



# The ideal lineup for seamless performance with your Nikon.

From the world's finest cameras and lenses to an immense range of specialized equipment and accessories, Nikon boasts the world's most comprehensive photography system. This brochure covers the most important Nikon photographic accessories — tools that work seamlessly with your Nikon camera for optimum performance.

Each accessory delivers the same exacting standard of quality that has made Nikon synonymous with professional photography. Nikon accessories are designed to withstand the most demanding photographic conditions imaginable to assure a lifetime of excellent service for everyone from beginners to professionals.

## Speedlights

Pp.4-14

When you want the finest flash results for your Nikon SLR, choose one of the many Nikon Speedlights.

Nikon Creative Lighting System  
SB-800/SB-600/SU-800/SB-R200  
Camera/Speedlight Compatibility  
TTL Flash System/Flash Accessories



## Battery Packs and Motor Drives

Pp.20-21

Beef up your power with a boost from one of these battery packs or motor drives.

Battery Packs  
(for F6, F5, N90s, N80, N75, D2 series, D200)  
External Power Source  
Motor Drive (for FM3a)

## Viewing Accessories

Pp.24-25

Customize your shooting views with one of these superior Nikon accessories.  
Interchangeable Focusing Screens  
Viewing Attachment

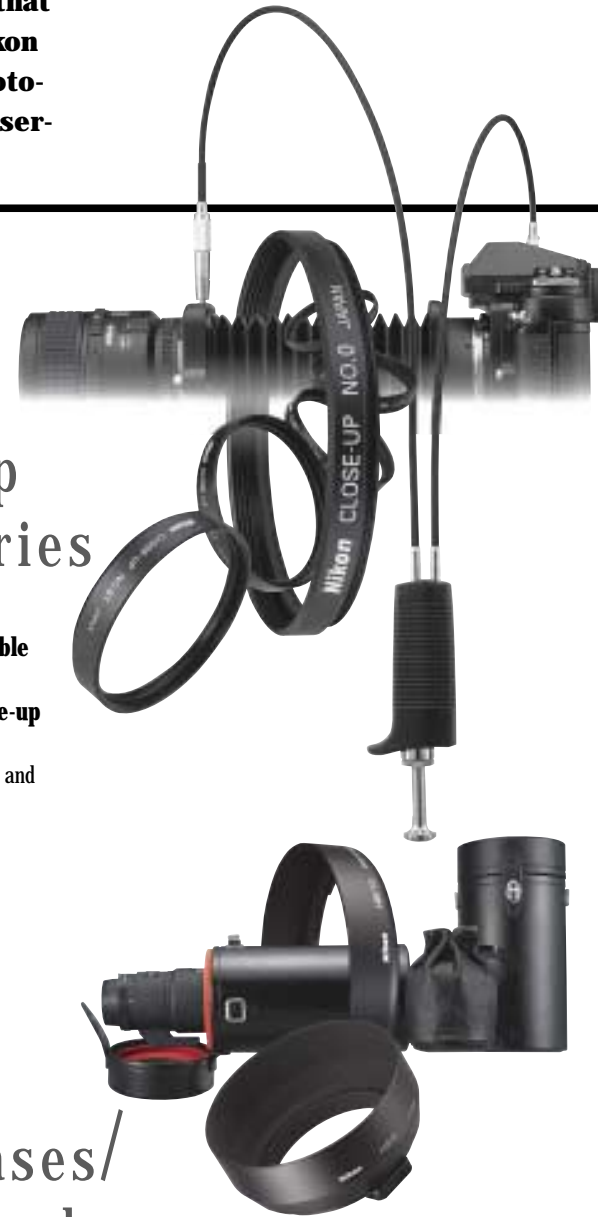


## Close-Up Accessories

P.28

These can be indispensable when you need to reveal precise details with close-up photography.

Bellows Focusing Attachment and Accessories  
Close-up Attachment Lenses  
Auto Extension Rings



## Remote Control & Data Communication Accessories

Pp.22-23

Explore more creative shooting with these remote and data communication accessories.

Two-Pin Remote Accessories  
Ten-Pin Remote Accessories  
Cable Release AR-3  
Remote Cord MC-DC1  
Modulite Remote Control Set  
Data Communication Accessories



## Filters

Pp.26-27

Absolute necessities for many types of photography. This comprehensive lineup covers all the bases.

Filters for Color and B&W Photography  
Filters for B&W Photography  
Filters for Color Photography



## Lens Cases/Lens Hoods

P. 29

Ideal companions for your precious Nikkor lenses.

Lens Cases, Lens Hoods, Lens and Body Caps,  
Lens strap



## Software

Pp.15-19

Postproduction imaging tool that's a key element to any digital imaging workflow.

Nikon Capture 4  
PictureProject  
Digital Filters



## Camera Cases/Straps

Pp.30-31

These offer the best protection and convenience for your Nikon.

Camera Cases, Compartment Case, Neckstraps,  
Hand Strap

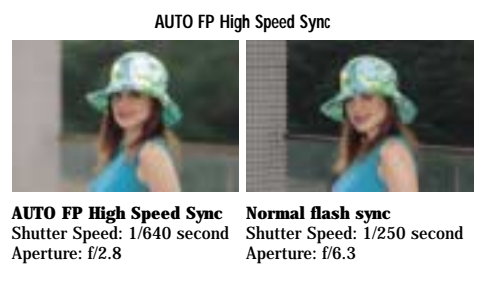




# Nikon Creative Lighting System



The right lighting is crucial to photography. That's why the Nikon Creative Lighting System provides superior performance and a near-limitless amount of illumination options. When cameras like the Nikon F6, D2 series, D200, D70 series or D50 are partnered with equipment that is compatible with the Creative Lighting System (i.e. Speedlights SB-800/SB-600/SB-R200 and Wireless Speedlight Commander SU-800), a new level of flash performance and potential is possible. Along with i-TTL Flash Control, an evolution of the highly regarded D-TTL system, features like Flash Value Lock (FV Lock), AUTO FP High Speed Sync, Wide-Area AF-Assist Illuminator and Flash Color Information Communication (for digital SLRs) help make the Nikon Creative Lighting System the best there is. And thanks to Advanced Wireless Lighting, you have up to four separate i-TTL Speedlight groups at your disposal. The possibilities are endless, so let your ideas truly shine.



**AUTO FP High Speed Sync**  
Shutter Speed: 1/640 second  
Aperture: f/2.8

**Normal flash sync**  
Shutter Speed: 1/250 second  
Aperture: f/6.3

**i-TTL Balanced Fill-Flash**  
Emitted from a Speedlight before the main flash and reflected off every object in the frame, monitor pre-flashes are picked up by either the five-segment TTL flash sensor or an RGB sensor. This information, along with data from the Matrix Metering system is analyzed to adjust flash output for most balanced background/foreground exposure possible. This technology takes Nikon's flash control system to unprecedented levels of precision and performance.

**AUTO FP High Speed Sync**  
This mode offers ample fill-in flash during shooting in bright conditions using fast-aperture lenses, enabling effective blur in the background. Once this mode is activated, high-speed flash synchronization makes available shutter speeds that are faster than the camera's own flash sync speed.

**Flash Value Lock (FV Lock)**  
Flash Value represents the degree of flash exposure for the subject. FV Lock lets you maintain the desired flash exposure during zooming, or even when recomposing a shot, allowing you to concentrate on the scene's lighting.

**Wide-Area AF-Assist Illuminator**  
Wide-Area AF-Assist Illuminator can be used with all 11 focus-areas found in the F6, D2 series and D200, as well as the five areas utilized in the D70 series and D50. This gives you autofocus shooting capability in dim lighting -- even when you change the focus area with a compatible camera.

**Flash Color Information Communication**  
Color accuracy in digital SLR flash photography is better than ever, thanks to Nikon's

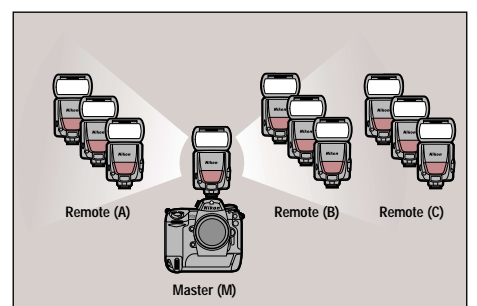
Creative Lighting System. In Auto White Balance mode, the master unit attached to the digital SLR camera transmits flash color information to the camera. Voltage, flash duration and other variables can affect flash color information, so the camera uses data like this to achieve optimum white balance.

**Distance-Priority Manual Flash (SB-800 only)**  
In this mode, the SB-800 automatically controls the light output according to distance value and set apertures. Enter the shooting distance value and you can take pictures having the same exposure -- even when shooting at different apertures. This mode allows you to make exposure compensation by varying the flash output level compensation value.

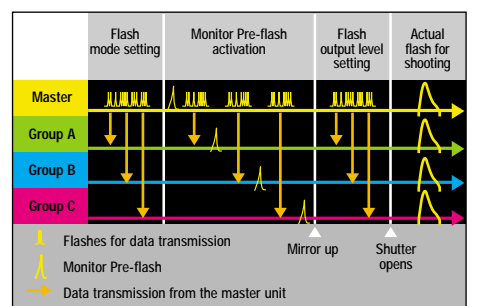
**Modeling Flash**  
Press the Modeling Flash button and the flash will fire repeatedly at a reduced output level. This is useful for checking illumination levels and the shadows cast on the subject before actually taking the picture. The flash can fire up to approximately 3 seconds while the button is pressed.

**Advanced Wireless Lighting**  
Thanks to Nikon's Creative Lighting System, Advanced Wireless Lighting (also called "wireless multiple flash") is as easy to use as an on-camera Speedlight, enabling professionals and advanced amateurs alike to freely test the seemingly limitless creative potential of the system. You can separate i-TTL Speedlights into four groups (comprised of the master\* and three remote i-TTL Speedlight groups), for comprehensive control over scene lighting. The master allows you to control independent flash mode settings (TTL, Auto Aperture [Non-TTL Auto], Manual, Repeating and Flash Cancel) and adjust flash output level compensation values for each group. With no limit to the number of Speedlights contained in each group, Advanced Wireless Lighting offers virtually absolute control over background illumination.

\*Wireless Speedlight Commander SU-800 can be used as a master to trigger remote units. SB-600 cannot be used as a master unit.



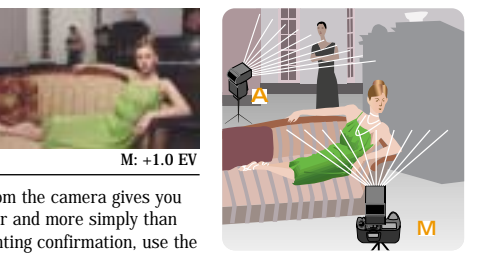
**Advanced Wireless Lighting**  
Using the master unit's LCD, you can set the flash mode and flash output level compensation values independently for each group (A, B and C) and the master unit (M).



**Advanced Wireless Lighting procedure (When TTL mode is selected for each Speedlight unit)**  
In Advanced Wireless Lighting, flash mode and other types of information are transmitted to each remote unit in the form of a series of low-level flashes from the master unit. In TTL mode, the camera's exposure metering sensor detects Monitor pre-flashes to determine each flash unit's output level.



The ability to adjust the flash output level of every flash unit from the camera gives you the freedom to experiment with a variety of settings much faster and more simply than with conventional systems. For convenience in pre-shooting lighting confirmation, use the Modeling Flash function.

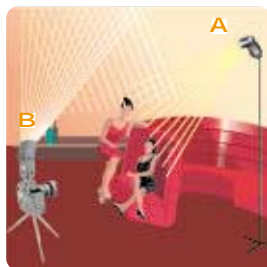




## See where Advanced Wireless Lighting can take you

The following examples show how to create dramatic effects with Advanced Wireless Lighting. From simple wireless lighting with one remote Speedlight to more artistic lighting using four Speedlight groups, these examples will guide you to a new dimension of enjoyment in flash photography.

### Emphasize spatial effects through shadows



**Equipment:**  
Nikon D2x and two SB-800s  
**Setting:**  
The remote Speedlight SB-800 [A] is located at a distance, illuminating the subject from the right. Considering the distance to the subjects, the Speedlight is set at Manual full output to make depth of field larger with a smaller aperture. For the SB-800 [B] attached to the D2x as a master, an amber filter is used to maintain a warm atmosphere based on red. With Manual 1/2 output, the master SB-800 illuminates the whole scene by bouncing light off a white ceiling.

### Create unique perspectives



### Illuminate subjects facing different directions

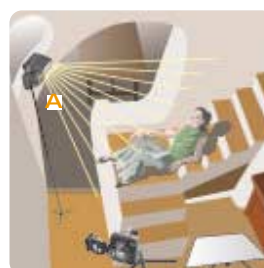


**Equipment:**  
Nikon D2x and four SB-800s  
**Setting:**  
The Speedlight SB-800 attached to the D2x as a master is set to Flash Cancel mode and used solely to trigger the remote Speedlights. The remote SB-800s [A] and [C] are both set at TTL (exposure compensated at  $-0.7$  EV for [A] and  $-1.0$  EV for [C]), so that the outline of the subjects' faces is pronounced while highlighted areas will not appear washed out. Another remote SB-800 [B] set at TTL (exposure compensated at  $+0.7$  EV) illuminates the window from outside. A blue filter is utilized to create the dramatic shadow of window frames.

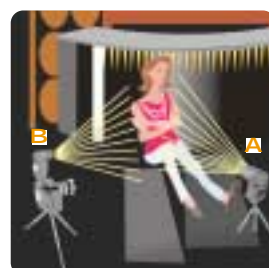
### Create atmospheric through indirect lighting



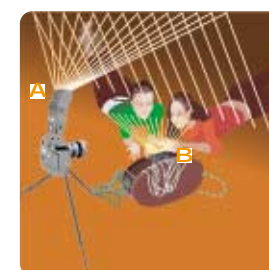
### Utilize available indoor lighting



**Equipment:**  
Nikon D2x and two SB-800s  
**Setting:**  
The Speedlight SB-800 attached to the D2x as a master is set to Flash Cancel mode and used solely to trigger the remote Speedlight [A]. The remote SB-800 illuminates the subject from the left-hand side in TTL mode. A reflector located at the front right-hand side of the subject prevents shadowy areas of the subject from becoming too dark.

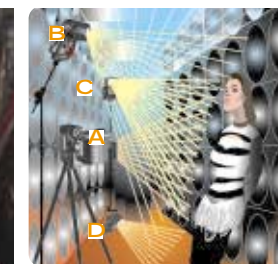


**Equipment:**  
Nikon D2x and two SB-800s  
**Setting:**  
To illuminate the wall the subject is leaning against, Slow Sync mode is used. The Speedlight SB-800 [A] illuminates the subject from the right-hand side at Manual 1/4. The strong reflective light from the wall emphasizes its metallic surface. The Speedlight SB-800 [B] attached to the D2x as a master provides soft illumination at Manual 1/64 so that shadowy areas of the subject do not appear too dark.



**Equipment:**  
Nikon D2x and two SB-800s  
**Setting:**  
The Speedlight SB-800 [A] attached to the D2x as a master illuminates the ceiling above the subjects in TTL mode (exposure compensated at  $-3$  EV). This light bounced off the ceiling prevents shadowy areas around the subjects from appearing too dark without diminishing the illumination from the jewel box. The remote SB-800 [B] placed in the jewel box and directed upward provides sufficient illumination in TTL mode (compensated at  $+1.3$  EV). A bounce adapter creates the effect of a jewel box illuminated from the inside.

### Emphasize perspective through multiple speedlights



**Equipment:**  
Nikon D2x, three SB-800s and one SB-600  
**Setting:**  
The Speedlight SB-800 [A] attached to the D2x as a master illuminates the subject from the front at Manual 1/32 output. A bounce adapter is used to cover the wideangle 12-24mm lens and soften the light. The remote SB-800 [B] illuminates the subject's face from above at Manual 1/4 output. The remote SB-800 [C] with bounce adapter is set at Manual 1/8 output. The remote SB-600 [D] with a wide panel is set at Manual 1/8 output. The latter two remote Speedlights provide light patterns on upper and lower parts of the glossy wall, respectively. The SB-600 also illuminates the floor.





Speedlight

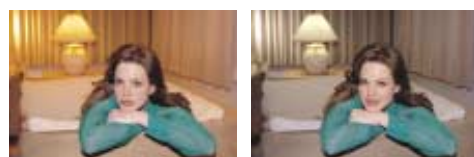
# SB-800

A revolutionary achievement for Nikon's Creative Lighting System



With color filter

**Color Filters**  
 The SB-800 Speedlight ships with two filters developed exclusively for digital cameras — one for incandescent and the other for fluorescent lighting. The optional SJ-1 Color Filter Package, which contains 8 different colored filters, is also available.



**Without filter**      **With incandescent filter**

Taking flash pictures under incandescent light with the white balance set to "Flash" results in an orange-tinted background (left). For natural color throughout the image, use the incandescent filter and set white balance to "Incandescent" (right).



The SB-800 is a high-performance Speedlight with a large guide number of 125 (ISO 100, ft.) or 174 (ISO 200, ft.) at the 35mm zoom-head position. Automatic power zoom covers 24mm to 105mm, with a built-in Wide Flash Adapter that extends the wideangle range to 14mm or 17mm. The built-in AF-Assist Illuminator can be used with all the focus areas of each camera. For bounce-flash or closeup photography, the flash head can be rotated upwards 90°, downwards 7° below the horizontal, 180° to the left, and 90° the right. Soft lighting can be achieved with the supplied Bounce Adapter.

Depending on the camera and lens, the SB-800 supports i-TTL, TTL, Auto Aperture (AA), non-TTL Auto and Manual flash control. Creative Lighting System features such as Advanced Wireless Lighting (including Modeling Flash), AUTO FP High Speed Sync and Flash Value Lock are made possible when used with the F6, D2-series, D200, D70-series and D50 cameras.

In Distance-Priority Manual Flash mode, once you've entered the shooting distance value, even changing the aperture won't alter the flash exposure.

**Quick Recycling Battery Pack**

The supplied Quick Recycling Battery Pack SD-800 enables installation of a fifth battery to shorten recycling time to as short as 2.9 seconds in Manual mode at full output.

**Speedlight Stand AS-19**

For the stable placement of the SB-800. A tripod socket is also provided.

**Bounce Adapter SW-10H**

By attaching the SW-10H over the flash head, you can diffuse the light during bounce flash to further soften the shadows.

**SB-800 Specifications**

**Electronic construction**  
 Automatic Insulated Gate Bipolar Transistor (IGBT) and series circuitry  
**Guide number**  
 125 (ISO 100, ft.), 174 (ISO 200, ft.)

**Angle of coverage**  
 24mm, 28mm, 35mm to 105mm (in 5mm zoom steps); 17mm, 14mm with built-in wide-flash adapter; 14mm with soft dome

**Flash mode**  
 i-TTL, D-TTL, TTL (film-based cameras); Auto Aperture; Non-TTL Auto; M (Manual): full, 1/2, 1/4, 1/8, 1/16, 1/32, 1/64 and 1/128 output

**Recycling time**  
 Approx. 2.9 seconds with supplied Quick Recycling Battery Pack SD-800 (Manual at full)

**Number of flashes**  
 Approx. 130 (Manual at full)

**Bounce capability**  
 Flash head tilts down to -7°, or up to 90°; flash head rotates horizontally 180° to the left or 90° to the right

**AF-Assist Illuminator**  
 Automatically turns on when performing autofocus in dim light or in the dark with AF SLRs; approx. 10m shooting distance with a 50mm f/1.8 lens

**Power source**  
 Four 1.5V LR6 (AA-size alkaline), 1.2V KR-AA (AA-size NiCd), 1.5V R6/AA-size Nickel, 1.2V R6/AA-size Ni-MH or 1.5V FR6/AA-size lithium batteries; High-Performance Battery Pack SD-8A, Power Bracket Unit SK-6A/6

**Dimensions (W × H × D)**  
 Approx. 2.8 × 5.1 × 3.7 in.

**Weight (without batteries)**  
 Approx. 12.3 oz.

**Accessories provided**  
 Quick Recycling Battery Pack SD-800, Speedlight Stand AS-19, Speedlight Color Filter Set SJ-800, Bounce Adapter SW-10H, Soft Case SS-800

Specifications apply when fresh LR6 (AA-size alkaline) batteries are used at normal temperature (68°F); AF-Assist Illuminator, zoom flash or LCD illuminator is not used.

Speedlight

# SB-600

Compact Speedlight supports Nikon's Creative Lighting System



Using Advanced Wireless Lighting to create side lighting (with SB-800 as a master unit and SB-600 as a remote i-TTL Speedlight)

The SB-600 is a portable, high-performance Speedlight that supports Nikon's Creative Lighting System. Within its compact body, the SB-600 has inherited most of the creative features of the SB-800 to offer a truly impressive range of possibilities. It features a guide number of 98 (ISO 100, ft. at 35mm) and automatic power zoom coverage from 24mm to 85mm. The built-in wide flash adapter increases the angle of coverage to a range of 14mm to 85mm. A tilting/rotating flash head makes it easy to perform bounce flash shooting. Depending on the camera and lens you use with the SB-600, you can employ TTL auto flash and Manual flash control. When used with the F6, D2-series, D200, D70-series and D50 cameras, the SB-600 enables Advanced Wireless Lighting\* (including Modeling flash), Flash Value Lock (FV Lock), AUTO FP High Speed Sync, Wide-Area AF-Assist Illuminator and Flash Color Information Communication (for digital SLR).

\*The SB-600 cannot be used as the master unit for Advanced Wireless Lighting operation.

**Speedlight Stand AS-19**

For the stable placement of the SB-800. A tripod socket is also provided.

**SB-600 Specifications**

**Electronic construction**  
 Automatic Insulated Gate Bipolar Transistor (IGBT) and series circuitry  
**Guide number**  
 98 (ISO 100, ft.), 138 (ISO 200, ft.)

**Angle of coverage**  
 85mm, 70mm, 50mm, 35mm, 28mm, 24mm, 14mm with built-in wide-flash adapter

**Flash mode**  
 i-TTL, D-TTL, TTL (film-based cameras); Non-TTL Auto; M (Manual): full, 1/2, 1/4, 1/8, 1/16, 1/32 and 1/64 output

**Recycling time**  
 Approx. 4.0 seconds (Manual at full)

**Number of flashes**  
 Approx. 180 (Manual at full)

**Bounce capability**  
 Flash head tilts up to 90°; flash head rotates horizontally 180° to the left or 90° to the right

**AF-Assist Illuminator**  
 Automatically turns on when performing autofocus in dim light or in the dark with AF SLRs; approx. 10m shooting distance with a 50mm f/1.8 lens

**Power source**  
 Four 1.5V LR6 (AA-size alkaline), 1.2V KR-AA (AA-size NiCd), 1.5V R6/AA-size Nickel, 1.2V R6/AA-size Ni-MH or 1.5V FR6/AA-size lithium batteries

**Dimensions (W × H × D)**  
 Approx. 3.0 × 4.9 × 3.5 in.

**Weight (without batteries)**  
 Approx. 10.6 oz.

**Accessories provided**  
 Speedlight Stand AS-19, Soft Case SS-600

Specifications apply when fresh LR6 (AA-size alkaline) batteries are used at normal temperature (68°F); AF-Assist Illuminator, zoom flash or LCD illuminator is not used.





## Close-up Speedlight Commander Kit R1C1/ Close-up Speedlight Remote Kit R1

The newly developed Nikon Wireless Speedlight system is compatible with the Creative Lighting System and easily enables versatile close-up flash and wireless multiple-flash shooting.

The main components of the system are the Wireless Speedlight Commander SU-800, Wireless Remote Speedlight SB-R200, and Attachment Ring SX-1.

Wireless close-up flash shooting is made easy by using the SU-800 and the SB-R200. The SB-R200 can be handheld or attached to a lens in use via the SX-1. Advanced Wireless Lighting is made possible by using the SU-800 as a commander to control up to three i-TTL Speedlight groups. What's more, Creative Lighting System features such as AUTO FP High Speed Sync, FV Lock and Modeling Flash are available with the system, and a variety of accessories are available to enhance the enjoyment of flash photography.

The system is available as the Close-up Speedlight Commander Kit R1C1 and the Close-up Speedlight Remote Kit R1.

The R1C1 package includes:

- Wireless Speedlight Commander SU-800
- Wireless Remote Speedlight SB-R200 (x2)
- Attachment Ring SX-1
- Adapter Rings (5 types)
- Color Filter Holder SZ-1 (x2)
- Color Filter Set SJ-R200 (x2)
- Extreme Close Up Positioning Adapter SW-11 (x2)
- IR Panel for Built-in Flash SG-3IR
- Flexible Arm Clip SW-C1
- Attachment Ring SX-1
- Diffuser SW-12
- Speedlight Stand AS-20 (x2)

The R1 contains all the same components except the Wireless Speedlight Commander SU-800.

Recommended lenses:

- AF Micro-Nikkor 60mm f/2.8D (Optional Adapter Ring UR-5 is required.)
- AF Micro-Nikkor 105mm f/2.8D
- AF Micro-Nikkor 200mm f/4D ED-IF

Please refer to the instruction manual for a complete list of usable lenses, as well as the number of SB-R200 units attachable to a lens and available focal range of each lens.



## Components and Accessories

### Wireless Speedlight Commander SU-800

The SU-800 features a commander function that can trigger wireless remote flash units SB-R200, SB-600 and SB-800. AF-Assist Illuminator, Target Light button and Test button are provided.

### Wireless Remote Speedlight SB-R200

The SB-R200 features a guide number of 30 (ISO 100, ft.) or 46 (ISO 200, ft.). When attached to a lens via the SX-1, the flash head can be tilted up to 60 degrees toward the optical axis of the lens or up to 45 degrees away from of the lens.

### Attachment Ring SX-1

For attaching the SB-R200 to the lens front via adapter ring. Up to eight SB-R200 units can be attached. The SB-R200 can be moved via the SX-1, positioning it at a desired click stop (each stop is 15°).

### Adapter Rings

Enables placing the Attachment Ring SX-1 on the front of the lens. Five filter attachment sizes (52mm, 62mm, 67mm, 72mm, 77mm) are available.

### Color Filter Holder SZ-1

Enables attaching filters to the SB-R200.

### Color Filter Set SJ-R200 (for SB-R200 package)

Contains four filters (Blue, Red, FL-G1 for fluorescent light and TN-A1 for incandescent light).

Color Filter Set SJ-2 (optional) Contains 8 types, 20 filters in total.

### Speedlight Stand AS-20

For the stable placement of the SB-R200. A tripod socket is also provided.

### Extreme Close-Up Positioning Adapter SW-11

For centering the light from the SB-R200 flash to an optical axis, which is especially effective in close-up shooting. Recommended for shooting distances (lens to subject) within 15cm.

### IR Panel for Built-in Flash SG-3IR

Attached to the camera's accessory shoe when the built-in Speedlight of a camera is used as a commander.

### Flexible Arm Clip SW-C1

Enables the attachment of a Diffuser, etc. Can be attached to the guide groove of the Attachment Ring SX-1.

### Diffuser SW-12

This milky-white board is used to diffuse light from a flash and to soften shadows.

### Cases

- Soft Case for SU-800
- Soft Case for SB-R200
- Soft Case for SX-1
- Close-up Speedlight Kit Case SS-MS1

### TTL Cord SC-30 (optional)

Connect the SU-800 and SB-R200 to enable close-up flash shooting when using a camera not compatible with the Creative Lighting System.

### Adapter Ring UR-5 (optional)

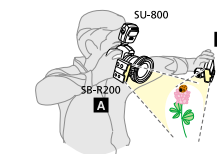
With the AF Micro-Nikkor 60mm f/2.8D, attach the Attachment Ring SX-1 to the lens using Adapter Ring UR-5 and Adapter Ring SX-1-72.

Note: These products (except SJ-R200) can be purchased separately.

## Examples of Wireless Flash Shooting Using the System

### Dual-light close-up shooting

Equipment: Nikon D70, SU-800 and two SB-R200 units

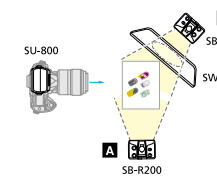


#### Setting:

SB-R200 [A] is attached to the front of the lens, while SB-R200 [B] is handheld to illuminate the subject from the left, to soften shadows and to highlight the subject.

### Dual-light flash shooting with a diffuser

Equipment: Nikon D70, SU-800 and two SB-R200 units

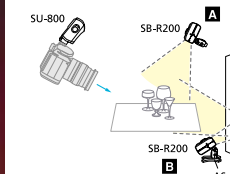


#### Setting:

Two remote SB-R200 units illuminate small subjects from the right and left to bring out the detail and textures of the material. The Diffuser SW-12 is placed in front of the SB-R200 [B] to soften shadows and render vivid colors.

### Dual-light flash shooting with color filters

Equipment: Nikon D70, SU-800 and two SB-R200 units

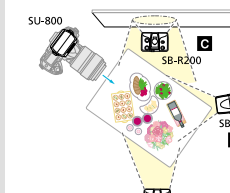


#### Setting:

SB-R200 [A] illuminates the table from above with a blue filter. SB-R200 [B] adds dramatic color effects by bouncing light off the wall with a red filter.

### Triple-light flash shooting

Equipment: Nikon D70, SU-800, two SB-R200s and one SB-800



#### Setting:

Speedlight SB-800 [A] is used as a main flash unit to illuminate the table from the upper left. SB-R200 units [B] and [C] are placed on both the right and left sides to eliminate shadows. As a result, a vivid rendition of the food's color and texture is achieved.



R1 Kit + D200

R1C1 Kit + D200

### Wireless Speedlight Commander SU-800 Specifications

<b>Transmission mode</b> Infrared-pulse emitting communication using a flash discharge tube	<b>Flash coverage</b> Approx. 60° (vertical), approx. 78° (horizontal)
<b>Transmission range</b> Approx. 20m for SB-800/SB-600, approx. 4m for SB-R200 at normal setting	<b>Display</b> LCD, ready-light
<b>Number of channels</b> 4	<b>AF-Assist Illuminator</b> Automatically turns on when performing autofocus in dim light or in the dark with AF SLRs; approx. 10m shooting distance with a 50mm f/1.8 lens
<b>Number of groups</b> 3	<b>Power source</b> One 3V CR123A lithium battery
<b>Number of transmissions</b> Approx. 1,200	<b>Dimensions (W x H x D)</b> Approx. 2.7 x 3.8 x 2.3 in.
<b>Transmission interval</b> Approx. 1 second	<b>Weight (without battery)</b> Approx. 5.6 oz.
<b>Flash light wavelengths</b> Approx. 800 to 1,000nm (infrared ray)	

### Wireless Remote Speedlight SB-R200 Specifications

<b>Electronic construction</b> Automatic Insulated Gate Bipolar Transistor (IGBT) and series circuitry (for wireless remote flash unit only)	<b>Bounce capability</b> Flash head tilts down to 60°, or up to 45°
<b>Guide number</b> 30 (ISO 100, ft.), 46 (ISO 200, ft.)	<b>Mounting foot</b> Dedicated shoe for Attachment Ring SX-1 or Speedlight Stand AS-20
<b>Angle of coverage</b> 24mm	<b>Target light</b> White LED
<b>Flash mode</b> i-TTL, D-TTL, TTL (film-based cameras); Auto Aperture; M (Manual): full ~ 1/64 output (close-up), full ~ 1/128 output (commander)	<b>Display</b> Ready-light
<b>Recycling time</b> Approx. 6.0 seconds (Manual at full)	<b>Power source</b> One 3V CR123A lithium battery
<b>Number of flashes</b> Approx. 290 (Manual at full)	<b>Dimensions (W x H x D)</b> Approx. 3.1 x 3.0 x 2.2 in.
	<b>Weight (without battery)</b> Approx. 4.2 oz.

Specifications apply when a fresh battery is used at normal temperature (68°F); AF-Assist Illuminator is not used.

### Camera/Speedlight Compatibility

	SB-800						
F6	Matrix	AA	A	M	GN	RPT	AF ZOOM
F5	3D	AA	A	M	GN	RPT	AF ZOOM
F100	3D	AA	A	M	GN	RPT	AF ZOOM
N80/N75	3D	AA	A	M	GN	RPT	AF ZOOM
N65	3D	AA	A	M	GN	RPT	AF ZOOM
N55		AA	A	M	GN	RPT	AF
FM3A	Matrix	AA	A	M	GN	RPT	
D2 series	Matrix	AA	A	M	GN	RPT	AF ZOOM
D1 series	Matrix	AA	A	M	GN	RPT	AF ZOOM
D200	Matrix	AA	A	M	GN	RPT	AF ZOOM
D100	Matrix	AA	A	M	GN	RPT	AF ZOOM
D70s	Matrix	AA	A	M	GN	RPT	AF ZOOM
	SB-600						
F6	Matrix	Matrix	M				AF ZOOM
F5	3D	Matrix	M				AF ZOOM
F100	3D	Matrix	M				AF ZOOM
N80/N75	3D	Matrix	M				AF ZOOM
N65	3D	Matrix	M				AF ZOOM
N55							
FM3A	Matrix		M				
D2 series	Matrix	Matrix	M				AF ZOOM
D1 series	Matrix		M				AF ZOOM
D200	Matrix	Matrix	M				AF ZOOM
D100	Matrix		M				AF ZOOM
D70s	Matrix		M				AF ZOOM

Note: This chart shows the features available when the Speedlight is connected directly to each Nikon camera, and standard features with an AF Nikkor lens attached.

### TTL Flash System

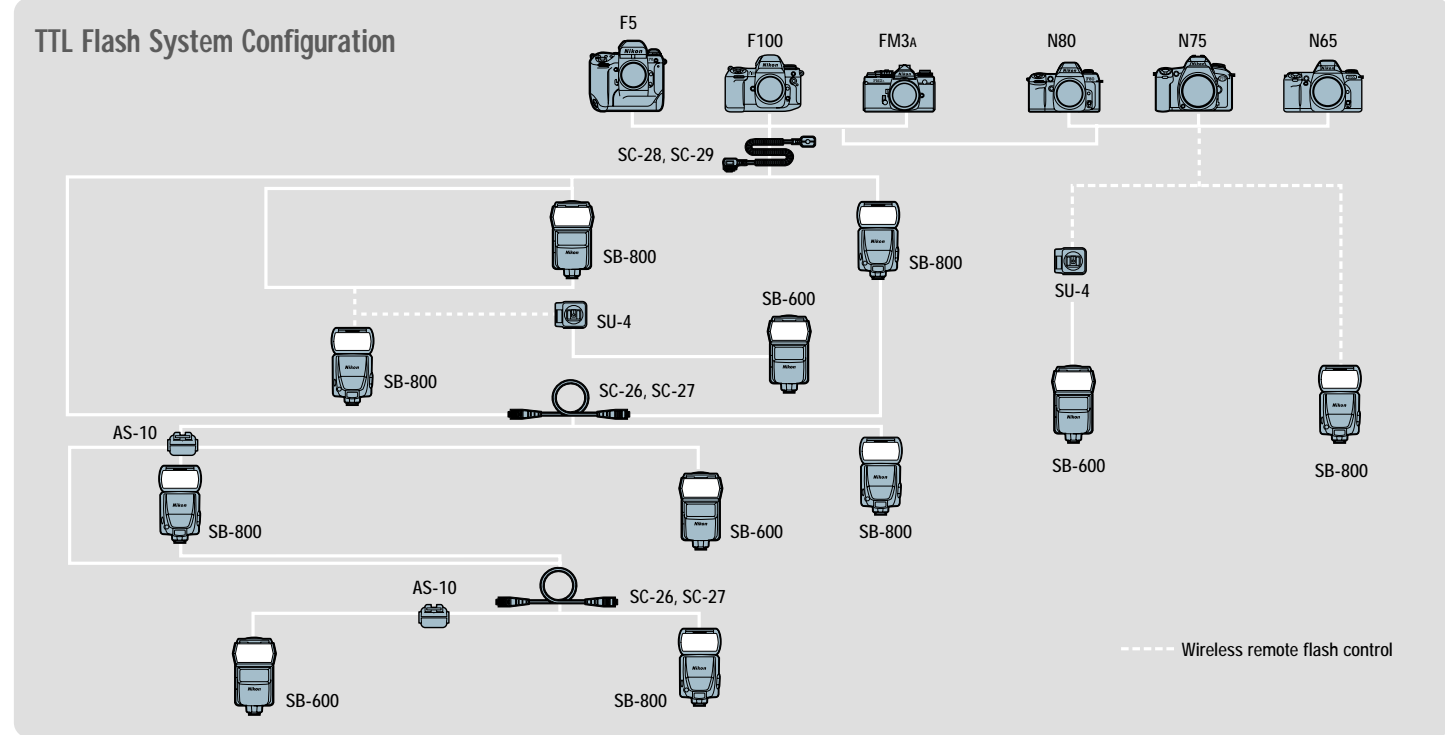
Nikon's professional-quality TTL multiple-flash system is designed so that even a novice can use it with confidence right away. Choose any combination of TTL Speedlights with your Nikon F5, F100, FM3A, N80, N75 or N65 camera. Then use the TTL remote or TTL multi-flash sync cord available for TTL off-camera or multi-flash photography. You're all set for off-camera multiple-flash photography — without the strong shadows. You'll be able



to create stunning effects and always get perfectly exposed pictures. Plus, there's no need for complicated manual exposure-value calculation or accessory flash meters.

Note: With SB-800 and SB-600 Speedlights the F6, D2 series, D200 and D70 series can perform wireless multiple flash shooting with i-TTL Flash Control. Digital SLR cameras (D2 series, D1 series, D200 and D70 series) cannot be used for multiple flash shooting in TTL auto flash mode. Multiple flash is possible with these cameras in manual or Non-TTL auto flash mode.

### TTL Flash System Configuration



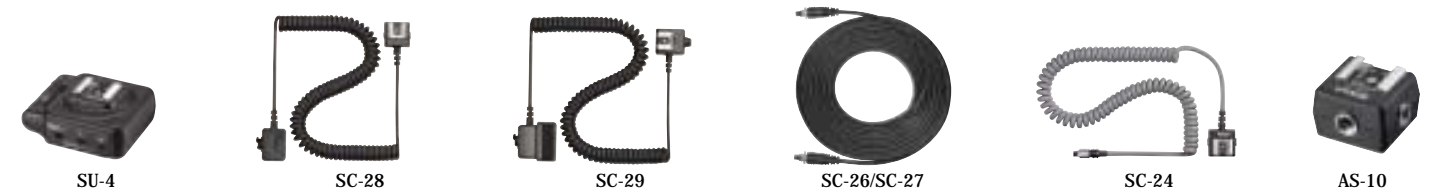
- i-TTL** i-TTL Balanced Fill-Flash  
Flash output level is decided before actual shooting, according to data from the TTL Multi Sensor or RGB sensor, distance information from the lens in use and the results of Monitor Pre-flash.
- 3D** 3D Multi-Sensor Balanced Fill-Flash  
The camera's built-in computer determines which segments of TTL Multi Sensor should be used for TTL automatic balanced fill-flash operation, according to data from the TTL Multi Sensor, distance information from the lens in use and the results of Monitor Pre-flash.

- D-TTL** D-TTL Flash  
TTL auto flash mode for Nikon Digital SLRs. The flash output level is attained before shooting based on Monitor Pre-flash and distance information.

- Matrix** Matrix Balanced Fill-Flash  
Based on the results of Matrix Metering, the flash output level is adjusted for the most well-balanced exposure between the main subject and background.
- TTL** Standard TTL Flash  
The main subject is correctly exposed regardless of the background brightness.
- AA** Auto Aperture Flash  
The flash output level is automatically controlled by the flash sensor on the Speedlight according to the aperture setting on the camera.
- A** Non-TTL Auto Flash  
The flash output level is automatically controlled by the flash sensor on the Speedlight according to the aperture manually set on the Speedlight.
- M** Manual  
The flash output level is manually set on the Speedlight.

- GN** Distance-Priority Manual Flash  
Once the shooting distance value is set, even changing the aperture won't alter the flash exposure.
- RPT** Repeating Flash  
The Speedlight delivers a strobe effect, firing the flash continuously at selected rates.
- Red-Eye** Red-Eye Reduction  
Minimizes red-eye effect, for natural-looking flash portraits.
- AF** AF-Assist Illuminator  
Projects LED light on the subject, making it possible to focus on the subject even in total darkness.
- ZOOM** Automatic power zoom  
The zoom head is automatically adjusted according to the focal length of the lens in use.

### Accessories for TTL Flash System



- Wireless Slave Flash Controller SU-4**  
When connected to a Nikon Speedlight with ISO-type mounting, this enables wireless TTL flash control when using another Nikon Speedlight as a master unit. The provided Diffuser reduces the built-in Speedlight's output, making the remote unit a main flash. (i-TTL/D-TTL operation is not possible.)  
Note: You have to cancel the Monitor Pre-flash function before using the SU-4 for wireless remote flash operation.
- TTL Remote Cord SC-28/SC-29 (4.9 ft.)**  
The TTL Remote Cord SC-28/SC-29 comes with two multiple flash terminals, making off-camera TTL flash control easy. With the F6, D2 series, the SC-29 also works as an external AF-assist illuminator.
- TTL Multi-Flash Sync Cord SC-26 (4.9 ft.)/SC-27 (9.8 ft.)**  
TTL Multi-Flash Sync Cord SC-26/SC-27 connects TTL flash units to each other through the TTL Remote Cord SC-28/SC-29 (i-TTL/D-TTL operation is not possible.)  
TTL Remote Cord SC-24 (4.9 ft.)  
For TTL flash control when using the Nikon F5 with DW-30 or DW-31.
- TTL Multi-Flash Adapter AS-10**  
Attach the AS-10 to a Nikon Speedlight such as the SB-800 or SB-27. Connect additional TTL Speedlight units with the SC-26 or SC-27. The AS-10, featuring tripod socket, controls up to three TTL Speedlight units.



Flash Accessories

Power Bracket



**Power Bracket Unit SK-6A\***  
Not only does the SK-6A enable you to use the camera-mountable SB-800 as a grip-type flash, it also offers you remote-flash capability. Used as an external power source, in combination with the Speedlight's own power source, the SK-6A reduces minimum recycling time by about half and doubles the total number of flashes available. It accepts six

1.5V LR6 (AA-size alkaline), 1.2V KR-AA (R6/AA-size NiCd) or 1.5V FR6 (AA-size lithium) batteries.  
\* The SK-6 may be substituted for the SK-6A in some countries.

SK-6A+SB-800+F100



Bracket



SK-7

**Bracket SK-7**  
This enables you to attach a TTL Speedlight unit next to a Nikon SLR. By connecting the TTL Speedlight unit and Nikon SLR's accessory shoe with the TTL Remote Cord SC-28/29, you can use the Speedlight as a grip-type flash.

Adapter



AS-15

**Sync Terminal Adapter AS-15**  
The AS-15 is designed for use with Nikon cameras with standard ISO-type accessory shoes which do not have a sync terminal.

Speedlight Stand



AS-19

**Speedlight Stand AS-19**  
The Speedlight Stand AS-19 is designed for stable placement of a Nikon Speedlight. Use the AS-19 for setting remote flash unit(s) in multiple remote flash shooting. The AS-19 also features a tripod socket.

External Power Sources



**High-Performance Battery Pack SD-8A**  
The SD-8A is designed for use with the SB-800 to shorten flash recycling time and enhance flash capacity. It accepts six 1.5V LR6 (AA-size alkaline), 1.2V KR-AA (R6/AA-size NiCd), 1.5V FR6 (AA-size lithium) or 1.2V R6/AA-size Ni-MH batteries.

Flash Unit Couplers

**Flash Unit Coupler AS-17 (for F3 series)**  
This unit gives you TTL flash control capability for the F3 when used with TTL Speedlights that feature an ISO-type mounting foot (i.e. the SB-800, etc.).

**Flash Unit Coupler AS-7 (for F3 series)**  
The AS-7 is required when using the F3 series with the SB-800. It lets you rewind or replace film without removing the coupler.

**Flash Unit Coupler AS-6**  
As for the SB-16A, for Nikons with standard ISO-type accessory shoes, there's the AS-6.

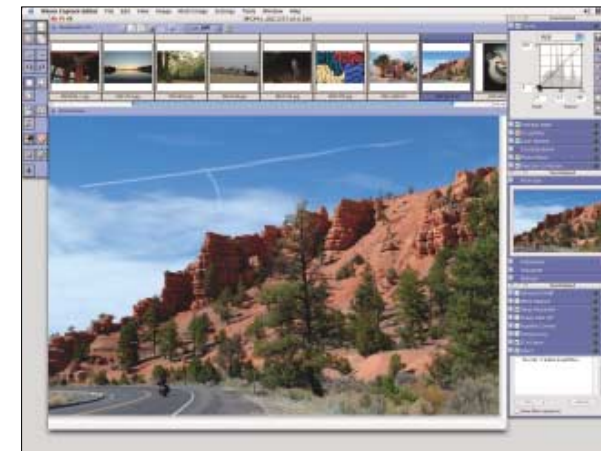


Software

# Software for Nikon Digital Cameras

The postproduction imaging tool that's a key element to an efficient, effective digital imaging workflow.

Nikon's newly upgraded image-enhancement software affords you the ability to explore digital imaging more in-depth, and grants you a high degree of control via your personal computer.

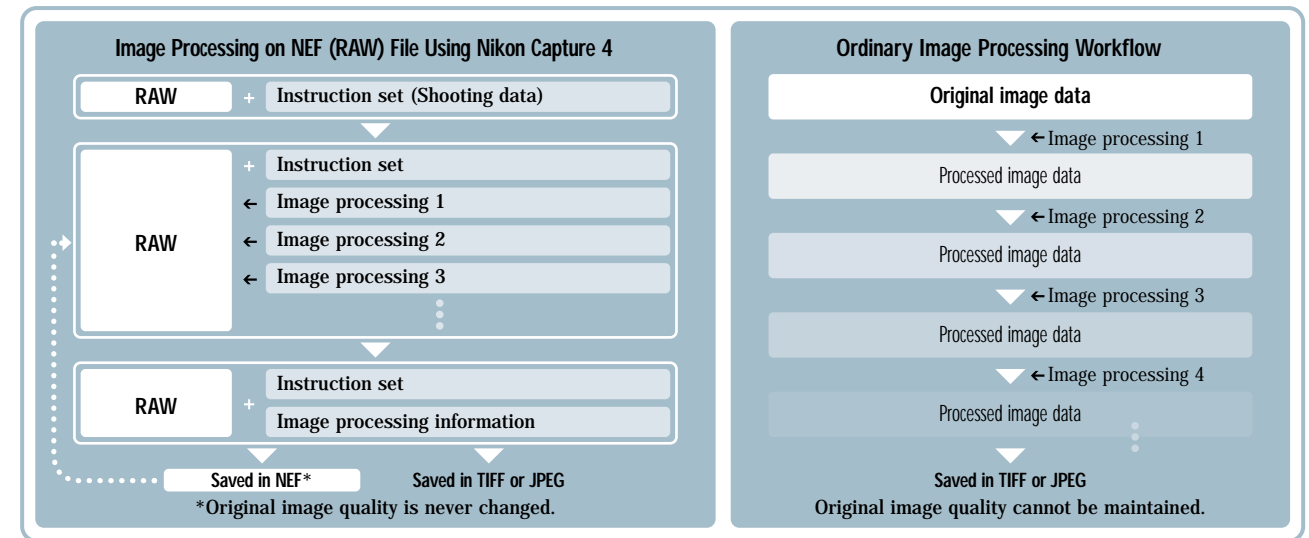


Nikon Capture 4



A powerful postproduction tool, Nikon Capture 4 comprises Nikon Capture 4 Editor and Nikon Capture 4 Camera Control. Using the software, you can transfer images to your computer, view, edit, and even print them — all in a single process. Nikon Capture 4 gives you comprehensive control over the final quality of your Nikon Electronic Format (NEF) image data.

Note: Nikon Capture 4 version 4.4 or later is required with the D200.



**■ Nikon Electronic Format (NEF) File**  
This unique format consists of the RAW data of an image, along with an instruction set that provides extensive image editing capability not available with other file formats. With a NEF file, the original RAW data of an image is never changed. All corrections and adjustments that you make are preserved in the file's instruction set. You can change the instruction set as many times as you like without ever disturbing the original image's RAW data. Nikon cameras compatible with NEF are the D2 series, D1 series, D200, D100, D70 series, D50 digital SLRs, and the COOLPIX 8800, 8700, 8400, 5700 digital compacts.



## Nikon Capture 4 Editor

Nikon Capture 4's Editor component provides you with a broad variety of image adjustment tools, some of which can only be applied to NEF (RAW) data.



### White Balance\*

The tools in the White Balance palette are used to adjust white balance for NEF (RAW) images. White balance can be adjusted by specifying the desired color temperature or by sampling the image for the gray point. You can define white balance using a single point or the average of an area.

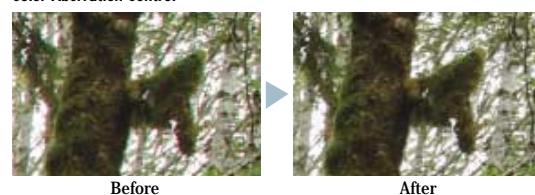
### Advanced RAW\*

Many of the attributes of NEF (RAW) image data can be altered or corrected using the Advanced RAW feature. Exposure Compensation, Sharpening, Tone Compensation, Color Mode, Saturation Setting and Hue Adjustment combine to give you a high degree of control over image quality.

### Color Aberration Control\*

This feature reduces lateral chromatic aberration (colored fringes or halos) that appears toward the edge of an image — a phenomenon caused by differences in the refractive index of each color's wavelength — in RAW images taken with Nikon digital SLRs.

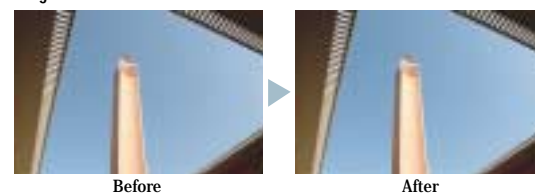
Color Aberration Control



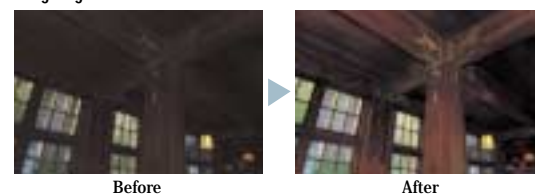
Vignette Control



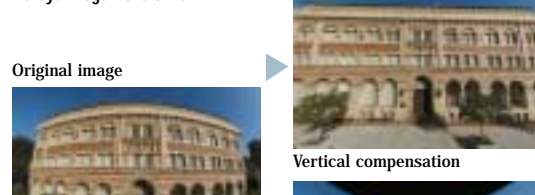
Image Dust Off



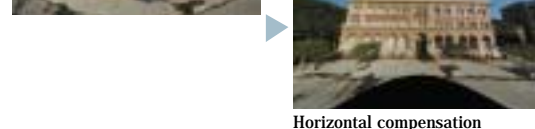
D-Lighting



Fisheye Image Transformer



Original image



### Fisheye Image Transformer

The tools in the Fisheye Lens palette convert images taken with the AF DX Fisheye 10.5mm f/2.8G ED lens to rectilinear images. Both vertical and horizontal compensation can be performed.

### Noise Reduction

Random noise that appears in digital camera images can be effectively minimized using the Color Noise Reduction function. Edge Noise Reduction makes outlines more distinct by reducing the noise along the edges of a photo. Color Moire Reduction is also usable with NEF images.

\*These features can only be applied to NEF (RAW) image data.

### Other handy, innovative features

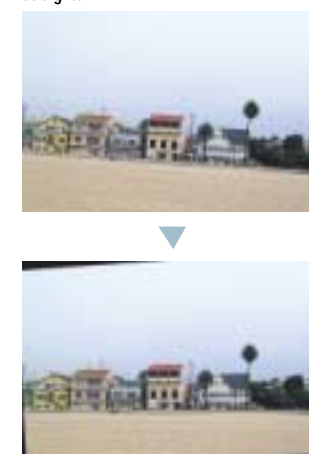
- **LCH Editor** enables editing of Luminosity (master lightness), Chroma (color saturation or vividness) and Hue.
- **Color Booster** allows simple enhancement of overall color saturation according to the type of subject.
- The **Color Balance** palette offers simple controls for adjustment of overall brightness, contrast and color balance for the entire image.
- The **Photo Effects** palette enables easy conversion of color images to black-and-white, sepia or other monochrome tints.
- To correct "red-eye" in portrait subjects, the **Red-Eye Correction** palette is available.
- Using **Unsharp Mask**, you can enhance image sharpness by increasing the contrast of the edges of the image, while leaving other areas untouched.
- **Size/Resolution** lets you specify the final output image size.
- Compatibility with Color Modes I, II, III, Ia and IIIa.

### Plug-in filters and software update

- Compatibility with nik Color Efex Pro™ 2.0 plug-in photographic filters enables quick, easy digital image enhancement. (See page 19.)
- Nikon Message Center\* enables automatic software update if the computer is connected to the Internet when Nikon Capture 4 starts.

\* Not compatible with Mac OS 9.

Straighten



"Lost Shadows" display



"Lost Highlights" display



## Superb operability for improved efficiency

Nikon Capture 4 incorporates tools that allow you to **zoom in/out**, **scroll**, **rotate**, **flip**, **straighten** and **crop** images. The **Multi-Image Window** enables image adjustment while viewing the thumbnail list within a folder. The **Information Palette** shows the position and color of the pixel under the mouse pointer. Areas of the image that are "lost" by **highlights or shadows** can be confirmed even during adjustments of Curves and Color Balance. The **Histogram Palette** shows the level distribution for the image in the active window. Changes made to images can be recorded using the **Markers Palette**. To enable you to apply the adjustment settings of one image to another, Nikon Capture 4 Editor lets you **save and copy the settings** independently or simultaneously. The **Save Progress** window shows all save operations currently in progress, and can be used to pause, restart or cancel the current task. And **Batch Processing** enables automated processing of multiple images — particularly effective when applied to a series of photographs taken under identical conditions.



## Nikon Capture 4 Camera Control

Once you connect the D2 series (USB Hi-Speed), D1 series (IEEE 1394) or D200/D70 series/D50 (USB) to your computer, the Camera Control component of the Nikon Capture 4 provides you with remote control from your computer of virtually every aspect of camera operation. Wireless Transmitters WT-2/2A give D2x and D2Hs users remote control functionality\* via PTP/IP. Pictures taken with the camera will be stored on your computer's hard disk as opposed to the camera's memory card. This turns your computer's hard disk into the equivalent of a large-capacity media card — especially valuable when performing high-volume shooting.

\* Compatible with Windows XP or Mac OS X (ver. 10.3 or later).

### Capture 4 Functions/Cameras Compatibility Chart

Function	Camera	D2 series	D1 series	D200/D100 D70 series/D50	COOLPIX RAW (NEF)	COOLPIX series
White Balance*1		○	○	○	○	—
Advanced RAW*1		○	○	○	○ <sup>2</sup>	—
Vignette Control*1		○	○	○	—	—
Image Dust Off*1		○	○ <sup>3</sup>	○	—	—
Color Aberration Control*1		○ <sup>4</sup>	○	○	○	○
D-Lighting		○	○	○	○	○
Noise Reduction <sup>5</sup>		○	○	○	○	○
Red-Eye Reduction		○	○	○	○	○
Fisheye Image Transformer*6		○	○	○	—	—
Camera Control		○	○	○ <sup>7</sup>	—	—

\*1: Can only be applied to NEF (RAW) image data

\*2: Color Mode setting is not possible

\*3: Compatible with firmware ver.1.10 or later

\*4: Not available with multiple exposures or images created with image overlay (D2x)

\*5: Color Moire Reduction can only be applied to NEF (RAW) image data

\*6: Compatible with AF DX Fisheye 10.5mm f/2.8G ED lens only

\*7: Compatible with firmware ver.2.00 or later when using Mac OS (D100)

### Nikon Capture 4 System Requirements

Windows		Macintosh	
OS	Pre-installed versions of Windows® XP Professional, Windows® XP Home Edition, Windows® 2000 Professional, Windows® Millennium Edition (Me), Windows® 98 Second Edition (SE)	OS	Mac® OS 9.0.4 ~ 9.2.2 <sup>1</sup> , Mac® OS X (10.1.5 or later)
Models		Models	Models with built-in USB or FireWire support
CPU	Pentium® 300MHz or higher, with built-in USB ports	RAM	Mac OS X: 256MB (768MB or more recommended) Mac OS 9: memory allocation of 512MB or more (Editor), 64MB or more (Camera Control)
RAM	256MB (768MB or more recommended)	Hard disk	200MB required for installation
Hard disk	200MB required for installation	Display	800 x 600 pixels or more with 16-bit color (thousands of colors); 24-bit color (millions of colors) recommended
Display	800 x 600 pixels or more with 16-bit color (High Color); 24-bit color (True Color) recommended	Interface	IEEE 1394 <sup>2</sup> : Built-in FireWire interface (For connecting D1 series cameras) USB <sup>3</sup> : Built-in USB interface, or RATO Systems REX-PCIU3 board, (USB 2.0 USB board for use with MAC OS X and the D2 series)
Interface	IEEE 1394 <sup>2</sup> : OHCI compliant IEEE 1394 interface board or interface card <sup>3</sup> (For connecting D1 series cameras) USB <sup>3</sup> : Built-in USB interface	Others	CD-ROM drive required for installation
Others	CD-ROM drive required for installation		

\*1: When used in conjunction with other software, the total amount of free space required can be determined by referring to the user's guides for the respective programs.

\*2: Data transfer may not work properly if the connection to a computer is made via an IEEE 1394 (FireWire) hub.

\*3: Check the support page on Nikon's web site for a list of compatible boards and cards.

\*4: Data transfer may not work properly if the connection to a computer is via a USB hub.

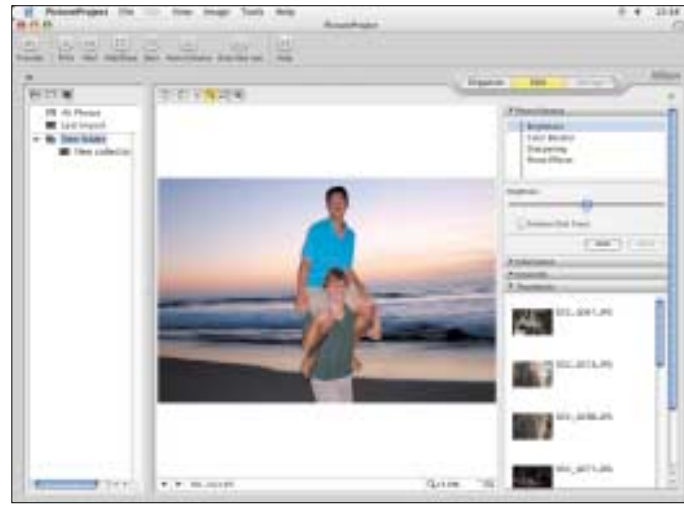
\*1: CarbonLib 1.6 or later required.

\*2: Data transfer may not work properly if the connection to a computer is made via a IEEE 1394 (FireWire) hub.

\*3: Data transfer may not work properly if the connection to a computer is via a USB hub.



PictureProject



Designed to provide a simple, intuitive and seamless experience for digital photographers of all skill levels, PictureProject incorporates powerful tools that will make the process of transferring, organizing, editing, and sharing digital images easy, productive, and fun.



PictureProject

Major features (ver. 1.6)

- Image files are automatically imported when a camera is connected to the user's computer, with thumbnail previews for easy image pre-selection and confirmation.
- Drag-and-drop images to organize them into "collections" that can be easily accessed.
- Powerful search capabilities to locate any image quickly by name, keyword, captured or modified date, etc.
- Intuitive editing tools simplify the enhancement of your images and the incorporation of creative effects.
- Any and all changes made to images can be reset or modified as many times as desired without affecting the original image file.
- Slideshows can include custom background music.
- Design templates make it easy to share images via e-mail and attractive prints.
- Pop-up messaging service employed to deliver software update notifications, and provide links to helpful technical information.
- CD or DVD images created using PictureProject can be displayed without being imported.
- The "muvee"™ plug-in features easily selectable music, style and caption options, simplifying video-making\*.

\* Optional plug-in PictureProject DVD Show is required to burn DVDs.

To further enhance your digital imaging experience, PictureProject features compatibility with three optional plug-ins.

PictureProject DVD Show

Have even more fun making videos. You can create a DVD-video or a Video-CD with the click of a single button. Enjoy flexible control over effects, duration and music.

PictureProject COOLPIX Remote Control

This software allows you to control COOLPIX-series digital cameras\* remotely from your computer. Camera settings can be adjusted in the Settings Panel. Capture an image by clicking the Shoot button in the COOLPIX Remote Control dialog, and it is transferred directly to the computer hard disk and catalogued in PictureProject without being saved to the camera memory card. Because every camera operation is controlled while monitoring images to be taken, the software improves workflow efficiency even in professional applications.

PictureProject System Requirements

Windows	
OS	Pre-installed versions of Windows® XP Home Edition/Professional, Windows® 2000 Professional, Windows® Me, Windows® 98 SE
CPU	Pentium™ 300MHz or higher recommended (Pentium III 500MHz or higher for muvee option)
RAM	64MB or more recommended (128MB or more for RAW images or muvee option)
Hard disk	60MB required for installation
Display	800 x 600 pixels or more with 16-bit color (High Color/thousands of colors) or more
Others	CD-ROM drive required for installation
Macintosh	
OS	Mac® OS X version 10.1.5 or later (version 10.2.8 or later required for "Burn Disc" function)
Models	Models with built-in USB or FireWire port required
RAM	64MB or more recommended (128MB or more for RAW images or muvee option)
Hard disk	60MB required for installation
Display	800 x 600 pixels or more with 16-bit color (High Color/thousands of colors) or more
Others	CD-ROM drive required for installation



\* COOLPIX L1 and COOLPIX S4 can be used with the software.

nik Color Efex Pro™ 2.0 Express Edition

The Express Edition of the nik Color Efex Pro™ 2.0 is a simple version of digital photographic filters offered by nik multimedia, Inc. It contains 15 filters that even first-time digital-filter users can easily handle. (For more details, see page 19.)

Digital Filters

nik Color Efex Pro™ 2.0

nik Color Efex Pro™ 2.0 photographic filters, offered by nik multimedia, Inc., make digital photographic enhancements quicker, easier and better. Utilizing the top digital photographic filter technology available, this impressive collection of powerful, versatile filters allow nik Color Efex Pro™ 2.0 to offer significantly improved image enhancement and transformation.

Versatility to support users of all skill levels nik Color Efex Pro™ 2.0, compatible with Nikon Capture version 4.1 or later features three editions\* — Standard, Select and Complete — to best satisfy a wide range of photographers. The Standard Edition includes 19 key filters for color and light enhancements. The Select Edition comprises 45 filters, including those available in the Standard Edition. The Complete Edition enables access to all 75 filters in the collection. One other option of nik Color Efex Pro™ 2.0, the Express Edition — which contains 15 basic filters\*\* — is available as an optional plug-in and is compatible with PictureProject version 1.1 or later.

\* Also compatible with PictureProject version 1.1 or later.  
\*\* All these filters are included in the Standard Edition compatible with Nikon Capture version 4.1 or later.

Multiple filter types

nik Color Efex Pro™ 2.0 filters are categorized into two groups — "Traditional" and "Stylizing". Traditional filters function like conventional photographic filters, and include B/W Conversion, Polarization, Graduated, Skylight, and Infrared filters. Stylizing filters enable the enhancement of an image or the creation of a photographic style or abstract transformation.

Major features

- Functionality in RGB, CMYK, Grayscale, and LAB, in both 8- and 16-bit/channel modes.
- True Light™ is a dynamic color treatment system that every filter utilizes automatically to provide better color and light enhancements. It preserves the relation-

System Requirements

Windows	
OS	Pre-installed versions of Windows® XP Home Edition/Professional, Windows® 2000 Professional, Windows® Me, Windows® 98 SE
CPU	Pentium™ 300MHz or higher (800MHz or higher recommended)
RAM	128MB (256MB or more recommended)
Hard disk	240MB for the Complete Edition, 150MB for the Select Edition, 70MB for the Standard Edition
Display	800 x 600 pixels with 16-bit color (1,024 x 768 pixels with 24-bit color recommended)
Macintosh	
OS	Mac® OS X (version 10.1.5 or later)
Models	G3 processor or later (G4 or later recommended)
RAM	128MB (256MB or more recommended)
Hard disk	390MB for the Complete Edition, 250MB for the Select Edition, 110MB for the Standard Edition
Display	800 x 600 pixels with 16-bit color (1,024 x 768 pixels with 24-bit color recommended)



ships between color, contrast, and detail, delivering more natural film-like images.

- The Advanced Panel (available in selected filters) enables you to see the relationship of highlights and shadows in your image while controlling the enhancement and protecting these elements of the image. A histogram display enables you to identify potential problems in the image.
- Using a Selective tool, access to each of the filters is quick and easy. By simply selecting a filter from the palette, it can be applied to the image.
- As each filter adjusts its effect based on the detail structures, colors and contrast range, consistency across a range of images is possible.

• The capability of the filters to adapt to previous filter adjustments or changes to the image is extremely valuable, as it allows you to apply filters in a different order, giving you increased control and additional enhancement options.

- The Preview Toggle feature enables you to alternate between the original image and the one with the current effect(s) applied.
- The preview area is recalculated each time an adjustment is made to the image.
- You can create customized color filters using any color from a color picker for added versatility.

Old Photo: Color



before



after

Paper Toner



before



after

Pro Contrast



before



after





**For F6**

**Multi-Power Battery Pack MB-40**  
Runs on eight 1.5V LR6 (AA-size alkaline), 1.5V FR6 (AA-size lithium), 1.2V R6/AA-size Ni-MH batteries or Rechargeable Li-ion Battery EN-EL4 and provides a film advance speed of up to 8.0 fps. Provides an alternative shutter release button, AF start button, multi selector and command dials to make shooting vertical-format pictures much more comfortable.



**For F5**

**Ni-MH Battery Unit MN-30**  
This nickel-metal hydride battery unit enables you to make the most of the F5's powerful capabilities. It contributes to film advance speed of up to 8 frames per second, film rewind speed of 4 seconds for a 36-exp. roll and stable camera performance even in cold ambient temperatures. To charge the MN-30, Multi Charger MH-19 is available. The External Power Cord MC-32 with two banana-type plugs connects 12V DC external power source to the F5.



**For N90s**

**Multi-Power Vertical Grip MB-10**  
A dedicated grip designed for the N90s, the MB-10 provides an alternative shutter release button for vertical shooting. It runs on either four R6/AA-size batteries or two 3V CR123A lithium batteries (with MS-11).



**For N80**

**Battery Pack MB-16**  
Connected to the tripod socket on the N80 bottom, it accepts four 1.5V LR6 (AA-size alkaline), 1.5V FR6 (AA-size lithium), 1.2V KR-AA (R6/AA-size NiCd) or 1.2V R6/AA-size Ni-MH batteries.



**For N75**

**Battery Pack MB-18**  
A dedicated grip designed for the N75, the MB-18 provides an alternative shutter release button for vertical shooting. It accepts four 1.5V LR6 (AA-size alkaline), 1.5V FR6 (AA-size lithium), 1.2V KR-AA (R6/AA-size NiCd) or 1.2V R6/AA-size Ni-MH batteries.



**For F6/D2 series**

**Quick Charger MH-21**  
With the MH-21, you can recharge Rechargeable Li-ion Battery EN-EL4.



**For D200**

**Multi-Function Battery Pack MB-D200**  
The ergonomically designed MB-D200 blends extended stability and shooting potential. Runs on either six LR6/AA-size alkaline, FR6/AA-size lithium, 1.2V R6/AA-size Ni-MH batteries, or two EN-EL3e rechargeable Li-ion batteries. Features an extra command dial, shutter release button and AF start button for vertical shooting.

**For D200**

**Multi Charger MH-19**  
With the MH-19, you can recharge two units of the Rechargeable Li-ion Battery EN-EL3e. Other batteries can also be recharged by using optional charge cords.



**External Power Source**

**Anti-Cold Battery Holder DB-2 (for FM3A)**  
The DB-2 keeps your camera and metering system operating in extreme cold. Remove the two batteries from the camera battery chamber, attach the chamber to the DB-2 loaded with two R6/AA-size\* batteries via DB-2 connecting cord, then put the DB-2 in a coat or other warm place.

\* Do not use R6/AA-size NiCd, Ni-MH or lithium batteries. A tripod cannot be attached when the DB-2 is connected.

**External Battery Pack DB-6 (for N90s)**  
For added power, especially during prolonged or low-temperature shooting, the Nikon N90s can count on the DB-6, which uses six D-type batteries, as an alternative power source. The DB-6 connects to the N90s via the Nikon External Power Cord MC-29.



**For FM3A**

**Motor Drive MD-12**  
Enables you to shoot at a rate of up to 3.2 frames per second. Lightly pressing the trigger activates the camera's exposure meter.

**MD-12 Specifications**  
Firing rate: Approx. 3.2 fps (at 1/125 s shutter speed or faster)  
Shooting modes: Single-frame (S); Continuous (C)  
Remote control: Possible; uses standard Nikon 3-pin connector  
Power source: Eight 1.5V LR6 (AA-size alkaline), 1.2V KR-AA (AA-size NiCd) or 1.5V R6 (AA-size manganese) batteries (integral battery holder)

Charger/battery unit compatibility (approx. charging time)

	MN-30 (for F5)	EN-EL3 (for D100/D70s/D70/D50)	EN-EL3a (for D100/D70s/D70/D50)	EN-EL3e (for D200/D100/D70s/D70/D50)	EN-EL4 (for F6, D2series)	Remarks
MH-19	✓* (95 min.)	✓ (120 min.)	✓ (135 min.)	✓ (135 min.)	—	100-240V AC/12V DC; can be plugged in to an automobile cigarette lighter
MH-21	—	—	—	—	✓ (100 min.)	

✓: Compatible —: Not compatible

\* Use the MC-E1 Charge Cord to recharge or refresh the MN-30.







MR-3



MC-12B

**Two-Pin Remote Accessories**  
For N70/FM3A with MD-12

**Terminal Release MR-3**  
The MR-3 connects to the remote-control terminal to provide an additional trigger button for firing camera in vertical position. It also enables you to trigger the camera with Nikon Cable Release AR-3.

**Remote Cord MC-12B (2.6 ft.)\***  
Enables you to perform remote firing up to 2.6 ft.

\* Function limited when MD-12 mounted; see instruction manual.



MC-36



MC-30



MC-21

**Ten-Pin Remote Accessories**  
For F6/F5/F100/D2 series/D1 series/D200/D100 with MB-D100

**Remote Cord MC-36 (2.8 ft.)**  
Enables remote firing of a camera and setting of Interval Timer and Long Time Exposure. LCD panel with illumination is incorporated.

**Remote Cord MC-30 (2.6 ft.)**  
Enables remote firing of a camera with trigger-lock function.

**Remote Cord MC-22 (3.3 ft.)**  
Useful for connection to shutter triggering device.

**Extension Cord MC-21 (9.8 ft.)**  
Used with MC-30 or MC-22.

**Connecting Cord MC-23 (1.3 ft.)**  
Connects two cameras for simultaneous or synchronized shutter release.

**Adapter Cord MC-25 (0.7 ft.)**  
Enables use of two-pin remote accessories: MC-4A, MC-12B, and MR-3.



MC-22



MC-23



MC-25

**Remote Cable for Cameras with Release Terminal**  
For N80/FM3A/D100

**Cable Release AR-3 (1.0 ft.)**  
Essential for slow shutter speeds, these cable releases ensure one-hand, vibration-free shutter release operation.



AR-3

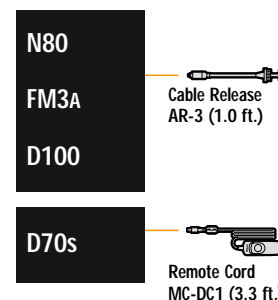
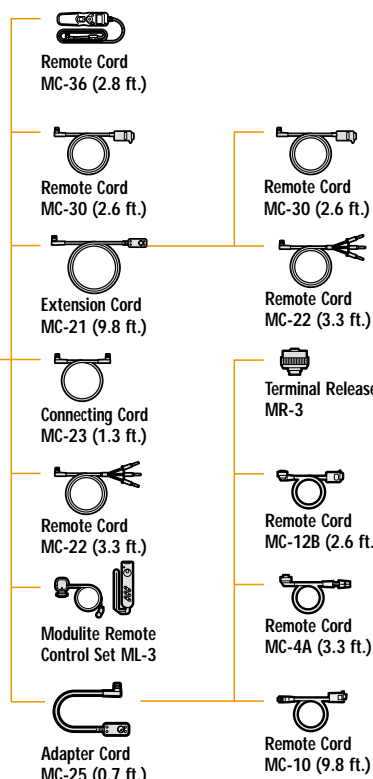


MC-DC1

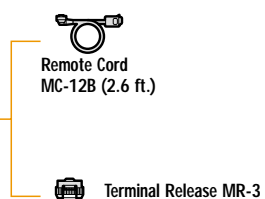
**Remote Cord**  
For D70s

**Remote Cord MC-DC1 (3.3 ft.)**  
Enables remote firing of the D70s.

F6  
F5  
F100  
D2 series  
D1 series  
D200  
D100 with MB-D100



N70  
FM3A with MD-12



Long Time Exposure



**Modulite Remote Control Set**

**ML-3 (for cameras with ten-pin remote terminal)**  
The ML-3 offers remote control for two separate channels via an infrared LED beam, enabling automatic camera operation from a distance of up to about 26 ft. Auto triggering, delayed shutter release, single and continuous shooting are possible.

**Specifications**  
No. of control output channels : Two channels available  
Shooting modes : S for single-frame shooting, C for continuous shooting, DELAY for 3 seconds delayed shooting, and TEST for operation check in A. TRIG mode  
Number of flashes\* (single-frame shooting) : 5,000 or higher  
Continuous standby time\* : Approx. 200 hours with F5, approx. 190 hours with F100 or N90s  
Power source : Transmitter: Two AAA-size alkaline or high-rate manganese batteries; Receiver: Supplied from camera body  
Dimensions (W x H x D) : Transmitter: Approx. 4.6 x 0.9 x 1.2 in.; Receiver: Approx. 2.0 x 1.4 x 1.9 in.  
Weight (without batteries) : Transmitter: Approx. 1.4 oz.; Receiver: Approx. 1.8 oz.

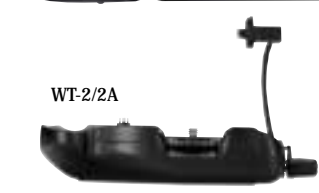
\*With a fresh set of alkaline batteries



MV-1



MC-35



WT-2/2A

**Data Communication Accessories**

**Data Reader MV-1**  
With the Nikon Data Reader MV-1, shooting data stored in your Nikon F5, F6 or F100 35mm (135) format SLRs can be easily viewed and manipulated on your personal computer. The data is first transferred from the camera to a memory card set in the MV-1, where it can then be transferred to a PC. Using spreadsheet software such as Microsoft Excel, the transferred data can now be easily viewed and manipulated on your computer. Data record capacity (number of film rolls whose shooting data can be recorded) differs with each camera and recording mode.

**Notes:**  
•In addition to the supplied CompactFlash™ card (8MB EC-8CF), Nikon-guaranteed Type I CF cards can also be used. Type II CF cards and Microdrives, however, cannot be used.

**GPS Cable MC-35**  
GPS Cable MC-35 enables the Nikon D2x/D2Hs digital SLR to be connected with NMEA-0183 protocol-compatible GPS (Global Positioning System) units such as models of GARMIN™ and MAGELLAN™. In this way, GPS position information from satellites and time signals synchronous to UTC (Universal Coordinated Time) are recorded within image data file as shots are taken with the D2x/D2Hs.

**Wireless Transmitter WT-2/2A (for D2x/D2Hs)**  
The Wireless Transmitter mounts on the bottom of the camera, and connects to the camera via a USB cable. When connected, wireless uploading of image data to an ftp server is possible. Power is supplied from the camera. The WT-2/2A can normally transmit up to about 98 ft., but the optional WA-E1 Extended Range Antenna can increase the effective range to 492 ft. The highspeed WT-2/2A features a post-transmission auto data-erase function, compatibility with various security protocols and enables wireless remote camera control via PTP/IP (Nikon Capture 4 ver. 4.3 or later is required).

**Notes:**  
•Transferring data from a memory card to a PC requires additional equipment, such as the PC Card Adapter EC-AD1 or a CF card reader.  
**Specifications**  
Power source : Supplied by the camera  
Cable length : Approx. 15.7 in.  
Dimensions (W x H x D) : Approx. 30.7 x 9.8 x 42.9 in.  
Weight : Approx. 3.5 oz. (main unit only, excluding memory card)  
Operating conditions : Temperature: 32~104°F, humidity: under 85%

**Note:** The WT-2 is sold in countries where governments approve the use of 13 frequency channels, while the WT-2A is made for sale in countries where use of only 11 frequency channels is authorized.

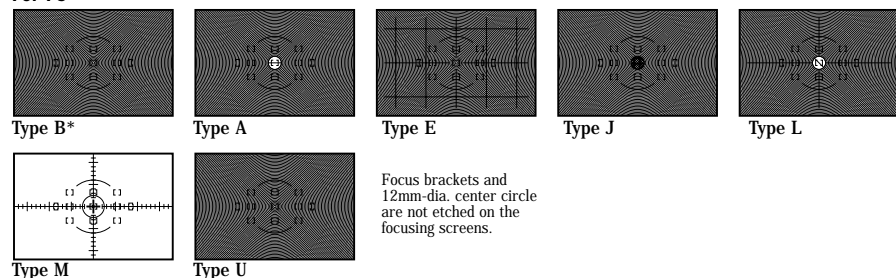


**Changing focusing screens****For F5**

Remove the finder, then change the focusing screen.



For F6, F100, N90s, FM3A, D2 series, D1 series  
Remove the lens, then change the focusing screen.

**Interchangeable Focusing Screens****For F6**

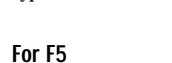
Type B\*

Type A

Type E

Type J

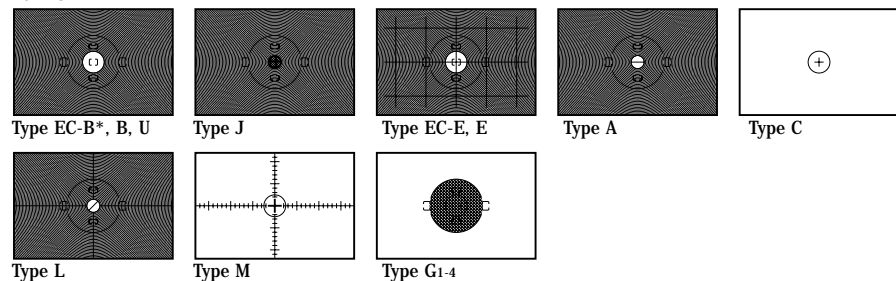
Type L



Type M

Type U

Focus brackets and 12mm-dia. center circle are not etched on the focusing screens.

**For F5**

Type EC-B\*, B, U

Type J

Type EC-E, E

Type A

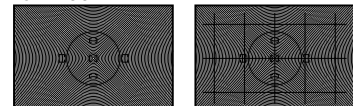
Type C



Type L

Type M

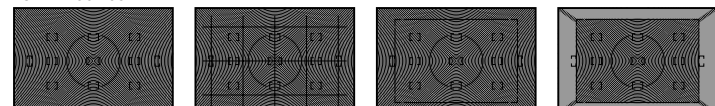
Type G1-4

**For F100**

Type B\*

Type E

Focus brackets and 12mm-dia. center circle are not etched on the focusing screens.

**For D2 series**

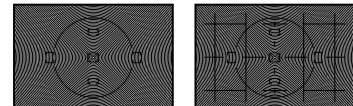
Type B\*

Type E

Type V\* (D2x only)

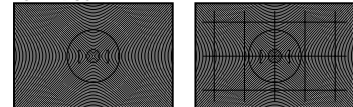
Type W (D2x only)

Focus brackets and 8mm-dia. center circle are not etched on the focusing screens.

**For D1 series**

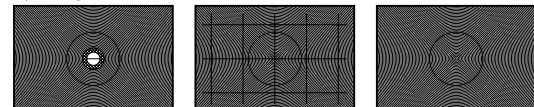
Type B\*

Type E

**For N90s**

Type B\*

Type E

**For FM3A**

Type K3\*

Type E3

Type B3

**Types B, B2, B3, D, U**

Each screen offers unobstructed viewing and easy focusing over the entire matte surface. Types D and U are especially for telephoto lenses.

**Type EC-B (for F5)**

With an Electrochromic (EC) device, shows the focus area selected and offers unobstructed viewing and easy focusing on the overall matte surface.

**Types K, K2, K3**

Feature a matte fresnel field with split-image rangefinder and microprism collar.

**Types EC-E (for F5), E, E2, E3**

Feature grid patterns that are ideal for architectural photography. Type EC-E screen shows the focus area selected and offers unobstructed viewing and easy focusing.

**Types A, J, L, P**

Designed for general photography, these screens have either a split-image rangefinder or a microprism or both.

**Types C, M**

Used for high-magnification close-ups or astrophotography.

**Types G (G1-G4)**

Exceptionally bright image because matte surface is not used. Suitable for dim light or fast-moving subjects.

**Type U**

Suitable with telephoto lenses longer than 200mm.

**Types V, W**

With the D2x, corner brackets indicate the rectangular area to be shot in High-speed Crop mode.

**Viewing Attachment****Right-Angle Viewing Attachment DR-5/DR-6**

Provides an upright, unreversed image for right-angle viewing. Individual eyesight adjustments are possible.

They allow you to set the reproduction ratio to either 1:1 or 1:2. The DR-5 is for cameras designed with a circular eyepiece, and the DR-6 is for rectangular-eyepiece cameras. An adapter ring is required for F6, F5, F100, D2 series and D1 series when attaching the DR-5.

**Eyepiece Magnifier DG-2**  
Provides 2× magnification of the central portion of the finder image. Eyesight adjustment provided. Useful for critical focusing in close-up photography. An eyepiece adapter is required with all cameras except FM3A.

**Magnifying Eyepiece DK-17M**  
Attached to the D2 series, D1 series, F6 and F5, the DK-17M magnifies the finder image by approximately 1.2 times. Diopter adjustment range is widened for both the + and - sides.

**Rubber Eyecups**

Increase viewing comfort and prevent stray light from entering viewfinder and washing out contrast.

**Eyepiece Correction Lenses**

An easy-to-use viewing and focusing aid for near- and farsighted photographers, which enables them to view the finder image accurately without having to wear their eyeglasses.

**Antifog Finder Eyepiece****DK-15/DK-17A**

This eyepiece features a transparent plastic plate with a special surface coating which reduces fogging on the eyepiece. DK-17A is for Nikon F6, F5, D2 series and D1 series, while DK-15 is for Nikon F100.



DR-6



DR-5



DG-2



DK-17M

**Eyepiece Correction Lenses**

●For F100  
(-5 to +3m<sup>-1</sup>, 9 kinds)



●For F6, F5,  
D2 series, D1 series  
(-3 to +2m<sup>-1</sup>, 5 kinds)



●DK-17C  
for F6, F5,  
D2 series, D1 series  
(-3 to +2m<sup>-1</sup>, 5 kinds)



●For FM3A  
(-5 to +3m<sup>-1</sup>, 9 kinds)



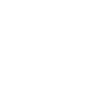
●For N80, N75, N65,  
N55, D100, D70s  
(-5 to +3m<sup>-1</sup>, 9 kinds)

**Antifog Finder Eyepiece**

●DK-15  
for F100



●DK-17A  
for F6, F5, D2 series,  
D1 series



●DK-19 for F6, F5,  
D2 series, D1 series

**Rubber Eyecups**

●DK-3 for FM3A



●DK-6 for F100



●DK-19 for F6, F5,  
D2 series, D1 series

**Eyepiece Adapter**

●DK-7 for F6, F5,  
F100, D2 series,  
D1 series



●For N80, N75,  
N65, N55,  
D100, D70s



# Filters

A wide variety of Nikon Filters are available.

Type	Neutral Color	Skylight	Ultraviolet	Yellow			Orange	Red	Green		Soft	Circular Polarizing				Amber		Blue							
	NC	L1BC	L37C	L39	Y44	Y48	Y52	O56	R60	X0	X1	No.1	No.2	C-PL	C-PL2	C-PL1S	C-PL2S	C-PL1L	C-PL2L	A2	A12	B2	B8	B12	
Filter Designation																									
Filter Factor																									
Daylight	1	1	1	1	1.5	1.7	2	3.5	8	2	5	1	1	2-4	2-4	2-4	2-4	2-4	2-4	1.2	2	1.2	1.6	2.2	
Tungsten Light	1	1	1	1	1	1.2	1.4	2	5	1.7	3.5	1	1	2-4	2-4	2-4	2-4	2-4	2-4	1.2	2	1.2	1.6	2.2	
Screw-in Type																									
39mm	•	•	•		•	•		•	•											•	•	•	•	•	
46mm	•													•											
52mm	•	•	•	•	•	•	•	•	•	•	•	•	•		•					•	•	•	•	•	
58mm	•														•										
62mm	•	•	•		•	•		•	•						•					•	•	•	•	•	
67mm															•										
72mm	•	•	•		•	•		•	•						•					•	•	•	•	•	
77mm	•		•		•	•		•	•						•					•	•	•	•	•	
95mm			•					•	•																
122mm			•		•	•		•	•																
Slip-in Type																									
39mm															•										
52mm																									
Bayonet Type		•						•	•												•		•		

L: Light M: Medium D: Deep

## Filters for Color and B&W Photography



### Circular Polarizing Filters

By reducing the light reflected from non-metallic surfaces, polarizing filters allow direct shooting through glass windows and reduce the glare from water surfaces and sunlit trees and grass. They are the only filters that darken the sky in color photography with-

out affecting color balances.

Nikon circular polarizing filters come in a rotating mount to enable different angles for different degrees of polarization, and effects may be seen in the viewfinder as the filter is rotated. They do not interfere with the autofocus or auto exposure operation of the Nikon AF SLRs.



### Soft Focus Filters No. 1, No. 2

The Soft Focus Filter No. 1 is good for portraits and gives a "romantic" style haze to images. The No. 2 filter is stronger and produces a fog-like effect in landscapes, or high-

lights a small subject surrounded by dark space. Both filters come in 52mm, 62mm and 72mm sizes to fit the front thread of a Nikkor lens. For the No. 1 filter, 77mm is also available.



### Ultraviolet L37C, L39 Skylight L1BC

While invisible to the naked eye, ultraviolet light can reduce contrast and detail. The colorless UV filters not only produce sharper, non-hazy B&W prints, they correct the blue or violet tints that may occur with color film. The

L37C is multilayer coated to further reduce reflection and the L39 is good for B&W prints of mountain or beach scenes. Both may be used as lens protectors. The multilayer coated Skylight L1BC also cuts UV light and is often left on the lens to protect it.

## Filters for B&W Photography



### Yellow Y44, Y48, Y52

Yellow filters absorb both the blue and ultraviolet light, so that skies appear darker in a B&W print. They are particularly useful for heighten-

ing contrast. Mild filter Y44 and medium filter Y48 are best suited for portraits and snap shots. Y52 offers the strongest effects and is commonly used for landscape photography.



### Orange O56, Red R60

The O56 and R60 offer greater contrast between sky and subjects than Y-series filters. The O56 subtracts green as well as blue

and ultraviolet. The R60 subtracts all colors of the spectrum except red and is often used with infrared film for special effects.



### Green X0, X1

Green filters subtract red and blue and let through green and yellow. Although both X0 and X1 absorb the same amount of blue, the

X0 absorbs less red than the X1, so its effect is milder. The X0 is used for general-purpose shooting, while the X1 is most effective for portraits.

## Filters for Color Photography



### Amber A2, A12

Because they subtract blue, amber filters correct the bluish colorations that sometimes affects daylight film. The mild A2 filter warms scenes shot on cloudy days or in the shade. The deeper colored A12 is used with tungsten film for outdoor shooting in fair weather.



### Blue B2, B8, B12

Blue filters subtract red and thus cool down colorations. B2 is a mild filter used with daylight film to remove the reddish tinge from sunrise or sunset shots. The medium-blue B8 corrects color when clear flashbulbs are used with daylight film. B12 is a color conversion filter which naturalizes the red cast produced by photofloods when shooting indoors with daylight film.

## Slip-in Circular Polarizing Filters



Designed for use in combination with telephoto lenses equipped with a slip-in filter holder, these filters reduce glare from non-metallic surfaces such as glass and water. Simply turn the rotating ring on the holder to find the most effective position. The filters do not affect autofocus or auto exposure features.

## Neutral Color NC Filters



Available in attachment sizes 39mm, 46mm, 52mm, 58mm, 62mm, 72mm and 77mm, these neutral-color filters serve as lens protectors. They do not affect color balance. In addition, multilayer coating prevents light reflection inside the glass, thus improving color rendition.

Slip-in Circular Polarizing Filters — Table of compatible lenses

	C-PL1S (39mm)	C-PL1L (52mm)	C-PL2S (39mm)	C-PL2L (52mm)	C-PL3L (52mm)
<b>AF Nikkor</b>					
AF-S VR 200mm f/2.8G ED-IF	—	—	—	—	✓
AF-S VR 300mm f/2.8G ED-IF	—	—	—	✓	—
AF-S 300mm f/2.8D ED-IF II	—	✓	—	—	—
AF-S 400mm f/2.8D ED-IF II	—	✓	—	—	—
AF-S 500mm f/4D ED-IF II	—	✓	—	—	—
AF-S 600mm f/4D ED-IF II	—	✓	—	—	—
AF-I 300mm f/2.8D ED-IF	—	—	✓	—	—
AF-I 400mm f/2.8D ED-IF	—	—	—	✓	—
AF-I 500mm f/4D ED-IF	—	—	✓	—	—
AF-I 600mm f/4D ED-IF	—	—	✓	—	—
AF 300mm f/2.8 ED-IF	✓	—	—	—	—
AF 300mm f/4 ED-IF	✓	—	—	—	—
<b>AI-type Nikkor</b>					
300mm f/2.8 ED-IF	✓	—	—	—	—
400mm f/3.5 ED-IF	✓	—	—	—	—
500mm f/4 P ED-IF	✓	—	—	—	—
600mm f/4 ED-IF	✓	—	—	—	—
600mm f/5.6 ED-IF	✓	—	—	—	—
800mm f/5.6 ED-IF	—	✓	—	—	—
1200-1700mm f/5.6-8 P ED-IF	—	✓	—	—	—

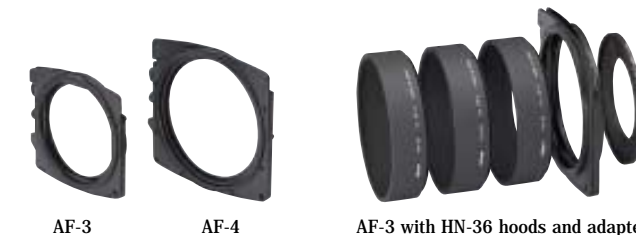
✓: Compatible

—: Incompatible

### Gelatin Filter Holders AF-3, AF-4

Accommodate gelatin or glass filters to thickness of approx. 2mm. The AF-3 is used with 3-inch square gelatin filters and Nikkor lenses having an attachment size of 52/62/67/72/77mm. The AF-4 is used with 4-inch square gelatin filters and Nikkor lenses having an attachment size of 52/62/67/72/77/82/95mm.

Nikon also offers two dedicated hood options — the HN-36 for the AF-3 and the HN-37 for the AF-4. Several hoods of equal diameter can be stacked, depending on the focal length of the lens in use.



### Gelatin Filter Holders AF-1, AF-2

These enable standard 75mm gelatin filters to be used with many Nikkor lenses, the AF-1 for 52mm attachment size and the AF-2 for 72mm attachment size.



AF Nikkor 85mm f/1.4D IF equipped with AF-4 and three HN-37 hoods, attached to a Nikon F6

### 72-62 Filter Adapter Ring UR-1

This adapter enables a filter with an attachment size of 72mm to be used with any Nikkor lens with an attachment size of 62mm.





BR-2A BR-5 BR-3 ES-1



PB-6M AR-10 (for N70, MC-25) AR-7 (for FM3A)



No. 0 No. 1 No. 2 No. 3T No. 4T No. 5T No. 6T



PK-11A PK-12 PK-13 PN-11

**Bellows Focusing Attachment and Accessories**

**Bellows Focusing Attachment PB-6**

Lets you vary the lens extension from 48mm to 208mm, producing frame-filling images of the most minute subjects. Requires an Auto Extension Ring when used with the F6, F5, D2 series, D1 series or D70s/D70.

The Bellows Spacer PB-6D Enables moving a Nikon F6, F5, D2 series or D1 series on the PB-6 rail without interference. It also allows horizontal/vertical changeover anywhere along the rail. Two PB-6Ds are needed with the PB-6; three are needed when using the PB-6E. Extension Bellows PB-6E Attaches to the PB-6 for magnification to an astounding 23x life-size when using a 20mm wideangle lens in reverse position.

**Slide Copying Adapter PS-6** Used with the PB-6 and a Nikkor lens to make duplicate slides. Cropping of the original slide is possible.

**Focusing Stage PG-2** Simplifies close-up focusing when using a camera or camera plus motor drive mounted on a tripod.

**Macro Adapter Ring BR-2A** Enables reverse-mounting of lenses — an inexpensive means of obtaining a relatively high reproduction ratio. The BR-2A also increases the working distance for normal or wideangle lenses.

Compatible with lenses that have a 52mm front attachment size.

**Macro Adapter Ring BR-5** Needed when using the BR-2A with lenses that have a 62mm front attachment size.

**Adapter Ring BR-3** A handy adapter that converts the bayonet mount of reverse mounted lenses to the 52mm thread used for filters and hoods.

**Slide Copying Adapter ES-1** Attached to the AF Micro-Nikkor 60mm f/2.8D lens with the BR-5 Ring or the Micro-Nikkor 55mm f/2.8 lens, this adapter enables duplication of 35mm film.

**Macro Copy Stand PB-6M** Attaches to the end of the PB-6 to convert it to a miniature copy stand or specimen stage.

**Cable Releases** The AR-4 and AR-7 Double Cable Release and the AR-10 Cable Release provide the PB-6 with automatic diaphragm control, even for a lens in the reversed position.

**Close-up Attachment Lenses**

Used singly or in combination, these lenses provide an easy way to increase magnification. Even when attached, you can use automatic exposure control and TTL metering. All lenses are treated with Nikon Integrated Coating to improve contrast and reduce flare. The higher

the close-up lens number, the closer you can focus. Numbers 0, 1 and 2 are recommended for lenses with a focal length to 55mm. 3T and 4T work best with lenses from 85mm to 200mm, and 5T and 6T with lenses from 70mm to 210mm. Numbers 3T, 4T, 5T and 6T are two-element achromatic lenses that ensure high image equality. Numbers 5T and 6T have a front attachment size of 62mm; for all other numbers, it is 52mm.

**Auto Extension Rings PK and PN**

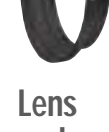
The PK-11A, PK-12 and PK-13 fit between the camera body and lens either single or in combinations, and retain automatic diaphragm and meter coupling with Nikkor lenses. This means you're free to compose, focus and meter at the brightest, fullest aperture position without having to manually stop down the lens before shooting. These rings also allow automatic exposure control.



**Lens Cases**



**Lens Hoods**



**Lens and Body Caps**



**Lens Strap**



LN-1

These cases keep lenses safe from dust, dampness and shocks. Cylindrical Case (CL): The handsome black leatherette finish is complemented by soft, plush lining. Trunk Case (CT): A durable trunk case is supplied with larger lenses including bright super-telephoto lenses. Soft Pouch (No. 58-62, CL-S1/S2/S3/S4/M1/M2/L1/L2): Accommodates a variety of lenses of different focal lengths.

Lens hoods minimize stray light, helping reduce flare and eliminate "ghost" images; they also protect the lens.

Screw-in (HN, HR): Screws onto the front of the lens; metal type available for extra strength; rubber type folds back over the lens when not in use.

Bayonet (HB): Twist-lock mounting for extra security.

Snap-on (HS): Snaps onto the front of the lens with a spring-type retainer ring; the mounting can be conveniently reversed for storage. Slip-on (HK): Slips over the front of the lens; tightened with knurled screw and retainer ring; used with wide-zoom and ultra-wide lenses.

To protect the front and rear portions of a lens from dust, fingerprints and scratches, Nikon makes lens caps in hard plastic, metal and leather. Body caps are also available to protect the mirror box and reflex mirror when no lens is mounted on the camera body.

The lens strap LN-1 is easily adjustable for carrying various telephoto lenses, even large, heavy ones, comfortably on a shoulder. Compatible with autofocus lenses: AF-S VR 300/2.8G, AF-S/AF-I 400/2.8D, AF-S 500/4D and AF-S 600/4D; and manual lenses: 200/2, 400/2.8, 400/3.5, 500/4P, 600/5.6 and 800/5.6.

AF Nikkor	Lens Hood	Lens Case
AF-S DX 12-24/4G ED-IF	HB-23	CL-S2
AF-S DX 17-55/2.8G ED-IF	HB-31	CL-1120
AF-S DX 18-55/3.5-5.6G ED	HB-33	CL-1120
AF-S DX 18-70/3.5-4.5G ED-IF	HB-32	CL-0915
AF-S DX VR 18-200/3.5-5.6G ED-IF	HB-35	CL-1018
AF-S DX 55-200/4.5-6.6G ED	HB-34	CL-0815
AF DX Fisheye 10.5/2.8G ED	Built-in	CL-0715
AF-S 17-35/2.8D ED-IF	HB-23	CL-S3, CL-76
AF 18-35/3.5-4.5D ED-IF	HB-23	CL-S1, CL-44
AF 24-85/2.8-4D IF	HB-25	CL-S1, CL-17, CL-49
AF-S 24-85/3.5-4.5G ED-IF	HB-28	CL-S2
AF-S VR 24-120/3.5-5.6G ED-IF	HB-25	CL-S2
AF-S 28-70/2.8D ED-IF	HB-19	CL-S4, CL-74
AF 28-80/3.3-5.6G	HB-20	CL-S1, CL-32S, CL-34A, No.62
AF 28-100/3.5-5.6G	HB-27	CL-S2, CL-32S
AF 28-105/3.5-4.5D IF	HB-18	CL-S1, CL-49, No. 62
AF 28-200/3.5-5.6G ED-IF	HB-30	CL-S2
AF 35-70/2.8D	HB-1	CL-S2, CL-33S
AF-S VR 70-200/2.8G ED-IF	HB-29	CL-M2
AF 70-300/4-5.6D ED	HB-15	CL-S4, CL-72
AF 70-300/4-5.6G	HB-26	CL-S4, CL-72
AF 80-200/2.8D ED	HB-7	CL-M2, CL-43A
AF VR 80-400/4.5-5.6D ED	HB-24	CL-M1
AF-S VR 200-400/4G ED-IF	HK-30	CL-L2
AF 14/2.8D ED	Built-in	CL-S2
AF 18/2.8D	HB-8	CL-S1, CL-17, CL-47
AF 20/2.8D	HB-4	CL-S1, CL-30S
AF 24/2.8D	HN-1	CL-S1, CL-30S, CL-34A
AF 28/1.4D	HK-7	CL-S1, CL-44, No.62
AF 28/2.8D	HN-2	CL-S1, CL-30S, CL-34A
AF 35/2D	HN-3	CL-S1, CL-30S, No.62
AF 50/1.4D	HR-2	CL-S1, CL-30S, CL-34A
AF 50/1.8D	HR-2	CL-S1, CL-30S
AF 85/1.4D IF	HN-31	CL-S1, CL-44, No.62
AF 85/1.8D	HN-23	CL-S1, CL-15S, CL-31S, No.62
AF 180/2.8D ED-IF	Built-in	CL-S4, CL-38, CL-72
AF-S VR 200/2G ED-IF	HK-31	CL-L1
AF-S VR 300/2.8G ED-IF	HK-30	CL-L1
AF-S 300/4D ED-IF	Built-in	CL-M2
AF-S 400/2.8D ED-IF II	HK-25	CT-402, CL-L2
AF-S 500/4D ED-IF II	HK-24	CT-502, CL-L2
AF-S 600/4D ED-IF II	HK-23	CT-606, CL-L2
AF Fisheye 16/2.8D	Built-in	CL-S1, CL-31S, No.61
AF Micro 60/2.8D	HN-22	CL-S1, CL-32S, No.62
AF Micro 105/2.8D	HS-7	CL-S3, CL-15S
AF Micro 200/4D ED-IF	HN-30	CL-M2, CL-45
AF DC 105/2D	Built-in	CL-S3, CL-72
AF DC 135/2D	Built-in	CL-S4, CL-72
<b>Zoom</b>		
35-200/3.5-4.5	HK-15	CL-S3, CL-13A
70-210/4.5-5.6	HR-1	CL-38
<b>Wideangle</b>		
24/2	HK-2	CL-S1, CL-31S, CL-34A
35/1.4	HN-3	CL-S1, CL-31S, CL-32S, No.62

Normal	Lens Hood	Lens Case
45/2.8 P	HN-35	Soft pouch type provided
50/1.2	HS-12/HR-2	CL-S1, CL-31S, CL-34A
<b>Telephoto</b>		
85/1.4	HN-20	CL-S2, CL-34A
105/2.5	Built-in	CL-S1, CL-32S, No.62
135/2.8	Built-in	CL-S1, CL-32S, No.62
<b>Reflex</b>		
500/8	HN-27	CL-39
1000/11	Built-in	CL-29
<b>Special Purpose</b>		
PC 28/3.5	HN-9	CL-S2, CL-34A, CL-46, No.62
PC Micro 85/2.8D	HB-22	CL-75
Micro 55/2.8	HN-3	CL-S1, CL-31S, CL-32S, CL-33S*, CL-15S*, No. 62
Micro 105/2.8	HS-14	CL-S4, CL-32S, CL-33S, CL-38**, CL-72, No. 62
Micro 200/4 IF	Built-in	CL-71
<b>Teleconverter</b>		
TC-14E II	-	CL-S1, CL-30S, No.61
TC-17E II	-	CL-0715, CL-S1, CL-30S
TC-20E II	-	CL-S1, CL-31S, No.62

\*With a PK-13 ring \*\*With a PN-11 ring

Lens Hoods for Circular Polarizing Filters	
52mm Circular Polarizing Filter	HN-12 <sup>1</sup>
62mm Circular Polarizing Filter	HN-26 <sup>2</sup>
72mm Circular Polarizing Filter	HN-13 <sup>1</sup>
77mm Circular Polarizing Filter	HN-34 <sup>1,3</sup>

1. Vignetting occurs with lenses shorter than 35mm.
2. Vignetting occurs with lenses shorter than 135mm.
3. AF-S 28-70mm f/2.8D ED-IF can be used at 50mm or longer zoom setting.

Note: Lens case names represent their types: CL for Cylindrical Cases, CT for Trunk Cases and No. 58-62 and CL-S/M/L for Soft Pouches. Lens hood names represent their types: HN for Screw-in, HR for Rubber Screw-in, HK for Slip-on, HS for Snap-on, HB for Bayonet, and HE for Extension.



CL-M1 CL-M2 CL-S1 CL-S2 CL-S3 CL-S4 CL-L1 CL-L2









### Multi-format Film Scanner SUPER COOLSCAN 9000 ED

- Multiple film format (120/220, 35mm, etc.)
- 4,000 dpi true optical resolution
- 16-bit A/D, 16-/8-bit output
- Large-diameter SCANNER NIKKOR ED lens
- Rod dispersion LED illumination
- Multi-sample scanning
- Scan Image Enhancer
- Quick AF & Quick Preview
- IEEE1394 interface
- Digital ICE<sup>4</sup> Advanced™  
(Digital ICE quad advanced)
- Digital ICE Professional™ for Kodachrome film



### 35mm/IX240 Film Scanner SUPER COOLSCAN 5000 ED

- 4,000 dpi true optical resolution
- 16-bit A/D, 16-/8-bit output
- SCANNER NIKKOR ED lens
- Fast 20-second scanning  
(including image transfer to monitor)
- Multi-sample scanning
- Scan Image Enhancer
- Quick AF & Quick Preview
- High-speed USB 2.0 interface
- Roll film compatible (optional)
- Digital ICE<sup>4</sup> Advanced™  
(Digital ICE quad advanced)



### 35mm/IX240 Film Scanner COOLSCAN V ED

- 4,000 dpi true optical resolution
- 14-bit A/D, 16-/8-bit output
- SCANNER NIKKOR ED lens
- Gentle-on-film LED illumination
- Fast 38-second scanning  
(including image transfer to monitor)
- Scan Image Enhancer
- Quick AF & Quick Preview
- Layout-free design
- Easy-to-connect USB interface
- Digital ICE<sup>4</sup> Advanced™  
(Digital ICE quad advanced)



Digital ICE<sup>4</sup> Advanced™ is Digital ICE™, Digital ROC™, Digital GEM™ and Digital DEE™.  
Digital ICE<sup>4</sup> Advanced™ are technologies developed by Applied Science Fiction.  
Digital ICE Professional™ is technology developed by Applied Science Fiction.

### Digital Photo Storage Viewer COOLWALKER MSV-01



#### Your 30GB portable photo album

- High-quality 30GB hard disk stores up to 10,000\* digital images  
\* Calculated for 6-megapixel images stored in JPEG FINE format
- High-quality 2.5-inch TFT color monitor
- Easy data transfer between COOLWALKER and CF Card or PC (USB 2.0)\*  
\* Using CF card type adapter, SD card is also usable
- Simple user interface for intuitive operation
- Compatible with JPEG, TIFF and NEF file
- Slideshow image display
- PictBridge compatible

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#### WARNING

TO ENSURE CORRECT USAGE, READ MANUALS CAREFULLY BEFORE USING YOUR EQUIPMENT.

If the picture matters the camera matters™



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