Specification subject to change without notice.
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 and Digital Imaging

Schneider filters are available in popular sizes including 4”x4”, 4”x5.65” (Panavision size), 5”x5”, 5.65”x5.65”, 6.6”x6.6” 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.
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 4”x5.65” ND .6 (2 stop) vertical soft edge grad filter—or any 4”x4” or 4”x5.65” square glass filter you need. Equipped with a handy spring-loaded 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 4”x4” and 4”x5.65” glass filters that fit neatly in the Landscape Control filter holder.

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

Compact ND Kit for 114MM/CP.2
4.5˝ Round — 68-884501
Includes: ND.6, ND.9, ND1.2, 114mm SSLR-4.5˝ Adapter Ring

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 4”x4” and 4”x5.65” 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.
Classic Soft®

Application: Blend small wrinkles and blemishes, while maintaining overall sharp focus to conceal the use of a softening filter. Greater strengths (1, 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.

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.

Sizes: 4˝x4˝, 4˝x5.65˝ (Panavision size), 5˝x5˝, 5.65˝x5.65˝, 6.6˝x6.6˝ plus 138mm, 4.5˝ & 48mm Rounds.

Strengths: 1/8, 1/4, 1/2, 1, 2

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 scene—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.

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˝x4˝, 4˝x5.65˝, 5˝x5˝, 5.65˝x5.65˝, 6.6˝x6.6˝ plus 43mm to 138mm Rounds.

Strengths: 1/16, 1/8, 1/4, 1/2 and 1

“When shooting a multi-camera series you are consistently cutting back and forth between cameras. I never worry about matching because I always have Schneider filters on each lens.”
Don A. Morgan, ASC

“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™

**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”x4”, 4”x5.65”, 5”x5”, 5.65”x5.65”, 6.6”x6.6” plus 43mm to 138mm Rounds.

**Strengths:** 1/8, 1/4, 1/2, 1 and 2

“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 and even actors. The Hollywood Black Magic on HD can do away with all of that. It makes the image seem more like film”

Brian J. Reynolds, DP

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

1. **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 highlight-flaring 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.

Classic Black Soft™

**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”x4”, 4”x5.65” (Panavision size), 6.6”x6.6” plus 138mm, 4.5” and 48mm Rounds.

**Strengths:** 1/8, 1/4, 1/2, 1, 2

“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, DP

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”x4”, 4”x5.65” (Panavision size), 5”x5”, 5.65”x5.65”, 6.6”x6.6” plus 138mm, 4.5” and 48mm Rounds.

**Strengths:** 1/8, 1/4, 1/2, 1, 2
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.

**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”x4”, 4”x5.65”, (Panavision size) 5”x5”, 5.65”x5.65”, 6.6”x6.6” plus 138mm, 4.5” and 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”x4”, 4”x5.65”, (Panavision size) 5”x5”, 5.65”x5.65”, 6.6”x6.6” plus 138mm, 4.5” and 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”x4”, 4”x5.65”, (Panavision size) 5”x5”, 5.65”x5.65”, 6.6”x6.6” plus 138mm, 4.5” and 48mm Rounds

**Strengths:** 1/8, 1/4, 1/2, 1, 2

“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
**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

**Without True-Pol®**

- They allow me to handle the occasional cross-light shine on complexions without having to deal with lighting.
- 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.

**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”x4”, 4”x5.65” (Panavision size), 5”x5”, 5.65”x5.65”, 6.6”x6.6”

**Special orders for rounds as well as 40.5mm and 48mm threaded behind-the-lens filters (with anti-reflection multi-coating)**

**Screw-on Polarizers for Video Lenses**

**The Top-Pol and Kaeemann 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.**

**Circular Polarizers employ a two layer 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.**

**Sizes:** 4”x4”, 4”x5.65” (Panavision size), 5”x5”, 5.65”x5.65”, 6.6”x6.6” and 138mm Round

**Without polarizing filter**

- Camera beam splitters send light in two directions: to an eyepiece and 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 and can create total blackout of the viewing image and/or the videotap.

**With polarizing filter**

- Circular Polarizers are so versatile they can also perform the opposite functions. Some use polarizers to increase or enhance reflections, simply by changing the filter’s setting. Ideal for:
  - Darkening skies for dramatic impact. While graduated neutral density filters can also be used to achieve this effect, the need to position their transition line accurately precludes their use in many applications. Polarizers do not suffer from this limitation.
  - Suppressing reflections & capturing truer color when filming actors through a windshield and from other rigged-car camera positions.
  - Greatly adding to the drama and appeal of the shot when shooting food (particularly meat or liquids).
  - Increasing the color saturation of any object with a glossy surface.

“**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
Applications: Eliminate the undesirable effects of IR contamination or pollution that can occur when photographing bright scenes with digital cinema CMOS sensor cameras. Can be used as an IR Reduction filters or in combination with ND, controlling exposure or depth of field under various lighting conditions without affecting color or contrast.

IRND: True Blacks from HD Cameras

Cinematographers have found that many of today’s high definition cameras have a high sensitivity to light just beyond the visible range. This can be beneficial in extending the color gamut of digital cameras to closely approach that of traditional film. However, light in the IR spectrum can also cause unwanted false color shifts and prevent the camera’s imagers from capturing true black tones.

To solve this problem, Schneider’s new Platinum Series IRND filters limit the light striking the camera’s CCD or CMOS imager to the visible spectrum. By carefully calculating the cutoff frequency in nanometers, Schneider has been able to produce a near infrared cut filter that lets users of High Definition cameras get the most out of their camera gear. This means the benefit of an extended color gamut without the worry of unwanted false colors. Eliminating the near infrared light leakage lets the camera maintain true color rendition in the blacks while maintaining high MTF of its lenses and camera system.

2-in-1 Function

The Platinum IRND combines the best attributes of Schneider’s Platinum series IR filter and Neutral Density (ND) filters in a single convenient package. Blending two effects into one filter makes it possible to have less glass in front of the lens — lowering the risk of a dirty surface, flares, reflections between the layers, or even the miniscule loss of clarity that may occur when using multiple filters simultaneously.

Great as a standard ND

Schneider Platinum Series IRND filters are free of off-axis color shift regardless of the focal length and can be stacked without introducing reflections. In addition, they can be used with all current digital and film cameras as IRND or standard N.D.

Sizes: All standard video and cine sizes, including: 4”x4”, 4”x5.65”, 5”x5”, 5.65”x5.65”, 6.6”x6.6” rectangular sizes plus rounds, 138mm, 4.5” and Series 9, plus common video sizes 72mm, 77mm, 82mm, and 95mm.

Strengths: IRND .3, IRND .6, IRND .9, IRND 1.2, IRND 1.5, IRND 1.8, IRND 2.1

Schneider came through for us with some of the first sets of their great new Platinum IRNDs, and all our color matching problems disappeared.

Lowell Peterson, ASC

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”x4”, 4”x5.65” (Panavision size), 5”x5”, 5.65”x5.65”, 6.6”x6.6” plus 77mm Rounds.

“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, DP
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 Rounsides, 4”x4”, 4”x5.65” (Panavision size), 5”x5”, 5.65”x5.65”. Also in round screw-on rear mount 40.5 and 48mm

**Strengths:** ND.3, ND.6, ND.9, ND.12, ND.15, ND.18

**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”x6.6”

**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”x6.6”

**Strengths:** ND 1.2 up/.6 Down

**Neutral Density Filters**

**Exposure & Light Transmission**

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Neutral Density 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”x4”, 4”x5.65” Horizontal (Panavision size), 5”x5”, 5.65”x5.65”, 6.6”x6.6”

**Strengths:** ND.3, ND.6, ND.9, ND.12, ND.15, ND.18

True-Match 10-stop variable ND Filter Kit

**Application:** The perfect choice for DSLR cameras with high ISO settings, the True-Match Vari-ND® 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 1-1/3 stop loss in full transmission to 10 stops full attenuation. By selecting the best quality materials, Schneider’s variable ND offers 10 stops (ND 3.3) attenuation with no blue color shift at maximum density (common 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 4”x4” 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:** 4”x4”, 77mm, 82mm.

Step Rings available for smaller sizes
VARI-ND FILTERS

4x5.65 Landscape Control Kit

**Application:** Landscape Control Filter Kit is designed with the demanding needs of nature and landscape photographers in mind. The graduated neutral density can be moved up or down in the scene & used to balance uneven exposure values from background to foreground that is difficult if not near impossible to achieve with post image processing.

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 0.6 (2 stop) vertical soft edge grad filter—or any 4x4” or 4x5.65” glass filter. Equipped with a handy springloaded quick release mechanism, the holder fits up to (2) 4mm thick glass filters. Simply attaches to the camera lens front via an interchangeable screw-in adapter ring. Schneider’s ND 0.6 vertical soft edge grad filter is made of water-white Schott glass for unsurpassed image quality and is an excellent choice for controlling bright skies without losing shadow detail.

True-Match Vari-ND® Thread-In

The 77mm and 82mm True-Match Vari-ND Thread-In is a single, low profile filter with both True-Match Polarizing filters in the correct orientation for maximum ease of use & efficiency. The low profile ring prevents vignetting on most DSLR camera lenses. By simply turning the built-in rotating ring, the photographer dials in the perfect amount of ND for the scene, from 1-1/3 to 10 stops of light loss. Step rings are available in common sizes to adapt the 77mm & 82mm sizes to smaller lens thread diameters.

True-Match Vari-ND® Upgrade Kit for the Schneider Landscape Control Kit allows the photographer to create a variable ND filter, utilizing the Landscape Control Kit.

The carefully matched set of filters work in combination to produce a density range from 1-1/3 stop light loss to 10 stops of light loss. By selecting the best quality materials, the Schneider variable ND offer 10 stops (ND 3.3) attenuation with no blue color shift at max. density, a common problem with inferior brands.

The kit is comprised of a screw-on 77mm True-Match Circular Polarizer (non-rotating) that threads to the front of the camera lens, and the 77mm adapter ring from the Landscape Control Kit that is then screwed onto it. The 4x4 True-Match Linear Polarizer slides into the 4” Filter Holder 4mm slot in front, which is then clipped onto the adapter ring. The filter holder can then be rotated to produce varying levels of density, from 1-1/3 to 10 stops of light loss. The perfect choice for DSLR cameras with high ISO settings. Step rings are available in common sizes to adapt the 77mm and 82mm sizes to smaller lens thread diameters.

Diopters

**Application:** Shorten the close-focusing 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, anti-reflective 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, +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 semi-circular, 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
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 & 81EF Color Conversion

Application: The 85 is primarily used to correct the color of tungsten balanced film when shooting in daylight. 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 over-correction 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”x4”, 4”x5.65” (Panavision size), 5”x5”, 5.65”x5.65”, 6.6”x6.6”, 138mm Round

85 & 81EF Color Conversion

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 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.

Sizes: Series 9, 4.5”, 138mm, 4”x4”, 4”x5.65” (Panavision size), 5”x5”, 5.65”x5.65”, 6.6”x6.6”, 138mm Round

85ND.6 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.

Combining 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”x4”, 4”x5.65” (Panavision size), 5”x5”, 5.65”x5.65”, 6.6”x6.6” 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”x4”, 4”x5.65” (Panavision size), 5”x5”, 5.65”x5.65”, 6.6”x6.6” and 138mm Round

Enhancing Filters

Application: Improves the color saturation of reds, oranges & earth-tones such as rust, brown & amber.

Sizes: Series 9, 4.5”, 138mm, 4”x4”, 4”x5.65” (Panavision size), 5”x5”, 5.65”x5.65”, 6.6”x6.6”, 138mm Round
Solid & Grad Color Effects

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 edge-chipping and delamination by Schneider's unique Edge Seal, which also significantly reduces edge reflections and flare.

Sizes:
- 4"x4", 4"x5.65" (Panavision size)
- 5"x5", 5.65"x5.65", 6.6"x6.6"

Graduated Color filters in Panavision size are available in horizontal (landscape) and vertical (portrait) orientation.

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 and accentuates foliage.

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 and dark complexions.

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

Paradise Blue (solid 3)
Application: Adds vibrant color to washed-out sky.

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"x4", 4"x5.65" (Panavision size), 5"x5", 5.65"x5.65", 6.6"x6.6"
Densities: 1, 2, 3

*Sahara Gold—Single Density only.
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:** 4˝x4˝, 4˝x5.65˝ (Panavision size), 5˝x5˝, 5.65˝x5.65˝, 6.6˝x6.6˝ and 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 & a slight aquamarine blue to simulate moonlight conditions. Total stop loss for the filter is 4 stops.

**Sizes:** 4˝x4˝ and 4˝x5.65˝ (Panavision size), 5˝x5˝, 5.65˝x5.65˝, 6.6˝x6.6˝

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˝x4˝, 4˝x5.65˝ (Panavision size), 5˝x5˝, 5.65˝x5.65˝, 6.6˝x6.6˝

**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 clear.

**Sizes:** 4˝x4˝, 4˝x5.65˝ (Panavision size), 5˝x5˝, 5.65˝x5.65˝, 6.6˝x6.6˝

**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˝x4˝, 4˝x5.65˝ (Panavision size), 5˝x5˝, 5.65˝x5.65˝, 6.6˝x6.6˝ plus 77mm Rounds

**Corrections:** 1/8, 1/4, 1/2

**Storm Blue Soft Edge Graduated Filter**

**Application:** Schneider Optics Storm Blue Soft Edge Graduated filter adds gray green color to ocean and sky for a greater dramatic, stormy effect.

**Sapphire Blue Solid Filter**

**Application:** Schneider Optics Sapphire Blue Solid filter adds an indigo blue color to the scene. It is most useful when a more dramatic blue effect is required. This filter is available in strengths of 1, 2, & 3 and as graduated filter. These strengths achieve a subtle, moderate, or bold effect.

**Strengths:** 1, 2, and 3 and as hard edge or soft edge graduated filters. These strengths achieve a subtle, moderate, or bold effect.

Photos courtesy of Reed Smoot, ASC
Circular True-Pol® for Video Assist & 3-D Projection

Application: To prevent viewfinder black-out on cameras which employ polarizing elements in the beam-splitters 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 two-layer design to prevent black out. 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”x4”, 4”x5.65” (Panavision size), 5”x5”, 5.65”x5.65”, 6.6”x6.6”, and 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.

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”x4”, 4”x5.65” (Panavision size), 5”x5”, 5.65”x5.65”, 6.6”x6.6”, 138mm Round

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.

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 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 Plexiglas 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.

3-D Window

Schneider optical flats are made of crystal-clear, water-white optical glass.
Every Schneider B+W filter is manufactured with precision to the exact thickness required for sharp focus.

**Schneider 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 7.

**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 6.

**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.

**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 multi-resistant 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.
True-Streak®

True Streak Filters
Clearly the most effective and exciting way to simulate the anamorphic blue streak effect with virtually any lens, anamorphic or not. Long, brilliantly colored streaks emanate from bright lights and highlights.

Colors: Blue, Red, Yellow, Orange, Green, Violet, Pink, Clear and the Confetti family

Strengths: 1mm (strongest), 2mm, 3mm, 4mm
Sizes: 4”x4”, 4”x5.65”, 6.6”x6.6”

Products for HD DSLR cameras

True-Match Vari-ND Thread-In

Application: True-Match Vari-ND Thread-In is a single, low profile filter with both True-Match Polarizing filters in the correct orientation for maximum ease of use and efficiency. The low profile ring prevents vignetting on most DSLR camera lenses. By simply turning the built-in rotating ring, the photographer dials in the perfect amount of ND for the scene, from 1-1/3 to 10 stops of light loss. Available in 77mm and 82mm thread.

4x5.65 Landscape Control Kit

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

True-Match Vari-ND® 10-Stop 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.

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

Century 4x4 Essential 5-Filter Kit with Holder

Kit Includes:
- ND .6 Solid
- ND .6 Soft Edge Graduated
- Circular Polarizer
- Black Frost® 1/2 Diffusion
- Warming Skin Tone Enhancer
Also includes Multi-Compartment Pouch & DVD

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.