal for interiors and portraits.
- Lightweight material makes it great for location shooting where broad illumination or fill-in light is needed.

12-0099.....\$549.00

WANT A DEMO? (800) 456-0203



Light Banks



Mini-Cumulite 🔰

- 31"x47" version of the Cumulite.
- White interior coating and rigid plexiglass diffuser.
- Uses a single standard Pulso, Primo or HMI lampbase.
- Graduated glass counter reflector guarantees even lighting.
- Rotating ring which gives the reflector a full range of self-arresting movements.
- All Mini-Cumulites ship by truck.

Mini-Cumulite for 301 Stand Requires counter-reflector.

Requires counter-reflector. 12-2014\$4,190.00

Glass Counter-Reflector for Pulso 2 / 4 for Mini Cumi 12-2015\$212.00

Broncolor 301 Stand



Megaflex

Two new softboxes measuring $4\times6^{1/2}$ ft. and 4×10 ft. Each Megaflex takes 2 Pulso, Primo or HMI lampheads and features an optional second diffuser.

Megaflex 200

12-0520		\$2,950.00
Megaflex 300	0	
12-0521		\$3,750.00

Bracket to Megaflex

Required to mount the Megaflex bank to Broncolor 301 and Flamingo stands. 32-0107......\$1,141.00

Mount the Megaflex on your rail system. See pg. 110.

(e) indicates special order items. See pg. 114 for details.



Boxlite

Boxlite

- 1600Ws capacity
- f/22 at 6¹/₂ ft., 1600ws, 100 ISO
 f/45¹/₂ at 2 ft., 1600ws 100 ISO
- Sealed front is spillproof great for food photography.
- Ideal for close-range lighting, jewelry photography, transparency duplication.
- Lets you place and control reflected highlights on your subjects.
- Even lighting from edge to edge.

Boxlite 40 (12" x 16")

With 2 flash tubes, 4 modeling lights, quick change head.

12-2025.....\$2,014.00

Lightbar System



Lightbar

These diffused, wide area lampheads measure 4.5 inches by 23 and 44 inches, respectively. The Lightbar 60 is rated at 3200Ws, while the 120 is a 2x3200Ws bi-tube design. Both are fan-cooled. The Lightbar is intended for large area lighting such as backgrounds, architectural and automotive subjects. "Evolution" uses halogen modeling lamps for brighter illumination.

Lightbar 60 Evolution		
12-5351	\$ <i>2,</i> 189.00	
Lightbar 120 Evolution		
12-5353	\$3,580.00	

Barn Doors

Double-hinged barn doors give you additional control over the Lightbar's falloff.

Barndoor for Lightbar 60 12-5370\$381.00 Barndoor for Lightbar 120 12-5371\$481.00

Transparent Plexi Cap

Use in place of the diffused cap supplied with the Lightbar.

Transparent Plexi Cap 60

12-5360	\$173.00
Transparent Plexi Cap 120	
12-5361	\$212.00

Mat Plexi Cap

Converts a Striplight 60 or 120 into a Lightbar. Also used as a replacement cap for the Lightbar.

Mat Plexi Cap 60

12-5362	\$172.00
Mat Plexi Cap 120	
12-5363	\$212.00



Striplight

This combination of the Lightbar and the Strip adapter creates a unit similar in function to the old Broncolor Striplight. The Striplight is flatsurfaced and more directional than the Lightbar.

Striplight 60

12-5355	\$2,189.00
Striplight 120	
12-5357	\$3,580.00

Strip Adapter

The Striplight adapter converts the Lightbar into a striplight.

Strip Adapter 60

12-5364	.\$131.00
Strip Adapter 120	
12-5365	.\$212.00



Honeycomb Grids

Further increases the directional effect of the Striplight or Strip adapter.

Honeycomb for S60 Adapter

12-5375	.\$186.00
Honeycomb for S120 Adapter	
12-5376	.\$243.00

Prices and specifications are subject to change without notice.

Fibrolite

Fibrolite

- Two to three times more light than other fiber optic systems.
- Use up to four fiber optic guides to place light precisely where you need it. Light small objects with a combination of accuracy and power never before possible, or highlight important points in a larger composition.
- Fiber optic cables transmit light without heat safe any distance.
- Individual outlet controls let you vary the output of each guide independently over a 3 fstop range.
- Built-in cooling fan for trouble-free multiple exposures.
- Compatible with all Broncolor power packs.
- Compatible with older Impact Fibro optical fibers and accessories.
- Shown with accessories (see below and right.)

Fibrolite Expert Kit

The Fibrolite Expert Kit is a great way to jump right into the Broncolor fiber optic system. It features a full set of fiber optic light guides in two different lengths, plus stands and lens attachments for each fiber.

The Broncolor Fibrolite will make your jewelry sparkle and your food more appetizing, without cramping your style or your set.

1	12-3006	Fibrolite
2	12-3013	60" Fiber Optic Cable
2	12-3017	80" Fiber Optic Cable
4	12 3010	Focusing Lens
4	12-3018	Articulated Arm
4	12-3020	Iron Base for Arm
12-3	009	\$5,995.00



Fibrolite Accessories

Fiber Optic Cable 40 Inch Glass fiber, with black flexible casing, active diameter 0.4".	12-3014	\$355.00
Fiber Optic Cable 60 inch	12-3013	\$457.00
Fiber Optic Cable 80 inch	12-3017	\$543.00
Optical Fiber with Two Strands Half flexible plastic tube with active diameter of 2 mm. Length 32".	12-3015	\$848.00
Focusing Lens With tube, insertable and adjustable on	12-3016	\$238.00
optical fiber, with locking screw.		
Filterholder for Fibrolite	12-3010	\$ 45.50
Color Filters for Fibrolite	12-3011	\$ 35.00
Grey Filters for Fibrolite	12-3012	\$ 35.00
Flashtube for Fibrolite	15-0005	\$383.00
75W Fibrolite Modeling Lamp	15-2012	\$ 38.50
Articulated Arm — Requires clamp		
or base (below)	12-3018	\$109.00
Clamp to Attach Arm to Table	12-3019	\$ 73.00
Iron Base for Arm	12-3020	\$ 98.00



Ringflash

The new Broncolor Ringflash is a circular 3200Ws head designed to let you shoot through its center. Depending on the distance from the subject, the Ringflash can produce perfectly shadowless lighting or the unique cross-shadow effect popular in today's fashion work. Its universal camera mount and 4" center opening make the Ringflash adaptable to virtually any camera and lens combination. It is compatible with any Broncolor pack up to 3200Ws. Please note that the Ringflash should not fire more than a total of 9600Ws per minute

(about 48 pops on a Grafit A2 at low power.) 12-2030\$1,399.00

Softlight Reflector for Ringflash

Counter-reflector creates a broader, softer indirect light from the Ringflash 12-2035\$414.00

Macro Reflector for Ringflash

Concentrates light for photography at macro distances. 12-2036\$414.00

^{12-3006.....\$2,340.00}

Flashtubes



Exclusive 5-year Flashtube Warranty

All ceramic-base Broncolor flashtubes feature a 5-year pro-rated warranty. If the tube fails or breaks for any reason*, we will replace it for a percentage of the current catalog price, determined by the age of the tube.

Time Since	Re
Purchase	Co
Up to 30 days	No
30 days - 1 year	10
1 year - 2 years	30
2 years - 3 years	50
3 years - 4 years	70
4 years - 5 years	90

Replacement Cost

No charge 10% of current catalog 30% of current catalog 50% of current catalog 70% of current catalog 90% of current catalog

* Does not apply in cases of abuse. Other terms and conditions apply; contact Sinar Bron for details. Minipuls, Visatec and Impact S flashtubes are not covered under warranty.



Flashtubes

2x3200Ws*

Self-Contained Units

Jen-Conta	amed omits		
Capacity	Used with these heads	Cat #	Price
150Ws	Impact 21	17-2012	\$ 111.00
300Ws	Impact 41, Impact 21	17-2014	\$ 155.00
170Ws	C-70 compact units	15-1001	\$ 310.00
375Ws	C-171 compact units	15-1002	\$ 321.00
600Ws	Impact S and Minipuls 40/80	15-0080	\$ 288.00
600Ws	Minipuls C40/C80	15-0043	\$ 107.00
1500Ws	Minipuls C200, D160	15-0044	\$ 199.00
300Ws	Visatec 800	17-1014	\$ 58.00
600Ws	Visatec 1600B	17-1015	\$ 93.00
1200Ws	Visatec 3200B	17-1013	\$ 161.00
Specialize	d Lighting Units		
1600Ws	Boxlite-Small	15-1014	\$ 352.00
1600Ws*	Boxlite-Small	15-1019	\$ 352.00
800Ws	Boxlite-Large (2x)	15-1015	\$ 256.00
800Ws*	Boxlite-Large (2x)	15-1020	\$ 248.00
950Ws		15-1020	\$ 272.00
	Effect light		
1600Ws	Striplight	15-1017	\$ 527.00
3200Ws*	Pulsospot 4	15-1022	\$ 923.00
3200Ws*	Fibrolite	15-0005	\$ 383.00
3200Ws	Sunlite Set	15-0150	\$ 375.00
Older Styl	e Heads		
1500Ws	Universal/Flashman	15-1010	\$ 578.00
1600Ws	Universal, Universal Hazy	15-1004	\$ 517.00
1600Ws	Spotlight (old style)	15-1007	\$ 533.00
1600Ws	Spot Projector (old style)	15-1008	\$ 533.00
1600Ws	Combiflex	15-1009	\$1,017.00
	-		
Lampbase			
1600Ws	Primo	15-1018	\$ 325.00
1600Ws	Flashman, Pulso 2,		
	Pulso 2-Hazy, Compuls	15-0002	\$ 476.00
1600Ws	UV-s coating for above units	15-0102	\$ 580.00
1600Ws	UV-s coating for Universal	15-1104	\$ 523.00
1600Ws	Mobilite/Picolite	15-0045	\$ 195.00
3200Ws*	Pulso 4, Pulso Hazy	15-0004	\$ 797.00
3200Ws*	Primo 4	15-1118	\$ 598.00
6400Ws	Pulso 8, 606, Pulso 8-Hazy	15-1005	\$1,322.00
6400Ws	UV-s coating for above units	15-1105	\$1,332.00
Twin Lam	pbases		
2x1600Ws	UV-s coating for Pulso Twin	15-0111	\$ 946.00
2x3200Ws	Pulso Twin 2 and 4	15-0012	\$1,082.00
2x3200Ws	UV-s coating - Pulso Twin 4	15-0012	\$1,082.00
2x3200vv3	Dulso Twin 2/4	15 0017	\$1,002.00

Most Broncolor flashtubes are supplied with a UV light absorbent coating. Normal coating is 5300° K ($\pm 150^{\circ}$)

15-0017

\$1,072.00

Pulso Twin 2/4

Special UV-s coating 5000°K (\pm 150°): Special order, 4 week delivery. *Uncoated (clear) 5900°K (\pm 150°)

Domes and Modeling Lamps



Non-UV Mat Protection Glass

Required when using optical spot

attachments and UV coated tubes.

15-0928\$173.00

Protection Glass, old Minipuls

15-0081.....\$59.50

Mat Protection Glass for older

15-0082.....\$87.00

14-3575\$457.00

14-3576\$171.00

14-4525\$538.00

HMI 575 Protection Dome,

for Pulso, Primo, Hazy

Lampbases

Minipuls

Mat

575W HMI Lamp

1200W HMI Lamp

Protection Glass for Pulso 2 / Primo, Minipuls C 15-0022\$124.00

UV Protection Glass for Pulso 4 / Primo 4 15-0026\$171.00

UV-S Protection Glass for Pulso 4 / Primo 4 15-0126\$173.00

UV Mat Protection Glass for Pulso, Primo, Hazy Lampbases Required when using optical spot attachment or Satellite reflector with uncoated flashtubes. 15-0028\$171.00

UV-S Mat Protection Glass for Pulso, Primo, Hazy Lampbases 15-0128\$173.00

Modeling Lamps

For Use With	Power	Cat. #	Price
Boxlight	40W	15-2007	\$ 15.50
Impact 21/41, Mobilite	50W	15-2030	\$ 9.50
Striplight	60W	15-2008	\$ 17.50
Lightbar	60W	15-2009	\$ 25.00
Fibrolite	75W	15-2012	\$ 38.50
Visatec Solo 1600/3200	150W	17-2006	\$ 23.00
Impact S40/S80, Picolite	150W	15-2020	\$ 29.00
All 110V lampheads,	250W	15-2001	\$ 21.50
Minipuls, Compuls 65/95			
Minipuls C40/C80/C200	300W	17-2013	\$ 48.50
Cumulite (220V)	250W	15-2006	\$114.00
Pulso 8, 606 (220V)	300W	15-2004	\$ 52.50
Primo (220V)	500W	15-2011	\$ 51.50
Pulso 8, 606 (240V)	650W	15-2005	\$ 52.50
Evolution Striplight/Lightbar	60W	15-2010	\$ 9.00

Flashtube and Dome UV-coating

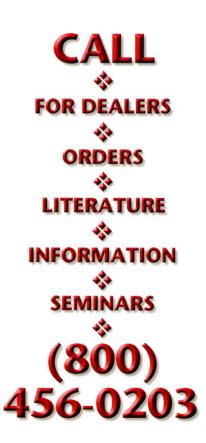
Virtually all Broncolor strobes feature a UV coating on the flashtube or protection dome to filter out the ultraviolet light produced by the flashtube. UV light shifts the color temperature towards blue, and it can cause many dyes containing optical whiteners and brighteners to fluoresce, creating unnatural color renditions that are hard to correct.

The standard UV coating on Broncolor strobes eliminates these problems, and balances the color temperature to 5300° K ($\pm 150^{\circ}$).

A special heavier coating, UV-S, is available for most flashtubes and protection domes. It balances to 5000° K ($\pm 150^{\circ}$).

All flashtubes 1600Ws and below have the Uv coating applied directly to the tube. Higher power tobes are uncoated, and must be used with a UV coated protection dome. These tubes generate too much heat to be coated directly.

Some flashtubes are available without UV coating if necessary; see the chart on the facing page.



Light Meters



FCM 2 Flashmeter

- New extended sensitivity range from EV 0 to 23.
- Measures both flash and continuous light, separately or combined.
- Film plane metering capability with the addition of the FCM 2 Probe.
- Two channel infrared triggering of Broncolor packs.
- Multiple flash measurement
- Mean and contrast readings.
- Infrared power level control of Grafit, Pulso and Opus packs.
- Range f/1.0 f/180.9 in ¹/₁₀ stops.
- ISO 3 4000.
- LCD display.
- Requires 9V battery, not included.
- 16-1014.....\$790.00

Probe for FCM 2 Flashmeter

Plugs into the FCM 2 meter to give you film plane metering capability with any metering back equipped Sinar view camera. 16-1011.....\$590.00

Sinar Booster 1

- Film plane metering probe for the Minolta Flashmeter IV or III.
- Measures continuous and strobe light.
- Long enough to reach all areas of a 4x5, 5x7 or 8x10 metering back.
- Window on the tip of the meter allows precise spot positioning.
- Two plastic bumpers prevent damage to your ground glass.

22-1025\$1,197.00



FCC Color/Flash Duration Meter

- Measures color temperature and flash duration (t 0.1).
- Color measurement of flash and continuous sources.
- Calculates proper filtration for any two programmable film types.
- Infrared color temperature control of Grafit A and Pulso A packs.
- Infrared triggering of all Broncolor packs.
- Lux readings of ambient light.
- Includes case.
- Requires one 9-volt battery (not included).
- 16-1020.....\$1,220.00

Sinar Color Control Filter Color Meter Kit

Includes all the filters necessary to make color corrections based on readings from the Broncolor FCC meter. Also includes a filter wallet for storage and a Color Control Filter Cleaning Kit. Requires Filterholder 100. *\$1-2200......\$1,258.00*

Y-Cable

Allows you to keep both your meter and your shutter plugged into your strobe's sync cable at the same time.

FCM Holder

Keep your FCM conveniently attached to the
side of your SINAR camera while using the FCM
Probe.
16 1012 002 00

16-1013\$92.00

Case for FM / FCM Meters

Nylon case for the FCM meter (included with	
FCC.)	
16-1009\$16.50	



broncolor

Broncolor User Profile

John Romeo has been operating a photographic studio in his native Philadelphia for the past eleven years. His clients include the top agencies of his area as well as national companies and high-end catalogs, including work for Bell Atlantic, Hilton Hotels & Casinos, MCI, Motown, Johnson & Johnson, Tropicana and Mattel. Over the years he has established a reputation as a photographer who has defined his style with a quality of light that adds an extra special touch to his studio and location work. A look at the images on his Web site–Romeophoto.com–reveals portraits that speak to an inner character of the subject and still life images imbued with a feeling of fresh and natural light. He brings it all off in his 2200 sq. ft. studio that, according to his bio, uses "state of the art" lighting equipment.

"If I were to define my style I'd say that whatever the image, I do my best to bring life to it through my use of light. Of course, every subject and set defines the lighting, but I consistently look for a natural, single light source for my images. I look for a realistic element of light, even though that might be an illusion created by multiple lights, reflectors and flags. Recently, for example, I did a shot of fall leaves in the studio and the final image looked as if it had been made outdoors."

To aid him in this process, Romeo has chosen Broncolor lights and accessories. He purchased his first set of Broncolor Pulso packs in 1993 and now works with the Grafit packs. "There's no question that these are the Mercedes of lighting, but there's also no question that you get what you pay for. I need my packs and heads to perform and to perform consistently, and that's what Broncolor has always delivered. I'm hooked on these lights. And while it's been rare, if a pack needs servicing, they are



done right and returned promptly. That's important to me. I use a pack per head, mainly because it gives me a sense of more control, and use softboxes, reflectors and grids to modulate the light. The true 3200 w/s delivered by the Grafit pack really helps with all the reflectors and bounce light that I use."

Romeo's reputation for lighting control is enhanced by his Broncolor equipment. "I'm very serious about color temperature control," he says, "and that's key when you're using more than one light on a set. I have found that I can control color temperature very finitely by working with the Broncolor flash duration settings. For example, if I want to go a bit cooler (about 200 degrees Kelvin higher) I switch from a 1/250 second to a 1/1000 second setting. This enables me to fine-tune my lighting and saves me a lot of Polaroids. It also shows that the heads are consistent across the board. If I'm using multiple heads I need that consistency, and that's what they deliver time after time." Romeo also uses a Broncolor Color Temperature meter and a Foba light stand on the set.

Digital is becoming an increasingly important aspect of Romeo's work, and he uses a Leaf Volare digital back on his Sinarcam 4x5 camera for his work. "This is where the Broncolor lighting has really made a difference," he says. "I began working with the Leaf Volare back about six months ago, and my digital work has taken off like a rocket. Lighting for digital has to be precise and consistent. First, the 1/10 stop difference in Grafit settings allows me to make very precise and subtle lighting differences between shots. With digital imaging you can take a number of shots without fear of wasting film or Polaroids."

"The consistency of lighting is also very important, and this is also where Broncolor lights really pay for themselves. I use strobe for each exposure of the 3-pass imaging of the Volare and each pass (or channel recording) is consistent. I find that it's tight enough to tolerances that the LeafCapture software has no problem with image processing. So the consistency of Broncolor lights has really worked for my digital as well as my film imaging. That's allowed me to expand my business without having to reinvest further in lighting gear."

"And, those Grafit packs allow me to wire right into my computer to make power and setting adjustments. I have to confess that I haven't taken advantage of that feature. I,m not that lazy yet."

More of John Romeo's work can be seen on his Web page: **Romeophoto.com**.

Stands, Adapters, Cables and Fuses

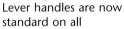
Stand	Height	Features	Cat. #	Price
Foba Staro Stand	6.5'	Caster stand ideal for Pulsospot 4. Needs		
		Clampholder (31-0902) & Threaded Bolt (31-0422).	31-0906	\$ 520.00
Junior Stand	8.2'	4 extensions. Ideal studio light stand	13-1002	\$ 274.00
Senior Stand	9.2'	4 extensions. Heavy-duty light stand	13-1003	\$ 354.00
Super Boom	8.2'	Stand and boom arm with adapter to Pulso head, with 2 hand cranks, stand attachment device, counter balance and casters.	13-3002	\$ 995.00
Minipuls C Suspension Bracket for Bail Systems		To hang Minipuls units right-side up from rail systems	13-4060	\$ 84.00

Bracket for Rail Systems

Broncolor Adapter

To put Pulso or HMI lamp heads on Century or Bogen 5/8" stands. 13-3008.....\$18.50

Locking Lever



Broncolor Pulso and HMI lampheads. Older heads can easily be converted by replacing the blue knob with this handle.

12-0013	3\$2	0	.5	0

Handle for Lamphead

Accessory handle for all Pulso and Flashman lampbases makes precise adjustment of the heads faster and easier. 12-0012.....\$24.50

Threaded Bolt to Clamping Holder

13-3024	\$80.	00	ļ

Bolt, Broncolor to 3/8" Thread

13-4005	\$\$	1	9	.5	0

Bolt, Bron to ³/₈" Thread & Foba Seat

13-4006	\$37.50

Casters for Senior Stand t of 2

(set of 5)	
13-4001.	\$104.00

Adapter Pulso to Superboom

13-3004	\$88.00

Heavy Light Adapter

Ideal for mounting large lights like the Flooter
or Pulsospot 4 to any 5/8" light stand.
17-2027\$56.00

Protection Cap

Replacement cap for Flashman, Pulso and	
Primo lampheads.	
12-9111\$20.	00

S indicates special order items. See pg. 114 for details.

Cables

Туре	Length	Cat. #	Price
Lamphead Extension*	16 ft.	15-4007	\$ 325.00
Lamphead Extension*	32 ft.	15-4008	\$ 389.00
Power, Pulso/Flmn/Opus/Grafit/Prin	no 10 ft.	15-4010	\$ 27.00
Power, Impact 21/41	10 ft.	17-2084	\$ 17.00
Sync Deluxe **	16 ft.	15-0050	\$ 96.00
Sync Deluxe **	32 ft.	15-0055	\$ 123.00
Sync, Standard	16 ft.	15-0054	\$ 27.50
Sync, Universal	16 ft.	15-4001	\$ 124.00
Sync Extension, Universal	32 ft.	15-4004	\$ 150.00
Sync Extension, Universal	16 ft.	15-4005	\$ 163.00
Sync Extension, Universal	32 ft.	15-4006	\$ 191.00
Sync Cable	13 ft.	17-2080	\$ 29.50

For Universal, Primo, Flashman, Pulso, Opus and Grafit

** Heavy duty sync cable for use with all current power packs and compact units.

*** Standard sync delivered with all power packs.

Fuses - Packages of 10

3.15 AF	Pulso & Primo Lampbase	15-5011	\$ 51.50
5 AF	Mobilite Lamphase	15-5013	\$ 42.00
3.15 AF	Picolite Lampbase	15-5014	\$ 42.00
30 AMP	Mobil Power Pack	15-5015	\$ 38.00
6.3 AF	Impact 21/41	17-2005	\$ 29.50
6.3 AFF	C70 / C171 / Unvl Lampbases	15-5007	\$ 40.50
8 AT	750 RT Power Pack	15-5001	\$ 38.50
10 AFF	606 Lampbases, HMI	15-5005	\$ 40.50
10 AT	750 RT / 1500 RT Power Pack	15-5010	\$ 40.50
12.5 AT	1500 RT Power Pack	15-5009	\$ 40.50
16 AF	200 / 260 / 606 Power Pack	15-5006	\$ 48.50
16 AT	Flashman, Pulso 220V, 304/404,		
	Primo pack	15-5003	\$ 48.50
16AT	Compuls	15-5002	\$ 48.50
20 AT	Pulso 120V Power Pack	15-5012	\$ 40.50
250 Mat	200/260 Power Pack	15-5008	\$ 17.50
500 Mat	Spot Projector - Lampbase	15-5004	\$ 36.50

Note: To prevent possible damage to modeling bulb and flashtube, use only the recommended super fast-blow fuse.

Pulso Wall Adapter, Bayonet

Mounts Broncolor 12-0910		5	\$14	5.00

0 Pulso Wall Adapter, "Hockey Puck" style

12-0912	\$48.50



Calculating movements is as easy as . . .

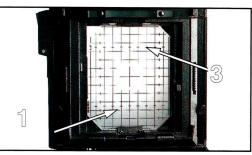


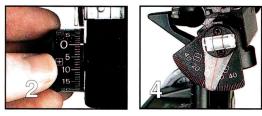
- 1. Focus on the bottom horizontal dotted line on the groundglass.
- 2. Zero the angle calculator on the left side of the rear standard by turning it until the 0 lines up with the white mark.
- 3. Focus on the top horizontal dotted line on the groundglass, using the fine focus on the rear standard. The angle calculator will automatically indicate the required degree of tilt.
- 4. Set the front standard tilt to the angle indicated on the dial.
- 5. Adjust focus if needed.
- 1. Focus on the right-hand vertical dotted line on the groundglass.
- 2. Zero the angle calculator on the left side of the rear standard by turning it until the 0 lines up with the white mark.
- 3. Focus on the left-hand vertical dotted line on the groundglass, using the fine focus on the rear standard. The angle calculator will automatically indicate the required degree of swing.
- 4. Set the front standard swing to the angle indicated on the dial.
- 5. Adjust focus if needed.

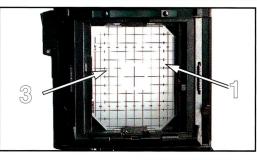


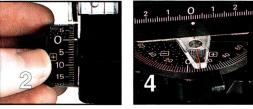
- 1. After setting any swings and tilts, Focus on the farthest point you want to keep in focus.
- 2. Set the depth of field scale to the zero point by lining up the arrow on the scale with the white dot on the camera. Turn the scale only, not the focusing knob.
- 3. Focus on the nearest point you want to keep in focus, using only the fine focusing drive on the rear standard.
- 4. Set your aperture to the f/stop indicated on the depth of field scale.
- 5. Turn the rear fine focus knob back until the depth scale reads half your working f/stop (for example, from f/22 you would turn back to f/11). You are now focused at the optimum point for that depth of field.

f1/f2









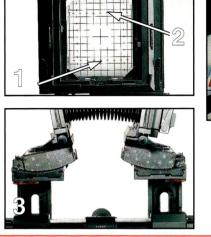




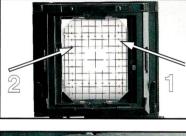




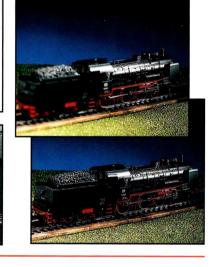
- 1. Focus on the bottom horizontal dotted line on the groundglass.
- 2. Tilt the rear standard until the image is sharp at the top dotted line.
- 3. Transfer the tilt angle to the front standard; ie. if your rear standard reads +5 degrees, set a tilt of +5 on the front standard. Note that the front standard will move in the opposite direction from the rear standard.
- 4. Reset the rear standard tilt to zero.
- 5. Adjust focus if needed.
- 1. Focus on the right-hand vertical dotted line on the groundglass.
- 2. Swing the rear standard until the image is sharp at the left-hand dotted line.
- 3. Transfer the swing angle to the front standard; ie. if your rear standard reads -7 degrees, set a swing of -7 on the front standard. Note that the front standard will move in the opposite direction from the rear standard.
- 4. Reset the rear standard swing to zero.
- 5. Adjust focus if needed.
- 1. After setting any swings and tilts, Focus on the farthest point you want to keep in focus.
- 2. Set the depth of field scale to the zero point by lining up the arrow on the scale with the white dot on the camera. Turn the scale only, not the focusing knob.
- 3. Focus on the nearest point you want to keep in focus, using only the fine focusing drive on the rear standard.
- 4. Set your aperture to the f/stop indicated on the depth of field scale.
- 5. Turn the rear fine focus knob back until the depth scale reads half your working f/stop (for example, from f/22 you would turn back to f/11). You are now focused at the optimum point for that depth of field.



















The Sinar f1/f2 view cameras give you an economical start in the Sinar system while outperforming any other camera in their class. A unique combination of features gives you unprecedented working speed and precision, but the f1 and f2 are still lightweight and compact enough to take with you on location.

- Patented 2-point focusing and angle calculator scale lets you calculate exact swings and tilts in seconds . . . with no guesswork!
- Depth-of-field scale helps you determine the optimum f-stop for your image — no more excessive stopping down, no guessing, no wasted test shots.
- Full Sinar System compatibility means you can add fully automatic shutters and film plane metering for even greater speed and precision. It also gives you access to the wide range of Sinar accessories.
- Geared fine focus combined with sliding coarse focus gives you . the best combination of speed and precision.
- True yaw-free movements mean that verticals stay vertical in every situation.
- Zero detents on swing, tilt, rise and shift movements.
- Infinitely extendible monorail lets you shoot with complete stability no matter what your camera extension.
- Fully upgradable to film plane metering or more sophisticated camera models, all camera components remain fully integrated into the system.
- Specifications:

Maximum Extension w/

Standard Bellows*: 18" Minimum Extension: 1.5" Standard Rail: 12" Weight: 7 lb (f1), 8 lb (f2)

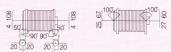
Sinar f1 4x5 View Camera

The Sinar f1 camera features rear standard with cylindrical angle calculator, depth of field scale, p2 style knobs, right hand operation, and 1/4 turn vertical shift lock. The front standard has an open clamp which makes it the ideal multipurpose standard if the f camera is upgraded to an f2 or a p2 model. See pg. 69 for film plane metering upgrades. 21-1005\$2331.00

Sinar f2 4x5 View Camera

There are a few basic differences between the f1 and the f2. The f2 features an enclosed rail clamp on the front standard for greater stability. The front standard also has fine focus capability. Swing and shift locks are separate on the f2, and feature a positive locking mechanism for even easier operation. See pg. 69 for film plane metering upgrade. 21-1007\$2673.00

*Requires additional rail for maximum extension. Shown with lens, not included.



Sinar f1/f2 View Cameras



Built-in calculators help you quickly determine exact swings, tilts and depth of field.

Image Kits



For the photographer on the go Sinar offers the f1 and f2 Image Kits. These kits are available with either the f1 or the f2 4x5 camera and your choice of a 150 or 210mm Sinaron lens. The Image Kit can easily be used for studio, architecture or even landscape photography, all in one easily transportable case.

Image Kit accessories include:

- 150 or 210mm high performance Sinaron f5.6 lens
- 6" Extension Rail
- 4x5 Wide Angle Bellows
- Bellows Holder (2)
- 4x5 Fresnel
- Filter Rod Reducing Bushing
- f1/f2 Image Case

	150mm	210mm
f1	21-5008	21-5012
	\$4117.00	\$4498.00
f2	21-5009	21-5013
	\$4608.00	\$5013.00



The Sinar x and p2 view cameras are the most advanced, featurepacked, easy to use cameras in the world. Everything about them is designed to help you work faster and more accurately, from self-locking geared movements to calculation of movements and depth of field. These cameras represent the culmination of 50 years of large format innovation and experience.

- The x and p2 are based on asymmetric tilts and swings, not the traditional center or base tilts. This means rapid and precise settings, without ever losing sharpness on the axis.
- You can calculate exact swings and tilts in seconds using the asymmetric movements and measuring scales. You won't have to guess at your movements anymore, and it's fast very fast.
- All x and p2 movements are gear-driven.
- The x and p2's precision micrometer drives are smooth and self-arresting. Once a movement is set, it stays - no more wrestling with locking knobs.
- Depth of field calculator tells you exactly how much depth of field you need, eliminating excessive stopping down forever.
- All controls are on the right side of the camera for fast, onehand operation.
- Most stable design of any view camera.
- Compatible with all Sinar accessories back to 1948.
- Metering back for film plane probes standard on p2 and upgradable on the x.
- Available in a variety of formats 4x5, 5x7 and 8x10 for the p2, 4x5 for the x, and a wide range of digital adapters for both.

• Professional photographers have long appreciated the quality and value of the Sinar line of view cameras. When you purchase a Sinar view camera you are not only purchasing many of the exclusive Sinar features, but also 50 years of experience in large format, as well as complete system interchangeability.

Specifications - x and p2:

- Maximum Extension w/ Standard Bellows*: 18" Minimum Extension: 1.5" Standard Rail: 12"
- Metering back

p2 vs. x: Additional p2 features

- Rail Clamp 2
- Format changeable
 - Zero detents
 - Lower-effort gearing

Sinar X 4x5 View Camera

Weight: 13 lb.

Includes Sinar X 4x5 front and rear standards, 4x5 non-metering back, Rail Clamp 1, 12" base rail and 4x5 standard bellows. 21-2204

Sinar p2 4x5 View Camera

Equipped with Sinar p2 front standard, Sinar p2 rear standard, 12" basic rail unit, rail clamp 2, bellows, metering back, ground glass and plateholder for 4x5 format.

21-2201\$7030.00

Sinar p2 8x10 View Camera

Comes equipped with special 8x10 front and rear standard bearers, 12" basic rail, tapered bellows, metering back, ground glass and plateholder for 8x10.

Sinar x and p2 View Cameras



Self-locking, asymmetric swings and tilts calculate movements in seconds without ever losing focus on the axis

Film Plane Metering Upgrades

Measuring light at the film plane is the most precise way to read exposure and control contrast. Since film plane probes meter the exact light that will expose your film, readings automatically compensate for bellows extension, filters and other factors which can influence exposure.

Any Sinar view camera not already equipped with a metering back can be easily upgraded to film plane metering capability. The following components are all you need:

4x5 Metering Holder Frame

Allows a probe to be placed in the film plane. Replaces the non-metering frame supplied with the x. Already included on the p2. 23-2025\$602.00

Sinar Booster 1

Film	plane metering probe for use with	the
	olta Flashmeter III, IV and V.	
22-1	1025\$	1197.00

OR

Broncolor FCM 2 Meter

A sophisticated but easy to use flash and ambient light meter. Includes multiple and average readings, flash/ambient comparisons, and infrared triggering of Broncolor strobes. Requires FCM 2 Probe, below. 16-1014.....\$790.00 FCM 2 Probe 16-1011.....\$590.00

QUESTIONS? CALL TOLL FREE (800) 456-0203

Sinar Pro Kits



Sinar x Pro Kit 4x5

Equipped with a Sinar x 4x5 view camera and all Pro Kit accessories. 21-5002.....\$11,289.00

Sinar p2 Pro Kit 4x5

Equipped with a Sinar p2 4x5 view camera and all Pro Kit accessories. 21-5003......\$13,743.00

Sinar p2 Pro Kit 8x10

Equipped with a Sinar p2 8x10 view camera and all Pro Kit Accessories 21-5005......\$17,471.00

Pro Kit Accessories

- 18" Extension Rail (8x10)
 6" Extension Rail (4x5)
 Auto Aperture Shutter
- •Wide Angle Bellows (format)
- •Fresnel Lens (format)
- •Reducing Bushing
- •Camera/Accessory Case (4x5)

•Expert Case (8x10) •1 or 2 Lenses (format) For 4x5: 210mm f/5.6 Sinaron, 90mm f/6.8 Sinaron For 8x10: 300mm f/5.6 Sinaron If you are looking for a complete package that includes not only the camera but a shutter, lenses, wide angle bellows and more, this is the kit for you.

The Sinar Pro Kit offers the professional photographer a complete ready-to-go system in one small case. If this is your first move into large format or even if it is an additional camera for an already busy studio, this outfit offers virtually everything you need.

The lenses offered with this kit are the Sinaron lens series. These lenses have quickly become known worldwide for their superior quality and performance in view camera optics.



Sinar Expert Kits



For the discriminating photographer Sinar offers the Expert Kits. Both these kits feature the state-of-the-art Sinar x or p2 cameras.

The Expert Kit features a large array of Sinar accessories to complement the camera. The kit is set up for the studio photographer who wants the very best in equipment at his fingertips.

Even if you have to go on the road, this case is ready when you are. Four removable casters allow you to roll the case easily through airports or on location, and it's durable enough to be checked as airline baggage.

> ORDERS DEALERS INFORMATION (800) 456-0203

Sinar x 4x5 Expert Kit

Equipped with a Sinar x 4x5 view camera and all Expert accessories. 21-6202......\$8,584.00

Sinar p2 Expert Kit 4x5

Equipped with a Sinar p2 4x5 view camera and all Expert accessories. 21-6201.....\$11,038.00

Sinar p2 Expert Kit 8x10

Equipped with a Sinar p2 8x10 view camera and all Expert Accessories 21-6203.....\$14,633.00

Expert Kit Accessories

- 6" Extension Rail
- 18" Extension Rail
- Multipurpose Standard I
- 4x5 Square Bellows
- Wide Angle Bellows (4x5 or 8x10)
- Bellows Holders (2)
- Bellows Hood Mask II

- Fresnel (4x5 or 8x10)
- Filter Holder Rod Set (3)
- Binocular Magnifier Board
- Lighthood w/ lightdrop
- Expert Case

Shown with Sinaron-s 210mm DB lens, sold separately. See pg. 84.

Camera Supports

Extension Rails, black 6" 23-1207.....\$178.00

12″ 23-1209.....\$208.00

18″ 23-1206.....\$361.00

Base Rails, black 12" 23-1208.....\$205.00

Rail Cap Black

Replacement end cap for the base rail. This cap prevents unlocked standards from sliding off the rail. 23-1204.....\$48.00

Rail Cap Special

Prevents unlocked standards from sliding off an extension rail used without a base rail. 23-1005.....\$25.00



Reducing Bushing $\frac{3}{s''}$ to $\frac{1}{4''}$ Unlike all other reducing bushings on the market, the Sinar reducing bushing is designed to be installed in the rail clamp from the top down, not from the bottom up. This allows greater security when using the $\frac{1}{4''}$ thread.

23-6006.....\$15.00



Pan Tilt Head

The Sinar Pan Tilt Head is designed to maintain the convenient right-hand operation of Sinar cameras. Its compact design makes it more stable than other heads, and its long lever handle is easier to tighten and loosen than traditional twist locks. The camera plate is keyed to Sinar rail clamps for quick camera attachment, and the 360° panoramic base is calibrated for precise positioning.

23-6010.....\$651.00

Rail Clamp 2

The "over the top" clamping mechanism of the Rail Clamp 2 provides even greater stability than the original rail clamp. Use as a replacement, or as a



second clamp with the Base Plate 2 Package. 23-1019.....\$692.00

Rail Clamp

23-1001.....\$265.00



Base Plate 2 Package Adds extra stability to any Sinar camera, especially at long bellows extensions

- 23-1016 Base Plate 2
- 23-1016 Base Plate 2
 23-1018 Quick Release Adapter
- 2 23-1017 Clamping Adapter

This package requires one additional Rail Clamp (23-1001) or Rail Clamp 2 (23-1019). 23-1116......\$1258.00

Clamping Adapter Rail Clamp to Base Plate 2

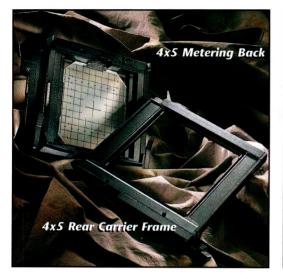
One clamping adapter is required for each rail clamp attached to the Base Plate 2. 23-1017.....\$271.00

Quick-Release Adapter

To attach the Base Plate 2 to a Pan-Tilt Head, tripod or camera stand. 23-1018.....\$126.00

ORDERS DEALERS INFORMATION (800) 456-0203

Camera Standards





Standard	Features	Cat. #	Price	
f1/f2 Standards				
f1 Front Standard / Multipurpose Standard	 Intermediate standard to link two bellows for long camera extensions The basis for a versatile compendium lens shade Front standard of all f1 cameras 	23-2210	\$ 698.00	
f2 Front Standard	Geared fine focus and separate locks for horizontal shift and swing	23-2212	\$1,132.00	
f1 4x5 Rear Standard	nonzontal shire and swing	23-2211	\$ 956.00	
f2 4x5 Rear Standard	 Separate locks for horizontal shift and swing 	23-2213	\$1,359.00	
5x7 Multipurpose Standard	• Links 8x10 bellows to 5x7 special bellows	23-2200	\$1,531.00	
f1/f2 5x7 Rear Standard		23-2215	\$2,937.00	
f1/f2 8x10 Rear Standard		23-2201	\$3,147.00	
p2 Standards				
p2 4x5 Rear Standard	 Fully geared, self-arresting movements Requires rear carrier frame and metering back 	23-2208	\$3,380.00	
p2 4x5 Front Standard		23-2204	\$4,045.00	
p2 8x10 Rear Standard	 Special T-shaped design for added stability Longer rise and shift range for larger formats 	23-2209	\$5,429.00	
p2 8x10 Front Standard	• Longer rise and shift range for larger formats	23-2206	\$5,026.00	
Backs and Frames				
4x5 Metering Back	For film plane metering probes. Standard back on p2. Consists of 23-2025 & 23-2024	22-1022	\$ 965.00	
4x5 Non-Metering Back	Replacement back, a1/f1/f2/x and older Sinars	23-2027	\$ 698.00	
4x5 Metering Frame	Upgrades non-metering backs	23-2025	\$ 602.00	
4x5 Frame - Non MB	Non-metering replacement frame	23-2023	\$ 252.00	
4x5 Screen Frame 2 with Lifting Levers	Groundglass half of camera back Upgrades backs without levers	23-2024	\$ 443.00	
4x5 Rear Carrier Frame	Bellows/back attachment frame for p2 standards.	23-2017	\$ 557.00	
5x7 Metering Back	Fluid dampened	23-2115	\$1,783.00	
5x7 Rear Carrier Frame	Adapts p2 standard to 5x7 back and bellows	23-2018	\$1,163.00	
8x10 MB Metering Back	Fluid dampened	23-1916	\$2,775.00	
8x10 MB Rear Carrier Frame	Adapts p2 standard to 8x10 MB back and bellows	23-1919	\$1,845.00	

Bellows

The Sinar system features nine different bellows for every application. Virtually all of them can be employed as lens shades or groundglass viewing screens.

The 4x5 square bellows is standard with all Sinar 4x5 cameras. In addition, this versatile bellows can also be used with Multipurpose standards to increase camera extension for all formats.

The 4x5 Wide Angle Bellows is used with shorter lenses. This "Bag Bellows" lets you use full camera movements at short extensions.

To focus with lenses 65mm or shorter, you'll need the Extra Wide Angle Bellows. Its thinframe, double-bag design allows you to move the camera standards to within 1/4 inch of each other.

The 5x7 Tapered Bellows is standard on all 5x7 cameras, and connects a 5x7 back to a 4x5 front standard. It can also be combined with a



5x7 Multipurpose Standard and an 8x10 to 5x7 Special Bellows for extra-long extensions on an 8x10 without vignetting problems.

The 8x10 Tapered Bellows is available in two styles for current meterback (MB) cameras and the older, non metering frames (Non-MB).

Size	Туре	Product#	Max. Ext.	Use with Lenses	Comments	Price
4x5	Square	23-3004	19″		Standard or multipurpose bellows	\$289.00
4x5	Wide Angle	23-3007	-	75-135mm		\$289.00
4x5	Extra Wide	23-3014	-	45- 65mm	For 65mm and shorter lenses	\$536.00
5x7	Tapered	23-3001	25″		5x7 to 4x5	\$550.00
5x7	Wide Angle	23-3005	-	90-165mm	5x7 to 4x5	\$500.00
8x10	Tapered MB	23-3008	23″		8x10MB to 4x5	\$1,112.00
8x10	Special	23-3010	50"*		8x10MB to 5x7 intermediate	\$1,829.00
8x10	Wide Angle	23-3011	-	120-240mm	8x10MB to 4x5	\$992.00

(MB) Metering Back - Fits newer style metering back 8x10 with rear frame size 121/8 x 121/8"

*Special bellows used with 5x7 tapered bellows and 5x7 multipurpose standard to prevent vignetting with extensions over 35".

⁹ indicates special order items. See pg. 114 for details.

A filter rod combined with any 4x5 bellows and a pair of bellows holders gives you an instant bellows lens hood for any Sinar camera. For added flexibility, use a joint rod which gives the lens hood a full range of adjustments.

Filter Rod 4 '/4" 23-1012\$26.00	
Filter Rod 6 ¹ / ₄ "	
23-1011 \$27.00	

23-1011	\$27	
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-- . ..

Filter Rod 10"

23-1010	\$ 45.	00)

Bellows Holder

Lets you attach the bellows to either the filter
rods or joint rod for use as a lens shade.
23-1013\$31.00



Joint Rod

Two-point swivel rod for attaching a compendium hood to the front of
the camera as a lens shade or a bellows to the back as a focusing hood.
23-1015\$150.00

Special Effects Accessories



Bellows Hood Mask I

Functions both as a lens shade and as a mask to block off part of the image from being exposed. Attaches to either a Multipurpose Standard or a bellows holder. Has two built-in wings and a set of clips to hold two additional wings (supplied) or your own custom masks. 23-4015.....\$159.00

5x5" Semi Reflecting Mirror with Housing

This mirror lets your camera "see" two sets at once, making it a valuable special effects tool. Mounts on a Multipurpose Standard. 23-4005.....\$753.00



Bellows Hood Mask II

This versatile accessory uses four micrometer-driven curtains to give you precision masking capability and easy multiple images. As a lens hood, you get maximum reduction of stray light, resulting in better color saturation. Attaches to a Multipurpose Standard, or to a Filterholder I for rotation capability. 23-4025.....\$854.00



Lens Shade Packages

Although it's not always the first thing you think of in the studio, a good lens shade is one of the most important accessories you'll ever own. Few things can have such a dramatic effect on the quality of your images.

Without a lens shade, light that isn't actually part of your image can enter the lens from the sides. This stray light serves no purpose except to lower the contrast and color saturation of your images, and in some cases will even introduce color casts. A compendium lens shade like one of the packages at right will block out all light except for the actual image. You'll be amazed at the difference it can make.



Deluxe Lens Shade Package

Designed for maximum flexibility and stray light reduction. A full compendium lens shade consisting of a Multipurpose Standard, Bellows Hood Mask II and Wide Angle Bellows, bellows holder and filter holder rod. 23-2223.....\$1,896.00



Basic Lens Shade Package

Consists of a Wide Angle Bellows supported by a bellows rod and two bellows holders. 23-2222.....\$500.00

Viewing Accessories



Bino Magnifier Board

Can be used with any bellows attached to the back of the camera to view the ground glass without having to use a dark cloth. New improved version allows you to make the Bino Board self-supporting by attaching it to a bellows clip and filter rod. Requires Lighthood (23-4030.)

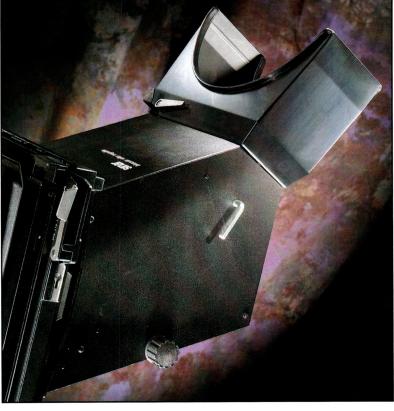
23-4031.....\$277.00

Lighthood with Lightdrop

Attaches to either the Bino Reflex Housing or the Bino Board to block out ambient light. 23-4030.....\$222.00

Corrective Loupe

4.25 Diopter.	
23-4023	\$196.00



Bino Reflex Housing Kit

Bino Reflex Housing Only

Housing only, for photographers who already own a Lighthood.	
23-4019\$696	.00

Bino Reflex Housing Kit with 4.25 Corrective Loupe As above, with 4.25 corrective loupes. Includes Lighthood. 23-4026.....\$830.00

Viewing Packages



Deluxe Viewing Package

For completely flexible, hands-free groundglass shading. Includes Multipurpose Standard, Wide Angle Bellows and Bellows Hood Mask 1.

23-2220.....\$1,146.00



Standard Viewing Package

Attach a freestanding bellows to the back of any Sinar for groundglass shading. Includes Wide Angle Bellows, Joint Rod and Bellows Holder.

23-2221\$469.00



4x5 Ground Glass

With 1cm grid and calibration lines for asymmetric movements.

\$62.00

5x7 Ground Glass

As above, with image size markings for standard and metric film sizes. 23-4010.....\$76.00

8x10 MB Ground Glass

For 8x10 metering back cameras. With 1 cm grid, calibration lines for asymmetric movements and image size markings. $10^{1}/2'' \times 8^{7}/8''$. 23-4029.....\$138.00

8x10 Ground Glass (non-MB)

Fits older style non-metering back cameras. Measures 10" x 81/4" 23-4009.....\$141.00

4x5 Mounted Fresnel Lens

The Sinar Fresnel Lens gives you a brighter viewing area to judge both camera movements and focusing. The fresnel can easily be snapped into place over the groundglass. 23-2012.....\$215.00



4x5 Fresnel Lens Only

Replacement freshel for existing frames.	
23-4011\$	141.00

5x7 Fresnel Lens

23-4013	 5284.	00

8x10 MB Fresnel Lens

For the current line of meter back cameras. 23-4032.....\$368.00

Indicates special order items. See pg. 114 for details.

Format Changing Sets



8x10 MB Format **Changing Set**

Now you can convert your p2 4x5 camera into an 8x10 guickly and easily. Simply remove the 4x5 format bellows from the front standard, loosen one screw, place the 8x10 format changing kit in its place, retighten the screw, attach the bellows and you're shooting 8x10! The format changing kit consists of Tapered Bellows (23-3008), Rear Carrier Frame (23-1919) and Metering Back (23-1916). 23-1902.....\$3,783.00



4x5 Format Changing Set

To convert 8x10 into a 4x5 camera. Consists of Standard Bellows (23-3004), Metering Back (22-1022), and Rear Carrier Frame (23-2017). 23-2003.....\$1,731.00

5x7 MB Format Changing Set

Consists of Tapered Bellows (23-3001), 5x7 Rear Carrier Frame (23-2018) and 5x7 Metering Back (23-2115.) 23-1901.....\$3,279.00

8x10 MB to 4x5 Reducing Adapter

Use a Reducing Adapter to shoot a quick 4x5 test print in place of a costlier 8x10 test. No refocusing is required. 23-1917.....\$1,512.00

5x7 to 4x5 Reducing Adapter

23-7003......\$910.00

NOTE: Reducing adapters require use of a 4x5 Glass and Holder Carrier (23-2027), or Metering Back (22-1022).

SINAR • BRONCOLOR • FOBA • LEAF • PRO CYC **SINAR BRON: YOUR ONE STOP IMAGING SOURCE**

Film Holders



Precision Sheet Film Holder

- Sinar engineering eliminates the "weak link" in 4x5 view camera precision.
- Single film sheet is held in place by a twostage pressure plate instead of just floating around in the holder.
- Tolerance of the film plane is just ±0.03mm no matter what emulsion you use.
- Three cutouts along the edges of the film holder allow the imprinting of copyright notices with a litho film insert.
- Adjustable dials can imprint two digits along the edge of the frame.
- Indicators show whether or not the holder is loaded and whether the film has been exposed.

23-7065\$727.00



Adhesive Sheet Film Holders

- Patented design achieves a level of precision never before possible in 8x10 and 5x7 photography.
- Film is held perfectly flat against the holder, which results in noticeably sharper images.
- Film is prevented from shifting within the holder, making it indispensable for multiple image work.

8x10 Adhesive Film Holder

23-7068.....\$373.00

5x7 Adhesive Film Holder

23-7067	7\$271.00
23-7007	



Zoom 2 Multiformat Rollholder for 120/220 film

- Five rollfilm holders in one!
- New improved frame counter and new darkslide design.
- Five different formats from 6x4.5 to 6x12cm.
- Multiple formats let one lens behave like five.
- Inserted into the camera just like a regular film holder.
- Formats can be changed in the middle of a roll with no overlap.
- Specially engineered film path assures perfect film flatness the film takes no sharp turns before entering the film gate.
- Fits all 4x5 view cameras.
- Includes Vario Mask (23-7084) and one film cartridge (23-7060).
- The only rollfilm holder you'll ever need.
- 23-7073\$2,893.00

6x9 Format Rollholder

For fixed format 6x9cm. 23-7078.....\$2,305.00

6x7 Format Rollholder

For fixed format 6x7cm. 23-7077.....\$2,305.00

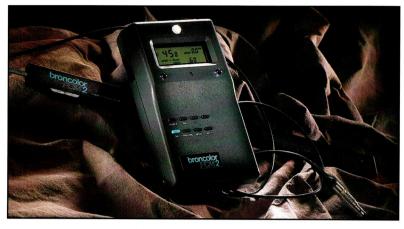
Vario Mask



Vario Mask

23-7084	\$146.00
Film Cartridge	
Replacement.	
23-7080	\$87.00
4 Film Cartridge Package	
With case	
23-7082	\$335.00
Viewing Mask Set	
23-4016	\$46.00

Light Meters



FCM 2 Flashmeter

- New extended sensitivity range from EV 0 to 23.
- Measures both flash and continuous light, separately or combined.
- Film plane metering capability with the addition of the FCM 2 Probe.
- Two channel infrared triggering of Broncolor packs.
- Multiple flash measurement
- Mean and contrast readings.
- Infrared power level control of Pulso and Opus packs.
- Range f/1.0 f/180.9 in ¹/₁₀ stops.
- ISO 3 4000.
- LCD display.
- Requires 9V battery, not included.

Probe for FCM 2 Flashmeter

Plugs into the FCM 2 meter to give you film plane metering capability with any metering back equipped Sinar view camera. 16-1011.....\$590.00

Exposure Calculator

Place the cap of this pencil into your set, focus the camera, measure the side marked factor and read your bellows factor. When using the depth-of-field scale for close-ups the f/stop scale will give you the compensation needed.

23-9020\$25.00

Y-Sync Cable

The new Y-cable lets you trigger strobes with both your shutter and your light meter without switching cables. This simplifies the metering process when used with film plane meters such as the Broncolor FCM and probe or the Minolta IV/Booster 1.

22-3008\$121.00

Minolta Light Meter Holder

Designed to attach the Minolta Flashmeter IV to the side of a Sinar camera.

23-2028	\$101.	.00



Sinar Booster 1

- Film plane metering probe for the Minolta Flashmeter V, IV or III, and for the Broncolor FCM 2 (with adapter).
- Measures continuous and strobe light.
- Reads down to .0062 lux (continuous) / .0049 lux (strobe.)
- Long enough to reach all areas of a 4x5, 5x7 or 8x10 metering back.
- Window on the tip of the meter allows precise spot positioning.
- Two plastic bumpers prevent damage to your ground glass.

22-1025.....\$1,197.00



Auto-Aperture Shutter



Sinar Auto Aperture Shutter

The Auto Aperture Shutter lets you concentrate more on your shooting and less on the mechanics of camera operation.

- Control all operations from behind the camera where you should be. No more having to kneel down in front of your camera to see if the shutter is closed, stopped down or even cocked.
- The shutter is always fully open so you have maximum brightness on the groundglass. When you insert a film holder into the back of the camera, the shutter automatically closes down - no more lost sheets of film!
- Automatically self-cocking
- Shutter speeds from 1/60 to 8 seconds, plus bulb
- Aperture control from f/4 to f/45 (higher apertures controlled through DB-manual mount)
- Includes a filterholder which accepts up to three 100mm filters inside the camera.
- To be used with the Auto Aperture Shutter, lenses must be mounted in the Sinar DB mount. If you already have lenses in shutters you can buy a do-it-yourself DB conversion kit.
- Includes: Filterholder for behind-the-lens shutters, cable release, auto cable and sync lead adapter.

22-2001.....\$2,519.00

Prices and specifications are subject to change without notice.

Cable Release Replacement cable release for the Auto Aperture Shutter. 22-2002\$147.00 **Automatic Cable** Replacement cable, connects the shutter to the plateholder so that the film holder automatically closes the shutter. 22-2003.....\$234.00 **Coupling Piece** Used to connect two auto cables when you have a long bellows extension. 22-2007.....\$72.00 **Bayonet Piece** Replacement piece to attach the automatic cable to the camera back. 22-2004\$57.00 Automatic Adapter For use on 8x10 back. Permits use of Lisco holders with round corners. 22-2006.....\$41.00 Sync Lead Adapter Replacement coiled adapter to connect flash cables to the Digital and Auto Aperture Shutters. 22-3005\$75.00 **Filterholder for Shutters** Allows you to mount up to 3 100mm Sinar Color Control filters on an Auto Aperture, Expolux or Digital Shutter. 58-3000\$66.00



DB Mounted Lenses

All lenses used with Sinar automatic shutters should be mounted on DB boards. A DB board is a special lensboard which contains an aperture mechanism controllable by the shutter, as well as spacers specific to your lens. You can purchase lenses already DB mounted, or mount them yourself with a conversion kit (page 86.)

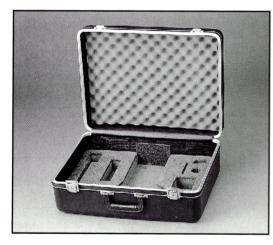


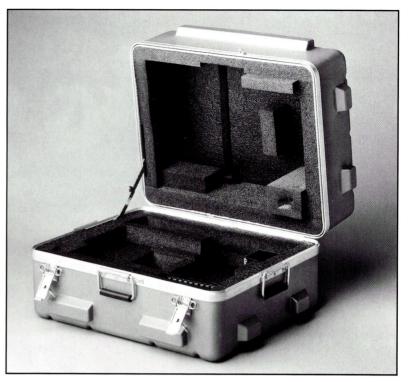


Sinar Camera or Accessory Case

This case is constructed of high density polyethylene. It is designed to be top loaded with the camera supported by the rail. Vertical dividers keep the camera firmly in place, while all interior surfaces are covered with Etha-foam. Outside dimensions are 20" L x 11" W x 18" D. Weight 15 lbs.

23-5021.....\$461.00





Expert Case, Heavy Duty

The Sinar Expert case is designed to hold either a 4x5 or 8x10 Sinar camera along with a full load of accessories. This case is manufactured from high density polyethylene that resists temperature changes, and has a shock absorbing rib design. The Etha-foam interior construction is custom die cut to hold your camera safely. A set of velcro straps further secures your camera for safe transportation.

The case has a continuous piano hinge for extra durability, with heavy duty military latches to assure that it won't come open in transit. Recessed, spring loaded padded handles are located both on the front and top of the case. It also features $3^{"}$ hard rubber casters so that the case can be rolled along when loaded. Includes 2 lens boxes. Outside dimensions measure $25^{"}$ L x $19^{"}$ W x $15^{"}$ D. Weight 26 lbs.

23-5023.....\$632.00

Casters, Set of 4

10-1122.....\$51.00

Sinar f1 & f2 Image Case

Designed to hold either the f1 or the f2 camera in a custom Etha-foam insert. In addition, the attache styled Image Case has room to store two lenses, two extension rails, six film holders, a Polaroid 545 holder, wide angle bellows and bellows clips.





Dust Cover, Large

Keep your camera dust-free when not in use. At the end of the day just cover it with this heavy vinyl dust cover. 23-5034......\$81.00

Expolux Case

Designed to securely hold an entire Expolux Shutter system for transportation or storage. Measures 25x18x7". 23-5011\$252.00

Sinaron lenses are:

- Manufactured to incredibly precise Swiss tolerances.
- Designed for optimum resolution, contrast and color rendition with minimal fall-off, distortion and flare.
- Mounted at the exact center of the lensboard and parallel aligned.
- Mounted with minimum deviation in centering and separation between matched element groups.
- Tested for the best possible image performance.
- Designed to let you take full advantage of the wide range of swings and tilts available on Sinar cameras.
- Sinaron lenses used with Sinar cameras provide matched bearing points on the lensboard and lens standard, and minimum deviations between the film plane and the image standard bearing points.

Sinaron WE

- Ultra-wide 110° angle of coverage.
- Apochromatic for maximum performance across the entire image field.
- 45 and 55mm

Sinaron W

- 102 to 105° angle of coverage.
- Distortion at infinity minimized to below 0.5%.
- 65, 75, 90, 115, 155, 200mm

Sinaron S

- 72° angle of coverage lets you take full advantage of camera movements without sacrificing quality.
- 135, 150, 180, 210, 240, 300, 360, 480mm

Sinaron SE

- Extra-wide 75°/68° angle of coverage expands the range of camera movements.
- ED (Extra-low dispersion) glass gives outstanding color rendition.
- Reduced light fall-off at the image edges.



- Optimum performance over a wider range of apertures.
- 135, 150, 180, 210, 240, 300, 360mm

Sinaron WS

- 80° angle of coverage.
- Apochromatic design eliminates color fringing.
- Improved performance at edge of field.
- Performance is optimized for reproduction up to 1:3
- 210 and 300mm.

Macro-Sinaron

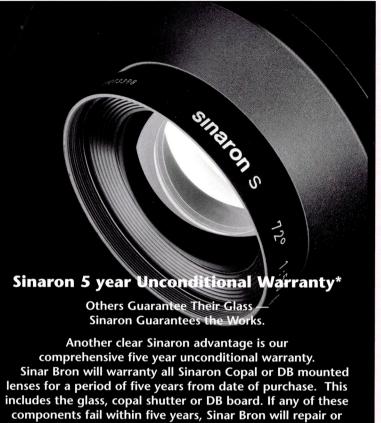
- Optimized for extreme reproduction ratios.
- High speed for easy focusing at extreme extensions.
- 180mm

Apo Sinaron

- Superior performance at 1:1
- Image quality maintained at smaller ratios for complete flexibility.
- Long focal lengths for increased camera-subject distance.
- Four element symmetrical design.
- 150, 240, 300, 360, 480mm

Sinaron-Digital

- For use with CCD capture backs.
 - Shorter focal lengths suited to the size of area CCD's.
 Lenses mount inside the camera for maximum
 - Lenses mount inside the camera for maximum movements.
 - Higher resolution than conventional view camera lenses
 - 35, 45, 55, 80, 105, 120, 135 & 180mm.



replace it at our option, free of charge.

* The only thing this warranty does not cover is misuse or abuse.

New Macro-Sinaron 180mm f/5.6

When your work calls for shooting at large reproduction ratios ($^{1}/_{3}$ life size and above), it's time to consider a lens better suited to macro photography than your standard view camera lens.

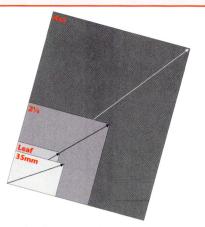
Every lens has an optimum range in which it will give you the best results. Normal lenses like the Sinaron-s or Sinaron-se work best from 1:infinity up to about 1:3. At larger ratios, you will get much better results from a lens specifically designed for macro work.

The newest macro offering from Sinar is the Macro-Sinaron 180mm f/5.6. The Macro-Sinaron is a six element lens whose main design focus is image quality at large reproduction ratios (from 1:3 to 3:1). The front and rear elements can be exchanged to optimize the lens for ratios above or below 1:1.

New Sinaron-WE

The new Sinaron-WE series represents some of the widest available view camera lenses. Like the new, computer-designed Sinaron-SE lenses, their apochromatic correction ensures maximum image quality across the entire image circle.

The 110° angle of coverage is the widest of any lens in the Sinaron series, and both the 45 and 55mm lenses feature a fast maximum aperture of f/4.5



Equivalent Focal Lengths with similar angles of view for most popular formats (in mm)

35mm	6x6	4x5	8x10
17	35	65	130
20	40	75	150
24	50	90	180
30	60	115	230
35	70	135	270
40	80	150	300
50	95	180	360
55	110	210	420
65	125	240	480
80	160	300	600
90	200	360	
125	250	480	

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Lens type	mm	Angle of coverage	Copal Shutter	Filter thread	Image circle @ f/22		Shif <mark>4x5</mark>		at infi 5x7	nity and	f/22 8x10	
Sinaron-we	45	110°	0	58	131mm	-	-	-	-		-	
f/4.5	55	110°	0	67	163mm	5	7	-	-	-	-	
Sinaron-w	65	105°	0	58	170mm	10	12	-	-	-	-	
f/4.5	75	105°	0	67	195mm	25	29	-	-	-	-	
.,	90	105°	1	82	236mm	48	54	16	20		- 11 - 11 - 11 - 11 - 11 - 11 - 11 - 1	
Sinaron-w	90	102°	0	67	221mm	40	45	7	9	-	-	
f/6.8	115	104°	1	82	291mm	77	85	47	57	-	-	
1/0.0	155	102°	1	105	382mm	125	133	95	110	42	50	
Sinaron-s	135	72°	0	40.5	200mm	28	32	-		-		
f/5.6	150	72°	0	49	214mm	36	41	2	3	-	-	
	180	72°	1	39	262mm	62	68	30	38			
	210	72°	1	67	310mm	83	90	52	63		100029	
	240	72°	3	77	350mm	108	116	79	92	23	28	
	300	72°	3	86	425mm		148	110	125	58	67	
f/6.8	360	64°	3	105	435mm		161	123	139	72	83	
f/9.0	480	56°	3	112	480mm	175	184	147	163	97	109	
Sinaron-se	135	75°	0	49	208mm	32	37	-		-	-	
f/5.6	150	75°	0	49	231mm	45	50	12	16	-	-	
1, 210	180	75°	1	67	276mm	69	76	38	47			
	210	75°	1	72	316mm	91	98	60	72	2	3	
	240	75°	3	86	372mm	120	128	90	104	36	43	
	300	75°	3	100	448mm	159	168	130	146	79	91	
f/6.8	360	68°	3	112	468mm	169	178	140	157	90	102	
Sinaron-ws	210	80°	3	105	352mm	109	117	80	94	24	29	
f/5.6	300	80°	3	127	490mm	180	190	152	169	102	115	
Macro-Sinaron	180	70°	1	67	302mm	83	90	52	63	- 10 A	-	1:5
f/5.6		60°			415mm	142	150	113	128	61	70	1:1
Apo-Sinaron	240	48°	1	49	212mm	35	39		-	- 1	-	
f/9	300	48°	1	49	264mm	63	70	32	40	-	-	
	360	48°	3	58	318mm	92	99	62	74	3	4	
	480	46°	3	67	396mm	132		104	118	50	59	

Footnotes for pricing chart (at right)
 M:DBM Manual override already built in for smaller aperture openings. Manual override may be ordered for any DB lens or conversion kit at an additional charge. Order regular product number plus (24-1061).

a: Camera movements are limited while focused at infinity.

Copal Mounted Lenses include:

• Lens precision mounted on Sinar lensboard

• Leatherette storage case for lens on board

• Board, mounting and case are a \$88.00 value included in prices below

			ount Lenses		DB Moun	t Lenses	DB Conv	version Kits
		Prod.	Lensboard Mounting		Prod.		Prod.	
Lens Type	e mm	No.	and Case	Price	No.	Price	No.	Price
Sinaron w	e* 45 f/4.5C	24-7208	\$115.00 N/C	\$1,822.00	N/A		N/A	
	55 f/4.5C	24-7233		\$1,890.00	N/A		N/A	
Sinaron w	* 65 f/4.5	24-7201	\$115.00 N/C	\$1,662.00	24-3101a	\$1,662.00	24-1101	\$ 656.00
	75 f/4.5	24-7202		\$1,748.00	24-3102	\$1,748.00	24-1102	\$ 656.00
	90 f/4.5	24-7203	\$115.00 N/C	\$1,981.00	24-3102	\$1,981.00	24-1102	
	20171.3	217205	\$-5.00 N/C	\$1,201.00	24-3103	\$1,901.00	24-1105	\$ 656.00
	90 f/6.8	24-7205	\$115.00 N/C	\$1,335.00	24-3105	\$1,335.00	24-1105	\$ 656.00
	115 f/6.8	24-7206	\$115.00 N/C	\$2,027.00	24-3106	\$2,027.00	24-1106	\$ 656.00
	155 f/6.8	24-7207	\$115.00 N/C	\$4,220.00	N/A	+_,•_,•••	N/A	\$ 050.00
			_				And a second	
Sinaron s	135 f/5.6	24-7210	\$115.00 N/C	\$ 920.00	24-3110	\$ 932.00	24-1110	\$ 656.00
	150 f/5.6	24-7211	\$115.00 N/C	\$ 944.00	24-3111	\$ 944.00	24-1111	\$ 656.00
	180 f/5.6	24-7212	\$115.00 N/C	\$1,188.00	24-3112	\$1,188.00	24-1112	\$ 656.00
								+ 000.00
	210 f/5.6	24-7213	\$115.00 N/C	\$1,294.00	24-3113	\$1,294.00	24-1113	\$ 656.00
	240 f/5.6	24-7214	\$115.00 N/C	\$1,981.00	24-3114	\$1,981.00	24-1114	\$ 854.00
	300 f/5.6M	24-7215	\$115.00 N/C	\$3,112.00	24-3115	\$3,112.00	24-1115	\$1,208.00
				•		,		\$1,200.00
	360 f/6.8M	24-7216	\$115.00 N/C	\$3,485.00	24-3116	\$3,485.00	24-1116	\$1,208.00
	480 f/5.6M	24-7217	\$115.00 N/C	\$4,255.00	24-3117	\$4,255.00	24-1117	\$1,208.00
						,		+.,
Sinaron se	135 f/5.6	24-7235	\$115.00 N/C	\$1,084.00	24-3135	\$1,084.00	24-1130	\$ 656.00
	150 f/5.6	24-7236	\$115.00 N/C	\$1,130.00	24-3136	\$1,130.00	24-1131	\$ 656.00
	180 f/5.6	24-7237	\$115.00 N/C	\$1,363.00	24-3137	\$1,363.00	24-1132	\$ 656.00
	210 f/5.6	24-7238	\$115.00 N/C	\$1,550.00	24-3138	\$1,550.00	24-1133	\$ 656.00
	240 f/5.6	24-7239	\$115.00 N/C	\$2,868.00	24-3139	\$2,868.00	24-1134	\$ 854.00
	300 f/5.6M	24-7240	\$115.00 N/C	\$3,742.00	24-3140	\$3,742.00	24-1135	\$1,208.00
	360 f/6.8M	24-7241	\$115.00 N/C	\$4,197.00	24-3141	\$4,197.00	24-1136	\$1,208.00
								.,
Sinaron ws		24-7219	\$115.00 N/C	\$2,319.00	N/A		24-1119	\$1,208.00
	300 f/5.6	24-7220	\$115.00 N/C	\$4,045.00	N/A		N/A	,
Mague	100 6/5 6	24 7222	6445 - 11/5					
Macro-	180 f/5.6	24-7223	\$115.00 N/C	\$2,004.00	24-3123	\$2,004.00	24-1120	\$ 656.00
Sinaron								
Аро-	240 f/9M	24-7226	\$115.00 N/C	\$1,654.00	24 21 24	£1 (54 00	24 1124	* 070 c -
Sinaron	300 f/9M	24-7220	\$115.00 N/C \$115.00 N/C		24-3126	\$1,654.00	24-1126	\$ 972.00
	500 1/ 2101	27-1221	₽ 115.00 N/C	\$1,865.00	24-3127	\$1,865.00	24-1127	\$ 972.00
	360 f/9M	24-7228	\$115.00 N/C	\$2,576.00	24 21 20	\$257600	24 1120	£1.000.05
	480 f/9M	24-7229	\$115.00 N/C	\$3,043.00	24-3128	\$2,576.00	24-1128	\$1,208.00
		27-1227	9-9.00 N/C	¥3,043.00	24-3129	\$3,043.00	24-1129	\$1,208.00

*Center-Graduated Filters for Wide Angle Lenses

To compensate for edge falloff at wider apertures and faster shutter speeds.

24-1151	GRADUATED FILTER M82x0,75 for 90, 115	\$729.00
24-1152	GRADUATED FILTER M58x0,75 for 45, 65	\$440.00
24-1153	GRADUATED FILTER M105x1 for 155	\$1,379.00

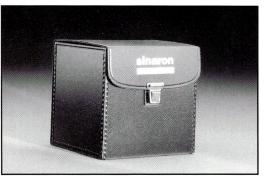
DB mounted lenses are for use with Sinar automatic behind-the-lens shutters

Sinar

Lensboards and Conversion Kits

Lensboards

Blank	24-1001	\$ 71.00
#0	24-1048	\$ 96.00
#1	24-1049	\$ 96.00
#3	24-1050	\$ 96.00
Manual Override for DB Conversion add	24-1061	\$349.00
Recess Board #0	24-1052	\$349.00
Recess Board #00	24-1053	\$349.00
X800 Board with spacer (State lens type)	24-1051	\$252.00
Linhof Lensboard Adapter - Allows use of		
Linhof Technika mounted lenses on	24 1005	6500.00
Sinar cameras.	24-1005	\$500.00
Hasselblad Body Adapter	23-7007	\$701.00
Lensboard Holder		
Prevents accidentally released lenses from		
falling off the standard.	24-1002	\$26.00



Lens Box

Keep your large format lenses safe whether they're on location or on the shelf. Accommodates most lenses with lensboards. 24-1003.....\$25.00

DB Conversion Kits

Lens Type	mm	DB Conversion Prod. # Price	Lens Type mm	DB Conversion Prod. # Price	Lens Type mm DB Conversion Prod. # Price
Grandagon f/4.5 105°	65 75 90	N/A 24-1082 \$ 656.00 24-1084 \$ 656.00	Super Angulon 65 105° f 5.6 75 90	N/A 24-1021 \$ 656.00 24-1022 \$ 656.00	Nikkor SW f/4.5 75 24-1068 \$ 656.00 90 24-1044 \$ 656.00
Grandagon f/6.8	75 90 115 155	24-1086 \$ 656.00 24-1088 \$ 656.00 24-1090 \$ 656.00 N/A	Super Angulon 75 100° f/8 90 120 165 210	24-1023 \$ 656.00 24-1019 \$ 656.00 24-1020 \$1,008.00	f/8 90 24-1075 \$ 656.00 Nikkor W 100 24-1069 \$ 656.00 f/5.6 135 24-1037 \$ 656.00 150 24-1038 \$ 656.00 180 24-1039 \$ 656.00
Sironar-N f/5.6 72°	100 135 150	24-1014 \$ 656.00 24-1013 \$ 656.00 24-1015 \$ 656.00 24-1015 \$ 656.00	Symmar -S 100 70° f/5.6 120 135	24-1024\$656.0024-1073\$656.0024-1025\$656.00	210 24-1040 \$ 656.00 Nikkor W 240 24-1041 \$ 854.00 f/6.3 300 24-1042 \$1,208.00
	180 210 240 300	24-1016\$656.0024-1017\$656.0024-1029\$854.0024-1030\$1,208.00	150 180 210	24-1018\$656.0024-1026\$656.0024-1027\$656.00	Nikkor M f/9 300 24-1046 \$1,008.00 450 24-1063 \$1,208.00 Nik. AM-ED f5.6120 24-1070 \$ 656.00
f/6.8 64° f/8.4 56°	360 480	24-1031 \$1,208.00 N/A	240 300	24-1028 \$ 854.00 24-1007 \$1,208.00	Many lenses not shown here can also be DB mounted. If you don't see your lens
Makro-Sironar f/5.6	210 300	24-1066 \$ 854.00 24-1067 \$1,208.00	* f/6.8 70° 360 * f/8.4 56° 480	24-1008 \$1,208.00 24-1009 \$1,208.00	here, contact our Service Department for more information.
Apo-Sir. MC f/5.6	150 210	24-1091 \$ 656.00 24-1092 \$1,208.00	Sup. Symmar 210 HM 80° f 5.6	24-1077 \$ 854.00	* DB conversion of lenses marked with an asterisk may not be possible. Contact Sinar
Apo-Ronar f/9	150 240 300	24-1080 \$ 656.00 24-1032 \$1,008.00 24-1033 \$1,008.00	Apo-Symmar 120 f 5.6 150 210	24-1093\$656.0024-1094\$656.0024-1095\$656.00	Bron for details.
	360 420 480 600	24-1034 \$1,208.00 24-1035 \$1,208.00 24-1036 \$1,208.00 N/A			







DSS-GAMMA ┥

The new DSS-GAMMA stand gives studio photographers legendary Foba smoothness and stability in the most compact package yet. If space is at a premium, the GAMMA will give you much more flexibility than a tripod without taking over the studio.

- Holds cameras up to 15.5 lbs, or 20 lbs. with additional weight
- Built-in 360° rotating center column ring with calibration scales.
- Exclusive Foba hexagonal column and crossarm ensures smooth, precise operation. The steel column is completely rigid and cannot twist.
- All movements glide on 24 roller bearings for incredibly smooth, feather-light adjustments. Even the heaviest cameras will adjust with one finger.
- Large, sturdy base with single-pedal locking mechanism
- Built-in camera platforms on both ends of the hexagonal crossarm. Mount cameras directly or add a ballhead or pan-tilt head for more flexibility.
- Millimeter calibrations on vertical and horizontal movements for precise camera positioning
- Standard height approximately 8'; can be cut down (\$50 charge) to whatever height you need.
- 36" crossarm length
- Weight 158 lbs.
- 31-0190\$2,795.00

indicates items which ship by truck. Call for shipping charges.

DSS-GAMMA Camera Stand



Accessory Tray

Keep film holders, loupes, notepads and coffee within arm's reach. 14" diameter, felt covered. Also compatible with DSS-ALPHA stands. 31-0172\$218.00

Counterweight

4.8 lb. weight to	increase	capacity	of the stand.
31-0163			

Recommended Camera Heads

Foba Superball 33-0500\$33	93.00
Mini-Superball 33-0400\$20	09.00
Sinar Pan-Tilt head 23-6010\$62	20.00

Foba Pan-tilt Head 31-0119\$776.00

New-style single pedal base lock



Conveniently placed lock knobs for rise, shift and rotation



CALL FOR DEALERS ORDERS LITERATURE INFORMATION SEMINARS (800) 456-0203



ASABA **Camera Stand**

ASABA 🖌

• The #1-selling heavy camera stand in America.

- Exclusive hexagonal construction ensures smooth, precise operation. Vertical and horizontal adjustments move in perfect alignment, with none of the shake and rattle common on round and square columns.
- All movements glide on 24 roller bearings for incredibly smooth, feather-light adjustments. Even the heaviest cameras will adjust with one finger.
- Large, sturdy base with single-pedal locking mechanism
- Standard height 10'; can be cut down (\$50 charge) to whatever height you need.
- Perfect for the 4x5 photographer who shoots some 8x10
- Weight 220 lbs.
- Shown with accessory tray, rotation base, camera tilt head, gear head and angle bracket, not included.
- 31-0140\$2,795.00

ASABA Counterweight 7 lbs

Additiona	al counter weight for use with heavier cameras.	
31-0144.		\$85.00

indicates items which ship by truck. Call for shipping charges.

Large, convenient locking knobs let you work from either side of the stand



Fast singlepedal locking mechanism





Camera Tilt Head

Standard tilt head for use on the ASABA. Comes with 3/8" screw. 31-0142.....\$259.00

Camera Tilt Head for Gear Head

Used if a tilt head/gear head rather than angle bracket/gear head is desired. Requires 31-0117. 31-0127.....\$310.00



Accessory Tray

19" diameter metal tray to keep your accessories close at hand. Features felt covered surface

Angle Bracket Used to offset the

31-0143.....\$180.00



eras for smooth tilt operation on either the gear head or crossarm. 31-0111.....\$477.00

weight of heavy cam-

Gear Head

For fine gear driven adjustment of heavy cameras. Requires the use of either a tilt head (31-0127) or an angle bracket (31-0109) to attach the

camera. Includes adapter sleeve (31-0145). 31-0117.....\$955.00



Low Position Arm

This arm further extends the versatility of the ASABA by allowing you to move your camera to within inches of the ground. 31-0175\$690.00

Extension Arms

The arm adds 23" to the reach of your stand. 31-0135\$289.00





DSS-OMEGA 🛹

Who says you can't improve on perfection? The engineers at Foba have taken one of the most popular stands on the market and made it the ideal solution for an even larger portion of the market. The DSS-OMEGA represents everything the DSS-ALPHA has meant to the market. It has a massive steel center column, just like the ALPHA. It has a convenient center-rotating crossarm, just like the ALPHA. It holds even the heaviest cameras, just like the ALPHA. And like all Foba stands, it has a hexagonal column and crossarm riding on 24 roller bearings for silky smooth movements.

So what's the difference? Well, it's almost 35% less expensive, for starters. We use a simplified base unit with single-pedal locking, and we equip the DSS-OMEGA with only one camera mounting position, though you can always add a second. The horizontal and vertical shift scales are also optional, though the rotation still features full 360° calibration.

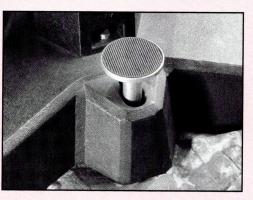
- Rotating crossarm allows for quicker rotation, even if you're ten feet up a ladder.
- Wide center column increases stability and allows for a shorter counterweight, increasing the range of vertical movement.
- The stand has the capacity to hold 24 lbs. without additional counterweight.
- Standard mounting points accommodate one camera and two accessory trays.
- The DSS-OMEGA stands 9'6" high and weights in at 282 lbs.
- Uses the same broad line of stand accessories as the DSS-ALPHA.
- 31-0195\$3,995.00

Platform Adapter for DSS-OMEGA

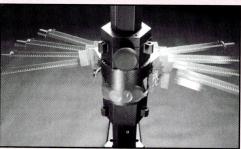
Upgrade stand to accommodate second camera mounting accessory. 31-0199\$159.00

indicates items which ship by truck. Call for shipping charges.

Fast singlepedal locking mechanism



New 360° calibrated crossarm rotation



DSS-OMEGA Camera Stand

Head

Camera Tilt



Tilt head or Foba pan head. 31-0171\$396.00

Standard camera plat-

the crossarm. Ideal for

use with a Sinar Pan-

form for the end of

Accessory Tray

The OMEGA can accept up to two of these swiveling accessory trays to keep film holders, loupes, notepads and coffee within arm's reach.

14" diameter, felt covered. 31-0172\$218.00



The angle bracket improves the balance of large cameras by moving the center of rotation around the crossarm higher up on the camera. 31-0174\$634.00

Angle Bracket

Low Position Arm

The Low Position Arm drops your camera 14" below the crossarm to achieve very low perspectives. Can also be used above the crossarm

for additional height. Requires Camera Tilt Head or Angle Bracket.

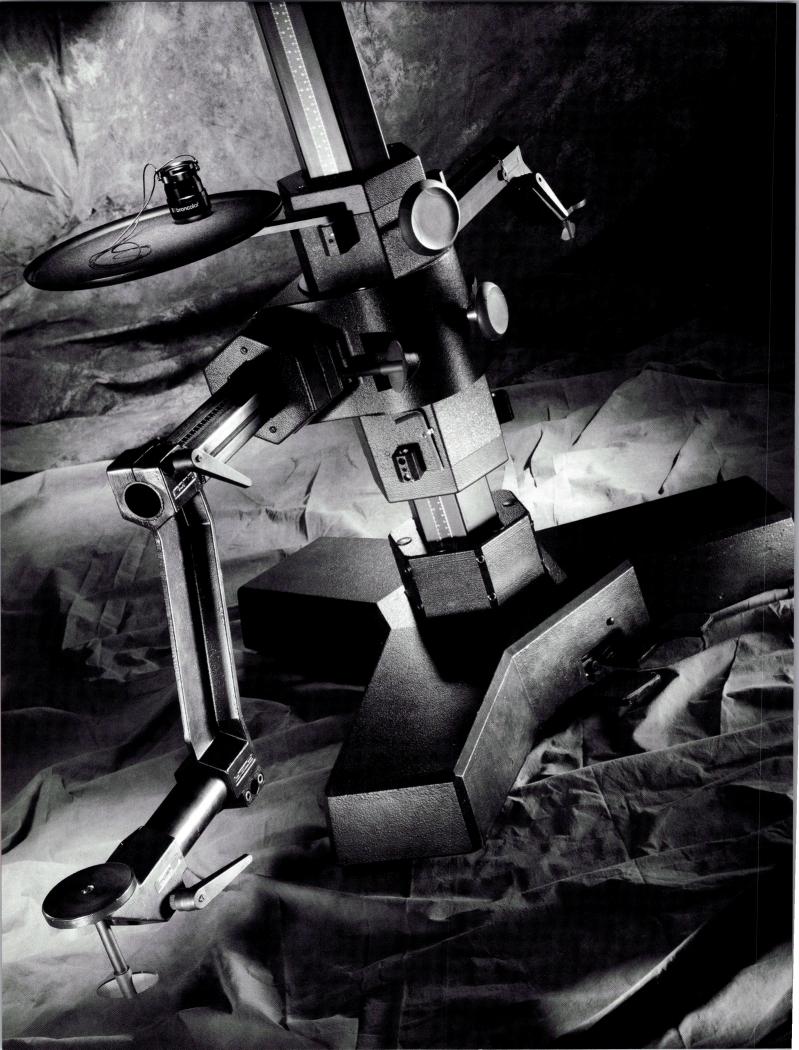
31-0173\$705.00

Gear Head

Use with the Camera Tilt Head or Angle Bracket for precise, effortless tilt adjustment of any size camera. 31-0177\$1258.00

Counterweight





DSS-Alpha Stand 🛛 🫲

Just when you thought it couldn't get any better, Foba improved upon its top of the line ASTIO stand with the new DSS-ALPHA. Bigger, more versatile, and even easier to handle, its stability and control make the DSS (Digital Support System)-ALPHA ideal for virtually any digital photography application.

- New wider center column increases stability and allows for a shorter counterweight, increasing the range of vertical movement.
- New rotating crossarm allows you to adjust your stand's rotation quickly, even if you're ten feet up a ladder.
- New gas-pressurized base locking lets you lock and unlock the wheels effortlessly, without shifting the position of the camera.
- New adjustment scales on the column and crossarm, for greater precision and repeatability.
- Larger base for even greater stability.
- Flexible design allows for up to four swing-arm accessory trays.
- Weight 341 lb.

Plus, the ALPHA still has all the features that set Foba stands apart:

- Hexagonal column and crossarm for stability and smooth adjustment.
- Vertical and horizontal movements glide on 24 roller bearings for fingertip-adjustable smoothness.
- Standard height 10 feet. Special order heights up to 12' available. Shorter heights available for a \$50 modification fee.
- Shown with accessory tray, low position arm, camera tilt head and angle bracket, not included.
- 31-0170\$5199.00

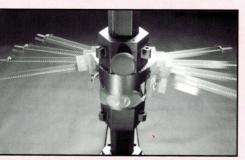
DSS-ALPHA, 12 foot (Requires use of 31-0178)

31-0180\$5599.00

ALPHA Base Extension

Widens the base for added stability on ALPHA stands ordered with heights greater than 10 feet. 31-0178\$851.00

New 360° calibrated crossarm rotation



New effortless base locking mechanism



DSS-ALPHA Camera Stand

head.



31-0171\$396.00

ALPHA Camera

Standard camera plat-

form for the end of the crossarm. Ideal for

use with a Sinar Pan-

Tilt head or Foba pan

Tilt Head

ALPHA Accessory Tray

The ALPHA can accept up to four of these swiveling accessory trays to keep film holders, loupes, notepads and coffee within arm's reach.

14" diameter, felt covered. 31-0172\$218.00



ALPHA Angle Bracket

The angle bracket improves the balance of large cameras by moving the center of rotation around the crossarm higher up on the camera.

31-0174\$634.00



ALPHA Low Position Arm

The Low Position Arm drops your camera 14" below the crossarm to achieve very low perspectives. Can also be used above the crossarm

for additional height. Requires Camera Tilt Head or Angle Bracket.

31-0173\$705.00

ALPHA Gear Head

Use with the Camera Tilt Head or Angle Bracket for precise, effortless tilt adjustment of any size camera. 31-0177\$1,258.00

ALPHA Counterweight

11 lb. additional weight helps balance the stand's vertical adjustment for heavier cameras. 31-0110\$137.00



Superball Ball Heads



Foba Superball

The Foba Superball is made with the precision of Sinar and the reliability of Foba. This ball head comes with the largest range of accessories available. Whether you need a quick release plate, a normal camera plate (we offer both 3/8'' and 1/4''), or even a Hasselblad plate, our Superball has them all.

The Superball has one of the strongest locks on the market today. Once the ball is locked it stays locked. But that's not to say you can't adjust the friction on the ball to suit your needs. Besides this, the base can rotate a full 360° and its tension is adjustable.

New improved models feature higher capacity, even better locking mechanism, and improved cold-weather performance.

Specifications:

Base diameter:	3"
Height:	5"
Weight:	2.6 lb.
Capacity:	32 lb. Improved!

Superball with 3/8" / 1/4" Standard Head

Can be used on all types of tripods and studio stands. Will take Superball accessories. Standard head can be reversed for 1/4" or 3/8" threads. 33-0500\$393.00

Superball with Quick Release Head

The quick release plate allows you to change cameras quickly and easily with the twist of just one knob. Head includes a removable safety stopper. There are six types of quick release plates to choose from: 3/8'', 1/4'', 35mm, Hasselblad 3/8'' and 1/4'' and Sinar a1. 33-0505\$410.00

Mini-Superball

Foba's Mini-Superball puts the advanced features of Foba's popular Superball into a very compact, lightweight package. Mini-Superball features include:

- Large, ¹/₄ turn locking knob makes the head very easy to handle and locks down firmly with just a twist.
- User-adjustable tension allows you to fine-tune the performance of the ball to suit the shooting situation, as well as to compensate for wear over the life of the ball.
- Teflon collar for smooth rotation
- Compact size and 12-lb. capacity are ideal for small and medium format cameras in the studio or in the field.
- **New improved models** feature higher capacity, even better locking mechanism, and improved cold-weather performance.
- Specifications:

5			Improved!
Weight:	1.3 lb.	Capacity:	15 lb.
Base diameter:	2.5"	Height:	3.9"

Mini Superball

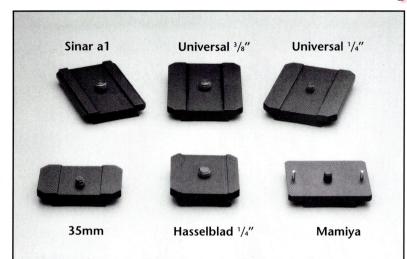
33-0400)	 	 	\$209.00

Mini Su	perball	with a	juick	release	head
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33-0404	33-0404	\$255.00
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SINAR • BRONCOLOR • FOBA • LEAF • PRO CYC SINAR BRON: YOUR ONE STOP IMAGING SOURCE

Superball Ball Heads



Quick Release Plates

Туре	Thread	Cat. #	Price
35mm	1/4″	33-0508	\$54.00
Hasselblad	³ /8″	33-0509	\$54.00
Hasselblad	1/4″	33-0506	\$54.00
Mamiya	³ /8″	33-0515	\$73.00
Universal	3/8"	33-0512	\$54.00
Universal	1/4″	33-0510	\$54.00
Sinar a1	3/8″	33-0516	\$54.00

All Quick Release plates are designed for use with the Superball Quick Release Head for easy mounting and removal of cameras.



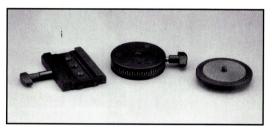
Prices and specifications are subject to change without notice.



Base Plate

Attaches to the bottom of the Superball head. This allows the head to be used easily from a very low level such as the ground, or for table top use.

33-0507\$119.00



Universal Reversible Camera Plate

Has both $\frac{3}{8}''$ and $\frac{1}{4}''$ threads. Supplied with the standard Superball head (33-0500).

Universal Plate for Superball

33-0511	\$54.00
Universal Plate for Mini-Superball	
33-0517	\$48.50

Quick Release Head

Can be added to the standard ball head as an option at a later date. Supplied with (33-0505).

Quick Release Plate for Superball

33-0513	\$125.00
Quick Release for Mini-Superball	
22 0510	£05 00

33-0518.....\$95.00

Panorama Adapter

For use on either Superball. Allows rotation of the camera plate at any angle in addition to the base rotation. **33-0514**

Panoramic Base for Mini-Superball

anoranne base for mini-superban
Provides calibrated 360° base rotation for either
Mini-Superball.
33-0519\$141.00

| || || ||

Tripods and Accessories

Mini Universal Tripod

This versatile mini tripod (only 11" high) can be extended with combitubes for use on stairs or other uneven surfaces. 31-0123......\$525.00

Panoramic Adapter

The panoramic adapter is a 360° rotatable collar featuring both $\frac{3}{8}''$ and $\frac{1}{4}''$ threads. It can be used on the



Alfao/Alfeo, Mini Universal tripod or any other tripod or camera stand.

31-0156\$249.00

Pan Tilt Head

Foba's pan tilt head for either their camera stands or tripods. Equipped with both ³/₈" and ¹/₄" threads. *31-0119.......\$776.00*



Double Pan Tilt Head

The double pan tilt head is similar to the original head, but features an additional tilt movement for full 3dimensional flexibility. 31-0118......\$959.00





ALFAE/ALFEA Tripod Combo

This new heavy-duty tripod is perfect for your medium or large format camera. Improvements in this new model include large, easy-grip leg locks, more secure center column attachment and a built-in level. This tripod will comfortably hold any format camera, all the way up to 8x10. You can increase the basic height of the tripod to an almost unlimited height by using combitubes.

ORDERS DEALERS INFORMATION (800) 456-0203

Tripod Spike, ea. 31-0107	\$25.50
Rubber Foot, ea. 31-0124	\$13.25

31-0137.....\$1350.00

Foba's Combitube System is the build-anything, rig-anything, hold-anything solution to hundreds of studio problems. Dozens of tubes, connectors, clamps and stands can be combined in an infinite variety of ways.

MAXI Combitube Kit

6 4

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- 16 CONRO AS 80 cm Combitube
 - COKRO AS 40 cm Combitube
 - COARO AS 20 cm Combitube
 - COGEA Adjustable clamp
 - CODEA Right angle connector
 - CODIO Cross-connector COGAE Universal table clamp
 - COFLO Flexible arm, 20cm
 - COKLE Combitube clamp, tapped 3/8"
 - COKLO-5 Set of 5 Combitube clamps
 - CEKLU Swiveling clamp for Combitube
 - COSNO AS Tripod, black
 - COGUO Rubber foot

31-0400\$2008.00

MIDI Combitube Kit

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4

- CONRO AS 80 cm Combitube 9
- 4 COKRO AS 40 cm Combitube
- 4 COARO AS 20 cm Combitube
- 6 COGEA Adjustable clamp 2
 - CODEA Right angle connector
 - **CODIO** Cross-connector
 - COGAE Universal table clamp
 - COFLU Flexible arm, 40cm
 - COKLE Combitube clamp, tapped 3/8"
 - COKLI Universal joint with clamp
 - COKLO-5 Set of 5 Combitube clamps
 - COGUO Rubber foot

6 4

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31-0401\$1183.00

MINI Combitube Kit

- CONRO AS 80 cm Combitube
- COKRO AS 40 cm Combitube
- COARO AS 20 cm Combitube COGEA Adjustable clamp
- CODEA Right angle connector
- COGAE Universal table clamp
- COFLO Flexible arm, 20cm
- COKLE Combitube clamp, tapped 3/8"
- COKLI Universal joint with clamp
- COKLO-5 Set of 5 Combitube clamps

^{31-0402.....\$826.00}





Clamps, Arms and Bases

COKLO	Standard Combitube clamp for holding cards, diffusers, backdrops, etc. Includes hanging hook.	31-0222	\$19.50
	Set of 5 COKLO clamps	31-0223	\$79.00
	Set of 10 COKLO clamps	31-0224	\$132.00
COKLE	Combitube clamp with 3/8" female thread for attachment to flexible arms	31-0232	\$33.00
COKLI	Clamp with ball-socket joint and connector to mount directly to Combitube.	31-0416	\$93.00
CESRA	Improved 13 lb., 12" base stand with handle	31-0404	\$125.00
CESRU	Additional weight (19 lb.) for CESRA	31-0257	\$130.00
CARRI	Wall flange; mounts Combitubes to wall or ceiling.	31-0403	\$46.00
COFLU	16" flexible arm, for use with CEBRO and COKLE.	31-0412	\$46.00
COFLO	8" flexible arm	31-0250	\$39.00
CEBRO	2.4 lb tabletop base; for use with COFLU/COFLO and COKLE clamp.	31-0408	\$64.00







31-0415

31-0205

31-0239

\$ 5.50

\$ 68.00

\$231.00

	6 lb. counterweight assembly for Combitube boom assemblies.
GEGOU	(not pictured) 4.4 lb. counterweight for attachment directly to Combitu
COGUO	Rubber foot for Combitube.
CEGOE	4 lb. additional counterweight for CEGEO.
COSAO	Combitube carrying bag.

Background Stands

For background paper. Stores 15 rolls of paper vertically. Two additional rolls are always ready to use. Requires the use of clamp with brake (31-0305) to roll and unroll the background paper. Another recommended accessory is the trailing edge (31-0314).

31-0315\$2,345.00

Combitube Packages

Wallmounted Background Stand

For 3 rolls of paper. Consists of Triple bracket, 3 clamps with brakes, 3 trailing edges.

31-0348\$1,237.00

Triple Bracket for Wallmount

Set of 2. 31-0331.....\$115.00

Single Brackets

Set of 2. 31-0329.....\$59.00

Clamp with Brake

Consists of 2 improved clamp inserts (31-0304) for cardboard tube, Chainwheel (31-0339), Chain (31-0338) and Brake Device (31-0302). 31-0305.....\$203.00

Same as above but without chain and chain wheel. 31-0304.....\$155.00

Chain only 31-0338.....\$42.00

Chainwheel only 31-0339\$28.50

Brake Device To keep paper in position. 31-0302.....\$32.50

Trailing Edge 🛹 For paper 9' wide. 31-0314\$112.00

Trailing Edge 🛛 🛲

For paper 11.5' wide 31-0312\$170.00

€ indicates special order items. See pg. 114 for details.



Consists of:

Combitube

Boom Stand

A modular, counter-

weighted boom stand

for suspending lights or reflectors over a set.

You can modify this

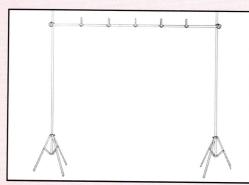
from the rest of the

Combitube system.

stand with accessories

31-0414	COGEA connector
31-0211	CESRA base
31-0257	CESRU base weight
31-0236	CONRO AS combitubes
31-0215	CEGOU counterweight
31-0222	COKLO clamps
	31-0211 31-0257 31-0236 31-0215

31-0998.....\$448.00



Combitube Background Stand

A versatile, portable and customizable stand for muslins or seamless. Can be made even more versatile by combining additional Combitube components.

C	0	n	S	is	ts	of

2	31-0249	COSNO stands
9	31-0236	CONRO AS combitube
1	31-0227	COKRO combitube
2	31-0414	COGEA adjustable clamps
5	31-0222	COKLO clamps

31-0999.....\$549.00



Light Stand Package

One common use of the Combitube system is to construct flexible light stands. We've put together a package that includes everything you need for a Combitube light stand. The package includes:

31-0404	В
31-0236	2
31-0209	C
31-0422	A

1

2

1

ase stand "9" Combitube lampholder Adapter

Mounting the head on the clampholder allows you to adjust its height and direction instantly and without restriction. You can lower the head to within inches of the floor, something not possible with conventional light stands.

When using heads with large softboxes, we recommend using the additional weight for the base (31-0257). 31-0499.....\$283.00

Shooting Tables

DIMIL •

- 33" high, 69" long by 48" wide color correct plexi shooting surface.
- Preformed front curve built in.
- Sand blasted surface allows for reflection free photography.
- No visible crossbars to prevent you from shooting into the curve.
- Combi connectors attach the versatile combitube system directly onto the table for added flexibility. Shown with optional Combitube accessories.
- 31-0333\$1,040.00

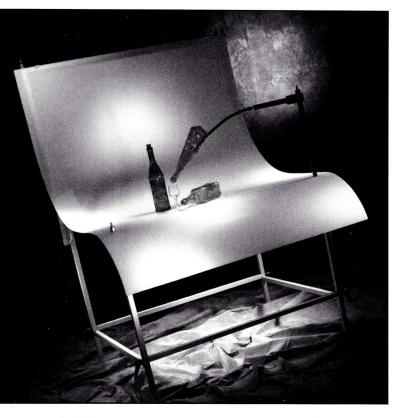
Aluminum Frame

31-0320	\$719.00
---------	----------

Plexiglas Replacement

31-0309	\$812.00
Casters	
31-0233	\$93.00

Prices and specifications are subject to change without notice.



DIMIU Shooting Table 🛛 🛲

This compact, affordable table is ideal for studios where space is at a premium, since it measures only 36"w x34"d x45"h. Like all Foba tables, the DIMIU has no crossbars behind the color-correct plexiglass surface, allowing you the freedom to light from above or below anywhere on the table surface. The table also has connectors for the Combitube accessory system. Shown with optional accessories. **31-0316**\$638.00

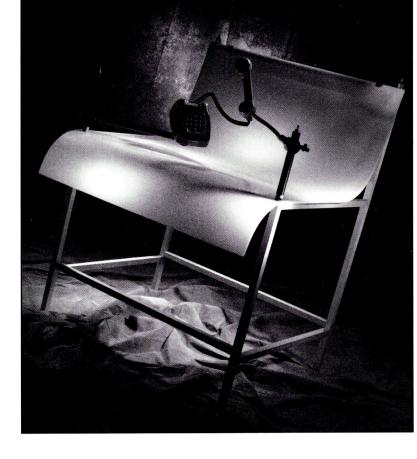
Replacement Plexi for DIMIU

31-0317	\$3	90.00

Replacement Frame for DIMIU

CAMUN Tabletop Arm

Kit made of COMBITUBE components to construct modular and flexible tabletop arm. Great for all Foba shooting tables. 31-0940\$124.00





Shooting Tables

DIGRO 🛹

Foba's largest light table with curved front. Shadowless design eliminates crossbars under the shooting area, and there are multiple attachment points for Combitube. Size of plexi plate 51" wide x 82" deep x 35" high. 31-0318\$4,507.00

Plexiglass replacement 🛛 🖊

	-	
21 0225		82 254 00
21-0223	••••••••••••	\$2,234.00

Brackets replacement

Set of 2	
31-0326	\$689.00

DIBRO 🛹 🤇

Same as DIGRO, 63" wide.	
31-0351\$5,6	23.00

6 indicates special order items. See pg. 114 for details.

DIMIN Shooting Cove

A departure from our other table designs, the new DIMIN makes it even easier to light and shoot small products. The deep shooting cove is made of translucent plexiglass, allowing you to light through it from any angle. Combined with a single light in front, you can easily achieve soft, wraparound lighting.

Because of the cove design, you can shoot from more angles than usual without having to worry about running out of background.

The DIMIN frame uses components of the Combitube system, letting you easily expand and customize it. Gobos and reflectors can be built right in, making the DIMIN a self-contained photo studio. You can even attach lights right to the base with the proper adapters.

Cove measures 39"w x 27"h x 21"d. 31-0450\$1,845.00

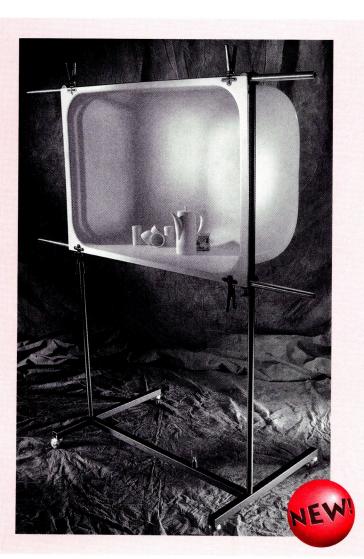
DIPLA Light Box for DIMIN.

31-0455\$850.00

Plexiglas Cone - large Base diameter 19.5", height 19.5". 31-0340 ...\$447.00

Plexiglass Cone - small Base Diameter 73/4", Height 8.5". 31-0341.....\$158.00





Roof Track System

Clear the stands off your floor in a few easy steps

Help us design your rail system:

Start by answering a few simple questions on this worksheet. Then, following the guidelines at the bottom of the page, sketch out the basic system on the grid at right. Your Sinar Bron rep will help you fill in some of the specifics, and from that we'll be able to quote your customized rail system.

Size of your studio:	Quantities of items to be suspended:
x	Standard lampheads with reflectors
Desired size of rail system:	
	Heads with heavy reflectors
x	(spots, large softboxes, etc)
Ceiling height (structural ceiling, not drop ceiling)	Monolights
ft	Motorized scissors desired? (Y/N)
Height of any ceiling obstructions (ducts, lights, pipes, drop ceiling)	Power Packs
(uuces, iigites, pipes, arep com.g,	Pack type:
ft	
	Large bank lights (Mini-Cumulite, Megaflex, etc.)
Desired height of rail system off floor	
	Туре
ft	

Laying out your rail system:

You want to start with the main rails. These are fixed rails, running the long way across your studio, and bolted to the ceiling. If there are obstructions on the ceiling, the main rails can be lowered past them with extension brackets.

You need at least two main rails. There should be no more than 8 or 9 feet between main rails. A 15 foot wide system, for example, would use three main rails.

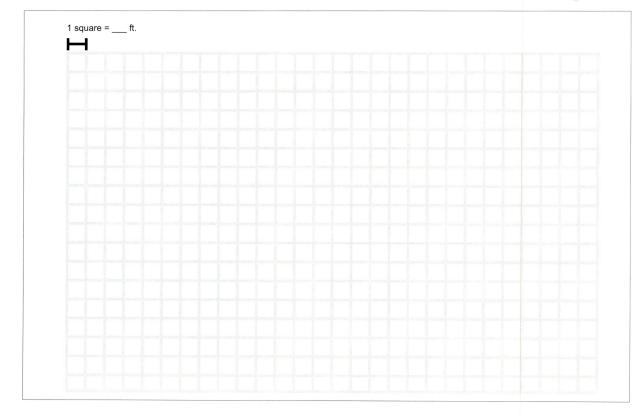
Each main rail must be attached to the ceiling with ceiling mounts. Mounts should be placed at each end of the main rail, and every six feet in between. If you are planning to mount two rails end-to-end for an extra-long main rail, place a ceiling mount at the joint between them. Each ceiling mount can carry a load of slightly more than 50 lbs.

Most of your lights will be hung from the mobile cross rails. Cross rails hang from the main rails with Cross Trolleys, using one for each main rail crossed. Cross rails can move along the length of the system, and are freely adjustable to any angle.

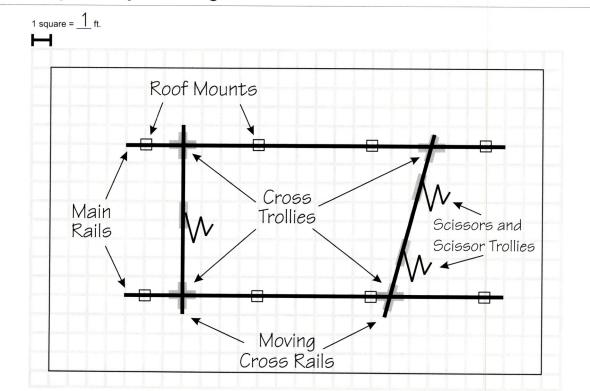
Each head hung requires a scissor, scissor trolly and the correct adapter for the head. Scissors can support loads of up to 26 lbs. Heavier loads require an additional tension spring.

Each power pack requires a power pack holder and trolly. You may also wish to place cable holders along the rails to keep lamphead cables from dangling in your way.

Roof Track System



Sample Rail System Design



Roof Track System

When it comes to ceiling rail systems, Foba wrote the book. Whether you need a large overhead system for car photography, or a lightweight ceiling rail system for people, Foba has the system for you.

The traditional rail system is custom designed for your studio. We can help you design a system perfect for the type of photography you do. These systems can hold any type of light source from a single head to a giant light bank.

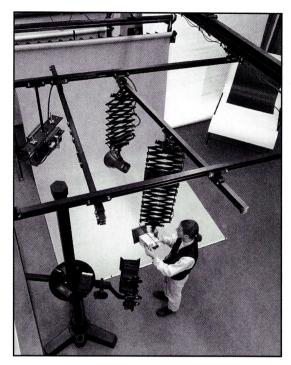
They can be operated either manually or fully automatically by infrared Servor control.

If you are tired of tripping over light cords and not having enough room to move in your studio, please give us a call and let us design a system for you.

The Foba Roof Track system is an easy way to expand your studio square footage without moving! Imagine the amount of space to be gained just by eliminating light stands from the studio floor, let alone the lamphead cables that you have so often tripped over.

When compared to the cost of just a few light stands and a couple of boom arms this system is relatively inexpensive.

You can choose from three basic kits or build your own custom system, and the installation is just as easy. If you need help in choosing the correct system just call your local Foba dealer or Sinar Bron and we will be glad to discuss your Foba rail system.



MINI-KIT (10x10') 🛹

Consi	sts of:
4	32-0610

4	32-0010	TO Talls
8	32-0638	Endbuffers
4	32-0630	Cross trolleys
2	32-0600	Scissors
2	32-0624	Scissor trolleys
3	32-0639	Roof mount, set of 2
2	32-0635	Cable holder set of 4
2	31-0840	Safety Cable
2	32-0678	Universal adapters

10/ maile

32-0133\$2,018.00

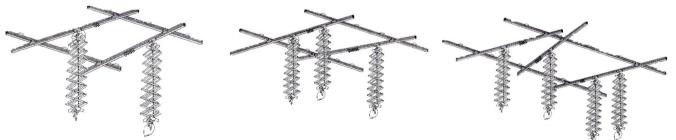
PROFI-KIT (10x10') 🛹

Consi	sts of	
4	32-0610	10' rails
4	32-0630	Cross trolleys
3	32-0600	Scissors
3	32-0624	Scissors trolleys
8	32-0638	Endbuffers
4	32-0639	Roof mount set of 2
3	32-0635	Cable holder set of 4
3	31-0840	Safety Cable
3	32-0678	Universal adapters
32-02	32	\$2,696.00

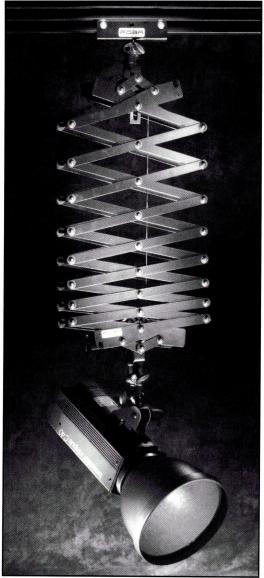
MAXI-KIT (10x20') 🛹

С	ons	ists of	
	2	32-0620	20' rails
	3	32-0610	10' rails
	8	32-0638	Endbuffers
	6	32-0630	Cross trolleys
	4	32-0600	Scissors
	4	32-0624	Scissor trolleys
	5	32-0639	Roof mounts set of 2
	4	32-0635	Cable holder set of 4
	4	31-0840	Safety Cable
	4	32-0678	Universal adapters
	3	32-0649	24 lbs springs for scissors

32-0336\$3,821.00



SINAR • BRONCOLOR • FOBA • LEAF • PRO CYC SINAR BRON: YOUR ONE STOP IMAGING SOURCE



Scissors

Three new models of scissors feature a friction clamping mechanism to hold your lights at the height you set them. An additional spring is available to offset the weight of heavier lights. Also includes two safety cables

15 to 80" Scissors	3
32-0600\$396.00	
20 to 118" scissors	
32-0601\$590.00	
24 to 155" scissors	
32-0602\$827.00	
Motorized Scissors	
32-0653\$718.00	
Spring (8.8 lbs)	
32-0648\$83.00	



Cross Trolley	
To install cross rails onto main rails.	
32-0630\$8	5.00

Cross Trolley Special To put roof track onto steel main rail. 32-0631\$271.00

Trolley for Adapters 32-0632.....\$58.00

Trolley with Combitube Adapter

Allows installation of combitubes on Roof Track System 32-0641.....\$62.00

Motorized Scissors Trolley Requires power control unit (32-0654).

32-0658\$339.00

Power Control Unit

To control motorized carriages, pantographs and suspension systems. This unit comes complete with a hand held remote unit that may be attached to

any ferrous surface via a magnet on the back side. 24Vdc output.

4 Channel Power Control Unit

32-0654\$540.00





Brake, set of 2 32-0640\$34.50



Cable Holder with Hook 32-0634.....\$18.50



Cable Holders Set of 4. Clips will hold cable up to 1/2'' diameter. 32-0635.....\$63.00

Roof Track System

Megaflex Suspension 8

This new system mounts the Megaflex 200 and 300 light banks to any Foba rail system. The system is available in either manual cable controlled or motorized infrared controlled versions. For the Roof Track system, the suspension requires the proper trolleys, below.



Set of 4 Trolleys for Megaflex

32-0660\$136.00

Suspension to Roof Track

Infrared Controlled Suspension

32-0100\$5,643.00 **Cable Controlled Suspension** 32-0105\$4,801.00

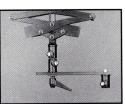
Endbuffer

Set of 2. An endbuffer must be mounted at both ends of each rail section to prevent equipment from sliding off.



Balance Adapter

Has female attachment to be fitted between pantograph and unbalanced lighting fixtures or other appliances. 32-0657.....\$90.00



Multiple Scissors Bracket

Bracket for multiple mounting of scissors or extensions for lamps heavier than 48.5 lbs. 32-0675.....\$102.00



Broncolor Adapter

32-0671.....\$35.50 **Combitube Adapter** 32-0673.....\$30.50

Universal Adapter 32-0678.....\$12.00

Roof Mount

Set of 2. Mounts rail section onto ceiling. It is advisable to attach mount to rail on the around and then attach



roof mount to ceiling with rail section attached. 32-0639.....\$48.50

13

20'

Roof Track Rails, black 🛛 🛲

6.5′	
32-0606	\$96.00
10′	
32-0610	\$130.00

Adjustable Bracket

For use with an uneven ceiling, the bracket allows adjust-



32-0613.....\$198.00

32-0620.....\$254.00

ment of the roof mounts so that they are level. Requires the use of the threaded bar.

32-0636\$140.00

M16 Threaded Bar (39")

For use with the adjustable bracket. 32-0637.....\$42.50

Extension Bracket 8

Using extension brackets enables rail system to be mounted at a



fixed distance from the ceiling to allow for ducts, pipes and other obstructions. Custom lengths from 4"-20" 32-0642.....\$59.00 Custom lengths from 21"-39"

32-0643.....\$68.00

Power Pack Holder

Power pack rests on platform which is attached to rail system with 3/8" spigot. This will hold a pack up to (32-0627).



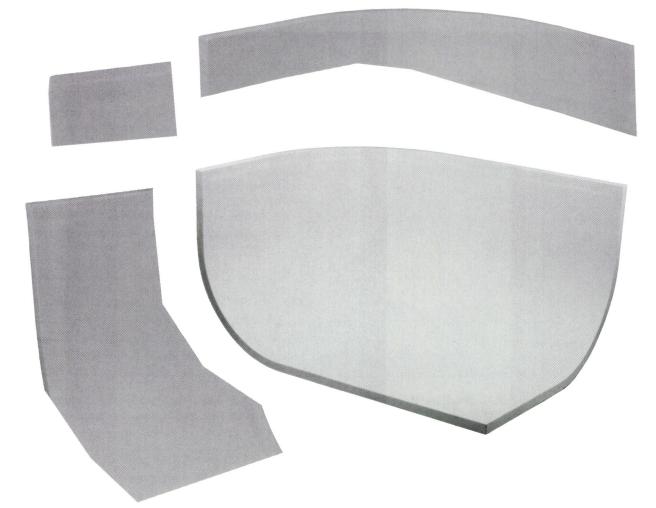
17" wide and 9" high. Requires (32-0624) and 32-0626\$141.00

⁵/⁸" Female to Female Adapter

Allows the power pack holder to be mounted directly to the trolley (32-0624) 32-0627.....\$30.50



Pro Cyc



New Tabletop Cyc System

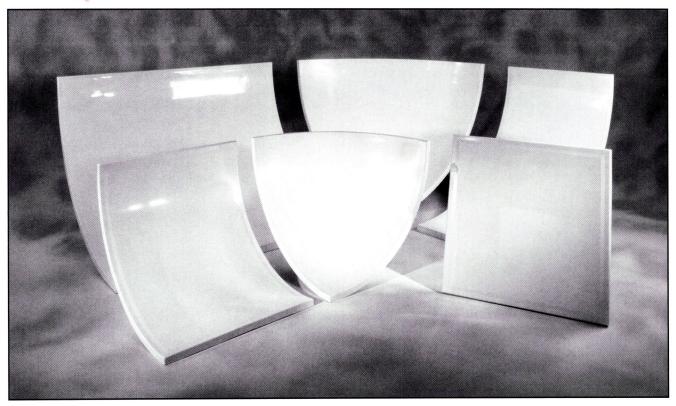
Pro Cyc's new tabletop system brings all the advantages of a big studio cyc to small product work. It features an 18" radius on the bottom base-to-wall curve, and a wider 24" radius in the horizontal corner curve. The cyc is easily lit to vanish behind your subject for easy silhouet-ting. Plus, its wraparound design helps reflect light back onto the subject.

The tabletop cyc is made of heavy-duty fiberglass for superior strength and stability. The basic module is ready to use, with no assembly required. But like its bigger brothers, it's part of a modular system that can be expanded in all directions to meet your needs. Tapered edges allow joints to be filled invisibly to create a seamless system of any size.

Tabletop Cyc 3.5' x 5', under 40 lbs. <i>70-3000\$995.00</i>
24"Additional Side Curve 70-3005\$295.00
12" Additional Side Curve 70-3010\$275.00
12x24 Flat Panel 70-3015\$79.00
18x24 Flat Panel 70-3020\$99.00

Pro-Cyc technology for tabletop photography

Pro Cyc



Pro-Cyc is a special order item.
 See pg. 114 for details.

All Pro-Cyc orders are shipped by truck. Call for shipping charges.



3 ¹ / ₂ ' Radius	Pro Cyc
3 ¹ /2′ Radius 4′	Straight Section
70-2001	\$445.00

3¹/₂' Radius 90° Corner Section 70-2003.....\$1,095.00

New **3**¹/*2*' **Radius 120° Corner Section** This new corner section gives a more open 120° curve between two walls. Takes up a little more room than the standard 90° corner, but lights as easily as a 5 foot radius corner. 70-2004.....\$1,295.00

4' Flat Square Panel

Used for flat sections of portable 3¹/₂' installations with the free-standing support system. **70-2002**.....\$395.00

The $3^{1/2}$ foot radius system is ideal for studios where space is at a premium. Because of its reduced size and weight, the cyc wall occupies less space in your studio and can be shipped less expensively.

The $3^{1}/_{2}$ foot radius cyc is made of ${}^{s}/_{16}$ " PVC, which is also far more durable than a traditional plaster cyc.

In the $3^{1/2}$ foot radius system, the standard 4 foot long sections can be user-modified to any required length. To maintain stability, the lip at the end of the section is cut off and reattached with PVC cement after the section is cut to the desired length.

5' Radius Pro Cyc

5′	Radiu	s Straight	Section — 4'	length
70	-1001			\$695.00

Custom Le	ngths up to 4 feet
70-1004	\$745.00
5' Padius	Straight Soction & longth

	Naulus	Juangine	Jection	-0 1	ingen	
70)-1002				\$1,295.	00

Custom lengths - 4-8 feet

70-1005	\$ 1	,395.00

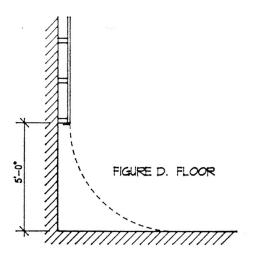
5' x 5' Radius Corner Section

70-1003\$1,495.00

5 foot radius Pro-Cyc is the strongest, most versatile cyc wall on the market. Its extra-large 5' radius makes it easier to light than smaller radius cycs, since the broad curve is less likely to fall into shadow. And, because the modular sections are preformed, you can be assured of a smooth, perfectly curved surface.

5 foot radius sections are made of thick, highly durable fiberglass. Unlike traditional plaster cycs, the fiberglass will not be damaged by high heels, standing, or even jumping on it!





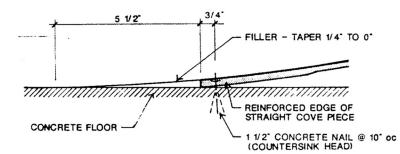
Both the 3¹/₂ and 5 foot radius Pro Cyc share these unique features:

- Modular Design: The entire system can be assembled by using just a few different types of pieces - floor, ceiling and corner sections.
- Patented Tapered Design: All edges are slightly tapered so that taped and spackled seams are the same level as the rest of the wall.
- Fast Installation: Because of its modular design, installation time is 50 to 75% less than a typical dry wall/ plaster cyc.
- Movable: All sections can be easily removed and reinstalled in a new studio.

Installing Pro-Cyc is a fairly straightforward process. In fact, if you've ever installed drywall over rough framing, you can install Pro-cyc.

When installing a straight section, the module is aligned with the framing and secured with drywall screws. This process is repeated until an entire section is installed.

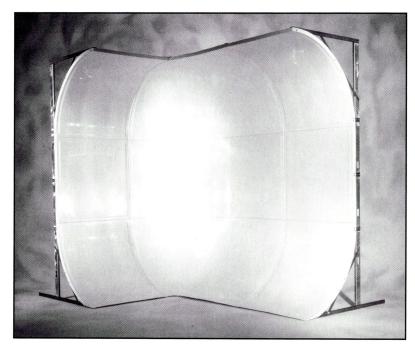
When you come to a corner module, one edge is attached to a vertical cove section and the remaining two edges become starting points for



straight sections of cove modules.

Bottom edges are fastened to the floor with concrete nails and the space between floor and the lip of the cove is filled with compound and then taped.

Installation is not a difficult job and you'll find that your studio is only out of commission for only a few days instead of a few weeks with the old system.



Freestanding Support System

Pro-Cyc's new modular frame system allows you to create temporary or freestanding $3^{1}/2'$ radius cyc installations. Instead of framing drywall and bolting the cyc to your wall, you can set up the steel support structure and fill in the flat surfaces with the new 4' square panels. Once set up, you can fill in the joints and paint the cyc as if it were a permanent installation.

In fact, you can use the support system for permanent installations, since it's strong enough to meet building codes. So whether you're installing a cyc for a short-term job or in a studio you know you'll eventually grow out of, the support system will allow you to easily take your cyc with you.

A freestanding installation requires one set of supports for every vertical "row" of cyc pieces, plus one for the end.

11.5' height 70-2010	\$155.00
15.5′ height	
70-2020	\$210.00

Terms and Conditions

Special Orders

Sinar Bron can special order non-stock items with a normal delivery time of 4-6 weeks. Due to the one of a kind nature of these items, we cannot accept returns of these items unless the item is defective. A 50% non-refundable deposit is required at time of order, and orders cannot be cancelled after placement.

Order by Telephone

To take advantage of Sinar Bron's toll-free Order-By-Phone service, call 1-800-456-0203. We're open Monday thru Friday 9 a.m. to 5 p.m. Eastern.

For faster service, please have the following information ready before you call:

- Credit Card Number and Expiration Date.
- Sinar Bron's Product Number
- Quantity of each item.
- Description of each item.
- The price listed in the catalog.

We suggest that you use the Order Form to help you organize this information, and to provide you with a record of your order.

Price and availability will be confirmed at the time of your call. If you should require additional information, our Technical Sales Staff will be happy to help you.

Order By Mail

Use the accompanying Sinar Bron Order Form. Send your mail order, with payment to:

Sinar Bron, Inc.

17 Progress St.

Edison, N.J. 08820

Please call for price confirmation before you mail in your order.

Terms of Payment

Credit Card Orders (\$25.00 Minimum) Telephone and mail order may be charged directly to your Visa, Mastercard or American Express. We reserve the right to hold all firsttime customer orders pending cardholder address verification.

Check With Order

Sinar Bron will process your check and reserves the right to hold orders pending bank clearance.

Financing

Now you can expand your purchasing ability without a large capital outlay using Sinar Bron's financing programs. These programs allow for payments up to 30 months. For full details on this plan, please call our Financing Department.

Warranty Repair for Sinar Bron Products

Should you have a Sinar Bron product that requires warranty service, return the item, prepaid, directly to Sinar Bron Inc., 17 Progress St. Edison, N.J. 08820 Att: Service Dept. Please include a photocopy of your proof-of-purchase, as well as a note describing the problem you are having.

Return Procedure

- 1.You may return an item for any reason within 10 days from date of shipment.
- 2.To return an item, please call ahead to (908) 754-5800 to get a Merchandise Return Authorization number. No items will be accepted without one.
- 3.To qualify for the return, the item must be in brand new condition, in the original undamaged packaging with all the components, and the original unused warranty card.
- 4. The returned item must be sent to us prepaid. Returns sent C.O.D. or "shipping charges collect" will not be accepted.
- 5.All returns are subject to a minimum 15% restocking charge.

We have made every effort to assure the accuracy of all information in this catalog. However, we reserve the right to correct any errors, whether in pricing, description, specification, etc. All prices and specifications are subject to change without notice. Some prices may be subject to quantities on hand and availability.

Shortages

All claims for errors in shipments and/or shortage must be made to Sinar Bron in writing within 3 days of receipt of package. The claim must include a copy of the packing slip. You must retain all packing materials.

Loss and Damage

All products delivered to carriers have been inspected for accuracy of package contents, condition and packing. All claims for in-transit damage, carton shortage or pilferage must be made by you with the carrier. We will assist you in preparing the claim, if requested and notified within 3 days after receipt of product, when claim has been noted on the delivery receipt.





17 Progress St., Edison, NJ 08820 (908) 754-5800 • Fax (908) 754-5807 Toll Free (800) 456-0203

Sold To:

(Please Print)

Daytime Phone

Phone your order in - (800) 456-0203Fax us your order - (908) 754-5807Mail a completed order form to the address at left

See important terms and conditions on next page

Ship To:

Name

Address

Only if different than billing address

Name			
Address			
City, State, Zip			

City, State, Zip

Qty.	Catalog Number	Description	Price (ea.)	Total
esident	ts of CA CO CT EL CA IL A	1 1N, MO, NC, NI, NY, OH, TX, VA.	Subtotal	

Residents of CA, CO, CT, FL, GA, IL, MN, MO, NC, NJ, NY, OH, TX, VA, WA, WI please add local sales tax.

Orders prepaid by personal check will not ship before 10 days from receipt of payment.

We ship UPS surface unless otherwise specified. Use the chart below to determine shipping and handling. For UPS air, Federal Express, Parcel Post and truck freight shipments, please contact us for an estimate.

Indicates truck shipment; call for estimate.

-- -

Total Order	Shipping Charges
Under \$100.00	\$ 8.00
\$100.00-\$249.99	\$10.00
\$250.00-\$499.00	\$12.00
\$500.00-\$999.99	\$14.00
\$1000.00-\$1999.0	0 \$20.00
\$2000.00 and up	\$25.00

. . . .

Method of Payment

Sales Tax (if applicable)

Shipping & Handling

□ Visa □ MasterCard □ American Express □ Check or Money Order

Total

Account Number

Expiration Date Signature

Sinar Bron Financing

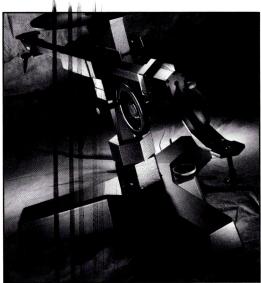
Ready to go digital, or move up to a new lighting system? Not everyone will have the cash on hand to make a major capital investment. With a variety of financing options and terms available, you'll get equipment that can start making money for you today, paying for itself as you use it. Leaf Volare: As low as \$854 per month!**

Sinarback 23: As low as \$960 per month!*



disinem?

* Based on 30 months, 20% down. LeafVolare and Sinarback are pictured in Sinarcam configurations. Rates are for digital back only. Prices and financing rates are subject to change. **Leaf products are leased through 3rd party lender, 36 months with 10% buyout.



ASABA: As low as \$90 per month!*



Financing Application Confidential Information

17 Progress St., Edison, NJ 08820 (908) 754-5800 • Fax (908) 754-5807 Toll Free (800) 456-0203

	COSIGNER INFORMATION (if applicable)
APPLICANT NAME	NAME
LEGAL COMPANY NAME	ADDRESS
ADDRESS	CITY
	STATEZIP
STATE ZIP SOCIAL SEC. #	TELEPHONESS#
TELEPHONE E-MAIL	

SHIP TO

51111 T C					
(if different than above)	Street	City	County	State	Zip

BANK REFERENCE (Exa	ict branch) — LIST ALL BAN				
BANK 1	BRANCH	ACCT. #	ACCT TYPE	OFFICER	PHONE
2					
3					

Fill in equipment to be leased below, or attach a completed order form.

Qty.	Catalog N	umber	De	scription	5		Price (ea.)	Total
						с. Ф		
		×		2				
-								
		9		2				
		Month	ly Paymen	its	Total	Equipment Cost		
Choose your term, and multiply the total financed cost (equipment						- 20% down payment		
less 20% down) by factor below to calculate your monthly payments.				*Sales Ta	x (if applicable)			
_ ` ` ` `		nths) 12 20 24 30 0.088 0.056 0.048 0.04	*Ship	oing & Handling				
		0.000	0.050	0.040	0.04		Total Cost	

*SALES TAX, FREIGHT AND APPLICATION FEES CANNOT BE FINANCED, AND ARE DUE IN FULL UPON EXECUTION OF CONTRACT.

THE UNDERSIGNED CERTIFIES THAT THE ABOVE INFORMATION, GIVEN FOR CREDIT PURPOSES IS TRUE AND CORRECT AND AUTHORIZES THE FIRM OR PERSON TO WHOM THIS APPLICATION IS MADE AND ANY CREDIT BUREAU OR OTHER INVESTIGATIVE AGENCY TO INVESTIGATE THE REFERENCES, STATEMENTS OR OTHER DATA LISTED OR ACCOMPANYING THIS APPLICATION. THE UNDERSIGNED AUTHORIZES ALL PARTIES CONTACTED TO RELEASE CREDIT AND FINANCIAL INFORMATION REQUESTED AS PART OF SAID INVESTIGATION.

***Application Fee**

Send completed form with \$25.00 application fee to:	APPLICANT		
Sinar Bron Financing			
17 Progress St.	BY	TITLE	
Edison, NJ 08820			
Fax: (908) 754-5807	DATE		1

Meet Sinar Bron's Headquarter's Staff



OFFICE/ADMINISTRATION Left to right standing: Angela DiCarlo, Michael Tangreti, Jim Bellina, Bill Andrews Left to right seated: Cindy Salvato, Yolanda M. Calia, Sara Spotte



OPERATIONS

Left to right standing: Mark Atkinson, Joe Boyko, Gordon Sullivan, Jason Gordon Left to right seated: Lee Edwards, Sherrie DeOcampo, Scott Smith



SERVICE Left to right: Bobbie Lee Gordon, Larry Makoski, Mike Gerien, Steve Lewis (seated)

District Sales Managers

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Alabama, Georgia, Carolinas, Tennessee Danny Goldstein

(770) 331-8266 dgoldstein@sinarbron.com

Florida David Forney (908) 672-5961 dforney@sinarbron.com

AK, HI, MS, MT, ND, PR, SD, WY, North Eastern NV Sinar Bron Main Office (800) 456-0203 sales@sinarbron.com To support you before, during and after a sale Sinar Bron has a nationwide network of field representatives. If there's no sales rep listed for your area, please call (800) 456-0203 for assistance.

Authorized Service Centers

Associated Camera Repair Portland, OR (503) 232-5625 Broncolor Only

Authorized Camera Service Sherman Oaks, CA (818) 788-0404 Sinar only

Mel Pierce Camera Hollywood, CA (213) 465-2191 Sinar only

Keith H.Murphy Electronics Warren, MI (313) 779-0030 Broncolor only

Imagination Concepts Universal Inver Grove Heights, MN (612) 450-9924 Sinar Only National Camera Exchange Golden Valley,MN (612) 546-6831 Broncolor Only

E. G. G. Maplewood, MN (612) 483-8588 Sinar Only

Precision Camera Works Niles, IL (847) 823-3330

W. Schiller St. Louis, MO (314) 968-3650 Broncolor only

SK Grimes Camera Repair Boston, MA (617) 951-1480

Arce Photographic Services Stamford, CT (203) 348-1923 Sinar only Professional Camera Repair New York, NY (212) 382-0550 Sinar only

Pro Camera Charlottesville, VA

(804) 979-1915 Broncolor only

Southeast Camera Repair Norcross, GA

(404) 441-7700 Sinar only

Peachtree Camera Repair

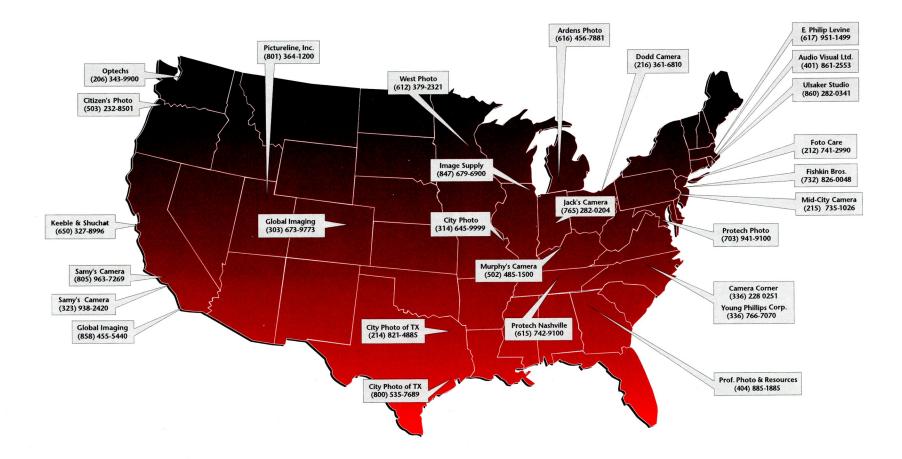
Marietta, GA (404) 795-8020 Sinar only

Power Strobe Repair

Atlanta, GA (404) 874-0022 Broncolor only Besides Sinar Bron's own service department, there are a number of service centers across the country authorized to repair Sinar or Broncolor equipment.

Instructions for sending items to Sinar Bron Service Only:

Pack the item carefully, and be sure to ship any parts necessary to diagnose the problem. Enclose a detailed note describing the problem, and be sure to include your address and phone number. Mark packages: Sinar Bron Imaging Service Department 17 Progress St. Edison, NJ 08820 Repairs not addressed to Service will be refused.



Sinar Bron Imaging's Full Line Dealer Network

All equipment in this catalog is available through the Full Line Authorized Dealers above.

There are other fine Authorized Professional Dealers who carry parts of our product line. However, due to space limitations only the full line dealers are listed here.

Publications



Creative Large Format: Basics and Applications

The first book in a series covering all areas of large format photography. The first volume is an in-depth introduction to large format, covering everything from view camera theory to advanced metering and filtration techniques.

Subjects such as the Scheimpflug rule of intersecting planes and the patented Sinar systems for calculating swings and tilts are illustrated in extreme detail.

By clearly explaining what appear to be complicated issues, "Basics and Applications" helps to convey the limitless creative potential of large format photography to new and experienced users alike. It serves as a technical reference for future volumes in the series, leaving them free to concentrate on the creative aspects and techniques of large format. Soft bound, 112 pages. 41-1052.....\$35.00

Professional Lighting Technique, 2nd Ed.

Broncolor has completely revised their comprehensive

Professional Lighting Technique to bring it up to date with current equipment and lighting styles. This book runs the complete gamut of lighting issues, including color and light theory, specific lighting techniques and styles, and a rundown of the application of specific equipment. Pro Lighting Technique is illustrated with work by many of today's most talented image makers. 41-1077.....\$42.00

Creative Large Format: Architectural Photography

The second volume in the Creative Large Format series explores the demanding field of architectural photography. It explores the longstanding relationship between photography and architecture, from the beginnings of the art through today.

All the techniques and concepts involved in architectural work, from camera handling to natural light, are discussed in detail. Successful architectural work demands both technical mastery and creative vision. Author Urs Tillmans gives the reader an understanding of both through examples and illustrations of the techniques of many successful architectural photographers. *41-1057.......\$42.00*

Creative Large Format: Natural Landscapes

Creative Large

Format: People Photography

Sinar's fourth entry in the popular Creative Large Format series concerns an increasingly popular use for large format cameras - portraiture and fashion. While most people photography has traditionally been done with smaller formats, many young photographers are taking advantage of the creative flexibility of view cameras for their work. *People Photography* examines the portfolios of these newcomers, as well as "Old Masters" like Richard Avedon who have been producing award-winning large format portraiture for decades. **41-1060......\$42.00**

Creative Large Format: Advertising Photography

Loaded with illustrations and examples, the fifth volume in the Creative Large Format series covers the tools and processes of creative visualization used by successful advertising photographers around the world. The merits of various formats are compared, including the use of digital camera backs in place of film.

Like the rest of the Creative Large Format series, Advertising Photography also contains portfolios by a half dozen international photographers, illustrating a wide variety of concept and technique.

41-1061.....\$42.00

The Photographic Flash:

A concise illustrated history. 41-1088.....\$54.00





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