

cokin®

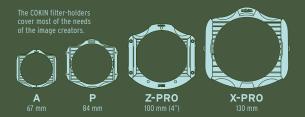
Filters Your Solutions

Your Solutions
for better images

COKIN, ALMOST 40 YEARS OF CONTINUOUS INNOVATION

The COKIN story is first and foremost the story of a man, its founder Jean Coquin, a renowned French photographer who worked for the best-known brands and whose career was marked by numerous innovations that revolutionized the world of photography. It is also the story of a team that has never ceased to keep his vision alive, anticipating the desires of photographers and videographers around the world. The creation of the Z-PRO system is the resulting outcome.

- 1972 Jean Coquin creates the first line of photographic filters in CR39®, the "Rolls-Royce®" of organic glass used for corrective lenses in eyeglasses. Veritable material of the future history would prove it! , CR39® is light and unbreakable, has an extremely high optical transmission factor and is perfectly suited for tinting. It is the perfect base for making photographic filters, its precision surpassing that of mineral glass. These will eventually become the "CROMOFILTERS", the first graduated filters to appear on the market!
- 1978 Jean Coquin invents the SOUARE FILTER SYSTEM, devising a universal filterholder that will leave a permanent mark and has been often copied. It is
 still being sold almost 40 years later a record in the world of photography!
 This clever filter-holder is completely unique and is then accompanied by a
 complete line of 80 creative filters. It is introduced with a colour brochure
 of 40 pages translated into 8 languages: the A system (67 mm) is born!
 Presented at "Photokina" in 1978, the product will enjoy an enormous
 global success and will be immediately sold in more than 30 countries.
- 1982 In response to new, wide-angle lenses and increasingly brighter optics, COKIN launches its P system (84 mm) and improves upon its line of filters exceeding by then 120 models.
- The arrival of the auto-focus reflex camera put high-quality photography within reach of the entire public. The perfect timing of its arrival on the market, together with increasing demand for creative filters will boost COKIN's sales above all hopes, so much so that, twenty years later, nearly 100 million COKIN filters have been sold in more than 100 countries. The A and P lines offer around 200 different filters.
- COKIN launches the X-PRO System in response to the keen interest of photographers in ultra-wide angle lenses. The system proves itself to be the perfect solution to the problem of vignetting. COKIN filters can now be mounted on the near totality of available lenses for photography, video and cinema. This new system comes to the aid of specific classes of users: professional cameramen and photographers working with large format cameras.
- At the end of two years of research and development, the COKIN team presents the Z-PRO System, a culmination of its technical knowledge, precision design and workmanship. Created to respond to the needs of professional photographers, it constitutes a practical, reliable and ergonomic solution to numerous filtering problems.



SUMMARY



COKIN SIGNATURE PHOTOS

P 4 > P 23

These photographs well illustrate the current trend of the use of filters in photography: their purpose is to harmonize, improve, or refine the vision of the artist. At times, certain filters can even be combined to create even more remarkable visual effects.

The range of COKIN Z-PRO products responds to all of these expectations and covers all types of photography: landscape, architecture, industrial, still-life, portrait, fashion, beauty, wedding...



THE COKIN Z-PRO SYSTEM

P 16 > P 31

This system was intended for professional use. It is the ultimate culmination of technical knowledge acquired in four decades that COKIN has been in the business of manufacturing precision photographic filters. The Z-PRO System supports very specific professional applications and offers accessories that find no equivalent elsewhere in the market.

This system unmistakably facilitates the practice of producing images: the use of filters becomes swift, simple, and effective.



THE RANGE OF Z-PRO FILTERS

P 32 > P 48

This range contains close to 100 filters that cover the entire set of needs of image creators, experts, or professionals. It includes traditional technical filters, equivalent to the well-known Kodak® gelatins, but also filters that are specific to the COKIN® brand, such as the neutral densitys, blue and tobacco graduated filters (so often copied by others...), or the diffusion filters whose quality, variety and uniqueness are universally recognized.

These filters are as useful in digital photography as they are with film, as needed in photography as they are in HD video. They are the key to a creative universe limited only by your imagination!

Andrew Kime
Llyn Trawsfynydd, Snowdonia, Northern Wales

Born in 1960, Andrew Kime discovered his passion for landscape photography at the age of 7, a passion that has been with him ever since. Today, he travels frequently but appreciates above all his native Wales, where he lives in the heart of Snowdonia National Park. This region, made up of lakes, peat boss, deep forests and still-wild coasts, naturally offers him numerous opportunities to satisfy his passion. His images are the reflection of the profound respect that nature inspires in him and he hopes, in this way, to contribute to its protection. His photographs are frequently published in photo and nature magazines.

Andrew Kime is an outspoken proponent of photographic filtering which, according to him, intensifies the creative process and allows him to spend more time surrounded by nature, rather than sitting in front of his computer...

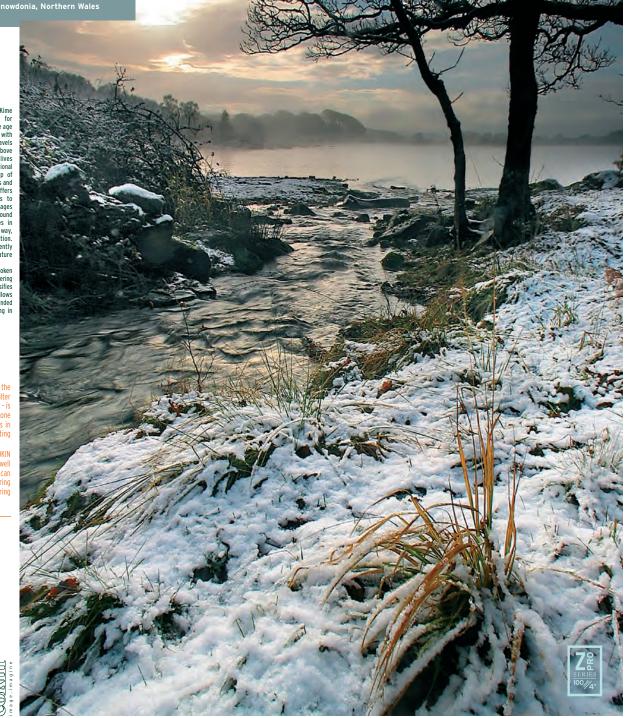
First snow in November, on the edge of a stream...

The adjustment of the ND8 or the ND0.9 neutral grey graduated fline the sky is darkened by 3 ffotops - is proven to be somewhat delicate: one must keep a maximum of details in the sky without obviously affecting the snowy part of the image.

The strict neutrality of the COKIN neutral grey graduated filters is well demonstrated here. Such results can only be obtained by direct filtering during the shoot and not during post-production!



121S Gradual Neutral Grey G2 Soft ND8 - 0.9







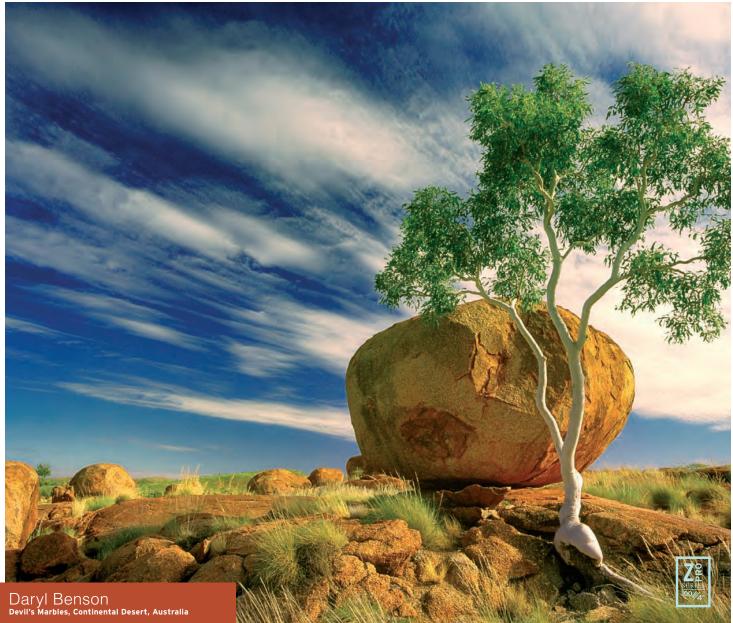
Daryl Benson was born, raised, and currently lives in Alberta, Canada, surrounded on one side by 1,000 kilometers of wild prairies and, on the other, the highest summits of the Canadian Rockies. He has been a renowned landscape photographer for more than 25 years. The author of two wonderful books

– a photographic guide to the Canadian countryside and another commemorating Alberta's centennial - he is a regular contributor to Outdoor Photographer. Daryl's photographs - taken on the five continents ${\mathord{\text{--}}}$ are distributed by two photo agencies, including the famed Getty Images. He is a member of the Canadian Association for Photographic Art, the North American Nature Photography Association, and the International Association of Panoramic Photographers. He has exhibited his work around the world... in Auckland, New Zealand as well as in Yellowknife, in Canada's Northwest Territories. He is a smart user of certain COKIN filters, including the polarizing and the Varicolor® filters.

In landscape photography, one often has the opportunity to use the Blue/ Wellow Varicolor® filter as these two primary colours meet regularly in nature. On this particular morning the sun had suddenly pierced the cloud covering, lighting like a beacon the yellowed grass that spread out at my feet. This filter allowed me to intensify the contrast between the yellow grass and the blue background, thus reinforcing the impression of intense cold. Only the COKIN Varicolor® can produce such vivid images!









The day began radiantly and extremely hot, as always in the heart of the Australian desert. A little after breakfast the cirrus clouds began to form, stretching out rapidly on the horizon. Oriented 90° in relation to the sun, the polarizing filter allowed me to enhance the blue of the sky and to bring out the clouds. The isolated Eucalyptus detaches itself perfectly from the immensity of its surroundings. This lost corner of the earth goes by the enchanting name of The Devil's Marbles.

To discover other images by Daryl Benson, visit his website www.darylbenson.com







Peaceful autumn evening, on the edge of a pond...

The wise choice of a neutral grey graduated filter allowed on the one hand, the balancing of the delicately setting sun... the last touch of light on the trees, and on the other hand, the grass in the foreground... situated in the shade.

The addition of a warm-toned filter (81B) subtly reinforces the autumnal tints.

Andrew Kime, like many other landscape photographers, prefers filtration that only an experienced eye can perceive. No matter what your level of expertise with Photoshop® or other software, you simply cannot obtain renderings as subtle in digital post-production.

Think also of the precious time that the use of filters at capture will save you...



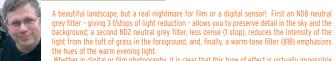




1215 Gradual Neutral Grey G2 Soft ND8 - **0.9**







Whether in digital or film photography, it is clear that this type of effect is virtually impossible to achieve in the laboratory or in post-production. Only the choice of the right combination of filters mounted on a lens allows for the achievement of this kind of image quality!



121S Gradual Neutral Grey G2 Soft ND8 - 0.9



121L 027 Gradual Warm Neutral Grey G2 Light 81B ND2 - **0.3**





Beach at Sunset, descending tide.

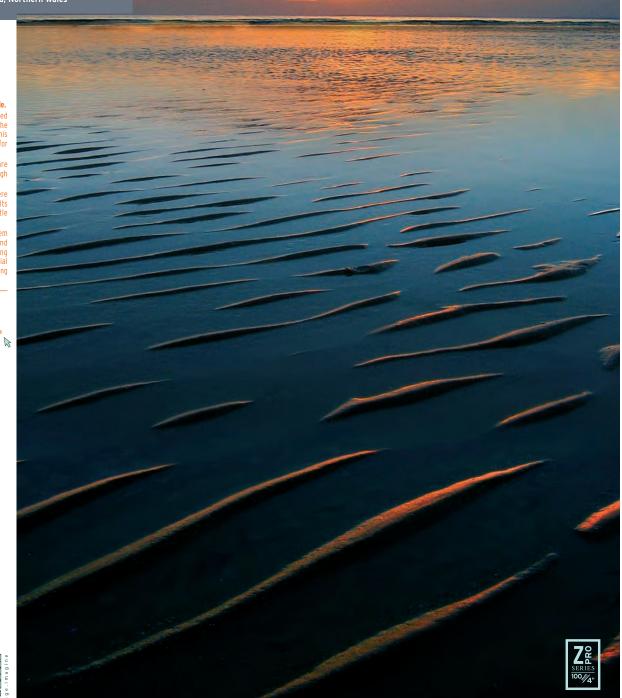
The exposure was calculated for the highlights to make the play of shadow and light on this beach stand out. No need here for graduated filters...

The hues of the setting sun are discretely sublimated through the use of a warm-tone filter.

Andrew Kime demonstrates here that one can achieve results of great quality with very little means.

The COKIN Z-PRO Filter System is intelligently designed and therefore quick to set up, giving you those few extra but crucial seconds when the light is changing very rapidly.

To discover other images by Andrew Kime, visit his website www.imagesofsnowdonia.com



027 Warm 81B







A riel Greco is a case apart in the world of fashion photography. Born in New York, this American divides his time between the U.S. and Paris, where he has lived for over a decade after having pursued his studies in Art Theory at UC Berkeley.

He manages two simultaneous careers: Art Director and Fashion Photographer. As an Art Director, for over seven years he has helped to create or reinforce the

images of known brands by finding (or producting) the words, pictures or sounds that can transmit a subtle essence or intense feeling.

subtle essence or intense feeling.
As a Fashion Photographer – photography has inspired him since the age of 16 – he articulates his work digitally, profiting nonetheless from the best of "traditional" photographic equipment: the best lenses and the best creative filters... those of COMIN obviously!

In fashion photography, I seek to create images that reflect an atmosphere or Irelease a particular emotion. To succeed at this, all the participants in the shoot have to be in the same emotional space. The COKIN diffuser filters set it up very easily. The outcome is visible in the viewfinder and we can all see it...all get into it. The objective is realized quickly (aided by small personal touches...) and definitively. To see what I imagined and be certain I've captured it, this is possible only with the COKIN System!



830 Diffuser 1



THE 7 STRONG POINTS OF THE Z-PRO SYSTEM



UNIVERSAL & TIMELESS

FILM - DIGITAL - HD VIDEO

The size of the Z-PRO filter-holder covers all current formats: 35 mm SLR, medium format, large format, and panoramic; digital backs; HD video cameras; for Cinema, both 16 or 35 mm film cameras. The system is adaptable to all lenses up to 96 mm in diameter.

Created almost 40 years ago, COKIN filter-holders defy time while being constantly perfected with each passing generation. The Z-PRO is the latest model and therefore benefits from all of the knowledge accumulated by the firm over the past 40* years. Opting for the COKIN Z-PRO System is an intelligent choice. No matter what lenses you may buy later, no matter what equipment you may use in the future, the durability and relevance of your investment in the system are assured.



PRACTICAL & WELL-CONCEIVED

MODULAR - RELIABLE - LIGHT AND NON-CUMBERSOME

Both the Z-PRO filter-holders and the specialized bellows are completely modular: without a single tool you can regulate, in next to no time, either the number of filters used simultaneously or their thickness (1.6 to 2 mm, or 4 mm). Both adapt to all configurations. The filter holder's coupling with an adapter ring that firmly clicks it into place is foolproof, instantaneous, and guards against accidental disengagement (during the insertion of a filter, for example). The Z-PRO filterholder is ultra-light (70 g) while remaining perfectly solid. Each square filter is in CR39° glass and is sold in an ultra-flat pouch (4 mm) which weights barely 20 g (30 g for graduated). Thus, a complete set of a dozen filters, together with its filterholder and two adapter rings, measures only 7.5 cm in width and weights less than 630 g. The Z-PRO System is a masterpiece of ingenuity and always finds its place in a shoulder bag... always ready to go to work...



EXEMPT FROM VIGNETTING*

* from 16 mm in 35 mm film photography in the proper configuration.

INTEGRATED WIDE-ANGLE FILTER-HOLDER - REVERSIBLE

Thanks to its well-researched design, the Z-PRO filter-holder in a 3-filter configuration leaves only 24 mm of space between the filter and the front of the lens! Thus, in 35mm photography, there is no visible vignetting with a 20 mm lens. The thinness of the adapter rings helps to achieve this goal. For this reason, there is no need for special adapter rings for use with wide-angle lenses...

In a single-filter configuration, the filter sits 10 mm closer to the lens and the Z-PRO system is thus transformed into a veritable super wide-angle filter-holder. There is no need of a screwdriver nor the purchase of "special" wide-angle holder, ... In this way, the use of a 17-40mm zoom lens is free of any vignetting whatsoever. In extreme cases, as with an 18 mm lens, the Z-PRO filter-holders can be used in reversed position. This leaves a gap of only 13.5 mm between filter and lens!

> The COKIN Z-PRO System offers the best ratio optical quality/cost/versatility/efficiency

Your best "filter" investment

Z-PRO filter- + holder









COKIN Z-PRO polarizing filter with separate and independant rotation

or I modular bellows with integrated

other makers such as Lee®. Schneider®. Tiffen®

to cover ALL your lenses up to Ø 96 mm



A UNIQUE POLARIZING FILTER

THE Z-PRO IS THE LOGICAL CHOICE

Set in a patented notched ring, the polarizing Z-PRO filter fits into the first slot. independent of the rotation of the filter-holder. It is used without any special mount or additional accessory and can be combined, if necessary, with a graduated filter: you begin by adjusting the graduated filter (rotation and height), then proceed by rotating the polarizing filter with the index finger until the desired effect is obtained.

This easy-to-use polarizing filter (available in linear or circular models) is much less costly and cumbersome than similar systems and is of an incontestable quality. Its chromatic neutrality is impeccable. In addition, because of its position in the first slot of the filterholder, it produces no vignetting as do other polarizing filters that are positioned at the front their filter-holders, farther from the front element of lens.



INDISPUTABLE OPTICAL & MECHANICAL QUALITY COMPLETE MASTERY OF CR39 - 40 YEARS OF EXPERIENCE

COKIN is not only a manufacturer of "square" filters, but also its own organic CR39® glass. This quarantees the perfect mastery of optical quality. The remarkable optical transmission of the Z-PRO filters allows for their use not only in digital or film photography, but high-definition video (HD) as well.

Beyond the production and treatment of organic glass in its own factories, COKIN works with numerous materials such as aluminum, mineral glass and high-tech PVC derivatives. This diverse knowledge - protected by numerous patents - is the fruit of 40 years of experience in optical mechanics. COKIN's worldwide notoriety is indisputable; COKIN is even a proud supplier to NASA!



OPEN SYSTEM ASTECHNICALLY PRECISE AS IT IS IMAGINATIVE PRO FORMAT - COMPLETE LINE IN CONSTANT EVOLUTION

The 100 mm format (4") is the professional standard. Z-PRO filter-holders therefore allow for the use, beyond those of its own line, of numerous other filters of the same format (and sometimes, of different thicknesses) designed by manufacturers such as Lee®, Schneider® or Tiffen®. Your "filter" choice is thus virtually unlimited.

Equipped with unrivaled flexibility and adjustability, the Z-PRO filter-holder is accompanied - to date - by a line of hearly 100 filters, several of which appear on the brochure cover and are detailed on pages 32-48. New filters are currently in the testing phase and will be available shortly (consult the website www.cokin-pro.com for more information).



MODERN, PERFECTILY ADAPTED TO DIGITAL

TIME-SAVING - EFFECTS UNATTAINABLE IN POST-PRODUCTION

The nearly full-scale adoption of digital photography by professionals has considerably modified the production process of images. The time spent managing post-production has seen a vast increase. Titlering images at capture leads to a considerable time savings. Moreover, this streamlining of differing workflow means that a good photographer is not forced to acquire the specialized knowledge necessary to use complicated image-retouching softwares... much less the expensive softwares, themselvest

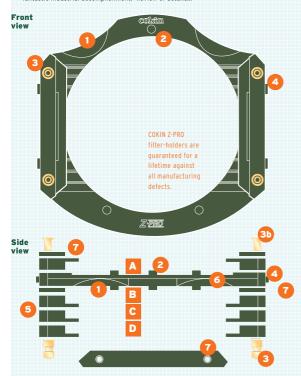
Finally, certain effects are quite simply, unattainable impost production, like the elimination of reflections by using a polarizing lifter, or the mastery of the difference in contrast between the sky and the foreground in landscape photography by using a neutral density graduated filter. In all y no maniputation of curves or levels will ever allow you to recuperate a totally burned out sky, devoid of all visible content!

THE FILTER-HOLDER APPLICATIONS- SLOTS - ASSEMBLY - USES - INSERTION OF FILTERS



Quick to set up and easy to use, COKIN Z-PRO filter-holder is conceived to facilitate the work of those who have made the judicious choice of filtering directly, while shooting.

Their lightness (70 g) and flexibility of use offer two major benefits: on one hand, they do not alter the fluidity of manual focusing "crucial in cinema", and on the other hand, it exerts no strain on the built-in motors of auto-focus or zoom lenses. The materials used in its manufacture resist large temperature changes and the "granite" coating of the filter-holder is always agreeable to the touch, no matter what the working conditions. Although it may not be immediately apparent due to their simplicity, the Z-PRO filter-holder is a remarkable compilation of technologies and a fantastic industrial accomplishment! Review of details...



APPLICATION OF THE Z-PRO FILTER-HOLDER

External width: 122 mm

1. Notches for easy adjustment of the polarizing filter (left or right-handed). 2. Sliding tab for blocking the adapter ring (adjustments down to 1/10 mm), flexible and smooth rotation of filter-holder, accidental detachment impossible. Be careful not to scatch the filter during insertion into slot B. 3. Reversible knurled screw-nut (4) for dismantling the flat sections of the filter-holder. Precise diameters to insure tight fit of filters in the holder. 3b. 28 mm brass screw, reversible if necessary. 4. Fastening sprocket for accessories (to come). 5. Spring-tensioned slots to prevent filters from slipping out (2 sets of 4), calculated flexibility for a linear and precise placement of the filters. Age-resistant materials used in order to guarantee the suppleness of slots for years to come. 6. Base Plate: base for the spring-tensioned slots, self-centering, configurable as needed and firmly held on by the 4 brass screws. 7. Spacer (4 supplied) increases the gap between two screws and allows for the use of mineral glass filters of 4 mm thickness, used often in filmmaking. The fluidify of rotation of the polarizing filter in Slot B is also eased by employment of the spacer.

4 SLOTS FOR MULTIPLE USE

18

A. Used normally, receives the adapter ring which is screwed onto the lens. This ring is inserted from the top. With reverse mounting (see p 31), it accepts a filter inserted from the bottom. B. In normal use, accepts a round filter (polarizing, for example), inserted from the top. In reverse mounting, it receives the adapter ring. C & D. In normal use, accepts 100 x 100 mm or 150 mm filters, from the top or bottom.

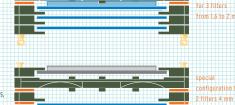
POSSIBLE COMBINATIONS OF ASSEMBLY*

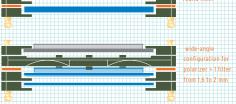
You can set the Z-PRO filter-holder as you see fit, in function of the thickness of the filters used and the number of filters employed simultaneously.

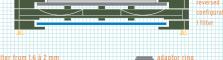
Using the system's standard components you can obtain up to 10 specific combinations either for use with 4 mm thick filters, or for example, for working with super wide-angle zoom without risk of vignetting. These modifications are quick and easy to carry out without the use of supplementary tools.

* *(or more , using supplementary section or spacers, supplied separately).

Note: Always remember that, no matter what their intrinsic optical quality, superposing more than three filters at a time risks compromising the performance of your lens.







pola/varicofor filter

GUIDELINES FOR USE

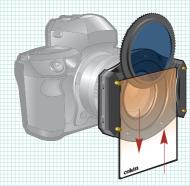
- Select the adapter ring corresponding to the diameter of your lens' thread size.
 For certain diameters, ring exist in different screw sizes: 0.50, 0.75, or 1.00. If unsure, consult your lens' instructions.
- Screw the adapter ring onto the lens.
- Slide, from bottom to top, the back of the filter-holder onto the adapter ring until it makes contact with the sliding tab from above 2.
- Suggestion: push it all the way to the back to ensure that you don't scuff your filters.
- Push the two sliding tabs all the way to the back from below so that they block the ring and so that they don't subsequently scuff the filter inserted in the middle slot.
- Your filter-holder is ready for use.

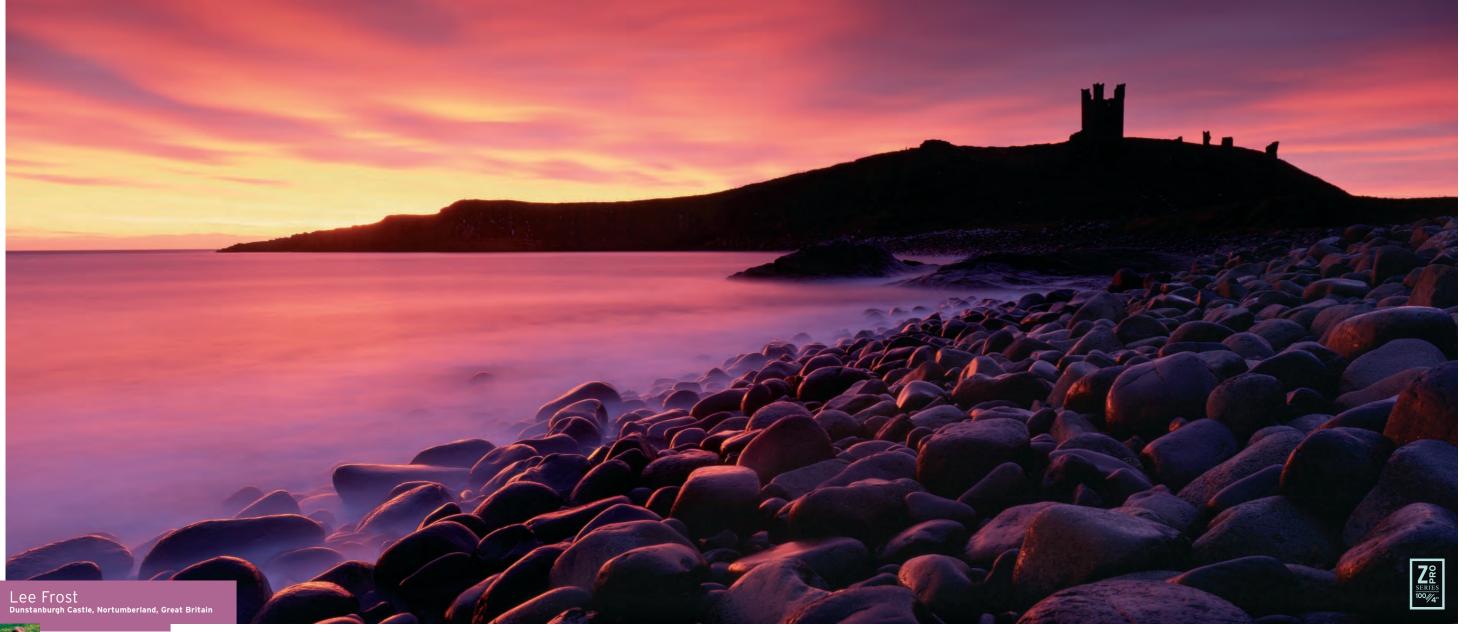
Attention: Never insert a 100 mm rectangular filter into the slot closest to the lens. This slot is reserved for round filters (polarizing, for example) or for the adapter ring in reversed configuration.

INSERTION OF FILTERS

The insertion of a filter in the Z-PRO filter-holder is astonishingly fast, flexible, and easy, especially if you compare it to the difficulties you might encounter when attempting to quickly fasten a screw-in filter on a large-diameter lens! The flexibility of the springaction slots and the rotational versatility of the filter-holder are perfectly adapted to the careful adjustments required for the setting up of a graduated neutral density filter, for example.

For more information on the filters or Z-PRO accessories, see pages 24-51.





Born in 1966 near Barnsley, in Southern Yorkshire (UK), Lee Frost has been enthralled with landscape photography from his earliest years. Since his first Zenith® camera, he has used an impressive array of equipment in all formats, from 35 mm to 6 x 17" panoramic, always multiplying his creative experiences with the same passion and keen artistic sense. Endowed with a taste for pedagogy, he has written numerous books on photographic technique that have been trans-

lated into number of languages including Korean, and Chinese. In addition, he has written a work entirely dedicated to filters in which he recognizes the merits of the COKIN Systems... He has also composed hundreds of articles regularly published in the English-speaking press over the last 15 years and written in an accessible style that has made him very popular. Amateur photographer turned professional, he is currently working on a book of creative digital photo techniques.

Taken at dawn, this image presents a perfectly natural palette of colours. Lee Frost simply used a graduated filter to keep the sky within 3 stops and lend more detail to the pebbles in the foreground*. The very long exposure - 2 minutes at if 32 - is without doubt partly responsible for these astonishing colours, owing to the reciprocity of the Velvia® film used. This English castle is situated 15 miles from Lee Frost's home. He told us that this is one of the most astonishing sunrises that he has ever had the opportunity to photograph!

To discover other images by Lee Frost, visit his website www.leefrost.co.uk



121S Gradual Neutral Grey G2 Soft ND8 - 0.9



62 x 0.75 67 x 0.75

72 x 0.75 77 x 0.75 82 x 0.75

86 x 0.75 86 x 1.00 95 x 1.00 96 x 1.00

Rollei® VI

BAYONETS Hasselblad® B50 Hasselblad® B60 Hasselblad® B70

For all other dimensions please contact us.

The COKIN Z-PRO System offers a variety of models of adapter rings, available in a set (opposite). Manufactured in France out of machined aluminum and black anodized to prevent reflections, these non-deformable rings are, with the exception of the Ø 95 and 96 mm, remarkably compact. Their rapid action threading is designed to not damage the threading of your lenses. They avoid vignetting on lenses up to 86 mm in diameter. However, due to their thickness, both the Ø 95 and 96mm rings can - with certain lenses - limit your angular field. If you need to mount a Z-PRO filter-holder onto a lens with a diameter of less than 49 mm, COKIN offers step-down rings down to 24 mm. The filterholders fit very snugly on the adapter rings, with no more than a few tenths of a millimeter of play, assuring the rapid, smooth rotation indispensable for the precise adjustments

required by certain filters. Mounting a filter holder onto a lens equipped with the appropriate adapter ring is simple, sure and fast. Under these conditions changing lenses takes but a matter of seconds, assuming each lens has its own ring, obviously... This is the perfect set up, especially when the light is rapidly changing.

Front view

The adapter rings for the Z-PRO System are

the body of the ring itself is only 1.7 mm thick! Perfectly rigid, they conform to the lens and cause no vignetting. This is why the Z-PRO System has no need of a "special wide-angle" adapter ring.

(*with the exception of the 95 mm and 96 mm rings)

Diameter: 100 mm

Z-PRO System covers the

entirety of professional

image production tools,

film or digital, still or

moving images, in all

formats currently found on

Today and tomorrow, it will

guaranteeing the soundness

of your investment for years

the professional market.

respond to your needs,

UNIVERSAL, the COKIN

more than 100 filters* Film 35 mm 24 x 36 mm 24 x 65 mm 120, 220, 70 mm 4,5 x 6 cm 6 x 6 cm 6 x 7 cm 6 x 8 cm 6 x 9 cm 6 x 12 cm 6 x 17 cm 6 x 24 cm Sheets (USA/Europe) 4 x 5" 5 x 7" 9 x 12 mm 13 x 18 mm 8 x 101 Cinema 16mm 35mm 70mm Digital Medium format back

1 filter-Video & Broadcast

Mini DV DVCAM DVCPRO Betacam HDCAM

holder or 1 modular * annrox in 2006 belows + compatible brand filters (integrated filter-holder)

including 3 pola filters notched plate *

to come.

POLARIZING FILTERS **LINEAR & CIRCULAR POLARIZERS VARICOLOR® BLUE/YELLOW**



The Z-PRO polarizing filters constitute one of the major advantages of the System. High-tech to the extreme (see opposite) they are inserted directly into the first slot of the filter-holder and need no extraneous accessories. Placed very close to the lens, they produce no vignetting and are much better protected against reflections than when positioned further from the lens, as with certain other filter systems on the market. Moreover, in contrast to those "slim" screw-in polarizing filters lacking additional threading on their exterior side, one can add another filter to the configuration if necessary. Finally, owing to the conception of the Z-PRO System, you will only need a single polarizing filter for all of your lenses, current or future, up to 96 mm in diameter!

Each Z-PRO polarizing filter is set in a patented notched frame (see below) that allows for precision rotational fine-tuning with the index finger, independently of the filter-holder itself to be used in combination with a graduated filter, for example.

(i) Light and compact, a Z-PRO polarizing filter is astonishingly simple to use and renders extraordinary results, as much in terms of its optical quality as in the visual impact of your images themselves. Its chromatic neutrality is unquestionable (see page 49).

One of those tools a serious photographer just can't do without Diameter: 100 mm

CIRCULAR OR LINEAR?

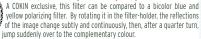
 Linear polarizing filters (Z160) risk - depending on the optical scheme of a given camera body - interfering with some auto-focus or exposure meterina systems.

Reserve lit for large format lenses and for holder SLR Cameras with manual focus. Outside of this particularity, the photographic results will be identical with either model.

• Circular polarizing filters (Z164) are perfectly compatible with auto-focus cameras and through-the-lens (TTL) metering systems. The circular model must be oriented correctly! you can check its orientation by observing a subject throught the filter. In order to appreciate this effect, simply rotate and examine how the image changes progressively, either in the viewfinder or with the naked eye.

A Z-PRO polarizing filter is also very simple to use with a panoramic or rangefinder camera. Expo. + 1~2 stops, according to the intensity of teh filter's effects.

VARICOLOR® BLUE/YELLOW (Z173)



Even if not as often employed as some of the others, this unique filter offers compelling possibilities for use with those subjects that lend themselves to its magic! For example, if the two dominant colors in your composition are those of the filter itself, -such as a warm foreground and a background in tones of blue, like a harvest landscape against a blue sky, the Varicolor® blue/vellow will enrich your image with an astonishing palette of colours (see pages 6-7).

PEERLESS VERSATILITY

Of all filters that can be employed at capture, the polarizing filter is without contest the one whose impact on your images will be most significant; intensifying the blueness of the sky, saturating the entirety of the colour spectrum, finessing the intensity of bright lights and reflections! (see pages 6-7)

- In sunny weather and even more during morning or evening hours - and if you respect a right angle (90°) between the shooting axis and the position of the sun, a polarizing filter will darken the blue of the sky (sometimes making it almost black...), throwing the clouds into stark relief.
- The intensity of its effect also depends on the film used, or, in digital photography, on your level of saturation, but in either case its contribution remains crucial because there is more, real content to work with.
- Note that with wide-angle lenses from 24mm and shorter (in 35mm photography terms) the side of the image which is farthest from the sun will be darker than the other. This is an inevitable optical phenomenon, independent of the polarizing filter, that must be corrected using a neutral density graduated filter.
- Whether used in full sunlight or in overcast weather, polarizing filters significantly improve the saturation of colours. You will obtain greener greens, richer reds and ever more brilliant yellows. You will be surprised to see how certain colours, dull to the naked eve, become vibrant and dazzling with this filter.
- In all kinds of weather, polarizing filters reduce. eliminate. and reflections on all non-metallic surfaces like water or windows. This capacity to work on all reflections and bright lights finds numerous photographic applications which one must be careful not to overuse... It brings transcendence to vegetation, transforms bodies of water. opens vistas... brings fish to the surface... nymphes even!
- Polarizing filters are often used in conjunction with other filters such as the 81 A or 81B warming filters (026, 027) or the neutral density graduated filters (121L. 121M. 121S). See pages 37 and 33.

Side

view

Front view

When shooting images, no matter what the medium in question - photo, video or cinema - flare

remains a constant concern. Cameramen have long since mastered the problem with matte boxes,

"flags", and other light shading devices... Photographers who work in large format have also

always had a very useful shading tool: a bellows, which they carefully adjust before each trip of

the shutter. Hasselblad® has popularized this accessory in medium format and for years COKIN

has endowed its systems with excellent combinations of bellows and filter-holders (sometimes

called a "compendium"). The Z-PRO System includes this optional accessory which has become

The Z350 Modular Bellows

cokin

rather indispensable, considering the extreme susceptibility of today's digital sensors to flare.



Certain seemingly unimportant accessories are absolutely necessary for the everyday usage of filters, including accessories relating to their transport and cleaning.



Z-PRO individual cloth filter sleeves

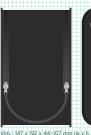
Each Z-PRO filter is supplied in a separate, very thin, suede-like cloth filter sleeve which comes in a single size. It is lightweight and practical for use both in the studio or outdoors. Inserted filters are extremely accessible and, at the same time, very well-protected. Each filter sleeve is marked with the reference of the filter it contains for rapid retrieval of the correct filter

A well-adapted solution to occasional use which really limits the general burden of carrying a complete set of filters.

The Z-PRO multi-storage carrying-pouch

This padded, waterproof case is made of tough "900 deniers" nylon and hold up to 7 filters, each individually protected by a soft, felt separator. Additionally, you can store two supplementary adapter rings. A zipper allows for complete and easy access. The inside of the carrying-case is detachable for other potential use and it comes equipped with strap and a belt loop.

The Z-PRO multi-storage carrying-case is ideal for keeping all of the current filters close-at-hand, always ready and always protected between shots. ©







dim.: 147 x 192 x 44~107 mm (w x h x d), 250 a (without filter), ref. Z306

cokin

The COKIN PRO cleaning cloth

Designed for the efficient but gentle cleaning of organic or mineral glass filters, this cloth can also be used for all sorts of optics. Constructed from anti-static, non-abrasive, non-shedding microfiber cloth (ultra-adept at capturing fine dust particles), and absolutely free of chemical residues harmful to the filter's optical coating, it constitutes a real guarantee of longevity for your filters. It is machinewashable and delivered in a protective carry-case.

○ Large in size (48 x 12 cm unfolded, 12 x 12 folded), this cloth can likewise serve as added protection against flare pouring through the filter-holder slots or the bellows itself: simply drape it over and its black color and opaqueness will block-out extraneous light. Simple, practical, and rather clever!

dim.: 480 x 120 mm (w x I), ref. R908.

Side view

The Z-PRO bellows is supplied with an integrated filter-holder that remains fully functional: modularity (1, 2 or 3 slots, according to need), flexible manipulation and precise rotation.

- The bellows is manufactured from a high-tech 'form memory' material that doesn't rely on support rails for extension, limits the weight and obstruction of the accessory, and allows for a higher degree of adjustability (favoring one side, for example, in order to accomodate the displacement of a view camera's lens).
- This "compendium" ensures, no matter what focal length is used, a maximum protection against flare, stopping rays of light than the interior coating of a rigid lens hood.



External dimensions: 175 x 145 x 38 (w x h x d) - ref: Z350

- Thanks to its compactness when closed and its superior extendibility, this lens hood has proven to be especially versatile: in 6 x 7, it is suitable for lens focal lengths from 50 mm to 250 mm. That means you only need a single lens hood for several lenses!
- To improve its anti-reflective action you can slide optional mats onto the front of the bellows. They will allow you either to further increase its effectiveness with telephoto lenses (from 200 mm in medium-format), or to better adjust the extendable section of the lens hood to your photographic format (originally conceived for formats 4.5 x 6 and 6 x 7 cm, 4 x 5"; the two optional mats are intended either for 6 x 6 cameras, or for 35mm or 6 x 9 formats). With a bellows, the contrast and saturation of images are noticeably

improved and, most of all, the devastating effects of flare - especially fatal in digital - are reduced to a minimum!

Combined with the High-Tech COKIN PRO cleaning cloth, it blocks all entrance of flare into the lens. Non-cumbersome the folds of the bellows being much better suited for when closed and light (210 g), this modular bellows adapts itself to all lenses (up to 96mm in diameter), except to super wide-angle lenses (risks of vignetting below 50mm in medium-format).

Handling & Cleaning The Z-PRO Filters

• With the exception of the polarizing and Varicolor® filters, Z-PRO filters are made in CR39® organic glass, an optical material of exceptional quality; virtually unbreakable and extremely long-lasting if they are handled with care and stored in a case with adequate protection.

*It is true that these filters have proven to be a bit more sensitive to scratching than those made of mineral glass... But if you drop the latter on a hard surface or the ground, it will be without a doubt the last time that you will use them... As for their alleged propensity for attracting dust, this is not a concern if they are regularly cleaned with a dry anti-static cloth made of micro-fiber, like the COKIN PRO cleaning cloth.

- Handle the filters by holding them by their edges to avoid fingerprints as much as possible and keep them in their individual sleeves when not in use. If you take care of them as you would your eyeglasses, they will stay like new for years to come.
- To tidy up the filters, use a dry air spray (held vertically) or a gentle non-static paintbrush.
- For fingerprints or water smudges, wash the filter in warm water, then rinse it in lukewarm clean water and dry sideways. Delicately remove possible residues from the lens with the cloth.

LENS QUALITY - BENEFITS OF SQUARE FILTERING: FOR WHO, WHY? - RANGE AS TECHNICAL AS IT IS CREATIVE - 2 STARTER KITS



BUILDING a line of professional filters is not an easy thing to do. Despite the constant need for quality, it is necessary to cover the gamut of user needs, whether technical or creative. Once the line is created, it is still necessary to follow the changes in the market - or, in the case of digital photography, you could even say revolution! Jean Coguin knew how to stay ahead of the curve, always pushing the optical envelope. Solid, innovative and of a decidedly modern concept, conceived by an optician and creator of images, COKIN came out ahead with the Z-PRO line and its remarkable filter-holder, a filtering system perfectly adapted to the professional demands of the 21st century. Its efficiency, precision and fantastic savings of time has captured the loyalty of photographers who understand and have mastered image filtering. It is and remains the only choice for creating some

A lens of impeccable quality

of the most advanced graphic effects.

1972, COKIN became the first worldwide maker of photographic filters to use CR39® organic glass in photography. This extraordinary material with an optical transmission greater than 95% offers a many major advantages, as much for the quality of its manufacturing as for its use.

- For more than 40 years, COKIN worked on its own. CR39®glass, from the beginning, using the purest resin, and has today mastered to perfection all the production stages of this difficult fabrication; polymerization, casting, tailoring, cutting, colormetric operations, perfection of the material and control of its thickness to infinitesimal parameters, parallelism of surfaces and rigorous flatness, remarkable precision and homogeneity of tints - equal or superior to those of mineral glass. Everything possible is done to obtain irreproachable optical quality.
- With COKIN filters, one will not see any alteration of optical sharpness, nor artifacts with digital captures. You can use up to 3 filters at the same time without

degradation of the definition. The optical excellence of the Z-PRO filters allow for their use, not only in film or digital photography, but also in high-definition digital video (HDV).

- Organic glass filters are much lighter than their counterparts in mineral glass. They are unbreakable (and do not have threads, which can bend if dropped). intrinsically anti-UV (thanks to a patented process that incorporates the UV filter into the material of the COKIN CR39® glass), perfectly stable over time, easy to clean and much less expensive!
- Finally, the precision of the positioning of the filter in the filter-holder, its ease of insertion or removal, the
 - flexibility of its adjustment, in height as well as rotation, all converge into a quality and a comfort of use without equal.



Gradual Tobacco T2 Full

Advantages of square filters (rectangular)

When COKIN first began, most photographic filters were made of mineral glass and mounted in a threaded screw-in ring-frame. Then, in 1978, COKIN introduced the concept of a square filter and the use of CR39® glass. It was a veritable revolution and received worldwide acclaim. Millions of filters were sold and numerous copies came onto the market.

- For each filter type, only a single filter is necessary to adapt to any number of different lenses, no matter what their diameter or thread size. As it is, square filters are already much lighter than their glass counterparts, but in addition, you do not need nearly as many! Plus, they are unbreakable, easy to handle, much quicker to use, and most of all, they have never-before-seen adjustment possibilities (in height and rotation)! What's more, one can easily combine filters and adjust them
- As well, these filters come in a vast variety of tints, including a few that are completely original. The filters exceed technical standards by a creative leap and this fundamentally changes the spirit and intensity of their use. Because of the possibility of owning an entire system of filters at a much lower cost, square filters enjoy an unmatched popularity today.
- Throughout the generations of filter-holders, the problem of vignetting has been considerably reduced to the point of being almost non-existent today, except in rare cases because of unavoidable optical laws.
- In terms of efficiency, square filters in organic glass are clearly superior to screw-in filters. The optical differential being imperceptible in current use, one can understand why the best professionals always return to square filters, leaving behind uncoloured and anti-UV screw-in filters for

While on this subject, it is important to note that COKIN does also manufacture screw-in filters of mineral glass in numerous styles and diameters (from 25 to 86 mm) with the same eye to constant perfection. Consult your retailer or our website at www.cokin.com for more details.

Soft effect. Diffuser filter 1.

> Photography Andrew Kime



Filtering: for whom and why?

The technical discussions and disagreements that photographers have often, involve the subject of

- There are those who do not want to hear about filters. those who find that filters distort the reality or their work, and those who think that filters degrade the quality of their optics (false!). There are also those who use filters but hope that no one can tell, and finally, those who use filters and hope that their use is obvious!
- All of these photographers even the first cited are or will eventually be concerned by the use of filters, whether it be to improve, correct or sublimate an image. With the exception of the first group, all are correct. This shows the fantastic diversity in the world of imaging, fixed or animated. For all of these groups, COKIN makes it a priority to offer as large a choice as possible, but with one constant: unquestionable manufacturing quality and originality. The "COKIN Touch", the COKIN style! Today the trend is towards discrete use of filters to

create images that combine naturalness, documentary quality and the personal vision of the artist.

 The potential range of uses for filters can be as vast as the brands offered by the different manufacturers. One book -that of Lee Frost, The Photographer's Guide to Filters published by David & Charles, -suffices for describing them in detailed fashion so that each photographer can adapt his or her vision to that of the filter. Correct a dominant colour, reduce the contrast scale of an image, manage flare, reduce the problem of reciprocity, access the infrared spectrum, bring colour to black and white, introduce a romantic, pictorial or quaint ambiance: There are many uses that filters execute instantly, upon capture (in digital), and without any alteration of the image quality!

* including that of Lee Frost, published by David & Charles, "The Photographer's Guide to Filters".

A line as technical as it is creative

professional filters: 100 mm (4") of width, the format imposed by Kodak® years ago...

- Each COKIN filter responds to a specific photographic need, whether it be of a technical or creative aspect. The 100 or so filters in the line cover the basic essentials of problems encountered by photographers and filmmakers. In case of additional requirements, the Z-PRO System is perfectly compatible with the principal 100 mm systems on the market: Lee®, Tiffen® and Schneider®.
- On the technical front, there are over 30 filters designed to correct colour drifts, either by correction or conversion, (filters of the series 80, 82, 81, and 85, pages 36-37), or by compensation (CC cyan magenta and yellow filters, pages 38-39); filters that allow for modulation of greys in black and white photography, or specific anti-UV filters for fluorescent illumination or infrared photography (pages 40-41): and 15 graduated filters, colored on one part (neutral, blue or tobacco tones) and transparent on the other, or even the famous "sunset" filters (pages 32-35). The high-precision manufacturing technique devised by COKIN to create its

"he Z-PRO line has adopted the standard format of graduated filters is of a remarkable regularity. COKIN offers numerous graduated options with their blue and tobacco filters. Their range of use goes beyond the purely technical domain, often becoming very creative!

> • On the specifically creative front, there are filters which allow for adding a sepia tone to images (page 48), as well as over 20 diffusion filters of diverse colours and intensities that offer a line of astonishingly varied effects (pages 42-47). Among them is the COKIN Diffuser and Pastel filters whose reputation cannot be beaten!

You can see the entire Z-PRO line on the fold-out page at the end of this brochure. Because it is in constant evolution. you can keep up-to-date with the latest filters by visiting our website, www.cokin-pro.com. Once you have taken a few practice shots and mastered their action/effect, these filters will give you perfectly foreseeable results. Your work will be fail-safe, very rapid, and in the case of digital photography, you will save enormous time in post-production!

Two starter kits

start up advantageously with the Z-PRO System, COKIN offers two different starter kits including 1 Z-PRO filter-holder, 3 graduated filters and 1 carrying case (able to store up to 7 filters and 2 adapter rings, ref. Z306).



 The first, the PRO Grad kit, includes 3 graduated "light" filters, neutral density (121L), blue (123L) and tobacco (125L). ref. U960



 The second, the PRO Grad ND kit, combines 3 graduated neutral density filters from the line (121L, 121M and 121S). ref. U961

FILTERS ALSO IN DIGITAL - BETTER THAN PHOTOSHOP® - VIDEO AND BROADCAST - EVERYDAY FILTERING



Does what Photoshop® can not and will not do!

Perfectly up-to-date for digital photography

is a common misconception that in digital photography there is no longer a need for filters because one can do it all with Photoshop." Luckily, true professionals count on real experience and unremitting work to create their images! They well understand the davantage of using certain filters while shooting, even in digital photography. They also understand the limits of post-treatment and don't expect "miracles". Above all, they know the time that can be wasted and prefer a more efficient method: that of filtering at capture!

- This proves to be true and cannot be more simple: filters function in digital photography exactly as in film, with only very rare exceptions. Whether it is to correct or improve an image or to add a personal touch through use of a specific effect, the utilization and the philosophy of using filters remains the same. Many photographers such as Andrew Kime estimate, moreover, that the reflection associated with filtering allows one to be more relevant in terms of composition and exposure, and to therefore improve the percentage of successful images. Much more so for digital photography, as it allows for instantaneous control of the image result when one is immersed in the subject... and not much later, when you are in front of a computer screen!
- It is also important to keep in mind a fundamental rule of imaging, both still and motion: details or visual information not present on the film - or on the memory card - is irretrievably lost! For example, with an overexposed, washed out sky, in film-based photography no lab assistant can "burn-in" non-existing details, just as no software can retouch it digitally. Yes, it is possible to recreate a portion of the image by pixel copy, but this technique is not very authentic and is much more timecostly than is the simple insertion of the appropriate filter on the filter-holder! Anticipation and filtering at capture will therefore always remain preferable to a fastidious and lengthy correction by computer
- In digital photography, certain filters quickly become must-haves": anti-UV filters (sensors are as sensitive as film to this part of the spectrum), graduated filters (neutral or coloured), polarizing and Varicolore* filters, and neutral density filters. Others still remain very useful as diffusion filters (the blurredness generated by image-retouching software cannot even compare with images captured on sitel) or conversion filters (certain photographers prefer blocking the balance of whites during daylight and use the filter corresponding to illumination: they find it much more sure and simple). Even a simple colour compensator filter (CC series) requires - for its application in digital post-treatment - knowledge of the transposition of values in photographic density by percentage using Photoshop*!

You will find in the following pages the details of the respective actions (pages 32-48).

 If you go over everyday digital retouching and reserve it for "extra special" effects and anticipate corrections or effects from capture time, the correct usage of filters remains more than ever up to date!

- A Ithough it is incontestable that image retouch A softwares in general and Photoshop® in particular greatly contributed to the success of digital photography, there remain a number of image corrections and effects that can only be obtained by filtering at capture. Among them, here are four cases where software cannot be substituted for the use of a filter:
- In a landscape image with long distances, taken without an anti-Uf filter, uncorrected atmospheric haze will introduce into the image characteristic defaults: dominant blue, reduction of contrast and alteration of the clarity. Using software, one can certainly eliminate the dominant, emphasize the contrast and improve the clarity; but, in any case, one can not recapture the clarity and level of brilliance that an anti-Uf filter would bring, and all instantaneously
- In a number of landscapes one is often confronted with a wide brightness scale between the sky and the foreground. This type largely surpasses the restitution capabilities of the sensor. When this happens, you must either expose for the foreground -with the sky washed-out and lacking in detail-, or expose for the sky -with the foreground totally underexposed and much too dark. In either case, no manipulation using software will allow for the correct restoration of the image. Only the use of a neutral density graduated filter at capture allows for reducing the scale of contrast and retaining the detail of the sky and the foreground at the same time. You can thus compensate for 5 stops or even more. Plus, you can avoid re-copying the sky from one image and bringing it to another, with all of the difficulties and time that this assumes..
- For eliminating reflections from non-metallic surfaces, a polarizing filter works easily by simple rotation. Trying to obtain the same result with image touch-up software becomes "mission impossible"!
- When the light intensity of the subject does not allow you to use a shutter speed slow enough to obtain a blurred effect on moving water, for example – a neutral density filter will allow you to obtain one, two, or even three shutter-speed settings slower! Here again, the effect can obviously not be recreated in dioilal post-freatment.

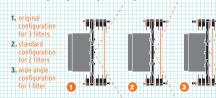
Therefore, this is why anti-UV, neutral density, polarizing filters remain absolute "must-haves" in digital photography! They are not the only ones, as detailed in the following pages... Even when they are not absolutely necessary, filters still simplify achieving the desired corrections or effects so much that one would really be mistaken not to make use of them.

NO FILTER ITH FILTER 121M ET 027

> Photography Andrew Kime

Angle changes

without vignetting, according to the configuration.



SPECIFIC NEEDS OF VIDEO

For this unique market in full expansion and constant evolution, the Z-PRO System constitutes an interesting alternative.

- First, the entire line of Z-PRO filters is compatible with the filter-holders of the 100 mm "matte-box" type (COKIN has launched one - the Z360). Taking into account their very competitive price and their excellent optical quality, these filters represent a very interesting option!
- Next, the Z-PRO filter-holder adapts perfectly to all industry zooms up to 96 mm in diameter. Very light (no strain on the internal motors of lenses), non-cumbersome, usable in extra-flat configuration (absence of vignetting in very wide-angle zoom position), it responds to the

AND BROADCASTING

gamut of criteria required by cameramen. In addition, it is completely modular and can easily be dismounted and reset in order to accept filters of 4 mm thickness, often used in filmmaking and video-broadcasting (see page 19).



- The vast choice of the Z-PRO line covers at once both the technical and creative needs of cameramen. If need be, they can also use the 100 mm (4") filters of other brands, such as Tiffen® or Schneider®.
- Last, but certainly not least, the price of Z-PRO filters is proven to be extremely advantageous!

Everyday filters

The mounting of your lenses in the Z-PRO filter-holder

takes but a matter of seconds, especially if each one of them is equipped with an adapter ring. The mastery of the different filters is also very rapid, the logic of their functioning is quite clear. With a little experience, you will know right away which one to use for each scene.

- In film, when acquiring a new filter consider taking a few images with and without the filter to familiarize yourself with its action. In digital, the capture screen allows you to visualize the outcome instantaneously and directly.
- For everyday use, we recommend configuration of two slots to reduce the risk of vignetting in wide-angle position with a transstandard zoom. You can also use a polarizing filter (in the first slot of the filter-holder) and a graduated filter (in the second slot) at the same time, and separately adjust each filter to its correct rotation degree. With some extremely wide-angles, you may need to configurate to only one slot. The fastest way is to mount the filterholder in its reverse position (see the diagram opposite). In this case, you must return the sliding tabs to the up-wards position (it moves easily by insertion of a ball-point in its center groove). With one filter, but especially.
- Even though they are unbreakable, mount your filters with caution especially avoiding fingerprints and clean them carefully between each use with the Z-PRO hightech antistatic cleaning cloth. If you follow this advice, they will retain their newness for long
- There are two possibilities for determining exposures with your filters: either your camera is equipped with through-the-lens (TTL) metering and automatically, gives the correct settings, or you measure the light with a separate exposure meter and you then apply an exposure factor, depending upon the filter used.

This general rule has a few exceptions: the polar izing filter (its absorption depends on its rotation) and the graduated filters for which you do not take into account a factor because its action only bears on the sive (adjust the exposure on the foreground). In case of doubt, open halfway (in side or digital) or by one stop (in negative film) to be sure of the result.

And now, on the creative side.

NEUTRAL DENSITY FILTERS UNIFORM - GRADUATED SHADING -**NEUTRALITY - TRANSITION - ADJUSTMENT**



DESIGNED so that absolutely no colour from the entire visible spectrum prevails, the COKIN® neutral density filters can be used in many different contexts, depending on which type is used: uniform shading (square) or graduated shading (rectangular).

In the first case, they uniformly reduce the quantity of light that reaches the film - or the sensor - increasing the exposure time. The filters have 3 main practical applications: emphasizing the flow of movement, reducing the depth of field or avoiding overexposure.

In the second case, they are used to reduce the contrast difference of a composition in film as well as in digital photography. They allow for a well-balanced image; they are the filters most used by landscape «pro» photographers to yield both harmonious skies and detailed foregrounds at once. In both cases, they are offered in 3 gradations - equal to 1, 2 or 3 stops - and can be used individually or combined as necessary in order to extend their range, whether shooting in black and white or colour.

With these filters, images can be created which are impossible to obtain in digital post-processing. When an excess in contrast has produced a sky whose level is set to 255, no software filter will ever bring back either pixels or detail. The neutral density filters are also currently used in filmmaking and video. When they are not simply irreplaceable, the need to maintain a constant shutter speed compels their use.

UNIFORM NEUTRAL DENSITY FILTERS



Faithfully NEUTRAL

Thanks to their exclusive tinting procedures and their continuous and rigorous quality control during the entire manufacturing process, COKIN is able to offer absolute neutrality for the entire visible spectrum with each of its professional neutral filters

Prolonging the exposure by 1, 2 or 3 stops is very useful for emphasizing the fluidity of water, accentuating the movement of waves, suggesting the rustling of wheat fields or capturing the bustle of passers-by... Thus, an ND4 (0.6) filter slows the shutter speed down from 1/15 to 1 second, a considerable amount.

- The reduction of the light intensity allows for saving of 1, 2 or 3 stops and reduces the depth of field by just as much, thus focusing the attention on the principal subject.
- In digital, certain sensors are very sensitive to the diffraction whose effects become visible as from f/11. A neutral density filter can prove to be very useful for avoiding optical loss!



Neutral Grev 153 ND2 - 0.3 ND4 - 0.6



Neutral Grev 154

 In filmmaking and video, these filters are often used because the shutter speed is, apart from variable shutters, dependant on how quickly shots are taken. If one wishes to be able to play with the depth of field, or avoid overexposure under intense lighting, they provide a unique solution as simple as it is effective.

 Finally, in certain very bright environments, at high altitudes for example, and with a sensitive ISO, only a neutral density filter allows for the correct exposure. With a catadioptric lens, this type of filter is the only safeguard against overexposure.

COKIN also offers numerous other filters of neutral density for industrial or scientific use, as in the control of long processes or sun nhotography For more information please

- ND8 0.9 • NEUTRAL GREY ND2: neutral optical density 0.3, factor 2, expo + 1 stops, for fine adjustment.
- NEUTRAL GREY ND4: neutral optical density 0.6, factor 4, expo + 2 stops, everyday use.
- NEUTRAL GREY ND8: neutral optical density 0.9, factor 8, expo + 3 stops, very useful in video.

Here is a type of image impossible to achieve without ND Gradual filters It was made with a 121 M and a 121 S overlay: the discrepancy between the sky and the foreground is 5 stops. One can thus capture the harmony of the entire composition the darkening of the trees on the right - linked with the usage of filters - rests very accentable > Photography A. Kime NO FILTER FILTERS 121M ET 121S

NEUTRAL DENSITY GRADUAL FILTERS

These filters offer on the one hand, a zone of density that is rigorously neutral - absorbing 1, 2 or 3 diaphragms - and on the other hand, a completely transparent part, separated from each other by a transition zone that can be short or long. They are used either way, alone or combined, depending on the requirements of the composition. One can also combine them to other filters, such as a polarizing or warm filter (see pages 25 and 37)

• The neutral density gradual filter lets you bring the difference in contrast down to the limit of tonalities that film or sensor can record. When the accuracy of the exposure with 12-bit digital SLR cameras is







121M **Neutral Grey** Medium ND4 - 0.6



• The remarkable efficiency of these filters

time of the shooting.

is accompanied by the reliability of optical performance as well as the absolute neutrality of the chromatic balance of the image. When well-handled, this type of filtering is undetectable to the untrained eye.

as essential as with slide film, one immediately

grasps the importance of these filters from the

- (i) If their best-known use is in controlling the orightness of skies, these filters find their justi-
- Even a grey sky can benefit from the action of a neutral density gradual filter!
- These filters can also favour the effect of blurred movement in one part of the image, alike
- Soft ND8 0.9 • GRADUAL GREY ND2: neutral optical density 0.3 (upper part), factor 2, expo compensated for around 1 stop on the upper part, long transition, an additional choice for touch-ups.
- GRADUAL GREY ND4: neutral optical density 0.6 (upper part), factor 4, expo compensated for around 2 stops on the upper part, long transition, the usual choice for slide.
- GRADUAL GREY SOFT ND8: neutral optical density 0,9 (upper part), factor 8, expo compensated for around 3 stops on the upper part, long transition, the right choice for negatives film or digital.

W TO CHOOSE and USE a COKIN Neutral Density Gradual filter

TRANSITION Long or short?

With long transition filters (all the Z-PRO graduated filters except the 124 & 125), passage from density to transparency is very gradual, while with the short transition filters, it is much more abrunt

The first filters, by far the most often used, are more tolerant as to their placement and adapt themselves to subjects where the break in contrast is irregular or not well defined: thus, the filters of the second type are reserved more for images whose «horizons» breath are well-marked. Their adjustment, both vertical and horizontal, must be more nrecise

that will be used for the final exposure.

Then count the number of stops difference – at constant speed – and round

up to the lesser normalized value. Thus, $2^{\nu z}$ stops will be rounded to 2; you will then need a density of 0.6 (ND4).

effect depending on the subject; for example, a reflection must be less bright than its source. Case in point: a snow-covered mountain that is reflec-ted in a lake and becomes duller than

Finally, depending on the way that the zone separating light and shadow

• To decide which filter density to use, presents itself, you will choose either a be noticeable. Note that the type of

the diaphragm as much as possible by

viewfinder, as the effect of the fil-ter - while visible to the naked eye In practice, the ideal is to use the 3 - depends both on the lens and on available densities (special sets are

you just need to manuar - preferably in manuar own treatment of the property of the manual professional profe

the foreground. Note that modern SLR cameras perfectly manage this type of

the diaphragin as much as possible by operating the diaphragin as much as possible by operating the pressing the depth of field preview filter via the matrix metering, button to better see the transition acone in the viewfinder while adjusting a glance the filter you need to use and to until its transition zone corresponds among the transition zone corresponds apperfectly with the light intensity line of your framing. of your framing. matically take photos both with and
This test must be carried out in the without filters to familiarize yourself

the diaphragm setting. The more the available form COKIN).

The open the street of the graduated shading will

COLOURED GRADUATED

BLUE - TOBACCO - SUNSET



WHEN the sky is not as blue as one wishes, the setting sun not as radiant, or if one wishes to add a touch of personal colour, the coloured graduated filters are the right answer. They darken one part of the image (most often the upper part) by adding the appropriate tint, blue, tobacco, or "sunset".

The gradual blue filters are available in 5 models for optimal adjustment of the correction level desired. They can be very useful for enhancing a grey and lacklustre sky by giving it a sunnier aspect, something that a polarizing filter cannot do under these circumstances. It is perfect for those who do not want a filter effect to be apparent!

The gradual tobacco respond to the exact opposite logic: their pronounced effect adds a very special touch to the image, a touch that delights some photographers. Here again, they exist in 5 versions, adaptable to everyone's taste or need.

With the COKIN "sunset" filters, the sun sets right when you need it to and its intensity is assured!

Place these filters as close as possible to the lens in order not to alter their transition zone.

If necessary, these filters can also be used in reversed position, either alone - to bring out the hyacinths in a forest for example - or together head-to-tail, one working on the upper part of the image, the other on the foreground. Thus a gradual blue filter can enhance a sky that is too dull, while a tobacco filter in reverse position can intensify the colour of the reeds in the foreground.



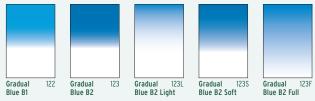
FILTER 123

> Photography Daryl Benson

THE GRADUAL **BLUE FILTERS**

These 5 filters differ distinctly either by their intensity or by their structure, as you can see in the icons below.

- To adjust the exposure, you can either measure the foreground without a filter and apply that value. or - with SLR cameras that feature matrix metering - measure the exposure directly with the filter in place. 🙂
- Note that placing the filter's transition zone in the image requires the same attention as for the neutral density gradual filters (see page 33), 😩



- GRADUAL BLUE B1: around 12/3 stop on upper part, long transition, the best choice for a subtle effect.
- GRADUAL BLUE B2: around 2 stops on upper part, long transition, more pronounced effect.
- GRADUAL BLUE B2 LIGHT: around 2/3 stop on upper part, the perfectionist's choice for touch-ups.
- GRADUAL BLUE B2 SOFT: around 12/3 stop on upper part, long transition, the other standard choice with easier positioning for irregular horizons.
- GRADUAL BLUE B2 FULL: around 21/3 stops on upper part, long transition, the filter for images where the sky predominates.



GRADUAL TOBACCO FILTERS

created by Jean Coquin in the early 1970s, the COKIN gradual tobacco filters - the famous "CROMOFILTERS" - have had a worldwide success. Today, they remain the ideal tool for many - in particular commercial photographers - but can also be used "discreetly" as seen in the example above. Thus, to accentuate the "tobacco" effect while avoiding a tint that is too pronounced, Andrew Kime has cleverly combined a 125L with a neutral density gradual filter - a 121M in this case - plus a 027 warm tone.

- > Photography Andrew Kime
- Based on the same basic tint, the 5 gradual tobacco filters available differ by their intensity and their structure, as is clearly shown in the icons below.
- © To adjust the exposure and the transition zone consult the instructions for the gradual blue fil-
- @ Pay special attention to the transition zone of the Z124/Z125 filter, short and a bit trickier



discreet tobacco effect.

Tobacco T1









• GRADUAL TOBACCO T1: around 2 stops on upper part, long transition, the right choice for a real but

- GRADUAL TOBACCO T2: around 3 stops on upper part, short transition, very pronounced "tobacco" effect, with a sharp border.
- GRADUAL TOBACCO T2 LIGHT: around 2 stops on upper part, long transition, the choice for a subtle "tobacco" effect.
- GRADUAL TOBACCO T2 SOFT: around 2 stops on upper part, long transition, pronounced "tobacco", adapted for irregular horizons.
- GRADUAL TOBACCO T2 FULL: around 2 stops on upper part, extra long transition, pronounced "tobacco" effect on the entire image

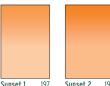


SUNSET FILTERS

> Photography : D. Benson

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These filters allow you to intensify or simulate a realistic sunset. Their specific tint is graduated from top to bottom: the upper part, more coloured, intensifies the effect of the sky; the





Sunset 2

lower part, paler, gives the rest of the image the early evening effect desired.

- The 2 available models differ only by the intensity of their tint: they will increase the exposure setting by 2/3 or 1 stop, delivering an effect that is much more pronounced. They excel for backlighting or silhouette effects
- If, at dusk, there is little or no sunlight, this kind of filter is sure. to give you a fantastic helping hand. 😊
- . SUNSET 1: around 2/3 stops on upper part, long transition, the right choice for a moderate effect.
- SUNSET 2: around 1 stop on upper part, long transition, the filter for radiant sunsets. Even allows for the creation of a sunset in the middle of the day!

FILTERS FOR LIGHT BALANCE CORRECTION AND COLOUR-CONVERSION SERIES 80 - 82 - 81 - 85



As everyone knows, the colour warmth of daylight constantly varies, from dawn to dusk. Our eyes do not notice this, thanks to an automatic phenomenon of adaptation. It is the same with artificial light, which varies considerably according to the emitting source - electronic flash or tungsten lamp, for example.

The emulsion immediately reacts to these differences, which translate into prevailing colours that are more or less pronounced depending on the light source and the type of film. The colour correction or conversion filters are available to correct these shifts in colour.

In digital they remain a more sure, precise and predictable solution than the white balance setting included with digital cameras, whether it be automatic or pre-adjusted to generic values.

These filters belong to two families - blue or orange - depending on whether they cool down or warm up the light. In each family they come in various intensities intended either for strong colour conversions or for fine adjustments. Each filter carries out a very precise shift in warmth, expressed in Kelvins or in Mireds (see the table opposite). A few amongst them are essential, such as the 026 and 027 (81A and B), while the others have very specific uses. For example, shots using tungsten lamps of 3,200 Kelvins with a daylight film.

The Z-PRO filters are perfectly calibrated, to the nearest Mired, to answer the most specific professional demands. For precise filtering, a colour meter has lost none of its usefulness, not even in this age of digital photography!



FILTER BLUE 80A

Photography Lee Frost

BLUF CONVERSION **FILTERS**

SERIES 80

The 3 blue filters of series 80 are technical conversion filters for use with daylight films under artificial lighting with tungsten lamps or other warm sources. The most powerful conversion is that of filter 020 (80A), each filter of the series lessening in intensity from there.

 Even when one works with "artificial light" films. these filters can help correct, for example, the prevailing colours of tungsten bulbs. For indoor shoots, stop before completely correcting the dominant warm tone so as to maintain the ambiance!

(2) On the other hand, the series 80 filters - especially the 020 (80A) - can be used in the middle of the day sion of a night-time shoot. This is the famous "Day for night" filter, invaluable to filmmakers!









• BLUE (80A): conversion of 3.000 K to 3,200 K. + around 2/3 stop

- BLUE (80B): conversion of 2,900 K to 3,200 K. + around 1^{2/3} stop
- BLUE (80C): conversion of 2.800 K to 3.200 K. + around 1 stop

BLUE CORRECTION FILTERS SERIES 82

These ³ filters produce subtle corrections in colour temperature in order to reduce or eliminate certain warm colours that dominate the image; for example to get a more neutral depiction of a façade illuminated by the setting sun, or to make skin look less tan when under a hot light.

© Used less frequently than the Series 81 filters, these are often used in a context contrary to their intended purpose - to reinforce the prevailing natural blue colour of some shots, in misty or snowy weather, before a sunrise or in the rain - so as to emphasize the atmosphere.







- BLUE (82A): conversion of 3,000 K to 3.200 K. + around 1/3 stop
- BLUE (82B): conversion of 2,900 K to 3,200 K. + around 2/3 stop
- BLUE (82C): conversion of 2,800 K to 3,200 K. + around 2/3 stop

WARM-TONE CORRECTION SÉRIES 81

Of all the colour conversion filters the Series 81 filters are the best for everyday use. Available in 5 intensities, from the weakest - the 026 - to the strongest - the 037 - they warm up light gradually, thus responding well to lighting conditions which photographers confront most often.

- So, on cloudy days, a 026 filter (81A) or a 027 (81B) will add a light touch by counterbalancing the bluish part of the light. But in good weather, they will enhance your subject with a pleasing shade of tan.
- For a stronger effect, the 028 (81C) and 035 (81D) filters reinforce warm lights, such as those at dawn or dusk, especially if the subject is well-suited for it. like an autumn forest or
- As for the 037 (81EF), reserve its use for special cases: a pale sunset which you wish to reinforce or when you want a very noticeable
- Finally, with the 039 (81Z), your subject will instantly gain the effect of 6 UV cabin tanning sessions! For light-skinned models, the effect is guaranteed... and less dangerous! For landscapes, each autumn forest will turn immediately into an "Indian summer". This is an effect filter that deserves the name!

Warm

81D

85A

035

Warm

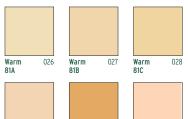
81FF



> Photography Lee Frost

(ii) With experience and practice, you will know right away which filter to use. Avoid potential overcorrections which can often be unpleasant: yellow-tinted clouds suggest pollution, and a model with skin that's too yellow looks iaundiced!

These filters combine very well with diffuser or pastel filters (see pages 42 and 43). Three of these combinations exist as specific COKIN filters, the Warm Diffusers (see page 46).



• WARM (81A): conversion of 3.400 K to 3.200 K. + around 1/3 stop • WARM (81B): conversion of 3.500 K to 3.200 K. + around 1/3 stop • WARM (81C): conversion of 3.600 K to 3.200 K. + around 1/3 stop 028 • WARM (81D): conversion of 3,700 K to

039

- 3,200 K. + around 2/3 stop • WARM (81EF): conversion of 3.850 K to 3.200 K. + around 2/3 stop • WARM (81Z): conversion of 3.450 K to
- 3,400 K. + around 1/3 stop

ORANGE CONVERSION FILTERS SERIES 85

Warm

81Z

037

These 3 filters are either "super" warmers or conversion filters with a specificity: their respective intensity does not increase, as with other filters of the series, but is irregular; the 030 is the strongest, the 031 the weakest, and the 029 falls between the two

- On one hand, they correct, for example, the strong dominant blue of shaded places in sunlit exteriors (029) or on cloudy days (031).
- (a) These filters are great for reinforcing, very naturally, a sunset or a landscape of dunes or autumn undergrowth with backlighting, thus
- On the other hand, they allow for the use, during full daylight with films balanced for artificial lights, of type A (029) or B (030) filters, without the dominant inherent blue.

85C



85B

- ORANGE (85A): conversion of 5,500 K to 3.400 K. + around 2/3 stop
- ORANGE (85B): conversion of 5,500 K to 3,200 K. + around 2/3 stop
- ORANGE (85C): conversion of 5,500 K to 3,800 K. + around 1/3 stop

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COLOUR COMPENSATING

CYAN - MAGENTA - YELLOW SERIES



CONTRARY to the 80 Series filters (blue or orange) which are designed to rectify prevailing chromatic tints coming from the differences in colour temperature between the film and that of the light source(s), the colour compensating filters (cyan, magenta and yellow) correct dominant monochromatic colours, linked to various causes, from intrusive reflections/glare/undesired rays to reciprocity failure.

Originated from the famous Kodak® Wratten gels, the COKIN CC filters are equivalent to them chromatically, but have proven to be much more rugged/resistant in the long term. Working on the principle of subtractive syntheses of colours, these filters - each available in 6 different intensities that can be combined as necessary - allow for correction of any chromatic discrepancy.

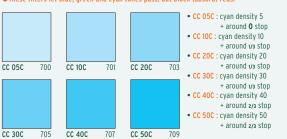
Their uses are numerous and varied: balancing a mixture of light sources, compensating an aging flash tube, rectifying the occurrence of intrusive reflections/glare/an undesired ray, correcting the colour discrepancy in B mode that comes from reciprocity failure, removing the chromatic variation of certain films, etc.

Their use is a matter of experience and attention, check of the film manufacturers' instructions, knowledge of the light sources, and - with the latter - the use of a three-channel colour meter, such as the Minolta® III F, which measures ambient colour temperature and works directly with the CC filters.

Besides these purely technical uses (that often come up in commercial, industrial, or architecture photography), these filters can also play a very interesting creative role by introducing a dominant colour, subtle or pronounced, according to the type of filter used. One can also discreetly emphasize the tint of certain pale

CC CYAN SERIES

• These filters let blue, green and cyan tones pass, but block (absorb) reds.



RECIPROCITY FAILURE

For each combination of diaphragm and speed, there is a corresponding quantity of light that reaches the film or the sensor. The "reciprocity

law" implies that if one increases the exposure length by one setting while closing the diaphragm by one value, this quantity of light remains

However, this law does not take effect neither for very long exposures nor for those which are extremely short. This is what's known called the "Schwarzschild

In practice, you only need to worry about this for exposure times faster than 1/10,000th of a second or slower than 1, 10 to 100 seconds, depending on the type of film used. Film sensitivity diminishes then

rapidly, requiring, on one hand, an additional increase in exposure time and, on the other hand, a specific filtering. All film manufacturers publish technical brochures - not only for this kind of film, but also by emulsion type - which specify the conditions of use of their products according to the exposure time used. The filtering needed under these conditions requires CC filters. As than example, the Fuji® Velvia® requires an exposure correction of + 2/3 stop for 10 seconds of exposure as well as a CC 10M filter

In some cases, the prevailing tints that come from these discrepancies are absolutely astonishing. Depending on your tastes – or the demands of your clients – you can either consider them as creative or... attempt to correct them !



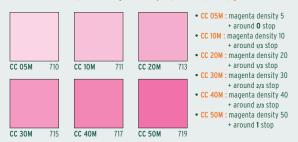


> Photography Ariel Greco

39

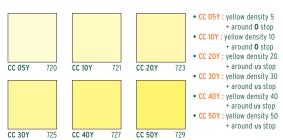
CC MAGENTA SERIES

• These filters let red, blue and magenta tones pass, but block (absorb) greens.



CC YELLOW SERIES

• These filters let red, green and yellow tones pass but block (absorb) blues.



With digital shooting, the use of these filters is still relevant, as much for the simplicity and time gain that they bring in practice, as for the sureness and predictability of their results.

Yes, an automatic white balance can work well, but in the large majority of difficult situations, good filtering during the shooting remains and will always be preferable. One can certainly attempt to apply the same correction to the image during post-processing, but the time spent will not be the same, by far! And you must still know how and be able to do it, for you risk not being able to correct the dominant unwanted tints, because in this case you must add colours

SPECIAL FILTERS **ULTRA VIOLET - FLUO - INFRARED**



UV & SKYLIGHT FILTERS

These filters are in fact ultraviolet blockers, light rays whose wavelength is below 400 nm and to which our eyes are not at all (or just barely) sensitive. But that significantly affects films as well as photo or video sensors. It results in a characteristic prevailing blue, particularly evident at high altitudes - where the UV rays are very intense - at sea level, and in aerial photography.

- These filters visibly reduce atmospheric haze at far distances and cut down this dominant blue. They only intercept UV rays and therefore in theory add no colouration of their own. In practice, this is generally not the case!
- The neutral UV N (230) really is neutral: the Skylight 1A (232) introduces a dominant rose and makes the images a little warmer, without completely attaining the effect of an 81A, for example, while the UV Y (231), very light vellow. diminishes the dominant blue very often associated with UV rays. These three filters improve the sheen of images and none of them requires exposure consideration.
- O You should know that the COKIN CR39® filter has the inherent capacity to screen out UV light - the cutoff point is at 400 nm - so it is not necessary to add one of these 3 filters if you are already using any other Z-PRO filter.

THE SCREW. For those who wish to permanently protect the front part of their lenses from dust, scratches and various projectiles, COKIN also offers protection filters of a very high quality, in mineral or organic glass depending on the model, in standard or thin ("slim") screw mounting, in over 20 diameters from 25 to 86 mm and in 7 different types; three UV (standard, neutral < or multi-layer coating), and four Skylights, 1A and 🦙 1B (each available as standard or multi-layer coating). Now you can satisfy all your needs and ensure the long life of your precious optical components.



Sky Neutral





- UV Sky Neutral : chromatically neutral anti-UV filter. + 0 stop
- UV Y: presents a very light yellow tone, ideal for diminishing dominant blues. + O stop
- . Skylight 1B: presents a rose tone, makes colours a little warmer in shady or cloudy weather. + 0 stop

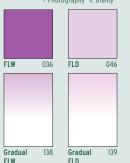
FLUO FILTERS

Fluorescent tubes - which come in various models and which therefore can wear out to varying degrees - emit a discontinuous spectrum of light characterized by a very strong proportion of green. With a film balanced for daylight, this translates into a very characteristic prevailing greenish tint that, while it adds a certain look to images that some people appreciate, can be very difficult to remove completely ...

- In the absence of colour compensating filters (CC, see page) 39), perfectly adapted to this type of lighting, a more simple solution consists in opting for filters designed specifically for use with fluorescent lighting and which exist in 2 types; FLD for films balanced for daylight, and FLW for those that compensate for artificial light. Combining a colour warmth conversion action with a correction of the specific dominant tint, these filters strike a balance as best they can among the range of situations that can present themselves.
- (c) When one is confronted with mixed lighting and this is often the case we or FLW, depending on the type of film used. The upper part of these filters is intended to work with "neon" lighting, and the bottom part is neutral. easy to implement for solving problems created by many of these mixed
- FLW: for films balanced for artificial light. + 0 stop
- Gradual FLW: for films balanced for artificial light and in case of mixed sources, +1 stop
- FLD : for films balanced for daylight, for use preferably with mixed sources. + 2/3 stop
- Gradual FLD: for films balanced for daylight and with mixed sources. + 2/3 stop



> Photography V. Diamy





> Photography José Joaquin Castro

INFRARED FILTER

Beyond the spectrum of light visible to the human eye - which is roughly between 400 and 700 nm - one finds infrared light, which we can perceive by way of special films, black and white as well as colour, and today, via digital sensors, at least those without anti-IR filters (or with removable ones)

 In order for these different media to fully record the effect of the inner spectrum of infrared light, one needs a filter that blocks the visible spectrum and lets infrared light pass through. That is precisely what the 007 filter does, in the same way as the Kodak® Wratten® 89B filter.

The resulting image will vary considerably depending on the film or sensor used.

In black and white with a professional film such as Kodak's® "High Speed Infrared", the image taken with COKIN 007 filter will have a characteristic aspect; blue skies will become almost black and vegetation will take on various shades of white, giving it a surreal appearance.

In colour, with an emulsion such as the Kodak® "Ektachrome Professional Infrared EIR", the image will present absolutely surrealistic tones, varying between magentas and blues with a vellow filter (001), shifting over to vellows and

reds with an orange (002) or red (003) filter, and reaching its maximum effect with the IR filter (007). The infrared filter is an endless source of research and inspiration.

The arrival of digital cameras has further sustained the keen interest in creative infrared photography. The basic effect is close to that obtained in black and white film, but the possibilities of post-processing open the door to virtually limitless creative possibilities. Once you have assured yourself that your sensor can record the inner spectrum of infrared light, think of carrying out a specific white balance beforehand with the IR filter in place for best results.



Infrared: blocks all visible light up to 650 nm, allows 50% of light to 720 nm and more than 90% of the infrared beyond.

Infrared

(89B)

WORKING BEYOND THE VISIBLE Auto-focus and exposure meters are here completely unnecessary!

Think about shifting the focus forward to the infrared mark of your lens (if there is one!) and adjust the aperture as much as

For the exposure, taking the indexes on the technical brochure of the film as a starting point - in digital, push the sensitivity but not beyond 400 ISO - measure the exposure manually, with the filter in place; take a number of shots (2 to 4 stops over the calculated exposure) by increments of one stop; do preliminary tests before starting to shoot...

Finally, work preferably with a tripod to avoid all fuzziness linked to prolonged exposures

Working with infrared imagery is quite demanding. Among other issues, the film must be loaded in complete darkness and must be kept cool at all times, numerous tries are necessary, and the results can be unpredictable. But they are worth the effort put into them!

In digital, the effort goes into the time spent in postproduction! Time-consuming but so captiviting!!

Basically, one opens the file, the image being in brown-red tones; change it over to black and white by completely desaturating the colour image (avoid using greyscale); finally adjust the light/colour setting until obtaining the desired result. And practice makes perfect, as usual, for creation of images that are out of the ordinary, even magical,



When one wishes to bring a romantic or mysterious atmosphere to an image, to put an often disappointing reality in its best light, or to give the image a visibly painterly appearance, every image creator must need, at one time or another, a diffusion filter whose effect is either barely perceivable, or that lends a somewhat dreamlike form to

② In this area, the choices COKIN offers are as vast as its worldwide reputation. The Z-PRO line offers 20 filters of this kind, presented in the 6 following pages.

According to whim or necessity, in numerous photographic domains (portrait, fashion, nature or landscape, to name but a few), photographers and filmmakers time and again choose the COKIN soft diffusion because of their variety paired with such remarkable quality.

Diffuser and Pastel filters are among the most difficult to manufacture. Indeed, toning down an image is not the same as making it out of focus... It is all a matter of balance and mastery of the diffusion of light, as engineers of specialized optics well know. These types of filters transmit, depending on their degree of diffusion, 70 to 90% of the image's original sharpness, and use other processes to obtain the effect of diffusion for the rest of the spectrum, playing either on the sharpness or the contrast, or both.

DIFFUSER FILTERS

The outstanding images taken with a COKIN diffuser filter are now too numerous to mention! These filters use an exclusive COKIN process created by its founder and kept carefully secret ever since in the company laboratories. It's the way they diffuse the light from the luminous points of the image that gives shots that characteristic aspect. Copied numerous times but never equaled, the Z-PRO diffuser filters exist in 4 intensities, from the most subtle to the most marked. There is nothing else like them on the market.

- The Diffuser Light (820) is best for landscape photography and intimate portraiture. There is no equal for reducing facial wrinkles and small imperfections of the skin and is almost unperceivable.
- With the Diffuser 1 (830) and especially the Diffuser 2 (840), you can literally make the years melt away as if by magic, leaving behind only radiance and glow. As for nature shots, they will have a completely different dimension! Discovering these filters means entering into a world of images that were the mark of an era, and when one flips through a current fashion magazine, it's clear that they're back in style!
- The Diffuser 3 (850) offers such a great diffusing potential that it virtually transforms itself into a shower curtain and you are propelled into Brian de Palma's "Dressed to Kill". The nude remains its subject of choice.



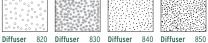
















• Diffuser light: subtle diffusion

- Diffuseur 1: visible diffusion Diffuseur 2: marked diffusion
- Diffuseur 3: total diffusion







PASTEL FILTERS

With these filters you enter right into a romantic atmosphere, so strong is their effect on the image. They add a soft, unique touch to portraits; hair flows like silk, skin is warm and expressions languid. As for still lifes, they come close to the appearance of a painting, attaining an incomparable atmosphere that is delicate and fresh.

• These two filters - the second being simply stronger than the first - bring out lively colours and intense lights, diffusing and treating them like an artist.

These filters give superb outdoor results, in cloudy weather, and





• Pastel 1: strong effect, portraits, still lifes, landscapes. Pastel 2 : very strong effect.

portraits, still lifes

shots, one must still keep in mind that the canno't recreate the with filters, results are are perfectly predict ble and you can change hem very simply and as many times as you need until you obtain your desired result. In one of your model, in the

recent software

versions have made great strides in the

area of out-of-focus

are closely linked to the intensity and the quality of light used. Think of overexposing by 1/3 or 1/2 of a stop to accentuate their effect You will then see that bright lights take on a completely different dimension! In addition, the effect is in general much more pronounced than with an open diaphragm. Finally, do not forget that with certain filters. auto focus will ston working...

Used on an everyday basis in cinema for some time now, the net filters diffuse and disperse reflected light. The Z-PRO line offers four net filters. Depending on their tonality, they conserve and contrast (blacks), or diminish (whites), reducing the power and the saturation of tints. According to the fineness of their mesh, their effect can be marked or discreet: the tighter the mesh is, the more pronounced the diffusion.

• In portraiture, these filters reduce or eliminate undesired reflections on the skin, such as on the nose, the chin or the forehead, whether they be due to the sun, to flashes, or to spotlights. In landscapes, they ensure a harmonious distribution of light when using backlighting, bringing their unique touch to the image. As a general rule, one can say that their effects are strong for small details

while uniform surfaces are only slightly affected. Always place them in the appear on the image.

THE NET FILTERS

1 Black



2 Black

difficulties for use with landscapes where a wide depth of field is required. Net filter 1 White: marked diffusion effect, diminished contrasts. + 1/3 stop

first groove and do not go past an aperture of 4 or 5.6 while working, especially

if you're using a wide-angle lens, otherwise you risk having their structure

They are in essence wide-aperture filters which means that they may raise a few

Net filter 1 Black: marked diffusion effect, retained

• Net filter 2 White : discreet diffusion effect, diminished contrasts. + 1/3 stop

contrasts. + 1/3 stop



IN PRACTICE, the results obtained with diffuser filters

Net Filter 142 Net Filter 143 1 White

contrasts. + 1/3 stop

Net Filter 144 Net Filter 145 • Net filter 2 Black : discreet diffusion effect, retained

100//4

SUNSOFT - SOFTWARM - DIFFUSER WARM

WHEN one wants to both often an image and make it warmer, the Z-PRO line offers three filters suited to the task: the warm diffusers. Their double effect lends itself to numerous applications: portraits, weddings, beauty photos, still lifes, landscapes, etc. There are many subjects to which these filters add a touch of seductive romanticism - very seductive at that!

For portraits, these 3 filters have in common the capacity to smooth away physical imperfections, make skin more beautiful and illuminate faces when the subject is back-lit.

For landscapes with warm tones - autumn forests or a countryside at harvest time, for example - these 3 filters reinforce the seasonal colours and produce a welcoming atmosphere whose effects can go beyond the image.

These are just a few subjects where the association of a certain degree of soft focus and a more or less pronounced warming up of the light can be guite useful!

© In practice, think about shifting to manual focus if you work with an auto-focus reflex... As a general rule, these 3 filters accommodate themselves better, outdoors, to bright lights that they transform into gentle morning or late-afternoon lighting.

THE SUNSOFT FILTER

Created for the 10th anniversary of the company, already more than 20 years ago, this filter combines a very strong capacity for «warming» tones up - in fact, it is the equivalent of a 81EF (037) filter - with a good level of diffusion, that of Diffuser 1 (830).

THE SOFTWARM FILTER

This filter offers the lowest level of diffusion - that of Diffuser Light (820) - and warms tones less, in the way an 81B (027) does. Its result is more natural.

THE WARM DIFFUSER FILTER

It warms tints as would a beautiful evening light (or a 039 filter...) and delivers a level of soft focus that is ideal for faces. It is without a doubt one of the most appropriate filters for "glamour" portraits.

- Sunsoft: combination of filters 830 and 037. + 1 stop
- Softwarm: combination of filters 820 and 027, + 1/3 stop.
- Diffuser Warm: combines a salmon tint (0.39) and a light blur. + 1/3 stop





Softwarm 696



Diffuser 697 Warm



THE CENTER-SPOT UNCOLORED - GREY - OVAL



WHEN the idea is to enhance the subject while isolating it within a lightly blurred border, the Center-Spot filters are the appropriate response. There are 6 of these filters in the Z-PRO line; they form a coherent set with multiple possibilities, in which each filter has its distinct personality.

The central zone of sharpness can be small and round, or much larger and of oval shape; their peripheral power of diffusion declines, depending on the model, in 2 densities; their use is optimised for wide-angle lenses of 20 to 35 mm (with 35mm film, Center-Spots WA).

Created essentially for use with portraits, the Uncolored and Grey Center-Spots can also lend their specific touch to still lifes or some landscapes.

As for the Oval Center-Spots, they are designed for use with full-length portraits or two-shots, they are

used most typically in wedding photography. The apparent size of the zone of sharpness is a function of the focal distance used (think of the conversion filter factor of APS sensors!); the shorter the focal length is, the more visible the zone will be. As for the transition from sharp to

UNCOLORED CENTER-SPOT FILTERS

These filters create blur around the central subject in a completely natural-looking way, giving the subject prominence in the image.

(a) We recommend working with apertures of f/5.6 or f/8 in order to keep a suffia small flash or a reflector - brightens the effect of the filter. The surrounding blur is much stronger with the O71 filter. These 2 filters are to be used preferably with focal points between 20 and 35 mm (in 24 x 36).





C. Spot WA Incolored 1

070 C.Spot WA I Incolored 2

- Center-Spot WA Incolored 1: the ideal filter for beginners, + 0 stop
- Center-Spot WA Incolored 2: more pronounced blurred perimeter. + 2/3 stop

GREY CENTER-SPOT FILTERS

These filters work by blurring and darkening the periphery of the image in a more or less noticeable way. The intensity and the quality of the central subject's lighting are clearly emphasized.

© Use the same instructions as for the Uncolored Center-Spot filters for the aperture Be sure to adapt the choice of your Center-Spots to the general tonality of your image to make it more harmonious.





C. Spot WA Grev 1

072 C.Spot 073 WA Grev 2

• Center-Spot WA Grey 1: good fusion level of fore and backgrounds. + 11/3 stop

• Center-Spot WA Grey 2: more marked peripheral shadowing. + 2 stops

OVAL CENTER-SPOT FILTERS

For larger or taller subjects, you should ont for the oval Center-Spots which come in 2 tonalities for the surrounding blur, clear white or charcoal grey.

• If wedding photography is still their main use, it's because these filters help to make unsightly settings less noticeable, centering the attention on the happy couple. They can also be used in numerous other situations requiring the same effect: still lifes, landscapes, or even sometimes sports.





C.Spot White

140 Oval C.Spot Black

- Oval Center-Spot White: peripheral blur in white tones. + 1/3 stop
- Oval Center-Spot Black : peripheral blur in charcoal grev. + 1/3 stop

FILTERS FOR BLACK & WHITE AND SEPIA PHOTOGRAPHY



THE SPECTRAL sensitivity of panchromatic black & white films deviates from that of the human eye, especially in artificial light. The black & white specific filters allow for the differentiation of colors translated into excessively close nuances of grey. As for the sepia filters, they are the answer for those wishing to recreate the images from times past.

FILTERS FOR BLACK & WHITE PHOTOGRAPHY

These COKIN filters are completely unique. They are not exactly the same as their Wratten® or Kodak® counter-parts, but are optimized to obtain the best graphic effects possible in each of the 5 tints of the line. Used in colour, they generate effects that are absolutely spectacular!

 For understanding which filter to use with black & white photography, there is one simple rule: to brighten a colour you must choose a filter of the same colour, and, to darken, you must use a filter of complementary colour. Thus, a green filter will brighten vegetation and a vellow or grange filter will darken the sky.

@ In black & white, everything being a question of nuances and contrasts, these filters constitute a powerful method of expression, no matter what the subject is.













Yellow-Green

- Yellow: darkens blues, brings out clouds well, diminishes atmospheric haze. + 2/3 stop
- Orange: brightens reds, darkens violets and blues, reinforces contrasts in landscapes and architecture photography, ideal for outdoor nudes. + 12/3 stop
- Red: strongly brightens reds, darkens blues and greens, creates spectacular stormy skies. + 31/3 stop
- Green: clearly brightens greens and darkens reds, ideal for nature photography. + 22/3 stop
- Yellow-Green: darkens blues and brightens green tones, very good filter in general for landscapes, works wonderfully with portraits. + 2/3 stop

SEPIA FILTERS

Sepia tones are perfect for the creation or images from times past, roll suitable subjects (portables, included past) still lifes, for example) you can either photograph them directly – with colour film or digitally – with one or the tones are perfect for the creation of images from times past. For suitable subjects (portraits, landscapes or other of the two filters available, or re-shoot black and white images (on the copy stand, if needed) with the 005 filter - in

In both cases, using a filter is without a doubt the most rapid and efficient method for obtaining images in pleasant sepia tones, rather than subjecting yourself to long and tedious work with film or digital.

> Photography Jean-François Alexandre







005 . Sepia: pronounced tonality, ideal for reshooting black & white photos on the copy stand. + 32/3 stop

 Sepialight: lighter tonality. recommended for direct shoots.

+ 3 stop

Sepia

COKIN WATCHWORDS: SERVICE & QUALITY



THE COKIN GROUP has some 80 employees, works with around 250 subcontractors, and its global network has more than 100 exclusive distributors. Whether it is research & development. manufacturing, marketing, sales or product distribution, each of the players in this human-sized company keeps a daily watch on the firm's rigorous quality standards and works to ensure the best possible service for its customers.

COKIN represents a wonderful demonstration of what happens when an outstanding manufacturer enhances its recognized know-how by taking the opinions and comments of its numerous professional customers into account. The quality of the company's products and its references are its greatest assets.

Impeccable workmanship

perienced photographer and brilliant inventor. Jean Coguin is also at the origin of an industrial process that distinguishes itself in many special ways.

First - astonishing in this era of globalisation - all of the optical products in the 7-PRO line are manufactured in France.

Second, COKIN makes itself what constitutes its raw material - plates of CR39® glass - in one of the company factories in Alsace, France. This approach, carried out at each level of production, constitutes the best quarantee of constant quality throughout the entire manufacturing process.

- The quality controls at COKIN are the same that one encounters throughout the precision optics industry: every filter is individually inspected at least 4 times, every filter-holder 7 to 8 times. The human eye remains in each case the decisive element in this constant search for quality!
- The manufacturing of filters alternates hetween manual and machine operations Behind COKIN's industrial achievements. there are still women and men, shaped by a remarkable company culture.

In addition, the qualified company personnel have an average of 25 years on the job... An immense store of know-how. a constant will to do the job well, a special dyeing process carefully kept secret - these are just some of the numerous assets that explain the excellence of COKIN products.

COKIN USERS are numerous and prestigious, and include...

NASA's Space Shuttle program: use of special filters for their telescopes.

CINEMA, Akira Kurosawa, director; Fabrice Rousselot, head cameraman: and many others have chosen COKIN filters for their films.

COKIN, leading-edge Research & Development for more than 40 vears

KIN is one of the rare companies that really lends an attentive ear to the wishes and the questions of its users.

- It is also one of the rare brands to manufacture products conceived and created by professionals, FOR professionals. The Z-PRO line is a remarkable
- The Z-PRO filter-holders are a combination of technology and industrial accomplishment: each component, each material, each piece, each coating is a response to an astonishingly complex set of specifications.

Thus, in this case alone, the choice of a rather flexible high-tech material for the strips used to tighten the filters, and that of another material, more rigid for the large plate, requires the expertise of numerous specialists...

 When one realizes that over the vears COKIN has seen over twenty imitations of its products and today there remain but one or two, it becomes clear that COKIN has achieved an extraordinary feat.

Guaranteed worldwide distribution

The over 100 COKIN distributors worldwith image craftsmen, photographers or cameramen, no matter where they are on earth, to satisfy and if possible anticipate their needs.

 The majority of COKIN distributors have been doing so for many years and have a perfect knowledge of the products. One could almost say that, anywhere you go on this vast planet, you will find your preferred filters.

And when one is a "pro", this counts for a lot!

20 <u>. a</u> SERIES 100 //4"



A VERY HIGH-TECH POLARIZING FILTER

The properties of a polarizing filter come from the effect of an aceto-butyrate film on polarized light. This film is extremely fragile and is often not completely flat when applied. It is therefore pressed between high optical precision. The reasons behind the exceptio-Z-PRO polarizing filters can be seen in the details of how this process is carried out.

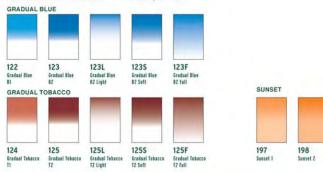
- The polarizing film is bonded by machine to the two mineral glass lenses with a special optical glue, then vacuum-sealed at a specific temperature. This method assures its flatness and eliminates micro-hubbles sometimes resulting from gluing, in the same way that soaking slides in oil before placing them on a drum scanner allows for elimination of possible scuffs and imperfections. The seal is assembled at the edges to insure its durability and it is polished all once again to guarantee optimal quality.
- This method also means that the number of air-to-glass surfaces , -a troublesome source of flare- is reduced: rather than six air-to-glass surfaces, you have only two. improving the performance of the optical transmission. Subjected to a continuous and rigorous quality control the COKIN manufacturing process guarantees you uncompromising image quality.
- From the very first image taken, the benefits of using this exceptional filter will be obvious: absence of any dominant tints (greenish, for example), absolute neutrality, sharpness and reinforced colour saturation. All clear signs of the durability and quality of the COKIN PRO polarizing filters, 😊

THE COKIN Z-PRO RANGE

NEUTRAL DENSITY FILTERS - PLAIN & GRADUATED p 32 - 33



GRADUATED COLOUR FILTERS p 34 - 35



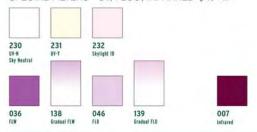
FILTERS FOR CORRECTION & COLOUR CONVERSION p 36 - 37



COLOUR COMPENSATING FILTERS p 38 - 39



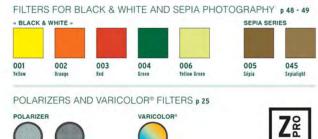
SPECIAL FILTERS - UV, FLUO, INFRARED p 40 - 41



DIFFUSION FILTERS p 42 - 45







SERIES





COKIN IN THE WORLD

Although all COKIN optical products, including the adapter rings, are manufactured in France due to the constant concern of obtaining optimal quality, the company ensures as much as possible that their products are available worldwide thanks to a network of nearly 100 regularly supplied distributors.

ALGERIA . ARGENTINA . AUSTRALIA . AUSTRIA BELGIUM BRAZIL . BULGARIA . CANADA . CANARY ISLANDS CZECH REPUBLIC . CHILE . CHINA COLOMBIA COSTA RICA • CROATIA • CYPRUS • DENMARK • EGYPT SALVADOR . ECUADOR . ESTONIA . FIJI . FINLAND FRANCE • GERMANY • GIBRALTAR • GREECE • GUATEMALA HONG KONG . HUNGARY . ICELAND . INDIA . INDONESIA IRAN . IRELAND . ISRAEL . ITALY . IVORY COAST . JAPAN JORDAN . KAZAKHSTAN . KUWAIT . LATVIA . LEBANON LITHUANIA . MACEDONIA . MALAYSIA MALTA . MOROCCO MEXICO . NETHERLANDS . NEW CALEDONIA . NEW ZEALAND . NORWAY . OMAN . PANAMA . PARAGUAY PERU . PHILIPPINES . POLAND PORTUGAL . OATAR ROMANIA • RUSSIA • SAUDI ARABIA • SERBIA • SINGAPORE SLOVAKIA . SLOVENIA . SOUTH AFRICA . SOUTH KOREA SPAIN . SRI LANKA . SWEDEN . SWITZERLAND . SYRIA TAIWAN . THAILAND . TUNISIA . TURKEY . UKRAINE STATES . URUGUAY . VENEZUELA . VIETNAM . YEMEN

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