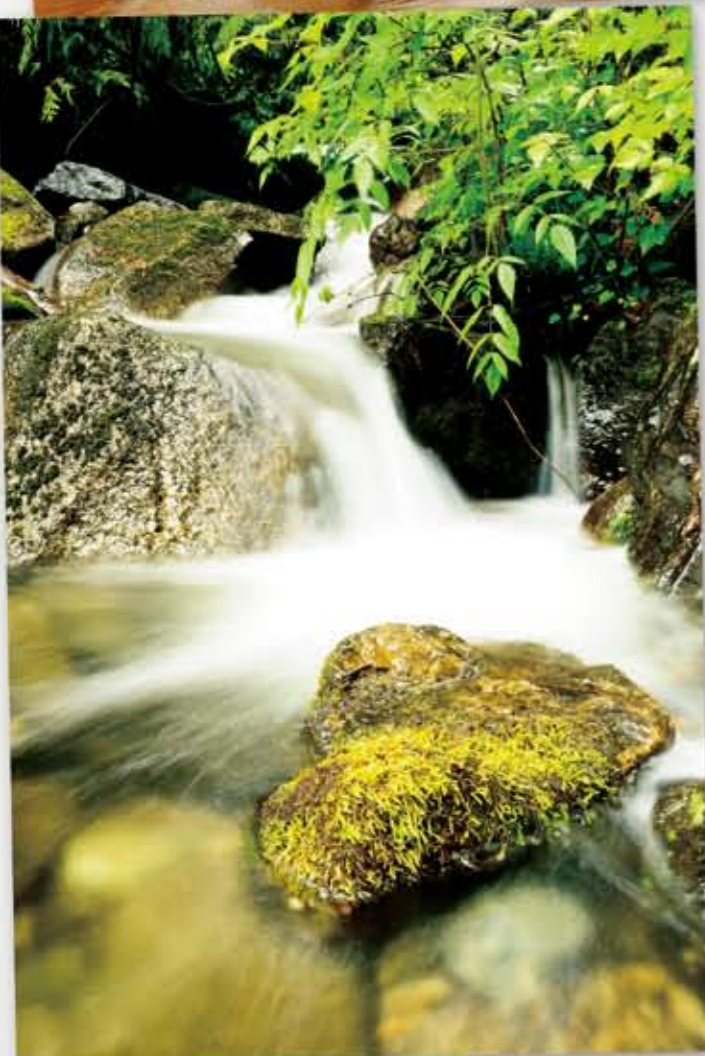






Take a bold approach to low-light scenes: low-noise from ISO 200 to 3200

• Lens: AF-S NIKKOR 14-24mm f/2.8G ED
 • Exposure: [M] mode, 1/30 second, f/2.8 • White balance: Auto • Sensitivity: ISO 3200 • Picture Control: Landscape



Pure, natural color: new Landscape Picture Control

• Lens: AF-S DX NIKKOR 16-85mm f/3.5-5.6G ED VR • Exposure: [M] mode, 1.3 second, f/25
 • White balance: Cloudy • Sensitivity: ISO 200 • Picture Control: Landscape



Capture the most important element clearly: Face priority AF in Live View

• Lens: AF-S DX NIKKOR 18-105mm f/3.5-5.6G ED VR • Exposure: [A] mode, 1/250 second, f/5 • White balance: Cloudy • Sensitivity: ISO 200 • Picture Control: Standard



Photographers, take your passion further

Now is the time for new creativity, and to rethink what a digital SLR camera can achieve.

It's time for the D90, a camera with everything you would expect from Nikon's next-generation D-SLRs, and some unexpected surprises, as well.

The stunning image quality is inherited from the D300, Nikon's DX-format flagship. The D90 also has Nikon's unmatched ergonomics and high performance, and now takes high-quality movies with beautiful results.

The world of photography has changed, and with the D90 in your hands, it's time to make your own rules.

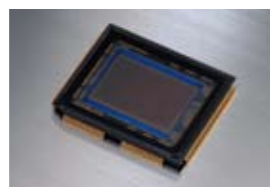
- Incredible image quality using 12.3 effective megapixels, Nikon's DX-format CMOS image sensor and exclusive EXPEED image processing
- Remarkable low-noise performance from ISO 200 to 3200
- D-Movie, an innovative movie shooting feature for digital SLR cameras
- Scene Recognition System integrated with Face Detection System
- Live View capability with 3-in., approx. 920k-dot high-resolution LCD and dedicated Live View button
- Compatible with the Picture Control System and offering new Portrait and Landscape modes for more vibrant, customized colors
- Bright pentaprism viewfinder featuring frame coverage of approx. 96%
- Active D-Lighting for high-contrast lighting situations
- In-camera retouch, including newly added features: Fisheye, Distortion Control and Straighten



Challenge your perception of image quality



The newly developed Nikon DX-format CMOS image sensor with 12.3 effective megapixels and Integrated Dust Reduction System



DX-format CMOS image sensor

The D90 incorporates a newly developed DX-format CMOS image sensor with technology directly inherited from the D300, Nikon's DX-format flagship. With its 12.3 effective megapixels and extraordinarily high signal-to-noise ratio, the D90 delivers low-noise images with detail and tonal gradation beyond your expectations, while Nikon's Integrated Dust Reduction System works to free image-degrading dust particles from the sensor's optical low-pass filter.

EXPEED for smooth tones, rich colors and fine details



EXPEED

Nikon's comprehensive EXPEED technology is engineered to make the most of the sensor's rich, 12.3-megapixel data. The result — color, detail and high-speed processing inspired by the groundbreaking D300. The D90's image-processing engine produces high-resolution pictures at remarkable speeds, better enabling high-speed continuous shooting. EXPEED also contributes to the outstanding performance of other powerful features, including Live View and the new Face Detection System.

Rich color and low noise from ISO 200 to 3200

The D90 gives you the freedom to shoot in a remarkably wide variety of lighting conditions, including dimly lit scenes, without worrying about image-degrading noise. ISO can be raised as high as Hi 1 (ISO 6400 equivalent) or lowered to Lo 1 (ISO 100 equivalent).

Customize the visual style of your images: Picture Control

Nikon's Picture Control System allows you to customize the look and mood of your images. Choose from six settings: Standard, Vivid, Neutral, Monochrome and the newly added Portrait and Landscape. Try using the Quick Adjust* function to easily make further adjustments according to your needs and preferences, then save the settings as Custom Picture Controls.

*Quick Adjust is not available with Neutral and Monochrome settings.

More sophisticated Active D-Lighting for high-contrast lighting situations

Details in the shadows and highlighted areas of your photos are often lost when strong lighting increases the contrast between the bright and dark areas of your image. Nikon's unique Active D-Lighting technology accurately restores these important details by localizing tone control while you shoot. Choose from four levels, including the new Extra High. Active D-Lighting can be used manually or set to Auto mode. It is also possible to bracket your pictures to get one with Active D-Lighting and one without.

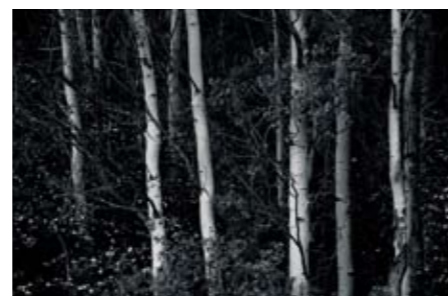
*Matrix metering is recommended when using Active D-Lighting.



Rich color and low noise at high ISO sensitivity
 • Lens: AF-S NIKKOR 24-70mm f/2.8G ED • Exposure: [M] mode, 1/320 second, f/2.8 • White balance: Direct sunlight • Sensitivity: ISO 3200
 • Picture Control: Standard



Picture Control [Vivid]



Picture Control [Monochrome]



Picture Control [Portrait]

• Lens: AF Nikkor 85mm f/1.4D IF • Exposure: [M] mode, 1/800 second, f/5 • White balance: Cloudy • Sensitivity: ISO 200



Active D-Lighting [High]



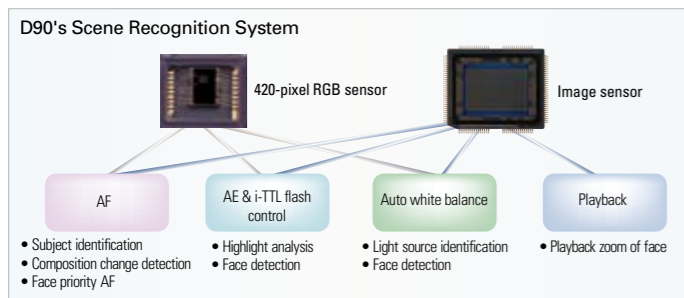
Active D-Lighting [off]

Treat every scene with astounding accuracy



Scene Recognition System with the Face Detection System

First introduced on the D3 and D300 flagship cameras, Nikon's breakthrough Scene Recognition System is also featured in the D90. This unique technology utilizes a 420-pixel RGB sensor to analyze immense amounts of scene and color information in order to understand what the camera is about to shoot. Milliseconds before the shutter is released, the camera optimizes the autofocus, auto exposure, i-TTL control and white balance. The D90 also uses Nikon's new Face Detection System to render human faces with a newfound sharpness and accuracy.



3D-tracking (11 points) maintains sharp focus when changing composition.



3D Color Matrix Metering II delivers consistently well-balanced exposures.



Auto white balance for faithful colors

Improved autofocus performance

The D90 demonstrates amazing autofocus accuracy by utilizing color and brightness information from its 420-pixel RGB sensor. When shooting in Auto-area AF mode, the camera quickly focuses on the main subject by detecting foreground, background and subject position. When using 3D-tracking (11 points) mode, the camera uses your subject's color and brightness information to keep it in sharp focus as you change the composition.

Sophisticated auto exposure

Nikon's 3D Color Matrix Metering II became one of the most highly acclaimed metering systems by delivering consistently well-balanced exposures — even in lighting conditions that confuse other systems. Further extending its exposure capability, Nikon's Scene Recognition System evaluates each scene's highlights, delivering even more light metering precision. Moreover, the D90 detects faces when using face priority AF, giving you ideal exposures of your human subjects.

Incredibly accurate auto white balance

Auto white balance combines with Nikon's Scene Recognition System to analyze each scene's light sources, cross-referencing this information with 5,000 actual picture data examples from over 20,000 images in its onboard white balance database. Even under mixed lighting or difficult light sources like mercury vapor lights, the D90 calculates an ideal white balance for remarkably faithful colors.

Playback zoom

Utilizing information from the new Face Detection System, the D90 detects up to ten human faces during playback. Select one face and the D90 zooms in for faster focus confirmation.

Versatile, practical 11-point AF system

Thanks to Multi-CAM 1000 autofocus module, the D90's 11-point AF system has fast and precise autofocus coverage across the frame with the most sensitive AF sensor operating from the center. In addition, the D90 has versatile AF-area modes to handle most shooting situations: Single-point AF is recommended for stationary subjects, dynamic-area AF for moving subjects, auto-area AF for spontaneous shooting and 3D-tracking (11 points) AF for changing composition after focusing on your subject.



Freeze the moment, capture the movement — the tools are all here



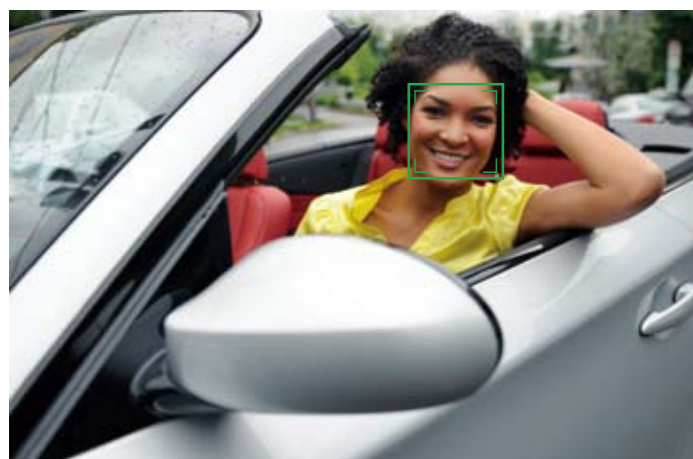
■ Live View with 3-in., 920k-dot, high-density color LCD

Striking images often require uncommon perspectives. With the D90's Live View function, you can shoot effectively without looking through the viewfinder. Simply press Live View's dedicated button for instant access and the 3-in., approx.



Live View button for instant access

920k-dot LCD with its 170-degree viewing angle supports your Live View shooting. There are three contrast-detect AF modes which let you focus on any point in the frame: Face priority AF automatically detects up to five faces and focuses on the one calculated to be the closest. Wide area AF offers a large AF area suitable for handheld shooting and normal area AF provides focus with pinpoint accuracy when using a tripod.



Face priority AF



Wide area AF



Normal area AF

■ Quick responses and shooting at 4.5 frames a second

The D90 captures crucial moments thanks to its impressive 0.15-second start-up time, 65-millisecond shutter release time lag (CIPA standard) and ability to shoot at 4.5 frames a second for up to 100 shots*.

*Normal-Large image setting, using a Panasonic Pro HIGH SPEED 2 GB SD memory card.

■ Innovative D-SLR movie function: D-Movie

A new idea for D-SLRs, the D90 offers a movie function, allowing you to shoot movies in three different motion JPEG formats: 320 x 216 pixels, 640 x 424 pixels and HD720p (1,280 x 720 pixels). Now you can capture life's moving moments with added drama by using many of Nikon's NIKKOR lenses, including the AF DX Fisheye 10.5mm f/2.8G ED and the Micro-NIKKOR lenses. The shallow depth of field can give your movies a more creative and emotional impact. An additional benefit is the D90 image sensor, which is much larger than a typical camcorder for higher image quality and exceptional high ISO performance during low-light shooting.

*Autofocus is not available when recording movies. Matrix metering is used regardless of the metering method selected.



D-Movie can be played on the camera's LCD monitor, as well as on a computer, TV or HDTV screen.

■ Large, bright viewfinder features 96% frame coverage

The D90 has a precise eye-level pentaprism viewfinder with approx. 96% (centered) frame coverage and an easy-to-view 19.5mm eyepoint (at -1.0 m⁻¹), so photographers can concentrate on capturing the moment. The built-in 16-frame grid display can be activated to align the horizontal and vertical lines in your image or assist in more pleasing compositions.



Pentaprism

■ Built-in, pop-up flash commands Advanced Wireless Lighting

The D90 is equipped with Nikon's i-TTL flash control, renowned for consistently accurate and balanced flash exposures. The built-in flash has an 18mm lens coverage and works as a wireless commander, controlling up to two independent groups of an unlimited number of remote Speedlights and providing incredible creative lighting control — on location or in the studio.



Advanced Wireless Lighting
SB-600 controlled by the D90's built-in flash working as a commander.
• Lens: AF-S DX NIKKOR 18-105mm f/3.5-5.6G ED VR • Exposure: [A] mode, 1/60 second, f/5.6
• White balance: Direct sunlight • Sensitivity: ISO 800 • Picture Control: Standard

■ Ergonomic superiority in a light, compact body

At a remarkably light 1 lb. 6 oz./620 g, the D90 is designed to meld with a photographer's hands. Its compact body offers a stable grip and an intuitive layout of controls that make operation and creative flow natural and effortless.

■ New Advanced Scene Modes

When you're not sure which camera settings are appropriate, simply rely on the Advanced Scene Modes. Just turn the mode dial to the appropriate icon: Portrait, Landscape, Close-up, Sports or Night Portrait. Unlike traditional scene modes, the D90 will automatically optimize the exposure, image processing, Active D-Lighting, and Picture Control to get the most out of your subject matter. What's more, the D90 has exceptional low-noise performance and accurately adjusts the camera settings whether VR (Vibration Reduction) is activated or not, so you can expect beautiful, crisp images, even in many low-light scenes.



Portrait



Landscape



Close-up



Night Portrait



Maintain the excitement in-camera and online



■ Proven endurance: Resilient shutter units

Reliability is not a luxury — it's a necessity. That's why Nikon subjected numerous D90 shutter mechanisms to grueling 100,000-cycle shutter-release tests with the unit fully assembled in the camera.



Shutter unit

■ Intelligent power management

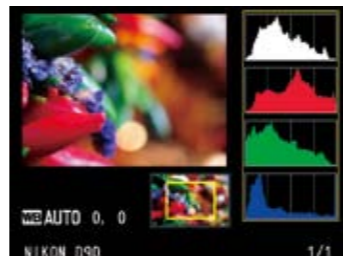
Because of the D90's highly efficient energy-saving design, approx. 850 pictures can be taken on a single charge of the Rechargeable Li-ion Battery EN-EL3e. (CIPA standard, with AF-S DX NIKKOR 18-105mm f/3.5-5.6G ED VR, with 50% of pictures taken with flash)

■ More playback options

The D90 gives you ample options for viewing and selecting the right shot. Thumbnail display can show up to 72 frames at a time on the LCD, while Calendar playback arranges images in chronological order. You can also check the histograms of a magnified portion of an image. When selecting shots for deleting, hiding, printing and Pictmotion, you can also choose an image by specifying date of capture.



72-frame playback



Histogram of a magnified portion of an image

■ Extensive in-camera Retouch Menus

The D90's wide variety of image editing functions makes it possible for you to enhance your pictures without the need for a computer, making creative exploration easier than ever.

The editing menus

- Straighten (manual control in +/-5 degree)
- Distortion Control (automatic compensation using lens information and manual compensation selectable)
- Fisheye (optical effects similar to a fisheye lens, select from 10 levels)
- D-Lighting
- Red-eye Correction
- Trim
- Monochrome
- Filter Effects
- Color Balance
- Small Picture
- Image Overlay
- NEF (RAW) Processing
- Quick Retouch

• Straighten



Original



• Fisheye



Original



■ An exciting way to enjoy images:

HDMI compatibility



You can enjoy both still images and movies shot with the D90 via HDMI (High-Definition Multimedia Interface) with the global-standard digital A/V signal transfer. Type C connector (mini size) is employed.

■ Original slideshow: Pictmotion

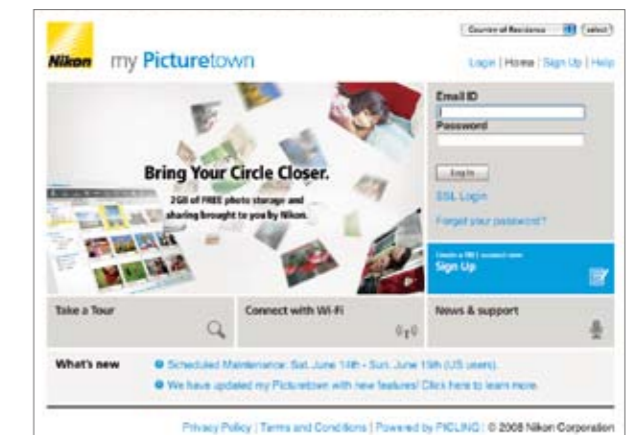
Try Nikon's easy-to-use Pictmotion function to create innovative slideshows combining five choices of both background music and image effects. You can watch the slideshow on your 3-in. LCD, a TV screen via video output or an HDTV set via HDMI output.

■ Store your images online: Nikon's my Pictown

Transfer your memories instantly to my Pictown, Nikon's simple online storage and sharing site for photos and video. Nikon's my Pictown platform supports the following file formats: NEF (RAW), JPEG, MOV and AVI.

my **Pictown**

<http://mypictown.com>



Memory card capacity

The following table shows the approximate number of pictures that can be stored on a 2 GB Panasonic Pro HIGH SPEED SD (secure digital) card at different image quality and size settings.

Image quality	Image size	File size*1	Number of available shots*1	Number of consecutive shots available*2
NEF (RAW) + JPEG fine*3	Large	16.9 MB	89	7
	Medium	14.4 MB	104	7
	Small	12.4 MB	118	7
NEF (RAW) + JPEG normal*3	Large	13.9 MB	106	7
	Medium	12.6 MB	116	7
	Small	11.6 MB	124	7
NEF (RAW) + JPEG basic*3	Large	12.3 MB	118	7
	Medium	11.7 MB	123	7
	Small	11.2 MB	128	7
NEF (RAW)	—	10.8 MB	133	9
JPEG fine	Large	6.0 MB	271	25
	Medium	3.4 MB	480	100
	Small	1.6 MB	1000	100
JPEG normal	Large	3.0 MB	539	100
	Medium	1.7 MB	931	100
	Small	0.8 MB	2000	100
JPEG basic	Large	1.5 MB	1000	100
	Medium	0.9 MB	1800	100
	Small	0.4 MB	3800	100

Approved memory cards

The following SD memory cards have been tested and approved for use in the D90. All cards of the designated make and capacity can be used, regardless of speed.

SanDisk	512 MB, 1 GB, 2 GB*1, 4 GB*2, 8 GB*2
Toshiba	512 MB, 1 GB, 2 GB*1, 4 GB*2, 8 GB*2, 16 GB*2, 32 GB*2
Panasonic	512 MB, 1 GB, 2 GB*1, 4 GB*2, 8 GB*2, 16 GB*2, 32 GB*2
Lexar Media	512 MB, 1 GB, 2 GB*1, 4 GB*2
	Platinum II: 512 MB, 1 GB, 2 GB*1, 4 GB*2
	Professional: 1 GB, 2 GB*1, 4 GB*2

*1 If card will be used with a card reader or other device, check that the device supports 2 GB cards.

*2 SDHC compliant. If card will be used with a card reader or other device, check that the device supports SDHC.

*1 All figures are approximate. File size varies with scene recorded.

*2 Maximum number of exposures that can be stored in memory buffer. May vary depending on conditions.

*3 Image size applies to JPEG images only. Size of NEF (RAW) images cannot be changed. File size is the total for NEF (RAW) and JPEG images.

A world of excellence at your command

NIKKOR lenses: Exceptional image integrity on Nikon cameras

For over 75 years, NIKKOR lenses have delivered unmatched optical performance. From ultra-wide-angle to super telephoto, NIKKOR lenses have been praised the world over for their ability to deliver extraordinary sharpness, contrast, color accuracy and consistency. Many NIKKOR interchangeable lenses include the advantage of Nikon's VR (Vibration Reduction) system, allowing you to shoot up to three or four shutter speeds slower* than would otherwise be possible. This is just one of a host of innovative technologies that give NIKKOR lenses the level of quality that so many professionals demand.

*Under Nikon measurement conditions

AF-S DX NIKKOR 18-105mm f/3.5-5.6G ED VR

This is a versatile 5.8x zoom lens with VR (Vibration Reduction), making it ideal for a wide range of photography — from landscapes to portraits. The aspherical lens element and ED glass are used for superb sharpness. (Picture angle is equivalent to a 27-157.5mm lens in 35mm and FX-formats.)

AF-S DX NIKKOR 16-85mm f/3.5-5.6G ED VR

This compact and lightweight lens covers the wide focal range of 16mm, and with VR II (Vibration Reduction), you can shoot at shutter speeds up to four stops slower* and ED glass elements control color aberration. (Picture angle is equivalent to a 24-127.5mm lens in 35mm and FX-formats.)

*Under Nikon measurement conditions

AF-S Micro NIKKOR 60mm f/2.8G ED

This impressive lens lets you shoot as close as 7.28 in./18.5cm. Its Nano Crystal Coat reduces ghost and flare lighting problems in backlit situations or when shooting towards a light source, while two aspherical lens elements and ED glass deliver precision for your close-up photography. (Picture angle is equivalent to a 90mm lens in DX-format.)

Lens Compatibility Chart

Camera setting	Focus mode			Exposure mode		Metering system		
	AF	M (with electronic rangefinder)	M	☉	☉	3D	Color	☐
Lens/accessory								
Type G or D AF Nikkor ² , AF-S, AF-I Nikkor	○	○	○	○	○	○	—	○ ³
PC-E NIKKOR series ⁴	—	○	○	○	○	○	—	○ ³
PC Micro 85mm f/2.8D ⁵	—	○ ⁴	○	—	○	○	—	○ ³
AF-S / AF-I teleconverter ⁶	○ ⁷	○ ⁷	○	○	○	○	—	○ ³
Other AF Nikkor (except lenses for F3AF)	○ ⁸	○ ⁸	○	○	○	—	○	○ ³
AI-P Nikkor	—	○ ⁹	○	○	○	—	○	○ ³
AI-, AI modified Nikkor or Nikkor Series E lenses	—	○ ⁹	○	—	○ ¹¹	—	—	—
Medical-Nikkor 120mm f/4	—	○	○	—	○ ^{11,12}	—	—	—
Reflex-Nikkor	—	—	○	—	○ ¹¹	—	—	—
PC-Nikkor	—	○ ⁴	○	—	○ ¹¹	—	—	—
AI-type Teleconverter	—	○ ⁷	○	—	○ ¹¹	—	—	—
PB-6 Bellows Focusing Attachment ¹³	—	○ ⁹	○	—	○ ¹¹	—	—	—
Auto extension rings (PK-series 11A, 12, or 13; PN-11)	—	○ ⁹	○	—	○ ¹¹	—	—	—

Nikon Creative Lighting System

The D90 works seamlessly with Nikon Speedlights such as the SB-900, SB-800, SB-600, SB-400 and Wireless Speedlight Commander SU-800. It is also fully compatible with the Nikon Creative Lighting System and the built-in flash works as a commander for off-camera Speedlights to deliver accurate flash lighting via i-TTL flash control and Advanced Wireless Lighting.



Multi-Power Battery Pack MB-D80

The MB-D80 gives you the choice of using one or two Rechargeable Li-ion Battery EN-EL3e or six R6/AA-size batteries*¹ to extend your battery life up to 1700 shots*². An ergonomically placed shutter-release button also allows for more comfortable vertical shooting.

*1 Compatible R6/AA-size batteries: alkaline, Ni-MH, lithium and nickel-manganese
*2 When using two Rechargeable Li-ion Battery EN-EL3e

Remote Cord MC-DC2

Ideal for tripod shooting, the MC-DC2 allows you to release the shutter when you want to avoid camera vibration or to shoot from a distance. It can also keep the shutter-release button pressed for long-time exposures (bulb).

GPS Unit GP-1

With the GPS Unit GP-1 attached to the D90, location information such as latitude, longitude, altitude and time are automatically recorded to each image's EXIF data.

- 1 IX-Nikkor lenses cannot be used.
- 2 Vibration Reduction (VR) supported with VR lenses.
- 3 Spot metering meters selected focus point.
- 4 Cannot be used with shifting or tilting.
- 5 The camera's exposure metering and flash control systems may not function as expected when the lens is shifted and/or tilted or an aperture other than the maximum aperture is used.
- 6 AF-S or AF-I lens required.
- 7 With maximum effective aperture of f/5.6 or faster.
- 8 When AF 80-200mm f/2.8, AF 35-70mm f/2.8, AF 28-85mm f/3.5-4.5 (New), or AF 28-85mm f/3.5-4.5 lenses are zoomed all the way in at the minimum focus distance, the in-focus indicator may be displayed when the image on the matte screen in the viewfinder is not in focus. Focus manually until image in viewfinder is in focus.
- 9 With maximum aperture of f/5.6 or faster.
- 10 Some lenses cannot be used.
- 11 Electronic analog exposure display cannot be used.
- 12 Shutter speeds slower than 1/60 s not available.
- 13 Attach in vertical orientation; can be used in horizontal orientation once attached.

Capture NX 2

Powerful tools for quick and easy photo editing

Nikon's latest non-destructive photo editing software gets the most out of your JPEG, TIFF and RAW (NEF) photographs. Like Nikon's Picture Control feature, Capture NX 2 is designed for photographers. It features the award-winning



patented U Point[®] technology, which enables you to:

- Modify and enhance color and details quickly and precisely with only a few mouse clicks
- Quickly fix blemishes and other distracting elements with the Auto Retouch Brush
- Easily select any area for adjustment without the need for complicated layers or masks
- Enjoy full support for all RAW (NEF) settings



ViewNX

Browse and organize with ease

This powerful photo browsing and editing software is supplied with your D90. With one click, the browser allows you to work with your RAW (NEF) and JPEG files, which can also be used to adjust exposure compensation and white balance or optimize images via the Picture Control utility. Labels can be added to help categorize, prioritize and filter your images. You can even create your own Picture Control settings and save the results for sharing with other D-SLRs that support Picture Control.



Camera Control Pro 2

Take control of your photography — remotely

With Camera Control Pro 2, you can remotely operate and adjust most of the D90's settings, including full control of Live View, Picture Control, white balance and the 11-point AF system.

Capture NX 2 system requirements

	Windows	Macintosh
OS	Pre-installed versions of 32-bit Windows Vista Home Basic /Home Premium / Business /Enterprise /Ultimate (Service Pack 1) editions or Windows XP Home or Professional (Service Pack 2) editions	Macintosh OS X (version 10.4.11, 10.5.2)
Processor	Pentium 4 or better	PowerPC G4, PowerPC G5, Intel Core Duo, Intel Core 2 Duo, Intel Xeon, or better
RAM (Memory)	768 MB minimum (1 GB or more recommended)	
Hard-disk space	200 MB required for installation	
Monitor resolution	1,024 x 768 pixels or higher (1,280 x 1,024 pixels or higher recommended) with 16-bit color or more (32-bit color recommended)	1,024 x 768 pixels or higher (1,280 x 1,024 pixels or higher recommended) with 64,000 colors or more (16.7 million colors or more recommended)
Others	<ul style="list-style-type: none"> • CD-ROM drive required for installation • Internet connection required to utilize Nikon Message Center • Environment for recognizing operation-guaranteed memory cards required to import/export Custom Picture Controls 	

SYSTEM CHART

