



At the heart of the image™

D90™

ENGINEERED FOR ARTISTRY UNLEASH YOUR POTENTIAL

D90™

FEATURES

- **12.3-megapixel DX-format CMOS imaging sensor**
Coupled with Nikon's *EXPEED* image processing technologies and NIKKOR optics, breathtaking image fidelity is assured
- **Continuous shooting as fast as 4.5 frames-per-second** Combined with fast 0.15ms power-up and split-second 65ms shooting lag, dramatic action and decisive moments are captured easily
- **D-Movie Mode — Cinematic 24fps HD with sound** Record cinematic-quality movie clips at up to 720p HD (1280 x 720 pixels) in Motion JPEG format, enhanced by NIKKOR interchangeable lens quality and versatility
- **Low noise ISO sensitivity from 200 to 3200**
High signal-to-noise components and design deliver exceptional performance, even at high ISO settings
- **3-inch super-density 920,000-dot color LCD monitor**
- **Built-in image sensor cleaning**
- **11-point AF system with Face Priority**
- **One-button Live View**
- **Nikon 3D Color Matrix Metering II with Scene Recognition System**
- **Comprehensive exposure control**
- **Auto Active D-Lighting**
- **Durable, high precision shutter**
- **In-Camera Image Editing**
- **GPS geo-tagging** (optional GP-1 required)
- **Available packed with AF-S DX NIKKOR 18-105mm f/3.5-5.6G ED VR lens**



For more information visit nikonusa.com

Nikon Digital SLR Camera D90 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	12.9 million
Dust-reduction system	Image Sensor Cleaning, Image Dust Off reference data (optional Capture NX 2 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	<ul style="list-style-type: none"> • NEF (RAW) • JPEG: JPEG-Baseline compliant with fine (approx. 1:4), normal (approx. 1:8), or basic (approx. 1:16) compression • NEF (RAW) + JPEG: Single photograph recorded in both NEF (RAW) and JPEG formats
Picture Control System	Can be selected from Standard, Neutral, Vivid, Monochrome, Portrait, Landscape; storage for up to nine custom Picture Controls
Media	SD memory cards, SDHC compliant
File system	DCF (Design Rule for Camera File System) 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. 96% horizontal and 96% 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 focus frame (framing grid can be displayed)
Reflex mirror	Quick-return type
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 (other modes)
Lens aperture	Instant return, electronically controlled
Lens	
Compatible lenses	See product brochure
Shutter	
Type	Electronically controlled vertical-travel focal-plane shutter
Speed	1/4,000 to 30 s in steps of 1/3 or 1/2 EV, Bulb
Flash sync speed	X = 1/200 s; synchronizes with shutter at 1/200 s or slower
Release	
Release mode	Single-frame, continuous low speed, continuous high speed, self-timer, delayed remote, quick-response
Frame advance rate	Continuous high speed: up to 4.5 fps, continuous low speed: 1-4 fps
Self-timer	Can be selected from 2, 5, 10 and 20 s duration
Exposure	
Metering	TTL exposure metering using 420-pixel RGB sensor
Metering method	<ul style="list-style-type: none"> • Matrix: 3D color matrix metering II (type G and D lenses); color matrix metering II (other CPU lenses) • Center-weighted: Weight of 75% given to 6-, 8- or 10-mm circle in center of frame • Spot: Meters 3.5-mm circle (about 2% of frame) centered on selected focus point • Matrix or center-weighted metering: 0-20 EV • Spot metering: 2-20 EV
Range (ISO 100 equivalent, f/1.4 lens, 68°F/20°C)	
Exposure meter coupling	CPU
Exposure modes	Auto modes (auto, auto [flash off]), Advanced Scene Modes (Portrait, Landscape, Sports, Close-up, Night Portrait), programmed auto with flexible program (P), shutter-priority auto (S), aperture-priority auto (A), manual (M)
Exposure compensation	±5 EV in increments of 1/3 or 1/2 EV
Exposure bracketing	2 or 3 frames in steps of 1/3, 1/2, 2/3, 1 or 2 EV
Exposure lock	Luminosity locked at detected value with AE-L/AF-L button
ISO sensitivity (Recommended Exposure Index)	ISO 200 to 3200 in steps of 1/3 EV, can also be set to approx. 0.3, 0.7 or 1 EV (ISO 100 equivalent) below ISO 200, or to approx. 0.3, 0.7 or 1 EV (ISO 6400 equivalent) over ISO 3200, ISO sensitivity auto control available
Active D-Lighting	Can be selected from Auto, Extra high, High, Normal, Low or off
Active D-Lighting bracketing	2 frames
Focus	
Autofocus	Nikon Multi-CAM 1000 autofocus module with TTL phase detection, 11 focus points (including 1 cross-type sensor) and AF-assist illuminator (range approx. 1 ft. 8 in.-9 ft. 10 in./0.5-3 m)
Detection range	-1 to +19 EV (ISO 100 equivalent, 68°F/20°C)
Lens servo	<ul style="list-style-type: none"> • Autofocus: Single-servo AF (AF-S); continuous-servo AF (AF-C); predictive focus tracking automatically activated according to subject status (AF-A) • Manual (M): Electronic rangefinder supported
Focus point	Can be selected from 11 focus points
AF-area modes	Single-point AF, dynamic-area AF, auto-area AF, 3D-tracking (11 points) 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	Auto, Portrait, Close-up, Night Portrait modes: Auto flash with auto pop-up P, S, A, M: Manual pop-up with button release
Guide number (ft./m at 68°F/20°C)	<ul style="list-style-type: none"> • At ISO 200: Approx. 56/17, 59/18 with manual flash • At ISO 100 equivalent: Approx. 39/12, 43/13 with manual flash
Flash control	<ul style="list-style-type: none"> • TTL: i-TTL balanced fill-flash and standard i-TTL flash for digital SLR using 420-pixel RGB sensor are available with built-in flash, SB-900, SB-800, SB-600 or SB-400 • Auto aperture: Available with SB-900, SB-800 and CPU lenses • Non-TTL auto: Supported flash units include SB-900, SB-800, SB-28, SB-27 or SB-22s • Range-priority manual: Available with SB-900 and SB-800
Flash modes	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 or 1/2 EV
Flash bracketing	2 or 3 frames in steps of 1/3, 1/2, 2/3, 1 or 2 EV
Flash-ready indicator	Lights when built-in flash or SB-900, SB-800, SB-600, SB-400, SB-80DX, SB-28DX or SB-50DX is fully charged; blinks for 3 s after flash is fired at full output in i-TTL or auto aperture modes
Accessory shoe	Standard ISO 518 hot-shoe contact with safety lock
Nikon Creative Lighting System (CLS)	Advanced Wireless Lighting supported with built-in flash, SB-900, SB-800 or SU-800 as commander and SB-900, SB-800, SB-600 or SB-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 420-pixel RGB sensor); 12 manual modes with fine-tuning; color temperature setting; preset manual white balance
White balance bracketing	2 or 3 frames in steps of 1, 2 or 3

Live View	
AF modes	Face priority AF, wide area AF, normal area AF
Focus	Contrast-detect AF anywhere in frame (camera selects focus point automatically when face priority AF is selected)

Movie	
Image size (pixels)	1,280 x 720/24 fps, 640 x 424/24 fps, 320 x 216/24 fps
File format	AVI
Compression format	Motion-JPEG, with monaural sound

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

Playback	
Playback function	Full-frame and thumbnail (4, 9 or 72 images or calendar) playback with playback zoom, movie playback, Pictmotion, slide show, histogram display, highlights, auto image rotation, and image comment (up to 36 characters)

Interface	
USB	Hi-Speed USB
Audio video output	Can be selected from NTSC and PAL; simultaneous playback from both the audio video output and on the LCD monitor available
HDMI output	Type C HDMI connector; camera monitor turns off when HDMI cable is connected
Accessory terminal	<ul style="list-style-type: none"> • Remote Cord MC-DC2 (Optional) • GPS Unit GP-1 (Optional)

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

Power source	
Battery	One Rechargeable Li-ion Battery EN-EL3e
Battery pack	Multi-Power Battery Pack MB-D80 (optional) with one or two Rechargeable Li-ion Battery EN-EL3e, or six R6/AA-size alkaline, Ni-MH, lithium or nickel-manganese batteries (Battery Holder MS-D200 is required when using R6/AA-size batteries.)
AC adapter	AC Adapter EH-5a (optional)

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

Dimensions/Weight	
Dimensions (W x H x D)	Approx. 5.2 x 4.1 x 3.0 in./132 x 103 x 77 mm
Weight	Approx. 1 lb. 6 oz./620 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)

Accessories	
Supplied accessories (may differ by country or area)	Rechargeable Li-ion Battery EN-EL3e, Quick Charger MH-18a, Eyepiece Cap DK-5, Rubber Eyecup DK-21, USB Cable UC-E4, Audio Video Cable EG-D2, Camera Strap AN-DC1, LCD Monitor Cover BM-10, Body Cap, Accessory Shoe Cover BS-1, Software Suite CD-ROM

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WARNING

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



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