Nikon ®

At the heart of the image ™

D300™

75th Anniversary **NIKKOR**

60th Anniversary Nikon Cameras

Precision engineered to deliver new professional-level functionality, performance and reliability, the Nikon D300 combines innovative Nikon technologies with advanced new features to optimize all aspects of camera performance and form the ideal blend of Nikon DX-format performance.

Empower Creativity

- ◆ New 12.3 effective megapixel Nikon DX-format CMOS image sensor
- ◆ New EXPEED Digital Image Processing concept
- ◆ Selectable 12-bit or 14-bit A/D conversion with full 16-bit processing
- ◆ Nikon's new exclusive Scene Recognition System
- ◆ New 51-point autofocus system with advanced AF modes and 3D Focus Tracking
- ◆ Large, bright pentaprism viewfinder features frame coverage of virtually 100%
- ◆ Rapid 6 frames per second[1] continuous shooting up to 100 JPEG images[2,3]
- ◆ Up to 8 fps[4] continuous shooting for up to 100 shots[2,3] with Multi-Power Battery Pack MB-D10
- ◆ New Picture Control settings for fine-tuned image control
- ◆ New Live View with two modes for Hand-held and Tripod shooting situations
- ◆ New Self-cleaning Sensor Unit provides effective dust reduction
- ◆ New 3-in. LCD with approx. 920,000-dot resolution, 170° wide-angle viewing and rugged tempered glass protection
- ◆ Instant start-up of 0.13 s power-up and 45-millisecond shutter release time lag[5]
- ◆ Magnesium alloy body for strength, durability and light weight
- ◆ New Active D-Lighting allows the choice to automatically optimize tone reproduction in both shadows and highlights during exposure

D300™

*1 When using Rechargeable Li-ion Battery EN-EL3e. *2 NORMAL-LARGE image setting, using a SanDisk Extreme IV CompactFlash card. *3 When shooting in Continuous-servo AF (C) using Shutter-Priority Auto [S] or Manual [M] exposure modes and a shutter speed of 1/250 s or faster with other settings at default. Continuous shooting speed for 14-bit NEF (RAW) is approx. 2.5 fps. *4 8 fps requires either 1) Multi-Power Battery Pack MB-D10 with Battery Chamber Cover BL-3 and either Rechargeable Li-ion Battery EN-EL4/EN-EL4a or eight R6/AA-size batteries or 2) AC Adapter EH-5a/EH-5, all of which are sold separately. *5 When shooting in JPEG, TIFF or 12-bit NEF (RAW) formats.

New 12.3 megapixel DX-format CMOS image sensor

Developed to provide the highest level of DX-format photographic performance and assuring response needed for virtually any shooting conditions, the new 12.3 effective megapixel DX-format CMOS image sensor for the D300 also delivers compact Nikon DX-format system size and technology advantages. Its integrated analog-to-digital converter offers the ability to select between high quality 12-bit or 14-bit conversion, and its design encompasses a broad light sensitivity range of ISO 200 to 3200, (plus Lo 1, ISO 100 equivalent and Hi 1, ISO 6400 equivalent). High-speed output enables rapid continuous shooting and realizes the new Live View shooting modes. The Optical Low Pass Filter (OLPF) not only helps prevent moiré, color fringing and shifting, but also functions as part of Nikon's first Self-cleaning Sensor Unit built into the D300.

Self-cleaning Sensor Unit

The D300's Dust-reduction System with the new Self-cleaning Sensor Unit uses four different resonance frequencies to vibrate the OLPF in front of the image sensor and shake particles free.

Nikon's EXPEED for a new level of processing speed and precision

Nikon's comprehensive new EXPEED Digital Image Processing concept marks the culmination of years dedicated to advancing photographic and digital imaging technologies to best satisfy the needs of photographers. The processing system developed for the D300 applies optimized technologies based on the EXPEED concept to deliver processing power that not only extends the achievable levels of high resolution, fine detail and high image quality, but also improves system performance for faster continuous shooting, faster memory card access and the implementation of the Live View shooting modes. All internal processing is handled in full 16-bit color, rendering improved tone characteristics, finer detail and higher image quality, all at outstanding speed that exemplifies this level of precision. Additionally, lateral chromatic aberration reduction effectively reduces color bleeding around the image periphery.

The new heart of ultimate DX-format performance

Raising the bar on DX-sensor and processing performance for limitless creative possibility

Nikon

D300

Nikon EXPEED

JAPAN

**EXPEED** ™

New Scene Recognition System

Nikon's new and exclusive Scene Recognition System helps optimize autofocus, auto exposure and auto white balance performance by advancing the use of Nikon's acclaimed 1,005-segment RGB sensor to recognize the conditions of the subject and framed scene prior to capturing the shot.
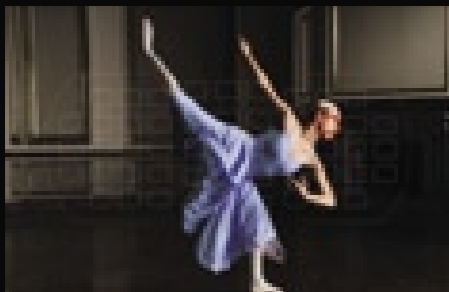
Improves autofocus on moving subjects

Detects highlight areas
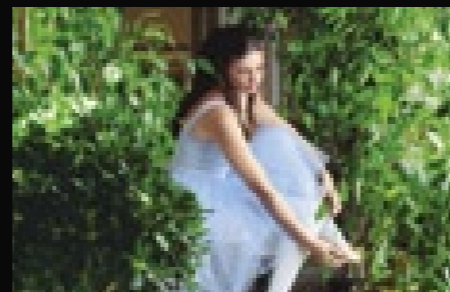
Detects scene characteristics and recognizes patterns

Contribution to AF performance

Subject tracking data computed from the 1,005-segment RGB sensor greatly improves the speed and precision of automatic focus point selection, particularly for 3D-tracking and Automatic-area AF. Having recognized the color of a subject within a user-selected focus point, the system automatically traces and tracks subject movement, and even effectively predicts focus if the subject momentarily moves outside the focus points. Subject identification information is also used to distinguish your subject from the background and sky when shooting portraits.

Contribution to AE performance

The finely segmented metering data from the 1,005-segment RGB sensor enables highly detailed detection of highlight areas. The results of this highlight analysis are used to compute the range of brightness to be reproduced, which provides more accurate exposure control.

Contribution to Auto White Balance performance

Accurate light source identification is obtained as information captured prior to exposure by extracting scene characteristics while recognizing patterns. It is then applied to the auto white balance algorithms for optimal selection of white balance to match the scene.

Recognizing every scene as unique

Intelligent light, color and subject position analysis enables you to command the scene

Light and color information from the 1,005-segment RGB sensor is used to recognize the conditions of the subject & scene prior to shooting

Image shown above is for representation purposes only.

3D-tracking automatically switches the point of focus to maintain precise subject lock

Single-point AF lets you select any individual focus point for shooting still subjects
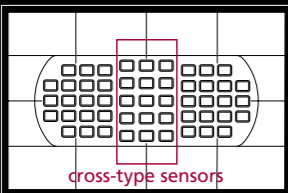

Dynamic-area AF modes are useful for tracking moving subjects over a wide area

New precision 51-point AF system

Featuring the world's largest number[1] of focus points laid out in an intelligent

cross-type sensors

array of 15 cross-type sensors and 36 vertical sensors, Nikon's new Multi-CAM 3500DX autofocus module maximizes the potential of lenses with maximum apertures of f/5.6[2] and instils the D300 AF system with a new level of speed, precision and high-density frame coverage. Benefits gained from working with Nikon's new Scene Recognition System and improved focus algorithms

also contribute to the system's impressive performance. The 51-point AF system also allows the use of an 11 focus point mode.

[1] Among digital SLR cameras as of August 23, 2007 (according to research conducted by NIKON CORPORATION)
[2] Depending upon the shooting conditions, some lens and teleconverter pairs will limit the function of the upper and lower three cross-type sensors to line sensor operation, even if the combined theoretical aperture is f/5.6.

Dynamic-area AF modes

Dynamic-area AF allows a choice of three different size areas using groups of either 9, 21 or all 51 focus points. Also available is 51-point Dynamic-area AF with 3D-tracking; automatic focus point switching that takes full advantage of all 51 AF points as it uses color and light information to accurately track the subject.

High-speed shooting at up to 8 fps

The D300 is capable of shooting continuous bursts of up to 100 shots[1] at a rapid 6 fps[2], and as fast as 8 fps[3] when using the Multi-Power Battery Pack MB-D10.

[1] NORMAL - LARGE image setting, using a SanDisk Extreme IV CompactFlash card
[2] When using one Rechargeable Li-ion Battery EN-EL3e
[3] 8 fps requires either 1) Multi-Power Battery Pack MB-D10, Battery Chamber Cover BL-3 and either Rechargeable Li-ion Battery EN-EL4/EN-EL4a or 8 R6/AA-size batteries or 2) AC Adapter EH-5a/EH-5, all of which are sold separately.

Response that's always ready to go

Power-up within 0.13 s, a shutter release time lag of 45-milliseconds[1], and viewfinder blackout time of approx. 90-milliseconds[2] contribute to optimized all-around performance that lets photographers respond to any sudden shutter opportunities.

[1] When shooting in JPEG, TIFF or 12-bit NEF (RAW) formats
[2] When shooting at 6 fps, 86-milliseconds when shooting at 8 fps

Acquisition of winning performance

Pinpoint precision, responsive shooting and total flexibility to capture any subject, anywhere

New Picture Control System

A new system developed by Nikon to respond to the needs of photographers, Picture Control makes it easy to select and apply desired adjustments and create optimized images to suit individual preferences and shooting styles. Those using multiple camera bodies will also appreciate that the same settings produce consistent picture tone on all camera models that support the Nikon Picture Control system.
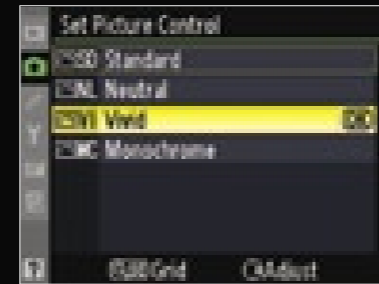
PICTURE CONTROL™

It's as easy as starting with one of the four basic setting files - Standard, Neutral, Vivid or Monochrome - as a base, or from one of up to 9 user-created custom Picture Controls. These can be directly modified for easy adjustment and customization of individual image parameters, including sharpness, contrast, brightness, color saturation, tone and the monochrome filter effects. Or, when

in Standard or Vivid, parameters can be adjusted at once using the new Quick Adjust function. The results achieved can be saved as a custom Picture Control to a CompactFlash memory card for easy transfer to another D300 or D3 camera body as well as to a computer.
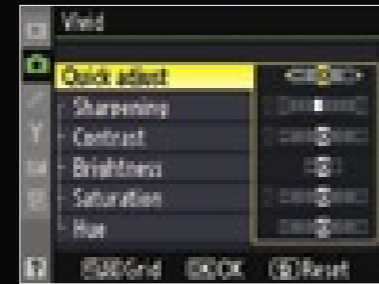
Software integration maximizes workflow efficiency

The system's intuitive interface and easy-to-master settings for creating Picture Controls and applying adjustments to images are also available within Nikon's software programs, Capture NX*, ViewNX and Camera Control Pro 2*. To maximize workflow efficiency and further expand creative freedom, custom Picture Controls created within Capture NX or Camera Control Pro 2 can also be transferred to and used in the camera.
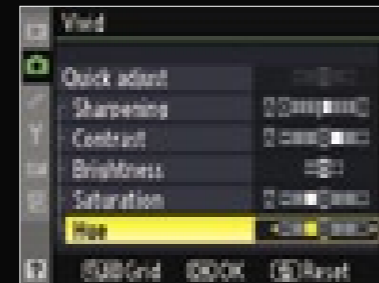
* Optional software

Ultimate control over consistent results

Achieve finished images that match your vision, with predictable results that can be repeated even when changing camera bodies

Picture Control selection menus

Quick Adjust screen

Adjustment setting screen

Picture Control Grid display

Standard
Suitable for most shooting situations, produces results that are colorful, yet with a balanced, natural tone.

Neutral
Produces natural-looking results that establish a precedence for reproducing the subject material as observed when shooting. Well suited for faithful post-processing.

Vivid
Produces colorful results with extra punch. A handy setting when you wish to emphasize primary colors.

Monochrome
Produces customizable black & white, sepia and other monochrome images. Four filters are available for contrast control including red, orange, green and yellow.
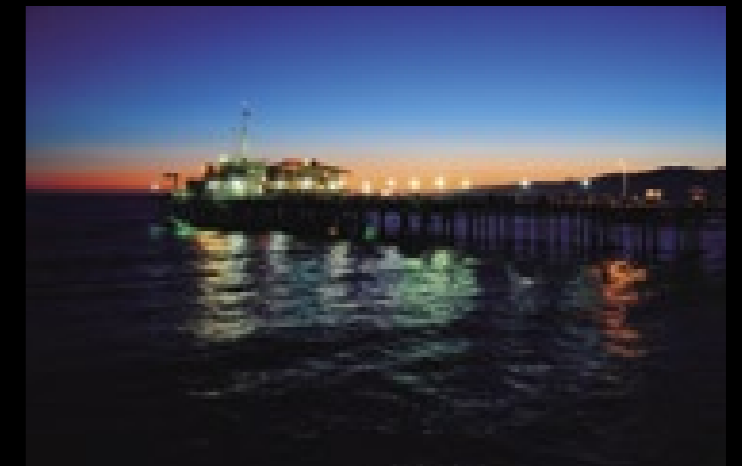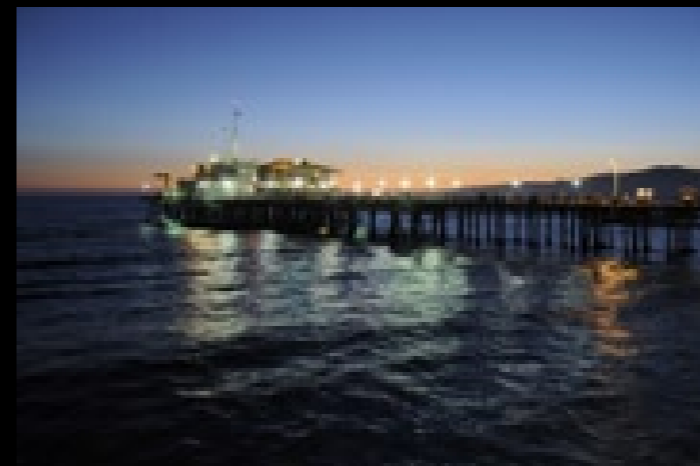
Custom
(Left) Using preset Standard Picture Control with the following adjustments implemented: Sharpness [+7], Contrast [-2], Brightness [+1], Saturation [-2], Hue [0].
(Right) Using preset Vivid Picture Control with the following adjustments implemented: Sharpness [+6], Contrast [0], Brightness [-1], Saturation [+3], Hue [-3].

1	2
3	4
5	6

1. • AF-S DX VR Zoom-Nikkor 18-200mm f/3.5-5.6G ED
• 1/1250 second, f/5.6
• White balance: Auto
• ISO sensitivity: 200
• Picture Control: Standard

2. • AF-S VR Micro-Nikkor 105mm f/2.8G ED
• 1/80 second, f/5.6
• White balance: Flash
• ISO sensitivity: 200
• Picture Control: Neutral

3. • AF-S DX VR Zoom-Nikkor 18-200mm f/3.5-5.6G ED
• 1/2000 second, f/5.3
• White balance: Auto
• ISO sensitivity: 200
• Picture Control: Vivid

4. • AF-S DX VR Zoom-Nikkor 18-200mm f/3.5-5.6G ED
• 1/320 second, f/5
• White balance: Auto
• ISO sensitivity: 200
• Picture Control: Monochrome

5/6. • AF-S DX VR Zoom-Nikkor 18-200mm f/3.5-5.6G ED
• 1/2.5 second, f/4.5
• White balance: Auto
• ISO sensitivity: 400
• Picture Control: Custom

New 3-in. high-resolution VGA LCD monitor

The D300 features an expansive new 3-in. VGA LCD monitor. Its unprecedented approx. 920,000-dot resolution and reduced flicker digital output assures clear and detailed image display, which is invaluable for confirming focus or assessing image sharpness at up to 27 times* magnification. A wide 170˚ viewing angle from all directions and bright display makes it easy to view images or confirm menu settings when shooting outdoors. Playback options include single frame, 4 or 9-image thumbnail display, as well as channel-independent RGB histogram and highlight point displays. Tempered glass protection enhances D300 durability.
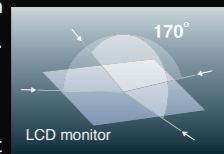
* [L]-size JPEG or NEF (RAW) images

Two Live View modes for framing and composition using the LCD

Nikon's new Live View function* enhances the D300's fast image processing capacity and large, high-resolution LCD to offer a new level of creative potential that lets you use the LCD in place of the viewfinder for confirming subjects and composition when you cannot physically see your subject through the viewfinder, or where exact focus is crucial. Remote preview, focusing and shooting from a PC (wired or wireless) are also available when using optional Nikon Camera Control Pro 2 software.

* Although Live View can be used for up to an hour, the function is automatically terminated if the camera's internal temperature rises beyond set parameters. In such a case, a 30-second countdown timer appears in the upper left corner of the LCD monitor before Live View shooting ends.

Hand-held mode

Hand-held mode and the LCD's 170° wide viewing angle are a great help when shooting from high or low angles that make it difficult to see through the viewfinder, such as when holding the camera above your head to shoot over a crowd. You can easily recompose the frame prior to actual shooting using standard phase-detection AF and all 51 AF points.

Tripod mode

Tripod mode is ideal for still life photography in a studio environment. High-precision focal plane contrast AF using the D300's CMOS sensor achieves pinpoint focus on the subject. And the ability to zoom in up to 13 times on the area surrounding any focus point serves as a major aid to even more precise focus adjustment.

The ultimate balance of advanced function and control

From Live View to wireless image transfer and remote camera control, each function is designed to maximize creative productivity

Use Live View's Tripod mode and the 3-in. high-resolution LCD for confirming subjects that offer a challenge when focusing through the viewfinder. For even more assurance, install Camera Control Pro 2 software and use Live View to confirm each shot on your computer's monitor before releasing the shutter remotely.

## New Wireless Transmitter WT-4/4A*1 (optional)

Nikon's Wireless Transmitter WT-4/4A delivers the convenience and efficiency of extended image transfer options via IEEE 802.11b/g/a wireless connections, as well as wired 10BASE-T and 100BASE-TX connections. New Thumbnail Select mode*2 permits thumbnail display of images taken with up to five wirelessly connected cameras on a computer display. Images selected by confirming the thumbnail can be downloaded and saved on the computer. With this mode, both photographer and computer operator can concentrate on their own assignments. Remote camera operation and image viewing, including the use of Live View, is also available when the Wireless Transmitter WT-4/4A is used in conjunction with optional Camera Control Pro 2.

*1 The WT-4 is sold in countries that approve the use of thirteen frequency channels. The WT-4A version is sold in countries that limit use to eleven frequency channels.
*2 Supplied software should be pre-installed.
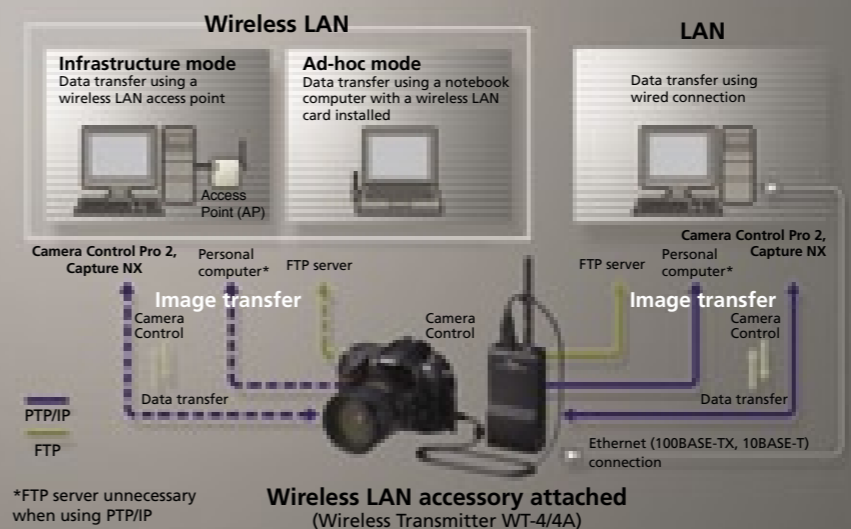
Camera Control Pro 2 (optional)

Camera Control Pro 2 remote control software lets you change most camera settings, take photos and transfer image data remotely from a computer via USB, Firewire (IEEE 1394) or Wi-Fi connections. A revised interface ensures easy operation and efficient workflow. Included is the new enhanced Viewer function that quickly transfers thumbnail and preview images to the computer, making it easier and quicker to confirm which shots should be transferred and which will be deleted without transferring the actual image data.

Camera Control Pro 2 adds support for controlling advanced new features of the D300 and D3, including the new Picture Control System, the 51-point AF system and the new double-axis white balance fine-tuning scheme, which adds a vertical axis of color cast direction for more precise control. Of particular note is added support for Live View, with full control over the respective features of Hand-held and Tripod modes.

ViewNX

Designed to support the viewing and assessment of large collections of images in full size or handy thumbnail sizes, ViewNX (available as part of the Software Suite CD-ROM) makes it easier to browse, compare and organize files. Moreover, compatibility with Capture NX enables productive workflow.

ViewNX System Requirements (Ver. 1.0)

OS	Windows: Preinstalled versions of Windows Vista Home Basic/Home Premium/Business/Enterprise/Ultimate (32-bit), Windows XP Home Edition/Professional (SP2), Windows 2000 Professional (SP4) Macintosh: Mac OS X (version 10.3.9, 10.4.10)
CPU/Model	Windows: Intel Celeron/Pentium 4/Core series 1 GHz or higher Macintosh: Power PC G4/G5, Intel* Core series / Xeon series
RAM	Windows: 512 MB required, 1 GB or more recommended (Windows Vista 1 GB required, 1.5 GB or more recommended) Macintosh: 512 MB required, 1 GB or more recommended
Hard disk	50 MB required for installation, 500 MB required (1 GB recommended) for operation
Display	Windows: XGA (1024 x 768 or more) with 24-bit color or more recommended Macintosh: XGA (1024 x 768 or more) with 16.7 million colors or more
Others	File compatibility • Compliant with images, movies, sound files and image dust off data created by Nikon digital cameras • Compliant with NEF, TIFF (RGB) and JPEG format images generated by Nikon application software • CD-ROM drive required for installation

* Universal binary compliant

Wireless Transmitter WT-4/4A Image Transfer System

Wireless LAN **LAN**

Infrastructure mode
Data transfer using a wireless LAN access point

Ad-hoc mode
Data transfer using a notebook computer with a wireless LAN card installed

Data transfer using wired connection

Access Point (AP)

Camera Control Pro 2, Capture NX
Personal computer*
FTP server

Camera Control Pro 2, Capture NX
FTP server
Personal computer*

Image transfer
Image transfer

Camera Control
Camera Control
Camera Control

PTP/IP
FTP

Data transfer
Data transfer

Ethernet (100BASE-TX, 10BASE-T) connection

*FTP server unnecessary when using PTP/IP

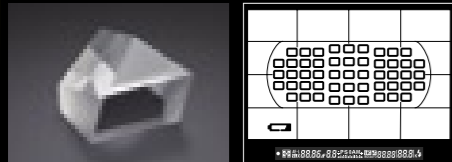**Wireless LAN accessory attached**
(Wireless Transmitter WT-4/4A)

Without Active D-Lighting

With Active D-Lighting

Large viewfinder features frame coverage of virtually 100%

The new eye-level pentaprism viewfinder for the D300 aids composition and adds assurance to focus control by providing frame coverage of virtually 100% and large 0.94x magnification.

Large top control panel

The large top LCD panel is designed to convey maximum information at a glance, and is even tilted slightly rearward for easier viewing.

Informative displays provide valuable feedback

The lettering for information displays can be manually or automatically switched between black and white lettering to best suit the lighting conditions when shooting. An advanced battery indicator conveys detailed information for both the battery installed in the camera as well as batteries in the Multi-Power Battery Pack MB-D10.
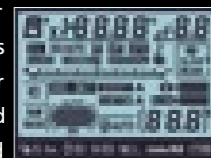
Active D-Lighting provides real-time highlight and shadow correction

Active D-Lighting helps produce broader tone reproduction in both shadows and highlights, all while applying localized tone control technology to achieve natural looking contrast across the entire image for more attractive results with greater detail. Simply choose the desired strength level before shooting and let Active D-Lighting prove its worth when shooting high contrast scenes, such as a shaded subject on a sunny day or a brightly lit outdoor scene shot through a door or window.

Exposure modes that provide flexible control

[P] Programmed auto mode automatically sets both shutter speed and aperture, and includes Flexible Program for fast selection of alternate shutter speed and aperture combinations. [S] Shutter-Priority auto offers shutter speed selection from 1/8,000 to 30 s. [A] Aperture-Priority auto allows free selection from among all aperture settings. [M] Manual gives full control over both shutter speed and aperture.

Broad ISO sensitivity range with flexible control

Sensitivity can be set manually between ISO 200 and 3200 in increments of 1/3 1/2, or 1 EV, with extended range settings down to Lo 1 for ISO 100 equivalent and up to Hi 1 for ISO 6400 equivalent. Refined high-ISO noise reduction helps ensure maximum image quality throughout the higher range. Automatic sensitivity adjustment (ISO AUTO) is also available, freeing you to concentrate on composition while the camera automatically adjusts sensitivity to maximize available light and achieve optimal exposure for the shot.

Accurate white balance

Advanced Auto White Balance capably produces natural coloration in most situations. Manual settings are also available, including direct selection of Kelvin color temperature; a choice of six specific settings with fine-tuning, as well as a preset manual option for using a gray or white object as a reference. A vertical axis of color cast direction is newly added to the process of tuning white balance and the increments have been made finer to deliver more precise control.
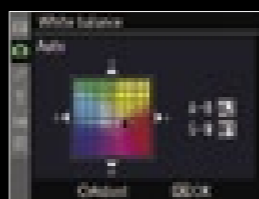
Optimized color space

A selection of two color spaces is available to best match the specific subject, assignment, or workflow environment. The default sRGB setting is well suited when images are to be played back or printed as taken, without editing or post-processing. The Adobe RGB setting realizes a wider color reproduction range for high-quality or commercial output that requires a wider color gamut.
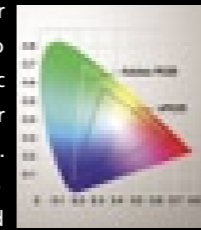
Histogram and channel-independent histogram displays

Accurate histogram and RGB histogram displays aid in quickly confirming exposure. All three color channels can be represented as a whole using Conventional RGB display, while Selectable RGB allows each color channel to be viewed independently to assist exposure and white balance adjustment decisions.
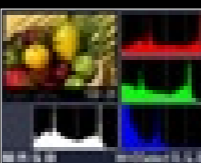
Multiple Exposure

Multiple Exposure is a custom shooting option that allows for imaginative results by producing a single image within the camera from up to 10 consecutive exposures. Colors are reproduced noticeably better than photographs combined in an imaging application.

Image Overlay

Image Overlay is an in-camera retouch feature that combines two saved NEF (RAW) images into a single composite image, taking advantage of precise opacity controls to achieve the desired result. The composite image can be saved as a NEF or JPEG file, and the originals remain unaffected.

Durable shutter unit

Testing to 150,000 cycles stands as firm testament to the durability and reliability of the new double-bladed shutter unit for the D300. A refined mirror balance mechanism that completes its motion cycle and reaches a full stop virtually without mirror

bounce helps promote maximum stability and speed, smoother AF detection, and the extended viewfinder visibility needed for fast, accurate focus tracking and continuous shooting.

Magnesium alloy body

The magnesium alloy body for the D300 combines rugged durability with mobility, and features an enhanced sealing system that helps protect against moisture and dust.

New Multi-Power Battery Pack MB-D10 (optional)

The new optional Multi-Power Battery Pack MB-D10 combines added stability with extended shooting potential and the durability of a magnesium alloy external case with the same level of sealing protection inherent to the D300 to help protect against moisture and dust. Supporting the use of 3 types of battery and featuring a sequential power supply with auto-switching to the battery installed inside the camera body, the MB-D10 also enables high-speed continuous shooting at a rate of 8 fps* for up to 100 consecutive shots.

With EN-EL3e installed

With EN-EL4a installed

* 8 fps requires either 1) Multi-Power Battery Pack MB-D10 with Battery Chamber Cover BL-3 and either Rechargeable Li-ion Battery EN-EL4/EN-EL4a or eight R6/AA-size batteries or 2) AC Adapter EH-5a/EH-5, all of which are sold separately.

Optimized battery performance

The high-energy Rechargeable Li-ion Battery EN-EL3e delivers enough power to shoot up to approx. 1000 consecutive images on a single charge*1 (or up to approx. 3000

shots according to research conducted by NIKON CORPORATION*2) or 3000 shots*1 when using the Multi-Power Battery Pack MB-D10 with Rechargeable Li-ion Battery EN-EL4a*3 installed, in addition to the EN-EL3e installed inside the camera body.

*1 Based on CIPA standards with an AF-S VR 24-120 mm f/3.5-5.6G ED lens
*2 Achieved under following test conditions: measured at 68°F/20°C with an AF-S VR 24-120 mm f/3.5-5.6G ED lens, image quality set to JPEG basic, image size set to M (medium), shutter speed 1/250 s, shutter-release button pressed halfway for three seconds and focus cycled from infinity to minimum range three times; six shots then taken in succession and monitor turned on for five seconds and then turned off; cycle repeated once exposure meters turned off.
*3 Requires Battery Chamber Cover BL-3

Custom Setting menus

Grouped according to basic features for fast and easy access within the color-coded menu display, the D300's wealth of Custom Settings and memory banks for saving up to four complete selections allow instant switching to the optimized selection for the shoot.

Custom setting bank	d3 Viewfinder warning display
Reset custom settings	d4 CL mode shooting speed
a Autofocus	d5 Max. continuous release
a1 AF-C priority selection	d6 File number sequence
a2 AF-S priority selection	d7 Shooting info display
a3 Dynamic AF area	d8 LCD illumination
a4 Focus tracking with lock-on	d9 Exposure delay mode
a5 AF activation	d10 MB-D10 battery type
a6 AF point illumination	d11 Battery order
a7 Focus point wrap-around	**e Bracketing/flash**
a8 AF point selection	e1 Flash sync speed
a9 AF-assist	e2 Flash shutter speed
a10 AF-ON for MB-D10	e3 Flash cntrl for built-in flash
b Metering/exposure	e4 Modeling flash
b1 ISO sensitivity step value	e5 Auto bracketing set
b2 EV steps for exposure cntrl.	e6 Auto bracketing (Mode M)
b3 Exp comp/fine tune	e7 Bracketing order
b4 Easy exposure compensation	**f Controls**
b5 Center-weighted area	f1 Multi selector center button
b6 Fine tune optimal exposure	f2 Multi selector
c Timers/AE lock	f3 Photo info/playback
c1 Shutter-release button AE-L	f4 Assign FUNC. button
c2 Auto meter-off delay	f5 Assign preview button
c3 Self-timer delay	f6 Assign AE-L/AF-L button
c4 Monitor off delay	f7 Customize command dials
d Shooting/display	f8 Release button to use dial
d1 Beep	f9 No memory card?
d2 Viewfinder grid display	f10 Reverse indicators

Intuitive handling, total reliability

Every button, control and function is designed to enable creative freedom

Enhanced moisture and dust resistant areas are outlined in red.

Ultimate optical performance

Tight integration with Nikon's Total Imaging System ensures seamless compatibility with a diverse lineup of superb NIKKOR lenses

45 million NIKKOR

NIKKOR lenses

The image quality achieved by any SLR camera system is directly influenced by the quality of the lenses it can accommodate; and none equal the performance and quality of Nikon's AF, AF-S and dedicated DX NIKKOR lenses. Each NIKKOR lens proudly represents the company's 90-year heritage of developing the finest components and building processes to produce industry-leading photo optics with precision mechanisms and optimized performance.

ED and Super ED glass elements compensate for magnification and help correct chromatic aberration. Exclusive Nano-Crystal anti-reflective coating prevents reflection better than conventional lenses to reduce flare and glare, especially under strong lighting.

AF-S DX Zoom-Nikkor 17-55mm f/2.8G ED
Wide-angle zoom lens exclusively for use with Nikon DX-Format digital SLR (Picture angle equivalent to a 25.5-82.5mm lens in 35mm and FX-formats)

AF-S DX VR Zoom-Nikkor 18-200mm f/3.5-5.6G ED
A compact and lightweight high-power zoom lens for Nikon digital SLRs, featuring enhanced Vibration Reduction (Picture angle equivalent to a 27-300mm lens in 35mm and FX-formats)

Meniscus protective glass elements prevent damage to large-diameter telephoto lenses while providing sharp, clear images with less ghosting. Three types of precision-ground aspheric elements help minimize lens aberrations and wide-angle lens distortion.

Precision mechanisms include the Close-range Correction system used in fisheye, wide-angle and other lenses to provide superior picture quality at close focusing distances. Nikon's own SWM (Silent Wave Motor) technology combines fast and accurate autofocusing with super-quiet operation. And Internal Focusing (IF) helps ensure smoother focusing and a better balanced body.

DX NIKKOR lenses are designed expressly for use with Nikon DX-format digital SLR cameras. Featuring designs that are both light and compact, the enhanced wide picture angle performance and outstanding center-to-edge-to-corner image quality of DX NIKKOR lenses contribute to achieving superb Nikon DX-format performance.

The VR lens advantage

Simply stated, Nikon's advanced Vibration Reduction system for reducing the image degrading effects of camera shake exceeds the performance capabilities of in-camera image stabilization systems. The VR II optical lens shift mechanism of Nikon's lens-based system delivers performance equivalent

to shooting at shutter speeds of up to 4 stops faster*, making it possible to take substantially sharper handheld pictures at slower shutter speeds in lower lighting conditions. The VR II system's optics physically adjust in real time, so a stable image is seen through the viewfinder while confirming the shot. And, because the optical lens shift mechanism is optimized for each focal length, each VR lens produces consistent results.

Two VR modes are available to match shooting conditions. Normal mode primarily reduces camera shake in handheld shooting, and detects panning automatically. Active mode compensates for situations where vibration is pronounced and frequent, such as when shooting from a moving vehicle.

* Under Nikon measurement conditions

VR OFF

VR ON

- AF-S DX VR Zoom-Nikkor 18-200mm f/3.5-5.6G ED
- 1/30 second, f/4.8 • White balance: Auto • ISO sensitivity: 200
- Picture Control: Standard

Function Compatibility Chart

Camera setting / Lens/accessory	Focus Mode			Exposure mode			Metering system		
	S C	M (with electronic rangefinder)	M	P S	A M		3D	Color	* • [3]
CPU lenses [1] Type G or D AF Nikkor[2] AF-S, AF-I Nikkor	√	√	√	√	√		√	—	√[3]
PC-Micro Nikkor 85 mm f/2.8D[4]	—	√[5]	√	—[6]	√		√	—	√[3]
AF-S / AF-I Teleconverter[7]	√[8]	√[8]	√	√	√		√	—	√[3]
Other AF Nikkor (except lenses for F3AF)	√[9]	√[9]	√	√	√		—	√	√[3]
AI-P Nikkor	—	√[10]	√	√	√		—	√	√[3]
Non-CPU lenses [11] AI-, AI modified Nikkor or Nikon Series E Lenses[12]	—	√[10]	√	—	√[13]		—	√[14]	√[15]
Medical-Nikkor 120 mm f/4	—	√	√	—	√[16]		—	—	—
Reflex-Nikkor	—	—	√	—	√[13]		—	—	√[13]
PC-Nikkor	—	√[5]	√	—	√[17]		—	—	√
AI-type Teleconverter[18]	—	√[8]	√	—	√[13]		—	√[14]	√[15]
Bellows Focusing Attachment PB-6[19]	—	√[8]	√	—	√[20]		—	—	√
Auto Extension Rings PK-11A/12/13/PN-11	—	√[8]	√	—	√[13]		—	—	√

1. IX-Nikkor lenses cannot be used. 2. Vibration Reduction (VR) supported with VR lenses. 3. Spot metering meters selected focus point. 4. The camera's exposure metering and flash control systems do not work properly when shifting and/or tilting the lens, or when an aperture other than the maximum aperture is used. 5. Electronic rangefinder cannot be used while shifting or tilting. 6. Manual exposure mode only. 7. Compatible with AF-I Nikkor lenses and with all AF-S lenses except DX 12-24 mm f/4G ED and AF-S series 17-35 mm f/2.8D ED, DX 17-55 mm f/2.8G, 24-85 mm f/3.5-4.5G ED, VR 24-120 mm f/3.5-5.6G ED, and 28-70 mm f/2.8D ED. 8. With maximum effective aperture of f/5.6 or faster. 9. When focusing at minimum focus distance with AF 80-200mm f/2.8, AF 35-70mm f/2.8, new AF 28-85mm f/3.5-4.5, or AF 28-85mm f/3.5-4.5 lenses at maximum zoom, in-focus indicator may be displayed when image on matte screen in viewfinder is not in focus. Adjust focus manually until image in viewfinder is in focus. 10. With maximum aperture of f/5.6 or faster. 11. Some lenses cannot be used 12. Range of rotation for AI 80-200mm f/2.8 ED tripod mount is limited by camera body. Filters cannot be exchanged while AI 200-400mm f/4 ED is mounted on camera. 13. If maximum aperture is specified using Non-CPU Lens Data, aperture value will be displayed in viewfinder and control panel. 14. Can be used only if lens focal length and maximum aperture are specified using Non-CPU Lens Data. Use spot or center-weighted metering if desired results are not achieved. 15. For improved precision, specify lens focal length and maximum aperture using Non-CPU Lens Data. 16. Can be used in manual exposure modes at shutter speeds slower than 1/125 s. 17. Exposure determined by presetting lens aperture. In aperture-priority auto exposure mode, preset aperture using lens aperture ring before performing AE lock or shifting lens. In manual exposure mode, preset aperture using lens aperture ring and determine exposure before shifting lens. 18. Exposure compensation required when used with certain lenses. See teleconverter manual for details. 19. Requires Auto Extension Ring PK-12/13. Bellows Spacer PB-6D may be required depending on camera orientation. 20. Use preset aperture. In aperture-priority auto exposure mode, set aperture using focusing attachment before determining exposure and taking photograph.
• Reprocopy Outfit PF-4 requires Camera Holder PA-4.

Advanced lighting control

Nikon's Creative Lighting System provides advanced control and incredible flexibility to fully empower the creative process

SB-800

SB-600

SB-400

Nikon close-up Speedlight Commander Kit R1C1

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. Full support for the Advanced Wireless Lighting System lets the built-in flash function as a wireless remote commander that provides direct, two-group wireless control over SB-600, SB-800 or SB-R200 Speedlights.

Full support for Nikon's Creative Lighting System

The D300 also 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 and SB-600 Speedlights also feature an AF-Assist Illuminator for multi-area AF tailored to the D300's AF Sensor Module, as well as Auto Zoom flash coverage.

* SB-400 is not compatible with Advanced Wireless Lighting

i- TTL flash control

Building on the accuracy of the monitor preflash, the brighter, shorter i-TTL pre-flash enables more precise evaluation of flash exposure to achieve outstanding results born of better automatic flash balance.

Advanced Wireless Lighting System

Exclusive technology does away with the need for cables and flash meters to provide you with a totally flexible lighting solution. With the built-in flash, SB-800 Speedlight or SU-800 Wireless Commander serving as the Master controller, up to 3 remote groups of any number of SB-800, SB-600 or SB-R200 Speedlights can be arranged as you like for total lighting control, with mode settings (i-TTL, AA, A, M, Repeating and Flash cancel) available for each individual group and the Master controller, and full i-TTL control available based not only on general output ratios for each group, but also on subject brightness. As a result, each flash output ratio can be set, even if a remote is repositioned. Flash compensation can also be adjusted on the fly for each group, with settings easily made and confirmed on the Master controller's large dot matrix LCD. There's also a choice of 4 frequency channels to minimize the risk of interference with other photographers' Speedlights.

FV (Flash Value) Lock

FV (Flash Value) Lock is the flash equivalent of AE Lock, allowing the photographer to change composition while maintaining a desired flash value.

Repeating flash function

Repeating flash function serves as an excellent advantage for capturing fast-moving subjects.

Modeling Flash

Modeling Flash fires a one-second (approx.) stroboscopic burst, enabling the photographer to visually check for shadows and reflective objects and assess overall lighting prior to shooting.

Auto FP High-Speed Sync

Auto FP High-Speed Sync operating with the optional SB-800 or SB-600 Speedlights, allows flash synchronization in all exposure modes at shutter speeds up to 1/8,000 second - providing fill flash that achieves effective background blur, even when shooting in bright conditions or at High ISO values.
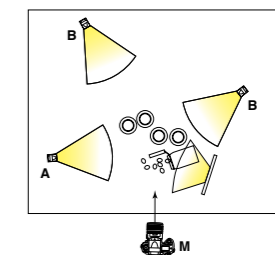
Master M (Built-in Flash): Off
Remote A (SB-800): Manual
Remote B (SB-800): Manual

- Lens: AF-S VR Micro-Nikkor 105mm f/2.8G ED
- 1/250 second, f/4
- White balance: Auto
- ISO sensitivity: 200
- Picture Control: Standard

Capture NX

The highly versatile photo editing solution Nikon's Capture NX software provides easier access to powerful and visually intuitive enhancement tools that help photographers tap the full potential of the extended range and versatility of NEF (RAW) images. Capture NX also supports JPEG and TIFF processing to satisfy a broader range of photofinishing needs and applications.

Elegant versatility for efficient workflow

Nikon's latest software provides efficiency and flexibility to help achieve maximum quality consistently and with minimal effort

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 that release the power of NEF (RAW) files, and also turn processing and editing of JPEG and TIFF files from almost any digital camera into an easy process.

Control Point:

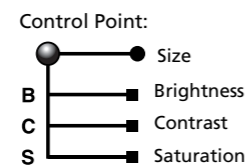|	
●	Size
B	Brightness
C	Contrast
S	Saturation

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

Raw adjustments
Photographers can freely manipulate white balance, color balance, tone curves and noise reduction for NEF (RAW) files after shooting. The results can be saved and multiple renditions created, all with the assurance that the RAW data for the original shot contained within each NEF (RAW) file is permanently retained.

Picture Control system support
Any custom Picture Controls you create can be used for image processing with Capture

Control points were used to add the effect of light hitting the surface of the arched rock in the foreground and to bring life to the color and texture of the distant rocks on the right side by adjusting brightness, contrast and saturation. The sky was then enhanced by bringing out its blues and the reds of the mountains in the background were adjusted to depict dawn light, resulting in an image that faithfully reproduces the impression the scene left when taking the shot.

NX. Picture Controls can be applied to NEF image files taken with other cameras. Moreover, you can freely open and modify Picture Controls within Picture Control Utility.

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.

D-Lighting
D-Lighting allows photographers to manipulate shadows and highlights while maintaining mid-tones to produce optimized results from images with areas of under or overexposure. Choose from D-Lighting HQ when quality is the priority, or D-Lighting HS for high-speed results.

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, Advanced Noise Reduction and other useful functions

Capture NX System Requirements

OS	Windows: Preinstalled versions of Windows Vista Home Basic/Home Premium/Business/Enterprise/Ultimate (32-bit), Windows XP Home Edition/Professional (SP2), Windows 2000 Professional (SP4) Macintosh: Mac OS X (version 10.3.9 or later)
CPU/Model	Windows: Pentium III, 1 GHz or higher, Pentium 4, 2 GHz or higher recommended Macintosh: Power PC G4/G5, Intel Core series / Xeon series
RAM	Windows Vista: 512 MB or more (1 GB or more recommended) Windows XP/2000: 256 MB or more (1 GB or more recommended) Macintosh: 256 MB or more (1 GB or more recommended)
Hard disk	200 MB required for installation, 1 GB required for operation
Display	800 x 600 (all elements may not be properly displayed, 1024 x 768 or more recommended) with 16-bit color (High Color) or 24-bit color (True Color) recommended
Others	• CD-ROM drive required for installation • Additional installation of latest software updates available online via the Nikon website may be required.

UPOINT™ TECHNOLOGY
by Nik Software

Nik™ Software

Full array of system expansion options

Nikon's Total Imaging System makes it easy to customize system setups and optimize performance for specific shooting requirements

10-pin remote connection

The 10-pin connection terminal extends flexible remote shooting possibilities by supporting use of accessories such as the Remote Cord MC-30/MC-36 and Modulite Remote Control Set ML-3.

Remote Cord MC-36

GPS (Global Positioning System) support

NMEA 0183 (ver. 2.01 and 3.01) compliant GPS units can be connected via the optional GPS Cable MC-35 to record latitude, longitude, altitude, heading (direction) and UTC (Coordinated Universal Time) information directly to the file for each shot.

HDMI* high definition video output

HDMI (High Definition Multimedia Interface) connectivity makes it possible to enjoy high-quality HDTV display that is compliant with global standards for the transmission of digital image and digital audio signals.

* HDMI 1.3a compliant

PictBridge support

Pictures can be printed by simply connecting the D300 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.

Image Authentication Software (optional)

When the authenticity of an image needs to be proven or verified, Nikon's exclusive Image Authentication function can readily confirm if the original image data has been tampered with, and also if any changes have been made to date and GPS information.

Image Authentication Software System Requirements (available for Windows only)

OS	Windows: Preinstalled versions of Windows Vista Home Basic/Home Premium/Business/Enterprise/Ultimate (32-bit), Windows XP Home Edition/Professional (SP2), Windows 2000 Professional (SP4)
CPU/Model	Pentium 4, 1 GHz or higher
RAM	512 MB or more recommended
Hard disk	50 MB required for installation, 200 MB required for operation
Display	800 x 600 or more with 16-bit color (High Color) or more
Interface	USB: One standard Universal Serial Bus port necessary (for USB drive use)
Others	• CD-ROM drive required for installation • Internet connection may be required • Software update of version 1.0.1 is required

Memory Card Capacity and Image Quality/Size

The following table shows the approximate number of pictures that can be stored on a 2 GB SanDisk Extreme III (SDCFX) card at different image quality and size settings.
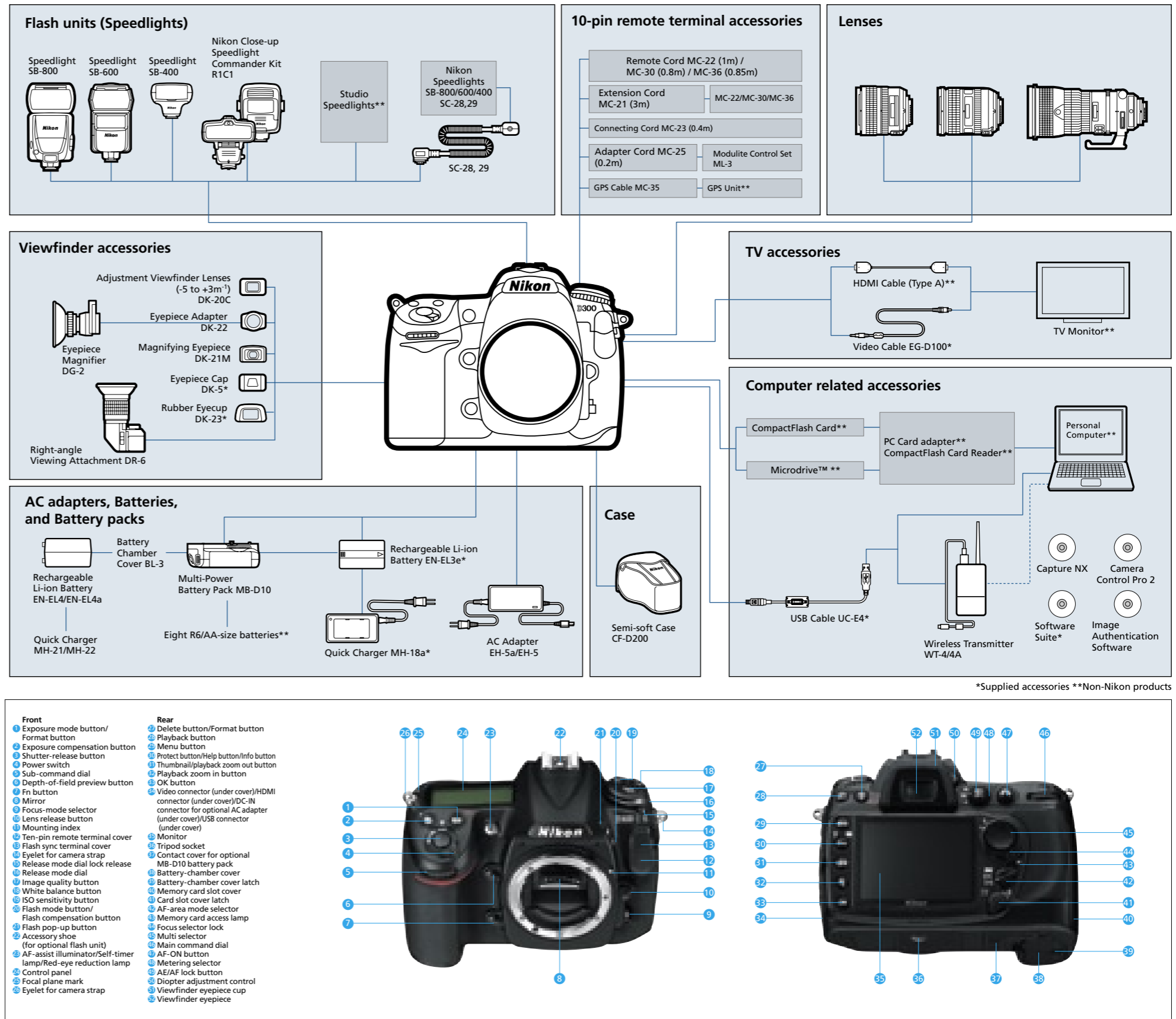
Image Quality	Image Size	File Size*1	Number of Available Shots*1	Number of Consecutive Shots Available*1*2
NEF (RAW), Lossless compressed, 12-bit	—	Approx. 13.6 MB	98 shots	18 shots
NEF (RAW), Lossless compressed, 14-bit*3	—	Approx. 16.7 MB	75 shots	21 shots
NEF (RAW), Compressed, 12-bit	—	Approx. 11.3 MB	135 shots	21 shots
NEF (RAW), Compressed, 14-bit*3	—	Approx. 14.2 MB	112 shots	27 shots
NEF (RAW), Uncompressed, 12-bit	—	Approx. 19.4 MB	98 shots	17 shots
NEF (RAW), Uncompressed, 14-bit*3	—	Approx. 25.3 MB	75 shots	16 shots
TIFF (RGB)	L	Approx. 36.5 MB	52 shots	16 shots
	M	Approx. 21.2 MB	93 shots	20 shots
	S	Approx. 10.2 MB	208 shots	29 shots
JPEG FINE*4	L	Approx. 5.8 MB	276 shots	43 shots
	M	Approx. 3.3 MB	488 shots	89 shots
	S	Approx. 1.5 MB	1000 shots	100 shots
JPEG NORMAL*4	L	Approx. 2.9 MB	548 shots	90 shots
	M	Approx. 1.6 MB	946 shots	100 shots
	S	Approx. 0.7 MB	2000 shots	100 shots
JPEG BASIC*4	L	Approx. 1.5 MB	1000 shots	100 shots
	M	Approx. 0.8 MB	1800 shots	100 shots
	S	Approx. 0.4 MB	3900 shots	100 shots

*1 All figures are approximate. File size varies with scene recorded.
*2 Maximum number of exposures that can be stored in memory buffer. Capacity of memory buffer will drop if noise reduction is on. Drops if Optimal Quality is selected for JPEG Compression, ISO sensitivity is set to Hi 0.3 or higher, High ISO NR is on when auto ISO sensitivity control is on or ISO sensitivity is set to 800 or higher, or long exposure noise reduction, active D-lighting, or image authentication is on.
*3 Maximum frame rate when recording 14-bit NEF (RAW) images is 2.5 fps.
*4 Figures assume JPEG Compression is set to Size Priority. Selecting Optimal Quality increases the file size of JPEG images; number of images and buffer capacity drop accordingly.

Flash units (Speedlights)

Speedlight SB-800
Speedlight SB-600
Speedlight SB-400
Nikon Close-up Speedlight Commander Kit R1C1
Studio Speedlights**
Nikon Speedlights SB-800/600/400 SC-28,29
SC-28, 29

10-pin remote terminal accessories

Remote Cord MC-22 (1m) / MC-30 (0.8m) / MC-36 (0.85m)
Extension Cord MC-21 (3m)
MC-22/MC-30/MC-36
Connecting Cord MC-23 (0.4m)
Adapter Cord MC-25 (0.2m)
Modulite Control Set ML-3
GPS Cable MC-35
GPS Unit**

Lenses

Viewfinder accessories

Eyepiece Magnifier DG-2
Adjustment Viewfinder Lenses (-5 to +3m⁻¹) DK-20C
Eyepiece Adapter DK-22
Magnifying Eyepiece DK-21M
Eyepiece Cap DK-5*
Rubber Eyecup DK-23*
Right-angle Viewing Attachment DR-6

TV accessories

HDMI Cable (Type A)**
TV Monitor**
Video Cable EG-D100*

Computer related accessories

CompactFlash Card**
Microdrive™ **
PC Card adapter** CompactFlash Card Reader**
Personal Computer**

AC adapters, Batteries, and Battery packs

Rechargeable Li-ion Battery EN-EL4a/EN-EL4a
Battery Chamber Cover BL-3
Multi-Power Battery Pack MB-D10
Rechargeable Li-ion Battery EN-EL3e*
Quick Charger MH-21/MH-22
Eight R6/AA-size batteries**
Quick Charger MH-18a*
AC Adapter EH-5a/EH-5

Case

Semi-soft Case CF-D200

USB Cable UC-E4*
Wireless Transmitter WT-4/4A
Capture NX
Camera Control Pro 2
Software Suite*
Image Authentication Software

*Supplied accessories **Non-Nikon products

Front
1. Exposure mode button/Format button
2. Exposure compensation button
3. Shutter-release button
4. Power switch
5. Sub-command dial
6. Depth-of-field preview button
7. Fn button
8. Mirror
9. Focus-mode selector
10. Lens release button
11. Mounting index
12. Ten-pin remote terminal cover
13. Flash sync terminal cover
14. Eyelet for camera strap
15. Release mode dial lock release
16. Release mode dial
17. Image quality button
18. White balance button
19. ISO sensitivity button
20. Flash mode button/Flash compensation button
21. Flash pop-up button
22. Accessory shoe
23. AF-assist illuminator/Self-timer lamp/Red-eye reduction lamp
24. Control panel
25. Focal plane mark
26. Eyelet for camera strap

Rear
27. Delete button/Format button
28. Playback button
29. Menu button
30. Protect button/Help button/Info button
31. Thumbnail/playback zoom out button
32. Playback zoom in button
33. OK button
34. Video connector (under cover)/HDMI connector (under cover)/DC-IN connector for optional AC adapter (under cover)/USB connector (under cover)
35. Monitor
36. Tripod socket
37. Contact cover for optional MB-D10 battery pack
38. Battery-chamber cover
39. Battery-chamber cover latch
40. Memory card slot cover
41. Card slot cover latch
42. AF-area mode selector
43. Memory card access lamp
44. Focus selector lock
45. Multi selector
46. Main command dial
47. AF-ON button
48. Metering selector
49. AE/AF lock button
50. Diopter adjustment control
51. Viewfinder eyepiece cup
52. Viewfinder eyepiece

Nikon Digital SLR Camera D300 Specifications

Type
Type — Single-lens reflex digital camera
Lens mount — Nikon F mount (with AF coupling and AF contacts)
Effective picture angle — Approx. 1.5 x lens focal length (Nikon DX format)

Effective pixels
Effective pixels — 12.3 million

Image sensor
Image sensor — 23.6 x 15.8 mm CMOS sensor
Total pixels — 13.1 million
Dust-reduction System — Image sensor cleaning, Image Dust Off reference data (optional Capture NX software required)

Storage
Image size (pixels) — • 4,288 x 2,848 (L) • 3,216 x 2,136 (M) • 2,144 x 1,424 (S)
File format — • NEF (RAW): 12 or 14-bit, lossless compressed, compressed, or uncompressed
• TIFF (RGB)
• JPEG: JPEG-Baseline compliant with fine (approx. 1 : 4), normal (approx. 1 : 8), or basic (approx. 1 : 16) compression (Size priority); Optimal quality compression available
• NEF (RAW) + JPEG: Single photograph recorded in both NEF (RAW) and JPEG formats
Picture Control System — Can be selected from Standard, Neutral, Vivid, Monochrome; storage for up to nine custom Picture Controls
Media — Type I and II CompactFlash memory cards (UDMA compliant); Microdrives
File system — DCF (Design Rule for Camera File Systems) 2.0, DPOF (Digital Print Order Format), Exif 2.21 (Exchangeable Image File Format for Digital Still Cameras), PictBridge

Viewfinder
Viewfinder — Eye-level pentaprism single-lens reflex viewfinder
Frame coverage — Approx. 100% horizontal and 100% vertical
Magnification — Approx. 0.94 x (50mm f/1.4 lens at infinity, -1.0 m^{-1})
Eyepoint — 19.5 mm (-1.0 m^{-1})
Diopter adjustment — -2 to +1 m^{-1}
Focusing screen — Type B BriteView clear matte screen Mark II with AF area brackets (grid lines can be displayed)
Reflex mirror — Quick return
Depth-of-field preview — When depth of field preview button is pressed, lens aperture is stopped down to value selected by user (A and M modes) or by camera (P and S modes)
Lens aperture — Instant return, electronically controlled

Lens
Compatible lenses — Refer to page 18

Shutter
Type — Electronically-controlled vertical-travel focal-plane shutter
Shutter Speed — 1/8000 to 30 s in steps of 1/3, 1/2, or 1 EV, Bulb, X250
Flash sync speed — X=1/250 s; synchronizes with shutter at 1/320 s or slower (flash range drops at speeds between 1/320 and 1/250 s)

Release
Release mode — S (Single frame), CL (Continuous-low speed), CH (Continuous high-speed), LV (Live view), (Self-timer), M$_{UP}$ (Mirror up)
Frame advance rate — • With Rechargeable Li-ion Battery EN-EL3e: Up to 6 fps
• With Multi-Power Battery Pack MB-D10 (optional) and Rechargeable Li-ion Battery EN-EL4a/EN-EL4 (optional) or eight R6/AA-size batteries or with AC Adapter EH-5a/EH-5 (optional): Up to 7 fps (CL mode) or 8 fps (CH mode)
Self-timer — Can be selected from 2, 5, 10 and 20 s duration

Exposure
Metering — TTL exposure metering using 1,005-segment RGB sensor
Metering method — • Matrix: 3D color matrix metering II supported with type G and D lenses; color matrix metering II available with other CPU lenses and color matrix metering available with non-CPU lenses if user provides lens data
• Center-weighted: Weight of 75% given to 6, 8, 10 or 13-mm circle in center of frame, or weighting based on average of entire frame (fixed at 8 mm when non CPU lens is used)
• Spot: Meters 3-mm circle (about 2% of frame) centered on selected focus point (on center focus point when non-CPU lens is used)
Range (ISO 100, f/1.4 lens, 68°F/20°C) — • Matrix or center-weighted metering: 0-20 EV
• Spot metering: 2-20 EV
Exposure meter coupling — Combined CPU and AI
Exposure mode — Programmed auto with flexible program (P); shutter-priority auto (S); aperture priority auto (A); manual (M)
Exposure compensation — -5 to +5 EV in increments of 1/3, 1/2 or 1 EV
Exposure bracketing — 2 to 9 frames in steps of 1/3, 1/2, 2/3 or 1 EV
Exposure lock — Luminosity locked at detected value with AE-L/AF-L button
ISO sensitivity (R.E.I.) — ISO 200 to 3200 in steps of 1/3, 1/2 or 1 EV. Can also be set to approx. 0.3, 0.5, 0.7 or 1 EV below ISO 200 or to approx. 0.3, 0.5, 0.7 or 1 EV above ISO 3200
Active D-Lighting — Can be selected from [High], [Normal] or [Low]

Focus
Autofocus — Nikon Multi-CAM 3500DX autofocus module with TTL phase detection, fine-tuning, 51 focus points (including 15 cross-type sensors) and AF-assist illuminator (range approx. 1 ft. 8 in. to 9 ft. 10 in./0.5 to 3 m)
Detection range — -1 to +19 EV (ISO 100, 68°F/20°C)
Lens servo — • Autofocus: Instant single-servo AF (S); continuous-servo AF (C); predictive focus tracking automatically activated according to subject status in single- and continuous-servo AF
• Manual (M): Electronic range finding supported
Focus point — Can be selected from 51 or 11 focus points
AF-area mode — Single-point AF, Dynamic-area AF, Automatic-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

Flash
Built-in flash — Manual pop-up with button release and a Guide Number of 56/17 (ft/m, ISO 200, 68°F/20°C; GN at ISO 100 equivalent is 39/12) or 59/18 in manual mode (ft/m, ISO 200, 68°F/20°C; GN at ISO 100 equivalent is 43/13)
Flash control — • TTL: i-TTL balanced fill-flash and standard i-TTL flash for digital SLR using 1,005-segment RGB sensor are available with built-in flash and SB-800, SB-600 or SB-400
• Auto aperture: Available with SB-800 and CPU lens
• Non-TTL auto: Supported flash units include SB-800, 28, 27 and 22 s
• Range-priority manual: Available with SB-800
Flash mode — Front curtain sync, slow sync, rear-curtain sync, red-eye reduction, red-eye reduction with slow sync
Flash compensation — -3 to +1 EV in increments of 1/3, 1/2 or 1 EV
Flash bracketing — 2 to 9 frames in steps of 1/3, 1/2, 2/3 or 1 EV
Flash-ready indicator — Lights when built-in flash or SB-series Speedlight such as 800, 600, 400, 80DX, 28DX or 50DX is fully charged; blinks after flash is fired at full output

Accessory shoe — Standard ISO 518 hot-shoe contact with safety lock

Nikon Creative Lighting System (CLS) — Advanced Wireless Lighting supported with built-in flash or Speedlights such as SB-800, or SU-800 as commander and SB-800, 600 or R200 as remotes; Auto FP High-Speed Sync and modeling illumination supported with all CLS-compatible flash units except SB-400; Flash Color Information Communication and FV lock supported with all CLS-compatible flash units

White balance
White balance — Auto (TTL white-balance with main image sensor and 1,005 segment RGB sensor); seven manual modes with fine-tuning; color temperature setting
Bracketing — 2 to 9 frames in steps of 1, 2 or 3

Live View
Modes — Hand-held, Tripod
Autofocus — • Hand-held: Phase-detection AF with 51 focus points (including 15 cross-type sensors)
• Tripod: Contrast-detect AF anywhere in frame

Monitor
Monitor — 3-in., approx. 920,000-dot (VGA), low-temperature polysilicon TFT LCD with 170° viewing angle, approx. 100% frame coverage and brightness adjustment

Playback
Playback — Full-frame and thumbnail (four or nine images) playback with playback zoom, slide show, histogram display, auto image rotation and image comment (up to 36 characters)

Interface
USB — Hi-Speed USB
Video output — Can be selected from NTSC and PAL
HDMI output — Version 1.3a with type A HDMI connector; camera monitor turns off when HDMI cable is connected
Ten-pin remote terminal — Can be used to connect remote control or GPS device compliant with NMEA 0183 version 2.01 or 3.01 (requires optional GPS Cable MC-35 and cable with D-sub 9-pin connector)

Supported languages
Supported languages — Chinese (Simplified and Traditional), Dutch, English, Finnish, French, German, Italian, Japanese, Korean, Polish, Portuguese, Russian, Spanish, Swedish

Power source
Battery — One Rechargeable Li-ion Battery EN-EL3e
Battery pack — Optional Multi-Power Battery Pack MB-D10 with one Rechargeable Li-ion Battery EN-EL3e, EN-EL4/EN-EL4a, eight R6/AA-size alkaline, Ni-MH, lithium, or nickel-manganese batteries; Rechargeable Li-ion Battery EN-EL4a/EN-EL4 and R6/AA-size batteries available separately; Battery Chamber Cover BL-3 (available separately) required for use with Rechargeable Li-ion Battery EN-EL4/EN-EL4a.
AC adapter — AC adapter EH-5a/EH-5 (available separately)

Tripod socket
Tripod socket — 1/4 in. (ISO 1222)

Dimensions and weight
Dimensions — Approx. 5.8 x 4.5 x 2.9 in. / 147 x 114 x 74 mm
Weight — Approx. 1 lb. 13 oz. / 825 g without battery, memory card, body cap or monitor cover

Operating environment
Temperature — 32-104°F (0-40°C)
Humidity — Less than 85% (no condensation)

Supplied Accessories
Supplied Accessories (may differ by country or area) — Rechargeable Li-ion Battery EN-EL3e, Quick Charger MH-18a, USB Cable UC-E4, Video Cable EG-D100, Strap AN-D300, LCD Monitor Cover BM-8, Body cap, Eyepiece Cap DK-5, Rubber Eyecup DK-23, Software Suite CD-ROM

Specifications and equipment are subject to change without any notice or obligation on the part of the manufacturer. September 2008

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