



PRODUCT CATALOG





We open, The world of imagination

Kenko Co. Ltd is Japan's largest photographic accessory manufacturer and distributor with a decades old tradition of manufacturing quality accessories to enhance the enjoyment of photography. This tradition has guided the development of innovative and reliable products that aid photographers all over the world in their creation of beautiful images.

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PRO1 Digital Filter Series



Essential for Digital Photography

Kenko manufactures and markets the highest quality filter glass. Our latest offering is PRO1 Digital Series Filters, which dedicated to up and coming Digital SLR cameras. Key features cover DMC, new Digital Multi Coating, Black Almite frame, Black Rimmed Glass, Low Profile Frame, Knurled Frame Edge, UV protected Cases.

Digital Cameras Need Multicoated Filters

Digital camera CCD or CMOS sensors are highly susceptible to reflections - this stray light can ruin your photographs! Don't risk your valuable photos by using bare-glass filters.



Digital Multi-Coated

Digital multi-coated filters greatly reduce the appearance of lens flare and ghosting caused by reflections.



Black Almite Frame

Filters feature a black matte aluminum satin finish almite frame which reduces reflections.



Black Rimmed Glass

These filters are equipped with black rimmed glass to reduce the chance of light reflecting off the edge.



Low Profile Frame

Ultra thin filter frames to help avoid vignetting on super wide angle lenses are also designed to hold a lens cap.



Knurling Edge Frame

These filters are equipped with a straight knurling edge for non-slip, easy attachment and removal.



UV Protected Case

Filter cases are UV protected to further lengthen the life of filters.

PRO1 Digital

PROTECTOR (W)

Protect your valued lenses

This is the ultimate in clear filters. It will not affect the color balance or performance of your lenses in the slightest. However, constant use will protect your valued lenses from expensive front element damage which could be caused by dirt, knocks or scratches



FEATURES:

DMC
DIGITAL MULTI-COATED

BAF
BLACK ALMITE FRAME

BRG
BLACK RIMMED GLASS

LPF
LOW PROFILE FRAME

KEF
KNURLING EDGE FRAME

UVC
UV PROTECTED CASE

AVAILABLE SIZES:

37mm 40.5mm 46mm 49mm 52mm 55mm 58mm 62mm 67mm 72mm 77mm 82mm

PRO1 Digital

WIDE BAND CIRCULAR PL

Color and contrast enhancement

WIDE BAND CIRCULAR PL Filter allows you to remove unwanted reflection from nonmetallic surfaces such as water and glass. Kenko's CIRCULAR PL uses newly developed, innovative polarizing material. WIDE BAND makes Digital SLR camera's viewfinder image color difference has been corrected.



▲ With ND4 Filter



▲ Without Filter

FEATURES:

DMC
DIGITAL MULTI-COATED

BAF
BLACK ALMITE FRAME

BRG
BLACK RIMMED GLASS

LPF
LOW PROFILE FRAME

KEF
KNURLING EDGE FRAME

UVC
UV PROTECTED CASE

AVAILABLE SIZES:

37mm 40.5mm 46mm 49mm 52mm 55mm 58mm 62mm 67mm 72mm 77mm 82mm

PRO1 Digital

UV (W)



A multi-purpose fine-weather filter

Absorbs the ultraviolet rays which often makes outdoor photographs hazy and indistinct. This multi-purpose, all-around filter can serve as a permanent lens protector. While designed specifically for digital cameras the PRO1 Digital series can be used on film cameras as well.



▲ With UV Filter

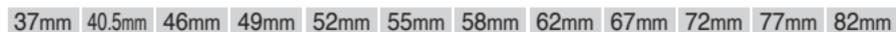


▲ Without Filter

FEATURES:



AVAILABLE SIZES:



PRO1 Digital

PRO ND4(W) / PRO ND8(W) / PRO ND16(W)



For wider apertures or longer exposures

This PRO ND4/ND8 filter reduces the amount of light entering the lens so wider apertures can be selected, which is perfect for portraiture to reduce depth of field. Subject appears crisp and clear while the background becomes a soft blur. Also widely used for photographs of waterfalls and other nature scenes to emphasize movement.



▲ With PRO ND8 Filter

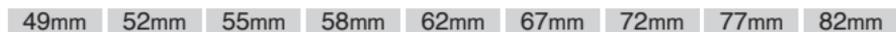


▲ Without Filter

FEATURES:

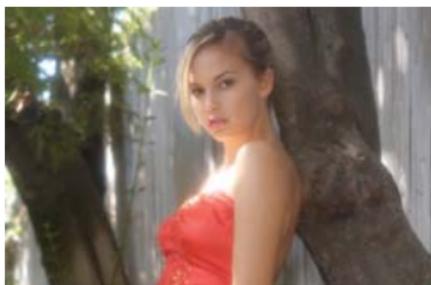


AVAILABLE SIZES:



PRO1 Digital**PRO SOFTON-A****Clear focus and soft gradation**

Creates a picture with a clear focus and a soft gradation. This effect is especially evident on an object with a point light source. A filter randomly arranging minute lens shaped like drops of water on the surface of a acrylic board scatters the light and results in a soft focus.



▲ With PRO SOFTON-A Filter



▲ Without Filter

FEATURES:

DMC
DIGITAL MULTI-COATED**BAF**
BLACK ALMITE FRAME**BRG**
BLACK RIMMED GLASS**LPF**
LOW PROFILE FRAME**KEF**
KNURLING EDGE FRAME**UVC**
UV PROTECTED CASE

AVAILABLE SIZES:

49mm 52mm 55mm 58mm 62mm 67mm 72mm 77mm 82mm

PRO1 Digital**R-CROSS SCREEN****Add a dramatic four-cross flare**

The R-CROSS SCREEN filter adds a dramatic four-cross flare to very bright areas, giving a soft-focus effect. Ideal for photographs of night scene illumination or other scenes with strong reflections



▲ With R-CROSS SCREEN Filter



▲ Without Filter

FEATURES:

DMC
DIGITAL MULTI-COATED**BAF**
BLACK ALMITE FRAME**BRG**
BLACK RIMMED GLASS**LPF**
LOW PROFILE FRAME**KEF**
KNURLING EDGE FRAME**UVC**
UV PROTECTED CASE

AVAILABLE SIZES:

49mm 52mm 55mm 58mm 62mm 67mm 72mm 77mm 82mm

PRO1 Digital

AC CLOSE-UP LENS No.3



A world of new creativity

The CLOSE-UP No.3 lens turns a normal lens into a macro by reducing the lens, minimum focusing distance. Depth-of-field is shallow so use as small an aperture as possible. CLOSE-UP NO.3 offers a world of new creativity.



▲ With AC CLOSE-UP No.3

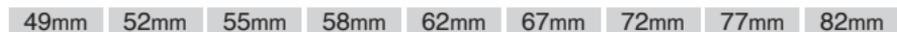


▲ Without Filter

FEATURES:



AVAILABLE SIZES:



PRO1 Digital

R72



Most popular infrared filter in the world

Infrared filter helps cut down all other lights except infrared light, which is not visible to human eyes. Kenko R72 filter permits light of around 700 wavelength to pass through, which is the most popular infrared filter in the world!



▲ With R72 Filter



▲ Without Filter

FEATURES:



AVAILABLE SIZES:



Zéto THE ULTIMATE FILTER

Zero Reflection

Super High Transparency

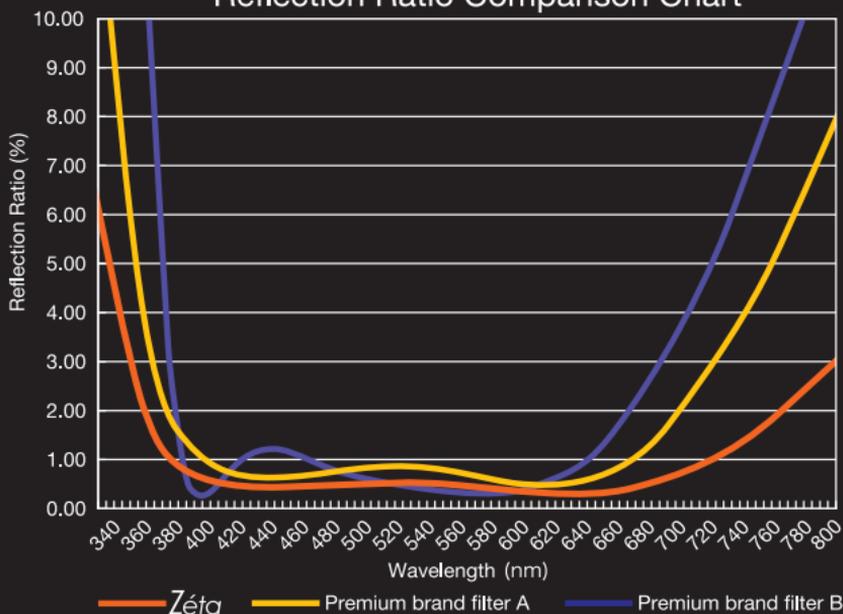
Super Durable

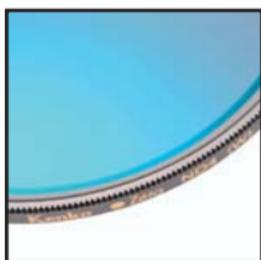


ZR (Zero Reflection) Super Multi-Coating

This innovative coating will not interfere with any color or light transmission. Reflections are eliminated by allowing light to enter the filter at virtually any angle. This filter will produce superior results and can be used with any type of lens (wide angle to telephoto).

Reflection Ratio Comparison Chart





Ultra Smooth Surface Nano Glass Technology

Our Nano Glass Technology creates an ultra smooth surface from the finest particles of glass, making it stain and scratch resistant without any effect to the image.



High End Constructed Ultra Thin Frame

The glass of this lens is precision machined and attached using Retainer Ring Mount Technology giving this filter an unsurpassed durability. An ultra thin frame also makes it wide-angle lens compatible.



Sophisticated Filter Case

Sleek design and durable, a protective and easy to use polycarbonate resin compact case comes with the every Zeta filter.



ND Glass Uses Deposition Proces

TechnologyThe Zeta ND filter is created using a deposition process which produces superior color and imaging.



L41 Super UV Cut Glass

The Zeta UV L41 filter absorbs up to 410nm of ultraviolet rays. Normal UV glass has a slight yellow tint, but the L41 is perfectly clear due of the use of a high-performance glass.



Premium Quality Polarising Film

Zeta uses high transparency & high durability premium quality C-PL film which will not change color and light transmission.

Zéta *Wideband C-PL (W)*

Ultimate Color Enhancement



C-PL filters allow you to remove unwanted reflections from non-metallic surfaces such as water, glass etc. They also enable colors to become more saturated and appear clearer with better contrast. This effect is often used to increase the contrast and saturation in blue skies and white clouds. Kenko's C-PL filter do not affect the overall color balance of a shot.

FEATURES:

Premium Quality Polarising Film

ZR (Zero Reflection) Super Multi-Coating

Ultra Smooth Surface - Nano Glass Technology

High End Constructed - Ultra Thin Frame

Sophisticated Filter Case

AVAILABLE SIZES:

49mm 52mm 55mm 58mm 62mm 67mm 72mm 77mm 82mm

Zéta *UV L41 (W)*

Ultimate All-Around Filter



Absorbs the ultraviolet rays which often makes outdoor photographs hazy and indistinct. This multi-purpose, all-around filter can serve as a permanent lens protector. While designed specifically for digital cameras the Zeta series can be used on film cameras as well.

FEATURES:

L41 Super UV Cut Glass

ZR (Zero Reflection) Super Multi-Coating

Ultra Smooth Surface - Nano Glass Technology

High End Constructed - Ultra Thin Frame

Sophisticated Filter Case

AVAILABLE SIZES:

49mm 52mm 55mm 58mm 62mm 67mm 72mm 77mm 82mm

Zéta Protector (W)

Ultimate Lens Protection



This is the ultimate in clear filters. It will not affect the color balance or performance of your lenses in the slightest. However, constant use will protect your valued lenses from expensive front element damage which could be caused by dirt, knocks or scratches.

FEATURES:

Super Clear & Strong - Premium Optical Glass
ZR (Zero Reflection) Super Multi-Coating
Ultra Smooth Surface - Nano Glass Technology
High End Constructed - Ultra Thin Frame
Sophisticated Filter Case

AVAILABLE SIZES:

49mm 52mm 55mm 58mm 62mm 67mm 72mm 77mm 82mm

Zéta ND4 (W) / ND8 (W)

Ultimate Neutral Density Filters



This ND4/ND8 filter reduce the amount of light entering the lens so wider apertures can be selected, which is perfect for portraiture to reduce depth of field. Subject appears crisp and clear while the background becomes a soft blur. Also widely used for photographs of waterfalls and other nature scenes to emphasize movement.

FEATURES:

ND Glass Uses Deposition Process Technology
ZR (Zero Reflection) Super Multi-Coating
Ultra Smooth Surface - Nano Glass Technology
High End Constructed - Ultra Thin Frame
Sophisticated Filter Case

AVAILABLE SIZES:

49mm 52mm 55mm 58mm 62mm 67mm 72mm 77mm 82mm

Zéta EX



CIRCULAR POLARIZER

The world's thinnest, lightest circular polarizer ever



Extra Thin, Extra Light

Only 0.8mm Thin Glass, 10g Feather Light Filter

Zeta EX uses a specially polished 4 layer thin glass and ultra thin frame combination making it wide-angle lens compatible. Even with being this thin, the Zeta EX still has the front screw on function for attaching a lens cap. The super light weight mechanically benefits certain AF lenses.



Extra Bright

High Transparency Polarizing Film

Zeta EX transmits as much as 25% more light through the polarizing film, giving the photographer about 1 stop more light than a standard circular polarizer.



Extra Anti-Reflective

ZR (Zero Reflection) Super Multi-Coating

This innovative coating will not interfere with any color or light transmission. Reflections are eliminated by allowing light to enter the filter at virtually any angle.



Extra Smooth Glass

Nano Glass Technology

Our Nano Glass Technology creates an ultra smooth surface from the finest particles of glass, making it stain and scratch resistant without any effect to the image.

MAX PL KIT

**PL Finder [R]****&****C-PL(W) Vernier Filter****for Rangefinders and SLR cameras****CLEAR - BRIGHT - EASY Maximize Polarizing Effects***Hard to see polarizing effects...*

- 1.with all rangefinders
- 2.due to LCD screen glare
- 3.through dark/small viewfinders of Digital SLRs
4. especially when using a zoom lens

The solution = The MAX PL KIT

You simply mount the PL Finder on the hotshoe of your camera. Attach the included vernier polarizing filter in front of your lens. Look through the PL Finder, turn the ring on the PL Finder to achieve the desire effect. Note the numerical mark on PL Finder where the white dot is. Adjust the vernier polarizing filter so that the numerical marking on the filter is also pointing at the same direction (ie: inline with the white dot on the PL Finder). Then compose the picture using your camera's viewfinder and take the shot.

**Reduce Glare and Reflections**

Using the C-PL filter, reflections and glare can be reduced significantly from non-metallic surfaces. A camera angle of 30 degrees from the reflecting surface (glass, water, etc.) is ideal for maximum effect.

**Color and Contrast**

Enhancement sometimes appears bluish. This is also caused by light polarization. Using the polarizing filter will help to greatly reduce the softness caused by atmospheric haze

Variable **NDX**

DMC
DIGITAL MULTI COATED

ND2.5 - ND1000

Just turn the outer filter ring

**Newly Developed Unique Design**

Kenko's uniquely designed variable neutral density filter provides the equivalent brightness range of ND 2.5 to ND 1,000.

Easy to Operate

A simple turn of the outer filter ring quickly and easily adjusts the density level.

**Easy Framing / Easy Focus**

This innovative coating will not interfere with any color or light transmission. Reflections are eliminated by allowing light to enter the filter at virtually any angle.

**Polarizing Effect Cancellation**

The Variable NDX filter changes the brightness of light using a polarized filter. This new filter uses a "polarizing effect cancellation" where a polarized filter is used, but purely for controlling the amount of light with no effect on color balance, glare or reflections.

FOR DIGITAL CAMERAS HD MOVIE CAMERAS



Avoid Vignetting

The singular versatility of the Variable NDX filter not only replaces a whole set of stacking neutral density filters it also removes vignetting which may be caused by using multiple filters.

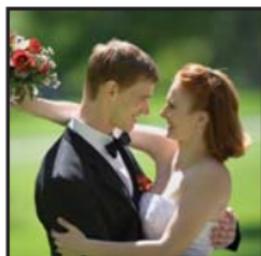
For Longer Exposures

Without changing the aperture, the NDX filter allows the freedom to change the shutter speed according to the effect desired. For example, without adjusting the aperture, the same 1/60 scene can be taken using the Variable NDX filter with shutter speeds from 1/20 to 16 seconds, with just a turn of the outer filter ring. The problem of diffraction is eliminated by being able to work with a slow shutter speed.



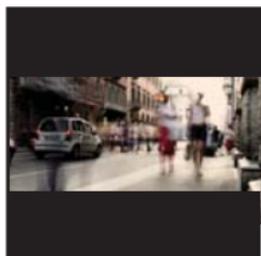
For Wider Apertures

With the Variable NDX filter, the shutter speed remains constant for a wide aperture easily creating a blurred background effect.



Ultimate Filter for Landscape Photography

The flexibility of using different shutter speeds is the perfect tool for creating new worlds in landscape photography.



Flex Light Control for Digital SLR HD Video

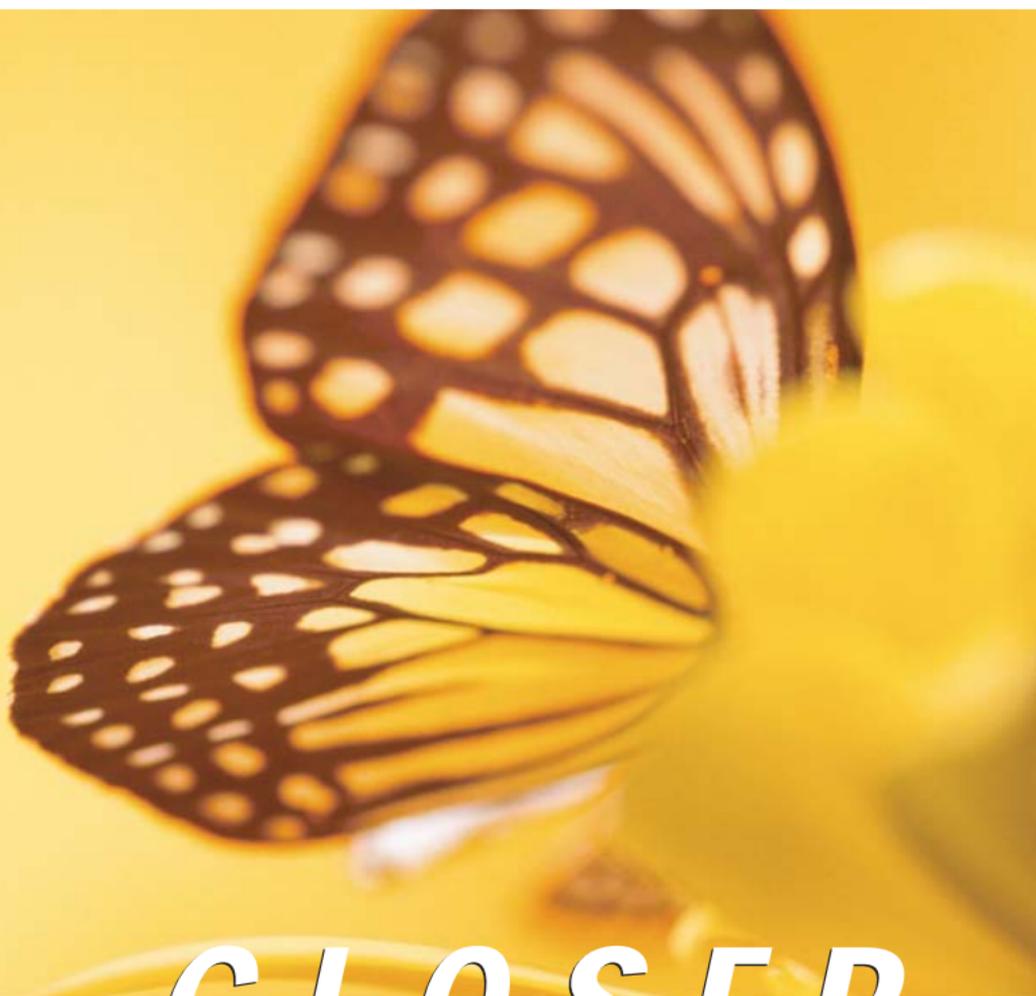
For HD video-enabled cameras, use the Variable NDX filter to easily adjust light control and for manual fade in - fade out effects.

for Digital SLRs

TELEPLUS DGX/DG SERIES

Kenko

**TELEPLUS DGX/DG
SERIES
FOR DIGITAL SLRs**



CLOSER



1.4X, 2X TELEPHOTO CONVERTER

PRO 300 AF DGX 1.4X, 2X



KENKO Teleplus Pro 300 DGX converters are made with precision quality multi-coated optical glass supplied by Hoya Corporation, the worlds largest manufacturer of optical glass. These glass elements were designed to match the optical quality of the prime lens (even at the edges) and telephoto zoom lenses. The optical design of the elements and light path is wide enough not to cause vignetting.

The PRO 300 family are designed specifically to be used with prime telephoto lenses of 100mm or above, such as 300 mm f/2.8 lenses, and work best with telephoto lenses of 200mm to 500mm. The PRO 300 can be used with telephoto zoom lenses as well as prime lenses. However, Kenko does not recommend them for zoom lenses that have a range starting under 50 mm.

KENKO PRO 300 AF Teleplus converters have genuine Gate Array IC (Integrated Circuitry). It means that the converter's own unique circuitry maintains signal integrity between the camera body and lens. These converters are designed to electronically operate the same way as an original manufacturer's converter.¹

Full AF operation with PRO 300 2.0x DGX is possible when using camera lenses with maximum aperture of F2.8 or brighter. Please be aware that AF will work properly only if there is enough light and contrast on the subject to activate the camera's AF sensors. (Manual focusing is required when using lenses with smaller maximum f-stop value than those given above.)

With the PRO 300 1.4x, DGX full AF operation is possible with camera lenses having a maximum aperture of F4 or brighter. The same light and contrast requirements apply.

The DGX Teleplus converters have updated circuitry to record exif data more accurately. In the exif exposure data (meta-data recorded with a digital picture) DGX converters record the equivalent aperture and focal length of the lens setting plus tele-converter. Optically and mechanically they are the identical to the prior high-quality DG series converters.

Most Canon EOS camera bodies are programmed to shut down auto focus if the calculated effective aperture for the lens and teleconverter is smaller than f/5.6, the Kenko Teleplus PRO 300 converters work the same way.

SPECIFICATIONS	1.4X	2.0X
Magnification:	1.4x	2.0x
Depth of field:	1/1.4 of prime lens	1/2 of prime lens
Minimum focus distance:	Same as prime lens	Same as prime lens
Construction:	5E / 4G	7E / 4G
Diaphragm coupling:	Fully automatic	Fully automatic
Lens coating:	Digital Multi Coating	Digital Multi Coating
Exposure magnification:	Approx. 2 times (equivalent to 1 diaphragm)	Approx. 4 times (equivalent to 2 diaphragm)
Barrel length:	27.0mm approx.	51.0mm approx.
Weight:	4.6 oz.(132g)	6.4 oz.(184g)
Mount Available for:	Canon-EOS* Nikon-AF	Canon-EOS* Nikon-AF

*Canon EF-S lenses are not applicable.

3X TELEPHOTO CONVERTER

PRO 300 AF DG 3X

Placed between the camera body and lens, a teleconverter contains a set of optics that will effectively increase the focal length of a lens by a specific amount. Common magnifications are 1.4 times and 2 times, but the Kenko Teleplus PRO 300 AF converter has a 3x magnification. For example, using a 3 times (3x) teleconverter will increase the focal of 300mm lens to 900mm.

The Teleplus PRO 300 converter is made with high quality multicoated optical glass supplied by Hoya Corporation, the worlds largest manufacturer of optical glass. The PRO 300 3x is designed for use with lenses of 50mm or above and work best with telephoto lenses of 100mm to 500mm. The PRO 300 3.0x can be used with telephoto zoom lenses as well as prime lenses. However, Kenko does not recommend them for lenses that have a zoom range that starts under 50 mm.

KENKO PRO 300 AF Teleplus converters have genuine Gate Array IC (Integrated Circuitry). It means that the converter's unique circuitry maintains signal integrity between the camera body and lens. These converters are designed to electronically operate the same way an original manufacturer's converter would provided there is enough light available.

Important Note: Due to the 3 stop light loss inherent in a 3x converter, Kenko PRO 300 3.0X has no AF capability. The lens must be focused manually. The converter has all the circuitry for aperture activation and metering.

SPECIFICATIONS	
Magnification:	3.0x
Depth of field:	1/3 of prime lens
Minimum focus distance:	Same as prime lens
Construction:	7E / 4G
Diaphragm coupling:	Manual focus
Lens coating:	Digital Multi Coating
Exposure magnification:	Approx. 3 times (equivalent to 3 diaphragm)
Barrel length:	65.0mm approx.
Weight:	6.8 oz.(194g)
Mount Available for:	Canon-EOS* Nikon-AF

*Canon EF-S lenses are not applicable.



2X TELEPHOTO CONVERTER

MC7 AF 2.0 DGX



Placed between the camera body and lens, a teleconverter contains a set of optics that will effectively increase the focal length of any lens with which it is used. The KENKO TelePlus MC7 AF 2.0X DGX converter has the effect of multiplying the focal length of your lens by 2.0x, turning a 300mm lens into an equivalent 600mm lens.

The MC7 AF 2.0X DGX converter has genuine Gate Array IC (Integrated Circuitry). It means the converter's unique circuitry maintains signal integrity between the camera body and lens. The 7-element design is made with high quality multi-coated optical glass supplied by Hoya Corporation, the world's largest manufacturer of optical glass.

Full AF operation with the TelePlus MC7 AF 2.0X is possible using camera lenses with open apertures of F2.8 or brighter. Please be aware that AF will work properly only if there is enough light and contrast on the subject to activate the camera's AF sensors. (Manual focusing may be necessary when using lenses with smaller open f-stop values than that given above.)

The DGX TelePlus converters have updated circuitry to record exif data more accurately. In the exif exposure data (meta-data recorded with a digital picture) DGX converters record the equivalent aperture and focal length of the lens setting plus teleconverter. Optically and mechanically they are identical to the prior high-quality DG series converters.

SPECIFICATIONS	
Magnification:	2.0x
Depth of field:	1/2 of prime lens
Minimum focus distance:	Same as prime lens
Construction:	7E / 5G
Diaphragm coupling:	Fully automatic
Lens coating:	Digital Multi Coating
Exposure magnification:	Approx. 4 times (equivalent to 2 diaphragm)
Barrel length:	35.7mm approx.
Weight:	5.5 oz. (157g)
Mount Available for:	Canon-EOS* Nikon-AF Sony Alpha

*Canon EF-S lenses are not applicable.

1.4X, 2X TELEPHOTO CONVERTER

MC4 AF 1.4 and 2.0 DGX



Placed between the camera body and lens, a teleconverter contains a set of optics that will effectively increase the focal length of any lens with which it is used. The KENKO TelePlus MC4 AF 1.4X / 2.0X DGX converter has the effect of multiplying the focal length of your lens by 1.4x / 2.0x, turning a 300mm lens into an equivalent 420mm lens for the 1.4 and 600mm for the 2.0x.

Both the MC4 AF 1.4X and 2.0X DGX converters have genuine Gate Array IC (Integrated Circuitry). This means the converter's unique circuitry maintains signal integrity between the camera body and lens. The 4-element design is made with high quality multi-coated optical glass supplied by Hoya Corporation, the world's largest manufacturer of optical glass.

Full AF operation with the TelePlus MC4 AF 1.4X is possible using a camera lens with an open aperture of F4 or brighter while the 2.0X DGX would require an open aperture of F2.8 or brighter. Please be aware that AF will work properly only if there is enough light and contrast on the subject to activate the camera's AF sensors properly. (Manual focusing may be necessary when using lenses with smaller open f-stop values than that given above.)

The DGX TelePlus converters have updated circuitry to record exif data more accurately. In the exif exposure data (meta-data recorded with a digital picture) DGX converters record the equivalent aperture and focal length of the lens setting plus teleconverter. Optically and mechanically they are identical to the prior high-quality DG series converters.

SPECIFICATIONS	1.4X	2.0X
Magnification:	1.4x	2.0x
Depth of field:	1/1.4 of prime lens	1/2 of prime lens
Minimum focus distance:	Same as prime lens	Same as prime lens
Construction:	4E / 4G	4E / 4G
Diaphragm coupling:	Fully automatic	Fully automatic
Lens coating:	Digital Multi Coating	Digital Multi Coating
Exposure magnification:	Approx. 2 times (equivalent to 1 diaphragm)	Approx. 4 times (equivalent to 2 diaphragm)
Barrel length:	25mm	26.0mm
Weight:	3.8 oz.(110g)	3.9 oz. (111g)
Mount Available for:	Canon-EOS* Nikon-AF Sony Alpha	Canon-EOS* Nikon-AF Sony Alpha

*Canon EF-S lenses are not applicable.

**12mm, 20mm, 36mm EXTENSION TUBE SET
AUTO EXTENSION TUBE SET DG**



Extension tubes are designed to enable a lens to focus closer than its normal set minimum focusing distance. Getting closer has the effect of magnifying your subject (making it appear larger in the viewfinder and in your pictures). They are exceptionally useful for macro photography, enabling you to convert almost any lens into a macro lens at a fraction of the cost while maintaining its original optical quality.

The DG extension tubes have no optics. They are mounted in between the camera body and lens to create more distance between the lens and film plane. By moving the lens farther away from the film or CCD sensor in the camera, the lens is forced to focus much closer than normal. The greater the length of the extension tube, the closer the lens can focus.



with 36mm



with 20mm+36mm



with 12mm+20mm+36mm

SPECIFICATIONS	12mm	20mm	36mm
Diaphragm coupling:	Perfect coupling		
TTL.EE metering:	Perfect coupling		
Length of tubes:	12mm	20mm	36mm
Diameter of tubes:	62mm approx.		
Weight:	2.5 oz. (72g)	2.9 oz. (84g)	3.9 oz. (112g)
Mount Available for:	Canon-EOS*, Nikon-AF, SONY-α		

*Canon EF-S lenses are not applicable.

**EXTENSION RING
UNIPLUS TUBE DG 25**



Kenko UNIPLUS TUBE (extension ring) is an accessory exclusively designed for use with standard AF lenses to shoot subject at closer distance with higher magnification. Magnification ratio for TUBE 25 is about 1/2 with 50mm standard lens. Perfect coupling with automatic aperture, TTL metering and AE mechanism.

SPECIFICATIONS	UNIPLUS TUBE DG 25
Diaphragm coupling:	Perfect coupling
Construction:	Perfect coupling
Barrel length:	approx. 25mm
Weight:	3.4 oz. (98g)
Mount Available for:	Canon-EOS*, Nikon-AF, SONY-α

*Canon EF-S lenses are not applicable.


 Kenko

CONVERSION LENSES
 FOR DIGITAL STILL & VIDEO


Improved Digital Imagery

Since it fits right over your camera's existing lens system, a wide-angle converter affects the full zoom range of your camera's lens. A wide-angle converter increases your angle of view - scenics include more of the landscape, groups include more people, and interiors show more of the room. A 0.5x wide-angle converter **DOUBLES** your angle of view, allowing you to get twice as much in the picture (AND your telephoto setting also becomes wider; not zooming in as close). Conversely, a telephoto converter brings everything closer. A 2x converter will double your camera's maximum focal length, bringing things twice as close, throughout the zoom range.

The Effects of Conversion Lenses

A wide-angle converter affects the full zoom range of your camera's lens. A wide-angle converter increases your angle of view - scenics include more of the landscape, groups include more people, and interiors show more of the room. A 0.5x wide-angle converter **DOUBLES** your angle of view, allowing you to get twice as much in the picture (AND your telephoto setting also becomes wider; not zooming in as close). Conversely, a telephoto converter brings everything closer. A 2x converter will double your camera's maximum focal length, bringing things twice as close, throughout the zoom range.



Wide-angle



Normal



Telephoto



Fish-Eye

STANDARD FISH-EYE

KDV-0252

52mm 0.25x

This high-quality 0.25x fish-eye extreme wide-angle video conversion lens is designed for "Prosumer" video cameras having a 52mm or smaller filter thread. The high curvature of field or "fish-eye" effect give video a creative look. The multi-coated front element and all glass elements maintain optical quality needed by today's videographers

Magnification:	0.25x	Filter Thread:	None
Construction:	3E / 3G	Diameter:	2.6 in.(66mm)
Mount Thread:	52mm	Length:	2.2 in.(56mm)
Adapter Rings:	None	Weight:	7.2 oz.(204g)



Semi Fish-Eye

STANDARD WIDE-ANGLE

SGW-043

37mm 0.43x

This wide-angle lens is extremely small, and was created for high resolution compact video cameras that have 37mm sized filter threads or smaller. This high-quality lens has an extreme curvature of field, or fish-eye effect - a creative look for extreme sports, web-casts, etc. The optical glass lens elements are multi-coated to reduce the possibility of flare, ghosting and internal reflection.

Magnification:	0.43x	Filter Thread:	None
Construction:	3E / 3G	Diameter:	2.1 in.(53mm)
Mount Thread:	37mm	Length:	1.3 in.(33mm)
Adapter Rings:	None	Weight:	4.1 oz.(115g)



STANDARD WIDE-ANGLE

SGW-05

37mm 0.5x

The SGW-05 (0.5X wide angle) is designed to work with compact digital and analog camcorders having a 37mm filter thread. The wide-angle will double your field of view.

Magnification:	0.5x	Filter Thread:	None
Construction:	2E / 2G	Diameter:	1.9 in.(48mm)
Mount Thread:	37mm	Length:	1.26 in.(32mm)
Adapter Rings:	None	Weight:	2.5 oz.(70g)



STANDARD TELEPHOTO

SGT-20

37mm 2.0x

These two lenses, the SGW-05 (0.5X wide angle) and the SGT-20 (2.0X telephoto) are designed to work with compact digital and analog camcorders having a 37mm filter thread. Each greatly expands the zoom features of the camera - the wide-angle will double your field of view while the telephoto lens will double the optical zoom, getting twice as close without resorting to a digital telephoto mode.

Magnification:	2.0x	Filter Thread:	46mm
Construction:	2E / 2G	Diameter:	1.9 in.(48mm)
Mount Thread:	37mm	Length:	1.25 in.(32mm)
Adapter Rings:	None	Weight:	2.1 oz.(60g)

KFM-1100 AUTO DIGI METER**For Both Flash and Ambient Light Readings****Simple, Easy-to-Use, Accurate.**

Ambient Light Readings

The KFM-1100 shutter speed can be selected in a range from as long as 30 minutes to as fast as 1/8000 of a second (This range is selectable in full stop, 1/2 stop or 1/3 stop increments).

The light reading is displayed on the meter's LCD window as both digital and analog data. If you wish to select a different shutter speed after a reading is taken, the aperture reading will automatically change accordingly. The KFM-1100 can read a very wide range of light from the very low equivalent EV -2.0 to EV 19.9 (incident light based on ISO 100).

The meter can also be set to a Cine mode to be used with Cine cameras and display light readings from 8 to 128 frames/sec.

Flash Light Reading

When using with flash, select Cord or Non-Cord depending on the shooting conditions. For Cord setting, connect the Flash sync-cord to the Sync Terminal in the front of the KFM-1100 then a light reading can be taken by simply pressing the Measurement button on the side of the meter. When using a non-cord set-up, pressing the measurement button sets the meter in stand-by mode. When the flash is fired manually, the meter takes a reading.

Analyze Function

When taking readings in mixed flash and ambient lighting, the KFM-1100 can measure the flash and ambient light almost simultaneously. The percentage of flash light in the over-all exposure is then displayed in the analyze scale on the LCD. The analyze scale is divided into 4 sections, each section represents flash contribution of approximately 25% of the total lighting. For example, if 3 sections of the analyze scale are lit, the flash to ambient light ratio is approx. 75% flash to 25% ambient. After taking a reading, the shutter speed can be changed and the meter will recalculate the exposure. Setting a slower shutter speed would result in a greater ambient to flash ratio. Setting a faster shutter speed would result in a lesser ambient to flash ratio. The analyze scale helps balance the 2 sources of lighting for more predictable results. Then, the lighting and exposure can be set to get the desired look.

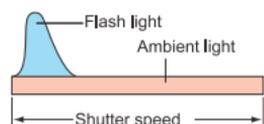
25% of exposure is from flash.



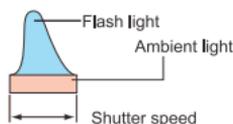
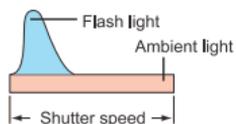
50% of exposure is from flash.



75% of exposure is from flash.



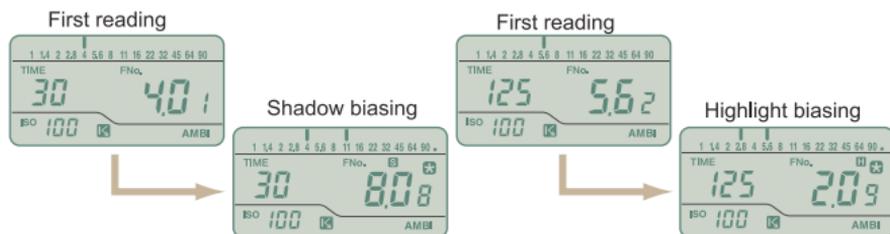
Analyze scale



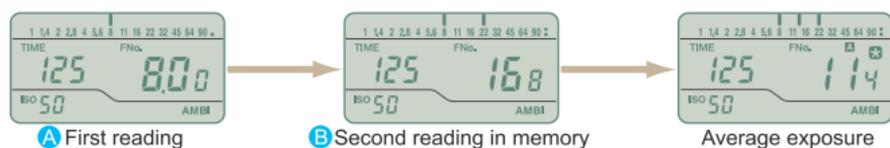
Analyze scale	Ratio between flash and ambient light		Results
	Flash light	Ambient light	
	Approx. 0%	Approx. 100%	Exposure is dominated by ambient light with virtually no influence from flash light
	Approx. 25%	Approx. 75%	Ambient light is dominant, but flash light also has some influence.
	Approx. 50%	Approx. 50%	Ambient light and flash light contribute the same amounts to the exposure.
	Approx. 75%	Approx. 25%	Flash light is dominant, but ambient light also has some influence.
	Approx. 100%	Approx. 0%	Exposure is dominated by flash light with virtually no influence from ambient light

Calculation Function

The KFM-1100s calculation function can be used to average readings stored in memory or bias exposures toward shadow or highlights when taking reflected light readings. This allows for more accurate recording of shadow or highlight detail.



Note: Examples shown to the right require the 5 degree spot attachment in the ambient mode.



Memory

The KFM-1100 has memory slots to store 2 separate readings. Both stored readings and the current reading are displayed simultaneously in the analog scale. Memory markers also show the number of stored readings. Having readings stored in memory makes it easier to analyze the contrast range of your subject, the lighting ratio or viewing several separate readings in relation to one another.



Custom Settings

At any time you can set the display readings to your liking for:
 Selecting the shutter speed stops (1, 1/2, 1/3 stops)
 Selecting the F no. Display mode (F number + 0.1 increment intermediate value display, or just F number direct reading display)
 Selecting the exposure correction value (EV - 10 to 10)

Specifications

Type:	Hand-held exposure meter for measuring ambient and flash light	
Reception Method:	Incident-light readings	
Receptors:	Incident: Spherical Diffuser - 270 rotating receptor head	
Measuring modes:	AMBI: Ambient light CORD: Flash light and flash bulb light using a sync cord NON.CORD: Flash light without a sync cord	
Measuring range (ISO 100):	Ambient light Incident	EV -2.0 to 19.9
	Flash light	Incident-light readings:
Repeatability:	±0.1 stop	
Display range: ISO:	3 to 8000 (1/3 stop increments)	
	Shutter speed (ambient): 30 min. to 1/8000 sec. (1, 1/2, 1/3 stop increments)	
	Shutter speed (flash): 1 sec to 1/500 sec. (1, 1/2, 1/3 stop increments)	
	Framing rate:	8 to 128 f/s
	Exposure:	F1.0 to 90+0.9 stop (0.1 stop increments)
	Ev:	-17 to 40.8 (0.1 stop increments)
	Exposure difference:	-10 to +10 (0.1 stop increments)
	Analog scale:	FNO. 1.0 to 90 (1/2 stop increments)
	Analyze scale:	Flash light proportion 0 to 100% (25% increments)
Other functions:	Memory, S/A/H calculation, brightness difference Analyze function for calculating ratio of flash light to ambient light	
Power:	One AA alkaline dry cell (LR-6/1.5 V)	
humidity range:	no condensation	
Others:	Accessory-receptor jack (with cap) Display correction function -10.0 to +10.0Ev Sync terminal	
Dimensions:	57 (W) x 157 (H) x 26 (D) mm	
Weight:	135 g (4.7 oz.) excluding battery	
Standard accessories:	Spherical Diffuser, neck strap, case, a single alkaline dry cell (note)	

(Note) The single alkaline dry cell is only for products marketed in Japan.

Specifications and external appearances described herein are subject to change without notice.

Optional Accessories



Flat Diffuser

This diffuser is used to measure the lighting ratio between main and auxiliary light sources to determine illuminance values, and to take exposure readings for flat surfaces such as paintings.



Spot Finder 5°

Viewfinder 5° feature 5° angles of acceptance respectively, and enable spot metering of subjects from a distance. The meter can thus be used to accurately measure small areas of a scene.



Reflected-Light Attachment II

The reflected-light attachment has 40° angle of acceptance, which corresponds to the angle of view seen with a 50mm lens on a 35mm SLR camera.

KFM-2100 FLASH METER**Flash Meter With Integrated Spot Meter****Flash Meter With Integrated Spot Meter**

The Kenko KFM-2100 is an exposure meter that incorporates both flash and spot metering functions into one compact unit.

The KFM-2100 can simultaneously display an exposure reading on the flash meter (for measuring incident light) and an exposure reading on the spot meter (for measuring reflected light).

But its more than one simple easy-to-use integrated system that fits comfortably in hand. It also incorporates the Exposure Navigation System, which displays information on the LCD that helps you determine the proper exposure for a scene.

Memory

The KFM-2100 flash meter has memory slots to store 10 separate readings. Both stored readings and the current reading can be displayed simultaneously in the vertical analog scale. Memory markers also show the number of stored readings. Having readings stored in memory makes it easier to analyze the contrast range of your subject, the lighting ratio or viewing several separate readings in relation to one another.

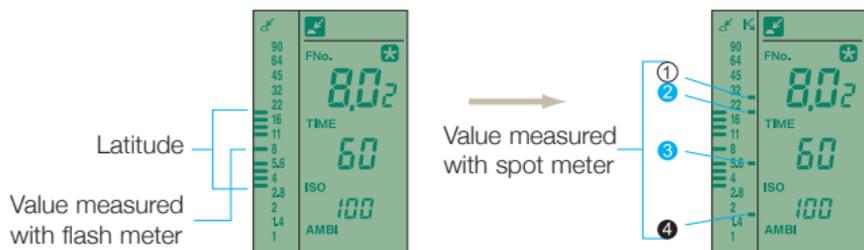
Latitude Display Function

Latitude is the degree to which you can over or under expose an image and still have acceptable image quality from the exposure. This concept is as critical with digital photography as with film. (Hint: Use your Digital Camera's RAW setting for widest possible latitude also referred to as Dynamic Range, but a typical digital SLR's sensor has about a + or - 2 stop latitude range, making it similar to photographing with color negative film.)

The latitude or difference in exposure between the brightest highlight areas of a scene and the darkest shadow areas can be determined by the KFM-2100 to make better informed lighting and exposure choices with the latitude function and built-in 1° spot meter. Note: Latitude and Dynamic Range can vary widely with different Digital SLR sensor types or different film types. Before using the KFM-2100 specify the correct latitude for the Digital camera or film being used.



① can be saturated with white.
④ can be saturated with black.
The measured values ② and ③ are to be within the specified latitude.



Check if the measured values ② and ③ are within the specified latitude.

Viewfinder

The KFM-2100 can display digital readings, not just in the LCD on the front of the meter, but on a LCD display in the viewfinder window as well. This allows light reading to be seen while still looking through the viewfinder. The meter also has dioptic adjustments for more comfortable viewing.



Ambient Light Reading

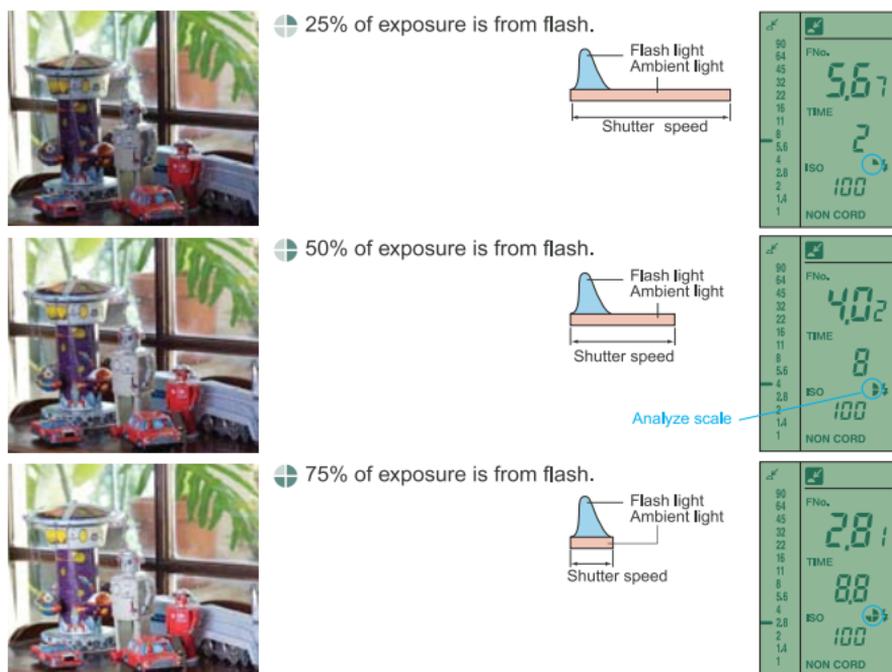
The KFM-2100 flash meter's shutter speed can be selected in a range from as long as 30 minutes to as fast at 1/16,000 of a second (This range is selectable in full stop, 1/2 stop or 1/3 stop increments). The light reading is displayed on the meter's LCD window as both a digital and analog data. Once a reading is taken if you wish to change the shutter speed and the aperture reading will automatically change accordingly. The KFM-2100 can read a very wide range of light from the very low equivalent EV -2.0 to 19.9 (incident light based on ISO 100). The meter can also be set to a Cine mode to be used with Cine cameras and display light readings from 8 to 128 frames/sec.

Flash Light Reading

When using with flash, select Cord or Non-Cord depending on the shooting conditions. For Cord setting, connect the Flash sync-cord to the Sync Terminal in the front of the KFM-2100 flash meter then a light reading can be taken by simply pressing the Measurement button on the side of the meter. When using a non-cord set-up, pressing the measurement button sets the meter in stand-by mode. When the flash is fired manually, the meter takes a reading.

Analyze Function

When taking readings in mixed flash and ambient lighting, the KFM-2100 can measure the flash and ambient light almost simultaneously. The percentage of flash in the over-all exposure is then displayed in the analyze scale on the LCD. The analyze scale is divided into 4 sections, each section represents flash contribution of approximately 25% of the total lighting. For example, if 3 sections of the analyze scale are lit, the flash to ambient light ratio is approx. 75% flash to 25% ambient. After taking a reading, the shutter speed can be changed and the meter will recalculate the exposure. Setting a slower shutter speed would result in a greater ambient to flash ratio. Setting a faster shutter speed would result in a lesser ambient to flash ratio. The analyze scale helps you balance the 2 sources of lighting for more predictable results, so you can set the lighting and exposure to get the look you want.



Calculation Function

The KFM-2100 flash meter has a calculation function that can be used to average readings stored in memory or bias exposures toward shadow or highlights when taking reflected light readings. This allows for more accurate recording of shadow or highlight detail.

Specifications

Type:	Hand-held exposure meter for measuring ambient and flash light		
Reception method:	Incident-light and spot reflected-light readings		
Receptors:	Incident-light readings: Spherical Diffuser, Swivels 270 Spot reflected-light: angle 1		
Measurement modes:	AMBI: Ambient light CORD: Flash light measurement with the sync cord NON.CORD: Flash light without using a sync cord		
Measuring range:	Ambient light	Incident-light readings:	EV -2.0 to 19.9
(ISO 100)		Spot reflected-light:	EV 2.0 to 24.5
	Flash light	Incident-light readings:	FNO. 1.0 to 128 + 0.9 stop
		Spot reflected-light:	FNO. 2.8 to 128 + 0.9 stop
Measuring Distance:	1.3m to infinity (∞) (for spot measurement)		
Viewfinder:	Single-lens reflect type with fixed focal point Magnification: 1.2x Viewing angle: 12 (vertical) x 17 (horizontal) Dioptric adjustment range: -3.0 to +1.0		
Repeatability:	+/- 0.1 EV		
Display range:	Exposure: F 1.0 to 128 + 0.9 stop (0.1 stop increments) EV: -17 to 40.9 (0.1 stop increments) Shutter speed (ambient): 30 min. to 1/16000 sec. (1, 1/2 or 1/3 stop increments) Shutter speed (flash): 30 min. to 1/1000 sec. (1, 1/2 or 1/3 stop increments) Frame rate (Opening angle of 180): 8,12,16,18,24,25,30,32,64,128 ISO: 3 to 8000 (1/3 increments) Exposure difference: -10 to +10 (0.1 stop increments) Analog scale: FNO. 1.0 to 90 (1/2 stop increments) Analyze scale: Flash light proportion 0 to 100%(25% increments)		
Other functions:	Latitude display function, Light Ratio Analyze function, Memory function S/A/H calculation, Brightness difference function, Exposure correction function: -10 to +10 (0.1 stop increments)		
Others:	Sync terminal		
Power:	One AA alkaline dry cell (LR-6/1.5 V)		
Dimensions:	66 (W) x 175 (H) x 31 (D) mm		
Weight:	185 g (6.5 oz) excluding battery		
Accessories:	strap, case, a single alkaline dry cell (note)		

(Note) The single alkaline dry cell is only for products marketed in Japan.
Specifications and external appearances described herein are subject to change without notice.

Optional Accessories



Flat Diffuser

This diffuser is used to measure the lighting ratio between main and auxiliary light sources to determine illuminance values, and to take exposure readings for flat surfaces such as paintings.

Because Color is Critical

Knowing the color temperature before taking a photograph saves you time and money



Tungsten light (Daylight film),
80A filter and 82B filter



No filter

Ambient Light Readings

First set the appropriate film type, choose the display mode and memory channel (if present). Set the Mode switch to "AMBI", then simply aim the meter's light receptor at the scene and press the measurement button. Measurement readings will be calculated and appear almost immediately in the LCD display and color temperature measurements will be taken as long as the measurement button is held down. The KCM-3100's measuring range for ambient light is EV 3 to 16.3 using ISO 100.

Three Display Modes

LB (Light Balancing) and CC (Color Compensating) Indexes

The LB index is used to select the right amber or blue LB filter needed to balance a light source. Its measurement is the mired difference between the photographic color temperature specified for the selected film type and the temperature of the light source. The CC index is the value of the required magenta or green colored CC filter.



Filter number and CC index

The Kodak Wrattan light balancing filter number (or numbers) needed, display directly in the LCD to make easy selection of amber or blue LB filter (s). The CC index is the value of the required magenta or green colored CC filter.



Photographic Color Temperature

The photographic color temperature of the light source is measured in degrees Kelvin and determined according to the spectral sensitivity of color films.



Flash Light Readings

First set the appropriate film type and choose the display mode. Set flash range selector switch to Hi or Lo depending on the output of the flash unit (s), set the shutter speed to be used (from 1 sec. to 1/500 sec.). The total flash measurement range is from f/2.8 to f/180 at ISO 100.

Flash Reading With Sync Cord

For Sync Cord setting, set the mode selector switch to "CORD" and connect the flash sync-cord to the Sync Terminal in the front of the KCM-3100, Then a temperature reading can be taken by simply pressing the Measurement button on the side of the meter. The flash will then fire, a measurement will be taken and the measurement reading will appear in the LCD display.

Flash Reading Without Sync Cord

When using a non-cord flash set-up, set the mode selector switch to "NON.C." Pressing the measurement button sets the meter in stand-by mode. When the flash is fired manually, a measurement will be taken and the measurement reading will appear in the LCD display.

Analyzer Mode for Flash Light Measurements Only

By setting the shutter speed to "F", the KCM-3100 will only display measurement readings for the light from a flash.



Flash and fluorescent light (Daylight film), 81C filter and 30M filter

Useful Shutter Speed Range

A selectable range of shutter speeds from 1 full second down to a fast 1/500 of a second set in full stops for flash measurement. Lighting for Flash photography usually is made up of a combination of flash and ambient light. The KCM-3100 measures the “mixed” lighting at the selected shutter speed. After measurement the shutter speed set in the meter can be changed which effectively changes the ratio of ambient light to flash. The meter will automatically recalculate the results and display the new reading for the new shutter speed



1/500 sec.



1/15 sec.



1 sec.

Examples of changes in image color due to changes in shutter speed (Daylight film, no filter; meter displays show suggested filtration for “normal” color reproduction)

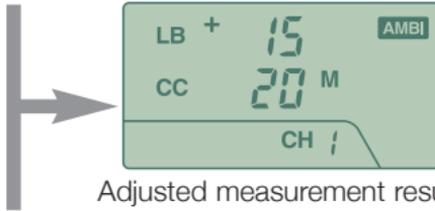
Nine memory channels for customizing the meter to any working style

Film and lighting equipment manufacturers all claim that their products are balanced to “daylight” (5500K) or “tungsten” (3400K or 3200K). However, their testing is performed in laboratories under highly controlled conditions. We live and photograph in the real world. CCD and CMOS sensors from different manufactures read and interpret color differently. Film from different manufactures render color differently. Different batches of the same film render color differently. Different lighting equipment renders color differently. The quality and age of that equipment is also a factor. The sun cannot even be relied upon, rarely shines at a perfect (5500K) and can vary widely depending on time of day, weather and pollution in the air.

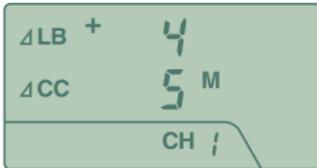
The KCM-3100s nine memory channels make coping with these challenges much more simple. Once you determine the correct filtration for the film or equipment being used you can simply enter the difference between your filtration and the meter reading into the meter’s memory. The meter will adjust all future reading accordingly.



Original reading



Adjusted measurement result



Your correction values

Specifications

Type:	Three-color digital color meter for color photography; determines filtration required and photographic color temperature of light sources
Receptor head:	Rotating (90° to right/180° to left) receptor head containing three silicon photocells (filtered to red, green, and blue sensitivities appropriate for color photography)
Measurement modes:	Ambient (AMBI); flash (CORD, NON.C)
Measuring range (ISO 100):	Ambient: EV 3 to 16.3; Flash: f/2.8 to 180 (in two ranges)
Shutter-speed setting range:	1 to 1/500 sec. in 1-stop increments (for flash measurements)
Display:	Liquid crystal (LCD)
Display modes:	LB index and CC index; LB filter number and CC index; photographic color temperature
Display range:	LB index: -500 to 500 mireds CC index: 200G to 200M LB filter number: 80A + 80D to 85B + 81EF Photographic color temperature: 1600 to 40,000K
Analyze function:	Determines measurement values for only flash light in mixed flash/ambient situations
Memory function:	9 memory channels for storing correction values to adjust calculated filtration (LB index and CC index); stored values automatically added to initially calculated values before display of results Correction-value range: ΔLB: -100 to + 100 mireds; CC: 100G to 100M
Repeatability:	LB index: 2 mireds CC index: 2 digits Photographic color temperature: Corresponding to 2 mireds
Power source:	2 AA-size batteries
Dimensions:	70 (W) x 170 (H) x 28 (D) mm
Weight:	185 g (6.5 oz) excluding battery
Standard Accessories:	Case, strap

(Note) The single alkaline dry cell is only for products marketed in Japan.
Specifications and external appearances described herein are subject to change without notice.

We open, The world of imagination



KENKO CO., LTD.

3-9-19 NISHI-OCHIAI, SHINJUKU-KU, TOKYO 161-8570 JAPAN

Phone: 81-3-5982-3206 Fax: 81-3-5982-3229

Visit our website at www.kenkoglobal.com



Kenko is a registered company in the Environmental Management System.

We obtained ISO certification 14001 in August, 2004.

