Nikon

At the heart of the image

DIGITAL SLR CAMERA

D80

90th Anniversary

For every aspiring photographer – High performance that satisfies all shooting styles

- 10.2 effective megapixel CCD image sensor
- Advanced image processing engine
- Improved 11-area AF system
- 0.18 sec. start-up and short release time lag
- 2.5-inch LCD with wide viewing angle
- Large, bright 0.94x viewfinder
- Nikon D-SLR build quality and fine ergonomic design
- D-Lighting, Filters effects and a wide range of image enhancement options

D80

Two photographers, Italy and the D80

Photographers from different fields share their impressions after shooting with the D80 on a trip to Italy.

About shooting in Italy - -

H (Hien): I've long dreamed of shooting in Venice. As a photojournalist, I always strive to convey the moment just as I see it with my own eyes. This demands a great amount of footwork to get acquainted with the location, and the time to establish a rapport with the locals. Shooting early in the morning with the D80 left an immediate impression on me. There was limited light, and that was comprised of a mixture of natural and artificial light. A film camera in such a situation requires complicated use of filters, whereas the D80 was able to achieve accurate white balance and metering under mixed light sources and produce beautiful results.

Y (Yves): I believe shooting in the café allowed me to clearly express my feelings about the location. I am always exploring how best to express myself based on the inspiration I draw from the actual scene. And for me, the light is the inspiration. I like to control the light in each shot, which of course includes capturing the mood of the natural light, while at times also taking advantage of reflected light or using flashes. The D80 produced images just as I envisioned them, performing perfectly throughout the trip.

Images from the D80 are of the highest quality, and I can edit them freely after the shot. The D80 can even perform in-camera editing, which only adds to the creative possibilities and makes digital easier and more enjoyable for everyone.

First impressions of shooting with the D80 - -

H: All functions respond immediately. The camera is ready to shoot the instant I turn it on, shutter response is excellent, and autofocus is fast and precise. Speed is of the essence to my style of photography. That's why the remarkable speed of the D80 captured my attention right away.

Yves Paternoster
Born in France, Yves studied photography in Amsterdam and began working as a freelance photographer. Currently living in Amsterdam, Yves focuses primarily on commercial photography.

Anyone who takes photos understands the desire to capture precious moments the instant they unfold, and the need for a camera with the speed and precision to be always ready to shoot.

Y: I was also impressed by the speed and efficiency of operation. The placement and size of buttons and controls makes them easy to use. I also find the menus easy to understand, and intuitive to use. The solid feel of the camera body belies its compact size, it was easy to carry around and simple to use from the very beginning.

Hien Lam Duc
Born in Laos, Hien emigrated to France at the age of 16. He began his career as a photojournalist with a series on the Mekong River. Hien now lives in Paris and photographs around the world, with particular concentration on Laos.

"The D80 is a perfect camera for every aspiring photographer and fully capable of satisfying the most demanding."
– Hien Lam Duc

H:I use the LCD monitor to confirm what I just shot and find the D80's 2.5-inch monitor very easy to view. The display is bright, colors are excellent, and the high resolution is a practical benefit. I found this combination even helps me confirm sharpness. The playback and preview features are also easy to operate. You can zoom in or out using a single button, and it's easy to return to a full-frame view. There's no doubt that the ease of operation and quality of display makes the LCD monitor a useful tool, not only for checking shots and settings, but also for communicating with the people that I'm photographing.

About the 10.2 megapixel images - -

Y: Skin tones really come out great. They are accurately reproduced, even when shooting in soft light, or people with darker complexions. I'm also pleased with how sharp and clear shots came out, even when shooting with little light with which to work.

H: Even when shooting from the gondola in bright sunlight, the reds in my subject, the blue sky, and the black of the gondola were all accurately reproduced. I used the Landscape mode of the Digi-Vari Programs for this shot, and the outstanding quality of the contrast, color reproduction and smooth transitions all caught my eye. There's no doubt that the D80's automatic settings can deliver satisfying results. With automatic settings like this, anyone can take professional-quality photos.

Impressions after completing the shoot - -

H: I was particularly taken with the quality of response, the ease of manual control, and the flexibility of settings and functions. Autofocus also delivered the precision I've come to expect of Nikon SLR cameras. The viewfinder provides a clear view, and it's easy to change focus points to match the shot.

I shot with the D80 the same way I use my film bodies, and I felt completely comfortable doing so. The D80 is a performer that transcends distinctions between film and digital cameras.

Y: One of the advantages of digital is in how it smoothes the photographic process. You can change settings at any time on a digital camera that are the equivalent of changing the type of film. A good example of this is the ability to change sensitivity. Digital is also more efficient than film. You can't confirm what you've shot with film until after developing the film, whereas digital allows you to accurately confirm whatever you want as you shoot. This point really struck me as I shot with the D80.

H: It sounds as though we agree that the D80 is a perfect camera for every aspiring photographer, as well as one that is capable of satisfying both a photojournalist such as me, and a commercial photographer such as yourself.

"The camera provided satisfying results that were sharp and clear." – Yves Paternoster

I've shot from this location before, but never this early in the morning. The D80's automatic functions worked wonderfully, capturing the mood of the moment as I hoped to express it.

– Yves Paternoster

- Image quality mode: RAW (NEF)
- Lens: AF-S Zoom-Nikkor 17-35mm f/2.8D IF-ED
- Exposure mode: [M] 1/2.5 second, f/5.6
- White balance: Auto • Sensitivity: ISO-equiv. 125

I tried to shoot this scene just as it struck my eye. I used the Landscape mode of the Digi-Vari Programs for this shot, and I'm very pleased with how the D80 was able to accurately reproduce the moment.

– Hien Lam Duc

- Image quality mode: RAW (NEF)
- Lens: AF DX Fisheye-Nikkor 10.5mm f/2.8G ED
- Exposure mode: Digital Vari-Program [Landscape] 1/125 second, f/9
- White balance: Auto • Sensitivity: ISO-equiv. 100

It was a challenge to find a new perspective on a famous vista. The weather wasn't the best, but the D80's automatic white balance managed to handle the mixed lighting conditions brilliantly and I got a very good shot.

– Yves Paternoster

- Image quality mode: RAW (NEF)
- Lens: AF-S Zoom-Nikkor 17-35mm f/2.8D IF-ED
- Exposure mode: [A] 2 seconds, f/9
- White balance: Auto • Sensitivity: ISO-equiv. 100

I really enjoyed taking this picture. Inspired by the light and the interaction of the people, and aided by the ease with which the D80 performed, I was able to visually express my feelings about the scene.

– Yves Paternoster

- Image quality mode: RAW (NEF)
- Lens: AF-S Zoom-Nikkor 17-35mm f/2.8D IF-ED
- Exposure mode: [A] 1/60 second, f/5 • White balance: Auto
- Sensitivity: ISO-equiv. 200 • Built-in-flash: Manual

The colors of the traditional costumes, the passion of the dance and the scenic background made me eager to capture the moment in a panoramic shot. The D80 handled the lighting perfectly, and the results are great.

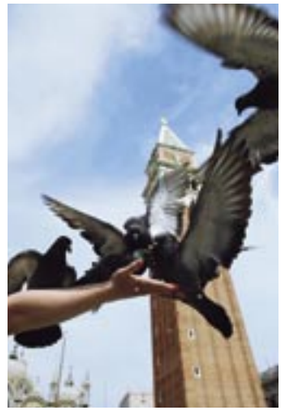
– Hien Lam Duc

- Image quality mode: RAW (NEF)
- Lens: AF DX Fisheye-Nikkor 10.5mm f/2.8G ED
- Exposure mode: [P] 1/320 second, f/9
- White balance: Auto • Sensitivity: ISO-equiv. 125

With this photo, I wanted to capture the spontaneity of the moment just as I had witnessed it. It was also fun to show this photo to the fisherman on the spot and let him see for himself how well it came out.

– Hien Lam Duc

- Image quality mode: RAW (NEF)
- Lens: AF-S DX Zoom-Nikkor 17-55mm f/2.8G IF-ED
- Exposure mode: [S] 1/125 seconds, f/4
- White balance: Auto • Sensitivity: ISO-equiv. 100



1	4	5
	6	
2	3	

1 • Lens: AF-S Zoom-Nikkor 17-35mm f/2.8D IF-ED • Exposure mode: [S] 1/60 second, f/2.8 • White balance: Auto • Sensitivity: ISO-equiv. 200
2 • Lens: AF-S VR Zoom-Nikkor 70-200mm f/2.8G IF-ED • Exposure mode: [S] 1/250 second, f/4 • White balance: Auto • Sensitivity: ISO-equiv. 100
3 • Lens: AF-S VR Micro-Nikkor 105mm f/2.8G IF-ED • Exposure mode: [S] 1/60 second, f/3.5 • White balance: Auto • Sensitivity: ISO-equiv. 200
4 • Lens: AF DX Fisheye-Nikkor 10.5mm f/2.8G ED • Exposure mode: Digital Vari-Program [Landscape] 1/1.3 second, f/2.8 • White balance: Auto • Sensitivity: ISO-equiv. 100
5 • Lens: AF-S DX Zoom-Nikkor 17-55mm f/2.8G IF-ED • Exposure mode: [S] 1/400 seconds, f/6.3 • White balance: Auto • Sensitivity: ISO-equiv. 100
6 • Lens: AF-S DX Zoom-Nikkor 17-55mm f/2.8G IF-ED • Exposure mode: Digital Vari-Program [Landscape] 1/200 second, f/10 • White balance: Auto • Sensitivity: ISO-equiv. 400
All photos taken with image quality mode: RAW (NEF)
1-3: Yves Paternoster 4-6: Hien Lam Duc

– NIKKOR lenses used for the preceding photos include:

AF DX Fisheye-Nikkor
10.5mm f/2.8G ED

AF-S DX Zoom-Nikkor
17-55mm f/2.8G IF-ED

AF-S VR Zoom-Nikkor
70-200mm f/2.8G IF-ED

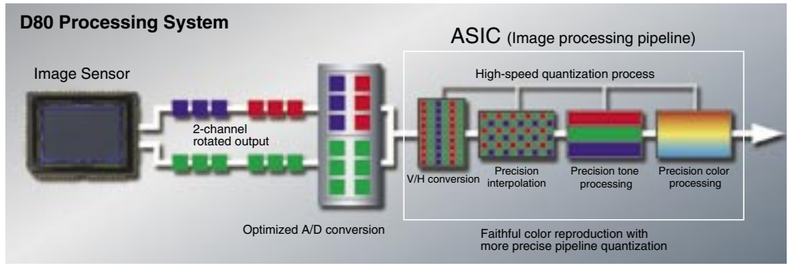
AF-S Zoom-Nikkor
17-35mm f/2.8D IF-ED

AF-S VR Micro-Nikkor
105mm f/2.8G IF-ED

For every aspiring photographer...

High-resolution image processing engine

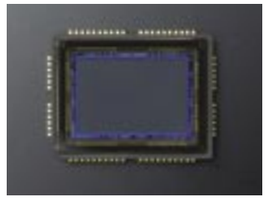
One of the key advances developed for the D80 is its high-resolution image processing engine. At its heart is a dedicated new high-performance processing chip that greatly accelerates performance on all levels, while also consuming less power than its predecessors. It also inherits advantages developed exclusively for Nikon's latest professional digital SLR cameras, combining color independent analog pre-conditioning with improved 12-bit digital image processing algorithms. The result is natural-looking images that benefit from faithful color and tone reproduction. The level of performance attained allows the new engine to rapidly and efficiently process the 10.2 megapixel resolution images captured by the DX-format CCD image sensor.



Beautiful results with accurate colors and sharp details

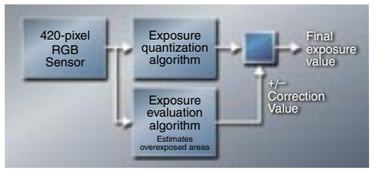
10.2 effective megapixel Nikon DX-format CCD

Optimized to capture sharp details, the 10.2 effective megapixel CCD image sensor yields extraordinarily high-resolution images, providing plenty of freedom to crop creatively or print impressive enlargements.



Advanced Auto Exposure system

Consistently dependable exposure is the hallmark of Nikon's exclusive 3D-Color Matrix Metering II. Refinements for the D80 include its inheriting the advanced exposure evaluation system from the Nikon D2XS and D200 digital SLR cameras. Brightness, color, contrast, selected focus area and camera-to-subject distance information is evaluated, with the results referenced against the expansive onboard database of exposure data from over 30,000 actual photographic scenes, and the final exposure value calculated - instantly. Variable-size center-weighted metering is also available, as are a choice of 11 spot meters linked to each of the 11-area AF system's area sensors.



Broad ISO-equivalent sensitivity range

The D80 features extensive range for sure performance through diverse lighting conditions. Sensitivity can be set manually between ISO speeds of 100 and 1600 in 1/3-EV increments, or boosted even higher using the HI-0.3, HI-0.7 or HI-1 settings. Automatic sensitivity adjustment (ISO AUTO) is also available offering the freedom to concentrate on composition while the camera selects the right sensitivity for the shot.

Precision white balance

Advanced Auto White Balance (AWB) produces natural coloration by matching white balance to the light source of the shot. Other flexible options include a choice of six specific manual settings with fine-tuning, (Incandescent, Fluorescent, Direct Sunlight, Flash, Cloudy, and Shade), as well as a preset option for using a gray or white object as a reference.

11-area AF system

The D80 inherits Nikon's advanced Multi-CAM 1000 AF Sensor Module that recently debuted in the D200. Refinements to this new 11-area AF system ensure consistently fast and precise focus lock under varying shooting conditions, all while the addition of effective new focusing options instills photographers with greater confidence to get the desired shot. For example, while the system is able to use each of its 11 focus areas individually, the center sensor can also be switched to wide-frame operation for broader coverage. Refinements to the programming algorithms that control lens focus action further improve system response and focus precision, along with subject acquisition and tracking abilities.

Auto-area AF mode

This new mode measures all 11 focus areas, automatically determines which of them are on the primary subject, and activates only those areas. During AF measurement, all focus areas that lie within the range of proper focus blink for easier confirmation.

Optimized color modes

Nikon's advanced color reproduction system optimizes the three available color modes to best match the subject or intended use for the image.

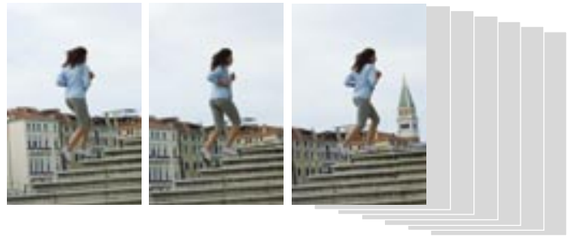
Mode Ia: Renders natural-looking skin tones out of the camera. (sRGB)
Mode II: Realizes a wider color range suitable for processing or retouching. (Adobe RGB)
Mode IIIa: Renders vivid landscape and floral colors out of the camera. (sRGB)

Instant start-up and immediate response

The D80 starts up in approx. 0.18 seconds, so it's ready to shoot immediately. Its short shutter release time lag of approximately 80 milliseconds helps ensure instant response while shooting, as does the fast and precise focus of the new 11-area AF system with AF-assist illuminator. Images are processed and recorded extremely quickly. Preview images are displayed instantly.

High-speed continuous shooting

Capable of shooting a rapid 3 frames per second in continuous bursts of up to 100 JPEG (FINE M-size or smaller) or 6 RAW (NEF) images, the D80 makes it easier to stay on top of the action or to capture those unexpected, yet precious picture opportunities. Refinements to achieve this performance include improved processing speed, optimized buffer memory handling, as well as higher data transfer rates.



Broad shutter speed options

Shutter speeds from 1/4,000 to 30 sec. can be selected manually or used in conjunction with the automated program modes. Bulb and time options as well as flash-synchronized shutter speeds of up to 1/200 sec. further enhance the digital photo experience.

Optimize image options

Easily accessed optimization options closely tailor results to the scene at hand or the intended use of the image. Image sharpening, tone compensation, color mode, saturation and hue adjustment is controlled by the user-selected choice of Normal, Softer, Vivid, More vivid, Portrait, Custom or Black-and-white options.

Multiple Exposure

This feature creates a single image within the camera from up to 3 consecutive exposures, producing an effect that resembles multiple exposure techniques used with film.

Higher energy lithium-ion battery

The EN-EL3e rechargeable lithium-ion battery with increased energy capacity delivers enough power to shoot as many as 2,700 images per charge*. The battery can be recharged at any time, and it now features an accurate real-time fuel gauge system that displays the percentage of remaining charge, number of shots since last charge and overall status of battery service life.

*Achieved under the following test conditions: Fully charged EN-EL3e battery; temperature of 20°C/68°F; Zoom-Nikkor AF-S DX 18-135mm f/3.5-4.5G IF-ED lens; continuous shooting mode: continuous-servo autofocus; image quality set to JPEG BASIC; image size set to Medium; shutter speed 1/250 second; shutter release pressed halfway for three seconds and focus cycled from infinity to minimum range three times with each shot; monitor turned on for five seconds after six shots and then turned off; cycle repeated once exposure meters turned off.

In-camera image editing functions

Exclusive in-camera image editing features under the new Retouch menu help ensure consistently satisfying results and greater creative freedom. **D-Lighting** automatically brings out detail to enhance results and add creative flair, all while achieving overall exposure balance. **In-camera Red-eye correction** automatically detects and compensates the annoying red-eye effect sometimes caused by flash. Images can be trimmed within the camera to produce smaller files for easy sharing or greater efficiency for specific end purposes.

Additional options include:

- **Image Overlay** merges a pair of selected RAW(NEF) files taken with the D80 to create a new composite image within the camera as a RAW(NEF) or JPEG file.
- **Monochrome settings** (Black-and-white, Sepia, Cyanotype)
- **Filter Effects** (Skylight, Warm filter, Color balance)

Without D-Lighting

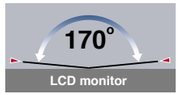
With D-Lighting

Always ready to shoot, easily and precisely

Greater operating ease with Nikon ergonomics

The D80 packs high performance and high resolution into a body that is more compact and slimmer than previous Nikon digital SLR cameras. True to Nikon's commitment to intuitive operation, the size, layout and operation of all buttons and controls are designed for maximum ease of use.

Large wide-angle 2.5" LCD monitor with improved menus



The D80 features a large new 2.5-inch 230,000-dot high-resolution LCD monitor that provides an ultra-wide 170° viewing angle from all directions. To accurately assess sharpness, images can be easily previewed at up to 25 times magnification using new dedicated zoom buttons. A new RGB histogram display aids in evaluating exposures with greater precision. Other playback options include single frame, 4 or 9-image thumbnail display, an improved histogram display and highlight point display.

Refinements to the new menu interface make navigation easier on the eye, easier to understand and easier to use. The carefully chosen color scheme helps make the larger font size of menu items remarkably easy to read. Menus can be customized to display only selected items using the new "My Menu" set.

Automated Digital Vari-Program and Exposure modes

A selection of 7 Digital Vari-Programs makes creative photography as simple as rotating the mode dial. Choose from **Auto**, **Portrait**, **Landscape**, **Close Up**, **Sports**, **Night Landscape**, or **Night Portrait** and the selected program automatically optimizes white balance, sharpening, tone (contrast), color, saturation and hue settings to best match the scene. Greater personal control over camera operation is provided by the Programmed auto **[P]**, Shutter-Priority Auto **[S]**, Aperture-Priority Auto **[A]** and Manual **[M]** exposure modes.

Large, bright 0.94x viewfinder

Another important new feature of the D80 is the adoption of the pentaprism viewfinder from the D200. This new eye-level optical viewfinder features large magnification (0.94x) that helps ensure a clear view for precise composition. The diopter adjustment control knob also makes it easier to fine-tune the view to match eyesight. The viewfinder's integrated grid display can also be turned on to assist composition.

Storage media (SD memory card)

The D80 is compatible with SD memory cards. Already widely in use around the world and available in a variety of capacities, SD memory cards feature efficiency and convenience in a slim, compact design.

Built-in Slideshow functions

Built-in slideshow options for the D80 include Standard or Pictmotion, which includes style selections that control transitions and background music. Shows can be enjoyed on the camera's 2.5-inch LCD monitor, or complete with audio on a television when connected via the supplied AV cable.

Built-in flash with i-TTL flash control

The powerful built-in flash does much more than fire when natural lighting is inadequate or effectively add balanced fill flash when there is strong backlighting. Nikon's highly robust i-TTL flash control evaluates flash exposure with greater precision to achieve better automatic flash balance and deliver outstanding results. It also helps realize features such as Repeating flash function for creating stroboscopic effects and the Modeling Flash, which allows photographers to visually check for shadows and reflective objects and assess overall lighting prior to shooting. Full support for the Advanced Wireless Lighting System lets the built-in flash function as a remote commander that provides direct control to wireless SB-800, SB-600 or SB-400 Speedlights.

Integrated flexibility for maximum versatility

NIKKOR Lenses

Lens quality directly influences the image quality achieved by any SLR camera. Nikon's solid heritage of delivering the finest optics, precision mechanisms, and optimized performance has long earned NIKKOR lenses the highest praises of photographers. In 2007, total accumulated production of NIKKOR lenses topped 40 million units. The D80 employs the Nikon F lens mount to ensure seamless compatibility with the unequalled performance and quality of Nikon's full lineup of AF, AF-S and dedicated DX NIKKOR lenses.

AF-S DX Zoom-Nikkor 18-135mm f/3.5-5.6G IF-ED

Designed to combine top performance with outstanding value, this compact 7.5x zoom lens ably covers wide-angle to telephoto shots with its focal length range of 18-135mm, the equivalent of 27-202mm in 35mm [135] format.

AF-S VR Zoom-Nikkor 70-300mm f/4.5-5.6G IF-ED

An ideal choice for shooting everything from portraits to sports and wildlife, this high-power telephoto zoom lens combines a 4.3x zoom ratio with a range equivalent to 105-450mm in 35mm [135] format. Nikon's advanced VRII (Vibration Reduction) technology helps minimize the impact of camera shake for sharper handheld pictures.

The following CPU lenses can be used with the D80. IX Nikkor CPU lenses cannot be used.

Lens/accessory \ Camera setting	Focus			Mode		Metering
	AF	M(with electronic range finder)	M	Digital Vari Program,P,S,A	M	[1]
Type G or D AF Nikkor[2]; AF-S, AF-I Nikkor	✓	✓	✓	✓	✓	✓
PC-Micro Nikkor 85mm f/2.8D[3]	—	✓[4]	✓	—	✓	✓
AF-S/AF-I Teleconverter[5]	✓[6]	✓[6]	✓	✓	✓	✓
Other AF Nikkor (except lenses for F3AF)	✓[7]	✓[7]	✓	✓	✓	✓
AI-P Nikkor	—	✓[8]	✓	✓	✓	✓

1. Spot metering meters selected focus area. 2. Vibration Reduction (VR) supported with VR lenses. 3. Camera exposure metering and flash control may not function when lens is shifted and/or tilted or aperture is not at maximum. 4. Electronic range finder cannot be used when shifting or tilting lens. 5. See teleconverter manual for list of compatible lenses. 6. With maximum effective aperture of f/5.6 or faster. 7. If AF 80-200mm f/2.8S, 35-70mm f/2.8S, new-model 28-85mm f/3.5-4.5S, or 28-85mm f/3.5-4.5S is zoomed while focusing at minimum range, image on matte screen in viewfinder may not be in focus when in-focus indicator is displayed. Focus manually using image in viewfinder as guide. 8. With maximum aperture of f/5.6 or faster.

Non-CPU Lenses

The non-CPU lenses listed below may be used, but only when the camera is in mode M. Selecting another mode disables the shutter release. Aperture must be adjusted manually via the lens aperture ring and the camera autofocus system, metering, electronic analog exposure display, and TTL flash control cannot be used. Except where otherwise noted, the electronic range finder can be used with lenses that have a maximum aperture of f/5.6 or faster.

- AI-modified, AI-, AI-S, or Series E Nikkor
- Medical Nikkor 120mm f/4 (can only be used at shutter speeds slower than 1/60 s)
- Reflex Nikkor (electronic range finder can not be used)
- PC Nikkor (electronic range finder can not be used when shifting or tilting lens)
- AI-type teleconverter*
- PB-6 Bellows focusing attachment (attach in vertical orientation; can be used in horizontal orientation once attached)*
- Auto extension rings (PK-11A, 12, 13; PN-11)*

*Electronic range finder can be used if maximum effective aperture is f/5.6 or faster.

Creative Lighting System Support for enhanced lighting

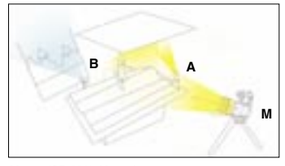
The D80 works seamlessly with Nikon SB-800, SB-600, SB-400 and SB-R200 Speedlights, delivering the full benefits of i-TTL flash control's advanced monitor pre-flash, accurate bounce-flash measurement and comprehensive wireless operation. The SB-800, SB-600 and SB-400 Speedlights also feature a Wide-Area AF-Assist Illuminator and Auto Zoom flash coverage.

SB-800

SB-600

SB-400

Nikon Close-up Speedlight Commander Kit R1C1



Master (SB-800): Manual
Remote A (SB-800): Manual
Remote B (SB-600): Manual

- Image quality mode: RAW (NEF)
- Lens: AF-S DX VR Zoom-Nikkor 18-200mm f/3.5-5.6G IF-ED
- Exposure mode: [S] 1/60 second, f/8
- White balance: Flash
- Sensitivity: ISO-equiv. 100

Capture NX (optional)

Nikon software for simpler, full-scale image processing and editing

The NEF advantage

NEF (Nikon Electronic Format) satisfies ever-changing photographic needs with extended range and versatility. The RAW data contained within each NEF file is never altered, regardless of how many times the file is opened and new renditions saved.

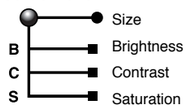
Highly versatile photo editing solution

Nikon's new Capture NX software provides easier access to powerful and visually intuitive enhancement tools that help photographers tap the full potential of NEF images.

U Point™ technology

Patented U Point™ technology allows easy selection of image areas according to points of interest, and turns the application of effects and enhancements into an intuitive photographic process. U Point™ combines with the extensive Nikon Capture toolbox to offer an unsurpassed set of features for NEF images as well as JPEG and TIFF files from most any digital camera.

Control Point:



Control points make it easy to adjust brightness, contrast, saturation, hue, red, green, blue, warmth, and much more.

Lens correction tools

A trio of original tools help expand imaging possibilities for a wider variety of lenses by compensating for lens effects such as vignette in corners, pincushion and barrel distortion, or color fringing.

Selective tools

Capture NX offers a range of selective tools for applying over 25 enhancement styles, including the Brush, Lasso, Marquee, Gradient and Fill/Remove tools.

Additional features

Other tools that enhance Capture NX's unique capabilities include: Browser, Batch Processing, Edit List, Red-Eye Reduction, Version and Noise Reduction and other useful functions.

Capture NX System Requirements

OS	Windows: Windows Vista (32-bit), Windows XP Home Edition, Windows XP Professional, Windows 2000 Professional Macintosh: Mac OS X (version 10.3.9 or later)
RAM	256MB minimum, 512MB minimum (Windows Vista) (1.0GB or more recommended)
Hard disk	200MB required for installation
Display	800 x 600 pixels (1024 x 768 or more recommended) with 16-bit color (High Color/thousands of colors) or 24-bit color (True Color/millions of colors) recommended
Others	· CD-ROM drive required for installation · Internet connection required for some options

Camera Control Pro 2 (optional)

With Camera Control Pro 2, photographers can remotely operate and adjust most settings of the D80. And for a further refinement of workflow, there's also the option to download images directly to the computer's hard disk during shooting.

Compatibility and Accessories

Hi-Speed USB compatible

The D80's Hi-Speed USB interface enables fast data transfer speeds from camera to computer.

PictBridge support

Pictures can be printed as simply as connecting the D80 to any PictBridge compatible printer via the supplied USB cable and giving the command. In-camera page setup support makes printing easier while also affording finer control over the results.

New Multi-Power Battery Pack MB-D80

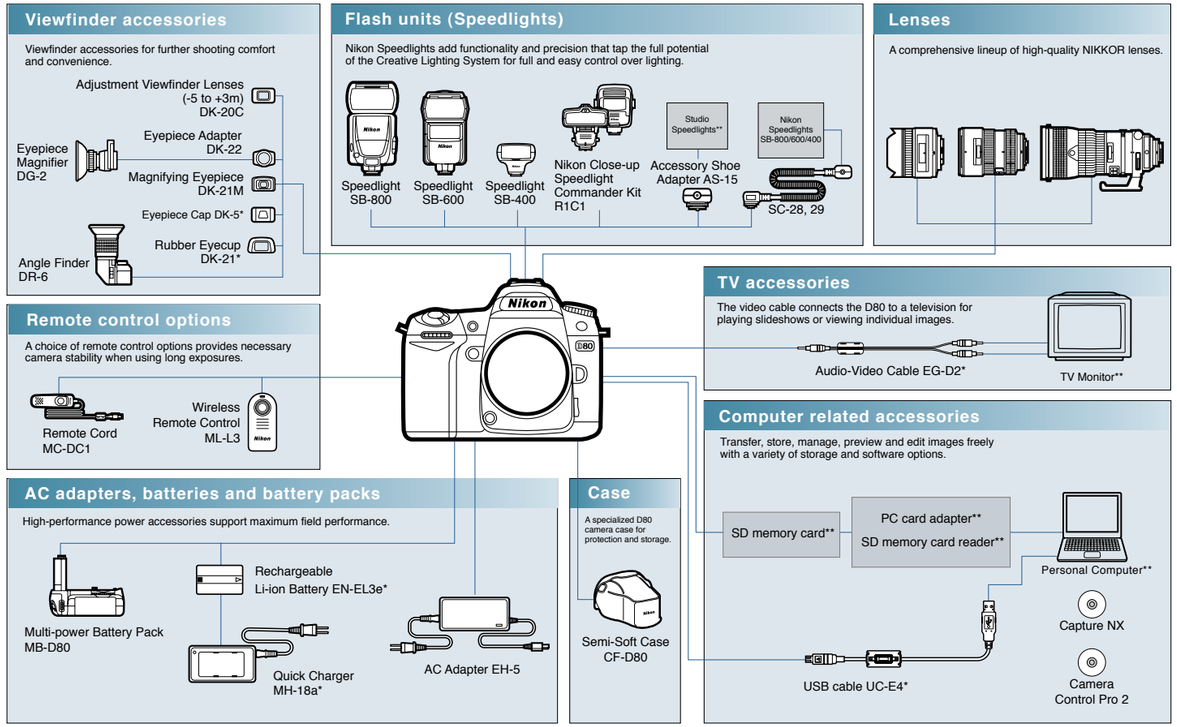
The new Multi-Power Battery Pack MB-D80 features an ergonomic design that blends added stability with extended shooting potential of up to 5,000 shots. Running on either one or two EN-EL3e batteries, or on six AA-size batteries*, the battery pack adds extra command dials along with alternate shutter release and AE-L/AF-L buttons that facilitate more comfortable shooting in vertical format. *Compatible AA-size batteries: alkaline, Ni-MH, lithium and nickel-manganese

Remote Cord MC-DC1 (Approx. 1.0m in length.)

Wireless (IR) Remote Control ML-L3

A choice of remote control options provides necessary camera stability when using long exposures, such as for landscape and macro photography.

MC-DC1



*Supplied accessories **Non-Nikon products

Front

Rear

1. Shooting mode (Single/continuous; self-timer; Remote control modes) button
2. Exposure compensation/ reset button
3. Shutter-release button
4. Power switch/Illuminator switch
5. Sub-command dial
6. FUNC. button
7. Depth-of-field preview button
8. Eyelet for camera strap
9. AF mode/reset button
10. Metering mode button/Format button
11. Control Panel
12. AF-assist illuminator /Self-timer lamp/Red-eye reduction lamp
13. Built-in flash
14. Accessory shoe
15. Focal plane mark
16. Mode dial
17. Eyelet for camera strap
18. Infrared receiver
19. Flash mode / Flash compensation button
20. Bracketing button
21. Video connector (under cover)
    Reset switch (under cover)
    DC-in connector (under cover)
    USB connector (under cover)
    Remote cord connector (under cover)
22. Lens release button
23. Focus-mode selector
24. Playback button
25. Menu button
26. Protect/Help button/ WB (white balance) button
27. Thumbnail button/ISO (ISO sensitivity) button
28. Playback zoom/QUAL (image quality/size)
29. Tripod socket
30. Delete button / Format button
31. Viewfinder eyepiece cup
32. Viewfinder eyepiece
33. Diopter adjustment control
34. AE-L / AF-L button
35. Main command dial
36. Multi selector
37. Memory card slot cover
38. Focus selector lock
39. LCD monitor
40. Memory card access lamp
41. OK Button
42. Battery-chamber cover latch
43. Battery-chamber cover

Nikon Digital SLR Camera D80 Specifications

Type of Camera	Single-lens reflex digital camera
Effective Pixels	10.2 million
Image Sensor	RGB CCD, 23.6 x 15.8mm; total pixels: 10.75 million
Image Size (pixels)	3,872 x 2,592 [L], 2,896 x 1,944 [M], 1,936 x 1,296 [S]
ISO Sensitivity (Recommended Exposure Index)	100 to 1600 ; H0.3, H0.7 and H1 available
Storage Media	SD memory card, SDHC compatible
Storage System	Compressed NEF (RAW): 12-bit compression, JPEG: JPEG baseline-compliant
File System	Exif 2.21, Compliant DCF 2.0 and DPOF
White Balance	Auto (TTL white balance with 420-pixel RGB sensor), six manual modes with fine-tuning, color temperature setting (in Kelvin), or preset white balance, white balance bracketing
LCD Monitor	2.5-in., 230,000-dot, low-temperature polysilicon TFT LCD with brightness adjustment available, allows up to 170-degree viewing angle
Playback Function	1) Full frame 2) Thumbnail (4 or 9 segments) 3) Zoom 4) Slideshow (Standard or Pictmotion) 5) RGB histogram indication 6) Shooting data 7) Highlight point display 8) Auto image rotation
Delete Function	Card format, All photographs delete, Selected photographs delete
Video Output	Can be selected from NTSC and PAL
Interface	Hi-Speed USB (mini-B connector); SD card slot: supports firmware updates via SD cards
Text Input	Up to 36 characters of alphanumeric text input available with LCD monitor and multi-selector; stored in Exif header
Compatible Lenses	Nikon F mount (with AF coupling and AF contacts)
Picture Angle	Equivalent in 35mm [135] format is approx. 1.5 times lens focal length
Viewfinder	Fixed eye-level pentaprism; built-in diopter adjustment (-2.0 to +1.0 m^{-1})
Eyepoint	19.5mm (-1.0 m^{-1})
Focusing Screen	Type-B BriteView Clear Matte screen Mark II with superimposed focus brackets and On-Demand grid lines
Viewfinder Frame Coverage	Approx. 95% (vertical & horizontal)
Viewfinder Magnification	Approx. 0.94x with 50mm lens at infinity; -1.0 m^{-1}
Viewfinder Information	Focus indications, Metering system, AE/FV lock indicator, Flash sync indicator, Shutter speed, Aperture value, Exposure/Exposure compensation indicator, ISO sensitivity, Exposure mode, Flash output level compensation, Exposure compensation, Number of remaining exposures
Autofocus	TTL phase detection by Nikon Multi-CAM 1000 autofocus module with AF-assist illuminator (approx. 0.5 to 3.0m) Detection range: -1 to +19 EV (ISO 100 equivalent, at normal temperature: 20°C/68°F)
Lens Servo	Instant single-servo (AF-S); continuous-servo (AF-C); auto AF-S/AF-C selection (AF-A); manual (M); predictive focus tracking automatically activated according to subject status in continuous-servo AF
Focus Area	Normal: 11 areas; single area or group can be selected; Wide: focus area can be switched to center wide-frame focus area
AF Area Mode	1) Single Area AF 2) Dynamic Area AF 3) Auto-area AF
Focus Lock	Focus can be locked by pressing shutter-release button halfway (single-servo AF) or by pressing AE-L/AF-L button
Exposure Metering System	Three-mode through-the-lens (TTL) exposure metering 1) 3D Color Matrix Metering II (type G and D lenses); color matrix metering II (other CPU lenses); metering performed by 420-segment RGB sensor 2) Center-weighted: Weight of 75% given to 6, 8, or 10mm dia. circle in center of frame 3) Spot: Meters 3.5mm dia. circle (about 2.5% of frame) centered on active focus area
Exposure Metering Range (ISO 100 equivalent, f/1.4 lens, 20°C/68°F)	1) 0 to 20 EV (3D Color Matrix or center-weighted metering) 2) 2 to 20 EV (spot metering)
Exposure Meter Coupling	CPU coupling
Exposure Modes	Digital Vari-Program (Auto, Portrait, Landscape, Macro Close up, Sports, Night Landscape, Night Portrait), Programmed Auto [P] with flexible program; Shutter-Priority Auto [S]; Aperture Priority Auto [A]; Manual [M]
Exposure Compensation	±5 EV in increments of 1/3 or 1/2 EV
Auto Exposure Lock	Luminosity locked at detected value with AE-L/AF-L button
Auto Exposure Bracketing	2 to 3 exposures in increments from values between 1/3 to 2 EV
Shooting Modes	1) Single frame shooting mode 2) Continuous shooting mode: approx. 3 frames per second 3) Self-timer 4) Delayed remote mode 5) Quick-response remote mode
Shutter	Electronically-controlled vertical-travel focal plane shutter; 1/4000 to 30 s. in steps of 1/3, 1/2 EV, Bulb
Sync Contact	X-contact only; flash synchronization at up to 1/200 s.
Built-in Flash	(Auto, Portrait, Landscape, Macro Close up, Sports, Night Landscape, Night Portrait) auto flash with auto pop-up; Manual pop-up with button release Guide number (ISO 100, m/ft.): approx. 13/42
Flash Control	1) TTL: TTL flash control by 420-pixel RGB sensor Built-in Speedlight: i-TTL balanced fill-flash or standard i-TTL flash (spot metering or mode dial set to [M]) SB-800, 600 or 400: i-TTL balanced fill-flash for digital SLR and standard i-TTL flash for digital SLR 2) Auto aperture: Available with SB-800 with CPU lens 3) Non-TTL Auto: Available with Speedlights such as SB-800, 80DX, 28DX, 28, 27, and 22s 4) Range-priority manual; available with SB-800
Flash Sync Mode	1) Auto 2) Fill-in flash 3) Red-eye Reduction, 4) Red-eye Reduction with Slow Sync, 5) Slow Sync, 6) Rear-curtain Sync 7) Off
Flash Compensation	-3 to +1 EV in increments of 1/3 EV or 1/2 EV
Accessory Shoe	Standard ISO hot-shoe contact with safety lock
Self-timer	Electronically controlled timer with 2 to 20 seconds duration (2, 5, 10 and 20 second selectable)
Depth of field Preview	When CPU lens is attached, lens aperture can be stopped down to value selected by user (A and M modes) or value selected by camera (other modes)
Remote Control	Via Remote Cord MC-DC1 (optional) or Wireless Remote Control ML-L3 (optional)
Power Source	One Rechargeable Li-ion Battery EN-EL3e, Battery Pack MB-D80 (optional) with one or two rechargeable Nikon EN-EL3e Li-ion batteries or six R6/AA-size alkaline (LR6), Ni-MH (HR6), lithium (FR6) batteries, or nickel-manganese (ZR6) AA batteries, AC Adapter EH-5 (optional)
Tripod Socket	1/4 in. (ISO 1222)
Dimensions (W x H x D)	Approx. 132 x 103 x 77mm (5.2 x 4.1 x 3.0in.)
Weight	Approx. 585g (1 lb. 5 oz.) without battery, memory card, body cap, or monitor cover
Supplied Accessories*	Rechargeable Li-ion Battery EN-EL3e, Quick Charger MH-18a, Audio-Video Cable EG-D2, USB Cable UC-E4, Strap, Body Cap BF-1A, Eyepiece Cap DK-5, Rubber Eyecup DK-21, LCD Monitor Cover BM-7, Accessory Shoe Cover BS-1
Optional Accessories	Multi-Power Battery Pack MB-D80, Magnifying Eyepiece DK-21M, AC Adapter EH-5, Wireless Remote Control ML-L3, Remote Cord MC-DC1, Speedlight SB-800/SB-600/SB-400/SB-R200, Capture NX, Camera Control Pro 2 For more details refer to system chart on page 15.

*Supplied accessories may differ in each country or area.

Approved Memory Cards
The following SD memory cards have been tested and approved for use in the D80. All cards of the designated make and capacity can be used, regardless of speed.
Toshiba 64MB, 128MB, 256MB, 512MB, 1GB, 2GB*
SanDisk 64MB, 128MB, 256MB, 512MB, 1GB, 2GB*, 4GB**
Panasonic 64MB, 128MB, 256MB, 512MB, 1GB, 2GB*
Lexar 256MB, 512MB, 1GB, 2GB*
*If card will be used with card reader or other device, check that device supports 2GB cards.
**SDHC compliant. If card will be used with card reader or other device, check that device supports SDHC. Operation is not guaranteed with other makes of card. Contact the manufacturer for details on the above cards.

Image Quality, Image Size and Number of Available Shots (when using 1GB SD card)
The following table shows the approximate number of pictures that can be stored on a 1 GB Panasonic Pro HIGH SPEED card at different image quality and size settings.

Image Quality	Image Size	File Size	Number of Available Shots[1]	Number of Consecutive Shots Available[2]
RAW (NEF) + JPEG FINE[3]	L	approx. 17.2MB	54 frames	6 frames
	M	approx. 15.1MB	63 frames	6 frames
	S	approx. 13.6MB	72 frames	6 frames
RAW (NEF) + JPEG NORMAL[3]	L	approx. 14.8MB	65 frames	6 frames
	M	approx. 13.8MB	71 frames	6 frames
	S	approx. 13.0MB	76 frames	6 frames
RAW (NEF) + JPEG BASIC[3]	L	approx. 13.6MB	72 frames	6 frames
	M	approx. 13.0MB	76 frames	6 frames
	S	approx. 12.7MB	78 frames	6 frames
RAW (NEF)	–	approx. 12.4MB	82 frames	6 frames
JPEG FINE	L	approx. 4.8MB	133 frames	23 frames
	M	approx. 2.7MB	233 frames	100 frames
	S	approx. 1.2MB	503 frames	100 frames
JPEG NORMAL	L	approx. 2.4MB	260 frames	100 frames
	M	approx. 1.3MB	446 frames	100 frames
	S	approx. 0.6MB	918 frames	100 frames
JPEG BASIC	L	approx. 1.2MB	503 frames	100 frames
	M	approx. 0.7MB	867 frames	100 frames
	S	approx. 0.3MB	1500 frames	100 frames

1. All figures are approximate. File size varies with scene recorded and make of memory card.
2. Maximum number of frames that can be taken before shooting stops at ISO 100. Capacity of buffer (number of frames that can be taken before buffer is full and shooting slows) is displayed in control panel. Capacity of memory buffer drops if noise reduction is on.
3. Image size applies to JPEG images only. Size of RAW (NEF) images can not be changed. File size is the total for compressed RAW (NEF) and JPEG images.

Online Video Tutorial - Digitutor
http://www.nikondigitutor.com/index_eng.html

WARNING **TO ENSURE CORRECT USAGE, READ MANUALS CAREFULLY BEFORE USING YOUR EQUIPMENT. SOME DOCUMENTATION IS SUPPLIED ON CD-ROM ONLY.**

Nikon Hong Kong Ltd. Suite 1001, 10/F Cityplaza One, 1111 King's Road, Taikoo Shing, Hong Kong **www.nikon.com.hk**
Nikon Singapore Pte. Ltd. No. 80 Anson Road, Fuji Xerox Towers, #10-01/02, Singapore 079907 **www.nikon.com.sg**
Nikon (Malaysia) Sdn. Bhd. 11th Floor, Block A, Menara PKNS, No. 17, Jalan Yong Shook Lin, 46050 Petaling Jaya, Selangor Darul Ehsan, Malaysia **www.nikon.com.my**
Nikon Australia Pty Ltd. Unit F1, Lidcombe Business Park, 3-29 Birnie Avenue, Lidcombe NSW 2141, Australia **www.nikon.com.au**
Nikon Imaging Korea Co., Ltd. 12F The Chamber of Commerce & Industry Bldg 45 4ga Namdaemunro, Jung-gu, Seoul, 100-743 Korea **www.nikon-image.co.kr**
Nikon India Private Limited Plot no 17, Sector 32, Institutional Area, Gurgaon 122002, Haryana, India
Nikon Canada Inc. 1366 Aerowood Drive, Mississauga, Ontario L4W 1C1, Canada **www.nikon.ca**

NIKON CORPORATION Fuji Bldg., 2-3, Marunouchi 3-chome, Chiyoda-ku Tokyo 100-8331, Japan **http://nikonimaging.com/**

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