

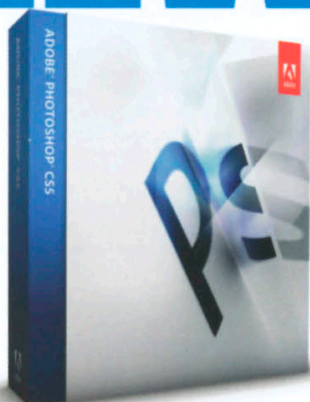
ROUNDUP: ON THE ROAD WITH PHOTO BACKPACKS

SHUTTERBUG®

SEPTEMBER 2010

TOOLS, TECHNIQUES & CREATIVITY

WHAT'S NEW? ADOBE PHOTOSHOP CS5 & APPLE APERTURE 3



**PLUS!
OUR PICKS**

**LAPTOPS FOR
PHOTOGRAPHERS!**

WE TEST

**CANON EOS
REBEL T2i**

**PLUSTEK
7600i
SCANNER**



US \$4.99 • CAN \$5.99
shutterbug.com



A SOURCE INTERLINK MEDIA PUBLICATION

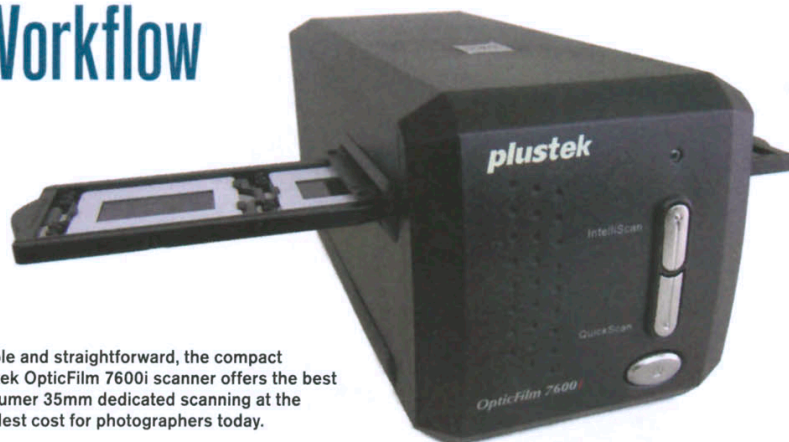
Plustek's OpticFilm 7600i 35mm Scanner

A Scanner/Software Workflow

I've been testing and reporting on film scanners for almost 20 years, and names like Imacon, Kodak, Nikon, Microtek, and UMAX all come to mind. A more recent entrant is Plustek; their 7600i is the only new, modern dedicated 35mm film scanner to come out recently, so it demanded attention.

True, Epson, Canon, and HP flat-bed scanners come with film scanning capability. And their recent models do extremely well scanning 120 medium format and larger film, providing really fine image files. But when squeezed down to scan a 1x1.5" 35mm film frame it is pushing the envelope too far, thus a dedicated film scanner has obvious advantages. The Plustek OpticFilm 7600i fills that void quite nicely and affordably, at a little over \$500 (street) for the Ai model. The 7600i has close to twice the optical resolution (7200dpi) of the venerable Nikon 35mm scanners, once considered the best, with their max optical resolution of 4000dpi.

One feature that the Nikon scanners



Simple and straightforward, the compact Plustek OpticFilm 7600i scanner offers the best consumer 35mm dedicated scanning at the smallest cost for photographers today.

introduced early in the game was the use of LED lamps, something taken up by Plustek here. The advantage is that LEDs are brighter, yet produce less heat, allowing increased scan speeds while contributing less to temperatures that might cause a film image to pop and change focus position.

In many ways the Plustek is a simpler device than most of the 35mm film scanners of recent years. The support and movement of the film being scanned is entirely manual; there are no internal motors and mechanisms to transport the film carrier into and past the scanning window, so it is all done by the user's

hand. This is a small inconvenience, but it also does not complicate the scanner with complex features, so this simplicity avoids wear and problems. The only work the scanner does internally is to move the light source and linear array CCD from one side of the film image across it to the other to make each scan.

That might seem simple enough, but there is a second scanning system at about 45° from the LED light scan that uses infrared illumination to record an image of the film's surface to document any irregularities. This "iSRD image sensing" detects any dust, dirt, or scratches on the surface of the film and creates another image layer related to the image file. That scanned data is then related in processing to the visual image data and the dust, dirt, and scratches are replaced with interpolated data from image information adjacent to the flaw. The software then replaces the image of the dust, dirt, and scratches with picture information, which is incorporated in the final output image so the flaws are not reproduced in the final scan.

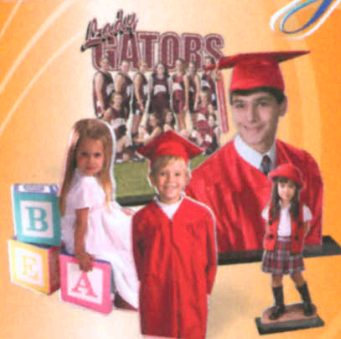
The primary function of a scanner is to direct illumination through the film so a

LaserSoft's SilverFast SE or Ai 6 is the supplied driver software for the Plustek 7600i scanner and offers a new Archival scanning option that makes a fast series of Raw scan files with a built-in infrared channel for dust and scratch removal.





Novelty



NEW Single-Side Laser Cut Products!

Same quality product, but
25% less expensive!
Your photo is attached to a
single layer of acrylic backing.

Single-Side Laser Cut Photo Sculptures

PHS2-SS (2"x3") **\$9.20**
PHS5-SS (5"x7") **\$14.80**
PHS8-SS (8"x10") **\$18.95**

Single-Side Laser Cut Brag Pins!

CAP2-SS (2"x3") **\$7.60**

Single-Side Laser Cut Magnets!

CAM2-SS (2"x3") **\$7.60**
CAM5-SS (5"x7") **\$10.00**

Single-Side Laser Cut Ornaments!

AORN2-SS (2"x3") **\$7.60**
AORN5-SS (5"x7") **\$10.00**

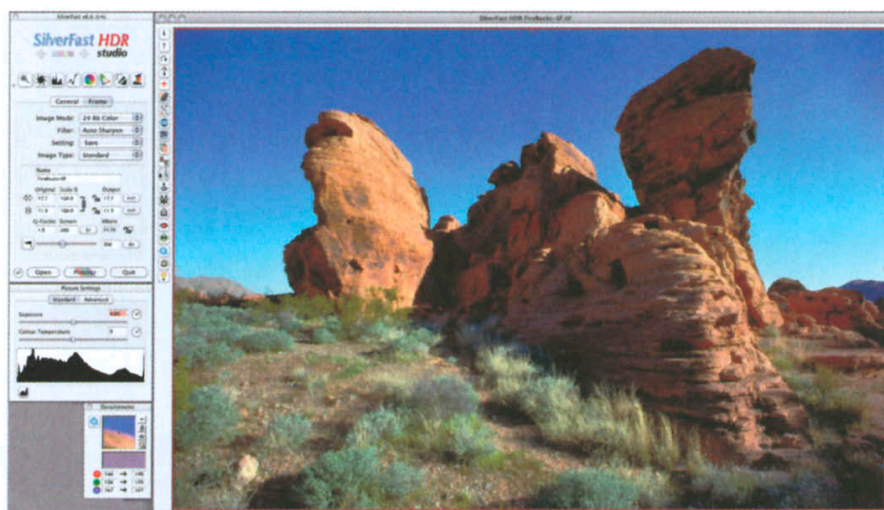
Please visit our website at
www.photonovelty.com
for more information or call
1-800-844-5616 ext. 714

**No Extra Charge for
Multiple Heads or
Complex Cutouts!**

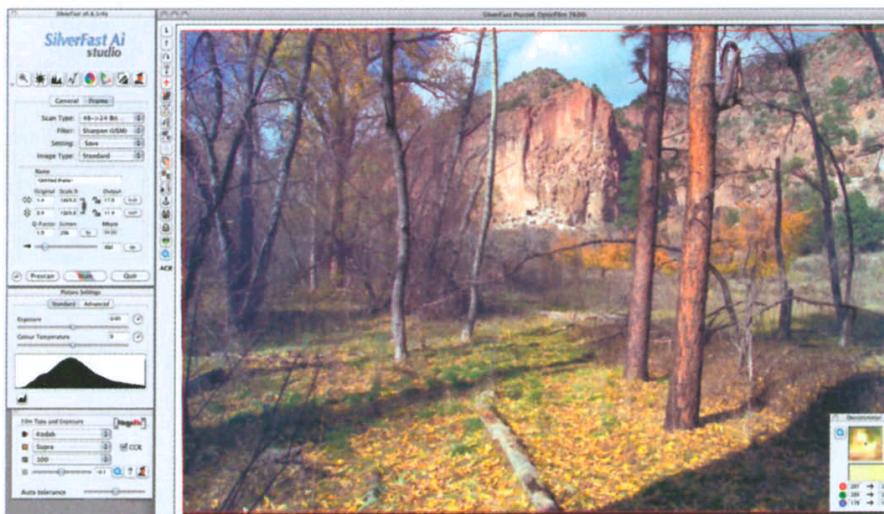
linear array CCD sensor bar of three lines of cells—one for red, green, and blue light measurement—records the color values of each small section of the film image being scanned. The one important specification about the CCD other than its count of sensors is the dynamic range of its sensitivity. The Plustek OpticFilm 7600i has a dynamic range of 3.5. This is a greater range than the density range of any slide film that is, at maximum, not more than 3.2 or 3.3.

The dynamic range of the CCD also sets the size of the color space in which the data from a scan is stored and, if it is much larger as has been desired in the past, then the downside is that films with low density ranges like black-and-white

and color negatives reproduce a low range of readings that fill just part of the color space. The larger the color space, the more the scan data from negative films must be expanded by software to fill the receiving space in an image file. This can be a problem with scanners with high dynamic range CCD sensors. Fortunately, CCD technology has advanced, thanks to all the development digital cameras have financed, so current CCD sensors are more light sensitive even in small site sizes, allowing for very accurate, high-resolution results like those from the 7200 ppi of the Plustek's sensor. The result of all this is that resultant scans are sufficient to make finely detailed 16x24" prints of a



The other half of the 64-bit color Archival process is LaserSoft's SilverFast HDR, which is a high-bit Raw image photo file processing application providing all of the adjustment and correction tools of the best image-editing applications and more. It functions on a virtual preview interactive window and supports making all of the corrections and adjustments virtually, which are then saved to a finished file behind the scenes in any format desired.



The Plustek 7600i SilverFast driver application can also support all of the different standard methods of scanning. This is from a color negative stock supported by NegaFix, which yields automatic adjustments based on film characteristics. The Preview, or pre-scan virtual image, can then be further adjusted perceptually.

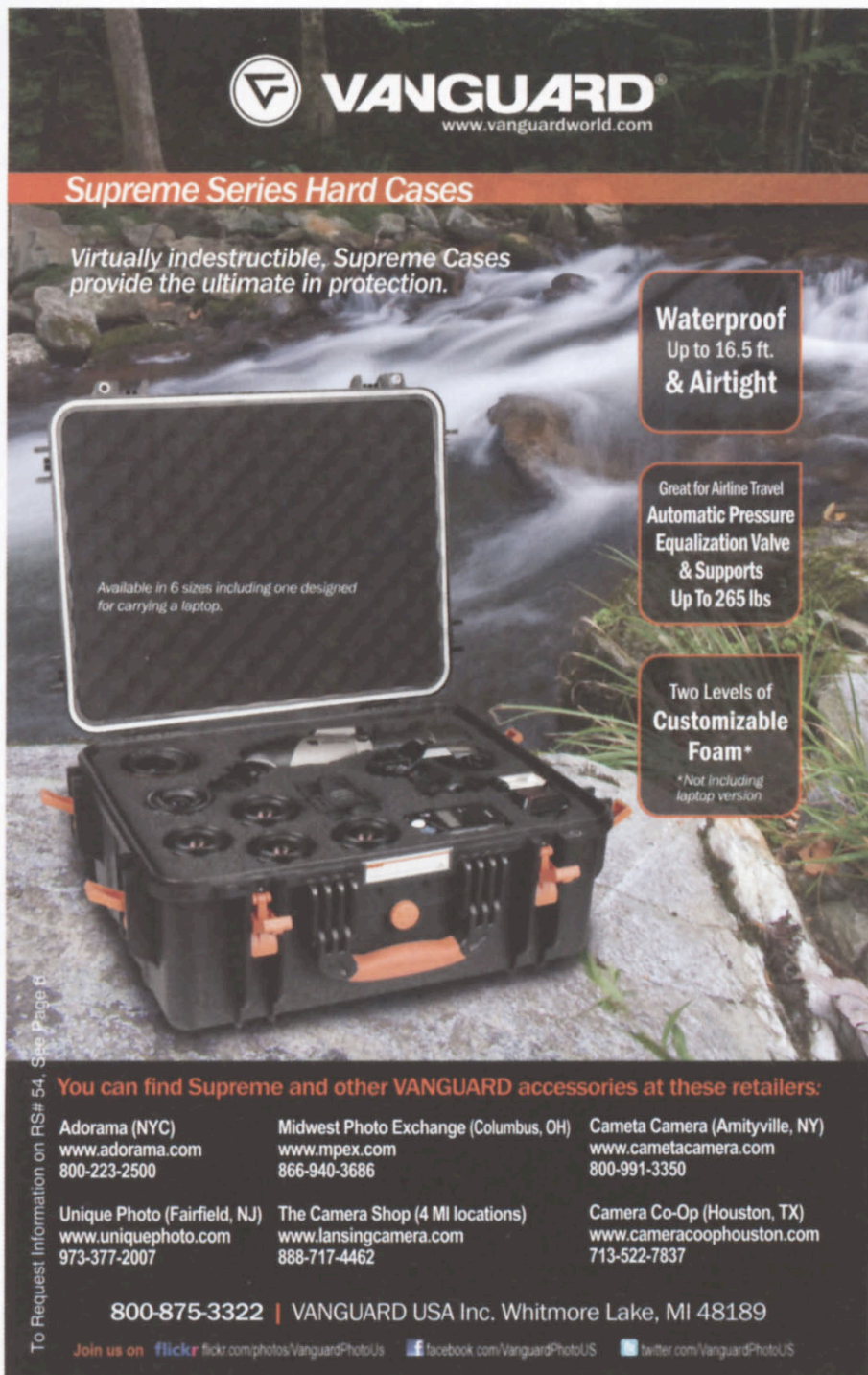
Photos © 2010, David B. Brooks. All Rights Reserved

quality that was seldom seen from 35mm cameras in the past.

What a scanner does is physically illuminate and read the color and density values in a film image and produce Raw RGB data from that reading at a great depth of 16 bits per RGB channel. The film image that is measured can include an infinite number of different kinds of subjects with a wide range

of characteristics in density, contrast, saturation as well as all the more complex attributes of all the different brands and kinds of film that have been used or are in use with 35mm cameras.

In the past, some photographers using a scanner would just output the Raw scanner data files and open these files in Photoshop or some other image-editing application to color correct and adjust



VANGUARD
www.vanguardworld.com

Supreme Series Hard Cases

Virtually indestructible, Supreme Cases provide the ultimate in protection.

Available in 6 sizes including one designed for carrying a laptop.

Waterproof
Up to 16.5 ft.
& Airtight

Great for Airline Travel
Automatic Pressure Equalization Valve & Supports
Up To 265 lbs

Two Levels of Customizable Foam*
*Not including laptop version

You can find Supreme and other VANGUARD accessories at these retailers:

Adorama (NYC) www.adorama.com 800-223-2500	Midwest Photo Exchange (Columbus, OH) www.mpex.com 866-940-3686	Cameta Camera (Amityville, NY) www.cametacamera.com 800-991-3350
Unique Photo (Fairfield, NJ) www.uniquephoto.com 973-377-2007	The Camera Shop (4 MI locations) www.lansingcamera.com 888-717-4462	Camera Co-Op (Houston, TX) www.cameracoophouston.com 713-522-7837

800-875-3322 | VANGUARD USA Inc. Whitmore Lake, MI 48189

Join us on [flickr](#) flickr.com/photos/VanguardPhotoUS [facebook](#) com/VanguardPhotoUS [twitter](#) com/VanguardPhotoUS

To Request Information on RS# 54, See Page 6



© 2010, David B. Brooks, All Rights Reserved

Some years ago Kodak sent me a sample of a new professional very high-speed Ektachrome film. So I grabbed my gear and headed to the upriver of the Columbia between Washington and Oregon in the Dalles/Hood River neighborhood where the windsurfers sail. The film was pretty sharp and not too grainy for its speed, but this sample version produced slides with some pretty skewed color. However, scanned with the Plustek 7600i and SilverFast, both the bright color of the windsurfers and the background were brought under control.

the image values. That was justified because early scanner driver software often had weak editing capabilities or was not very user-friendly, or both. But now, considering the very large Raw files the Plustek 7600i can output, using an image-editing application to process each file is grossly inefficient. The entire large file has to be opened and each correction or adjustment has to be applied. If you make an adjustment mistake very often, then the only correction is going back to the original Raw file and starting over again.

Fortunately, a much more efficient and better choice is supplied with the Plustek 7600i with either LaserSoft's SilverFast SE or Ai 6 software, which supports an easy-to-learn color correction and adjustment set of tools that parallels those found in image editors. Instead of having to work with a big file, SilverFast uses a high-quality

pre-scan image preview window that when adjusted reflects any changes made in the picture, and these adjustments can be made one after another, built on top of the last, following the essential order suggested by the software's "Scan Pilot" to guide beginners. And if you shifted color balance too much or changed contrast too much, for example, you can go back to that dialog at any time before final scan and readjust without any problem.

SilverFast supports scanner profiling for all varieties of film, including Kodachrome. With negative films, the "NegaFix" window allows you to choose the manufacturer and brand of film so a "film term" adjustment is made to the processing. In addition, you can do things like making multiple scans of the film to get more shadow detail and reduce noise. There are numerous similar options, which I will not detail here, but rather refer you to the many features LaserSoft offers in each version of SilverFast on their website at: www.silverfast.com.



© 2010, David B. Brooks. All Rights Reserved

In the recent past, scanners and scanning software did not effectively support the best reproduction of image files from black-and-white film. With SilverFast's latest NegaFix there are black-and-white film manufacturer and brand selections that are quite effective.

The Scan Process

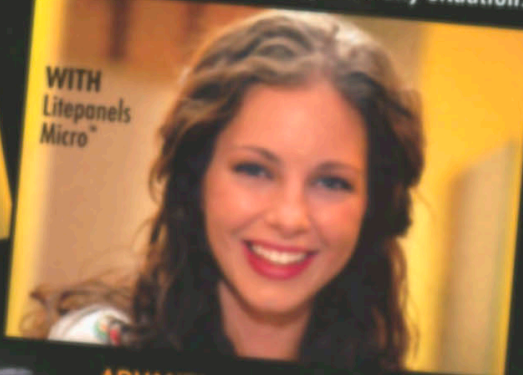
If I have done a lot of anything since 1990 it has been trying out and reporting on scanners of all types and descriptions. A good many of these scanners have included LaserSoft's

SilverFast software, so it is now a very familiar way of scanning for me. For this test I concentrated most of my work on scanning transparency slide films, mostly E-6, but also older Agfachromes, and even brought some black-and-white and

Dramatically Better with Litepanels® Micro.



The Micro's integrated dimmer lets you dial up just the right amount of light for any situation.



Discover Litepanels® Micro™, the perfect eyelight—fully dimmable and powered by AA batteries. Since the dawn of filmmaking, Hollywood cinematographers have understood the importance of a good eyelight—one that literally gives life to the face. Now in the era of HD resolution, it's even more essential. Litepanels offers its patented lighting technology in a brilliant lighting solution—ideally suited to your camcorder. Get Litepanels Micro today to bathe your subject with soft wrap-around light.

ADVANTAGES

- Bright, soft output
- Heat-free LED technology
- Dimmable from 100% to 0 with minimal color shift
- DV affordable
- 1.5 hrs run time from 4 AA batteries*
*Runs 1.5 hrs. on 4 AA batteries (HD Alkaline)
 7-8 hours on Energizer e2 Lithium Ion batteries



MicroPro model also available!



Winner of the 2009 Emmy®



LITE PANELS®

Tel +1 818 752 7009
info@litepanels.com
www.litepanels.com



Litepanels
 A Vitec Group brand

Visit litepanels.com for behind-the-scene video clips.


VANGUARD®
www.vanguardworld.com

UPRISE Series Camera Bags



Expands when extra room is needed



Sling bags and backpacks feature a quick zip access side panel



UP-Rise 46 & 48 include a laptop compartment



Expands in size when you need it!

Available in backpack, sling bag, shoulder bag, zoom bag and messenger bag models.

You can find UP-Rise and other Vanguard accessories at these retailers:

Adorama (NYC)
www.adorama.com
800-223-2500

B & H Photo (NYC)
www.bhphoto.com
800-947-9915

The Camera Shop (4 MI locations)
www.lansingcamera.com
888-717-4462

Glazer's Camera (Seattle, WA)
www.glazerscamera.com
888-531-3232

J & R Music World (NYC)
www.jr.com
800-806-1115

Cameta Camera (Amityville, NY)
www.cametacamera.com
800-991-3350

Van's Photo (Mentor, OH)
www.vansmentor.com
440-205-2004

Tall's Camera (Seattle, WA)
www.tallscamera.com
4 Area Locations

Ace Photo (Ashburn, VA)
www.acephoto.net
703-430-3333

800-875-3322 | VANGUARD USA Inc. Whitmore Lake, MI 48189

Join us on [flickr](https://www.flickr.com/photos/VanguardPhotoUS) [facebook](https://www.facebook.com/VanguardPhotoUS) [twitter](https://twitter.com/VanguardPhotoUS)

Proudly distributed in CANADA by Digitec Trading, Inc. www.digitectrading.com
To Request Information on RS# 19, See Page 6.

color negative films into the mix. In fact, I got more scans done and finished in a shorter period than I would have expected, and that is due to the SilverFast Archival method of making 64-bit color scans and then processing those Raw files with SilverFast HDR. In addition, a fair amount of the scanning I did was using a more conventional approach of scanning to 48-bit (color) and 16-bit (grayscale) for archiving.

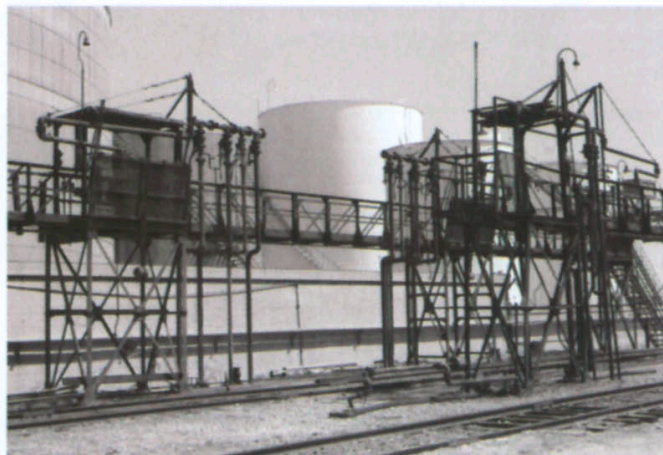
One feature I wanted to test here was the dust and scratch removal, which in the past did not live up to expectations. In fact, it did not work on my own personal Plustek 7500i model because the alignment between the infrared and white light scans was off. I can report that the 7600i model works accurately, so just about all of the slide scans were cleaned by SilverFast iSRD, and I had little post-scan editing work to do.

What kept me going scan after scan was that I was getting really pleasing results, even with some rather difficult film originals. Not everything I shot on film in the past was done with the accuracy or with the best choice of film for the subjects and conditions. So a large part of my scanning work with SilverFast involved correcting exposure mistakes and, on occasion, processing glitches, like one roll of Ektachrome that was processed with color negative chemistry.

Conclusions And Recommendations

I did become quite engaged in the scan work, but the question remained—did the image qualities I obtained meet all of my hopes and expectations? Yes, and especially so as the cost of even the more expensive Ai model 7600i is about half of what my Minolta DiMAGE Scan Elite 5400 II cost a few years ago—and this Plustek makes better scans at even higher resolution. However, as I considered this conclusion I had to take into account that Plustek is a relatively new name in the digital photo marketplace, while all of the older, more established brands

Photos © 2010, David B. Brooks. All Rights Reserved



(Above, left): Whenever I'd get a chance, I would go out for a drive along the back country roads to look for pictures. This time a few "weeds," as some would call them, caught my eye, and the picture embodies to me why nature is a fairy-tale wonderland. But to get this image scanned and adjusted to fit that scene in my mind's eye took the tools in SilverFast to ideally balance the foreground and background with just the right density and color. (Above, right): Los Angeles has a few visual moments but it is not a photogenic city. However, south near San Pedro is an industrial area that is a gold mine of subjects for black-and-white film. I used it as a location for testing whenever I was doing black and white. And with the Plustek scanner and SilverFast, getting just the right balance of tones as well as detail sharpness was quite easy. (Left): The Plustek 7600i includes SilverFast iSRD, an image dirt, scratch, and dust removal and correction using an infrared scan of the film surfaces. On the left is a typical part of an image with big and small surface elements that would require a lot of hand retouching. But on the right, after iSRD is applied, the image is clean and free of extraneous flaws. Unlike other methods in the past, iSRD provides a computer screen window showing the identification of the defects and a slider adjustment to decrease or increase the cleaning effect.

SHUTTERBUG Digital Photography How-To Guide

The Shutterbug Digital Photography How-To Guide is a special publication featuring how-to advice and a host of applications covering a wide range of interests for the digital photographer. The How-To Guide contains tips on capturing better quality pictures from digital cameras and making the best prints possible. Each and every digital photography enthusiast will find lots of great tips, expert advice and applications galore that will help them get the most out of their digital photography experience.

Available Now!

Call

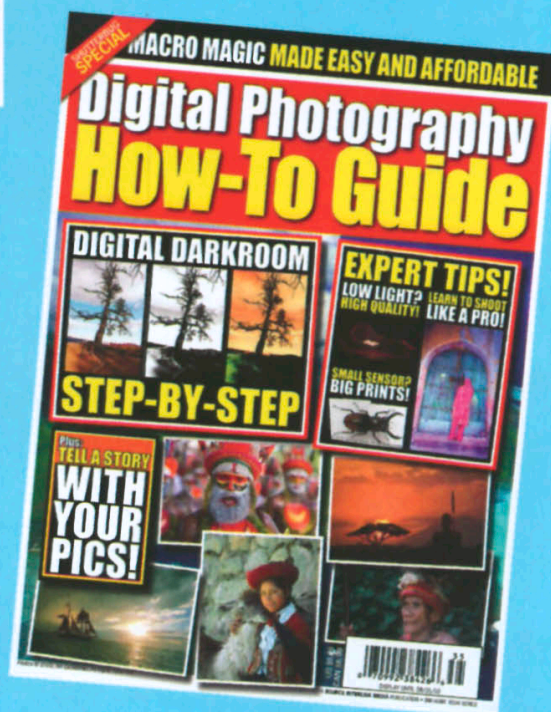
US: 1-888-453-8012, ext. 1

CAN: 1-321-225-3137

Monday-Friday 8:00am-5pm EST

Visa, MC & AMEX Only

\$8.25 Includes S/H (\$9.85 Canada)



no longer make a dedicated scanner and there really isn't any competition left. So, if you want a new, high-performance 35mm film scanner at an affordable cost, this is it.

As far as the performance of the hardware and SilverFast software is concerned, it provides better scans of 35mm film than any other scanner I have used, and that includes all of the popular brands and models of the past. And as I have gotten acquainted with the Plustek people in the US, I have confidence their intentions are good and in the interests of their customers.

If Plustek is a company you've never heard of before that is not a necessary detriment and doesn't really affect my bottom line. Which is, there wasn't ever such a good and affordable 35mm film scanner back when several brands were available. If there were and I had tried the Plustek 7600i and saw the results I obtained in my test, I would have still picked this new Plustek 7600i.

For more information, contact Plustek at: www.plustek.com.



At one time or another in the film days I would use just about anything on 35mm celluloid to shoot pictures. My favorite "city at night" film was slide duplicating film. Even though incredibly slow in film speed, it was by far the lowest contrast transparency color emulsion, so the high contrast of lights and dark shadows at night was much easier to capture. And again this was no problem to scan with the Plustek 7600i, reproducing excellent image files.

SV SMITH-VICTOR CORPORATION a division of PromarkBrands

Lighting Products for Digital Imaging, Film Photography & Video



KT900 - Essential Advanced Kit

- 3-Light 1250 Watt Photoflood Kit
- 2 - 12" Reflectors 1- 5" Reflector
- 3 - 8' foot RS8 Aluminum Stands
- 1 - MB110 Boom Arm
- 1 - Soft Wheel Case with Pull Handle
- *** Two, Three and Four Light Kits Available



IMAGEMAKER™ PLUS

- 1 - 20" Light Tent
- 2 - Sweeps (Black, White)
- 2 - Chroma-Key Sweeps (Green, Blue)
- 2 - 10" Reflectors with Diffusers
- 2 - Tabletop Stands
- 2 - 26 Watt Fluorescent Lamps
- 1 - Table Top Tripod



K74 Continuous Soft Box Pro-Kit

- 1 - 720-SG 1000-watt Quartz Light
- 1 - 765-UM 600-watt Quartz Light
- 2 - Raven RS13 13' Aluminum Stands
- 1 - SBC1236 12" x 36" Softbox
- 1 - SBC36 36" Square Softbox
- 1 - MB150 Medium Weight Boom Arm
- 1 - PL03CS Wheeled Soft Case and more...



SV Light Modifiers

Wide Selection including:
Barn doors, gels, reflectors, booms, diffusers, light stands, umbrellas, and more . . .
Studio and location photography.

To learn more about our complete range of Smith-Victor products, and a list of dealers near you, visit www.SmithVictor.com, or call us at 800.348.9862
To Request Information on RS# 259, See Page 6.