

It Starts with the GlassTM

West Coast: 7701 Haskell Avenue, Van Nuys, CA 91406 Tel: 818-766-3715 • Fax: 818-505-9865

East Coast: 285 Oser Avenue, Hauppauge, NY 11788 Tel: 631-761-5000 • Fax: 631-761-5090

mptv@schneideroptics.com • www.schneideroptics.com

2010-2011

Schneider Filters

For Professional HD, DSLR, Digital Video & Cinematography

Specification subject to change without notice.

Contents

Contento	
Introduction	3
Filter Kits	4
Filter Kits with Holder	5
Classic Soft™ Filters	6
HD Classic Soft™ Filters	7
Hollywood Black Magic [™] Filters	8
Classic Black Soft™ Filters	9
Black Frost [™] Filters	10
White Frost [™] Filters	10
LowCon 2000™ Filters	10
DigiCon™ Filters	11
True-Pol [®] Polarizing Filters	12
Diopters	13
Split Field Diopters	13
Neutral Density Filters	14
Dual Grad Filters	14
Neutral Density Attenuator Filters	15
True-Match 10-stop variable ND Filter Kit	15
Color Correction Filters	16
Combination Filters	17
Enhancing Filters	17
UV-410 Filters	17
Solid & Grad Color Effects Filters	18
Graduated Color Filters	19
Coral Filters	20
Day for Night Filter	20
Magenta Filters	20
Sunset Filter	20
CTB Color Correction Filters	21
True Cut IR Filter	21
Rhino Glass	22
Optical Flats	22
3-D Windows	22
Circular True-Pol® for Video Assist	23
Quarter Wave Retarders	23
MPTV Photo Round Filters	24
B+W Screw-on Filters	25
Popular DSLR Products	26
Popular DSLR Products Cam Caddie Scorpion	26

Schneider OPTICS It Starts with the Glass

Schneider Optics, a U.S. subsidiary of acclaimed German lens maker Schneider Kreuznach, represents a long history of extraordinary lenses and filters for many industries including still photography, High Definition, television broadcasting, cinematography, and digital projection. It's no wonder Schneider filters for motion pictures and digital cinematography are the finest in the industry.

Consistent Precision

Diamond cut from crystal-clear, water-white optical glass, Schneider filters are ground and polished to a precise flatness and plane-parallelism (exact parallel relationship between front and back filter surfaces). Then, to ensure perfection, this is verified by a laser interferometer. Schneider filters are then checked with a densitometer for consistent density and tested with a spectrophotometer for proper light transmission. This ultra-high consistency allows cinematographers to swap like filters mid-shoot with no discernible variation in color or effect. What's more, the unprecedented purity, color saturation and repeatability of Schneider filters virtually eliminates the need for lab color timing correction.

Ultra Durability

Schneider filters stand up to the most rigorous demands on set or location. Many feature Schneider's specially formulated hard anti-reflective coating to resist flaking, peeling and scratching. This proprietary coating also reduces light loss and flare to less than 1% per surface, compared to untreated glass that has a light loss of 4% per surface.

Schneider screw-on filters feature virtually jam-proof precision mounting rings, while unmounted Schneider laminated filters are protected against delamination and edge-chipping by Schneider's unique Edge Seal, which also reduces edge reflection and edge flare.

Professional Sizes for Film & High Definition Digital Video Schneider filters are available in popular sizes including 4"x 4", 4"x 5.65" (Panavision size), 5"x 5", 5.65"x 5.65", 6.6"x 6.6" and 138mm rounds. Screw-on filters are available in 58, 62, 72, 77, 82, 86, 95, 102, 105, and 127mm sizes. For more information or additional sizes, visit us online.

www.schneideroptics.com

4X4 • 5X5 • 5.65X5.65 FILTER KITS

4X4 • 5.65X5.65 FILTER KITS WITH HOLDER

Digital Starter Kit* 4x4 — 68-884401 Includes:

Circular Polarizer

True Pol® filters reduce glare and reflections, saturate colors, deepen blue skies, improve contrast and penetrate haze.

Black Frost[™] 1/2

These filters flare highlights, mute colors, & tone down contrast, while retaining rich blacks.

ND .9

These filters are designed to control exposure or depth of field under various lighting conditions

without affecting color or contrast. Light Control* 4x4 — 68-884402 **Includes:**

One-Stop Pol

Significantly decreases reflections while reducing available light by one stop.

Lowcon 1/4

Mutes the excessive contrast & spreads light into shadow areas. Reduces black contrast without reducing resolution or muddying the image.

Digicon 1/2

Optically raises black levels while lowering highlights. By compensating with

in-camera gamma settings, a higher dynamic range can be recorded than the camera alone can achieve.

HD Pro Filter Kit* 5x5 — 68-885501 5.65x5.65 — 68-885701 **Includes:**

Clear, ND.6 Grad Soft Edge, ND.9 Grad Soft Edge, ND.9 Full Attenuator, True Pol Linear.

Exposure Kit* 4x5.65 - 68-885601

Includes: ND.3, ND.6 Solid, ND.6, ND.9,

Soft Edge Graduated.



True Cut IR 750, ND.9, NDI.2, NDI.5

Skin Tone Filter Kit* 4x4 — 68-884403 Includes:

Maui Brown I

Enhances browns & golds, gives depth to foliage. Excellent for enhancing dark skin tones.

Gold I

For an overall warming effect. Portrays healthy skin tones and accentuates foliage.

Coral 1/8

Achieves the same degree of apparent warmth under different light conditions. Maintains consistent color balance throughout an entire day of shooting, or creates a sunset or dawn effect during the day.

Landscape* 4x4 — 68-884404 Includes:

Storm Blue 2 SE Grad Adds grey green color to

ocean and sky for a stormy effect.

Maui Brown 2

Enhances browns & golds, gives depth to foliage. Excellent for enhancing dark skin tones.

Classic Sunset

Enhances an existing sunset or creates the illusion of a flame orange sunset where none exists. Offers intense flame orange color that transitions to a soft gold gradient band across the center.

* Packaged in a soft filter pouch which includes a hook & loop strap to belt mount with padded slots to protect your filters.

Landscape **Control** Kit

4x5.65 - 68-885603

Includes:

- ND .6 Soft Edge Graduated
- 4" Filter Holder
- 77mm Wide-Angle Adapter Ring
- Filter Pouch



The Landscape Control Filter Kit includes an easy-to-use filter holder that makes it a snap to add the Kit's Schneider 4x5.65 ND .6 (2 stop) vertical soft edge grad filter-or any 4x4 or 4.5.65 square glass filter you need. Equipped with a handy springloaded quick release mechanism, the holder fits up to 2 filters and simply attaches to the camera lens front via an interchangeable screw-in adapter ring.

Schneider offers a full assortment of top quality 4x4 and 4x5.65 glass filters that fit neatly in the Landscape Control filter holder.

Schneider's ND .6 vertical soft edge grad filter is made of waterwhite Schott glass for unsurpassed image quality and is an excellent choice for controlling bright skies without losing shadow detail.

4" Filter Holder 94-250000

The 4" Filter Holder is made to hold Schneider MPTV 4mm thick water-white Schott glass filters that are available in 4x4 and 4x5.65 sizes. The holder rotates a full 360° enabling the use of polarizers or graduated filters. It can accommodate up to 2 glass filters. The holder includes a 77mm Wide Angle adapter ring which can be removed from the holder with a simple pull of the brass tab (located on the top) to exchange for other available sizes. The adapter ring can also be used with conventional step rings to quickly accommodate smaller filter diameter lenses.



Century 4x4 Essential 5-Filter Kit with Holder

70-C48802 Includes:

- ND .6 Solid
- ND .6 Soft Edge Graduated
- Circular Polarizer
- Black Frost 1/2 Diffusion Warming Skin Tone Enhancer

Also includes 77mm Adapter Ring, Multi-compartment Pouch & DVD



4x4 5-Filter Kit includes an easy-to-use 4" filter holder that eliminates the need for bulky mattebox systems-----teamed with 5 superior quality precision glass filters selected to help balance exposure, control depth of field & compensate for limited dynamic range. Equipped with a handy spring-loaded quick-release mechanism, the filter holder fits up to 2 filters & simply attaches to the camera lens front via an interchangeable screw-in adapter ring.



ASSIC SOFT^M FAMILY

Classic Soft[™]

Application: Blend small wrinkles and blemishes, while maintaining overall sharp focus to conceal the use of a softening filter. Greater strengths (I, 2) can add a mood to the scene by causing highlights to glow softly. Use with cine or HD cameras with 2/3" chip or larger.

Schneider has developed a subtle and effective softening filter that can be used freely without fear of compromising the high quality of contemporary lenses. Schneider Classic Soft filters are made possible by state-of-the-art optical technology and a proprietary Schneider manufacturing technique. In the normal range of exposure, this filter imparts only a closely confined, very subtle glow to highlights. If large amounts of over-exposure exist in a scene, like a blown window, Classic Soft filters add a stylish glow that keeps the scene's contrast under control, while adding a romantic look.

As with all Schneider optical glass filters, Classic Soft filters are designed for use in front of long lenses, singly or in combination, for even greater creative control.

Extreme Consistency

Classic Soft filters are manufactured to Schneider's renowned standards so same strength filters can be switched between A & B cameras, or lost filters can be replaced, with no discernable difference.

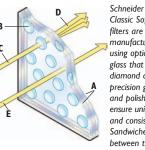




Sizes: 4"x 4", 4"x 5.65"(Panavision size), 5"x 5", 5.65"x 5.65", 6.6"x 6.6" plus 138mm, 4.5" & 48mm Rounds. Strengths: 1/8, 1/4, 1/2, 1, 2

The Secret of In-focus Diffusion[™]

Hundreds of Micro-Lenslets[™] arrayed within each Schneider Classic Soft filter provide a precisely controlled soft image that is overlaid on a sharp, in-focus image. The number of Micro-Lenslets per square inch determines the image-bending effectiveness of each Classic Soft filter. This combination diffuses the image while maintaining overall sharp focus.



Classic Soft filters are manufactured using optical glass that is diamond cut, precision ground and polished to ensure uniformity and consistency. Sandwiched between two

pieces of this optical glass (A) are hundreds of precision Micro-Lenslets (B). During use, image light (C) that passes through each Micro-Lenslet is only slightly refracted (D), while light (E) passing between Micro-Lenslets is unaffected.

Classic Soft filters are tested with a laser interferometer to ensure exact flatness and the parallel relationship between both sides.

"When shooting a multicamera series you are consistently cutting back and forth between cameras. I never worry about matching because I always bave Schneider filters on each lens." Don A. Morgan, ASC

HD Classic Soft[™]

Application: For subtle softening when using new 1/2", 1/3", and 1/4" chip cameras. Blends small wrinkles and blemishes while maintaining sharp overall focus.

When professionals asked for a way to bring subtle, softening effects to High Definition, Schneider listened and met the challenge.

HD Classic Softs impart a closely confined, very subtle glow to highlights. If large amounts of overexposure exist in a scenelike a "blown" window - they produce a stylish glow that keeps the scene's contrast under control, while adding a romantic look. This effect also blends small wrinkles and blemishes, while maintaining an overall sharp focus that conceals the fact that a softening filter has been used.

These new filters are designed to allow shooting in all HD formats, including 1/2", 1/3" and 1/4" chip cameras without fear of artifacts. Like all Schneider Optics professional filters, the HD Classic Soft line is manufactured from crystal clear, water-white optical glass that is diamond cut, precision ground and polished to the most exacting tolerances, to ensure absolute uniformity and consistency.

HD Classic SoftTM

Schneider HD Classic Softs produce the same rich In-Focus Diffusion™ as the standard Classic Soft series. Each one contains a carefully calculated amount of precisely positioned Micro-Lenslets[™]. These provide a controlled soft image that is overlaid on a sharp, in-focus image, creating In-focus Diffusion[™].

Sizes: 4"x 4", 4"x 5.65", 5"x 5", 5.65"x 5.65" and 6.6"x 6.6" plus 43mm to 138mm Rounds. Strengths: 1/16, 1/8, 1/4, 1/2 & Ī

"I'm a long-time fan of the Classic Soft[™]. It is the best wrinkle remover ever-and it is light enough to use on digital and film." Nancy Schreiber, ASC



HOLLYWOOD BLACK MAGIC

CLASSIC SOFT[™] FAMILY

Hollywood Black Magic™

Application: To remove unsightly blemishes & wrinkles while providing the look of an airbrushed texture to the image. Can subtly diminish the video edge while maintaining rich blacks and colors.

Building on the success of HD Classic Soft filters with the Micro-Lenslet design and Black Frost filters' Black Micropore technology, Hollywood Black Magic filters combine the best attributes of both. The shooter can select from a wide range of diffusion choices from subtly diminishing the "video edge" to removing years off the age of a person. Pleasant softening of bright highlights helps control exposure while maintaining rich blacks and colors.

Sizes: 4"x 4", 4"x 5.65", 5"x 5", 5.65"x 5.65" and 6.6"x 6.6" plus 43mm to 138mm Rounds. Strengths: 1/8, 1/4, 1/2. 1 & 2

Diffusion Filters Generally, diffusion falls into one of three main categories:

I. Image softening filters. Primarily affect resolution. Act cosmetically to hide wrinkles & blend blemishes on actors.

2. Black fogging filters. Low cons and other filters that raise the exposure of black levels.

3. White or highlightflaring filters. Put a halo

around blown windows, light sources, or areas of high exposure. Can also be used to reduce picture contrast by lowering white exposure, and to create romantic or period looks.



Application:

Combines the benefits of Classic Soft with the subtle effects of the Black Frost 1/8. Ideal for close-ups. and can be used to facilitate a seamless transition in the look and continuity from scene to scene, adding pleasing diffusion for High Definition cameras.

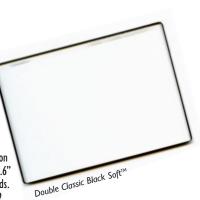
Sizes: 4"x 4", 4"x 5.65" (Panavision size), 6.6"x 6.6" plus 138mm, 4.5" & 48mm Rounds. Strengths: 1/8, 1/4, 1/2, 1, 2

Double Classic Black Soft™

Application:

For in-focus diffusion plus a heavier Black Frost effect, without filter stacking. Combines the features of the Schneider Classic Soft with a Black Frost 1/4.

Sizes: 4"x 4", 4"x 5.65" (Panavision size), 5"x 5", 5.65"x 5.65", 6.6"x 6.6" plus 138mm, 4.5" & 48mm Rounds. Strengths: 1/8, 1/4, 1/2, 1, 2



Classic Black Soft™

"Hollywood Black Magic Filters are nothing short of amazing. When shooting HD, you suddenly see everything. All the imperfections not meant for the audience to see. Make-up



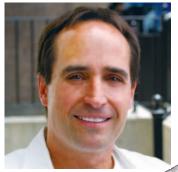
freaks out. Same with set designers & even actors. The Hollywood Black Magic on HD can do away with all of that. It makes the image seem more like film"

wood Black

Brian J. Reynolds Director of Photography

"What the Classic Black Soft[™] does in maintaining the look in HD is priceless! The subtle pop reminds me of what film does. Schneider is the Rolls Royce of glass."

William Webb Director of Photography

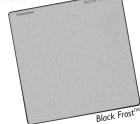


Black Frost™

Application: A fine black mist flairs highlights, tones down contrast, while retaining rich blacks. Black Frost filters give a "filmic look" to High Definition images. Depending on the strength, they subtly enhance a scene without fear of image degradation or reduction of black saturation.

Black Frost filters enable cinematographers to capture blacker blacks than possible with similar type filters. Shooters achieve a unique image styling that can be applied freely, without fear of having scenes appear heavy handed.

Thanks to proprietary Schneider design & manufacturing techniques, Black Frost filters contain thousands of MicroPore[™] particles, which introduce precise amounts of light diffraction while controlling stray light and flare—like never before.



MicroPore particles control the degree of diffusion in a predictable and repeatable manner. By eliminating excessive light scatter and veiling glare associated with other makes, Black Frost filters enable extraordinary control and convenience.

Black Frost filters can be used in front of long lenses, alone, or combined with other Schneider filters.

Sizes:

4"x 4", 4"x 5.65", (Panavision size) 5"x 5", 5.65"x 5.65", 6.6"x 6.6" plus 138mm, 4.5" & 48mm Rounds. **Strengths:** 1/8, 1/4, 1/2, 1, 2

White Frost[™]

Application:

A fine white mist lowers contrast and flairs highlights, while creating a dreamlike effect. Doesn't affect image resolution or color reproduction. Used for picture styling & mood modifying.

White Frost filters are useful for adding a halo around light sources, blown windows, or other areas of high exposure. They can also reduce picture contrast by lowering white exposure, and can help create a romantic or period look. Depending on the strength, they enhance a scene, subtly or strongly. For a soft, romantic look, combine White Frost filter with a Schneider Classic Soft.

Sizes: 4"x 4", 4"x 5.65", (Panavision size) 5"x 5", 5.65"x 5.65", 6.6"x 6.6" plus 138mm, 4.5" & 48mm Rounds. Strengths: 1/8, 1/4, 1/2, 1, 2

LowCon 2000

Application: To mute the excessive contrast and spread light into shadow areas. Can desaturate a scene for artistic mood. Lower strengths can be used to take the high contrast edge off today's lenses.

Unlike similar filters, LowCon 2000 filters reduce black contrast without reducing resolution or muddying the image.

Sizes: 4"x 4", 4"x 5.65", (Panavision size) 5"x 5", 5.65" x 5.65", 6.6"x 6.6" plus 138mm, 4.5" & 48mm Rounds. Strengths: 1/8, 1/4, 1/2, 1, 2

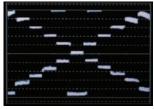
DigiCon™

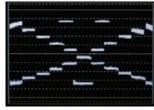
Application: For a "filmic look" when shooting with digital cameras. When in front of the lens, optically raises black levels while lowering highlights, capturing a higher dynamic range.

By compensating with in-camera gamma settings, a higher dynamic range can be recorded than the camera alone can achieve. The result is more detail in highlights and shadows with no effect on resolution and no color shift. Highlight areas remain clean and halo-free. Use it on a 35mm cine camera to approximate the look of a lower contrast film stock.



Sizes: 4"x 4", 4"x 5.65", (Panavision size) 5"x 5", 5.65"x 5.65", 6.6"x 6.6" plus 138mm, 4.5" & 48mm Rounds. Strengths: 1/8, 1/4, 1/2, 1, 2





Without Digicon

With Digicon

With Schneider Optics' Digicon, waveform monitor shows 20% uniform compression of original dynamic range.

"Thanks to the DigiCon, when we do exteriors, the pavement can be hotter and the foliage plays nicely. It allows me to create a much more filmic look. I no longer have to reign in the highlights & I can open up the blacks." George Mooradian, ASC



IOPTERS

Schneider Diopters are available in a full range of popular strengths.

True-Pol® Polarizing Filters

Applications: The most effective polarizer made for cine and electronic cameras, Schneider True-Pol® filters have an extinction ratio of ER 374. twelve times more effective than other such filters! Unmatched in ability to:

- Reduce glare & unwanted reflections
- Saturate colors & improve contrast
- Deepen blue skies
- Penetrate haze



True-Pol® Linear Polarizer True-Pol filters utilize polarizing film which is laminated between two pieces of Schneider's crystal-clear, water-white optical glass. The filter is protected against edge-chipping and delamination by a unique Edge Seal process, which also reduces edge reflections & flare.

The absolute clarity of the glass combined with advanced polarizing material make True-Pol filters particularly useful on demanding scenes. like shooting through windshields in rigged vehicles. Cinematographers report that True-Pol filters capture more color saturation, wider tonal range and greater contrast inside the car.

Sizes: 4"x 4", 4"x 5.65" (Panavision size), 5"x 5", 5.65"x 5.65", 6.6"x 6.6" and rounds in Series 9, 4.5", 138mm, 6" 9.5", 40.5 & 48mm.

"I love Schneider One-Stop Linear Polarizers for interiors. They allow me to handle the occasional cross-light shine on complexions without having to deal with lighting." Francis Kenny, ASC

One-Stop Linear Polarizer Applications: Low light such as indoors or night requiring elimination of glare and reflections off surfaces like car and storefront windows.

While the standard True-Pol is 1 3/5 stops, the One-Stop Linear Polarizer significantly reduces reflections while reducing available light by just one stop.

Sizes: 4"x 4", 4"x 5.65" (Panavision size), 5"x 5", 5.65"x 5.65", 6.6"x 6.6" Special orders for rounds as well as 40.5mm & 48mm threaded behindthe-lens filters (with anti-reflection multi-coating)

Screw-on Polarizers for **Video Lenses**

The Top-Pol and Kaesemann Pol employ Schneider's brass mounting rings to virtually eliminate jamming on the lens barrel. ENG camera operators, concerned with vignetting during wide-angles, may be interested in Schneider's Slim-Line B+W circular polarizers.



When one polariizing filter is turned & the other is held stationary, the density of the two should go from slightly gray to almost black. The more light passing through the filters at maximum density, the weaker the polarizing effect.



Diopters

Application:

Shorten the closefocusing distance of normal fixed focal length or zoom lenses. This allows the camera to focus closer to the subject and achieve a larger image size, while bringing out the sharpest details in even the tiniest subjects.

These high-quality close-up lenses require absolutely no exposure compensation. Schneider Diopters are made from the finest optical glass. They feature Schneider's hard, antireflective coating on both front and rear surfaces. This measurably reduces light loss and flare while helping to ensure proper color, contrast, and overall image quality. Screw-on Schneider Diopters are supplied with brass mounting rings, while drop-in models feature rugged black anodized aluminum rings.

Schneider Diopters are protected by a unique mounting technique which ensures superb structural integrity and consistent long-term performance, even in the harshest production environments.

Sizes: Series 9, 4.5", 138mm and 6" Rounds Strengths: For drop-in matte boxes: +1/2, +1, +2 and +3. For greater magnification, two Schneider Diopters can be combined.

Split-Field Diopters

Application: To enhance depth of field. Permit more of the scene to be in total focus simultaneously. Often used to increase depth of field in pictures shot with anamorphic lenses.

Schneider Split-Field Diopters are semicircular, single-element close-up lenses mounted in precision-crafted metal rings. To prevent the optical element from rattling or coming loose, Schneider first fits the glass to the mount with great precision and then locks it firmly in place with a state-of-the-art sealant.

Selecting the proper Split-Field Diopter for your scene depends on:

- Diopter power
- Distance from the lens to the far subject
- Distance from the lens to the close-up subject

Sizes: Series 9, 4.5", 138mm and 6" Rounds Strengths: +1/2, +1, +2, +3





No Diopter



+2 Diopter

+3 Diopter

Neutral Density Filters

Application: Control exposure or depth of field under various lighting conditions without affecting color or contrast.

- Permit use of high-speed film in bright lighting conditions.
- Diminish distracting backgrounds by allowing the use of wider apertures to reduce depth of field as required to throw the background out of focus while maintaining subject focus.
- Helps control the amount of light reaching the film without relying solely on the lens aperture.
- Enable even exposure in an unbalanced lighting situation.

Absorptive Neutral Density Filters

Schneider offers a full range of densities which provide exposure reductions of one to six stops, respectively. Maintaining a low F-stop for depth of field these filters are used for control of bright day exteriors

Only Schneider Absorptive ND filters are a laboratory-precise neutral gray. Each filter is made of two pieces of crystal-clear optical glass, which allows for the transmission of the truest possible attenuated light. To prevent edge-chipping and delamination, they feature Schneider's proprietary Edge Seal.

Sizes: Series 9, 4.5", 138mm Rounds, 4"x 4", 4"x 5.65" (Panavision size). 5"x 5", 5.65"x 5.65". Also in round screw-on rear mount 40.5 & 48mm Strengths: ND.3, ND.6, ND.9, ND1.2, ND1.5, ND1.8

Neutral Density Filter Exposure & Light Transmission			
ND	Transmission	Exposure Stops	
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0 1.2 2.0	80% 63% 40% 32% 25% 16% 13% 6% 1%	'/ ₃ 2/ ₃ 1 1 ¹ / ₃ 2 ¹ / ₃ 2 ¹ / ₃ 2 ¹ / ₃ 3 ¹ / ₃ 4 ² / ₃	
3.0 4.0	0.1% 0.01%	10 13 ¹/₃	

ND Combo Grads

Application: Help balance exposure and/or compensate for the limited dynamic range of digital cameras. Add two stops of ND to control overexposure of the sky or exposure of a scene from side to side. For example, a scene looking down a city street with buildings on one side in direct sunlight and shaded buildings on the other. The same technique can be applied indoors when a window or doorway blows out. For more of a film look, the cinematographer can decrease depth of field by shooting wide open.

The ND combo combines a solid neutral density filter (0.3, 0.6, 0.9, 1.2) with a soft edge 0.6 ND. In all densities, the additional soft edge is two stops more than the lower half of the filter.

Size: 6.6"x 6.6" **Strength Combinations:** ND 0.3/0.9, ND 0.6/1.2, ND 0.9/1.5, ND 1.2/1.8

Dual Grad

Application: To control exposure and/or depth of field for 2 different areas of the frame. Ideal for car shoots to neutralize the sky above the vehicle & the foreground below.

This unique filter offers a clear area separating 2 graduated ND attenuator sections. One section covering 2/3 of the glass graduates from 4 stops to the central clear, while the smaller 1/3 goes from 2 stops at the edge to the clear section.

Size: 6.6"x 6.6" Strengths: ND 1.2 up/.6 Down



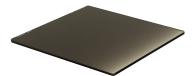
Dual Grad

Neutral Density True-Match Attenuators

Application: To control overall exposure and depth of field under various lighting conditions, without affecting color or contrast. Neutral Density (ND) Attenuators are used to control difficult lighting conditions such as bright sun, shadow shots of city streets or excessive bright windows in an interior shot without having to hide a grad line within the scene.

These filters diminish distracting backgrounds by enabling the use of wider lens apertures, thereby reducing depth of field. Conversely, they can be used to properly expose varying light levels within a given frame and allow the amount of light reaching the film to be controlled without relying solely on camera aperture. Made of the finest crystal-clear, water-white optical glass, ND Attenuators are precision engineered with unparalleled smoothness, uniformity and consistency and can be used alone or in combination with other filters with no image degradation.

Sizes: 4"x 4", 4"x 5.65" Horizontal (Panavision size), 5"x 5", 5.65"x 5.65", 6.6"x 6.6". Strengths: ND.3, ND.6, ND.9, ND1.2, ND1.5, ND1.8





10-stop variable ND Filter Kit

Application: The perfect choice for DSLR cameras with high ISO settings, it allows the user to select the lens f/stop & camera speed independent of ambient light conditions. Works in conjunction with Schneider's DSLR 4" Filter Support system.

> This carefully matched set of filters work in combination. to produce a density range from |-|/3 stop loss in full transmission to II stops full attenuation. By

selecting the best quality materials, Schneider's variable ND offers II stops (ND 3.3) attenuation with no blue color shift at maximum density (commonly a problem with inferior or unmatched materials.)

The kit is comprised of a screw-on True-Match filter in 67mm to 95mm sizes that mount on the camera lens. a Schneider 4x4 rotating 2-slot filter holder, and a True-Match 4"x4" filter. The filters can be purchased separately, without the filter holder for those who already have a 4"x4" rotating matte box with 4mm slots.

Size: 4x4 and 58, 62, 67mm, 72, 77mm, 82mm, 85mm and 95

""The Schneider ND Attenuator is quite the amazing tool, particularly for digital sensors." Bill Bennett, ASC

Color Correction Filters

Color Correction filters change the color content of the light to match the color response of the film and permit the user to

creatively modify color in subtle ways.

Encompassing a wide range of colors and densities, color correction filters are categorized into three main groups: Color Conversion, Light Balancing and Color Compensating. Each can create a wealth of practical color-temperature corrections and creative color effects.

85 & 81 EF Color Conversion

Application: The 85 is primarily used to correct the color of tungsten balanced film when shooting in day-light. The 81EF helps penetrate light fog and eliminates the strong blue tone & haziness produced by UV light. The 81EF reduces blue tones in shadow areas without causing the look of an overcast sky. An 81EF can be combined with an 85, to achieve overcorrection resulting in a warm look.

The 85 remains the industry's most commonly used color conversion filter. Schneider strictly adheres to Kodak Wratten color standards.

Sizes: Series 9, 4.5", 138mm, 4"x 4", 4"x 5.65" (Panavision size), 5"x 5", 5.65"x 5.65", 6.6"x 6.6", 138mm Round



Schneider 85 & 81EF filters can be used alone or combined.

Tungsten balanced film without a Schneider 85 filter.



Schneider's 81 Series For Skin Tones

Application: The 81-Two is used to accentuate skin tones for a warmer appearance. For a subject with darker skin tones, the 81-One is more appropriate. Ideal for romantic close-ups, the 81 Series can be combined with softening filters.

Schneider's 81-One and 81-Two warming filters were born from

the 81-A. Both filters are designed to add warmth to skin tones and reduce excessive blue in outdoor open shade.

Sizes: Series 9, Schneider 85 4.5", 138mm,

4"x 4", 4"x 5.65" Schneider consistency ensures that an 85ND.6 Combination filter will produce an (Panavision size), effect that precisely matches the results of stacking separate 85 & ND.6 filters. 6.6"x 6.6" and 138mm Round



Tungsten balanced film with a Schneider 85 filter.

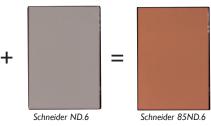


Combination Filters

Application: When more filter effects are desired than can be fit in a two or three slot matte box. combination filters make it possible.

Blending two or more filter effects into one filter makes it possible to have less glass in front of the lens -an advantage when using several filters simultaneously. Schneider's 85 Neutral Density combination filters are precision ground and polished to a perfect flatness and parallel thickness, and feature Schneider's unique Edge Seal, which prevents edge-chipping and delamination, and also reduces edge-reflections & flare.

Schneider offers several other combination filters including the 85/True-Pol and 81EF/True-Pol.



Sizes: Series 9, 4.5", 138mm, 4"x 4", 4"x 5.65" (Panavision size), 5"x 5", 5.65"x 5.65", 6.6"x 6.6" and 138mm Round

Enhancing Filters

Application: Improves the color saturation of reds, oranges & earthtones such as rust, brown & amber. Without enhancing filter



The range of colors improved by the Schneider Enhancing filter (made from didymium glass) makes it popular for use on autumn foliage and brownish-red scenic compositions, such as those found at the Grand Canyon. It is also the filter of choice for intensifying the red in objects such as tomatoes, cherries, strawberries and fire engines.

For more dramatic and exciting effects, a Schneider Enhancing filter can be combined with a polarizing filter.

Sizes: Series 9, 4.5", 138mm, 4"x 4", 4"x 5.65" (Panavision size) 5"x 5", 5.65"x 5.65", 6.6"x 6.6" and 138mm Round

UV-410 Penetrates Haze

Application: Ultraviolet-blocking filter effectively reduces or eliminates photographic haze in locations where the atmospheric conditions contain a heavy concentration of dust particles, water droplets & pollution.

Photographic haze - often found in mountainous or coastal regions and industrial areas - scatters light and produces a bluish cast causing film to render a lack of color, contrast and overall image quality. By filtering out ultraviolet light below 410 nanometers, the Schneider UV-410 blocks the blue cast, penetrates haze and permits the film to capture vivid colors and sharper detail.

Sizes: Series 9, 4.5", 138mm, 4"x 4", 4"x 5.65" (Panavision size), 5"x 5", 5.65"x 5.65", 6.6"x 6.6", 138mm Round With enhancing filter



16

SOLID & GRAD COLOR EFFECTS



Sahara Gold*

Application: Especially useful in creating a rich, warm scene for an old Technicolor look. This filter approximates 3/4 the color correction value of an 85 filter. Can also replace an 81EF for a cool look. Holds skintones better than 81EF.



Maui Brown

Application: Enhances browns & golds, gives depth to foliage & architecture. Lightest density #1 excellent for enhancing dark skin tones.



Amber (solid 3) Application: Can simulate the effect of candlelight or a firelit scene.



Antique Suede (solid 1) Application: Reduces greenish tint in complexion shadows. Outdoors it helps accentuate foliage.



Gold (solid 3) Application: For an overall warming effect. Portrays healthy skintones & accentuates foliage.

*Sahara Gold—Single Density only.

Schneider

Golden Sepia (solid 1) Application: For a period look like in old photographs.



Chocolate (solid 2) **Application:** Natural warming effect. Helps smooth transition between light & dark complexions.



Tobacco (solid 2) **Application:** For an old west period look.



Sapphire Blue (solid 3) Application: Adds indigo blue color.



Storm Blue (solid 2) Application: Adds gray green color to ocean and sky for a stormy effect.

SOLIDS

Sizes: 4"x 4", 4"x 5.65" (Panavision size), 5"x 5", 5.65"x 5.65", 6.6" x 6.6" Densities: 1, 2, 3

Graduated **Color Filters**

Application: Add color to part of a scene where color may be weak or absent. Can also be used for color effects which contribute to the cinematic drama of a scene.

All Schneider Graduated Color filters are part clear and part color. They are designed to be used in professional matte boxes, so that they are readily positioned at the exact angle required to create desired effects.

Graduated Color filters, designed to provide a wide range of photographic effects, work well with sky, foliage and skin tones. They can be combined with each other, or with other filters, to provide a virtually limitless range of breathtaking effects.

Schneider Neutral Density (ND) Grads can be used to balance exposure in uneven lighting situations or to increase color saturation in sky scenes, by lowering sky exposure.

Soft or Hard Edge

Schneider makes both soft-edge and hard-edge Graduated Color filters. Typically soft-edge filters are used with wide to medium-angle lenses because these lenses have greater depth of field. Hard-edge filters are preferred for use with telephoto lenses or for bold transitions.



All Schneider Graduated Color filters perform beautifully, providing exactly the desired degree of color effect without calling undue attention to the transition of the filter itself. In fact, soft-edge Schneider Graduated filters have such a smooth transition from color to clear, that the point of transition is not readily visible even when using short focal-length lenses. It's also the filter of choice when shooting irregular horizons or city skylines.

Graduated Color filters feature crystal-clear, water-white optical glass, and are protected against edgechipping and delamination by Schneider's unique Edge Seal, which also significantly reduces edge reflections and flare.

Sizes: 4"x 4", 4"x 5.65" (Panavision size) 5"x 5", 5.65"x 5.65", 6.6"x 6.6" Graduated Color filters in Panavision size are available in horizontal (landscape) & vertical (portrait).



		l
Verti	cal	



Hard-edge blend

No filter

Soft-edge blend

4"x 5.65"





Soft-edge blend

Hard-edge blend

COLOR CORRECTION FILTERS

Corals

Application: To warm cool lighting situations such as overcast days and scenes in open shade.

Varying strength Coral filters can be used to achieve the same degree of apparent warmth under different light conditions. This makes them particularly useful for maintaining consistent color balance throughout an entire day of shooting, or to create a sunset or dawn effect during the day. Can be used as warming filters

> for dramatic effects or to under-correct a scene for an excessively blue look, adding drama.

Sizes: Sizes: 4"x 4", 4"x 5.65" (Panavision size), 5"x 5", 5.65"x 5.65", 6.6"x 6.6" & 138mm Round Densities: 1/8, 1/4, 1/2, 1 & 2

Day for Night

Application: For a believable nighttime look.

The Day for Night combines Neutral Density and a slight aquamarine blue to simulate moonlight conditions. Total stop loss for the filter is 4 stops.

Sizes: 4"x 4" and 4"x 5.65" (Panavision size), 5"x 5", 5.65"x 5.65", 6.6"x 6.6"



Solid Magentas Application: Correcting fluorescent lighting, music videos.

Schneider graduated Color Correction filters are rated 1, 2, 3. All Magenta filters are matched exactly to Kodak Wratten standards.

Sizes: 4"x 4", 4"x 5.65" (Panavision size), 5"x 5", 5.65"x 5.65", 6.6"x 6.6" Densities: 10cc., 20cc., 30cc.

Sunset

Classic Sunset Application: Works with a wide range of focal lengths to

enhance an existing sunset or create the illusion of a flame orange sunset where none exists.

Schneider's Classic Sunset filter offers intense flame orange color that transitions to a soft gold gradient band across the center. The density at the darkest edge is 2 stops. The other half of the filter is dear.



Day for Night filter

Without a filter



A Schneider Coral filter enhances orange foliage.



A graduated Coral filter can enhance a sunset.





courtesy of Reed Smoot, ASC

Photos

Same shot through a Schneider Classic Sunset filter.



CTB Color Correction

Application: When working in HD, balances temperature from tungsten toward daylight.

Many of today's HD sensors are designed to work best in a daylight balanced lighting spectrum. With presets that compensate for tungsten light, this often raises significant noise in color channels under difficult low light conditions.

Schneider's CTB filter line balances color temperature from tungsten toward daylight in incremental steps. Users then have control to correct as much or as little of the exposure as desired. So they can color correct while maintaining low noise levels at minimal light level.

The new CTB filter line has been designed to correspond to existing lighting color correction standards, offering a range of correction for most situations. Stop loss is 0.17 for the eighth, 0.24 for the quarter and 0.34 for the half.

These filters maintain a high MTF (modulation transfer function).

Sizes: 4"x 4", 4"x 5.65" (Panavision size), 5"x 5", 5.65"x 5.65", 6.6"x 6.6" plus 77mm Rounds. Corrections: 1/8, 1/4, 1/2

"Despite improved filtration built into RED's new MX sensor, Schneider IR filters are still essential to consistently ensure true blacks when shooting in bright sunlight with heavy ND."

James Mathers Director of Photography



True Cut IR

Application: IR contamination when photographing scenes with digital cinema CMOS sensor cameras.

Schneider has developed a family of IR filters to complement the demanding requirements of today's High Definition cameras.

High Definition camera arrays have a high sensitivity to light beyond the visible range. This can be beneficial in applications such as machine vision or surveillance but for most production this tends to be a problem due to unwanted color shifts in dark or black materials. Schneider's True-Cut IR filter solutions eliminate this problem by limiting the light striking the CCD or CMOS imager to the visible spectrum.

Sizes: 4"x 4", 4"x 5.65" (Panavision size), 5"x 5", 5.65"x 5.65", 6.6"x 6.6", plus 77mm Rounds.



21

D A P P L I C A T I O N S

Rhino Glass™

Application:

Anti-reflective water-white glass to protect onboard monitors, vector scopes, and waveform monitors.

Made from water-white precision optical glass and treated with a durable anti-reflective coating, Rhino Glass cost-effectively protects the screens of expensive on-board monitors and the front of 3D Rigs. Attaching with Velcro[®] or RTV provides easy removal for cleaning or replacement. Rhino Glass can be cleaned with common glass cleaners. Available in popular sizes. Custom sizes available on request.

Optical Flats



Application: During stunts which can damage a lens, Schneider Optical Flats protect expensive front elements and other filters, while providing the truest image, free of unwanted color shifts.

Made from Schneider's clear optical glass, these filters minimize or eliminate the need for laboratory color correction caused by filter variation. Both the front and rear surfaces of these solid-glass (non-laminated) filters receive Schneider's hard anti-reflective coating, which measurably improves light transmission.

Sizes: Series 9, 4.5", 138mm, 4"x 4", 4"x 5.65" (Panavision size), 5"x 5", 5.65"x 5.65", 6.6"x 6.6", 138mm Round

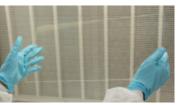
3-D Windows

Application: Anti-reflective water-white glass to protect 3D beam splitters.

Beamsplitters used in today's 3-D camera rigs are an expensive component of the systems. However they are susceptible to damage from flying debris and are difficult to clean without damaging. Because of the exposed front surface silver coating on the splitters, even small deposits of saliva from talking too close to the rig can contaminate and damage the coating permanently by etching into it.

Schneider Optics offers a full line of optical glass anti-reflection coated windows in stock and custom sizes to provide low-cost protection. These protective windows can be used with long focal length lenses without reducing resolution and are easily cleaned.

Schneider also produces Optical Grade Polycarbonate windows that can be used as protection. While these economical windows do not offer as high a quality of optical performance as glass they can be used in situations where durability and protection is needed.



3D Window

Schneider optical flats are made of crystal-clear, water-white optical glass.



Circular True-Pol® for Video Assist & 3-D Projection

Application: To prevent viewfinder black-out on cameras which employ polarizing elements in the beamsplitters of the viewing system, like Arriflex 435 and MovieCam Compact.

Camera beam splitters send light in two directions: to an eyepiece & to a video tap. Light in a camera's viewing system can become polarized, and when a standard (linear) polarizing filter is attached to the lens, the light becomes cross polarized. This hinders visibility & can create total blackout of the viewing image and/or the videotap.

Circular Polarizers employ a twolayer design to prevent blackout. The first layer is made of the polarizing substance used in all True-Pol filters. Layer two is made of a 1/4-wave retarder plate to prevent cross-polarization. To ensure correct lens barrel placement, Schneider clearly marks the Circular True-Pol filters' outer surface.

Available in Left and Right hand polarization for projection in standard and custom sizes.

Sizes: 4"x 4", 4"x 5.65" (Panavision size), 5"x 5", 5.65"x 5.65", 6.6"x 6.6" & 138mm Round

Quarter Wave Retarders

Application: To prevent left/right disparity in images that contain glare.

3-D camera rigs that employ a beamsplitter can be susceptible to partial polarization because of the silvered surface used by the reflected image. This generally produces a left/right disparity in images that contain glare.

Schneider Quarter Wave Retarders ensure that both optical paths have identical properties, thus correcting the linear polarization.

These filters have virtually no light loss and can be used in different configurations to correct polarization mismatches. The filters are made of water white optical quality glass with a thin film laminated within. Each filter is polished to produce a high quality optical flat that can be used without any reduction in resolution.

Sizes: Available in custom and stock sizes.

SCREW-ON FILTERS



Application: Professional still formats and DV cameras requiring a filter that screws onto the front of the lens without a mattebox.

Schneider's industry-standard diffusion filters used in feature film cinematography and television are now available for film, digital SLR and HD video cameras.

Classic Soft[™]

Finally Hollywood's favorite diffusion softening filter is available for digital SLR and DV cameras with 2/3" chips and bigger. They provide the optimum way to blend small wrinkles and blemishes while maintaining an overall sharp focus to conceal the use of a softening filter. For more information on Classic Soft, see page 6.

Black Frost[™]

Black Frost[™] filters subtly enhance a scene providing an airbrushed look to the image. In fact, they enable photographers to capture blacker blacks than are possible with similar types of filters. For more information on Black Frost, see page 10.

HD Classic Soft[™]

Schneider HD Classic Soft filters were designed in response to requests for a high-quality softening filter to complement the new high-resolution 1/2", 1/3" and 1/4" chip cameras. They deliver the same subtle, effective softening performance of the standard Classic Soft filters. This effect blends small wrinkles and blemishes, while maintaining overall sharp focus. For more information on HD Classic Soft, see page 7.

Hollywood Black Magic[™]

Hollywood Black Magic filters removes unsightly blemishes and wrinkles while providing a smooth transition in the highlights. Pleasant softening of bright highlights helps control exposure while maintaining rich blacks and colors. For more information on Hollywood Black Magic, see page 8.

Sizes: Screw-on filters are available in 43, 58, 62, 72, 77, 82 rounds. For more information or additional sizes, visit us online.

HD CLASSIC SOF

B+W FILTER B+W Screw-on Filters

Application: Professional Cine Style, HD Video and Still Format cameras requiring a filter that screws onto the front of the lens.

The Schneider line of B+W filters has been an essential optical tool of users of medium and large format cameras for over 60 years. Outfitted with precision-engineered screw-on mounts, constructed of the highest quality materials, B+W filters are renowned for their unmatched ability to safeguard the lens while enhancing performance and delivering unsurpassed image quality. Now the full line of B+W filters is available in screw-on versions designed specifically for work with HDTV & DV cameras.

B+W uses the very best glass & filter mounts and machines them with CNC-controlled fabrication machines to make sure that filters, supplementary lenses, and special effects attachments perform their functions optimally and without jeopardizing the image quality. This provides the tightest possible tolerances with stringent quality control at every stage of production. B+W filters are available uncoated, single layer or with multiresistant coating (MRC) technology. B+W's unique, proprietary MRC virtually eliminates surface reflections on both sides of the filter, which results in maximum light transmission. What's more, the extraordinary hardness of the coating minimizes scratching and its water and dirt repelling surfaces facilitate the filter's care and preservation.

Sizes: 58, 62, 72, 77, 82, 86, 95, 102, 105, and 127mm. For more information or additional sizes, visit us online.

Every Schneider B+W filter is manufactured with precision to the exact thickness required for sharp focus.

DSLR PRODUCTS

CAM CADDIE SCORPION

Popular Products for HD DSLR cameras



True-Match 10-stop variable ND Filter Kit

Application: The perfect choice for DSLR cameras with high ISO settings, it allows the user to select the lens f/stop and camera speed independent of ambient light conditions. Works with Schneider's DSLR 4" Filter Support system.

See page 15 for additional information.

4x5.65 Landscape Control Kit

68-885603 Includes:

- ND .6 (2 Stop) Vertical Soft Edge Grad
- 4" Filter Holder
- 77mm Wide-Angle Adapter Ring
- Filter Pouch

See page 4 for additional information.



Graduated Color Filters

Application: Add color to part of a scene where color may be weak or absent. Can also be used for color effects which contribute to the cinematic drama of a scene. See page 19 for additional information.

4" Filter Holder 94-250000

The 4" Filter Holder is made to hold Schneider MPTV 4mm thick water-white Schott glass filters that are available in 4x4 and 4x5.65 sizes.

See page 5 for additional information.

Century 4x4 Essential 5-Filter Kit with Holder



70-C48802 Includes:

- ND .6 Solid
- ND .6 Soft Edge Graduated
- Circular Polarizer
- Black Frost 1/2 Diffusion
- Warming Skin Tone Enhancer Also includes 77mm Adapter Ring, Multi-compartment Pouch & DVD See page 5 for additional information.

Schneider MPTV Photo Round Filters

Application: Schneider's industry-standard diffusion filters used in feature film cinematography and television are now available for film, digital SLR and HD video cameras. See page 28 for additional information.



Cam Caddie Scorpion

OCC-0100-00 Professional video and DSLR camera support.

Schneider Optics, the exclusive worldwide distributor, now offers the Cam Caddie, a simple, yet amazingly effective hand held stabilizing device designed to work with virtually any lightweight still, DV or HDSLR camera.

This effective yet affordable mount holds a variety of HD, DV, DSLR, and video DSLR cameras. Constructed of lightweight polymer, Cam Caddie provides a comfortable, solid camera platform that enables stable support and dampens movement while shooting—enabling smooth and steady footage.



What's more, the system can facilitate moves that look like a professional jib arm or camera stabilizer. It is ideal for capturing dynamic action camera work like skateboarders, sports, weddings, corporate films, walk throughs, and more. Optional accessories include a shoe and the Accessory Wing and tripod adapter that allows for the quick attachment and release of monitors, lights, microphones, and other important accessories.

Features:

- Stable and lightweight
- Quick-Release: attach any camera in seconds
- Multi-Angle positioning plate to achive the perfect balance
- Space for most mics, monitors, lights & other accessories





Cam Caddie Accessory Shoe

Attach accessories to the Cam Caddie Scorpion. Completely adjustable: mount one or multiple Accessory Shoes to the Cam Caddie Scorpion. Attach all or your accessories such as Flash units, Litepanels, Microphones, XLR Inputs or External Recording devices.





Features:

- Mount accessories to the Cam Caddie Scorpion
- Attach: Field Recorders, Lavaliere Transponders, Lights, Litepanels, Mics & Monitors
- Attach TTL Speedlite & Flash Units
- Adjustable to Maximize Weight Distribution & Balance Points
- Mount Monitors in Different Viewing Positions
- Quick Release Attachment

27

