



Sinar Bron
IMAGING

Vladimir Simovich of Studio 612 is this year's cover photographer. Vladimir is also one of the first photographers in the US to use the new Leaf Volare digital back in production. The front cover is one of his first Leaf Volare images. Here's his story:

I was born in Belgrade, Yugoslavia and I lived there until I was 29.

Since I was 7 years old I recall having interests in painting, mosaics, cinematography, music, etc. In my teen years I had interests in sound, and music recording. When I was nineteen, I became more interested in the visual and I switched to cinematography, which finally led me to photography.

During my school years and after I received my degree, I started doing professional assignments. I started with fashion photography, editorial, magazine covers etc. I had my work published in almost every major magazine in the former Yugoslavia, which include more than 30 magazine covers.

Because of the weak economy in Yugoslavia it was impossible to specialize just in one field (fashion, product, photojournalism) as is common in the United States. This brings many disadvantages, but also makes you very experienced, knowledgeable, being able to survive in the difficult situations.

At the end of 1991 I made the decision to move to the United States, mostly because of the huge market, enormous opportunity in the advertising and photography business and the typical European curiosity about the U.S.

In 1992 I started working for the Robinson's May department stores as a product photographer. That was a photo studio of over 30,000 sq ft, turning out around 15,000 shots a year. At the end of 1992 I worked on testing early digital cameras and the conversion from a traditional to a digital workflow. Our results were extremely



successful. In a studio with such tight deadlines and huge volume, where photographers are producing on average 10 to 15 shots a day, we didn't have any down time. We found digital production more color consistent, and more efficient.

Our production department was very suspicious in the beginning, but shortly after we established our digital routine, they complained if we sent them transparencies! Conversion from traditional to digital created tremendous savings, because we completely erased the cost of film, Polaroid, processing and on top of that - scanning. We found digital suitable and more convenient than film in many situations, even on location.

Our corporation fully implemented the results of our research in 8 other studios throughout the United States. We also took part in consulting, retraining etc.

In 1997 together with Ken Reece I was invited by a high-end digital prepress and premedia company, Designer Color Systems Inc. to start a new Creative Department (Studio 612) and Photo Studio (Flashworks) in St. Louis, MO. DCS's management concluded that traditional prepress

I was amazed how CLEAN a file I was getting out of the Leaf Volare. I couldn't find any trace of digital noise.

I was truly amazed.

would suffer drastic changes in the future, because of digital photography, direct to plate process etc. Knowing that, they wanted to be prepared for the future so they made the decision to open Studio 612, which consists of

Flashworks - photo studio, Liquid Picture - 2D and 3D imaging, and Liquid Graphic - graphic design department.

In order to succeed, DCS Management wanted professionals to run the studio. For their big agency clients they had to offer nothing but the best in order to match what the clients are accustomed to. They wanted to offer their existing customers new services, as well as to gain new customers through our service. To achieve this, we had to carefully select creatives to be hired and equipment to buy. Making a decision on the equipment wasn't hard — we chose mostly Sinar Bron products.

Throughout my career I have been using Sinar Cameras. I haven't seen anything that will match the reliability and durability of these cameras. I feel fortunate to be able to use this great product. They work in every situation, with every angle, or movement. The versatility of this camera is what I like the most. I work for so many different clients, agencies and companies that my work goes from small web site images to huge billboards. I could be working on 4x5, 8x10, or with a digital back, all with the same camera.

I found the greatest improvement to the digital capture to be the Sinarcam and Sinaron digital lens. This combination completely overcame problems associated with the small diagonal size of single or triple capture digital backs. It allows me to do all movements with my camera as if I'm working with film. To support it we use Foba stands.

For our lighting we use numerous Broncolor Primo packs. But for our liquid shots (This is St. Louis, home of Anheuser Busch) we use only Grafit packs. The luxury of dialing in a flash duration is a photographer's "dream come true." Color consistency is of extreme importance with three-capture digital backs such as the Leaf DCB II or Volare. Broncolor lights are best for that. The variety of light accessories and shapers allowed me to satisfy even the most demanding clients.

For the shot used on the cover page, I used a new Leaf Volare, in combination with a Sinarcam and 135mm Sinaron digital lens, on a Foba stand. My lighting was 2 Broncolor Grafit packs, and 4 heads with P70 reflectors.

Thanks to the new Volare camera and its rectangular CCD chip I was able to use virtually the whole image without any cropping. After initial tests done with the Volare I was amazed how CLEAN a file I was getting out of it. I couldn't find any trace of digital noise. I was truly amazed. To celebrate that cleanliness I chose pretty simple CLEAN composition consisting of white and fresh CLEAN cool blue. The final touch to this Liquid Composition (bubbles) I produced in our Liquid (Picture) Studio.

Welcome to the 1999 Sinar Bron catalog. It's been a busy year for us here, and that translates into good news for you.

Photokina '98 has given us more new products at once than we've seen in quite a while. Each of our manufacturers had major product introductions or even whole new product lines, and many of them directly reflect the things you've been asking us for.

Digital photographers will be happy to know that we've expanded and updated our offerings, while simultaneously lowering our prices up to 30 percent! The new Scitex **Leaf Volare** is a landmark development, offering the 2kx3k Leaf VHTwist™ rotating CCD and a host of other new features, all for less than ever before. We also still carry the trusted DCB II Live to round out the line.

Perhaps the biggest digital news this year was the introduction of the **Sinarback**, a new multifunction digital back from Sinar. With the capability to capture both moving and still subjects, wide camera compatibility and very easy workflow, the Sinarback can handle situations that would previously have required two separate backs.

We will continue to support and expand both the Scitex and Sinar lines to provide you with the best choice of solutions around.

One thing that we have to offer isn't new and isn't always obvious — support. We're one of the only full-service imaging vendors in the country. That means we can build you an entire studio from bare walls, and back it up with advice and support from your regional SBI rep, your dealer, our in-house technical staff and the support groups at Scitex and Sinar.

Even though it can seem that digital gets all the attention these days, we're paying close

attention to the needs of conventional photographers with some exciting new products.

Broncolor steps out of the studio with the introduction of the **Mobil** system. The Mobil is a go-anywhere, battery-powered pack that still delivers 1200Ws power with Broncolor accuracy and efficiency. Accompanying this pack is the **Mobilite**, a full-powered head barely larger than a soda can.

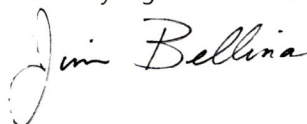
For studio photographers, the new **Minipuls D 160** monolight brings Broncolor's famous 1/10 stop digital adjustments to its self-contained line. The D160 also features illuminated digital power displays and Mac/PC control capability.

Foba has given us a third major camera stand, the **DSS-GAMMA**. Smaller and lighter than the ASABA, the GAMMA has many of the advanced features introduced in the DSS-ALPHA, and will appeal to conventional and digital photographers alike. Foba has also introduced the **DIMIN shooting cove**, which acts as a combination shooting table and 180° light tent for small product shots.

Pro-Cyc has designed a new **Tabletop Cyc** system, which can be easily lit to completely vanish from your images. Like its big brothers, the tabletop cyc is modular and expandable.

This year, we're running a series of monthly, limited-time promotions to give you some of our most popular equipment at significant discounts. Make sure you're on your dealer's mailing list to stay informed about these specials.

I hope you enjoy this new catalog and everything we have to offer. Please be sure to stop by and see us at PhotoPlus East, Seybold, and many regional shows throughout the year.



**Celebrating
60 years of
Foba studio
innovations**

New e-mail addresses

General information: info@sinarbron.com
Technical help: tech@sinarbron.com
Repairs: service@sinarbron.com
Literature requests: 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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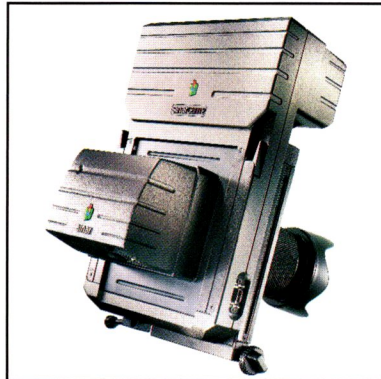
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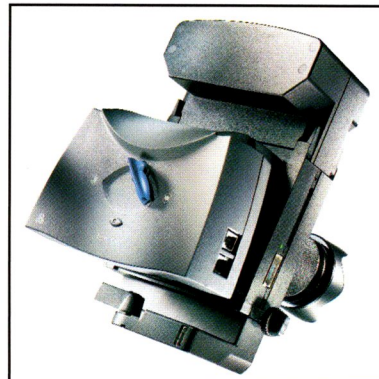
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Prices and specifications are subject to change without notice.

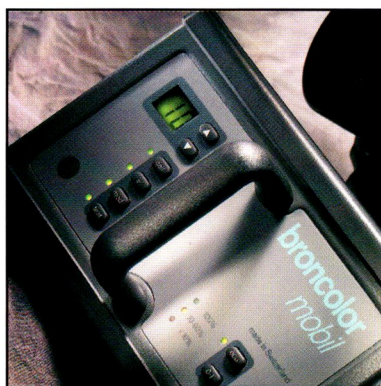
New for '99



Sinarback



LeafVolare



Mobil pack



DSS-GAMMA



sinar

Digital Photography



Sinarback

The universal digital back from Sinar

Sinar begins its second half-century with the introduction of the Sinarback, a universal digital back for virtually any type of application.

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

- **2048x2048 pixel** color CCD (24x24mm)
- **One-Shot Action mode** to capture moving subjects in a single pass, much like film



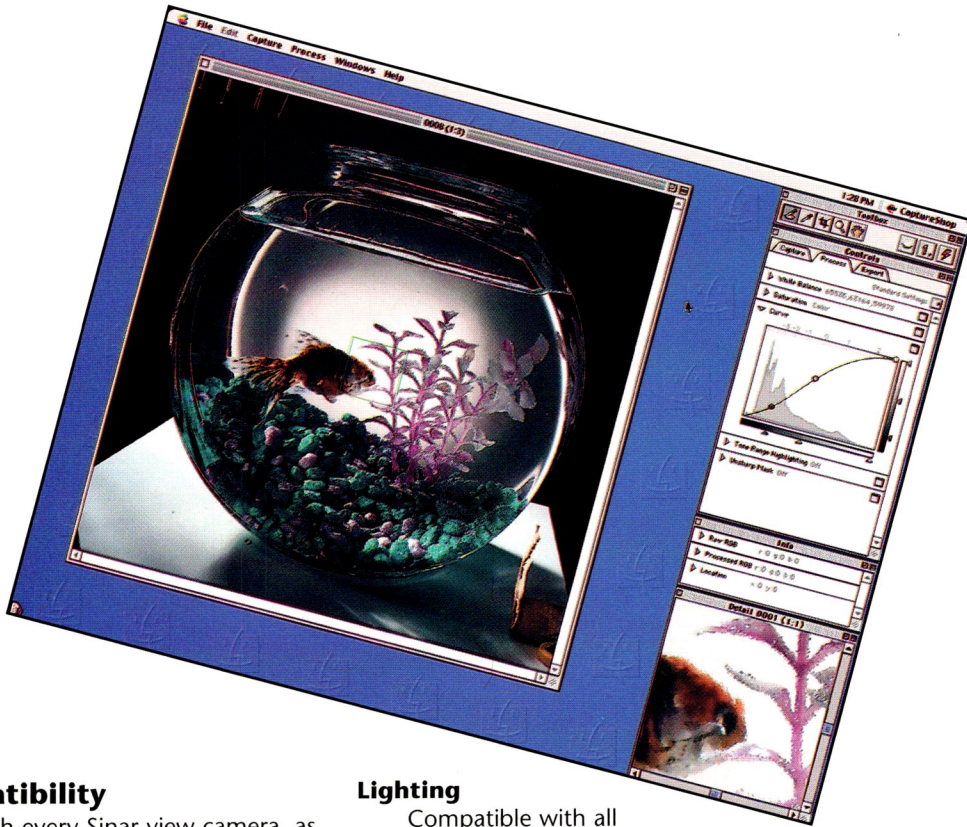
- **4-shot Still Life mode** captures still subjects with higher quality
- **Microstepping CCD** moves between each exposure, capturing full color information for each pixel — no interpolation and no filter wheel needed
- **Unique 2-axis piezoelectric stepping motors** move the CCD just one pixel vertically and one pixel horizontally. 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

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

- 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
- Less than two seconds between exposures required in one-shot mode
- Shoot directly into contact sheet for maximum working speed
- Built-in ICC profiling capability captures color values from a Macbeth Color Checker
- Very intuitive Sinar CaptureShop™ software provides a very 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
- Any control can become a floating window
- Built-in unsharp masking function
- 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*
- 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
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: 4.5x3.5x2.75", 1.5 lb.

Body Adapters:

Hasselblad, Mamiya RZ 67, Fuji GX 680, Rollei reflex 6008, all 4x5 Sinar cameras, Sinarcam 2

Computer Requirements:

Apple Power Mac 8100 or higher
System 8.1 or higher
Unoccupied PCI slot
128 MB RAM
Monitor and video card for minimum 1024x768 resolution at 24 bits per pixel

File Size:

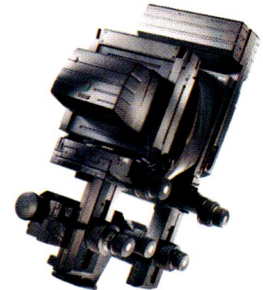
25 mb (42 bit), 12 mb (24 bit)
4 mb (8 bit b&w)

Power Supply:

110-220 vAC, 50-60 hz, autoswitching

Sinarback

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 6.
97-6002.....\$26,868.00



* Medium format configurations, and Sinar configurations without Sinarcam 2, will have lower-quality live video image since no LCD shutter is present.

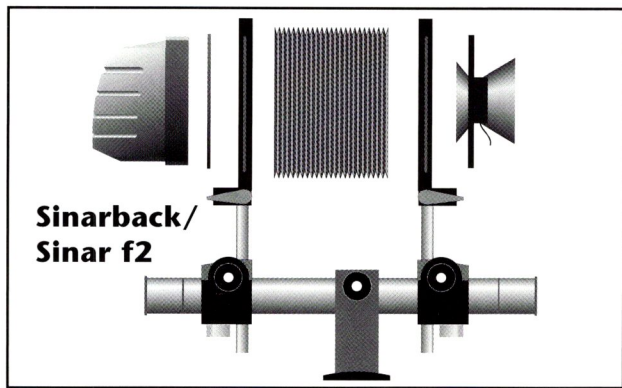
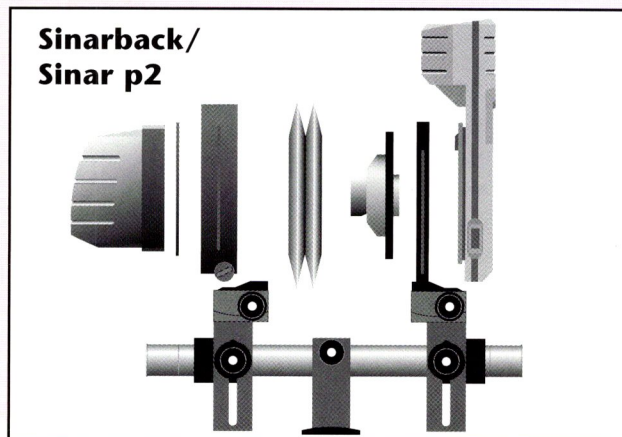
Recommended Sinarback Configurations

Sinarback / Sinar p2

- 97-6002 Sinarback
- 96-1110 Sinar p2 digital
- 96-6001 Sinarcam 2
- 96-6010 Sinar adapter kit for Sinarback
- 96-6200 Sinarback power supply RS-232
- 96-6018 Wide carrier frame
- 23-3007 Wide angle bellows
- 25-31xx Sinaron Digital Lens (pg. 18)

Optional Accessories

- 23-2223 Lens Shade Kit
- 23-6010 Pan/Tilt Head
- 23-12xx Extension Rail
- 96-6013 Sinarback sliding adapter*
- 96-6016 On-camera LCD monitor 10.4"



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

Optional Accessories

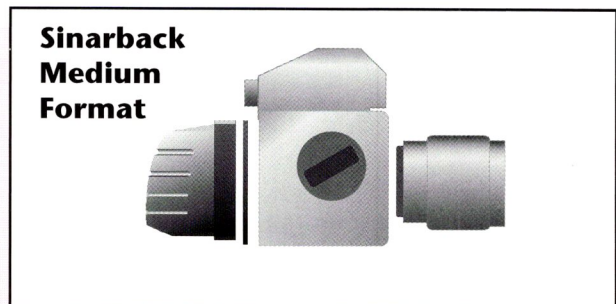
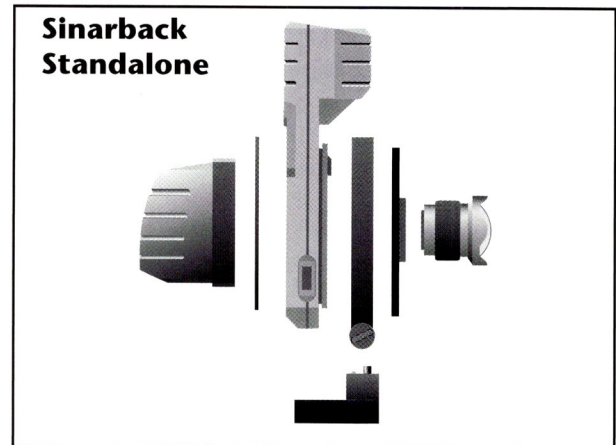
- 23-2223 Lens Shade Kit
- 23-6010 Pan/Tilt Head
- 23-12xx Extension Rail
- 96-6013 Sinarback sliding adapter*
- 96-6016 On-camera LCD monitor 10.4"

Sinarback / Sinarcam 2 Standalone

- 97-6002 Sinarback
- 96-6001 Sinarcam 2
- 96-6010 Sinar adapter kit for Sinarback
- 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. 18), Nikon, Leica R, Olympus, Hasselblad, Mamiya 645

Optional Accessories

- 23-2222 Lens Shade Kit (basic)
- 23-6010 Pan/Tilt Head
- 96-6014 Handle for Sinarcam 2
- 96-6013 Sinarback sliding adapter*
- 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 or Rollei adapter kit for Sinarback
- Note: Requires compatible medium format camera system*

* Sinarback sliding adapter requires Sinarback/Hasselblad interface plate

Sinarback Accessories

DIGITAL
Leaf sinar



Sinarback Interface Kits

Sinar Interface Kit for Sinarback

To connect the Sinarback to any Sinar 4x5 view camera, or to the Sinarcam 2 in the standalone configuration. When using the Sliding Adapter, use the Hasselblad interface (below).

96-6010\$316.00

Hasselblad Interface Kit for Sinarback

97-6030\$437.00

Mamiya RZ Interface Kit for Sinarback

97-6040\$437.00

Fuji GX-680 Interface Kit for Sinarback

97-6050\$437.00

Rollei 6008 Interface Kit for Sinarback

97-6060\$437.00

Sinarback Power Supply, RS-232

For use with the Sinarback and Sinarcam 2 combination.

96-6200\$1213.00

Sinarback Power Supply, 12V/MF

For use with the Sinarback in medium format configurations.

97-6205\$195.00

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. 17)

For use only with the Sinarback. For Leaf backs, use the Sinarcam 1 digital camera body (pg. 17).

96-6001\$7080.00

Tripod Adapter 2 for Sinarcam 2

96-6011\$378.00

Handle for Standalone Sinarback

Frees your Sinarback Standalone from the tripod, giving extra mobility within the studio.

96-6014\$1264.00

Sliding Adapter for Sinarback

Augments the Sinarback's live video with a direct viewfinder. Requires Hasselblad interface.

96-6013\$3919.00

Magnified Viewfinder for Sliding Adapter

25-1911\$1034.00

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\$822.00

Sinar p2 Digital

p2 without 4x5 parts for use with digital adapters.

96-1110\$5046.00

Sinaron Digital EF lenses

The Sinaron Digital EF lenses are designed for use with the Sinarback/Sinarcam2 Standalone, or the equivalent Leaf/Sinarcam solutions. They are high-resolution digital optics in focusing mounts. EF lenses are due for release in mid-1999; please call or check our website at www.sinarbron.com for details.

**TOLL FREE
ORDER LINE
(800)
456-0203**

Sinarback

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.

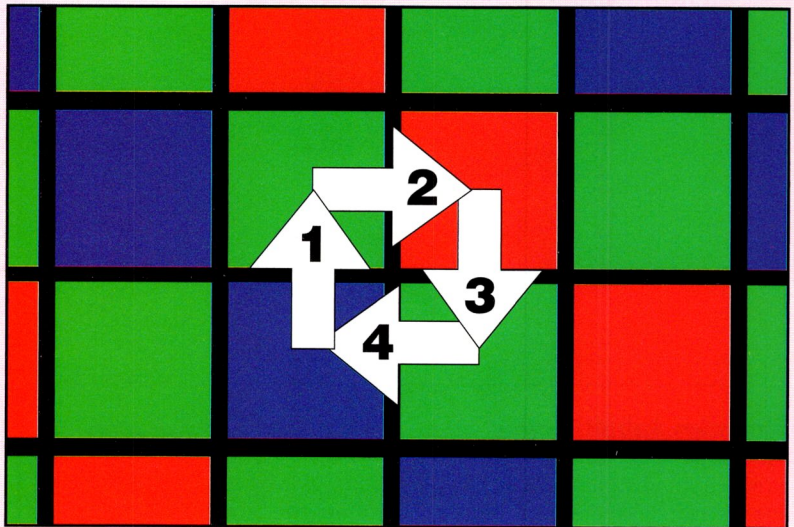
Often, the solution to this problem is to buy two separate backs. But the technology built into the Sinarback lets it perform as both a single-shot and as a four-shot back.

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-

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.



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.

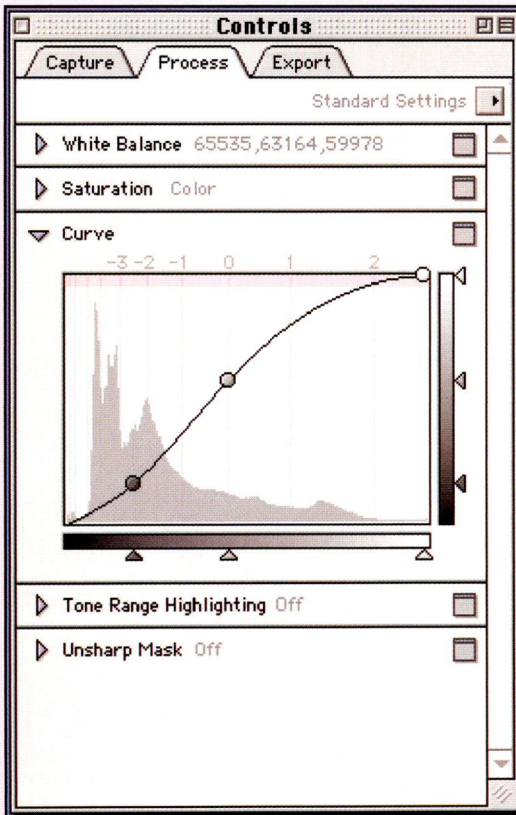
You'll get maximum ease of use with the Sinarback and Sinarcam 2 on a Sinar p2 view camera. With this combination, all shutter functions are automated, there's an LCD shutter for higher-quality live video, and you have the tried-and-true Sinar 2-point focusing system to calculate your camera movements.



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
- Digital densitometer reads R,G,B values in both 8-bit and 14-bit
- Sophisticated merge function lets you custom-mix two images
- Fully customizable grid lines on live video and capture windows
- Export images at any size and resolution
- Built-in unsharp masking
- Precise computer control of shutter speed and aperture (with DB lenses)
- Tone range highlighting shows all image areas falling within any brightness range you choose
- Individual vertical and horizontal adjustments for each point on the tone curve
- ICC profiling function automatically calibrates the camera to a Macbeth Color Checker
- White Shading function compensates for lens falloff
- Light meter helps judge overall image exposure



Sinarback Image

*Sinarback
"Action Mode"
Capture*



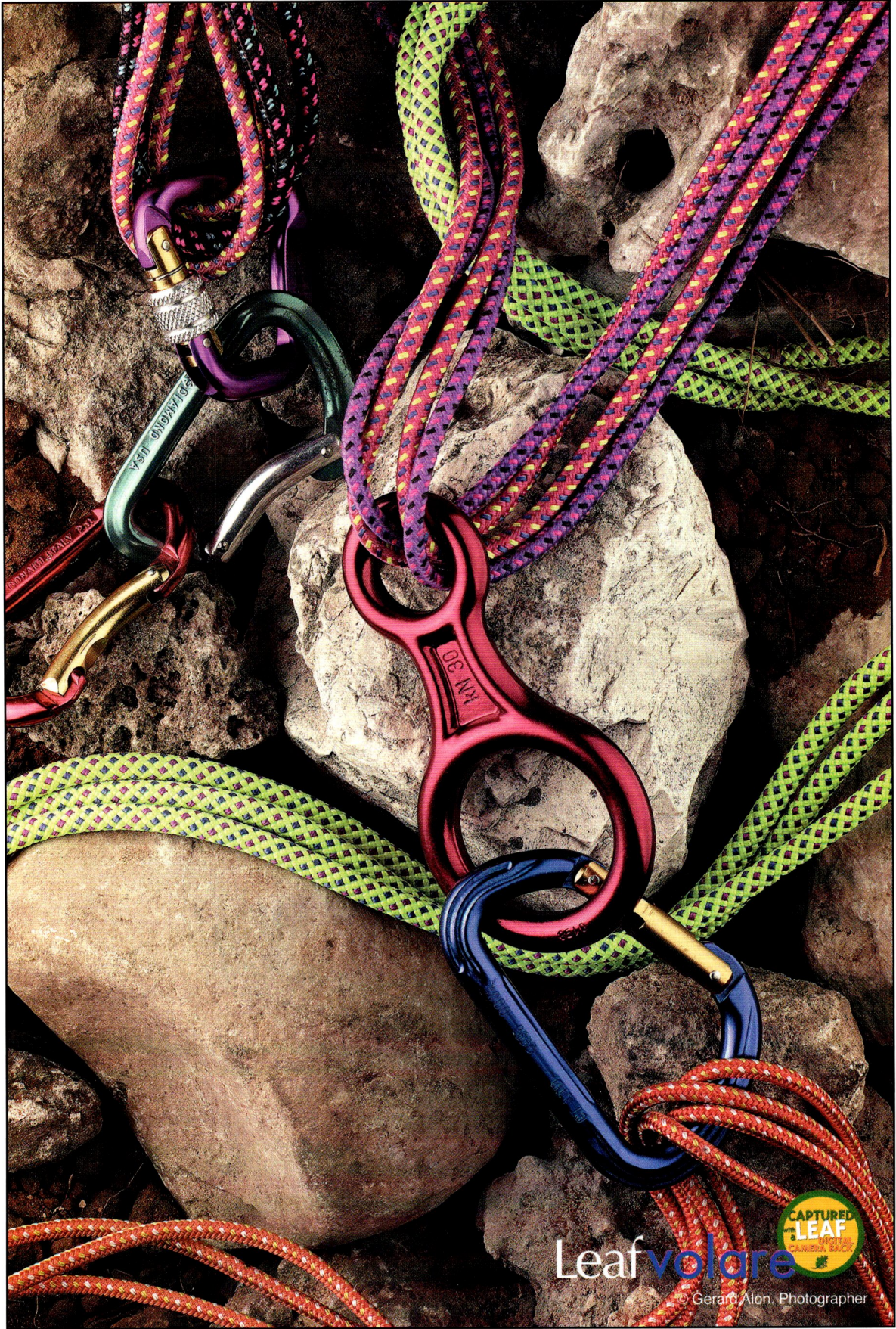
The Advantages of Digital Photography

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.

Leaf Volare™ Image

P
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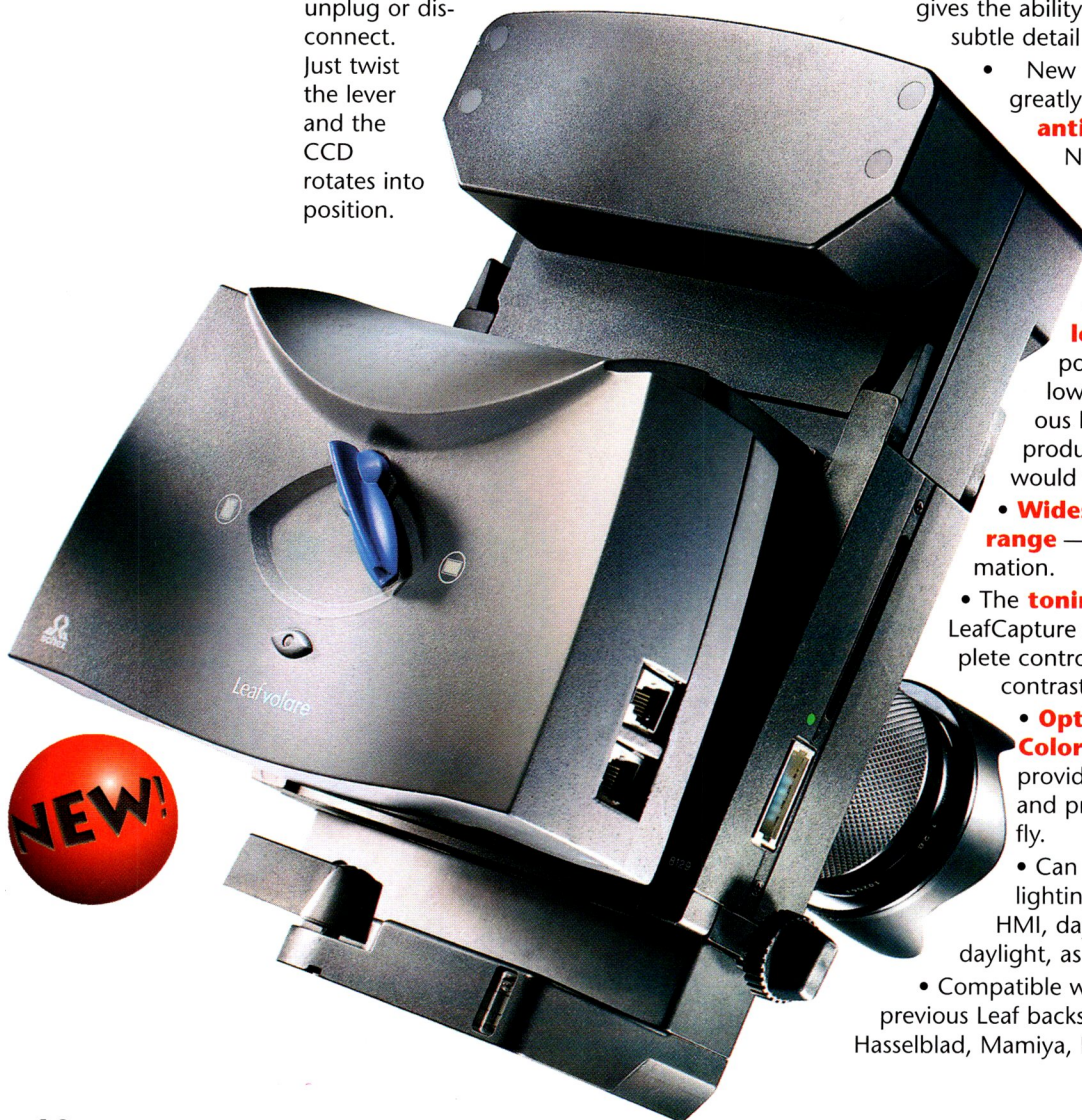
Leaf Volare™

The new state of the art

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 disconnect. Just twist the lever and the CCD rotates into position.



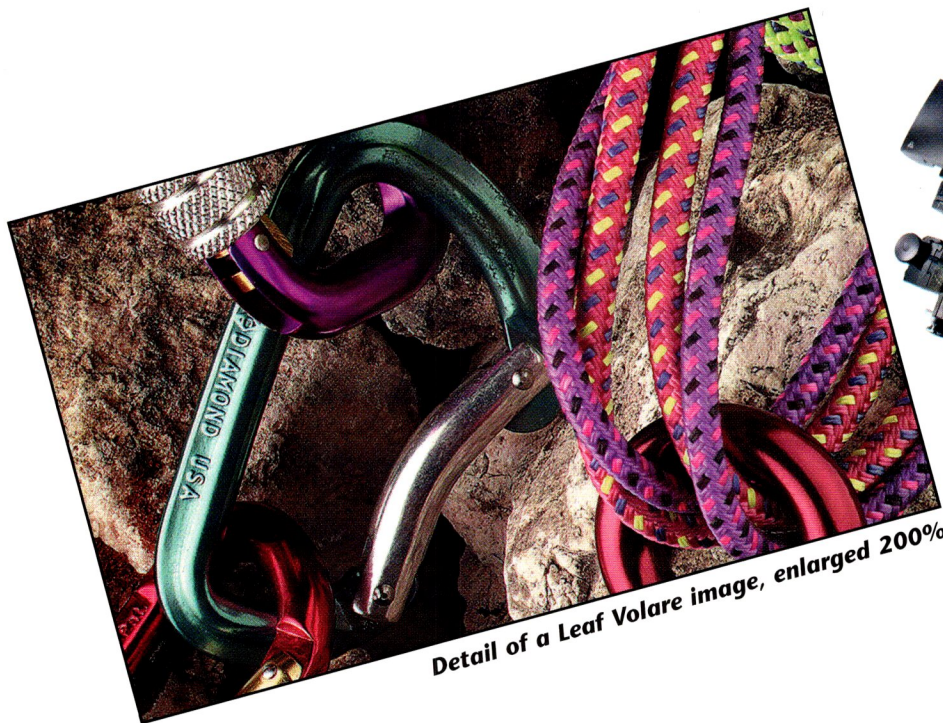
New Leaf LiveFocus™

- **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)



Detail of a Leaf Volare image, enlarged 200%



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

CCD

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

Includes back, power supply, PCI card, cabling and software. **Requires** personality kit and filter wheel (below). See page 16 for recommended configurations.

95-4000\$25,000.00

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\$1600.00

Leaf Volare with Sinarcam

Complete back and body combination, including Sinarcam personality kit. Requires lens, lensboard and tripod adapter (pg. 17), or Sinar p2, digital lens and aperture motor for view camera configuration.

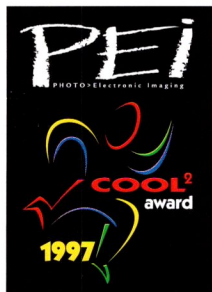
96-1400\$33,900.00

Leaf DCB II Live™

The trusted classic, now more affordable than ever

Based on technology proven in over 2,700 installations worldwide, the DCB II Live is the trusted workhorse of the Leaf digital line. Its 2048x2048 pixel actively cooled CCD produces images which rival the quality of film. Perhaps the best feature of the DCB II Live is its new low price — almost 30% lower than before.

Key features of the Leaf DCB II Live include:



Tried-and-True Technology

- **Proven technology** — over 2700 units installed worldwide
- Our most affordable digital back

High Quality Images

- 3 shot color, 1 shot black and white
- 2048x2048 pixel cooled CCD
- Thermoelectric CCD cooling reduces image noise and delivers consistent performance
- 12 megabyte file size (RGB, 24 bit)
- 14 bit per color (42 bit RGB) raw file capture
- Easily reproduce images two pages across under high line screens



- Files scale up to very large sizes for digital C-prints or other large-format output with no image degradation

Live Video Focusing

- Live video window can be used for composition, focusing and lighting.
- High 4 frame per second live video frame rate for smooth focusing
- View through the lens from anywhere in the studio to set up your shots faster than ever
- Magnified video loupe and contrast meter for critical focusing
- Leaf Digital Layout™ lets you overlay a page layout or art director's sketch right on top of the live video window. Compose shots directly to a layout. Includes patented variable opacity control for easy viewing.

Advanced Leaf Software

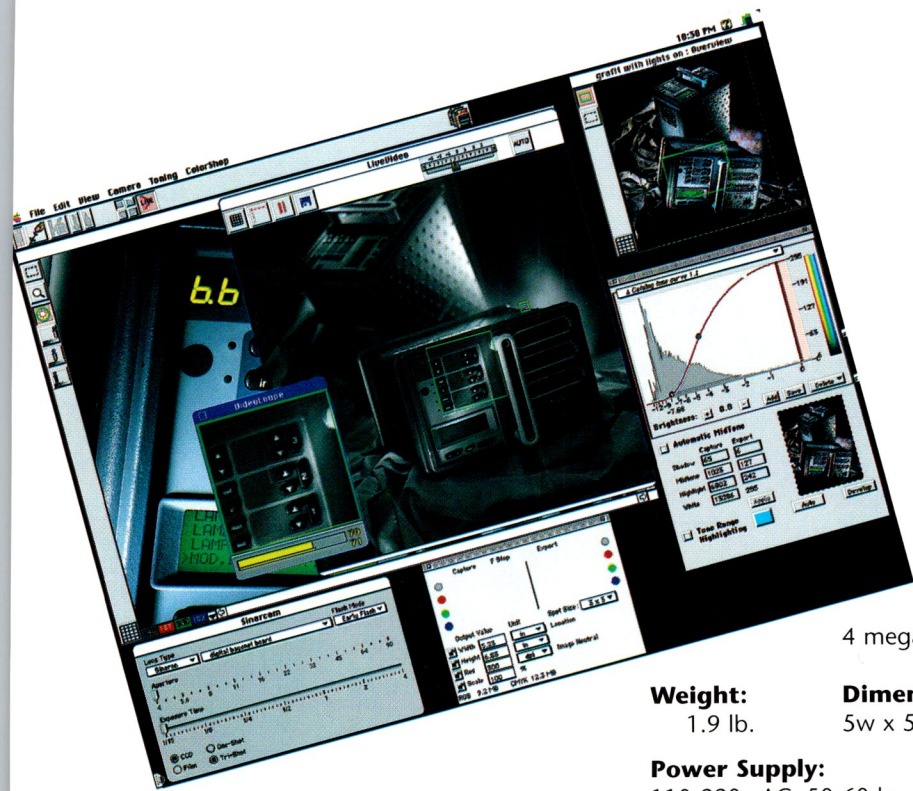
- LeafCapture™ software is the standard by which all other camera software is measured
- Fast, efficient workflow lets you quickly capture, tone and export images
- Toning curve gives you complete control over the brightness and contrast range of the image
 - A library of tone curves can be created for different reproduction situations, and recalled instantly.
 - Add optional Leaf ColorShop™ software to perform all prepress functions on the fly, in a single pass. Includes RGB to CMYK conversion, scaling, unsharp masking, global and local color correction, UCR/GCR, gradation and gray balance controls
 - ColorShop delivers better image quality than performing separate operations in other software packages

Sinarcam Integration

- Sinarcam body eliminates the need for an external filter wheel, and protects filters from dust and stray light
- All camera functions automated - no need to open the shutter or the diaphragm to focus.
- Shutter speed and f-stop control right from the Leaf software*
- Completely modular system functions in fixed-body or view camera configurations
- Compatible with over 200 large, medium and small format lenses

Hasselblad Configuration

Requires filter wheel, not shown.



Technical Specifications

Type

3-exposure color, 1-exposure black and white, Live Video Focusing

Sensor

2048 x 2048 pixel CCD
31x31 mm
Thermoelectrically cooled to reduce noise
Patented anti-blooming to preserve high-light detail

Exposure

ISO 200 for black and white
ISO 50 for color
Shutter speeds from 1/1000 - 32 sec.

Dynamic Range

Greater than 11 f/stops
14 bits per pixel per color (16,384 levels)

Lighting

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

Camera Body Adapters:

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

Computer Requirements:

Apple Power Macintosh 8500 or higher or Intel Pentium 133 or higher
Mac System 7.1 or higher; or Windows NT 4.0 or higher
Unoccupied PCI slot for Leaf interface card
64 MB ram min., 128 or more recommended
Monitor and video card for minimum 1024x768 resolution at 24 bits per pixel

File Size:

24 megabytes (42 bit Leaf HDR, color)
12MB (24 bit, color)
4 megabytes (8 bit b&w)

Weight:

1.9 lb.

Dimensions:

5w x 5h x 4.3 d

Power Supply:

110-220 vAC, 50-60 hz, autoswitching

Agency / Safety Approvals:

FCC class A, DOC class A, CE, UL, CSA, TUV

Leaf DCB II Live

Includes back, power supply, PCI card and cables. **Requires** personality kit and filter wheel for medium format configurations, or Sinarcam, interface kit and accessories for view camera/Sinarcam standalone applications. See page 16 for recommended configurations.

New Lower Price!

95-3000.....\$19,500.00

Hasselblad Personality Kit

95-0550.....\$900.00

Mamiya Personality Kit

95-0770.....\$900.00

Fuji Personality Kit

95-0660.....\$900.00

Filter Wheel

Required for above personality kits.

95-3004.....\$1600.00

DCB II Live / Sinarcam

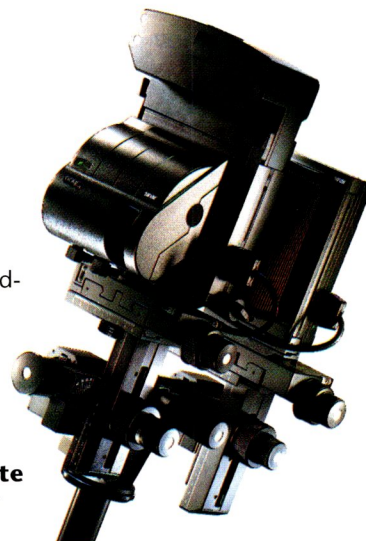
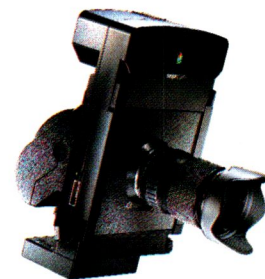
Complete back and body combination, including Sinarcam personality kit. Requires lens, lensboard and tripod adapter (pg. 17), or Sinar p2, digital lens and aperture motor for view camera configuration.

96-1005.....\$28,900.00

Sinarcam Sliding Adapter Interface Plate

Required to use the Sinarcam sliding adapter with the DCB II Live, DCB II or CatchLight.

95-0450.....\$900.00



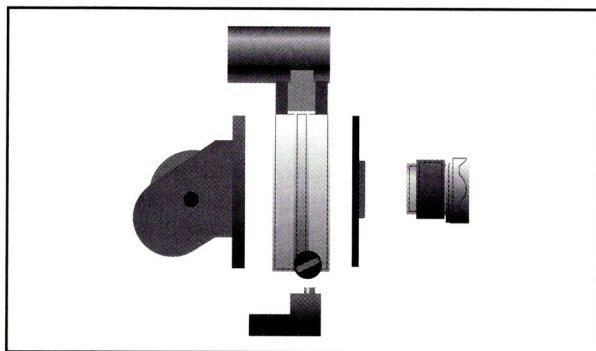
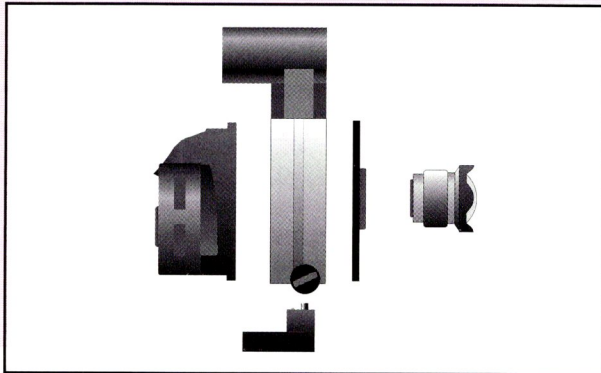
Sinarcam Accessories

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



DCB II Live / Sinarcam Standalone Configuration

- 96-0001 Sinarcam body
- 96-0005 DCB II Live for Sinarcam
- 96-5xxx Bayonet Lensboard and lens compatible with selected board
- 96-5001 Tripod Adapter

Also recommended:

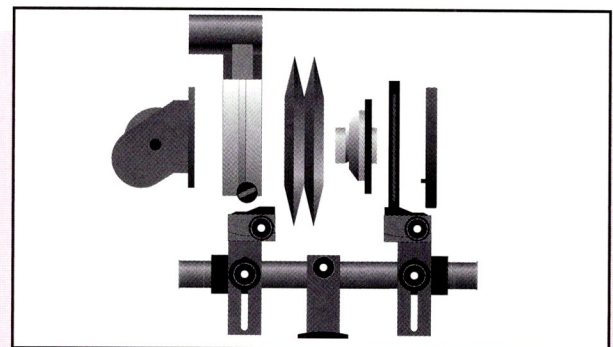
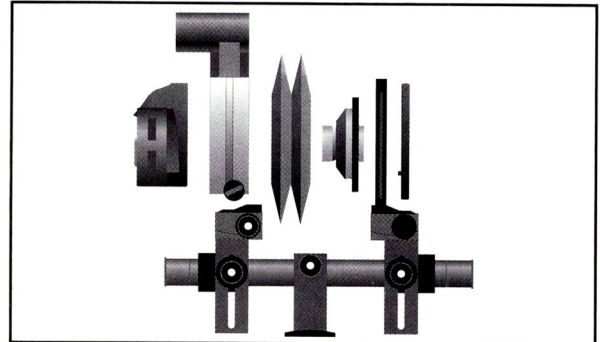
- 23-2222 Lens shade package (basic)
- 23-6010 Sinar pan-tilt head

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



DCB II Live / Sinarcam p2 Configuration

- 96-0001 Sinarcam body
- 96-0005 DCB II Live for Sinarcam
- 96-1110 Sinar p2 for Sinarcam
- 23-3007 Wide angle bellows
- 96-5020 Aperture motor
- 25-3163 80mm Sinaron digital lens

Also recommended:

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

What are the differences between a Sinarcam 1 and a Sinarcam 2?

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 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.

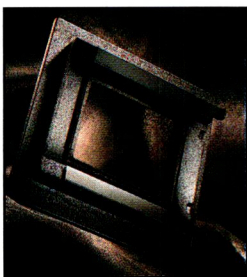
All lensboards and Sinaron digital lenses listed at right are compatible with both Sinarcams.

Sinarcam Accessories

DIGITAL
Leaf 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\$499.00

Mamiya RB Rollfilm adapter

96-5010\$499.00

Accessory Groundglass

Mount temporarily in place of the DCB II Live for those occasions when direct groundglass viewing is necessary.

96-5011\$1110.00



DCB Holder

Holds your DCB Live safely when you remove it to use a rollfilm adapter or accessory ground-glass. For p2 configurations only.

96-5030\$543.00

Aperture motor for Sinar p2

To move the stand-alone Sinarcam to a Sinar p2, you have to add two things - a Sinaron digital lens (pg. 18) and this aperture motor, which lets the



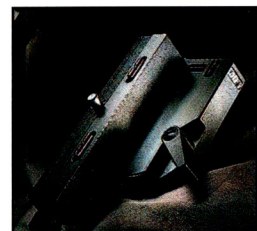
Sinarcam control the lens aperture.

96-5020\$2240.00

Tripod Adapter

If you purchase the Sinarcam p2 configuration, this adapter (along with a lens and lensboard) will convert it to stand-alone configuration.

96-5001\$482.00



Sinarcam 1 body only

96-0001\$10,088.00

Sinarcam adapter board

To mount a DCB II Live to a Sinarcam1 body.

96-5040\$2430.00

Sinar p2 for Sinarcam

Without 4x5 format kit

96-1110\$5046.00

Sinaron Digital Lenses for Sinarcam 1 and 2

This new family of Sinaron Digital lenses is for use with the standalone configuration of the Sinarcam. An automatic or manual Sinaron/Olympus lensboard is required for use with these lenses.

Type	Min. f/stop	Filter Size	Product #	Price
24mm 2.0	16	55	96-4024	\$1479.00
24mm 3.5 Shift	22	NA	96-4025	\$4465.00
35mm 2.8 Shift	22	49	96-4035	\$1797.00
180mm 2.8	22	62	96-4180	\$2210.00
Zoom 35-80	32	72	96-4358	\$2397.00

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 roll-film adapters or the Sinarcam Sliding Adapter (conventional or digital.)

Type	Cat. # for Digital	Use with film or sliding adap.*	Price
Nikon	96-5206	96-5306	\$1050.00
Sinaron/Olympus	96-5204	96-5304	\$1050.00

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.)

Type	Cat. # for Digital	Use with film or sliding adap.*	Price
Hasselblad Shift	96-5002	96-5102	\$1787.00
Mamiya 645 Shift	96-5003		\$1787.00
Leica	96-5008		\$590.00

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

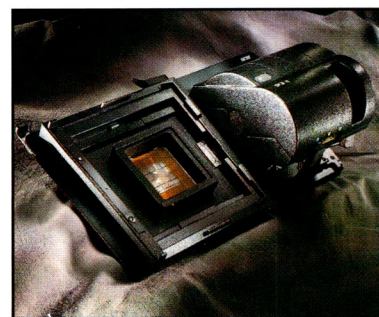
Sinarcam Sliding Adapter

This adapter fits between the Sinarcam1 and Leaf DCB II Live, and lets you use a groundglass in addition to the live video viewing.

The groundglass side of the adapter also accepts Hasselblad roll-film magazines as well as Sinar roll-film holders and 4x5 sheet film holders. (Actual film area exposed approx. 3x3cm.) The adapter also permits the original DCB II and

CatchLight to be mounted to the Sinarcam, to take advantage of the wider lens selection as well as future features. Not compatible with the LeafVolare. Requires adapter plate (95-0450, pg. 23).

96-5050\$4995.00



Sinar Digital Solutions



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.

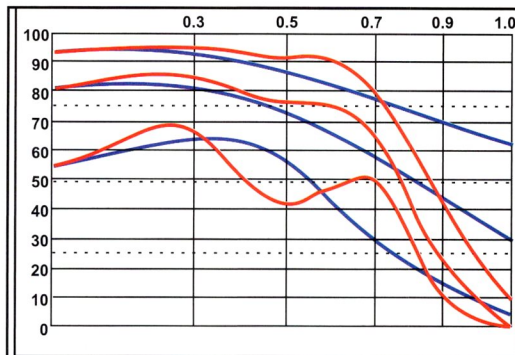
The lenses are mounted behind the front standard, which moves the lens and CCD as close together as possible while still maintaining a comfortable separation between the standards. This permits greater swings and tilts than traditional view camera lenses.

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

Focal Length	4x5 Equivalent	Aperture Range	Angle of Coverage	Image cir. @ infinity	Shifts at infinity	Tricolor Cat. #	Price
35mm	135mm	4.5-22	85°	67mm	12mm	25-3166	\$3800.00
45mm	170mm	4.5-32	82°	80mm	22mm	25-3167	\$3304.00
55mm	210mm	4.5-32	83°	101mm	33mm	25-3168	\$3430.00
80mm	300mm	4.0-32	58°	92mm	28mm	25-3163	\$3800.00
105mm	400mm	4.0-32	54°	107mm	36mm	25-3165	\$3966.00
120mm	450mm	4.5-22	46°	122-305mm*	44-137mm*	25-3169	\$3304.00
135mm	480mm	5.6-45	58°	150mm	58mm	25-3164	\$3966.00
180mm	670mm	4.8-32	50°	168mm	67mm	25-3066	\$8032.00

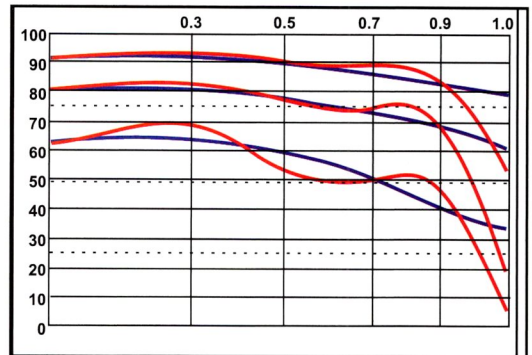
*Depends on scale of reproduction. Range shown from 1:5 to 2:1.

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 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 4.2 million pixel grid that makes up a Leaf 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 **Binary digit** 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 about 33° F. 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 chan-

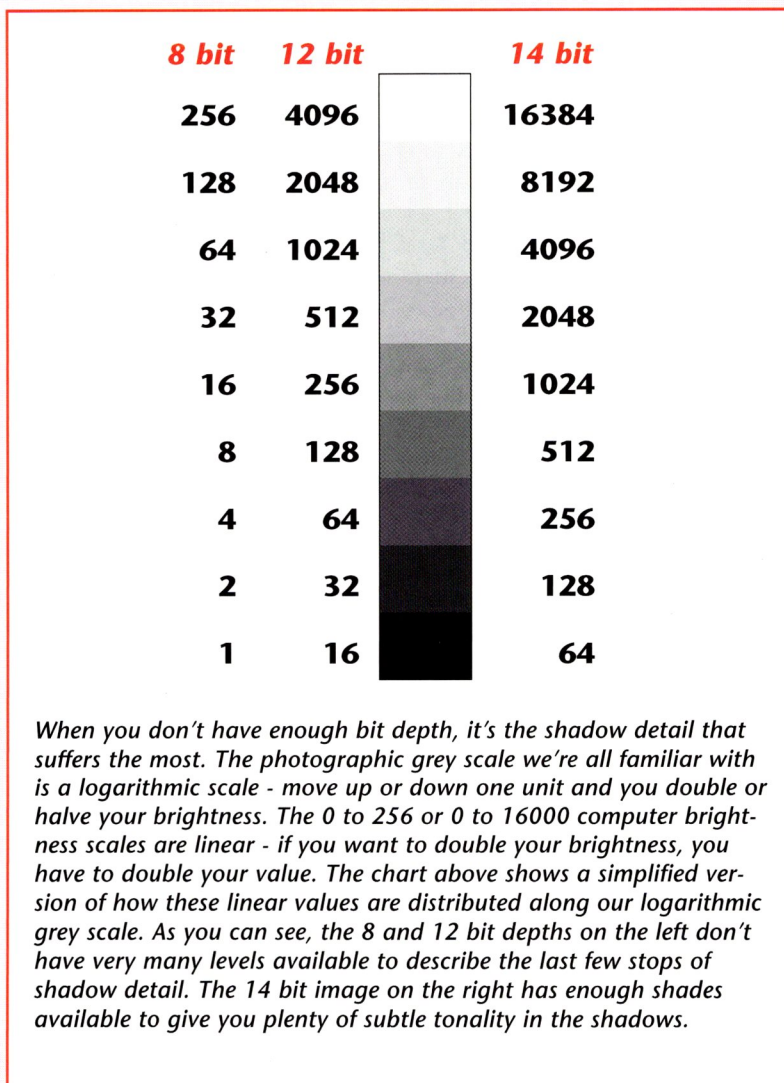
nel. 8 bits x 3 channels (red, green and blue) is 24 bits. 14 bits x 3 channels is 42 bits.

While our backs capture a full 42 bits of data, today's electronic publishing systems are designed to handle only 24 bits. Despite this limitation, virtually all digital cameras and scan-

ners 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 capture 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.

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



Leaf ColorShop/HDR™

Create ready-for-press images on the fly with your Leaf Volare, Leaf DCB or CatchLight

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

ColorShop applies the technology behind 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

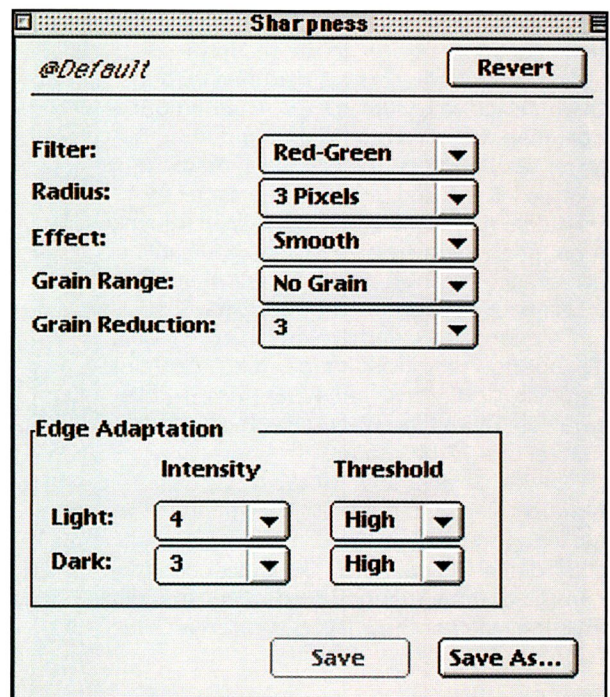
Sometimes, you'll find that your image reproduces with an overall cast, both in neutral and saturated color areas. This is common with some conventional proofing methods, for example. Gradation adjusts overall color to remove these casts.

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.



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

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.

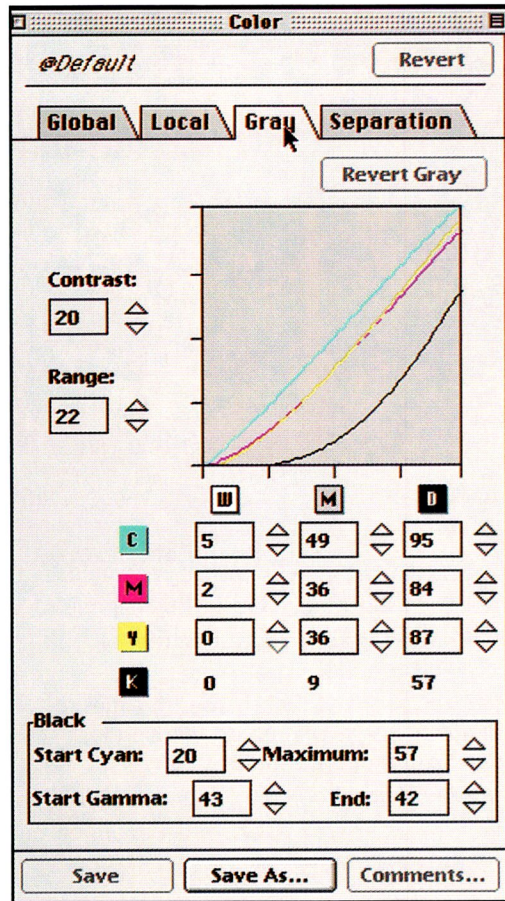


Image Scaling

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

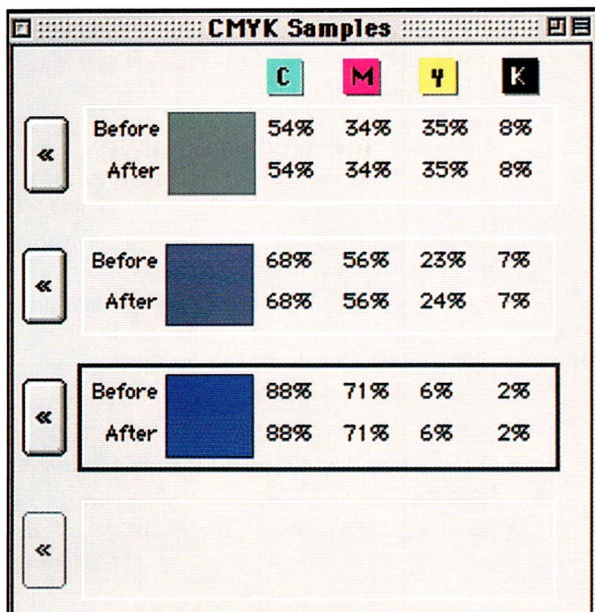
If you want to learn more about ColorShop workflow, check out the new tutorial at:

www.scitex.com/products/input/leaf/index.htm

ColorShop/HDR™ for Power Mac

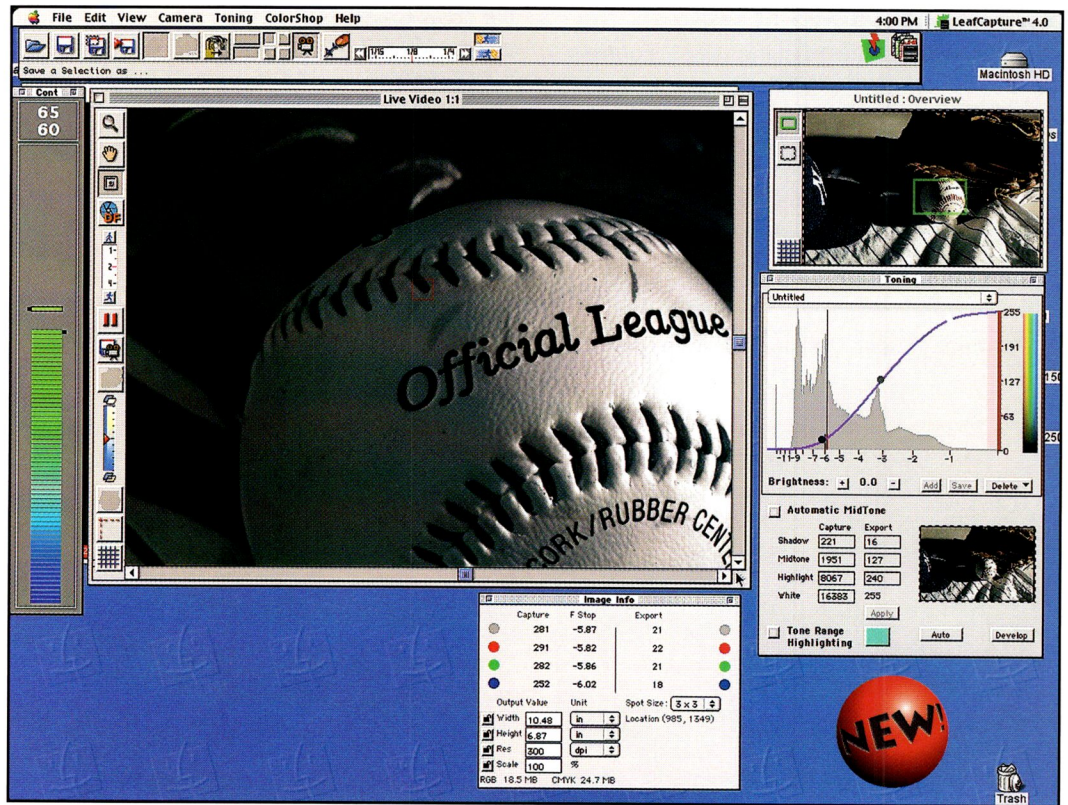
Includes software, security dongle, and manuals. ColorShop requires a Leaf Volare, DCB, DCB II, DCB II Live or CatchLight, and a Power-PC based Macintosh.

95-0013\$2200.00



Leaf Software and Hardware

The latest
version of
the greatest
camera
software



LeafCapture 4.0

With the release of LeafCapture 4.0, Scitex continues its tradition of free software upgrades with major features. LeafCapture 4 is compatible with the LeafVolare and Leaf DCB II Live digital backs. For the DCB I, II and CatchLight, see DCB/CatchLight 3.6 below.

The features in LeafCapture 4 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 4 include:

- **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 LeafVolare backs.
- **"Enhance Preview"** sharpens images to simulate results of unsharp masking for clients during the shoot
- Improved auto-toning algorithm
- Plus, **more major new features** are on the way in LeafCapture 4.1

And that's just the new stuff. LeafCapture 4 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** and LeafVolare)
- **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

(continued)

A Photographer's Intro to Prepress

Gray is the Way

Digital cameras and camera backs provide photographers with amazing new capabilities. Today, photographers can predict and determine printing ink densities while shooting the subject. Digital proofing can provide contract quality prints in the studio while the set is still in place. Art direction and page composition can happen in real-time while appropriate images are being created. Never before has this been possible.

However, with the move to digital, many of the standards which controlled color and reproduction have been eliminated. One hundred and fifty years of photographic reproduction produced a system of chemical and mechanical standards that allowed photographers to work without great regard for color creation or consistency. Mass produced emulsion batches and standardized chemistry and machinery have removed the photographer from the worries of color reproduction in the studio.

This is where digital photographers face their biggest challenges. The leap into digital is a leap into a world where the comfortable standards have been eliminated. No longer does bracketing compensate for missed exposure. There is no fixed color balance manufactured into a digital camera. And the processing of a digital file cannot be controlled by time or chemistry temperature. So what is a digital photographer to do? Use gray to take the day!

When shooting digital RGB files in the studio, whether for 4-color reproduction or not, there are only a few factors that you can control. These include where highlights and shadows maintain detail, lighting ratios, and neutral balance. If these variables can not be controlled, consistent output of any sort will not be possible.

Neutral or gray balance is the key to controlling color further along in the digital workflow. One of the binding rules of color reproduction is: "If neutrals reproduce neutral, the color will take care of itself". This is true when generating RGB for reproduction in CMYK as well as when holding color on press. This is the one standard that can be controlled in the studio, on a live set. Actually, this can be controlled much more consistently with digital than it can be with film.

The procedure is simple. Almost all software provided with digital cameras today have a function called, appropriately enough, Make Neutral or Gray Control or Color Balance. To utilize it, a neutral target must be placed in the scene, and once an image is captured, the cursor or selection tool is used to sample the neutral target. Press on the magic button and bingo, gray balance is achieved. Simple. Of course, it is not quite as simple as it may seem. Here are a few points to consider further:

All 'gray cards' are not manufactured equal. Most targets previous to digital photography were created with Reflection Density in mind, not neutrality. Therefore you may be making gray on something with a slight cast. Most 14 and 21 step gray scales are not neutral. Neither are regular photographic gray cards. The old favorite MacBeth Color Checker is still the best bet for true neutrality.

Place the target where it is not receiving a colored reflection or glare. Try to make the target levitate a little over the set. Attempt to have a target in every RGB file that will be separated. The neutral target is the only line of defense for

a digital photographer! It is also the only thing in an image that a separator can understand. Prepress operators can not know the color of the product, but they all understand neutrality.

Make neutral on every shot. Why leave anything to chance? It only takes a few seconds to apply this new standard.

In seeking the great Gray Way, do many tests before getting into production work, and seek help from professionals. As the old standards are eroded away

by technology, find partners that will help you with the transition into this new, non-standard realm.

Professional Training Services

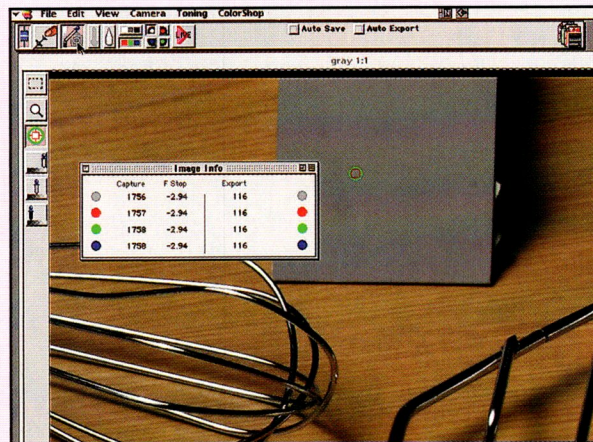
Since its inception, El etc, Inc. has offered professional on-site digital camera training and integration. Over 70 businesses, including Hallmark Cards, Circuit City and IBM have begun to realize the full potential of their digital photography systems since entrusting us with their training needs. We have opened a Photographic Training Center in Northboro, MA and now offer more services than ever.

- Digital Camera System Training
- Measured Photography Techniques
- Lighting for Digital Reproduction
- Advanced View Camera Techniques
- Prepress Workflow Workshops
- CD-ROM based Training Modules

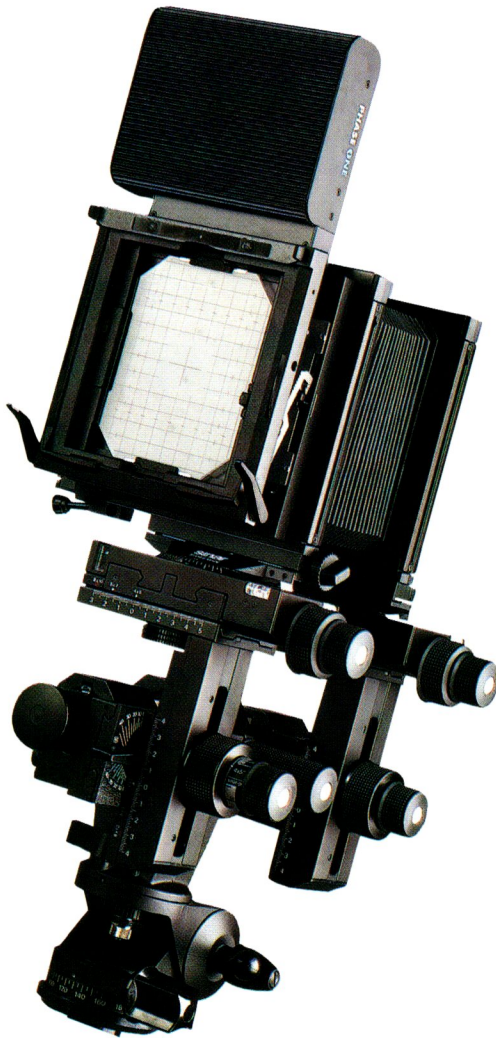
Whether you are diving into digital or refining your studio techniques, let El etc help you make the most of your photography.

El etc, Inc.
300 W. Main St. Bldg. A
PO Box 725
Northboro, MA 01532
Voice: 508 351 9567
Paper: 508 351 9568
E-mail: training@eietc.com

El etc
ELECTRONIC IMAGING
EDUCATION • TRAINING • CONSULTING



Sinar Digital Accessories



Scanning Back Configurations

Sinar view cameras are also the best platform for digital scanning backs. Sinar's precision, stability and advanced shutter systems deliver the best results in the least possible time.

Recommended basic configuration for scan backs:

- Sinar p2 or X 4x5 view camera
- Auto Aperture shutter or Expolux Shutter (software controlled by Phase One backs)
- sinaron DB lenses (135mm is normal for this format)
- Compendium lens shade (Multipurpose Standard, Wide Angle Bellows, Bellows Hood Mask 2)
- 4x5 Fresnel
- Bino Reflex Housing
- 6" Extension rail
- Sinar pan tilt head
- Format Mask for Dicommed or Phase One
- Filter Holder Kit (Dicomed only)

Individual System Components:

Older Leaf/Sinar Systems

p2/Leaf Horizontal Adapter

For the DCB II and CatchLight.

25-1915\$4929.00

Adjustable Viewfinder for Sliding Adapters

25-1911\$1034.00

Leaf / Expolux Release Cable 2

Replacement cable for the horizontal adapter.

25-1916\$289.00

Leaf / Expolux Release Cable

Replacement cable for the original vertical adapter.

25-1913\$313.00

Leaf Filter Wheel Adapter

25-1912\$144.00

Other Digital Backs

p2/Kodak Horizontal Adapter [Ⓢ]

For the Kodak DCS-465.

25-1920\$4929.00

p2/Megavision Adapter [Ⓢ]

25-1967\$1890.00

p2/Big Shot Adapter [Ⓢ]

25-1969\$6550.00

p2/Carnival Adapter [Ⓢ]

25-1970\$6550.00

Kodak / Expolux Release Cable

25-1931\$264.00

Big Shot/Expolux Release Cable

25-1936\$116.00

Carnival/Expolux Release Cable

25-1971\$235.00

Format Mask, Phase 1

Masks any 4x5 Sinar groundglass to the image area of the Phase 1 digital back.

25-1962\$35.00

Format Mask, Dicommed

As above, for the Dicommed scan back.

25-1963\$35.00

Filter Holder Kit, Dicommed

Attaches either size Dicommed filter to the back of the Auto-Aperture shutter.

25-1964\$314.00

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

Leaf Users

Interwest / Rastar Color Inc. is a newly merged company formed in April of 1998. Interwest was a large 17 years old, prestigious and award winning Scitex prepress shop that provided traditional digital scanning and digital film output for the print trade. Rastar Color, a 7-year-old digital prepress company, was a major competitor. What Rastar Color brought to the party, that was looked at as being vital to the success of the prepress shop of the future, was its digital photography services. Kevin Despain, President of Interwest / Rastar Color, takes time out of a hectic schedule to share with us what acquiring a Leaf Volare digital back has meant to his organization's growth.

Three years ago my company purchased a Dicomed scanback for the digital capture of fine art and paintings; things that would typically be copied to transparency then scanned in the traditional sense on a scanner. The digital technology was implemented as a plan to offset the anticipated obsolescence of scanning, but what it did was expose us to photography and that whole side of the business.

We had been looking at alternate capture technologies for a while and had been very familiar with the Leaf DCB II Live and felt that product would be the next step for us in improving the quality of services we offer our clients. We had tested everything on the market. Scitex has been a great partner all along and they are the market leader. Sinar Bron is the leading full service company in this market and the two help deliver the total solution.

When the Leaf Volare was introduced this fall, we took one look at it and knew this was the time to make the move. The major impact the Volare has offered us compared to the scanback has undoubtedly been in the areas of quality and productivity. The speed of the Volare versus the scanback has just blown everyone away!

We have gone back and re-shot some of the very paintings and illustrations that we had originally felt the scanback was absolutely necessary for being able to sample up files to reproduce large sizes. The Volare has been able to replicate these files very well; the quality is just as good if not better than those very large files. The scaling technology in the Leaf is just incredible. It has far exceeded our expectations in terms of the size of the images we can generate. Us "bit-heads" are always concerned with resolution and how far we can push and actual image. That Volare chip enables us to produce some very large imagery and make some very sophisticated buyers extremely happy; and these are artists. In the fine arts industry, clients can be very difficult to please.

We have two digital presses on location and we've had a couple of scenarios recently where clients presented us with last minute needs for



a small quantity of printed brochures. We were able to shoot some imagery first thing in the morning, separate it, drop it into a layout, and provide 500 -1000 printed pieces that afternoon to someone waiting to catch a plane. A short time ago, I could never have considered taking a job like that. Now, we're on the cutting-edge of not only digital photography but of digital printing technology as well and speed has certainly been a tremendous advantage for us; that which we have found a way to do faster has attracted customers to us.

With regards to the size of the projects, we were never able to shoot large quantities of images productively. We were very reluctant to take on a catalog that had 200-500 images in it; we didn't have the resources to do that. Certainly we would have done the prepress for these clients as we have done in the past, but this is a new way of generating revenue where we never had revenue before.

With the volume of work, the size of the jobs, and the customers that we now work with, it should take about three months, certainly no more than six months for the camera back to pay itself off. We are not after the average segment of the photographic market, we are looking to demonstrate that digital photography has arrived and its quality is as good as, and in some cases superior to traditional methods. We also use Broncolor lights, a Foba studio stand, and a Sinar p2 view camera. We chose the best equipment available in order to support a message we are sending to our market - of offering superior quality services.

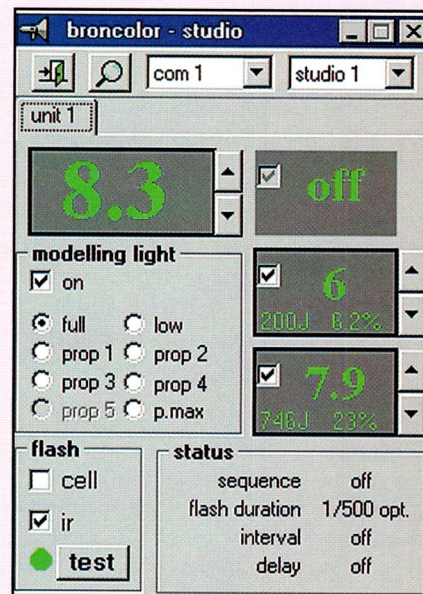
Lighting for Digital Photography

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

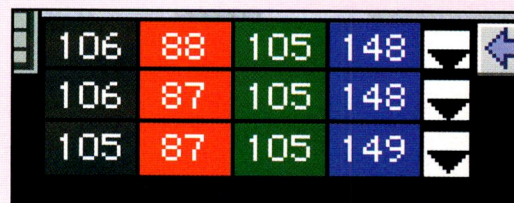
Want to see how your own strobes do in the consistency test? Here's a simple way to do it, with any strobes and a 3- or 4-pass digital back.

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 real-time 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.

■ broncolor





broncolor
mobile

broncolor
mobile

made in Switzerland

test
mod
ir
cell

100%
10-90%
<10%

eco
0-1

CE

battery
charger

broncolor
mobile

NEW!

Mobil Portable Power Pack

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 $f/45^{2/3}$ (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

<i>mobil</i>	
Capacity	1200Ws (1500Ws w/AC adapter)
Output*	$f/45^{2/3}$
Flash Duration t 0.1**	1/230 sec.
100% Recycle Time	6 sec.
Triggering	IR/Cord/Cell
Adjustment Range	Over 4 stops in $1/10$ stop increments
Modeling Light	50 W (with Mobilite head), Auto shut-off
Distribution	Symmetric
Lamphead Outlets	2
Power Requirements	User-replaceable battery or optional AC line adapter
Dimensions	9.25x5.75x10.75
Weight	13.2 lbs
Catalog Number	10-2007
Price	\$1710.00

* 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.



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.

Also available as the Picolite, with full 150W modeling lamp and the same small form factor, for use with AC-powered Broncolor packs.

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

12-1207\$529.00

Mobilite/Picolite Accessories

4 Wing Barn Doors

12-0471\$205.55

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

Pulso Adapter

Allows the use of lightweight standard Broncolor accessories.

12-1007\$164.00

Mobil Pack Accessories

Spare Battery for Mobil

16-3011\$62.00

AC Line Adapter for Mobil

Transforms the Mobil into a conventionally-powered 1500Ws pack.

16-3015\$TBA



Fashion

broncolor
primo A

broncolor
primo A

broncolor
primo

broncolor
primo 4

broncolor® made in Switzerland

1/4
1/8
1/1
p3
p2
OFF
on off
cell
slow
test
bliz
sync

16 A1

**Microprocessor Controlled
for Digital Imaging!**

Primo Power Packs

Primo power packs have all the power and reliability 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.

The Primo provides symmetric distribution, while the fixed asymmetric system of the Primo A lets you choose your power distribution by selecting the proper combination of lamphead outlets.

Primo/Primo A 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.
- Symmetric and asymmetric versions.
- 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/90¹/₃ (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.



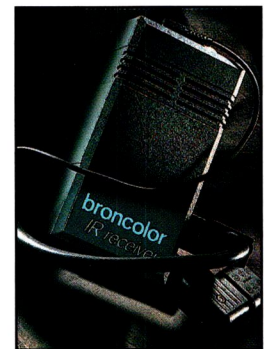
Clear, simple controls make the advanced technology of the Primo packs easy.

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



broncolor

	<i>primo</i>	<i>primoA</i>	<i>primo Fashion</i>	<i>primo 4</i>
Capacity	1600Ws	1600Ws	1000Ws	3200Ws
Output*	f/64 ¹ / ₃	f/64 ¹ / ₃	f/45 ¹ / ₃	f/90 ¹ / ₃
Flash Duration t 0.5	1/700-1/1700	1/700-1/2200	1/1200-1/2800s	1/260-1/630s
Flash Duration t 0.1**	1/230-1/530	1/230-1/810	1/400-1/950s	1/80-1/200s
100% Recycle Time	1.4-2.5sec	1.4-2.5 sec.	0.18-0.9s	
Triggering	Sync Cable / Photocell / Optional Infrared			
Adjustment Range	3 Stops in 1/3 stop increments			
Modeling Light	250 W proportional to flash power			
Distribution	Symmetrical	Asymmetrical	Asymmetrical	Symmetrical
Lamphead Outlets	3	3	2	3
Dimensions	10.8"x6.5"x10.8"	10.8"x6.5"x10.8"	11x7x11	11x7x12
Weight	14.3 lbs.	14.3 lbs.	12 lb.	16 lb.
Catalog Number	10-2008	10-2018	10-2017	10-2019
Price	\$1695.00	\$2495.00	\$1695.00	\$2495.00

* 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.

**Microprocessor Controlled
for Digital Imaging!**



color grafit A2

NEW!

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.

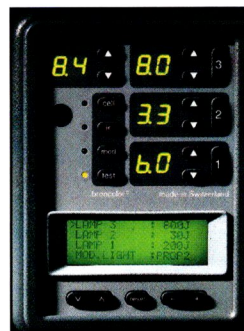
- Menu-driven commands: All special features of Grafit A are controlled from a 4-line LCD menu screen. Simple controls let you change all the pack's advanced settings and display crucial information at the touch of a button. The LCD is backlit for easy visibility in dark studios.
- Even better asymmetric 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.
- 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, asymmetries, 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 Server 3 or Server E
- Dual sync sockets.

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

	<i>grafittA2</i>	<i>grafittA4</i>
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 1/10 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, 200-240V/10A Switchable	
Dimensions	7x11x12	7x11x16
Weight	17.5 lb.	24 lb.
Catalog Number	10-3000	10-3025
Price	\$4995.00	\$6995.00
NEW!		
With Mac/PC interface:	<i>grafittA2 plus</i>	<i>grafittA4 plus</i>
Catalog Number	10-3200	10-3225
Price	\$5695.00	\$7695.00

* 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.

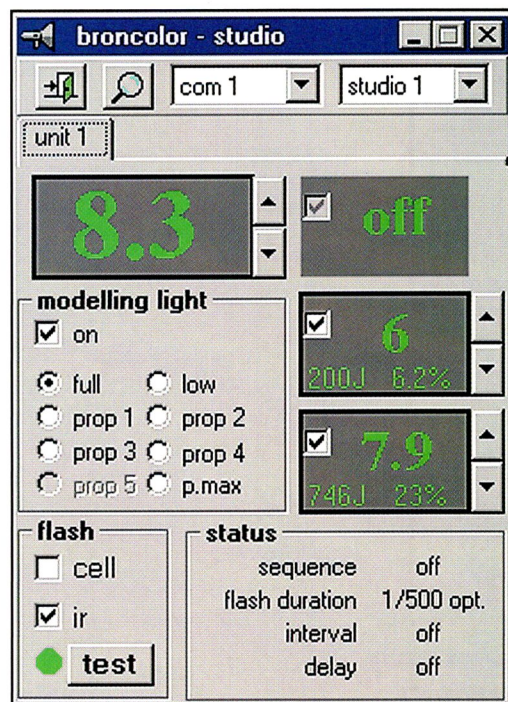
Grafit A2/A4 Power Packs



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.

broncolor

Grafit A In-Depth

Main Power Control (points to 'power on' indicator)

Individual Head Control (points to 'off' indicator for 101-Grafit A4)

Full Modeling Light Control (points to 'modeling light' section)

3-way power level readout (points to '9.6' and '9.5' readouts)

Special Functions Status (points to 't01 optimum 1/285' status)

Grafit A+ Software - Compact Display

Grafit A+ Software - Full Display

Multiple Power Pack Control (points to '100-Grafit A2' and '101-Grafit A4' tabs)

4-slot Memory saves pack settings (points to 'memory' tab)

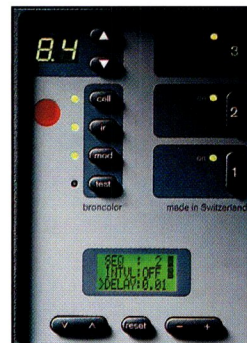
Individual Head Labels (points to 'effect light', 'fill-in light', 'main light' labels)

Easy Access to Auxiliary Functions (points to 'auxiliary flash functions' section)

Quick Adjustment of Minor Pack Functions (points to 'options' and 'infos' tabs)

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 31.

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 Servo.
- Engineered for safety - meets UL specs.

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	<i>grafit2</i>	<i>grafit4</i>
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 stop increments	
Modeling Light	250 W, proportional to flash power	
Distribution	Symmetric	Symmetric
Lamphead Outlets	3	3
Special Functions	Multiple Flash, Delay Flash, Flash Count, Trigger Delay, Stroboscopic Mode, "Ping Pong" multi-pack sync, 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	\$3695.00	\$5595.00

* 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.

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"

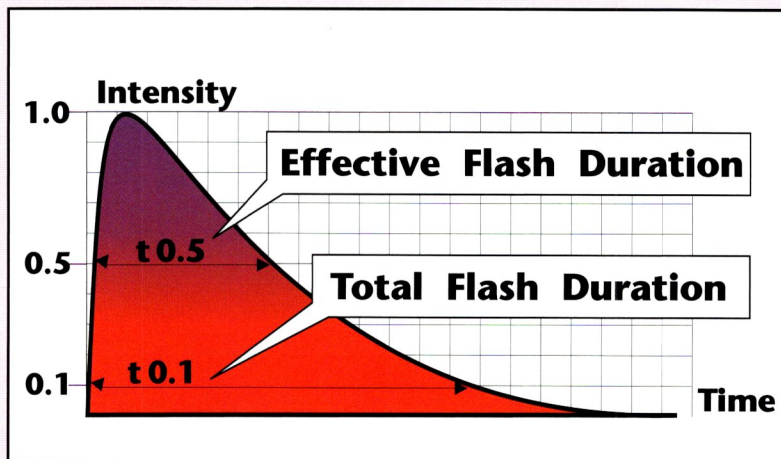
You can see that there's quite a bit of light which isn't accounted for by a t0.5 measurement. In effect, the flash duration is longer than you think it

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."

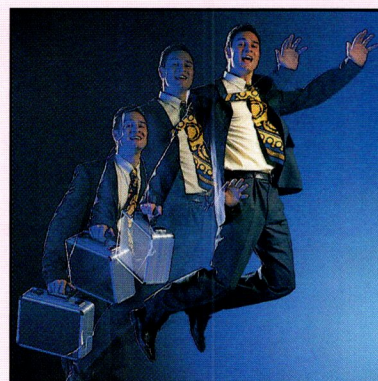
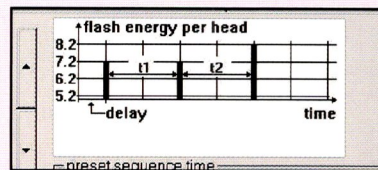
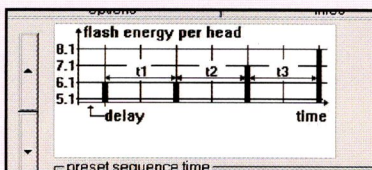
The Grafit A power packs are the only ones which actually let you select your desired t0.1 flash duration. You can tell the pack to give you the fastest possible duration for your power level, giving you motion-stopping capability all the way down to 1/7000 sec. No other power pack in the world will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

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



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.



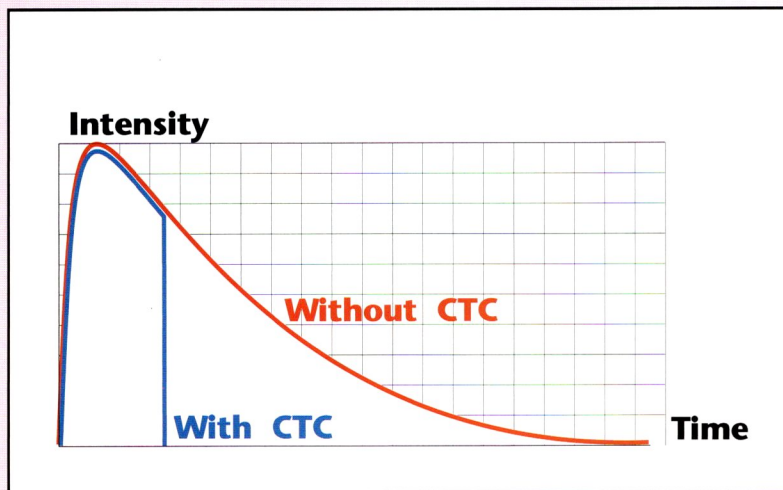
Grafit A In-Depth

Color Temperature: Consistent or Controlled

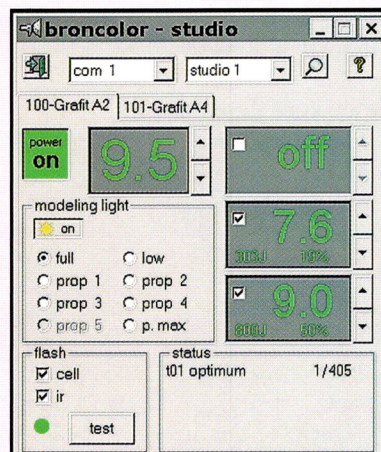
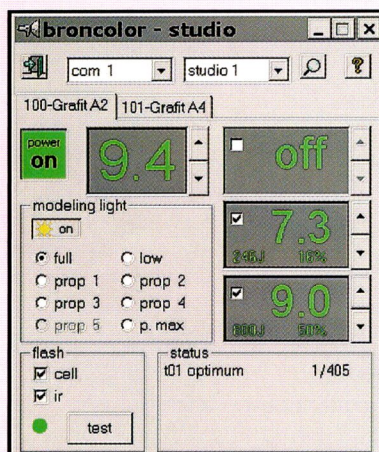
With most power packs, color temperature can decrease by about 120 degrees Kelvin for every f-stop of power reduction. Over a 3 stop adjustment range, that would be a color temperature decrease of about 360K. With a wider 6 or 7 stop range, the temperature difference would be about 800K from high power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



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

15-0043\$106.00

Flashtube for Minipuls C200

15-0044\$188.00

Glass Dome for Minipuls C

15-0022\$122.00

Mat Protection Dome for Minipuls

For use with the optical spot attachment, or for extra diffusion.

15-0028\$168.00

	<i>minipuls</i> C40	<i>minipuls</i> C80	<i>minipuls</i> C200
Capacity	300Ws	600Ws	1500Ws
Output*	f/32	f/45	f/64
Flash Duration t 0.5	1/1000	1/600	1/1000
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, continuously variable		4 stops, continuously variable
Modeling Light	250W	250W	250W
	Proportional 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	\$1080.00	\$1299.00	\$2060.00

Minipuls C200
f/64 for \$2060
Best dollar to f/stop value

* Output measured at 6 1/2 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



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 hard-wired operation of all pack functions
- Connect multiple units to one computer — 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.

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	<i>minipuls</i> D160	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, 1/10 stop increments	
Modeling Light	300W, Proportional to flash power	
Special Features	Flash sequence and delay, "Plus" upgradable to Mac/PC control	
Power Requirements	110-240v switchable, 16A	
Dimensions	4.5x4x19.5"	
Weight	10 lb.	
Catalog Number	11-1600 (D160)	11-1660 (D160+)
Price	\$2030.00	\$2598.00

* Output measured at 6 1/2 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.

Power Pack Accessories



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

IRQ/IRI/IRS Battery

17-2107.....\$10.00

Accessory Shoe for Sinar

23-4020.....\$58.00

Minipuls Kits

Minipuls C Travel Kit

- 2 Minipuls C40
- 2 P-Travel Reflectors
- 1 Barn Doors to P-Travel
- 2 Stands
- 1 Sync Cable
- 1 Stand Bag
- 1 Case

11-2020.....\$2825.00

Minipuls C Classic Kit

- 1 Minipuls C80
- 2 Minipuls C40
- 2 P-Travel Reflectors
- 1 Barn Doors to P-Travel
- 1 Pulsoflex 80
- 3 Stands
- 1 Sync Cable
- 1 Stand Bag
- 1 Case

11-2025.....\$4999.00

Minipuls C Expert Kit

- 3 Minipuls C80
- 2 P-Travel Reflectors
- 1 Barn Doors to P-Travel
- 1 Umbrella Reflector
- 1 Silver Umbrella
- 1 Pulsoflex 80
- 1 IRX Transmitter
- 3 Stands
- 1 Stand Bag
- 1 Case

11-2030.....\$5869.00

Minipuls Location Kit 2

- 2 Minipuls C200
- 2 P-Travel Reflectors
- 2 Stands
- 1 Sync Cable
- 1 Stand Bag
- 1 Case

11-2010.....\$4999.00

Minipuls Location Kit 3

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

11-2015.....\$8369.00



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 photocell and trigger up to four separate groups of power packs.

Remote control is ideal for situations where you'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 motorized 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.....\$1390.00



Sync Box

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

HMI Continuous Lighting



HMI 575 HMI 1200

Quartz equivalent	1500W	3000W
Max. output, Lux	12000 lx	318000 lx
f/stop*	f/11.5	f/64
Ballast size	11x4x7	11x4.5x8.5
Ballast weight	7.5 lb	10.5 lb
Head weight	5.75 lb	6.5 lb

Compatible Reflectors - HMI 575

P50, P65, P70, P120, Softlight, Hazylight 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\$4857.00

HMI 1200 Package

Includes ballast, lamphead, bulb, Par Reflector and 5500K diffusion lens set.
14-4500\$6851.00

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 Flooter.
14-3581\$249.00

Par Reflector for HMI 575, 5500K

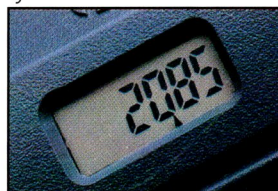
The same reflector as the HMI 1200, adapted for the HMI 575. With 5500K UV coated lenses.
14-2520\$713.00

Par Reflector for HMI 575, 5900K

14-2525\$481.00

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.
- 2½ 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.



Lampbases



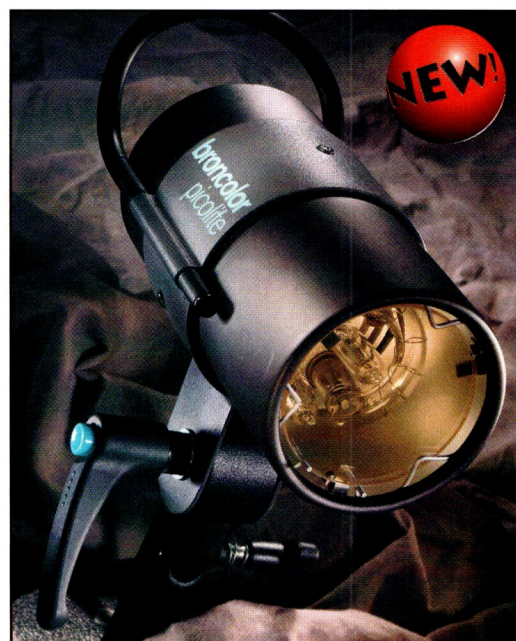
Head	Power	Dome	Cable	Fan	Dimensions	Wt	Cat. #	Price
Primo	1600Ws	Included	16'	Yes	5x6x5.5"	4.75 lb.	12-1018	\$699.00
Primo 4	3200Ws	Included	16'	Yes	5x6x5.5"	4.75 lb.	12-1019	\$975.00
Pulso F2	1600Ws	Included	16'	Yes	11.6x4.75x5"	6 lb.	12-0003	\$1299.00
Pulso F2	1600Ws	Included	32'	Yes	11.6x4.75x5"	6 lb.	12-0007	\$1455.00
Pulso F4	3200Ws	Included	16'	Yes	11.6x4.75x5"	6 lb.	12-0005	\$1770.00
Pulso F4	3200Ws	Included	32'	Yes	11.6x4.75x5"	6 lb.	12-0010	\$2015.00
Pulso Twin 4	2x3200Ws	Included	16'	Yes	10.5x4.75x5"	9 lb.	12-0016	\$2167.00
Picolite	1600Ws	Included	11.4'	Yes	8x5.5x3"	2.75 lb.	12-1208	\$529.00

**TOLL
FREE
ORDER
LINE
(800)
456-
0203**

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



Reflectors



Reflector	Angle	Dia. x Depth	f/stop*	For use with	Cat. #	Price
P45 reflector	45°	11.5 x 14"	128	Primo, Pulso 2/4 heads	12-0045	\$373.00
P50 reflector	50°	13.5 x 15.5"	128 ¹ / ₃	Pulso 8, Twin, HMI	12-0050	\$520.00
P65 reflector	65°	11 x 9.5"	128¹/₃	Pulso 8, Twin, HMI	12-0065	\$244.00
P70 reflector	70°	9 x 7.5"	90¹/₃	Primo, Pulso 2/4	12-0070	\$165.00
P120 reflector	120°	8.5 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	—	—	—	—	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	\$1040.00
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.

Type	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

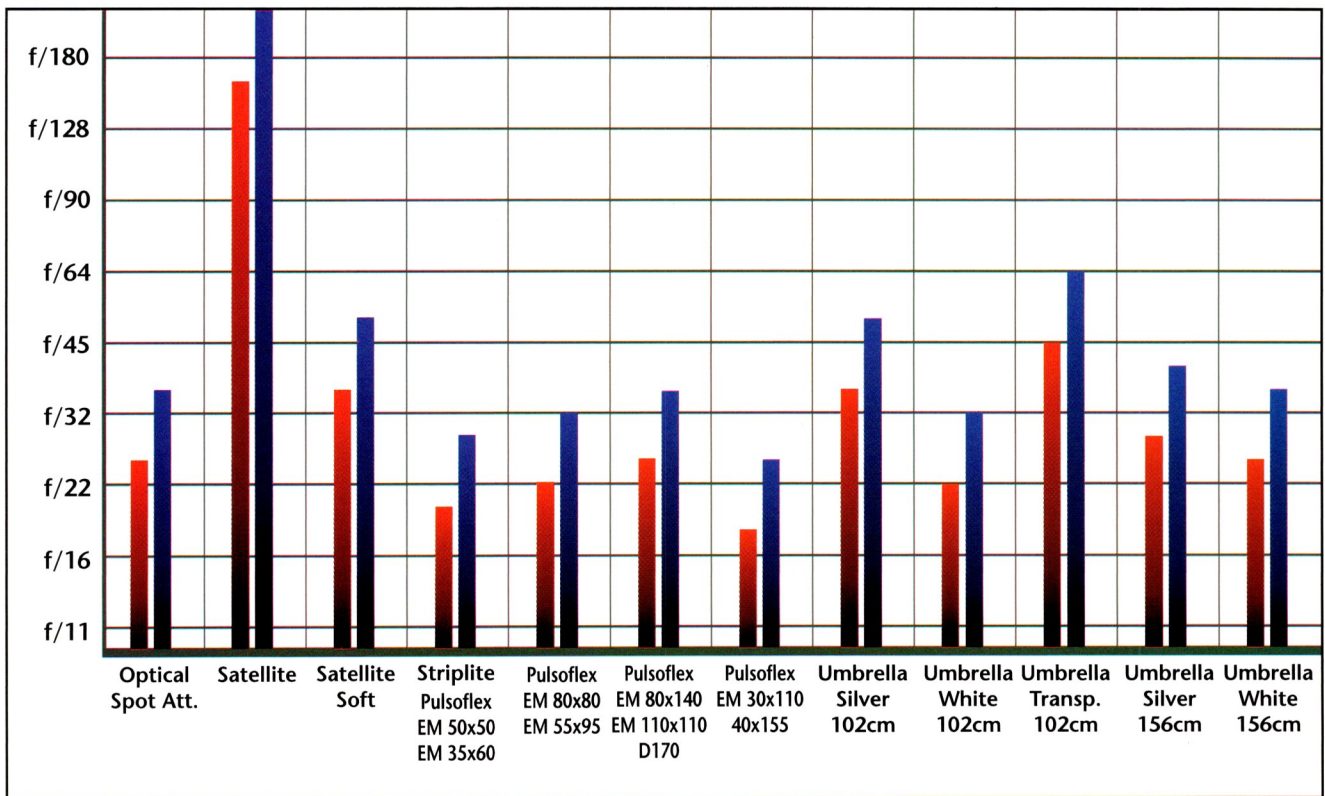
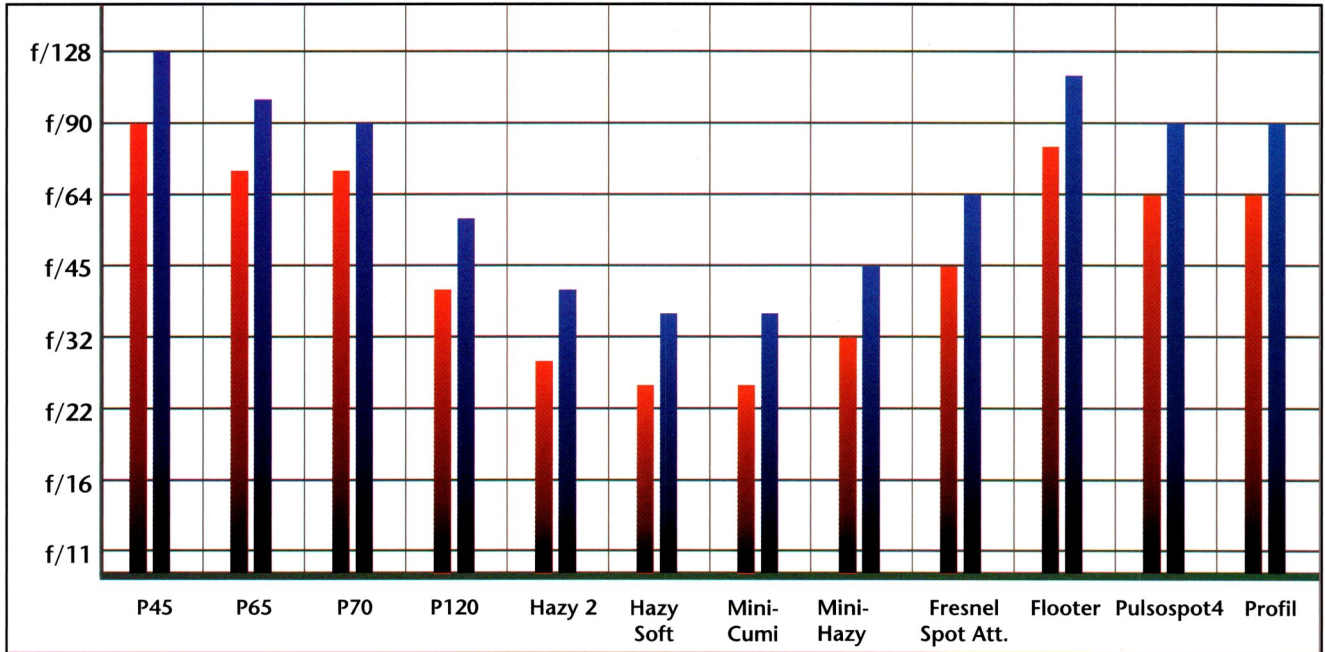
Broncolor reflectors are designed to give you maximum light quality and efficiency. They produce as much light as possible for their given area of coverage, with extremely smooth, even falloff for predictable, controllable gradations.

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

Primo / Primo A
Grafit 2
Grafit A2/A2+

Primo 4
Grafit 4
Grafit A4/A4+



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 $f/180^{2/3}$ 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.

And now, Broncolor has added a new member to the Satellite family - the Satellite Soft. 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-high-intensity 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, as well as the HMI 575 head. Includes special reflector and mat protection dome.

12-0095\$2279.00

Satellite Soft

$f/45^{1/3}$ @ 6 1/2 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\$2279.00

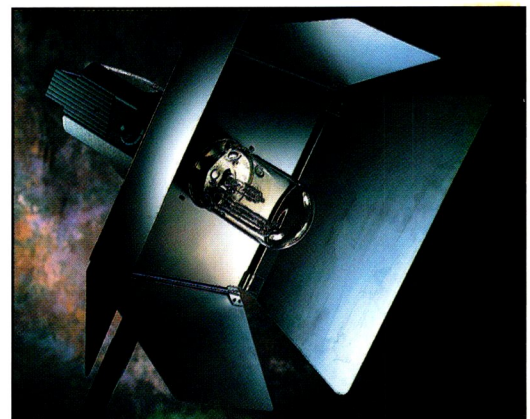


Sunlite Set

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 flash-tube presents a small, point light source for hard, direct light. The barn doors allow you to control the extent of spillage 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 protection domes.

12-0150\$908.00



Softboxes and Umbrellas

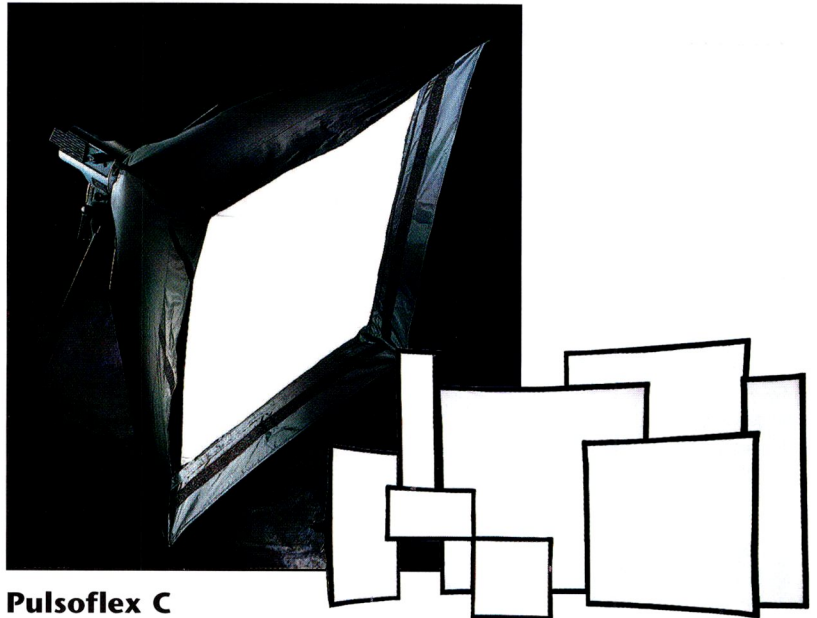
More efficient and controllable than conventional umbrellas, the Pulsoflex provides soft, diffused, direct illumination, making it an excellent light source for almost any type of job.

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.



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 (All boxes 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

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 Pulsoflex EM 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 / HMI1200 80x80

Barn doors	12-0268	\$207.00
Honeycomb	12-0781	\$649.00
Additional diffuser	12-0746	\$450.00
Louver set	12-0780	\$477.00

EM softboxes marked with * are not compatible with the HMI 575.

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" subject illumination 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.....\$3395.00

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.....\$3395.00

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.....\$2375.00

Counter-Reflector

For Hazy Soft with Pulso 2/4 or Primo lamphead.

12-2015.....\$212.00

Honeycomb to Hazy 2 / Hazy Soft

12-0393.....\$1040.00

Diffuser Foils with Tape

15-3008.....\$191.00

Diffuser Foil

10 meter roll for 5 replacement foils.

15-3009.....\$718.00

Hazy Diffusion Foils with Frame and Tape


15-3016.....\$405.00

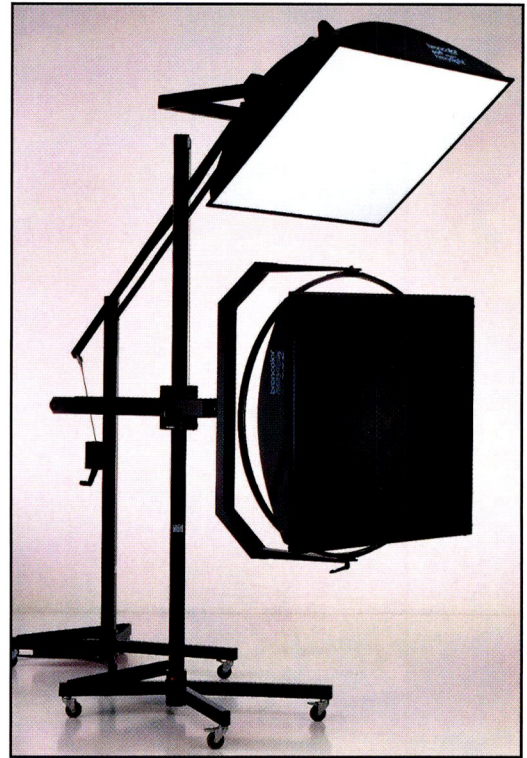
Flamingo Adapter for Hazylight/Mini Cumulite

13-1011.....\$207.00

Counterweight for 301 Stand

13-1006.....\$337.00

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



Broncolor 301 Stand

- For Hazylight or Mini-Cumulite.
 - Counterbalanced horizontal arm for quick adjustment.
 - Maximum height 8.8 feet.
- 13-1005.....\$4240.00

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.....\$3147.00

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.

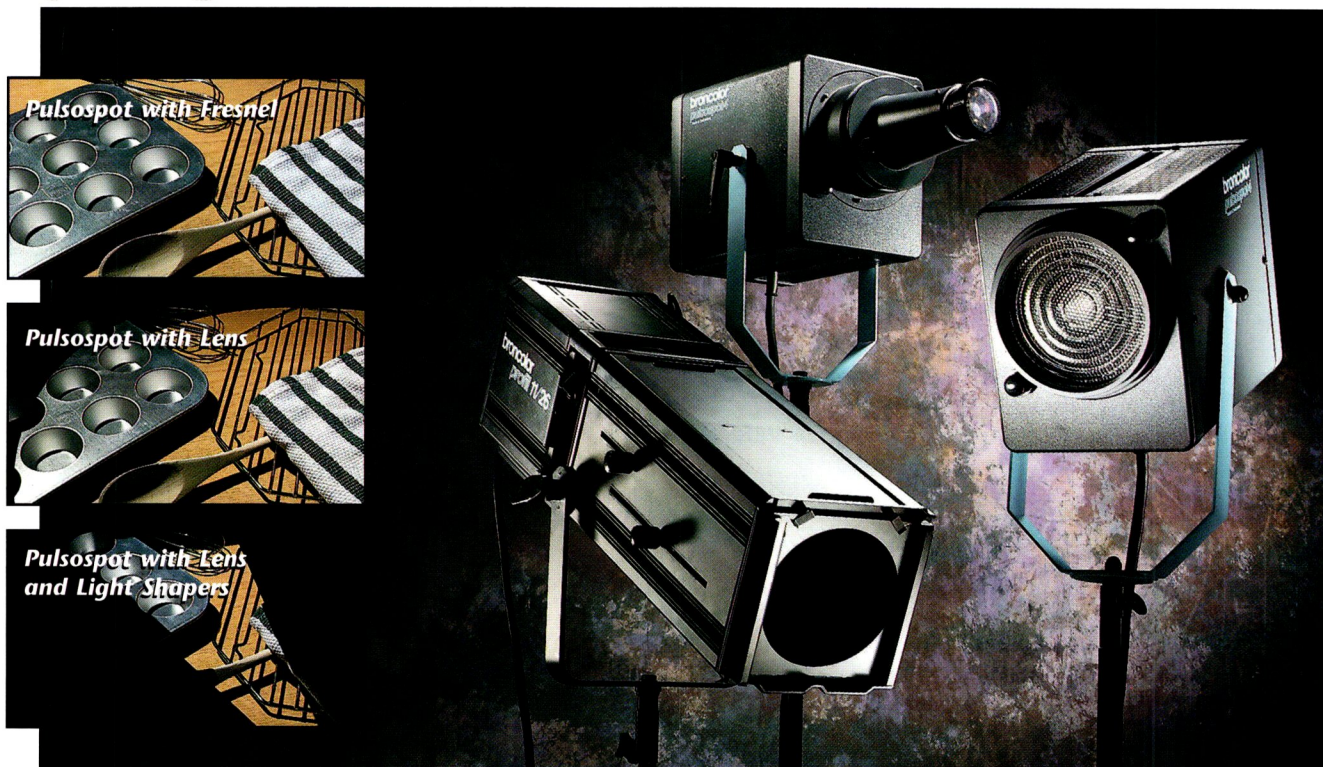
- f/45 at 6 1/2 ft. (3200Ws, 100 ISO)
 - Uses standard lampbases
- 12-0460.....\$1589.00

Mini-Hazylight Stand

Maximum height 7.4 ft.

13-0460.....\$1599.00

Spotlights



Profil 11/26 Theatrical Spot [Ⓢ]

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 (6½ feet, ISO 100, 11°.) Scales for angle and focus allow you to easily repeat any combination of settings.

12-3032\$3995.00

Pulsospot Accessories

Barn Door to Pulsospot 4

12-4015\$259.00

Slide Holder 6x6

13-3026\$65.50

Slide Holder 24x36

13-3028\$65.50

4 Part Slide Template

12-3030\$98.00

Pulsospot 4

f/90 at 6½ ft., (3200Ws, 15°), f/64½ at 6½ 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\$2695.00

Attachment lens 150mm

f/32½ at 6½ ft., (3200Ws, ISO 100)

Projects a non-color fringing hard light circle (from 5 to 30 inches at 6½ feet). Can project transparencies for rear or top projection with slide holders, see below.

12-3024\$2174.00

Attachment lens 100mm

f/22½ at 6½ ft., (3200Ws, ISO 100)

Projects a larger circle than the 150mm attachment lens (7 to 44½ inches at 6½ feet)

12-3025\$2060.00

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



Pulso Flooter "S"

f/128 @ 6 1/2 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 15-70°. Weight 24 lb.

12-3135.....\$2496.00

Barn Door set To Flooter

12-3036.....\$228.00

Honeycomb To Flooter

12-3037.....\$171.00

Modification Kit for Flooter

Converts older Flooters to new "S" model

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 6 1/2 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.....\$1559.00

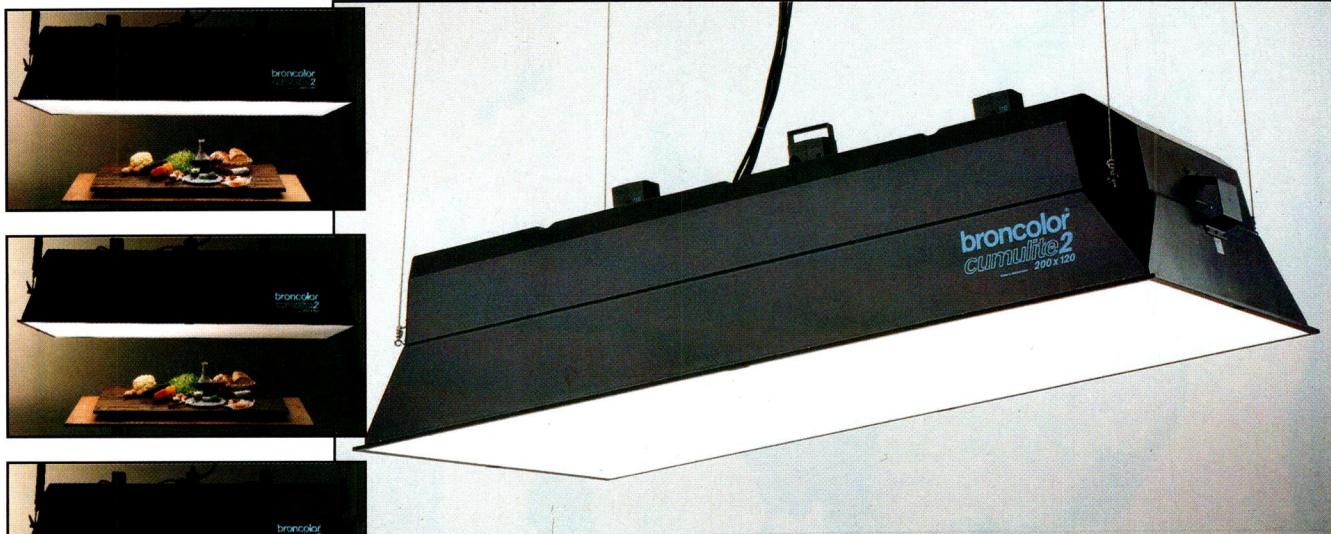
Broncolor Optical Spot

f/32 1/3 at 6 1/2 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.....\$1559.00

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 lampbase 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 Grait 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

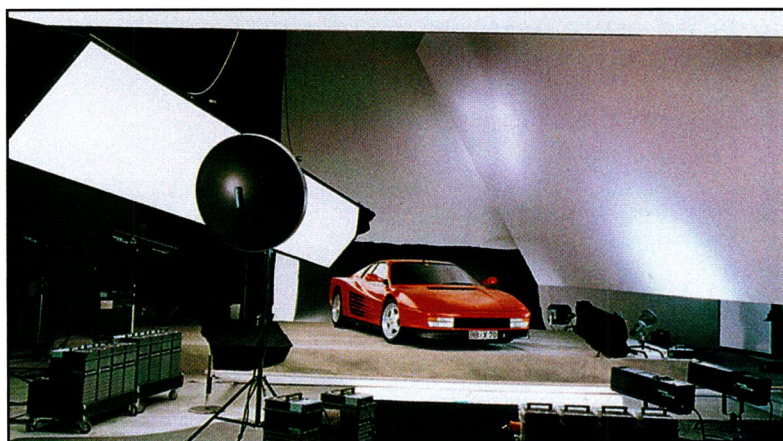
f/32.7 @ 3200Ws (6 1/2 ft., ISO 100)
79x48" fiberglass reflector supplied with plexiglass diffuser, 2 glass counter-reflectors and cover for central opening. Weight 64 lbs.
12-2026.....\$7500.00

Megalite

When you need the biggest light you can get your hands on, Megalite is the way to go. Great for continuous end-to-end highlights on cars, or for lighting room sets and other large objects in your studio.

Megalite is available in two basic widths - 5 and 8 feet. The length can be customized to 8 different sizes from 8 feet to an incredible 32 feet. The 5x8' Megalite takes 2 heads, the 8x8 4 heads, all the way up to 16 heads in the 8x32' size. That's over 51,000Ws maximum output!

The Megalite is compatible with Pulso F and Primo heads (special flashtubes required.) The HMI 575 can also be used, for anywhere from 1150 to 9200 watts of continuous light output. Existing Megalites can be extended if you need



greater length. A steel ceiling rail system is recommended.
12-2055.....Call for custom pricing

Light Banks



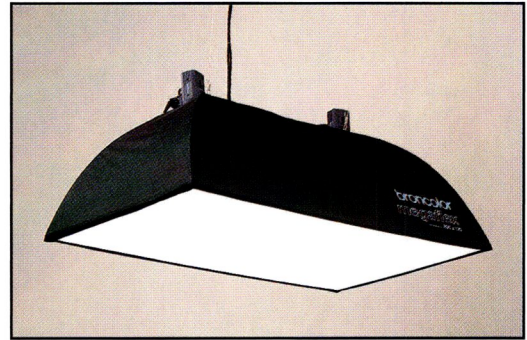
Mini-Cumulite

- 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.
12-2014\$4190.00

Broncolor 301 Stand
For use with Mini-Cumulite or HazyLight reflectors. See pg. 49.
13-1005\$4240.00

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



Megaflex

Two new softboxes measuring 4x6½ ft. and 4x10 ft. Each Megaflex takes 2 Pulso, Primo or HMI lampheads and features an optional second diffuser.

Megaflex 200
12-0520\$2950.00

Megaflex 300
12-0521\$3750.00

Bracket to Megaflex

Required to mount the Megaflex bank to Broncolor 301 and Flamingo stands.
32-0107\$1141.00

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

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



Boxlite

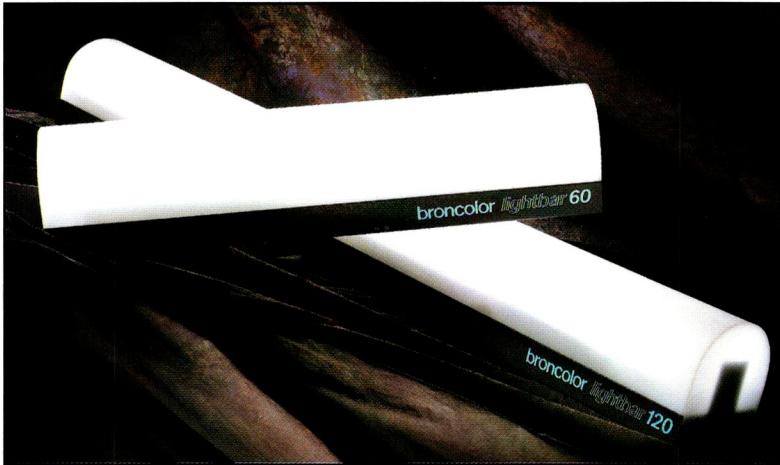
Boxlite

- 1600Ws capacity
- f/22 at 6½ ft., 1600ws, 100 ISO
f/45½ 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\$2014.00

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.

Lightbar 60

12-5351.....\$2189.00

Lightbar 120

12-5353.....\$3580.00

Barn Doors

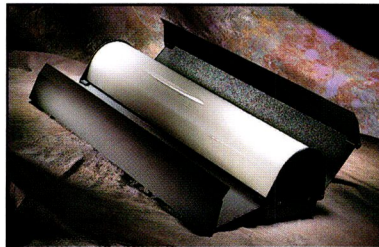
Double-hinged barn doors give you additional control over the Lightbar's falloff.

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

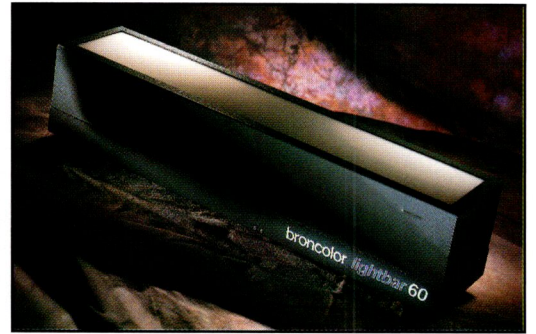
Converts a Striplight 60 or 120 into a Lightbar. Also used as a replacement cap for the Lightbar.

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 flat-surfaced and more directional than the Lightbar.

Striplight 60

12-5355.....\$2189.00

Striplight 120

12-5357.....\$3580.00

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

- 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 f-stop 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.)

12-3006.....\$2340.00

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.

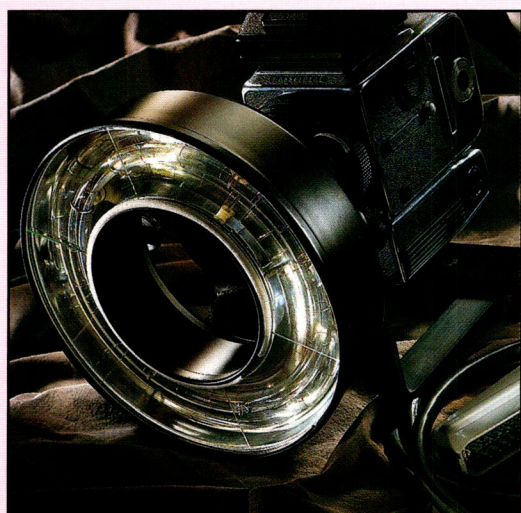
1	12-3006	Fibrolite
2	12-3013	60" Fiber Optic Cable
2	12-3017	80" Fiber Optic Cable
4	12-3016	Focusing Lens
4	12-3018	Articulated Arm
4	12-3020	Iron Base for Arm

12-3009.....\$6522.00



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 optical fiber, with locking screw.	12-3016	\$238.00
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\$1399.00

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

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 Purchase	Replacement Cost
Up to 30 days	No charge
30 days - 1 year	10% of current catalog
1 year - 2 years	30% of current catalog
2 years - 3 years	50% of current catalog
3 years - 4 years	70% of current catalog
4 years - 5 years	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.

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

Flashtubes

Self-Contained Units

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	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

Specialized 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	Effect light	15-1006	\$272.00
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 Style 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	\$1017.00

Lampbases

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	\$1322.00
6400Ws	UV-s coating for above units	15-1105	\$1332.00

Twin Lampbases

2x1600Ws	UV-s coating for Pulso Twin	15-0111	\$946.00
2x3200Ws	Pulso Twin 2 and 4	15-0012	\$1082.00
2x3200Ws	UV-s coating - Pulso Twin 4	15-0016	\$1082.00
2x3200Ws*	Pulso Twin 2/4	15-0017	\$1072.00

Most Broncolor flashtubes are supplied with a UV light absorbent coating. Normal coating is 5300°K (±150°)
Special UV-s coating 5000°K (±150°): Special order, 4 week delivery.
*Uncoated (clear) 5900°K (±150°)

Domes and Modeling Lamps



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

Non-UV Mat Protection Glass for Pulso, Primo, Hazy Lampbases

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 Minipuls
15-0082.....\$87.00

575W HMI Lamp
14-3575\$457.00

HMI 575 Protection Dome, Mat
14-3576\$171.00

1200W HMI Lamp
14-4525\$538.00

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, Minipuls, Compuls 65/95	250W	15-2001	\$21.50
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

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 (±150°).

A special heavier coating, UV-S, is available for most flashtubes and protection domes. It balances to 5000°K (±150°).

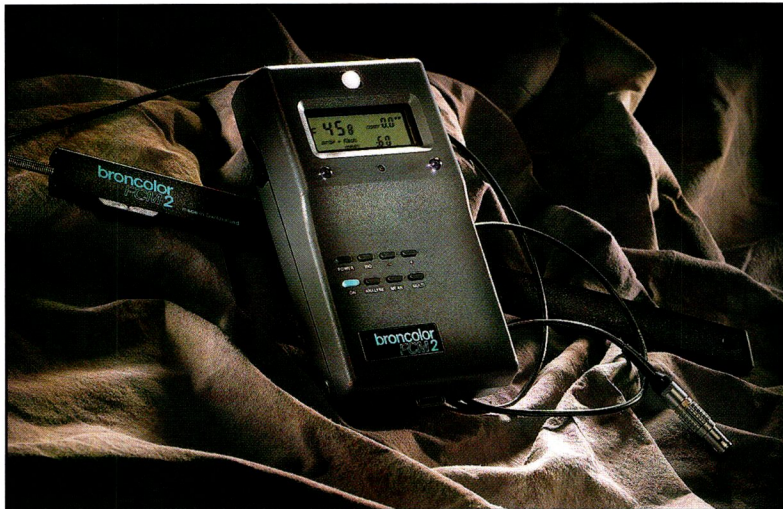
All flashtubes 1600Ws and below have the UV coating applied directly to the tube. Higher power tubes are uncoated, and must be used with a UV coated protection dome. These tubes generate too much heat to be coated directly.

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

broncolor

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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

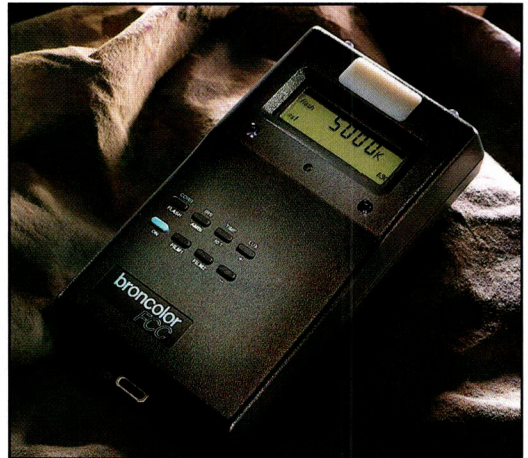
Plugs into the FCM 2 meter to give you film plane metering capability with any metering back equipped Sinar view camera.

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.....\$1140.00



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.....\$1220.00

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 (see page 82.)

51-2200.....\$1198.00

Y-Cable

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

22-3008.....\$115.00

FCM Holder

Keep your FCM conveniently attached to the side of your SINAR camera while using the FCM Probe.

16-1013.....\$92.00

Case for FM / FCM Meters

Nylon case for the FCM meter (included with FCC.)

16-1009.....\$16.50

Broncolor User Profile

Tom Upton first became interested in photography in the sixth grade when he saw his first image develop in a tray. Early on he realized the major differences in lighting needs with a digital set vs. shooting film. He remained in denial for many years, compensating for poorly lit sets; compromising his work using basic strobe lighting. His first and only demo of Broncolor lighting changed his creative direction forever. Now six months later, with his packs fully paid off, Tom openly wonders how he ever kept his sanity and grew his business before he upgraded to Broncolor Grafit.

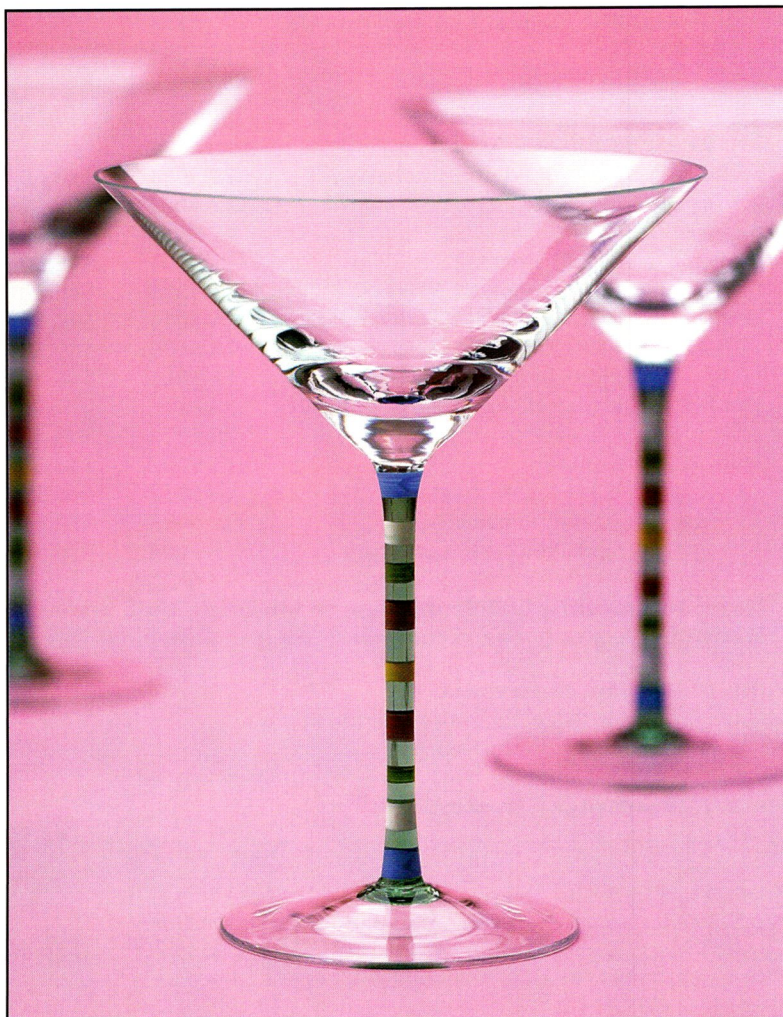
I set up my digital studio in 1995 and equipped it with a state-of-the-art Leaf DCB II Digital Camera Back. Having made this significant investment, I decided to make a go of it with the same Norman strobes I got started with twelve years ago. About a year into shooting digitally, I went and took a color theory course. What happens when you become involved with digital photography is you have to become adept at pre-press, you have to become a better photographer, and you have to better at lighting. That color theory course helped me to understand the importance of knowing what kind of dot I need for my highlights and shadows and immediately, I came to the conclusion my Norman strobes wouldn't serve my needs well. Suddenly using a Grafit became imperative, not just something to consider.

After one look at the Grafit A4, I realized I had basically suffered through my Normans for twenty years. The Broncolor pack is smooth, clean, and well made. The cables are thick, the connections are sturdy, and I know I'm getting a full 3200 watt/seconds. In the past I would constantly have to shut down my packs every time I would unplug and


re-plug my connectors in order to avoid dumping my packs and arcing my connectors. Also, with my old packs, when I would put on some of my older light boxes, the color temperature would be even more greatly affected by the fade in the light boxes. Now I'm in control. If I adjust my pack by a 1/10 stop, my meter reads a 1/10-stop difference. Now that's unbelievable control. The light my Grafit pack gives off is powerful and true, and I don't nearly spend as much time making corrections. After that initial demo, my dealer knew they had me. I went to the bank and immediately applied for a line of credit.

Now, I've got great lighting! My main lighting consists of my Grafit A4 and three heads. I keep my old packs to have "depth in the bullpen" for bigger sets however; I'd love to trade it in for more Grafit. Unfortunately, it's like trading pesetas for dollars - you don't get anything for this stuff. Broncolor is more expensive, but it's like buying a Volvo. It's worth it and it's not going to fall apart. My clients have been blown away with how much more smoothly a shoot goes now. I can take 40 shots a day now by just swapping product in and out and having to make only minor adjustments to the lighting. I now have consistent lighting that is repeatable and reliable. My Grafit holds a good depth of field and the interface is so well designed that it has helped me improve my workflow tremendously. It acts like a workhorse; there's no monkeying around like in the past having to figure out how to adjust the power in subtle increments.

If I was to impart any words of wisdom to a photographer just getting started on their own, I would have to ask them this: how much time do you want to spend setting up lights and dealing with lights versus making good creative adjustments to lighting. With Broncolor equipment, setup is quick and you get to spend time doing the careful lighting of your products or subjects because the strobes are adjustable and intuitive. I wish I had bought Broncolor when I had first started out. It's like buying a nice house; you've got to be able to live with it. I had strobes that I didn't like for a long time. It can be a heavy hit at the onset, but as time goes on, and they prove to be reliable and provide good light, it is worthwhile. I would encourage photographers to talk to other Broncolor users before they make a buying decision. Ask them to share their experiences. Have them rent Broncolor for a shoot and see for themselves. I love my Grafits; they truly are the best. It's been 7 months and I've already paid off the line of credit. Now they're making money for me. I've worked hard but it was worth it, and now I've bought that Volvo!



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 Rail Systems		To hang Minipuls units right-side up from rail systems	13-4060	\$84.00

Broncolor Adapter

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



Locking Lever

Lever handles are now standard on all Broncolor Pulso and HMI lampheads. Older heads can easily be converted by replacing the blue knob with this handle.
12-0013.....\$20.50

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

Bolt, Broncolor to 3/8" Thread

13-4005.....\$19.50

Bolt, Bron to 3/8" Thread & Foba Seat

13-4006.....\$37.50

Castors for Senior Stand

(set of 3)
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

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

Cables

Type	Length	Cat. #	Price
Lamphead Extension*	16 ft.	15-4007	\$325.00
Lamphead Extension*	32 ft.	15-4008	\$389.00
Power, Pulso/Flmn/Opus/Grafit/Primo	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

* 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
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 reflectors to the wall for storage.
12-0910.....\$145.00

Pulso Wall Adapter, "Hockey Puck" style

12-0912.....\$48.50

Protection Cap

Replacement cap for Flashman, Pulso and Primo lampheads.
12-9111.....\$20.00

sinar

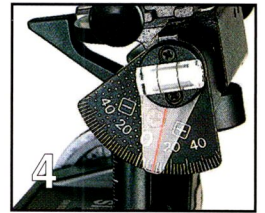
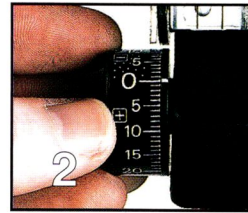
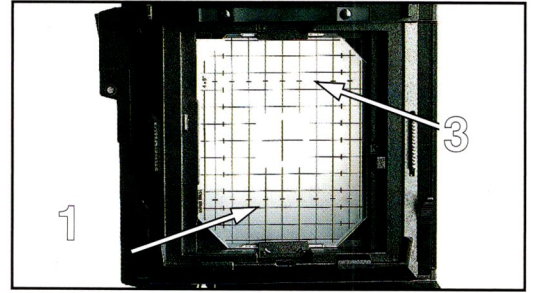


Calculating movements is as easy as . . .

f1/f2

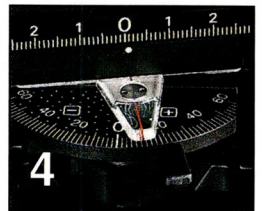
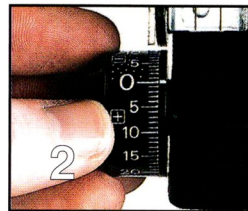
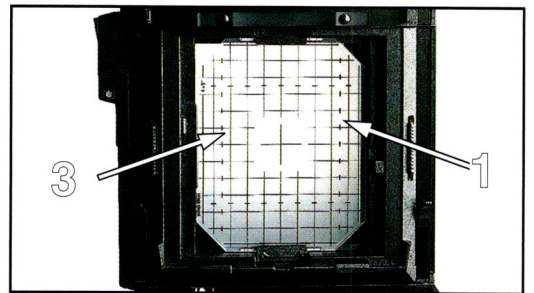
1 TILTS

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.



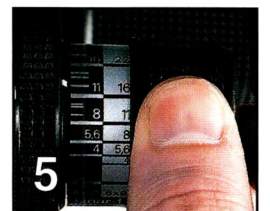
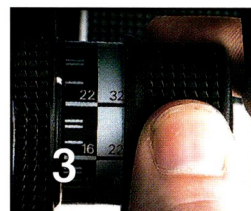
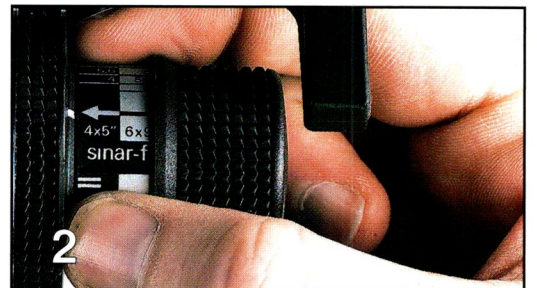
2 SWINGS

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.



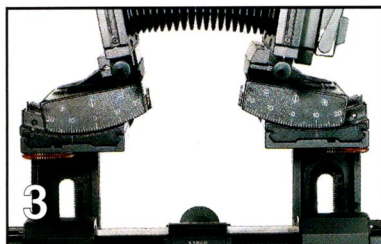
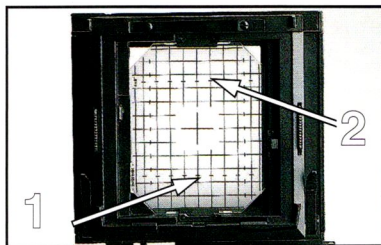
3 DEPTH OF FIELD

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.

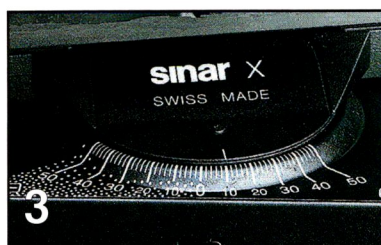
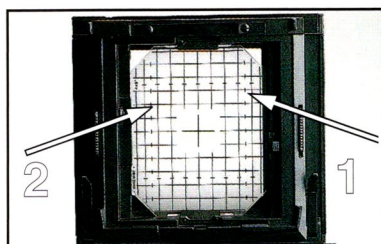


x/p2

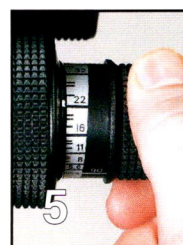
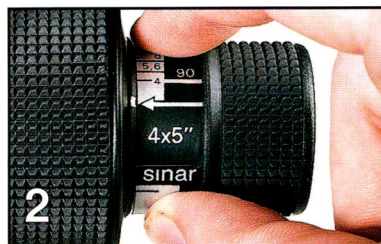
1. Focus on the bottom horizontal dotted line on the groundglass.
2. Tilt the rear standard until the image is sharp at the top dotted line.
3. Transfer the tilt angle to the front standard; ie. if your rear standard reads +5 degrees, set a tilt of +5 on the front standard. Note that the front standard 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.



Sinar



Sinar f1/f2 View Cameras

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. 67 for film plane metering upgrades.

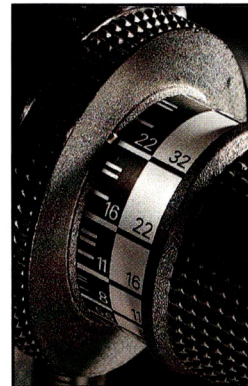
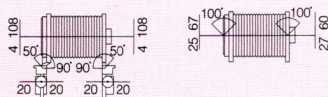
21-1005\$2220.00

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. 67 for film plane metering upgrade.

21-1007\$2546.00

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



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 \$3835.00	21-5012 \$4166.00
f2	21-5009 \$4303.00	21-5013 \$4656.00

Sinar



Sinar x and p2 View Cameras

The Sinar x and p2 view cameras are the most advanced, feature-packed, 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, one-hand 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 upgradeable 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"
Weight: 13 lb.

p2 vs. x: Additional p2 features

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

Sinar X 4x5 View Camera

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

21-2204\$3995.00

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\$6695.00

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.

21-2203\$9482.00

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



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\$573.00

Sinar Booster 1

Film plane metering probe for use with the Minolta Flashmeter III, IV and V.

22-1025\$1140.00

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

Sinar Pro Kits



Sinar x Pro Kit 4x5

Equipped with a Sinar x 4x5 view camera and all Pro Kit accessories.
 21-5002.....\$10,512.00

Sinar p2 Pro Kit 4x5

Equipped with a Sinar p2 4x5 view camera and all Pro Kit accessories.
 21-5003.....\$12,850.00

Sinar p2 Pro Kit 8x10

Equipped with a Sinar p2 8x10 view camera and all Pro Kit Accessories
 21-5005.....\$16,356.00

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.

**QUESTIONS?
 CALL TOLL FREE
 (800) 456-0203**

Sinar Expert Kits



Sinar

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.

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Sinar x 4x5 Expert Kit

Equipped with a Sinar x 4x5 view camera and all Expert accessories.
21-6202.....\$8175.00

Sinar p2 Expert Kit 4x5

Equipped with a Sinar p2 4x5 view camera and all Expert accessories.
21-6201.....\$10,512.00

Sinar p2 Expert Kit 8x10

Equipped with a Sinar p2 8x10 view camera and all Expert Accessories
21-6203.....\$13,936.00

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
- Lighhood w/ lightdrop
- Expert Case

Shown with Sinaron-s 210mm DB lens, sold separately. See pg. 82.

Camera Supports

Extension Rails, black

- 6" 23-1207.....\$164.00
- 12" 23-1209.....\$199.00
- 18" 23-1206.....\$344.00



Base Rails, black

- 12" 23-1208.....\$195.00
- 36" 23-1210.....\$761.00

Rail Cap Black

Replacement end cap for the base rail. This cap prevents unlocked standards from sliding off the rail. 23-1204.....\$45.00

Rail Cap Special

Prevents unlocked standards from sliding off an extension rail used without a base rail. 23-1005.....\$24.00

Reducing Bushing 3/8" to 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 1/4" thread. 23-6006.....\$14.00



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.....\$620.00

23-6010.....\$620.00

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.....\$659.00



23-1019.....\$659.00

Rail Clamp

23-1001.....\$252.00



Base Plate 2 Package

Adds extra stability to any Sinar camera, especially at long bellows extensions

- 1 23-1016 Base Plate 2
- 1 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.....\$1198.00

23-1116.....\$1198.00

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.....\$258.00

Quick-Release Adapter

To attach the Base Plate 2 to a Pan-Tilt Head, tripod or camera stand. 23-1018.....\$120.00

23-1018.....\$120.00

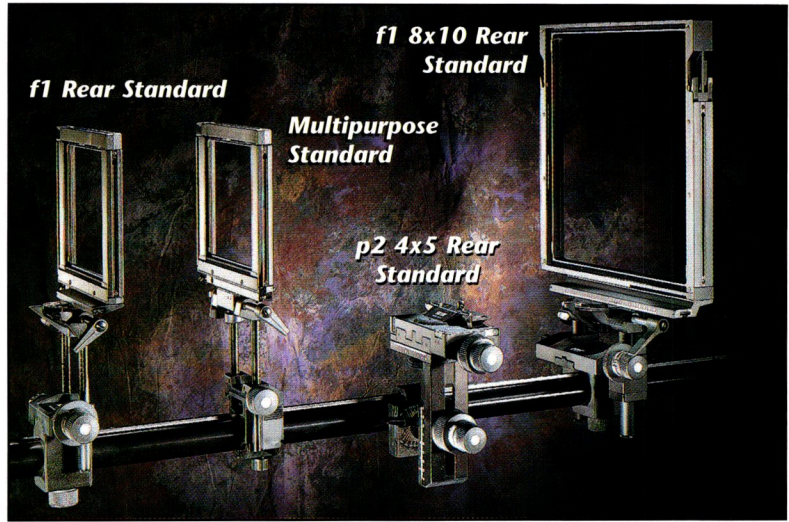
VAPO Variable Position Rail Clamp

If you've ever tried to adjust the leveling of a large, heavy view camera, or a camera pointed straight down, you know how difficult it can be to make precision adjustments. The VAPO solves this problem by rotating the camera around its rail with a large, self-arresting adjustment wheel. Turning the wheel results in only slight leveling adjustments, giving you the most precise leveling capability available, while the wheel still spins easily enough to let you make larger adjustments. Once you have your camera set properly, the VAPO locks in place with the turn of a lever. 23-1020.....\$1198.00



23-1020.....\$1198.00

Camera Standards



Standard	Features	Cat. #	Price
f1/f2 Standards			
f1 Front Standard / Multipurpose Standard	<ul style="list-style-type: none"> • 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	\$665.00
f2 Front Standard	<ul style="list-style-type: none"> • Geared fine focus and separate locks for horizontal shift and swing 	23-2212	\$1078.00
f1 4x5 Rear Standard	<ul style="list-style-type: none"> • Separate locks for horizontal shift and swing • Links 8x10 bellows to 5x7 special bellows 	23-2211	\$910.00
f2 4x5 Rear Standard		23-2213	\$1294.00
5x7 Multipurpose Standard		23-2200	\$1458.00
f1/f2 5x7 Rear Standard		23-2215	\$2797.00
p2 Standards			
p2 4x5 Rear Standard	<ul style="list-style-type: none"> • Fully geared, self-arresting movements • Requires rear carrier frame and metering back 	23-2208	\$3219.00
p2 4x5 Front Standard	<ul style="list-style-type: none"> • Special T-shaped design for added stability • Longer rise and shift range for larger formats 	23-2204	\$3852.00
p2 8x10 Rear Standard		23-2209	\$5170.00
p2 8x10 Front Standard	<ul style="list-style-type: none"> • Longer rise and shift range for larger formats 	23-2206	\$4787.00
Backs and Frames			
4x5 Metering Back	For film plane metering probes. Standard back on p2. Consists of 23-2025 & 23-2024	22-1022	\$919.00
4x5 Non-Metering Back	Replacement back, a1/f1/f2/x and older Sinars	23-2027	\$665.00
4x5 Metering Frame	Upgrades non-metering backs	23-2025	\$573.00
4x5 Frame - Non MB	Non-metering replacement frame	23-2023	\$240.00
4x5 Screen Frame 2 with Lifting Levers	Groundglass half of camera back Upgrades backs without levers	23-2024	\$422.00
4x5 Rear Carrier Frame	Bellows/back attachment frame for p2 standards.	23-2017	\$530.00
5x7 Metering Back	Fluid dampened	23-2115	\$1698.00
5x7 Rear Carrier Frame	Adapts p2 standard to 5x7 back and bellows	23-2018	\$1108.00
8x10 MB Metering Back	Fluid dampened	23-1916	\$2643.00
8x10 MB Rear Carrier Frame	Adapts p2 standard to 8x10 MB back and bellows	23-1919	\$1757.00

Sinar

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 thin-frame, 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 meter-back (MB) cameras and the older, non metering frames (Non-MB).

Size	Type	Product#	Max. Ext.	Use with Lenses	Comments	Price
4x5	Square	23-3004	19"		Standard or multipurpose bellows	\$275.00
4x5	Wide Angle	23-3007	-	75-135mm		\$275.00
4x5	Extra Wide	23-3014	-	45- 65mm	For 65mm and shorter lenses	\$510.00
5x7	Tapered	23-3001	25"		5x7 to 4x5	\$524.00
5x7	Wide Angle	23-3005	-	90-165mm	5x7 to 4x5	\$476.00
8x10	Tapered MB	23-3008	23"		8x10MB to 4x5	\$1059.00
8x10	Special	23-3010	50"*		8x10MB to 5x7 intermediate	\$1742.00
8x10	Wide Angle	23-3011	-	120-240mm	8x10MB to 4x5	\$945.00

(MB) Metering Back - Fits newer style metering back 8x10 with rear frame size 12 1/8 x 12 1/8"

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

Ⓢ 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 1/4"

23-1012\$24.00

Filter Rod 6 1/4"

23-1011\$25.00

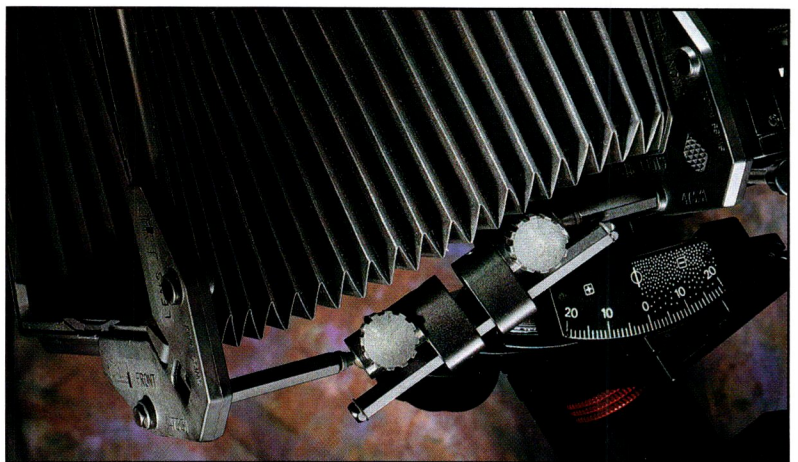
Filter Rod 10"

23-1010\$43.00

Bellows Holder

Lets you attach the bellows to either the filter rods or joint rod for use as a lens shade.

23-1013\$29.00



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\$143.00

Special Effects Accessories



Bellows Hood Mask I

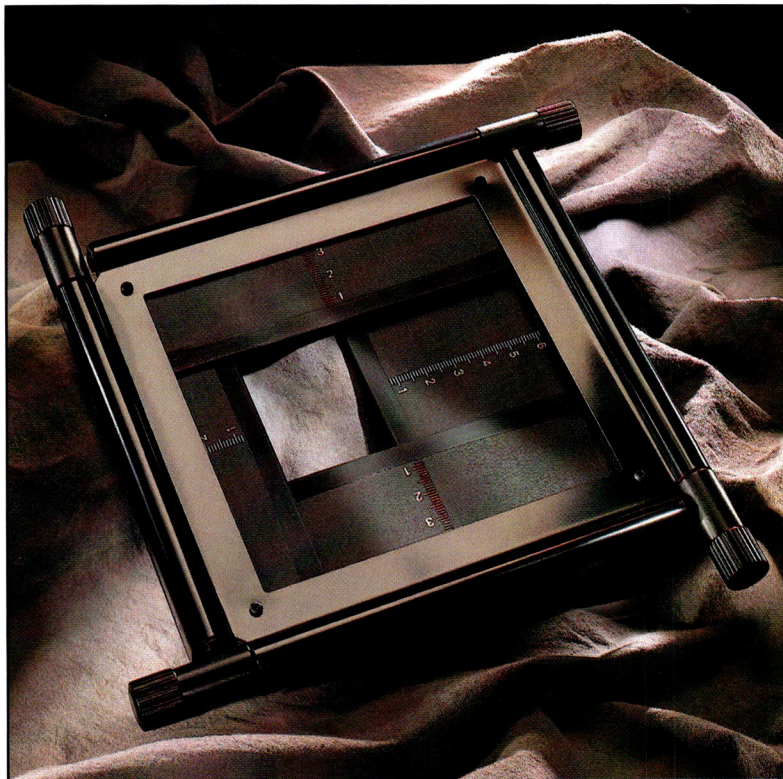
Functions both as a lens shade and as a mask to block off part of the image from being exposed. Attaches to either a Multipurpose Standard or a bellows holder. Has two built-in wings and a set of clips to hold two additional wings (supplied) or your own custom masks.
 23-4015\$151.00

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\$717.00

Cross Level

For 2-axis leveling. Hooks to any Sinar standard.
 23-4017\$175.00



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\$813.00

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.
 23-2223\$1806.00



Basic Lens Shade Package

Consists of a Wide Angle Bellows supported by a bellows rod and two bellows holders.
 23-2222\$476.00

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\$264.00

Lighthood with Lightdrop

Attaches to either the Bino Reflex Housing or the Bino Board to block out ambient light.

23-4030\$211.00

Corrective Loupe

4.25 Diopter.

23-4023\$187.00

Bino Reflex Housing Kit

The Sinar Bino Reflex Housing allows you to view the entire groundglass area right side up. The mirror is adjustable so you always have the brightest image on the groundglass, especially when used with our fresnel lens. This kit includes the Bino Reflex Housing (23-4019) and Lighthood (23-4030).

23-4022\$688.00

Bino Reflex Housing Only

Housing only, for photographers who already own a Lighthood.

23-4019\$663.00

Bino Reflex Housing Kit with 4.25 Corrective Loupe

As above, with 4.25 corrective loupes. Includes Lighthood.

23-4026\$790.00

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\$1091.00



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\$447.00

Accessories

4x5 Ground Glass

With 1 cm grid and calibration lines for asymmetric movements.

23-4007\$59.00

5x7 Ground Glass

As above, with image size markings for standard and metric film sizes.

23-4010\$72.00

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" x 8 7/8".

23-4029\$126.00

8x10 Ground Glass (non-MB)

Fits older style non-metering back cameras. Measures 10" x 8 1/4"

23-4009\$134.00

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\$205.00

4x5 Fresnel Lens Only

Replacement fresnel for existing frames.

23-4011\$134.00

5x7 Fresnel Lens

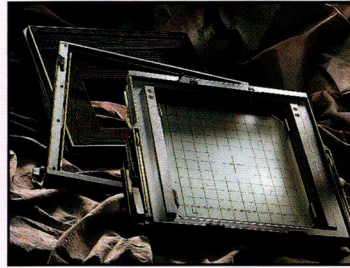
23-4013\$270.00

8x10 MB Fresnel Lens

For the current line of meter back cameras.

23-4032\$350.00

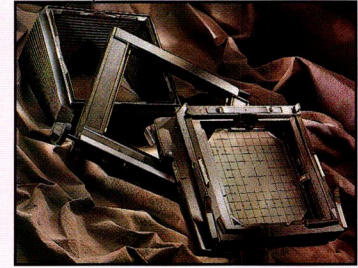
Format Changing Sets



8x10 MB Format Changing Set

Now you can convert your p2 4x5 camera into an 8x10 quickly 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\$3603.00



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\$1649.00

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\$3123.00

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\$1440.00

5x7 to 4x5 Reducing Adapter

23-7003\$867.00

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

Sinar

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 two-stage pressure plate instead of just floating around in the holder.
- Tolerance of the film plane is just $\pm 0.03\text{mm}$ 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\$692.00



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\$355.00

5x7 Adhesive Film Holder

23-7067\$258.00



Zoom 2 Multifformat 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\$2755.00

6x9 Format Rollholder

For fixed format 6x9cm.

23-7078.....\$2195.00

6x7 Format Rollholder

For fixed format 6x7cm.

23-7077.....\$2195.00



Vario Mask

Vario Mask

23-7084\$139.00

Film Cartridge

Replacement.

23-7080\$83.00

4 Film Cartridge Package

With case

23-7082\$319.00

Viewing Mask Set

23-4016\$43.00

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.

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

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\$24.00

Y-Sync Cable

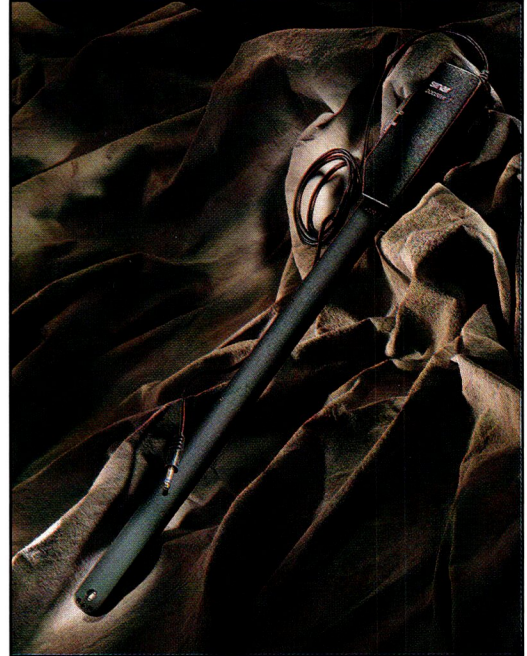
The new Y-cable lets you trigger strobes with both your shutter and your light meter without switching cables. This simplifies the metering process when used with film plane meters such as the Broncolor FCM and probe or the Minolta IV/Booster 1.

22-3008\$115.00

Minolta Light Meter Holder

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

23-2028\$95.00



Sinar Booster 1

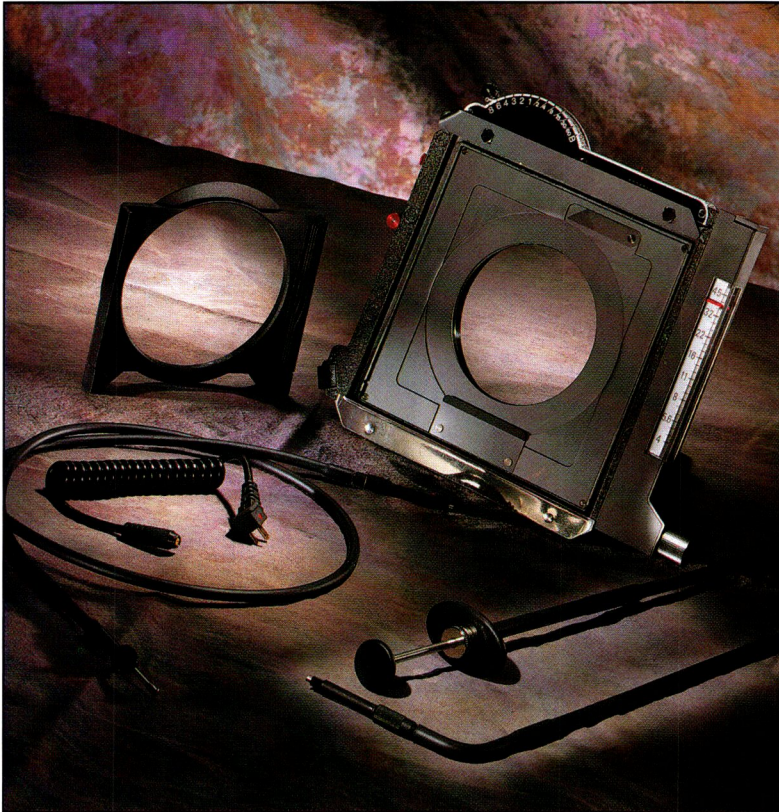
- Film plane metering probe for the Minolta Flashmeter V, IV or III, and for the Broncolor FCM 2 (with adapter).
- Measures continuous and strobe light.
- Reads down to .0062 lux (continuous) / .0049 lux (strobe.)
- Long enough to reach all areas of a 4x5, 5x7 or 8x10 metering back.
- Window on the tip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

22-1025\$1140.00

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Sinar

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.....\$2399.00

Prices and specifications are subject to change without notice.

Cable Release

Replacement cable release for the Auto Aperture Shutter.

22-2002.....\$140.00

Automatic Cable

Replacement cable, connects the shutter to the plateholder so that the film holder automatically closes the shutter.

22-2003.....\$223.00

Coupling Piece

Used to connect two auto cables when you have a long bellows extension.

22-2007.....\$69.00

Bayonet Piece

Replacement piece to attach the automatic cable to the camera back.

22-2004.....\$54.00

Automatic Adapter

For use on 8x10 back. Permits use of Lisco holders with round corners.

22-2006.....\$39.00

Sync Lead Adapter

Replacement coiled adapter to connect flash cables to the Digital and Auto Aperture Shutters.

22-3005.....\$71.00

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.....\$63.00



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 84.)

Expolux System

Expolux System

The Sinar Expolux system is a state of the art, completely integrated shutter and metering system. It was designed to offer complete reliability, ease of use and an easily expandable set of features.

Expolux Shutter

- Electronically-controlled behind the lens shutter designed to deliver the ultimate in accurate, reliable, vibration-free operation.
- Used with DB-mounted lenses, so all your lenses share a single shutter for complete exposure consistency.
- Exposure range from 10 hours to 1/500sec., in increments as fine as 1/10 f/stop.
- Aperture range is f/4 to f/128.

Expolux Monitor.

- The "brains" of the Expolux system
- Complete control over all shutter and metering functions.
- Large, menu-driven LCD-display
- Software knows which lens you have mounted, and takes into account which film you are using when calculating your exposures.
- Advanced program functions include mixed light metering, 'info' reference metering, flash trigger delay, and double exposure lock.
- Interchangeable software card allows you to add new capabilities to your system just by upgrading to a newer version of the Expolux software.
- **New** Macintosh interface eliminates the Monitor in digital imaging applications.

Expolux Booster.

- Reads flash, continuous or mixed light directly in the film plane, for the most precise readings possible.
- Can be used with any meter-backed Sinar.
- Makes the Expolux system the ultimate measured photography tool, allowing you to quickly gather detailed information on the contrast range of your image.
- Reads flash, continuous or mixed light directly in the film plane, for the most precise readings possible.

Expolux Power Supply

- AC power supply for in-studio use

Expolux Power Converter

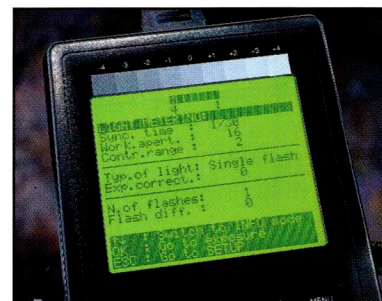
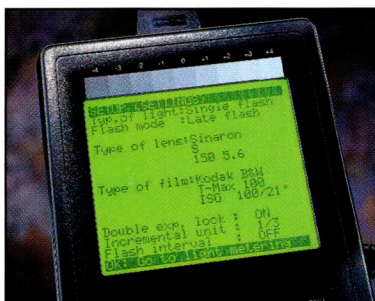
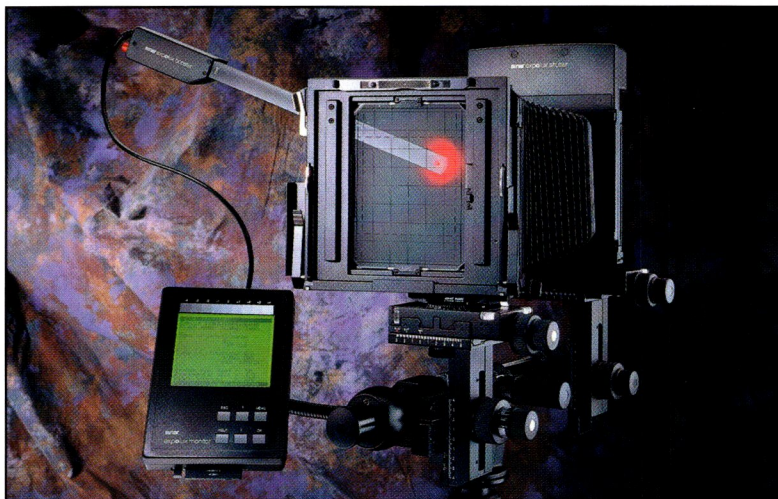
- Battery-operated power supply for location use.

Expolux System Complete

Includes:

Expolux Shutter	Expolux Monitor Holder
Expolux Monitor	Expolux Booster
Expolux Power Supply	All Cables
Expolux Card	

22-4000.....\$10,828.00



"Easy Mode" Package

An Expolux system without light-metering capability. Software runs in the simplified "Easy Mode." The Easy Mode package can be upgraded to a full Expolux system by adding an Expolux booster.

22-4005\$9504.00

Expolux Packages for Digital Photography

For use with Leaf, Kodak and other strobe-capable digital backs.

See page 24

Code Plates

Code plates mount to the corner of the lensboard and allow the shutter to automatically detect the lens type. Mount one to each lens you use with an Expolux.

Contact our Service Department

Expolux Components

Shutter

22-4010\$5579.00

Monitor

22-4020\$3389.00

Power Supply

22-4015\$1026.00

Expolux Card

22-4022\$258.00

Monitor Holder

22-4030\$246.00

Monitor-Shutter Cable

22-4026\$118.00

Monitor-Power Supply Cable

22-4027\$158.00

Expolux Release Cable

22-4021\$188.00

Expolux Booster

22-4025\$1426.00

Sinaron Lenses

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.



- 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.

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.

Macro-Sinaron

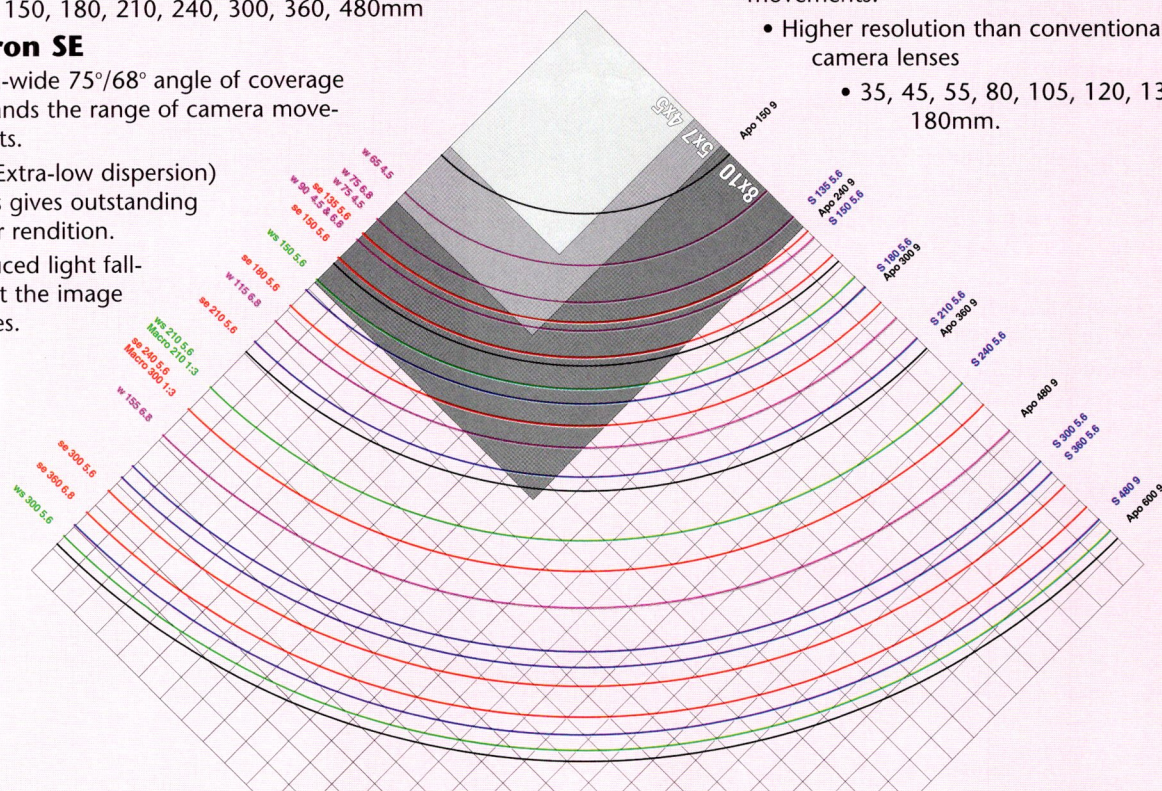
- Optimized for extreme reproduction ratios.
- High speed for easy focusing at extreme extensions.
- 180mm

Apo Sinaron

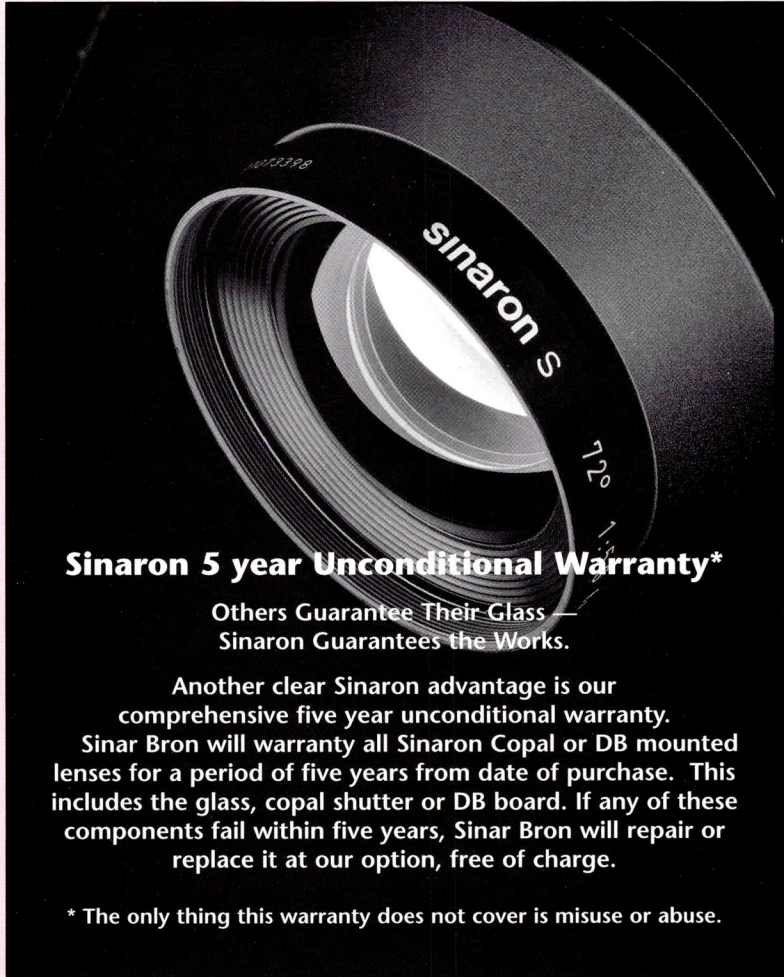
- Superior performance at 1:1
- Image quality maintained at smaller ratios for complete flexibility.
- Long focal lengths for increased camera-subject distance.
- Four element symmetrical design.
- 150, 240, 300, 360, 480mm

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 movements.
 - Higher resolution than conventional view camera lenses
 - 35, 45, 55, 80, 105, 120, 135 & 180mm.



Sinaron Lenses



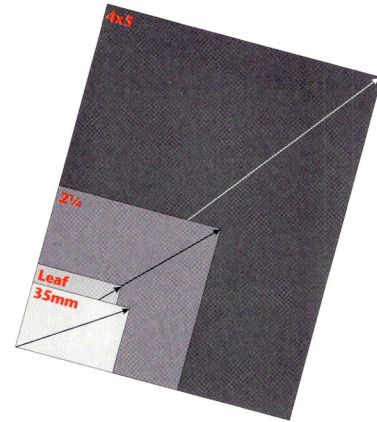
Sinaron 5 year Unconditional Warranty*

Others Guarantee Their Glass —
Sinaron Guarantees the Works.

Another clear Sinaron advantage is our comprehensive five year unconditional warranty.

Sinar Bron will warranty all Sinaron Copal or DB mounted lenses for a period of five years from date of purchase. This includes the glass, copal shutter or DB board. If any of these components fail within five years, Sinar Bron will repair or replace it at our option, free of charge.

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



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	

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

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(800)
456-0203

Sinaron Lenses

Lens type	mm	Angle of coverage	Copal Shutter	Filter thread	Image circle @ f/22	Shifts in mm at infinity and f/22						
						4x5		5x7		8x10		
Sinaron-we f/4.5	45	110°	0	58	131mm	-	-	-	-	-	-	
	55	110°	0	67	163mm	5	7	-	-	-	-	
Sinaron-w f/4.5	65	105°	0	58	170mm	10	12	-	-	-	-	
	75	105°	0	67	195mm	25	29	-	-	-	-	
	90	105°	1	82	236mm	48	54	16	20	-	-	
Sinaron-w f/6.8	90	102°	0	67	221mm	40	45	7	9	-	-	
	115	104°	1	82	291mm	77	85	47	57	-	-	
	155	102°	1	105	382mm	125	133	95	110	42	50	
Sinaron-s f/5.6	135	72°	0	40.5	200mm	28	32	-	-	-	-	
	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	-	-	
	240	72°	3	77	350mm	108	116	79	92	23	28	
	300	72°	3	86	425mm	139	148	110	125	58	67	
f/6.8	360	64°	3	105	435mm	152	161	123	139	72	83	
	480	56°	3	112	480mm	175	184	147	163	97	109	
Sinaron-se f/5.6	135	75°	0	49	208mm	32	37	-	-	-	-	
	150	75°	0	49	231mm	45	50	12	16	-	-	
	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 f/5.6	210	80°	3	105	352mm	109	117	80	94	24	29	
	300	80°	3	127	490mm	180	190	152	169	102	115	
Macro-Sinaron f/5.6	180	70°	1	67	302mm	83	90	52	63	-	-	1:5
		60°			415mm	142	150	113	128	61	70	1:1
Apo-Sinaron f/9	240	48°	1	49	212mm	35	39	-	-	-	-	
	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	141	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.

Sinaron Lenses

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

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

Copal Mount Lenses

Lens Type	mm	DB Conversion Kits		DB Mount Lenses		Copal Mount Lenses			
		Prod. No.	Price	Prod. No.	Price	Prod. No.	Lensboard Mounting and Case	Price	
Sinaron we*	45 f/4.5C	N/A		N/A		24-7208	\$115.00 N/C	\$1822.00	
	55 f/4.5C	N/A		N/A		24-7233	\$115.00 N/C	\$1890.00	
Sinaron w*	65 f/4.5	24-1101	\$625.00	24-3101a	\$1662.00	24-7201	\$115.00 N/C	\$1662.00	
	75 f/4.5	24-1102	\$625.00	24-3102	\$1748.00	24-7202	\$115.00 N/C	\$1748.00	
	90 f/4.5	24-1103	\$625.00	24-3103	\$1981.00	24-7203	\$115.00 N/C	\$1981.00	
	90 f/6.8	24-1105	\$625.00	24-3105	\$1335.00	24-7205	\$115.00 N/C	\$1335.00	
	115 f/6.8	24-1106	\$625.00	24-3106	\$2027.00	24-7206	\$115.00 N/C	\$2027.00	
	155 f/6.8	N/A		N/A		24-7207	\$115.00 N/C	\$4220.00	
	Sinaron s	135 f/5.6	24-1110	\$625.00	24-3110	\$932.00	24-7210	\$115.00 N/C	\$920.00
150 f/5.6		24-1111	\$625.00	24-3111	\$944.00	24-7211	\$115.00 N/C	\$944.00	
180 f/5.6		24-1112	\$625.00	24-3112	\$1188.00	24-7212	\$115.00 N/C	\$1188.00	
210 f/5.6		24-1113	\$625.00	24-3113	\$1294.00	24-7213	\$115.00 N/C	\$1294.00	
240 f/5.6		24-1114	\$813.00	24-3114	\$1981.00	24-7214	\$115.00 N/C	\$1981.00	
300 f/5.6M		24-1115	\$1150.00	24-3115	\$3112.00	24-7215	\$115.00 N/C	\$3112.00	
360 f/5.6M		24-1116	\$1150.00	24-3116	\$3485.00	24-7216	\$115.00 N/C	\$3485.00	
480 f/5.6M		24-1117	\$1150.00	24-3117	\$4255.00	24-7217	\$115.00 N/C	\$4255.00	
Sinaron se		135 f/5.6	24-1130	\$625.00	24-3135	\$1084.00	24-7235	\$115.00 N/C	\$1084.00
		150 f/5.6	24-1131	\$625.00	24-3136	\$1130.00	24-7236	\$115.00 N/C	\$1130.00
	180 f/5.6	24-1132	\$625.00	24-3137	\$1363.00	24-7237	\$115.00 N/C	\$1363.00	
	210 f/5.6	24-1133	\$625.00	24-3138	\$1550.00	24-7238	\$115.00 N/C	\$1550.00	
	240 f/5.6	24-1134	\$813.00	24-3139	\$2868.00	24-7239	\$115.00 N/C	\$2868.00	
	300 f/5.6M	24-1135	\$1150.00	24-3140	\$3742.00	24-7240	\$115.00 N/C	\$3742.00	
	360 f/6.8M	24-1136	\$1150.00	24-3141	\$4197.00	24-7241	\$115.00 N/C	\$4197.00	
	Sinaron ws	210 f/5.6	24-1119	\$1150.00	24-3119	\$2319.00	24-7219	\$115.00 N/C	\$2319.00
300 f/5.6		N/A		N/A		24-7220	\$115.00 N/C	\$4045.00	
Macro-Sinaron	180 f/5.6	24-1120	\$625.00	24-3123	\$2004.00	24-7223	\$115.00 N/C	\$2004.00	
Apo-Sinaron	240 f/9M	24-1126	\$926.00	24-3126	\$1654.00	24-7226	\$115.00 N/C	\$1654.00	
	300 f/9M	24-1127	\$926.00	24-3127	\$1865.00	24-7227	\$115.00 N/C	\$1865.00	
	360 f/9M	24-1128	\$1150.00	24-3128	\$2576.00	24-7228	\$115.00 N/C	\$2576.00	
	480 f/9M	24-1129	\$1150.00	24-3129	\$3043.00	24-7229	\$115.00 N/C	\$3043.00	

*Center-Graduated Filters for Wide Angle Lenses

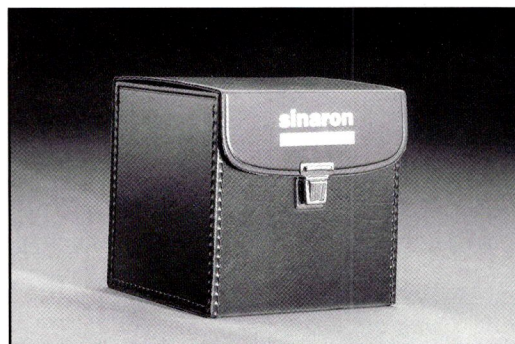
To compensate for edge falloff at wider apertures and faster shutter speeds.

24-1150	GRADUATED FILTER M67x0,75 for 55, 75, 90 6.8	\$513.00
24-1151	GRADUATED FILTER M82x0,75 for 90, 115	\$694.00
24-1152	GRADUATED FILTER M58x0,75 for 45, 65	\$418.00
24-1153	GRADUATED FILTER M105x1 for 155	\$1313.00

Lensboards and Conversion Kits

Lensboards

Blank	24-1001	\$68.00
#0	24-1048	\$91.00
#1	24-1049	\$91.00
#3	24-1050	\$91.00
Manual Override for DB Conversion add	24-1061	\$332.00
Recess Board #0	24-1052	\$332.00
Recess Board #00	24-1053	\$332.00
X800 Board with spacer (State lens type)	24-1051	\$240.00
Linhof Lensboard Adapter - Allows use of Linhof Technika mounted lenses on Sinar cameras.	24-1005	\$476.00
Hasselblad Body Adapter	23-7007	\$668.00
Lensboard Holder Prevents accidentally released lenses from falling off the standard.	24-1002	\$24.00



Lens Box

Keep your large format lenses safe whether they're on location or on the shelf. Accommodates most lenses with lensboards.

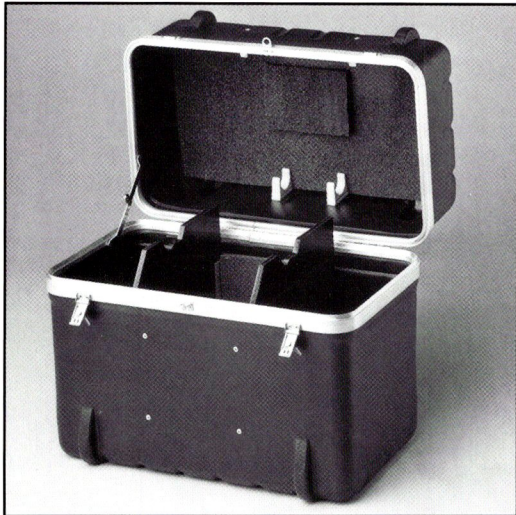
24-1003 \$24.00

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	N/A		Super Angulon 105° f 5.6	65	N/A		Nikkor SW f/4.5	75	24-1068	\$625.00
	75	24-1082	\$625.00		75	24-1021	\$625.00		90	24-1044	\$625.00
	90	24-1084	\$625.00		90	24-1022	\$625.00	f/8	90	24-1075	\$625.00
Grandagon f/6.8	75	24-1086	\$625.00	Super Angulon 100° f/8	75	24-1023	\$625.00	Nikkor W f/5.6	100	24-1069	\$625.00
	90	24-1088	\$625.00		90	24-1019	\$625.00		135	24-1037	\$625.00
	115	24-1090	\$625.00		120	24-1020	\$960.00		150	24-1038	\$625.00
	155	N/A			165				180	24-1039	\$625.00
Sironar-N f/5.6 72°	100	24-1014	\$625.00	Symmar -S 70° f/5.6	100	24-1024	\$625.00		210	24-1040	\$625.00
	135	24-1013	\$625.00		120	24-1073	\$625.00	Nikkor W f/6.3	240	24-1041	\$813.00
	150	24-1015	\$625.00		135	24-1025	\$625.00		300	24-1042	\$1150.00
	180	24-1016	\$625.00		150	24-1018	\$625.00	Nikkor M f/9	300	24-1046	\$960.00
	210	24-1017	\$625.00		180	24-1026	\$625.00		450	24-1063	\$1150.00
	240	24-1029	\$813.00		210	24-1027	\$625.00	Nik. AM-ED f5.6120		24-1070	\$625.00
	300	24-1030	\$1150.00		240	24-1028	\$813.00				
f/6.8 64°	360	24-1031	\$1150.00		300	24-1007	\$1150.00				
f/8.4 56°	480	N/A		* f/6.8 70°	360	24-1008	\$1150.00				
Makro-Sironar f/5.6	210	24-1066	\$813.00	* f/8.4 56°	480	24-1009	\$1150.00				
	300	24-1067	\$1150.00	Sup. Symmar HM 80° f 5.6	210	24-1077	\$813.00				
Apo-Sir. MC f/5.6	150	24-1091	\$625.00	Apo-Symmar f 5.6	120	24-1093	\$625.00				
	210	24-1092	\$1150.00		150	24-1094	\$625.00				
Apo-Ronar f/9	150	24-1080	\$625.00		210	24-1095	\$625.00				
	240	24-1032	\$960.00								
	300	24-1033	\$960.00								
	360	24-1034	\$1150.00								
	420	24-1035	\$1150.00								
	480	24-1036	\$1150.00								
	600	N/A									

Many lenses not shown here can also be DB mounted. If you don't see your lens here, contact our Service Department for more information.

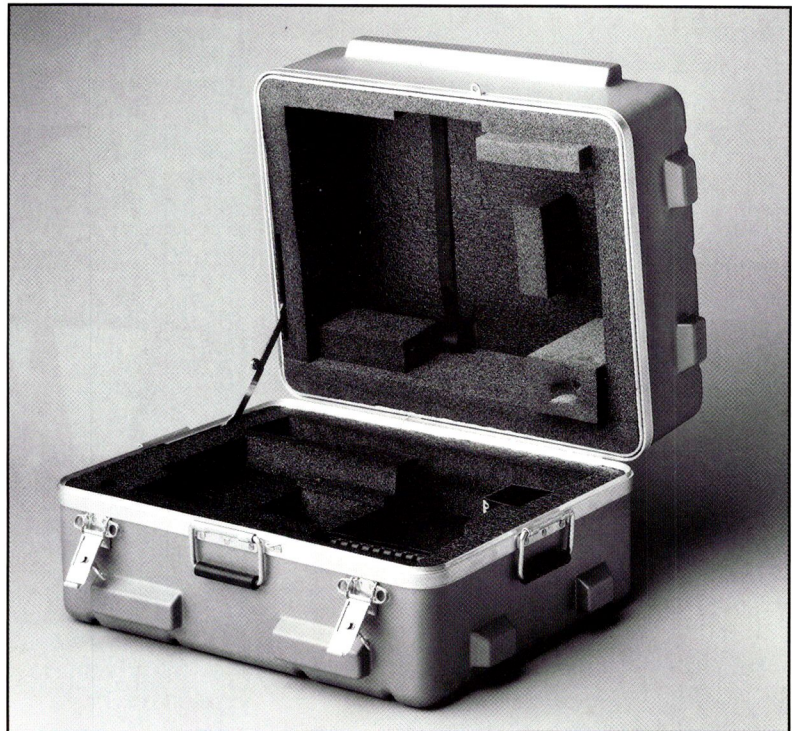
* DB conversion of lenses marked with an asterisk may not be possible. Contact Sinar Bron for details.



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 5 lbs.

23-5021\$439.00



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\$602.00

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.

The exterior has a light weight aluminum closure, and a padded handle with suitcase-style latches. The locks are designed to prevent the case from being opened upside down. Outside dimensions are 21" L x 13" W x 8" D. Weight 2.5 lbs.

23-5026\$223.00



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\$77.00



Expolux Case

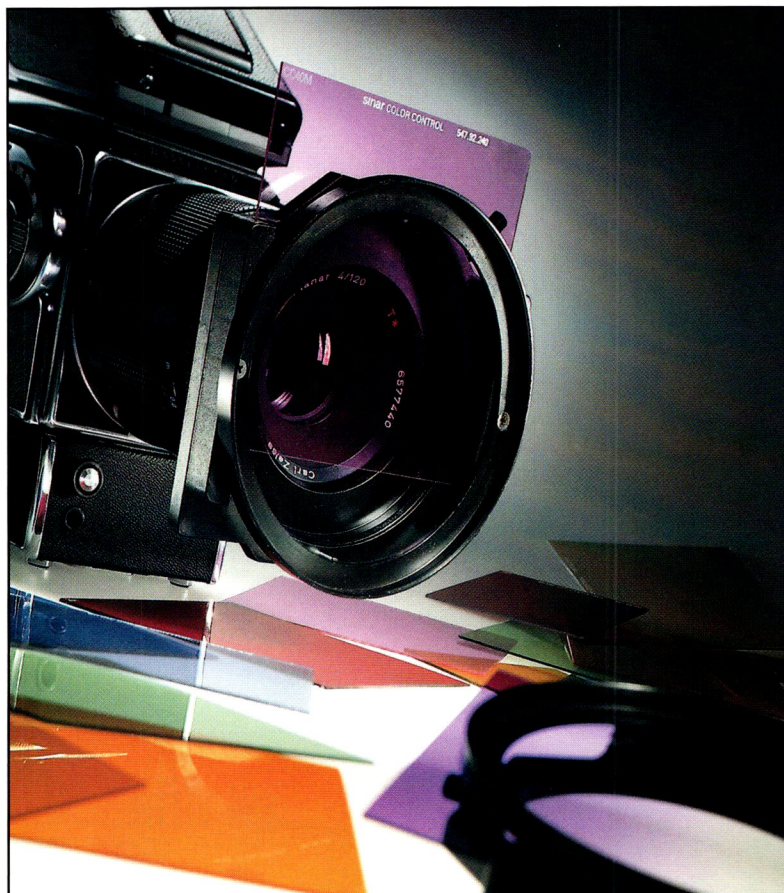
Designed to securely hold an entire Expolux Shutter system for transportation or storage. Measures 25x18x7".

23-5011\$240.00

Color Control Filter System

The SINAR COLOR CONTROL filter system is designed for the practical professional and meets all needs. The filters are made of a special synthetic resin that transmits more light than glass, yet has a lower refractive index.

Optically, SINAR COLOR CONTROL filters match the best dyed-in-the-mass glass filters - but without the latter's weight, fragility, and cost problems. Moreover, dyeing optical glass is restricted to just a few hues. SINAR COLOR CONTROL filters, on the other hand, rely on a new mass-dyeing process for any hue and density.



SINAR COLOR CONTROL FILTERS

- Are optically plane parallel.
- Are lightweight, virtually unbreakable, and scratch-resistant.
- Offer precise, edge-to-edge uniform density and coloration.
- Are dyed-in-the-mass and therefore show consistent optical characteristics.
- Precisely meet Kodak absorption standards.
- Fit ALL camera systems of ALL sizes.
- Are equally usable on video and movie cameras.

COLOR CORRECTION	100 mm	75 mm	COLOR CORRECTION	100 mm	75 mm	COLOR CORRECTION	100 mm	75 mm
	4 inch	3 inch		4 inch	3 inch		4 inch	3 inch
	\$55.00	\$24.00		\$55.00	\$24.00		\$55.00	\$24.00
CYAN 025	59-2103	59-3103	YELLOW 025	59-2303	59-3303	GREEN 025	59-2503	59-3503
CYAN 05	59-2105	59-3105	YELLOW 05	59-2305	59-3305	GREEN 05	59-2505	59-3505
CYAN 10	59-2110	59-3110	YELLOW 10	59-2310	59-3310	GREEN 10	59-2510	59-3510
CYAN 15	59-2115	59-3115	YELLOW 15	59-2315	59-3315	GREEN 15	59-2515	59-3515
CYAN 20	59-2120	59-3120	YELLOW 20	59-2320	59-3320	GREEN 20	59-2520	59-3520
CYAN 30	59-2130	59-3130	YELLOW 30	59-2330	59-3330	GREEN 30	59-2530	59-3530
CYAN 40	59-2140	59-3140	YELLOW 40	59-2340	59-3340	GREEN 40	59-2540	59-3540
CYAN 50	59-2150	59-3150	YELLOW 50	59-2350	59-3350	GREEN 50	59-2550	59-3550
MAGENTA 025	59-2203	59-3203	RED 025	59-2403	59-3403	BLUE 025	59-2603	59-3603
MAGENTA 05	59-2205	59-3205	RED 05	59-2405	59-3405	BLUE 05	59-2605	59-3605
MAGENTA 10	59-2210	59-3210	RED 10	59-2410	59-3410	BLUE 10	59-2610	59-3610
MAGENTA 15	59-2215	59-3215	RED 15	59-2415	59-3415	BLUE 15	59-2615	59-3615
MAGENTA 20	59-2220	59-3220	RED 20	59-2420	59-3420	BLUE 20	59-2620	59-3620
MAGENTA 30	59-2230	59-3230	RED 30	59-2430	59-3430	BLUE 30	59-2630	59-3630
MAGENTA 40	59-2240	59-3240	RED 40	59-2440	59-3440	BLUE 40	59-2640	59-3640
MAGENTA 50	59-2250	59-3250	RED 50	59-2450	59-3450	BLUE 50	59-2650	59-3650

Sinar Color Control Cleaning Kit

SCC filters should only be cleaned with this specially formulated solution. Use of other cleaning agents may fog

the filter. Kit contains solution and cleaning cloths.

51-0079\$47.00

Color Control Filter System

COLOR TEMPERATURE CORRECTION	100 mm 4 inch	75mm 3 inch	BLACK AND WHITE	100mm 4 inch	75mm 3 inch	GRADUATES	100mm 4 inch
CTC 80A	59-2801	59-3801	# 8 YELLOW	59-2703	59-3703	YELLOW	59-2903
CTC 80B	59-2802	59-3802	#25 RED	59-2704	59-3704	BLUE	59-2906
CTC 80C	59-2803	59-3803	#1A SKYLIGHT	59-2710	59-3710	CHOCOLATE	59-2910
CTC 80D	59-2804	59-3804	#2B UV	59-2715	59-3715	SEPIA	59-2911
			#16 ORANGE	59-2720	59-3720	TOBACCO	59-2912
CTC 81	59-2810	59-3810	#38 LIGHT BLUE	59-2725	59-3725	VIOLET	59-2913
CTC 81A	59-2811	59-3811	#47B DARK BLUE	59-2726	59-3726	CORAL	59-2914
CTC 81B	59-2812	59-3812	#11 YEL./GREEN	59-2730	59-3730	PINK	59-2915
CTC 81C	59-2813	59-3813	#58 GREEN	59-2705	59-3705	TWILIGHT	59-2916
CTC 81D	59-2814	59-3814				SUNSET	59-2917
CTC 81EF	59-2815	59-3815					
			NEUTRAL DENSITY	4 inch \$124.00	3 inch \$48.00		\$144.00
CTC 82	59-2820	59-3820	0.1 N.D. (1/3 stop)	59-2010	59-3010	0.3 N.D. (0-1 stop)	59-2930
CTC 82A	59-2821	59-3821	0.2 N.D. (2/3 stop)	59-2020	59-3020	0.6 N.D. (0-2 stop)	59-2960
CTC 82B	59-2822	59-3822	0.3 N.D. (1 stop)	59-2030	59-3030	0.9 N.D. (0-3 stop)	59-2990
CTC 82C	59-2823	59-3823	0.6 N.D. (2 stop)	59-2040	59-3040		
			0.9 N.D. (3 stop)	59-2050	59-3050		
CTC 85	59-2850	59-3850					
CTC 85B	59-2852	59-3852					
CTC 85C	59-2853	59-3853					
			4" POLARIZER \$939.00				
			Swing-in; mount on filter rod	59-7027			
						SPECIAL EFFECT	4 inch \$78.00
						SOFT FOCUS	59-2751
						DIFFUSER 1D	59-2752
						DIFFUSER 3D	59-2770
						DIFFUSER 6D	59-2757
						FOG	59-2753
						STAR 4MM 4 PT.	59-2756
						STAR 4MM 6 PT.	59-2754
						STAR 4MM 8 PT.	59-2755
							3 inch \$40.00
							59-3751
							59-3752
							59-3770
							59-3757
							59-3753
							59-3756
							59-3754
							59-3755

100mm Color Meter Kit

The Sinar Color Meter Kit includes all filters necessary to make color corrections based on readings from the Broncolor FCC or the Minolta Color Meter. It also includes a filter wallet for storage and a Sinar Color Control Filter cleaning kit.

1- 100mm Wallet

1- Filter Cleaning Kit

12- Color Correction Filters:

Magenta, Green each in 6 Densities (0.05, 0.10, 0.20, 0.30, 0.40)

17- Color Temperature Filters:

Blue (80B, 80C, 80D, 82, 82A, 82B, 82C)

Orange (81, 81A, 81B, 81C, 81D, 81EF, 85, 85C)

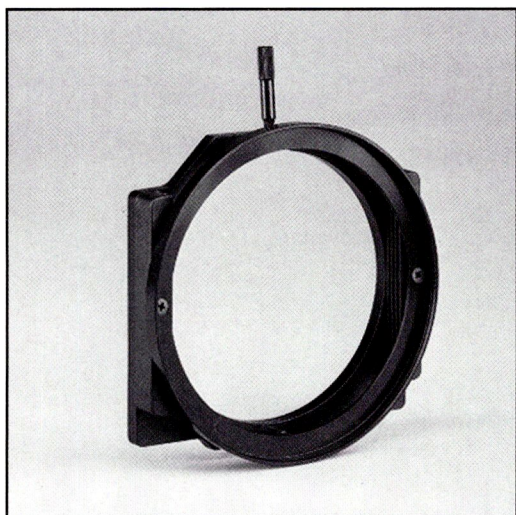
51-2200.....\$1198.00



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

Sinar

Color Control Filter System



Filterholder 100

Holds three 100mm (4 inch) filters. Attaches to lens threads with an adapter ring, or to rear element with behind the lens adapter. Includes 3-25mm lens shades.
55-2751\$283.00

Repl. Tube 25mm for Filterholder 100.

55-2010\$23.00

Cap for Filterholder 100

55-2750\$16.50

Filterholder-1

Holds one 125mm (5 inch) filter. Attaches to lens threads with adapter ring. Can take 4x5 bellows or Bellows Hood Mask II on the front, and allows them to rotate 360°.

55-1711\$306.00

Filterholder-2

Same as Filterholder-1, for two filters.

55-1721\$337.00

Filterholder for Behind the Lens Shutters

Allows you to mount three 100mm filters (excluding graduates) inside the camera when using the Auto Aperture, Digital or Expolux behind-the-lens shutters.

58-3000\$63.00

Adapter Rings

for Filterholder 100

Size	Cat. #	Price
40.5mm	58-2040	\$71.00
49mm	58-2049	\$71.00
52mm	58-2052	\$71.00
55mm	58-2055	\$71.00
58mm	58-2058	\$71.00
62mm	58-2062	\$71.00
67mm	58-2067	\$71.00
72mm	58-2072	\$71.00
77mm	58-2077	\$71.00
82mm	58-2082	\$71.00
86mm	58-2086	\$71.00
Rollei	58-2271	\$138.00
Hass.-70	58-2272	\$138.00
Hass.-60	58-2270	\$138.00
Hass.-50	58-2269	\$138.00

Behind the Lens Adapters
Select by rear lens element diameter

42mm for 31.5-42mm	58-3042	\$105.00
60mm for 42.1-60mm	58-3060	\$105.00
80mm for 60.1-80mm	58-3080	\$105.00

for Filterholder 1/2

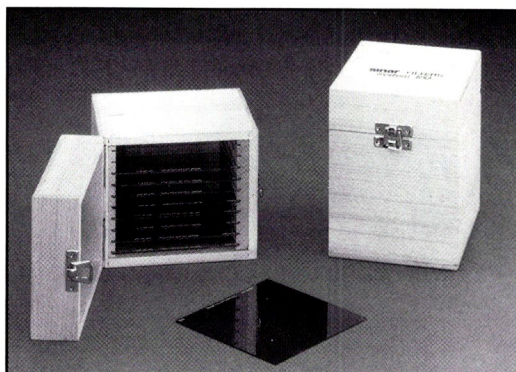
Size	Cat. #	Price
40.5mm *	58-1040	\$144.00
49mm *	58-1049	\$144.00
52mm *	58-1052	\$144.00
55mm *	58-1055	\$144.00
58mm *	58-1058	\$144.00
67mm *	58-1067	\$144.00
72mm *	58-1072	\$144.00
77mm *	58-1077	\$144.00
82mm *	58-1082	\$144.00
86mm *	58-1086	\$144.00
95mm *	58-1095	\$144.00
100mm	58-1100	\$144.00
105mm	58-1105	\$144.00
110mm	58-1110	\$144.00
112mm	58-1112	\$144.00
120mm	58-1120	\$144.00
127mm	58-1127	\$144.00

* These rings may also be used with the 100mm filter system, but they may cause some inconvenience because of their larger external diameter.

Graduated Filter Box

Holds 10 100mm graduated filters.

55-1770\$88.00



Wood Filter Box

This lightweight container holds 10 4-inch SCC filters, except for graduates.

55-1769\$74.00

Filter Wallet

Holds 30 100mm / 4 inch filters.

55-2772\$81.00

**TOLL FREE
ORDER LINE
(800)
456-0203**

FOBA






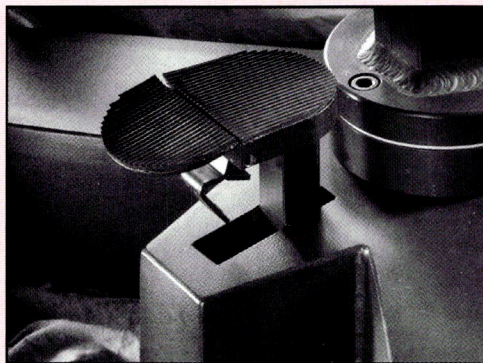
DSS-GAMMA

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 8'; can be cut down (\$50 charge) to whatever height you need.
 - 36" crossarm length
 - Weight 158 lbs.
- 31-0190\$2795.00

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

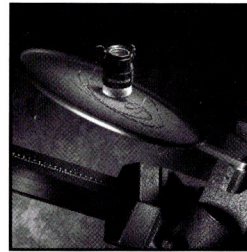
**New-style
single pedal
base lock**



**Conveniently
placed lock
knobs for
rise, shift
and rotation**



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.....\$65.00

Recommended Camera Heads

Foba Superball

33-0500\$393.00

Mini-Superball

33-0400\$209.00

Sinar Pan-Tilt head

23-6010\$620.00

Foba Pan-tilt Head

31-0119\$776.00

CALL
❖
FOR DEALERS

❖
ORDERS

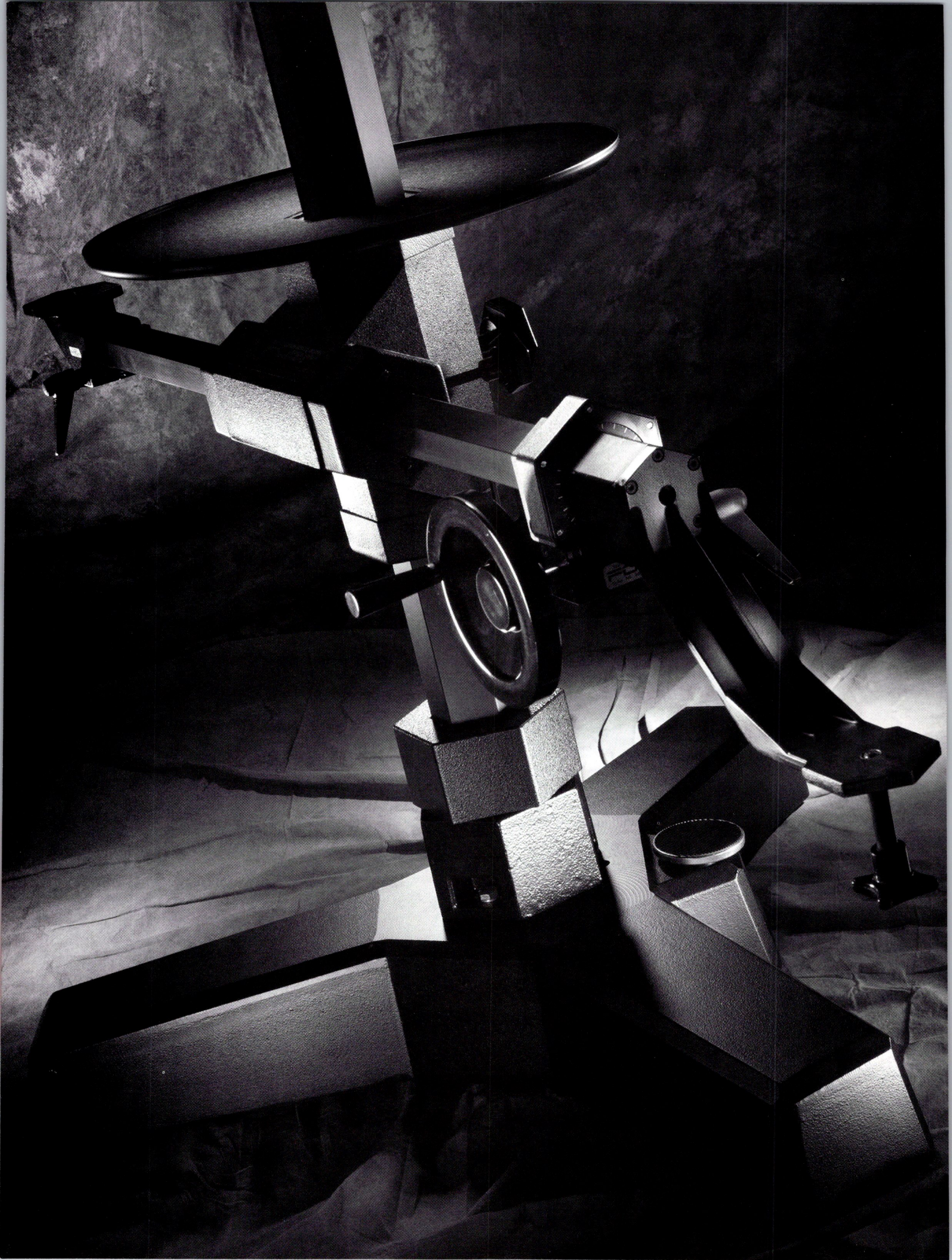
❖
LITERATURE

❖
INFORMATION

❖
SEMINARS

❖
(800)
456-0203

TECHNICAL



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\$2795.00

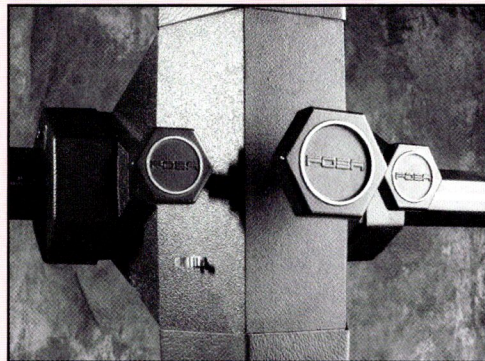
ASABA Counterweight 7 lbs

Additional counter weight for use with heavier cameras.

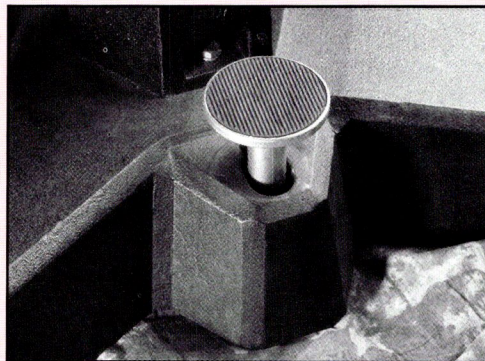
31-0144\$85.00

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

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



Fast single-pedal locking mechanism

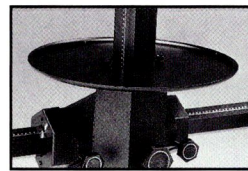


Camera Tilt Head

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

Camera Tilt Head for Gear Head

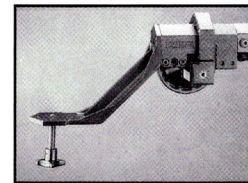
Used if a tilt head/gear head rather than angle bracket/gear head is desired. Requires 31-0117. 31-0127.....\$310.00



Accessory Tray

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

31-0143.....\$180.00



Angle Bracket

Used to offset the weight of heavy cameras for smooth tilt operation on either the gear head or crossarm.

31-0111\$477.00



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



Rotating Column Flange

Provides ASABA stands with center-column rotation. 31-0146\$495.00

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.

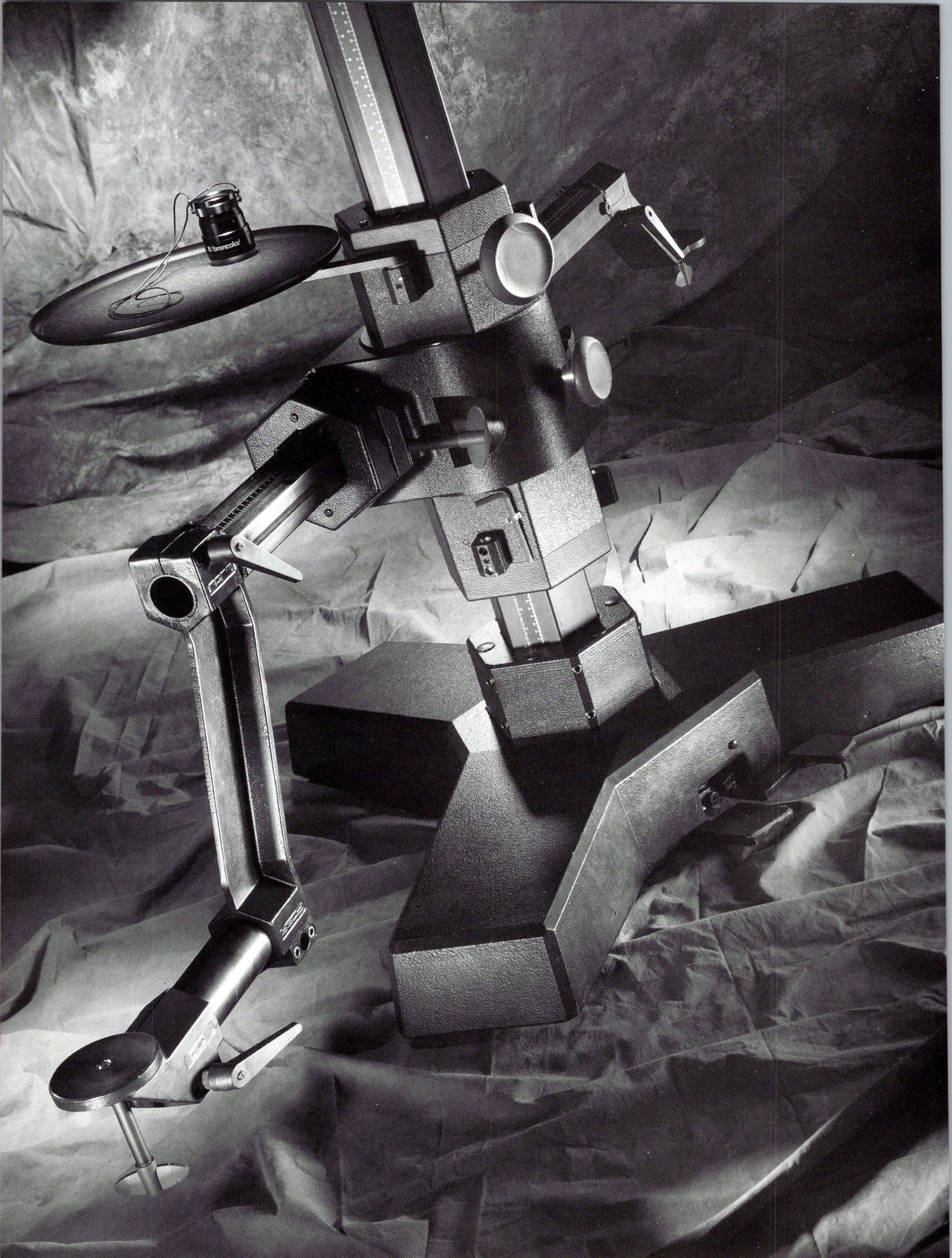
31-0175\$690.00

Extension Arms

The arm adds 23" to the reach of your stand.

31-0135\$289.00

L
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S
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DSS-ALPHA Camera Stand

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

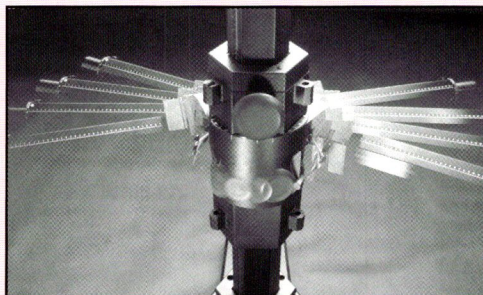
31-0180\$5599.00

ALPHA Base Extension

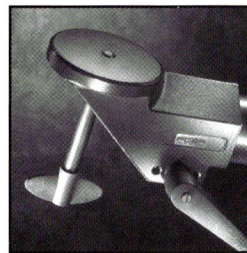
Widens the base for added stability on ALPHA stands ordered with heights greater than 10 feet.

31-0178\$851.00

**New 360°
calibrated
crossarm
rotation**



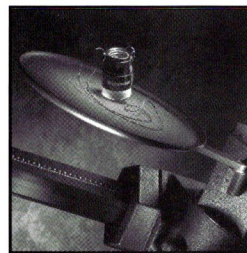
**New
effortless
base locking
mechanism**



ALPHA Camera Tilt Head

Standard camera platform for the end of the crossarm. Ideal for use with a Sinar Pan-Tilt head or Foba pan head.

31-0171\$396.00

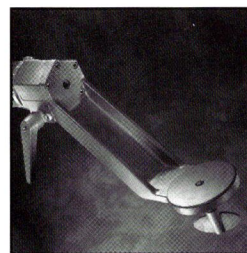


ALPHA Accessory Tray

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.

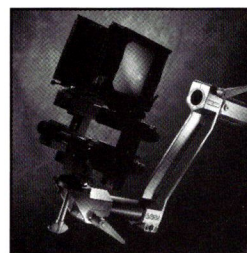
31-0172\$218.00



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\$1258.00

ALPHA Counterweight

11 lb. additional weight helps balance the stand's vertical adjustment for heavier cameras.

31-0110\$137.00

F O B A

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:

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

Mini Superball

33-0400\$209.00

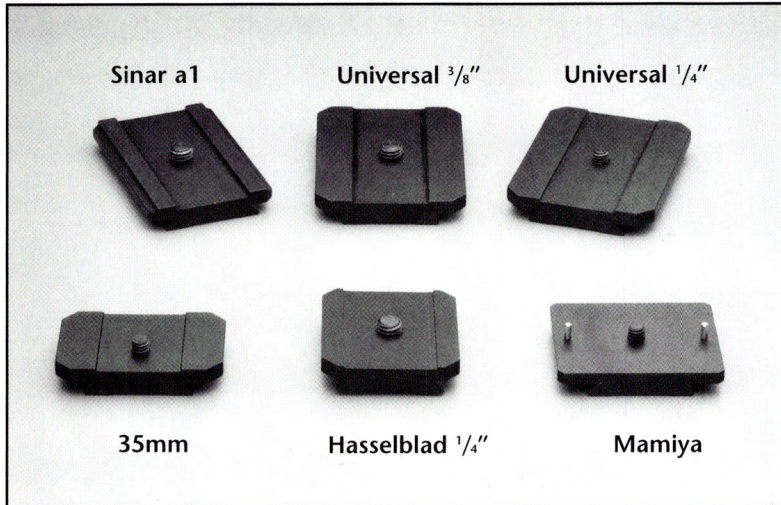
Mini Superball with quick release head

33-0404\$255.00

SINAR BRON ONLINE
WWW.SINARBRON.COM

OR E-MAIL: INFO@SINARBRON.COM

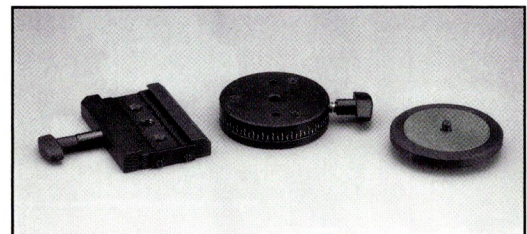
Superball Ball Heads



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 3/8" and 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

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\$225.00

Panoramic Base for Mini-Superball

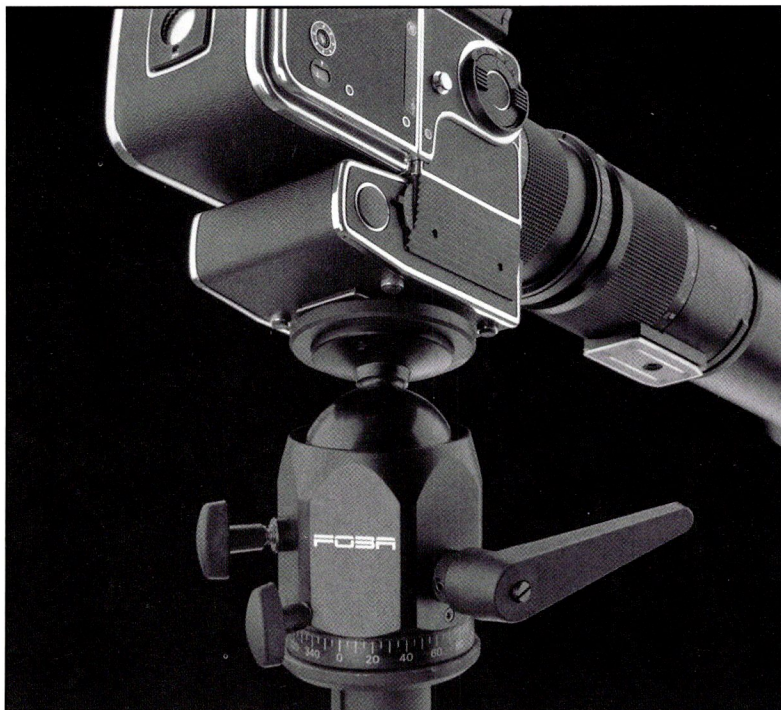
Provides calibrated 360° base rotation for either Mini-Superball.

33-0519\$141.00

Quick Release Plates

Type	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.

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.

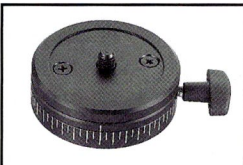
31-0123.....\$525.00



Panoramic Adapter

The panoramic adapter is a 360° rotatable collar featuring both 3/8" and 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 3-dimensional flexibility.

31-0118.....\$959.00



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



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.

31-0137\$1350.00

Tripod Spike, ea.

31-0107\$25.50

Rubber Foot, ea.

31-0124\$13.25

**CALL
FOR THE DEALER
NEAREST YOU
(800)
456-0203**

Combitube System

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

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

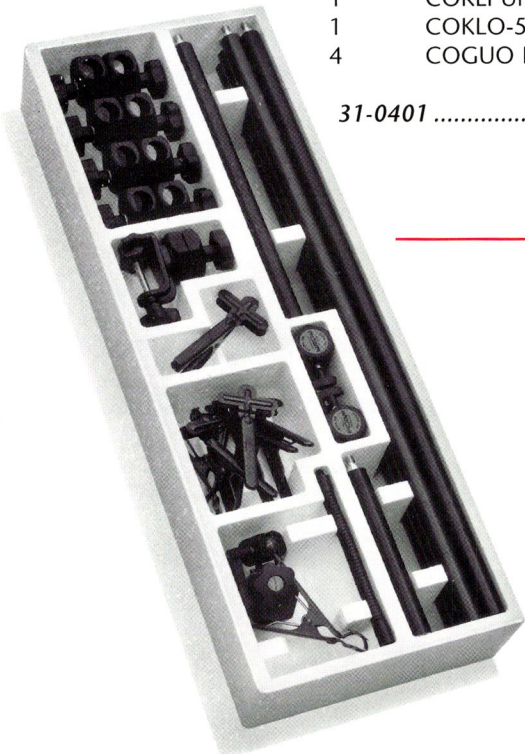
31-0400\$1826.00



MIDI Combitube Kit

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

31-0401\$1127.00



MINI Combitube Kit

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

31-0402\$787.00

FOBA

Combitube System



Combitube

The heart of the Foba Combitube system is the tube itself. The combitubes are made of aluminum and have a non-reflective matt black surface. The unique cone connectors allow you to connect an unlimited number of combitubes.

20 cm (8")	31-0216	\$29.50
40 cm (16")	31-0227	\$38.00
80 cm (32")	31-0236	\$46.00
160cm (64")	31-0230	\$76.00

Spring Tension Tube

31-0218.....\$161.00



CODIO

CODEA

COTRA

COTRI

New COGEU

COTRU

CEKLU

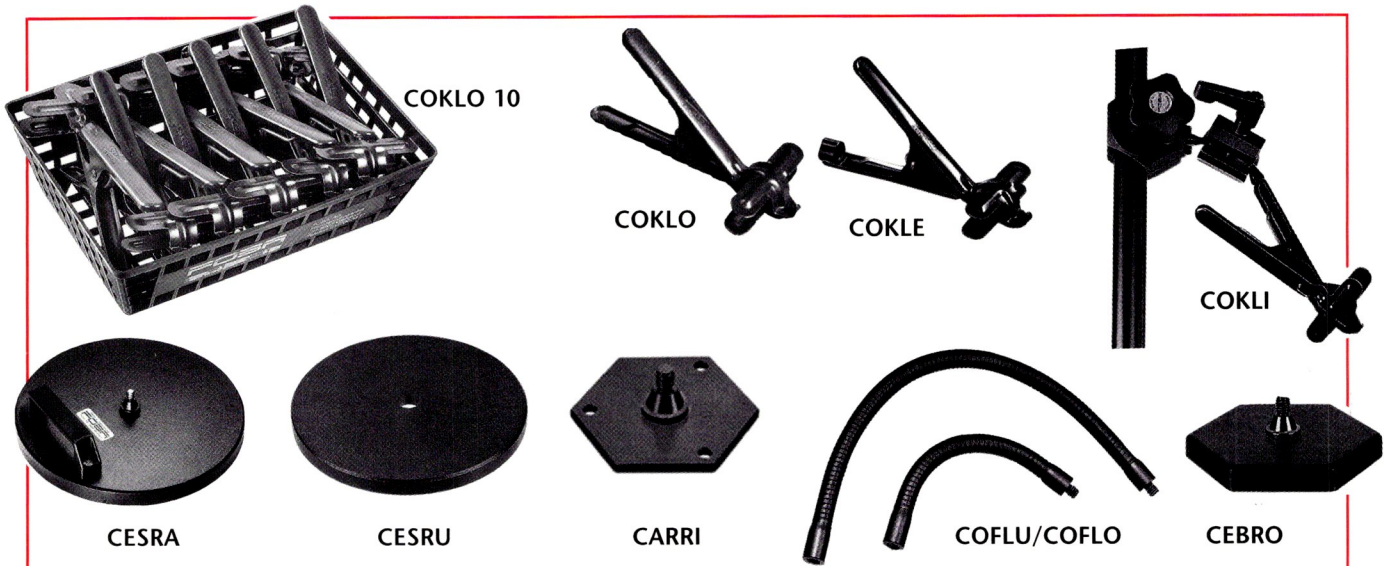
COGAE

COGAE

Connectors

CODIO	Cross-connector for two Combitubes.	31-0411	\$46.00
CODEA	Right-angle connector attaches one Combitube perpendicular to end of another.	31-0410	\$49.00
COTRA	Triple connector attaches two tubes together at the ends with a third tube in between, at right angles to the others.	31-0420	\$61.00
COTRI	Hinged right-angle connector can attach anywhere on existing Combitube assemblies without dismantling anything.	31-0421	\$79.00
COGEU	Similar to CODIO, with two freely adjustable halves to position tubes at any angle.	31-0423	\$132.00
COTRU	New 3-way corner connector attaches three Combitubes at right angles to each other. Perfect for table corners.	31-0263	\$81.00
CEKLU	Ball-socket adapter connects two Combitubes at any angle.	31-0406	\$75.00
COGAE	Universal clamp attaches a combitube to any surface or tube up to 45mm thick.	31-0413	\$90.00
COGAE	360° adjustable clamp locks down in any one of 52 positions. Clamp angle can be adjusted without loosening its grip.	31-0414	\$41.00

Combitube System



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 $\frac{3}{8}$ " 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



CEONO	Clampholder; ideal for mounting lampheads to combitube. Slides instantly by pulling the trigger, locks in place by releasing it.	31-0209	\$193.00
SAONO	Clampholder for STARO stand	31-0902	\$198.00
CESRO	32 lb., 4-leg caster base for Combitubes.	31-0407	\$412.00
COLRU	Caster for Combitube	31-0418	\$42.50
STARO	CESRO plus heavy-duty 30mm tube. Add SAONO to make complete stand. Ⓢ	31-0906	\$520.00
COSNO	26" Aluminum folding stand	31-0249	\$112.00
COSTO	36" aluminum folding stand.	31-0243	\$212.00

LORBER

Combitube System



CEONA



RODEE



CEHUA



CEHUO



CEPRO



CORPO



COLBE



CESTU



CESTO

Adapters

CEONA	Extension for CEONO Clampholder.	31-0907	\$89.00
RODEE	Lamphead adapter threaded for Combitubes. Ideal for mounting the Broncolor Primo head. Use w/ Broncolor Adapter for Pulso heads.	31-0300	\$27.50
CEHUA	Adapter sleeve, tapped $\frac{3}{8}$ "	31-0405	\$19.50
CEHUO	Adapter sleeve. Threaded for Combitube on the bottom, holds insert adapters (CEBLO, CEPRO, COLBE, CORPO) for quick release.	31-0207	\$22.50
CEPRO	Insert adapter with hook. Attaches via CEHUA/CEHUO sleeve.	31-0210	\$32.50
CORPO	Forked insert adapter designed to support Foba background core. Attaches via CEHUA/CEHUO sleeve.	31-0238	\$32.50
COLBE	Universal $\frac{3}{8}$ " insert adapter with wing nut. Attaches via CEHUA/CEHUO sleeve.	31-0417	\$16.50
CESTU	Camera adapter for Combitube, with $\frac{1}{4}$ " and $\frac{3}{8}$ " threads.	31-0409	\$77.00
CESTO	$\frac{3}{8}$ " rod with adjusting disk, to mount camera to end of Combitube.	31-0213	\$38.00
CEBLI	$\frac{5}{8}$ " lamphead adapter (not pictured.)	31-0422	\$25.50



COTIO



CEGEO



COGUO



CEGOE



COSAO

Miscellaneous Accessories

COTIO	Table plate, 19" diameter. For use with Combitube and base stand.	31-0419	\$147.00
CEGEO	6 lb. counterweight assembly for Combitube boom assemblies.	31-0204	\$119.00
GEGOU	(not pictured) 4.4 lb. counterweight for attachment directly to Combitube	31-0215	\$60.00
COGUO	Rubber foot for Combitube.	31-0415	\$5.50
CEGOE	4 lb. additional counterweight for CEGEO.	31-0205	\$68.00
COSAO	Combitube carrying bag.	31-0239	\$231.00

Background Stands

Movable Stand

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\$2345.00

Wallmounted Background Stand

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

31-0348\$1237.00

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

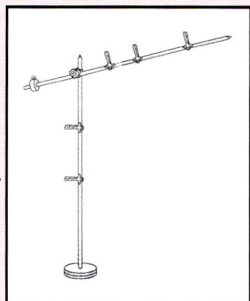
For paper 11.5' wide
31-0312\$170.00

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

Combitube Packages

Combitube Boom Stand

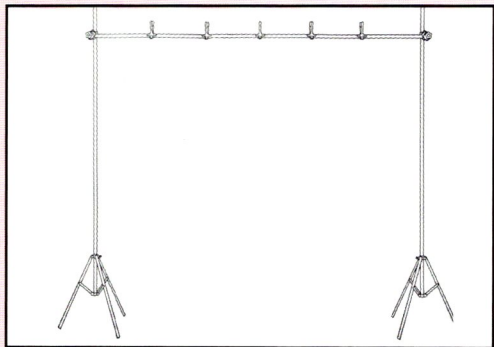
A modular, counter-weighted boom stand for suspending lights or reflectors over a set. You can modify this stand with accessories from the rest of the Combitube system.



Consists of:

- | | | |
|---|---------|---------------------|
| 1 | 31-0414 | COGEA connector |
| 1 | 31-0211 | CESRA base |
| 1 | 31-0257 | CESRU base weight |
| 4 | 31-0236 | CONRO AS combitubes |
| 1 | 31-0215 | CEGOU counterweight |
| 5 | 31-0222 | COKLO clamps |

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.

Consists 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:

- | | | |
|---|---------|----------------|
| 1 | 31-0404 | Base stand |
| 2 | 31-0236 | 2'9" Combitube |
| 1 | 31-0209 | Clampholder |
| 1 | 31-0422 | 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

COMBITUBE

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\$990.00

Aluminum Frame

31-0320\$678.00

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\$608.00

Replacement Plexi for DIMIU

31-0317\$390.00

Replacement Frame for DIMIU

31-0319\$299.00

**TOLL FREE
ORDER LINE
(800)
456-0203**

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\$3756.00

Plexiglass replacement

31-0325\$2254.00

Brackets replacement

Set of 2

31-0326\$689.00

DIBRO

Same as DIGRO, 63" wide.

31-0351\$5112.00



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.

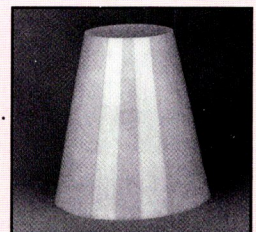
Cove measures 39"w x 27"h x 21"d.

31-0450\$1499.00

**Prototype pictured. Final version may differ slightly.*

Plexiglas Cone - large

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



Plexiglass Cone - small

Base Diameter 7 3/4", Height 8.5".
31-0341\$158.00

COMBITUBE

of 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:

_____ x _____

Desired size of rail system:

_____ x _____

Ceiling height (structural ceiling, not drop ceiling)

_____ ft

Height of any ceiling obstructions (ducts, lights, pipes, drop ceiling)

_____ ft

Desired height of rail system off floor

_____ ft

Quantities of items to be suspended:

___ Standard lampheads with reflectors

___ Heads with heavy reflectors (spots, large softboxes, etc)

___ Monolights

___ Motorized scissors desired? (Y/N)

___ Power Packs

Pack type: _____

___ Large bank lights (Mini-Cumulite, Megaflex, etc.)

Type _____

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.

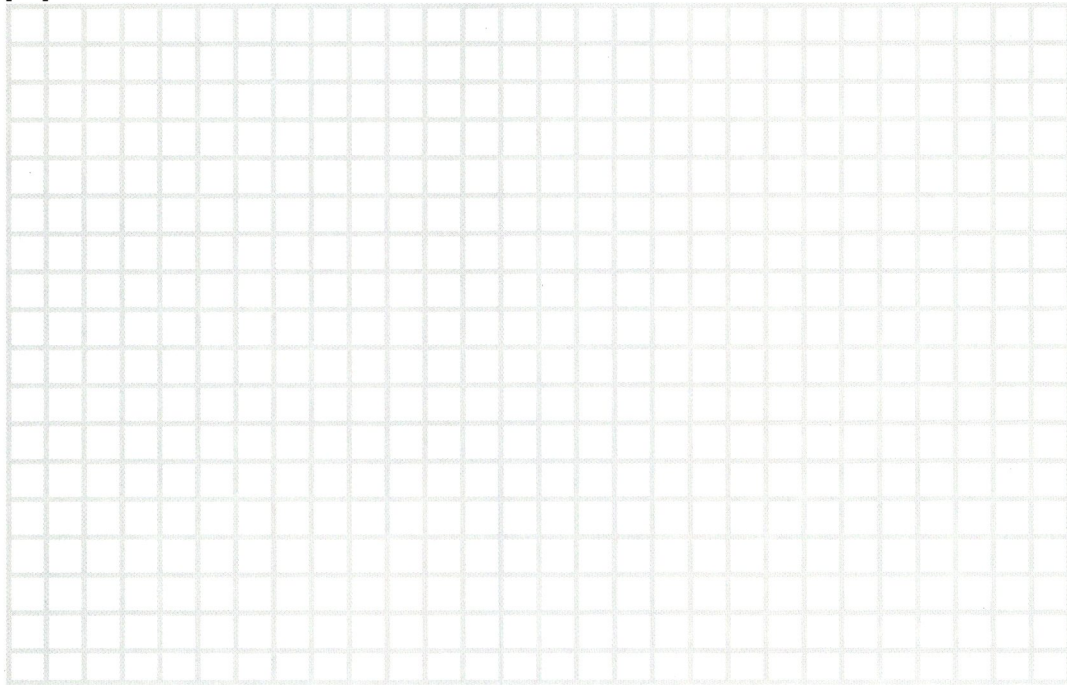
Most of your lights will be hung from the mobile cross rails. Cross rails hang from the main rails with Cross Trolleys, using one for each main rail crossed. Cross rails can move along the length of the system, and are freely adjustable to any angle.

Each head hung requires a scissor, scissor trolley 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 trolley. You may also wish to place cable holders along the rails to keep lamphead cables from dangling in your way.

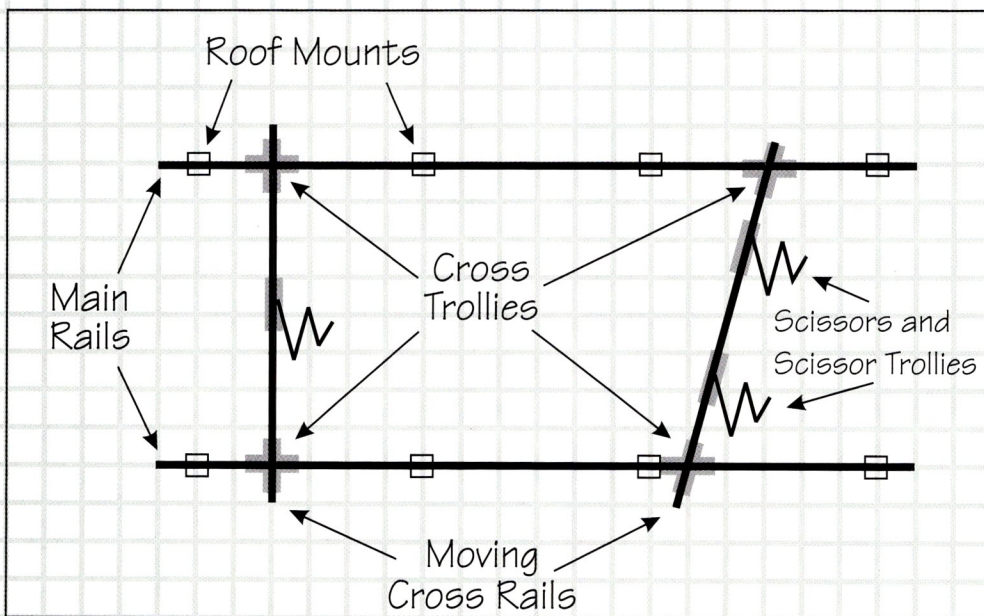
Roof Track System

1 square = ___ ft.



Sample Rail System Design

1 square = 1 ft.



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.

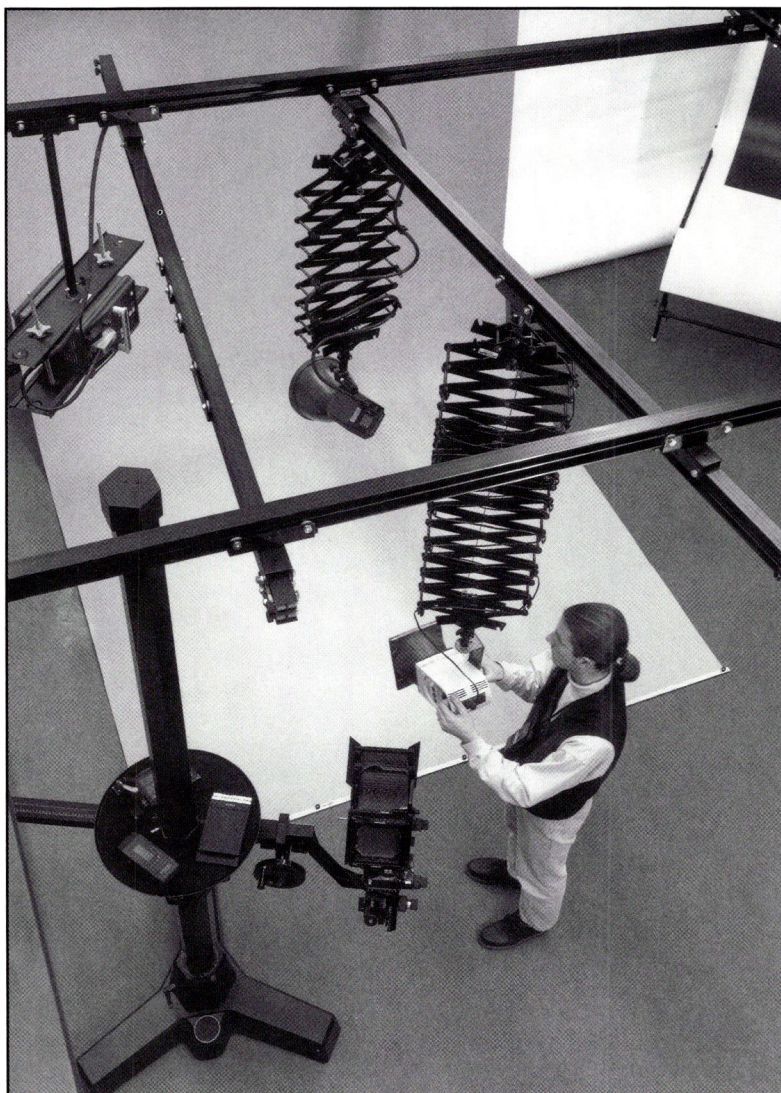
They can be operated either manually or fully automatically by infrared Servor control.

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')



Consists of:

4	32-0610	10' rails
8	32-0638	Endbuffers
4	32-0630	Cross trolleys
2	32-0651	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

32-0133\$1802.00

PROFI-KIT (10x10')



Consists of

4	32-0610	10' rails
4	32-0630	Cross trolleys
3	32-0651	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

32-0232.....\$2543.00

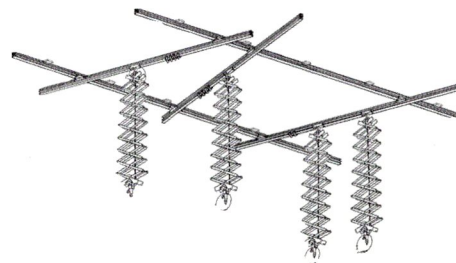
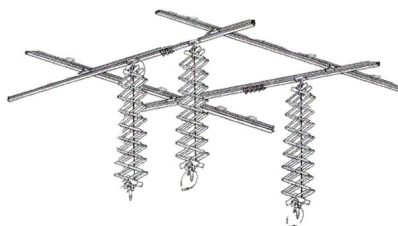
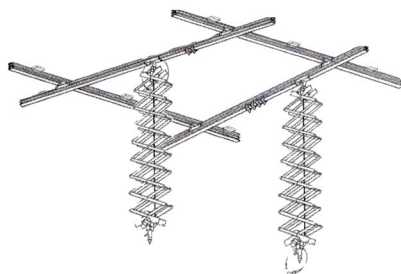
MAXI-KIT (10x20')



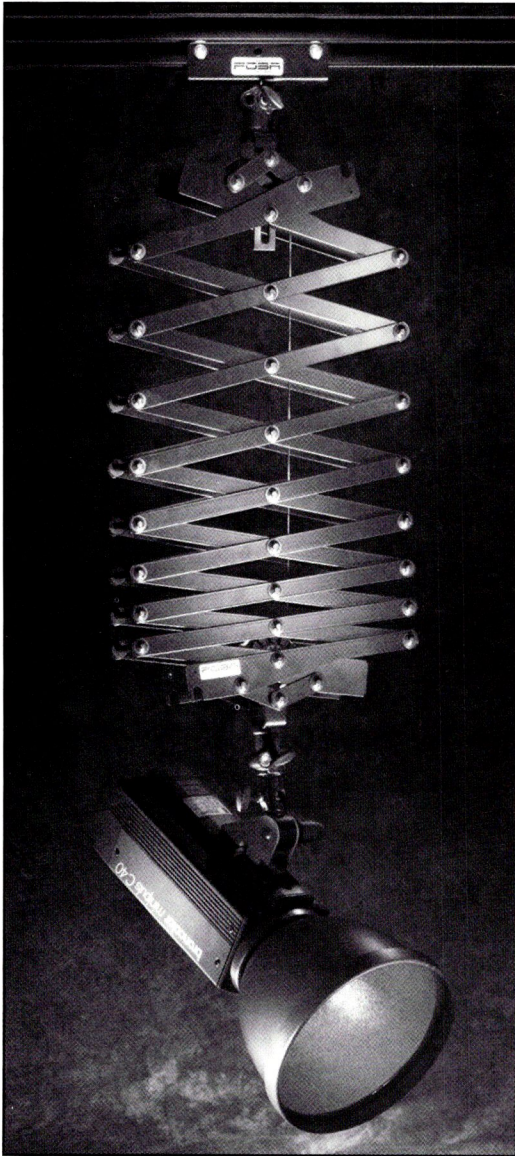
Consists of

2	32-0620	20' rails
3	32-0610	10' rails
8	32-0638	Endbuffers
6	32-0630	Cross trolleys
4	32-0651	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\$3821.00



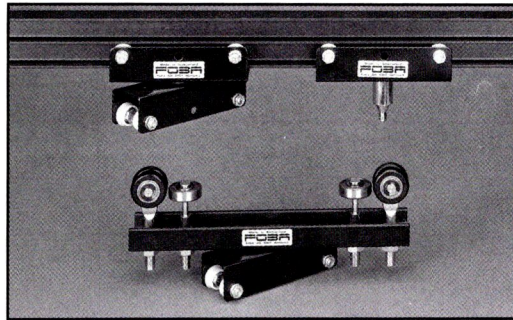
Roof Track System



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	
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.....\$85.00

Cross Trolley Special

To put roof track onto steel main rail.

32-0631

Trolley for Adapters

32-0632.....\$58.00

Trolley with Combitube Adapter

Allows installation of combitubes on Roof Track System

32-0641.....\$62.00

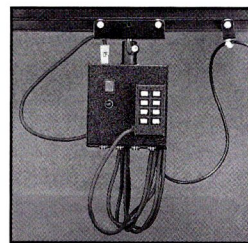
Motorized Scissors Trolley

Requires power control unit (32-0654).

32-0658

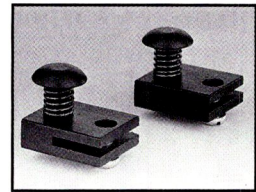
Power Control Unit

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.



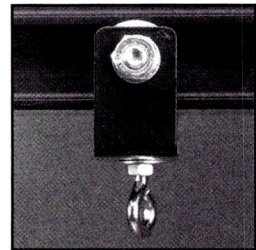
4 Channel Power Control Unit

32-0654



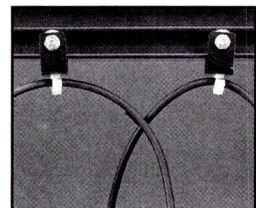
Brake, set of 2

32-0640



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

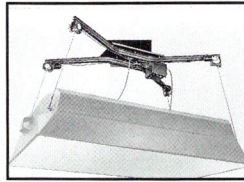
**TOLL FREE
ORDER LINE
(800)
456-0203**

ROBERT

Roof Track System

Megaflex Suspension

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.



Infrared Controlled Suspension

32-0100\$5643.00

Cable Controlled Suspension

32-0105\$4801.00

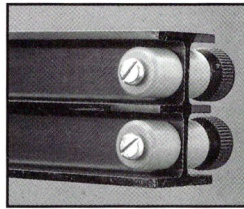
Set of 4 Trolleys for Megaflex Suspension to Roof Track

32-0660\$136.00

Endbuffer

Set of 2. An endbuffer must be mounted at both ends of each rail section to prevent equipment from sliding off.

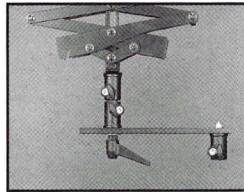
32-0638.....\$21.50



Balance Adapter

Has female attachment to be fitted between pantograph and unbalanced lighting fixtures or other appliances.

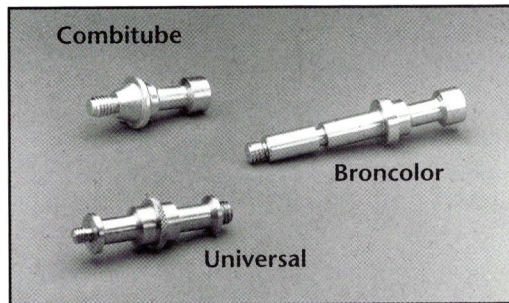
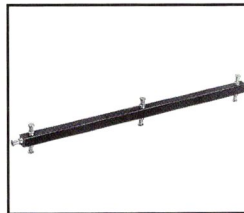
32-0657.....\$90.00



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

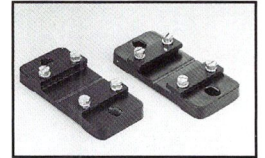
32-0673.....\$30.50

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 ground and then attach



roof mount to ceiling with rail section attached.

32-0639.....\$48.50

Roof Track Rails, black

6.5' 32-0606.....\$96.00

10' 32-0610.....\$130.00

13' 32-0613.....\$198.00

20' 32-0620.....\$254.00

Adjustable Bracket

For use with an uneven ceiling, the bracket allows adjustment of the roof mounts so that they are level. Requires the use of the threaded bar.

32-0636\$109.00



M16 Threaded Bar (39")

For use with the adjustable bracket.

32-0637.....\$42.50

Extension Bracket

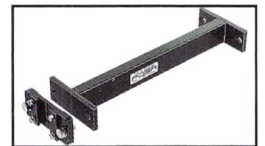
Using extension brackets enables rail system to be mounted at a fixed distance from the ceiling to allow for ducts, pipes and other obstructions.

Custom lengths from 4"-20"

32-0642.....\$59.00

Custom lengths from 21"-39"

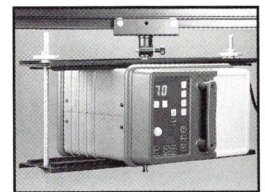
32-0643.....\$68.00



Power Pack Holder

Power pack rests on platform which is attached to rail system with $\frac{3}{8}$ " spigot. This will hold a pack up to 17" wide and 9" high. Requires (32-0624) and (32-0627).

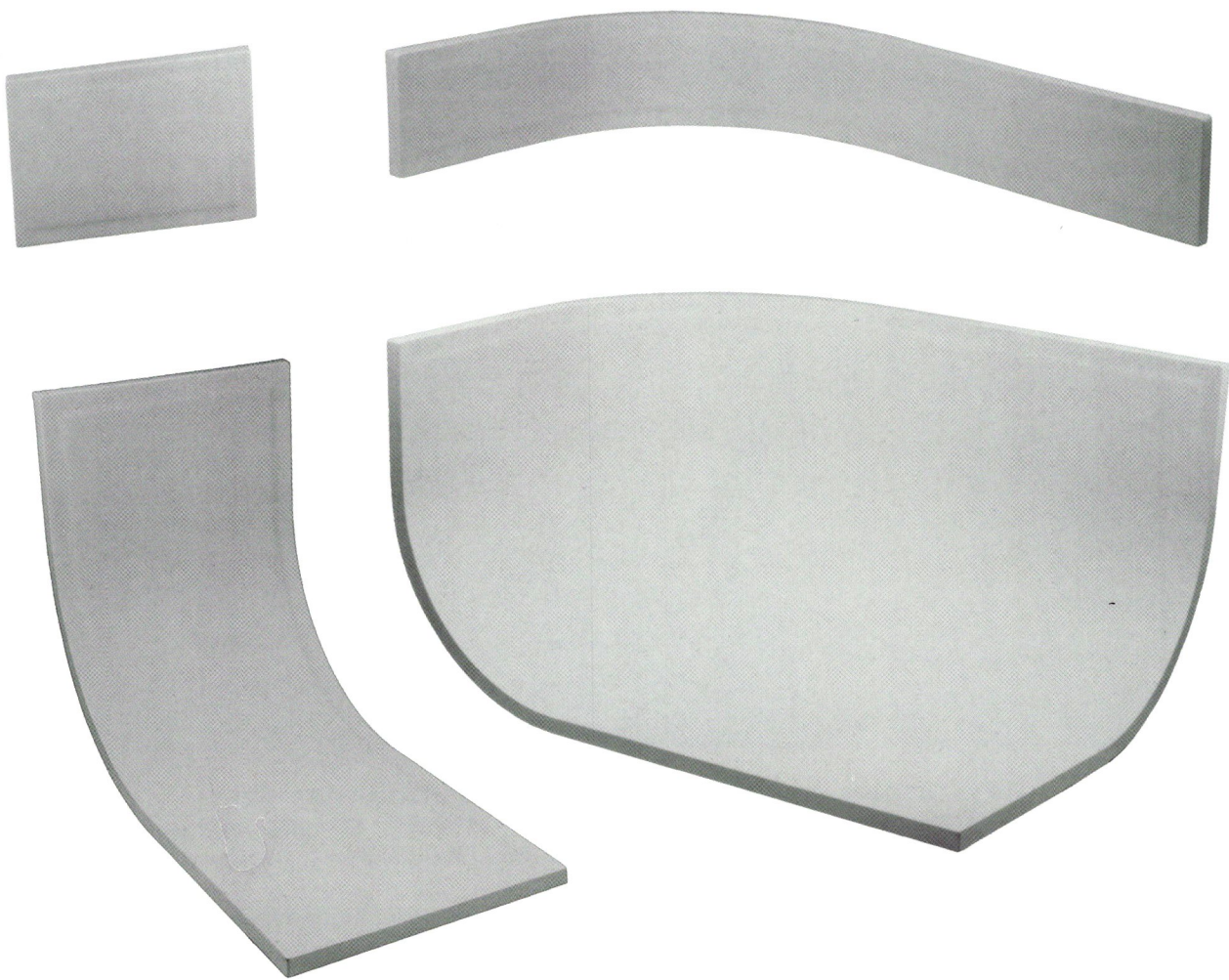
32-0626\$141.00



$\frac{5}{8}$ " Female to Female Adapter

Allows the power pack holder to be mounted directly to the trolley (32-0624)

32-0627.....\$30.50



**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 silhouetting. 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.

70-3000.....\$995.00

24" Additional Side Curve

70-3005.....\$295.00

12" Additional Side Curve

70-3010.....\$275.00

12x24 Flat Panel

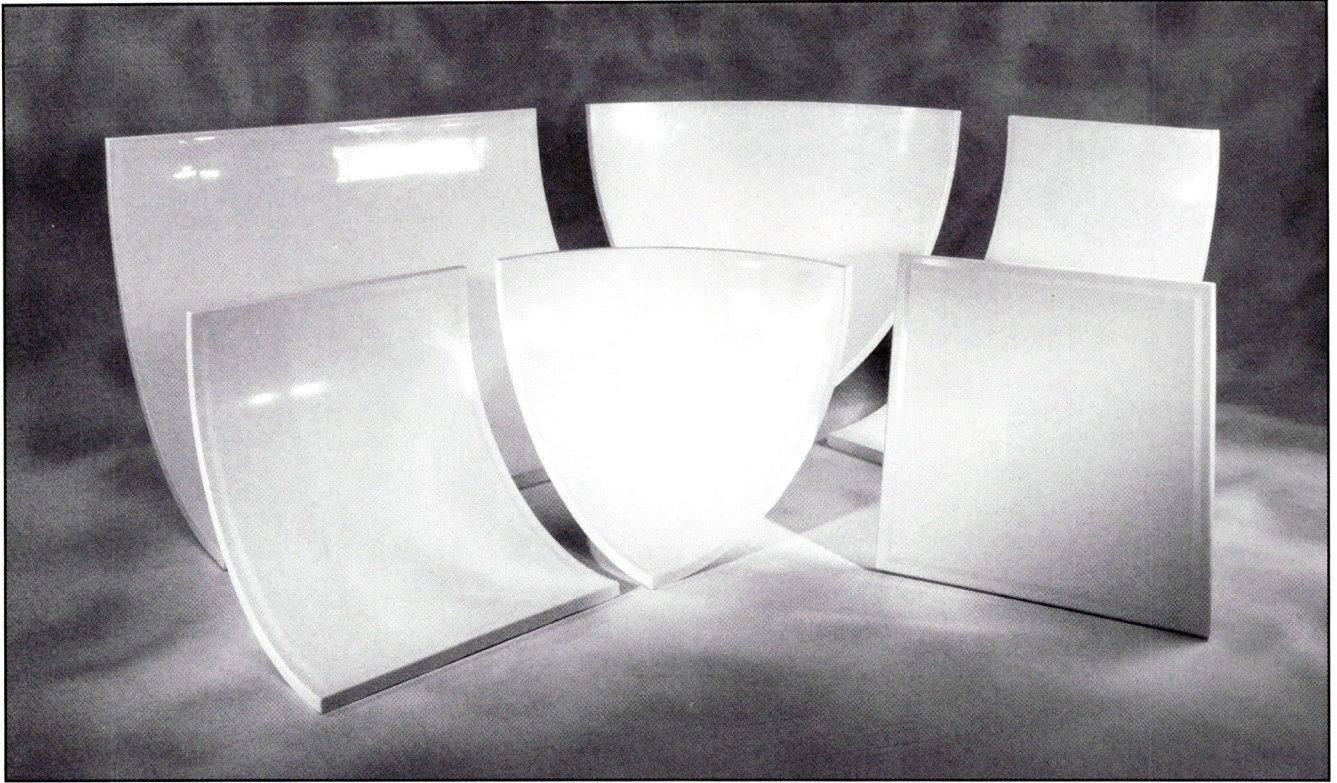
70-3015.....\$79.00

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.

**CUSTOM
PRO-CYC
QUOTES
FOR
YOUR
STUDIO
(800)
456-
0203**

3 1/2' Radius Pro Cyc

3 1/2' Radius 4' Straight Section

70-2001\$395.00

3 1/2' Radius 90° Corner Section

70-2003\$925.00

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\$1065.00

4' Flat Square Panel

Used for flat sections of portable 3 1/2' installations with the free-standing support system.

70-2002\$360.00

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 5/16" 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' Radius Straight Section — 4' length

70-1001\$595.00

Custom Lengths up to 4 feet

70-1004\$670.00

5' Radius Straight Section — 8' length

70-1002\$1195.00

Custom lengths - 4-8 feet

70-1005\$1270.00

5' x 5' Radius Corner Section

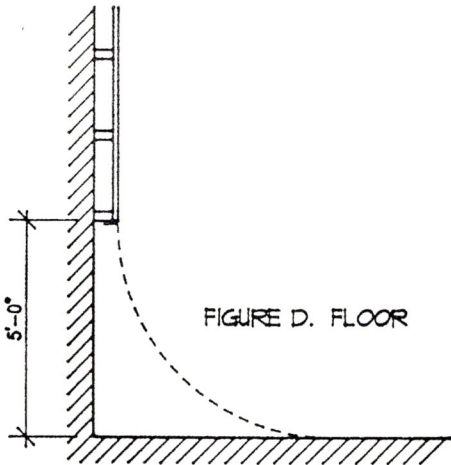
70-1003\$1295.00

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 3 1/2 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.



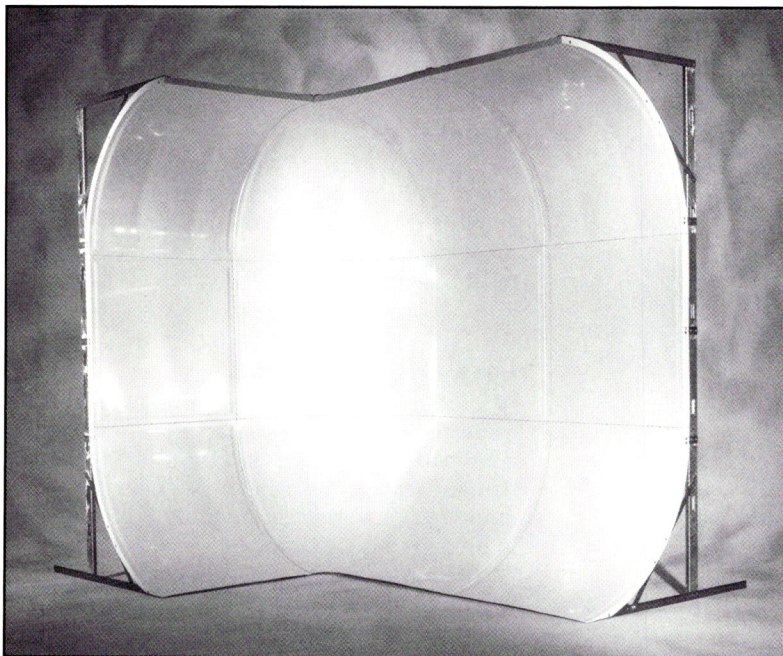
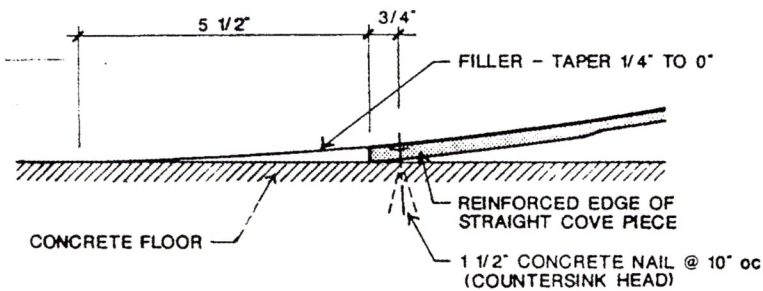
Installing Pro-Cyc is a fairly straightforward process. In fact, if you've ever installed drywall over rough framing, you can install Pro-cyc.

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\$140.00

15.5' height

70-2020\$185.00

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 first-time 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, pre-paid, directly to Sinar Bron Inc., 17 Progress St. Edison, N.J. 08820 Attn: 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 pre-paid. 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.

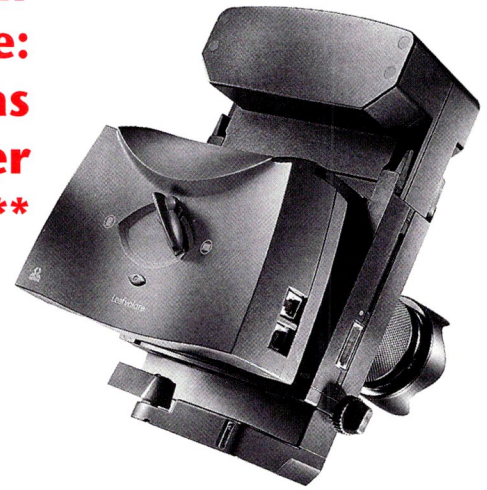
Loss and Damage

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.

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.

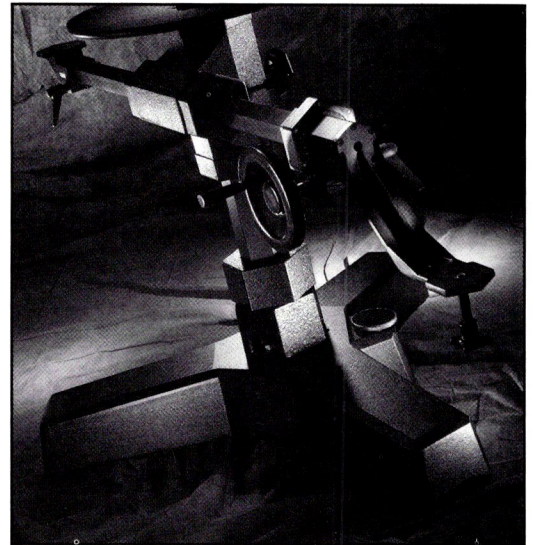
**Leaf
Volare:
As low as
\$854 per
month!****



**Sinarback:
As low as
\$860 per
month!***



**Grafit:
As low as
\$119 per
month!***



**ASABA:
As low as \$90 per
month!***

* 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.



**Financing Application
Confidential Information**
17 Progress St., Edison, NJ 08820
(908) 754-5800 • Fax (908) 754-5807
Toll Free (800) 456-0203

APPLICANT NAME _____
 LEGAL COMPANY NAME _____
 ADDRESS _____
 CITY _____ COUNTY _____
 STATE _____ ZIP _____ SOCIAL SEC. # _____
 TELEPHONE _____ CONTACT _____

COSIGNER INFORMATION (if applicable)
 NAME _____
 ADDRESS _____
 CITY _____
 STATE _____ ZIP _____
 TELEPHONE _____ SS# _____

SHIP TO _____
 (if different than above) Street City County State Zip

BANK REFERENCE (Exact branch) — LIST ALL BANKS USED FOR LAST 5 YEARS				OFFICER	PHONE
BANK	BRANCH	ACCT. #	ACCT TYPE		
1					
2					
3					

Fill in equipment to be leased below, or attach a completed order form.

Qty.	Catalog Number	Description	Price (ea.)	Total

Monthly Payments				
Choose your term, and multiply the total financed cost (equipment less 20% down) by factor below to calculate your monthly payments.				
Term (months)	12	20	24	30
Factor	0.088	0.056	0.048	0.04

Total Equipment Cost	
- 20% down payment	
*Sales Tax (if applicable)	
*Shipping & Handling	
Total Cost	
*Document Fee	

*SALES TAX, FREIGHT AND DOCUMENT 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.

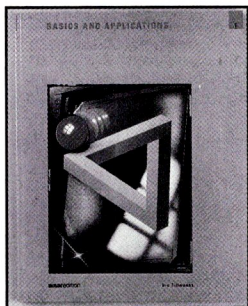
Send completed form to:
 Sinar Bron Financing
 17 Progress St.
 Edison, NJ 08820
 Fax: (908) 754-5807

APPLICANT _____

BY _____ TITLE _____

DATE _____

Publications



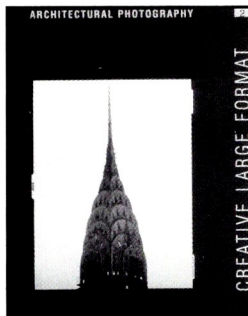
Creative Large Format: Basics and Applications

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



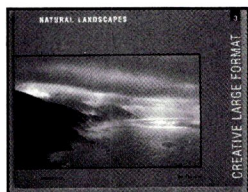
Creative Large Format: Architectural Photography

The second volume in the Creative Large Format series explores the demanding field of architectural photography. It explores the long-standing 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

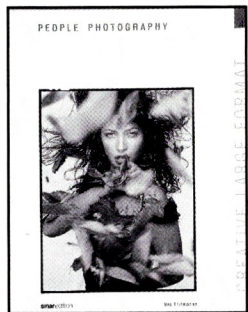


Creative Large Format: Natural Landscapes

The third offering in the Creative Large Format series tackles the subject of landscape photography. The first half of the book, illustrated with many stunning examples, covers the technical

aspects of landscapes. The second half takes a look at the work of seven accomplished photographers, with discussions of both their techniques and their individual philosophies.

41-1058\$42.00

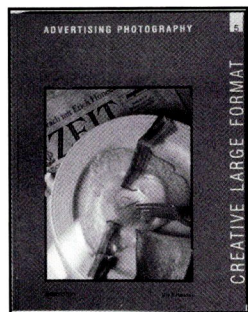


Creative Large Format: People Photography

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

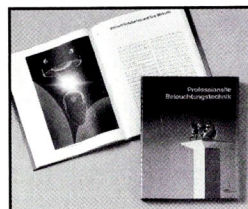


Creative Large Format: Advertising Photography

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



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

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dforney@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
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St. Louis, MO
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Norcross, GA
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Peachtree Camera Repair

Marietta, GA
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Power Strobe Repair

Atlanta, GA
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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.

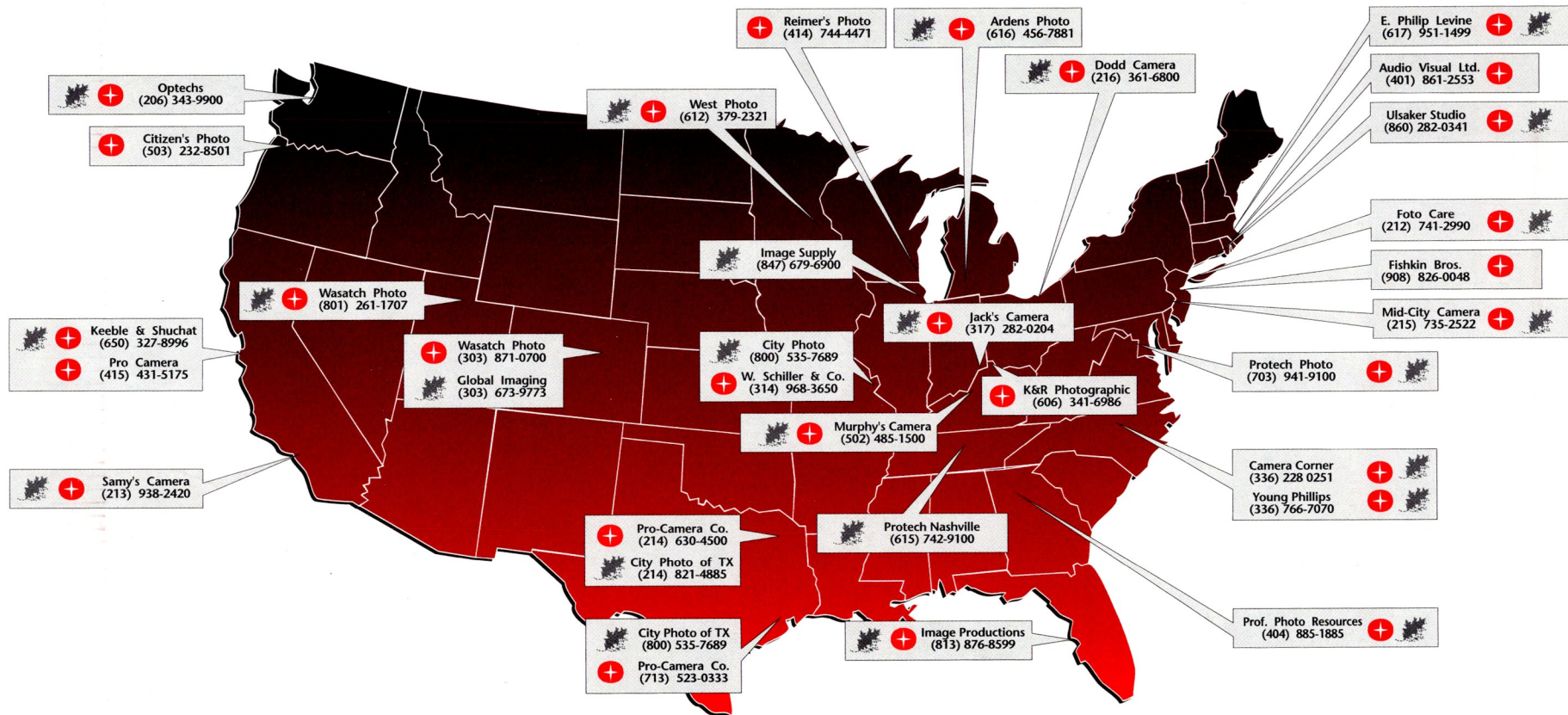
Instructions for sending items to Sinar Bron Service Only:

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 Full Line Dealers and Leaf Dealers

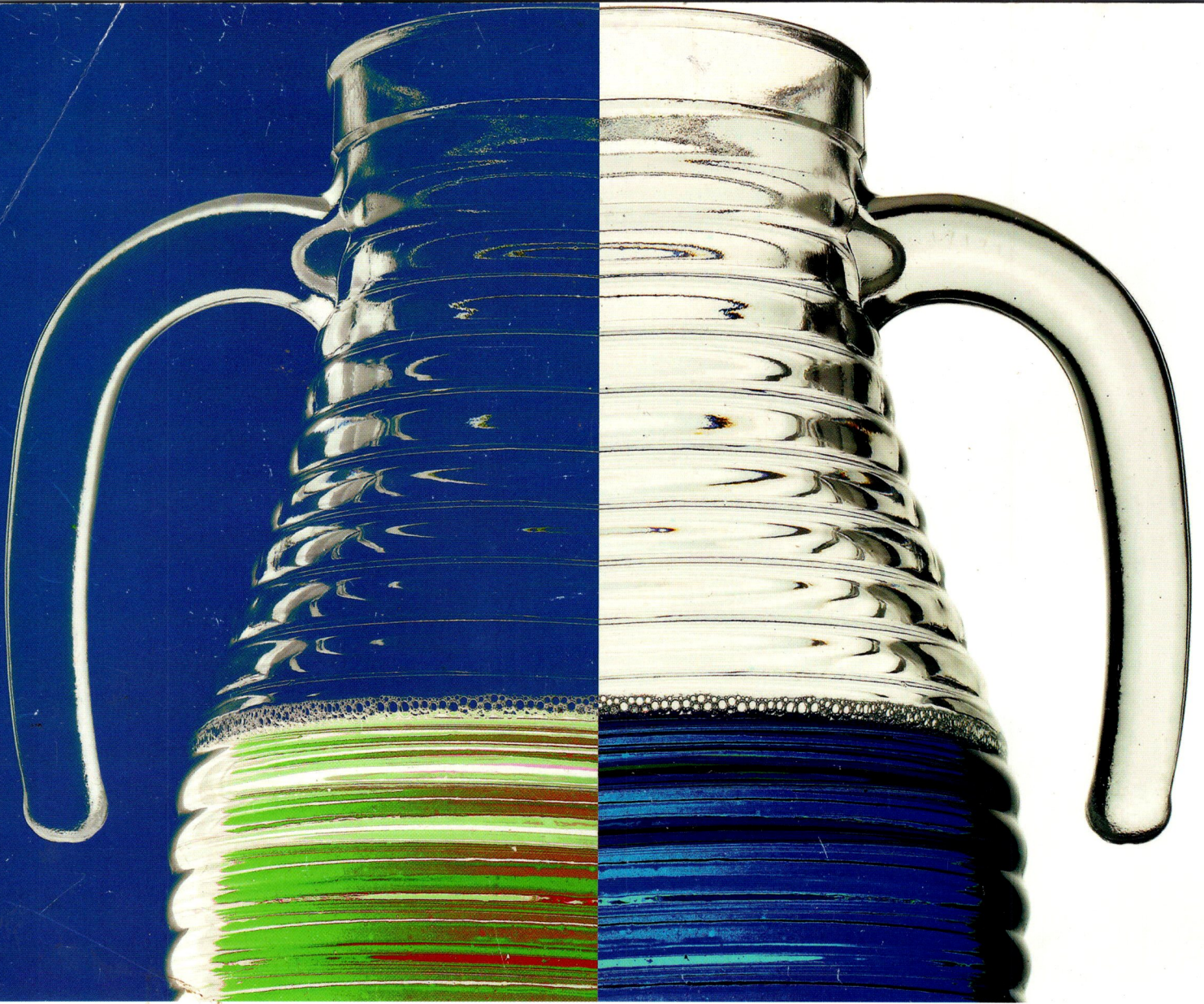
All equipment in this catalog is available through the Full Line Authorized Dealers above. Each dealer is marked with a symbol indicating whether they are a + Full Line Dealer (Sinar, Broncolor, Foba), ♻ Leaf Dealer, or both.

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.



Foba
60

**Sinar Bron Imaging
congratulates Foba AG
for 60 years of the
world's finest studio
accessory innovations.**



Sinar Bron
IMAGING

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Toll Free (800) 456-0203

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